

Report to:  
Darren Rowley



5796 U.S. Hwy 64  
Farmington, NM 87401

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



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## Analytical Report

### Logos Resources

Project Name: Bondad 33 9 22A

Work Order: E108018

Job Number: 12035-0114

Received: 8/10/2021

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
8/20/21

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
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Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/20/21



Darren Rowley  
2010 Afton Place  
Farmington, NM 87401

Project Name: Bondad 33 9 22A  
Workorder: E108018  
Date Received: 8/10/2021 10:02:00AM

Darren Rowley,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/10/2021 10:02:00AM, under the Project Name: Bondad 33 9 22A.

The analytical test results summarized in this report with the Project Name: Bondad 33 9 22A apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

**Alexa Michaels**  
Sample Custody Officer  
Office: 505-632-1881  
[labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**  
**Lynn Jarboe**  
Technical Representative/Client Services  
Office: 505-421-LABS(5227)  
Cell: 505-320-4759  
[ljjarboe@envirotech-inc.com](mailto:ljjarboe@envirotech-inc.com)

**West Texas Midland/Odessa Area**  
**Tom Brown**  
Technical Representative  
Cell: 832-444-7704  
[tbrown@envirotech-inc.com](mailto:tbrown@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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## Sample Summary

Logos Resources  
2010 Afton Place  
Farmington NM, 87401

Project Name: Bondad 33 9 22A  
Project Number: 12035-0114  
Project Manager: Darren Rowley

**Reported:**  
08/20/21 10:55

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SB-1 grab sample westside	E108018-01A	Soil	08/10/21	08/10/21	Glass Jar, 4 oz.
	E108018-01B	Soil	08/10/21	08/10/21	Glass Jar, 2 oz.
SB-2 grab sample westside	E108018-02A	Soil	08/10/21	08/10/21	Glass Jar, 4 oz.
	E108018-02B	Soil	08/10/21	08/10/21	Glass Jar, 2 oz.
background sample	E108018-03A	Soil	08/10/21	08/10/21	Glass Jar, 4 oz.
	E108018-03B	Soil	08/10/21	08/10/21	Glass Jar, 4 oz.



## Sample Data

Logos Resources 2010 Afton Place Farmington NM, 87401	Project Name: Bondad 33 9 22A Project Number: 12035-0114 Project Manager: Darren Rowley	<b>Reported:</b> 8/20/2021 10:55:42AM
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### SB-1 grab sample westside

E108018-01

Analyte	Result	MDL	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Hexavalent Chromium (Cr6+) by EPA 7196A/3060A</b>							
	mg/kg	mg/kg	mg/kg	Analyst: RKS			Batch: 2134016
Chromium (VI)	0.820	0.300	0.500	1	08/18/21	08/19/21	
<b>Volatile Organic Compounds by EPA 8260B</b>							
	mg/kg		mg/kg	Analyst: IY			Batch: 2133010
Benzene	ND		0.0250	1	08/10/21	08/18/21	
Ethylbenzene	ND		0.0250	1	08/10/21	08/18/21	
1-Methylnaphthalene	ND		0.200	1	08/10/21	08/18/21	
2-Methylnaphthalene	ND		0.200	1	08/10/21	08/18/21	
Naphthalene	ND		0.100	1	08/10/21	08/18/21	
1,2,4-Trimethylbenzene	ND		0.100	1	08/10/21	08/18/21	
1,3,5-Trimethylbenzene	ND		0.0250	1	08/10/21	08/18/21	
Toluene	ND		0.0250	1	08/10/21	08/18/21	
o-Xylene	ND		0.0250	1	08/10/21	08/18/21	
p,m-Xylene	ND		0.0500	1	08/10/21	08/18/21	
Total Xylenes	ND		0.0250	1	08/10/21	08/18/21	
Surrogate: Bromofluorobenzene		98.6 %	70-130		08/10/21	08/18/21	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130		08/10/21	08/18/21	
Surrogate: Toluene-d8		98.3 %	70-130		08/10/21	08/18/21	
<b>Wet Chemistry by 9050A/2510B</b>							
	uS/cm		uS/cm	Analyst: RAS			Batch: 2133035
Specific Conductance (@ 25 C)	187		10.0	1	08/13/21	08/13/21	
<b>Wet Chemistry by EPA 9045D</b>							
	pH Units		pH Units	Analyst: RAS			Batch: 2134014
pH @25°C	8.07			1	08/18/21	08/18/21	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>							
	mg/kg		mg/kg	Analyst: IY			Batch: 2133010
Gasoline Range Organics (C6-C10)	ND		20.0	1	08/10/21	08/18/21	
Surrogate: Bromofluorobenzene		98.6 %	70-130		08/10/21	08/18/21	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130		08/10/21	08/18/21	
Surrogate: Toluene-d8		98.3 %	70-130		08/10/21	08/18/21	



## Sample Data

Logos Resources  
2010 Afton Place  
Farmington NM, 87401

Project Name: Bondad 33 9 22A  
Project Number: 12035-0114  
Project Manager: Darren Rowley

