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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NCS1927552019
District RP	
Facility ID	
Application ID	

Release Notification

DENIED

Responsible Party

Responsible Party: LOGOS Operating, LLC	OGRID: 289408
Contact Name: Larissa Farrell	Contact Telephone: 505-787-2027
Contact email: lfarrell@logosresourcesllc.com	Incident # *(assigned by OCD)*
Contact mailing address: 2010 Afton Place Farmington, NM 87401	

Location of Release Source

Latitude 36.8723412 Longitude -107.3201752
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Rosa Unit 376A	Site Type: Well
Date Release Discovered: 9/13/2019	API# *(if applicable)*: 30-039-29705

Unit Letter	Section	Township	Range	County
E	25	31N	5W	Rio Arriba

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

* Closure Report Does not meet Requirements of 19.15.12 NMAC - No photos of remediation. Review and Resubmit no later than 3/30/2020

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls): Unknown	Volume Recovered (bbls): 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: The cause of this release is unknown. OCD inspectors found signs of release in secondary containment. The area will be delineated and remediation will be conducted to the area. The secondary containment is not lined.

State of New Mexico
Oil Conservation Division

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

☒ The source of the release has been stopped.

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

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

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

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

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

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

Printed Name: Larissa Farrell Title: Regulatory/Environmental Technician

Signature: Larissa Farrell Date: 9/16/19

email: lfarrell@logosresourcesllc.com Telephone: (505) 787-2027

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

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

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

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

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
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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: _Larissa Farrell_____ Title: ____Env/Reg Technician_____

Signature: Larissa Farrell Date: __11/22/2019_____

email: _lfarrell@logosresourcesllc.com_____ Telephone: _(505) 787-2027_____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: ***Each of the following items 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.

Printed Name: Larissa Farrell Title: Env/Reg Technician

Signature: Larissa Farrell Date: 11/22/19

email: lfarrell@logosresourcesllc.com Telephone: (505)787-2027

OCD Only

Received by: Date:

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: DENIED Date:

Printed Name: Title:

LOGOS RESOURCES II, LLC

2010 Afton Place
Farmington, NM 87401
Phone: (505) 278-8720
Fax: (505) 326-6112

November 22, 2019

Cory Smith
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Re: nCS1927552019
Rosa Unit 376A Remediation Activity
30-039-29705
E - Sec. 25, T31N, R05W
Rio Arriba County, New Mexico

Dear Mr. Smith.

