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Energy Minerals and Natural Resources ULL 22 Marging agents 2: Bit S For St. Artein, MM 8210 Oil Conservation Division Submit 1 Corp V Brieffahr Castrict Office Submit 1 Corp V Brieffahr Castrict Office Status 1: S For St. Artein, MM 8210 Oil Conservation Division Status 1: Corp V Brieffahr Castrict Office Submit 1 Corp V Brieffahr Castrict Office Status 1: Fe, NM 87505 Release Notification and Corrective Action DAMES 3: Status Fe, NM 87505 Release Notification and Corrective Action Nume of Company WPK Energy Inc/RKI MULL 921 Pacifity Name: RDX Federal 2:-21 Facility Name: RDX Federal 2:-21 Stafface Owner: Federal Mineral Owner: Federal Address S10 Factor 12:-21 Fooling Name RDX Federal 2:-21 Facility Name: RDX Federal 2:-21 Unit Letter Section E 21 2 05 Unit Letter Section Township Range Page of Release. Problem Release 15 Bhit Source of Release. Problem Release 12 Bhit	District I State o				ate of I	New Mex	ico		ART	ESIA DISTRICT	
Description Oil Conservation Division Submit 1 Corp. State Produce Office	District II Energy Mineral			nerals a	and Natura	l Resources		JUL	22 2 Deced August 8, 2011		
Description 1220 South SL. Francis Dr. account of the problem of	District III District III Oil Cons				Conserv	vation Div	vision	Submi	t I Copy	10 appropriate District Office in	
12/15 % Primete Dr. Asame PC, NM 1930 Santa Fe, NM 1930 Santa Fe, NM 1930 Release Notification and Corrective Action Name of Company WPX Energy Inc/RK1 Au/UAS9 Contact Karolina Blaney Address 5315 Beena Vista Dr. Telephone No. 590 580 0743 Feacility Name: KOX Federal 21-21 Feacility Name: KOX Fede	District IV	KOau, Azle	c, NM 8/410	_	1220	South	St. Franc	is Dr.		ac	cordance with 19.15.29 NMAC.
Release Notification and Corrective Action Initial Report Final Report Name of Company WPX Energy Inc/RKI AUL/NSM Contact Karolina Blaney Address 5315 Buena Vista Dr. Telephone No. 970 389 0743 Facility Name: RDX Federal 21-21 Facility Type: Well Pad Softace Owner: Federal API No. 30- 015-41267 Surface Owner: Federal API No. 30- 015-41267 LOCATION OF RELEASE County E 21 265 30E 1650 FNL 990 FWL Eddy Value Release. Produced Water and Oil Volume of Release: 15 Bbls Volume Recovered: 5 Bbls Source of Release Produced Water and Oil Volume of Release: 15 Bbls Volume Recovered: 5 Bbls Yee of Release. Produced Water and Oil Volume of Release: 15 Bbls Volume Recovered: 5 Bbls Yee of Release Produced Water and Oil Volume of Release: 15 Bbls Volume Recovered: 5 Bbls Yee of Release Produced Water and Oil Volume of Release: 15 Bbls Volume Recovered: 7 R/2016 - 1020 hrs MT Was Immediate Notice Given? Yes No Ø Not Required NMCDD Heather Paterson & Michael Bracker, BLM Shelly Tucker<	1220 S. St. Fran	cis Dr., Sant	a Fe, NM 87503)	Sa	inta Fe	³ e, NM 87505				
Image It All DU-UISUU OPERATOR Initial Report Final Rep Name of Company WPX Energy Inc/RKI Contact Karolina Blaney Contact Karolina Blaney Address S315 Buena Vista Dr. Telephone No. 970 589 0743 Federal Federal Federal Surface Owner: Federal Mineral Owner: Federal API No. 30-015-41267 Initial Report Contact Karolina Blaney Unit Letter Section Township Range Feet from the East/West Line County E 21 265 30E 1650 FNL 990 PWL Eddy Unit Letter Section Township Range Feet from the East/West Line County Eddy Properine valve focated Mature and Oil Volume of Release: Date and Hour of Discovery Try Properine valve focated in a valve can 7/8/2016 1/20 Ins MT Try Single value can Try Single value can Try Single value can NMCDE Mater Patterson & Michael Bratcher, BLM Shelly Tucker By Whon? Karolina Blaney Date and Hour; 7/8/16-13:50 Ins MT Try Single value canse by the soffice on Iocation. 5 bits of the spilice and Hour; 7/8/16-13:50 Ins MT This				Rele	ease Notific	cation	and Co	orrective A	ction		
Name of Company WPX Energy IncRKI AULASS Contact Karolina Blancy Address S315 Buena Visato Dr. Telephone No. 970 38 90743 Facility Name: RDX Federal 21-21 Facility Type: Well Pad Surface Owner: Federal Mineral Owner: Federal API No. 30- 015-41267 LOCATION OF RELEASE Unit Letter Section Township Range E 21 26S 30E Feder from the Pert from the East/West Line County E 21 26S 30E Feder from the North/South Line Feet from the East/West Line County E 21 26S 30E Feet from the North/South Line Feet from the East/West Line County Figure and Point of Discource 708 for the East/West Line County Eddy Type of Release. Produced Water and Oil Vulture of Release: 15 Bhs Volume Recovered: 5 Bhs Source of Release Type of Release. Produced Water and Oil Volume Reclass: 15 Bhs Volume Recovered: 708 2016 - 1020 hrs MT Was Immediate Notice Green? Yes No No Required No Required By Whon? Karoling Blaney Date and Hour: 7/8/16-13:50 hrs MT NA </td <td>NABI</td> <td>12104</td> <td>9514</td> <td></td> <td></td> <td>~</td> <td>OPERA</td> <td>Г<mark>OR</mark></td> <td>Ď</td> <td>Initia</td> <td>al Report 🔲 Final Repor</td>	NABI	12104	9514			~	OPERA	Г <mark>OR</mark>	Ď	Initia	al Report 🔲 Final Repor
Address 3515 buend Visia Dr. Telephone No. 9/02 S8 0/43 Facility Ame: ROX Federal 21-21 Facility Type: Well Pad Surface Owner: Federal API No. 30-015-41267 LoCATION OF RELEASE LoCATION OF RELEASE Unit Letter Section Township Range Feed from the North/South Line Feed from the Eas/West Line Counny E 21 26S 30E 1650 FNL 990 FWL Eddy Latitude: 32.030564 N Longitude: -103.8912511 W NATURE OF RELEASE Date and Hour of Discovery Polare Recovered: 5 Bbls Source of Release: Date and Hour of Discovery Polare Recovered: 5 Bbls Polare Recovered: 5 Bbls Source of Release Polare And Hour of Discovery NMOCD Heather Patterson & Michael Bratcher, BLM Shelly Tucker By Whon? Karolina Blaney Date and Hour. 78/16-13:50 hrs MT Was a Watercourse Reached? N/A N/A If a Watercourse was Impacted. Describe Fully.* N/A Describe Cause of Problem and Remedial Action Taken.* N/A The impacted area will be saded in these results. The toing action Taken.* N/A N/A Discover of rule act	Name of Co	mpany	WPX Energ	y Inc/RK	1 24428	9	Contact	Karolina Blan	ney		
Surface Owner: Federal Mineral Owner: Federal API No. 30-015-41267 LoCATION OF RELEASE LoCATION OF RELEASE Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County E 21 26S 30E 1650 FNL 990 FWL Eddy Latitude: 30.30564 N Longitude: -10.3.8912511 W NATURE OF RELEASE Type of Release. Produced Water and Oil Volume of Release: 15 Bhis Volume Recovered: 5 Bbis Source of Release Date and Hour of Occurrence 178/2016-1020 hrs MT 178/2016-1020 hrs MT Was Immediate Notice Giveo? Yes No No Required Non Required IVES, To Whom? Was a Watercourse Reached? Yes No No Required No/A Was a watercourse Reached? Yes No No/A No/A If watercourse was Impacted. Describe Fully.* N/A Describe Cause of Problem and Remedial Action Taken.* This spill was caused by the suffing box failure. Approximately 13 bbis of produced water and 2 bbis of oil were spilled on location. 5 bbils of the spiller anterial were recovered with a vacuum truck. Th	Facility Nar		Federal 21-2	r 1		1	Facility Typ	vo. 970 589 074 e: Well Pad	3		
Solitace Owner, Figleral [Printerar Owner, Frederal [Printerar Owner, Frederal Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line Country E 21 26S 30E 1650 FNL 990 FWL Eddy Latitude: 32.030564 N Longitude: -103.8912511 W NATURE OF RELEASE Date and Hour of Discovery Date and Hour of Discovery Date and Hour of Occurrence Date and Hour of Discovery T/R/2016 102 bms MT Was Immediate Notice Givern? Lyes No Not Required Whom? NMCOD Heather Patterson & Michael Bracher, BLM Shelly Tucker By Whon? Karolina Blaney Date and Hour; 7/R/2016 1350 hms MT Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. M/A If YES, Volume Impacting the Watercourse. N/A N/A Describe Cause of Problem and Remedial Action Taken.* This spill was caused by the suffing box failure. Approximately 13 bbls of produced water and 2 bbls of oil were spilled on location. 5 bbls of the spiller and PH in accordance with NM OCD Guidelines for Remediation of Leaks. Spills, and Releases. Further mediation will be based on these results. The total ranking score for his site is 10 and the site will be remediation to Leaks. Spills, and Releases. Furn	Surface Ow	ner: Enda	rol		Minoral ()unori I	Federal			A DI No	30 015 41267
LOCATION OF RELEASE Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County	Surface Ow	ner. rede	iai			Jwner, r	euerai			AFTINO	. 50- 015-41207
Onit Letter Getting Foundation Range Peet from the Point/south Line Peet from the Past West Line County E 21 26S 30E 1650 FNL 900 FWL Eddy Latitude: 32.030564 N Longitude: -103.8912511 W NATURE OF RELEASE Type of Release. Produced Water and Oil Volume of Release: 15.81b. Volume Recovered: 5 Bbls Source of Release Date and Hour 708/16- 128 at Mole of Occurrence 178/2016 - 1020 hrs MT Was Immediate Notice Given? Yes No No Required NMOCO Henther Patterson & Michael Bratcher, BLM Shelly Tucker By Mbon? Karolina Blaney Date and Hour. 78/16- 13:50 hrs MT If YES, Volume Impacting the Watercourse. W/A If a Watercourse was Impacted. Describe Fully.* N/A N/A Describe Cause of Problem and Remedial Action Taken.* This spill was caused by the stuffing box failure. Approximately 13 bbls of produced water and 2 bbls of oil were spilled on location. 5 bbls of the spillec material were recovered with a vacuum truck. The impacted soil was scraped and hauled off for disposal. Describe Area Affected and Cleanup Action Taken.* The impacted area will be sampled for BTEX and TPH in accordance with NM OCD Guidelines for Remediation of Leaks. Spill	Unit Lattar	Section	Tourship	Donos	LOCA		NOF REI	LEASE	Ennalla	at Line	Country
E 21 265 30E 1650 FNL 990 FWL Eddy Latitude: 32.030564 N Longitude: -103.8912511 W NATURE OF RELEASE Type of Release. Produced Water and Oil Volume of Release: 15 Bbls Volume Recovered: 5 Bbls Source of Release Date and Hour of Occurrence Date and Hour of Discovery TypEline valve can TyR2016 TyR2016 TyR2016 178/2016	Unit Letter	Section	Townsmp	Kange	Feet from the	INOFUL/S	South Line	reet from the	Eastwe	st Line	County
Latitude: 32.030564 N Longitude: -103.8912511 W NATURE OF RELEASE Type of Release. Produced Water and Oil Volume of Release: 15 Bbis Volume Recovered: 5 Bbis Source of Release Date and Hour of Occurrence Date and Hour of Occurrence Date and Hour of Occurrence Pipeline valve can 7/8/2016 7/8/2016 7/8/2016 Was Immediate Notice Given? If YES, To Whom? Minot Required NMOCD Heather Patterson & Michael Bratcher, BLM Shelly Tucker By Whom? Karolina Blaney Date and Hour 7/8/16-13:50 hrs NT Minot Required NMOCD Heather Patterson & Michael Bratcher, BLM Shelly Tucker By Whom? Karolina Blaney Date and Hour 7/8/16-13:50 hrs NT Minot Required N/A Was a Watercourse was Impacted. Describe Fully.* N/A N/A N/A Describe Cause of Problem and Remedial Action Taken.* N/A This spill was caused by the stuffing box failure. Approximately 13 bbls of produced water and 2 bbls of oil were spilled on location. 5 bbls of the spiller anterial were recovered with a vacuum truck. The impacted soil was scraped and hauled off for disposal. Describe Area Affected and Cleanup Action Taken.* The impacted area will be asmpled for BTEX and TPH in accordance with NM OCD Guidelines for Remediated to levels specified in 10-19 column of the Guidelines are required to report and/or file certain release notiffeations and perform correcive actions for re	E	21	265	_30E	1650	FNL		990	FWL		Eddy
NATURE OF RELEASE Type of Release Produced Water and Oil Volume of Release: 15 Bbls Volume of Release Pipeline valve located in a valve can 7/8/2016 7/8/2016 7/8/2016 7/8/2016 Was Immediate Notice Given? If YES. To Whom? 7/8/2016 7/8/2016 7/8/2016 7/8/2016 By Whom? Karolina Blaney Date and Hour: 7/8/16-13:50 hrs MT Was a Watercourse Reached? If YES. To Whom? Was a Watercourse Reached? Yes No N/A If a Watercourse was Impacted. Describe Fully.* N/A Describe Cause of Problem and Remedial Action Taken.* This spill was caused by the stuffing box failure. Approximately 13 bbls of produced water and 2 bbls of oil were spilled on location. 5 bbls of the spiller material were recovered with a vacuum truck. The impacted soil was scraped and hauled off for disposal. Describe Area Affected and Cleanup Action Taken.* * The impacted area will be sampled for BTEX and TPH in accordance with NM OCD Guidelines for Remediation of Leaks. Spills. and Releases. Further remediation will be based on these results. The total ranking score for this site is 10 and the site will he remediated to levels specified in 10-19 column of the Guidelines document. This spill dd not leave the well pad location. Pheroby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulatio				L	atitude: 32.030	564 N	Longitude	e: -103.8912511	W		
Type of Refease. Produced Water and Oil Volume of Refease. Volume of Refease. Date and Hour of Oscurrence Pipeline valve located in a valve can 7/8/2016 To Was Immediate Notice Given? If YES, To Whom? Was Immediate Notice Given? If YES, To Whom? NMOCD Heather Patterson & Michael Bratcher. BLM Shelly Tucker By Whom? Karolina Blaney Date and Hour of Discovery. The YES, Volume Impacting the Watercourse. Was a Watercourse Reached? Yes IN NO N/A If a Watercourse was Impacted. Describe Fully.* N/A N/A Describe Cause of Problem and Remedial Action Taken.* N/A This spill was caused by the stuffing box failure. Approximately 13 bbls of produced water and 2 bbls of oil were spilled on location. 5 bbls of the spiller material were recovered with a vacuum truck. The impacted soil was scraped and hauled off for disposal. Describe Area Affected and Cleanup Action Taken.* The impacted area will be sampled for BTEX and TPH in accordance with NM OCD Guidelines for Remediation of Leaks. Spills, and Releases. Further remediation will be based on these results. The total ranking score for this site is 10 and the site will be remediated to levels specified in 10-19 column of the Guidelines document. This spill did not leave the well pad location. 1 hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are requiced to report and/or file certain release					NAT	URE	OF REL	EASE			
Pipeline valve located in a valve can 78/2016 7/8/2016 - 1020 hrs MT Was Immediate Notice Given? Yes No No K Not Required Whom? Karolina Blaney Date and Hour: 7/8/16-13:50 hrs MT If YES, To Whom? Was a Watercourse Reached? Yes No No If a Watercourse was Impacted. Describe Fully.* N/A If YES, Volume Impacting the Watercourse. Describe Cause of Problem and Remedial Action Taken.* N/A This spill was caused by the stuffing box failure. Approximately 13 bbls of produced water and 2 bbls of oil were spilled on location. 5 bbls of the spiller material were recovered with a vacuum truck. The impacted soil was scraped and hauled off for disposal. Describe Area Affected and Cleanup Action Taken.* The impacted area will be sampled for BTEX and TPH in accordance with NM OCD Guidelines for Remediation of Leaks. Spills, and Releases. Further remediation will be based on these results. The total ranking score for this site is 10 and the site will be remediated to levels specified in 10-19 column of the Guidelines document. This spill did not leave the well pad location. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Inal Report" does not releave the operator of itability should their operator mendat	Source of Re	lease Produ	ced Water and	1 Oil			Date and H	Release: 15 Bbis	s 	Date ar	d Hour of Discovery
Was Immediate Notice Given? If YES. To Whom? NMOCD Heather Patterson & Michael Bratcher. BLM Shelly Tucker By Whom? Karolina Blaney Date and Hour: 7/8/16-13:50 hrs MT Was a Watercourse Reached? If YES. To Whom? If a Watercourse was Impacted. Describe Fully.* N/A N/A Describe Cause of Problem and Remedial Action Taken.* N/A This spill was caused by the stuffing box failure. Approximately 13 bbls of produced water and 2 bbls of oil were spilled on location. 5 bbls of the spiller material were recovered with a vacuum truck. The impacted soil was scraped and hauled off for disposal. Describe Area Affected and Cleanup Action Taken.* The impacted area will be sampled for BTEX and TPH in accordance with NM OCD Guidelines for Remediation of Leaks. Spills, and Releases. Further remediation will be hased on these results. The total ranking score for this site is 10 and the site will be remediated to levels specified in 10-19 column of the Guidelines document. This spill did not leave the well pad location. Thereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releave the ordenator file inbility should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water. surface water, human health or the environment. The acceptance of a C-141 report the MMOCD marked as "Final Report" dees not relieve the operator of leability ishould their operations have failed to adequate	Pipeline valv	e located in	n a valve can				7/8/2016 7/8/2016 – 1020 hrs MT				
By Whom? Karolina Blaney Date and Hour: 7/8/16-13:50 hrs MT Was a Watercourse Reached? If YES. Volume Impacting the Watercourse. N/A If YES. Volume Impacting the Watercourse. N/A N/A If a Watercourse was Impacted, Describe Fully.* N/A Describe Cause of Problem and Remedial Action Taken.* This spill was caused by the stuffing box failure. Approximately 13 bbls of produced water and 2 bbls of oil were spilled on location. 5 bbls of the spiller material were recovered with a vacuum truck. The impacted soil was scraped and hauled off for disposal. Describe Area Affected and Cleanup Action Taken.* The impacted area will be sampled for BTEX and TPH in accordance with NM OCD Guidelines for Remediation of Leaks. Spills, and Releases. Further remediation will be based on these results. The total ranking score for this site is 10 and the site will be remediated to levels specified in 10-19 column of the Guidelines document. This spill did not leave the well pad location. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 does not relieve the operator of releases which may endanger for local laws and/or regulations. Washing Blaney OIL CONSERVATION DIVISION Signature: Approved by Environmental Specialist <tr< td=""><td>Was Immedia</td><td>ate Notice (</td><td>Given?</td><td>Yes [</td><td>No 🕅 Not R</td><td>equired</td><td colspan="3">If YES, To Whom?</td></tr<>	Was Immedia	ate Notice (Given?	Yes [No 🕅 Not R	equired	If YES, To Whom?				
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If a Watercourse was Impacted, Describe Fully.* N/A Describe Cause of Problem and Remedial Action Taken.* This spill was caused by the stuffing box failure. Approximately 13 bbls of produced water and 2 bbls of oil were spilled on location. 5 bbls of the spilled material were recovered with a vacuum truck. The impacted soil was scraped and hauled off for disposal. Describe Area Affected and Cleanup Action Taken.* The impacted area will be sampled for BTEX and TPH in accordance with NM OCD Guidelines for Remediation of Leaks. Spills, and Releases. Further remediation will be based on these results. The total ranking score for this site is 10 and the site will be remediated to levels specified in 10-19 column of the Guidelines document. This spill did not leave the well pad location. Thereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability or the environment. In addition, NMOCD 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.		<u> </u>		Yes 🛛] No	_	N/A				
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Describe Cause of Problem and Remedial Action Taken.* This spill was caused by the stuffing box failure. Approximately 13 bbls of produced water and 2 bbls of oil were spilled on location. 5 bbls of the spilled material were recovered with a vacuum truck. The impacted soil was scraped and hauled off for disposal. Describe Area Affected and Cleanup Action Taken.* The impacted area will be sampled for BTEX and TPH in accordance with NM OCD Guidelines for Remediation of Leaks. Spills, and Releases. Further remediation will be based on these results. The total ranking score for this site is 10 and the site will be remediated to levels specified in 10-19 column of the Guidelines document. This spill did not leave the well pad location. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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. Signature: Mam/um. Blaney Printed Name: Karolina Blaney Approval Date: T125.116 Expiration Date: N/A Conditions of Approval: Conditions of Approval: Attached	D 1 0		1.0	1.1.4.4							
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or the environment. In addition, NMOCD 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. Karolina Blaney Printed Name: Karolina Blaney Title: Environmental Specialist Approval Date: 125/16 E-mail Address: Karolina.blaney@wpxenergy.com Conditions of Approval:	should their	operations h	have failed to	adequately	investigate and r	emediate	e contaminati	on that pose a thr	eat to grou	ind wate	r, surface water, human health
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E-mail Address: Karolina.blaney@wpxenergy.com Conditions of Approval: Attached	Title: Environmental Specialist					Approval Da	te: 7 25 1	6 E	piration	Date: N/A	
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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

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Incident ID	nAB1621049514
District RP	2RP-3801
Facility ID	
Application ID	

Release Notification

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)				
Contact mailing address 5315 Buena Vista Drive, Carlsbad, New Mexico, 88220				

Location of Release Source

Latitude 32.030564

Longitude -103.8912511

(NAD 83 in decimal degrees to 5 decimal places)

Site Name RDX Federal 21-21	Site Type Well Pad
Date Release Discovered 7/8/2016	API# (if applicable) 30-015-41267

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

Surface Owner: State Federal Tribal Private (Name: _

Nature and Volume of Release

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

Crude Oil	Volume Released (bbls) 2	Volume Recovered (bbls) 5 (Oil & PW)				
Produced Water	Volume Released (bbls) 13	Volume Recovered (bbls)				
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No NA				
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 :The spill to be released on to the wellpad	was caused by the stuffing box failure and resulted in approximately 13	barrel (bbls) of produced water and 2 bbls of oil				

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

Page 2

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
🗌 Yes 📈 No	
If YES, was immediate no	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

 \checkmark 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.

