# ENSOLUM

September 27, 2023

New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

### Re: Closure Request RDX Federal 21 #041 & #042 Incident Numbers nAPP2305933356 & nAPP2320173651 Eddy County, New Mexico

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of WPX Energy Permian, LLC (WPX), has prepared this *Closure Request* to document assessment, excavation, and soil sampling activities performed at the RDX Federal 21 #041 & #042 (Site) in Unit M, Section 21, Township 26 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the Site assessment, excavation, and soil sampling activities was to address waste-containing soil resulting from two releases of crude oil and produced water at the Site. Based on the excavation activities and analytical results from the soil sampling events, WPX is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Numbers nAPP2305933356 and nAPP2320173651.

### SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Eddy County, New Mexico (32.0223007°, -103.8916702°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On February 20, 2023, high fluid levels sent approximately 1 barrel (bbl) of crude oil to the flare. The majority of the fluid was consumed by a fire at the base of the flare. A small volume of fluid misted the vegetation off-pad south of the flare. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on February 28, 2023. The release was assigned Incident Number nAPP2305933356.

On July 20, 2023, a flow line below ground level developed a leak causing 17 bbls of produced water to release to the pad surface and the caliche road off-pad. WPX reported the release to the NMOCD on a Form C-141 on July 31, 2023. The release was assigned Incident Number nAPP2320173651.

Since these two releases occurred in the vicinity of each other on the same well pad, WPX addressed the two releases together and below is a summary of remedial actions completed to address both releases.

RDX Federal 21 #041 & #042

E N S O L U M

### SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

The closest permitted groundwater well with depth to groundwater data is WPX well RDX Federal Com 21-43, located approximately 0.3 miles east of the Site. The well had a reported depth to groundwater greater than 105 feet below ground surface (bgs) and a total depth of 110 feet bgs. There are no regional or Site-specific hydrological conditions, such as shallow surface water, karst features, wetlands, or vegetation that suggest the Site is conducive to shallow groundwater. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well record is included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is a dry wash, located approximately 0.23 miles northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). Site receptors are identified on Figure 1.

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the pasture area that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top 4 feet of areas that will be reclaimed following remediation.

#### SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On March 30, 2023, Site assessment activities were conducted to evaluate the RDX Federal 21 #041 release extent based on information provided on the Form C-141 and visual observations. Four preliminary assessment soil samples (SS01 through SS04) were collected around the release extent from the ground surface (0 feet bgs) to assess the lateral extent and one borehole (SS05) was advanced via hand auger within the release extent to assess the vertical extent. The pothole was advanced to a depth 0.5 feet bgs. The borehole and delineation soil sample locations are depicted on Figure 2.

On August 14, 2023, Site assessment activities were conducted to evaluate the RDX Federal 21 #042 release extent based on information provided on the Form C-141 and visual observations. Seven preliminary assessment soil samples (SS01 through SS07) were collected around the release extent at the ground surface (depth of 0 feet bgs) to assess the lateral extent of the release.

RDX Federal 21 #041 & #042

## E N S O L U M

The preliminary soil samples from the two incidents were field screened for TPH using PetroFLAG<sup>®</sup> and chloride using the Mohr titration method. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figures 2 and 3, respectively.

All soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Envirotech Analytical Laboratory (Envirotech) in Farmington, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for all Site assessment soil samples from the two releases indicated all COC concentrations were in compliance with the Closure Criteria; however, second depths within the release extent were still required for the RDX Federal 21 #042 release. The lateral extent of the release for RDX Federal 21 #041 was defined by soil samples SS01 through SS04, and the vertical extent of the release was defined by soil sample SS05. The lateral extent of the release for RDX Federal 21 #042 was defined by soil sample SS07.

### DELINEATION AND EXCAVATION SOIL SAMPLING ACTIVITIES

Beginning on August 14, 2023, Ensolum personnel were at the Site to oversee delineation activities of RDX Federal 21 #042. Two boreholes (PH01 and PH02) were advanced via backhoe within the release extent to assess the vertical extent of the release. Delineation soil samples were collected from each pothole at depths ranging from 1-foot to 3 feet bgs. Soil from the potholes was field screened for TPH and chloride. Field screening results and observations for the potholes were logged on lithologic soil sampling logs, which are included in Appendix C. The pothole and delineation soil sample locations are depicted on Figure 3.

Laboratory analytical results for the delineation soil samples collected from potholes PH01 and PH02 indicated all COC concentrations were compliant with the Closure Criteria and compliant with the reclamation standards in samples collected in the off-pad road area from the top 4 feet of the subsurface.

Upon completion of delineation activities, identified waste-containing soil was excavated from the release areas as indicated by visible staining, laboratory analytical results for the preliminary soil samples, and field screening results for the delineation soil samples. Excavation activities were performed using a backhoe and transport vehicles. The excavation occurred on-pad, in the pasture area south of the pad, and across the road southwest of the pad. To direct excavation activities, soil was screened for TPH and chloride. The excavation was completed to depths ranging from 0.5-feet to 4 feet bgs. Photographic documentation of the excavation activities is included in Appendix D.

Following removal of waste-containing soil, 5-point composite soil samples were collected at least every 200 square feet from the floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples from the two excavations included:

- RDX Federal 21 #041: Floor soil samples FS01 through FS21 collected at depths ranging from 0.5 feet to 4 feet bgs. Sidewall soil samples SW05 and SW06 at depths ranging from the ground surface to 1-foot bgs and 2 feet bgs, respectively.
- RDX Federal 21 #042: Floor soil samples FS22 through FS48 collected at depths ranging from 0.5 feet to 4 feet bgs. Sidewall soil samples SW01 through SW04 and SW07 collected at depths ranging from the ground surface to 4 feet bgs.

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The excavation extents and excavation soil sample locations are presented on Figures 4 and 5, respectively.

Laboratory analytical results for excavation sidewall samples SW01 through SW04, SW07 and excavation floor samples FS01 through FS06 and FS08 through FS48 indicated all COC concentrations were compliant with the Closure Criteria and compliant with the reclamation requirement. Chloride concentrations in floor soil sample FS07 and sidewall soil sample SW06 exceeded the reclamation requirement and as such, additional waste-containing soil was excavated and the resampled locations indicated all COC concentrations were compliant with the Closure Criteria and reclamation requirement. Laboratory analytical results are summarized in Tables 2 through 4 and laboratory analytical reports are included as Appendix E.

The RDX Federal 21 #041 excavation area measured approximately 4,267 square feet. A total of approximately 140 cubic yards of waste-containing soil was removed during the excavation. The soil was transported and properly disposed of at the R360 Red Bluff Facility in New Mexico. The RDX Federal 21 #042 excavation area measured approximately 5,097 square feet. A total of approximately 400 cubic yards of waste-containing soil was removed during the excavation. The soil was transported and properly disposed of at the R360 Red Bluff Facility in New Mexico.

### **CLOSURE REQUEST**

Site assessment and excavation activities were conducted at the Site to address the February 2022 flare fire and the July 2023 release of produced water. Laboratory analytical results for the excavation soil samples, collected from the final excavation extents, indicated all COC concentrations were compliant with the Site Closure Criteria and compliant with the reclamation requirement, where applicable. Based on soil sample analytical results, no further remediation was required. WPX will backfill the excavations with material purchased locally and recontour the Site to match existing Site conditions. The disturbed pasture area will be re-seeded with an approved BLM seed mixture.

Excavation of waste-containing soil has mitigated adverse effects at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. WPX believes these remedial actions are protective of human health, the environment, and groundwater. As such, WPX respectfully requests closure for Incident Numbers nAPP2305933356 and nAPP2320173651.

If you have any questions or comments, please contact Ms. Ashley Giovengo at (575) 988-0055 or agiovengo@ensolum.com.

Sincerely, **Ensolum, LLC** 

Ashley Giovengo Senior Engineer

Daniel R. Moir, PG Senior Managing Geologist

RDX Federal 21 #041 & #042

## **E** N S O L U M

### Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations (RDX Federal 21 #041)
Figure 3	Delineation Soil Sample Locations (RDX Federal 21 #042)
Figure 4	Excavation Soil Sample Locations (RDX Federal 21 #041)
Figure 5	Excavation Soil Sample Locations (RDX Federal 21 #042)
Table 1	Delineation Soil Samples (RDX Federal 21 #041 & 42)
Table 2	Confirmation Soil Samples (RDX Federal 21 #041)
Table 3	Confirmation Soil Samples (RDX Federal 21 #042)
Table 4	Confirmation Sidewall Soil Samples (RDX Federal 21 #041 & #042)
Appendix A Appendix B Appendix C Appendix D	Form C-141 Referenced Well Records Lithologic Soil Sampling Logs Photographic Log Laboratory Analytical Reports & Chain-of-Custody Documentation

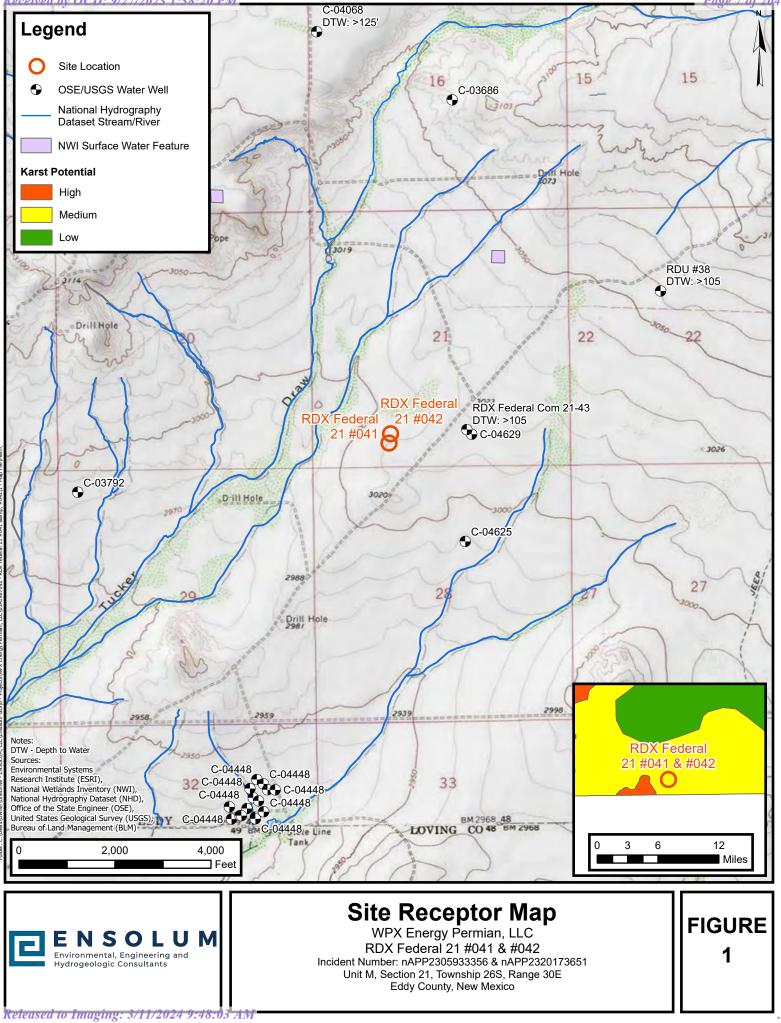
- Appendix E Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix F NMOCD Correspondence



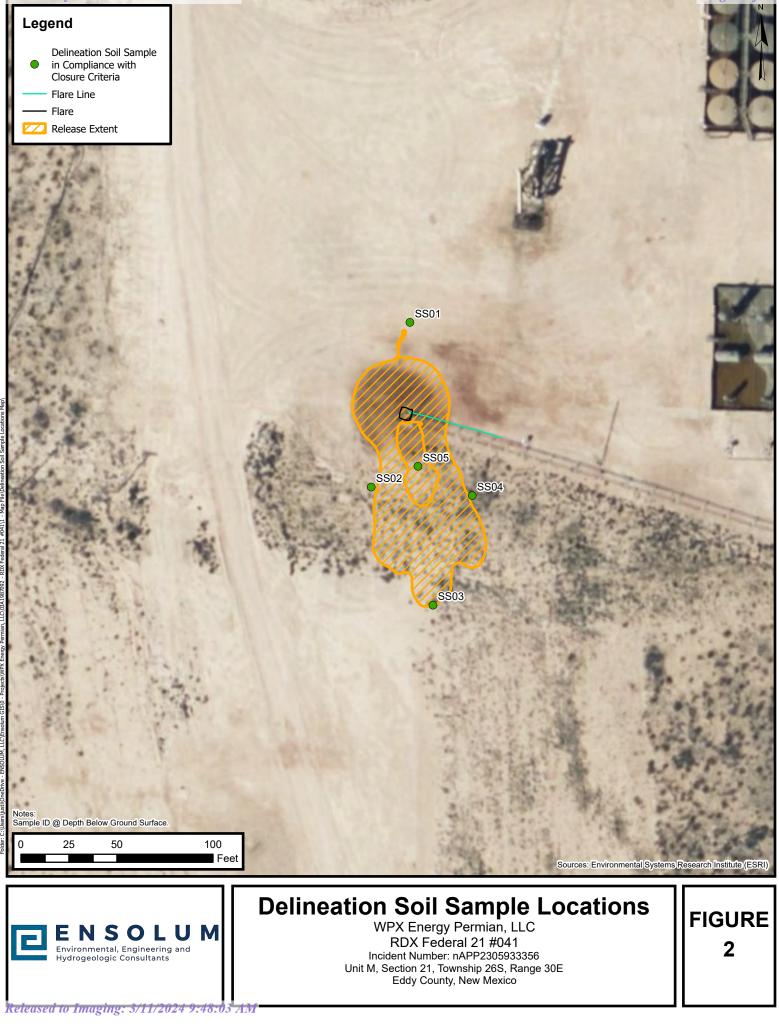
# **FIGURES**

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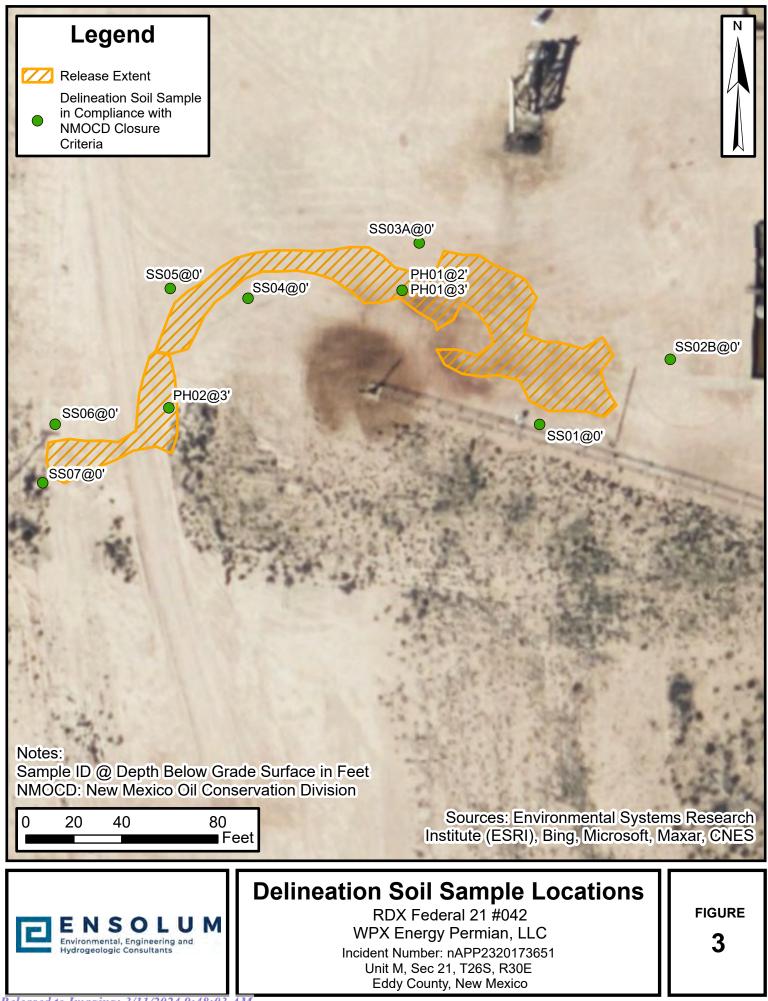
Page 7 of 264

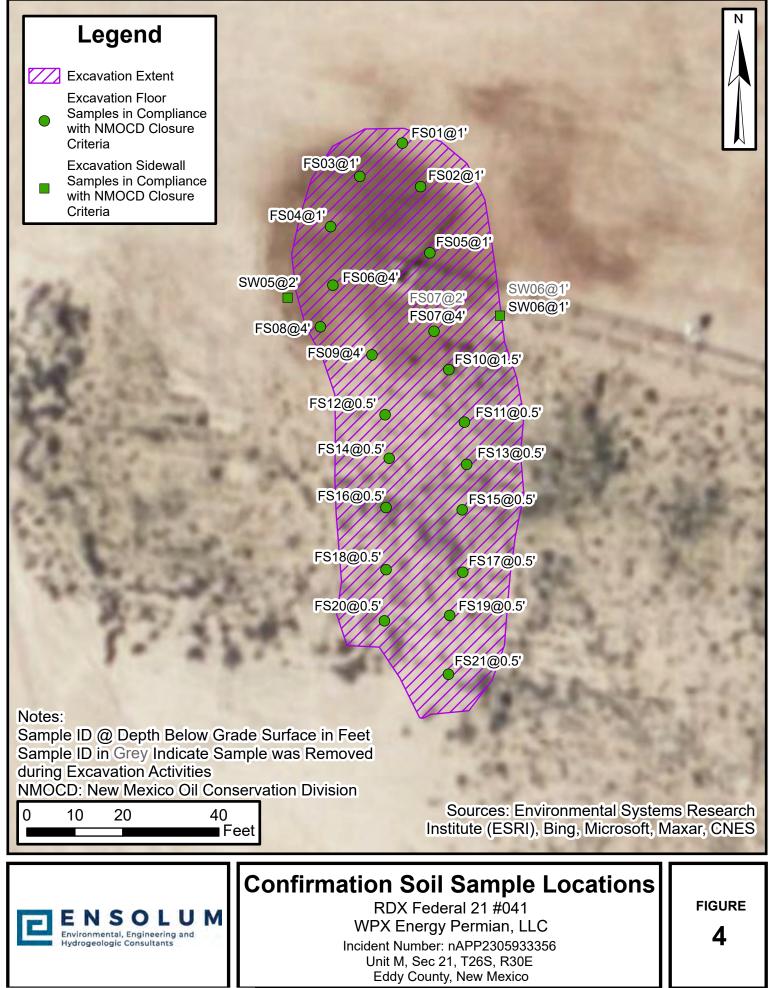


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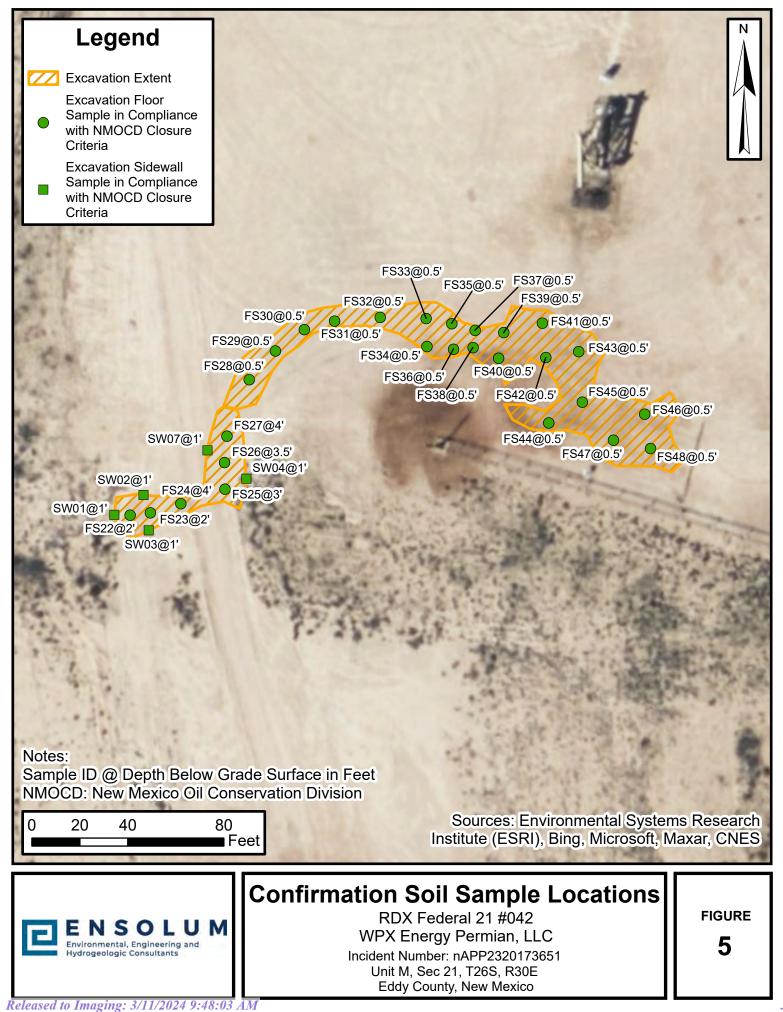


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# TABLES

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				RDX Federal 2 WPX	TABLE 1 LE ANALYTIC 1 #041 & RDX Energy Permia County, New	Federal 21 #04 an, LLC	12			
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I C	Closure Criteria (I	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Delineation Soi	I Samples (RDX	Federal 21 #04	1)			
SS01	03/30/2023	0	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	250
SS02	03/30/2023	0	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	<40.0
SS03	03/30/2023	0	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	<40.0
SS04	03/30/2023	0	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	<40.0
SS05	03/30/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	<40.0
				Delineation Soi	l Samples (RDX	Federal 21 #04	2)			
SS01	08/14/2023	0	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	191
SS02B	08/14/2023	0	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	186
SS03A	08/14/2023	0	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	145
SS04	08/14/2023	0	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	268
SS05	08/14/2023	0	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	201
SS06	08/14/2023	0	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	215
SS07	08/14/2023	0	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	27.7
			De	lineation Pothole	Soil Samples (	RDX Federal 21	#042)			
PH01	08/14/2023	2	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	742
PH01	08/14/2023	3	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	567
PH02	08/14/2023	3	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	69.1

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation NM requirement where applicable.

ORO: Oil Range Organics TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

Grey text indicates soil sample removed during excavation activities

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				RDX Federal 2 WPX	TABLE 2 LE ANALYTIC 1 #041 & RDX Energy Permia County, New	Federal 21 #04 an, LLC	12			
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I (	Closure Criteria (	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Confirmation So	il Samples (RD	X Federal 21 #04	<b>1</b> 1)			
FS01	08/15/2023	1	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	1,030
FS02	08/15/2023	1	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	1,150
FS03	08/15/2023	1	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	2,760
FS04	08/15/2023	1	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	1,560
FS05	08/15/2023	1	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	2,250
FS06	08/18/2023	4	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	372
FS07	08/16/2023	2	<0.025	<0.025	<20.0	<25.0	<del>&lt;50.0</del>	<20.0	<20.0	917
FS07	09/06/2023	4	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	353
FS08	08/18/2023	4	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	359
FS09	08/18/2023	4	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	494.0
FS10	08/15/2023	15	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	598
FS11	08/15/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	89.7
FS12	08/15/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	<40.0
FS13	08/15/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	21.4
FS14	08/15/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	<40.0
FS15	08/15/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	<40.0
FS16	08/15/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	<40.0
FS17	08/15/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	<40.0
FS18	08/15/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	<40.0
FS19	08/15/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	<40.0
FS20	08/15/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	<40.0
FS21	08/15/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	109

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

ORO: Oil Range Organics TPH: Total Petroleum Hydrocarbon

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation NMAC: New M

requirement where applicable.

NMAC: New Mexico Administrative Code Grey text indicates soil sample removed during excavation activities

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#### TABLE 3 SOIL SAMPLE ANALYTICAL RESULTS RDX Federal 21 #041 & RDX Federal 21 #042 WPX Energy Permian, LLC Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I C	losure Criteria (	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Confirmation So	il Samples (RD)	X Federal 21 #04	42)		1	
FS22	08/15/2023	2	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	113
FS23	08/15/2023	2	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	382
FS24	08/16/2023	4	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	329
FS25	08/17/2023	3	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	447
FS26	08/17/2023	3.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	364
FS27	08/17/2023	4	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	392
FS28	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	6,600
FS29	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	4,520
FS30	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	1,730
FS31	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	9,100
FS32	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	9,990
FS33	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	16,400
FS34	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	6,870
FS35	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	4,940
FS36	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	3,040
FS37	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	2,040
FS38	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	2,200
FS39	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	5,380
FS40	08/18/2023	0.5	<0.025	<0.025	<20.0	27.0	<50.0	27.0	27.0	6,730

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

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BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation NMAC: New Mexico Administrative Code requirement where applicable.

GRO: Gasoline Range Organics

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Grey text indicates soil sample removed during excavation activities

# E N S O L U M

				SOIL SAMP RDX Federal 2 WPX I	ABLE 3 CONT LE ANALYTIC 1 #041 & RDX Energy Permia County, New	AL RESULTS Federal 21 #04 an, LLC	12			
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I C	losure Criteria (	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Confirmation So	il Samples (RD)	X Federal 21 #04	12)	1	•	
FS41	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	4,780
FS42	08/18/2023	0.5	<0.025	<0.025	<20.0	30.8	<50.0	30.8	30.8	6,110
FS43	08/18/2023	0.5	<0.025	<0.025	<20.0	463	337	463	800	6,500
FS44	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	7,630
FS45	08/18/2023	0.5	<0.025	<0.025	<20.0	108	78.5	108	187	18,600
FS46	08/18/2023	0.5	<0.025	<0.025	<20.0	94.3	85.0	94.0	179.3	538
FS47	08/18/2023	0.5	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	18,700

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation NMAC: New Mexico Administrative Code requirement where applicable.

#### GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Grey text indicates soil sample removed during excavation activities

.

# ENSOLUM

				RDX Federal 2 WPX	TABLE 4 LE ANALYTIC 1 #041 & RDX Energy Permia County, New	Federal 21 #04 an, LLC	12			
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I C	losure Criteria (	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
			Con	firmation Sidewa	II Soil Samples	(RDX Federal 2	1 #042)			
SW01	08/15/2023	1	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	220
SW02	08/16/2023	1	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	260
SW03	08/15/2023	1	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	98.4
SW04	08/17/2023	2	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	38.2
SW07	08/17/2023	1	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	50.5
			Con	firmation Sidewa	II Soil Samples	(RDX Federal 2	1 #041)			
SW05	08/18/2023	2	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	400
SW06	08/16/2023	4	<0.025	<0.025	<del>&lt;20.0</del>	<25.0	<del>&lt;50.0</del>	<20.0	<del>&lt;20.0</del>	841
SW06	09/06/2023	1	<0.025	<0.025	<20.0	<25.0	<50.0	<20.0	<20.0	88.8

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation

requirement where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities



# **APPENDIX A**

Form C-141

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources Department

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

Page 19 of 264

Incident ID	nAPP2305933356
District RP	
Facility ID	
Application ID	

### **Responsible Party**

Responsible Party WPX Energy Permain, LLC	OGRID 246289
Contact Name Jim Raley	Contact Telephone 575-689-7597
Contact email Jim.Raley@dvn.com	Incident # (assigned by OCD) nAPP2305933356
Contact mailing address 5315 Buena Vista Drive, Carlsbad, NM 88220	

## **Location of Release Source**

Latitude <u>32.0223007</u>

Longitude <u>-103.8916702</u> (NAD 83 in decimal degrees to 5 decimal places)

Site Name: RDX FEDERAL 21 #041	Site Type Oil Well
Date Release Discovered: 02/20/2023	API# (if applicable) 30-015-41269

Unit Letter	Section	Township	Range	County
М	21	26S	30E	Eddy

Surface Owner: State Federal Tribal Private (Name: \_\_\_\_\_

## Nature and Volume of Release

Crude Oil	Volume Released (bbls) 1	Volume Recovered (bbls) 0
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
	reater high leveled and sent approx 1 bbl of oil to flare tre. Light misting occurred on vegetation off pad.	e. Majority of fluids were consumed by fire, a small fire

 $bbl estimate = \frac{saturated soil volume (ft^{2})}{4.21(\frac{ft^{3}}{bbl equivalent})} * estimated soil porosity(\%) + recovered fluids (bbl)$ 

	3 1:38:20 PM State of New Mexico	Incident ID	nAPP2305933356
e 2	Oil Conservation Division	District RP	
		Facility ID	
		Application ID	
19.15.29.7(A) NMAC?			

### **Initial Response**

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

 $\square$  The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

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

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

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

Printed Name: \_\_\_Jim Raley\_\_\_\_\_\_ Title: \_\_\_Environmental Professional\_\_\_\_\_\_

Signature: \_\_\_\_\_\_ Date: \_\_\_\_\_\_ Date: \_\_\_\_\_\_

email: \_\_\_\_jim.raley@dvn.com\_\_\_\_\_

Telephone: 575-689-7597\_\_\_\_\_

OCD Only

Received by: Jocelyn Harimon

Date:	02/28/2023
Date:	02,20,2020

Received by OCD: 9/27/2023 1:38:20 PM Form C-141 State of New Mexico

Page 3

Oil Conservation Division

	Page 21 of 264
Incident ID	nAPP2305933356
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>105 (</u> ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	🛛 Yes 🗌 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

#### Characterization Report Checklist: Each of the following items must be included in the report.

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- $\boxtimes$  Depth to water determination
- Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-mile of the lateral extents of the release
- $\boxtimes$  Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

orm C-1/1	23 1:38:20 PM State of New Mexico		Page 22 of
		Incident ID	nAPP2305933356
ige 4	Oil Conservation Division	District RP	
		Facility ID	
		Application ID	
regulations all operators are r public health or the environm failed to adequately investiga addition, OCD acceptance of and/or regulations.	Date	as and perform corrective actions for re- es not relieve the operator of liability s- oundwater, surface water, human heal sibility for compliance with any other to Environmental Professional E: <u>09/21/2023</u>	eleases which may endanger should their operations have th or the environment. In
OCD Only Received by:		Date:	

Page 6

Oil Conservation Division

Incident ID	nAPP2305933356
District RP	
Facility ID	
Application ID	

## Closure

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

Closure Report Attachment Checklist: Each of the following iter	ms must be included in the closure report	
Closure Report Attachment Checknist: Each of the following the	ms musi ve incluaea in the closure report.	
A scaled site and sampling diagram as described in 19.15.29.11 NMAC		
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)		
Laboratory analyses of final sampling (Note: appropriate ODC)	District office must be notified 2 days prior to final sampling)	
Description of remediation activities		
	ediate contamination that pose a threat to groundwater, surface water, C-141 report does not relieve the operator of responsibility for ons. The responsible party acknowledges they must substantially litions that existed prior to the release or their final land use in D when reclamation and re-vegetation are complete. 	
OCD Only		
Received by:	Date:	
	f liability should their operations have failed to adequately investigate and ater, human health, or the environment nor does not relieve the responsible regulations.	
Closure Approved by:	Date:	
Printed Name:	Title:	

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

Page 24 of 264

Incident ID	nAPP2320173651
District RP	
Facility ID	
Application ID	

### **Responsible Party**

Responsible Party WPX Energy Permian, LLC	OGRID 246289
Contact Name Jim Raley	Contact Telephone 575-689-7597
Contact email Jim.Raley@dvn.com	Incident # (assigned by OCD) nAPP2320173651
Contact mailing address 5315 Buena Vista Drive, Carlsbad, NM 88220	

## **Location of Release Source**

Latitude \_\_\_\_\_32.0224686\_

Longitude \_\_\_\_-103.889541\_\_\_\_ (NAD 83 in decimal degrees to 5 decimal places)

Site Name: RDX FEDERAL 21 #042	Site Type Oil Well
Date Release Discovered: 7/20/2023	API# (if applicable) 30-015-40643

Unit Letter	Section	Township	Range	County
Ν	21	26S	30E	Eddy

Surface Owner: State Federal Tribal Private (Name:

## Nature and Volume of Release

	al(s) Released (Select all that apply and attach calculations or specific		
Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)	
Produced Water	Volume Released (bbls) 17	Volume Recovered (bbls) 0	
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No	
Condensate	Volume Released (bbls)	Volume Recovered (bbls)	
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)	
Other (describe)       Volume/Weight Released (provide units)       Volume/Weight Recovered (provide units)			
Cause of Release: Below	ground flowline developed leak. Allowing for approx	. 17 bbls of produced water to impact pad surface.	
$bbl \ estimate = \frac{saturated \ soil \ v}{4.21(\frac{f}{bbl \ equ})}$	$\frac{olume(ft^2)}{t^3} * estimated soil porosity(\%) + recovered fluids (bbl)$ $\frac{1}{(walkent)}$		

Page 2

### Oil Conservation F

### Oil Conservation Division

Incident ID	nAPP2320173651
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by	
19.15.29.7(A) NMAC?	
🗌 Yes 🖾 No	
If YES, was immediate ne	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

## **Initial Response**

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

 $\square$  The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

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

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Telephone: 575-689-7597

Printed Name: \_\_\_Jim Raley\_\_\_\_\_\_ Title: \_\_\_Environmental Professional\_\_\_\_\_\_

Signature: \_\_\_\_\_\_ Date: \_\_\_\_\_\_ Date: \_\_\_\_\_\_

email: \_\_\_\_jim.raley@dvn.com\_\_\_\_\_

OCD Only

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Received by OCD: 9/27/2023 1:38:20 PM Form C-141 State of New Mexico

Page 3

Oil Conservation Division

	Page 26 of 26-
Incident ID	nAPP2320173651
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	🛛 Yes 🗌 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

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- $\boxtimes$  Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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eceived by OCD: 9/27/202	3 1:38:20 PM State of New Mexico	Page 27 of			
		Incident ID	nAPP2320173651		
age 4	Oil Conservation Division	District RP			
		Facility ID			
		Application ID			
regulations all operators are republic health or the environm failed to adequately investigat addition, OCD acceptance of	nation given above is true and complete to the best of my kn equired to report and/or file certain release notifications and ent. The acceptance of a C-141 report by the OCD does not te and remediate contamination that pose a threat to groundv a C-141 report does not relieve the operator of responsibility	perform corrective actions for re relieve the operator of liability s vater, surface water, human heal	eleases which may endanger should their operations have th or the environment. In		
and/or regulations. Printed Name: James Rale	yTitle: <u>Env</u>	ironmental Professional			
Signature:	Date: <u>09/2</u>	1/2023			
email: jim.raley@dvn.com	Telephone	: <u>575-689-7597</u>			
OCD Only					
Received by:	Dat	e:			

Oil Conservation Division

Incident ID	nAPP2320173651
District RP	
Facility ID	
Application ID	

## Closure

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

<b><u>Closure Report Attachment Checklist</u></b> : Each of the following iter	ms must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29.11	NMAC
Photographs of the remediated site prior to backfill or photos or must be notified 2 days prior to liner inspection)	f the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate ODC)	District office must be notified 2 days prior to final sampling)
Description of remediation activities	
	contamination that pose a threat to groundwater, surface water, C-141 report does not relieve the operator of responsibility for ons. The responsible party acknowledges they must substantially litions that existed prior to the release or their final land use in
	Title: Environmental Professional
Signature:	Date: <u>09/21/2023</u>
email: jim.raley@dvn.com	_Telephone: <u>575-689-7597</u>
OCD Only	
Received by:	Date:
	f liability should their operations have failed to adequately investigate and ater, human health, or the environment nor does not relieve the responsible regulations.
Closure Approved by:	Date:
Printed Name:	Title:

Page 6



# **APPENDIX B**

Well Record

•

		HR					BORI	NG LOG/	MONITORING W	VELL COMPLETION	N DIAGRAM	
							Boring/We		IW-1	Location: RDX Federal C	Com 21-43	
		S O	LUI		NS		Date:			Client:		
Drilling Me	thad		Sampling				Logged By:		9/2020	WPX Energy Drilled By:		
	ir Rotar	v	Sampring		one		Logged By.		nn, P.G.	Talon L	PE	
Gravel Pack	k Type:	5	Gravel Pac	ck Depth Inte	erval:		Seal Type:		Seal Depth Interval:	Latitude:		
	0/20 Sar				lags			lone	None	32.0225	571	
Casing Typ PVC	e:	Diameter: 2-inch		Depth Inter 0-100 fe			Boring Tota	al Depth (ft. B0 1	(3S): 10	Longitude: -103.884	371	
Screen Type	e:	Slot:		Diameter:	Depth 1	Interval:	Well Total	Depth (ft. BGS		Depth to Water (ft. BTOC):	DTW Date:	
PVC		0.010-in	nch	2-inch	100 -	105 ft		1	05	> 105	12/16/2020	
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	NSCS	Sample ID	Litholog	gy/Remarks	Well Completion	
0 5 10 15	NM	L	D	N	N	NM	SP	NS	Pale orange to tan poorly graded fine sand			
20	NM	Н	D	N	Ν	NM	CL	NS	Pale orange/tan/pale red clay, dry, with silt, fine sand, and minor caliche			
25 30 35 40 45	NM	L	D	N	N	NM	SP	NS	Pale orange to pale red poorly graded fine sand			
50 55 60	NM	L	D	N	N	NM	SP	NS	Golden yellow poorly graded fine sand with minor silt and clay			
65 70 75	NM	L	D	N	N	NM	SP	NS	Pale orange to pale red poorly graded fine sand with minor silt/clay			
80 85 90	NM	М	D	N	N	NM	SC	NS	Buff to orange color fine sand with medium sand and clay			
95	NM	Н	D	N	Ν	NM	CL	NS	Brown orange clay w	vith silt and fine sand	†	
100 105	NM	Н	D	N	N	NM	SC	NS	Golden yellow and buff colored clay with fine sand - TD Boring: 110' BGS; Sand 110' 105' BGS			



# APPENDIX C

Lithologic Soil Sampling Logs

•

						Sample Name: PH01	Date: 8/14/23		
		6				Site Name: RDX Federal 21 #042			
	ΕN	3		Incident Number: nAPP23201736	51				
				Job Number: 03A1987093					
LI'	THOLOGIC	C / SOIL S	AMPLING	Logged By: Cole Burton	Method:				
Coordinates: 32.0	)2229, -103.8	38968			Hole Diameter: 3'	Total Depth: 3'			
Comments: Field soil to distilled wa				nethod fo	r chloride. Chloride test performed	d with 1:1 dilution factor of			
Moisture Content (ppm) ( ppm) ( ppm) ( ppm) ( ppm) ( ppm) ( poth ( tpm) ( pbth ( tpm) ( poth ( tpm) ( poth ( tpm) ( poth ( tpm) ( poth ( tpm) ( poth ( tpm) ( poth ( tpm) ( tpm) ( tppm) ( tpm)						Lithologic De	scriptions		
М	Y	PH01	0	0	CCHE	Caliche, Light brown	n, Staining, Odor		
D	N	PH01	- 1 -	- - - 1 -	ССНЕ	Caliche, Light brown, So			
D 600	N	PH01	2	2	SP-SM	Sand w/ some silt, Light	brown, Poorly graded		
D 550	N	PH01	3	3	SP-SM	SAA			
				Tot	al Depth	3'			
Total Depth 3'									

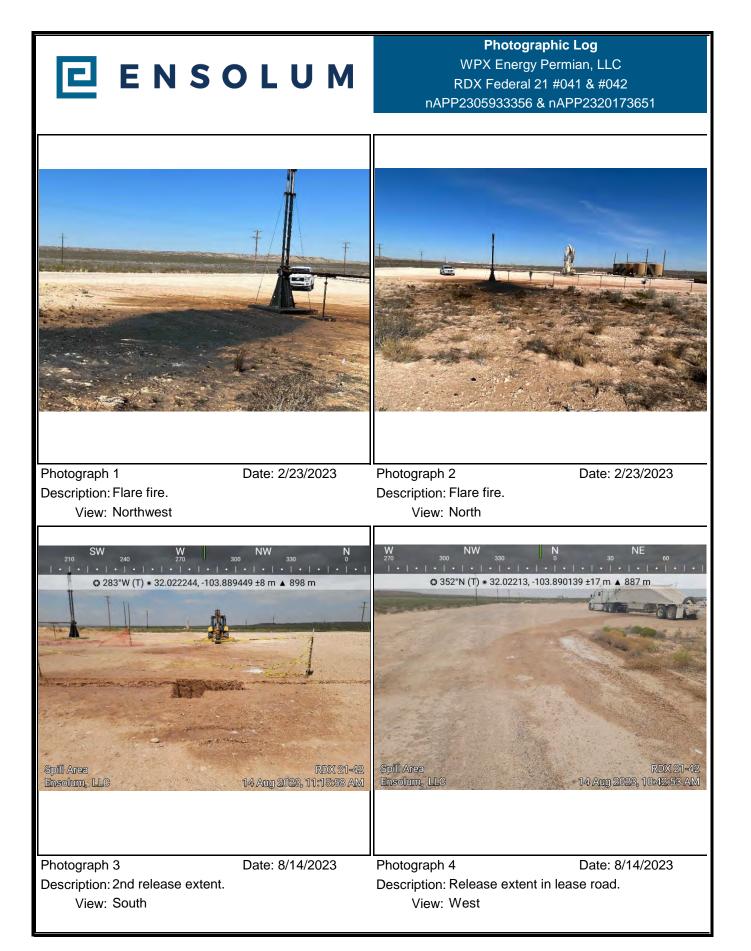
•

								Sample Name: PH02	Date: 8/14/23	
			NI	C	ΟΙ	Site Name: RDX Federal 21 #04				
				3		Incident Number: nAPP232017				
						Job Number: 03A1987093				
		lithol	OGI	C / SOIL S	SAMPLING	Logged By: Cole Burton	Method:			
	inates: 32							Hole Diameter: 3'	Total Depth: 3'	
Comments: Field screening conducted with the MOHR titration method for chloride. Chloride test performed with 1:1 dilution factor o soil to distilled water. No correction factors included.										
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic	Descriptions	
Μ			Y	PH02	0	0	CCHE	Caliche, Light bro	own, Staining, Odor	
м			N	PH02	1	- - - 1 -	SP-SM	Sand w/ some silt, Lig	ht brown, Poorly graded	
М			Ν	PH02	2	2	SP-SM	S	ĀA	
D	200		N	PH02	3	3	SP-SM	s	AA	
	-		-		-	Tot	al Depth	3'		
	Total Depth 3'									



APPENDIX D

Photographic Log





## 

#### Photographic Log WPX Energy Permian, LLC RDX Federal 21 #041 & #042 nAPP2305933356 & nAPP2320173651







## APPENDIX E

Laboratory Analytical Reports & Chain-of-Custody Documentation





5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

**Practical Solutions for a Better Tomorrow** 

## **Analytical Report**

Devon Energy - Carlsbad

Project Name: RDX

RDX Federal 21 #041

Work Order: E304001

Job Number: 01058-0007

Received: 4/3/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 4/6/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported. Date Reported: 4/6/23

Jerrod Inskeep 6488 7 Rivers Hwy Artesia, NM 88210

Project Name: RDX Federal 21 #041 Workorder: E304001 Date Received: 4/3/2023 8:00:00AM

Jerrod Inskeep,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/3/2023 8:00:00AM, under the Project Name: RDX Federal 21 #041.

