

December 20, 2022

James Beilman  
Mull Drilling Company  
1700 N Waterfront Pkwy  
Bld. 1200  
Wichita, KS 67206

RE: Project: TABLE 915-1 Nicoloson  
Pace Project No.: 60417574

Dear James Beilman:

Enclosed are the analytical results for sample(s) received by the laboratory on December 08, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Kansas City

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

Sincerely,



Heather Wilson  
heather.wilson@pacelabs.com  
1(913)563-1407  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

### Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219  
Missouri Inorganic Drinking Water Certification #: 10090  
Arkansas Drinking Water  
Arkansas Certification #: 22-031-0  
Illinois Certification #: 2000302021-3  
Iowa Certification #: 118  
Kansas/NELAP Certification #: E-10116  
Louisiana Certification #: 03055

Nevada Certification #: KS000212023-1  
Oklahoma Certification #: 2022-057  
Florida: Cert E871149 SEKS WET  
Texas Certification #: T104704407-21-15  
Utah Certification #: KS000212022-12  
Illinois Certification #: 004592  
Kansas Field Laboratory Accreditation: # E-92587  
Missouri SEKS Micro Certification: 10070

### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122  
Alabama Certification #: 40660  
Alaska Certification 17-026  
Arizona Certification #: AZ0612  
Arkansas Certification #: 88-0469  
California Certification #: 2932  
Canada Certification #: 1461.01  
Colorado Certification #: TN00003  
Connecticut Certification #: PH-0197  
DOD Certification: #1461.01  
EPA# TN00003  
Florida Certification #: E87487  
Georgia DW Certification #: 923  
Georgia Certification: NELAP  
Idaho Certification #: TN00003  
Illinois Certification #: 200008  
Indiana Certification #: C-TN-01  
Iowa Certification #: 364  
Kansas Certification #: E-10277  
Kentucky UST Certification #: 16  
Kentucky Certification #: 90010  
Louisiana Certification #: AI30792  
Louisiana DW Certification #: LA180010  
Maine Certification #: TN0002  
Maryland Certification #: 324  
Massachusetts Certification #: M-TN003  
Michigan Certification #: 9958  
Minnesota Certification #: 047-999-395  
Mississippi Certification #: TN00003  
Missouri Certification #: 340  
Montana Certification #: CERT0086  
Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34  
New Hampshire Certification #: 2975  
New Jersey Certification #: TN002  
New Mexico DW Certification  
New York Certification #: 11742  
North Carolina Aquatic Toxicity Certification #: 41  
North Carolina Drinking Water Certification #: 21704  
North Carolina Environmental Certificate #: 375  
North Dakota Certification #: R-140  
Ohio VAP Certification #: CL0069  
Oklahoma Certification #: 9915  
Oregon Certification #: TN200002  
Pennsylvania Certification #: 68-02979  
Rhode Island Certification #: LAO00356  
South Carolina Certification #: 84004  
South Dakota Certification  
Tennessee DW/Chem/Micro Certification #: 2006  
Texas Mold Certification #: LAB0152  
Texas Certification #: T 104704245-17-14  
USDA Soil Permit #: P330-15-00234  
Utah Certification #: TN00003  
Vermont Dept. of Health: ID# VT-2006  
Virginia Certification #: VT2006  
Virginia Certification #: 460132  
Washington Certification #: C847  
West Virginia Certification #: 233  
Wisconsin Certification #: 998093910  
Wyoming UST Certification #: via A2LA 2926.01  
A2LA-ISO 17025 Certification #: 1461.01  
A2LA-ISO 17025 Certification #: 1461.02  
AIHA-LAP/LLC EMLAP Certification #:100789

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## SAMPLE SUMMARY

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60417574001	SP-1	Solid	12/05/22 10:00	12/08/22 10:30
60417574002	SP-1 4'	Solid	12/05/22 10:15	12/08/22 10:30
60417574003	SP-2	Solid	12/05/22 10:30	12/08/22 10:30
60417574004	SP-3	Solid	12/05/22 10:50	12/08/22 10:30
60417574005	SP-4	Solid	12/05/22 11:00	12/08/22 10:30
60417574006	SP-5	Solid	12/05/22 11:15	12/08/22 10:30

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## SAMPLE ANALYTE COUNT

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60417574001	SP-1	EPA 8015B	YGR	4	PASI-K
		EPA 8015B	BA	2	PASI-K
		6010B-NE493 Ch 2	ABL	1	PAN
		EPA 6010	MA1	8	PASI-K
		EPA 6020	MRV	1	PASI-K
		EPA 8270 by SIM	SJJ	17	PASI-K
		EPA 8260C	RAD	9	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMK	1	PAN
		EPA 7199	ARD	1	PAN
		EPA 9045D	KAD	1	PAN
		EPA 9050	NTG	1	PAN
		Calculated	ZSA	1	PAN
		EPA 8015B	YGR	4	PASI-K
60417574002	SP-1 4'	EPA 8015B	BA	2	PASI-K
		6010B-NE493 Ch 2	ABL	1	PAN
		EPA 6010	MA1	8	PASI-K
		EPA 6020	MRV	1	PASI-K
		EPA 8270 by SIM	SJJ	17	PASI-K
		EPA 8260C	RAD	9	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMK	1	PAN
		EPA 7199	ARD	1	PAN
		EPA 9045D	KAD	1	PAN
		EPA 9050	NTG	1	PAN
		Calculated	ZSA	1	PAN
		EPA 8015B	YGR	4	PASI-K
		EPA 8015B	BA	2	PASI-K
60417574003	SP-2	6010B-NE493 Ch 2	ABL	1	PAN
		EPA 6010	MA1	8	PASI-K
		EPA 6020	MRV	1	PASI-K
		EPA 8270 by SIM	SJJ	17	PASI-K
		EPA 8260C	RAD	9	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMK	1	PAN
		EPA 7199	ARD	1	PAN
		EPA 9045D	KAD	1	PAN
		EPA 8015B	YGR	4	PASI-K
		EPA 8015B	BA	2	PASI-K
		6010B-NE493 Ch 2	ABL	1	PAN
		EPA 6010	MA1	8	PASI-K
		EPA 6020	MRV	1	PASI-K

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## SAMPLE ANALYTE COUNT

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60417574004	SP-3	EPA 9050	NTG	1	PAN
		Calculated	ZSA	1	PAN
		EPA 8015B	YGR	4	PASI-K
		EPA 8015B	BA	2	PASI-K
		6010B-NE493 Ch 2	ABL	1	PAN
		EPA 6010	MA1	8	PASI-K
		EPA 6020	MRV	1	PASI-K
		EPA 8270 by SIM	SJJ	17	PASI-K
		EPA 8260C	RAD	9	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMK	1	PAN
		EPA 7199	ARD	1	PAN
		EPA 9045D	KAD	1	PAN
		EPA 9050	NTG	1	PAN
		Calculated	ZSA	1	PAN
60417574005	SP-4	EPA 8015B	YGR	4	PASI-K
		EPA 8015B	BA	2	PASI-K
		6010B-NE493 Ch 2	ABL	1	PAN
		EPA 6010	MA1	8	PASI-K
		EPA 6020	MRV	1	PASI-K
		EPA 8270 by SIM	SJJ	17	PASI-K
		EPA 8260C	RAD	9	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMK	1	PAN
		EPA 7199	ARD	1	PAN
		EPA 9045D	KAD	1	PAN
		EPA 9050	NTG	1	PAN
		Calculated	ZSA	1	PAN
		EPA 8015B	YGR	4	PASI-K
		EPA 8015B	BA	2	PASI-K
60417574006	SP-5	6010B-NE493 Ch 2	ABL	1	PAN
		EPA 6010	MA1	8	PASI-K
		EPA 6020	MRV	1	PASI-K
		EPA 8270 by SIM	SJJ	17	PASI-K
		EPA 8260C	RAD	9	PASI-K
		ASTM D2974	DWC	1	PASI-K
		SM 2540G	CMK	1	PAN

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## SAMPLE ANALYTE COUNT

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7199	ARD	1	PAN
		EPA 9045D	KAD	1	PAN
		EPA 9050	NTG	1	PAN
		Calculated	ZSA	1	PAN

PAN = Pace National - Mt. Juliet

PASI-K = Pace Analytical Services - Kansas City

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

**Sample: SP-1** **Lab ID: 60417574001** Collected: 12/05/22 10:00 Received: 12/08/22 10:30 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-RRO (C28-C36)	ND	mg/kg	22.2	5.0	1	12/13/22 13:12	12/16/22 11:30		
TPH-DRO (C10-C28)	ND	mg/kg	11.1	5.0	1	12/13/22 13:12	12/16/22 11:30		
<b>Surrogates</b>									
n-Tetracosane (S)	77	%	31-152		1	12/13/22 13:12	12/16/22 11:30	646-31-1	
p-Terphenyl (S)	93	%	46-130		1	12/13/22 13:12	12/16/22 11:30	92-94-4	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
TPH-GRO	ND	mg/kg	11.4	1.4	1	12/16/22 09:42	12/16/22 23:10		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	66-130		1	12/16/22 09:42	12/16/22 23:10	460-00-4	
<b>Metals (ICP) 6010B-NE493 Ch 2</b>									
Analytical Method: 6010B-NE493 Ch 2 Preparation Method: HWS Boron									
Pace National - Mt. Juliet									
Boron, Hot Water Soluble	2580	ug/L	200	16.7	1	12/15/22 12:40	12/19/22 22:17	7440-42-8H	
<b>6010 MET ICP Red. Interference</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Pace Analytical Services - Kansas City									
Barium	57.5	mg/kg	0.47	0.093	1	12/13/22 07:00	12/14/22 20:45	7440-39-3	M1
Cadmium	0.46J	mg/kg	0.47	0.068	1	12/13/22 07:00	12/14/22 20:45	7440-43-9	
Copper	7.4	mg/kg	1.9	0.39	1	12/13/22 07:00	12/14/22 20:45	7440-50-8	
Lead	6.2	mg/kg	0.93	0.27	1	12/13/22 07:00	12/14/22 20:45	7439-92-1	
Nickel	7.3	mg/kg	0.47	0.23	1	12/13/22 07:00	12/14/22 20:45	7440-02-0	
Selenium	0.68J	mg/kg	1.4	0.29	1	12/13/22 07:00	12/14/22 20:45	7782-49-2	M1
Silver	ND	mg/kg	0.65	0.10	1	12/13/22 07:00	12/14/22 20:45	7440-22-4	
Zinc	32.3	mg/kg	9.3	0.20	1	12/13/22 07:00	12/14/22 20:45	7440-66-6	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Kansas City									
Arsenic	4.1	mg/kg	0.93	0.21	10	12/13/22 07:00	12/15/22 17:08	7440-38-2	
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	ND	mg/kg	0.0036	0.0020	1	12/14/22 08:10	12/14/22 13:47	83-32-9	
Anthracene	ND	mg/kg	0.0036	0.0019	1	12/14/22 08:10	12/14/22 13:47	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.0036	0.0020	1	12/14/22 08:10	12/14/22 13:47	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.0036	0.0015	1	12/14/22 08:10	12/14/22 13:47	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.0036	0.0020	1	12/14/22 08:10	12/14/22 13:47	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0036	0.0021	1	12/14/22 08:10	12/14/22 13:47	207-08-9	
Chrysene	ND	mg/kg	0.0036	0.0020	1	12/14/22 08:10	12/14/22 13:47	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0036	0.0020	1	12/14/22 08:10	12/14/22 13:47	53-70-3	
Fluoranthene	ND	mg/kg	0.0036	0.0025	1	12/14/22 08:10	12/14/22 13:47	206-44-0	
Fluorene	ND	mg/kg	0.0036	0.0024	1	12/14/22 08:10	12/14/22 13:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0036	0.0019	1	12/14/22 08:10	12/14/22 13:47	193-39-5	