**Reported:**  
8/20/2021 10:55:42AM

### SB-1 grab sample westside

**E108018-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: JL			Batch: 2133018
Diesel Range Organics (C10-C28)	<b>39.8</b>	25.0	1	08/11/21	08/11/21	
Oil Range Organics (C28-C36)	<b>93.2</b>	50.0	1	08/11/21	08/11/21	
Surrogate: n-Nonane		103 %	50-200	08/11/21	08/11/21	
<b>Total Metals by EPA 6010C</b>						
	mg/kg	mg/kg	Analyst: AC			Batch: 2133033
Arsenic	<b>2.40</b>	0.500	1	08/16/21	08/16/21	
Barium	<b>218</b>	6.25	1	08/16/21	08/16/21	
Cadmium	ND	0.250	1	08/16/21	08/16/21	
Copper	<b>4.73</b>	0.500	1	08/16/21	08/16/21	
Lead	<b>6.40</b>	0.250	1	08/16/21	08/16/21	
Nickel	<b>7.34</b>	1.25	1	08/16/21	08/16/21	
Selenium	ND	1.25	1	08/16/21	08/16/21	
Silver	ND	0.250	1	08/16/21	08/16/21	
Zinc	<b>40.1</b>	2.50	1	08/16/21	08/16/21	
<b>Soil Paste (SP) Leaching Procedure</b>						
	mg/L	mg/L	Analyst: AC			Batch: 2133031
Calcium	<b>111</b>	1.00	1	08/12/21	08/12/21	
Magnesium	<b>12.1</b>	1.00	1	08/12/21	08/12/21	
Sodium	<b>9.91</b>	2.00	1	08/12/21	08/12/21	
Sodium Absorption Ratio	<b>0.238</b>		1	08/13/21	08/13/21	
<b>Boron-Hot Water Soluble by EPA 6010C</b>						
	mg/L	mg/L	Analyst: AC			Batch: 2134017
Boron	ND	2.00	1	08/18/21	08/18/21	



## Sample Data

Logos Resources 2010 Afton Place Farmington NM, 87401	Project Name: Bondad 33 9 22A Project Number: 12035-0114 Project Manager: Darren Rowley	Reported: 8/20/2021 10:55:42AM
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### SB-2 grab sample westside

E108018-02

Analyte	Result	MDL	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Hexavalent Chromium (Cr6+) by EPA 7196A/3060A</b>	mg/kg	mg/kg	mg/kg	Analyst: RKS		Batch: 2134016	
Chromium (VI)	0.720	0.300	0.500	1	08/18/21	08/19/21	
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg		mg/kg	Analyst: IY		Batch: 2133010	
Benzene	ND		0.0250	1	08/10/21	08/18/21	
Ethylbenzene	ND		0.0250	1	08/10/21	08/18/21	
1-Methylnaphthalene	ND		0.200	1	08/10/21	08/18/21	
2-Methylnaphthalene	ND		0.200	1	08/10/21	08/18/21	
Naphthalene	ND		0.100	1	08/10/21	08/18/21	
1,2,4-Trimethylbenzene	ND		0.100	1	08/10/21	08/18/21	
1,3,5-Trimethylbenzene	ND		0.0250	1	08/10/21	08/18/21	
Toluene	ND		0.0250	1	08/10/21	08/18/21	
o-Xylene	ND		0.0250	1	08/10/21	08/18/21	
p,m-Xylene	ND		0.0500	1	08/10/21	08/18/21	
Total Xylenes	ND		0.0250	1	08/10/21	08/18/21	
Surrogate: Bromofluorobenzene		103 %	70-130		08/10/21	08/18/21	
Surrogate: 1,2-Dichloroethane-d4		94.3 %	70-130		08/10/21	08/18/21	
Surrogate: Toluene-d8		101 %	70-130		08/10/21	08/18/21	
<b>Wet Chemistry by 9050A/2510B</b>	uS/cm		uS/cm	Analyst: RAS		Batch: 2133035	
Specific Conductance (@ 25 C)	136		10.0	1	08/13/21	08/13/21	
<b>Wet Chemistry by EPA 9045D</b>	pH Units		pH Units	Analyst: RAS		Batch: 2134014	
pH @25°C	8.14			1	08/18/21	08/18/21	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg		mg/kg	Analyst: IY		Batch: 2133010	
Gasoline Range Organics (C6-C10)	ND		20.0	1	08/10/21	08/18/21	
Surrogate: Bromofluorobenzene		103 %	70-130		08/10/21	08/18/21	
Surrogate: 1,2-Dichloroethane-d4		94.3 %	70-130		08/10/21	08/18/21	
Surrogate: Toluene-d8		101 %	70-130		08/10/21	08/18/21	



## Sample Data

Logos Resources  
2010 Afton Place  
Farmington NM, 87401

Project Name: Bondad 33 9 22A  
Project Number: 12035-0114  
Project Manager: Darren Rowley

**Reported:**  
8/20/2021 10:55:42AM

### SB-2 grab sample westside

**E108018-02**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: JL			Batch: 2133018
Diesel Range Organics (C10-C28)	<b>236</b>	25.0	1	08/11/21	08/11/21	
Oil Range Organics (C28-C36)	<b>515</b>	50.0	1	08/11/21	08/11/21	
Surrogate: n-Nonane		103 %	50-200	08/11/21	08/11/21	
<b>Total Metals by EPA 6010C</b>						
	mg/kg	mg/kg	Analyst: AC			Batch: 2133033
Arsenic	<b>2.35</b>	0.500	1	08/16/21	08/16/21	
Barium	<b>340</b>	6.25	1	08/16/21	08/16/21	
Cadmium	ND	0.250	1	08/16/21	08/16/21	
Copper	<b>6.62</b>	0.500	1	08/16/21	08/16/21	
Lead	<b>6.42</b>	0.250	1	08/16/21	08/16/21	
Nickel	<b>8.33</b>	1.25	1	08/16/21	08/16/21	
Selenium	ND	1.25	1	08/16/21	08/16/21	
Silver	ND	0.250	1	08/16/21	08/16/21	
Zinc	<b>43.2</b>	2.50	1	08/16/21	08/16/21	
<b>Soil Paste (SP) Leaching Procedure</b>						
	mg/L	mg/L	Analyst: AC			Batch: 2133031
Calcium	<b>74.9</b>	1.00	1	08/12/21	08/12/21	
Magnesium	<b>19.5</b>	1.00	1	08/12/21	08/12/21	
Sodium	<b>10.5</b>	2.00	1	08/12/21	08/12/21	
Sodium Absorption Ratio	<b>0.278</b>		1	08/13/21	08/13/21	
<b>Boron-Hot Water Soluble by EPA 6010C</b>						
	mg/L	mg/L	Analyst: AC			Batch: 2134017
Boron	ND	2.00	1	08/18/21	08/18/21	