 \checkmark 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:10/27/2022
_{email:} _jim.raley@dvn.com	Telephone: 575-689-7597
OCD Only	
Received by:	Date:

Received by OCD: 10/27/2022 12:51:43 PM Form C-141 State of New Mexico

Oil Conservation Division

	Page 4 of 8
Incident ID	nAB1621049514
District RP	2RP-3801
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>>100</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 not on an exploration, development, production, or storage site?	🗌 Yes 🔀 No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data

Page 3

- Data table of soil contaminant concentration data
- \boxtimes Depth to water determination
- Determination of water sources and significant watercourses within ½-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.

Received by OCD: 10	1/27/2022 12:51:43 PM			Page 5 of 89
F0ffill C-141	State of New Mexico		Incident ID	nAB1621049514
Page 4	Oil Conservation Division		District RP	2RP-3801
			Facility ID	
			Application ID	
I hereby certify that the regulations all operator public health or the ere failed to adequately in addition, OCD accepts and/or regulations. Printed Name: Jim Signature:	ie information given above is true and complete to the ors are required to report and/or file certain release not ivironment. The acceptance of a C-141 report by the 0 ivestigate and remediate contamination that pose a thr ance of a C-141 report does not relieve the operator of Raley	best of my knowledge a ifications and perform c OCD does not relieve th eat to groundwater, surf f responsibility for comp 	and understand that purs orrective actions for rele e operator of liability sh ace water, human health liance with any other fe ntal Professional 2	uant to OCD rules and eases which may endanger ould their operations have or the environment. In deral, state, or local laws
OCD Only Received by:Jo	ocelyn Harimon	Date:1()/27/2022	

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Oil Conservation Division

Incident ID	nAB1621049514
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Closure

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

Closure Report Attachment Checklist: Each of the following items must be included in the closure report. A scaled site and sampling diagram as described in 19.15.29.11 NMAC Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection) Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling) Description of remediation activities I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

 Title:
 Environmental Professional

 Date:
 10/27/2022

 Printed Name: Jim Raley Signature: _____ Telephone: 575-689-7597 _{email:} jim.raley@dvn.com **OCD Only** Jocelyn Harimon Received by: Date: 10/27/2022 Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Hall Date: 11/2/2022 Printed Name: Brittany Hall Title: Environmental Specialist





CLOSURE REQUEST REPORT

Site Location:

RDX Federal 21-21 Eddy County, New Mexico **Incident Number** nAB1621049514

October 26, 2022 Ensolum Project No. 03A1987037

Prepared for:

WPX Energy Permian, LLC 5315 Buena Vista Dr. Carlsbad, NM 88220 **Attention: Jim Raley**

Prepared by:

Joyn S. Holy -

Joseph S. Hernandez Senior Geologist

Ashley J. Ager Ashley Ager, MS, PG

Principal

TABLE OF CONTENTS

1.0	INTRODUCTION	1
	1.1 Site Description & Background	1
	1.2 Site Characterization	1-2
2.0	REMEDIATION SUMMARY AND SOIL SAMPLING	2
	2.1 Delineation Activities	2
3.0	SOIL SAMPLING RESULTS	2
4.0	CLOSURE REQUEST	2-3

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Appendix A:	Figure 1: Site Receptor Map
	Figure 2: Delineation Soil Sample Locations
Appendix B:	Well Record
Appendix C:	Lithologic Soil Sampling Logs
Appendix D:	Photographic Log
Appendix E:	Tables
Appendix F:	Laboratory Analytical Reports & Chain-of-Custody Documentation



RDX Federal 21-21 Closure Request Report Incident Number nAB1621049514 **Page 9 of 89** October 26, 2022

1.0 INTRODUCTION

Ensolum, LLC (Ensolum) has prepared this Closure Request Report (CRR) to document corrective actions performed to date by WPX Permian Energy, LLC (WPX) at the RDX Federal 21-21 (hereinafter referred to as the "Site") in Unit E, Section 21, Township 26 South, Range 30 East, in Eddy County, New Mexico (Figure 1 in Appendix A). The corrective actions have been completed in accordance with New Mexico Oil and Conservation Division (NMOCD) regulatory requirements and guidelines.

WPX respectfully submits this CRR, which summarizes soil sampling activities for a reportable release of produced water and crude oil and provides updated depth to groundwater data from a recently drilled boring located within 0.5 mile of the Site.

1.1 Site Description & Background

The Site is located within Eddy County, New Mexico (32.030564° N, 103.8912511° W) and is associated with oil and gas exploration and production operations on Bureau of Land Management (BLM) Federal Land (**Figure 1 in Appendix A**).

On July 8, 2016, the stuffing box failed due to mechanical malfunction and resulted in the release of approximately 13 barrels (bbls) of produced water and 2 bbls of crude oil onto the surface of the well pad. A vaccum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 5 bbls of crude oil and produced water were recovered. WPX reported the release to the NMOCD via email on July 8, 2016 and with a subsquent Corrective Action Form C-141 (Form C-141) on July 22, 2016. The release was assigned Incident Number nAB1621049514.

1.2 Site Characterization

Ensolum characterized the Site to determine applicability of Table 1, Closure Criteria for Soils Impacted by a Release, from 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. Potential site receptors are identified on **Figure 1 in Appendix A**.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based a soil boring (MW-1) that was drilled by Talon LPE for WPX on December 8, 2020, located approximately 0.48 miles northwest of the Site at the RDX 17-3 well pad. Using a truck-mounted drill rig equipped with hollow stem auger, the soil boring was advanced to a total depth of 107 feet bgs. No fluids were observed within the soil boring after at least 72 hours. Following the observation period, the boring was plugged and abandoned. The well log is provided as **Appendix B**. The location of the soil boring (labeled as RDX 17-3) is depicted on **Figure 1 in Appendix A**.

The closest surface water or significant watercourse to the Site is an intermittent riverine, located approximately 741 feet northwest of the Site. The Site is greater than 300 feet from any occupied residence, school, hospital, institution, church, or wetland and greater than 1,000 feet to a freshwater well or spring. The Site is not within a 100-year floodplain. This Site is located in a medium potential karst area.



Based on the results of the Site Characterization and recently drilled soil boring, MW-1, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

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

2.0 REMEDIATION SUMMARY AND SOIL SAMPLING

2.1 Delineation Activities

Between July 29, 2022 and August 3, 2022, site assessment and delineation activities were conducted by Ensolum to characterize the subject release by verifying the presence or absence of impacted soil. Delineation soil samples were collected in potholes advanced via heavy equipment (samples designated PH). Delineation activites were directed by field sceening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. In general, a total of two soil samples were collected from each delineation soil sample location (PH01 through PH07): the sample with the highest observed field screening (0.5-foot bgs) and the greatest depth (ranging from 1-foot bgs to 6 feet bgs). The location of the delineation soil samples are shown in **Figure 2 in Appendix A**. Field screening results and observations for each delineation soil sample were recorded on lithologic soil sampling logs (**Appendix C**). Photographic documentation during delineation activities is included in **Appendix D**.

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

3.0 SOIL SAMPLING RESULTS

Laboratory analytical results for delineation soil samples PH01 through PH07 indicated benzene, BTEX, TPH-GRO/DRO, TPH and chloride concentrations were below the applicable Closure Criteria for the Site. Additionally, delineation soil samples PH02 at 6 feet and PH04 through PH07 at 0.5 foot bgs and 1 foot bgs indicate the subject release is delineated to the most stringent Table 1 Closure Criteria. Laboratory analytical results are summarized on **Table 1** in **Appendix E**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix F**.

4.0 CLOSURE REQUEST

The primary objectives of Ensolum's scope of services were to conduct site assessment and delineation soil sampling activities in order to confirm the presence or absence of impacted soil in accordance with the applicable NMOCD regulatory guidelines. Based on the results documented in this report, the following findings and conclusions regarding the release are presented:

- Laboratory analytical results for delineation soil samples PH01 through PH03 indicated BTEX, TPH-GRO/DRO, TPH and chloride were within the applicable Closure Criteria for the Site based on a confirmed depth to groundwater greater than 100 feet bgs; and
- Laboratory analytical results for delineation soil sample PH02 at 6 feet indicate the subject release is vertically delineated to the most stringent Table 1 Closure Criteria; and
- Laboratory analytical results for delineation soil samples PH04 through PH07 indicate the subject release is horizontally delineated to the most stringent Table 1 Closure Criteria.

WPX believes the scope of work described above will meet requirements set forth in NMAC 19.15.29.13 and be protective of human health, the environment, and groundwater. As such, WPX respectfully requests approval of this CRR from NMOCD. It should be noted that a 48-hour sampling notification was inadvertently not sent to NMOCD before the start of delineation soil sampling activities. WPX respectively requests documented delineation soil samples be accepted for Closure.





APPENDIX A

Figures

Received by OCD: 10/27/2022 12:51:43 PM

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APPENDIX B

Well Record

		HR	1				BORI	NG LOG/	MONITORING W	ELL COMPLETION	N DIAC	GRAM
		0.0	MDI		C E		Boring/Wel	l Number:	XX7 1	Location:	ш2	
		00			U E		Date:	M	W-1	KDA 1 /	#3	
	TM	2 U	LUI	101	12		12/8/2020 WI		WPX End	ergy		
Drilling Me	ethod:		Sampling N	Aethod:			Logged By: Drilled By:		DE			
A	Air Rotai	ry	Carryal De a	No In Donath Linte	one		C 1 T	J. L11	nn, PG	Talon L.	PE	
Gravel Pac	6 Type: 0/2.0 Sat	nd	Gravel Pac	$^{\text{K}}$ Depin Inte	ags		Sear Type:	lone	None	32 0367	65	
Casing Typ	e:	Diameter:		Depth Inter	val:		Boring Tota	al Depth (ft. BG	GS):	Longitude:	00	
PVC		2-inch		0-102 fe	eet bgs			10)7	-103.895	993	
Screen Typ	e:	Slot:	1	Diameter:	Depth 1	Interval:	Well Total	Depth (ft. BGS)):	Depth to Water (ft. BTOC):	DTW Dat	te:
PVC		0.010-11	nch	2-inch	102-	107 ft		1()/	> 10 /	12/10	5/2020
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	NSCS	Sample ID	Lithology	y/Remarks	W Com	Vell pletion
0												
5										-		
10										-		
15	NM	L	D	Ν	Ν	NM	SP	NS	Pale orange poorl	y graded fine sand -	-	
20										-	-	
20										-	-	
25											-	
30	NM	L	D	Ν	Ν	NM	SP	NS	Same as above wit	h slight increase in	-	
35									coarse sand	l and gravel	.	
40										v and ad fine and	_	
45	NM	L	D	Ν	Ν	NM	SP	NS	with very	y graded fine sand		
50									with very	slight sht		
55	NM	L	D	N	Ν	NM	SP	NS	Pale orange poorl	y graded fine sand	-	
60	NM	L	D	Ν	Ν	NM	SW	NS	Pale orange well	graded fine sand		
65												
70										-	-	
75	NM	М	SL M	Ν	Ν	NM	SM	NS	Pale red orange cla	ayey silty fine sand	-	
80									with minor coars	e sand and gravel	-	
85										-	-	
90											$\left \right $	
05									Dolo onor	-	-	
100	NM	L	SL M	Ν	Ν	NM	SP	NS	rate orange poorly	y sorted line sand -	-	
100									10 10	- 200	-	
105												



APPENDIX C

Lithologic Soil Sampling Logs

						Sample Name: PH01	Date: 8/3/2022
	F N			UM		Site Name: RDX Federal 21-21	
				• • •		Incident Number: nAB162104951	4
						Job Number: 03A1987037	
	LITHOLO	GIC / SOIL S	AMPLING	LOG		Logged By: Gilbert Moreno	Method: Backhoe
Coordinates: 32	.030564,-1	.03.89125				Hole Diameter: NA	Total Depth: 1'
Comments: Field performed with	d screening 1:4 dilutior	conducted with factor of soil	h HACH Chlo to distilled w	oride Test St vater. No coi	rips and F rrection fa	ID for chloride and vapor, respecti actors included.	vely. Chloride test
Moisture Content Chloride (ppm)	Vapor (ppm)	Staining Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	criptions
Dry 3,516.8	8 0.2	N PH01	0.5	0.5	CCHE	CALICHE, dry,tan with grave no stain, no odor	el, fine-course grain,
Dry 2,268.0	0.0	N PH01	1	1	SP-SM	sand, ary, light brown, verv stain, no odor	y nne-nne grain, no
				Total D	epth: 1	foot	

								Sample Name: PH02	Date: 8/3/2022
		FN		S C				Site Name: RDX Federal 21-21	-
								Incident Number: nAB1621049514	1
								Job Number: 03A1987037	
	L	ITHOLC	GIC	/ SOIL S	AMPLING	LOG		Logged By: Gilbert Moreno	Method: Backhoe
Coord	inates: 32.0)30564, -	103.8	9125				Hole Diameter: NA	Total Depth: 6'
Comments: Field screening conducted with HACH Chloride Test Strips and F performed with 1:4 dilution factor of soil to distilled water. No correction f								PID for chloride and vapor, respective actors included.	/ely. Chloride test
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	criptions
Dry	2,111.2	0.0	N	PH02	0.5	0.5	CCHE	CALICHE, dry, tan with grave no stain, no odor	el, fine-course grain,
Dry	2,111.2	0.0	N	PH02	1	- _ 1	SP-SM	SAND, dry, light brown, very stain, no odor	/ fine- fine grain, no
Dry	1,831.2	0.1		PH02	2	2	SP-SM	SAA	
Dry	705.6	0.0		PH02	4	- - - - - - - - - - - - - - - - - - -	CCHE	CALICHE, dry, tan with grave no stain, no odor	el, fine-course grain,
Dry	369.6	0.0	Ν	PH02	6	6	SW	no stain, no odor	siavei, course grain,
						Total D	epth: 6	feet	

				Sample Name: PH03	Date: 8/3/2022
				Site Name: RDX Federal 21-21	
				Incident Number: nAB1621049514	ļ
				Job Number: 03A1987037	
LITHOLO	GIC / SOIL SAME	PLING LOG		Logged By: Gilbert Moreno	Method: Backhoe
Coordinates: 32.030564, -	103.89125			Hole Diameter: NA	Total Depth: 1'
Comments: Field screenin performed with 1:4 dilution	g conducted with HA on factor of soil to dis	ACH Chloride Test Stri stilled water. No corre	ps and Plection fa	D for chloride and vapor, respectiv ctors included.	ely. Chloride test
Moisture Content Chloride (ppm) Vapor (ppm)	Staining Sample ID (ft	mple epth : bgs) Depth (ft bgs)	USCS/Rock Symbol	Lithologic Desc	criptions
Drv 2,615.2 0.0	N PH03 0	0.5 0.5	SP-SM	SAND, dry, brown with grave grain, no stain, no odor	el, very fine-fine
Dry 1,831.2 0.0	N PH03	<u>1 1 9</u>	SP-SM	SAA	
\mathbf{X}		Total De	epth: 1 f	foot	

						Sample Name: PH04	Date: 8/3/2022
I CI F	= N	SC		UM	1	Site Name: RDX Federal 21-21	
						Incident Number: nAB1621049514	1
						Job Number: 03A1987037	
LIT	HOLOGIC	/ SOIL SA	AMPLING	LOG		Logged By: Gilbert Moreno	Method: Backhoe
Coordinates: 32.030	0564, -103.8	9125				Hole Diameter: NA	Total Depth: 1'
Comments: Field sci performed with 1:4	creening cond I dilution fact	ducted witl tor of soil t	h HACH Chlo o distilled w	oride Test St vater. No co	rips and P rrection fa	ID for chloride and vapor, respective to for chloride and vapor, respective to the second s	vely. Chloride test
Moisture Content Chloride (ppm)	Vapor (ppm) Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	criptions
Dry <168	0.0 N	PH04	0.5	- 0.5 	SW-SM	SAND, dry, brown with grav grain, no stain, no odor	el, fine- course
Dry <168	0.0 N	PH04	1	1	SP	SAND, dry, brown, fine grain	n, no stain, no odor
					cpui. I		

					Sample Name: PH05	Date: 8/3/2022
	NSC		UN		Site Name: RDX Federal 21-21	
					Incident Number: nAB1621049514	1
					Job Number: 03A1987037	
LITHOL	OGIC / SOIL S	AMPLING	LOG		Logged By: Gilbert Moreno	Method: Backhoe
Coordinates: 32.030564,	-103.89125				Hole Diameter: NA	Total Depth: 1'
Comments: Field screeni performed with 1:4 dilut	ng conducted wit	th HACH Chl to distilled v	oride Test St vater. No co	rips and F rrection fa	ID for chloride and vapor, respective actors included.	vely. Chloride test
Moisture Content Chloride (ppm) Vapor (ppm)	Staining Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	criptions
Dry 270.4 0.0	N PH05	0.5	0.5	CCHE	CALICHE, dry, tan-brown wit course grain, no odor, no st	th gravel, fine- ain
Dry 280.8 0.1	N PH05	1	† 1	SP-SM	SAND, dry, brown, very fine no odor	-fine grain, no stain,
			Total D	epth: 1	foot	

						Sample Name: PH06	Date: 8/3/2022
	FN	2 1		UM	1	Site Name: RDX Federal 21-21	
					•	Incident Number: nAB162104952	14
						Job Number: 03A1987037	
L	ITHOLO	GIC / SC	JIL SAMPLING	LOG		Logged By: Gilbert Moreno	Method: Backhoe
Coordinates: 32.	030564,-1	.03.89125	, ,			Hole Diameter: NA	Total Depth: 1'
Comments: Field performed with	screening 1:4 dilutior	conducte n factor o	ed with HACH Chl f soil to distilled ۱	oride Test St water. No co	rips and P rrection fa	ID for chloride and vapor, respect actors included.	ively. Chloride test
Moisture Content Chloride (ppm)	Vapor (ppm)	Staining	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic De	scriptions
Dry 280	0.1	N PH	106 0.5	0.5	SP-SM	SAND, dry, brown, fine grai	n, no stain, no odor
Dry 240.8	0.0	N PH	106 1	<u>† 1</u>	SP-SM	SAA	
				Total D	epth: 1	foot	

						Sample Name: PH07	Date: 8/3/2022
	FN	S C		UN		Site Name: RDX Federal 21-21	
					-	Incident Number: nAB162104951	.4
						Job Number: 03A1987037	
L	ITHOLOGIC	/ SOIL S	AMPLING	LOG		Logged By: Gilbert Moreno	Method: Backhoe
Coordinates: 32.0	30564, -103.	39125				Hole Diameter: NA	Total Depth: 1'
Comments: Field performed with 1	screening cor :4 dilution fac	ducted wit	h HACH Chlo to distilled w	oride Test St vater. No coi	rips and P rrection fa	ID for chloride and vapor, respect ctors included.	ively. Chloride test
Moisture Content Chloride (ppm)	Vapor (ppm) Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic De	scriptions
Drv <168	0.0 N	PH07	0.5	0.5 	SP-SM	SAND, dry, brown, very fine no odor	e-fine grain, no stain,
Dry <168	0.0 N	PH07	1	1	SP-SM	SAA	



APPENDIX D

Photographic Log



Photographic Log WPX Energy Permian, LLC RDX Federal 21-21 Incident Number nAB1621049514



Photograph 1 Date: July 29, 2022 Description: View of well pad during site assessment.