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## ANALYTICAL RESULTS

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

**Sample: SP-1** **Lab ID: 60417574001** Collected: 12/05/22 10:00 Received: 12/08/22 10:30 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
1-Methylnaphthalene	ND	mg/kg	0.0036	0.0017	1	12/14/22 08:10	12/14/22 13:47	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0036	0.0022	1	12/14/22 08:10	12/14/22 13:47	91-57-6	
Naphthalene	ND	mg/kg	0.0036	0.0019	1	12/14/22 08:10	12/14/22 13:47	91-20-3	
Pyrene	ND	mg/kg	0.0036	0.0024	1	12/14/22 08:10	12/14/22 13:47	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	90	%	40-120		1	12/14/22 08:10	12/14/22 13:47	321-60-8	
Terphenyl-d14 (S)	94	%	45-130		1	12/14/22 08:10	12/14/22 13:47	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Benzene	<b>0.0011J</b>	mg/kg	0.0065	0.00060	1	12/12/22 12:38	12/12/22 18:37	71-43-2	
Ethylbenzene	ND	mg/kg	0.0065	0.0011	1	12/12/22 12:38	12/12/22 18:37	100-41-4	
Toluene	ND	mg/kg	0.026	0.0058	1	12/12/22 12:38	12/12/22 18:37	108-88-3	
1,2,4-Trimethylbenzene	ND	mg/kg	0.0065	0.00090	1	12/12/22 12:38	12/12/22 18:37	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/kg	0.0065	0.00057	1	12/12/22 12:38	12/12/22 18:37	108-67-8	
Xylene (Total)	ND	mg/kg	0.020	0.0048	1	12/12/22 12:38	12/12/22 18:37	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	112	%	80-120		1	12/12/22 12:38	12/12/22 18:37	2037-26-5	
4-Bromofluorobenzene (S)	104	%	83-119		1	12/12/22 12:38	12/12/22 18:37	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1	12/12/22 12:38	12/12/22 18:37	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	<b>13.5</b>	%	0.50	0.50	1		12/12/22 11:22		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>86.7</b>	%			1	12/14/22 18:03	12/14/22 18:17		
<b>Wet Chemistry 7199</b>									
Analytical Method: EPA 7199 Preparation Method: 3060A									
Pace National - Mt. Juliet									
Chromium, Hexavalent	<b>0.307J</b>	mg/kg	1.15	0.294	1	12/14/22 12:02	12/15/22 07:29	18540-29-9	D8,J
<b>Wet Chemistry 9045D</b>									
Analytical Method: EPA 9045D Preparation Method: 9045C/9045D									
Pace National - Mt. Juliet									
pH	<b>7.97</b>	Std. Units		0.10	1	12/14/22 10:00	12/14/22 12:00		H3
<b>Wet Chemistry 9050AMod</b>									
Analytical Method: EPA 9050 Preparation Method: 9050A									
Pace National - Mt. Juliet									
Specific Conductance @ 25 C	<b>10400</b>	umhos/cm	10.0	10.0	1	12/16/22 07:00	12/16/22 09:35		
<b>Calculated Results</b>									
Analytical Method: Calculated Preparation Method: Calc									
Pace National - Mt. Juliet									
Sodium Adsorption Ratio	<b>13.4</b>				1	12/19/22 15:19	12/19/22 15:19	SAR	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

**Sample: SP-1 4'** **Lab ID: 60417574002** Collected: 12/05/22 10:15 Received: 12/08/22 10:30 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-RRO (C28-C36)	ND	mg/kg	22.9	5.1	1	12/13/22 13:12	12/14/22 01:39		
TPH-DRO (C10-C28)	ND	mg/kg	11.5	5.1	1	12/13/22 13:12	12/14/22 01:39		
<b>Surrogates</b>									
n-Tetracosane (S)	88	%	31-152		1	12/13/22 13:12	12/14/22 01:39	646-31-1	
p-Terphenyl (S)	83	%	46-130		1	12/13/22 13:12	12/14/22 01:39	92-94-4	CL
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
TPH-GRO	ND	mg/kg	12.3	1.5	1	12/16/22 09:42	12/16/22 22:40		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	66-130		1	12/16/22 09:42	12/16/22 22:40	460-00-4	
<b>Metals (ICP) 6010B-NE493 Ch 2</b>									
Analytical Method: 6010B-NE493 Ch 2 Preparation Method: HWS Boron									
Pace National - Mt. Juliet									
Boron, Hot Water Soluble	<b>2290</b>	ug/L	200	16.7	1	12/15/22 12:40	12/19/22 22:20	7440-42-8H	
<b>6010 MET ICP Red. Interference</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Pace Analytical Services - Kansas City									
Barium	<b>142</b>	mg/kg	0.47	0.093	1	12/13/22 07:00	12/14/22 20:52	7440-39-3	
Cadmium	<b>1.1</b>	mg/kg	0.47	0.068	1	12/13/22 07:00	12/14/22 20:52	7440-43-9	
Copper	<b>21.3</b>	mg/kg	1.9	0.39	1	12/13/22 07:00	12/14/22 20:52	7440-50-8	
Lead	<b>10.8</b>	mg/kg	0.94	0.27	1	12/13/22 07:00	12/14/22 20:52	7439-92-1	
Nickel	<b>29.0</b>	mg/kg	0.47	0.23	1	12/13/22 07:00	12/14/22 20:52	7440-02-0	
Selenium	<b>1.7</b>	mg/kg	1.4	0.29	1	12/13/22 07:00	12/14/22 20:52	7782-49-2	
Silver	ND	mg/kg	0.66	0.10	1	12/13/22 07:00	12/14/22 20:52	7440-22-4	
Zinc	<b>37.8</b>	mg/kg	9.4	0.20	1	12/13/22 07:00	12/14/22 20:52	7440-66-6	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Kansas City									
Arsenic	<b>18.8</b>	mg/kg	1.0	0.23	10	12/13/22 07:00	12/15/22 17:10	7440-38-2	
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	ND	mg/kg	0.0039	0.0021	1	12/14/22 08:10	12/14/22 14:05	83-32-9	
Anthracene	ND	mg/kg	0.0039	0.0021	1	12/14/22 08:10	12/14/22 14:05	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.0039	0.0022	1	12/14/22 08:10	12/14/22 14:05	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.0039	0.0016	1	12/14/22 08:10	12/14/22 14:05	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.0039	0.0022	1	12/14/22 08:10	12/14/22 14:05	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0039	0.0022	1	12/14/22 08:10	12/14/22 14:05	207-08-9	
Chrysene	ND	mg/kg	0.0039	0.0021	1	12/14/22 08:10	12/14/22 14:05	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0039	0.0021	1	12/14/22 08:10	12/14/22 14:05	53-70-3	
Fluoranthene	ND	mg/kg	0.0039	0.0027	1	12/14/22 08:10	12/14/22 14:05	206-44-0	
Fluorene	ND	mg/kg	0.0039	0.0026	1	12/14/22 08:10	12/14/22 14:05	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0039	0.0021	1	12/14/22 08:10	12/14/22 14:05	193-39-5	

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## ANALYTICAL RESULTS

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

**Sample: SP-1 4'** **Lab ID: 60417574002** Collected: 12/05/22 10:15 Received: 12/08/22 10:30 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
1-Methylnaphthalene	ND	mg/kg	0.0039	0.0019	1	12/14/22 08:10	12/14/22 14:05	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0039	0.0024	1	12/14/22 08:10	12/14/22 14:05	91-57-6	
Naphthalene	ND	mg/kg	0.0039	0.0020	1	12/14/22 08:10	12/14/22 14:05	91-20-3	
Pyrene	ND	mg/kg	0.0039	0.0026	1	12/14/22 08:10	12/14/22 14:05	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	86	%	40-120		1	12/14/22 08:10	12/14/22 14:05	321-60-8	
Terphenyl-d14 (S)	90	%	45-130		1	12/14/22 08:10	12/14/22 14:05	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Benzene	<b>0.0013J</b>	mg/kg	0.0069	0.00063	1	12/12/22 12:38	12/12/22 18:57	71-43-2	
Ethylbenzene	ND	mg/kg	0.0069	0.0012	1	12/12/22 12:38	12/12/22 18:57	100-41-4	
Toluene	ND	mg/kg	0.028	0.0062	1	12/12/22 12:38	12/12/22 18:57	108-88-3	
1,2,4-Trimethylbenzene	ND	mg/kg	0.0069	0.00095	1	12/12/22 12:38	12/12/22 18:57	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/kg	0.0069	0.00060	1	12/12/22 12:38	12/12/22 18:57	108-67-8	
Xylene (Total)	ND	mg/kg	0.021	0.0051	1	12/12/22 12:38	12/12/22 18:57	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	114	%	80-120		1	12/12/22 12:38	12/12/22 18:57	2037-26-5	
4-Bromofluorobenzene (S)	103	%	83-119		1	12/12/22 12:38	12/12/22 18:57	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1	12/12/22 12:38	12/12/22 18:57	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	<b>16.7</b>	%	0.50	0.50	1		12/12/22 11:22		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>85.1</b>	%			1	12/14/22 18:03	12/14/22 18:17		
<b>Wet Chemistry 7199</b>									
Analytical Method: EPA 7199 Preparation Method: 3060A									
Pace National - Mt. Juliet									
Chromium, Hexavalent	ND	mg/kg	1.18	0.300	1	12/14/22 12:02	12/15/22 07:50	18540-29-9	
<b>Wet Chemistry 9045D</b>									
Analytical Method: EPA 9045D Preparation Method: 9045C/9045D									
Pace National - Mt. Juliet									
pH	<b>8.29</b>	Std. Units		0.10	1	12/15/22 08:30	12/15/22 10:39		H3
<b>Wet Chemistry 9050AMod</b>									
Analytical Method: EPA 9050 Preparation Method: 9050A									
Pace National - Mt. Juliet									
Specific Conductance @ 25 C	<b>3970</b>	umhos/cm	10.0	10.0	1	12/16/22 15:00	12/17/22 09:15		
<b>Calculated Results</b>									
Analytical Method: Calculated Preparation Method: Calc									
Pace National - Mt. Juliet									
Sodium Adsorption Ratio	<b>12.6</b>				1	12/19/22 15:22	12/19/22 15:22	SAR	