## Sample Data

Logos Resources 2010 Afton Place Farmington NM, 87401	Project Name: Bondad 33 9 22A Project Number: 12035-0114 Project Manager: Darren Rowley	<b>Reported:</b> 8/20/2021 10:55:42AM
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### background sample

**E108018-03**

Analyte	Result	MDL	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Hexavalent Chromium (Cr6+) by EPA 7196A/3060A</b>	mg/kg	mg/kg	mg/kg	Analyst: RKS		Batch: 2134016	
Chromium (VI)	<b>3.74</b>	<b>0.300</b>	0.500	1	08/18/21	08/19/21	
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg		mg/kg	Analyst: IY		Batch: 2133010	
Benzene	ND		0.0250	1	08/10/21	08/18/21	
Ethylbenzene	ND		0.0250	1	08/10/21	08/18/21	
1-Methylnaphthalene	ND		0.200	1	08/10/21	08/18/21	
2-Methylnaphthalene	ND		0.200	1	08/10/21	08/18/21	
Naphthalene	ND		0.100	1	08/10/21	08/18/21	
1,2,4-Trimethylbenzene	ND		0.100	1	08/10/21	08/18/21	
1,3,5-Trimethylbenzene	ND		0.0250	1	08/10/21	08/18/21	
Toluene	ND		0.0250	1	08/10/21	08/18/21	
o-Xylene	ND		0.0250	1	08/10/21	08/18/21	
p,m-Xylene	ND		0.0500	1	08/10/21	08/18/21	
Total Xylenes	ND		0.0250	1	08/10/21	08/18/21	
<i>Surrogate: Bromofluorobenzene</i>		99.3 %	70-130		08/10/21	08/18/21	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.0 %	70-130		08/10/21	08/18/21	
<i>Surrogate: Toluene-d8</i>		98.8 %	70-130		08/10/21	08/18/21	
<b>Wet Chemistry by 9050A/2510B</b>	uS/cm		uS/cm	Analyst: RAS		Batch: 2133035	
Specific Conductance (@ 25 C)	<b>848</b>		10.0	1	08/13/21	08/13/21	
<b>Wet Chemistry by EPA 9045D</b>	pH Units		pH Units	Analyst: RAS		Batch: 2134014	
pH @25°C	<b>7.50</b>			1	08/18/21	08/18/21	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg		mg/kg	Analyst: IY		Batch: 2133010	
Gasoline Range Organics (C6-C10)	ND		20.0	1	08/10/21	08/18/21	
<i>Surrogate: Bromofluorobenzene</i>		99.3 %	70-130		08/10/21	08/18/21	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.0 %	70-130		08/10/21	08/18/21	
<i>Surrogate: Toluene-d8</i>		98.8 %	70-130		08/10/21	08/18/21	



## Sample Data

Logos Resources  
2010 Afton Place  
Farmington NM, 87401

Project Name: Bondad 33 9 22A  
Project Number: 12035-0114  
Project Manager: Darren Rowley

**Reported:**  
8/20/2021 10:55:42AM

### background sample

**E108018-03**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: JL			Batch: 2133018
Diesel Range Organics (C10-C28)	ND	25.0	1	08/11/21	08/11/21	
Oil Range Organics (C28-C36)	ND	50.0	1	08/11/21	08/11/21	
Surrogate: n-Nonane	96.5 %	50-200		08/11/21	08/11/21	
<b>Total Metals by EPA 6010C</b>						
	mg/kg	mg/kg	Analyst: AC			Batch: 2133033
Arsenic	2.92	0.500	1	08/16/21	08/16/21	
Barium	668	6.25	1	08/16/21	08/16/21	
Cadmium	ND	0.250	1	08/16/21	08/16/21	
Copper	7.90	0.500	1	08/16/21	08/16/21	
Lead	10.5	0.250	1	08/16/21	08/16/21	
Nickel	9.13	1.25	1	08/16/21	08/16/21	
Selenium	ND	1.25	1	08/16/21	08/16/21	
Silver	ND	0.250	1	08/16/21	08/16/21	
Zinc	51.0	2.50	1	08/16/21	08/16/21	
<b>Soil Paste (SP) Leaching Procedure</b>						
	mg/L	mg/L	Analyst: AC			Batch: 2133031
Calcium	55.2	1.00	1	08/12/21	08/12/21	
Magnesium	6.69	1.00	1	08/12/21	08/12/21	
Sodium	14.7	2.00	1	08/12/21	08/12/21	
Sodium Absorption Ratio	0.496		1	08/13/21	08/13/21	
<b>Boron-Hot Water Soluble by EPA 6010C</b>						
	mg/L	mg/L	Analyst: AC			Batch: 2134017
Boron	ND	2.00	1	08/18/21	08/18/21	



## QC Summary Data

Logos Resources	Project Name:	Bondad 33 9 22A	<b>Reported:</b>
2010 Afton Place	Project Number:	12035-0114	
Farmington NM, 87401	Project Manager:	Darren Rowley	8/20/2021 10:55:42AM

### Hexavalent Chromium (Cr6+) by EPA 7196A/3060A

Analyst: RKS

Analyte	Result mg/kg	MDL mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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#### Blank (2134016-BLK1)