The analytical test results summarized in this report with the Project Name: RDX Federal 21 #041 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman Laboratory Director Office: 505-632-1881 Cell: 775-287-1762 whinchman@envirotech-inc.com

Field Offices:

Southern New Mexico Area Lynn Jarboe

Technical Representative/Client Services Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@envirotech-inc.com

Raina Schwanz Laboratory Administrator Office: 505-632-1881 rainaschwanz@envirotech-inc.com Alexa Michaels Sample Custody Officer Office: 505-632-1881 labadmin@envirotech-inc.com

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Envirotech Web Address: www.envirotech-inc.com



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## Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
SS01-0'	5
SS02-0'	6
SS03-0'	7
SS04-0'	8
SS05-0.5'	9
BG01-1'	10
QC Summary Data	11
QC - Volatile Organic Compounds by EPA 8260B	11
QC - Nonhalogenated Organics by EPA 8015D - GRO	12
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	13
QC - Anions by EPA 300.0/9056A	14
Definitions and Notes	15
Chain of Custody etc.	16

1	Received by OCD: 9/27/2023 1:38:20 PM			Page	43 of 264
		Sample Sum	mary		
	Devon Energy - Carlsbad	Project Name:	RDX Federal 21 #041	Derrer et e de	
	6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:	
	Artesia NM, 88210	Project Manager:	Jerrod Inskeep	04/06/23 13:59	

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
SS01-0'	E304001-01A Soil	03/30/23	04/03/23	Glass Jar, 2 oz.
SS02-0'	E304001-02A Soil	03/30/23	04/03/23	Glass Jar, 2 oz.
SS03-0'	E304001-03A Soil	03/30/23	04/03/23	Glass Jar, 2 oz.
SS04-0'	E304001-04A Soil	03/30/23	04/03/23	Glass Jar, 2 oz.
SS05-0.5'	E304001-05A Soil	03/30/23	04/03/23	Glass Jar, 2 oz.
BG01-1'	E304001-06A Soil	03/30/23	04/03/23	Glass Jar, 2 oz.



	S	Sample D	ata			
Devon Energy - Carlsbad	Project Nam	e: RD2	K Federal 21			
6488 7 Rivers Hwy	Project Num		58-0007			Reported:
Artesia NM, 88210	Project Mana	ager: Jerro	od Inskeep			4/6/2023 1:59:10PM
		SS01-0'				
		E304001-01				
		Reporting				
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Α	Analyst: SL		Batch: 2313098
Benzene	ND	0.0250	1	04/03/23	04/04/23	
Ethylbenzene	ND	0.0250	1	04/03/23	04/04/23	
Toluene	ND	0.0250	1	04/03/23	04/04/23	
o-Xylene	ND	0.0250	1	04/03/23	04/04/23	
o,m-Xylene	ND	0.0500	1	04/03/23	04/04/23	
Total Xylenes	ND	0.0250	1	04/03/23	04/04/23	
Surrogate: Bromofluorobenzene		91.3 %	70-130	04/03/23	04/04/23	
Surrogate: 1,2-Dichloroethane-d4		95.5 %	70-130	04/03/23	04/04/23	
Surrogate: Toluene-d8		104 %	70-130	04/03/23	04/04/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Α	Analyst: SL		Batch: 2313098
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/23	04/04/23	
Surrogate: Bromofluorobenzene		91.3 %	70-130	04/03/23	04/04/23	
Surrogate: 1,2-Dichloroethane-d4		95.5 %	70-130	04/03/23	04/04/23	
Surrogate: Toluene-d8		104 %	70-130	04/03/23	04/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Α	Analyst: JL		Batch: 2314032
Diesel Range Organics (C10-C28)	ND	25.0	1	04/05/23	04/05/23	
Dil Range Organics (C28-C36)	ND	50.0	1	04/05/23	04/05/23	
Surrogate: n-Nonane		105 %	50-200	04/05/23	04/05/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	Analyst: RAS		Batch: 2314020
Chloride	250	20.0	1	04/04/23	04/04/23	



	5	ample D	ala			
Devon Energy - Carlsbad	Project Name:	RDZ	K Federal 21	#041		
6488 7 Rivers Hwy	Project Numb	er: 0105	58-0007			Reported:
Artesia NM, 88210	Project Manag	ger: Jerro	od Inskeep			4/6/2023 1:59:10PM
		SS02-0'				
		E304001-02				
		Reporting				
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	Analyst: SL		Batch: 2313098
Benzene	ND	0.0250	1	04/03/23	04/04/23	
Ethylbenzene	ND	0.0250	1	04/03/23	04/04/23	
Toluene	ND	0.0250	1	04/03/23	04/04/23	
-Xylene	ND	0.0250	1	04/03/23	04/04/23	
,m-Xylene	ND	0.0500	1	04/03/23	04/04/23	
Total Xylenes	ND	0.0250	1	04/03/23	04/04/23	
Surrogate: Bromofluorobenzene		90.3 %	70-130	04/03/23	04/04/23	
urrogate: 1,2-Dichloroethane-d4		96.9 %	70-130	04/03/23	04/04/23	
urrogate: Toluene-d8		104 %	70-130	04/03/23	04/04/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	ŀ	Analyst: SL		Batch: 2313098
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/23	04/04/23	
Surrogate: Bromofluorobenzene		90.3 %	70-130	04/03/23	04/04/23	
urrogate: 1,2-Dichloroethane-d4		96.9 %	70-130	04/03/23	04/04/23	
urrogate: Toluene-d8		104 %	70-130	04/03/23	04/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	I	Analyst: JL		Batch: 2314032
Diesel Range Organics (C10-C28)	ND	25.0	1	04/05/23	04/05/23	
Dil Range Organics (C28-C36)	ND	50.0	1	04/05/23	04/05/23	
Surrogate: n-Nonane		101 %	50-200	04/05/23	04/05/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	Analyst: RAS		Batch: 2314020
Chloride	ND	40.0	2	04/04/23	04/04/23	



	D.	ample D	ata			
Devon Energy - Carlsbad 6488 7 Rivers Hwy	Project Name: Project Numb		K Federal 21 58-0007	#041		Reported:
Artesia NM, 88210	Project Manag		od Inskeep			4/6/2023 1:59:10PM
	, ,	-	I			
		SS03-0'				
		E304001-03				
		Reporting				
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	nalyst: SL		Batch: 2313098
Benzene	ND	0.0250	1	04/03/23	04/04/23	
Ethylbenzene	ND	0.0250	1	04/03/23	04/04/23	
Foluene	ND	0.0250	1	04/03/23	04/04/23	
p-Xylene	ND	0.0250	1	04/03/23	04/04/23	
o,m-Xylene	ND	0.0500	1	04/03/23	04/04/23	
Total Xylenes	ND	0.0250	1	04/03/23	04/04/23	
Surrogate: Bromofluorobenzene		89.4 %	70-130	04/03/23	04/04/23	
Surrogate: 1,2-Dichloroethane-d4		95.7 %	70-130	04/03/23	04/04/23	
Surrogate: Toluene-d8		103 %	70-130	04/03/23	04/04/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Α	nalyst: SL		Batch: 2313098
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/23	04/04/23	
Surrogate: Bromofluorobenzene		89.4 %	70-130	04/03/23	04/04/23	
Surrogate: 1,2-Dichloroethane-d4		95.7 %	70-130	04/03/23	04/04/23	
Surrogate: Toluene-d8		103 %	70-130	04/03/23	04/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	nalyst: JL		Batch: 2314032
Diesel Range Organics (C10-C28)	ND	25.0	1	04/05/23	04/05/23	
Dil Range Organics (C28-C36)	ND	50.0	1	04/05/23	04/05/23	
Surrogate: n-Nonane		114 %	50-200	04/05/23	04/05/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: RAS		Batch: 2314020
Chloride	ND	20.0	1	04/04/23	04/04/23	



	D	ample D	ala					
Devon Energy - Carlsbad	Project Name:	RDX	K Federal 21	#041				
6488 7 Rivers Hwy	Project Numbe	er: 0105						
Artesia NM, 88210	Project Manag	ger: Jerro	od Inskeep			4/6/2023 1:59:10PM		
		SS04-0'						
		E304001-04						
		Reporting						
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes		
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	analyst: SL		Batch: 2313098		
Benzene	ND	0.0250	1	04/03/23	04/04/23			
Ethylbenzene	ND	0.0250	1	04/03/23	04/04/23			
Toluene	ND	0.0250	1	04/03/23	04/04/23			
p-Xylene	ND	0.0250	1	04/03/23	04/04/23			
o,m-Xylene	ND	0.0500	1	04/03/23	04/04/23			
Fotal Xylenes	ND	0.0250	1	04/03/23	04/04/23			
Surrogate: Bromofluorobenzene		90.6 %	70-130	04/03/23	04/04/23			
Surrogate: 1,2-Dichloroethane-d4		95.8 %	70-130	04/03/23	04/04/23			
Surrogate: Toluene-d8		104 %	70-130	04/03/23	04/04/23			
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	ŀ	analyst: SL		Batch: 2313098		
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/23	04/04/23			
Surrogate: Bromofluorobenzene		90.6 %	70-130	04/03/23	04/04/23			
Surrogate: 1,2-Dichloroethane-d4		95.8 %	70-130	04/03/23	04/04/23			
Surrogate: Toluene-d8		104 %	70-130	04/03/23	04/04/23			
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	I	analyst: JL		Batch: 2314032		
Diesel Range Organics (C10-C28)	ND	25.0	1	04/05/23	04/05/23			
Dil Range Organics (C28-C36)	ND	50.0	1	04/05/23	04/05/23			
Surrogate: n-Nonane		113 %	50-200	04/05/23	04/05/23			
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	analyst: RAS		Batch: 2314020		
Chloride	ND	20.0	1	04/04/23	04/04/23			



	5	ample D	ala				
Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name Project Numb Project Manag	oer: 0103	X Federal 2 58-0007 od Inskeep	1 #041			<b>Reported:</b> 4/6/2023 1:59:10PM
		SS05-0.5'					
		E304001-05					
		Reporting					
Analyte	Result	Limit	Dilu	ition	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: S	SL		Batch: 2313098
Benzene	ND	0.0250	1	1	04/03/23	04/04/23	
Ethylbenzene	ND	0.0250	1	1	04/03/23	04/04/23	
Toluene	ND	0.0250	1	1	04/03/23	04/04/23	
p-Xylene	ND	0.0250	1	1	04/03/23	04/04/23	
o,m-Xylene	ND	0.0500	1	1	04/03/23	04/04/23	
Total Xylenes	ND	0.0250	1	1	04/03/23	04/04/23	
Surrogate: Bromofluorobenzene		89.8 %	70-130		04/03/23	04/04/23	
Surrogate: 1,2-Dichloroethane-d4		97.1 %	70-130		04/03/23	04/04/23	
Surrogate: Toluene-d8		103 %	70-130		04/03/23	04/04/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: S	SL		Batch: 2313098
Gasoline Range Organics (C6-C10)	ND	20.0	1	1	04/03/23	04/04/23	
Surrogate: Bromofluorobenzene		89.8 %	70-130		04/03/23	04/04/23	
Surrogate: 1,2-Dichloroethane-d4		97.1 %	70-130		04/03/23	04/04/23	
Surrogate: Toluene-d8		103 %	70-130		04/03/23	04/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: J	L		Batch: 2314032
Diesel Range Organics (C10-C28)	ND	25.0	1	1	04/05/23	04/05/23	
Dil Range Organics (C28-C36)	ND	50.0	1	1	04/05/23	04/05/23	
Surrogate: n-Nonane		113 %	50-200		04/05/23	04/05/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: I	RAS		Batch: 2314020
Chloride	ND	100	4	5	04/04/23	04/05/23	



Sampl	e Data
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		ample D				
Devon Energy - Carlsbad	Project Name:	RD2	K Federal 21	#041		
6488 7 Rivers Hwy	Project Numb	er: 0105	58-0007			Reported:
Artesia NM, 88210	Project Manag	ger: Jerro	od Inskeep			4/6/2023 1:59:10PM
		BG01-1'				
		E304001-06				
		Reporting				
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	nalyst: SL		Batch: 2313098
Benzene	ND	0.0250	1	04/03/23	04/04/23	
Ethylbenzene	ND	0.0250	1	04/03/23	04/04/23	
Toluene	ND	0.0250	1	04/03/23	04/04/23	
o-Xylene	ND	0.0250	1	04/03/23	04/04/23	
,m-Xylene	ND	0.0500	1	04/03/23	04/04/23	
Total Xylenes	ND	0.0250	1	04/03/23	04/04/23	
Surrogate: Bromofluorobenzene		90.5 %	70-130	04/03/23	04/04/23	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130	04/03/23	04/04/23	
urrogate: Toluene-d8		104 %	70-130	04/03/23	04/04/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	analyst: SL		Batch: 2313098
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/03/23	04/04/23	
Surrogate: Bromofluorobenzene		90.5 %	70-130	04/03/23	04/04/23	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130	04/03/23	04/04/23	
urrogate: Toluene-d8		104 %	70-130	04/03/23	04/04/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	analyst: JL		Batch: 2314032
Diesel Range Organics (C10-C28)	ND	25.0	1	04/05/23	04/05/23	
Dil Range Organics (C28-C36)	ND	50.0	1	04/05/23	04/05/23	
Surrogate: n-Nonane		111 %	50-200	04/05/23	04/05/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	analyst: RAS		Batch: 2314020
Chloride	ND	20.0	1	04/04/23	04/04/23	



## **QC Summary Data**

	Project Number:		058-0007					
	Project Manager:	Jei	rrod Inskeep					4/6/2023 1:59:10PM
,	Volatile Organic	e Compou	unds by EP.	A 82601	B			Analyst: SL
	Reporting	Spike	Source		Rec		RPD	
Result	Limit	Level	Result	Rec	Limits	RPD	Limit	
mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
						Prepared: 04	4/03/23 An	alyzed: 04/03/23
ND	0.0250							-
ND	0.0250							
ND	0.0250							
ND	0.0250							
ND	0.0500							
ND	0.0250							
0.476		0.500		95.2	70-130			
		0.500		97.7	70-130			
0.514		0.500		103	70-130			
						Prenarad. 0	1/03/23 1-	alwzed. 04/02/22
2.20		2.50		02.0	70.120		103/23 All	aryzou. 0 <del>4</del> /03/23
	0.0250							
0.494								
0.510		0.500		102	70-130			
						Prepared: 04	4/03/23 An	alyzed: 04/03/23
2.24	0.0250	2.50	ND	89.7	48-131			
2.39	0.0250	2.50	ND	95.4	45-135			
2.31	0.0250	2.50	ND	92.3	48-130			
2.41	0.0250	2.50	ND	96.4	43-135			
4.74	0.0500	5.00	ND	94.8	43-135			
7.15	0.0250	7.50	ND	95.3	43-135			
0.500		0.500		99.9	70-130			
0.507		0.500		101	70-130			
0.504		0.500		101	70-130			
			Source: I	E303162-	01	Prepared: 04	4/03/23 An	alyzed: 04/03/23
2.25	0.0250	2.50	ND	90.0	48-131	0.378	23	
2.44	0.0250	2.50	ND	97.6	45-135	2.26	27	
2.35	0.0250	2.50	ND	94.2	48-130	2.04	24	
2.46	0.0250	2.50	ND	98.5	43-135	2.16	27	
4.87	0.0500	5.00	ND	97.4	43-135	2.71	27	
7.33	0.0250	7.50	ND	97.8	43-135	2.52	27	
0.507		0.500		101	70-130			
0.501		0.500		100	70-130			
0.501				100	/0 150			
-	Result mg/kg ND ND ND ND ND ND ND 0.476 0.489 0.514 2.30 2.47 2.38 2.50 4.93 7.43 0.511 0.494 0.510 2.24 2.39 2.31 2.41 4.74 7.15 0.500 0.507 0.504 2.25 2.44 2.35 2.46 4.87 7.33 0.507	Constraint         Reporting Limit mg/kg           ND         0.0250           0.476         0.489           0.514         0.0250           2.30         0.0250           2.47         0.0250           2.38         0.0250           2.39         0.0250           4.93         0.0500           7.43         0.0250           2.39         0.0250           2.31         0.0250           2.31         0.0250           2.41         0.0250           2.50         0.0250           2.51         0.0250           2.52         0.0250           2.33         0.0250           2.44         0.0250           2.55         0.0250           2.46         0.0250           2.46         0.0250           2.46 </td <td>Volatile Organic Comporting Limit         Spike Level           Result         mg/kg         mg/kg           ND         0.0250           0.476         0.500           0.476         0.500           0.514         0.500           2.30         0.0250         2.50           2.30         0.0250         2.50           2.47         0.0250         2.50           2.50         0.0250         2.50           2.50         0.0250         2.50           2.50         0.500         7.50           0.511         0.500         5.00           0.510         0.500         2.50           2.39         0.0250         2.50           2.31         0.0250         2.50           2.31         0.0250         7.50           0.500         0.500         0.500<td>Volatile Organic Compounds by EP.           Result mg/kg         Reporting Mg/kg         Spike Level mg/kg         Source Result mg/kg           ND         0.0250         mg/kg         mg/kg           ND         0.0250         mg/kg         mg/kg           ND         0.0250         mg/kg         mg/kg           ND         0.0250         mg/kg         mg/kg           0.0750         ND         0.0250         mg/kg           0.476         0.500         0         0           0.476         0.500         0         0           0.476         0.500         0         0           0.477         0.0250         2.50         0           2.30         0.0250         2.50         0           2.47         0.0250         2.50         0           2.50         0.500         5.00         0           7.43         0.0250         7.50         0           0.511         0.500         5.00         ND           0.510         0.500         ND         0           2.34         0.0250         2.50         ND           2.39         0.0250         2.50         ND</td><td>Image: Constraint of the constraint of the</td><td>Volatile Organic Compounds by EPA 8260B           Result mg/kg         Reporting mg/kg         Spike mg/kg         Source Result mg/kg         Rec %         Rec Limits %           ND         0.0250         mg/kg         %         %         %           ND         0.0250           %         %           ND         0.0250            %         %           ND         0.0250            %         %         %           0.476         0.500         95.2         70-130         %         70-130           0.489         0.500         97.7         70-130           0.4489         0.500         98.6         70-130           2.30         0.0250         2.50         98.6         70-130           2.47         0.0250         2.50         98.6         70-130           2.50         0.0250         2.50         98.6         70-130           2.47         0.0250         2.50         99.9         70-130           2.44         0.0250         2.50         99.0         70-130           0.511         0.500         5.00         102</td><td>Volatile Organic Compounds by EPA 8260B           Result mg/kg         Reporting Mg/kg         Spike Level mg/kg         Source Result mg/kg         Rec %         Rec %         Rec %         Rep %         RPD %           ND         0.0250         mg/kg         %<!--</td--><td>Note transport           Volatile Organic Compounds by EPA \$260B           Result mg/kg         Reporting mg/kg         Spike mg/kg         Source mg/kg         Rec mg/kg         Rec %         Rec %         Rec %         RPD %         RPD %         Limit %           ND         0.0250         mg/kg         mg/kg         %         %         %         %         %           ND         0.0250         ND         0.0250         ND         ND         0.0250           ND         0.0250         0.500         95.2         70-130             0.476         0.500         97.7         70-130              0.476         0.500         97.0         70-130              0.474         0.505         2.50         98.6         70-130             2.47         0.0250         2.50         99.9         70-130              2.59         0.0250         2.50         99.0         70-130              2.47         0.0250         2.50         ND         98.6         70-130</td></td></td>	Volatile Organic Comporting Limit         Spike Level           Result         mg/kg         mg/kg           ND         0.0250           0.476         0.500           0.476         0.500           0.514         0.500           2.30         0.0250         2.50           2.30         0.0250         2.50           2.47         0.0250         2.50           2.50         0.0250         2.50           2.50         0.0250         2.50           2.50         0.500         7.50           0.511         0.500         5.00           0.510         0.500         2.50           2.39         0.0250         2.50           2.31         0.0250         2.50           2.31         0.0250         7.50           0.500         0.500         0.500 <td>Volatile Organic Compounds by EP.           Result mg/kg         Reporting Mg/kg         Spike Level mg/kg         Source Result mg/kg           ND         0.0250         mg/kg         mg/kg           ND         0.0250         mg/kg         mg/kg           ND         0.0250         mg/kg         mg/kg           ND         0.0250         mg/kg         mg/kg           0.0750         ND         0.0250         mg/kg           0.476         0.500         0         0           0.476         0.500         0         0           0.476         0.500         0         0           0.477         0.0250         2.50         0           2.30         0.0250         2.50         0           2.47         0.0250         2.50         0           2.50         0.500         5.00         0           7.43         0.0250         7.50         0           0.511         0.500         5.00         ND           0.510         0.500         ND         0           2.34         0.0250         2.50         ND           2.39         0.0250         2.50         ND</td> <td>Image: Constraint of the constraint of the</td> <td>Volatile Organic Compounds by EPA 8260B           Result mg/kg         Reporting mg/kg         Spike mg/kg         Source Result mg/kg         Rec %         Rec Limits %           ND         0.0250         mg/kg         %         %         %           ND         0.0250           %         %           ND         0.0250            %         %           ND         0.0250            %         %         %           0.476         0.500         95.2         70-130         %         70-130           0.489         0.500         97.7         70-130           0.4489         0.500         98.6         70-130           2.30         0.0250         2.50         98.6         70-130           2.47         0.0250         2.50         98.6         70-130           2.50         0.0250         2.50         98.6         70-130           2.47         0.0250         2.50         99.9         70-130           2.44         0.0250         2.50         99.0         70-130           0.511         0.500         5.00         102</td> <td>Volatile Organic Compounds by EPA 8260B           Result mg/kg         Reporting Mg/kg         Spike Level mg/kg         Source Result mg/kg         Rec %         Rec %         Rec %         Rep %         RPD %           ND         0.0250         mg/kg         %<!--</td--><td>Note transport           Volatile Organic Compounds by EPA \$260B           Result mg/kg         Reporting mg/kg         Spike mg/kg         Source mg/kg         Rec mg/kg         Rec %         Rec %         Rec %         RPD %         RPD %         Limit %           ND         0.0250         mg/kg         mg/kg         %         %         %         %         %           ND         0.0250         ND         0.0250         ND         ND         0.0250           ND         0.0250         0.500         95.2         70-130             0.476         0.500         97.7         70-130              0.476         0.500         97.0         70-130              0.474         0.505         2.50         98.6         70-130             2.47         0.0250         2.50         99.9         70-130              2.59         0.0250         2.50         99.0         70-130              2.47         0.0250         2.50         ND         98.6         70-130</td></td>	Volatile Organic Compounds by EP.           Result mg/kg         Reporting Mg/kg         Spike Level mg/kg         Source Result mg/kg           ND         0.0250         mg/kg         mg/kg           ND         0.0250         mg/kg         mg/kg           ND         0.0250         mg/kg         mg/kg           ND         0.0250         mg/kg         mg/kg           0.0750         ND         0.0250         mg/kg           0.476         0.500         0         0           0.476         0.500         0         0           0.476         0.500         0         0           0.477         0.0250         2.50         0           2.30         0.0250         2.50         0           2.47         0.0250         2.50         0           2.50         0.500         5.00         0           7.43         0.0250         7.50         0           0.511         0.500         5.00         ND           0.510         0.500         ND         0           2.34         0.0250         2.50         ND           2.39         0.0250         2.50         ND	Image: Constraint of the	Volatile Organic Compounds by EPA 8260B           Result mg/kg         Reporting mg/kg         Spike mg/kg         Source Result mg/kg         Rec %         Rec Limits %           ND         0.0250         mg/kg         %         %         %           ND         0.0250           %         %           ND         0.0250            %         %           ND         0.0250            %         %         %           0.476         0.500         95.2         70-130         %         70-130           0.489         0.500         97.7         70-130           0.4489         0.500         98.6         70-130           2.30         0.0250         2.50         98.6         70-130           2.47         0.0250         2.50         98.6         70-130           2.50         0.0250         2.50         98.6         70-130           2.47         0.0250         2.50         99.9         70-130           2.44         0.0250         2.50         99.0         70-130           0.511         0.500         5.00         102	Volatile Organic Compounds by EPA 8260B           Result mg/kg         Reporting Mg/kg         Spike Level mg/kg         Source Result mg/kg         Rec %         Rec %         Rec %         Rep %         RPD %           ND         0.0250         mg/kg         % </td <td>Note transport           Volatile Organic Compounds by EPA \$260B           Result mg/kg         Reporting mg/kg         Spike mg/kg         Source mg/kg         Rec mg/kg         Rec %         Rec %         Rec %         RPD %         RPD %         Limit %           ND         0.0250         mg/kg         mg/kg         %         %         %         %         %           ND         0.0250         ND         0.0250         ND         ND         0.0250           ND         0.0250         0.500         95.2         70-130             0.476         0.500         97.7         70-130              0.476         0.500         97.0         70-130              0.474         0.505         2.50         98.6         70-130             2.47         0.0250         2.50         99.9         70-130              2.59         0.0250         2.50         99.0         70-130              2.47         0.0250         2.50         ND         98.6         70-130</td>	Note transport           Volatile Organic Compounds by EPA \$260B           Result mg/kg         Reporting mg/kg         Spike mg/kg         Source mg/kg         Rec mg/kg         Rec %         Rec %         Rec %         RPD %         RPD %         Limit %           ND         0.0250         mg/kg         mg/kg         %         %         %         %         %           ND         0.0250         ND         0.0250         ND         ND         0.0250           ND         0.0250         0.500         95.2         70-130             0.476         0.500         97.7         70-130              0.476         0.500         97.0         70-130              0.474         0.505         2.50         98.6         70-130             2.47         0.0250         2.50         99.9         70-130              2.59         0.0250         2.50         99.0         70-130              2.47         0.0250         2.50         ND         98.6         70-130



## **QC Summary Data**

		QC DI		ary Date	•				
Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210		Project Name: Project Number: Project Manager:	0	RDX Federal 21 1058-0007 errod Inskeep	#041				<b>Reported:</b> 4/6/2023 1:59:10PM
	No	onhalogenated O	rganics	by EPA 801	5D - GI	RO			Analyst: SL
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2313098-BLK1)							Prepared: 0	4/03/23	Analyzed: 04/03/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.476		0.500		95.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.7	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			
LCS (2313098-BS2)							Prepared: 0	4/03/23	Analyzed: 04/03/23
Gasoline Range Organics (C6-C10)	45.3	20.0	50.0		90.5	70-130			
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.3	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.2	70-130			
Matrix Spike (2313098-MS2)				Source: l	E303162-(	)1	Prepared: 0	4/03/23	Analyzed: 04/03/23
Gasoline Range Organics (C6-C10)	49.4	20.0	50.0	ND	98.8	70-130			
Surrogate: Bromofluorobenzene	0.497		0.500		99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.6	70-130			
Surrogate: Toluene-d8	0.503		0.500		101	70-130			
Matrix Spike Dup (2313098-MSD2)				Source: l	E <b>303162-</b> (	)1	Prepared: 0	4/03/23	Analyzed: 04/03/23
Gasoline Range Organics (C6-C10)	48.2	20.0	50.0	ND	96.5	70-130	2.33	20	
			0.500		101	70 120			
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4	0.503 0.509		0.500 0.500		101 102	70-130 70-130			



## **QC Summary Data**

		$\mathbf{x} \mathbf{v} \mathbf{v}$		ary Date					
Devon Energy - Carlsbad 6488 7 Rivers Hwy		Project Name: Project Number:		DX Federal 21 1058-0007	1 #041				Reported:
Artesia NM, 88210		Project Manager:	Je	errod Inskeep					4/6/2023 1:59:10PM
	Nonha	logenated Org	anics by	EPA 8015I	) - DRO	/ORO			Analyst: JL
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2314032-BLK1)							Prepared: 0	4/05/23 A	Analyzed: 04/05/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	58.5		50.0		117	50-200			
LCS (2314032-BS1)							Prepared: 0	4/05/23 A	Analyzed: 04/05/23
Diesel Range Organics (C10-C28)	273	25.0	250		109	38-132			
Surrogate: n-Nonane	48.3		50.0		96.6	50-200			
Matrix Spike (2314032-MS1)				Source:	E304013-	09	Prepared: 0	4/05/23 A	Analyzed: 04/05/23
Diesel Range Organics (C10-C28)	279	25.0	250	ND	112	38-132			
Surrogate: n-Nonane	43.7		50.0		87.5	50-200			
Matrix Spike Dup (2314032-MSD1)				Source:	E304013-	09	Prepared: 0	4/05/23 A	Analyzed: 04/05/23
Diesel Range Organics (C10-C28)	287	25.0	250	ND	115	38-132	2.62	20	
Surrogate: n-Nonane	48.4		50.0		96.7	50-200			



## **QC Summary Data**

		<b>C</b>	-						
Devon Energy - Carlsbad		Project Name:	I	RDX Federal 2	1 #041				Reported:
6488 7 Rivers Hwy		Project Number	: (	01058-0007					•
Artesia NM, 88210		Project Manager	r: J	errod Inskeep					4/6/2023 1:59:10PM
		Anions	by EPA	300.0/90564	4				Analyst: RAS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2314020-BLK1)							Prepared: 0	4/04/23 <i>A</i>	Analyzed: 04/04/23
Chloride	ND	20.0							
LCS (2314020-BS1)							Prepared: 0	4/04/23 A	Analyzed: 04/04/23
Chloride	246	20.0	250		98.3	90-110			
Matrix Spike (2314020-MS1)				Source:	E304001-0	)1	Prepared: 0	4/04/23 A	Analyzed: 04/04/23
Chloride	490	20.0	250	250	95.9	80-120			
Matrix Spike Dup (2314020-MSD1)				Source:	E304001-(	)1	Prepared: 0	4/04/23 A	Analyzed: 04/04/23
Chloride	525	20.0	250	250	110	80-120	7.02	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Devon Ene	rgy - Carlsbad	Project Name:	RDX Federal 21 #041	
6488 7 Riv	ers Hwy	Project Number:	01058-0007	Reported:
Artesia NM	I, 88210	Project Manager:	Jerrod Inskeep	04/06/23 13:59

- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Reproject Information

												Page	
Client:     Devon     Bill To       Project:     RDX Federal 21 #041     Attention:     Jim Raley       Project Manager:     Jerrod Inskeep     Address:     5315 Buena Vista Dr       Address:     1224 Standpipe Rd     City, State, Zip:     Calsbad, NM 8822	20	E304001 010F								EPA F CWA	Program SDWA RCRA		
City, State, Zip: Carlsbad, NM 88220       Phone: 575-689-7597         Phone: 505-382-1211       Email: jim.raley@dvn.com         Email: jerrod.inskeep@wescominc.com       Email: jim.raley@dvn.com         Report due by:       Email: jim.raley@dvn.com		RO by 8015	RO by 8015	y 8021	8260	6010	Chloride 300.0		MM	TX		State DUT AZ	TX
Time Sampled         Date Sampled         Matrix         No. of Containers         Sample ID	Lab Number	DRO/ORO by	GRO/DRO by	BTEX by 8021	VOC by 8260	Metals 6010	Chlorid		BGDOC	BGDOC		Remark	5
10:07 3/30/23 Soil 1 Jar SS01 - 0'	1								x				
10:13 3/30/23 Soil 1 Jar SS02 - 0'	a								x				
10:17 3/30/23 Soil 1 Jar SS03 - 0'	3								x				
10:23 3/30/23 Soil 1 Jar SS04 - 0'	4								x				
10:34 3/30/23 Soil 1 Jar SS05 - 0.5'	5								x				
9:53 3/30/23 Soil 1 Jar BG01 - 1'	0								x				
													_
								-					
Additional Instructions: Kept on ice, Please CC: cole.burton@wescominc.com, shar.harves iason.iohnsen@wescominc.com. iustin.wenner@wescominc.com	ster@wesco	minc	.com	n, jim	n.rale	ey@d	vn.com,	jerrro	od.in	skeep@	wescominc.co	om,	
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabel date or time of collection is considered fraud and may be grounds for legal action. <u>Sampled by:</u>	ling the sample l	ocation	n,								e received on ice the da an 6 °C on subsequent		led or receive
Relinquished by: (Signature) ARRING ARRING Relinquished by: (Signature) Date Time Received by: (Signature) Received by: (Signature) Received by: (Signature)	Date 3-91-2 Date		Time 12 Time			Rece	eived on	ice:	L)	b Use ( ) N	Only		
Michelli Cungelis 3-31-23 1630 Kareng für Relingvished by: (Signature) Date Time Received by: (Signature) 231-23 4 7 45	Date 11 2	<u>-3</u> 73	Time	.0	0	<u>T1</u>		-L	<u>T2</u>		<u>T3</u>		
Sample Matrix: S - Solid, Sg - Sludge, A - Aqueous, O - Other	Container	Type				oly/pl		- ambe					-
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples is applicable only to those samples received by the laboratory with this COC. The liability of the laborator								e client	expe	nse. The	e report for the an	alysis of the	above

ceived l	by OCD: 9/27/2023 1:38:20 PM	Envirotech	Analytica	al Laboratory		Printed: 4/3/202	<i>Page 56 oj</i> 23 9:35:23AN
			•	ecklist (SRC)		Timeeut ne/20	
	Please take note of any NO checkmarks.	-	-				
e receive i	no response concerning these items within 24 hours of t	the date of this not	ice, all the sam	ples will be analyzed as req	luested.		
Client:	Devon Energy - Carlsbad	Date Received:	04/03/23 08:0	0	Work Order ID:	E304001	
hone:	(575) 748-0176	Date Logged In:	04/03/23 09:2	9	Logged In By:	Alexa Michaels	
Email:	jerrod.inskeep@wescom.com	Due Date:	04/07/23 17:0	0 (4 day TAT)			
Chain of (	Custody (COC)						
. Does th	e sample ID match the COC?		Yes				
2. Does the	e number of samples per sampling site location mat	tch the COC	Yes				
. Were sa	umples dropped off by client or carrier?		Yes	Carrier: Courier			
. Was the	COC complete, i.e., signatures, dates/times, reques	sted analyses?	Yes	<u> </u>			
5. Were al	l samples received within holding time? Note: Analysis, such as pH which should be conducted ir i.e, 15 minute hold time, are not included in this disucssio		Yes		Commen	ts/Resolution	
Sample Ti	urn Around Time (TAT)						
	COC indicate standard TAT, or Expedited TAT?		Yes				
Sample C	ooler						
-	ample cooler received?		Yes				
3. If yes, v	vas cooler received in good condition?		Yes				
. Was the	e sample(s) received intact, i.e., not broken?		Yes				
	custody/security seals present?		No				
	were custody/security seals intact?		NA				
•		:- (9) 290					
	e sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples are minutes of sampling visible ice, record the temperature. Actual sample	e received w/i 15	Yes				
		temperature. <u>1</u>	<u> </u>				
-	bontainer_ Jueous VOC samples present?		No				
-	OC samples collected in VOA Vials?		NA				
	head space less than 6-8 mm (pea sized or less)?		NA				
	trip blank (TB) included for VOC analyses?		NA				
	on-VOC samples collected in the correct containers'	0	Yes				
	appropriate volume/weight or number of sample containers		Yes				
Field Lab		ters concered.	105				
	field sample labels filled out with the minimum info	rmation:					
	imple ID?	Jiniation.	Yes				
	ate/Time Collected?		Yes				
	ollectors name?		No				
Sample P	<u>reservation</u>						
21. Does t	he COC or field labels indicate the samples were pr	reserved?	No				
	mple(s) correctly preserved? filteration required and/or requested for dissolved n	netals?	NA No				
Multiphas	se Sample Matrix						
26. Does t	he sample have more than one phase, i.e., multipha	se?	No				
	does the COC specify which phase(s) is to be analy		NA				
Subcontre	act Laboratory						
	mples required to get sent to a subcontract laborato	rv?	No				
	subcontract laboratory specified by the client and if			bcontract Lab:			

**Client Instruction** 



envirotech Inc.

Signature of client authorizing changes to the COC or sample disposition.





5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

**Practical Solutions for a Better Tomorrow** 

## **Analytical Report**

## Ensolum, LLC

Project Name:

RDX Federal 21 #041

Work Order: E308112

Job Number: 01058-0007

Received: 8/16/2023

Revision: 2

**Report Reviewed By:** 

Walter Hinchman Laboratory Director 8/24/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/24/23

Ashley Giovengo 3122 National Parks Hwy Carlsbad, NM 88220

Project Name: RDX Federal 21 #041 Workorder: E308112 Date Received: 8/16/2023 8:05:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/16/2023 8:05:00AM, under the Project Name: RDX Federal 21 #041.

The analytical test results summarized in this report with the Project Name: RDX Federal 21 #041 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

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## Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
PH01 - 3'	5
QC Summary Data	6
QC - Volatile Organic Compounds by EPA 8260B	6
QC - Nonhalogenated Organics by EPA 8015D - GRO	7
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	8
QC - Anions by EPA 300.0/9056A	9
Definitions and Notes	10
Chain of Custody etc.	11

		Sample Sum	mary		
Ensolum, LLC		Project Name:	RDX Federal 21 #04	41	Reported:
3122 National Parks Hwy		Project Number:	01058-0007		Reporteu:
Carlsbad NM, 88220		Project Manager:	Ashley Giovengo		08/24/23 11:05
Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
PH01 - 3'	E308112-01A	Soil	08/14/23	08/16/23	Glass Jar, 2 oz.

C



	~	ampic D				
Ensolum, LLC	Project Name		X Federal 21	#041		
3122 National Parks Hwy	Project Numb		58-0007			Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ley Giovengo	0		8/24/2023 11:05:45AM
		PH01 - 3'				
		E308112-01				
		Reporting				
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	А	analyst: RKS		Batch: 2333040
Benzene	ND	0.0250	1	08/16/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/16/23	08/18/23	
Toluene	ND	0.0250	1	08/16/23	08/18/23	
o-Xylene	ND	0.0250	1	08/16/23	08/18/23	
p,m-Xylene	ND	0.0500	1	08/16/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/16/23	08/18/23	
Surrogate: Bromofluorobenzene		100 %	70-130	08/16/23	08/18/23	
Surrogate: 1,2-Dichloroethane-d4		99.0 %	70-130	08/16/23	08/18/23	
Surrogate: Toluene-d8		101 %	70-130	08/16/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	А	nalyst: RKS		Batch: 2333040
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/16/23	08/18/23	
Surrogate: Bromofluorobenzene		100 %	70-130	08/16/23	08/18/23	
Surrogate: 1,2-Dichloroethane-d4		99.0 %	70-130	08/16/23	08/18/23	
Surrogate: Toluene-d8		101 %	70-130	08/16/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORC	mg/kg	mg/kg	А	nalyst: JL		Batch: 2333057
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/22/23	
Surrogate: n-Nonane		102 %	50-200	08/17/23	08/22/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: BA		Batch: 2333063
Chloride	567	200	10	08/17/23	08/17/23	



## QC Summary Data

Ensolum, LLC		Project Name:	RI	DX Federal 21	#041				Reported:
3122 National Parks Hwy		Project Number:		058-0007					Keporteu:
Carlsbad NM, 88220		Project Manager:		hley Gioveng	70			8/	24/2023 11:05:45AM
Curisoud 1111, 00220									
		Volatile Organic			Analyst: RKS				
Analyte		Reporting	Spike	Source		Rec	DDD	RPD	
	Result	Limit	Level	Result	Rec	Limits	RPD	Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2333040-BLK1)							Prepared: 08	8/16/23 Ana	alyzed: 08/18/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
p-Xylene	ND	0.0250							
o,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.502		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.6	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			
LCS (2333040-BS1)							Prepared: 08	8/16/23 An	alyzed: 08/18/23
Benzene	2.58	0.0250	2.50		103	70-130	1 .		,
Ethylbenzene	2.38	0.0250	2.50		96.9	70-130			
Toluene	2.51		2.50		101	70-130			
	2.56	0.0250	2.50		101	70-130			
p-Xylene	5.04	0.0250	5.00		102	70-130			
o,m-Xylene	5.04 7.60	0.0500	5.00 7.50		101	70-130			
Total Xylenes		0.0250	0.500		101	70-130			
Surrogate: Bromofluorobenzene	0.519		0.500			70-130			
Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8	0.503 0.512		0.500		101 102	70-130			
-	0.512		0.500	_					
Matrix Spike (2333040-MS1)				Source:	E308111-0	)5	Prepared: 08	8/16/23 Ana	alyzed: 08/18/23
Benzene	2.69	0.0250	2.50	ND	108	48-131			
Ethylbenzene	2.55	0.0250	2.50	ND	102	45-135			
Foluene	2.62	0.0250	2.50	ND	105	48-130			
i o i dente	0.50	0.0250	2.50	ND	108	43-135			
o-Xylene	2.70	0.0250							
p-Xylene	2.70 5.30	0.0250	5.00	ND	106	43-135			
p-Xylene p,m-Xylene			5.00 7.50		106 107	43-135 43-135			
>-Xylene p,m-Xylene Fotal Xylenes	5.30	0.0500		ND					
o-Xylene o,m-Xylene Fotal Xylenes Surrogate: Bromofluorobenzene	5.30 8.00	0.0500	7.50	ND	107	43-135			
	5.30 8.00 0.514	0.0500	7.50 0.500	ND	107 103	43-135 70-130			
o-Xylene o,m-Xylene Total Xylenes Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4	5.30 8.00 0.514 0.476	0.0500	7.50 0.500 0.500	ND ND	107 103 95.1	43-135 70-130 70-130 70-130	Prepared: 03	8/16/23 An:	alyzed: 08/18/23
p-Xylene p,m-Xylene Fotal Xylenes Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8 Matrix Spike Dup (2333040-MSD1)	5.30 8.00 0.514 0.476	0.0500	7.50 0.500 0.500	ND ND	107 103 95.1 103	43-135 70-130 70-130 70-130	Prepared: 00 3.77	8/16/23 Ana 23	alyzed: 08/18/23
p-Xylene p,m-Xylene Fotal Xylenes Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8 Matrix Spike Dup (2333040-MSD1) Benzene	5.30 8.00 0.514 0.476 0.515	0.0500 0.0250	7.50 0.500 0.500 0.500	ND ND Source:	107 103 95.1 103 E308111-(	43-135 70-130 70-130 70-130 70-130			alyzed: 08/18/23
p-Xylene p,m-Xylene Fotal Xylenes Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8 Matrix Spike Dup (2333040-MSD1) Benzene Ethylbenzene	5.30 8.00 0.514 0.476 0.515 2.59	0.0500 0.0250 0.0250	7.50 0.500 0.500 0.500 2.50	ND ND Source: ND	107 103 95.1 103 <b>E308111-(</b> 104	43-135 70-130 70-130 70-130 70-130 <b>05</b> 48-131	3.77	23	alyzed: 08/18/23
o-Xylene o,m-Xylene Fotal Xylenes Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8	5.30 8.00 0.514 0.476 0.515 2.59 2.44	0.0500 0.0250 0.0250 0.0250	7.50 0.500 0.500 0.500 2.50 2.50	ND ND Source: ND ND	107 103 95.1 103 <b>E308111-(</b> 104 97.5	43-135 70-130 70-130 70-130 70-130 <b>05</b> 48-131 45-135	3.77 4.61	23 27	alyzed: 08/18/23
p-Xylene p,m-Xylene Fotal Xylenes Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8 Matrix Spike Dup (2333040-MSD1) Benzene Ethylbenzene Foluene p-Xylene	5.30 8.00 0.514 0.476 0.515 2.59 2.44 2.52	0.0500 0.0250 0.0250 0.0250 0.0250 0.0250	7.50 0.500 0.500 0.500 2.50 2.50 2.50 2.5	ND ND Source: ND ND ND	107 103 95.1 103 <b>E308111-(</b> 104 97.5 101	43-135 70-130 70-130 70-130 70-130 <b>05</b> 48-131 45-135 48-130	3.77 4.61 3.74	23 27 24	alyzed: 08/18/23
p-Xylene p,m-Xylene Fotal Xylenes Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8 Matrix Spike Dup (2333040-MSD1) Benzene Ethylbenzene Foluene p-Xylene p,m-Xylene	5.30 8.00 0.514 0.476 0.515 2.59 2.44 2.52 2.65	0.0500 0.0250 0.0250 0.0250 0.0250 0.0250 0.0250	7.50 0.500 0.500 0.500 2.50 2.50 2.50 2.5	ND ND Source: ND ND ND ND ND	107 103 95.1 103 <b>E308111-6</b> 104 97.5 101 106	43-135 70-130 70-130 70-130 <b>05</b> 48-131 45-135 48-130 43-135	3.77 4.61 3.74 1.66	23 27 24 27	alyzed: 08/18/23
p-Xylene p,m-Xylene Fotal Xylenes Surrogate: Bromofluorobenzene Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8 Matrix Spike Dup (2333040-MSD1) Benzene Ethylbenzene Foluene	5.30 8.00 0.514 0.476 0.515 2.59 2.44 2.52 2.65 5.18	0.0500 0.0250 0.0250 0.0250 0.0250 0.0250 0.0250 0.0250 0.0250 0.0500	7.50 0.500 0.500 0.500 2.50 2.50 2.50 2.5	ND ND Source: ND ND ND ND ND ND	107 103 95.1 103 <b>E308111-6</b> 104 97.5 101 106 104	43-135 70-130 70-130 70-130 70-130 <b>05</b> 48-131 45-135 48-130 43-135 43-135	3.77 4.61 3.74 1.66 2.23	23 27 24 27 27	alyzed: 08/18/23
o-Xylene o,m-Xylene Fotal Xylenes Surrogate: Bromofluorobenzene Surrogate: Toluene-d8 Matrix Spike Dup (2333040-MSD1) Benzene Ethylbenzene Foluene o-Xylene o,m-Xylene Fotal Xylenes	5.30 8.00 0.514 0.476 0.515 2.59 2.44 2.52 2.65 5.18 7.84	0.0500 0.0250 0.0250 0.0250 0.0250 0.0250 0.0250 0.0250 0.0250 0.0500	7.50 0.500 0.500 0.500 2.50 2.50 2.50 2.5	ND ND Source: ND ND ND ND ND ND	107 103 95.1 103 E308111-6 104 97.5 101 106 104 104	43-135 70-130 70-130 70-130 <b>05</b> 48-131 45-135 48-130 43-135 43-135 43-135	3.77 4.61 3.74 1.66 2.23	23 27 24 27 27	alyzed: 08/18/23