Photograph 2 Date: August 3, 2022 Description: View of delineation activities.



Photograph 3 Date: August 3, 2022 Description: View of delineation activities.



Photograph 4 Date: August 3, 2022 Description: View of delineation activities.



APPENDIX E

Tables

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TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS	Eddy County, New Mexico
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Ensolum Project No. 03A1987037

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 1 C	closure Criteria ((NMAC 19.15.29)	10	50	NE	ЭN	NE	1,000	2,500	20,000
				Deline	ation Soil Sample Ar	alytical Results				
PH01	08/03/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	2,340
PH01	08/03/2022	1	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	1,860
PH02	08/03/2022	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	2,140
PH02	08/03/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	2,000
PH02	08/03/2022	9	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	543
PH03	08/03/2022	0.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	6'67>	2,640
PH03	08/03/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	2,310
PH04	08/03/2022	0.5	<0.00201	<0.00402	<50.0	50.3	<50.0	50.3	20.3	44.9
PH04	08/03/2022	1	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	35.5
PH05	08/03/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	6'67>	267
PH05	08/03/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	183
PH06	08/03/2022	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	220
PH06	08/03/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	200
PH07	08/03/2022	0.5	<0.00200	<0.00401	<50.0	<50.0	<49.1	<50.0	<50.0	<4.95
PH07	08/03/2022	1	<0.00200	<0.00399	<50.0	<50.0	<49.1	<50.0	<50.0	20.0

Notes:

bgs: below ground surface

NMOCD: New Mexico Oil Conservation Division mg/kg: milligrams per kilogram

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Ensolum

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Concentrations in **bold** exceed the NMUCU Lable 1 Closure Criteria and/or Keclamation Standard for Soils Impacted by a Release



APPENDIX F

Laboratory Analytical Reports & Chain-of-Custody Documentation

Received by OCD: 10/27/2022 12:51:43 PM

LINKS

Review your project results through

EOL

Have a Question?

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Ask— The Expert

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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2722-1

Laboratory Sample Delivery Group: Rural Eddy NM Client Project/Site: RDX-21-21

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Joseph Hernandez

RAMER

Authorized for release by: 8/16/2022 9:08:12 AM Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

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Method Summary	35
Sample Summary	36
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ceivea by OCD	: 10/2//2022 12:31:43 FNI	Puge 52 01 6	09
	Definitions/Glossary		1
Client: Ensolum	1	Job ID: 890-2722-1	
Project/Site: RI)X-21-21	SDG: Rural Eddy NM	
Qualifiers			3
GC VOA			
Qualifier	Qualifier Description		4
U	Indicates the analyte was analyzed for but not detected.		
GC Semi VOA			5
Qualifier	Qualifier Description		
*1	LCS/LCSD RPD exceeds control limits.		6
S1+	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		
HPI C/IC			
Qualifier	Qualifier Description		8
F1	MS and/or MSD recovery exceeds control limits.		
U	Indicates the analyte was analyzed for but not detected.		9
Glossary			4
Abbreviation	These commonly used abbreviations may or may not be present in this report.		
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis		
%R	Percent Recovery		
CFL	Contains Free Liquid		
CFU	Colony Forming Unit		
CNF	Contains No Free Liquid		
DER	Duplicate Error Ratio (normalized absolute difference)		1
Dil Fac	Dilution Factor		
DL	Detection Limit (DoD/DOE)		
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample		
DLC	Decision Level Concentration (Radiochemistry)		
EDL	Estimated Detection Limit (Dioxin)		
LOD	Limit of Detection (DoD/DOE)		
LOQ	Limit of Quantitation (DoD/DOE)		
MCL	EPA recommended "Maximum Contaminant Level"		
MDA	Minimum Detectable Activity (Radiochemistry)		
MDC	Minimum Detectable Concentration (Radiochemistry)		
MDL	Method Detection Limit		
ML	Minimum Level (Dioxin)		
MPN	Most Probable Number		

Released to Imaging: 11/2/2022 11:10:00 AM

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

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

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

Not Calculated

Negative / Absent

Positive / Present

Presumptive

Quality Control

MQL

NC

ND

NEG POS

PQL

PRES

QC

RER

RPD TEF

TEQ

TNTC

RL

Eurofins Carlsbad

Job ID: 890-2722-1 SDG: Rural Eddy NM

Job ID: 890-2722-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2722-1

Receipt

The samples were received on 8/3/2022 4:50 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-31570/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-31570 and analytical batch 880-31633 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-31560 and analytical batch 880-31932 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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Method: 8021B - Volatile Organic Compounds (GC)

Result Qualifier

U

Qualifier

<0.00201 U

<0.00201 U

<0.00201 U

<0.00201 U

<0.00402 U

111

%Recovery

<0.00402

RL

0.00201

0.00201

0.00201

0.00402

0.00201

0.00402

Limits

70 - 130

MDL

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

D

Prepared

08/08/22 13:23

08/08/22 13:23

08/08/22 13:23

08/08/22 13:23

08/08/22 13:23

08/08/22 13:23

Prepared

08/08/22 13:23

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Job ID: 890-2722-1 SDG: Rural Eddy NM

Client Sample ID: PH01

Date Collected: 08/03/22 09:00 Date Received: 08/03/22 16:50

Sample Depth: 0.5

Project/Site: RDX-21-21

Client: Ensolum

Analyte

Benzene

Toluene

o-Xylene

Surrogate

Clie Date Date Sam

Ethylbenzene

Xylenes, Total

m-Xylene & p-Xylene

4-Bromofluorobenzene (Surr)

Lab Sample ID: 890-2722-1

Analyzed

08/10/22 15:30

08/10/22 15:30

08/10/22 15:30

08/10/22 15:30

08/10/22 15:30

08/10/22 15:30

Analyzed

08/10/22 15:30

Matrix: Solid

Dil Fac

1

1

1

1

1

1

Dil Fac

5

1,4-Difluorobenzene (Surr)	108		70 - 130				08/08/22 13:23	08/10/22 15:30	1
Method: Total BTEX - Total BTE>	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			08/11/22 10:28	1
- Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/08/22 11:44	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		08/05/22 10:50	08/06/22 14:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 14:52	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 14:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				08/05/22 10:50	08/06/22 14:52	1
o-Terphenyl	116		70 - 130				08/05/22 10:50	08/06/22 14:52	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2340		50.1		mg/Kg			08/11/22 18:52	10
Client Sample ID: PH01							Lab Sar	nple ID: 890-	2722-2
Date Collected: 08/03/22 09:10								Matri	x: Solid
Date Received: 08/03/22 16:50									
ample Depth: 1									
Method: 8021B - Volatile Organic	c Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/08/22 13:23	08/10/22 15:50	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/08/22 13:23	08/10/22 15:50	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/08/22 13:23	08/10/22 15:50	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/08/22 13:23	08/10/22 15:50	1
o-Xylene	< 0.00201	U	0.00201		mg/Kg		08/08/22 13:23	08/10/22 15:50	1

<0.00402 U 0.00402 08/08/22 13:23 08/10/22 15:50 Xylenes, Total mg/Kg %Recovery Limits Prepared Surrogate Qualifier Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 70 - 130 08/08/22 13:23 08/10/22 15:50 107

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1

1

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

Method: Total BTEX - Total BTEX Calculation

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

%Recovery

104

Result

<49.8 U

< 0.00402

Qualifier

Qualifier

Ū

Result Qualifier

Limits

70 - 130

RL

RL

49.8

0.00402

Job ID: 890-2722-1 SDG: Rural Eddy NM

Client Sample ID: PH01

Date Collected: 08/03/22 09:10 Date Received: 08/03/22 16:50

Sample Depth: 1

1,4-Difluorobenzene (Surr)

Surrogate

Analyte

Analyte

Total TPH

Total BTEX

Client: Ensolum Project/Site: RDX-21-21

Analyzed

08/10/22 15:50

Analyzed

08/11/22 10:28

Analyzed

08/08/22 11:44

Lab Sample ID: 890-2722-3

Matrix: Solid

Prepared

08/08/22 13:23

Prepared

Prepared

D

D

Matrix: Solid

Dil Fac

Dil Fac

Dil Fac

1

5

		2	

Method: 8015B NM - Dieser Range	Organics (D	RU) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U *1	49.8		mg/Kg		08/05/22 10:50	08/06/22 15:14	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		08/05/22 10:50	08/06/22 15:14	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/05/22 10:50	08/06/22 15:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				08/05/22 10:50	08/06/22 15:14	1
o-Terphenyl	110		70 - 130				08/05/22 10:50	08/06/22 15:14	1

MDL Unit

MDL Unit

mg/Kg

mg/Kg

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1860	F1	24.8		mg/Kg			08/11/22 14:06	5

Client Sample ID: PH02

Date Collected: 08/03/22 09:20 Date Received: 08/03/22 16:50 Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Benzene <0.00202 U 0.00202 mg/Kg 08/08/22 13:23 08/10/22 16:11 Toluene <0.00202 U 0.00202 mg/Kg 08/08/22 13:23 08/10/22 16:11 1 Ethylbenzene <0.00202 U 0.00202 mg/Kg 08/08/22 13:23 08/10/22 16:11 0.00403 08/08/22 13:23 08/10/22 16:11 m-Xylene & p-Xylene <0.00403 U mg/Kg 1 o-Xylene <0.00202 U 0.00202 mg/Kg 08/08/22 13:23 08/10/22 16:11 Xylenes, Total <0.00403 U 0.00403 mg/Kg 08/08/22 13:23 08/10/22 16:11 1 %Recovery Qualifier Limits Dil Fac Surrogate Prepared Analvzed 70 - 130 4-Bromofluorobenzene (Surr) 108 08/08/22 13:23 08/10/22 16:11 1 1,4-Difluorobenzene (Surr) 103 70 - 130 08/08/22 13:23 08/10/22 16:11 1 Method: Total BTEX - Total BTEX Calculation Analvte Result Qualifier RL MDL D Dil Fac Unit Prepared Analyzed Total BTEX < 0.00403 Ū 0.00403 08/11/22 10:28 mg/Kg Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac <50.0 U Total TPH 50.0 08/08/22 11:44 mg/Kg 1

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Job ID: 890-2722-1 SDG: Rural Eddy NM

Client Sample ID: PH02

Date Collected: 08/03/22 09:20 Date Received: 08/03/22 16:50

Sample Depth: 0.5

Project/Site: RDX-21-21

Client: Ensolum

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		08/05/22 10:50	08/06/22 15:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 15:36	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 15:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				08/05/22 10:50	08/06/22 15:36	1
o-Terphenyl	110		70 - 130				08/05/22 10:50	08/06/22 15:36	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2140		25.0		mg/Kg			08/11/22 14:33	5

Client Sample ID: PH02

Date Collected: 08/03/22 09:30

Date Received: 08/03/22 16:50

Sample Depth: 1

Method: 8021B - Volatile Organic	c Compounds	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 16:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 16:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 16:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/08/22 13:23	08/10/22 16:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 16:31	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/08/22 13:23	08/10/22 16:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				08/08/22 13:23	08/10/22 16:31	1
1,4-Difluorobenzene (Surr)	104		70 - 130				08/08/22 13:23	08/10/22 16:31	1
- Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			08/11/22 10:28	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/08/22 11:44	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *1	49.9		mg/Kg		08/05/22 10:50	08/06/22 15:57	1
(GRO)-C6-C10	<10.0		40.0		~~~~// ~		00/05/00 10.50	00/06/00 15:57	1
C10-C28)	<49.9	0	49.9		mg/Kg		06/05/22 10:50	00/00/22 15.57	I
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/05/22 10:50	08/06/22 15:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				08/05/22 10:50	08/06/22 15:57	1
o-Terphenyl	109		70 - 130				08/05/22 10:50	08/06/22 15:57	1

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		Clier	nt Sample R	esults	5				
Client: Ensolum Project/Site: RDX-21-21								Job ID: 890 SDG: Rural E)-2722-1 Eddy NM
Client Sample ID: PH02 Date Collected: 08/03/22 09:30 Date Received: 08/03/22 16:50 Sample Depth: 1							Lab Sar	nple ID: 890- Matri	2722-4 ix: Solid
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble	ы	MDI	Unit	P	Bropored	Applyzed	Dil Eco
Chloride	2000	Quaimer	25.2	WIDL	mg/Kg		Frepareu	08/11/22 14:43	5
							Lab Car	ania ID: 000	2722 5
Date Collected: 08/03/22 09:40 Date Received: 08/03/22 16:50 Sample Depth: 0.5							Lab Sai	Matri	ix: Solid
Method: 8021B - Volatile Organic	Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/08/22 13:23	08/10/22 16:52	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/08/22 13:23	08/10/22 16:52	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/08/22 13:23	08/10/22 16:52	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/08/22 13:23	08/10/22 16:52	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/08/22 13:23	08/10/22 16:52	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/08/22 13:23	08/10/22 16:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				08/08/22 13:23	08/10/22 16:52	1
1,4-Difluorobenzene (Surr)	103		70 - 130				08/08/22 13:23	08/10/22 16:52	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			08/11/22 10:28	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/08/22 11:44	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		08/05/22 10:50	08/06/22 16:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/05/22 10:50	08/06/22 16:41	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/05/22 10:50	08/06/22 16:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				08/05/22 10:50	08/06/22 16:41	1
o-Terphenyl	122		70 - 130				08/05/22 10:50	08/06/22 16:41	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2640		25.1		mg/Kg			08/11/22 14:52	5

Method: 8021B - Volatile Organic Compounds (GC)

Result Qualifier

<0.00199 U

<0.00199 U

<0.00199 U

<0.00398 U

<0.00199 U

<0.00398 U

%Recovery Qualifier

114

RL

0.00199

0.00199

0.00199

0.00398

0.00199

0.00398

Limits

70 - 130

MDL Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

D

Prepared

08/08/22 13:23

08/08/22 13:23

08/08/22 13:23

08/08/22 13:23

08/08/22 13:23

08/08/22 13:23

Prepared

08/08/22 13:23

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Job ID: 890-2722-1 SDG: Rural Eddy NM

Client Sample ID: PH03

Date Collected: 08/03/22 09:50 Date Received: 08/03/22 16:50

Sample Depth: 1

Analyte

Benzene

Toluene

o-Xylene

Surrogate

Ethylbenzene

Xylenes, Total

m-Xylene & p-Xylene

4-Bromofluorobenzene (Surr)

Project/Site: RDX-21-21

Client: Ensolum

Lab Sample ID: 890-2722-6

Analyzed

08/10/22 17:32

08/10/22 17:32

08/10/22 17:32

08/10/22 17:32

08/10/22 17:32

08/10/22 17:32

Analyzed

08/10/22 17:32

1

1

1

1

1,4-Difluorobenzene (Surr)	97		70 - 130				08/08/22 13:23	08/10/22 17:32	1
Method: Total BTEX - Total BTEX	(Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/11/22 10:28	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/08/22 11:44	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		08/05/22 10:50	08/06/22 17:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/05/22 10:50	08/06/22 17:02	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/05/22 10:50	08/06/22 17:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				08/05/22 10:50	08/06/22 17:02	1
o-Terphenyl	112		70 - 130				08/05/22 10:50	08/06/22 17:02	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2310		25.0		mg/Kg			08/11/22 15:01	5
Client Sample ID: PH04							Lab Sar	nple ID: 890-	2722-7
Date Collected: 08/03/22 10:00								Matri	ix: Solid
Date Received: 08/03/22 16:50									
Sample Depth: 0.5									
Method: 8021B - Volatile Organic	c Compounds ((GC)							

<u>D</u>	Prepared	Analyzed	Dil Fac
			2.11 40
	08/08/22 13:23	08/10/22 20:25	1
	08/08/22 13:23	08/10/22 20:25	1
	08/08/22 13:23	08/10/22 20:25	1
	08/08/22 13:23	08/10/22 20:25	1
	08/08/22 13:23	08/10/22 20:25	1
	08/08/22 13:23	08/10/22 20:25	1
	Prepared	Analyzed	Dil Fac
	08/08/22 13:23	08/10/22 20:25	1
		08/08/22 13:23 08/08/22 13:23 08/08/22 13:23 08/08/22 13:23 08/08/22 13:23 Prepared 08/08/22 13:23	08/08/22 13:23 08/10/22 02:25 08/08/22 13:23 08/10/22 02:25 08/08/22 13:23 08/10/22 02:25 08/08/22 13:23 08/10/22 02:25 08/08/22 13:23 08/10/22 02:25 08/08/22 13:23 08/10/22 02:25 08/08/22 13:23 08/10/22 02:25

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

Method: Total BTEX - Total BTEX Calculation

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

%Recovery Qualifier

Result Qualifier

Result Qualifier

Result Qualifier

<50.0 U *1

50.3

<50.0 U

113

129

44.9

Result Qualifier

Qualifier

%Recovery

103

<0.00402 U

50.3

Limits

70 - 130

RL

RL

50.0

RL

50.0

50.0

50.0

RL

4.96

Limits

70 - 130

70 - 130

0.00402

MDL Unit

MDL Unit

MDL Unit

MDL Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Job ID: 890-2722-1 SDG: Rural Eddy NM

Client Sample ID: PH04

Date Collected: 08/03/22 10:00 Date Received: 08/03/22 16:50

Sample Depth: 0.5

1,4-Difluorobenzene (Surr)

Gasoline Range Organics

Diesel Range Organics (Over

Oll Range Organics (Over C28-C36)

Surrogate

Analyte

Analyte

Analyte

(GRO)-C6-C10

C10-C28)

Surrogate

o-Terphenyl

Analyte

Chloride

1-Chlorooctane

Total TPH

Total BTEX

Project/Site: RDX-21-21

Client: Ensolum

Lab Sample ID: 890-2722-7

Analyzed

08/10/22 20:25

Analyzed

08/11/22 10:28

Analyzed

08/08/22 11:44

Analyzed

08/06/22 17:24

08/06/22 17:24

08/06/22 17:24

Analyzed

08/06/22 17:24

08/06/22 17:24

Lab Sample ID: 890-2722-8

Prepared

08/08/22 13:23

Prepared

Prepared

Prepared

08/05/22 10:50

08/05/22 10:50

08/05/22 10:50

Prepared

08/05/22 10:50

08/05/22 10:50

D

D

D

Matrix: Solid

	Ę
Dil Fac 1	6
	7
Dil Fac	

Dil Fac

Dil Fac

Dil Fac

1

1

Matrix: Solid

1

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D Prepared Analyzed Dil Fac 08/11/22 15:29

Client Sample ID: PH04 Date Collected: 08/03/22 10:10

Date Received: 08/03/22 16:50 Sample Depth: 1

Method: 8021B - Volatile Organ	ic Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/08/22 13:23	08/10/22 20:46	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/08/22 13:23	08/10/22 20:46	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/08/22 13:23	08/10/22 20:46	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/08/22 13:23	08/10/22 20:46	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/08/22 13:23	08/10/22 20:46	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/08/22 13:23	08/10/22 20:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				08/08/22 13:23	08/10/22 20:46	1
1,4-Difluorobenzene (Surr)	100		70 - 130				08/08/22 13:23	08/10/22 20:46	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			08/11/22 10:28	1
Method: 8015 NM - Diesel Rang	e Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		ma/Ka			08/08/22 11.44	1