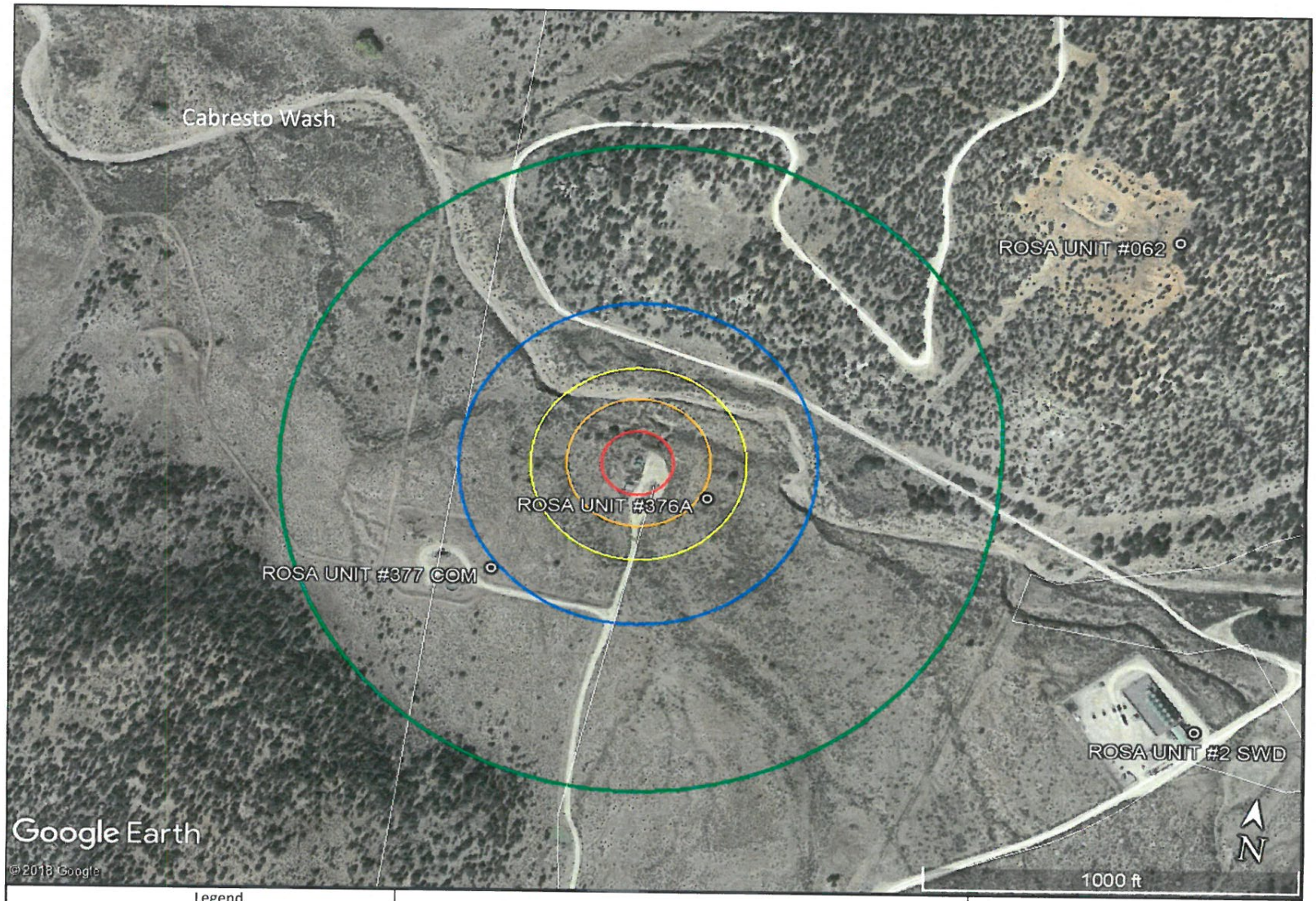
LOGOS Operating, LLC discovered an unknown release at the Rosa Unit 376A that remained within the secondary containment. LOGOS pulled all remaining standing water and applied nitrogen and gypsum to the affected area. LOGOS scheduled the confirmation sampling on 11/1/2019 with the NMOCD. Two 5-point composite sample were collected from within the secondary containment and delivered on ice to Envirotech Laboratories. The closest depth to ground water is located 5401' away in Section 33, T31N, R04W with record depth to groundwater at 112' bgs. The results from the sampling confirmed the NMAC 19.15.29.12 (E) Table I closure criteria has been met.

Sincerely,

Larissa Farrell

Larissa Farrell
Environmental/Regulatory Technician

Legend	LOGOS Operating, LLC –Rosa Unit 376A Scaled Site Map Unit E, Section 25, T31N, R5W Rio Arriba County, NM	LOGOS RESOURCES II, LLC
Impacted Area		



Legend

- 100' Radius
- 200' Radius
- 300' Radius
- 500' Radius
- 1000' Radius

LOGOS Operating, LLC – Rosa Unit 376A
Aerial Map
Unit E, Section 25, T31N, R5W
Rio Arriba County, NM

LOGOS RESOURCES II, LLC

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
SJ 00049		SJ	RA			3	33	31N	04W	298080	4080910*	5401	112	80	32
SJ 02384		SJ	RA	3	1	3	07	30N	04W	294736	4077762*	5674	185	95	90
SJ 02886		SJ	SJ	4	2	2	28	31N	04W	299249	4083393*	6051	150		
SJ 04039 POD1		SJ	SJ	2	3	2	14	30N	05W	292702	4076834	6409	275		
SJ 03556		SJ	RA	4	2	4	06	30N	05W	286796	4079673*	7322	450	250	200
SJ 02771		SJ	RA	2	1	1	17	30N	05W	287141	4077449*	8369	325	137	188

Average Depth to Water: **140 feet**
Minimum Depth: **80 feet**
Maximum Depth: **250 feet**