## **QC Summary Data**

		QC DI		ary Data	4				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	0	DX Federal 21 1058-0007 Ashley Gioveng					<b>Reported:</b> 8/24/2023 11:05:45AM
	No	Analyst: RKS							
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2333040-BLK1)							Prepared: 0	8/16/23	Analyzed: 08/18/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.502		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.6	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			
LCS (2333040-BS2)							Prepared: 0	8/16/23	Analyzed: 08/18/23
Gasoline Range Organics (C6-C10)	53.8	20.0	50.0		108	70-130			
Surrogate: Bromofluorobenzene	0.499		0.500		99.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.457		0.500		91.3	70-130			
Surrogate: Toluene-d8	0.520		0.500		104	70-130			
Matrix Spike (2333040-MS2)				Source:	E308111-0	5	Prepared: 0	8/16/23	Analyzed: 08/18/23
Gasoline Range Organics (C6-C10)	55.7	20.0	50.0	ND	111	70-130			
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.480		0.500		96.0	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			
Matrix Spike Dup (2333040-MSD2)				Source:	E308111-0	5	Prepared: 0	8/16/23	Analyzed: 08/18/23
Gasoline Range Organics (C6-C10)	56.9	20.0	50.0	ND	114	70-130	2.20	20	
Surrogate: Bromofluorobenzene	0.512		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.479		0.500		95.7	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			



## **QC Summary Data**

		QC S	umm	ary Data	l				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	C	RDX Federal 21 )1058-0007 Ashley Gioveng					<b>Reported:</b> 8/24/2023 11:05:45AM
	Nonh	alogenated Org	anics by	y EPA 8015D	- DRO	/ORO			Analyst: JL
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
	6 6	6 6	6 6	0 0	,,,	,,,		,,,	
Blank (2333057-BLK1)							Prepared: 0	8/17/23 A	Analyzed: 08/18/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	49.0		50.0		97.9	50-200			
LCS (2333057-BS1)							Prepared: 0	8/17/23 A	Analyzed: 08/18/23
Diesel Range Organics (C10-C28)	240	25.0	250		96.2	38-132			
Surrogate: n-Nonane	46.4		50.0		92.9	50-200			
Matrix Spike (2333057-MS1)				Source: l	E308115-	03	Prepared: 0	8/17/23 A	Analyzed: 08/18/23
Diesel Range Organics (C10-C28)	231	25.0	250	ND	92.2	38-132			
Surrogate: n-Nonane	40.0		50.0		80.1	50-200			
Matrix Spike Dup (2333057-MSD1)				Source: l	E308115-	03	Prepared: 0	8/17/23 A	Analyzed: 08/18/23
Diesel Range Organics (C10-C28)	236	25.0	250	ND	94.5	38-132	2.39	20	
Surrogate: n-Nonane	42.3		50.0		84.6	50-200			



## **QC Summary Data**

		QU N		ary Dat					
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager	(	RDX Federal 2 )1058-0007 Ashley Gioveng					<b>Reported:</b> 8/24/2023 11:05:45AN
		Anions	by EPA	300.0/9056A	۸				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2333063-BLK1)							Prepared: 0	8/17/23	Analyzed: 08/17/23
Chloride	ND	20.0							
LCS (2333063-BS1)							Prepared: 0	8/17/23	Analyzed: 08/17/23
Chloride	265	20.0	250		106	90-110			
Matrix Spike (2333063-MS1)				Source:	E308112-0	)1	Prepared: 0	8/17/23	Analyzed: 08/17/23
Chloride	802	200	250	567	93.8	80-120			
Matrix Spike Dup (2333063-MSD1)				Source:	E308112-0	)1	Prepared: 0	8/17/23	Analyzed: 08/17/23
Chloride	798	200	250	567	92.2	80-120	0.503	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Γ	Ensolum, LLC	Project Name:	RDX Federal 21 #041	
	3122 National Parks Hwy	Project Number:	01058-0007	Reported:
	Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	08/24/23 11:05

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



lient: E	nsolum, LLC.				Bill To		in the	1997	La	b Use	e On	ly		-	TA	Г	EPA P	rogram	
	RDX Federal	28 #041			Attention: Jim Raley		Lab V	NO#					1D	2D	3D	Standard	CWA	SDWA	
	lanager: Ash		engo		Address: 5315 Buena Vista	a Dr	E3	OX.	112	1	010	Number 58-0007				X			
Address:	3122 Nation	nal Parks	Hwy		City, State, Zip: Carlsbad N		201		A	naly	sis and Meth	bd	-				RCRA		
City, Stat	e, Zip: Carlst	bad NM,	88220		Phone: (575)689-7597		λq						1		1. 1964.04				
hone: 5	75-988-0055	5			Email: jim.raley@dvn.com			ORO									State		
mail: ap	giovengo@er	nsolum.c	om				1	30/0				0.0	MN			NM CO	UT AZ	TX	
leport di	ue by:			-				id/c	802	826(	5010	5 300			TX	×			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Lab Number		TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260 Metals 6010	Metals 6	Chloride 300.0	BGDOC	BGDOC	SDOC	GDOC		Remarks	
11:30	8/14/2023	Soil	1 Jar		PH01 - 3'	1							x			Do not run unle	ss PH01 - 2' is >	100TPH or 500 Cl	
											-								
											-			-					
	7				Contraction of the second					-			-	-		-			
		-						_	_			-				_			
		_			have been a started and the					_									
			-					_								1			
																	-		
Additiona	al Instruction	ns: Plea	se CC: cb	urton@ensol	um.com, agiovengo@ensolum.c	com, jim.raley@dv	n.com	n, cha	amilt	on@	enso	olum.com							
					am aware that tampering with or intentiona gal action. Sampled by	lly mislabelling the samp	le locatio	on,								eived on ice the day ss than 6 °C on subs		led or	
elinguste	d by: Wignature	e)	Date	be grounds for leg	50m Received by (Stanature)	Un 815	SOR	Time	0'.	50	Rece	ived on ice:	L	ab U	se Only	Y			
alinguishe	d by: Signature	Park	In B-	15.23 Time	(245 Received by: (Signature)	Go B.1	5.3	Time	330		T1		(c T2			T3			
elinquishe	d by: (Signature	195	Bate	16.03 Time	130 Received by: Signature	un Alla	1/2	Time	' D4	_		Temp °C	4			- 19			
1010	iv: S Soil Sd Sc	olid Sa - Shur	ize A - Aque	eous, O - Other	- mun nu	Containe	or Type	0.	lass			lastic, ag - am	her d	ass 1	- VOA	and the second		Solution -	

### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

Client:	Ensolum, LLC Da	te Received:	08/16/23 0	8:05	Work Order ID: E308112
Phone:	(575) 988-0055 Da	te Logged In:	08/15/23 1	5:48	Logged In By: Caitlin Mars
Email:	a.giovengo@ensolum.com Du	e Date:	08/22/23 1	7:00 (4 day TAT)	
Chain of	f Custody (COC)				
1. Does t	the sample ID match the COC?		Yes		
2. Does t	the number of samples per sampling site location match t	the COC	Yes		
3. Were s	samples dropped off by client or carrier?		Yes	Carrier: (	Courier
4. Was th	ne COC complete, i.e., signatures, dates/times, requested	analyses?	Yes		
5. Were a	all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion.	field,	Yes		Comments/Resolution
Sample '	<u>Turn Around Time (TAT)</u>				
6. Did th	e COC indicate standard TAT, or Expedited TAT?		Yes		COC Remarks: E308112-01A Sample ID
Sample	Cooler				PH01-3 (Do not run unless E308115-10A
7. Was a	sample cooler received?		Yes		Sample ID PH01-2 is >100 TPH or 600 Cl
8. If yes,	was cooler received in good condition?		Yes		) This workorder will be on hold until
9. Was th	ne sample(s) received intact, i.e., not broken?		Yes		results for E308115-10A are available to
10. Were	e custody/security seals present?		No		
11. If yes	s, were custody/security seals intact?		NA		review.
12. Was t	he sample received on ice? If yes, the recorded temp is 4°C, i.e., Note: Thermal preservation is not required, if samples are rec minutes of sampling		Yes		
13. If no	visible ice, record the temperature. Actual sample tem	perature: <u>4°</u>	<u>C</u>		
Sample	<u>Container</u>				
	aqueous VOC samples present?		No		
	VOC samples collected in VOA Vials?		NA		
	e head space less than 6-8 mm (pea sized or less)?		NA		
	a trip blank (TB) included for VOC analyses?		NA		
	non-VOC samples collected in the correct containers?	11 10	Yes		
	appropriate volume/weight or number of sample containers	collected?	Yes		
Field La	<b>Del</b> be field sample labels filled out with the minimum information of the set of the s	tion			
	Sample ID?	111011.	Yes		
	Date/Time Collected?		Yes		
(	Collectors name?		No		
	Preservation				
	s the COC or field labels indicate the samples were preserved	rved?	No		
	sample(s) correctly preserved?	1.0	NA		
	o filteration required and/or requested for dissolved meta	IS?	No		
	ase Sample Matrix				
	s the sample have more than one phase, i.e., multiphase?	10	No		
27. If yes	s, does the COC specify which phase(s) is to be analyzed	1?	NA		
	ract Laboratory				
28. Are s	samples required to get sent to a subcontract laboratory?		No		
	a subcontract laboratory specified by the client and if so				



envirotech Inc.

Signature of client authorizing changes to the COC or sample disposition.

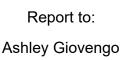
Date

Project Information

Released to Imaging: 3/11/2024 9:48:03 AM

P	DXF	eder	al 2	1 #04	١.	Changed pro	Ves	ct no	m	es	Per	-	Ci	Bu	rtor		8	124	12	3 C	M	
			1.51			Bill To	5			18/21/	La	b Us	e On	ly				TA	AT		EPA P	ogram
Project: RDX Federal-28-#041						Attention: Jim Raley				Lab WO# E308/12			Job Number			1D 2D 3D			St	andard	CWA	SDWA
Project Manager: Ashley Giovengo					1-1-	Address: 5315 Buena Vista Dr			E	308	112	2	010	58-	0007					x	Contract Children	1
Address: 3122 National Parks Hwy						City, State, Zip: Carlsbad NM, 88220				-			Analy	sis an	d Metho	d		1 mil	_			RCRA
	e, Zip: Carls		88220	the second s		Phone: (575)689-7597				yd (									1. A	Carlos and		
	75-988-0055					Email: jim.raley@dvn.com	1-1-1-			ORC											State	
Email: agiovengo@ensolum.com									DRO/	21	20	0	0.00		WN	10	TX		NM CO	UT AZ	TX ·	
Report d	ue by:	-		T	addin's	I and the second s		1		RO/I	y 80	γ 82	s 601	de 3		U				×		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID			Lab Number		TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC			Remarks		
11:30	8/14/2023	Soil	1 Jar			PH01 - 3'	1								x				Do not run unle	14 PH01 - 2' is >	LOOTPH or 600 Cl	
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			And the second			om, agiovengo@ensolum.com, j					amil	ton@	Pens	olum	.com							
date or time	of collection is co	onsidered fra		y of this sample. I a y be grounds for leg			abellir	ng the sampl	e locat				receive	ed packe	d in ice at an	avg ter	mp abo	ve 0 but	less th	l on ice the day an 6 °C on subs		led or
M	ed by: Signatur		Date	15/23 10.1 Time	50	Prom Acceived by (Senature)	~	Date 15	Set.	Time	0'	50	Rece	eived	on ice:	1	ab U	se Or N	ıly			
Relinguished by (Signatura)							Bill	5.0	16	33	D				<u>T2</u> <u>T3</u>				<u>T3</u>			
imd	a/ 11	nza	8	6.030	12	arth Man	-	8/16/	13	8	:0	5		i Tem	p°c_L	1					-10	
	rix: S - Soil, Sd - So				lar	-		Containe													1.1.6	-
samples is	applicable only	to those sa	imples rece	lived by the labor	aton	other arrangements are made. Hazardo with this COC. The liability of the labora	atory	is limited to	o the a	amour	nt paic	ent o I for c	on the	repor	t at the cl	ient e	xpens	e. The	e repo	ort for the a	nalysis of t	ne above
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Page 69 of 264





5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

**Practical Solutions for a Better Tomorrow** 

## **Analytical Report**

## Ensolum, LLC

Project Name:

RDX Federal 21 #041

Work Order: E308127

Job Number: 01058-0007

Received: 8/17/2023

Revision: 1

**Report Reviewed By:** 

Walter Hinchman Laboratory Director 8/22/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/22/23

Ashley Giovengo 3122 National Parks Hwy Carlsbad, NM 88220

Project Name: RDX Federal 21 #041 Workorder: E308127 Date Received: 8/17/2023 8:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on,

The analytical test results summarized in this report with the Project Name: RDX Federal 21 #041 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

8/17/2023 8:00:00AM, under the Project Name: RDX Federal 21 #041.

Respectfully,

Walter Hinchman Laboratory Director Office: 505-632-1881 Cell: 775-287-1762 whinchman@envirotech-inc.com

Field Offices:

Southern New Mexico Area Lynn Jarboe Technical Representative/Client Services

Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@envirotech-inc.com Raina Schwanz Laboratory Administrator Office: 505-632-1881 rainaschwanz@envirotech-inc.com Alexa Michaels Sample Custody Officer Office: 505-632-1881 labadmin@envirotech-inc.com

West Texas Midland/Odessa Area Rayny Hagan Technical Representative Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com



Page 71 of 264

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## Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	5
Sample Data	6
FS01 - 1'	6
FS02 - 1'	7
FS03 - 1'	8
FS04 - 1'	9
FS05 - 1'	10
FS10 - 1.5'	11
FS115'	12
FS125'	13
FS135'	14
FS145'	15
FS155'	16
FS165'	17
FS175'	18
FS185'	19
FS195'	20
FS205'	21
FS215'	22
QC Summary Data	23
QC - Volatile Organics by EPA 8021B	23
QC - Nonhalogenated Organics by EPA 8015D - GRO	24

•

# Table of Contents (continued)

QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	25
QC - Anions by EPA 300.0/9056A	26
Definitions and Notes	27
Chain of Custody etc.	28

#### Sample Summary

		Sample Sum	mary			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	RDX Federal 21 #( 01058-0007 Ashley Giovengo	041	<b>Reported:</b> 08/22/23 16:05	
Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container	
FS01 - 1'	E308127-01A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS02 - 1'	E308127-02A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS03 - 1'	E308127-03A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS04 - 1'	E308127-04A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS05 - 1'	E308127-05A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS10 - 1.5'	E308127-06A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS115'	E308127-07A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS125'	E308127-08A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS135'	E308127-09A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS145'	E308127-10A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS155'	E308127-11A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS165'	E308127-12A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS175'	E308127-13A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS185'	E308127-14A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS195'	E308127-15A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS205'	E308127-16A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	
FS215'	E308127-17A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.	



	N	ampic D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Num Project Mana	ber: 010	X Federal 21 #041 58-0007 ley Giovengo			<b>Reported:</b> 8/22/2023 4:05:57PM
		FS01 - 1'				
		E308127-01				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	t: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
p-Xylene	ND	0.0250	1	08/17/23	08/18/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
urrogate: 4-Bromochlorobenzene-PID		95.1 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst	:: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.8 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst	t: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/17/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/17/23	
Surrogate: n-Nonane		109 %	50-200	08/17/23	08/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	t: BA		Batch: 2333066
Chloride	1030	400	20	08/17/23	08/20/23	



	5	ampie D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Mana	er: 010	K Federal 21 #041 58-0007 ley Giovengo			<b>Reported:</b> 8/22/2023 4:05:57PM
Calisuau Nivi, 88220	Floject Mallag	-	ley Glovengo			0/22/2023 <b>4</b> .05.571 W
		FS02 - 1'				
		E308127-02				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
o-Xylene	ND	0.0250	1	08/17/23	08/18/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
Surrogate: 4-Bromochlorobenzene-PID		95.5 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst	RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.8 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst	Batch: 2333054		
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/17/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/17/23	
Surrogate: n-Nonane		101 %	50-200	08/17/23	08/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	BA		Batch: 2333066
Chloride	1150	400	20	08/17/23	08/20/23	



	3	ample D	ลเล			
Ensolum, LLC 3122 National Parks Hwy	Project Name Project Numb		X Federal 21 #041 58-0007			Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ley Giovengo			8/22/2023 4:05:57PM
		FS03 - 1'				
		E308127-03				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
oluene	ND	0.0250	1	08/17/23	08/18/23	
o-Xylene	ND	0.0250	1	08/17/23	08/18/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
urrogate: 4-Bromochlorobenzene-PID		92.9 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst	: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.5 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst	: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/17/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/17/23	
Surrogate: n-Nonane		105 %	50-200	08/17/23	08/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	: BA		Batch: 2333066
Chloride	2760	400	20	08/17/23	08/20/23	



	5	ample D	ala			
Ensolum, LLC	Project Name:	: RD2	K Federal 21 #	041		
3122 National Parks Hwy	Project Numb	er: 0105	58-0007			Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ey Giovengo			8/22/2023 4:05:57PM
		FS04 - 1'				
		E308127-04				
		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	An	alyst: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
thylbenzene	ND	0.0250	1	08/17/23	08/18/23	
oluene	ND	0.0250	1	08/17/23	08/18/23	
-Xylene	ND	0.0250	1	08/17/23	08/18/23	
,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
urrogate: 4-Bromochlorobenzene-PID		95.5 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		91.2 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/17/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/17/23	
urrogate: n-Nonane		99.7 %	50-200	08/17/23	08/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2333066
Chloride	1560	100	5	08/17/23	08/20/23	



	D.	ample D	ala			
Ensolum, LLC	Project Name	: RDZ	K Federal 21 #04	1		
3122 National Parks Hwy	Project Numb	Reported:				
Carlsbad NM, 88220	Project Manag	ger: Ash	ey Giovengo			8/22/2023 4:05:57PM
		FS05 - 1'				
		E308127-05				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
o-Xylene	ND	0.0250	1	08/17/23	08/18/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
urrogate: 4-Bromochlorobenzene-PID		95.2 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.6 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/17/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/17/23	
Surrogate: n-Nonane		104 %	50-200	08/17/23	08/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: BA		Batch: 2333066
Chloride	2250	400	20	08/17/23	08/20/23	



## Sample Data

	25	ample D	ลเล			
Ensolum, LLC 3122 National Parks Hwy	Project Name: Project Numbe		K Federal 21 #041 58-0007			Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ley Giovengo			8/22/2023 4:05:57PM
		FS10 - 1.5'				
		E308127-06				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
-Xylene	ND	0.0250	1	08/17/23	08/18/23	
,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
urrogate: 4-Bromochlorobenzene-PID		94.4 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	:: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.0 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	:: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
Surrogate: n-Nonane		105 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	:: BA		Batch: 2333066
Chloride	598	200	10	08/17/23	08/20/23	



## Sample Data

	5	ample D	ala			
Ensolum, LLC	Project Name:	RD2	K Federal 21 #04	1		
3122 National Parks Hwy	Project Numb	er: 0105	58-0007			Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ley Giovengo			8/22/2023 4:05:57PM
		FS115'				
		E308127-07				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	rst: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
o-Xylene	ND	0.0250	1	08/17/23	08/18/23	
p,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
Surrogate: 4-Bromochlorobenzene-PID		94.8 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	vst: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.1 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	rst: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
Surrogate: n-Nonane		107 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	rst: BA		Batch: 2333066
Chloride	89.7	40.0	2	08/17/23	08/20/23	



	50	ample D	ala			
Ensolum, LLC	Project Name:	RDZ	K Federal 21 #	041		
3122 National Parks Hwy	Project Numbe	er: 0103	58-0007		Reported:	
Carlsbad NM, 88220	Project Manag	ger: Ash	ey Giovengo			8/22/2023 4:05:57PM
		FS125'				
		E308127-08				
		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
o-Xylene	ND	0.0250	1	08/17/23	08/18/23	
,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
urrogate: 4-Bromochlorobenzene-PID		95.5 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		93.6 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
urrogate: n-Nonane		106 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2333066
Chloride	ND	40.0	2	08/17/23	08/20/23	



	25	ample D	ลเล			
Ensolum, LLC	Project Name:	RDZ	X Federal 21 #	041		
3122 National Parks Hwy	Project Number: 01058-0007					Reported:
Carlsbad NM, 88220	Project Manag	er: Ash	ley Giovengo			8/22/2023 4:05:57PM
		FS135'				
	-	E308127-09				
		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	An	alyst: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
thylbenzene	ND	0.0250	1	08/17/23	08/18/23	
oluene	ND	0.0250	1	08/17/23	08/18/23	
-Xylene	ND	0.0250	1	08/17/23	08/18/23	
,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
urrogate: 4-Bromochlorobenzene-PID		95.5 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		90.0 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
urrogate: n-Nonane		105 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2333066
Chloride	21.4	20.0	1	08/17/23	08/20/23	



## Sample Data

	3	ample D	ลเล			
Ensolum, LLC	Project Name	: RD2	X Federal 21 #041			
3122 National Parks Hwy	Project Numb	er: 010:	58-0007			Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ley Giovengo			8/22/2023 4:05:57PM
		FS145'				
		E308127-10				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
p-Xylene	ND	0.0250	1	08/17/23	08/18/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Fotal Xylenes	ND	0.0250	1	08/17/23	08/18/23	
Surrogate: 4-Bromochlorobenzene-PID		94.6 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	t: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.5 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	t: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
Surrogate: n-Nonane		106 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: BA		Batch: 2333066
Chloride	ND	40.0	2	08/17/23	08/20/23	



## Sample Data

	3	ample D	ata			
Ensolum, LLC	Project Name	e: RD2	K Federal 21 #04	1		
3122 National Parks Hwy	Project Numb	ber: 010	58-0007			Reported:
Carlsbad NM, 88220	Project Mana	iger: Ash	ley Giovengo			8/22/2023 4:05:57PM
		FS155'				
		E308127-11				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
o-Xylene	ND	0.0250	1	08/17/23	08/18/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
Surrogate: 4-Bromochlorobenzene-PID		95.1 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.2 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
Surrogate: n-Nonane		106 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: BA		Batch: 2333066
Chloride	ND	20.0	1	08/17/23	08/20/23	

## Sample Data

	D	ample D	ata			
Ensolum, LLC	Project Name		X Federal 21 #04	l		
3122 National Parks Hwy	Project Numb	oer: 010	58-0007			Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ley Giovengo			8/22/2023 4:05:57PM
		FS165'				
		E308127-12				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	st: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
p-Xylene	ND	0.0250	1	08/17/23	08/18/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Fotal Xylenes	ND	0.0250	1	08/17/23	08/18/23	
Surrogate: 4-Bromochlorobenzene-PID		95.4 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	st: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.7 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	st: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
Surrogate: n-Nonane		107 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	st: BA		Batch: 2333066
Chloride	ND	40.0	2	08/17/23	08/20/23	



## Sample Data

	Da	ample D	ata			
Ensolum, LLC	Project Name:	RD2	K Federal 21 #041	1		
3122 National Parks Hwy	Project Numbe	er: 0105	58-0007			Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ley Giovengo			8/22/2023 4:05:57PM
		FS175'				
		E308127-13				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	st: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
p-Xylene	ND	0.0250	1	08/17/23	08/18/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Fotal Xylenes	ND	0.0250	1	08/17/23	08/18/23	
Surrogate: 4-Bromochlorobenzene-PID		95.4 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	st: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.3 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	st: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
Surrogate: n-Nonane		105 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	st: BA		Batch: 2333066
Chloride	ND	40.0	2	08/17/23	08/20/23	



## Sample Data

	25	ample D	ลเล			
Ensolum, LLC	Project Name:	RD	K Federal 21 #041			
3122 National Parks Hwy	Project Numbe	er: 010	58-0007			Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ey Giovengo			8/22/2023 4:05:57PM
		FS185'				
		E308127-14				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	:: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
o-Xylene	ND	0.0250	1	08/17/23	08/18/23	
p,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Fotal Xylenes	ND	0.0250	1	08/17/23	08/18/23	
Surrogate: 4-Bromochlorobenzene-PID		95.0 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	:: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.4 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	t: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
Surrogate: n-Nonane		103 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: BA		Batch: 2333066
Chloride	ND	40.0	2	08/17/23	08/20/23	

## Sample Data

	D	ample D	ata			
Ensolum, LLC	Project Name:	RD2	K Federal 21 #04	41		
3122 National Parks Hwy	Project Numb	er: 0103	58-0007			Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ley Giovengo			8/22/2023 4:05:57PM
		FS195'				
		E308127-15				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
o-Xylene	ND	0.0250	1	08/17/23	08/18/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
Surrogate: 4-Bromochlorobenzene-PID		93.9 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		89.8 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
Surrogate: n-Nonane		106 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2333066
Chloride	ND	100	5	08/17/23	08/20/23	

	3	ample D	ลเล			
Ensolum, LLC 3122 National Parks Hwy	Project Name Project Numb	er: 010	X Federal 21 #04 58-0007	1		Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ley Giovengo			8/22/2023 4:05:57PM
		FS205'				
		E308127-16				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg mg/kg Analyst: RKS			Batch: 2333056		
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
-Xylene	ND	0.0250	1	08/17/23	08/18/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
Surrogate: 4-Bromochlorobenzene-PID		94.1 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.9 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
Surrogate: n-Nonane		108 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: BA		Batch: 2333066
Chloride	ND	100	5	08/17/23	08/20/23	



## Sample Data

	52	ample D	ata			
Ensolum, LLC	Project Name:	RD	X Federal 21 #041			
3122 National Parks Hwy	Project Numbe	er: 010	58-0007			Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ley Giovengo			8/22/2023 4:05:57PM
		FS215'				
	-	E308127-17				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: RKS		Batch: 2333056
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
p-Xylene	ND	0.0250	1	08/17/23	08/18/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/18/23	
Surrogate: 4-Bromochlorobenzene-PID		94.5 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	t: RKS		Batch: 2333056
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.8 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	t: JL		Batch: 2333054
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
Surrogate: n-Nonane		108 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: BA		Batch: 2333066
Chloride	109	40.0	2	08/17/23	08/20/23	

# **QC Summary Data**

		<u><u>v</u> v v</u>		ing Dut					
Ensolum, LLC		Project Name:		DX Federal 2	1 #041				Reported:
3122 National Parks Hwy		Project Number:	0	1058-0007					
Carlsbad NM, 88220		Project Manager:	А	shley Gioveng	go				8/22/2023 4:05:57PM
		Volatile O	rganics	by EPA 802	21B				Analyst: RKS
Analyte		Reporting	Spike	Source		Rec	DDD	RPD	
	Result mg/kg	Limit mg/kg	Level mg/kg	Result mg/kg	Rec %	Limits %	RPD %	Limit %	Notes
Blank (2333056-BLK1)							Prepared: 0	8/17/23 A	analyzed: 08/18/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.59		8.00		94.9	70-130			
LCS (2333056-BS1)							Prepared: 0	8/17/23 A	analyzed: 08/18/23
Benzene	5.32	0.0250	5.00		106	70-130			
Ethylbenzene	5.23	0.0250	5.00		105	70-130			
Toluene	5.30	0.0250	5.00		106	70-130			
p-Xylene	5.24	0.0250	5.00		105	70-130			
p,m-Xylene	10.6	0.0500	10.0		106	70-130			
Total Xylenes	15.9	0.0250	15.0		106	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.56		8.00		94.5	70-130			
Matrix Spike (2333056-MS1)				Source:	E308127-	02	Prepared: 0	8/17/23 A	analyzed: 08/18/23
Benzene	5.21	0.0250	5.00	ND	104	54-133			
Ethylbenzene	5.10	0.0250	5.00	ND	102	61-133			
Toluene	5.18	0.0250	5.00	ND	104	61-130			
p-Xylene	5.12	0.0250	5.00	ND	102	63-131			
p,m-Xylene	10.4	0.0500	10.0	ND	104	63-131			
Total Xylenes	15.5	0.0250	15.0	ND	103	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.53		8.00		94.2	70-130			
Matrix Spike Dup (2333056-MSD1)				Source:	E308127-	02	Prepared: 0	8/17/23 A	analyzed: 08/18/23
Benzene	4.83	0.0250	5.00	ND	96.7	54-133	7.47	20	
Ethylbenzene	4.77	0.0250	5.00	ND	95.5	61-133	6.56	20	
Toluene	4.83	0.0250	5.00	ND	96.6	61-130	7.06	20	
o-Xylene	4.76	0.0250	5.00	ND	95.2	63-131	7.26	20	
p,m-Xylene	9.73	0.0500	10.0	ND	97.3	63-131	6.29	20	
Total Xylenes	14.5	0.0250	15.0	ND	96.6	63-131	6.61	20	
Surrogate: 4-Bromochlorobenzene-PID	7.68		8.00		96.0	70-130			



## **QC Summary Data**

		QC S	uIIIII	ary Data	1				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	0	RDX Federal 21 11058-0007 Ashley Gioveng					<b>Reported:</b> 8/22/2023 4:05:57PM
	Nor	nhalogenated C	Organics	by EPA 801	15D - GI	RO			Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2333056-BLK1)							Prepared: 0	8/17/23 A	analyzed: 08/18/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.35		8.00		91.9	70-130			
LCS (2333056-BS2)							Prepared: 0	8/17/23 A	analyzed: 08/18/23
Gasoline Range Organics (C6-C10)	49.8	20.0	50.0		99.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.24		8.00		90.5	70-130			
Matrix Spike (2333056-MS2)				Source:	E308127-0	02	Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Gasoline Range Organics (C6-C10)	46.8	20.0	50.0	ND	93.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.2	70-130			
Matrix Spike Dup (2333056-MSD2)				Source:	E308127-0	02	Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Gasoline Range Organics (C6-C10)	50.0	20.0	50.0	ND	100	70-130	6.68	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.36		8.00		91.9	70-130			

Page 24 of 30



## **QC Summary Data**

		QC SI		ary Data					
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	0	RDX Federal 21 01058-0007 Ashley Giovengo					<b>Reported:</b> 8/22/2023 4:05:57PM
	Nonh	alogenated Orga	anics by	v EPA 8015D	- DRO	/ORO			Analyst: JL
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2333054-BLK1)							Prepared: 0	8/17/23 A	nalyzed: 08/17/23
Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36)	ND ND	25.0 50.0							
Surrogate: n-Nonane	53.5		50.0		107	50-200			
LCS (2333054-BS1)							Prepared: 0	8/17/23 A	analyzed: 08/17/23
Diesel Range Organics (C10-C28)	244	25.0	250		97.7	38-132			
Surrogate: n-Nonane	52.8		50.0		106	50-200			
Matrix Spike (2333054-MS1)				Source: <b>E</b>	2308127-	01	Prepared: 0	8/17/23 A	analyzed: 08/17/23
Diesel Range Organics (C10-C28)	262	25.0	250	ND	105	38-132			
Surrogate: n-Nonane	53.6		50.0		107	50-200			
Matrix Spike Dup (2333054-MSD1)				Source: E	308127-	01	Prepared: 0	8/17/23 A	analyzed: 08/17/23
Diesel Range Organics (C10-C28)	258	25.0	250	ND	103	38-132	1.30	20	
Surrogate: n-Nonane	52.0		50.0		104	50-200			



## **QC Summary Data**

		$\mathbf{x} \in \mathbf{z}$							
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager	: 0	RDX Federal 2 01058-0007 Ashley Gioveng					<b>Reported:</b> 8/22/2023 4:05:57PM
		Anions	by EPA	300.0/90564	4				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2333066-BLK1)							Prepared: 0	8/17/23 A	Analyzed: 08/20/23
Chloride LCS (2333066-BS1)	ND	20.0					Prepared: 0	8/17/23 A	Analyzed: 08/20/23
Chloride	243	20.0	250	Former	97.4 <b>E308127-</b>	90-110	Bronorod: 0	9/17/22	Analyzed: 08/20/23
Matrix Spike (2333066-MS1) Chloride	1300	400	250	1030	107	80-120	riepared: 0	0/1//23 F	mary260. 06/20/23
Matrix Spike Dup (2333066-MSD1)				Source:	E308127-	01	Prepared: 0	8/17/23 A	Analyzed: 08/20/23
Chloride	1260	400	250	1030	90.1	80-120	3.21	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Γ	Ensolum, LLC	Project Name:	RDX Federal 21 #041	
	3122 National Parks Hwy	Project Number:	01058-0007	Reported:
	Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	08/22/23 16:05

- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client:	Ensolum, LLC					Bill To						TAT				EPA Pr	ogram				
Project	: RDX Federa	1 21 #041				tion: Jim Raley		Ī	Lab WC	D#	00	Job	Num	ber	1D	2D	3D		ndard	CWA	SDWA
	Manager: As					ess: 5315 Buena Vista D	and the second se		E30	181	21	a	<u>758-</u>	000	1			-	x		DODA
	s: 3122 Natio					City, State, Zip: Carlsbad NM, 88220 Analysis and Meth		d Metho	d	-	<u> </u>	_	CARGE YOR		RCRA						
	ate, Zip: Carls 575-988-005		, 88220			Phone: (575)689-7597						-		State							
	agiovengo@e		um com		Email	: Jim.raley@dvn.com		-	0/0				0		WN			N	IM CO	UT AZ	TX
Charles and the second second	due by:								A/DR		8021 8260	5010	300.0				TX		×		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID				ab nber	TPH GRO/DRO/ORO by	8015	BTEX by 8021 VOC by 8260	Metals 6010	Chloride		BGDOC		GDOC			Remarks	ogram SDWA RCRA
11:21	8/15/2023	Soil	1 Jar		F	S01 - 1'	1	0							x						
11:17	8/15/2023	Soil	1 Jar		F	S02 - 1'	2								x						
11:15	8/15/2023	Soil	1 Jar		F	S03 - 1'	3								x						
11:13	8/15/2023	Soil	1 Jar		F	S04 - 1'	4								x						
12:23	8/15/2023	Soil	1 Jar		F	-S05 - 1	5								x						
11:01	8/15/2023	Soil	1 Jar		FS	510 - 1.5'	6								x						
9:47	8/15/2023	Soil	1 Jar		F	S115'	7								x						
9:45	8/15/2023	Soil	1 Jar		F	\$125'	8								x						
9:55	8/15/2023	Soil	1 Jar		F	\$135'	9								x						
9:51	8/15/2023	Soil	1 Jar		F	S145'	Ic								x						
Additio	nal Instructio	ns: Plea	ase CC: c	burton@ensolu	m.com, a	giovengo@ensolum.co	m, jim.rale	y@dvi	n.com,	cha	milto	n@er	nsolur	n.com							
date or tin	ne of collection is c	onsidered f	raud and ma	ay be grounds for lega	l action.	tampering with or intentionally Sampled by:			e locatior	n,					in avg te	mp abo	ve 0 but	less than		they are sam equent days.	pled or
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an	hed by (Signatur	and	7		50	Buth M	In 8			-	00	<u>T1</u>			<u>T2</u>				<u>гз</u>		
Relinquis	hed by: (Signatur	re)	Date	Time	R	eceived by: (Signature)	Date			me		10000-000	G Ten	and the second se	4	-	alar Tarihan				
	atrix: <b>S</b> - Soil, <b>Sd</b> - S													c, ag - an						1	the show
						rrangements are made. Har his COC. The liability of the la									client	expen	se. Th	ne repo	rt for the	analysis of	the above

Releas

ient:	Ensolum, LLC.				Bi	Bill To Lab Use Only						TAT				EPA Program			
	<b>RDX</b> Federal				Attention: Jim Raley		Lab	WO#	WO# Job Number		er	1D	2D		Standard	CWA	SDWA		
	Manager: As	al solution of the second s			Address: 5315 Buena		E	308	3125	7	010	581	0007				х		
	: 3122 Natio				City, State, Zip: Carls		_	_		A	Analys	sis and	Metho	d					RCRA
and the second se	te, Zip: Carls 575-988-005		88220		Phone: (575)689-759		-	O by									1 - 11		
	giovengo@e		rom		Email: jim.raley@dvr	i.com	-	D/OR				_					NIM CC	State	TY
Report of	CONTRACTOR OF THE OWNER OF THE OWNER							/DRC	8021	260	010	300.0	300.0	WN		¥		OT AL	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Lab Numbe	r	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC	×	Remarks	
10:00	8/15/2023	Soil	1 Jar		FS155'	11								x		-			rogram SDWA RCRA
10:03	8/15/2023	Soil	1 Jar		FS165'	12								x					
10:07	8/15/2023	Soil	1 Jar	1	FS175'	13					1			x					-
10:10	8/15/2023	Soil	1 Jar		FS185'	14								x					
10:21	8/15/2023	Soil	1 Jar		FS195'	15								x					
10:27	8/15/2023	Soil	1 Jar		FS205'	16								x					
10:27	8/15/2023	Soil	1 Jar		FS215'	17								x					
					m.com, agiovengo@enso				amilto					reservati	ion must	be recei	ived on ice the da	v they are samp	led or
ate or tim		onsidered fr		y be grounds for lega		<i>i</i> :								avg temp	o above (	) but less	s than 6 °C on sub		
R	ed by: (Signatur	2		116/25 10 Time	DO Camella Beived by bignatu	mlany 0-10	0.2	\$1C	000	2	Recei	ived o	n ice:		)/ N	Only			
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										-		Temp		t					
	trix: S - Soil, Sd - So				less other arrangements are ma	Contain													

Page 98 of 264

### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

Email:       a.giovengo@ensolum.com       Due Date:       08/23/23 17:00 (4 day TAT)         Chain of Custody (COC)       1. Does the sample ID match the COC?       Yes         2. Does the number of samples per sampling site location match the COC       Yes         3. Were samples dropped off by client or carrier?       Yes         4. Was the COC complete, i.e., signatures, dates/times, requested analyses?       Yes         5. Were all samples received within holding time?       Yes         Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.       Comments/I         Sample Turn Around Time (TAT)       Yes         6. Did the COC indicate standard TAT, or Expedited TAT?       Yes         7. Was a sample cooler received?       Yes         8. If yes, was cooler received in good condition?       Yes         9. Was the sample(s) received intact, i.e., not broken?       Yes         9. Was the sample(s) received intact, i.e., not broken?       Yes         9. Was the sample(s) received intact, i.e., not broken?       Yes	Caitlin Mars
Email:       a.giovengo@ensolum.com       Due Date:       08/23/23 17:00 (4 day TAT)         Chain of Custody (COC)       1. Does the sample ID match the COC?       Yes         2. Does the number of samples per sampling site location match the COC       Yes         3. Were samples dropped off by client or carrier?       Yes         4. Was the COC complete, i.e., signatures, dates/times, requested analyses?       Yes         5. Were all samples received within holding time?       Yes         Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.       Comments/I         Sample Turn Around Time (TAT)       Yes         6. Did the COC indicate standard TAT, or Expedited TAT?       Yes         7. Was a sample cooler received?       Yes         8. If yes, was cooler received in good condition?       Yes         9. Was the sample(s) received intact, i.e., not broken?       Yes         9. Was the sample(s) received intact, i.e., not broken?       Yes         10. We was the sample(s) received intact, i.e., not broken?       Yes	<u>Resolution</u>
1. Does the sample ID match the COC?       Yes         2. Does the number of samples per sampling site location match the COC       Yes         3. Were samples dropped off by client or carrier?       Yes         4. Was the COC complete, i.e., signatures, dates/times, requested analyses?       Yes         5. Were all samples received within holding time?       Yes         Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.       Comments/I         Sample Turn Around Time (TAT)       Kes         6. Did the COC indicate standard TAT, or Expedited TAT?       Yes         7. Was a sample cooler received?       Yes         8. If yes, was cooler received in good condition?       Yes         9. Was the sample(s) received intact, i.e., not broken?       Yes         10. We will due to be intervent on the standard?       Yes	<u>Resolution</u>
<ul> <li>2. Does the number of samples per sampling site location match the COC Yes</li> <li>3. Were samples dropped off by client or carrier? Yes</li> <li>4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes</li> <li>5. Were all samples received within holding time? Yes Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.</li> <li>Sample Turn Around Time (TAT)</li> <li>6. Did the COC indicate standard TAT, or Expedited TAT? Yes</li> <li>Sample Cooler</li> <li>7. Was a sample cooler received? Yes</li> <li>8. If yes, was cooler received in good condition? Yes</li> <li>9. Was the sample(s) received intact, i.e., not broken? Yes</li> </ul>	<u>Resolution</u>
<ul> <li>3. Were samples dropped off by client or carrier?</li> <li>4. Was the COC complete, i.e., signatures, dates/times, requested analyses?</li> <li>5. Were all samples received within holding time?</li> <li>Note: Analysis, such as pH which should be conducted in the field,</li> <li>i.e., 15 minute hold time, are not included in this discussion.</li> </ul> Sample Turn Around Time (TAT) 6. Did the COC indicate standard TAT, or Expedited TAT? Yes Sample Cooler 7. Was a sample cooler received? 8. If yes, was cooler received in good condition? Yes 9. Was the sample(s) received intact, i.e., not broken? Yes	<u>Resolution</u>
<ul> <li>4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes</li> <li>5. Were all samples received within holding time? Yes Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.</li> <li>Sample Turn Around Time (TAT)</li> <li>6. Did the COC indicate standard TAT, or Expedited TAT? Yes</li> <li>Sample Cooler</li> <li>7. Was a sample cooler received? Yes</li> <li>8. If yes, was cooler received in good condition? Yes</li> <li>9. Was the sample(s) received intact, i.e., not broken? Yes</li> </ul>	<u>Resolution</u>
<ul> <li>5. Were all samples received within holding time? Yes Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.</li> <li>Sample Turn Around Time (TAT)</li> <li>6. Did the COC indicate standard TAT, or Expedited TAT? Yes</li> <li>Sample Cooler</li> <li>7. Was a sample cooler received? Yes</li> <li>8. If yes, was cooler received in good condition? Yes</li> <li>9. Was the sample(s) received intact, i.e., not broken? Yes</li> </ul>	<u>Resolution</u>
Note: Analysis, such as pH which should be conducted in the field,       Comments/I         i.e, 15 minute hold time, are not included in this disucssion.       Comments/I         Sample Turn Around Time (TAT)       Yes         6. Did the COC indicate standard TAT, or Expedited TAT?       Yes         Sample Cooler       Yes         7. Was a sample cooler received?       Yes         8. If yes, was cooler received in good condition?       Yes         9. Was the sample(s) received intact, i.e., not broken?       Yes         10. When which should be conducted in the field,       Yes	<u>Resolution</u>
6. Did the COC indicate standard TAT, or Expedited TAT?       Yes         Sample Cooler       Yes         7. Was a sample cooler received?       Yes         8. If yes, was cooler received in good condition?       Yes         9. Was the sample(s) received intact, i.e., not broken?       Yes         10. Wine and March an	
Sample Cooler         7. Was a sample cooler received?         8. If yes, was cooler received in good condition?         9. Was the sample(s) received intact, i.e., not broken?         Yes	
7. Was a sample cooler received?     Yes       8. If yes, was cooler received in good condition?     Yes       9. Was the sample(s) received intact, i.e., not broken?     Yes       10. When we have the sample of the same the s	
8. If yes, was cooler received in good condition?     Yes       9. Was the sample(s) received intact, i.e., not broken?     Yes	
9. Was the sample(s) received intact, i.e., not broken? Yes	
10. Were custody/security seals present?	
10. Were custody/security seals present? No	
11. If yes, were custody/security seals intact? NA	
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes Note: Thermal preservation is not required, if samples are received w/i 15	
minutes of sampling 13. If no visible ice, record the temperature. Actual sample temperature: $4^{\circ}C$	
Sample Container	
14. Are aqueous VOC samples present? No	
15. Are VOC samples collected in VOA Vials? NA	
16. Is the head space less than 6-8 mm (pea sized or less)?   NA	
17. Was a trip blank (TB) included for VOC analyses? NA	
18. Are non-VOC samples collected in the correct containers? Yes	
19. Is the appropriate volume/weight or number of sample containers collected? Yes	
<u>Field Label</u>	
20. Were field sample labels filled out with the minimum information: Sample ID? Yes	
Date/Time Collected? Yes	
Collectors name? Yes	
Sample Preservation	
21. Does the COC or field labels indicate the samples were preserved? No	
22. Are sample(s) correctly preserved? NA	
24. Is lab filteration required and/or requested for dissolved metals? No	
Multiphase Sample Matrix	
26. Does the sample have more than one phase, i.e., multiphase? No	
27. If yes, does the COC specify which phase(s) is to be analyzed? NA	
Subcontract Laboratory	
28. Are samples required to get sent to a subcontract laboratory? No	
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA	
Client Instruction	

Signature of client authorizing changes to the COC or sample disposition.