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Dil Fac

1

1

1

1

1

1

Dil Fac

Dil Fac

Dil Fac

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

Dil Fac

Dil Fac

Dil Fac

Dil Fac

Job ID: 890-2722-1 SDG: Rural Eddy NM

Client Sample ID: PH04

Client: Ensolum Project/Site: RDX-21-21

Sample Depth: 1

Date Collected: 08/03/22 10:10 Date Received: 08/03/22 16:50

Lab Sample ID: 890-2722-8 Matrix: Solid

Analyzed

08/06/22 17:46

08/06/22 17:46

08/06/22 17:46

Analyzed

08/06/22 17:46

08/06/22 17:46

Analyzed

08/16/22 08:15

Analyzed

08/10/22 21:06

08/10/22 21:06

08/10/22 21:06

08/10/22 21:06

08/10/22 21:06

08/10/22 21:06

Analyzed

08/10/22 21:06

08/10/22 21:06

Analyzed

08/11/22 10:28

Analyzed

08/08/22 11:44

Analyzed

08/06/22 18:07

5

Sample ID: 890-2722-9 Matrix: Solid

Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared
Gasoline Range Organics	<50.0	U *1	50.0		mg/Kg		08/05/22 10:50
(GRO)-C6-C10	.50.0		50.0				00/05/00 40 50
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/05/22 10:50
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/22 10:50
Surrogate	%Recovery	Qualifier	Limits				Prepared
1-Chlorooctane	94		70 - 130				08/05/22 10:50
o-Terphenyl	108		70 - 130				08/05/22 10:50
Method: 300.0 - Anions. Ion Chr	romatography -	Soluble					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared
Chloride	35.5		5.05		mg/Kg		
Client Sample ID: PH05							Lab Sa
Date Collected: 08/03/22 10:20							
Date Received: 08/03/22 16:50							
Sample Depth: 0.5							
Method: 8021B - Volatile Organi	ic Compounds ((GC)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared
Benzene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:23
Toluene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:23
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:23
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/08/22 13:23
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:23
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/08/22 13:23
Surrogate	%Recovery	Qualifier	Limits				Prepared
4-Bromofluorobenzene (Surr)	102		70 - 130				08/08/22 13:23
1,4-Difluorobenzene (Surr)	101		70 - 130				08/08/22 13:23
Method: Total BTEX - Total BTE	X Calculation						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared
Total BTEX	<0.00398	U	0.00398		mg/Kg		
Method: 8015 NM - Diesel Rang	e Organics (DR	O) (GC)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared
Total TPH	<49.9	U	49.9		mg/Kg	_	
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared
Gasoline Range Organics	<49.9	U *1	49.9		mg/Kg	_	08/05/22 10:50

(GRO)-C6-C10 08/05/22 10:50 08/06/22 18:07 **Diesel Range Organics (Over** <49.9 U 49.9 mg/Kg C10-C28) 49.9 08/05/22 10:50 08/06/22 18:07 Oll Range Organics (Over C28-C36) <49.9 U mg/Kg Qualifier Dil Fac %Recovery Limits Prepared Surrogate Analvzed 70 - 130 08/05/22 10:50 08/06/22 18:07 1-Chlorooctane 93 110 70 - 130 08/05/22 10:50 08/06/22 18:07 o-Terphenyl

Received by OCD: 10/27/2022 12:51:43 PM

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		Clier	nt Sample R	esults	5					
Client: Ensolum Project/Site: RDX-21-21			·					Job ID: 890 SDG: Rural E)-2722-1 ddy NM	2
Client Sample ID: PH05 Date Collected: 08/03/22 10:20 Date Received: 08/03/22 16:50 Sample Depth: 0.5							Lab Sar	nple ID: 890- Matri	2722-9 ix: Solid	3 4
Method: 300.0 - Anions, Ion Chror	natography -	Soluble								5
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	C
Chloride	267		25.0		mg/Kg			08/11/22 15:47	5	0
Client Sample ID: PH05 Date Collected: 08/03/22 10:30 Date Received: 08/03/22 16:50 Sample Depth: 1							Lab Sam	ple ID: 890-2 Matri	722-10 ix: Solid	7 8
Method: 8021B - Volatile Organic	Compounds (GC)								9
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 21:26	1	
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 21:26	1	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 21:26	1	
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/08/22 13:23	08/10/22 21:26	1	
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 21:26	1	
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/08/22 13:23	08/10/22 21:26	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	13
4-Bromofluorobenzene (Surr)	105		70 - 130				08/08/22 13:23	08/10/22 21:26	1	
1,4-Difluorobenzene (Surr)	98		70 - 130				08/08/22 13:23	08/10/22 21:26	1	
Method: Total BTEX - Total BTEX	Calculation									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	<0.00399	U	0.00399		mg/Kg			08/11/22 10:28	1	
Method: 8015 NM - Diesel Range (Organics (DR	O) (GC)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<50.0	U	50.0		mg/Kg			08/08/22 11:44	1	
Method: 8015B NM - Diesel Range	Organics (D	RO) (GC)				_				
	Result		KL	MDL		U	Prepared			
Gasoline Range Organics (GRO)-C6-C10	<50.0	0 -1	50.0		mg/Kg		08/05/22 10:50	08/06/22 18:29	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 18:29	1	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 18:29	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	97		70 - 130				08/05/22 10:50	08/06/22 18:29	1	
o-Terphenyl	111		70 - 130				08/05/22 10:50	08/06/22 18:29	1	
Method: 300.0 - Anions, Ion Chror	natography -	Soluble								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	183		4.96		mg/Kg			08/11/22 15:56	1	

Method: 8021B - Volatile Organic Compounds (GC)

Method: Total BTEX - Total BTEX Calculation

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

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

RL

0.00202

0.00202

0.00202

0.00403

0.00202

0.00403

Limits

70 - 130

70 - 130

RL

RL

50.0

RL

50.0

50.0

-- -

0.00403

MDL

MDL Unit

MDL Unit

мрі

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Unit

mg/Kg

mg/Kg

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Job ID: 890-2722-1 SDG: Rural Eddy NM

Client Sample ID: PH06

Date Collected: 08/03/22 12:40 Date Received: 08/03/22 16:50

Sample Depth: 0.5

Client: Ensolum Project/Site: RDX-21-21

Analyte

Benzene

Toluene

o-Xylene

Surrogate

Analyte

Analyte

Analyte

C10-C28)

(GRO)-C6-C10

Total TPH

Total BTEX

Ethylbenzene

Xylenes, Total

m-Xylene & p-Xylene

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Gasoline Range Organics

Diesel Range Organics (Over

Lab Sample ID: 890-2722-11

Analyzed

08/10/22 21:47

08/10/22 21:47

08/10/22 21:47

08/10/22 21:47

08/10/22 21:47

08/10/22 21:47

Analyzed

08/10/22 21:47

08/10/22 21:47

Analyzed

08/11/22 10:28

Analyzed

08/08/22 11:44

Analyzed

08/06/22 18:50

08/06/22 18:50

08/06/22 18:50

Analyzed

08/06/22 18:50

08/06/22 18:50

Analyzed

08/11/22 16:06

Lab Sample ID: 890-2722-12

Prepared

08/08/22 13:23

08/08/22 13:23

08/08/22 13:23

08/08/22 13:23

08/08/22 13:23

08/08/22 13:23

Prepared

08/08/22 13:23

08/08/22 13:23

Prepared

Prepared

Prepared

08/05/22 10:50

08/05/22 10:50

08/05/22 10:50

Prepared

08/05/22 10:50

08/05/22 10:50

Prepared

D

D

D

D

D

Matrix: Solid

Dil Fac

1

1

1

1

1

1

Dil Fac

Dil Fac

Dil Fac

Dil Fac

1

1

1

Dil Fac

Dil Fac

Matrix: Solid

5

Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg
Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane	97		70 - 130		
o-Terphenyl	113		70 - 130		
Analyte	Result	Qualifier	RL	MDL	Unit
Analyte	Result	Qualifier	RL	MDL	Unit
Chloride	220		4.98		mg/Kg
Client Sample ID: PH06					
Data Callestad: 09/02/22 12:50					
Date Conected: 00/05/22 12:50					

Result Qualifier

U

Qualifier

Qualifier

U

Result Qualifier

Result Qualifier

<50.0 U *1

<50.0 U

-- -

<50.0 U

<0.00202 U

<0.00202 U

<0.00202 U

<0.00202 U

<0.00403 U

101

102

Result

< 0.00403

%Recovery

<0.00403

Sample Depth: 1

Method: 8021B - Volatile Organ	nic Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 22:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 22:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 22:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/08/22 13:23	08/10/22 22:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 22:07	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/08/22 13:23	08/10/22 22:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				08/08/22 13:23	08/10/22 22:07	1

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Released to Imaging: 11/2/2022 11:10:00 AM

8/16/2022

Job ID: 890-2722-1 SDG: Rural Eddy NM

Lab Sample ID: 890-2722-12

Lab Sample ID: 890-2722-13

Matrix: Solid

Client Sample ID: PH06 Date Collected: 08/03/22 12:50 Date Received: 08/03/22 1

Sample Depth: 1

Client: Ensolum

Project/Site: RDX-21-21

								4
(GC) (Conti	nued)							5
Qualifier	Limits				Prepared	Analyzed	Dil Fac	6
	70 - 130				08/08/22 13:23	08/10/22 22:07	1	0
Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
U	0.00399		mg/Kg			08/11/22 10:28	1	8
(GC)								
Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	3
U	49.9		mg/Kg			08/08/22 11:44	1	
RO) (GC)								
Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
U *1	49.9		mg/Kg		08/05/22 10:50	08/06/22 19:12	1	
U	49.9		ma/Ka		08/05/22 10:50	08/06/22 19:12	1	
-			33				·	40
U	49.9		mg/Kg		08/05/22 10:50	08/06/22 19:12	1	13
	(GC) (Contin Qualifier U CO) (GC) Qualifier U CO) (GC) Qualifier U CO) (GC) Qualifier U CO) (GC) Qualifier U CO) (GC) Qualifier U CO QU QU QU QU QU QU QU QU QU QU	(GC) (Continued) Qualifier Limits 70 - 130 Image: Continued Image: Continued <td>(GC) (Continued) qualifier Limits 70 - 130 E Qualifier U 0.00399 CO) (GC) MDL U 49.9 PRO) (GC) MDL U*1 49.9 U 49.9 U 49.9 U 49.9</td> <td>(GC) (Continued)$T$$Limits$$T$$T0 - 130$$T$$T0 - 130$<td>(GC) (Continued)$\frac{Qualifier}{D}$$\frac{Limits}{70 - 130}$$\frac{Qualifier}{U}$$\frac{RL}{70 - 130}$MDLUnit mg/KgD$\frac{Qualifier}{U}$$\frac{RL}{9.9}$MDLUnit mg/KgD$\frac{Qualifier}{U}$$\frac{RL}{49.9}$MDLUnit mg/KgD$\frac{Qualifier}{U + 1}$$\frac{RL}{49.9}$MDLUnit mg/KgD$\frac{Qualifier}{U + 1}$$\frac{RL}{49.9}$MDLUnit mg/KgD$U$$49.9mg/KgDU$$49.9mg/KgU$$49.9$mg/Kg</td><td>(GC) (Continued)</td><td>(GC) (Continued) $\frac{Qualifier}{D}$ Limits}{70 - 130 Prepared Analyzed $\frac{0}{08/08/22}$ $\frac{1}{323}$ $\frac{0}{08/10/22}$ $\frac{1}{22:07}$ $\frac{1}{0}$ $\frac{1}{00}$ $\frac{1}{000}$ $\frac{1}{0000399}$ $\frac{1}{mg/Kg}$ $\frac{1}{0}$ $\frac{1}{08/08/22}$ $\frac{1}{08/10/22}$ $\frac{1}{08/10/22}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{08/10/22}$ $\frac{1}{22:07}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{08/10/22}$ $\frac{1}{22:07}$ $\frac{1}{0}$ $\frac{1}{0}$</td><td>(GC) (Continued) g Qualifier Limits Prepared Analyzed Dil Fac 70 - 130 $08/08/22 \ 13:23$ $08/10/22 \ 22:07$ 1 t Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 00 (GC) 0.00399 MDL Unit D Prepared Analyzed Dil Fac 00 (GC) Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 00 (GC) Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 00 (GC) Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 00 (GC) Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 01 V 11 49.9 mg/Kg 08/05/22 10:50 08/06/22 19:12 1 01 V 49.9 mg/Kg 08/05/22 10:50 08/06/22 19:12 1</td></td>	(GC) (Continued) qualifier Limits 70 - 130 E Qualifier U 0.00399 CO) (GC) MDL U 49.9 PRO) (GC) MDL U*1 49.9 U 49.9 U 49.9 U 49.9	(GC) (Continued) T $Limits$ T $T0 - 130$ <td>(GC) (Continued)$\frac{Qualifier}{D}$$\frac{Limits}{70 - 130}$$\frac{Qualifier}{U}$$\frac{RL}{70 - 130}$MDLUnit mg/KgD$\frac{Qualifier}{U}$$\frac{RL}{9.9}$MDLUnit mg/KgD$\frac{Qualifier}{U}$$\frac{RL}{49.9}$MDLUnit mg/KgD$\frac{Qualifier}{U + 1}$$\frac{RL}{49.9}$MDLUnit mg/KgD$\frac{Qualifier}{U + 1}$$\frac{RL}{49.9}$MDLUnit mg/KgD$U$$49.9mg/KgDU$$49.9mg/KgU$$49.9$mg/Kg</td> <td>(GC) (Continued)</td> <td>(GC) (Continued) $\frac{Qualifier}{D}$ Limits}{70 - 130 Prepared Analyzed $\frac{0}{08/08/22}$ $\frac{1}{323}$ $\frac{0}{08/10/22}$ $\frac{1}{22:07}$ $\frac{1}{0}$ $\frac{1}{00}$ $\frac{1}{000}$ $\frac{1}{0000399}$ $\frac{1}{mg/Kg}$ $\frac{1}{0}$ $\frac{1}{08/08/22}$ $\frac{1}{08/10/22}$ $\frac{1}{08/10/22}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{08/10/22}$ $\frac{1}{22:07}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{08/10/22}$ $\frac{1}{22:07}$ $\frac{1}{0}$ $\frac{1}{0}$</td> <td>(GC) (Continued) g Qualifier Limits Prepared Analyzed Dil Fac 70 - 130 $08/08/22 \ 13:23$ $08/10/22 \ 22:07$ 1 t Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 00 (GC) 0.00399 MDL Unit D Prepared Analyzed Dil Fac 00 (GC) Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 00 (GC) Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 00 (GC) Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 00 (GC) Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 01 V 11 49.9 mg/Kg 08/05/22 10:50 08/06/22 19:12 1 01 V 49.9 mg/Kg 08/05/22 10:50 08/06/22 19:12 1</td>	(GC) (Continued) $\frac{Qualifier}{D}$ $\frac{Limits}{70 - 130}$ $\frac{Qualifier}{U}$ $\frac{RL}{70 - 130}$ MDLUnit mg/KgD $\frac{Qualifier}{U}$ $\frac{RL}{9.9}$ MDLUnit mg/KgD $\frac{Qualifier}{U}$ $\frac{RL}{49.9}$ MDLUnit mg/KgD $\frac{Qualifier}{U + 1}$ $\frac{RL}{49.9}$ MDLUnit mg/KgD $\frac{Qualifier}{U + 1}$ $\frac{RL}{49.9}$ MDLUnit mg/KgD U 49.9 mg/KgD U 49.9 mg/Kg U 49.9 mg/Kg	(GC) (Continued)	(GC) (Continued) $\frac{Qualifier}{D}$ Limits}{70 - 130 Prepared Analyzed $\frac{0}{08/08/22}$ $\frac{1}{323}$ $\frac{0}{08/10/22}$ $\frac{1}{22:07}$ $\frac{1}{0}$ $\frac{1}{00}$ $\frac{1}{000}$ $\frac{1}{0000399}$ $\frac{1}{mg/Kg}$ $\frac{1}{0}$ $\frac{1}{08/08/22}$ $\frac{1}{08/10/22}$ $\frac{1}{08/10/22}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{08/10/22}$ $\frac{1}{22:07}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{0}$ $\frac{1}{08/10/22}$ $\frac{1}{22:07}$ $\frac{1}{0}$	(GC) (Continued) g Qualifier Limits Prepared Analyzed Dil Fac 70 - 130 $08/08/22 \ 13:23$ $08/10/22 \ 22:07$ 1 t Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 00 (GC) 0.00399 MDL Unit D Prepared Analyzed Dil Fac 00 (GC) Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 00 (GC) Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 00 (GC) Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 00 (GC) Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 01 V 11 49.9 mg/Kg 08/05/22 10:50 08/06/22 19:12 1 01 V 49.9 mg/Kg 08/05/22 10:50 08/06/22 19:12 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *1	49.9		mg/Kg		08/05/22 10:50	08/06/22 19:12	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/05/22 10:50	08/06/22 19:12	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/05/22 10:50	08/06/22 19:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				08/05/22 10:50	08/06/22 19:12	1
			70 400				08/05/00 10.50	08/06/22 10:12	1

wethou. 300.0 - Amons, for Chron	natography -	Soluple							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	200		4.99		mg/Kg			08/11/22 16:15	1

Client Sample ID: PH07

Date Collected: 08/03/22 13:00 Date Received: 08/03/22 16:50 Sample Depth: 0.5

Method: 8021B - Volatile Orga	nic Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 22:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 22:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 22:28	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/08/22 13:23	08/10/22 22:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 22:28	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/08/22 13:23	08/10/22 22:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				08/08/22 13:23	08/10/22 22:28	1
1,4-Difluorobenzene (Surr)	103		70 - 130				08/08/22 13:23	08/10/22 22:28	1
Method: Total BTEX - Total B1	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			08/11/22 10:28	1
Method: 8015 NM - Diesel Rar	nge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/08/22 11:44	1

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Matrix: Solid

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

<50.0 U *1

<50.0 U

<50.0 U

95

109

<4.95 U

Result Qualifier

Qualifier

%Recovery

RL

50.0

50.0

50.0

RL

4.95

Limits

70 - 130

70 - 130

MDL Unit

MDL Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

D

D

Prepared

08/05/22 10:50

08/05/22 10:50

08/05/22 10:50

Prepared

08/05/22 10:50

08/05/22 10:50

Prepared

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Job ID: 890-2722-1 SDG: Rural Eddy NM

Client Sample ID: PH07

Client: Ensolum

Project/Site: RDX-21-21

Sample Depth: 0.5

Gasoline Range Organics

Diesel Range Organics (Over

Oll Range Organics (Over C28-C36)

Client Sample ID: PH07

Date Collected: 08/03/22 13:10

Date Received: 08/03/22 16:50

Analyte

(GRO)-C6-C10

C10-C28)

Surrogate 1-Chlorooctane

o-Terphenyl

Analyte

Chloride

Sample Depth: 1

Date Collected: 08/03/22 13:00 Date Received: 08/03/22 16:50

Lab Sample ID: 890-2722-13

Analyzed

08/06/22 19:33

08/06/22 19:33

08/06/22 19:33

Analyzed

08/06/22 19:33

08/06/22 19:33

Analyzed

08/11/22 16:42

Lab Sample ID: 890-2722-14

Matrix: Solid

Dil Fac

1

1

1

1

1

Dil Fac

Dil Fac

Matrix: Solid

Method: 8021B - Volatile Organic	Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 22:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 22:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 22:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/08/22 13:23	08/10/22 22:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 22:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/08/22 13:23	08/10/22 22:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				08/08/22 13:23	08/10/22 22:48	1
1,4-Difluorobenzene (Surr)	100		70 - 130				08/08/22 13:23	08/10/22 22:48	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			08/11/22 10:28	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/08/22 11:44	1
Method: 8015B NM - Diesel Range	Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		08/05/22 10:50	08/06/22 19:55	1
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 19:55	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 19:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				08/05/22 10:50	08/06/22 19:55	1
o-Terphenyl	119		70 - 130				08/05/22 10:50	08/06/22 19:55	1

		Client	Sample R	esults	5					
Client: Ensolum Project/Site: RDX-21-21								Job ID: 890 SDG: Rural E)-2722-1 ddy NM	2
Client Sample ID: PH07 Date Collected: 08/03/22 13:10							Lab San	nple ID: 890-2 Matri	722-14 ix: Solid	
Date Received: 08/03/22 16:50 Sample Depth: 1										4
Method: 300.0 - Anions, Ion Chron	natography - Result	Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	5
Chloride	20.0		5.00		mg/Kg			08/11/22 16:52	1	6
										7
										8
										9
										13

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Job ID: 890-2722-1 SDG: Rural Eddy NM