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## ANALYTICAL RESULTS

Project: TABLE 915-1 Nicoloson  
Pace Project No.: 60417574

**Sample: SP-2** **Lab ID: 60417574003** Collected: 12/05/22 10:30 Received: 12/08/22 10:30 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-RRO (C28-C36)	ND	mg/kg	21.8	4.9	1	12/13/22 13:12	12/14/22 01:47		
TPH-DRO (C10-C28)	ND	mg/kg	10.9	4.9	1	12/13/22 13:12	12/14/22 01:47		
<b>Surrogates</b>									
n-Tetracosane (S)	80	%	31-152		1	12/13/22 13:12	12/14/22 01:47	646-31-1	
p-Terphenyl (S)	75	%	46-130		1	12/13/22 13:12	12/14/22 01:47	92-94-4	CL
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
TPH-GRO	ND	mg/kg	10.7	1.3	1	12/16/22 09:42	12/16/22 23:25		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	66-130		1	12/16/22 09:42	12/16/22 23:25	460-00-4	
<b>Metals (ICP) 6010B-NE493 Ch 2</b>									
Analytical Method: 6010B-NE493 Ch 2 Preparation Method: HWS Boron									
Pace National - Mt. Juliet									
Boron, Hot Water Soluble	865	ug/L	200	16.7	1	12/15/22 12:40	12/19/22 22:23	7440-42-8H	
<b>6010 MET ICP Red. Interference</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Pace Analytical Services - Kansas City									
Barium	66.2	mg/kg	0.52	0.10	1	12/13/22 07:00	12/14/22 20:54	7440-39-3	
Cadmium	0.80	mg/kg	0.52	0.075	1	12/13/22 07:00	12/14/22 20:54	7440-43-9	
Copper	5.7	mg/kg	2.1	0.43	1	12/13/22 07:00	12/14/22 20:54	7440-50-8	
Lead	5.5	mg/kg	1.0	0.30	1	12/13/22 07:00	12/14/22 20:54	7439-92-1	
Nickel	6.0	mg/kg	0.52	0.26	1	12/13/22 07:00	12/14/22 20:54	7440-02-0	
Selenium	0.40J	mg/kg	1.6	0.32	1	12/13/22 07:00	12/14/22 20:54	7782-49-2	
Silver	ND	mg/kg	0.73	0.11	1	12/13/22 07:00	12/14/22 20:54	7440-22-4	
Zinc	51.4	mg/kg	10.4	0.22	1	12/13/22 07:00	12/14/22 20:54	7440-66-6	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Kansas City									
Arsenic	3.4	mg/kg	1.0	0.24	10	12/13/22 07:00	12/15/22 17:19	7440-38-2	
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	ND	mg/kg	0.0035	0.0019	1	12/14/22 08:10	12/14/22 14:23	83-32-9	
Anthracene	ND	mg/kg	0.0035	0.0018	1	12/14/22 08:10	12/14/22 14:23	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.0035	0.0019	1	12/14/22 08:10	12/14/22 14:23	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.0035	0.0014	1	12/14/22 08:10	12/14/22 14:23	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.0035	0.0019	1	12/14/22 08:10	12/14/22 14:23	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0035	0.0020	1	12/14/22 08:10	12/14/22 14:23	207-08-9	
Chrysene	ND	mg/kg	0.0035	0.0019	1	12/14/22 08:10	12/14/22 14:23	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0035	0.0019	1	12/14/22 08:10	12/14/22 14:23	53-70-3	
Fluoranthene	ND	mg/kg	0.0035	0.0024	1	12/14/22 08:10	12/14/22 14:23	206-44-0	
Fluorene	ND	mg/kg	0.0035	0.0023	1	12/14/22 08:10	12/14/22 14:23	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0035	0.0018	1	12/14/22 08:10	12/14/22 14:23	193-39-5	

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## ANALYTICAL RESULTS

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

**Sample: SP-2** **Lab ID: 60417574003** Collected: 12/05/22 10:30 Received: 12/08/22 10:30 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
1-Methylnaphthalene	ND	mg/kg	0.0035	0.0017	1	12/14/22 08:10	12/14/22 14:23	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0035	0.0021	1	12/14/22 08:10	12/14/22 14:23	91-57-6	
Naphthalene	ND	mg/kg	0.0035	0.0018	1	12/14/22 08:10	12/14/22 14:23	91-20-3	
Pyrene	ND	mg/kg	0.0035	0.0023	1	12/14/22 08:10	12/14/22 14:23	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	87	%	40-120		1	12/14/22 08:10	12/14/22 14:23	321-60-8	
Terphenyl-d14 (S)	92	%	45-130		1	12/14/22 08:10	12/14/22 14:23	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Benzene	<b>0.0011J</b>	mg/kg	0.0059	0.00054	1	12/12/22 12:38	12/12/22 19:16	71-43-2	
Ethylbenzene	ND	mg/kg	0.0059	0.0010	1	12/12/22 12:38	12/12/22 19:16	100-41-4	
Toluene	ND	mg/kg	0.024	0.0053	1	12/12/22 12:38	12/12/22 19:16	108-88-3	
1,2,4-Trimethylbenzene	ND	mg/kg	0.0059	0.00082	1	12/12/22 12:38	12/12/22 19:16	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/kg	0.0059	0.00052	1	12/12/22 12:38	12/12/22 19:16	108-67-8	
Xylene (Total)	ND	mg/kg	0.018	0.0044	1	12/12/22 12:38	12/12/22 19:16	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	112	%	80-120		1	12/12/22 12:38	12/12/22 19:16	2037-26-5	
4-Bromofluorobenzene (S)	105	%	83-119		1	12/12/22 12:38	12/12/22 19:16	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	12/12/22 12:38	12/12/22 19:16	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	<b>9.5</b>	%	0.50	0.50	1		12/12/22 11:22		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>93.4</b>	%			1	12/14/22 18:03	12/14/22 18:17		
<b>Wet Chemistry 7199</b>									
Analytical Method: EPA 7199 Preparation Method: 3060A									
Pace National - Mt. Juliet									
Chromium, Hexavalent	ND	mg/kg	1.07	0.273	1	12/14/22 12:02	12/15/22 07:55	18540-29-9	
<b>Wet Chemistry 9045D</b>									
Analytical Method: EPA 9045D Preparation Method: 9045C/9045D									
Pace National - Mt. Juliet									
pH	<b>8.14</b>	Std. Units		0.10	1	12/15/22 08:30	12/15/22 10:39		H3
<b>Wet Chemistry 9050AMod</b>									
Analytical Method: EPA 9050 Preparation Method: 9050A									
Pace National - Mt. Juliet									
Specific Conductance @ 25 C	<b>2240</b>	umhos/cm	10.0	10.0	1	12/16/22 15:00	12/17/22 09:15		
<b>Calculated Results</b>									
Analytical Method: Calculated Preparation Method: Calc									
Pace National - Mt. Juliet									
Sodium Adsorption Ratio	<b>7.32</b>				1	12/19/22 15:30	12/19/22 15:30	SAR	

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## ANALYTICAL RESULTS

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

**Sample: SP-3** **Lab ID: 60417574004** Collected: 12/05/22 10:50 Received: 12/08/22 10:30 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-RRO (C28-C36)	ND	mg/kg	21.5	4.8	1	12/13/22 13:12	12/14/22 01:55		
TPH-DRO (C10-C28)	ND	mg/kg	10.8	4.8	1	12/13/22 13:12	12/14/22 01:55		
<b>Surrogates</b>									
n-Tetracosane (S)	71	%	31-152		1	12/13/22 13:12	12/14/22 01:55	646-31-1	
p-Terphenyl (S)	67	%	46-130		1	12/13/22 13:12	12/14/22 01:55	92-94-4	CL
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
TPH-GRO	ND	mg/kg	10.6	1.3	1	12/16/22 09:42	12/16/22 22:55		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	66-130		1	12/16/22 09:42	12/16/22 22:55	460-00-4	
<b>Metals (ICP) 6010B-NE493 Ch 2</b>									
Analytical Method: 6010B-NE493 Ch 2 Preparation Method: HWS Boron									
Pace National - Mt. Juliet									
Boron, Hot Water Soluble	<b>888</b>	ug/L	200	16.7	1	12/15/22 12:40	12/19/22 22:31	7440-42-8H	
<b>6010 MET ICP Red. Interference</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Pace Analytical Services - Kansas City									
Barium	<b>42.9</b>	mg/kg	0.49	0.098	1	12/13/22 07:00	12/14/22 20:56	7440-39-3	
Cadmium	<b>0.31J</b>	mg/kg	0.49	0.071	1	12/13/22 07:00	12/14/22 20:56	7440-43-9	
Copper	<b>4.6</b>	mg/kg	2.0	0.41	1	12/13/22 07:00	12/14/22 20:56	7440-50-8	
Lead	<b>4.9</b>	mg/kg	0.99	0.29	1	12/13/22 07:00	12/14/22 20:56	7439-92-1	
Nickel	<b>4.5</b>	mg/kg	0.49	0.25	1	12/13/22 07:00	12/14/22 20:56	7440-02-0	
Selenium	<b>0.44J</b>	mg/kg	1.5	0.30	1	12/13/22 07:00	12/14/22 20:56	7782-49-2	
Silver	ND	mg/kg	0.69	0.11	1	12/13/22 07:00	12/14/22 20:56	7440-22-4	
Zinc	<b>18.1</b>	mg/kg	9.9	0.21	1	12/13/22 07:00	12/14/22 20:56	7440-66-6	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Kansas City									
Arsenic	<b>3.5</b>	mg/kg	0.99	0.23	10	12/13/22 07:00	12/15/22 17:22	7440-38-2	
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 14:41	83-32-9	
Anthracene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 14:41	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.0034	0.0019	1	12/14/22 08:10	12/14/22 14:41	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.0034	0.0014	1	12/14/22 08:10	12/14/22 14:41	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.0034	0.0019	1	12/14/22 08:10	12/14/22 14:41	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0034	0.0019	1	12/14/22 08:10	12/14/22 14:41	207-08-9	
Chrysene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 14:41	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 14:41	53-70-3	
Fluoranthene	<b>0.0032J</b>	mg/kg	0.0034	0.0024	1	12/14/22 08:10	12/14/22 14:41	206-44-0	
Fluorene	ND	mg/kg	0.0034	0.0022	1	12/14/22 08:10	12/14/22 14:41	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 14:41	193-39-5	