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5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

**Practical Solutions for a Better Tomorrow** 

# **Analytical Report**

# Ensolum, LLC

Project Name: RDX Federal 21 #041

Work Order: E308156

Job Number: 01058-0007

Received: 8/22/2023

Revision: 1

**Report Reviewed By:** 

Walter Hinchman Laboratory Director 8/25/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/25/23

Ashley Giovengo 3122 National Parks Hwy Carlsbad, NM 88220

Project Name: RDX Federal 21 #041 Workorder: E308156 Date Received: 8/22/2023 8:15:00AM

Ashley Giovengo,



Page 101 of 264

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/22/2023 8:15:00AM, under the Project Name: RDX Federal 21 #041.

The analytical test results summarized in this report with the Project Name: RDX Federal 21 #041 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman Laboratory Director Office: 505-632-1881 Cell: 775-287-1762 whinchman@envirotech-inc.com

Field Offices:

Southern New Mexico Area Lynn Jarboe

Technical Representative/Client Services Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@envirotech-inc.com

Raina Schwanz Laboratory Administrator Office: 505-632-1881 rainaschwanz@envirotech-inc.com Alexa Michaels Sample Custody Officer Office: 505-632-1881 labadmin@envirotech-inc.com

West Texas Midland/Odessa Area Rayny Hagan Technical Representative Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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# Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
FS06 - 4'	5
FS08 - 4'	6
FS09 - 4'	7
SW05 - 2'	8
QC Summary Data	9
QC - Volatile Organics by EPA 8021B	9
QC - Nonhalogenated Organics by EPA 8015D - GRO	10
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	11
QC - Anions by EPA 300.0/9056A	12
Definitions and Notes	13
Chain of Custody etc.	14

#### Page 103 of 264

v		Sample Sum	mary		0
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	RDX Federal 21 #0 01058-0007 Ashley Giovengo	41	<b>Reported:</b> 08/25/23 10:34
Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS06 - 4'	E308156-01A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
FS08 - 4'	E308156-02A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
FS09 - 4'	E308156-03A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
SW05 - 2'	E308156-04A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.



		ampic D	ata			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numbe Project Manag	er: 010:	K Federal 21 #041 58-0007 ley Giovengo			<b>Reported:</b> 8/25/2023 10:34:22AM
		FS06 - 4'				
		E308156-01				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	: RKS		Batch: 2334019
Benzene	ND	0.0250	1	08/22/23	08/23/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/23/23	
Toluene	ND	0.0250	1	08/22/23	08/23/23	
o-Xylene	ND	0.0250	1	08/22/23	08/23/23	
p,m-Xylene	ND	0.0500	1	08/22/23	08/23/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/23/23	
Surrogate: 4-Bromochlorobenzene-PID		90.0 %	70-130	08/22/23	08/23/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst	: RKS		Batch: 2334019
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		84.0 %	70-130	08/22/23	08/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst	: KM		Batch: 2334041
Diesel Range Organics (C10-C28)	ND	25.0	1	08/23/23	08/24/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/23/23	08/24/23	
Surrogate: n-Nonane		97.2 %	50-200	08/23/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	: BA		Batch: 2334029
Chloride	372	200	10	08/22/23	08/22/23	



	D.	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy	Project Name: Project Numb	er: 0103	K Federal 21 #0- 58-0007	41		Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ley Giovengo			8/25/2023 10:34:22AN
		FS08 - 4'				
		E308156-02				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2334019
Benzene	ND	0.0250	1	08/22/23	08/23/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/23/23	
Toluene	ND	0.0250	1	08/22/23	08/23/23	
o-Xylene	ND	0.0250	1	08/22/23	08/23/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/23/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/23/23	
Surrogate: 4-Bromochlorobenzene-PID		90.2 %	70-130	08/22/23	08/23/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2334019
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		83.7 %	70-130	08/22/23	08/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: KM		Batch: 2334041
Diesel Range Organics (C10-C28)	ND	25.0	1	08/23/23	08/24/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/23/23	08/24/23	
Surrogate: n-Nonane		93.5 %	50-200	08/23/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2334029
Chloride	359	200	10	08/22/23	08/22/23	



	Si	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numbe Project Manag	er: 0103	K Federal 21 #041 58-0007 ley Giovengo			<b>Reported:</b> 8/25/2023 10:34:22AM
		FS09 - 4'				
		E308156-03				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst:	RKS		Batch: 2334019
Benzene	ND	0.0250	1	08/22/23	08/23/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/23/23	
Toluene	ND	0.0250	1	08/22/23	08/23/23	
p-Xylene	ND	0.0250	1	08/22/23	08/23/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/23/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/23/23	
urrogate: 4-Bromochlorobenzene-PID		90.4 %	70-130	08/22/23	08/23/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst:	RKS		Batch: 2334019
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		83.6 %	70-130	08/22/23	08/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst:	KM		Batch: 2334041
Diesel Range Organics (C10-C28)	ND	25.0	1	08/23/23	08/24/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/23/23	08/24/23	
Surrogate: n-Nonane		90.0 %	50-200	08/23/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst:	BA		Batch: 2334029
Chloride	494	400	20	08/22/23	08/22/23	



	0	ampic D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Mana	ber: 010	X Federal 21 #041 58-0007 ley Giovengo			<b>Reported:</b> 8/25/2023 10:34:22AM
		SW05 - 2'				
		E308156-04				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst	: RKS		Batch: 2334019
Benzene	ND	0.0250	1	08/22/23	08/23/23	
thylbenzene	ND	0.0250	1	08/22/23	08/23/23	
oluene	ND	0.0250	1	08/22/23	08/23/23	
-Xylene	ND	0.0250	1	08/22/23	08/23/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/23/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/23/23	
urrogate: 4-Bromochlorobenzene-PID		91.1 %	70-130	08/22/23	08/23/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst	Analyst: RKS		Batch: 2334019
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/23/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		84.3 %	70-130	08/22/23	08/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst	: KM		Batch: 2334041
Diesel Range Organics (C10-C28)	ND	25.0	1	08/23/23	08/24/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/23/23	08/24/23	
urrogate: n-Nonane		96.3 %	50-200	08/23/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	: BA		Batch: 2334029
Chloride	400	200	10	08/22/23	08/22/23	



# **QC Summary Data**

		QC D		ing Duc						
Ensolum, LLC 3122 National Parks Hwy		Project Name: Project Number:	01	DX Federal 2 1058-0007					Reported:	
Carlsbad NM, 88220		Project Manager:	A	shley Gioveng	go				8/25/2023 10:34:22AM	
	Volatile Organics by EPA 8021B								Analyst: RKS	
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit		
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes	
Blank (2334019-BLK1)							Prepared: 0	8/22/23 A	Analyzed: 08/22/23	
Benzene	ND	0.0250							•	
Ethylbenzene	ND	0.0250								
Toluene	ND	0.0250								
o-Xylene	ND	0.0250								
p,m-Xylene	ND	0.0500								
Total Xylenes	ND	0.0250								
Surrogate: 4-Bromochlorobenzene-PID	7.24	0.0200	8.00		90.5	70-130				
LCS (2334019-BS1)							Prepared: 0	8/22/23 A	Analyzed: 08/22/23	
Benzene	4.93	0.0250	5.00		98.5	70-130				
Ethylbenzene	4.72	0.0250	5.00		94.4	70-130				
Toluene	4.91	0.0250	5.00		98.3	70-130				
o-Xylene	4.84	0.0250	5.00		96.9	70-130				
p,m-Xylene	9.75	0.0500	10.0		97.5	70-130				
Total Xylenes	14.6	0.0250	15.0		97.3	70-130				
Surrogate: 4-Bromochlorobenzene-PID	7.26		8.00		90.8	70-130				
Matrix Spike (2334019-MS1)				Source:	E308148-0	01	Prepared: 0	08/22/23 Analyzed: 08/23/23		
Benzene	4.86	0.0250	5.00	ND	97.2	54-133				
Ethylbenzene	4.66	0.0250	5.00	ND	93.1	61-133				
Toluene	4.86	0.0250	5.00	ND	97.1	61-130				
o-Xylene	4.77	0.0250	5.00	ND	95.4	63-131				
p,m-Xylene	9.62	0.0500	10.0	ND	96.2	63-131				
Total Xylenes	14.4	0.0250	15.0	ND	96.0	63-131				
Surrogate: 4-Bromochlorobenzene-PID	7.23		8.00		90.3	70-130				
Matrix Spike Dup (2334019-MSD1)				Source:	E308148-(	01	Prepared: 0	8/22/23 A	Analyzed: 08/23/23	
Benzene	4.74	0.0250	5.00	ND	94.8	54-133	2.48	20		
Ethylbenzene	4.53	0.0250	5.00	ND	90.6	61-133	2.77	20		
Toluene	4.73	0.0250	5.00	ND	94.6	61-130	2.66	20		
		0.0250	5.00	ND	93.2	63-131	2.32	20		
o-Xylene	4.66	0.0230	2100	ПВ	15.2					
o-Xylene p,m-Xylene	4.66 9.37	0.0230	10.0	ND	93.7	63-131	2.68	20		
•						63-131 63-131	2.68 2.56	20 20		



# **QC Summary Data**

		QC D	umm	aly Data	a a				
Ensolum, LLC 3122 National Parks Hwy		Project Name: Project Number:	(	RDX Federal 21 )1058-0007					Reported:
Carlsbad NM, 88220		Project Manager	: 4	Ashley Gioveng	0				8/25/2023 10:34:22AM
	Nor	halogenated (	Organics	s by EPA 801	15D - GI	RO			Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2334019-BLK1)							Prepared: 0	8/22/23 A	nalyzed: 08/22/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.86		8.00		85.7	70-130			
LCS (2334019-BS2)							Prepared: 0	8/22/23 A	analyzed: 08/23/23
Gasoline Range Organics (C6-C10)	44.0	20.0	50.0		88.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.92		8.00		86.5	70-130			
Matrix Spike (2334019-MS2)				Source:	E308148-	01	Prepared: 0	8/22/23 A	analyzed: 08/23/23
Gasoline Range Organics (C6-C10)	43.6	20.0	50.0	ND	87.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.92		8.00		86.6	70-130			
Matrix Spike Dup (2334019-MSD2)				Source:	E308148-	01	Prepared: 0	8/22/23 A	nalyzed: 08/23/23
Gasoline Range Organics (C6-C10)	44.0	20.0	50.0	ND	88.0	70-130	0.946	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.89		8.00		86.2	70-130			



# **QC Summary Data**

		QC BI	u I I I I I I	ary Data					
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 21 )1058-0007 Ashley Giovengo					<b>Reported:</b> 8/25/2023 10:34:22AM
	Nonh	alogenated Orga	anics by	y EPA 8015D	- DRO	/ORO			Analyst: KM
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2334041-BLK1)							Prepared: 0	8/23/23 A	Analyzed: 08/23/23
Diesel Range Organics (C10-C28)	ND	25.0					Tiepurea. o	0/20/20 1	inary200. 00/25/25
Oil Range Organics (C28-C36)	ND	23.0 50.0							
Surrogate: n-Nonane	58.5		50.0		117	50-200			
LCS (2334041-BS1)							Prepared: 0	8/23/23 A	Analyzed: 08/24/23
Diesel Range Organics (C10-C28)	248	25.0	250		99.4	38-132			
Surrogate: n-Nonane	48.2		50.0		96.3	50-200			
Matrix Spike (2334041-MS1)				Source: <b>F</b>	308155-	23	Prepared: 0	8/23/23 A	Analyzed: 08/24/23
Diesel Range Organics (C10-C28)	245	25.0	250	ND	98.2	38-132			
Surrogate: n-Nonane	45.2		50.0		90.5	50-200			
Matrix Spike Dup (2334041-MSD1)				Source: <b>F</b>	2308155-	23	Prepared: 0	8/23/23 A	Analyzed: 08/24/23
Diesel Range Organics (C10-C28)	249	25.0	250	ND	99.7	38-132	1.54	20	
Surrogate: n-Nonane	47.6		50.0		95.2	50-200			



## **QC Summary Data**

		$\mathbf{x} \circ \sim$	••••••	···· J – ····					
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager	(	RDX Federal 2 )1058-0007 Ashley Gioveng					<b>Reported:</b> 8/25/2023 10:34:22A
		Anions	by EPA	300.0/90564	4				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	
Blank (2334029-BLK1)							Prepared: 0	8/22/23	Analyzed: 08/22/23
Chloride	ND	20.0							
LCS (2334029-BS1)							Prepared: 0	8/22/23	Analyzed: 08/22/23
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2334029-MS1)				Source:	E308154-2	21	Prepared: 0	8/22/23	Analyzed: 08/22/23
Chloride	269	20.0	250	ND	108	80-120			
Matrix Spike Dup (2334029-MSD1)				Source:	E308154-2	21	Prepared: 0	8/22/23	Analyzed: 08/22/23
Chloride	273	20.0	250	ND	109	80-120	1.38	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Γ	Ensolum, LLC	Project Name:	RDX Federal 21 #041	
	3122 National Parks Hwy	Project Number:	01058-0007	Reported:
	Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	08/25/23 10:34

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



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### Chain of Custody

Page	1	_0

Received by OCD: 9/27/2023 1:38:20 PM

			1. 12						010	58	-000	7 (	m	-				
Client: Ensolum, LLC.				Bill To			Lab Use Only							TA		rogram		
Project: RDX Federal 2				Attention: Jim Raley	2	Lab WO	BOSISU Job Number			ber	1D	2D	3D	Standa	rd CWA	SDW.		
Project Manager: Ashle				Address: 5315 Buena Vista Dr		E30	515				-0001				X			
Address: 3122 Nationa				City, State, Zip: Carlsbad NM, 8	38220	-	_	_	Analy	sis ar	nd Metho	d	_		100		RCR/	
City, State, Zip: Carlsba	ad NM, 8	88220		Phone: (575)689-7597		hy									1.50	Share -		
Phone: 575-988-0055				Email: jim.raley@dvn.com		ORC										State	1	
Email: agiovengo@ens	solum.co	om				ORO/	121	60	9	300.0		MN		X	NM	CO UT AZ	ZTX	
Report due by:	T				The state of	RO/I	y 80	y 82	\$ 601	de 3(		U			×			
Sampled	Matrix	No. of Containers	Sample ID		Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride :		BGDOC		GDOC		Remark	s	
12:34 8/18/2023	Soil	1 Jar		FS06 - 4'	I							x						
12:26 8/18/2023	Soil	1 Jar		FS08 - 4'	2							x	-					
12:27 8/18/2023	Soil	1 Jar		FS09 - 4'	3							x						
13:40 8/18/2023	Soil	1 Jar		SW05 - 2'	4							x						
																1.7.1		
					a star a star													
			· · · · · · · · · · · · · · · · · · ·															
Additional Instructions	: Pleas	se CC: cb	ourton@ensolur	n.com, agiovengo@ensolum.com	, jim.raley@dv	vn.com, c	hami	ilton	@ens	olur	n.com							
, (field sampler), attest to the vi late or time of collection is cons				aware that tampering with or intentionally mi action. <u>Sampled by:</u>	slabelling the samp	ble location,										the day they are san on subsequent days.	npled or	
Relinquished by (Signature)			21-23 Time		L 8:21.		11		Rece	eiveo	l on ice:			se Or N	nly			
Relinquished by: (Signature)	meds	- Date	H.J.3 ITIME	Received by: (Signature)	b B.2	·23/	7/	5	<u>T1</u>			<u>T2</u>			<u></u>			
Relinquished by: (Signature)	im	B	21.23 2:	345 arth Mar	~ 8/22	23 8	:14	5		Constant and and	np °C	4						
ample Matrix: S - Soil, Sd - Solid						er Type: g -												
				ess other arrangements are made. Hazar ory with this COC. The liability of the labo								lient	expen	se. Th	ne report fo	r the analysis of	f the abov	
									1	2		-					-	
									E	2		E				rot	e	

### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

	s: Please take note of any NO checkmarks.	•	-	Checklist	` ´	od os rogu	ostad	
	e no response concerning these items within 24 hours of the end of the Ensolum, LLC	ate Received:	08/22/23		i de anaiyz	eu as requ	Work Order ID:	E308156
Client:								
Phone: Email:		ate Logged In: 1e Date:	08/21/23		TAT)		Logged In By:	Caitlin Mars
Eman.		le Date.	06/26/25	3 17:00 (4 da	y IAI)			
<u>Chain o</u>	of Custody (COC)							
l. Does	the sample ID match the COC?		Yes					
2. Does	the number of samples per sampling site location match	the COC	Yes					
3. Were	samples dropped off by client or carrier?		Yes	Ca	rrier: <u>Cou</u>	rier		
4. Was t	he COC complete, i.e., signatures, dates/times, requested	l analyses?	Yes					
5. Were	all samples received within holding time?	~	Yes					
	Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion.	e field,					Comme	nts/Resolution
Sample	Turn Around Time (TAT)							
6. Did th	he COC indicate standard TAT, or Expedited TAT?		Yes					
Sample	Cooler							
	a sample cooler received?		Yes					
8. If yes	, was cooler received in good condition?		Yes					
9. Was t	he sample(s) received intact, i.e., not broken?		Yes					
10. Were	e custody/security seals present?		No					
11. If ye	es, were custody/security seals intact?		NA					
	the sample received on ice? If yes, the recorded temp is 4°C, i.e. Note: Thermal preservation is not required, if samples are re- minutes of sampling	ceived w/i 15	Yes					
	visible ice, record the temperature. Actual sample tem	nperature. <u>4</u>	<u>c</u>					
	<u>Container</u>		NI					
	aqueous VOC samples present?		No NA					
	VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)?		NA					
			NA					
	a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers?							
	e appropriate volume/weight or number of sample containers?	collected?	Yes Yes					
		conecteur	105					
Field La 20 Were	ader e field sample labels filled out with the minimum inform	ation						
	Sample ID?		Yes					
	Date/Time Collected?		Yes					
0	Collectors name?		Yes					
	<b>Preservation</b>							
	s the COC or field labels indicate the samples were prese	rved?	No					
	sample(s) correctly preserved?		NA					
24. Is la	b filteration required and/or requested for dissolved meta	ils?	No					
	nase Sample Matrix							
	s the sample have more than one phase, i.e., multiphase?		No					
27. If ye	es, does the COC specify which phase(s) is to be analyzed	d?	NA					
	tract Laboratory							
28. Are	samples required to get sent to a subcontract laboratory?		No					
29. Was	a subcontract laboratory specified by the client and if so	who?	NA	Subcontr	act Lab: N	A		
Client ]	Instruction							

Signature of client authorizing changes to the COC or sample disposition.



envirotech Inc.

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5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

**Practical Solutions for a Better Tomorrow** 

# **Analytical Report**

Ensolum, LLC

Project Name: RDX Federal 21 #041

NDA i edelal 21 #04

Work Order: E308136

Job Number: 01058-0007

Received: 8/18/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 8/22/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported. Date Reported: 8/22/23

Ashley Giovengo 3122 National Parks Hwy Carlsbad, NM 88220

Project Name: RDX Federal 21 #041 Workorder: E308136 Date Received: 8/18/2023 8:15:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/18/2023 8:15:00AM, under the Project Name: RDX Federal 21 #041.

The analytical test results summarized in this report with the Project Name: RDX Federal 21 #041 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman Laboratory Director Office: 505-632-1881 Cell: 775-287-1762 whinchman@envirotech-inc.com

Field Offices:

Southern New Mexico Area Lynn Jarboe Technical Representative/Client Services

Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@envirotech-inc.com Raina Schwanz Laboratory Administrator Office: 505-632-1881 rainaschwanz@envirotech-inc.com Alexa Michaels Sample Custody Officer Office: 505-632-1881 labadmin@envirotech-inc.com

West Texas Midland/Odessa Area Rayny Hagan Technical Representative Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com



Page 116 of 264

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# Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
FS07 - 2'	5
SW06 - 1'	6
QC Summary Data	7
QC - Volatile Organics by EPA 8021B	7
QC - Nonhalogenated Organics by EPA 8015D - GRO	8
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	9
QC - Anions by EPA 300.0/9056A	10
Definitions and Notes	11
Chain of Custody etc.	12

FS07 - 2'

SW06 - 1'

		Sample Sum	mary	
Ensolum, LLC		Project Name:	RDX Federal 21 #041	Reported:
3122 National Parks Hwy		Project Number:	01058-0007	Reporteu:
Carlsbad NM, 88220		Project Manager:	Ashley Giovengo	08/22/23 16:08
Client Sample ID	Lab Sample ID	Matrix	Sampled Received	l Container

Soil

Soil

E308136-01A

E308136-02A

08/16/23

08/16/23

08/18/23

08/18/23

Page 118 of 264

Glass Jar, 32 oz.

Glass Jar, 2 oz.



	5	ampic D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numbo Project Manag	er: 0103	X Federal 21 #04 58-0007 ley Giovengo	41		<b>Reported:</b> 8/22/2023 4:08:17PM
		FS07 - 2'				
		E308136-01				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2333053
Benzene	ND	0.0250	1	08/18/23	08/19/23	
Ethylbenzene	ND	0.0250	1	08/18/23	08/19/23	
Toluene	ND	0.0250	1	08/18/23	08/19/23	
p-Xylene	ND	0.0250	1	08/18/23	08/19/23	
o,m-Xylene	ND	0.0500	1	08/18/23	08/19/23	
Total Xylenes	ND	0.0250	1	08/18/23	08/19/23	
urrogate: 4-Bromochlorobenzene-PID		89.8 %	70-130	08/18/23	08/19/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2333053
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/18/23	08/19/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.1 %	70-130	08/18/23	08/19/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: KM		Batch: 2333075
Diesel Range Organics (C10-C28)	ND	25.0	1	08/18/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/18/23	08/18/23	
Surrogate: n-Nonane		89.9 %	50-200	08/18/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2333077
Chloride	917	40.0	2	08/18/23	08/20/23	

# Sample Data



## Sample Data

	b	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Mana	ber: 010	X Federal 21 58-0007 ley Giovengo			<b>Reported:</b> 8/22/2023 4:08:17PM
		SW06 - 1'				
		E308136-02				
		Reporting				
Analyte	Result	Limit	Diluti	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	A	nalyst: RKS		Batch: 2333053
Benzene	ND	0.0250	1	08/18/23	08/19/23	
Ethylbenzene	ND	0.0250	1	08/18/23	08/19/23	
Toluene	ND	0.0250	1	08/18/23	08/19/23	
p-Xylene	ND	0.0250	1	08/18/23	08/19/23	
o,m-Xylene	ND	0.0500	1	08/18/23	08/19/23	
Fotal Xylenes	ND	0.0250	1	08/18/23	08/19/23	
Surrogate: 4-Bromochlorobenzene-PID		91.3 %	70-130	08/18/23	08/19/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	nalyst: RKS		Batch: 2333053
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/18/23	08/19/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.8 %	70-130	08/18/23	08/19/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	nalyst: KM		Batch: 2333075
Diesel Range Organics (C10-C28)	ND	25.0	1	08/18/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/18/23	08/18/23	
Gurrogate: n-Nonane		95.0 %	50-200	08/18/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: BA		Batch: 2333077
Chloride	841	20.0	1	08/18/23	08/20/23	



# **QC Summary Data**

		QC DI							
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	01	DX Federal 2 058-0007 shley Gioveng					<b>Reported:</b> 8/22/2023 4:08:17PM
		Volatile O	rganics b	oy EPA 802	21B				Analyst: RKS
Analyte		Reporting	Spike	Source		Rec		RPD	
	Result	Limit	Level	Result	Rec	Limits	RPD	Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2333053-BLK1)							Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.57		8.00		94.6	70-130			
LCS (2333053-BS1)							Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Benzene	5.19	0.0250	5.00		104	70-130			
Ethylbenzene	5.12	0.0250	5.00		102	70-130			
Toluene	5.19	0.0250	5.00		104	70-130			
p-Xylene	5.12	0.0250	5.00		102	70-130			
p,m-Xylene	10.4	0.0500	10.0		104	70-130			
Total Xylenes	15.6	0.0250	15.0		104	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.62		8.00		95.2	70-130			
Matrix Spike (2333053-MS1)				Source:	E308128-0	)1	Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Benzene	4.94	0.0250	5.00	ND	98.8	54-133			
Ethylbenzene	6.66	0.0250	5.00	1.76	97.9	61-133			
Toluene	5.29	0.0250	5.00	0.284	100	61-130			
p-Xylene	7.57	0.0250	5.00	2.63	99.0	63-131			
p,m-Xylene	14.9	0.0500	10.0	5.16	97.3	63-131			
Total Xylenes	22.5	0.0250	15.0	7.78	97.8	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.40		8.00		92.5	70-130			
				Source:	E308128-0	)1	Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Matrix Spike Dup (2333053-MSD1)									
	5.02	0.0250	5.00	ND	100	54-133	1.60	20	
Benzene	5.02 6.72	0.0250 0.0250	5.00 5.00			54-133 61-133	1.60 0.927	20 20	
Benzene Ethylbenzene				ND	100				
Benzene Ethylbenzene Toluene	6.72	0.0250	5.00	ND 1.76	100 99.2	61-133	0.927	20	
Benzene Ethylbenzene Toluene o-Xylene	6.72 5.32	0.0250 0.0250	5.00 5.00	ND 1.76 0.284	100 99.2 101	61-133 61-130	0.927 0.476	20 20	
Matrix Spike Dup (2333053-MSD1) Benzene Ethylbenzene Toluene o-Xylene p.m-Xylene Total Xylenes	6.72 5.32 7.56	0.0250 0.0250 0.0250	5.00 5.00 5.00	ND 1.76 0.284 2.63	100 99.2 101 98.6	61-133 61-130 63-131	0.927 0.476 0.213	20 20 20	·



# **QC Summary Data**

		QC D	umm	ary Data	u				
Ensolum, LLC 3122 National Parks Hwy		Project Name: Project Number:	0	RDX Federal 21					<b>Reported:</b>
Carlsbad NM, 88220		Project Manager:	P	Ashley Gioveng	<u>;</u> 0				8/22/2023 4:08:17PM
	Noi	nhalogenated C	Organics	by EPA 80	15D - GI	RO			Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2333053-BLK1)							Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.3	70-130			
LCS (2333053-BS2)							Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Gasoline Range Organics (C6-C10)	51.0	20.0	50.0		102	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.37		8.00		92.1	70-130			
Matrix Spike (2333053-MS2)				Source:	E308128-	01	Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Gasoline Range Organics (C6-C10)	189	20.0	50.0	114	150	70-130			M1
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.47		8.00		106	70-130			
Matrix Spike Dup (2333053-MSD2)				Source:	E308128-	01	Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Gasoline Range Organics (C6-C10)	180	20.0	50.0	114	132	70-130	4.75	20	M1
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.04		8.00		100	70-130			



# **QC Summary Data**

		QC BI	u I I I I I I	ary Data					
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 21 )1058-0007 Ashley Giovengo					<b>Reported:</b> 8/22/2023 4:08:17PM
	Nonh	alogenated Orga	anics by	v EPA 8015D	- DRO	/ORO			Analyst: KM
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2333075-BLK1)							Prepared: 0	8/18/23 A	nalyzed: 08/18/23
Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36)	ND ND	25.0 50.0							
Surrogate: n-Nonane	47.3		50.0		94.6	50-200			
LCS (2333075-BS1)							Prepared: 0	8/18/23 A	analyzed: 08/18/23
Diesel Range Organics (C10-C28)	233	25.0	250		93.2	38-132			
Surrogate: n-Nonane	44.0		50.0		87.9	50-200			
Matrix Spike (2333075-MS1)				Source: <b>F</b>	2308135-	02	Prepared: 0	8/18/23 A	analyzed: 08/18/23
Diesel Range Organics (C10-C28)	231	25.0	250	ND	92.6	38-132			
Surrogate: n-Nonane	42.1		50.0		84.2	50-200			
Matrix Spike Dup (2333075-MSD1)				Source: <b>F</b>	2308135-	02	Prepared: 0	8/18/23 A	analyzed: 08/18/23
Diesel Range Organics (C10-C28)	233	25.0	250	ND	93.0	38-132	0.488	20	
Surrogate: n-Nonane	42.9		50.0		85.8	50-200			



## **QC Summary Data**

			••••••	····· · · · · · · · · · · · · · · · ·					
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 2 01058-0007 Ashley Gioveng					<b>Reported:</b> 8/22/2023 4:08:17PM
		Anions	by EPA	300.0/9056	4				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2333077-BLK1)							Prepared: 0	8/18/23	Analyzed: 08/19/23
Chloride	ND	20.0							
LCS (2333077-BS1)							Prepared: 0	8/18/23	Analyzed: 08/19/23
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2333077-MS1)				Source:	E308066-	01	Prepared: 0	8/18/23	Analyzed: 08/19/23
Chloride	273	20.0	250	ND	109	80-120			
Matrix Spike Dup (2333077-MSD1)				Source:	E308066-	01	Prepared: 0	8/18/23	Analyzed: 08/19/23
Chloride	275	20.0	250	ND	110	80-120	0.434	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Ensolum, LLC	Project Name:	RDX Federal 21 #041	
3122 National Parks Hwy	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	08/22/23 16:08

M1 Matrix spike recovery was above acceptance limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Release Project Information

Page \_ of

Received by OCD: 9/27/2023 1:38:20 PM

Client:	Ensolum, LLC					Bill To					ab U						T	AT		EPA P	rogram
	<b>RDX</b> Federal					Attention: Jim Raley			Lab WC	D#	1997	Job	Num	-0007	1D	2D	3D	Sta	ndard	CWA	SDWA
Project	Manager: As	hley Giov	vengo			Address: 5315 Buena Vista D			E30	819	56	101	58	-0007					х		
Address	: 3122 Natio	nal Parks	Hwy			City, State, Zip: Carlsbad NM,	88220				-	Anal	ysis a	nd Metho	bd						RCRA
City, Sta	te, Zip: Carls	bad NM,	88220		1	Phone: (575)689-7597	1		by						1						
Phone:	575-988-005	5	-			Email: jim.raley@dvn.com			ORO				1.5							State	
Email: a	agiovengo@e	nsolum.	com		10				0/0	-			0		WN			1 Tr	NM CO	UT AZ	TX
Report of	due by:								TPH GRO/DRO/ORO by	8015 BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0				¥,		×		
Time			No. of		-		La	0	GRC	(by	by 8	als 6	ride		BGDOC		V		~		<u></u>
Sampled	Date Sampled	Matrix	Containers	Sample ID			Num	ber	LPH	8015 BTEX	100	Met	Chlo		3GD		GDOC			Remarks	
10:38	8/16/2023	Soil	1 Jar	1	1	FS07 - 2'					-	-			x						
10.50	0/00000					C14/06 41			-	-	-	male	hand		-	-	-			- and the second se	
10:52	8/16/2023	Soil	1 Jar		_	SW06 - 1'	2								x						
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								955	-	-	-	-			-	-	-				+
									-					2.							
	5						Styre &	670									-				
																				1	
Additio	nal Instructio	ns: Ple	ase CC: cl	burton@ens	olum	.com, agiovengo@ensolum.com	n, jim.raley(	odvn	n.com, d	cham	ilton	@ens	solur	n.com	1	1					
I, (field san	npler), attest to th	e validity ar	id authentici	ty of this sample	. I am a	aware that tampering with or intentionally r	nislabelling the	ample	location,	in the second		100000								they are samp	led or
date or tim	ne of collection is o	considered f			r legal a	ction. Sampled by:		-		-	_	receive	ed pack	ed in ice at ar	n avg te	mp abov	ve 0 but	less than	6 °C on subse	quent days.	
Relinquis	ned by: (Signatu	re)	Date	-17-23 Ti	me 7.ºC	S Received by (Signature)	Date 8/	73	Tim.	:39	,	Reco	eiver	l on ice:		ab U	se Or	nly	and the second		Section 1
Relinquis	hed Signatu	re)	Date	-17-23 TI	1/12	Beceived by: (Signature)	Date 8.	17.	72 Tim	e	30	1.1.1			C				53		
Relinquis	hed by: (Signatu	re)		.18.23	me	Received by: (rignature)	Date	1	n Tim	3. M	50				<u>T2</u>				<u>r3</u>		
6	onen	ma		9	Ŋ	s cultur Man	n sil	16	20	1.	1			np °C_	7		110				
	atrix: S - Soil, Sd - S				dunles	r other errongements are made.								c, ag - am					1 fearth	and at the	
						is other arrangements are made. Haza ry with this COC. The liability of the lab									lient	expens	se. Th	e repor	t for the a	nalysis of t	ne above
								and a second second				-						-			e

### **Envirotech Analytical Laboratory**

### Sample Receipt Checklist (SRC)

Client:	Ensolum, LLC Da	ate Received:	08/18/23	08:15	Work Order ID:	E308136
Phone:	(575) 988-0055 Da	ate Logged In:	08/17/23	16:32	Logged In By:	Caitlin Mars
Email:		le Date:	08/24/23	17:00 (4 day TAT)		
Chain of	f Custody (COC)					
1. Does t	the sample ID match the COC?		Yes			
2. Does t	the number of samples per sampling site location match	the COC	Yes			
3. Were s	samples dropped off by client or carrier?		Yes	Carrier: Courier		
4. Was th	ne COC complete, i.e., signatures, dates/times, requested	l analyses?	Yes			
5. Were a	all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion.	e field,	Yes		<u>Commen</u>	s/Resolution
Sample 7	Turn Around Time (TAT)					
	e COC indicate standard TAT, or Expedited TAT?		Yes			
Sample	•					
	sample cooler received?		Yes			
	was cooler received in good condition?		Yes			
9. Was th	ne sample(s) received intact, i.e., not broken?		Yes			
	custody/security seals present?		No			
	s, were custody/security seals intact?		NA			
-	he sample received on ice? If yes, the recorded temp is 4°C, i.e. Note: Thermal preservation is not required, if samples are re-	,	Yes			
13 Ifno	visible ice, record the temperature. Actual sample ter		c			
		nperature. <u>+</u>	<u> </u>			
	Container_ aqueous VOC samples present?		No			
	VOC samples collected in VOA Vials?		NA			
	e head space less than 6-8 mm (pea sized or less)?		NA			
	a trip blank (TB) included for VOC analyses?		NA			
	non-VOC samples collected in the correct containers?		Yes			
	appropriate volume/weight or number of sample containers	collected?	Yes			
Field La			100			
	field sample labels filled out with the minimum inform	ation:				
	Sample ID?		Yes			
Ι	Date/Time Collected?		Yes			
	Collectors name?		Yes			
	Preservation	10				
	the COC or field labels indicate the samples were prese	rved?	No			
	sample(s) correctly preserved?	1-9	NA N-			
	o filteration required and/or requested for dissolved meta	us <i>?</i>	No			
	ase Sample Matrix					
	the sample have more than one phase, i.e., multiphase?		No			
27. If yes	s, does the COC specify which phase(s) is to be analyzed	d?	NA			
Subcont	ract Laboratory_					
28. Are s	samples required to get sent to a subcontract laboratory?		No			

Signature of client authorizing changes to the COC or sample disposition.



•





5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

**Practical Solutions for a Better Tomorrow** 

# **Analytical Report**

Ensolum, LLC

Project Name:

RDX Federal 21 #041

Work Order: E309054

Job Number: 01058-0007

Received: 9/8/2023

Revision: 1

**Report Reviewed By:** 

Walter Hinchman Laboratory Director 9/13/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 9/13/23

Ashley Giovengo 3122 National Parks Hwy Carlsbad, NM 88220

Project Name: RDX Federal 21 #041 Workorder: E309054 Date Received: 9/8/2023 6:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/8/2023 6:00:00AM, under the Project Name: RDX Federal 21 #041.

The analytical test results summarized in this report with the Project Name: RDX Federal 21 #041 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

**Raina Schwanz** 

Respectfully,

Walter Hinchman Laboratory Director Office: 505-632-1881 Cell: 775-287-1762 whinchman@envirotech-inc.com

Field Offices:

Southern New Mexico Area Lynn Jarboe

Technical Representative/Client Services Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@envirotech-inc.com

Laboratory Administrator Office: 505-632-1881 rainaschwanz@envirotech-inc.com Alexa Michaels Sample Custody Officer Office: 505-632-1881 labadmin@envirotech-inc.com

West Texas Midland/Odessa Area Rayny Hagan Technical Representative Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com



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# Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
FS07 - 4'	5
SW06 - 1'	6
QC Summary Data	7
QC - Volatile Organic Compounds by EPA 8260B	7
QC - Nonhalogenated Organics by EPA 8015D - GRO	8
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	9
QC - Anions by EPA 300.0/9056A	10
Definitions and Notes	11
Chain of Custody etc.	12

FS07 - 4'

SW06 - 1'

		Sample Sum	mary	
Ensolum, LLC		Project Name:	RDX Federal 21 #041	Reported:
3122 National Parks Hwy		Project Number:	01058-0007	Reporteu:
Carlsbad NM, 88220		Project Manager:	Ashley Giovengo	09/13/23 13:57
Client Sample ID	Lab Sample ID	Matrix	Sampled Receive	d Container

Soil

Soil

E309054-01A

E309054-02A

09/06/23

09/06/23

09/08/23

09/08/23



.

Glass Jar, 2 oz.

Glass Jar, 2 oz.