Record Count: 6

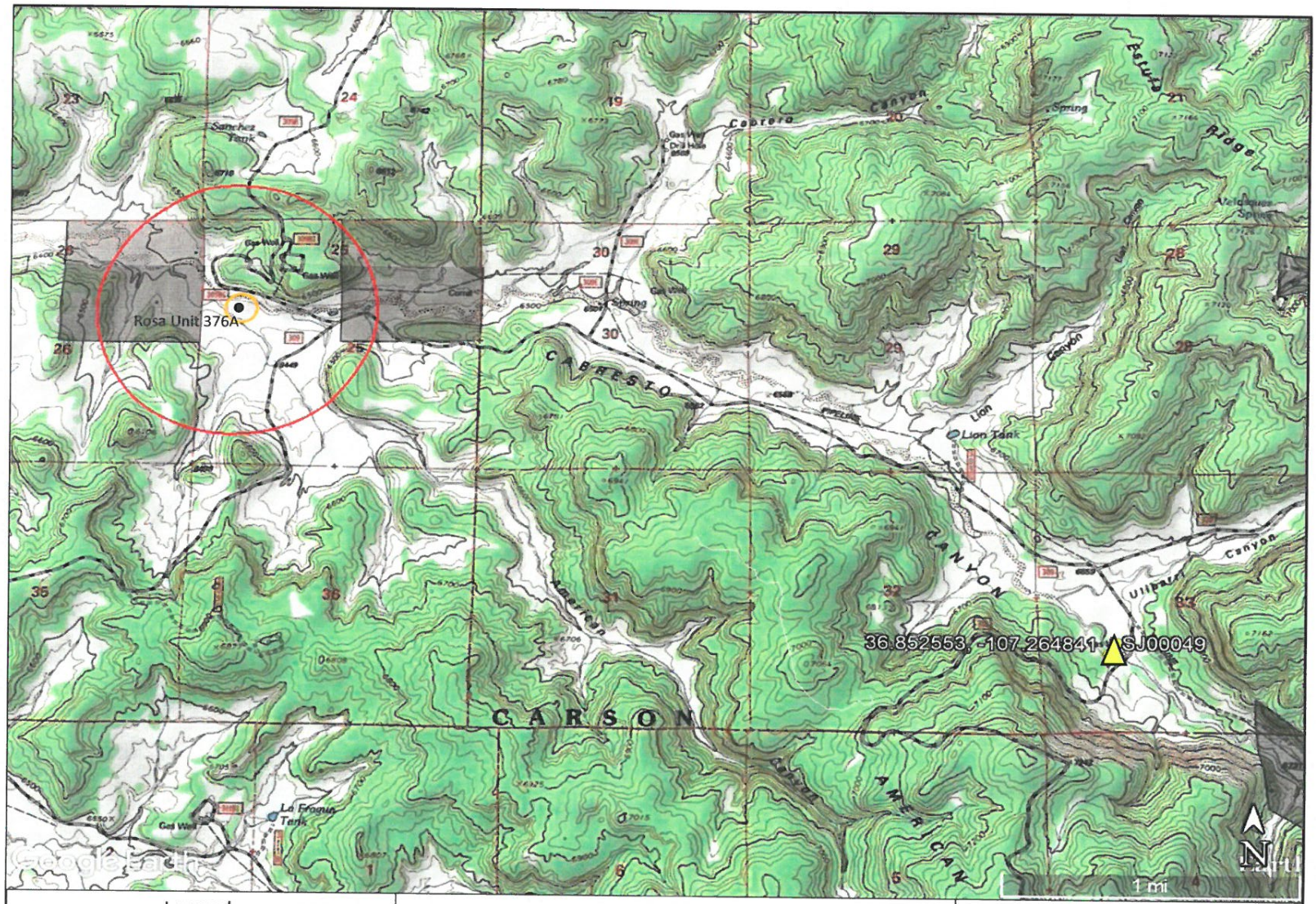
UTMNAD83 Radius Search (in meters):