Prepared: 08/18/21 Analyzed: 08/19/21

Chromium (VI)	ND	0.300	0.500							
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#### LCS (2134016-BS1)

Prepared: 08/18/21 Analyzed: 08/19/21

Chromium (VI)	6.34	0.300	0.500	6.00		106	80-120			
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#### LCS Dup (2134016-BSD1)

Prepared: 08/18/21 Analyzed: 08/19/21

Chromium (VI)	5.74	0.300	0.500	6.00		95.7	80-120	9.93	20	
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#### Matrix Spike (2134016-MS1)

**Source: E108018-01** Prepared: 08/18/21 Analyzed: 08/19/21

Chromium (VI)	1.18	0.300	0.500	6.00	0.820	6.00	70-130			M3
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# QC Summary Data

Logos Resources	Project Name:	Bondad 33 9 22A	Reported:
2010 Afton Place	Project Number:	12035-0114	
Farmington NM, 87401	Project Manager:	Darren Rowley	8/20/2021 10:55:42AM

## Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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### Blank (2133010-BLK1)

Prepared: 08/10/21 Analyzed: 08/18/21

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
1-Methylnaphthalene	ND	0.200							
2-Methylnaphthalene	ND	0.200							
Naphthalene	ND	0.100							
1,2,4-Trimethylbenzene	ND	0.100							
1,3,5-Trimethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							

Surrogate: Bromofluorobenzene	0.490		0.500		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.466		0.500		93.1	70-130			
Surrogate: Toluene-d8	0.493		0.500		98.6	70-130			

### LCS (2133010-BS1)

Prepared: 08/10/21 Analyzed: 08/18/21

Benzene	2.72	0.0250	2.50		109	70-130			
Ethylbenzene	2.83	0.0250	2.50		113	70-130			
1-Methylnaphthalene	2.61	0.200	2.50		105	43-162			
2-Methylnaphthalene	2.39	0.200	2.50		95.5	50-159			
Naphthalene	2.57	0.100	2.50		103	70-132			
1,2,4-Trimethylbenzene	2.68	0.100	2.50		107	70-130			
1,3,5-Trimethylbenzene	2.63	0.0250	2.50		105	70-130			
Toluene	2.80	0.0250	2.50		112	70-130			
o-Xylene	2.67	0.0250	2.50		107	70-130			
p,m-Xylene	5.51	0.0500	5.00		110	70-130			
Total Xylenes	8.18	0.0250	7.50		109	70-130			

Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.510		0.500		102	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			

### Matrix Spike (2133010-MS1)

Source: E108018-01 Prepared: 08/10/21 Analyzed: 08/18/21

Benzene	2.72	0.0250	2.50	ND	109	48-131			
Ethylbenzene	2.78	0.0250	2.50	ND	111	45-135			
1-Methylnaphthalene	2.58	0.200	2.50	ND	103	35-173			
2-Methylnaphthalene	2.39	0.200	2.50	ND	95.6	33-175			
Naphthalene	2.55	0.100	2.50	ND	102	18-145			
1,2,4-Trimethylbenzene	2.67	0.100	2.50	ND	107	33-139			
1,3,5-Trimethylbenzene	2.56	0.0250	2.50	ND	102	37-138			
Toluene	2.75	0.0250	2.50	ND	110	48-130			
o-Xylene	2.63	0.0250	2.50	ND	105	43-135			
p,m-Xylene	5.41	0.0500	5.00	ND	108	43-135			
Total Xylenes	8.04	0.0250	7.50	ND	107	43-135			

Surrogate: Bromofluorobenzene	0.490		0.500		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		98.9	70-130			
Surrogate: Toluene-d8	0.493		0.500		98.6	70-130			

### Matrix Spike Dup (2133010-MSD1)

Source: E108018-01 Prepared: 08/10/21 Analyzed: 08/18/21

Benzene	2.69	0.0250	2.50	ND	108	48-131	0.795	23	
Ethylbenzene	2.84	0.0250	2.50	ND	114	45-135	2.24	27	
1-Methylnaphthalene	2.63	0.200	2.50	ND	105	35-173	1.88	35	



## QC Summary Data

Logos Resources	Project Name:	Bondad 33 9 22A	<b>Reported:</b>
2010 Afton Place	Project Number:	12035-0114	
Farmington NM, 87401	Project Manager:	Darren Rowley	8/20/2021 10:55:42AM

### Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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#### Matrix Spike Dup (2133010-MSD1)

Source: E108018-01 Prepared: 08/10/21 Analyzed: 08/18/21

2-Methylnaphthalene	2.44	0.200	2.50	ND	97.5	33-175	2.01	35	
Naphthalene	2.54	0.100	2.50	ND	101	18-145	0.452	34	
1,2,4-Trimethylbenzene	2.59	0.100	2.50	ND	104	33-139	2.79	31	
1,3,5-Trimethylbenzene	2.54	0.0250	2.50	ND	102	37-138	0.529	31	
Toluene	2.85	0.0250	2.50	ND	114	48-130	3.64	24	
o-Xylene	2.67	0.0250	2.50	ND	107	43-135	1.49	27	
p,m-Xylene	5.53	0.0500	5.00	ND	111	43-135	2.21	27	
Total Xylenes	8.20	0.0250	7.50	ND	109	43-135	1.98	27	
Surrogate: Bromofluorobenzene	0.493		0.500		98.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			



## QC Summary Data

Logos Resources	Project Name:	Bondad 33 9 22A	<b>Reported:</b>
2010 Afton Place	Project Number:	12035-0114	
Farmington NM, 87401	Project Manager:	Darren Rowley	8/20/2021 10:55:42AM

### Wet Chemistry by 9050A/2510B

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	uS/cm	uS/cm	uS/cm	uS/cm	%	%	%	%	