Prep Type: Total/NA

Method: 8021B - Volatile Organic Compounds (GC) Matrix: Solid

Percent Surrogate Recovery (Acceptance Limits) BFB1 DFBZ1 (70-130) (70-130) Lab Sample ID **Client Sample ID** 880-17690-A-6-C MS 95 Matrix Spike 104 6 880-17690-A-6-D MSD Matrix Spike Duplicate 105 98 890-2704-A-9-D MS Matrix Spike 106 93 890-2704-A-9-E MSD Matrix Spike Duplicate 102 103 890-2722-1 PH01 108 111 890-2722-2 PH01 107 104 890-2722-3 PH02 103 108 890-2722-4 PH02 109 104 890-2722-5 PH03 109 103 10 11 12 13 890-2722-6 PH03 114 97 890-2722-7 PH04 103 103 890-2722-8 PH04 101 100 890-2722-9 PH05 102 101 890-2722-10 PH05 105 98 PH06 102 890-2722-11 101 890-2722-12 PH06 108 100 890-2722-13 PH07 106 103 890-2722-14 PH07 102 100 LCS 880-31768/1-A Lab Control Sample 111 92 LCS 880-31769/1-A Lab Control Sample 107 100 Lab Control Sample Dup 104 LCSD 880-31768/2-A 92 MB 880-31768/5-A Method Blank 94 97 MB 880-31769/5-A Method Blank 94 102

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Percent Surrogate Recovery (Acceptance Limits) 1C01 OTPH1 (70-130) Lab Sample ID **Client Sample ID** (70 - 130)890-2712-A-1-C MS Matrix Spike 77 85 890-2712-A-1-D MSD Matrix Spike Duplicate 92 101 890-2722-1 PH01 99 116 890-2722-2 PH01 95 110 890-2722-3 PH02 96 110 890-2722-4 PH02 97 109 890-2722-5 PH03 107 122 890-2722-6 PH03 96 112 890-2722-7 PH04 113 129 890-2722-8 PH04 94 108 PH05 890-2722-9 93 110 890-2722-10 PH05 97 111 890-2722-11 PH06 97 113 890-2722-12 PH06 95 108 890-2722-13 PH07 95 109 890-2722-14 PH07 106 119

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Prep Type: Total/NA

Surrogate Summary

Client: Ensolum Project/Site: RDX-21-21				Job ID: 890-2722-1 SDG: Rural Eddy NM	2
Method: 8015B NM Matrix: Solid	- Diesel Range Organics	s (DRO) (GC	:) (Conti	nued) Prep Type: Total/NA	
		1CO1	OTPH1	Percent Surrogate Recovery (Acceptance Limits)	4
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		5
LCS 880-31570/2-A	Lab Control Sample	135 S1+	133 S1+	·	5
LCSD 880-31570/3-A	Lab Control Sample Dup	111	130		6
MB 880-31570/1-A	Method Blank	91	105		0
Surrogate Legend					
1CO = 1-Chlorooctane OTPH = o-Terphenyl					8
					9
					13

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QC Sample Results

Client: Ensolum Project/Site: RDX-21-21

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31768/	5-A								Client	t Sai	mple ID: N	lethod	Blank
Matrix: Solid											Prep Ty	/pe: To	otal/NA
Analysis Batch: 31904											Prep l	Batch:	31768
Analuto	M	B MB	ы		мы	Unit		п	Proparad		Analuzo	d	Dil Eac
Benzene	<0.0020		0.00200			ma/Ka		-	08/08/22 13	.11	08/11/22 0	2.38	1
Toluene	<0.0020		0.00200			mg/Kg			08/08/22 13	·11	08/11/22 02	2.30	1
Ethylbenzene	<0.0020		0.00200			ma/Ka			08/08/22 13	·11	08/11/22 02	2.30	1
m-Yylene & n-Yylene	<0.0020		0.00200			mg/Kg			08/08/22 13	· 1 1	08/11/22 02	2.00	' 1
	<0.0040		0.00400			ma/Ka			08/08/22 13	·11	08/11/22 0/	2.38	1
Xylenes Total	<0.0020		0.00200			ma/Ka			08/08/22 13	·11	08/11/22 02	2.00	1
Aylenes, Iotai	<0.0040	0 0	0.00400			mg/rtg			00/00/22 13		00/11/22 02	2.30	I
	М	BMB							_	_			
Surrogate	%Recover	ry Qualifier							Prepared	1	Analyze		Dil Fac
4-Bromofluorobenzene (Surr)	ç	14	70 - 130						08/08/22 13	:11	08/11/22 0	2:38	1
1,4-Difluorobenzene (Surr)	ç)7	70 - 130						08/08/22 13	:11	08/11/22 0.	2:38	1
Lab Sample ID: LCS 880-31768	8/1 -A							C	lient Samp	ole II	D: Lab Co	ntrol S	ample
Analysis Rotaby 21004											Prep Iy	pe: IC	24760
Analysis Batch: 31904			Spiko	1.09	1.09						Prep I	Batch:	31/00
Analuta			Spike	Beault	0.00	lifior	Unit				/inec		
Benzene			0 100	0.07170	Quai	lillei	ma/Ka			· 	70 130		
			0.100	0.083/1			ma/Ka		83	-	70 130		
Ethylbenzene			0.100	0.00341			mg/Kg		88	2	70 - 130		
			0.200	0.00733			mg/Kg		00	, 	70 130		
			0.200	0.1000			mg/Kg		92	-	70 - 130		
0-Aylene			0.100	0.09220			mg/ng		92	-	70 - 150		
	LCS LC	cs											
Surrogate	%Recovery Q	ualifier	Limits										
4-Bromofluorobenzene (Surr)	111		70 - 130										
1,4-Difluorobenzene (Surr)	92		70 - 130										
Lab Sample ID: LCSD 880-3176	68/2-A						Cli	ent	Sample ID): La	b Control	Samp	le Dup
Matrix: Solid											Prep Ty	/pe: To	otal/NA
Analysis Batch: 31904											Prep	Batch:	31768
-			Spike	LCSD	LCS	D					%Rec		RPD
Analyte			Added	Result	Qual	lifier	Unit		D %Rec	;	Limits	RPD	Limit
Benzene			0.100	0.07256			mg/Kg		73	3	70 - 130	1	35
Toluene			0.100	0.08266			mg/Kg		83	3	70 - 130	1	35
Ethylbenzene			0.100	0.08687			mg/Kg		87	,	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.1804			mg/Kg		90)	70 - 130	2	35
o-Xylene			0.100	0.09054			mg/Kg		91		70 - 130	2	35
		200											
Surrogata	CCSD LC	JSD	Limito										
4-Bromofluorobenzene (Surr)	104		70 130										
1 4-Diffuorobenzene (Surr)	02		70 - 130										
	32		10 - 100										
Lab Sample ID: 890-2704-A-9-E) MS								Clie	nt S	ample ID:	Matrix	Spike
Matrix: Solid											Prep Ty	/pe: To	otal/NA
Analysis Batch: 31904											Prep	Batch:	31768
	Sample Sa	ample	Spike	MS	MS						%Rec		

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Client: Ensolum

Project/Site: RDX-21-21

QC Sample Results

Job ID: 890-2722-1 SDG: Rural Eddy NM

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

Lab Sample ID: 890-2704-A-9	D-D MS										Client S	Sample ID:	Matrix	Spike
Matrix: Solid												Prep T	vpe: To	otal/NA
Analysis Batch: 31904												Prep	Batch:	31768
-	Sample	Sam	ple	Spike	MS	MS						%Rec		
Analyte	Result	Qua	lifier	Added	Result	Quali	ifier	Unit		D	%Rec	Limits		
Ethylbenzene	< 0.00199	U		0.0998	0.09810			mg/Kg			98	70 - 130		
m-Xylene & p-Xylene	<0.00398	U		0.200	0.2010			mg/Kg			101	70 - 130		
o-Xylene	<0.00199	U		0.0998	0.09903			mg/Kg			99	70 - 130		
-														
	MS	MS												
Surrogate	%Recovery	Qua	lifier	Limits										
4-Bromofluorobenzene (Surr)	106			70 - 130										
1,4-Difluorobenzene (Surr)	93			70 - 130										
														
Lab Sample ID: 890-2704-A-9	9-E MSD								Cile	nt Sa	ample ID:	Matrix Sp		plicate
Matrix: Solid												Prepi	ype: IC	
Analysis Batch: 31904	<u> </u>	~										Prep	Batch:	31768
	Sample	Sam	pie	Spike	MSD	MSD				_	~ -	%Rec		RPD
	Result	Qual	inter	Added	Result	Quali	mer	Unit		<u> </u>				Limit
Benzene	< 0.00199	0		0.100	0.1022			mg/Kg			102	70 - 130	18	35
	< 0.00199	U		0.100	0.09599			mg/Kg			96	70 - 130	2	35
Ethylbenzene	<0.00199	U		0.100	0.09685			mg/Kg			96	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U		0.201	0.1954			mg/Kg			97	70 - 130	3	35
o-Xylene	<0.00199	U		0.100	0.09572			mg/Kg			95	70 - 130	3	35
	MSD	MSD)											
Surrogate	%Recovery	Qua	lifier	Limits										
4-Bromofluorobenzene (Surr)	102			70_130										
1,4-Difluorobenzene (Surr)	103			70_130										
Lab Sample ID: MB 880-3176	9/5-A										Client Sa	mple ID: I	Viethod	Blank
Matrix: Solid												Prep T	ype: To	tal/NA
Analysis Batch: 31904												Prep	Batch:	31769
		MB	МВ											
Analyte	R	esult	Qualifier	RI	-	MDL	Unit		D	Р	repared	Analyz	ed	Dil Fac
Benzene	<0.0	0200	U	0.00200)		mg/Kg	3	_	08/0	8/22 13:23	08/10/22	14:40	1
Toluene	<0.0	0200	U	0.00200)		mg/Kg]		08/0	8/22 13:23	08/10/22	14:40	1
Ethylbenzene	<0.0	0200	U	0.00200)		mg/Kg	9		08/0	8/22 13:23	08/10/22	14:40	1
m-Xylene & p-Xylene	<0.0	0400	U	0.00400)		mg/Kg	9		08/0	8/22 13:23	08/10/22	14:40	1
o-Xylene	<0.0	0200	U	0.00200)		mg/Kg	3		08/0	8/22 13:23	08/10/22	14:40	1
Xylenes, Total	<0.0	0400	U	0.00400)		mg/Kg	3		08/0	8/22 13:23	08/10/22	14:40	1
		MB	MB											
Surrogate	%Reco	overy	Qualifier	Limits	_					P	repared	Analyz	ed	Dil Fac
4-Bromofluorobenzene (Surr)		94		70 - 130						08/0	8/22 13:23	08/10/22	14:40	1
1,4-Difluorobenzene (Surr)		102		70 - 130						08/0	8/22 13:23	08/10/22	14:40	1
 Lah Sample ID: LCS 990 347	60/1_1								^	liont	Sample		ontrol 9	ample
Matrix: Solid	03/1-A								C	nent	Sample			
Matrix. Juliu												Prep I	Potet	24760
Analysis Datch: 31904				Spiko	1.00	109						%Pec	DatCII:	31103
Analyta				Added	Beault	0	fior	l Init		P	% Bee	/onec		
Analyte				Added	Result	Quali	ner	Unit			%Rec	LIIIII(S		

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Client: Ensolum

Project/Site: RDX-21-21

QC Sample Results

Job ID: 890-2722-1 SDG: Rural Eddy NM

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

Lab Sample ID: LCS 880-317	769/1-A						Client	Sample	ID: Lab Co	ontrol Sa	ample
Matrix: Solid									Prep 1	ype: To	tal/NA
Analysis Batch: 31904									Prep	Batch:	31769
			Spike	LCS	LCS		_		%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
o-Xylene			0.100	0.09984		mg/Kg		100	70 - 130		
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	107		70 - 130								
1,4-Difluorobenzene (Surr)	100		70 - 130								
Lab Sample ID: 880-17690-A	-6-C MS							Client	Sample ID	: Matrix	Spike
Matrix: Solid									Prep 1	ype: To	tal/NA
Analysis Batch: 31904									Prep	Batch:	31769
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	<0.00201	U	0.100	0.09015		mg/Kg		90	70 - 130		
Toluene	<0.00201	U	0.100	0.09789		mg/Kg		97	70 - 130		
Ethylbenzene	<0.00201	U	0.100	0.09981		mg/Kg		99	70 - 130		
m-Xylene & p-Xylene	< 0.00402	U	0.201	0.2056		mg/Kg		102	70 - 130		
o-Xylene	<0.00201	U	0.100	0.1003		mg/Kg		100	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	104		70 - 130								
1,4-Difluorobenzene (Surr)	95		70 - 130								
_											
Lab Sample ID: 880-17690-A	-6-D MSD					CI	ient Sa	ample IC	: Matrix Sp	pike Dup	olicate
Matrix: Solid									Prep 1	ype: To	tal/NA
Analysis Batch: 31904									Prep	Batch:	31769
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0998	0.08375		mg/Kg		84	70 - 130	7	35
Toluene	<0.00201	U	0.0998	0.08778		mg/Kg		88	70 - 130	11	35
Ethylbenzene	<0.00201	U	0.0998	0.08858		mg/Kg		89	70 - 130	12	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1816		mg/Kg		91	70 - 130	12	35
o-Xylene	<0.00201	U	0.0998	0.08941		mg/Kg		90	70 - 130	11	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	105		70 - 130								
1,4-Difluorobenzene (Surr)	98		70 - 130								
Method: 8015B NM - Dies	sel Range Oi	ganics (I	DRO) (GC)								

Lab Sample ID: MB 880-31570/1-A Matrix: Solid Analysis Batch: 31633							Client Sa	mple ID: Metho Prep Type: ٦ Prep Batch	d Blank Fotal/NA n: 31570
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 10:56	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 10:56	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 10:56	1

QC Sample Results

Job ID: 890-2722-1 SDG: Rural Eddy NM

Client: Ensolum Project/Site: RDX-21-21

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

Lab Sample ID: MB 880-31570/	'1-A								Client S	ample ID: N	lethod	Blank
Matrix: Solid										Prep Ty	/pe: To	otal/NA
Analysis Batch: 31633										Prep I	Batch:	31570
		MB M	В									
Surrogate	%Reco	very Q	ualifier	Limits				P	repared	Analyze	d	Dil Fac
1-Chlorooctane		91		70 - 130)			08/0	5/22 10:50	08/06/22 1	0:56	1
o-Terphenyl		105		70 - 130)			08/0	5/22 10:50	08/06/22 1	0:56	1
- Lab Sample ID: LCS 880-3157()/2-A							Client	Sample	ID: Lab Co	ntrol S	Sample
Matrix: Solid										Prep Tv	/pe: To	otal/NA
Analysis Batch: 31633										Prep	Batch:	31570
,				Spike	LCS	LCS				%Rec		
Analyte				Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Bange Organics				1000	1077		ma/Ka		108	70 - 130		
(GRO)-C6-C10												
Diesel Range Organics (Over				1000	1004		mg/Kg		100	70 - 130		
C10-C28)												
	LCS	LCS										
Surrogate	%Recovery	Qualifie	er	Limits								
1-Chlorooctane	135	S1+		70 - 130								
o-Terphenyl	133	S1+		70 - 130								
Lab Sample ID: LCSD 880-315	70/3-A						Clie	nt San	ple ID: L	ab Control	Samp	le Dup
Matrix: Solid										Prep Ty	/pe: To	otal/NA
Analysis Batch: 31633										Prep I	Batch:	31570
				Spike	LCSD	LCSD				%Rec		RPD
Analyte				Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics				1000	860.0	*1	mg/Kg		86	70 - 130	22	20
(GRO)-C6-C10												
Diesel Range Organics (Over				1000	967.6		mg/Kg		97	70 - 130	4	20
C10-C28)												
	LCSD	LCSD										
Surrogate	%Recovery	Qualifie	er	Limits								
1-Chlorooctane	111			70 - 130								
o-Terphenyl	130			70 - 130								
Ξ												
Lab Sample ID: 890-2712-A-1-0	CMS								Client	Sample ID:	Matrix	Spike
Matrix: Solid										Prep Ty	/pe: To	otal/NA
Analysis Batch: 31633										Prep I	Batch:	31570
	Sample	Sample	•	Spike	MS	MS				%Rec		
Analyte	Result	Qualifie	er	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1		999	994.7		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U		999	709.9		mg/Kg		71	70 - 130		
Sumo moto	MS	MS Our life		l incita								
	70 Recovery	Qualifie		70 120								
	// 0E			70 120								
o-reiphenyi	65			10 - 130								

QC Sample Results

Job ID: 890-2722-1 SDG: Rural Eddy NM

Client: Ensolum Project/Site: RDX-21-21

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

Lab Sample ID: 890-2712-A-1	-D MSD					C	Client S	ample II	D: Matrix Sp	oike Dup	olicate
Matrix: Solid									Prep 1	Гуре: То	tal/N/
Analysis Batch: 31633									Prep	Batch:	3157
	Sample	Sample	Spike	MSD	MSD				%Rec		RP
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Gasoline Range Organics	<49.9	U *1	999	840.2		mg/Kg		84	70 - 130	17	20
(GRO)-C6-C10 Diagol Bango Organico (Over	~10.0		000	942 E		malka		04	70 120	17	20
C10-C28)	<49.9	0	999	043.3		mg/Kg		04	70 - 130	17	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	92		70 - 130								
o-Terphenyl	101		70 - 130								
ethod: 300.0 - Anions, Id	on Chromat	ography						Client	Sample ID:	Method	Blan
Matrix: Solid								onent	Dron	Type: S	olubl
Analysis Batch: 21022									гіер	Type. 3	JUDIE
Anarysis Dateil. 31332		MB MB									
Analyta	в			ы	MDI Unit			Droporod	Analyz	ad	
Chlorida	ĸ			RL			<u> </u>	repareu	Allaly2	40.00	DIFAC
Shionde		5.00 0		5.00	ing/it	.y			00/11/22	15.50	
Lab Sample ID: LCS 880-3156	60/2-A						Clien	t Sample	e ID: Lab Co	ontrol S	ample
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 31932											
			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride			250	248.4		mg/Kg		99	90 - 110		
Lab Sample ID: LCSD 880-31	560/3-A					Cli	ent Sar	nple ID:	Lab Contro	l Sampl	e Dur
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 31932										.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	п	%Rec	Limits	RPD	Limi
Chloride			250	248.0		mg/Kg		99	90 - 110	0	20
	•										DUG
Lab Sample ID: 890-2722-2 W	5								Client Sal	mple ID:	PHU
									Prep	Type: 5	
Matrix: Solid											
Matrix: Solid Analysis Batch: 31932									~ -		
Matrix: Solid Analysis Batch: 31932	Sample	Sample	Spike	MS	MS				%Rec		
Matrix: Solid Analysis Batch: 31932 Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Matrix: Solid Analysis Batch: 31932 Analyte Chloride	Sample Result 1860	Sample Qualifier F1	Spike Added 1240	MS Result 3350	MS Qualifier F1	Unit mg/Kg	<u>D</u>	% Rec	%Rec Limits 90 - 110		
Matrix: Solid Analysis Batch: 31932 Analyte Chloride Lab Sample ID: 890-2722-2 M	Sample <u>Result</u> 1860	Sample Qualifier F1	Spike Added 1240	MS Result 3350	MS Qualifier F1	<mark>Unit</mark> mg/Kg	<u>D</u>	%Rec 120	%Rec Limits 90 - 110		PH0
Matrix: Solid Analysis Batch: 31932 Analyte Chloride Lab Sample ID: 890-2722-2 M Matrix: Solid	Sample Result 1860	Sample Qualifier F1	Spike Added 1240	MS Result 3350	MS Qualifier F1	<mark>Unit</mark> mg/Kg	<u>D</u>	%Rec 120	%Rec Limits 90 - 110 Client Sau Prep	 mple ID: Type: S	PH0 ²
Matrix: Solid Analysis Batch: 31932 Analyte Chloride Lab Sample ID: 890-2722-2 M Vatrix: Solid Analysis Batch: 31932	Sample Result 1860	Sample Qualifier F1	Spike Added 1240	MS Result 3350	MS Qualifier F1	- <mark>Unit</mark> mg/Kg	<u> </u>	<u>%Rec</u> 120	%Rec Limits 90 - 110 Client Sau Prep	mple ID: Type: S	PH01 oluble
Matrix: Solid Analysis Batch: 31932 Analyte Chloride Lab Sample ID: 890-2722-2 M Matrix: Solid Analysis Batch: 31932	Sample Result 1860 SD Sample	Sample Qualifier F1	Spike Added 1240 Spike	MS Result 3350 MSD	MS Qualifier F1 MSD	- <mark>Unit</mark> mg/Kg	<u> </u>		%Rec Limits 90 - 110 Client Sar Prep %Rec	mple ID: Type: S	PH01 oluble RPE
Matrix: Solid Analysis Batch: 31932 Analyte Chloride Lab Sample ID: 890-2722-2 M Matrix: Solid Analysis Batch: 31932 Analyte	Sample Result 1860 SD Sample Result	Sample Qualifier F1 Sample Qualifier	Spike Added 1240 Spike Added	MS <u>Result</u> 3350 MSD Result	MS Qualifier F1 MSD Qualifier	Unit	<u>D</u>	%Rec 120 %Rec	%Rec Limits 90 - 110 Client Sau Prep %Rec Limits	mple ID: Type: S RPD	PH01 oluble RPC Limi