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## ANALYTICAL RESULTS

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

**Sample: SP-3** **Lab ID: 60417574004** Collected: 12/05/22 10:50 Received: 12/08/22 10:30 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
1-Methylnaphthalene	ND	mg/kg	0.0034	0.0016	1	12/14/22 08:10	12/14/22 14:41	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0034	0.0021	1	12/14/22 08:10	12/14/22 14:41	91-57-6	
Naphthalene	ND	mg/kg	0.0034	0.0017	1	12/14/22 08:10	12/14/22 14:41	91-20-3	
Pyrene	<b>0.0023J</b>	mg/kg	0.0034	0.0022	1	12/14/22 08:10	12/14/22 14:41	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	81	%	40-120		1	12/14/22 08:10	12/14/22 14:41	321-60-8	
Terphenyl-d14 (S)	83	%	45-130		1	12/14/22 08:10	12/14/22 14:41	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Benzene	<b>0.0011J</b>	mg/kg	0.0058	0.00053	1	12/12/22 12:38	12/12/22 19:35	71-43-2	
Ethylbenzene	ND	mg/kg	0.0058	0.0010	1	12/12/22 12:38	12/12/22 19:35	100-41-4	
Toluene	ND	mg/kg	0.023	0.0052	1	12/12/22 12:38	12/12/22 19:35	108-88-3	
1,2,4-Trimethylbenzene	ND	mg/kg	0.0058	0.00081	1	12/12/22 12:38	12/12/22 19:35	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/kg	0.0058	0.00051	1	12/12/22 12:38	12/12/22 19:35	108-67-8	
Xylene (Total)	ND	mg/kg	0.018	0.0043	1	12/12/22 12:38	12/12/22 19:35	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	112	%	80-120		1	12/12/22 12:38	12/12/22 19:35	2037-26-5	
4-Bromofluorobenzene (S)	105	%	83-119		1	12/12/22 12:38	12/12/22 19:35	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1	12/12/22 12:38	12/12/22 19:35	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	<b>7.9</b>	%	0.50	0.50	1		12/12/22 11:22		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>93.2</b>	%			1	12/14/22 18:03	12/14/22 18:17		
<b>Wet Chemistry 7199</b>									
Analytical Method: EPA 7199 Preparation Method: 3060A									
Pace National - Mt. Juliet									
Chromium, Hexavalent	ND	mg/kg	1.07	0.274	1	12/14/22 12:02	12/15/22 08:21	18540-29-9	
<b>Wet Chemistry 9045D</b>									
Analytical Method: EPA 9045D Preparation Method: 9045C/9045D									
Pace National - Mt. Juliet									
pH	<b>8.01</b>	Std. Units		0.10	1	12/15/22 08:30	12/15/22 10:39		H3
<b>Wet Chemistry 9050AMod</b>									
Analytical Method: EPA 9050 Preparation Method: 9050A									
Pace National - Mt. Juliet									
Specific Conductance @ 25 C	<b>2550</b>	umhos/cm	10.0	10.0	1	12/16/22 15:00	12/17/22 09:15		
<b>Calculated Results</b>									
Analytical Method: Calculated Preparation Method: Calc									
Pace National - Mt. Juliet									
Sodium Adsorption Ratio	<b>6.34</b>				1	12/19/22 15:33	12/19/22 15:33	SAR	

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## ANALYTICAL RESULTS

Project: TABLE 915-1 Nicoloson  
Pace Project No.: 60417574

**Sample: SP-4** **Lab ID: 60417574005** Collected: 12/05/22 11:00 Received: 12/08/22 10:30 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-RRO (C28-C36)	<b>4.7J</b>	mg/kg	20.7	4.6	1	12/13/22 13:12	12/14/22 02:03		
TPH-DRO (C10-C28)	ND	mg/kg	10.3	4.6	1	12/13/22 13:12	12/14/22 02:03		
<b>Surrogates</b>									
n-Tetracosane (S)	67	%	31-152		1	12/13/22 13:12	12/14/22 02:03	646-31-1	
p-Terphenyl (S)	63	%	46-130		1	12/13/22 13:12	12/14/22 02:03	92-94-4	CL
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
TPH-GRO	ND	mg/kg	9.8	1.2	1	12/16/22 09:42	12/16/22 23:55		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	90	%	66-130		1	12/16/22 09:42	12/16/22 23:55	460-00-4	
<b>Metals (ICP) 6010B-NE493 Ch 2</b>									
Analytical Method: 6010B-NE493 Ch 2 Preparation Method: HWS Boron									
Pace National - Mt. Juliet									
Boron, Hot Water Soluble	<b>557</b>	ug/L	200	16.7	1	12/15/22 12:40	12/19/22 22:34	7440-42-8H	
<b>6010 MET ICP Red. Interference</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Pace Analytical Services - Kansas City									
Barium	<b>60.9</b>	mg/kg	0.40	0.078	1	12/13/22 07:00	12/14/22 20:58	7440-39-3	
Cadmium	<b>0.39J</b>	mg/kg	0.40	0.057	1	12/13/22 07:00	12/14/22 20:58	7440-43-9	
Copper	<b>6.4</b>	mg/kg	1.6	0.33	1	12/13/22 07:00	12/14/22 20:58	7440-50-8	
Lead	<b>5.8</b>	mg/kg	0.79	0.23	1	12/13/22 07:00	12/14/22 20:58	7439-92-1	
Nickel	<b>7.2</b>	mg/kg	0.40	0.20	1	12/13/22 07:00	12/14/22 20:58	7440-02-0	
Selenium	<b>0.32J</b>	mg/kg	1.2	0.24	1	12/13/22 07:00	12/14/22 20:58	7782-49-2	
Silver	ND	mg/kg	0.55	0.085	1	12/13/22 07:00	12/14/22 20:58	7440-22-4	
Zinc	<b>27.5</b>	mg/kg	7.9	0.17	1	12/13/22 07:00	12/14/22 20:58	7440-66-6	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Kansas City									
Arsenic	<b>3.3</b>	mg/kg	0.79	0.18	10	12/13/22 07:00	12/15/22 17:24	7440-38-2	
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 14:59	83-32-9	
Anthracene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 14:59	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.0034	0.0019	1	12/14/22 08:10	12/14/22 14:59	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.0034	0.0014	1	12/14/22 08:10	12/14/22 14:59	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.0034	0.0019	1	12/14/22 08:10	12/14/22 14:59	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0034	0.0019	1	12/14/22 08:10	12/14/22 14:59	207-08-9	
Chrysene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 14:59	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 14:59	53-70-3	
Fluoranthene	<b>0.0044</b>	mg/kg	0.0034	0.0023	1	12/14/22 08:10	12/14/22 14:59	206-44-0	
Fluorene	ND	mg/kg	0.0034	0.0022	1	12/14/22 08:10	12/14/22 14:59	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 14:59	193-39-5	

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## ANALYTICAL RESULTS

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

**Sample: SP-4** **Lab ID: 60417574005** Collected: 12/05/22 11:00 Received: 12/08/22 10:30 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
1-Methylnaphthalene	ND	mg/kg	0.0034	0.0016	1	12/14/22 08:10	12/14/22 14:59	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0034	0.0021	1	12/14/22 08:10	12/14/22 14:59	91-57-6	
Naphthalene	ND	mg/kg	0.0034	0.0017	1	12/14/22 08:10	12/14/22 14:59	91-20-3	
Pyrene	<b>0.0033J</b>	mg/kg	0.0034	0.0022	1	12/14/22 08:10	12/14/22 14:59	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	80	%	40-120		1	12/14/22 08:10	12/14/22 14:59	321-60-8	
Terphenyl-d14 (S)	83	%	45-130		1	12/14/22 08:10	12/14/22 14:59	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Benzene	<b>0.0010J</b>	mg/kg	0.0056	0.00051	1	12/12/22 12:38	12/12/22 19:55	71-43-2	
Ethylbenzene	ND	mg/kg	0.0056	0.00096	1	12/12/22 12:38	12/12/22 19:55	100-41-4	
Toluene	ND	mg/kg	0.022	0.0049	1	12/12/22 12:38	12/12/22 19:55	108-88-3	
1,2,4-Trimethylbenzene	ND	mg/kg	0.0056	0.00077	1	12/12/22 12:38	12/12/22 19:55	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/kg	0.0056	0.00048	1	12/12/22 12:38	12/12/22 19:55	108-67-8	
Xylene (Total)	ND	mg/kg	0.017	0.0041	1	12/12/22 12:38	12/12/22 19:55	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	113	%	80-120		1	12/12/22 12:38	12/12/22 19:55	2037-26-5	
4-Bromofluorobenzene (S)	105	%	83-119		1	12/12/22 12:38	12/12/22 19:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1	12/12/22 12:38	12/12/22 19:55	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	<b>5.6</b>	%	0.50	0.50	1		12/12/22 11:22		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>94.5</b>	%			1	12/14/22 18:03	12/14/22 18:17		
<b>Wet Chemistry 7199</b>									
Analytical Method: EPA 7199 Preparation Method: 3060A									
Pace National - Mt. Juliet									
Chromium, Hexavalent	<b>0.526J</b>	mg/kg	1.06	0.270	1	12/14/22 17:26	12/16/22 12:42	18540-29-9	B,J
<b>Wet Chemistry 9045D</b>									
Analytical Method: EPA 9045D Preparation Method: 9045C/9045D									
Pace National - Mt. Juliet									
pH	<b>7.91</b>	Std. Units		0.10	1	12/15/22 08:30	12/15/22 10:39		H3
<b>Wet Chemistry 9050AMod</b>									
Analytical Method: EPA 9050 Preparation Method: 9050A									
Pace National - Mt. Juliet									
Specific Conductance @ 25 C	<b>1580</b>	umhos/cm	10.0	10.0	1	12/16/22 15:00	12/17/22 09:15		
<b>Calculated Results</b>									
Analytical Method: Calculated Preparation Method: Calc									
Pace National - Mt. Juliet									
Sodium Adsorption Ratio	<b>9.01</b>				1	12/19/22 15:36	12/19/22 15:36	SAR	

