Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

August 25, 2014

Kyle Lawrence
Center for Toxicology and Environmental Health, LLC
8781 Sheridan Blvd #140
Arvada, CO 80005

RE: Project: 106460 Red River Supply
Pace Project No.: 10277975

Dear Kyle Lawrence:
Enclosed are the analytical results for sample(s) received by the laboratory on August 16, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kabor Xiong

Kabor Xiong
kabor.xiong@pacelabs.com
Project Manager

Enclosures

cc: Scott Kluska, CTEH
Jeff LaRock, CTEH
Lab Results

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ED_001822A_00018694-00001

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 106460 Red River Supply
Pace Project No.: 10277975

Minnesota Certification IDs
1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alabama Certification #40770
Alabama Certification #40770
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida/NELAP Certification #: E87605
Guam Certification #: Pace
Georgia Certification #: 959
Idaho Certification #: MN00064
Hawaii Certification #MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Kentucky Dept of Envi. Protection - WW #:90062
Louisiana DEQ Certification #: 3086
Louisiana DHH #: LA140001
Maine Certification #: 2013011
Maryland Certification #: 322
Michigan DEPH Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT0092
Nebraska Certification #: Pace
New York Certification #: 11647
North Carolina Certification #: 530
North Carolina State Public Health #: 27700
North Dakota Certification #: R-036
Ohio EPA #: 4150
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Saipan (CNMI) #:MP0003
South Carolina #:74003001
Texas Certification #: T104704192
Tennessee Certification #: 02818
Utah Certification #: MN000642013-4
Virginia DGS Certification #: 251
Virginia/VELAP Certification #: Pace
Washington Certification #: C486
Wisconsin Certification #: 999407970
West Virginia Certification #: 382
West Virginia DHHR #:9952C

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 106460 Red River Supply
Pace Project No.: 10277975

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10277975001	**0815WP03C**	Solid	08/15/14 08:50	08/16/14 09:20
10277975002	**0815WP03B**	Solid	08/15/14 08:48	08/16/14 09:20
10277975003	**0815WP03A**	Solid	08/15/14 08:46	08/16/14 09:20

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 106460 Red River Supply
Pace Project No.: 10277975

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10277975001	**0815WP03C**	EPA 6010	IP	7
		EPA 7470A	DM	1
		ASTM D2974	AMP	1
		EPA 8270	JLR	18
		EPA 8260	SH2	14
10277975002	**0815WP03B**	EPA 6010	IP	7
		EPA 7470A	DM	1
		ASTM D2974	AMP	1
		EPA 8270	JLR	18
		EPA 8260	SH2	14
10277975003	**0815WP03A**	EPA 6010	IP	7
		EPA 7470A	DM	1
		ASTM D2974	AMP	1
		EPA 8270	JLR	18
		EPA 8260	SH2	14

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 106460 Red River Supply
Pace Project No.: 10277975