	S	Sample D	ata				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Num Project Mana	ber: 0105	K Federal 2 58-0007 ley Giovenş				<b>Reported:</b> 9/13/2023 1:57:35PM
		FS07 - 4'					
		E309054-01					
		Reporting					
Analyte	Result	Limit	Dilu	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	RKS		Batch: 2337004
Benzene	ND	0.0250	:	1	09/11/23	09/11/23	
Ethylbenzene	ND	0.0250	1	1	09/11/23	09/11/23	
Toluene	ND	0.0250	1	1	09/11/23	09/11/23	
p-Xylene	ND	0.0250	1	1	09/11/23	09/11/23	
o,m-Xylene	ND	0.0500	:	1	09/11/23	09/11/23	
Total Xylenes	ND	0.0250		1	09/11/23	09/11/23	
Surrogate: Bromofluorobenzene		105 %	70-130		09/11/23	09/11/23	
Surrogate: 1,2-Dichloroethane-d4		97.5 %	70-130		09/11/23	09/11/23	
Surrogate: Toluene-d8		101 %	70-130		09/11/23	09/11/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	RKS		Batch: 2337004
Gasoline Range Organics (C6-C10)	ND	20.0	i	1	09/11/23	09/11/23	
Surrogate: Bromofluorobenzene		105 %	70-130		09/11/23	09/11/23	
Surrogate: 1,2-Dichloroethane-d4		97.5 %	70-130		09/11/23	09/11/23	
Surrogate: Toluene-d8		101 %	70-130		09/11/23	09/11/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	КМ		Batch: 2337027
Diesel Range Organics (C10-C28)	ND	25.0	:	1	09/12/23	09/13/23	
Dil Range Organics (C28-C36)	ND	50.0		1	09/12/23	09/13/23	
Surrogate: n-Nonane		112 %	50-200		09/12/23	09/13/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	BA		Batch: 2337014
Chloride	353	200	1	0	09/11/23	09/12/23	



# envirotech Inc.

### Sample Data

	50	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numbe Project Manag	er: 010:	K Federal 21 58-0007 ley Gioveng			<b>Reported:</b> 9/13/2023 1:57:35PM
		SW06 - 1'				
		E309054-02				
		Reporting				
Analyte	Result	Limit	Dilu	tion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	1	Analyst: RKS		Batch: 2337004
Benzene	ND	0.0250	1	09/11/23	09/12/23	
Ethylbenzene	ND	0.0250	1	09/11/23	09/12/23	
Toluene	ND	0.0250	1	09/11/23	09/12/23	
p-Xylene	ND	0.0250	1	09/11/23	09/12/23	
,m-Xylene	ND	0.0500	1	09/11/23	09/12/23	
Fotal Xylenes	ND	0.0250	1	09/11/23	09/12/23	
Surrogate: Bromofluorobenzene		110 %	70-130	09/11/23	09/12/23	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130	09/11/23	09/12/23	
Surrogate: Toluene-d8		103 %	70-130	09/11/23	09/12/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	1	Analyst: RKS		Batch: 2337004
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/11/23	09/12/23	
Surrogate: Bromofluorobenzene		110 %	70-130	09/11/23	09/12/23	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130	09/11/23	09/12/23	
Surrogate: Toluene-d8		103 %	70-130	09/11/23	09/12/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	1	Analyst: KM		Batch: 2337027
Diesel Range Organics (C10-C28)	ND	25.0	1	09/12/23	09/13/23	
Dil Range Organics (C28-C36)	ND	50.0	1	09/12/23	09/13/23	
urrogate: n-Nonane		112 %	50-200	09/12/23	09/13/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	1	Analyst: BA		Batch: 2337014
Chloride	88.8	40.0	2	09/11/23	09/12/23	



# **QC Summary Data**

				iry Dai	a					
Ensolum, LLC 3122 National Parks Hwy		Project Name: Project Number:	01	DX Federal 2 058-0007					Reported:	
Carlsbad NM, 88220		Project Manager:	As	shley Gioveng	go			9/1	9/13/2023 1:57:35PM	
		Volatile Organic	B	Analyst: RKS						
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit		
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes	
Blank (2337004-BLK1)							Prepared: 0	9/11/23 Anal	yzed: 09/11/23	
Benzene	ND	0.0250								
Ethylbenzene	ND	0.0250								
Toluene	ND	0.0250								
o-Xylene	ND	0.0250								
p,m-Xylene	ND	0.0500								
Total Xylenes	ND	0.0250								
Surrogate: Bromofluorobenzene	0.547		0.500		109	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.466		0.500		93.1	70-130				
Surrogate: Toluene-d8	0.513		0.500		103	70-130				
LCS (2337004-BS1)							Prepared: 0	9/11/23 Anal	yzed: 09/11/23	
Benzene	2.49	0.0250	2.50		99.4	70-130	1		<u>, , , , , , , , , , , , , , , , , , , </u>	
Ethylbenzene	2.57	0.0250	2.50		103	70-130				
-	2.48		2.50		99.2	70-130				
Toluene	2.48	0.0250	2.50		107	70-130				
o-Xylene	5.22	0.0250	5.00		107	70-130				
p,m-Xylene	7.89	0.0500 0.0250	7.50		104	70-130				
Total Xylenes		0.0250	0.500		105	70-130				
Surrogate: Bromofluorobenzene	0.527									
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130				
Surrogate: Toluene-d8	0.501		0.500		100	70-130				
Matrix Spike (2337004-MS1)					E309054-		Prepared: 0	9/11/23 Anal	yzed: 09/11/23	
Benzene	2.51	0.0250	2.50	ND	100	48-131				
Ethylbenzene	2.58	0.0250	2.50	ND	103	45-135				
Toluene	2.49	0.0250	2.50	ND	99.7	48-130				
o-Xylene	2.67	0.0250	2.50	ND	107	43-135				
p,m-Xylene	5.20	0.0500	5.00	ND	104	43-135				
Total Xylenes	7.87	0.0250	7.50	ND	105	43-135				
Surrogate: Bromofluorobenzene	0.536		0.500		107	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.468		0.500		93.6	70-130				
Surrogate: Toluene-d8	0.498		0.500		99.6	70-130				
Matrix Spike Dup (2337004-MSD1)					E309054-		-		yzed: 09/12/23	
Benzene	2.50	0.0250	2.50	ND	99.9	48-131	0.400	23		
Ethylbenzene	2.59	0.0250	2.50	ND	104	45-135	0.328	27		
Toluene	2.49	0.0250	2.50	ND	99.5	48-130	0.221	24		
o-Xylene	2.68	0.0250	2.50	ND	107	43-135	0.430	27		
p,m-Xylene	5.23	0.0500	5.00	ND	105	43-135	0.623	27		
Total Xylenes	7.91	0.0250	7.50	ND	105	43-135	0.558	27		
Surrogate: Bromofluorobenzene	0.532		0.500		106	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.5	70-130				
-										
Surrogate: Toluene-d8	0.496		0.500		99.1	70-130				



# **QC Summary Data**

				ary Data	•				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	C	RDX Federal 21 11058-0007 Ashley Gioveng					<b>Reported:</b> 9/13/2023 1:57:35PM
	No	onhalogenated O	rganics	by EPA 801	15D - GF	RO			Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2337004-BLK1)							Prepared: 0	9/11/23 A	Analyzed: 09/11/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.547		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.466		0.500		93.1	70-130			
Surrogate: Toluene-d8	0.513		0.500		103	70-130			
LCS (2337004-BS2)							Prepared: 0	9/11/23 A	Analyzed: 09/11/23
Gasoline Range Organics (C6-C10)	53.3	20.0	50.0		107	70-130			
Surrogate: Bromofluorobenzene	0.536		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.8	70-130			
Surrogate: Toluene-d8	0.505		0.500		101	70-130			
Matrix Spike (2337004-MS2)				Source:	E309054-0	)1	Prepared: 0	9/11/23 A	Analyzed: 09/12/23
Gasoline Range Organics (C6-C10)	56.4	20.0	50.0	ND	113	70-130			
Surrogate: Bromofluorobenzene	0.533		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.464		0.500		92.7	70-130			
Surrogate: Toluene-d8	0.508		0.500		102	70-130			
Matrix Spike Dup (2337004-MSD2)				Source:	E309054-0	)1	Prepared: 0	9/11/23 A	Analyzed: 09/12/23
Gasoline Range Organics (C6-C10)	53.2	20.0	50.0	ND	106	70-130	5.78	20	
Surrogate: Bromofluorobenzene	0.531		0.500		106	70-130			
	0.482		0.500		96.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		20.4	70 150			



# **QC Summary Data**

		QC D	umm	aly Data	L				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 21 )1058-0007 Ashley Giovengo					<b>Reported:</b> 9/13/2023 1:57:35PM
	Nonh	alogenated Org	anics by	y EPA 8015D	- DRO	/ORO			Analyst: KM
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2337027-BLK1)							Prepared: 0	9/12/23 A	nalyzed: 09/12/23
Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36)	ND ND	25.0 50.0							
Surrogate: n-Nonane	57.0		50.0		114	50-200			
LCS (2337027-BS1)							Prepared: 0	9/12/23 A	nalyzed: 09/12/23
Diesel Range Organics (C10-C28)	274	25.0	250		109	38-132			
Surrogate: n-Nonane	54.2		50.0		108	50-200			
Matrix Spike (2337027-MS1)				Source: I	E <b>309091</b> -	03	Prepared: 0	9/12/23 A	nalyzed: 09/12/23
Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132			
Surrogate: n-Nonane	54.8		50.0		110	50-200			
Matrix Spike Dup (2337027-MSD1)				Source: I	E <b>309091</b> -	03	Prepared: 0	9/12/23 A	nalyzed: 09/12/23
Diesel Range Organics (C10-C28)	280	25.0	250	ND	112	38-132	1.15	20	
Surrogate: n-Nonane	56.9		50.0		114	50-200			



## **QC Summary Data**

		$\mathbf{x} \in \mathbf{z}$			~				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 2 01058-0007 Ashley Gioveng					<b>Reported:</b> 9/13/2023 1:57:35PM
		Anions	by EPA	300.0/90564	۸				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2337014-BLK1)							Prepared: 0	9/11/23 /	Analyzed: 09/11/23
Chloride LCS (2337014-BS1)	ND	20.0					Prepared: 0	9/11/23 /	Analyzed: 09/11/23
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2337014-MS1)				Source:	E309048-	01	Prepared: 0	9/11/23	Analyzed: 09/11/23
Chloride	248	20.0	250	ND	99.1	80-120			
Matrix Spike Dup (2337014-MSD1)				Source:	E309048-	01	Prepared: 0	9/11/23	Analyzed: 09/12/23
Chloride	250	20.0	250	ND	99.8	80-120	0.756	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Γ	Ensolum, LLC	Project Name:	RDX Federal 21 #041	
I	3122 National Parks Hwy	Project Number:	01058-0007	Reported:
I	Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	09/13/23 13:57

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Released Project Information

Received by OCD: 9/27/2023 1:38:20 PM

	Ensolum, LLC				Bill To		C. March	Lab Use Only ab WO# Job Number 309054 01058.0007						ТАТ				EPA Program	
	: RDX Federal				Attention: Jim Raley		Lab WO	#		Job	Num	ber	1D	2D	3D	Standard	CWA	SDWA	
	Manager: As				Address: 5315 Buena Vista Dr		E30	905	54	010	158	.0007				x			
	s: 3122 Natio				City, State, Zip: Carlsbad NM, 88	3220				Analy	sis a	nd Metho	d					RCRA	
	ate, Zip: Carls		88220		Phone: (575)689-7597		by												
	575-988-005				Email: jim.raley@dvn.com		ORO										State		
Email:	agiovengo@e	nsolum.c	com				RO/	11	0		0.0		MN		×	NM CO	UT AZ	TX	
Report	due by:						q/o	802	826	6010	e 30				TX	×	500		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Lab Number	TPH GRO/DRO/ORO by	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC		Remarks		
10:49	9/6/2023	Soil	1 Jar		FS07 - 4'	1							x						
11:30	9/6/2023	Soil	1 Jar		SW06 - 1'	2							x						
						1.													
		-			and a second	1.4.4													
								+											
								-	-					-					
								-	-					-			14		
						-		-						-		_			
						A Printer				-									
dditio	onal Instructio	ns: Plea	ase CC: cl	ourton@enso	um.com, agiovengo@ensolum.com, j	im.raley@dv	n.com, c	hami	lton	@ens	solur	n.com							
	mpler), attest to th me of collection is o			10 C	am aware that tampering with or intentionally misla gal action. <u>Sampled by:</u>	abelling the samp	le location,			and the second second						eived on ice the day ess than 6 °C on subs		led or	
lel	shed by: (Signaty	70	Date 9-	7-23 7	:08 Received by: (Signature)	- 9-7-	23 D	705	8	Rece	eiveo	d on ice:		ab Us	se On I	ly			
we	shed by: (Signatu	males	_ Q-	723 IS	145 Received by: (Signature)	Date 4 - 7	·23 1	819	5	<u>T1</u>			<u>T2</u>			<u></u>			
Relinqui	shed by: (Signatu	1160	Date 9.	8.23 2	43 Conthe Man	Date 9.8.2	23 10	:0	0	AVG	Ten	np°C	4						
ample N	latrix: S - Soil, Sd - S		idge, A - Aqu	eous, O - Other		Containe	r Type: g -	glass	~		1000	c, ag - amb	er gl	ass, v	- VOA				
Note: Sa	mples are discard	led 30 days	s after resu	Its are reported u	inless other arrangements are made. Hazardo ratory with this COC. The liability of the labora	us samples will	be returne	ed to c	lient o	or disp	osed	of at the cl					analysis of t	he above	

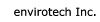
### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

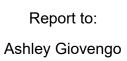
	Ensolum, LLC D	ate Received:	09/08/23	06:00	Work Order ID:	E309054
Phone:	(575) 988-0055 D	ate Logged In:	09/07/23	16:34	Logged In By:	Alexa Michaels
Email:	a.giovengo@ensolum.com D	ue Date:	09/14/23	17:00 (4 day TAT)		
<u>Chain of</u>	f Custody (COC)					
1. Does t	the sample ID match the COC?		Yes			
2. Does t	the number of samples per sampling site location match	the COC	Yes			
3. Were s	samples dropped off by client or carrier?		Yes	Carrier: Courier		
4. Was th	he COC complete, i.e., signatures, dates/times, requested	d analyses?	Yes			
5. Were a	all samples received within holding time? Note: Analysis, such as pH which should be conducted in th i.e, 15 minute hold time, are not included in this disucssion.	e field,	Yes		Commen	ts/Resolution
<u>Sample '</u>	<u>Turn Around Time (TAT)</u>					
6. Did th	e COC indicate standard TAT, or Expedited TAT?		Yes			
Sample (	<u>Cooler</u>					
	sample cooler received?		Yes			
8. If yes,	, was cooler received in good condition?		Yes			
9. Was th	he sample(s) received intact, i.e., not broken?		Yes			
10. Were	e custody/security seals present?		No			
11. If yes	s, were custody/security seals intact?		NA			
12. Was th	he sample received on ice? If yes, the recorded temp is 4°C, i.e Note: Thermal preservation is not required, if samples are re minutes of sampling	·	Yes			
13 If no	visible ice, record the temperature. Actual sample ter	mnerature: 4%	С			
	Container	<u> </u>	<u> </u>			
-	aqueous VOC samples present?		No			
	VOC samples collected in VOA Vials?		NA			
	e head space less than 6-8 mm (pea sized or less)?		NA			
16. Is the						
	a trip blank (TB) included for VOC analyses?		NA			
17. Was a	a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers?		NA Yes			
17. Was a 18. Are r	non-VOC samples collected in the correct containers?	s collected?	Yes			
17. Was a 18. Are r 19. Is the	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container	s collected?				
17. Was a 18. Are r 19. Is the <b>Field La</b>	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample container		Yes			
<ul> <li>17. Was a</li> <li>18. Are r</li> <li>19. Is the</li> <li>Field La</li> <li>20. Were</li> </ul>	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers abel		Yes			
17. Was a 18. Are r 19. Is the Field La 20. Were S	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected?		Yes Yes			
17. Was a 18. Are r 19. Is the Field La 20. Were S C	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name?		Yes Yes Yes			
17. Was a 18. Are r 19. Is the Field La 20. Were S C Sample J	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u>	nation:	Yes Yes Yes Yes Yes			
17. Was a 18. Are r 19. Is the Field La 20. Were S C Sample J 21. Does	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers bel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were prese	nation:	Yes Yes Yes Yes No			
17. Was a 18. Are r 19. Is the <b>Field La</b> 20. Were S C Sample J 21. Does 22. Are s	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers bel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were prese sample(s) correctly preserved?	nation: erved?	Yes Yes Yes Yes No NA			
17. Was a 18. Are r 19. Is the <b>Field La</b> 20. Were S C Sample 1 21. Does 22. Are s 24. Is lab	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <b>Preservation</b> is the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved met	nation: erved?	Yes Yes Yes Yes No			
17. Was a 18. Are r 19. Is the Field La 20. Were S C Sample 1 21. Does 22. Are s 24. Is lab Multipha	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation as the COC or field labels indicate the samples were prese sample(s) correctly preserved? to filteration required and/or requested for dissolved meta mase Sample Matrix	nation: erved? als?	Yes Yes Yes Yes No NA No			
17. Was a 18. Are r 19. Is the Field La 20. Were S C Sample 1 21. Does 22. Are s 24. Is lab Multiph 26. Does	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation a the COC or field labels indicate the samples were prese sample(s) correctly preserved? to filteration required and/or requested for dissolved meta tase Sample Matrix is the sample have more than one phase, i.e., multiphase?	nation: erved? als?	Yes Yes Yes Yes No NA No			
17. Was a 18. Are r 19. Is the <b>Field La</b> 20. Were S C <b>Sample</b> J 21. Does 22. Are s 24. Is lab <b>Multiph</b> 26. Does 27. If yes	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? the filteration required and/or requested for dissolved meta tase Sample Matrix is the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyze	nation: erved? als?	Yes Yes Yes Yes No NA No			
17. Was a 18. Are r 19. Is the <b>Field La</b> 20. Were S C <b>Sample</b> 1 21. Does 22. Are s 24. Is lab <b>Multiph</b> 26. Does 27. If yes	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? the COC or field labels indicate the samples were prese sample(s) correctly preserved? the sample Matrix s the sample Matrix s the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyze tract Laboratory.	nation: erved? als? d?	Yes Yes Yes Yes No NA No No			
17. Was a 18. Are r 19. Is the <b>Field La</b> 20. Were S I C <b>Sample I</b> 21. Does 22. Are s 24. Is lab <b>Multiph</b> 26. Does 27. If yes <b>Subcont</b> 28. Are s	non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers thel e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? the filteration required and/or requested for dissolved meta tase Sample Matrix is the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyze	nation: erved? als? d?	Yes Yes Yes Yes No NA No			

- (

Date



Signature of client authorizing changes to the COC or sample disposition.





5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





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**Practical Solutions for a Better Tomorrow** 

# **Analytical Report**

Ensolum, LLC

Project Name: RDX Fede

RDX Federal 28 #041

Work Order: E308115

Job Number: 01058-0007

Received: 8/16/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 8/22/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported. Date Reported: 8/22/23

Ashley Giovengo 3122 National Parks Hwy Carlsbad, NM 88220

Project Name: RDX Federal 28 #041 Workorder: E308115 Date Received: 8/16/2023 8:05:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/16/2023 8:05:00AM, under the Project Name: RDX Federal 28 #041.

The analytical test results summarized in this report with the Project Name: RDX Federal 28 #041 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman Laboratory Director Office: 505-632-1881 Cell: 775-287-1762 whinchman@envirotech-inc.com

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West Texas Midland/Odessa Area Rayny Hagan Technical Representative Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com



Page 142 of 264

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# Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
SS01 - 0'	5
SS02B - 0'	6
SS03A - 0'	7
SS04 - 0'	8
SS05 - 0'	9
SS06 - 0'	10
SS07 - 0'	11
PH02 - 3'	12
PH01 - 2'	13
QC Summary Data	14
QC - Volatile Organic Compounds by EPA 8260B	14
QC - Nonhalogenated Organics by EPA 8015D - GRO	15
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	16
QC - Anions by EPA 300.0/9056A	17
Definitions and Notes	18
Chain of Custody etc.	19

### Sample Summarv

		Sample Sum	mary		
Ensolum, LLC		Project Name:	RDX Federal 28 #0	)41	Reported:
3122 National Parks Hwy		Project Number:	01058-0007		Keportu.
Carlsbad NM, 88220		Project Manager:	Ashley Giovengo		08/22/23 15:26
Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01 - 0'	E308115-01A	Soil	08/14/23	08/16/23	Glass Jar, 2 oz.
SS02B - 0'	E308115-02A	Soil	08/14/23	08/16/23	Glass Jar, 2 oz.
SS03A - 0'	E308115-03A	Soil	08/14/23	08/16/23	Glass Jar, 2 oz.
SS04 - 0'	E308115-04A	Soil	08/14/23	08/16/23	Glass Jar, 2 oz.
SS05 - 0'	E308115-05A	Soil	08/14/23	08/16/23	Glass Jar, 2 oz.
SS06 - 0'	E308115-06A	Soil	08/14/23	08/16/23	Glass Jar, 2 oz.
SS07 - 0'	E308115-07A	Soil	08/14/23	08/16/23	Glass Jar, 2 oz.
PH02 - 3'	E308115-08A	Soil	08/14/23	08/16/23	Glass Jar, 2 oz.
PH02 - 4'	E308115-09A	Soil	08/14/23	08/16/23	Glass Jar, 2 oz.
PH01 - 2'	E308115-10A	Soil	08/14/23	08/16/23	Glass Jar, 2 oz.



		impic D				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numbe Project Manag	er: 0103	K Federal 28 58-0007 ley Giovengo			<b>Reported:</b> 8/22/2023 3:26:44PM
		SS01 - 0'				
		E308115-01				
		Reporting				
Analyte	Result	Limit	Diluti	on Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	А	nalyst: RKS		Batch: 2333044
Benzene	ND	0.0250	1	08/16/23	08/17/23	
Ethylbenzene	ND	0.0250	1	08/16/23	08/17/23	
Toluene	ND	0.0250	1	08/16/23	08/17/23	
o-Xylene	ND	0.0250	1	08/16/23	08/17/23	
p,m-Xylene	ND	0.0500	1	08/16/23	08/17/23	
Total Xylenes	ND	0.0250	1	08/16/23	08/17/23	
Surrogate: Bromofluorobenzene		118 %	70-130	08/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		96.9 %	70-130	08/16/23	08/17/23	
Surrogate: Toluene-d8		106 %	70-130	08/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	А	nalyst: RKS		Batch: 2333044
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/16/23	08/17/23	
Surrogate: Bromofluorobenzene		118 %	70-130	08/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		96.9 %	70-130	08/16/23	08/17/23	
Surrogate: Toluene-d8		106 %	70-130	08/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	nalyst: JL		Batch: 2333057
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/22/23	
Surrogate: n-Nonane		90.5 %	50-200	08/17/23	08/22/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: BA		Batch: 2333063
Chloride	191	20.0	1	08/17/23	08/18/23	



	5	ample D	ala				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Manag	oer: 0103	K Federal 28 58-0007 ley Gioveng				<b>Reported:</b> 8/22/2023 3:26:44PM
		SS02B - 0'					
		E308115-02					
		Reporting					
Analyte	Result	Limit	Dilu	tion P	repared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: RKS			Batch: 2333044
Benzene	ND	0.0250	1	0	8/16/23	08/17/23	
Ethylbenzene	ND	0.0250	1	0	8/16/23	08/17/23	
Toluene	ND	0.0250	1	0	8/16/23	08/17/23	
p-Xylene	ND	0.0250	1	0	8/16/23	08/17/23	
o,m-Xylene	ND	0.0500	1	0	8/16/23	08/17/23	
Fotal Xylenes	ND	0.0250	1	0	8/16/23	08/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130	0	8/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130	0	8/16/23	08/17/23	
Surrogate: Toluene-d8		107 %	70-130	0	8/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS			Batch: 2333044
Gasoline Range Organics (C6-C10)	ND	20.0	1	0	8/16/23	08/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130	0	8/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130	0	8/16/23	08/17/23	
Surrogate: Toluene-d8		107 %	70-130	0	8/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	-	Analyst: JL			Batch: 2333057
Diesel Range Organics (C10-C28)	ND	25.0	1	0	8/17/23	08/22/23	
Dil Range Organics (C28-C36)	ND	50.0	1	0	8/17/23	08/22/23	
Surrogate: n-Nonane		94.7 %	50-200	0	8/17/23	08/22/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA			Batch: 2333063
Chloride	186	40.0	2	2 0	8/17/23	08/18/23	



	0	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Mana	ber: 0105	X Federal 28 58-0007 ley Gioveng			<b>Reported:</b> 8/22/2023 3:26:44PM
		SS03A - 0'				
		E308115-03				
		Reporting				
Analyte	Result	Limit	Dilu	tion Prepare	d Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: RKS		Batch: 2333044
Benzene	ND	0.0250	1	08/16/2	3 08/17/23	
Ethylbenzene	ND	0.0250	1	08/16/2	3 08/17/23	
Toluene	ND	0.0250	1	08/16/2	3 08/17/23	
-Xylene	ND	0.0250	1	08/16/2	3 08/17/23	
,m-Xylene	ND	0.0500	1	08/16/2	3 08/17/23	
Total Xylenes	ND	0.0250	1	08/16/2	3 08/17/23	
urrogate: Bromofluorobenzene		121 %	70-130	08/16/2	3 08/17/23	
urrogate: 1,2-Dichloroethane-d4		95.0 %	70-130	08/16/2	3 08/17/23	
urrogate: Toluene-d8		105 %	70-130	08/16/2	3 08/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS		Batch: 2333044
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/16/2	3 08/17/23	
urrogate: Bromofluorobenzene		121 %	70-130	08/16/2	3 08/17/23	
'urrogate: 1,2-Dichloroethane-d4		95.0 %	70-130	08/16/2	3 08/17/23	
urrogate: Toluene-d8		105 %	70-130	08/16/2	3 08/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2333057
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/2	3 08/19/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/2	3 08/19/23	
urrogate: n-Nonane		84.1 %	50-200	08/17/2	3 08/19/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA		Batch: 2333063
Chloride	145	20.0	1	08/17/2	3 08/18/23	



	5	ample D	aia				
Ensolum, LLC 3122 National Parks Hwy	Project Name: Project Numbe		X Federal 2 58-0007	8 #041			Reported:
Carlsbad NM, 88220	Project Manag	ger: Ash	ley Gioveng	go		8/22/2023 3:26:44PM	
		SS04 - 0'					
		E308115-04					
		Reporting					
Analyte	Result	Limit	Dilu	ition	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: RI	KS		Batch: 2333044
Benzene	ND	0.0250	1	l	08/16/23	08/17/23	
Ethylbenzene	ND	0.0250	1	1	08/16/23	08/17/23	
Toluene	ND	0.0250	1	1	08/16/23	08/17/23	
p-Xylene	ND	0.0250	1	1	08/16/23	08/17/23	
o,m-Xylene	ND	0.0500	1	1	08/16/23	08/17/23	
Total Xylenes	ND	0.0250	1	1	08/16/23	08/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130		08/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.2 %	70-130		08/16/23	08/17/23	
Surrogate: Toluene-d8		105 %	70-130		08/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RF	KS		Batch: 2333044
Gasoline Range Organics (C6-C10)	ND	20.0	1	1	08/16/23	08/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130		08/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		97.2 %	70-130		08/16/23	08/17/23	
Surrogate: Toluene-d8		105 %	70-130		08/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL			Batch: 2333057
Diesel Range Organics (C10-C28)	ND	25.0	1	1	08/17/23	08/19/23	
Dil Range Organics (C28-C36)	ND	50.0	1	1	08/17/23	08/19/23	
Surrogate: n-Nonane		89.8 %	50-200		08/17/23	08/19/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA	A		Batch: 2333063
Chloride	268	20.0	1	1	08/17/23	08/18/23	



	56	ample D	aca				
Ensolum, LLC	Project Name:		X Federal 28	#041		D ( )	
3122 National Parks Hwy Carlsbad NM, 88220	Project Numbe Project Manag		58-0007 ley Gioveng	<b>Reported:</b> 8/22/2023 3:26:44PM			
Carisbad NM, 88220	Project Manag	er: Asn	ley Gloveng	5		8/22/2023 5.20. <del>44</del> 1 W	
		SS05 - 0'					
		E308115-05					
		Reporting					
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes	
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	I	analyst: RKS		Batch: 2333044	
Benzene	ND	0.0250	1	08/16/23	08/17/23		
Ethylbenzene	ND	0.0250	1	08/16/23	08/17/23		
Toluene	ND	0.0250	1	08/16/23	08/17/23		
p-Xylene	ND	0.0250	1	08/16/23	08/17/23		
o,m-Xylene	ND	0.0500	1	08/16/23	08/17/23		
Total Xylenes	ND	0.0250	1	08/16/23	08/17/23		
Surrogate: Bromofluorobenzene		117 %	70-130	08/16/23	08/17/23		
Surrogate: 1,2-Dichloroethane-d4		96.2 %	70-130	08/16/23	08/17/23		
Surrogate: Toluene-d8		106 %	70-130	08/16/23	08/17/23		
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	I	analyst: RKS		Batch: 2333044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/16/23	08/17/23		
Surrogate: Bromofluorobenzene		117 %	70-130	08/16/23	08/17/23		
Surrogate: 1,2-Dichloroethane-d4		96.2 %	70-130	08/16/23	08/17/23		
Surrogate: Toluene-d8		106 %	70-130	08/16/23	08/17/23		
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	I	analyst: JL		Batch: 2333057	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/19/23		
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/19/23		
Surrogate: n-Nonane		87.4 %	50-200	08/17/23	08/19/23		
Anions by EPA 300.0/9056A	mg/kg	mg/kg	I	analyst: BA		Batch: 2333063	
Chloride	201	20.0	1	08/17/23	08/18/23		



	56	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy	Project Name: Project Numbe	er: 010:	X Federal 28 58-0007			Reported:
Carlsbad NM, 88220	Project Manag	er: Ash	ley Giovenge	)		8/22/2023 3:26:44PM
		SS06 - 0'				
		E308115-06				
		Reporting				
Analyte	Result	Limit	Dilut	on Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg mg/kg Analyst: RKS					Batch: 2333044
Benzene	ND	0.0250	1	08/16/23	08/17/23	
Ethylbenzene	ND	0.0250	1	08/16/23	08/17/23	
Toluene	ND	0.0250	1	08/16/23	08/17/23	
p-Xylene	ND	0.0250	1	08/16/23	08/17/23	
p,m-Xylene	ND	0.0500	1	08/16/23	08/17/23	
Total Xylenes	ND	0.0250	1	08/16/23	08/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130	08/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		93.1 %	70-130	08/16/23	08/17/23	
Surrogate: Toluene-d8		107 %	70-130	08/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	nalyst: RKS		Batch: 2333044
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/16/23	08/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130	08/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		93.1 %	70-130	08/16/23	08/17/23	
Surrogate: Toluene-d8		107 %	70-130	08/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg mg/kg Analyst: JL			Batch: 2333057	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/19/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/19/23	
Surrogate: n-Nonane		91.4 %	50-200	08/17/23	08/19/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: BA		Batch: 2333063
Chloride	215	20.0	1	08/17/23	08/18/23	



	Di	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numbe Project Manag	er: 010:	X Federal 28 58-0007 ley Gioveng			<b>Reported:</b> 8/22/2023 3:26:44PM
		SS07 - 0'				
		E308115-07				
		Reporting				
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	Analyst: RKS		Batch: 2333044
Benzene	ND	0.0250	1	08/16/23	08/17/23	
Ethylbenzene	ND	0.0250	1	08/16/23	08/17/23	
Toluene	ND	0.0250	1	08/16/23	08/17/23	
p-Xylene	ND	0.0250	1	08/16/23	08/17/23	
o,m-Xylene	ND	0.0500	1	08/16/23	08/17/23	
Total Xylenes	ND	0.0250	1	08/16/23	08/17/23	
Surrogate: Bromofluorobenzene		120 %	70-130	08/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130	08/16/23	08/17/23	
Surrogate: Toluene-d8		106 %	70-130	08/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	Analyst: RKS		Batch: 2333044
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/16/23	08/17/23	
Surrogate: Bromofluorobenzene		120 %	70-130	08/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130	08/16/23	08/17/23	
Surrogate: Toluene-d8		106 %	70-130	08/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	Analyst: JL		Batch: 2333057
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/19/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/19/23	
Surrogate: n-Nonane		83.3 %	50-200	08/17/23	08/19/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	Analyst: BA		Batch: 2333063
Chloride	27.7	20.0	1	08/17/23	08/18/23	



	9	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Mana	oer: 0103	K Federal 28 58-0007 ley Gioveng			<b>Reported:</b> 8/22/2023 3:26:44PM
,	5 .	PH02 - 3'	, ,			
		E308115-08				
		Reporting				
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	1	Analyst: RKS		Batch: 2333044
Benzene	ND	0.0250	1	08/16/23	08/17/23	
Ethylbenzene	ND	0.0250	1	08/16/23	08/17/23	
Toluene	ND	0.0250	1	08/16/23	08/17/23	
o-Xylene	ND	0.0250	1	08/16/23	08/17/23	
o,m-Xylene	ND	0.0500	1	08/16/23	08/17/23	
Fotal Xylenes	ND	0.0250	1	08/16/23	08/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130	08/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130	08/16/23	08/17/23	
Surrogate: Toluene-d8		107 %	70-130	08/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	1	Analyst: RKS		Batch: 2333044
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/16/23	08/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130	08/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130	08/16/23	08/17/23	
Surrogate: Toluene-d8		107 %	70-130	08/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	1	Analyst: JL		Batch: 2333057
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/19/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/19/23	
Surrogate: n-Nonane		79.0 %	50-200	08/17/23	08/19/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	1	Analyst: BA		Batch: 2333063
Chloride	69.1	20.0	1	08/17/23	08/18/23	



#### Sample Data

	0	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Mana	ber: 0103	K Federal 28 58-0007 ley Giovengo			<b>Reported:</b> 8/22/2023 3:26:44PM
		PH01 - 2'				
		E308115-10				
		Reporting				
Analyte	Result	Limit	Dilut	on Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	А	nalyst: RKS		Batch: 2333044
Benzene	ND	0.0250	1	08/16/23	08/17/23	
Ethylbenzene	ND	0.0250	1	08/16/23	08/17/23	
Toluene	ND	0.0250	1	08/16/23	08/17/23	
-Xylene	ND	0.0250	1	08/16/23	08/17/23	
,m-Xylene	ND	0.0500	1	08/16/23	08/17/23	
Total Xylenes	ND	0.0250	1	08/16/23	08/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130	08/16/23	08/17/23	
Surrogate: 1,2-Dichloroethane-d4		95.0 %	70-130	08/16/23	08/17/23	
urrogate: Toluene-d8		106 %	70-130	08/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	А	nalyst: RKS		Batch: 2333044
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/16/23	08/17/23	
Surrogate: Bromofluorobenzene		117 %	70-130	08/16/23	08/17/23	
urrogate: 1,2-Dichloroethane-d4		95.0 %	70-130	08/16/23	08/17/23	
urrogate: Toluene-d8		106 %	70-130	08/16/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	ng/kg mg/kg Analyst: JL				Batch: 2333057
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/19/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/19/23	
urrogate: n-Nonane		87.4 %	50-200	08/17/23	08/19/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	А	nalyst: BA		Batch: 2333063
Chloride	742	400	20	08/17/23	08/18/23	



## **QC Summary Data**

		<u> </u>		iny Data					
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	01	DX Federal 28 058-0007 shley Gioveng				8/2	<b>Reported:</b> 22/2023 3:26:44PM
					-	<u> </u>			
		Volatile Organic	Compoi	unds by El	PA 82601	3			Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2333044-BLK1)							Prepared: 0	8/16/23 Anal	yzed: 08/17/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.587		0.500		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.497		0.500		99.3	70-130			
Surrogate: 1,2-Dichloroethane-u4 Surrogate: Toluene-d8	0.536		0.500		107	70-130			
LCS (2333044-BS1)							Prepared: 0	8/16/23 Anal	yzed: 08/17/23
	2.44	0.0250	2.50		97.5	70-130	110pulou o	0,10,20 1114	<u>j2001 00/17/20</u>
Benzene	2.44	0.0250	2.50		97.9	70-130			
Ethylbenzene	2.45	0.0250	2.50		97.5	70-130			
Toluene	2.56	0.0250	2.50		102	70-130			
o-Xylene	5.13	0.0250				70-130			
p,m-Xylene		0.0500	5.00		103				
Total Xylenes	7.69	0.0250	7.50		103	70-130			
Surrogate: Bromofluorobenzene	0.601		0.500		120	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.3	70-130			
Surrogate: Toluene-d8	0.535		0.500		107	70-130			
Matrix Spike (2333044-MS1)				Source:	E308115-(	03	Prepared: 0	8/16/23 Anal	yzed: 08/17/23
Benzene	2.42	0.0250	2.50	ND	96.7	48-131			
Ethylbenzene	2.40	0.0250	2.50	ND	96.0	45-135			
Toluene	2.38	0.0250	2.50	ND	95.2	48-130			
o-Xylene	2.54	0.0250	2.50	ND	101	43-135			
p,m-Xylene	5.06	0.0500	5.00	ND	101	43-135			
Total Xylenes	7.60	0.0250	7.50	ND	101	43-135			
Surrogate: Bromofluorobenzene	0.606		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.2	70-130			
Surrogate: Toluene-d8	0.528		0.500		106	70-130			
Matrix Spike Dup (2333044-MSD1)				Source:	E308115-0	03	Prepared: 0	8/16/23 Anal	yzed: 08/17/23
Benzene	2.42	0.0250	2.50	ND	96.9	48-131	0.248	23	
Ethylbenzene	2.46	0.0250	2.50	ND	98.4	45-135	2.53	27	
Toluene	2.44	0.0250	2.50	ND	97.5	48-130	2.35	24	
o-Xylene	2.58	0.0250	2.50	ND	103	43-135	1.86	27	
p,m-Xylene	5.16	0.0500	5.00	ND	103	43-135	1.94	27	
Total Xylenes	7.74	0.0250	7.50	ND	103	43-135	1.91	27	
Surrogate: Bromofluorobenzene	0.605		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.5	70-130			
			0.500		105	70-130			
Surrogate: Toluene-d8	0.524		0.500		105	70-150			



## **QC Summary Data**

		QC BI							
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	0	DX Federal 28 1058-0007 .shley Gioveng					<b>Reported:</b> 8/22/2023 3:26:44PM
	No		Analyst: RKS						
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2333044-BLK1)							Prepared: 0	8/16/23 A	Analyzed: 08/17/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.587		0.500		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.497		0.500		99.3	70-130			
Surrogate: Toluene-d8	0.536		0.500		107	70-130			
LCS (2333044-BS2)							Prepared: 0	8/16/23 A	Analyzed: 08/17/23
Gasoline Range Organics (C6-C10)	54.5	20.0	50.0		109	70-130			
Surrogate: Bromofluorobenzene	0.598		0.500		120	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.2	70-130			
Surrogate: Toluene-d8	0.534		0.500		107	70-130			
Matrix Spike (2333044-MS2)				Source:	E308115-0	3	Prepared: 0	8/16/23 A	Analyzed: 08/17/23
Gasoline Range Organics (C6-C10)	53.5	20.0	50.0	ND	107	70-130			
Surrogate: Bromofluorobenzene	0.592		0.500		118	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.477		0.500		95.3	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			
Matrix Spike Dup (2333044-MSD2)				Source:	E308115-0	3	Prepared: 0	8/16/23 A	Analyzed: 08/17/23
Gasoline Range Organics (C6-C10)	54.2	20.0	50.0	ND	108	70-130	1.19	20	
Surrogate: Bromofluorobenzene	0.593		0.500		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			



## **QC Summary Data**

		QC D	umm	ary Data					
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 28 01058-0007 Ashley Giovengo					<b>Reported:</b> 8/22/2023 3:26:44PM
	Nonh	alogenated Org	anics by	y EPA 8015D	- DRO	/ORO			Analyst: JL
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2333057-BLK1)							Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36)	ND ND	25.0 50.0							
Surrogate: n-Nonane	49.0		50.0		97.9	50-200			
LCS (2333057-BS1)							Prepared: 0	8/17/23 A	analyzed: 08/18/23
Diesel Range Organics (C10-C28)	240	25.0	250		96.2	38-132			
Surrogate: n-Nonane	46.4		50.0		92.9	50-200			
Matrix Spike (2333057-MS1)				Source: <b>F</b>	308115-	03	Prepared: 0	8/17/23 A	analyzed: 08/18/23
Diesel Range Organics (C10-C28)	231	25.0	250	ND	92.2	38-132			
Surrogate: n-Nonane	40.0		50.0		80.1	50-200			
Matrix Spike Dup (2333057-MSD1)				Source: <b>F</b>	308115-	03	Prepared: 0	8/17/23 A	analyzed: 08/18/23
Diesel Range Organics (C10-C28)	236	25.0	250	ND	94.5	38-132	2.39	20	
Surrogate: n-Nonane	42.3		50.0		84.6	50-200			



#### **QC Summary Data**

		$\mathbf{x} \in \mathbf{z}$			~				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 28 01058-0007 Ashley Gioveng					<b>Reported:</b> 8/22/2023 3:26:44PM
		Anions	by EPA	300.0/90564	4				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2333063-BLK1)							Prepared: 0	8/17/23	Analyzed: 08/17/23
Chloride LCS (2333063-BS1)	ND	20.0					Prepared: 0	8/17/23	Analyzed: 08/17/23
Chloride	265	20.0	250	~	106	90-110	<b>D</b> 10	0.11.5/22	
Matrix Spike (2333063-MS1)				Source:	E308112-0	)1	Prepared: 0	8/17/23	Analyzed: 08/17/23
Chloride	802	200	250	567	93.8	80-120			
Matrix Spike Dup (2333063-MSD1)				Source:	E308112-0	)1	Prepared: 0	8/17/23	Analyzed: 08/17/23
Chloride	798	200	250	567	92.2	80-120	0.503	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Γ	Ensolum, LLC	Project Name:	RDX Federal 28 #041	
	3122 National Parks Hwy	Project Number:	01058-0007	Reported:
	Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	08/22/23 15:26

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Reference Project Information

Page \_\_\_\_\_ of \_\_\_\_

Received by OCD: 9/27/2023 1:38:20 PM

Page 159 of 264

lient: Er	nsolum, LLC.				Bill To		Contraction of	L	ab U	se On	ly		T		T	AT		EPA P	rogram
	RDX Federal				Attention: Jim Raley		Lab WC	#	Job Number		ber	1D 2D 3D Standa		ndard	CWA	SDWA			
	lanager: Ash				Address: 5315 Buena Vista		E30	611:	5	010	58-	0007					х		
	3122 Nation	C C C C C C C C C C C C C C C C C C C	and the state of t		City, State, Zip: Carlsbad NM	M, 88220				Analy	sis ar	nd Metho	d				12		RCRA
ity, State	e, Zip: Carlst	bad NM,	88220		Phone: (575)689-7597		þy												
	75-988-0055				Email: jim.raley@dvn.com		ORO											State	
mail: ag	iovengo@er	nsolum.co	om				30/0	-			0.0		WN			N	MM CO	UT AZ	TX
eport du	ue by:				and the second se		GRO/DRO/ORO by	802	826(	5010	300.0				TX		×		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Lab Number	TPH GR	BTEX by 8021	VOC by 8260	Metals 6010	Chloride :		BGDOC		GDOC			Remarks	
13:00	8/14/2023	Soil	1 Jar		SS01 - 0'	1							x					1	
14:39	8/14/2023	Soil	1 Jar		SS02B - 0'	2							x						
14:13	8/14/2023	Soil	1 Jar		SS03A - 0'	3							x						
13:15	8/14/2023	Soil	1 Jar		SS04 - 0'	4							x						
13:25	8/14/2023	Soil	1 Jar		SS05 - 0'	5							x						
13:26	8/14/2023	Soil	1 Jar		SS06 - 0'	6							x						
13:28	8/14/2023	Soil	1 Jar		SS07 - 0'	7							x						
12:04	8/14/2023	Soil	1 Jar		PH02 - 3'	8							x						
12:12	8/14/2023	Soil	1 Jar		PH02 - 4'	9							x			Do	o not run unle:	is PHO2 - 3' is > 1	100TPH or 60
11:20	8/14/2023	Soil	1 Jar		PH01 - 2'	10							x						
					um.com, agiovengo@ensolum.co			hamil	ton@	Denso	olum	.com							
te ortine	of collection is co	onsidered fra		y of this sample. I a y be grounds for leg	A	y mislabelling the sample	e location,					ring thermal p ed in ice at an i							led or
elinquistre	d by: (Signatur	S.	Date Date	Time	SOAM (and by: (Signature) Received by: (Signature)	Kn 8-15-2	Time	05		Rece	ived	on ice:			se On	ly			
elinquishe	d by: (Signatur	entre mese	- 0. D	15.23 (1 .16.23 Time	Begived by Bighature	A Stur	Time	83	-	<u>T1</u>	Tar		T2 4			<u> </u>	3	The second	
141.0					so puin i le	01012	50.	US.		AVG					Vo			and the second	a and
ote: Samp	ix: <b>S</b> - Soil, <b>Sd</b> - So les are discarde applicable only	ed 30 days	after result	ts are reported ur	nless other arrangements are made. Haz atory with this COC. The liability of the la	Container zardous samples will b boratory is limited to	be returne	d to cli	ient o	r dispo	sed o	f at the clie	ent ex	ass, v opense	- VOA	report	for the ar	alysis of th	ne above

#### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

lient:	Ensolum, LLC Da	te Received:	08/16/23 (	08:05	Work Order ID: E308115
Phone:	(575) 988-0055 Da	te Logged In:	08/15/23	15:52	Logged In By: Caitlin Mars
Email:		ie Date:	08/22/23	17:00 (4 day TAT)	
Chain o	of Custody (COC)				
1. Does	the sample ID match the COC?		Yes		
2. Does	the number of samples per sampling site location match	the COC	Yes		
3. Were	samples dropped off by client or carrier?		Yes	Carrier: C	ourier
4. Was th	he COC complete, i.e., signatures, dates/times, requested	analyses?	Yes	_	
5. Were	all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion.	e field,	Yes	_	Comments/Resolution
<u>Sample</u>	<u>Turn Around Time (TAT)</u>				
6. Did th	he COC indicate standard TAT, or Expedited TAT?		Yes		COC Remarks: E308115-09A Sample ID
<u>Sample</u>					PH02-4 (Do not run unless E308115-08A
7. Was a	a sample cooler received?		Yes		Sample ID PH02-3 is >100 TPH or 600 Cl
8. If yes	, was cooler received in good condition?		Yes		)
9. Was th	he sample(s) received intact, i.e., not broken?		Yes		,
10. Were	e custody/security seals present?		No		
11. If ye	es, were custody/security seals intact?		NA		
12. Was t	the sample received on ice? If yes, the recorded temp is 4°C, i.e. Note: Thermal preservation is not required, if samples are re- minutes of sampling		Yes		
13. If no	visible ice, record the temperature. Actual sample ter	nperature: 4°	С		
	Container				
	aqueous VOC samples present?		No		
	VOC samples collected in VOA Vials?		NA		
	he head space less than 6-8 mm (pea sized or less)?		NA		
	a trip blank (TB) included for VOC analyses?		NA		
	non-VOC samples collected in the correct containers?		Yes		
	e appropriate volume/weight or number of sample containers	collected?	Yes		
Field La	abel				
20. Were	e field sample labels filled out with the minimum inform	ation:			
	Sample ID?		Yes		
	Date/Time Collected?		Yes	L	
	Collectors name?		No		
	<u>Preservation</u> s the COC or field labels indicate the samples were prese	mund?	No		
	sample(s) correctly preserved?	aveu:	No NA		
	b filteration required and/or requested for dissolved meta	ls?	NA		
			INU		
	nase Sample Matrix		ЪT		
	s the sample have more than one phase, i.e., multiphase?		No		
-	es, does the COC specify which phase(s) is to be analyzed	<b>1</b> 1	NA		
	tract Laboratory		<b>N</b> 7		
28. Are	samples required to get sent to a subcontract laboratory?		No		
00 117	a subcontract laboratory specified by the client and if so	1.0	NA	Subcontract Lab	37.4



envirotech Inc.