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## ANALYTICAL RESULTS

Project: TABLE 915-1 Nicoloson  
Pace Project No.: 60417574

**Sample: SP-5** **Lab ID: 60417574006** Collected: 12/05/22 11:15 Received: 12/08/22 10:30 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
TPH-RRO (C28-C36)	ND	mg/kg	21.2	4.7	1	12/13/22 13:12	12/14/22 02:44		
TPH-DRO (C10-C28)	ND	mg/kg	10.6	4.7	1	12/13/22 13:12	12/14/22 02:44		CH
<b>Surrogates</b>									
n-Tetracosane (S)	63	%	31-152		1	12/13/22 13:12	12/14/22 02:44	646-31-1	
p-Terphenyl (S)	59	%	46-130		1	12/13/22 13:12	12/14/22 02:44	92-94-4	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
TPH-GRO	ND	mg/kg	10.4	1.3	1	12/16/22 09:42	12/16/22 23:40		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	91	%	66-130		1	12/16/22 09:42	12/16/22 23:40	460-00-4	
<b>Metals (ICP) 6010B-NE493 Ch 2</b>									
Analytical Method: 6010B-NE493 Ch 2 Preparation Method: HWS Boron									
Pace National - Mt. Juliet									
Boron, Hot Water Soluble	<b>202</b>	ug/L	200	16.7	1	12/15/22 12:40	12/19/22 22:37	7440-42-8H	
<b>6010 MET ICP Red. Interference</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Pace Analytical Services - Kansas City									
Barium	<b>78.3</b>	mg/kg	0.43	0.086	1	12/13/22 07:00	12/14/22 21:07	7440-39-3	
Cadmium	<b>0.37J</b>	mg/kg	0.43	0.062	1	12/13/22 07:00	12/14/22 21:07	7440-43-9	
Copper	<b>5.0</b>	mg/kg	1.7	0.36	1	12/13/22 07:00	12/14/22 21:07	7440-50-8	
Lead	<b>5.3</b>	mg/kg	0.86	0.25	1	12/13/22 07:00	12/14/22 21:07	7439-92-1	
Nickel	<b>5.9</b>	mg/kg	0.43	0.22	1	12/13/22 07:00	12/14/22 21:07	7440-02-0	
Selenium	<b>0.48J</b>	mg/kg	1.3	0.26	1	12/13/22 07:00	12/14/22 21:07	7782-49-2	
Silver	ND	mg/kg	0.60	0.093	1	12/13/22 07:00	12/14/22 21:07	7440-22-4	
Zinc	<b>21.8</b>	mg/kg	8.6	0.18	1	12/13/22 07:00	12/14/22 21:07	7440-66-6	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020 Preparation Method: EPA 3050									
Pace Analytical Services - Kansas City									
Arsenic	<b>3.8</b>	mg/kg	0.86	0.20	10	12/13/22 07:00	12/15/22 17:26	7440-38-2	
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
Acenaphthene	ND	mg/kg	0.0034	0.0019	1	12/14/22 08:10	12/14/22 15:17	83-32-9	
Anthracene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 15:17	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.0034	0.0019	1	12/14/22 08:10	12/14/22 15:17	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.0034	0.0014	1	12/14/22 08:10	12/14/22 15:17	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.0034	0.0019	1	12/14/22 08:10	12/14/22 15:17	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0034	0.0020	1	12/14/22 08:10	12/14/22 15:17	207-08-9	
Chrysene	ND	mg/kg	0.0034	0.0019	1	12/14/22 08:10	12/14/22 15:17	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0034	0.0019	1	12/14/22 08:10	12/14/22 15:17	53-70-3	
Fluoranthene	<b>0.0031J</b>	mg/kg	0.0034	0.0024	1	12/14/22 08:10	12/14/22 15:17	206-44-0	
Fluorene	ND	mg/kg	0.0034	0.0022	1	12/14/22 08:10	12/14/22 15:17	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 15:17	193-39-5	

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## ANALYTICAL RESULTS

Project: TABLE 915-1 Nicoloson  
Pace Project No.: 60417574

**Sample: SP-5** **Lab ID: 60417574006** Collected: 12/05/22 11:15 Received: 12/08/22 10:30 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Kansas City									
1-Methylnaphthalene	ND	mg/kg	0.0034	0.0017	1	12/14/22 08:10	12/14/22 15:17	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0034	0.0021	1	12/14/22 08:10	12/14/22 15:17	91-57-6	
Naphthalene	ND	mg/kg	0.0034	0.0018	1	12/14/22 08:10	12/14/22 15:17	91-20-3	
Pyrene	ND	mg/kg	0.0034	0.0023	1	12/14/22 08:10	12/14/22 15:17	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	82	%	40-120		1	12/14/22 08:10	12/14/22 15:17	321-60-8	
Terphenyl-d14 (S)	84	%	45-130		1	12/14/22 08:10	12/14/22 15:17	1718-51-0	
<b>8260C MSV 5035A Low Level</b>									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A/5030B									
Pace Analytical Services - Kansas City									
Benzene	<b>0.00095J</b>	mg/kg	0.0058	0.00053	1	12/12/22 12:38	12/12/22 20:14	71-43-2	
Ethylbenzene	ND	mg/kg	0.0058	0.0010	1	12/12/22 12:38	12/12/22 20:14	100-41-4	
Toluene	ND	mg/kg	0.023	0.0051	1	12/12/22 12:38	12/12/22 20:14	108-88-3	
1,2,4-Trimethylbenzene	ND	mg/kg	0.0058	0.00080	1	12/12/22 12:38	12/12/22 20:14	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/kg	0.0058	0.00050	1	12/12/22 12:38	12/12/22 20:14	108-67-8	
Xylene (Total)	ND	mg/kg	0.017	0.0043	1	12/12/22 12:38	12/12/22 20:14	1330-20-7	
<b>Surrogates</b>									
Toluene-d8 (S)	115	%	80-120		1	12/12/22 12:38	12/12/22 20:14	2037-26-5	
4-Bromofluorobenzene (S)	104	%	83-119		1	12/12/22 12:38	12/12/22 20:14	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1	12/12/22 12:38	12/12/22 20:14	2199-69-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Kansas City									
Percent Moisture	<b>8.0</b>	%	0.50	0.50	1		12/12/22 11:22		
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>93.3</b>	%			1	12/14/22 18:03	12/14/22 18:17		
<b>Wet Chemistry 7199</b>									
Analytical Method: EPA 7199 Preparation Method: 3060A									
Pace National - Mt. Juliet									
Chromium, Hexavalent	<b>0.326J</b>	mg/kg	1.07	0.273	1	12/14/22 17:26	12/16/22 12:47	18540-29-9	B,J
<b>Wet Chemistry 9045D</b>									
Analytical Method: EPA 9045D Preparation Method: 9045C/9045D									
Pace National - Mt. Juliet									
pH	<b>7.97</b>	Std. Units		0.10	1	12/15/22 08:30	12/15/22 10:39		H3
<b>Wet Chemistry 9050AMod</b>									
Analytical Method: EPA 9050 Preparation Method: 9050A									
Pace National - Mt. Juliet									
Specific Conductance @ 25 C	<b>330</b>	umhos/cm	10.0	10.0	1	12/16/22 15:00	12/17/22 09:15		
<b>Calculated Results</b>									
Analytical Method: Calculated Preparation Method: Calc									
Pace National - Mt. Juliet									
Sodium Adsorption Ratio	<b>0.268</b>				1	12/19/22 15:39	12/19/22 15:39	SAR	

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

QC Batch:	823519	Analysis Method:	EPA 8015B
QC Batch Method:	EPA 5035A/5030B	Analysis Description:	Gasoline Range Organics
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

METHOD BLANK: 3273314 Matrix: Solid

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-GRO	mg/kg	1.4J	10.0	1.2	12/16/22 22:25	
4-Bromofluorobenzene (S)	%	94	66-130		12/16/22 22:25	

LABORATORY CONTROL SAMPLE: 3273315

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	50	45.7	91	70-130	
4-Bromofluorobenzene (S)	%			95	66-130	

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

QC Batch: 1974769

Analysis Method: 6010B-NE493 Ch 2

QC Batch Method: HWS Boron

Analysis Description: Metals (ICP) 6010B-NE493 Ch 2

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

METHOD BLANK: R3873670-1

Matrix: Solid

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron, Hot Water Soluble	ug/L	ND	200	16.7	12/19/22 21:57	

LABORATORY CONTROL SAMPLE & LCSD: R3873670-2

R3873670-3

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Boron, Hot Water Soluble	ug/L	1000	1020	1030	102	103	80.0-120	0.670	20	

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson  
Pace Project No.: 60417574

QC Batch:	822625	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3050	Analysis Description:	6010 MET
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

METHOD BLANK: 3270075 Matrix: Solid  
Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	mg/kg	ND	0.50	0.099	12/14/22 20:41	
Cadmium	mg/kg	ND	0.50	0.072	12/14/22 20:41	
Copper	mg/kg	ND	2.0	0.41	12/14/22 20:41	
Lead	mg/kg	ND	1.0	0.29	12/14/22 20:41	
Nickel	mg/kg	ND	0.50	0.25	12/14/22 20:41	
Selenium	mg/kg	ND	1.5	0.31	12/14/22 20:41	
Silver	mg/kg	ND	0.70	0.11	12/14/22 20:41	
Zinc	mg/kg	ND	10.0	0.21	12/14/22 20:41	

LABORATORY CONTROL SAMPLE: 3270076

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	mg/kg	100	93.0	93	80-120	
Cadmium	mg/kg	100	90.9	91	80-120	
Copper	mg/kg	100	91.0	91	80-120	
Lead	mg/kg	100	90.0	90	80-120	
Nickel	mg/kg	100	92.2	92	80-120	
Selenium	mg/kg	100	87.4	87	80-120	
Silver	mg/kg	50	47.9	96	80-120	
Zinc	mg/kg	100	86.8	87	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3270077 3270078

Parameter	Units	60417574001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/kg	57.5	96.3	96.3	181	182	128	129	75-125	0	20	M1
Cadmium	mg/kg	0.46J	96.3	96.3	78.2	77.5	81	80	75-125	1	20	
Copper	mg/kg	7.4	96.3	96.3	91.4	88.0	87	84	75-125	4	20	
Lead	mg/kg	6.2	96.3	96.3	82.9	82.4	80	79	75-125	1	20	
Nickel	mg/kg	7.3	96.3	96.3	87.0	84.5	83	80	75-125	3	20	
Selenium	mg/kg	0.68J	96.3	96.3	72.0	70.5	74	72	75-125	2	20	M1
Silver	mg/kg	ND	48.2	48.2	46.3	42.0	96	87	75-125	10	20	
Zinc	mg/kg	32.3	96.3	96.3	115	111	86	81	75-125	4	20	

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

QC Batch: 822626

Analysis Method: EPA 6020

QC Batch Method: EPA 3050

Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

METHOD BLANK: 3270079

Matrix: Solid

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	ND	1.0	0.23	12/15/22 17:04	

LABORATORY CONTROL SAMPLE: 3270080

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	100	92.9	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3270081 3270082

Parameter	Units	60417574002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	18.8	91	96.8	97.0	99.0	86	83	75-125	2	20	