Client: Ensolum

Project/Site: RDX-21-21

Job ID: 890-2722-1 SDG: Rural Eddy NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2722-12 MS Matrix: Solid									Client Sar Prep	nple ID: Type: S	PH06 oluble
Analysis Batch: 31932	0	0	0						0/ D		
A L -d	Sample	Sample	Бріке	IVIS Descrit	MS Overlifter	11		0/ D = =	%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		%Rec	Limits		
Chloride	200		250	458.6		mg/Kg		104	90 - 110		
Lab Sample ID: 890-2722-12 MSD									Client Sa	mple ID:	PH06
Matrix: Solid									Prep	Type: So	oluble
Analysis Batch: 31932											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	200		250	475.0		mg/Kg		110	90 - 110	4	20

Client: Ensolum Project/Site: RDX-21-21

GC VOA

Prep Batch: 31768

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
MB 880-31768/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31768/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31768/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2704-A-9-D MS	Matrix Spike	Total/NA	Solid	5035	
890-2704-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 31769

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-2722-1	PH01	Total/NA	Solid	5035	
890-2722-2	PH01	Total/NA	Solid	5035	
890-2722-3	PH02	Total/NA	Solid	5035	
890-2722-4	PH02	Total/NA	Solid	5035	
890-2722-5	PH03	Total/NA	Solid	5035	
890-2722-6	PH03	Total/NA	Solid	5035	
890-2722-7	PH04	Total/NA	Solid	5035	
890-2722-8	PH04	Total/NA	Solid	5035	
890-2722-9	PH05	Total/NA	Solid	5035	
890-2722-10	PH05	Total/NA	Solid	5035	
890-2722-11	PH06	Total/NA	Solid	5035	
890-2722-12	PH06	Total/NA	Solid	5035	
890-2722-13	PH07	Total/NA	Solid	5035	
890-2722-14	PH07	Total/NA	Solid	5035	
MB 880-31769/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31769/1-A	Lab Control Sample	Total/NA	Solid	5035	
880-17690-A-6-C MS	Matrix Spike	Total/NA	Solid	5035	
880-17690-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 31904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2722-1	PH01	Total/NA	Solid	8021B	31769
890-2722-2	PH01	Total/NA	Solid	8021B	31769
890-2722-3	PH02	Total/NA	Solid	8021B	31769
890-2722-4	PH02	Total/NA	Solid	8021B	31769
890-2722-5	PH03	Total/NA	Solid	8021B	31769
890-2722-6	PH03	Total/NA	Solid	8021B	31769
890-2722-7	PH04	Total/NA	Solid	8021B	31769
890-2722-8	PH04	Total/NA	Solid	8021B	31769
890-2722-9	PH05	Total/NA	Solid	8021B	31769
890-2722-10	PH05	Total/NA	Solid	8021B	31769
890-2722-11	PH06	Total/NA	Solid	8021B	31769
890-2722-12	PH06	Total/NA	Solid	8021B	31769
890-2722-13	PH07	Total/NA	Solid	8021B	31769
890-2722-14	PH07	Total/NA	Solid	8021B	31769
MB 880-31768/5-A	Method Blank	Total/NA	Solid	8021B	31768
MB 880-31769/5-A	Method Blank	Total/NA	Solid	8021B	31769
LCS 880-31768/1-A	Lab Control Sample	Total/NA	Solid	8021B	31768
LCS 880-31769/1-A	Lab Control Sample	Total/NA	Solid	8021B	31769
LCSD 880-31768/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31768
880-17690-A-6-C MS	Matrix Spike	Total/NA	Solid	8021B	31769
880-17690-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	31769
890-2704-A-9-D MS	Matrix Spike	Total/NA	Solid	8021B	31768

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Job ID: 890-2722-1 SDG: Rural Eddy NM

Client: Ensolum Project/Site: RDX-21-21 Job ID: 890-2722-1

GC VOA (Continued)

Analysis Batch: 31904 (Continued)

PH06

PH06

PH07

PH07

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	31768
nalysis Batch: 31982					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2722-1	PH01	Total/NA	Solid	Total BTEX	
890-2722-2	PH01	Total/NA	Solid	Total BTEX	
890-2722-3	PH02	Total/NA	Solid	Total BTEX	
890-2722-4	PH02	Total/NA	Solid	Total BTEX	
890-2722-5	PH03	Total/NA	Solid	Total BTEX	
890-2722-6	PH03	Total/NA	Solid	Total BTEX	
890-2722-7	PH04	Total/NA	Solid	Total BTEX	
890-2722-8	PH04	Total/NA	Solid	Total BTEX	
890-2722-9	PH05	Total/NA	Solid	Total BTEX	
890-2722-10	PH05	Total/NA	Solid	Total BTEX	

Total/NA

Total/NA

Total/NA

Total/NA

Solid

Solid

Solid

Solid

GC Semi VOA

890-2722-11

890-2722-12

890-2722-13

890-2722-14

Prep Batch: 31570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2722-1	PH01	Total/NA	Solid	8015NM Prep	
890-2722-2	PH01	Total/NA	Solid	8015NM Prep	
890-2722-3	PH02	Total/NA	Solid	8015NM Prep	
890-2722-4	PH02	Total/NA	Solid	8015NM Prep	
890-2722-5	PH03	Total/NA	Solid	8015NM Prep	
890-2722-6	PH03	Total/NA	Solid	8015NM Prep	
890-2722-7	PH04	Total/NA	Solid	8015NM Prep	
890-2722-8	PH04	Total/NA	Solid	8015NM Prep	
890-2722-9	PH05	Total/NA	Solid	8015NM Prep	
890-2722-10	PH05	Total/NA	Solid	8015NM Prep	
890-2722-11	PH06	Total/NA	Solid	8015NM Prep	
890-2722-12	PH06	Total/NA	Solid	8015NM Prep	
890-2722-13	PH07	Total/NA	Solid	8015NM Prep	
890-2722-14	PH07	Total/NA	Solid	8015NM Prep	
MB 880-31570/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-31570/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-31570/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2712-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2712-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 31633

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-2722-1	PH01	Total/NA	Solid	8015B NM	31570
890-2722-2	PH01	Total/NA	Solid	8015B NM	31570
890-2722-3	PH02	Total/NA	Solid	8015B NM	31570
890-2722-4	PH02	Total/NA	Solid	8015B NM	31570
890-2722-5	PH03	Total/NA	Solid	8015B NM	31570
890-2722-6	PH03	Total/NA	Solid	8015B NM	31570

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SDG: Rural Eddy NM 5 8 9 10 11 12 13 Total BTEX Total BTEX Total BTEX Total BTEX Total BTEX

Client: Ensolum Project/Site: RDX-21-21

GC Semi VOA (Continued)

Analysis Batch: 31633 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2722-7	PH04	Total/NA	Solid	8015B NM	31570
890-2722-8	PH04	Total/NA	Solid	8015B NM	31570
890-2722-9	PH05	Total/NA	Solid	8015B NM	31570
890-2722-10	PH05	Total/NA	Solid	8015B NM	31570
890-2722-11	PH06	Total/NA	Solid	8015B NM	31570
890-2722-12	PH06	Total/NA	Solid	8015B NM	31570
890-2722-13	PH07	Total/NA	Solid	8015B NM	31570
890-2722-14	PH07	Total/NA	Solid	8015B NM	31570
MB 880-31570/1-A	Method Blank	Total/NA	Solid	8015B NM	31570
LCS 880-31570/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	31570
LCSD 880-31570/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	31570
890-2712-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	31570
890-2712-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	31570

Analysis Batch: 31748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2722-1	PH01	Total/NA	Solid	8015 NM	
890-2722-2	PH01	Total/NA	Solid	8015 NM	
890-2722-3	PH02	Total/NA	Solid	8015 NM	
890-2722-4	PH02	Total/NA	Solid	8015 NM	
890-2722-5	PH03	Total/NA	Solid	8015 NM	
890-2722-6	PH03	Total/NA	Solid	8015 NM	
890-2722-7	PH04	Total/NA	Solid	8015 NM	
890-2722-8	PH04	Total/NA	Solid	8015 NM	
890-2722-9	PH05	Total/NA	Solid	8015 NM	
890-2722-10	PH05	Total/NA	Solid	8015 NM	
890-2722-11	PH06	Total/NA	Solid	8015 NM	
890-2722-12	PH06	Total/NA	Solid	8015 NM	
890-2722-13	PH07	Total/NA	Solid	8015 NM	
890-2722-14	PH07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 31560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
890-2722-1	PH01	Soluble	Solid	DI Leach
890-2722-2	PH01	Soluble	Solid	DI Leach
890-2722-3	PH02	Soluble	Solid	DI Leach
890-2722-4	PH02	Soluble	Solid	DI Leach
890-2722-5	PH03	Soluble	Solid	DI Leach
890-2722-6	PH03	Soluble	Solid	DI Leach
890-2722-7	PH04	Soluble	Solid	DI Leach
890-2722-8	PH04	Soluble	Solid	DI Leach
890-2722-9	PH05	Soluble	Solid	DI Leach
890-2722-10	PH05	Soluble	Solid	DI Leach
890-2722-11	PH06	Soluble	Solid	DI Leach
890-2722-12	PH06	Soluble	Solid	DI Leach
890-2722-13	PH07	Soluble	Solid	DI Leach
890-2722-14	PH07	Soluble	Solid	DI Leach
MB 880-31560/1-A	Method Blank	Soluble	Solid	DI Leach
LCS 880-31560/2-A	Lab Control Sample	Soluble	Solid	DI Leach

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Job ID: 890-2722-1 SDG: Rural Eddy NM

Client: Ensolum Project/Site: RDX-21-21

HPLC/IC (Continued)

Leach Batch: 31560 (Continued)

Lab Sample ID LCSD 880-31560/3-A	Client Sample ID Lab Control Sample Dup	Prep Type Soluble	Matrix Solid	DI Leach	Prep Batch
890-2722-2 MS	PH01	Soluble	Solid	DI Leach	
890-2722-2 MSD	PH01	Soluble	Solid	DI Leach	
890-2722-12 MS	PH06	Soluble	Solid	DI Leach	
890-2722-12 MSD	PH06	Soluble	Solid	DI Leach	

Analysis Batch: 31932

HPLC/IC (Continue	d)					
Leach Batch: 31560 (Co	ontinued)					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	4
LCSD 880-31560/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach		
890-2722-2 MS	PH01	Soluble	Solid	DI Leach		þ
890-2722-2 MSD	PH01	Soluble	Solid	DI Leach		
890-2722-12 MS	PH06	Soluble	Solid	DI Leach		6
890-2722-12 MSD	PH06	Soluble	Solid	DI Leach		
Analysis Batch: 31932						
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch	8
890-2722-1	PH01	Soluble	Solid	300.0	31560	
890-2722-2	PH01	Soluble	Solid	300.0	31560	9
890-2722-3	PH02	Soluble	Solid	300.0	31560	
890-2722-4	PH02	Soluble	Solid	300.0	31560 🧃	
890-2722-5	PH03	Soluble	Solid	300.0	31560	
890-2722-6	PH03	Soluble	Solid	300.0	31560 🦯	
890-2722-7	PH04	Soluble	Solid	300.0	31560	
890-2722-8	PH04	Soluble	Solid	300.0	31560	
890-2722-9	PH05	Soluble	Solid	300.0	31560	
890-2722-10	PH05	Soluble	Solid	300.0	31560	0
890-2722-11	PH06	Soluble	Solid	300.0	31560	5
890-2722-12	PH06	Soluble	Solid	300.0	31560	
890-2722-13	PH07	Soluble	Solid	300.0	31560	
890-2722-14	PH07	Soluble	Solid	300.0	31560	
MB 880-31560/1-A	Method Blank	Soluble	Solid	300.0	31560	
LCS 880-31560/2-A	Lab Control Sample	Soluble	Solid	300.0	31560	
LCSD 880-31560/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31560	
890-2722-2 MS	PH01	Soluble	Solid	300.0	31560	
890-2722-2 MSD	PH01	Soluble	Solid	300.0	31560	
890-2722-12 MS	PH06	Soluble	Solid	300.0	31560	
890-2722-12 MSD	PH06	Soluble	Solid	300.0	31560	

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Job ID: 890-2722-1 SDG: Rural Eddy NM

5 6

9

12 13

Job ID: 890-2722-1 SDG: Rural Eddy NM

Lab Sample ID: 890-2722-1 Matrix: Solid

Lab Sample ID: 890-2722-2

Lab Sample ID: 890-2722-3

Lab Sample ID: 890-2722-4

Matrix: Solid

Matrix: Solid

Date Collected: 08/03/22 09:00 Date Received: 08/03/22 16:50

Client Sample ID: PH01

Client: Ensolum

Project/Site: RDX-21-21

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 15:30	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 14:52	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		10			31932	08/11/22 18:52	CH	EET MID

Client Sample ID: PH01

Date Collected: 08/03/22 09:10

Date Received: 08/03/22 16:50

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 15:50	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 15:14	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		5			31932	08/11/22 14:06	CH	EET MID

Client Sample ID: PH02

Date Collected: 08/03/22 09:20

Date Received: 08/03/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 16:11	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 15:36	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		5			31932	08/11/22 14:33	CH	EET MID

Client Sample ID: PH02 Date Collected: 08/03/22 09:30 Date Received: 08/03/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 16:31	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID

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Matrix: Solid

Job ID: 890-2722-1

SDG: Rural Eddy NM

Lab Sample ID: 890-2722-4

Lab Chronicle

Client: Ensolum Project/Site: RDX-21-21

Client Sample ID: PH02

Date Collected: 08/03/22 09:30 Date Received: 08/03/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 15:57	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		5			31932	08/11/22 14:43	СН	EET MID
Client Samp	le ID: PH03							Lab Sam	ple ID: 8	390-2722-

Client Sample ID: PH03 Date Collected: 08/03/22 09:40

Date Received: 08/03/22 16:50

-	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 16:52	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	31570 31633	08/05/22 10:50 08/06/22 16:41	DM SM	EET MID EET MID
Soluble Soluble	Leach Analysis	DI Leach 300.0		5	4.98 g	50 mL	31560 31932	08/05/22 10:32 08/11/22 14:52	СН СН	EET MID EET MID

Client Sample ID: PH03

Date Collected: 08/03/22 09:50 Date Received: 08/03/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 17:32	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 17:02	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		5			31932	08/11/22 15:01	CH	EET MID

Client Sample ID: PH04

Date Collected: 08/03/22 10:00 Date Received: 08/03/22 16:50

-	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 20:25	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g	10 mL	31570 31633	08/05/22 10:50 08/06/22 17:24	DM SM	EET MID EET MID

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Matrix: Solid 5 6 9

11 12 13

Lab Sample ID: 890-2722-6

Lab Sample ID: 890-2722-7

Matrix: Solid

Matrix: Solid

Matrix: Solid

Lab Chronicle

Job ID: 890-2722-1 SDG: Rural Eddy NM

Lab Sample ID: 890-2722-7

Lab Sample ID: 890-2722-8

Lab Sample ID: 890-2722-9

Client Sample ID: PH04 Date Collected: 08/03/22 10:00

Client: Ensolum

Project/Site: RDX-21-21

Date Received: 08/03/22 16:50

Ргер Туре	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		1			31932	08/11/22 15:29	СН	EET MID

Client Sample ID: PH04

Date Collected: 08/03/22 10:10 Date Received: 08/03/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 20:46	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 17:46	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		1			31932	08/16/22 08:15	CH	EET MID

Client Sample ID: PH05 Date Collected: 08/03/22 10:20

Date Received: 08/03/22 16:50

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 21:06	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 18:07	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		5			31932	08/11/22 15:47	CH	EET MID

Client Sample ID: PH05 Date Collected: 08/03/22 10:30

Date Received: 08/03/22 16:50

							_
Lab	Sample	ID:	890	-27	22.	-1	0
					~		

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 21:26	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 18:29	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		1			31932	08/11/22 15:56	CH	EET MID

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Matrix: Solid

Matrix: Solid

Matrix: Solid

9

Job ID: 890-2722-1 SDG: Rural Eddy NM

Lab Sample ID: 890-2722-11

Lab Sample ID: 890-2722-12

Lab Sample ID: 890-2722-13

Lab Sample ID: 890-2722-14

Matrix: Solid

Date Collected: 08/03/22 12:40 Date Received: 08/03/22 16:50

Client Sample ID: PH06

Project/Site: RDX-21-21

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 21:47	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 18:50	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		1			31932	08/11/22 16:06	СН	EET MID

Client Sample ID: PH06

Date Collected: 08/03/22 12:50

Date Received: 08/03/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 22:07	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 19:12	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		1			31932	08/11/22 16:15	СН	EET MID

Client Sample ID: PH07

Date Collected: 08/03/22 13:00

Date Received: 08/03/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 22:28	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 19:33	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		1			31932	08/11/22 16:42	CH	EET MID

Client Sample ID: PH07 Date Collected: 08/03/22 13:10 Date Received: 08/03/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 22:48	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31982	08/11/22 10:28	SM	EET MID

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Matrix: Solid

9

12 13

5 6

Matrix: Solid

Matrix: Solid

Job ID: 890-2722-1 SDG: Rural Eddy NM

Matrix: Solid

Lab Sample ID: 890-2722-14

Client Sample ID: PH07 Date Collected: 08/03/22 13:10

Client: Ensolum

Project/Site: RDX-21-21

Date Received: 08/03/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			31748	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 19:55	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	31560	08/05/22 10:32	СН	EET MID
Soluble	Analysis	300.0		1			31932	08/11/22 16:52	СН	EET MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Ensolum Project/Site: RDX-21-21

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	ut the laboratory is not certif	ied by the governing authority. This list ma	ay include analytes for
the agency does not of				
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method 8015 NM	Prep Method	Matrix Solid	Analyte Total TPH	

Job ID: 890-2722-1 SDG: Rural Eddy NM

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Eurofins Carlsbad

Method Summary

Client: Ensolum Project/Site: RDX-21-21 Job ID: 890-2722-1 SDG: Rural Eddy NM

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

Protocol References:

ASTM = ASTM International

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

Laboratory References:

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

Sample Summary

Client: Ensolum Project/Site: RDX-21-21

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2722-1	PH01	Solid	08/03/22 09:00	08/03/22 16:50	0.5
890-2722-2	PH01	Solid	08/03/22 09:10	08/03/22 16:50	1
890-2722-3	PH02	Solid	08/03/22 09:20	08/03/22 16:50	0.5
890-2722-4	PH02	Solid	08/03/22 09:30	08/03/22 16:50	1
890-2722-5	PH03	Solid	08/03/22 09:40	08/03/22 16:50	0.5
890-2722-6	PH03	Solid	08/03/22 09:50	08/03/22 16:50	1
890-2722-7	PH04	Solid	08/03/22 10:00	08/03/22 16:50	0.5
890-2722-8	PH04	Solid	08/03/22 10:10	08/03/22 16:50	1
890-2722-9	PH05	Solid	08/03/22 10:20	08/03/22 16:50	0.5
890-2722-10	PH05	Solid	08/03/22 10:30	08/03/22 16:50	1
890-2722-11	PH06	Solid	08/03/22 12:40	08/03/22 16:50	0.5
890-2722-12	PH06	Solid	08/03/22 12:50	08/03/22 16:50	1
890-2722-13	PH07	Solid	08/03/22 13:00	08/03/22 16:50	0.5
890-2722-14	PH07	Solid	08/03/22 13:10	08/03/22 16:50	1