Easting (X): 293199.38 Northing (Y): 4083224.13 Radius: 10000

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

11/21/19 10:06 AM

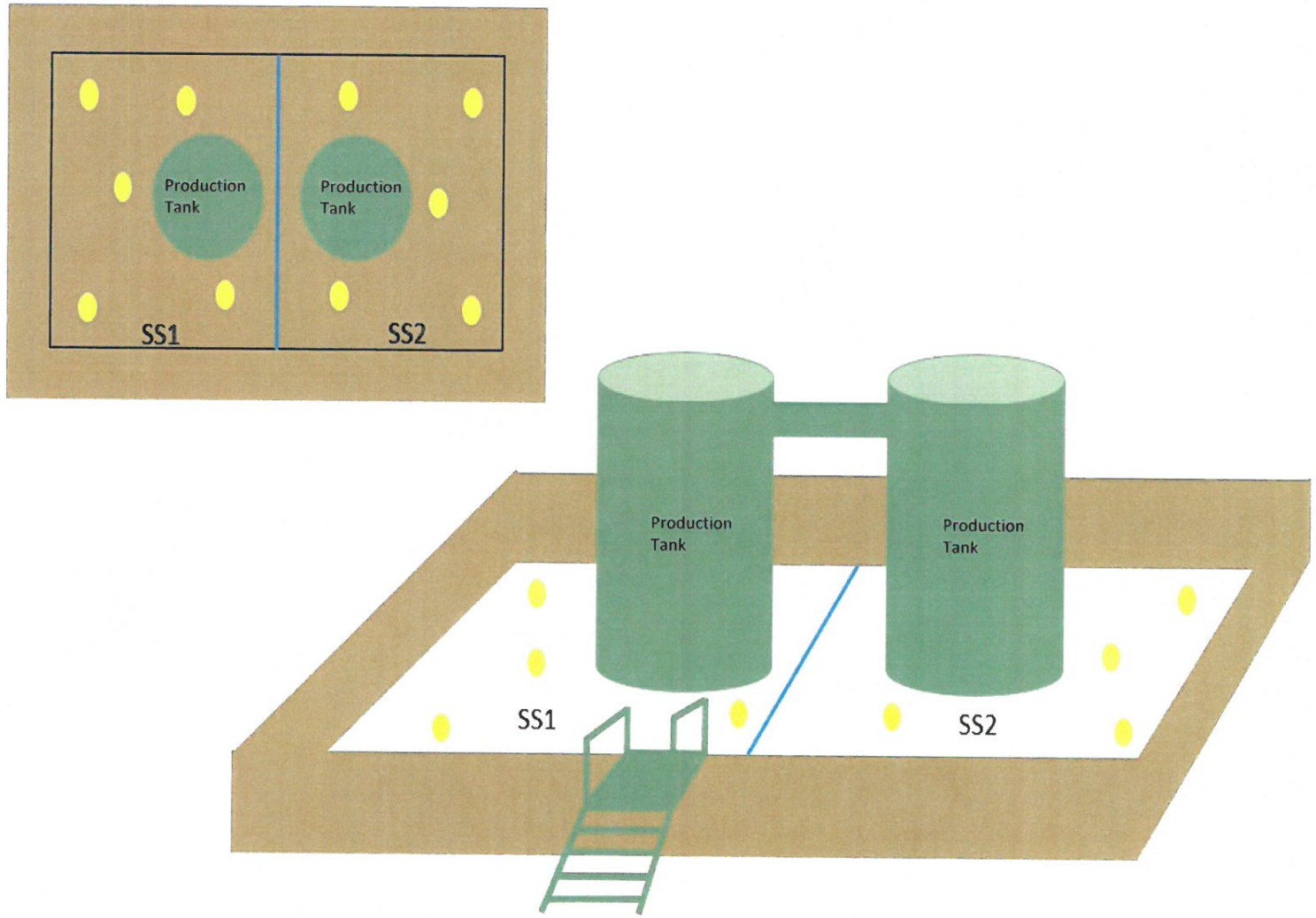
WATER COLUMN/ AVERAGE DEPTH TO WATER



Legend
- ½ mile radius
- 300' radius
- SJ00049 POD

LOGOS Operating, LLC – Rosa Unit 376A
Hydrology Map
Unit E, Section 25, T31N, R5W
Rio Arriba County, NM

LOGOS RESOURCES II, LLC



Legend	LOGOS Operating, LLC – Rosa Unit 376A Sampling Diagram Unit E, Section 25, T31N, R5W Rio Arriba County, NM	LOGOS RESOURCES II, LLC
Sampling point		