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson  
Pace Project No.: 60417574

QC Batch:	822548	Analysis Method:	EPA 8260C
QC Batch Method:	EPA 5035A/5030B	Analysis Description:	8260C MSV 5035A Low Level
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

METHOD BLANK: 3269908 Matrix: Solid  
Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	mg/kg	ND	0.0050	0.00069	12/12/22 18:18	
1,3,5-Trimethylbenzene	mg/kg	ND	0.0050	0.00043	12/12/22 18:18	
Benzene	mg/kg	ND	0.0050	0.00046	12/12/22 18:18	
Ethylbenzene	mg/kg	ND	0.0050	0.00087	12/12/22 18:18	
Toluene	mg/kg	ND	0.020	0.0044	12/12/22 18:18	
Xylene (Total)	mg/kg	ND	0.015	0.0037	12/12/22 18:18	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		12/12/22 18:18	
4-Bromofluorobenzene (S)	%	105	83-119		12/12/22 18:18	
Toluene-d8 (S)	%	113	80-120		12/12/22 18:18	

LABORATORY CONTROL SAMPLE: 3269909

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	mg/kg	1.2	1.2	98	79-121	
1,3,5-Trimethylbenzene	mg/kg	1.2	1.2	97	81-122	
Benzene	mg/kg	1.2	1.2	95	67-126	
Ethylbenzene	mg/kg	1.2	1.2	94	69-127	
Toluene	mg/kg	1.2	1.1	87	80-118	
Xylene (Total)	mg/kg	3.8	3.6	95	69-130	
1,2-Dichlorobenzene-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			102	83-119	
Toluene-d8 (S)	%			97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3269910 3269911

Parameter	Units	60417574001	MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Max	Qual
		Result	Spike Conc.	Spike Conc.								
1,2,4-Trimethylbenzene	mg/kg	ND	1.6	1.6	1.6	1.7	97	104	10-124	7	68	
1,3,5-Trimethylbenzene	mg/kg	ND	1.6	1.6	1.5	1.7	95	104	10-125	9	65	
Benzene	mg/kg	0.0011J	1.6	1.6	1.5	1.7	93	104	17-134	11	53	
Ethylbenzene	mg/kg	ND	1.6	1.6	1.5	1.6	92	101	10-137	9	60	
Toluene	mg/kg	ND	1.6	1.6	1.4	1.5	86	95	13-131	10	60	
Xylene (Total)	mg/kg	ND	4.9	4.9	4.6	5.0	94	103	10-137	9	58	
1,2-Dichlorobenzene-d4 (S)	%						99	98	80-120			
4-Bromofluorobenzene (S)	%						103	102	83-119			
Toluene-d8 (S)	%						97	97	80-120			

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson  
Pace Project No.: 60417574

QC Batch:	822590	Analysis Method:	EPA 8015B
QC Batch Method:	EPA 3546	Analysis Description:	EPA 8015B
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

METHOD BLANK: 3270010 Matrix: Solid  
Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
TPH-DRO (C10-C28)	mg/kg	ND	9.8	4.4	12/16/22 11:14	
TPH-RRO (C28-C36)	mg/kg	ND	19.6	4.4	12/16/22 11:14	
n-Tetracosane (S)	%	77	31-152		12/16/22 11:14	
p-Terphenyl (S)	%	91	46-130		12/16/22 11:14	

LABORATORY CONTROL SAMPLE: 3270011

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C28)	mg/kg	82.1	77.6	94	74-124	
n-Tetracosane (S)	%			95	31-152	
p-Terphenyl (S)	%			108	46-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3270012 3270013

Parameter	Units	60417574001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-DRO (C10-C28)	mg/kg	ND	92.6	96.3	97.3	94.9	102	96	30-130	2	35	
n-Tetracosane (S)	%						77	82	31-152			
p-Terphenyl (S)	%						79	79	46-130			CL

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson  
Pace Project No.: 60417574

QC Batch: 822613 Analysis Method: EPA 8270 by SIM  
QC Batch Method: EPA 3546 Analysis Description: 8270/3546 MSSV PAH by SIM  
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

METHOD BLANK: 3270036

Matrix: Solid

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1-Methylnaphthalene	mg/kg	ND	0.0033	0.0016	12/14/22 13:10	
2-Methylnaphthalene	mg/kg	ND	0.0033	0.0020	12/14/22 13:10	
Acenaphthene	mg/kg	ND	0.0033	0.0018	12/14/22 13:10	
Anthracene	mg/kg	ND	0.0033	0.0017	12/14/22 13:10	
Benzo(a)anthracene	mg/kg	ND	0.0033	0.0018	12/14/22 13:10	
Benzo(a)pyrene	mg/kg	ND	0.0033	0.0014	12/14/22 13:10	
Benzo(b)fluoranthene	mg/kg	ND	0.0033	0.0018	12/14/22 13:10	
Benzo(k)fluoranthene	mg/kg	ND	0.0033	0.0019	12/14/22 13:10	
Chrysene	mg/kg	ND	0.0033	0.0018	12/14/22 13:10	
Dibenz(a,h)anthracene	mg/kg	ND	0.0033	0.0018	12/14/22 13:10	
Fluoranthene	mg/kg	ND	0.0033	0.0023	12/14/22 13:10	
Fluorene	mg/kg	ND	0.0033	0.0021	12/14/22 13:10	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.0033	0.0017	12/14/22 13:10	
Naphthalene	mg/kg	ND	0.0033	0.0017	12/14/22 13:10	
Pyrene	mg/kg	ND	0.0033	0.0021	12/14/22 13:10	
2-Fluorobiphenyl (S)	%	103	40-120		12/14/22 13:10	
Terphenyl-d14 (S)	%	110	45-130		12/14/22 13:10	

LABORATORY CONTROL SAMPLE: 3270037

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	mg/kg	0.033	0.026	80	55-120	
2-Methylnaphthalene	mg/kg	0.033	0.027	82	55-120	
Acenaphthene	mg/kg	0.033	0.029	89	45-120	
Anthracene	mg/kg	0.033	0.029	90	50-120	
Benzo(a)anthracene	mg/kg	0.033	0.028	86	55-125	
Benzo(a)pyrene	mg/kg	0.033	0.029	88	45-120	
Benzo(b)fluoranthene	mg/kg	0.033	0.029	90	50-125	
Benzo(k)fluoranthene	mg/kg	0.033	0.033	100	55-120	
Chrysene	mg/kg	0.033	0.031	95	55-120	
Dibenz(a,h)anthracene	mg/kg	0.033	0.030	93	40-125	
Fluoranthene	mg/kg	0.033	0.031	95	50-125	
Fluorene	mg/kg	0.033	0.027	82	50-120	
Indeno(1,2,3-cd)pyrene	mg/kg	0.033	0.034	103	44-125	
Naphthalene	mg/kg	0.033	0.027	84	45-120	
Pyrene	mg/kg	0.033	0.032	99	50-125	
2-Fluorobiphenyl (S)	%			95	40-120	
Terphenyl-d14 (S)	%			98	45-130	

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3270997 3270998											
Parameter	Units	60417711001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
			Spike Conc.	Spike Conc.							
1-Methylnaphthalene	mg/kg	34.7 ug/kg	0.037	0.035	0.068	0.078	90	125	50-145	15	61
2-Methylnaphthalene	mg/kg	ND	0.037	0.035	0.028	0.031	78	88	50-120	8	61
Acenaphthene	mg/kg	2.1J ug/kg	0.037	0.035	0.032	0.036	82	99	10-150	12	42
Anthracene	mg/kg	ND	0.037	0.035	0.031	0.035	86	101	10-160	11	54
Benzo(a)anthracene	mg/kg	ND	0.037	0.035	0.030	0.033	82	95	10-160	10	62
Benzo(a)pyrene	mg/kg	ND	0.037	0.035	0.029	0.032	78	91	10-150	10	66
Benzo(b)fluoranthene	mg/kg	ND	0.037	0.035	0.029	0.033	80	93	10-165	11	61
Benzo(k)fluoranthene	mg/kg	ND	0.037	0.035	0.033	0.036	90	103	10-165	9	53
Chrysene	mg/kg	ND	0.037	0.035	0.031	0.034	85	98	10-150	10	57
Dibenz(a,h)anthracene	mg/kg	ND	0.037	0.035	0.025	0.027	67	78	10-175	10	48
Fluoranthene	mg/kg	ND	0.037	0.035	0.034	0.038	94	109	10-180	10	54
Fluorene	mg/kg	ND	0.037	0.035	0.032	0.036	82	99	20-145	13	39
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.037	0.035	0.027	0.030	75	85	10-150	7	59
Naphthalene	mg/kg	3.0J ug/kg	0.037	0.035	0.032	0.036	80	94	10-165	11	54
Pyrene	mg/kg	ND	0.037	0.035	0.033	0.036	90	103	10-180	9	61
2-Fluorobiphenyl (S)	%						84	97	40-120		
Terphenyl-d14 (S)	%						86	101	45-130		

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

QC Batch: 822535

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

METHOD BLANK: 3269856

Matrix: Solid

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	0.50	12/12/22 11:22	

SAMPLE DUPLICATE: 3269857

Parameter	Units	60417528004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	24.1	24.1	0	20	

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

QC Batch: 1973983

Analysis Method: SM 2540G

QC Batch Method: SM 2540 G

Analysis Description: Total Solids 2540 G-2011

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

METHOD BLANK: R3872296-1

Matrix: Solid

Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	ND			12/14/22 18:17	

LABORATORY CONTROL SAMPLE: R3872296-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	85.0-115	

SAMPLE DUPLICATE: R3872296-3

Parameter	Units	60417574001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	86.7	86.7	0.0918	10	

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson  
Pace Project No.: 60417574

QC Batch: 1973277 Analysis Method: EPA 7199  
QC Batch Method: 3060A Analysis Description: Wet Chemistry 7199  
Laboratory: Pace National - Mt. Juliet  
Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004

METHOD BLANK: R3873890-1 Matrix: Solid  
Associated Lab Samples: 60417574001, 60417574002, 60417574003, 60417574004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	ND	1.00	0.255	12/15/22 05:38	

LABORATORY CONTROL SAMPLE: R3873890-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	10.0	8.59	85.9	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3873890-6 R3873890-7

Parameter	Units	60417574003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/kg	ND	21.4	21.4	16.1	16.9	80.6	84.4	75.0-125	4.56	20	

MATRIX SPIKE SAMPLE: R3873890-8

Parameter	Units	60417574003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	ND	683	577	90.4	75.0-125	

SAMPLE DUPLICATE: R3873890-3

Parameter	Units	L1566398-02 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/kg	0.366	0.306J	17.8	20 J	

SAMPLE DUPLICATE: R3873890-4

Parameter	Units	60417574001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/kg	0.266	ND	200	20 D8	