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Ite: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions service. Eurofins Xenco. A minimum charge of \$86.00 will be applied to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotisted. Relinquisped by: (Signature) Received by: (Signature) Date/Time A and the Section Sec
Relinquished by: (Signature) Received by: (Signature) Date/Time Relinquished by: (Signature) Date/Time Conference N M M A 5 · 5 · 3 2 1/b 4
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Xenco	Midla EL	nd, TX (432) Paso, TX (91	704-5440, S 5) 585-3443 7 202 7660	an Antonio, Lubbock, ¹	ТХ (210) 509-3334 Х (806) 794-1296 М / 676) овв. 3100			
		C) MINI 'SO	, ucc 1-260 (Ŵ	v.xenco.com Page	0 0 ⁴ 13
r: Joseph Hernandez	Bill to: (if differe	nt) Ji	n Raley			>	Vork Order Comments	
e: Ensolum	Company Nan	le:	PX			Program: UST/PST	PRP 🛛 Brownfields 🗌 F	RC 🗌 Superfund 🗍
3122 National Parks HWY	Address:	55	15 Buena \	/ista Dr.		State of Project:		[
Carisbad, NM 88220	City, State ZIP	Ö	irlsbad, NN	88220		Reporting: Level II	evel III	RRP C Level IV
281-702-2329	Email: jhernandez@	Ensolum	com, jim.r	aley@dvr	com	Deliverables: EDD		ther.
RDX 21-21	Turn Around				ANALYSIS F	REQUEST	Pres	ervative Codes
r: 03A1987037	S Routine Rush	Pres. Code					None: NO	DI Water: H ₂ O
n: Rural Eddy, NM	Due Date: 5 DAY TAT						Cool: Cool	MeOH: Me
ne: Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm	\$					HCL: HC	HNO ₃ : HN NaOH: Na
	Wai Lear Vac Nn	nəte					H3PO4: HP	
eived Intact: Yes No Thermorpett		n en en	0.000				NaHSO4: N	ABIS
ty Seals: Yes No N/A Correction F	actor	ed					Na ₂ S ₂ O ₃ : 1	aSO ₃
dy Seals: Yes No N/A Temperature	e Reading:		2)	12			Zn Acetate NaOH+As	+NaOH: Zn orbic Acid: SAPC
le Identification Matrix Semular	Time Depth Grab	(# of	108) Hq	08) XƏT			Sam	ole Comments
PH06 S 8.3.22	12:40 0.5' Grat	-		• ×				
PH06 S 8.3.22	12:50 1' Grat	1 1	×	×				
PH07 S 8.3.22	13:00 0.5' Grat	1 1	×	×				Incident ID
PH07 S 8.3.22	13:10 1' Grat	1 1	×	×			An	31621049514
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100	~	1				
	1000							
0.7 / 6010 200.8 / 6020: 8 d(s) and Metal(s) to be analyzed	RCRA 13PPM Texas (TCLP / SPLP 6010: 8	1 AI Sb RCRA S	As Ba B As Ba	e B Cd Be Cd C	ca Cr Co Cu Fe r Co Cu Pb Mn N	Pb Mg Mn Mo Ni K Se Io Ni Se Ag TI U	Ag SiO ₂ Na Sr TI S Hg: 1631 / 245.1 / 74	n U V Zn 70 / 7471
 of this document and relinquishment of samples con in Xenco will be liable only for the cost of samples at in X minimum charge of \$85.00 will be applied to each 	istitutes a valid purchase order fr nd shall not assume any responsi n project and a charge of \$5 for ea	om client con bility for any ch sample su	pany to Euro losses or exp bmitted to Eu	fins Xenco, i enses incurr rofins Xenco	a affiliates and subcontrac ed by the client if such loss , but not analyzed. These t	tors. It assigns standard terms ar seare due to circumstances beyo erms will be enforced unless previ	id conditions nd the control ously negotiated.	
jed by: (Signature)	d.by։ (Signature)		ate/Time		elinquished by: (Sig	nature) Received	by: (Signature)	Date/Time
my Kin (- and	5.3	ee	5				
	9			4				

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 2722 List Number: 1 Creator: Clifton, Cloe

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

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

14

Job Number: 890-2722-1 SDG Number: Rural Eddy NM

List Source: Eurofins Carlsbad

14

Job Number: 890-2722-1 SDG Number: Rural Eddy NM

List Source: Eurofins Midland

List Creation: 08/05/22 10:35 AM

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 2722 List Number: 2 Creator: Rodriguez, Leticia

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

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Received by OCD: 10/27/2022 12:51:43 PM

LINKS

Review your project results through

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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2724-1

Laboratory Sample Delivery Group: 03A1987037 Client Project/Site: RDX 21-21

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Joseph Hernandez

RAMER

Authorized for release by: 8/12/2022 7:17:58 AM Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

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	Definitions/Glossary 1				
Client: EnsolumJob ID: 890-Project/Site: RDX 21-21SDG: 03A11		Job ID: 890-2724-1 SDG: 03A1987037	2		
Qualifiers			3		
GC VOA					
Qualifier	Qualifier Description		4		
F1	MS and/or MSD recovery exceeds control limits.				
F2	MS/MSD RPD exceeds control limits		5		
U	Indicates the analyte was analyzed for but not detected.				
GC Semi VOA			6		
Qualifier	Qualifier Description				
U	Indicates the analyte was analyzed for but not detected.				
HPLC/IC					
Qualifier	Qualifier Description		8		
U	Indicates the analyte was analyzed for but not detected.				
Glossary			9		
Abbreviation	These commonly used abbreviations may or may not be present in this report.				
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis				
%R	Percent Recovery				
CFL	Contains Free Liquid				
CFU	Colony Forming Unit				
CNF	Contains No Free Liquid				
DER	Duplicate Error Ratio (normalized absolute difference)		12		
Dil Fac	Dilution Factor		10		
DL	Detection Limit (DoD/DOE)				
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample				
DLC	Decision Level Concentration (Radiochemistry)				
EDL	Estimated Detection Limit (Dioxin)				
LOD	Limit of Detection (DoD/DOE)				
LOQ	Limit of Quantitation (DoD/DOE)				
MCL	EPA recommended "Maximum Contaminant Level"				
MDA	Minimum Detectable Activity (Radiochemistry)				
MDC	Minimum Detectable Concentration (Radiochemistry)				
MDL	Method Detection Limit				
ML	Minimum Levei (Dioxin)				
MPN	Most Probable Number				
MQL	Method Quantitation Limit				
	Not Calculated				
	Not Detected at the reporting limit (or MDL or EDL if snown)				
NEG					
	rusilive / rieseili				
FRES					
	Quality Control				
	Reporting Limit or Requested Limit (Radiochemistry)				
RPD	Relative Percent Difference, a measure of the relative difference between two points				
	Relative Ference Difference, a measure of the relative underence between two points				

TEQToxicity Equivalent Quotient (Dioxin)TNTCToo Numerous To Count

Toxicity Equivalent Factor (Dioxin)

TEF
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4

5

Job ID: 890-2724-1 SDG: 03A1987037

Job ID: 890-2724-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2724-1

Receipt

The sample was received on 8/4/2022 7:57 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-31801 and analytical batch 880-31685 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

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

Job ID: 890-2724-1 SDG: 03A1987037

Client Sample ID: PH02

Date Collected: 08/03/22 09:15 Date Received: 08/04/22 07:57

Sample Depth: 6

Client: Ensolum

Project/Site: RDX 21-21

Lab Sample ID: 890-2724-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00199	U	0.00199		mg/Kg		08/08/22 15:42	08/09/22 05:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/08/22 15:42	08/09/22 05:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/08/22 15:42	08/09/22 05:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/08/22 15:42	08/09/22 05:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/08/22 15:42	08/09/22 05:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/08/22 15:42	08/09/22 05:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	177		03 - 183				3/28/2771:547	3/28, 277 3:58/	1
1월-i đuorobenzene (Surr)	/7		03 - 183				3/23/2771:547	3/28, 2773:53/	1
- Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/09/22 10:34	1
- Method: 8015 NM - Diesel Rang	e Organics (DR	O) (GC)							
Method: 8015 NM - Diesel Rang Analyte	e Organics (DR Result	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH	e Organics (DR Result <49.9	O) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/08/22 12:38	Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Ran	e Organics (DR Result <49.9 ge Organics (D	O) (GC) Qualifier U RO) (GC)	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/08/22 12:38	Dil Fac 1
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte	e Organics (DR 	O) (GC) Qualifier U RO) (GC) Qualifier	RL	MDL	Unit mg/Kg Unit	<u>D</u> 	Prepared Prepared	Analyzed 08/08/22 12:38 Analyzed	Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10	e Organics (DR Result <49.9 ge Organics (D Result <49.9	O) (GC) Qualifier U RO) (GC) Qualifier U	RL 49.9 RL 49.9	MDL	Unit mg/Kg Unit mg/Kg	<u>D</u>	Prepared Prepared 08/05/22 11:58	Analyzed 08/08/22 12:38 Analyzed 08/06/22 22:47	Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR Result 49.9 ge Organics (D) ge Organics (D) <49.9	O) (GC) Qualifier U RO) (GC) Qualifier U	RL 49.9 RL 49.9	MDL MDL	Unit mg/Kg Unit mg/Kg mg/Kg	D	Prepared Prepared 08/05/22 11:58 08/05/22 11:58	Analyzed 08/08/22 12:38 Analyzed 08/06/22 22:47 08/06/22 22:47	Dil Fac 1 Dil Fac 1
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	e Organics (DR Result 49.9 ge Organics (D) ge Organics (A) 49.9	O) (GC) Qualifier U RO) (GC) Qualifier U U	RL 49.9 RL 49.9	MDL MDL	Unit mg/Kg Unit mg/Kg mg/Kg	D	Prepared Prepared 08/05/22 11:58 08/05/22 11:58	Analyzed 08/08/22 12:38 Analyzed 08/06/22 22:47 08/06/22 22:47	Dil Fac 1 Dil Fac 1
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	e Organics (DR Result 49.9 ge Organics (D) Result <49.9 <49.9 <49.9	O) (GC) Qualifier U RO) (GC) Qualifier U U U	RL 49.9 RL 49.9 49.9 49.9 49.9 49.9	MDL	Unit mg/Kg Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared Prepared 08/05/22 11:58 08/05/22 11:58 08/05/22 11:58	Analyzed 08/08/22 12:38 Analyzed 08/06/22 22:47 08/06/22 22:47	Dil Fac 1 Dil Fac 1 1 1
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	e Organics (DR Result 49.9 ge Organics (D Result <49.9 49.9 <49.9 <49.9 %Recovery	O) (GC) Qualifier U RO) (GC) Qualifier U U Qualifier	RL 49.9 RL 49.9 49.9 49.9 49.9 49.9 Limits	MDL	Unit mg/Kg Unit mg/Kg mg/Kg	<u>D</u>	Prepared Prepared 08/05/22 11:58 08/05/22 11:58 08/05/22 11:58 Prepared	Analyzed 08/08/22 12:38 Analyzed 08/06/22 22:47 08/06/22 22:47 08/06/22 22:47 Analyzed	Dil Fac 1 Dil Fac 1 1 1 Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-h cloroot ≠	e Organics (DR Result 49.9 ge Organics (D) Result 49.9 49.9 49.9 49.9	O) (GC) Qualifier U RO) (GC) Qualifier U U Qualifier	RL 49.9 RL 49.9 49.9 49.9 49.9 49.9 49.9 03.183	MDL	Unit mg/Kg Unit mg/Kg mg/Kg	D	Prepared Prepared 08/05/22 11:58 08/05/22 11:58 08/05/22 11:58 Prepared 3/ 2: 277 115 /	Analyzed 08/08/22 12:38 Analyzed 08/06/22 22:47 08/06/22 22:47 08/06/22 22:47 08/06/22 22:47 3/ 236277 77540	Dil Fac 1 Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-h cloroot ≠ o-Terpcenyl	e Organics (DR Result 49.9 ge Organics (D) Result <49.9 <49.9 <49.9 <49.9 <49.9 <19.9	O) (GC) Qualifier U RO) (GC) Qualifier U U Qualifier	RL 49.9 RL 49.9 49.9 49.9 49.9 49.9 03 - 183 03 - 183	MDL MDL	Unit mg/Kg Mg/Kg mg/Kg mg/Kg	D	Prepared Prepared 08/05/22 11:58 08/05/22 11:58 08/05/22 11:58 08/05/22 11:58 Prepared 3/ 28: 277 115/ 3/ 28: 277 115/	Analyzed 08/08/22 12:38 Analyzed 08/06/22 22:47 08/06/22 22:47 08/06/22 22:47 08/06/22 22:47 3/ 296277 77540 3/ 296277 77540	Dil Fac 1 Dil Fac 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-h cloroot ≠ o-Terpcenyl Method: 300.0 - Anions, Ion Chr	e Organics (DR 	O) (GC) Qualifier U RO) (GC) Qualifier U U Qualifier Soluble	RL 49.9 49.9 49.9 49.9 49.9 03 - 183 03 - 183	MDL	Unit mg/Kg Mg/Kg mg/Kg mg/Kg	D	Prepared Prepared 08/05/22 11:58 08/05/22 11:58 08/05/22 11:58 Prepared 3/ 28: 277 115 / 3/ 28: 277 115 /	Analyzed 08/08/22 12:38 Analyzed 08/06/22 22:47 08/06/22 22:47 08/06/22 22:47 08/06/22 22:47 3/ 236277 77540 3/ 236277 77540	Dil Fac 1 Dil Fac 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-h cloroot æne o-Terpcenyl Method: 300.0 - Anions, Ion Chr Analyte	e Organics (DR Result 49.9 ge Organics (D) ge Organics (D) 49.9 <49.9 <49.9 <49.9 %Recovery /: 133 comatography - Result	O) (GC) Qualifier U RO) (GC) Qualifier U U Qualifier Soluble Qualifier	RL 49.9 49.9 49.9 49.9 49.9 03.183 03.183 03.183 RL	MDL MDL	Unit mg/Kg mg/Kg mg/Kg mg/Kg	D D D	Prepared Prepared 08/05/22 11:58 08/05/22 11:58 08/05/22 11:58 08/05/22 11:58 Prepared 3/ 23: 277 115 / 3/ 23: 277 115 / Prepared	Analyzed 08/08/22 12:38 Analyzed 08/06/22 22:47 08/06/22 22:47 08/06/22 22:47 08/06/22 22:47 <i>Analyzed</i> 3/ 236277 77540 3/ 236277 77540	Dil Fac 1 Dil Fac 1 1 Dil Fac 1 Dil Fac

Eurofins Carlsbad

Released to Imaging: 11/2/2022 11:10:00 AM

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Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
880-17833-A-1-A MS	Matrix Spike	106	94	·	
880-17833-A-1-B MSD	Matrix Spike Duplicate	112	92		
890-2724-1	PH02	122	82		- 5
LCS 880-31801/1-A	Lab Control Sample	103	97		
LCSD 880-31801/2-A	Lab Control Sample Dup	106	97		
MB 880-31680/5-A	Method Blank	98	90		
MB 880-31801/5-A	Method Blank	104	91		
Surrogate Legend					
BFB = 4-Bromofluorober	nzene (Surr)				

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2723-A-1-C MS	Matrix Spike	89	90	
890-2723-A-1-D MSD	Matrix Spike Duplicate	89	91	
890-2724-1	PH02	85	100	
LCS 880-31577/2-A	Lab Control Sample	93	96	
LCSD 880-31577/3-A	Lab Control Sample Dup	91	95	
MB 880-31577/1-A	Method Blank	89	107	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Job ID: 890-2724-1 SDG: 03A1987037

Prep Type: Total/NA

Prep Type: Total/NA

QC Sample Results

Client: Ensolum Project/Site: RDX 21-21

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31680/5-	Α									Client Sa	ample ID:	Method	d Blank
Matrix: Solid											Prep	Type: T	otal/NA
Analysis Batch: 31685											Pre	p Batch	: 31680
	М	в мв											
Analyte	Resu	It Qualifier	RL		MDL	Unit		D	P	repared	Analy	/zed	Dil Fac
Benzene	<0.0020	0 U	0.00200			mg/Kg		_	08/0	8/22 08:17	08/08/22	2 12:03	1
Toluene	<0.0020	0 U	0.00200			mg/Kg			08/0	8/22 08:17	08/08/22	2 12:03	1
Ethylbenzene	<0.0020	0 U	0.00200			mg/Kg			08/0	8/22 08:17	08/08/22	2 12:03	1
m-Xylene & p-Xylene	<0.0040	0 U	0.00400			mg/Kg			08/0	8/22 08:17	08/08/22	2 12:03	1
o-Xylene	<0.0020	0 U	0.00200			mg/Kg			08/0	8/22 08:17	08/08/22	2 12:03	1
Xylenes, Total	<0.0040	0 U	0.00400			mg/Kg			08/0	8/22 08:17	08/08/22	2 12:03	1
	М	B MB											
Surrogate	%Recover	y Qualifier	Limits						P	repared	Analy	/zed	Dil Fac
4-Bromofluorobenzene (Surr)	1	7	03 - 8/ 3						3728	72: 37580	372372 :	8:53/	8
8,4-Difluorobenzene (Surr)	1	3	03 - 8/ 3						37 <i>2</i> 8	72: 37580	372372 :	8:53/	8
Lab Sample ID: MB 880-31801/5-	A									Client Sa	ample ID:	Method	Blank
Matrix: Solid											Prep	Type: 1	otal/NA
Analysis Batch: 31685	м	в мв									Pre	p Batch	: 31801
Analyte	Resu	It Qualifier	RL		MDL	Unit		D	P	repared	Analy	/zed	Dil Fac
Benzene	<0.0020	0 U	0.00200			mg/Kg		_	08/0	8/22 15:42	08/08/22	2 22:58	1
Toluene	<0.0020	0 U	0.00200			mg/Kg			08/0	8/22 15:42	08/08/22	2 22:58	1
Ethylbenzene	<0.0020	0 U	0.00200			mg/Kg			08/0	8/22 15:42	08/08/22	2 22:58	1
m-Xylene & p-Xylene	<0.0040	0 U	0.00400			ma/Ka			08/0	8/22 15:42	08/08/22	2 22:58	1
o-Xvlene	<0.0020	0 U	0.00200			ma/Ka			08/0	8/22 15:42	08/08/22	2 22:58	1
Xylenes Total	<0.0040	0 U	0.00400			ma/Ka			08/0	8/22 15:42	08/08/22	22.58	. 1
	M	B MR	0.00100			ing/itg			00,0	0,22 10.12	00/00/22	22.00	·
Surrogato	% Pacava	o wo	Limite						D	roparad	Anah	and	Dil Eac
A Bromofluorobenzene (Surr)									2700	72 . 8054.		·· 807	
8 4-Difluorobenzene (Surr)	1	7 8	03 8/3						3723	72 · 8054	372372		8
-	,	•							0, 10	12. 0001.	01212.		Ũ
Lab Sample ID: LCS 880-31801/1	-A							С	lient	Sample	ID: Lab C	Control S	Sample
Matrix: Solid											Prep	Type: T	otal/NA
Analysis Batch: 31685											Pre	p Batch	: 31801
-			Spike	LCS	LCS	;					%Rec		
Analyte			Added	Result	Qua	lifier	Unit		D	%Rec	Limits		
Benzene			0.100	0.1012			mg/Kg			101	70 - 130		
Toluene			0.100	0.09868			mg/Kg			99	70 - 130		
Ethylbenzene			0.100	0.1031			mg/Kg			103	70 - 130		
m-Xylene & p-Xylene			0.200	0.2069			mg/Kg			103	70 - 130		
o-Xylene			0.100	0.1139			mg/Kg			114	70 - 130		
Surrogata	«Pecovery O	S	Limite										
A Bromofluorobenzene (Surr)	22/	laintei	02 8/2										
8,4-Difluorobenzene (Surr)	10		03 - 8/ 3										
-													
Lab Sample ID: LCSD 880-31801/	/ 2-A						Cli	ent	Sam	ple ID: L	ab Contr	ol Samp	le Dup
Matrix: Solid											Prep	Type: T	otal/NA
Analysis Batch: 31685						_					Pre	p Batch	: 31801
			Spike	LCSD	LCS	D.			-	~ -	%Rec		RPD
			Added	Result	Qua	lifier	Unit		0	%Rec	Limits		Limit
			0.100	0.09009			mg/r\g			90	10 - 130	12	30

5

7

Job ID: 890-2724-1 SDG: 03A1987037

QC Sample Results

Project/Site: RDX 21-21

Method: 8021B - Volatile Organ

lethod: 8021B - Volatile Organic Compo	unds (GC) (Cont	inued)								
Lab Sample ID: LCSD 880-31801/2-A Matrix: Solid Analysis Batch: 31685				Clier	nt Sam	nple ID:	Lab Contro Prep 1 Pren	l Sampl ype: To Batch:	e Dup tal/NA 31801	4
Analysis Baton. 61000	Spike	LCSD	LCSD				%Rec	Daton	RPD	5
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Toluene	0.100	0.08972		mg/Kg		90	70 - 130	10	35	6
Ethylbenzene	0.100	0.09649		mg/Kg		96	70 - 130	7	35	
m-Xylene & p-Xylene	0.200	0.1946		mg/Kg		97	70 - 130	6	35	7
o-Xylene	0.100	0.1077		mg/Kg		108	70 - 130	6	35	
LCSD LCSI	ס									8

	LOOD	LUUD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	83h		03 - 8/ 3
8,4-Difluorobenzene (Surr)	10		03 - 8/ 3