#### Blank (2133035-BLK1)

Prepared: 08/13/21 Analyzed: 08/13/21

Specific Conductance (@ 25 C)

ND

10.0

#### LCS (2133035-BS1)

Prepared: 08/13/21 Analyzed: 08/13/21

Specific Conductance (@ 25 C)

1430

10.0

1410

101

98-102

#### Duplicate (2133035-DUP1)

**Source: E108030-01** Prepared: 08/13/21 Analyzed: 08/13/21

Specific Conductance (@ 25 C)

184

10.0

187

1.57

20



## QC Summary Data

Logos Resources	Project Name:	Bondad 33 9 22A	<b>Reported:</b>
2010 Afton Place	Project Number:	12035-0114	
Farmington NM, 87401	Project Manager:	Darren Rowley	8/20/2021 10:55:42AM

### Wet Chemistry by EPA 9045D

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	pH Units	pH Units	pH Units	pH Units	%	%	%	%	

#### LCS (2134014-BS1)

Prepared: 08/18/21 Analyzed: 08/18/21

pH	8.00	8.00	100	98.75-101.25
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#### Duplicate (2134014-DUP1)

Source: E108050-01 Prepared: 08/18/21 Analyzed: 08/18/21

pH	6.36	6.36	0.00	20
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## QC Summary Data

Logos Resources	Project Name:	Bondad 33 9 22A	<b>Reported:</b>
2010 Afton Place	Project Number:	12035-0114	
Farmington NM, 87401	Project Manager:	Darren Rowley	8/20/2021 10:55:42AM

### Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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#### Blank (2133010-BLK1)

Prepared: 08/10/21 Analyzed: 08/18/21

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.490		0.500		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.466		0.500		93.1	70-130			
Surrogate: Toluene-d8	0.493		0.500		98.6	70-130			

#### LCS (2133010-BS2)

Prepared: 08/10/21 Analyzed: 08/18/21

Gasoline Range Organics (C6-C10)	47.7	20.0	50.0		95.4	70-130			
Surrogate: Bromofluorobenzene	0.492		0.500		98.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.506		0.500		101	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

#### Matrix Spike (2133010-MS2)

Source: E108018-01 Prepared: 08/10/21 Analyzed: 08/18/21

Gasoline Range Organics (C6-C10)	53.0	20.0	50.0	ND	106	70-130			
Surrogate: Bromofluorobenzene	0.488		0.500		97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.496		0.500		99.1	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			

#### Matrix Spike Dup (2133010-MSD2)

Source: E108018-01 Prepared: 08/10/21 Analyzed: 08/18/21

Gasoline Range Organics (C6-C10)	52.7	20.0	50.0	ND	105	70-130	0.516	20	
Surrogate: Bromofluorobenzene	0.489		0.500		97.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.506		0.500		101	70-130			
Surrogate: Toluene-d8	0.501		0.500		100	70-130			





## QC Summary Data

Logos Resources	Project Name:	Bondad 33 9 22A	<b>Reported:</b>
2010 Afton Place	Project Number:	12035-0114	
Farmington NM, 87401	Project Manager:	Darren Rowley	8/20/2021 10:55:42AM

### Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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#### Blank (2133018-BLK1)

Prepared: 08/11/21 Analyzed: 08/11/21

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.6		50.0		91.1	50-200			

#### LCS (2133018-BS1)

Prepared: 08/11/21 Analyzed: 08/11/21

Diesel Range Organics (C10-C28)	389	25.0	500		77.7	38-132			
Surrogate: n-Nonane	41.1		50.0		82.1	50-200			

#### Matrix Spike (2133018-MS1)

Source: E108015-08 Prepared: 08/11/21 Analyzed: 08/11/21

Diesel Range Organics (C10-C28)	804	25.0	500	333	94.3	38-132			
Surrogate: n-Nonane	49.1		50.0		98.1	50-200			

#### Matrix Spike Dup (2133018-MSD1)

Source: E108015-08 Prepared: 08/11/21 Analyzed: 08/11/21

Diesel Range Organics (C10-C28)	804	25.0	500	333	94.2	38-132	0.0712	20	
Surrogate: n-Nonane	46.6		50.0		93.1	50-200			



## QC Summary Data

Logos Resources	Project Name:	Bondad 33 9 22A	<b>Reported:</b>
2010 Afton Place	Project Number:	12035-0114	
Farmington NM, 87401	Project Manager:	Darren Rowley	8/20/2021 10:55:42AM

### Total Metals by EPA 6010C

Analyst: AC

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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#### Blank (2133033-BLK1)

Prepared: 08/16/21 Analyzed: 08/16/21

Arsenic	ND	0.500
Barium	ND	6.25
Cadmium	ND	0.250
Copper	ND	0.500
Lead	ND	0.250
Nickel	ND	1.25
Selenium	ND	1.25
Silver	ND	0.250
Zinc	ND	2.50

#### LCS (2133033-BS1)

Prepared: 08/16/21 Analyzed: 08/16/21

Arsenic	12.6	0.500	12.5	101	80-120
Barium	319	6.25	313	102	80-120
Cadmium	6.28	0.250	6.25	100	80-120
Copper	12.4	0.500	12.5	99.2	80-120
Lead	6.09	0.250	6.25	97.4	80-120
Nickel	32.3	1.25	31.3	103	80-120
Selenium	32.3	1.25	31.3	103	80-120
Silver	2.50	0.250	2.50	99.8	80-120
Zinc	64.1	2.50	62.5	102	80-120