Signature of client authorizing changes to the COC or sample disposition.

Date





5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

**Practical Solutions for a Better Tomorrow** 

## **Analytical Report**

Ensolum, LLC

Project Name: RDX Federal 21 #042

Work Order: E308126

Job Number: 01058-0007

Received: 8/17/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 8/22/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported. Date Reported: 8/22/23

Ashley Giovengo 3122 National Parks Hwy Carlsbad, NM 88220

Project Name: RDX Federal 21 #042 Workorder: E308126 Date Received: 8/17/2023 8:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/17/2023 8:00:00AM, under the Project Name: RDX Federal 21 #042.

The analytical test results summarized in this report with the Project Name: RDX Federal 21 #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman Laboratory Director Office: 505-632-1881 Cell: 775-287-1762 whinchman@envirotech-inc.com

Field Offices:

Cell: 505-320-4759

ljarboe@envirotech-inc.com

Southern New Mexico Area Lynn Jarboe Technical Representative/Client Services Office: 505-421-LABS(5227)

Raina Schwanz Laboratory Administrator Office: 505-632-1881 rainaschwanz@envirotech-inc.com Alexa Michaels Sample Custody Officer Office: 505-632-1881 labadmin@envirotech-inc.com

West Texas Midland/Odessa Area Rayny Hagan Technical Representative Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com



Page 162 of 264

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## Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
FS22 - 2'	5
FS23 - 2'	6
SW01 - 1'	7
SW03 - 1'	8
QC Summary Data	9
QC - Volatile Organics by EPA 8021B	9
QC - Nonhalogenated Organics by EPA 8015D - GRO	10
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	11
QC - Anions by EPA 300.0/9056A	12
Definitions and Notes	13
Chain of Custody etc.	14

#### Page 164 of 264

v		Sample Sum	mary		6
Ensolum, LLC 3122 National Parks Hwy		Project Name: Project Number:	RDX Federal 21 #0 01058-0007	42	Reported:
Carlsbad NM, 88220		Project Manager:	Ashley Giovengo		08/22/23 16:03
Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS22 - 2'	E308126-01A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.
FS23 - 2'	E308126-02A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.
SW01 - 1'	E308126-03A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.
SW03 - 1'	E308126-04A	Soil	08/15/23	08/17/23	Glass Jar, 2 oz.



	5	ampie D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Manaş	oer: 010	X Federal 21 #0 58-0007 ley Giovengo	)42		<b>Reported:</b> 8/22/2023 4:03:06PM
		FS22 - 2'				
		E308126-01				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: RKS		Batch: 2333052
Benzene	ND	0.0250	1	08/17/23	08/17/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/17/23	
Toluene	ND	0.0250	1	08/17/23	08/17/23	
-Xylene	ND	0.0250	1	08/17/23	08/17/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/17/23	
Total Xylenes	ND	0.0250	1	08/17/23	08/17/23	
urrogate: 4-Bromochlorobenzene-PID		94.7 %	70-130	08/17/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: RKS		Batch: 2333052
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/17/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		90.9 %	70-130	08/17/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: JL		Batch: 2333057
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
urrogate: n-Nonane		92.6 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: BA		Batch: 2333064
Chloride	113	20.0	1	08/17/23	08/20/23	



	0	ampie D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Manaş	er: 010	X Federal 21 #0 58-0007 ley Giovengo	42		<b>Reported:</b> 8/22/2023 4:03:06PM
		FS23 - 2'				
		E308126-02				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2333052
Benzene	ND	0.0250	1	08/17/23	08/17/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/17/23	
Toluene	ND	0.0250	1	08/17/23	08/17/23	
p-Xylene	ND	0.0250	1	08/17/23	08/17/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/17/23	
Fotal Xylenes	ND	0.0250	1	08/17/23	08/17/23	
Surrogate: 4-Bromochlorobenzene-PID		94.6 %	70-130	08/17/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2333052
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		89.6 %	70-130	08/17/23	08/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: JL		Batch: 2333057
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
Surrogate: n-Nonane		94.7 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2333064
Chloride	382	20.0	1	08/17/23	08/20/23	



	0	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numl Project Mana	ber: 010	X Federal 21 # 58-0007 ley Giovengo	#042		<b>Reported:</b> 8/22/2023 4:03:06PM
		SW01 - 1'				
		E308126-03				
		Reporting				
Analyte	Result	Limit	Dilutic	on Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Ar	nalyst: RKS		Batch: 2333052
Benzene	ND	0.0250	1	08/17/23	08/17/23	
thylbenzene	ND	0.0250	1	08/17/23	08/17/23	
oluene	ND	0.0250	1	08/17/23	08/17/23	
-Xylene	ND	0.0250	1	08/17/23	08/17/23	
,m-Xylene	ND	0.0500	1	08/17/23	08/17/23	
otal Xylenes	ND	0.0250	1	08/17/23	08/17/23	
urrogate: 4-Bromochlorobenzene-PID		95.4 %	70-130	08/17/23	08/17/23	
onhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ar	nalyst: RKS		Batch: 2333052
asoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/17/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		91.0 %	70-130	08/17/23	08/17/23	
onhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ar	nalyst: JL		Batch: 2333057
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
urrogate: n-Nonane		96.4 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ar	nalyst: BA		Batch: 2333064
Chloride	220	20.0	1	08/17/23	08/20/23	



	b	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Mana	ber: 010	X Federal 21 # 58-0007 ley Giovengo	042		<b>Reported:</b> 8/22/2023 4:03:06PM
		SW03 - 1'				
		E308126-04				
		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: RKS		Batch: 2333052
Benzene	ND	0.0250	1	08/17/23	08/18/23	
Ethylbenzene	ND	0.0250	1	08/17/23	08/18/23	
Toluene	ND	0.0250	1	08/17/23	08/18/23	
o-Xylene	ND	0.0250	1	08/17/23	08/18/23	
o,m-Xylene	ND	0.0500	1	08/17/23	08/18/23	
Fotal Xylenes	ND	0.0250	1	08/17/23	08/18/23	
Surrogate: 4-Bromochlorobenzene-PID		93.5 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: RKS		Batch: 2333052
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/17/23	08/18/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.1 %	70-130	08/17/23	08/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: JL		Batch: 2333057
Diesel Range Organics (C10-C28)	ND	25.0	1	08/17/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/17/23	08/18/23	
Surrogate: n-Nonane		92.0 %	50-200	08/17/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2333064
Chloride	98.4	20.0	1	08/17/23	08/20/23	



## **QC Summary Data**

0		Reported:         8/22/2023       4:03:06PM         Analyst: RKS       Notes         Notes       Notes         analyzed:       08/17/23
ts RPD % Prepared: ( 0 Prepared: ( 0 0 0 0	Limit % 08/17/23 A	Analyst: RKS Notes
ts RPD % Prepared: ( 0 Prepared: ( 0 0 0 0	Limit % 08/17/23 A	Notes
ts RPD % Prepared: ( 0 Prepared: ( 0 0 0 0	Limit % 08/17/23 A	nalyzed: 08/17/23
% Prepared: ( 0 Prepared: ( 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	% 08/17/23 A	nalyzed: 08/17/23
0 Prepared: ( 0 0 0 0		
Prepared: (	08/17/23 A	nalyzed: 08/17/23
Prepared: (	08/17/23 A	.nalyzed: 08/17/23
Prepared: (	08/17/23 A	.nalyzed: 08/17/23
Prepared: (	08/17/23 A	.nalyzed: 08/17/23
Prepared: (	08/17/23 A	.nalyzed: 08/17/23
Prepared: (	08/17/23 A	.nalyzed: 08/17/23
Prepared: (	08/17/23 A	analyzed: 08/17/23
0 0 0 0 0	08/17/23 A	nalyzed: 08/17/23
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0		
Prepared: (	08/17/23 A	nalyzed: 08/17/23
3		
3		
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1		
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Prepared: (	08/17/23 A	nalyzed: 08/17/23
3 10.5	20	
3 11.5	20	
0 11.1	20	
1 11.8	20	
1 11.5	20	
1 11.6	20	
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Image: state	33 30 31 31 30 Prepared: 08/17/23 A 33 10.5 20 33 11.5 20 30 11.1 20 31 11.8 20 31 11.5 20



## **QC Summary Data**

		QC D	umm	ary Data	a				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager	(	RDX Federal 21 01058-0007 Ashley Gioveng					<b>Reported:</b> 8/22/2023 4:03:06PM
	Nor	halogenated (	Organics	s by EPA 80	15D - GI	RO			Analyst: RKS
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2333052-BLK1)							Prepared: 0	8/17/23 A	nalyzed: 08/17/23
Gasoline Range Organics (C6-C10)	ND	20.0					Troparoan o	0,1,,20 1.	inaly2001 00/17/20
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.32		8.00		91.5	70-130			
LCS (2333052-BS2)							Prepared: 0	8/17/23 A	nalyzed: 08/17/23
Gasoline Range Organics (C6-C10)	49.7	20.0	50.0		99.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.41		8.00		92.6	70-130			
Matrix Spike (2333052-MS2)				Source:	E308121-	02	Prepared: 0	8/17/23 A	nalyzed: 08/17/23
Gasoline Range Organics (C6-C10)	47.7	20.0	50.0	ND	95.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.42		8.00		92.8	70-130			
Matrix Spike Dup (2333052-MSD2)				Source:	E308121-	02	Prepared: 0	8/17/23 A	analyzed: 08/17/23
Gasoline Range Organics (C6-C10)	50.4	20.0	50.0	ND	101	70-130	5.33	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.30		8.00		91.2	70-130			



## **QC Summary Data**

		QC D	umm	ary Data	4				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	0	RDX Federal 21 11058-0007 Ashley Gioveng					<b>Reported:</b> 8/22/2023 4:03:06PM
	Nonha	alogenated Org	anics by	EPA 8015E	) - DRO	/ORO			Analyst: JL
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2333057-BLK1)							Prepared: 0	8/17/23 A	Analyzed: 08/18/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	49.0		50.0		97.9	50-200			
LCS (2333057-BS1)							Prepared: 0	8/17/23 A	Analyzed: 08/18/23
Diesel Range Organics (C10-C28)	240	25.0	250		96.2	38-132			
Surrogate: n-Nonane	46.4		50.0		92.9	50-200			
Matrix Spike (2333057-MS1)				Source:	E308115-(	03	Prepared: 0	8/17/23 A	Analyzed: 08/18/23
Diesel Range Organics (C10-C28)	231	25.0	250	ND	92.2	38-132			
Surrogate: n-Nonane	40.0		50.0		80.1	50-200			
Matrix Spike Dup (2333057-MSD1)				Source:	E308115-0	03	Prepared: 0	8/17/23 A	Analyzed: 08/18/23
Diesel Range Organics (C10-C28)	236	25.0	250	ND	94.5	38-132	2.39	20	
Surrogate: n-Nonane	42.3		50.0		84.6	50-200			



#### **QC Summary Data**

		$\mathbf{x} \in \mathbf{z}$			~				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 2 01058-0007 Ashley Gioveng					<b>Reported:</b> 8/22/2023 4:03:06PM
		Anions	by EPA	300.0/90564	4				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2333064-BLK1)							Prepared: 0	8/17/23	Analyzed: 08/19/23
Chloride LCS (2333064-BS1)	ND	20.0					Prepared: 0	8/17/23	Analyzed: 08/19/23
Chloride	247	20.0	250		98.6	90-110			
Matrix Spike (2333064-MS1)				Source:	E308119-(	)1	Prepared: 0	8/17/23	Analyzed: 08/19/23
Chloride	315	20.0	250	70.5	97.6	80-120			
Matrix Spike Dup (2333064-MSD1)				Source:	E308119-0	)1	Prepared: 0	8/17/23	Analyzed: 08/19/23
Chloride	319	20.0	250	70.5	99.3	80-120	1.28	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Γ	Ensolum, LLC	Project Name:	RDX Federal 21 #042	
	3122 National Parks Hwy	Project Number:	01058-0007	Reported:
	Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	08/22/23 16:03

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



1

	Ensolum, LLC					Bill To			1. 1.	L	ab U	Lab Use Only					TAT				EPA Program	
	RDX Federa			- <del></del>		Attention: Jim Raley		Lat	WO	Ħ		Job				1D	2D	3D	Sta	andard	CWA	SDWA
	Manager: As				1	Address: 5315 Buena Vista Dr		E	WO SO	612	Q.	00	58:	<b>.</b> 000	57[					x		1
	: 3122 Natio					City, State, Zip: Carlsbad NM, 882	20							nd Met								RCRA
ity, Sta	te, Zip: Carls	sbad NM,	88220			Phone: (575)689-7597			à		Γ											
hone:	575-98 <mark>8-</mark> 005	5				Email: jim.raley@dvn.com		1	22												State	
mail: a	giovengo@e	ensolum.o	com					1	8				。			5				NM CO		TY
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Sampled	Date Sampled	Matrix	Containers	Sample ID			Number		TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC		GDOC			Remarks	
12:40	8/15/2023	Soil	1 Jar			FS22 - 2'	1		<u> </u>			2				×		0				
12:43	8/15/2023	Soil	1 Jar			FS23 - 2'	2		-						-							
12:47	8/15/2023					SW01 - 1'		-		<u> </u>						<b>x</b>						
		Soil	1 Jar				3		<u> </u>				_			x						
13:48	8/15/2023	Soil	1 Jar			SW03 - 1'	4									x						
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						· · · · · · · · · · · · · · · · · · ·																
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ldition	al Instructio	ns: Plea	ise CC: cł	ourton@enso	lum.	com, agiovengo@ensolum.com, jir	n.raley@dv	n.co	om, ch	nami	lton(	@ens	olum	i.com								
				ty of this sample. I y be grounds for le		vare that tampering with or intentionally mislab	elling the sampl	e loca	ation,											on ice the day t n 6 °C on subse	• •	ed or
	ed by: (Signatur		Date	y de grounds for le			Data		Time												400110 0095.	
	ed by: (Signatur	•			00	O Carry Com Co	6 8-14	,-2		30	0	Rece	ived	on ice	:		b Us )/N	e On	ly			
an	alom t	arly	A 8.	623	71	5 auth Man	8/17/2	3	Time 8.	$\infty$	)	<u>T1</u>			. ]	T2				T3		
unquishe	ed by: (Signatuł	e)	Date	. Time		Received by: (Signature)	Date		Time			AVG	Tem	p °C	4							
npie Mat	rix: S - Soil, Sd - S	olid, Sg - Slu	dge, A - Aqu	eous, O - Other			Container	·Tvp	e: g - i	glass.	_			-	mbe	er gla	ss. v ·					
ote: Samp mples is a	ples are discard applicable only	ed 30 days to those sa	after resul imples reco	ts are reported u eived by the labo	inless ratory	other arrangements are made. Hazardou with this COC. The liability of the laborate	s samples will	be re	turned	d to cl	lient o	r dispo	osed o	f at the	clie	nt ex	pense	. The	e repo	ort for the a	nalysis of t	he above
												C	<u>、</u>			-						
						Do	ge 14 of 15	-				E			Ę			IV	/	irc	JL	e

Received by OCD: 9/27/2023 1:38:20 PM

Instructions: Please take note of any NO checkmarks.

#### **Envirotech Analytical Laboratory**

#### Sample Receipt Checklist (SRC)

Client:	Ensolum, LLC Da	te Received:	08/17/23 08	:00		Work Order ID:	E308126
Phone:	(575) 988-0055 Da	te Logged In:	08/16/23 17	:05		Logged In By:	Caitlin Mars
Email:	a.giovengo@ensolum.com Du	ie Date:	08/23/23 17	:00 (4 day TAT)			
Chain of	f Custody (COC)						
1. Does t	the sample ID match the COC?		Yes				
	the number of samples per sampling site location match	the COC	Yes				
3. Were s	samples dropped off by client or carrier?		Yes	Carrier: C	ourier		
4. Was th	he COC complete, i.e., signatures, dates/times, requested	analyses?	Yes				
5. Were a	all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion.	field,	Yes			Commen	ts/Resolution
Sample '	Turn Around Time (TAT)			1			
	e COC indicate standard TAT, or Expedited TAT?		Yes				
Sample	•		100				
	sample cooler received?		Yes				
	, was cooler received in good condition?		Yes				
-	he sample(s) received intact, i.e., not broken?		Yes				
	e custody/security seals present?		No				
	s, were custody/security seals intact?		NA				
12. Was ti	he sample received on ice? If yes, the recorded temp is 4°C, i.e. Note: Thermal preservation is not required, if samples are rec minutes of sampling visible ice, record the temperature. Actual sample tem	ceived w/i 15	Yes				
		iiperature. <u>4</u>	<u>c</u>				
	Container_ aqueous VOC samples present?		No				
	VOC samples collected in VOA Vials?		NA				
	e head space less than 6-8 mm (pea sized or less)?		NA				
	a trip blank (TB) included for VOC analyses?		NA				
	non-VOC samples collected in the correct containers?		Yes				
	appropriate volume/weight or number of sample containers	collected?	Yes				
Field La							
	e field sample labels filled out with the minimum information	ation:					
	Sample ID?		Yes				
	Date/Time Collected?		Yes	L			
	Collectors name? Preservation		Yes				
_	s the COC or field labels indicate the samples were prese	rved?	No				
	sample(s) correctly preserved?		NA				
	b filteration required and/or requested for dissolved meta	ls?	No				
	ase Sample Matrix		-				
	s the sample have more than one phase, i.e., multiphase?		No				
	s, does the COC specify which phase(s) is to be analyzed	1?	NA				
	tract Laboratory		1.12.1				
	samples required to get sent to a subcontract laboratory?		No				
	a subcontract laboratory specified by the client and if so	who?		Subcontract Lab	: NA		
	Instruction		~				

Signature of client authorizing changes to the COC or sample disposition.



•





5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

**Practical Solutions for a Better Tomorrow** 

## **Analytical Report**

Ensolum, LLC

Project Name: RDX Federal 21 #042

Work Order: E308135

Job Number: 01058-0007

Received: 8/18/2023

Revision: 1

**Report Reviewed By:** 

Walter Hinchman Laboratory Director 8/22/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/22/23

Ashley Giovengo 3122 National Parks Hwy Carlsbad, NM 88220

Project Name: RDX Federal 21 #042 Workorder: E308135 Date Received: 8/18/2023 8:15:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/18/2023 8:15:00AM, under the Project Name: RDX Federal 21 #042.

The analytical test results summarized in this report with the Project Name: RDX Federal 21 #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman Laboratory Director Office: 505-632-1881 Cell: 775-287-1762 whinchman@envirotech-inc.com

Field Offices:

Southern New Mexico Area Lynn Jarboe

Technical Representative/Client Services Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@envirotech-inc.com

Raina Schwanz Laboratory Administrator Office: 505-632-1881 rainaschwanz@envirotech-inc.com Alexa Michaels Sample Custody Officer Office: 505-632-1881 labadmin@envirotech-inc.com

West Texas Midland/Odessa Area Rayny Hagan Technical Representative Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com



Page 177 of 264

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## Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
FS24 - 4'	5
SW02 - 1'	6
QC Summary Data	7
QC - Volatile Organics by EPA 8021B	7
QC - Nonhalogenated Organics by EPA 8015D - GRO	8
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	9
QC - Anions by EPA 300.0/9056A	10
Definitions and Notes	11
Chain of Custody etc.	12

FS24 - 4'

SW02 - 1'

		Sample Sum	mary	
Ensolum, LLC		Project Name:	RDX Federal 21 #042	Reported:
3122 National Parks Hwy	Project Number: 01058-0007			Reporteu:
Carlsbad NM, 88220		Project Manager:	Ashley Giovengo	08/22/23 16:07
Client Sample ID	Lab Sample ID	Matrix	Sampled Received	Container

Soil

Soil

E308135-01A

E308135-02A

08/16/23

08/16/23

08/18/23

08/18/23

3	envirotech Inc.
	envirotech mc.

.

Glass Jar, 2 oz.

Glass Jar, 2 oz.

	D		ata			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Num Project Mana	ber: 0103	X Federal 21 # 58-0007 ley Giovengo	042		<b>Reported:</b> 8/22/2023 4:07:13PM
		FS24 - 4'				
		E308135-01				
		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: RKS		Batch: 2333053
Benzene	ND	0.0250	1	08/18/23	08/19/23	
Ethylbenzene	ND	0.0250	1	08/18/23	08/19/23	
Foluene	ND	0.0250	1	08/18/23	08/19/23	
p-Xylene	ND	0.0250	1	08/18/23	08/19/23	
o,m-Xylene	ND	0.0500	1	08/18/23	08/19/23	
Total Xylenes	ND	0.0250	1	08/18/23	08/19/23	
Surrogate: 4-Bromochlorobenzene-PID		89.0 %	70-130	08/18/23	08/19/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: RKS		Batch: 2333053
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/18/23	08/19/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		89.8 %	70-130	08/18/23	08/19/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: KM		Batch: 2333075
Diesel Range Organics (C10-C28)	ND	25.0	1	08/18/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/18/23	08/18/23	
Surrogate: n-Nonane		86.5 %	50-200	08/18/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2333077
Chloride	329	40.0	2	08/18/23	08/20/23	



	0	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Mana	ber: 010	X Federal 21 #04 58-0007 ley Giovengo	2		<b>Reported:</b> 8/22/2023 4:07:13PM
	i iojeet inana	0	ley slovengo			
		SW02 - 1'				
		E308135-02				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: RKS		Batch: 2333053
Benzene	ND	0.0250	1	08/18/23	08/19/23	
Ethylbenzene	ND	0.0250	1	08/18/23	08/19/23	
oluene	ND	0.0250	1	08/18/23	08/19/23	
-Xylene	ND	0.0250	1	08/18/23	08/19/23	
,m-Xylene	ND	0.0500	1	08/18/23	08/19/23	
otal Xylenes	ND	0.0250	1	08/18/23	08/19/23	
urrogate: 4-Bromochlorobenzene-PID		90.5 %	70-130	08/18/23	08/19/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: RKS	Batch: 2333053	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/18/23	08/19/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		92.0 %	70-130	08/18/23	08/19/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: KM		Batch: 2333075
Diesel Range Organics (C10-C28)	ND	25.0	1	08/18/23	08/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/18/23	08/18/23	
urrogate: n-Nonane		91.2 %	50-200	08/18/23	08/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: BA		Batch: 2333077
Chloride	260	200	10	08/18/23	08/20/23	



# **QC Summary Data**

)	RPD Limit %	Reported: 8/22/2023 4:07:13PM Analyst: RKS Notes nalyzed: 08/18/23
% Prepared: 08	RPD Limit %	Notes
% Prepared: 08	Limit %	Notes
% Prepared: 08	Limit %	
Prepared: 03		
)	08/17/23 Ar	nalyzed: 08/18/23
Prepared: 08		
1 .	8/17/23 Ar	nalyzed: 08/18/23
)		
)		
)		
)		
)		
)		
)		
Prepared: 0	8/17/23 Ar	nalyzed: 08/18/23
;		
;		
)		
)		
Prepared: 0	08/17/23 Ar	nalyzed: 08/18/23
1.60	20	
0.927	20	
0.476	20	
0.213	20	
0.0202	20	
0.0586	20	
)		
	Prepared: 0 Prepared: 0 Prepared: 0 1.60 0.927 0.476 0.213 0.0202 0.0586	Prepared: 08/17/23 Ar Prepared: 08/17/23 Ar 1.60 20 0.927 20 0.476 20 0.213 20 0.0202 20 0.0586 20



## **QC Summary Data**

		QC D	umm	ary Data	a				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	0	RDX Federal 21 )1058-0007 Ashley Gioveng					<b>Reported:</b> 8/22/2023 4:07:13PM
	No	nhalogenated (	Organics	by EPA 801	15D - GI	RO			Analyst: RKS
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
	0 0	6 6	66	6 6		,,,	,,,	,,,	
Blank (2333053-BLK1)							Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.3	70-130			
LCS (2333053-BS2)							Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Gasoline Range Organics (C6-C10)	51.0	20.0	50.0		102	70-130			-
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.37		8.00		92.1	70-130			
Matrix Spike (2333053-MS2)				Source:	E308128-	01	Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Gasoline Range Organics (C6-C10)	189	20.0	50.0	114	150	70-130			M1
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.47		8.00		106	70-130			
Matrix Spike Dup (2333053-MSD2)				Source:	E308128-	01	Prepared: 0	8/17/23 A	nalyzed: 08/18/23
Gasoline Range Organics (C6-C10)	180	20.0	50.0	114	132	70-130	4.75	20	M1
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.04		8.00		100	70-130			



## **QC Summary Data**

		QC BI	u I I I I I I	ary Data					
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 21 )1058-0007 Ashley Giovengo					<b>Reported:</b> 8/22/2023 4:07:13PM
	Nonh	alogenated Orga	anics by	y EPA 8015D	- DRO	/ORO			Analyst: KM
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2333075-BLK1)							Prepared: 0	8/18/23 A	nalyzed: 08/18/23
Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36)	ND ND	25.0 50.0							
Surrogate: n-Nonane	47.3		50.0		94.6	50-200			
LCS (2333075-BS1)							Prepared: 0	8/18/23 A	analyzed: 08/18/23
Diesel Range Organics (C10-C28)	233	25.0	250		93.2	38-132			
Surrogate: n-Nonane	44.0		50.0		87.9	50-200			
Matrix Spike (2333075-MS1)				Source: <b>E</b>	308135-	02	Prepared: 0	8/18/23 A	analyzed: 08/18/23
Diesel Range Organics (C10-C28)	231	25.0	250	ND	92.6	38-132			
Surrogate: n-Nonane	42.1		50.0		84.2	50-200			
Matrix Spike Dup (2333075-MSD1)				Source: E	308135-	02	Prepared: 0	8/18/23 A	analyzed: 08/18/23
Diesel Range Organics (C10-C28)	233	25.0	250	ND	93.0	38-132	0.488	20	
Surrogate: n-Nonane	42.9		50.0		85.8	50-200			



## **QC Summary Data**

		$\mathbf{x} \in \mathbf{z}$							
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 2 01058-0007 Ashley Gioveng					<b>Reported:</b> 8/22/2023 4:07:13PM
		Anions	by EPA	300.0/9056	4				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2333077-BLK1)							Prepared: 0	8/18/23	Analyzed: 08/19/23
Chloride	ND	20.0							
LCS (2333077-BS1)							Prepared: 0	8/18/23	Analyzed: 08/19/23
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2333077-MS1)				Source:	E308066-	01	Prepared: 0	8/18/23	Analyzed: 08/19/23
Chloride	273	20.0	250	ND	109	80-120			
Matrix Spike Dup (2333077-MSD1)				Source:	E308066-	01	Prepared: 0	8/18/23	Analyzed: 08/19/23
Chloride	275	20.0	250	ND	110	80-120	0.434	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Ensolum, LLC	Project Name:	RDX Federal 21 #042	
3122 National Parks Hwy	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	08/22/23 16:07

M1 Matrix spike recovery was above acceptance limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Relea

Received by OCD: 9/27/2023 1:38:20 PM

	Ensolum, LLC				Bill To		1	L	ab U	se Or	nly				T/	AT	EPA P	rogram
	<b>RDX</b> Federal				Attention: Jim Raley		Lab WC	D#	~	Job	Num	ber	1D	2D	3D	Standard	CWA	SDWA
Project	Manager: As	hley Gio	vengo		Address: 5315 Buena Vista Dr		Lab WC	813	50	DIC	22.	0007				x		
Address	: 3122 Natio	nal Parks	s Hwy		City, State, Zip: Carlsbad NM,	88220						d Metho						RCRA
City, Sta	te, Zip: Carls	bad NM	, 88220		Phone: (575)689-7597		ρλ					0						
Phone:	575-988-005	5			Email: jim.raley@dvn.com		TPH GRO/DRO/ORO by										State	-
Email: a	giovengo@e	nsolum.	com				0/0		-		0.		WN			NM CC	UT AZ	TX
Report of	lue by:						D/DF	8015 BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0				TX	×		
Time	Data Canadad		No. of	Consulta ID		Lab	GRO	(p)	bya	als 6	ride		0		N			
Sampled	Date Sampled	Matrix	Containers	Sample ID		Number	HdT	8019 BTE)	VOC	Met	Chlo		BGDOC		GDOC		Remarks	
13:17	8/16/2023	Soil	1 Jar		FS24 - 4'	1							x					
10:33	8/16/2023	Soil	1 Jar		SW02 - 1'	2							x					
				1														
				-	1													
								-					-	-				
		-				1		+	-				-	-	-			
		_						-	-	_			-	-				_
						-		-					-	-				_
									_				-					
									-								-	
Addition	al Instructio	ns: Plea	ase CC: cl	ourton@ensol	um.com, agiovengo@ensolum.com	n, jim.raley@dv	n.com,	cham	ilton	@ens	olum	.com						
date or tim	e of collection is c	onsidered f		ty of this sample. I by be grounds for lea	am aware that tampering with or intentionally m gal action. <u>Sampled by:</u>	islabelling the samp	le location,									ceived on ice the da less than 6 °C on sul		led or
~	ed by: (Signatur		Date	17-23 Time	US Receiverby: (Signature)	Date 7:	23 13	:30	1	Rece	eived	on ice:		Lab U	se On N	ily		
/	ed Gr. Gignatur		Date 8-/	7-23 Time	138 Received by (Signature)	6 8.17	7.23 1	63	50	T1	5 (N 146 - 5)		<u>T2</u>			<u>T3</u>		
Relinquish	ed by: (Signatur	re) M	So Bate	·18.23	115 Begeived by Senaturen	n 8/18/	23 8	:15	5	1.20	Tem	p°C_	4					
Sample Ma	trix: <b>S</b> - Soil, <b>Sd</b> - S	olid, Sg - Slu	idge, <b>A</b> - Aqu	eous, O - Other		Containe	r Type: g	- glass	s, p - p				ber g	lass, v	V-VOA	A		
Note: Sam	ples are discard	led 30 days	s after resu	Its are reported u	nless other arrangements are made. Hazar atory with this COC. The liability of the labo	rdous samples will	be return	ed to d	client o	or disp	osed o	f at the c					analysis of	he above
										C	3		-			-	- 1	-
										E	2		E			/ir	JO	e

#### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

Client:	Ensolum, LLC	Date Received:	08/18/23	08:15	Work Order ID:	E308135
Phone:	(575) 988-0055	Date Logged In:	08/17/23	16:28	Logged In By:	Caitlin Mars
Email:	a.giovengo@ensolum.com	Due Date:	08/24/23	17:00 (4 day TAT)		
Chain of	f Custody (COC)					
1. Does t	the sample ID match the COC?		Yes			
2. Does t	the number of samples per sampling site location mat	ch the COC	Yes			
3. Were a	samples dropped off by client or carrier?		Yes	Carrier: Courier		
4. Was th	he COC complete, i.e., signatures, dates/times, reques	sted analyses?	Yes			
5. Were a	all samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi		Yes		Commen	ts/Resolution
Sample '	<u>Turn Around Time (TAT)</u>					
6. Did th	e COC indicate standard TAT, or Expedited TAT?		Yes			
Sample	<u>Cooler</u>					
7. Was a	sample cooler received?		Yes			
8. If yes,	, was cooler received in good condition?		Yes			
9. Was th	he sample(s) received intact, i.e., not broken?		Yes			
10. Were	e custody/security seals present?		No			
11. If yes	s, were custody/security seals intact?		NA			
12. Was t	he sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling		Yes			
13. If no	visible ice, record the temperature. Actual sample	temperature: 4°	<u>C</u>			
Sample	<u>Container</u>	-				
	aqueous VOC samples present?		No			
	VOC samples collected in VOA Vials?		NA			
16. Is the	e head space less than 6-8 mm (pea sized or less)?		NA			
17. Was	a trip blank (TB) included for VOC analyses?		NA			
18. Are 1	non-VOC samples collected in the correct containers'	?	Yes			
19. Is the	appropriate volume/weight or number of sample contain	ners collected?	Yes			
Field La	ıbel					
20. Were	e field sample labels filled out with the minimum info	ormation:				
	Sample ID?		Yes			
	Date/Time Collected?		Yes	L		
	Collectors name?		Yes			
	<b>Preservation</b> s the COC or field labels indicate the samples were pr	asarwad?	No			
	sample(s) correctly preserved?		No NA			
	b filteration required and/or requested for dissolved n	netals?	NA			
		1044151	INU			
	ase Sample Matrix		<b>.</b>			
∠0. Does	is the sample have more than one phase, i.e., multiphate $c_{0}$ does the COC specify which phase(a) is to be evaluated as the constant of the second secon		No			
27 16	s, does the COC specify which phase(s) is to be analy	/2007	NA			
Subcont	ract Laboratory					
Subcont 28. Are s	aract Laboratory samples required to get sent to a subcontract laborato a subcontract laboratory specified by the client and in	•	No NA			

Signature of client authorizing changes to the COC or sample disposition.



•





5796 U.S. Hwy 64 Farmington, NM 87401

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# envirotech

**Practical Solutions for a Better Tomorrow** 

# **Analytical Report**

Ensolum, LLC

Project Name: RDX Federal 21 #042

Work Order: E308145

Job Number: 01058-0007

Received: 8/18/2023

Revision: 2

Report Reviewed By:

Walter Hinchman Laboratory Director 8/25/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported. Date Reported: 8/25/23

Ashley Giovengo 3122 National Parks Hwy Carlsbad, NM 88220

Project Name: RDX Federal 21 #042 Workorder: E308145 Date Received: 8/18/2023 1:45:00PM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/18/2023 1:45:00PM, under the Project Name: RDX Federal 21 #042.

The analytical test results summarized in this report with the Project Name: RDX Federal 21 #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman Laboratory Director Office: 505-632-1881 Cell: 775-287-1762 whinchman@envirotech-inc.com

Field Offices:

Cell: 505-320-4759

ljarboe@envirotech-inc.com

Southern New Mexico Area Lynn Jarboe Technical Representative/Client Services Office: 505-421-LABS(5227)

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Envirotech Web Address: www.envirotech-inc.com



Page 190 of 264

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## Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
FS25 - 3'	5
FS26 - 3.5'	6
FS27 - 4'	7
SW04 - 2'	8
SW07 - 1'	9
QC Summary Data	10
QC - Volatile Organics by EPA 8021B	10
QC - Nonhalogenated Organics by EPA 8015D - GRO	11
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	12
QC - Anions by EPA 300.0/9056A	13
Definitions and Notes	14
Chain of Custody etc.	15

#### Sample Summary

#### Page 192 of 264

		Sumple Sum	mai y		
Ensolum, LLC		Project Name:	RDX Federal 21 #0	)42	Reported:
3122 National Parks Hwy Carlsbad NM, 88220		Project Number:	01058-0007		08/25/23 13:04
Carisbad Nivi, 88220		Project Manager:	Ashley Giovengo		08/25/25 15:04
Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS25 - 3'	E308145-01A	Soil	08/17/23	08/18/23	Glass Jar, 2 oz.
FS26 - 3.5'	E308145-02A	Soil	08/17/23	08/18/23	Glass Jar, 2 oz.
FS27 - 4'	E308145-03A	Soil	08/17/23	08/18/23	Glass Jar, 2 oz.
SW04 - 2'	E308145-04A	Soil	08/17/23	08/18/23	Glass Jar, 2 oz.
SW07 - 1'	E308145-05A	Soil	08/17/23	08/18/23	Glass Jar, 2 oz.



		ampic D	uta			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numb Project Manag	er: 0105	K Federal 21 #0 58-0007 ley Giovengo	042		<b>Reported:</b> 8/25/2023 1:04:44PM
		FS25 - 3'				
		E308145-01				
		Reporting				
Analyte	Result	Limit	Dilutior	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	Analyst: RKS		Batch: 2334014
Benzene	ND	0.0250	1	08/21/23	08/22/23	
Ethylbenzene	ND	0.0250	1	08/21/23	08/22/23	
Toluene	ND	0.0250	1	08/21/23	08/22/23	
o-Xylene	ND	0.0250	1	08/21/23	08/22/23	
o,m-Xylene	ND	0.0500	1	08/21/23	08/22/23	
Total Xylenes	ND	0.0250	1	08/21/23	08/22/23	
Surrogate: 4-Bromochlorobenzene-PID		89.7 %	70-130	08/21/23	08/22/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: RKS		Batch: 2334014
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/23	08/22/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.1 %	70-130	08/21/23	08/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2334005
Diesel Range Organics (C10-C28)	ND	25.0	1	08/21/23	08/22/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/21/23	08/22/23	
Surrogate: n-Nonane		107 %	50-200	08/21/23	08/22/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2334010
Chloride	447	20.0	1	08/21/23	08/22/23	



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Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numb Project Manag	er: 010:	X Federal 21 # 58-0007 ley Giovengo	042		<b>Reported:</b> 8/25/2023 1:04:44PM
		FS26 - 3.5'				
		E308145-02				
		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: RKS		Batch: 2334014
Benzene	ND	0.0250	1	08/21/23	08/22/23	
Ethylbenzene	ND	0.0250	1	08/21/23	08/22/23	
Toluene	ND	0.0250	1	08/21/23	08/22/23	
p-Xylene	ND	0.0250	1	08/21/23	08/22/23	
o,m-Xylene	ND	0.0500	1	08/21/23	08/22/23	
Fotal Xylenes	ND	0.0250	1	08/21/23	08/22/23	
Surrogate: 4-Bromochlorobenzene-PID		89.9 %	70-130	08/21/23	08/22/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: RKS		Batch: 2334014
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/23	08/22/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.8 %	70-130	08/21/23	08/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: KM		Batch: 2334005
Diesel Range Organics (C10-C28)	ND	25.0	1	08/21/23	08/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/23	08/22/23	
Surrogate: n-Nonane		105 %	50-200	08/21/23	08/22/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2334010
Chloride	364	20.0	1	08/21/23	08/22/23	



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Ensolum, LLC 3122 National Parks Hwy	Project Name: Project Numb		X Federal 21 # 58-0007	042		Reported:
Carlsbad NM, 88220	Project Manag		ley Giovengo			8/25/2023 1:04:44PM
		FS27 - 4'				
		E308145-03				
		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	Analyst: RKS		Batch: 2334014
Benzene	ND	0.0250	1	08/21/23	08/22/23	
Ethylbenzene	ND	0.0250	1	08/21/23	08/22/23	
oluene	ND	0.0250	1	08/21/23	08/22/23	
o-Xylene	ND	0.0250	1	08/21/23	08/22/23	
o,m-Xylene	ND	0.0500	1	08/21/23	08/22/23	
Total Xylenes	ND	0.0250	1	08/21/23	08/22/23	
urrogate: 4-Bromochlorobenzene-PID		89.9 %	70-130	08/21/23	08/22/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: RKS		Batch: 2334014
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/23	08/22/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.3 %	70-130	08/21/23	08/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: KM		Batch: 2334005
Diesel Range Organics (C10-C28)	ND	25.0	1	08/21/23	08/22/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/21/23	08/22/23	
Surrogate: n-Nonane		99.3 %	50-200	08/21/23	08/22/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2334010
Chloride	392	20.0	1	08/21/23	08/22/23	



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Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Manaş	er: 010	X Federal 21 # 58-0007 ley Giovengo	042		<b>Reported:</b> 8/25/2023 1:04:44PM
		SW04 - 2'				
		E308145-04				
		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	nics by EPA 8021B mg/kg mg/kg Analys					Batch: 2334014
Benzene	ND	0.0250	1	08/21/23	08/22/23	
Ethylbenzene	ND	0.0250	1	08/21/23	08/22/23	
Foluene	ND	0.0250	1	08/21/23	08/22/23	
p-Xylene	ND	0.0250	1	08/21/23	08/22/23	
o,m-Xylene	ND	0.0500	1	08/21/23	08/22/23	
Fotal Xylenes	ND	0.0250	1	08/21/23	08/22/23	
Surrogate: 4-Bromochlorobenzene-PID		89.6 %	70-130	08/21/23	08/22/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: RKS		Batch: 2334014
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/23	08/22/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.6 %	70-130	08/21/23	08/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2334005
Diesel Range Organics (C10-C28)	ND	25.0	1	08/21/23	08/22/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/21/23	08/22/23	
Surrogate: n-Nonane		106 %	50-200	08/21/23	08/22/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2334010
Chloride	38.2	20.0	1	08/21/23	08/22/23	



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Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Manag	oer: 010	X Federal 21 58-0007 ley Giovengo			<b>Reported:</b> 8/25/2023 1:04:44PM
		SW07 - 1'				
		E308145-05				
		Reporting				
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	А	nalyst: RKS		Batch: 2334014
Benzene	ND	0.0250	1	08/21/23	08/22/23	
Ethylbenzene	ND	0.0250	1	08/21/23	08/22/23	
Foluene	ND	0.0250	1	08/21/23	08/22/23	
p-Xylene	ND	0.0250	1	08/21/23	08/22/23	
o,m-Xylene	ND	0.0500	1	08/21/23	08/22/23	
Fotal Xylenes	ND	0.0250	1	08/21/23	08/22/23	
Surrogate: 4-Bromochlorobenzene-PID		90.2 %	70-130	08/21/23	08/22/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	nalyst: RKS		Batch: 2334014
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/23	08/22/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		85.9 %	70-130	08/21/23	08/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	А	nalyst: KM		Batch: 2334005
Diesel Range Organics (C10-C28)	ND	25.0	1	08/21/23	08/22/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/21/23	08/22/23	
Surrogate: n-Nonane		100 %	50-200	08/21/23	08/22/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	А	nalyst: BA		Batch: 2334010
Chloride	50.5	20.0	1	08/21/23	08/22/23	