Lab Sample ID: 880-17833-A-1-A MS Matrix: Solid

Analysis Batch: 31685

Rec
nits
_ 130
- 130
- 130
- 130
- 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	83h		03 - 8/ 3
8,4-Difluorobenzene (Surr)	14		03 - 8/ 3

Lab Sample ID: 880-17833-A-1-B MSD Matrix: Solid

Analysis Batch: 31685

8,4-Difluorobenzene (Surr)

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U F1	0.0996	0.04430	F1	mg/Kg		44	70 - 130	20	35
Toluene	<0.00201	U F1	0.0996	0.02686	F1	mg/Kg		27	70 - 130	27	35
Ethylbenzene	<0.00201	U F1	0.0996	0.01866	F1	mg/Kg		19	70 - 130	26	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.03797	F1	mg/Kg		19	70 - 130	23	35
o-Xylene	<0.00201	U F1 F2	0.0996	0.01578	F1 F2	mg/Kg		16	70 - 130	44	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	88:		03 - 8/ 3								

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

1:

Lab Sample ID: MB 880-31577/1-A Matrix: Solid							Client Sa	mple ID: Metho Prep Type: 1	d Blank ſotal/NA
Analysis Batch: 31631								Prep Batch	n: 31577
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/05/22 11:58	08/06/22 20:38	1
(GRO)-C6-C10									

03 _ 8/ 3

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Job ID: 890-2724-1

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA Prep Batch: 31801

Client Sample ID: Matrix Spike

Prep Type: Total/NA

QC Sample Results

Project/Site: RDX 21-21

Job ID: 890-2724-1 SDG: 03A1987037

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

Lab Sample ID: MB 880-31577	/1-A									Client	Sample ID:	Method	Blank
Matrix: Solid											Prep	Type: To	otal/NA
Analysis Batch: 31631											Pre	p Batch	: 31577
	I	MB MB											
Analyte	Res	ult Qualifier	RI	L 	MDL	Unit		D	Р	repared	Analy	zed	Dil Fac
Diesel Range Organics (Over	<50	0.0 U	50.0	0		mg/K	g		08/0	5/22 11:5	8 08/06/22	2 20:38	1
C10-C28)	-50		50	0			~		00/0	E/00 11.E		0.00.00	1
Oli Range Organics (Over 626-636)	<50	0.0 0	50.1	0		mg/K	9		00/0	0/22 11.0	0 00/00/22	20.30	I
	I	MB MB											
Surrogate	%Recove	ery Qualifier	Limits						Р	repared	Analy	/zed	Dil Fac
8-c t lorooa96ne		71	03 - 8/ 3	-				-	3723	8C2: 8850	7 3723h2 :	: 35/7	8
o-Terpt enyl	8	30	03 - 8/ 3						3723	8C2: 8850	7 3723h2 :	: 35/7	8
Lab Sample ID: LCS 880-3157	7/ 2-A							CI	ient	Sampl	e ID: Lab C	control s	Sample
Matrix: Solid											Prep	Type: To	otal/NA
Analysis Batch: 31631											Pre	p Batch	: 31577
			Spike	LCS	LCS						%Rec		
Analyte			Added	Result	Qua	lifier	Unit		<u>D</u>	%Rec	Limits		
Gasoline Range Organics			1000	922.7			mg/Kg			92	70 - 130		
(GRO)-C0-C10 Diesel Range Organics (Over			1000	901 7			ma/Ka			90	70 130		
C10-C28)			1000	501.7			mg/rtg			50	70 - 100		
,													
		.CS											
Surrogate	%Recovery	lualifier	Limits										
o Torot opul	1/		03 - 0/ 3										
o-reipt engi	111		03 - 0/ 3										
Lab Sample ID: LCSD 880-315	77/3-A						Cli	ient :	Sam	nole ID:	Lab Contr	ol Samr	ole Dup
Matrix: Solid											Prep	Type: To	otal/NA
Analysis Batch: 31631											Pre	p Batch	: 31577
			Spike	LCSD	LCS	D					%Rec		RPD
Analyte			Added	Result	Qua	lifier	Unit		D	%Rec	Limits	RPD	Limit
Gasoline Range Organics			1000	905.4			mg/Kg		_	91	70 - 130	2	20
(GRO)-C6-C10													
Diesel Range Organics (Over			1000	879.0			mg/Kg			88	70 - 130	3	20
C10-C28)													
	LCSD L	CSD											
Surrogate	%Recovery G	Qualifier	Limits										
8-ctlorooa96ne	18		03 - 8/ 3										
o-Terpt enyl	1C		03 - 8/ 3										
Lab Sample ID: 890-2723-A-1-0	CMS									Client	t Sample II	D: Matrix	k Spike
Matrix: Solid											Prep	Type: T	otal/NA
Analysis Batch: 31631											Pre	p Batch	: 31577
	Sample S	ample	Spike	MS	MS				_		%Rec		
Analyte	Result C	Qualifier	Added	Result	Qua	lifier	Unit		D	%Rec	Limits		
Gasoline Range Organics	<49.9 L	J	999	1016			mg/Kg			100	70 - 130		
(GRO)-C0-C10 Diesel Range Organics (Over	<49.9 I	J	999	962 5			ma/Ka			94	70, 130		
C10-C28)				502.0						0.	100		
· ·		10											
Summerce	MS N		Lingitz										
Surrogate	mecovery G	wanner	LIMITS										

Eurofins Carlsbad

13

o-Terpt enyl

03 - 8/ 3

Client: Ensolum

Project/Site: RDX 21-21

QC Sample Results

5

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

Lab Sample ID: 890-2723-A-1-	D MSD					С	lient Sa	ample IC	D: Matrix S	pike Dur	olicate
Matrix: Solid									Prep 1	Гуре: То	tal/NA
Analysis Batch: 31631									Prep	Batch:	31577
	Sample	Sample	Spike	MSE	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Resul	t Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U	999	103		mg/Kg		101	70 - 130	1	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	999	981.9)	mg/Kg		96	70 - 130	2	20
C10-C28)											
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
8-ctlorooa96ne	71		03 - 8/ 3	-							
o-Terpt enyl	18		03 _ 8/ 3								
Method: 300.0 - Anions, Ic	on Chromat	ography									
Lab Sample ID: MB 880-31560)/1-A							Client S	Sample ID:	Method	Blank
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 31932											
		MB MB									
Analyte	R	esult Qualifier		RL	MDL Unit		D P	repared	Analyz	ed	Dil Fac
Chloride	<	<5.00 U		5.00	mg/ł	٢g			08/11/22	13:38	1
Lab Sample ID: LCS 990 2456	0/2 4						Client	Somela		ontrol S	omolo
Lab Sample ID. LCS 860-5156	0/2-A						Client	Sample	Drop	Tupor S	ample
Matrix. Solid									Frep	Type: 5	elanio
Analysis Batch: 31932			Cuilto						% Dee		
Analyta			Spike	LU		l la it		% Dee	%Rec		
			Added	249							
Chionde			200	240.4	ł	iiig/Kg		99	90 - 110		
Lab Sample ID: LCSD 880-315	560/3-A					Clie	ent Sam	nole ID:	Lab Contro	Sampl	e Dup
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 31932										.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
·			Spike	LCS	LCSD				%Rec		RPD
Analyte			Added	Resul	t Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	248.0)	mg/Kg		99	90 - 110	0	20
Lab Sample ID: 890-2722-A-12	2-B MS							Client	Sample ID	: Matrix	Spike
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 31932											
	Sample	Sample	Spike	MS	6 MS				%Rec		
Analyte	Result	Qualifier	Added	Resul	t Qualifier	Unit	D	%Rec	Limits		
Chloride	200		250	458.6	<u> </u>	mg/Kg		104	90 - 110		
						-					
Lab Sample ID: 890-2722-A-12	2-C MSD					C	lient Sa	ample IE	D: Matrix S	JIKE Dup	olicate
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 31932											
	Sample	Sample	Spike	MSE	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Resul	t Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	200		250	475.0)	mg/Kg		110	90 - 110	4	20

QC Association Summary

Client: Ensolum Project/Site: RDX 21-21

5 6 7

Job ID: 890-2724-1 SDG: 03A1987037

GC VOA

Prep Batch: 31680

Lab Sample ID	Client Sample ID	Client Sample ID Prep Type Matrix		Method			
MB 880-31680/5-A	Method Blank	Total/NA	Solid	5035			
Analysis Batch: 31685							
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch		
890-2724-1	PH02	Total/NA	Solid	8021B	31801		
MB 880-31680/5-A	Method Blank	Total/NA	Solid	8021B	31680		
MB 880-31801/5-A	Method Blank	Total/NA	Solid	8021B	31801		
LCS 880-31801/1-A Lab Control Sample		Total/NA	Solid	8021B	31801		
LCSD 880-31801/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31801		
880-17833-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	31801		
880-17833-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	31801		
Prep Batch: 31801							
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch		
890-2724-1	PH02	Total/NA	Solid	5035			
MB 880-31801/5-A	Method Blank	Total/NA	Solid	5035			
LCS 880-31801/1-A	Lab Control Sample	Total/NA	Solid	5035			
LCSD 880-31801/2-A	Lab Control Sample Dup	Total/NA	Solid	5035			
880-17833-A-1-A MS	Matrix Spike	Total/NA	Solid	5035			
880-17833-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035			
Analysis Batch: 31845							
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch		
890-2724-1	PH02	Total/NA	Solid	Total BTEX			

GC Semi VOA

Prep Batch: 31577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2724-1	PH02	Total/NA	Solid	8015NM Prep	
MB 880-31577/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-31577/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-31577/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2723-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2723-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 31631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2724-1	PH02	Total/NA	Solid	8015B NM	31577
MB 880-31577/1-A	Method Blank	Total/NA	Solid	8015B NM	31577
LCS 880-31577/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	31577
LCSD 880-31577/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	31577
890-2723-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	31577
890-2723-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	31577
Analysis Batch: 31761					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2724-1	PH02	Total/NA	Solid	8015 NM	_

QC Association Summary

Client: Ensolum Project/Site: RDX 21-21 Job ID: 890-2724-1 SDG: 03A1987037

HPLC/IC

Leach Batch: 31560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	4
890-2724-1	PH02	Soluble	Solid	DI Leach		
MB 880-31560/1-A	Method Blank	Soluble	Solid	DI Leach		5
LCS 880-31560/2-A	Lab Control Sample	Soluble	Solid	DI Leach		
LCSD 880-31560/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach		6
890-2722-A-12-B MS	Matrix Spike	Soluble	Solid	DI Leach		
890-2722-A-12-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach		
Analysis Batch: 31932						0
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	Ō
890-2724-1	PH02	Soluble	Solid	300.0	31560	9
MB 880-31560/1-A	Method Blank	Soluble	Solid	300.0	31560	
LCS 880-31560/2-A	Lab Control Sample	Soluble	Solid	300.0	31560	
LCSD 880-31560/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31560	
890-2722-A-12-B MS	Matrix Spike	Soluble	Solid	300.0	31560	
890-2722-A-12-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	31560	
						13

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method P	rep Batch
890-2724-1	PH02	Soluble	Solid	300.0	31560
MB 880-31560/1-A	Method Blank	Soluble	Solid	300.0	31560
LCS 880-31560/2-A	Lab Control Sample	Soluble	Solid	300.0	31560
LCSD 880-31560/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31560
890-2722-A-12-B MS	Matrix Spike	Soluble	Solid	300.0	31560
890-2722-A-12-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	31560

Eurofins Carlsbad

Job ID: 890-2721-P RDa : 0dy P9870d7

Lab Sample ID: 890-2724-1 Matrix: Solid

Date Collected: 08/03/22 09:15 Date Received: 08/04/22 07:57

Client Sample ID: PH02

Client: Ensolum

r joæ/tSRite: XDG 2P-2P

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
5ot3lSTy	r jeN	MDdM			M60dA	Mm4	dP80P	08\$08\$22 PM12	pХ	EE5 p ID
5ot3lSTy	yn3l. sis	802Pg		Р	Mm4	Mm4	dPL8M	08\$09\$22 0M08	рХ	EE5 p ID
5ot3ISTy	yn3l. sis	5ot3l g5EG		Р			dP81M	08\$09\$22 P0:d1	Rp	EE5 p ID
5ot3lSTy	yn3l. sis	80PMTp		Р			dP7LP	08\$08\$22 P2:d8	Rp	EE5 p ID
5ot3lSTy	r jeN	80PMTp rjeN			P060d A	P0 m4	dPM77	08\$0M522 PP:M8	Dp	EE5 p ID
5ot3lSTy	yn3l. sis	80 PMg Tp		Р			dPLdP	08\$0L\$22 22:17	Rp	EE5 p ID
Roluble	4e3/ B	DI 4e3/ B			M60dA	M0 m4	dPML0	08\$0M522 P0:d2	Ch	EE5 p ID
Roluble	yn3l. sis	d0060		Р	0 m4	P60 m4	dP9d2	08\$\$P\$22 P8:0L	Ch	EE5 p ID

Laboratory References:

EE5 p ID H Eujofins p i=I3n=, P2PP W6Floji=3 y ve, p i=I3n=, 5G 7970P, 5E4 (1d2)701-M110

Eujofins C3jlsb3=

Released to Imaging: 11/2/2022 11:10:00 AM

Accreditation/Certification Summary

Client: Ensolum r joœ/tSRite: XDG 2P-2P

Laboratory: Eurofins Midland

Nnless otMejUise notehw, II , n, If tes voj tMs I, boj, tojf Ueje / o. ejeh unhej e, / M, //jehit, tionSejtivi/, tion beloUT

Authority xeL, s		ogram	Identification Number	Expiration Date
		E4yr	xP01701100-22-21	06-d0-2d
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tMe, 3en/f hoes not o	, je m/ unen in uws jegojuwou wej / ejtivi/, tion T	ut tive i, boj, toji is not / ej tiv	en bi uve so. ejnins , uuvojiu i xivis iistin,	T In/lune, n, it les log Ow
tMe, 3en/f hoes not o y n, lfsis p etMoh	, je m/nunen mitwisjegojtwot wej / ejtivi/, tion T r jeg petMoh	p, tjiL	yn, lfte	
tMe volioUin3 , n, if tes tMe , 3en/f hoes not o y n, If sis p etMbh 80P5 Ap	, je m/ unen in uns jegojuwo wej / ejtivi/, tion T r jeg p etMoh	p , tjiL Rolih	yn, lf te xot, I xr H	

Job ID: 890-2721-P

Eujovins C, jlsb, h

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RDa: 0dy P9870d7

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Method Summary

lientEstuoimS dyoNNMEEGeEn∷jDc2C-2C Job ID: 890-2721-C GDR: 0r a C9870r 7

Method	Method Description	Protocol	Laboratory
802CW	4oi6Ben ByV6teMIoSComtgupRI(G/ 81X	ss) TID
)oE6iW),sc)oE6iW)scl6iMmi6Ee∋t) a A GB d	ss) TID
800L 5 T	Den un ij6tVn ByV6tekku pDjB(pRI(G/ 81X	ss) TID
80CLW5 T	Den un ij6tVn ByV6tekku pDjB(pRI(G/ 81X	ss) TID
r 0030	ateotu.lot I, yoS6EoVy6Q,h	TI a/ /	ss) TID
L0r L	lioung GhuEnS dmyVn 6tg)y6O	G/ 81X	ss) TID
80 CL5 Tdyn O	TeMjonxEj6Meet	G/ 81X	ss) TID
DI An6M	Dneotezng / 6EnyAn6M, etVdyoMngmyn	aG) T	ss) TID

Protocol References:

aG)T = aG)T ltEnyt6Eest6i

TI a// = "Tn E, ogu FoyI, n Solv6iat 6ihueu Bf/ 6Ebyatg/ 6uEbu". sda-X001PI-79-020. T6yM, CO38r atg GmbunqmmtEj nveueo tu3 G/ 81X = ") nuET n E, ogu Foys v6im6Be V Goieg / 6uEb. d, huelv6iPP, n Solv6iT n E, ogu".), eyg sgebeot. 5 ovn Sbny CO38X atg IEb UCg6Ebu3) a A GBd =) nuEa Snyelv6 A6boy6Ebyenu. GEbt g6yg B Ony6Be V dyoMngmyn

Laboratory References:

ss) TID = smyofetu Tegi6tg. C2CC/ 3Fioyeg6 avn. Tegi6tg.) c 7970C.) sAp1r2(701-L110

smyofetul 6yiub6g

Sample Summary

Client: Ensolum Project/Site: RDX 21-21 Job ID: 890-2724-1 SDG: 03A1987037

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-2724-1	PH02	Solid	08/03/22 09:15	08/04/22 07:57	6	4
						5
						6
						7
						8
						9
						12
						13

Work Order No:	Work Order Comments	ram: UST/PST PRP Brownfields RRC Superfund	of Project:	rting: Level II CLevel III C PST/UST T TRRP C Level IV	erables: EDD 🗌 ADaPT 🔲 Other:	Preservative Codes	None: NO DI Water: H ₂ O	Cool: Cool MeOH: Me	П П П Н НСL: HC HNO3: HN	H ₃ PO4: HP	NaHSO4: NABIS		Zh Acetate+NaOH: Zh NrOH+ Ascortic Acid: SAPC		Sample Comments			nAB1621049514					1, Mo Ni K Se Ag SiO ₂ Na Sr TI Sn U V Zn Ag TI U Hg:1631/245.1/7470/7471	ins standard terms and conditions o circumstances beyond the control enforced unless previously negotiated.	Received by: (Signature) Date/Time		
11) 240-4200. Daltas, TX (214) 902-0300 704-5440, San Antonio, TX (210) 509-3334 5) 585-3443. Lubbock, TX (806) 794-1296) 392-7550, Cartsbad, NM (575) 988-3199	n Ralev	Prod	15 Briena Vista Dr	risbad NM 88220 Repo	com. jim raley@dvn.com	ANALYSIS REQUEST						890-2724 Chain of Custo		510	102/102	× × ×							As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg N As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se	pany to Eurofins Xenco, its affiliates and subcontractors. It assig osses or expenses incurred by the client if such losses are due t bmitted to Eurofins Xenco, but not analyzed. These terms will be	ate/Time Relinquished by: (Signature)	22 1650 2	4
Houston, TX (28 Midland, TX (432) EL Paso, TX (91; Hobbs, NM (575)	Bill to: (if different)	Company Name:	Address 53	City State ZIP: Ca	hernandez@Ensolum.	Around	Code	5 DAY TAT	day received by sived by 4:30pm s	Yes No	NM_007	2d	201	- d)- (1)	Depth Grab/ # of Comp Cont	6' Grab/ 1 >			0.32	1 2		 	 PM Texas 11 AI Sb PLP 6010: 8RCRA Sb	Nurchase order from client com ime any responsibility for any I harge of \$5 for each sample su	ture) Da	8-3-5	
DS Environment Testing Xenco	Hernandez		3 Notional Darks HMV		-702-2329 Email. []	Turn	1987037	al Eddy, NM Due Date:	TAT starts the TAT starts the tab. If rece	Temp Blank: (Yes) No Wet Ice:	Yes No Thermometer ID:	Yes No (N/A) Correction Factor:	Yes No N/A Temperature Reading:	Corrected I emperature:	ation Matrix Date Time Sampled	S 8.3.22 9:15 (and m	C		 200.8 / 6020: 8RCRA 13P letal(s) to be analyzed TCLP / SF	ment and relinquishment of samples constitutes a valid p the liable only for the cost of samples and shall not assu to bargo of \$65.00 will be applied to each project and a ch	anature) / Received by: (Signat	and ANN Cide	
🛟 eurofir	Droiard Managar: 060		Address 2100	City State 7ID: Carle	Phone: 281-	Droiect Name	Project Number: 03A1	Project Location: Rura	Sampler's Name: Gilbt	SAMPLE RECEIPT	Samples Received Intact:	Cooler Custody Seals:	Sample Custody Seals:	Total Containers:	Sample Identifica	PH02							Total 200.7 / 6010 Circle Method(s) and M	Notice: Signature of this docum of service. Eurofins Xenco Will of Eurofins Xenco. A minimum (Relinauished/by: (Sic	Reper	3

Chain of Custody

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Job Number: 890-2724-1 SDG Number: 03A1987037

List Source: Eurofins Carlsbad

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 2724 List Number: 1 Creator: Clifton, Cloe

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

N/A

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Job Number: 890-2724-1 SDG Number: 03A1987037

List Source: Eurofins Midland

List Creation: 08/05/22 10:35 AM

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 2724 List Number: 2 Creator: Rodriguez, Leticia

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

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

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	154377
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	When the site is no longer in use for oil and gas operations it must meet the requirements of 19.15.29.13 NMAC.	11/2/2022

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Action 154377