#### LCS Dup (2133033-BSD1)

Prepared: 08/16/21 Analyzed: 08/16/21

Arsenic	12.6	0.500	12.5	101	80-120	0.0795	20
Barium	320	6.25	313	102	80-120	0.235	20
Cadmium	6.29	0.250	6.25	101	80-120	0.0796	20
Copper	12.5	0.500	12.5	99.8	80-120	0.643	20
Lead	6.11	0.250	6.25	97.8	80-120	0.451	20
Nickel	32.3	1.25	31.3	103	80-120	0.0774	20
Selenium	32.3	1.25	31.3	103	80-120	0.00	20
Silver	2.53	0.250	2.50	101	80-120	1.20	20
Zinc	64.2	2.50	62.5	103	80-120	0.156	20



## QC Summary Data

Logos Resources	Project Name:	Bondad 33 9 22A	<b>Reported:</b>
2010 Afton Place	Project Number:	12035-0114	
Farmington NM, 87401	Project Manager:	Darren Rowley	8/20/2021 10:55:42AM

### Soil Paste (SP) Leaching Procedure

Analyst: AC

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	

#### Blank (2133031-BLK1)

Prepared: 08/12/21 Analyzed: 08/12/21

Calcium	ND	1.00							
Magnesium	ND	1.00							
Sodium	ND	2.00							

#### LCS (2133031-BS1)

Prepared: 08/12/21 Analyzed: 08/12/21

Calcium	51.8	1.00	50.0		104	80-120			
Magnesium	50.7	1.00	50.0		101	80-120			
Sodium	18.9	2.00	20.0		94.6	80-120			

#### LCS Dup (2133031-BSD1)

Prepared: 08/12/21 Analyzed: 08/12/21

Calcium	51.6	1.00	50.0		103	80-120	0.464	20	
Magnesium	50.9	1.00	50.0		102	80-120	0.276	20	
Sodium	19.0	2.00	20.0		94.9	80-120	0.317	20	



## QC Summary Data

Logos Resources	Project Name:	Bondad 33 9 22A	<b>Reported:</b>
2010 Afton Place	Project Number:	12035-0114	
Farmington NM, 87401	Project Manager:	Darren Rowley	8/20/2021 10:55:42AM

### Boron-Hot Water Soluble by EPA 6010C

Analyst: AC

Analyte	Result mg/L	Reporting Limit mg/L	Spike Level mg/L	Source Result mg/L	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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#### Blank (2134017-BLK1)

Prepared: 08/18/21 Analyzed: 08/18/21

Boron	ND	2.00			
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#### LCS (2134017-BS1)

Prepared: 08/18/21 Analyzed: 08/18/21

Boron	53.1	2.00	50.0		106 80-120
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#### Matrix Spike (2134017-MS1)

**Source: E108018-03** Prepared: 08/18/21 Analyzed: 08/18/21

Boron	56.1	2.00	50.0	ND	112 75-125
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#### Matrix Spike Dup (2134017-MSD1)

**Source: E108018-03** Prepared: 08/18/21 Analyzed: 08/18/21

Boron	55.1	2.00	50.0	ND	110 75-125 1.80 20
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#### QC Summary Report Comment:

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



## Definitions and Notes

Logos Resources  
2010 Afton Place  
Farmington NM, 87401

Project Name: Bondad 33 9 22A  
Project Number: 12035-0114  
Project Manager: Darren Rowley

**Reported:**  
08/20/21 10:55

M3 Matrix spike recovery was outside quality control limits due to matrix interference. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



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**Sample Receipt Checklist (SRC)**

**Instructions:** Please take note of any NO checkmarks.

**If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.**

Client:	Logos Resources	Date Received:	08/10/21 10:02	Work Order ID:	E108018
Phone:	(505) 947-4974	Date Logged In:	08/10/21 10:24	Logged In By:	Raina Schwanz
Email:	drowley@logosresourcesllc.com	Due Date:	08/24/21 17:00 (10 day TAT)		

**Chain of Custody (COC)**

- |  |     |
|--|-----|
| 1. Does the sample ID match the COC?   | Yes |
| 2. Does the number of samples per sampling site location match the COC   | Yes |
| 3. Were samples dropped off by client or carrier?  | Yes |
| 4. Was the COC complete, i.e., signatures, dates/times, requested analyses?  | Yes |
| 5. Were all samples received within holding time?  | Yes |
| Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion. |     |

Carrier: Marie Florez

**Sample Turn Around Time (TAT)**

- |   |     |
|---|-----|
| 6. Did the COC indicate standard TAT, or Expedited TAT? | Yes |
|---|-----|

**Sample Cooler**

- |  |     |
|--|-----|
| 7. Was a sample cooler received?   | Yes |
| 8. If yes, was cooler received in good condition?  | Yes |
| 9. Was the sample(s) received intact, i.e., not broken?  | Yes |
| 10. Were custody/security seals present?   | No  |
| 11. If yes, were custody/security seals intact?  | NA  |
| 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C             | Yes |
| Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling |     |
| 13. If no visible ice, record the temperature. Actual sample temperature: <u>4°C</u>           |     |

**Sample Container**

- |  |     |
|--|-----|
| 14. Are aqueous VOC samples present?   | No  |
| 15. Are VOC samples collected in VOA Vials?                                    | NA  |
| 16. Is the head space less than 6-8 mm (pea sized or less)?                    | NA  |
| 17. Was a trip blank (TB) included for VOC analyses?                           | NA  |
| 18. Are non-VOC samples collected in the correct containers?                   | Yes |
| 19. Is the appropriate volume/weight or number of sample containers collected? | No  |

**Field Label**

- |   |     |
|---|-----|
| 20. Were field sample labels filled out with the minimum information: |     |
| Sample ID?  | Yes |
| Date/Time Collected?  | No  |
| Collectors name?  | No  |

**Sample Preservation**

- |   |    |
|---|----|
| 21. Does the COC or field labels indicate the samples were preserved? | No |
| 22. Are sample(s) correctly preserved?                                | NA |
| 24. Is lab filtration required and/or requested for dissolved metals? | No |

**Multiphase Sample Matrix**

- |  |    |
|--|----|
| 26. Does the sample have more than one phase, i.e., multiphase?    | No |
| 27. If yes, does the COC specify which phase(s) is to be analyzed? | NA |

**Subcontract Laboratory**

- |   |  |
|---|--|
| 28. Are samples required to get sent to a subcontract laboratory?       | Yes                                      |
| 29. Was a subcontract laboratory specified by the client and if so who? | No      Subcontract Lab: Pace Analytical |

**Client Instruction**

**Comments/Resolution**

Lab split up sample 1 & 2 into a 2oz jar to ship for PAH SIM 8270.