# **QC Summary Data**

		QU DI							
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	01	DX Federal 2 058-0007 shley Gioveng					<b>Reported:</b> 8/25/2023 1:04:44PM
Calisbau IVIVI, 88220		, ,		,	·				0/23/2023 1.0 <del>1.11</del> W
		Volatile O	rganics b	oy EPA 802	1B				Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2334014-BLK1)							Prepared: 0	8/21/23 A	nalyzed: 08/22/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.25	0.0250	8.00		90.6	70-130			
LCS (2334014-BS1)							Prepared: 0	8/21/23 A	analyzed: 08/22/23
Benzene	4.55	0.0250	5.00		90.9	70-130			
Ethylbenzene	4.37	0.0250	5.00		87.4	70-130			
Toluene	4.54	0.0250	5.00		90.9	70-130			
p-Xylene	4.48	0.0250	5.00		89.5	70-130			
p,m-Xylene	9.05	0.0500	10.0		90.5	70-130			
Total Xylenes	13.5	0.0250	15.0		90.2	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.24	010200	8.00		90.5	70-130			
Matrix Spike (2334014-MS1)				Source:	E308144-(	02	Prepared: 0	8/21/23 A	analyzed: 08/22/23
Benzene	5.06	0.0250	5.00	ND	101	54-133	1		•
Ethylbenzene	4.86	0.0250	5.00	ND	97.2	61-133			
Toluene	5.05	0.0250	5.00	ND	101	61-130			
o-Xylene	4.99	0.0250	5.00	ND	99.8	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes		0.0500							
	15.1	0.0250	15.0	ND	100	63-131			
•		0.0250	15.0 8.00	ND	100 92.3	63-131 70-130			
Surrogate: 4-Bromochlorobenzene-PID	15.1	0.0250				70-130	Prepared: 0	8/21/23 A	nalyzed: 08/22/23
Surrogate: 4-Bromochlorobenzene-PID Matrix Spike Dup (2334014-MSD1)	15.1 7.38		8.00	Source:	92.3 <b>E308144-</b>	70-130 02	1		nalyzed: 08/22/23
Surrogate: 4-Bromochlorobenzene-PID Matrix Spike Dup (2334014-MSD1) Benzene	15.1 7.38 4.85	0.0250	8.00		92.3	70-130	Prepared: 0 4.14 4.48	8/21/23 A 20 20	nalyzed: 08/22/23
Surrogate: 4-Bromochlorobenzene-PID Matrix Spike Dup (2334014-MSD1) Benzene Ethylbenzene	15.1 7.38 4.85 4.65	0.0250 0.0250	8.00 5.00 5.00	Source: ND ND	92.3 <b>E308144-</b> 97.1 93.0	70-130 02 54-133 61-133	4.14 4.48	20 20	analyzed: 08/22/23
Surrogate: 4-Bromochlorobenzene-PID Matrix Spike Dup (2334014-MSD1) Benzene Ethylbenzene Toluene	15.1 7.38 4.85 4.65 4.85	0.0250 0.0250 0.0250	8.00 5.00 5.00 5.00	Source: ND ND ND	92.3 <b>E308144-</b> 97.1 93.0 96.9	70-130 02 54-133 61-133 61-130	4.14 4.48 4.19	20 20 20	nalyzed: 08/22/23
Surrogate: 4-Bromochlorobenzene-PID Matrix Spike Dup (2334014-MSD1) Benzene Ethylbenzene Toluene o-Xylene	15.1 7.38 4.85 4.65 4.85 4.85 4.77	0.0250 0.0250 0.0250 0.0250	8.00 5.00 5.00 5.00 5.00	Source: ND ND ND ND	92.3 <b>E308144-</b> 97.1 93.0 96.9 95.4	70-130 02 54-133 61-133 61-130 63-131	4.14 4.48 4.19 4.46	20 20 20 20	nalyzed: 08/22/23
Surrogate: 4-Bromochlorobenzene-PID Matrix Spike Dup (2334014-MSD1) Benzene Ethylbenzene Toluene o-Xylene p,m-Xylene Total Xylenes	15.1 7.38 4.85 4.65 4.85	0.0250 0.0250 0.0250	8.00 5.00 5.00 5.00	Source: ND ND ND	92.3 <b>E308144-</b> 97.1 93.0 96.9	70-130 02 54-133 61-133 61-130	4.14 4.48 4.19	20 20 20	nalyzed: 08/22/23



## **QC Summary Data**

		QC D	umm	aly Data	a a				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager	(	RDX Federal 21 )1058-0007 Ashley Gioveng					<b>Reported:</b> 8/25/2023 1:04:44PM
	Nor	halogenated (				RO			Analyst: RKS
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
	iiig/kg	шукд	шукд	mg/Kg	70	70	70	70	Notes
Blank (2334014-BLK1)							Prepared: 0	8/21/23 A	nalyzed: 08/22/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.58		8.00		82.2	70-130			
LCS (2334014-BS2)							Prepared: 0	8/21/23 A	nalyzed: 08/22/23
Gasoline Range Organics (C6-C10)	46.5	20.0	50.0		92.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.65		8.00		83.1	70-130			
Matrix Spike (2334014-MS2)				Source:	E308144-	02	Prepared: 0	8/21/23 A	nalyzed: 08/22/23
Gasoline Range Organics (C6-C10)	50.4	20.0	50.0	ND	101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.10		8.00		88.8	70-130			
Matrix Spike Dup (2334014-MSD2)				Source:	E308144-	02	Prepared: 0	8/21/23 A	analyzed: 08/22/23
Gasoline Range Organics (C6-C10)	50.6	20.0	50.0	ND	101	70-130	0.437	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.14		8.00		89.3	70-130			



## **QC Summary Data**

		QC BI		ary Data					
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 21 01058-0007 Ashley Giovengo					<b>Reported:</b> 8/25/2023 1:04:44PM
	Nonh	alogenated Orga	anics by	y EPA 8015D	- DRO	/ORO			Analyst: KM
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
					70	70	70	70	Notes
Blank (2334005-BLK1)							Prepared: 0	8/21/23 A	analyzed: 08/22/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.2		50.0		102	50-200			
LCS (2334005-BS1)							Prepared: 0	8/21/23 A	analyzed: 08/22/23
Diesel Range Organics (C10-C28)	257	25.0	250		103	38-132			
Surrogate: n-Nonane	51.5		50.0		103	50-200			
Matrix Spike (2334005-MS1)				Source: E	308144-	01	Prepared: 0	8/21/23 A	analyzed: 08/22/23
Diesel Range Organics (C10-C28)	661	25.0	250	483	71.1	38-132			
Surrogate: n-Nonane	47.3		50.0		94.7	50-200			
Matrix Spike Dup (2334005-MSD1)				Source: E	308144-	01	Prepared: 0	8/21/23 A	analyzed: 08/22/23
Diesel Range Organics (C10-C28)	840	25.0	250	483	143	38-132	23.9	20	M2, R2
Surrogate: n-Nonane	56.0		50.0		112	50-200			



## **QC Summary Data**

		$\mathbf{x} \circ \sim$	••••••						
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager	(	RDX Federal 2 01058-0007 Ashley Gioveng					<b>Reported:</b> 8/25/2023 1:04:44PM
		Anions	by EPA	300.0/9056	4				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2334010-BLK1)	ND	20.0					Prepared: 0	8/21/23 A	Analyzed: 08/21/23
LCS (2334010-BS1)							Prepared: 0	8/21/23 A	Analyzed: 08/22/23
Chloride Matrix Spike (2334010-MS1)	256	20.0	250	Source:	102 E308147-0	90-110 <b>01</b>	Prepared: 0	8/21/23 A	Analyzed: 08/21/23
Chloride	1140	20.0	250	959	70.8	80-120			M4
Matrix Spike Dup (2334010-MSD1)				Source:	E308147-0	01	Prepared: 0	8/21/23 A	Analyzed: 08/21/23
Chloride	1070	20.0	250	959	45.5	80-120	5.72	20	M4

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Ensolum, LLC	Project Name:	RDX Federal 21 #042	
3122 National Parks Hwy	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	08/25/23 13:04

- M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.
- M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
- R2 The RPD exceeded the acceptance limit.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



**Project Information** 

Releas

Received by OCD: 9/27/2023 1:38:20 PM

	Ensolum, LLC					Bill To		1000		Lab L	Use Oi	nly				TA	AT T		EPA Pi	ogram
	<b>RDX</b> Federa	and the second se			At	tention: Jim Raley		Lab W	O#		Job	Num	ber	1D	2D	3D	Stan	dard	CWA	SDWA
roject	Manager: As	hley Giov	/engo		Ac	dress: 5315 Buena Vista Dr	r	E3	081	45	010	58-	0007				×	(	-	
Address	: 3122 Natio	nal Parks	Hwy		Cit	y, State, Zip: Carlsbad NM,	88220		1 10				d Metho					98-41		RCRA
City, Sta	te, Zip: Carls	bad NM,	88220		Ph	one: (575)689-7597		1 A		T				T						
hone:	575-988-005	5			and the second second	nail: jim.raley@dvn.com	·	RO											State	
Email: a	agiovengo@e	nsolum.c	com					0/0		1	3	0		5			N	NI CO I	UT AZ	TX
	due by:							/DR	3021	260	010	300.		NN		¥				
Time			No. of				Lab	SRO	bv d	by 8	ls 6(	ide		8		U		×1 1		land to be
Sampled	Date Sampled	Matrix	Containers	Sample ID			Number	TPH GRO/DRO/ORO by	8015 BTEX bv 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC			Remarks	
10:05	8/17/2023	Soil	1 Jar			FS25 - 3'	1							x					1	
10:07	8/17/2023	Soil	1 Jar	-		FS26 - 3.5'	2					•	1	x	-					
10:10	8/17/2023	Soil	1 Jar			FS27 - 4'	3							x						
11:05	8/17/2023	Soil	1 Jar			SW04 - 2'	4							x						
10:15	8/17/2023	Soil	1 Jar			SW07 - 1'	5							x				-		
	-											7								
																			3	
dditio	nal Instructio	ns: Plea	ase CC: ct	ourton@en	solum.com	, agiovengo@ensolum.com	n, jim.raley@dv	n.com,	chan	niltor	n@en	solum	.com			<u> </u>				
	npler), attest to th e of collection is c					that tampering with or intentionally m Sampled by:	nislabelling the samp	le locatior	1,		1.000		ing thermal d in ice at ar						hey are sampl quent days.	ed or
	Ned by: (Signatur		Date	118	ime 7:15	Received by: (Signature)	Date 8:18-0.		ne 3:4	5	Rec	eived	on ice:		ab U:	se On I	ly			<b>1</b>
	ied by: (Signatur		Date	Т	ïme	Received by: (Signature)	Date	Tir	ne		<u>T1</u>			<u>T2</u>			<u></u> <u>T3</u>			
elinquish	ed by: (Signatur	re)	Date	Т	ïme	Received by: (Signature)	Date	Tir	ne		AVO	6 Tem	1	•						
10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	trix: <b>S</b> - Soil, <b>Sd</b> - S		-				Containe											Contraction of Contra		
lote: San amples is	ples are discard applicable only	led 30 days to those sa	after resuļ amples rece	ts are reporte eived by the l	ed unless othe aboratory wit	er arrangements are made. Hazar h this COC. The liability of the labo	rdous samples will	be retur	ned to	client	t or disp	oosed c						for the a	nalysis of t	he above
amples is	applicable only	to those sa	amples rece	eived by the l	aboratory wit	h this COC. The liability of the labo	oratory is limited to	o the am	ount p	aid for	or on the	e repor	t.						<b>b</b> t	

#### **Envirotech Analytical Laboratory**

#### Sample Receipt Checklist (SRC)

Client:	Ensolum, LLC	Date Received:	08/18/23	13:45	Work Order ID:	E308145
Phone:	(575) 988-0055 E	Date Logged In:	08/18/23	15:28	Logged In By:	Caitlin Mars
Email:		Due Date:	08/25/23	17:00 (5 day TAT)		
Chain of	f Custody (COC)					
1. Does t	the sample ID match the COC?		Yes			
2. Does t	the number of samples per sampling site location match	the COC	Yes			
3. Were s	samples dropped off by client or carrier?		Yes	Carrier: Courier		
4. Was th	he COC complete, i.e., signatures, dates/times, requeste	d analyses?	Yes			
5. Were a	all samples received within holding time? Note: Analysis, such as pH which should be conducted in th i.e, 15 minute hold time, are not included in this disucssion.		Yes		Commen	ts/Resolution
Sample '	<u>Turn Around Time (TAT)</u>					
6. Did th	ne COC indicate standard TAT, or Expedited TAT?		Yes			
Sample	<u>Cooler</u>					
7. Was a	sample cooler received?		Yes			
8. If yes,	, was cooler received in good condition?		Yes			
9. Was th	he sample(s) received intact, i.e., not broken?		Yes			
10. Were	e custody/security seals present?		No			
11. If yes	s, were custody/security seals intact?		NA			
12. Was t	the sample received on ice? If yes, the recorded temp is 4°C, i.e. Note: Thermal preservation is not required, if samples are r minutes of sampling		Yes			
13. If no	visible ice, record the temperature. Actual sample te	mperature: 4°	с			
	Container	<b>I</b> · · · · · <u>—</u>				
	aqueous VOC samples present?		No			
	VOC samples collected in VOA Vials?		NA			
	e head space less than 6-8 mm (pea sized or less)?		NA			
	a trip blank (TB) included for VOC analyses?		NA			
	non-VOC samples collected in the correct containers?		Yes			
	appropriate volume/weight or number of sample container	s collected?	Yes			
Field La						
	e field sample labels filled out with the minimum inform	nation:				
	Sample ID?		Yes			
	Date/Time Collected?		Yes	L		
	Collectors name?		Yes			
-	<u>Preservation</u>	ch arma	ът.			
	s the COC or field labels indicate the samples were pres	civeu?	No Na			
	sample(s) correctly preserved? b filteration required and/or requested for dissolved met	ale?	NA No			
	· ·		INU			
	nase Sample Matrix	n				
	s the sample have more than one phase, i.e., multiphase		No			
	s, does the COC specify which phase(s) is to be analyze	eu?	NA			
	tract Laboratory					
	samples required to get sent to a subcontract laboratory a subcontract laboratory specified by the client and if s		No			
			NA	Subcontract Lab: NA		

Signature of client authorizing changes to the COC or sample disposition.



•





5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

**Practical Solutions for a Better Tomorrow** 

# **Analytical Report**

Ensolum, LLC

Project Name: RDX Federal 21 #042

Work Order: E308158

Job Number: 01058-0007

Received: 8/22/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 8/28/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported. Date Reported: 8/28/23

Ashley Giovengo 3122 National Parks Hwy Carlsbad, NM 88220

Project Name: RDX Federal 21 #042 Workorder: E308158 Date Received: 8/22/2023 8:15:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/22/2023 8:15:00AM, under the Project Name: RDX Federal 21 #042.

The analytical test results summarized in this report with the Project Name: RDX Federal 21 #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

**Raina Schwanz** 

Laboratory Administrator

rainaschwanz@envirotech-inc.com

Office: 505-632-1881

Respectfully,

Walter Hinchman Laboratory Director Office: 505-632-1881 Cell: 775-287-1762 whinchman@envirotech-inc.com

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**Alexa Michaels** 

Sample Custody Officer

labadmin@envirotech-inc.com

Office: 505-632-1881

Envirotech Web Address: www.envirotech-inc.com



Page 206 of 264

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# Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	5
Sample Data	6
FS28 - 0.5'	6
FS29 - 0.5'	7
FS30 - 0.5'	8
FS31 - 0.5'	9
FS32 - 0.5'	10
FS33 - 0.5'	11
FS34 - 0.5'	12
FS35 - 0.5'	13
FS36 - 0.5'	14
FS37 - 0.5'	15
FS38 - 0.5'	16
FS39 - 0.5'	17
FS40 - 0.5'	18
FS41 - 0.5'	19
FS42 - 0.5'	20
FS43 - 0.5'	21
FS44 - 0.5'	22
FS45 - 0.5'	23
FS46 - 0.5'	24
FS47 - 0.5'	25

•

# Table of Contents (continued)

FS48 - 0.5'	26
QC Summary Data	27
QC - Volatile Organic Compounds by EPA 8260B	27
QC - Volatile Organics by EPA 8021B	28
QC - Nonhalogenated Organics by EPA 8015D - GRO	29
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	31
QC - Anions by EPA 300.0/9056A	33
Definitions and Notes	35
Chain of Custody etc.	36

#### **Sample Summary**

		Sample Sum	mai y		
Ensolum, LLC		Project Name:	RDX Federal 21 #0	42	Reported:
3122 National Parks Hwy		Project Number:	01058-0007		Keporteu:
Carlsbad NM, 88220		Project Manager:	Ashley Giovengo		08/28/23 11:09
lient Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S28 - 0.5'	E308158-01A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
S29 - 0.5'	E308158-02A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
S30 - 0.5'	E308158-03A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
S31 - 0.5'	E308158-04A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
\$32 - 0.5'	E308158-05A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
833 - 0.5'	E308158-06A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
834 - 0.5'	E308158-07A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
\$35 - 0.5'	E308158-08A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
536 - 0.5'	E308158-09A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
\$37 - 0.5'	E308158-10A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
538 - 0.5'	E308158-11A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
839 - 0.5'	E308158-12A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
S40 - 0.5'	E308158-13A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
S41 - 0.5'	E308158-14A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
842 - 0.5'	E308158-15A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
S43 - 0.5'	E308158-16A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
S44 - 0.5'	E308158-17A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
545 - 0.5'	E308158-18A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
546 - 0.5'	E308158-19A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
547 - 0.5'	E308158-20A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.
S48 - 0.5'	E308158-21A	Soil	08/18/23	08/22/23	Glass Jar, 2 oz.



	5	ampic D	ata			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numbo Project Manag	er: 0103	K Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS28 - 0.5'				
		E308158-01				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
p-Xylene	ND	0.0250	1	08/22/23	08/24/23	
p,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		93.3 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2334032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.6 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	cg Analyst: JL			Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/24/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/24/23	
Surrogate: n-Nonane		93.2 %	50-200	08/24/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	: BA		Batch: 2334058
Chloride	6600	400	20	08/24/23	08/24/23	



	5	ampic D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numb Project Manag	er: 010	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS29 - 0.5'				
		E308158-02				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
p-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Fotal Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		92.7 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2334032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.8 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	/kg Analyst: JL			Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/24/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/24/23	
Surrogate: n-Nonane		92.4 %	50-200	08/24/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	BA		Batch: 2334058
Chloride	4520	400	20	08/24/23	08/24/23	



	5	ampie D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numb Project Manag	er: 010:	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS30 - 0.5'				
		E308158-03				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
p-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Fotal Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		93.8 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2334032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.0 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	kg Analyst: JL			Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/24/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/24/23	
Surrogate: n-Nonane		93.7 %	50-200	08/24/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	: BA		Batch: 2334058
Chloride	1730	400	20	08/24/23	08/24/23	



	5	ampic D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numbo Project Manag	er: 010	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS31 - 0.5'				
		E308158-04				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
p-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Fotal Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		94.2 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	g Analyst: IY			Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.5 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	g/kg Analyst: JL			Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/24/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/24/23	
Surrogate: n-Nonane		93.9 %	50-200	08/24/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	BA		Batch: 2334058
Chloride	9110	400	20	08/24/23	08/24/23	



	6	ampie D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Mana	oer: 010	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS32 - 0.5'				
		E308158-05				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
o-Xylene	ND	0.0250	1	08/22/23	08/24/23	
p,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		93.9 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2334032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.4 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	, Analyst: JL		Batch: 2334040	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/24/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/24/23	
Surrogate: n-Nonane		97.1 %	50-200	08/24/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	: BA		Batch: 2334058
Chloride	9990	400	20	08/24/23	08/24/23	



	5	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numb Project Manag	er: 010	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
	, ,		ley diovengo			
		FS33 - 0.5' E308158-06				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	Batchi 200 1002
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
o-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		93.9 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	/kg Analyst: IY			Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.0 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	ng/kg Analyst: JL			Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/24/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/24/23	
Surrogate: n-Nonane		95.5 %	50-200	08/24/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: BA		Batch: 2334058
Chloride	16400	1000	50	08/24/23	08/24/23	



	6	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Mana	ber: 010	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS34 - 0.5'				
		E308158-07				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	:: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
thylbenzene	ND	0.0250	1	08/22/23	08/24/23	
oluene	ND	0.0250	1	08/22/23	08/24/23	
-Xylene	ND	0.0250	1	08/22/23	08/24/23	
,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
fotal Xylenes	ND	0.0250	1	08/22/23	08/24/23	
urrogate: 4-Bromochlorobenzene-PID		93.5 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	g Analyst: IY		Batch: 2334032	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		92.1 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	zg Analyst: JL		Batch: 2334040	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/24/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/24/23	
urrogate: n-Nonane		94.5 %	50-200	08/24/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	:: BA		Batch: 2334058
Chloride	6870	400	20	08/24/23	08/24/23	



	CA CA	sample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Num Project Mana	ber: 010	X Federal 21 #042 58-0007 ley Giovengo	2		<b>Reported:</b> 8/28/2023 11:09:34AM
		FS35 - 0.5'				
		E308158-08				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	st: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
p-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Fotal Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		93.9 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	st: IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		97.2 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	st: JL		Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/24/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/24/23	
Surrogate: n-Nonane		95.4 %	50-200	08/24/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	st: BA		Batch: 2334058
Chloride	4940	400	20	08/24/23	08/24/23	
Anions by EPA 300.0/9056A Chloride			-		08/24/23	Bat



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Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numb Project Manag	er: 0103	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS36 - 0.5'				
		E308158-09				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst:	IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
p-Xylene	ND	0.0250	1	08/22/23	08/24/23	
p,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Fotal Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		92.7 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst:	IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		94.7 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst:	JL		Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/24/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/24/23	
Surrogate: n-Nonane		94.3 %	50-200	08/24/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst:	BA		Batch: 2334058
Chloride	3040	400	20	08/24/23	08/24/23	



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Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numb Project Manag	er: 010:	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS37 - 0.5'				
		E308158-10				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
thylbenzene	ND	0.0250	1	08/22/23	08/24/23	
oluene	ND	0.0250	1	08/22/23	08/24/23	
-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/24/23	
urrogate: 4-Bromochlorobenzene-PID		93.0 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		94.8 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst	: JL		Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/24/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/24/23	
urrogate: n-Nonane		95.4 %	50-200	08/24/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	: BA		Batch: 2334058
Chloride	2040	400	20	08/24/23	08/24/23	



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Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Manaş	er: 010	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS38 - 0.5'				
		E308158-11				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	:: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
thylbenzene	ND	0.0250	1	08/22/23	08/24/23	
oluene	ND	0.0250	1	08/22/23	08/24/23	
-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/24/23	
urrogate: 4-Bromochlorobenzene-PID		94.0 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	:: IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		94.2 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	:: JL		Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/24/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/24/23	
urrogate: n-Nonane		94.9 %	50-200	08/24/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	:: BA		Batch: 2334058
Chloride	2200	400	20	08/24/23	08/24/23	



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Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Manaş	er: 010:	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS39 - 0.5'				
		E308158-12				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
thylbenzene	ND	0.0250	1	08/22/23	08/24/23	
oluene	ND	0.0250	1	08/22/23	08/24/23	
-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/24/23	
urrogate: 4-Bromochlorobenzene-PID		94.0 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		94.0 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst	: JL		Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/25/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/25/23	
urrogate: n-Nonane		95.6 %	50-200	08/24/23	08/25/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	: BA		Batch: 2334058
Chloride	5380	400	20	08/24/23	08/24/23	



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Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numb Project Manag	er: 010:	X Federal 21 #042 58-0007 ley Giovengo	,		<b>Reported:</b> 8/28/2023 11:09:34AM
		FS40 - 0.5'				
		E308158-13				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
thylbenzene	ND	0.0250	1	08/22/23	08/24/23	
oluene	ND	0.0250	1	08/22/23	08/24/23	
-Xylene	ND	0.0250	1	08/22/23	08/24/23	
,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/24/23	
urrogate: 4-Bromochlorobenzene-PID		94.3 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	t: IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		94.8 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2334040
Diesel Range Organics (C10-C28)	27.0	25.0	1	08/24/23	08/25/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/25/23	
urrogate: n-Nonane		94.3 %	50-200	08/24/23	08/25/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: BA		Batch: 2334058
Chloride	6730	400	20	08/24/23	08/24/23	



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Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numb Project Manaş	er: 010:	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS41 - 0.5'				
		E308158-14				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
p-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Fotal Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		92.9 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.8 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst	: JL		Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/25/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/25/23	
Surrogate: n-Nonane		96.5 %	50-200	08/24/23	08/25/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	: BA		Batch: 2334058
Chloride	4780	400	20	08/24/23	08/25/23	



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Ensolum, LLC	Project Name:	RD	X Federal 21 #042			
3122 National Parks Hwy	Project Numbe	er: 010	58-0007	Reported:		
Carlsbad NM, 88220	Project Manag	er: Ash	ley Giovengo			8/28/2023 11:09:34AM
		FS42 - 0.5'				
		E308158-15				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
p-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		94.3 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.1 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst	: JL		Batch: 2334040
Diesel Range Organics (C10-C28)	30.8	25.0	1	08/24/23	08/25/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/25/23	
Surrogate: n-Nonane		94.7 %	50-200	08/24/23	08/25/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	: BA		Batch: 2334058
Chloride	6110	400	20	08/24/23	08/25/23	



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Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numb Project Manaş	er: 010	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS43 - 0.5'				
		E308158-16				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
p-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Fotal Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		93.1 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst	IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.0 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2334040
Diesel Range Organics (C10-C28)	463	25.0	1	08/24/23	08/25/23	
Dil Range Organics (C28-C36)	337	50.0	1	08/24/23	08/25/23	
Surrogate: n-Nonane		97.4 %	50-200	08/24/23	08/25/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	BA		Batch: 2334058
Chloride	6500	400	20	08/24/23	08/25/23	



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Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Manaş	er: 010:	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS44 - 0.5'				
		E308158-17				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ithylbenzene	ND	0.0250	1	08/22/23	08/24/23	
oluene	ND	0.0250	1	08/22/23	08/24/23	
-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/24/23	
urrogate: 4-Bromochlorobenzene-PID		94.2 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst	: IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		90.7 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/25/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/25/23	
urrogate: n-Nonane		93.1 %	50-200	08/24/23	08/25/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst	: BA		Batch: 2334058
Chloride	7630	400	20	08/24/23	08/25/23	



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Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numbe Project Manage	er: 0103	X Federal 21 #042 58-0007 ley Giovengo	2		<b>Reported:</b> 8/28/2023 11:09:34AM
	]	FS45 - 0.5'				
	]	E308158-18				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
p-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Total Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		94.2 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	t: IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.0 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	t: JL		Batch: 2334040
Diesel Range Organics (C10-C28)	108	25.0	1	08/24/23	08/25/23	
Dil Range Organics (C28-C36)	78.5	50.0	1	08/24/23	08/25/23	
Surrogate: n-Nonane		96.1 %	50-200	08/24/23	08/25/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: BA		Batch: 2334058
	18600	1000	50	08/24/23	08/25/23	



	6	ample D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Manag	ber: 010	X Federal 21 #04 58-0007 ley Giovengo	42		<b>Reported:</b> 8/28/2023 11:09:34AM
		FS46 - 0.5'				
		E308158-19				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	vst: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
Ethylbenzene	ND	0.0250	1	08/22/23	08/24/23	
Toluene	ND	0.0250	1	08/22/23	08/24/23	
p-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
Fotal Xylenes	ND	0.0250	1	08/22/23	08/24/23	
Surrogate: 4-Bromochlorobenzene-PID		93.1 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	vst: IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.7 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	, Analyst: JL			Batch: 2334040
Diesel Range Organics (C10-C28)	94.3	25.0	1	08/24/23	08/25/23	
Oil Range Organics (C28-C36)	85.0	50.0	1	08/24/23	08/25/23	
Surrogate: n-Nonane		93.6 %	50-200	08/24/23	08/25/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2334058
Chloride	538	40.0	2	08/24/23	08/25/23	



	0	ampie D	ala			
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Manag	oer: 010	X Federal 21 #042 58-0007 ley Giovengo			<b>Reported:</b> 8/28/2023 11:09:34AM
		FS47 - 0.5'				
		E308158-20				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analys	:: IY		Batch: 2334032
Benzene	ND	0.0250	1	08/22/23	08/24/23	
thylbenzene	ND	0.0250	1	08/22/23	08/24/23	
oluene	ND	0.0250	1	08/22/23	08/24/23	
-Xylene	ND	0.0250	1	08/22/23	08/24/23	
o,m-Xylene	ND	0.0500	1	08/22/23	08/24/23	
fotal Xylenes	ND	0.0250	1	08/22/23	08/24/23	
urrogate: 4-Bromochlorobenzene-PID		93.4 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	:: IY		Batch: 2334032
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/22/23	08/24/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		92.4 %	70-130	08/22/23	08/24/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	:: JL		Batch: 2334040
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/23	08/25/23	
Dil Range Organics (C28-C36)	ND	50.0	1	08/24/23	08/25/23	
Surrogate: n-Nonane		94.5 %	50-200	08/24/23	08/25/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	:: BA		Batch: 2334058
Chloride	18700	400	20	08/24/23	08/25/23	



#### Sample Data

	5	ample D	ata				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Mana	ber: 0103	X Federal 21 58-0007 ley Gioveng				<b>Reported:</b> 8/28/2023 11:09:34AM
Curisous (1111, 00220	i iojeet mana	-					
		FS48 - 0.5'					
		E308158-21					
	D I	Reporting			<b>D</b>		N
Analyte	Result	Limit	Dilu	tion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: IY			Batch: 2334021
Benzene	ND	0.0250	1		08/22/23	08/23/23	
Ethylbenzene	ND	0.0250	1		08/22/23	08/23/23	
Toluene	ND	0.0250	1		08/22/23	08/23/23	
p-Xylene	ND	0.0250	1		08/22/23	08/23/23	
p,m-Xylene	ND	0.0500	1		08/22/23	08/23/23	
Total Xylenes	ND	0.0250	1		08/22/23	08/23/23	
Surrogate: Bromofluorobenzene		115 %	70-130		08/22/23	08/23/23	
Surrogate: 1,2-Dichloroethane-d4		99.7 %	70-130		08/22/23	08/23/23	
Surrogate: Toluene-d8		107 %	70-130		08/22/23	08/23/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY			Batch: 2334021
Gasoline Range Organics (C6-C10)	ND	20.0	1		08/22/23	08/23/23	
Surrogate: Bromofluorobenzene		115 %	70-130		08/22/23	08/23/23	
Surrogate: 1,2-Dichloroethane-d4		99.7 %	70-130		08/22/23	08/23/23	
Surrogate: Toluene-d8		107 %	70-130		08/22/23	08/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: Kl	MN		Batch: 2334041
Diesel Range Organics (C10-C28)	ND	25.0	1		08/23/23	08/24/23	
Dil Range Organics (C28-C36)	ND	50.0	1		08/23/23	08/24/23	
Surrogate: n-Nonane		94.1 %	50-200		08/23/23	08/24/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA	A		Batch: 2334061
Chloride	2530	40.0	2	2	08/24/23	08/24/23	



## **QC Summary Data**

		VC 51		- 5 - 000	-				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	01	DX Federal 21 058-0007 hley Gioveng				8/2	<b>Reported:</b> 28/2023 11:09:34AM
,	,	Volatile Organic				D			
		volatile Organic	Compo		A 02001	D			Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2334021-BLK1)							Prepared: 0	8/22/23 Ana	lyzed: 08/22/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
p-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.592		0.500		118	70-130			
• •									
Surrogate: 1,2-Dichloroethane-d4	0.491		0.500		98.1	70-130			
Surrogate: Toluene-d8	0.534		0.500		107	70-130			
LCS (2334021-BS1)							Prepared: 0	8/22/23 Ana	lyzed: 08/22/23
Benzene	2.53	0.0250	2.50		101	70-130			
Ethylbenzene	2.47	0.0250	2.50		98.8	70-130			
Toluene	2.50	0.0250	2.50		100	70-130			
o-Xylene	2.61	0.0250	2.50		104	70-130			
p,m-Xylene	5.18	0.0500	5.00		104	70-130			
Total Xylenes	7.79	0.0250	7.50		104	70-130			
Surrogate: Bromofluorobenzene	0.594		0.500		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.487		0.500		97.4	70-130			
Surrogate: Toluene-d8	0.534		0.500		107	70-130			
Matrix Spike (2334021-MS1)				Source:	E308157-	01	Prepared: 0	8/22/23 Ana	lyzed: 08/22/23
Benzene	2.63	0.0250	2.50	ND	105	48-131			-
Ethylbenzene	2.58	0.0250	2.50	ND	103	45-135			
Toluene	2.61	0.0250	2.50	ND	103	48-130			
o-Xylene	2.01	0.0250	2.50	ND	111	43-135			
p,m-Xylene	5.51	0.0500	5.00	ND	110	43-135			
Total Xylenes	8.28	0.0250	7.50	ND	110	43-135			
•		0.0230	0.500		120	70-130			
Surrogate: Bromofluorobenzene	0.599								
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500 0.500		98.7 107	70-130 70-130			
Surrogate: Toluene-d8	0 535								
Surrogate: Toluene-d8	0.535		0.500	6			<b>D</b> 1.0		1 00/00/00
Matrix Spike Dup (2334021-MSD1)		0.0250			E308157-	01	-		lyzed: 08/22/23
Matrix Spike Dup (2334021-MSD1) Benzene	2.61	0.0250	2.50	ND	<b>E308157-</b>	<b>01</b> 48-131	0.877	23	lyzed: 08/22/23
Matrix Spike Dup (2334021-MSD1) Benzene Ethylbenzene	2.61 2.54	0.0250	2.50 2.50	ND ND	<b>E308157-</b> 104 102	<b>01</b> 48-131 45-135	0.877 1.56	23 27	lyzed: 08/22/23
Matrix Spike Dup (2334021-MSD1) Benzene Ethylbenzene Toluene	2.61 2.54 2.57	0.0250 0.0250	2.50 2.50 2.50	ND ND ND	E308157- 104 102 103	<b>01</b> 48-131 45-135 48-130	0.877 1.56 1.66	23 27 24	lyzed: 08/22/23
Matrix Spike Dup (2334021-MSD1) Benzene Ethylbenzene Toluene p-Xylene	2.61 2.54 2.57 2.75	0.0250 0.0250 0.0250	2.50 2.50 2.50 2.50	ND ND ND ND	E308157- 104 102 103 110	<b>01</b> 48-131 45-135 48-130 43-135	0.877 1.56 1.66 0.598	23 27 24 27	lyzed: 08/22/23
Matrix Spike Dup (2334021-MSD1) Benzene Ethylbenzene Toluene o-Xylene p,m-Xylene	2.61 2.54 2.57 2.75 5.48	0.0250 0.0250 0.0250 0.0500	2.50 2.50 2.50 2.50 5.00	ND ND ND ND	E308157- 104 102 103 110 110	<b>01</b> 48-131 45-135 48-130 43-135 43-135	0.877 1.56 1.66 0.598 0.637	23 27 24 27 27	lyzed: 08/22/23
Matrix Spike Dup (2334021-MSD1) Benzene Ethylbenzene Toluene	2.61 2.54 2.57 2.75 5.48 8.23	0.0250 0.0250 0.0250	2.50 2.50 2.50 2.50 5.00 7.50	ND ND ND ND	E308157- 104 102 103 110 110 110	01 48-131 45-135 48-130 43-135 43-135 43-135	0.877 1.56 1.66 0.598	23 27 24 27	lyzed: 08/22/23
Matrix Spike Dup (2334021-MSD1) Benzene Ethylbenzene Toluene o-Xylene p,m-Xylene	2.61 2.54 2.57 2.75 5.48	0.0250 0.0250 0.0250 0.0500	2.50 2.50 2.50 2.50 5.00	ND ND ND ND	E308157- 104 102 103 110 110	<b>01</b> 48-131 45-135 48-130 43-135 43-135	0.877 1.56 1.66 0.598 0.637	23 27 24 27 27	lyzed: 08/22/23
Matrix Spike Dup (2334021-MSD1) Benzene Ethylbenzene Toluene o-Xylene p,m-Xylene Total Xylenes	2.61 2.54 2.57 2.75 5.48 8.23	0.0250 0.0250 0.0250 0.0500	2.50 2.50 2.50 2.50 5.00 7.50	ND ND ND ND	E308157- 104 102 103 110 110 110	01 48-131 45-135 48-130 43-135 43-135 43-135	0.877 1.56 1.66 0.598 0.637	23 27 24 27 27	lyzed: 08/22/23



## **QC Summary Data**

		QC D	u 1111110	i j Duu					
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	01	DX Federal 2 1058-0007 .shley Gioveng					<b>Reported:</b> 8/28/2023 11:09:34AM
		, 0		by EPA 802	-		Analyst: IY		
		Reporting	Spike	Source		Rec		RPD	
Analyte	Result	Limit	Level	Result	Rec	Limits	RPD	Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2334032-BLK1)							Prepared: 0	8/22/23 A	Analyzed: 08/24/23
Benzene	ND	0.0250					-		· ·
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
p-Xylene	ND	0.0250							
o,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.46		8.00		93.2	70-130			
LCS (2334032-BS1)							Prepared: 0	8/22/23 A	Analyzed: 08/24/23
Benzene	4.88	0.0250	5.00		97.6	70-130			
Ethylbenzene	4.82	0.0250	5.00		96.3	70-130			
Toluene	4.88	0.0250	5.00		97.6	70-130			
p-Xylene	4.85	0.0250	5.00		97.0	70-130			
o,m-Xylene	9.79	0.0500	10.0		97.9	70-130			
Total Xylenes	14.6	0.0250	15.0		97.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.47		8.00		93.3	70-130			
Matrix Spike (2334032-MS1)				Source:	E308158-	02	Prepared: 0	8/22/23 A	Analyzed: 08/24/23
Benzene	5.21	0.0250	5.00	ND	104	54-133			
Ethylbenzene	5.12	0.0250	5.00	ND	102	61-133			
Toluene	5.20	0.0250	5.00	ND	104	61-130			
p-Xylene	5.13	0.0250	5.00	ND	103	63-131			
o,m-Xylene	10.4	0.0500	10.0	ND	104	63-131			
Total Xylenes	15.5	0.0250	15.0	ND	104	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.47		8.00		93.3	70-130			
Matrix Spike Dup (2334032-MSD1)				Source:	E308158-	02	Prepared: 0	8/22/23 A	Analyzed: 08/24/23
Benzene	5.02	0.0250	5.00	ND	100	54-133	3.67	20	
Ethylbenzene	4.96	0.0250	5.00	ND	99.2	61-133	3.13	20	
Toluene	5.01	0.0250	5.00	ND	100	61-130	3.70	20	
		0.0250	5.00	ND	99.1	63-131	3.57	20	
p-Xylene	4.95	0.0230							
p-Xylene p,m-Xylene	4.95	0.0230	10.0	ND	101	63-131	3.36	20	



## **QC Summary Data**

Ensolum, LLCProject Name:RDX Federal 21 #0423122 National Parks HwyProject Number:01058-0007Data 101 101 102000Data 101 10200Data 101 10200		Reported:			
Carlsbad NM, 88220 Project Manager: Ashley Giovengo		8/28/2023 11:09:34AM			
Nonhalogenated Organics by EPA 8015D - GRO		Analyst: IY			
Analyte Reporting Spike Source Rec Result Limit Level Result Rec Limits	RPD RPD Limi				
mg/kg mg/kg mg/kg % %	% %	Notes			
Blank (2334021-BLK1) Prep	pared: 08/22/23	Analyzed: 08/22/23			
Gasoline Range Organics (C6-C10) ND 20.0					
Surrogate: Bromofluorobenzene 0.592 0.500 118 70-130					
Surrogate: 1,2-Dichloroethane-d4 0.491 0.500 98.1 70-130					
Surrogate: Toluene-d8 0.534 0.500 107 70-130					
LCS (2334021-BS2) Prep	pared: 08/22/23	Analyzed: 08/22/23			
Gasoline Range Organics (C6-C10)         50.7         20.0         50.0         101         70-130					
Surrogate: Bromofluorobenzene 0.602 0.500 120 70-130					
Surrogate: 1,2-Dichloroethane-d4 0.490 0.500 97.9 70-130					
Surrogate: Toluene-d8 0.544 0.500 109 70-130					
Matrix Spike (2334021-MS2)         Source: E308157-01         Prep	pared: 08/22/23	Analyzed: 08/22/23			
Gasoline Range Organics (C6-C10) 50.6 20.0 50.0 ND 101 70-130					
Surrogate: Bromofluorobenzene 0.602 0.500 120 70-130					
Surrogate: 1,2-Dichloroethane-d4 0.479 0.500 95.8 70-130					
Surrogate: Toluene-d8 0.545 0.500 109 70-130					
Matrix Spike Dup (2334021-MSD2) Source: E308157-01 Prep	pared: 08/22/23	Analyzed: 08/22/23			
Gasoline Range Organics (C6-C10)         50.8         20.0         50.0         ND         102         70-130	0.325 20				
Surrogate: Bromofluorobenzene 0.589 0.500 118 70-130					
Surrogate: 1,2-Dichloroethane-d4 0.478 0.500 95.5 70-130					



## **QC Summary Data**

		QC 5	uIIIIII	aly Data	a								
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	C	RDX Federal 21 01058-0007 Ashley Gioveng					<b>Reported:</b> 8/28/2023 11:09:34AM				
	Nonhalogenated Organics by EPA 8015D - GRO								Analyst: IY				
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes				
	шg/кg	iiig/kg	ing/kg	iiig/kg	70	/0	70	/0	notes				
Blank (2334032-BLK1)							Prepared: 0	8/22/23 A	nalyzed: 08/24/23				
Gasoline Range Organics (C6-C10)	ND	20.0											
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.37		8.00		92.1	70-130							
LCS (2334032-BS2)							Prepared: 0	8/22/23 A	nalyzed: 08/24/23				
Gasoline Range Organics (C6-C10)	43.1	20.0	50.0		86.1	70-130							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.29		8.00		91.2	70-130							
Matrix Spike (2334032-MS2)				Source:	E308158-	02	Prepared: 0	8/22/23 A	nalyzed: 08/24/23				
Gasoline Range Organics (C6-C10)	46.5	20.0	50.0	ND	93.0	70-130							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.40		8.00		92.5	70-130							
Matrix Spike Dup (2334032-MSD2)				Source:	E308158-	02	Prepared: 0	8/22/23 A	nalyzed: 08/24/23				
Gasoline Range Organics (C6-C10)	48.6	20.0	50.0	ND	97.3	70-130	4.53	20					
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.55		8.00		94.4	70-130							



## **QC Summary Data**

		QC D	umm	ary Data	u				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	C	RDX Federal 21 01058-0007 Ashley Gioveng					<b>Reported:</b> 8/28/2023 11:09:34AM
	Nonha	alogenated Org	anics by	7 EPA 8015E	) - DRO	/ORO			Analyst: JL
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2334040-BLK1)							Prepared: 0	8/22/23 A	Analyzed: 08/24/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.9		50.0		102	50-200			
LCS (2334040-BS1)							Prepared: 0	8/22/23 A	Analyzed: 08/24/23
Diesel Range Organics (C10-C28)	242	25.0	250		96.7	38-132			
Surrogate: n-Nonane	48.1		50.0		96.2	50-200			
Matrix Spike (2334040-MS1)				Source:	E308158-	06	Prepared: 0	8/22/23 A	Analyzed: 08/24/23
Diesel Range Organics (C10-C28)	239	25.0	250	ND	95.7	38-132			
Surrogate: n-Nonane	44.6		50.0		89.3	50-200			
Matrix Spike Dup (2334040-MSD1)				Source:	E308158-	06	Prepared: 0	8/22/23 A	Analyzed: 08/24/23
Diesel Range Organics (C10-C28)	242	25.0	250	ND	96.9	38-132	1.20	20	
Surrogate: n-Nonane	43.3		50.0		86.5	50-200			