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Analytical Laboratory

Analytical Report

Report Summary

Client: Logos Operating, LLC

Samples Received: 11/1/2019
Job Number: 12035-0114
Work Order: P911003
Project Name/Location: Rosa Unit

Report Reviewed By: Walter Hinchman Date: 11/11/19

Walter Hinchman, Laboratory Director

Supplement to analytical report generated on: 11/7/19 7:14 am

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

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Analytical Laboratory

Logos Operating, LLC	Project Name:	Rosa Unit	
PO Box 18	Project Number:	12035-0114	**Reported:**
Flora Vista NM, 87415	Project Manager:	Larissa Farrell	11/11/19 15:45

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Rosa Unit 376A SS1	P911003-01A	Soil	11/01/19	11/01/19	Glass Jar, 4 oz.
	P911003-01B	Soil	11/01/19	11/01/19	Glass Jar, 4 oz.
Rosa Unit 376A SS2	P911003-02A	Soil	11/01/19	11/01/19	Glass Jar, 4 oz.
	P911003-02B	Soil	11/01/19	11/01/19	Glass Jar, 4 oz.
Rosa Unit 322A	P911003-03A	Soil	11/01/19	11/01/19	Glass Jar, 4 oz.
	P911003-03B	Soil	11/01/19	11/01/19	Glass Jar, 4 oz.
Rosa Unit 312	P911003-04A	Soil	11/01/19	11/01/19	Glass Jar, 4 oz.
	P911003-04B	Soil	11/01/19	11/01/19	Glass Jar, 4 oz.

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Logos Operating, LLC	Project Name:	Rosa Unit	
PO Box 18	Project Number:	12035-0114	**Reported:**
Flora Vista NM, 87415	Project Manager:	Larissa Farrell	11/11/19 15:45

Rosa Unit 376A SS1
P911003-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*100 %*		*50-150*	*1944038*	*11/01/19*	*11/04/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945003	11/04/19	11/04/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1945003	11/04/19	11/04/19	EPA 8015D	
Surrogate: n-Nonane		*95.8 %*		*50-200*	*1945003*	*11/04/19*	*11/04/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.4 %*		*50-150*	*1944038*	*11/01/19*	*11/04/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**71.6**	40.0	mg/kg	2	1945002	11/04/19	11/05/19	EPA 300.0/9056A	

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Analytical Laboratory

Logos Operating, LLC	Project Name:	Rosa Unit	
PO Box 18	Project Number:	12035-0114	**Reported:**
Flora Vista NM, 87415	Project Manager:	Larissa Farrell	11/11/19 15:45

Rosa Unit 376A SS2
P911003-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*		*50-150*	*1944038*	*11/01/19*	*11/04/19*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1945003	11/04/19	11/04/19	EPA 8015D	
Oil Range Organics (C28-C40)	**59.9**	50.0	mg/kg	1	1945003	11/04/19	11/04/19	EPA 8015D	
Surrogate: n-Nonane		*102 %*		*50-200*	*1945003*	*11/04/19*	*11/04/19*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1944038	11/01/19	11/04/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.2 %*		*50-150*	*1944038*	*11/01/19*	*11/04/19*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**120**	40.0	mg/kg	2	1945002	11/04/19	11/05/19	EPA 300.0/9056A	

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Logos Operating, LLC	Project Name:	Rosa Unit	
PO Box 18	Project Number:	12035-0114	**Reported:**
Flora Vista NM, 87415	Project Manager:	Larissa Farrell	11/11/19 15:45