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

QC Batch: 1974447

Analysis Method: EPA 7199

QC Batch Method: 3060A

Analysis Description: Wet Chemistry 7199

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60417574005, 60417574006

METHOD BLANK: R3873902-1

Matrix: Solid

Associated Lab Samples: 60417574005, 60417574006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	0.262J	1.00	0.255	12/16/22 11:06	J

LABORATORY CONTROL SAMPLE: R3873902-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	10.0	9.69	96.9	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3873902-8 R3873902-9

Parameter	Units	L1562533-09 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/kg	ND	20.0	20.0	7.82	9.63	39.1	48.2	75.0-125	20.8	20	ML, R1

MATRIX SPIKE SAMPLE: R3873902-11

Parameter	Units	L1562533-09 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	ND	643	553	86.0	75.0-125	

SAMPLE DUPLICATE: R3873902-3

Parameter	Units	L1562533-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/kg	ND	ND	0.00	20	

SAMPLE DUPLICATE: R3873902-12

Parameter	Units	L1567128-05 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/kg	ND	ND	0.00	20	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

QC Batch: 1974048

QC Batch Method: 9045C/9045D

Analysis Method: EPA 9045D

Analysis Description: Wet Chemistry 9045D

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60417574001

LABORATORY CONTROL SAMPLE: R3871642-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
pH	Std. Units	10.0	9.90	99.0	99.0-101	

SAMPLE DUPLICATE: R3871642-2

Parameter	Units	L1566398-07 Result	Dup Result	RPD	Max RPD	Qualifiers
pH	Std. Units	8.16	8.20	0.489	1	

SAMPLE DUPLICATE: R3871642-3

Parameter	Units	L1566703-01 Result	Dup Result	RPD	Max RPD	Qualifiers
pH	Std. Units	7.91	7.95	0.504	1	

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

QC Batch: 1974472

Analysis Method: EPA 9045D

QC Batch Method: 9045C/9045D

Analysis Description: Wet Chemistry 9045D

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

LABORATORY CONTROL SAMPLE: R3872081-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
pH	Std. Units	10.0	9.91	99.1	99.0-101	

SAMPLE DUPLICATE: R3872081-2

Parameter	Units	L1566811-11 Result	Dup Result	RPD	Max RPD	Qualifiers
pH	Std. Units	8.25	8.25	0.00	1	

SAMPLE DUPLICATE: R3872081-3

Parameter	Units	L1567274-22 Result	Dup Result	RPD	Max RPD	Qualifiers
pH	Std. Units	7.92	7.97	0.629	1	

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

QC Batch: 1974991

QC Batch Method: 9050A

Analysis Method: EPA 9050

Analysis Description: Wet Chemistry 9050AMod

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60417574001

METHOD BLANK: R3872826-1

Matrix: Solid

Associated Lab Samples:

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Specific Conductance @ 25 C	umhos/cm	ND	10.0	10.0	12/16/22 09:35	

LABORATORY CONTROL SAMPLE: R3872826-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Specific Conductance @ 25 C	umhos/cm	1120	1090	97.2	85.0-115	

SAMPLE DUPLICATE: R3872826-3

Parameter	Units	L1566408-02 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance @ 25 C	umhos/cm	143	142	0.351	20	

SAMPLE DUPLICATE: R3872826-4

Parameter	Units	L1566721-03 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance @ 25 C	umhos/cm	5900	6030	2.18	20	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson  
Pace Project No.: 60417574

QC Batch: 1974991	Analysis Method: EPA 9050
QC Batch Method: EPA 9050	Analysis Description: Wet Chemistry 9050AMod
	Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 60417574001

METHOD BLANK: R3872826-1 Matrix: Solid

Associated Lab Samples:

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Specific Conductance @ 25 C	umhos/cm	ND	10.0	10.0	12/16/22 09:35	

LABORATORY CONTROL SAMPLE: R3872826-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Specific Conductance @ 25 C	umhos/cm	1120	1090	97.2	85.0-115	

SAMPLE DUPLICATE: R3872826-3

Parameter	Units	L1566408-02 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance @ 25 C	umhos/cm	143	142	0.351	20	

SAMPLE DUPLICATE: R3872826-4

Parameter	Units	L1566721-03 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance @ 25 C	umhos/cm	5900	6030	2.18	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson  
Pace Project No.: 60417574

QC Batch: 1975665 Analysis Method: EPA 9050  
QC Batch Method: 9050A Analysis Description: Wet Chemistry 9050AMod  
Laboratory: Pace National - Mt. Juliet  
Associated Lab Samples: 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

METHOD BLANK: R3872949-1 Matrix: Solid  
Associated Lab Samples:

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Specific Conductance @ 25 C	umhos/cm	ND	10.0	10.0	12/17/22 09:15	

LABORATORY CONTROL SAMPLE: R3872949-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Specific Conductance @ 25 C	umhos/cm	1120	1110	99.5	85.0-115	

SAMPLE DUPLICATE: R3872949-3

Parameter	Units	60417574003 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance @ 25 C	umhos/cm	2240	2290	2.25	20	

SAMPLE DUPLICATE: R3872949-4

Parameter	Units	L1567956-02 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance @ 25 C	umhos/cm	127	128	0.708	20	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

QC Batch:	1975665	Analysis Method:	EPA 9050
QC Batch Method:	EPA 9050	Analysis Description:	Wet Chemistry 9050AMod
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 60417574002, 60417574003, 60417574004, 60417574005, 60417574006

METHOD BLANK: R3872949-1

Matrix: Solid

Associated Lab Samples:

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Specific Conductance @ 25 C	umhos/cm	ND	10.0	10.0	12/17/22 09:15	

LABORATORY CONTROL SAMPLE: R3872949-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Specific Conductance @ 25 C	umhos/cm	1120	1110	99.5	85.0-115	

SAMPLE DUPLICATE: R3872949-3

Parameter	Units	60417574003 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance @ 25 C	umhos/cm	2240	2290	2.25	20	

SAMPLE DUPLICATE: R3872949-4

Parameter	Units	L1567956-02 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance @ 25 C	umhos/cm	127	128	0.708	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### SAMPLE QUALIFIERS

Sample: 60417574001

[1] Wet Chemistry by Method 9045D - 7.97 at 20.3C

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: 60417574002

[1] Wet Chemistry by Method 9045D - 8.29 at 20.9C

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: 60417574003

[1] Wet Chemistry by Method 9045D - 8.14 at 21C

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: 60417574004

[1] Wet Chemistry by Method 9045D - 8.01 at 21C

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: 60417574005

[1] Wet Chemistry by Method 9045D - 7.91 at 20.8C

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: 60417574006

[1] Wet Chemistry by Method 9045D - 7.97 at 21C

## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

---

### SAMPLE QUALIFIERS

Sample: 60417574006

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: R3871642-1

[1] Wet Chemistry by Method 9045D - 9.9 at 20.3C

Sample: R3871642-2

[1] Wet Chemistry by Method 9045D - 8.2 at 20.8C

Sample: R3871642-3

[1] Wet Chemistry by Method 9045D - 7.95 at 20.7C

Sample: R3872081-1

[1] Wet Chemistry by Method 9045D - 9.91 at 20.7C

Sample: R3872081-2

[1] Wet Chemistry by Method 9045D - 8.25 at 21.6C

Sample: R3872081-3

[1] Wet Chemistry by Method 9045D - 7.97 at 19.7C

Sample: R3872826-1

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: R3872826-2

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: R3872826-3

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: R3872826-4

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: R3872949-1

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: R3872949-2

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: R3872949-3

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: R3872949-4

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: L1562533-09

[1] Wet Chemistry by Method 7199 - Sample is an oxidizer.

Sample: L1566398-07

[1] Wet Chemistry by Method 9045D - 8.16 at 20.9C

Sample: L1566408-02

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: L1566703-01

[1] Wet Chemistry by Method 9045D - 7.91 at 20.9C

Sample: L1566721-03

[1] Wet Chemistry by Method 9050AMod - at 25C

Sample: L1566811-11

[1] Wet Chemistry by Method 9045D - 8.25 at 21.7C

## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

---

### SAMPLE QUALIFIERS

Sample: L1567274-22

[1] Wet Chemistry by Method 9045D - 7.92 at 20.3C

Sample: L1567956-02

[1] Wet Chemistry by Method 9050AMod - at 25C

### ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
D8	The sample and duplicate results for this parameter are less than 5 times the reporting limit, the RPD may not be statistically valid.
H3	Sample was received or analysis requested beyond the recognized method holding time.
J	Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
R1	RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60417574001	SP-1	EPA 3546	822590	EPA 8015B	822954
60417574002	SP-1 4'	EPA 3546	822590	EPA 8015B	822954
60417574003	SP-2	EPA 3546	822590	EPA 8015B	822954
60417574004	SP-3	EPA 3546	822590	EPA 8015B	822954
60417574005	SP-4	EPA 3546	822590	EPA 8015B	822954
60417574006	SP-5	EPA 3546	822590	EPA 8015B	822954
60417574001	SP-1	EPA 5035A/5030B	823519	EPA 8015B	823756
60417574002	SP-1 4'	EPA 5035A/5030B	823519	EPA 8015B	823756
60417574003	SP-2	EPA 5035A/5030B	823519	EPA 8015B	823756
60417574004	SP-3	EPA 5035A/5030B	823519	EPA 8015B	823756
60417574005	SP-4	EPA 5035A/5030B	823519	EPA 8015B	823756
60417574006	SP-5	EPA 5035A/5030B	823519	EPA 8015B	823756
60417574001	SP-1	HWS Boron	1974769	6010B-NE493 Ch 2	1974769
60417574002	SP-1 4'	HWS Boron	1974769	6010B-NE493 Ch 2	1974769
60417574003	SP-2	HWS Boron	1974769	6010B-NE493 Ch 2	1974769
60417574004	SP-3	HWS Boron	1974769	6010B-NE493 Ch 2	1974769
60417574005	SP-4	HWS Boron	1974769	6010B-NE493 Ch 2	1974769
60417574006	SP-5	HWS Boron	1974769	6010B-NE493 Ch 2	1974769
60417574001	SP-1	EPA 3050	822625	EPA 6010	822848
60417574002	SP-1 4'	EPA 3050	822625	EPA 6010	822848
60417574003	SP-2	EPA 3050	822625	EPA 6010	822848
60417574004	SP-3	EPA 3050	822625	EPA 6010	822848
60417574005	SP-4	EPA 3050	822625	EPA 6010	822848
60417574006	SP-5	EPA 3050	822625	EPA 6010	822848
60417574001	SP-1	EPA 3050	822626	EPA 6020	822850
60417574002	SP-1 4'	EPA 3050	822626	EPA 6020	822850
60417574003	SP-2	EPA 3050	822626	EPA 6020	822850
60417574004	SP-3	EPA 3050	822626	EPA 6020	822850
60417574005	SP-4	EPA 3050	822626	EPA 6020	822850
60417574006	SP-5	EPA 3050	822626	EPA 6020	822850
60417574001	SP-1	EPA 3546	822613	EPA 8270 by SIM	823103
60417574002	SP-1 4'	EPA 3546	822613	EPA 8270 by SIM	823103
60417574003	SP-2	EPA 3546	822613	EPA 8270 by SIM	823103
60417574004	SP-3	EPA 3546	822613	EPA 8270 by SIM	823103
60417574005	SP-4	EPA 3546	822613	EPA 8270 by SIM	823103
60417574006	SP-5	EPA 3546	822613	EPA 8270 by SIM	823103
60417574001	SP-1	EPA 5035A/5030B	822548	EPA 8260C	822651
60417574002	SP-1 4'	EPA 5035A/5030B	822548	EPA 8260C	822651
60417574003	SP-2	EPA 5035A/5030B	822548	EPA 8260C	822651
60417574004	SP-3	EPA 5035A/5030B	822548	EPA 8260C	822651
60417574005	SP-4	EPA 5035A/5030B	822548	EPA 8260C	822651
60417574006	SP-5	EPA 5035A/5030B	822548	EPA 8260C	822651
60417574001	SP-1	ASTM D2974	822535		
60417574002	SP-1 4'	ASTM D2974	822535		
60417574003	SP-2	ASTM D2974	822535		