## **QC Summary Data**

		QC D	umm	ary Data	u				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	0	RDX Federal 21 01058-0007 Ashley Gioveng					<b>Reported:</b> 8/28/2023 11:09:34AM
	Nonha	alogenated Org	anics by	y EPA 8015E	) - DRO	/ORO			Analyst: KM
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2334041-BLK1)							Prepared: 0	8/23/23 A	Analyzed: 08/23/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	58.5		50.0		117	50-200			
LCS (2334041-BS1)							Prepared: 0	8/23/23 A	Analyzed: 08/24/23
Diesel Range Organics (C10-C28)	248	25.0	250		99.4	38-132			
Surrogate: n-Nonane	48.2		50.0		96.3	50-200			
Matrix Spike (2334041-MS1)				Source:	E308155-	23	Prepared: 0	8/23/23 A	Analyzed: 08/24/23
Diesel Range Organics (C10-C28)	245	25.0	250	ND	98.2	38-132			
Surrogate: n-Nonane	45.2		50.0		90.5	50-200			
Matrix Spike Dup (2334041-MSD1)				Source:	E308155-	23	Prepared: 0	8/23/23 A	Analyzed: 08/24/23
Diesel Range Organics (C10-C28)	249	25.0	250	ND	99.7	38-132	1.54	20	
Surrogate: n-Nonane	47.6		50.0		95.2	50-200			



## **QC Summary Data**

21 #042				
				Reported:
igo				8/28/2023 11:09:34AM
A				Analyst: BA
Rec	Rec Limits	RPD	RPD Limit	
%	%	%	%	Notes
		Prepared: 08	8/24/23	Analyzed: 08/24/23
		Prepared: 08	8/24/23	Analyzed: 08/24/23
101	90-110			
: E308158-0	1	Prepared: 08	8/24/23	Analyzed: 08/24/23
266	80-120			M4
: E308158-0	1	Prepared: 08	8/24/23	Analyzed: 08/24/23
518	80-120	8.33	20	M4
	% 101 266 : E308158-0	5A Rec Limits % % 101 90-110 :: E308158-01 266 80-120 :: E308158-01	Kec         Rec         Limits         RPD           %         %         %         %           Prepared:         08         08           101         90-110         %         %           :: E308158-01         Prepared:         08           266         80-120         %         %           :: E308158-01         Prepared:         08	A         Rec         RPD         RPD         Limit           %         %         %         %         %         %           %         %         %         %         %         %         %           Prepared:         08/24/23         #          %



## **QC Summary Data**

		$\mathbf{x} \in \mathcal{Z}$	•••••						
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager	(	RDX Federal 2 )1058-0007 Ashley Gioveng					<b>Reported:</b> 8/28/2023 11:09:34AM
		Anions	by EPA	300.0/9056	4				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2334061-BLK1)							Prepared: 0	8/24/23 <i>A</i>	Analyzed: 08/24/23
Chloride LCS (2334061-BS1)	ND	20.0					Prepared: 0	8/24/23 A	Analyzed: 08/24/23
Chloride	252	20.0	250	_	101	90-110			
Matrix Spike (2334061-MS1)				Source:	E308158-2	21	Prepared: 0	8/24/23 A	Analyzed: 08/24/23
Chloride	2640	40.0	250	2530	41.1	80-120			M4
Matrix Spike Dup (2334061-MSD1)				Source:	E308158-2	21	Prepared: 0	8/24/23 A	Analyzed: 08/24/23
Chloride	2900	40.0	250	2530	145	80-120	9.35	20	M4

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



	Demition		
Ensolum, LLC	Project Name:	RDX Federal 21 #042	
3122 National Parks Hwy	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	08/28/23 11:09

M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Release Project Information

Page \_\_\_\_\_ of \_\_\_\_

Received by OCD: 9/27/2023 1:38:20 PM

Page 240 of 264

	Ensolum, LLC				Bill To				Lab	Us	e Onl	y			-	T	AT		EPA P	rogram
	RDX Federa				Attention: Jim Raley		Lab V	NO#			Job N			1D	2D	3D	Sta	andard	CWA	SDWA
	Manager: As				Address: 5315 Buena Vista D						010	58	-0007					х		
	: 3122 Natio				City, State, Zip: Carlsbad NM	1, 88220			11 - S	A	Analys	sis ar	nd Metho	d				ALL SYNCON		RCRA
	te, Zip: Carl		,88220		Phone: (575)689-7597			by										10. 20		
	575-988-005				Email: jim.raley@dvn.com			ORO											State	
Email: a	agiovengo@e	ensolum.	com					30/0				0.0		WN				NM CO	UT AZ	TX
Report of	due by:				n-2			id/c	802	879(	010	300				1 T		×		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Lab Number		TPH GRO/DRO/ORO by 8015	BTEX by 8021	VUC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC			Remarks	
10:40	8/18/2023	Soil	1 Jar		FS28 - 0.5'	1								x						
10:38	8/18/2023	Soil	1 Jar		FS29 - 0.5'	2								x						
10:36	8/18/2023	Soil	1 Jar		FS30 - 0.5'	3								x						
10:35	8/18/2023	Soil	1 Jar	-	FS31 - 0.5'	4				1				x						
10:30	8/18/2023	Soil	1 Jar		FS32 - 0.5'	5				1				x						
10:43	8/18/2023	Soil	1 Jar		FS33 - 0.5'	6								x				~		
10:46	8/18/2023	Soil	1 Jar		FS34 - 0.5'	7		2						x						
10:48	8/18/2023	Soil	1 Jar		FS35 - 0.5'	8								x						
10:49	8/18/2023	Soil	1 Jar		FS36 - 0.5'	9								x						
11:14	8/18/2023	Soil	1 Jar		FS37 - 0.5'	10								x						
ddition	nal Instructio	ns: Plea	ase CC: cl	ourton@ensolur	n.com, agiovengo@ensolum.com	m, jim.raley@dv	n.com	n, cha	amilto	n@	Penso	olun	n.com		-					- 11
				ty of this sample. I an by be grounds for legal	aware that tampering with or intentionally action. Sampled by:	mislabelling the sampl	e locatio	on,										on ice the day 1 n 6 °C on subse		ed or
elinquist	red by Kignatu	re)	Date	21-23 Time 7:	11 Received by: (Signature) Michelle Com	fr 8.21.		rime D711	1		Recei	ved	on ice:	K	ab U	se Or	nly			
	hed by: (Signatu		Date 8-	21-23 Time	Received by: (Signature)	Date 8.71.	22	Time	15		T1			5 T2				Т3		
elinquish	hed by: (Signatu	nes	Date	21.23 Z	345 ath Ma	~ 8/201	3	Time 81	5		AVG	Tem	np °C	4		i se s				
	trix: <b>S</b> - Soil, <b>Sd</b> - S					Container				- pc	oly/pla	astic	, ag - amb							
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Release Project Information

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Project: RDX Federal 21 #042		Attention: Jim Raley		Lab V		-7	Job	Num			2D	3D	Stan	dard	CWA	SDWA
Project Manager: Ashley Giovengo		Address: 5315 Buena Vista Dr		ES	<u> () ()</u>	20			-0007				<u> </u>	K I		
Address: 3122 National Parks Hwy		City, State, Zip: Carlsbad NM, 88	220			·····	Analy	ysis ar	d Metho	d	<b></b>					RCRA
City, State, Zip: Carlsbad NM, 88220		Phone: (575)689-7597			à											
Phone: 575-988-0055		Email: jim.raley@dvn.com			В I										State	
Email: agiovengo@ensolum.com						5   g		8		Σz		ř	N	м со	UT AZ	TX
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Time Sampled Date Sampled Matrix No. of Containers Sa	ample ID		Lab Number		1PH GRU/URU/URU by 8015	BIEX by 8021 VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC			Remarks	
11:15 8/18/2023 Soil 1 Jar		FS38 - 0.5'	1)							x						
11:17 8/18/2023 Soil 1 Jar		FS39 - 0.5'	12							x						
11:20 8/18/2023 Soil 1 Jar		FS40 - 0.5'	13							×						
11:22 8/18/2023 Soil 1 Jar		FS41 - 0.5'	14							x						
11:33 8/18/2023 Soil 1 Jar		FS42 - 0.5'	15							x						
11:30 8/18/2023 Soil 1 Jar		FS43 - 0.5'	16							×						
11:27 8/18/2023 Soil 1 Jar		FS44 - 0.5'	17							x						
11:27 8/18/2023 Soil 1 Jar		FS45 - 0.5'	17				-			x						
11:25 8/18/2023 Soil 1 Jar		FS46 - 0.5'	19							x						
11:15 8/18/2023 Soil 1 Jar		FS47 - 0.5'	20							x						
Additional Instructions: Please CC: cbu	rton@ensolum.	com, agiovengo@ensolum.com, ji		/n.con	n, chai	milton	n@en:	solun	n.com	<u> </u>						
I, (field sampler), attest to the validity and authenticity o date or time of collection is considered fraud and may b			belling the samp	le locati	on,				ring thermal   ed in ice at an						hey are samp! quent days.	ed or
Relinquished by: (Signature) Date	Time	Received by: (Signature)	h 8.21	23	Time 67	11	Rec	eived	on ice:		ab Us		nly			
Rolinguished hu (Cinnetheo)	1.23 Time	Received by (Signature)	n Orl	1	Time	15				T2	<b>y</b> ' ''		<u> </u>			
	1-23 73	Received by: (Signature)	Date / 77		Time	15		6 Tem		4			<u> </u>			
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueon			Containe	r Type	: g - gla					per øl	ass. v	- 10	A	<u> </u>		
Note: Samples are discarded 30 days after results		other arrangements are made. Hazardo												for the a	nalysis of t	he above
samples is applicable only to those samples receive																
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		121 #042					ention: Jim Raley		Lak	WO#	.~	T	Job				D 2	D	3D	Stand	lard	CWA	SDWA
	Manager: As					21-11	ress: 5315 Buena Vista Dr		E	306	15	ð	010	57	-0007	! [				х		-	
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	te, Zip: Carls		88220				ne: (575)689-7597		-	by (										198			
	575-988-005					Ema	ail: jim.raley@dvn.com	1	-	ORC												State	
	giovengo@e	ensolum.c	com	*						RO/	21	0	0	300.0			MN		X	NN	1 CO	UT AZ	TX
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Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	)	×.,		Lab Number		TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride.			BGDOC		GDOC			Remarks	
11:12	8/18/2023	Soil	1 Jar				FS48 - 0.5'	21									x						
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	-																						
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Additior	al Instructio	ons: Plea	ase CC: cl	burton@e	ensolur	n.com,	agiovengo@ensolum.com	, jim.raley@dv	/n.co	om, ch	amil	lton(	@ens	olur	n.com					_	- 10		-
	pler), attest to the of collection is a						at tampering with or intentionally m Sampled by:	islabelling the samp	le loc	ation,					iring therma ed in ice at a							hey are samp quent days.	led or
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Sample Ma	trix: S - Soil, Sd - S	Solid, Sg - Slu	udge, A - Aqu	Jeous, O - Oth	ner		www. I we	Containe	r Tyr	De: g - g	glass.		1/2012/02/2022/2	CO. THE CONTROL	APP STOL MORE DATE	nber	glass	s. v -	VOA				
Note: Sam	ples are discare	ded 30 days	s after resu	Its are repo	rted unl		arrangements are made. Hazar this COC. The liability of the labo	dous samples will	be r	eturnec	to cl	ient o	r disp	osed	of at the					report f	or the a	nalysis of t	he above

#### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

	Ensolum, LLC Da	ate Received:	08/22/23	08:15	Work Order ID:	E308158
Phone:	(575) 988-0055 Da	te Logged In:	08/22/23	09:09	Logged In By:	Caitlin Mars
Email:	a.giovengo@ensolum.com Du	ie Date:	08/28/23	17:00 (4 day TAT)		
Chain of	f Custody (COC)					
	the sample ID match the COC?		Yes			
	the number of samples per sampling site location match	the COC	Yes			
	samples dropped off by client or carrier?		Yes	Carrier: Courie	r	
	he COC complete, i.e., signatures, dates/times, requested	analyses?	Yes	Currer. <u>Courre</u>		
	all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion.	·	Yes		Comme	nts/Resolution
Sample '	<u>Turn Around Time (TAT)</u>					
6. Did th	e COC indicate standard TAT, or Expedited TAT?		Yes			
Sample (	<u>Cooler</u>					
7. Was a	sample cooler received?		Yes			
8. If yes,	, was cooler received in good condition?		Yes			
9. Was th	he sample(s) received intact, i.e., not broken?		Yes			
10. Were	e custody/security seals present?		No			
11. If yes	s, were custody/security seals intact?		NA			
-	he sample received on ice? If yes, the recorded temp is 4°C, i.e. Note: Thermal preservation is not required, if samples are re-		Yes			
13. If no	minutes of sampling visible ice, record the temperature. Actual sample ter	nperature: <u>4°</u>	<u>C</u>			
Sample	<u>Container</u>					
	aqueous VOC samples present?		No			
15. Are V	VOC samples collected in VOA Vials?		NA			
16. Is the	e head space less than 6-8 mm (pea sized or less)?		NA			
	a trip blank (TB) included for VOC analyses?		NA			
17. Was a			Yes			
	non-VOC samples collected in the correct containers?		103			
18. Are r	non-VOC samples collected in the correct containers? a appropriate volume/weight or number of sample containers	collected?	Yes			
18. Are r	appropriate volume/weight or number of sample containers	collected?				
<ol> <li>18. Are r</li> <li>19. Is the</li> <li>Field La</li> </ol>	appropriate volume/weight or number of sample containers					
<ol> <li>18. Are r.</li> <li>19. Is the</li> <li>Field La</li> <li>20. Were</li> <li>S</li> </ol>	appropriate volume/weight or number of sample containers <b>bel</b> e field sample labels filled out with the minimum inform Sample ID?					
18. Are r 19. Is the Field La 20. Were S	appropriate volume/weight or number of sample containers <u>ubel</u> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected?		Yes Yes Yes			
18. Are r 19. Is the Field La 20. Were S I	appropriate volume/weight or number of sample containers <u>bel</u> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name?		Yes			
18. Are r 19. Is the Field La 20. Were S C Sample J	appropriate volume/weight or number of sample containers <b>bel</b> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u>	ation:	Yes Yes Yes Yes			
<ul> <li>18. Are r</li> <li>19. Is the</li> <li>Field La</li> <li>20. Were</li> <li>S</li> <li>C</li> <li>Sample J</li> <li>21. Does</li> </ul>	e appropriate volume/weight or number of sample containers <b>bel</b> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were prese	ation:	Yes Yes Yes Yes No			
18. Are r 19. Is the Field La 20. Were S C Sample J 21. Does 22. Are s	e appropriate volume/weight or number of sample containers <b>bel</b> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were preses sample(s) correctly preserved?	ation: erved?	Yes Yes Yes No NA			
<ul> <li>18. Are r</li> <li>19. Is the</li> <li>Field La</li> <li>20. Were</li> <li>20. Were</li> <li>Sample 1</li> <li>21. Does</li> <li>22. Are s</li> <li>24. Is lab</li> </ul>	appropriate volume/weight or number of sample containers <b>bel</b> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <b>Preservation</b> a the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta	ation: erved?	Yes Yes Yes Yes No			
18. Are r 19. Is the Field La 20. Were S C Sample J 21. Does 22. Are s 24. Is lab Multiphi	appropriate volume/weight or number of sample containers <b>abel</b> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <b>Preservation</b> a the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta <b>uses Sample Matrix</b>	ation: erved? .ls?	Yes Yes Yes No NA No			
<ul> <li>18. Are r</li> <li>19. Is the</li> <li>Field La</li> <li>20. Were</li> <li>20. Were</li> <li>Sample 1</li> <li>21. Does</li> <li>22. Are s</li> <li>24. Is lab</li> <li>Multiph:</li> <li>26. Does</li> </ul>	appropriate volume/weight or number of sample containers <b>abel</b> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <b>Preservation</b> is the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta <b>hase Sample Matrix</b> is the sample have more than one phase, i.e., multiphase?	ation: rved? ls?	Yes Yes Yes No NA No			
<ul> <li>18. Are r</li> <li>19. Is the</li> <li>Field La</li> <li>20. Were</li> <li>S</li> <li>C</li> <li>Sample 1</li> <li>21. Does</li> <li>22. Are s</li> <li>24. Is lab</li> <li>Multiph:</li> <li>26. Does</li> </ul>	appropriate volume/weight or number of sample containers <b>abel</b> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <b>Preservation</b> a the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta <b>uses Sample Matrix</b>	ation: rved? ls?	Yes Yes Yes No NA No			
18. Are r 19. Is the Field La 20. Were S C Sample 1 21. Does 22. Are s 24. Is lab Multiph 26. Does 27. If yes	appropriate volume/weight or number of sample containers <b>abel</b> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <b>Preservation</b> is the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta <b>hase Sample Matrix</b> is the sample have more than one phase, i.e., multiphase?	ation: rved? ls?	Yes Yes Yes No NA No			
18. Are r 19. Is the Field La 20. Were S C Sample 1 21. Does 22. Are s 24. Is lab Multiph: 26. Does 27. If yes Subcont	e appropriate volume/weight or number of sample containers <b>bel</b> e field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? <b>Preservation</b> is the COC or field labels indicate the samples were prese sample(s) correctly preserved? to filteration required and/or requested for dissolved meta <b>tase Sample Matrix</b> is the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyzed	ation: vrved? lls? d?	Yes Yes Yes No NA No			

Signature of client authorizing changes to the COC or sample disposition.



envirotech Inc.

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5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

**Practical Solutions for a Better Tomorrow** 

## **Analytical Report**

Ensolum, LLC

Project Name:

RDX Federal 21 #041

Work Order: E309054

Job Number: 01058-0007

Received: 9/8/2023

Revision: 1

**Report Reviewed By:** 

Walter Hinchman Laboratory Director 9/13/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 9/13/23

Ashley Giovengo 3122 National Parks Hwy Carlsbad, NM 88220

Project Name: RDX Federal 21 #041 Workorder: E309054 Date Received: 9/8/2023 6:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/8/2023 6:00:00AM, under the Project Name: RDX Federal 21 #041.

The analytical test results summarized in this report with the Project Name: RDX Federal 21 #041 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman Laboratory Director Office: 505-632-1881 Cell: 775-287-1762 whinchman@envirotech-inc.com

Field Offices:

**Southern New Mexico Area** Lynn Jarboe Technical Representative/Client Services

Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@envirotech-inc.com

**Raina Schwanz** Laboratory Administrator Office: 505-632-1881 rainaschwanz@envirotech-inc.com **Alexa Michaels** Sample Custody Officer Office: 505-632-1881 labadmin@envirotech-inc.com

West Texas Midland/Odessa Area **Rayny Hagan Technical Representative** Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com



Page 245 of 264

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## Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
FS07 - 4'	5
SW06 - 1'	6
QC Summary Data	7
QC - Volatile Organic Compounds by EPA 8260B	7
QC - Nonhalogenated Organics by EPA 8015D - GRO	8
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	9
QC - Anions by EPA 300.0/9056A	10
Definitions and Notes	11
Chain of Custody etc.	12

FS07 - 4'

SW06 - 1'

		Sample Sum	mary		
Ensolum, LLC		Project Name:	RDX Federal 21 #041		Depented
3122 National Parks Hwy		Project Number:	01058-0007		Reported:
Carlsbad NM, 88220		Project Manager:	Ashley Giovengo		09/13/23 13:57
Client Sample ID	Lab Sample ID	Matrix	Sampled Rec	eived	Container

Soil

Soil

E309054-01A

E309054-02A

09/06/23

09/06/23

09/08/23

09/08/23

Glass Jar, 2 oz.

Glass Jar, 2 oz.

Page 247 of 264



		mpic D					
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Project Numbe Project Manag	r: 0105	K Federal 21 58-0007 ley Gioveng				<b>Reported:</b> 9/13/2023 1:57:35PM
		FS07 - 4'					
		E309054-01					
		Reporting					
Analyte	Result	Limit	Dilut	tion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	1	Analyst: RK	S		Batch: 2337004
Benzene	ND	0.0250	1		09/11/23	09/11/23	
Ethylbenzene	ND	0.0250	1		09/11/23	09/11/23	
Toluene	ND	0.0250	1		09/11/23	09/11/23	
p-Xylene	ND	0.0250	1		09/11/23	09/11/23	
p,m-Xylene	ND	0.0500	1		09/11/23	09/11/23	
Total Xylenes	ND	0.0250	1		09/11/23	09/11/23	
Surrogate: Bromofluorobenzene		105 %	70-130		09/11/23	09/11/23	
Surrogate: 1,2-Dichloroethane-d4		97.5 %	70-130		09/11/23	09/11/23	
Surrogate: Toluene-d8		101 %	70-130		09/11/23	09/11/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	1	Analyst: RK	S		Batch: 2337004
Gasoline Range Organics (C6-C10)	ND	20.0	1		09/11/23	09/11/23	
Surrogate: Bromofluorobenzene		105 %	70-130		09/11/23	09/11/23	
Surrogate: 1,2-Dichloroethane-d4		97.5 %	70-130		09/11/23	09/11/23	
Surrogate: Toluene-d8		101 %	70-130		09/11/23	09/11/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	1	Analyst: KN	1		Batch: 2337027
Diesel Range Organics (C10-C28)	ND	25.0	1		09/12/23	09/13/23	
Dil Range Organics (C28-C36)	ND	50.0	1		09/12/23	09/13/23	
Surrogate: n-Nonane		112 %	50-200		09/12/23	09/13/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	1	Analyst: BA			Batch: 2337014
Chloride	353	200	10	)	09/11/23	09/12/23	



	5	ample D	aia				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name Project Numb Project Mana	oer: 0103	K Federal 2 58-0007 ley Giovena				<b>Reported:</b> 9/13/2023 1:57:35PM
		SW06 - 1'					
		E309054-02					
		Reporting					
Analyte	Result	Limit	Dilu	ition	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: R	KS		Batch: 2337004
Benzene	ND	0.0250	:	1	09/11/23	09/12/23	
Ethylbenzene	ND	0.0250	1	1	09/11/23	09/12/23	
Toluene	ND	0.0250	1	1	09/11/23	09/12/23	
p-Xylene	ND	0.0250	:	1	09/11/23	09/12/23	
p,m-Xylene	ND	0.0500	:	1	09/11/23	09/12/23	
Total Xylenes	ND	0.0250		1	09/11/23	09/12/23	
Surrogate: Bromofluorobenzene		110 %	70-130		09/11/23	09/12/23	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130		09/11/23	09/12/23	
Surrogate: Toluene-d8		103 %	70-130		09/11/23	09/12/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: R	KS		Batch: 2337004
Gasoline Range Organics (C6-C10)	ND	20.0	i	1	09/11/23	09/12/23	
Surrogate: Bromofluorobenzene		110 %	70-130		09/11/23	09/12/23	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130		09/11/23	09/12/23	
Surrogate: Toluene-d8		103 %	70-130		09/11/23	09/12/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: K	М		Batch: 2337027
Diesel Range Organics (C10-C28)	ND	25.0	1	1	09/12/23	09/13/23	
Dil Range Organics (C28-C36)	ND	50.0		1	09/12/23	09/13/23	
Surrogate: n-Nonane		112 %	50-200		09/12/23	09/13/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: B	A		Batch: 2337014
Chloride	88.8	40.0		2	09/11/23	09/12/23	



## **QC Summary Data**

Ensolum, LLC		Project Name:		DX Federal 2	1 #041				Reported:
3122 National Parks Hwy		Project Number:		058-0007					
Carlsbad NM, 88220		Project Manager:	As	shley Gioveng	go			9/1	3/2023 1:57:35PM
		Volatile Organic	Compo	unds by EI	PA 82601	3			Analyst: RKS
Analyte	D l	Reporting Limit	Spike	Source Result	D	Rec Limits	RPD	RPD Limit	
	Result mg/kg	mg/kg	Level mg/kg	mg/kg	Rec %	2000 Million 2000	KPD %	%	Notes
BLL (2227004 BLIZ1)							Duran and O	0/11/22 A	
Blank (2337004-BLK1)	ND	0.0250					Prepared: 0	9/11/23 Anal	yzed: 09/11/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.547		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.466		0.500		93.1	70-130			
Surrogate: Toluene-d8	0.513		0.500		103	70-130			
LCS (2337004-BS1)							Prepared: 0	9/11/23 Anal	yzed: 09/11/23
Benzene	2.49	0.0250	2.50		99.4	70-130			
Ethylbenzene	2.57	0.0250	2.50		103	70-130			
Toluene	2.48	0.0250	2.50		99.2	70-130			
o-Xylene	2.67	0.0250	2.50		107	70-130			
p,m-Xylene	5.22	0.0500	5.00		104	70-130			
Total Xylenes	7.89	0.0250	7.50		105	70-130			
Surrogate: Bromofluorobenzene	0.527		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.501		0.500		100	70-130			
Matrix Spike (2337004-MS1)				Source:	E309054-0	01	Prepared: 0	9/11/23 Anal	yzed: 09/11/23
Benzene	2.51	0.0250	2.50	ND	100	48-131			
Ethylbenzene	2.58	0.0250	2.50	ND	103	45-135			
Toluene	2.49	0.0250	2.50	ND	99.7	48-130			
o-Xylene	2.67	0.0250	2.50	ND	107	43-135			
p,m-Xylene	5.20	0.0500	5.00	ND	104	43-135			
Total Xylenes	7.87	0.0250	7.50	ND	105	43-135			
Surrogate: Bromofluorobenzene	0.536		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.468		0.500		93.6	70-130			
Surrogate: Toluene-d8	0.498		0.500		99.6	70-130			
Matrix Spike Dup (2337004-MSD1)				Source:	E309054-0	01	Prepared: 0	9/11/23 Anal	yzed: 09/12/23
Benzene	2.50	0.0250	2.50	ND	99.9	48-131	0.400	23	
Ethylbenzene	2.59	0.0250	2.50	ND	104	45-135	0.328	27	
Toluene	2.49	0.0250	2.50	ND	99.5	48-130	0.221	24	
o-Xylene	2.68	0.0250	2.50	ND	107	43-135	0.430	27	
p,m-Xylene	5.23	0.0500	5.00	ND	105	43-135	0.623	27	
Total Xylenes	7.91	0.0250	7.50	ND	105	43-135	0.558	27	
Surrogate: Bromofluorobenzene	0.532		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.5	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.1	70-130			



## **QC Summary Data**

				ary Data	•				
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	C	RDX Federal 21 )1058-0007 Ashley Gioveng					<b>Reported:</b> 9/13/2023 1:57:35PM
	No	onhalogenated O	rganics	s by EPA 801	15D - GF	RO			Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2337004-BLK1)							Prepared: 0	9/11/23 <i>A</i>	Analyzed: 09/11/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.547		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.466		0.500		93.1	70-130			
Surrogate: Toluene-d8	0.513		0.500		103	70-130			
LCS (2337004-BS2)							Prepared: 0	9/11/23 A	Analyzed: 09/11/23
Gasoline Range Organics (C6-C10)	53.3	20.0	50.0		107	70-130			
Surrogate: Bromofluorobenzene	0.536		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.8	70-130			
Surrogate: Toluene-d8	0.505		0.500		101	70-130			
Matrix Spike (2337004-MS2)				Source:	E309054-0	)1	Prepared: 0	9/11/23 A	Analyzed: 09/12/23
Gasoline Range Organics (C6-C10)	56.4	20.0	50.0	ND	113	70-130			
Surrogate: Bromofluorobenzene	0.533		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.464		0.500		92.7	70-130			
Surrogate: Toluene-d8	0.508		0.500		102	70-130			
Matrix Spike Dup (2337004-MSD2)				Source:	E309054-0	)1	Prepared: 0	9/11/23 A	Analyzed: 09/12/23
Gasoline Range Organics (C6-C10)	53.2	20.0	50.0	ND	106	70-130	5.78	20	
Surrogate: Bromofluorobenzene	0.531		0.500		106	70-130			
	0.482		0.500		96.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.000		20.4	70 150			



## **QC Summary Data**

		QC D	umm	ary Data						
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 21 01058-0007 Ashley Giovengo					<b>Reported:</b> 9/13/2023 1:57:35PM	
	Nonh	alogenated Org	anics by	y EPA 8015D	- DRO	/ORO			Analyst: KM	
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes	
Blank (2337027-BLK1)							Prepared: 0	9/12/23 A	nalyzed: 09/12/23	
Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36)	ND ND	25.0 50.0								
Surrogate: n-Nonane	57.0		50.0		114	50-200				
LCS (2337027-BS1)								Prepared: 09/12/23 Analyzed: 09/12/23		
Diesel Range Organics (C10-C28)	274	25.0	250		109	38-132				
Surrogate: n-Nonane	54.2		50.0		108	50-200				
Matrix Spike (2337027-MS1)				Source: E309091-03			Prepared: 09/12/23 Analyzed: 09/12/23			
Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132				
Surrogate: n-Nonane	54.8		50.0		110	50-200				
Matrix Spike Dup (2337027-MSD1)				Source: E309091-03			Prepared: 0	9/12/23 A	analyzed: 09/12/23	
Diesel Range Organics (C10-C28)	280	25.0	250	ND	112	38-132	1.15	20		
Surrogate: n-Nonane	56.9		50.0		114	50-200				



### Received by OCD: 9/27/2023 1:38:20 PM

## **QC Summary Data**

			••••••						
Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(	RDX Federal 2 )1058-0007 Ashley Gioveng					<b>Reported:</b> 9/13/2023 1:57:35PM
		Anions	by EPA	300.0/9056	4				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2337014-BLK1)							Prepared: 0	9/11/23 <i>A</i>	Analyzed: 09/11/23
Chloride	ND	20.0							
LCS (2337014-BS1)							Prepared: 0	9/11/23 A	Analyzed: 09/11/23
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2337014-MS1)				Source:	E309048-(	01	Prepared: 0	9/11/23 A	Analyzed: 09/11/23
Chloride	248	20.0	250	ND	99.1	80-120			
Matrix Spike Dup (2337014-MSD1)				Source:	E309048-0	01	Prepared: 0	9/11/23 A	Analyzed: 09/12/23
Chloride	250	20.0	250	ND	99.8	80-120	0.756	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Γ	Ensolum, LLC	Project Name:	RDX Federal 21 #041	
I	3122 National Parks Hwy	Project Number:	01058-0007	Reported:
l	Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	09/13/23 13:57

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Release Project Information

Received by OCD: 9/27/2023 1:38:20 PM

Client: Ensolum, LLC.			Bill To		Lab Use Only							TA	T	EPA Program				
					Attention: Jim Raley		Lab WO	#		Job	Num	ber	1D	2D	3D	D Standard	CWA	SDWA
				Address: 5315 Buena Vista Dr	Address: 5315 Buena Vista Dr		Lab WO# E 309054		01058.0007					x				
	s: 3122 Natio				City, State, Zip: Carlsbad NM, 8	8220				Analy	/sis a	nd Metho	d		_			RCRA
	ate, Zip: Carls		88220		Phone: (575)689-7597		by									12.000		
	575-988-005				Email: jim.raley@dvn.com		ORC										State	
	agiovengo@e	nsolum.c	om				RO/	17	0	0	0.0		MN		X	NM CO	UT AZ	TX
Report	due by:						0/0	/ 80:	826	601	e 30					×		
Time Sample	d Date Sampled	Matrix	No. of Containers	Sample ID		Lab Number	TPH GRO/DRO/ORO by	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC		Remarks	
10:49	9/6/2023	Soil	1 Jar		FS07 - 4'	1							x					
11:30	9/6/2023	Soil	1 Jar		SW06 - 1'	2							x					
			_			. And the state												
						Diana												
																	- 1	
dditi	onal Instructio	ns: Plea	ase CC: cl	ourton@ensol	um.com, agiovengo@ensolum.com,	jim.raley@dv	n.com, c	hami	ilton	@ens	solur	n.com						
	impler), attest to th me of collection is o			10 C	am aware that tampering with or intentionally mis gal action. <u>Sampled by:</u>	abelling the samp	le location,									ceived on ice the day ess than 6 °C on subs		oled or
Religquished by: (Signature) Date Time Received by: (Signature) 9-7-23 7:08 HILLELLA GUERT						- 9-7-	23 D	TOR Received on ice: Y/ N										
Relinquished by: (Signature) Date Time Received by: (Signature) Q-723 IS45 Andre Milso				Date	·23 1	81	5	<u>T1</u>			<u>T2</u>			<u></u>				
Relinquished by: (Signature) Date 9.8.23 Time Recoved by: (Signature) And Bate 9.8.23						- 9.8.2	23 6	:0	0	AVG	Ten	np °C	+					
ample N	Aatrix: <b>S</b> - Soil, <b>Sd</b> - S	iolid, Sg - Slu	idge, <b>A</b> - Aqu	eous, O - Other		Containe	r Type: g -	glass	, p - p	oly/p	lasti	c, ag - amb	er gl	ass, v	- VOA			
					nless other arrangements are made. Hazard ratory with this COC. The liability of the labor								ient e	xpens	e. The	e report for the	analysis of t	the above

### **Envirotech Analytical Laboratory**

### Sample Receipt Checklist (SRC)

Client:	Ensolum, LLC	Date Received:	09/08/23 (	06:00	Work Order ID:	E309054
Phone:	(575) 988-0055	Date Logged In:	09/07/23	16:34	Logged In By:	Alexa Michaels
Email:	a.giovengo@ensolum.com	Due Date:	09/14/23	17:00 (4 day TAT)		
Chain of	Custody (COC)					
1. Does t	he sample ID match the COC?		Yes			
2. Does t	he number of samples per sampling site location ma	tch the COC	Yes			
3. Were s	samples dropped off by client or carrier?		Yes	Carrier: Courier		
4. Was th	e COC complete, i.e., signatures, dates/times, reque	sted analyses?	Yes			
5. Were a	all samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi		Yes		Comment	ts/Resolution
Sample '	<u> Turn Around Time (TAT)</u>					
6. Did th	e COC indicate standard TAT, or Expedited TAT?		Yes			
Sample (	Cooler					
	sample cooler received?		Yes			
8. If yes,	was cooler received in good condition?		Yes			
9. Was th	he sample(s) received intact, i.e., not broken?		Yes			
10. Were	custody/security seals present?		No			
11. If yes	s, were custody/security seals intact?		NA			
12. Was th	he sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling		Yes			
13. If no	visible ice, record the temperature. Actual sample	temperature: 4°	С			
	Container	1 _	_			
	equeous VOC samples present?		No			
	VOC samples collected in VOA Vials?		NA			
	head space less than 6-8 mm (pea sized or less)?		NA			
17. Was a	a trip blank (TB) included for VOC analyses?		NA			
	non-VOC samples collected in the correct containers	?	Yes			
	appropriate volume/weight or number of sample contai		Yes			
Field La	bel					
	field sample labels filled out with the minimum info	ormation:				
	Sample ID?		Yes			
	Date/Time Collected?		Yes	L		
	Collectors name?		Yes			
-	Preservation	recentred?	No			
	the COC or field labels indicate the samples were p	ieserveu?	No NA			
	ample(s) correctly preserved? filteration required and/or requested for dissolved n	netals?	NA No			
		10(415)	INU			
	ase Sample Matrix	9				
	the sample have more than one phase, i.e., multipha		No			
2/. If yes	s, does the COC specify which phase(s) is to be analy	yzed?	NA			
Subcont	ract Laboratory					
Subcont 28. Are s	ract Laboratory amples required to get sent to a subcontract laborato a subcontract laboratory specified by the client and i	-	No			

Signature of client authorizing changes to the COC or sample disposition.



•



# APPENDIX F

**Email Correspondence** 

From:	Raley, Jim
То:	Hamlet, Robert, EMNRD
Cc:	Bratcher, Michael, EMNRD; Harimon, Jocelyn, EMNRD; Ashley Giovengo
Subject:	RE: [EXTERNAL] RE: Extension Request RDX 21-41 nAPP2305933356
Date:	Tuesday, August 1, 2023 8:05:47 AM
Attachments:	image001.png

### [ \*\*EXTERNAL EMAIL\*\*]

Robert,

On February 20<sup>th</sup>, 2023 we had an flare fire which discharged approx. 1 bbl of fluids on to brush offsite. This site is on federal land. Prior to cleanup BLM requested a cultural survey as well as a biological survey for Scheers Beehive Cactus.

A 90 day extension was granted by NMOCD for August, 19<sup>th</sup> 2023.

On July 26<sup>th</sup>, 2023 formal permission to proceed with remediation was granted by the BLM after review of the cultural and biological survey results. WPX Energy will not be able to complete the remediation and reporting by the current due date.

WPX Energy respectfully asks for an additional extension to November 1<sup>st</sup>, 2023 to complete remediation and reporting for this incident, due to the delay imposed by required BLM cultural and biological surveys.

Jim Raley | Environmental Professional - Permian Basin 5315 Buena Vista Dr., Carlsbad, NM 88220 C: (575)689-7597 | jim.raley@dvn.com



From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Friday, June 2, 2023 1:32 PM
To: Raley, Jim <Jim.Raley@dvn.com>
Cc: Jerrod.Inskeep@wescominc.com; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>
Subject: RE: [EXTERNAL] RE: Extension Request RDX 21-41 nAPP2305933356

RE: Incident #NAPP2305933356

Jim,

Your request for an extension to **August 19th, 2023** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

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: Buchanan, Michael, EMNRD <<u>Michael.Buchanan@emnrd.nm.gov</u>>
Sent: Friday, June 2, 2023 9:19 AM
To: Bratcher, Michael, EMNRD <<u>mike.bratcher@emnrd.nm.gov</u>>
Cc: Hamlet, Robert, EMNRD <<u>Robert.Hamlet@emnrd.nm.gov</u>>
Subject: FW: [EXTERNAL] RE: Extension Request RDX 21-41 nAPP2305933356

Good morning,

Please see request below

From: Raley, Jim <<u>Jim.Raley@dvn.com</u>>
Sent: Thursday, June 1, 2023 6:41 AM
To: Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>>
Cc: Jerrod Inskeep <<u>Jerrod.Inskeep@wescominc.com</u>>
Subject: [EXTERNAL] RE: Extension Request RDX 21-41 nAPP2305933356

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

District II NMOCD,

I have not gotten a response on this extension request. However, as stated due to BLM request for a threatened plant survey, we are forced to extend this project.

Please let me know if you have any concerns.

Jim Raley | Environmental Professional - Permian Basin 5315 Buena Vista Dr., Carlsbad, NM 88220 C: (575)689-7597 | jim.raley@dvn.com



From: Raley, Jim
Sent: Tuesday, May 9, 2023 2:11 PM
To: OCD.Enviro@emnrd.nm.gov
Cc: Jerrod Inskeep <<u>Jerrod.Inskeep@wescominc.com</u>>
Subject: Extension Request RDX 21-41 nAPP2305933356

District II NMOCD,

On 02/20/2023 we had a flare burp that discharged approx. ½ bbl of fluids to the pasture area at the RDX 21-41 pad. A small fire developed at the base of the flare which made this incident reportable. Remediation would require assessment and possible removal of soils from around the base of the flare and out into the pasture area, the surface is federal BLM land. A map of the spill area was submitted to BLM along with a Sundry request asking for permission to evaluate and remove impacted soils. BLM responsed that a survey would be needed to identify any threatened species of Scheers Beehive Cactus, before we could proceed. An outside consultant has been secured to conduct this survey and communicate the findings to BLM before we proceed. \

Toi be able to conduct this survey will push the remediation past 90 days. WPX Energy respectfully requests a 90 day extension to August 19<sup>th</sup>, 2023, to comply with BLM request.

nAPP2305933356 RDX 21-41 30-015-41269

Jim Raley | Environmental Professional - Permian Basin 5315 Buena Vista Dr., Carlsbad, NM 88220 C: (575)689-7597 | jim.raley@dvn.com



Confidentiality Warning: This message and any attachments are intended only for the use of the intended recipient(s), are confidential, and may be privileged. If you are not the intended recipient, you are hereby notified that any review, retransmission, conversion to hard copy, copying, circulation or other use of all or any portion of this message and any attachments is strictly prohibited. If you are not the intended recipient, please notify the sender immediately by return e-mail, and delete this message and any attachments from your system.

From:	Ashley Giovengo
То:	Enviro, OCD, EMNRD; Morgan, Crisha A
Cc:	Raley, Jim; Chad Hamilton; Cole Burton
Subject:	48-hour Confirmation Sampling Notification Email - RDX Federal 21 #041 & RDX Federal 21 #042 - Incident Numbers nAPP2305933356 & nAPP2320173651
Date:	Friday, August 11, 2023 7:59:26 AM
Attachments:	image001.png image002.png image003.png image004.png

Hello,

We intend to collect confirmation samples at Devon Energy's RDX Federal 21 #041 and RDX Federal 21 #042 site (nAPP2305933356 & nAPP2320173651) on Tuesday, August 15, 2023, at 09:00 am MST.

Please let us know if you plan to be onsite to oversee the sampling.

Thanks,



Ashley Giovengo Senior Engineer 575-988-0055 Ensolum, LLC in f

From:	Ashley Giovengo
To:	Enviro, OCD, EMNRD; Morgan, Crisha A
Cc:	Raley, Jim; Chad Hamilton; Cole Burton
Subject:	RE: 48-hour Confirmation Sampling Notification Email - RDX Federal 21 #041 & RDX Federal 21 #042 - Incident Numbers nAPP2305933356 & nAPP2320173651
Date:	Tuesday, August 15, 2023 1:15:54 PM
Attachments:	image001.png image002.png image003.png image004.png

Hello All,

Please extend the confirmation sampling notification to include sampling conducted on Wednesday and Thursday (08/16 thru 08/17) at the RDX Federal 21 #041 and RDX Federal 21 #042 (nAPP2305933356 & nAPP2320173651) Site.

Thanks,



From: Ashley Giovengo

**Sent:** Friday, August 11, 2023 7:59 AM

To: Enviro, OCD, EMNRD <ocd.enviro@emnrd.nm.gov>; Morgan, Crisha A <camorgan@blm.gov>
 Cc: Raley, Jim <jim.raley@dvn.com>; Chad Hamilton <chamilton@ensolum.com>; Cole Burton
 <cburton@ensolum.com>

**Subject:** 48-hour Confirmation Sampling Notification Email - RDX Federal 21 #041 & RDX Federal 21 #042 - Incident Numbers nAPP2305933356 & nAPP2320173651

Hello,

We intend to collect confirmation samples at Devon Energy's RDX Federal 21 #041 and RDX Federal 21 #042 site (nAPP2305933356 & nAPP2320173651) on Tuesday, August 15, 2023, at 09:00 am MST.

Please let us know if you plan to be onsite to oversee the sampling.

Thanks,



Ashley Giovengo Senior Engineer 575-988-0055 Ensolum, LLC

From:	Ashley Giovengo
To:	Enviro, OCD, EMNRD; Morgan, Crisha A
Cc:	Raley, Jim; Chad Hamilton; Cole Burton
Subject:	48-hour Confirmation Sampling Notification Email - RDX Federal 21 #041 & RDX Federal 21 #042 - Incident Numbers nAPP2305933356 & nAPP2320173651
Date:	Tuesday, September 5, 2023 3:39:23 PM
Attachments:	image001.png image002.png image003.png image004.png

Hello,

We intend to re-collect 2 confirmation samples at Devon Energy's RDX Federal 21 #041 and RDX Federal 21 #042 site (nAPP2305933356 & nAPP2320173651) on Wednesday, September 06, 2023, at 09:00 am MST.

Please let us know if you plan to be onsite to oversee the sampling.

Thanks,



Ashley Giovengo Senior Engineer 575-988-0055 Ensolum, LLC in f ♥

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

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	269689
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS Created By Condition Condition Date scott.rodgers 3/11/2024 This Remediation Closure Report is approved. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. A report for reclamation and revegetation including pictures of the contoured backfilled excavation surface and a thorough discussion on reseeding mixture, vegetation ratio, timelines, etc.., will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete"

Page 264 of 264 CONDITIONS

Action 269689