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1944038 - Purge and Trap EPA 5030A										
Blank (1944038-BLK1)				Prepared: 11/01/19 1 Analyzed: 11/04/19 2						
Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	*8.19*		"	*8.00*		*102*	*50-150*			
LCS (1944038-BS1)				Prepared: 11/01/19 1 Analyzed: 11/05/19 0						
Benzene	5.05	0.0250	mg/kg	5.00		101	70-130			
Toluene	5.15	0.0250	"	5.00		103	70-130			
Ethylbenzene	5.04	0.0250	"	5.00		101	70-130			
p,m-Xylene	10.0	0.0500	"	10.0		100	70-130			
o-Xylene	4.98	0.0250	"	5.00		99.6	70-130			
Total Xylenes	15.0	0.0250	"	15.0		100	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.53*		"	*8.00*		*94.2*	*50-150*			
Matrix Spike (1944038-MS1)	**Source: P910199-01**			Prepared: 11/01/19 1 Analyzed: 11/05/19 1						
Benzene	5.02	0.0250	mg/kg	5.00	ND	100	54.3-133			
Toluene	5.13	0.0250	"	5.00	ND	103	61.4-130			
Ethylbenzene	5.03	0.0250	"	5.00	ND	101	61.4-133			
p,m-Xylene	10.0	0.0500	"	10.0	ND	100	63.3-131			
o-Xylene	5.03	0.0250	"	5.00	ND	101	63.3-131			
Total Xylenes	15.0	0.0250	"	15.0	ND	100	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	*8.25*		"	*8.00*		*103*	*50-150*			
Matrix Spike Dup (1944038-MSD1)	**Source: P910199-01**			Prepared: 11/01/19 1 Analyzed: 11/05/19 1						
Benzene	5.06	0.0250	mg/kg	5.00	ND	101	54.3-133	0.683	20	
Toluene	5.10	0.0250	"	5.00	ND	102	61.4-130	0.505	20	
Ethylbenzene	5.00	0.0250	"	5.00	ND	100	61.4-133	0.591	20	
p,m-Xylene	9.95	0.0500	"	10.0	ND	99.5	63.3-131	0.697	20	
o-Xylene	4.96	0.0250	"	5.00	ND	99.2	63.3-131	1.30	20	
Total Xylenes	14.9	0.0250	"	15.0	ND	99.4	63.3-131	0.899	20	
Surrogate: 4-Bromochlorobenzene-PID	*8.13*		"	*8.00*		*102*	*50-150*			

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Analytical Laboratory

Logos Operating, LLC	Project Name:	Rosa Unit	
PO Box 18	Project Number:	12035-0114	**Reported:**
Flora Vista NM, 87415	Project Manager:	Larissa Farrell	11/11/19 15:45

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1945003 - DRO Extraction EPA 3570										
Blank (1945003-BLK1)				Prepared: 11/04/19 1 Analyzed: 11/05/19 0						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*53.9*		"	*50.0*		*108*	*50-200*			
LCS (1945003-BS1)				Prepared & Analyzed: 11/04/19 1						
Diesel Range Organics (C10-C28)	480	25.0	mg/kg	500		96.0	38-132			
Surrogate: n-Nonane	*48.8*		"	*50.0*		*97.6*	*50-200*			
Matrix Spike (1945003-MS1)	**Source: P910199-01**			Prepared & Analyzed: 11/04/19 1						
Diesel Range Organics (C10-C28)	506	25.0	mg/kg	500	ND	101	38-132			
Surrogate: n-Nonane	*48.8*		"	*50.0*		*97.7*	*50-200*			
Matrix Spike Dup (1945003-MSD1)	**Source: P910199-01**			Prepared & Analyzed: 11/04/19 1						
Diesel Range Organics (C10-C28)	517	25.0	mg/kg	500	ND	103	38-132	2.31	20	
Surrogate: n-Nonane	*49.9*		"	*50.0*		*99.9*	*50-200*			

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Analytical Laboratory

Logos Operating, LLC	Project Name:	Rosa Unit	
PO Box 18	Project Number:	12035-0114	**Reported:**
Flora Vista NM, 87415	Project Manager:	Larissa Farrell	11/11/19 15:45

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1944038 - Purge and Trap EPA 5030A										
Blank (1944038-BLK1)				Prepared: 11/01/19 1 Analyzed: 11/04/19 2						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.79*		"	*8.00*		*84.8*	*50-150*			
LCS (1944038-BS2)				Prepared: 11/01/19 1 Analyzed: 11/05/19 1						
Gasoline Range Organics (C6-C10)	46.5	20.0	mg/kg	50.0		92.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.86*		"	*8.00*		*85.7*	*50-150*			
Matrix Spike (1944038-MS2)	**Source: P910199-01**			Prepared: 11/01/19 1 Analyzed: 11/05/19 1						
Gasoline Range Organics (C6-C10)	48.1	20.0	mg/kg	50.0	ND	96.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.82*		"	*8.00*		*85.3*	*50-150*			
Matrix Spike Dup (1944038-MSD2)	**Source: P910199-01**			Prepared: 11/01/19 1 Analyzed: 11/05/19 1						
Gasoline Range Organics (C6-C10)	48.8	20.0	mg/kg	50.0	ND	97.6	70-130	1.41	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.79*		"	*8.00*		*84.8*	*50-150*			