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

Date



envirotech Inc.





# ANALYTICAL REPORT

August 19, 2021

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## EnviroTech- NM

Sample Delivery Group: L1389208  
Samples Received: 08/11/2021  
Project Number: 12035-0114  
Description: Bondad 33 9 22A  
Site: E108018  
Report To: Raina Schwanz  
5796 US. Highway 64  
Farmington, NM 87401

Entire Report Reviewed By:

Jordan N Zito  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)



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		<sup>9</sup> Sc

# SAMPLE SUMMARY

## SB-1 GRAB SAMPLE WESTSIDE L1389208-01 Solid

Collected by  
M. Florez

Collected date/time  
08/10/21 07:00

Received date/time  
08/11/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1725408	1	08/18/21 20:36	08/19/21 01:34	AMG	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

## SB-1 GRAB SAMPLE EASTSIDE L1389208-02 Solid

Collected by  
M. Florez

Collected date/time  
08/10/21 07:00

Received date/time  
08/11/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1725408	1	08/18/21 20:36	08/19/21 01:54	AMG	Mt. Juliet, TN

<sup>4</sup>Cn

<sup>5</sup>Sr

## BACKGROUND SAMPLE L1389208-03 Solid

Collected by  
M. Florez

Collected date/time  
08/10/21 07:00

Received date/time  
08/11/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1725408	1	08/18/21 20:36	08/19/21 02:14	AMG	Mt. Juliet, TN

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jordan N Zito  
Project Manager



## Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch	
Anthracene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	<sup>1</sup> Cp
Acenaphthene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	<sup>2</sup> Tc
Acenaphthylene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	<sup>3</sup> Ss
Benzo(a)anthracene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	<sup>4</sup> Cn
Benzo(a)pyrene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	<sup>5</sup> Sr
Benzo(b)fluoranthene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	<sup>6</sup> Qc
Benzo(g,h,i)perylene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	<sup>7</sup> Gl
Benzo(k)fluoranthene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	<sup>8</sup> Al
Chrysene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	<sup>9</sup> Sc
Dibenz(a,h)anthracene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	
Fluoranthene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	
Fluorene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	
Naphthalene	ND		0.0200	1	08/19/2021 01:34	<a href="#">WG1725408</a>	
Phenanthrene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	
Pyrene	ND		0.00600	1	08/19/2021 01:34	<a href="#">WG1725408</a>	
1-Methylnaphthalene	ND		0.0200	1	08/19/2021 01:34	<a href="#">WG1725408</a>	
2-Methylnaphthalene	ND		0.0200	1	08/19/2021 01:34	<a href="#">WG1725408</a>	
2-Chloronaphthalene	ND		0.0200	1	08/19/2021 01:34	<a href="#">WG1725408</a>	
(S) p-Terphenyl-d14	64.6		23.0-120		08/19/2021 01:34	<a href="#">WG1725408</a>	
(S) Nitrobenzene-d5	54.5		14.0-149		08/19/2021 01:34	<a href="#">WG1725408</a>	
(S) 2-Fluorobiphenyl	59.0		34.0-125		08/19/2021 01:34	<a href="#">WG1725408</a>	

## Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch	
Anthracene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	<sup>1</sup> Cp
Acenaphthene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	<sup>2</sup> Tc
Acenaphthylene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	<sup>3</sup> Ss
Benzo(a)anthracene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	<sup>4</sup> Cn
Benzo(a)pyrene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	<sup>5</sup> Sr
Benzo(b)fluoranthene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	<sup>6</sup> Qc
Benzo(g,h,i)perylene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	<sup>7</sup> Gl
Benzo(k)fluoranthene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	<sup>8</sup> Al
Chrysene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	<sup>9</sup> Sc
Dibenz(a,h)anthracene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	
Fluoranthene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	
Fluorene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	
Naphthalene	ND		0.0200	1	08/19/2021 01:54	<a href="#">WG1725408</a>	
Phenanthrene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	
Pyrene	ND		0.00600	1	08/19/2021 01:54	<a href="#">WG1725408</a>	
1-Methylnaphthalene	ND		0.0200	1	08/19/2021 01:54	<a href="#">WG1725408</a>	
2-Methylnaphthalene	ND		0.0200	1	08/19/2021 01:54	<a href="#">WG1725408</a>	
2-Chloronaphthalene	ND		0.0200	1	08/19/2021 01:54	<a href="#">WG1725408</a>	
(S) p-Terphenyl-d14	94.2		23.0-120		08/19/2021 01:54	<a href="#">WG1725408</a>	
(S) Nitrobenzene-d5	76.0		14.0-149		08/19/2021 01:54	<a href="#">WG1725408</a>	
(S) 2-Fluorobiphenyl	83.7		34.0-125		08/19/2021 01:54	<a href="#">WG1725408</a>	