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: TABLE 915-1 Nicoloson

Pace Project No.: 60417574

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60417574004	SP-3	ASTM D2974	822535		
60417574005	SP-4	ASTM D2974	822535		
60417574006	SP-5	ASTM D2974	822535		
60417574001	SP-1	SM 2540 G	1973983	SM 2540G	1973983
60417574002	SP-1 4'	SM 2540 G	1973983	SM 2540G	1973983
60417574003	SP-2	SM 2540 G	1973983	SM 2540G	1973983
60417574004	SP-3	SM 2540 G	1973983	SM 2540G	1973983
60417574005	SP-4	SM 2540 G	1973983	SM 2540G	1973983
60417574006	SP-5	SM 2540 G	1973983	SM 2540G	1973983
60417574001	SP-1	3060A	1973277	EPA 7199	1973277
60417574002	SP-1 4'	3060A	1973277	EPA 7199	1973277
60417574003	SP-2	3060A	1973277	EPA 7199	1973277
60417574004	SP-3	3060A	1973277	EPA 7199	1973277
60417574005	SP-4	3060A	1974447	EPA 7199	1974447
60417574006	SP-5	3060A	1974447	EPA 7199	1974447
60417574001	SP-1	9045C/9045D	1974048	EPA 9045D	1974048
60417574002	SP-1 4'	9045C/9045D	1974472	EPA 9045D	1974472
60417574003	SP-2	9045C/9045D	1974472	EPA 9045D	1974472
60417574004	SP-3	9045C/9045D	1974472	EPA 9045D	1974472
60417574005	SP-4	9045C/9045D	1974472	EPA 9045D	1974472
60417574006	SP-5	9045C/9045D	1974472	EPA 9045D	1974472
60417574001	SP-1	9050A	1974991	EPA 9050	1974991
60417574002	SP-1 4'	9050A	1975665	EPA 9050	1975665
60417574003	SP-2	9050A	1975665	EPA 9050	1975665
60417574004	SP-3	9050A	1975665	EPA 9050	1975665
60417574005	SP-4	9050A	1975665	EPA 9050	1975665
60417574006	SP-5	9050A	1975665	EPA 9050	1975665
60417574001	SP-1	Calc	1974133	Calculated	1974133
60417574002	SP-1 4'	Calc	1974133	Calculated	1974133
60417574003	SP-2	Calc	1974133	Calculated	1974133
60417574004	SP-3	Calc	1974133	Calculated	1974133
60417574005	SP-4	Calc	1974133	Calculated	1974133
60417574006	SP-5	Calc	1974133	Calculated	1974133

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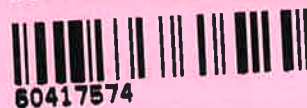


DC#\_Title: ENV-FRM-LENE-0009\_Samp

Revision: 2

Effective Date: 01/12/20

WO#: 60417574

Client Name: Mull Drilling CompanyCourier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☒ Other ☐Tracking #: \_\_\_\_\_ Pace Shipping Label Used? Yes ☐ No ☐Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐Packing Material: Bubble Wrap ☒ Bubble Bags ☒ Foam ☐ None ☐ Other ☒ 2PLUThermometer Used: T299 Type of Ice: Wet Blue ☐ None ☐Cooler Temperature (°C): As-read 1.2 Corr. Factor 0-0 Corrected 1.2Date and initials of person examining contents: 12/9/22 JA

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>SL</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks:		
Lead acetate strip turns dark? (Record only)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: <u>NO</u> State: <u>KS</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: \_\_\_\_\_

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

## CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately. Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/hubfs/pas-standard-1>

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	Mull Drilling Company	Report To:	James Beilman	Attention:	
Address:	1700 N Waterfront Pkwy	Copy To:		Company Name:	
	Bld. 1200, Wichita, KS 67206			Address:	
Email:	jbeilman@mulldrilling.com	Purchase Order #:		Pace Quote:	
Phone:	(316)364-9203	Project Name:	REE Table 295-1 Nice 16	Pace Project Manager:	heather.wilson@pacelabs.com
Fax:		Project #:		Pace Profile #:	15622 1
Requested Due Date:				State / Location	

[illegible]

Client: Mull Drilling Company

Profile #

5622-1 15035-2

Site: Table 995 - 1 McColander

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JG5U	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other
1	SL																													
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

Container Codes

Glass		Plastic		Misc.	
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar	BP1C	1L NaOH plastic
DG9H	40mL HCl amber vial	WGFU	4oz clear soil jar	BP1N	1L HNO3 plastic
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar	BP1S	1L H2SO4 plastic
DG9Q	40mL TSP amber vial	JG5U	4oz unpreserved amber wide	BP1U	1L unpreserved plastic
DG9S	40mL H2SO4 amber vial	AG0U	100mL unpreserved amber glass	BP1Z	1L NaOH, Zn Acetate
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass	BP2C	500mL NaOH plastic
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass	BP2N	500mL HNO3 plastic
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass	BP2S	500mL H2SO4 plastic
VG9T	40mL Na Thio clear vial	AG1U	1liter unpreserved amber glass	BP2U	500mL unpreserved plastic
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Acetate
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass	BP3C	250mL NaOH plastic
BG1U	1liter unpreserved glass	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic - field filtered
BG3H	250mL HCL Clear glass	AG2U	500mL unpreserved amber glass	BP3N	250mL HNO3 plastic
BG3U	250mL Unpres Clear glass	AG3U	250mL unpreserved amber glass	BP3U	250mL unpreserved plastic
WGDU	16oz clear soil jar	AG4U	125mL unpreserved amber glass	BP3S	250mL H2SO4 plastic
		AG5U	100mL unpreserved amber glass	BP3Z	250mL NaOH, Zn Acetate
				BP4U	125mL unpreserved plastic
				BP4N	125mL HNO3 plastic
				BP4S	125mL H2SO4 plastic
				WPDU	16oz unpreserved plastic

Work Order Number:

60417574

## Internal Transfer Chain of Custody



☐ Samples Pre-Logged into eCOC.

State Of Origin: CO

Cert. Needed: ☐ Yes ☒ No

Owner Received Date: 12/8/2022 Results Requested By: 12/20/2022

Workorder: 60417574

Workorder Name: TABLE 915-1 Nicoloson

Report To	Subcontract To	Requested Analysis
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Heather Wilson  
Pace Analytical Kansas  
9608 Loiret Blvd.  
Lenexa, KS 66219  
Phone 1(913)563-1407

Pace National  
12065 Lebanon Rd  
Mt. Juliet, TN 37122  
Phone (615) 758-5858

### Preserved Containers

[illegible]

## Comments

Transfers	Released By	Date/Time	Received By	Date/Time
1		12/13/22	HANA MINOCHIWA	12/13/22 - 09:00
2				
3				

Cooler Temperature on Receipt	°C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N
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\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.

*This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Sample Receipt Checklist

COC Seal Present/intact:	<u>Y</u> N	If Applicable	
COC Signed/Accurate:	<u>Y</u> N	VOA Zero Headspace:	<u>Y</u> N
Bottles arrive intact:	<u>Y</u> N	Pres. Correct/Check:	<u>Y</u> N
Correct bottles used:	<u>Y</u> N		
Sufficient volume sent:	<u>Y</u> N		
RAD Screen <0.5 mR/hr:	<u>Y</u> N		

6091 0793 6901

$$0.740 = 0.7 \text{ GrB 172}$$



**INTER\_LABORATORY WORK ORDER # 60417574**

(To be completed by sending lab)

**Ship To:**  
Pace National  
12065 Lebanon Rd  
Mt. Juliet, TN 37122  
Phone (615) 758-5858



Sending Project No:	60417574
Receiving Project No:	
Check Box for Consolidated Invoice:	<input type="checkbox"/>
Date Prepared:	12/12/22
<b>REQUESTED COMPLETION DATE:</b>	<b>12/20/2022</b>

Sending Region	IR60-Kansas	Sending Project Mgr.	Heather Wilson
Receiving Region	IR850-Pace National	External Client	Mull Drilling Company
State of Sample Origin	CO	QC Deliverable	STD REPORT

**All questions should be addressed to sending project manager.**

Requested Reportable Units \_\_\_\_\_ Report Wet or Dry Weight? ☐ IRWO Lab Need to run? \_\_\_\_\_ Cert. Needed NELAC

WORK REQUESTED				
Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples
Hot Water Barion 7199 CrIV			Unpreserved	6
Saturated Paste EC, SAR, pH	WGKU	6	Unpreserved	6
			Unpreserved	6
				<b>TOTAL</b>
				\$1,248.00

**Special Requirements:** Report D, QC Limits, MDLs (D),FR Only no EDD (0)

Receiving Region Department	Acctg. Code	Totals from above	Revenue Allocation	
			Receiving Region (80%)	Client Services Dept. Sending Region (20%)
Metals	20	\$738.00	\$590.40	\$147.60
Wet Chemistry	21	\$510.00	\$408.00	\$102.00
* Custom Revenue Allocation	<b>TOTAL</b>	<b>\$1,248.00</b>	<b>\$998.40</b>	<b>\$249.60</b>

**FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO**

Return Samples to Sending Region: ☐ Yes ☒ No

**DISPOSITION of FORM**

Original sent to the receiving lab - Copy kept at the sending lab.  
When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.