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Analytical Laboratory

Logos Operating, LLC	Project Name:	Rosa Unit	
PO Box 18	Project Number:	12035-0114	**Reported:**
Flora Vista NM, 87415	Project Manager:	Larissa Farrell	11/11/19 15:45

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1945002 - Anion Extraction EPA 300.0/9056A										
Blank (1945002-BLK1)				Prepared: 11/04/19 0 Analyzed: 11/04/19 1						
Chloride	ND	20.0	mg/kg							
LCS (1945002-BS1)				Prepared: 11/04/19 0 Analyzed: 11/04/19 1						
Chloride	256	20.0	mg/kg	250		102	90-110			
Matrix Spike (1945002-MS1)	**Source: P910166-01**			Prepared: 11/04/19 0 Analyzed: 11/04/19 1						
Chloride	284	20.0	mg/kg	250	27.1	103	80-120			
Matrix Spike Dup (1945002-MSD1)	**Source: P910166-01**			Prepared: 11/04/19 0 Analyzed: 11/04/19 1						
Chloride	283	20.0	mg/kg	250	27.1	102	80-120	0.335	20	

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

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Analytical Laboratory

Logos Operating, LLC	Project Name:	Rosa Unit	
PO Box 18	Project Number:	12035-0114	**Reported:**
Flora Vista NM, 87415	Project Manager:	Larissa Farrell	11/11/19 15:45

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information

Chain of Custody

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Client: LOGOS	Report Attention	Lab Use Only	TAT / EPA Program
Project:	Report due by:	Lab WO# P911003	Job Number 2035.0114
Project Manager: Larissa Fanz II	Attention:		1D 3D RCRA CWA SDWA
Address:	Address:		
City, State, Zip	City, State, Zip		
Phone: 505-419-1149	Phone:		
Email: Hanzll@logosresourcesllc.com	Email:		

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	6010 Total P	Remarks
12:31	11/1/19	S	2	Rosa Unit 376A SS1	1	✓	✓	✓			✓		
12:53	11/1/19	S	2	Rosa Unit 376A SS2	2	✓	✓	✓			✓		
11:39	11/1/19	S	2	Rosa Unit 322A	3	✓	✓	✓			✓		
10:33	11/1/19	S	2	Rosa Unit 312	4	✓	✓	✓			✓		

State: NM ✓ | CO | UT | AZ | TX | OK

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	11/1/19	2:44		11-1-19	14:44
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only

Received on ice: (Y) / N

T1 T2 T3

AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech Analytical Laboratory

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-1881 Fx (505) 632-1865

24 Hour Emergency Response Phone (800) 362-1879

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labadmin@envirotech-inc.com

Project Information

Chain of Custody

Page 1 of 1

Page 11 of 11

Client: LOGOS	Report Attention	Lab Use Only	TAT / EPA Program
Project: Rosa Unit	Report due by:	Lab WO# P911003	Job Number 12035-0044
Project Manager: Lanssafarrell	Attention:		1D 3D RCRA CWA SDWA
Address:	Address:		
City, State, Zip	City, State, Zip		State: NM CO UT AZ
Phone: 505-419-1100	Phone:		TX OK
Email: lfarrell@logosresourcesllc.com	Email:		

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	6010 Total P	Remarks
12:3	11/1/19	S	2	Rosa Unit 376A SS1	1	✓	✓	✓			✓		
12:33	11/1/19	S	2	Rosa Unit 376A SS2	2	✓	✓	✓			✓		
11:39	11/1/19	S	2	Rosa Unit 322A	3	✓	✓	✓			✓		
10:33	11/1/19	S	2	Rosa Unit 312	4	✓	✓	✓			✓		

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	11/1/19	2:44		11-1-19	14:44

Lab Use Only
Received on ice: (Y)/ N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

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