## BACKGROUND SAMPLE

Collected date/time: 08/10/21 07:00

## SAMPLE RESULTS - 03

L1389208

## Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Acenaphthene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Acenaphthylene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Benzo(a)anthracene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Benzo(a)pyrene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Benzo(b)fluoranthene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Benzo(g,h,i)perylene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Benzo(k)fluoranthene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Chrysene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Dibenz(a,h)anthracene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Fluoranthene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Fluorene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Naphthalene	ND		0.0200	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Phenanthrene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
Pyrene	ND		0.00600	1	08/19/2021 02:14	<a href="#">WG1725408</a>
1-Methylnaphthalene	ND		0.0200	1	08/19/2021 02:14	<a href="#">WG1725408</a>
2-Methylnaphthalene	ND		0.0200	1	08/19/2021 02:14	<a href="#">WG1725408</a>
2-Chloronaphthalene	ND		0.0200	1	08/19/2021 02:14	<a href="#">WG1725408</a>
(S) p-Terphenyl-d14	101		23.0-120		08/19/2021 02:14	<a href="#">WG1725408</a>
(S) Nitrobenzene-d5	79.2		14.0-149		08/19/2021 02:14	<a href="#">WG1725408</a>
(S) 2-Fluorobiphenyl	83.2		34.0-125		08/19/2021 02:14	<a href="#">WG1725408</a>

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

Method Blank (MB)

(MB) R3693898-2 08/19/21 00:14

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	68.2			14.0-149
(S) 2-Fluorobiphenyl	76.3			34.0-125
(S) p-Terphenyl-d14	92.0			23.0-120

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3693898-1 08/18/21 23:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0708	88.5	50.0-126	
Acenaphthene	0.0800	0.0736	92.0	50.0-120	
Acenaphthylene	0.0800	0.0762	95.3	50.0-120	
Benzo(a)anthracene	0.0800	0.0707	88.4	45.0-120	
Benzo(a)pyrene	0.0800	0.0687	85.9	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0807	101	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0764	95.5	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0792	99.0	49.0-125	
Chrysene	0.0800	0.0772	96.5	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0726	90.8	47.0-125	
Fluoranthene	0.0800	0.0722	90.3	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3693898-1 08/18/21 23:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Fluorene	0.0800	0.0743	92.9	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0737	92.1	46.0-125	
Naphthalene	0.0800	0.0714	89.3	50.0-120	
Phenanthrene	0.0800	0.0718	89.8	47.0-120	
Pyrene	0.0800	0.0787	98.4	43.0-123	
1-Methylnaphthalene	0.0800	0.0726	90.8	51.0-121	
2-Methylnaphthalene	0.0800	0.0672	84.0	50.0-120	
2-Chloronaphthalene	0.0800	0.0712	89.0	50.0-120	
(S) Nitrobenzene-d5			73.3	14.0-149	
(S) 2-Fluorobiphenyl			81.2	34.0-125	
(S) p-Terphenyl-d14			93.5	23.0-120	

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

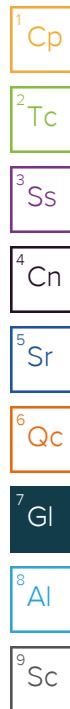
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

### Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.



# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1 6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1 4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



[illegible]

**Envirotech Analytical Laboratory**  
**Subcontract Sample Receipt Checklist (ScSRC)**

L1389208

Instructions: Please document any potential abnormalities/nonconformities with the submitted samples. It is requested the subcontract lab scan this document and the COC and email/fax these two documents upon sample receipt. It is also requested the subcontract laboratory call Envirotech immediately with any abnormalities/nonconformances that may impact the general quality of the requested sample analysis.

Envirotech WO ID: E108018      Date Shipped: 8/10/14  
Envirotech SCO: Raina Schwanz      Shipping Carrier: FedEx  
Subcontract Lab Name: Pace Analytical      State of Origin:      Envirotech Email: labadmin@envirotech-inc.com

State Certification Information

1. Does the receiving laboratory hold the appropriate RCRA/CWA/SDWA state certification?      Yes      No      NA

Note: There are no RCRA/CWA state certification programs for the states of NM / CO

2. Does the laboratory hold the certification for the requested method(s) of analysis?      Yes      No      NA

Chain of Custody (COC) Information

3. Does the sample ID match the COC?      Yes      No      NA

4. Does the number of samples per sampling site location match the COC?      Yes      No      NA

5. Was the COC complete, i.e., signatures, dates/times, requested analyses?      Yes      No      NA

6. Were samples received within the method specified holding time?      Yes      No      NA

Sample Turn Around Time (TAT) Information

7. Did the COC indicate standard TAT, or expedited TAT?      Yes      No      NA

Standard 6-day TAT ☐ 24-hr rush ☐ 48-hr rush ☐ 72-hr rush ☐ other rush ☐ \_\_\_\_\_

Sample Cooler Information

8. Was the sample cooler received in good condition?      Yes      No      NA

9. Was the sample(s) received in tact, i.e., not broken?      Yes      No      NA

10. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C      Yes      No      NA

11. If no visible ice, record the temperature.      Actual sample temperature: \_\_\_\_\_

Sample Container Information

12. Is the appropriate volume/weight or number of sample containers collected?      Yes      No      NA

Sample Preservation Information

Does the COC or field labels indicate the samples were correctly preserved?      Yes      No      NA

Multiphase Sample Matrix Information

Does the sample have more than one phase, i.e., multiphase?      Yes      No      NA

If so, does the COC specify which phase(s) is to be analyzed?      Yes      No      NA

Subcontract Laboratory Notes

Subcontract Laboratory Information

Subcontract Lab WO ID: \_\_\_\_\_ Phone No: \_\_\_\_\_ Email address: \_\_\_\_\_

Signature of subcontract laboratory sample custodian \_\_\_\_\_



envirotech Inc.