Sample: 0815WP03C **Lab ID: 10277975001** Collected: 08/15/14 08:50 Received: 08/16/14 09:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 08/20/14 11:41 Initial pH: 10.06; Final pH: 1.74							
Arsenic	ND	mg/L	0.10	1	08/20/14 15:45	08/21/14 23:54	7440-38-2	
Barium	**0.37**	mg/L	0.050	1	08/20/14 15:45	08/21/14 23:54	7440-39-3	
Cadmium	**0.059**	mg/L	0.015	1	08/20/14 15:45	08/22/14 16:33	7440-43-9	
Chromium	ND	mg/L	0.050	1	08/20/14 15:45	08/21/14 23:54	7440-47-3	
Lead	ND	mg/L	0.050	1	08/20/14 15:45	08/22/14 16:33	7439-92-1	
Selenium	ND	mg/L	0.10	1	08/20/14 15:45	08/21/14 23:54	7782-49-2	
Silver	ND	mg/L	0.050	1	08/20/14 15:45	08/22/14 16:33	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
	Leachate Method/Date: EPA 1311; 08/20/14 11:41 Initial pH: 10.06; Final pH: 1.74							
Mercury	ND	ug/L	0.60	1	08/20/14 15:38	08/21/14 10:36	7439-97-6	
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**5.2**	%	0.10	1		08/21/14 17:15		
8270 MSSV TCLP	Analytical Method: EPA 8270 Preparation Method: EPA 3520							
	Leachate Method/Date: EPA 1311; 08/20/14 09:48 Initial pH: 10.06; Final pH: 1.74							
1,4-Dichlorobenzene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:16	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:16	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:16	87-68-3	
Hexachlorobenzene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:16	118-74-1	
Hexachloroethane	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:16	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:16	95-48-7	
3&4-Methylphenol	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:16		
Nitrobenzene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:16	98-95-3	
Pentachlorophenol	ND	ug/L	230	1	08/20/14 10:23	08/21/14 17:16	87-86-5	
Pyridine	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:16	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:16	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:16	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	63	%.	35-125	1	08/20/14 10:23	08/21/14 17:16	4165-60-0	
2-Fluorobiphenyl (S)	48	%.	60-125	1	08/20/14 10:23	08/21/14 17:16	321-60-8	S0
Terphenyl-d14 (S)	73	%.	57-125	1	08/20/14 10:23	08/21/14 17:16	1718-51-0	
Phenol-d6 (S)	62	%.	48-125	1	08/20/14 10:23	08/21/14 17:16	13127-88-3	
2-Fluorophenol (S)	63	%.	49-125	1	08/20/14 10:23	08/21/14 17:16	367-12-4	
2,4,6-Tribromophenol (S)	74	%.	58-125	1	08/20/14 10:23	08/21/14 17:16	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 08/20/14 09:46							
Benzene	ND	ug/L	25.0	1		08/21/14 13:03	71-43-2	
2-Butanone (MEK)	ND	ug/L	125	1		08/21/14 13:03	78-93-3	
Carbon tetrachloride	ND	ug/L	25.0	1		08/21/14 13:03	56-23-5	
Chlorobenzene	ND	ug/L	25.0	1		08/21/14 13:03	108-90-7	
Chloroform	ND	ug/L	25.0	1		08/21/14 13:03	67-66-3	
1,4-Dichlorobenzene	ND	ug/L	25.0	1		08/21/14 13:03	106-46-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 106460 Red River Supply
Pace Project No.: 10277975

Sample: 0815WP03C **Lab ID: 10277975001** Collected: 08/15/14 08:50 Received: 08/16/14 09:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 08/20/14 09:46							
1,2-Dichloroethane	ND	ug/L	25.0	1		08/21/14 13:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	25.0	1		08/21/14 13:03	75-35-4	
Tetrachloroethene	ND	ug/L	25.0	1		08/21/14 13:03	127-18-4	
Trichloroethene	ND	ug/L	10.0	1		08/21/14 13:03	79-01-6	
Vinyl chloride	ND	ug/L	10.0	1		08/21/14 13:03	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%.	75-125	1		08/21/14 13:03	17060-07-0	
Toluene-d8 (S)	104	%.	75-125	1		08/21/14 13:03	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125	1		08/21/14 13:03	460-00-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 106460 Red River Supply
Pace Project No.: 10277975

Sample: 0815WP03B **Lab ID: 10277975002** Collected: 08/15/14 08:48 Received: 08/16/14 09:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 08/20/14 11:41 Initial pH: 8.77; Final pH: 1.56							
Arsenic	ND	mg/L	0.10	1	08/20/14 15:45	08/22/14 00:01	7440-38-2	
Barium	**0.38**	mg/L	0.050	1	08/20/14 15:45	08/22/14 00:01	7440-39-3	
Cadmium	**0.030**	mg/L	0.015	1	08/20/14 15:45	08/22/14 16:39	7440-43-9	
Chromium	ND	mg/L	0.050	1	08/20/14 15:45	08/22/14 00:01	7440-47-3	
Lead	ND	mg/L	0.050	1	08/20/14 15:45	08/22/14 16:39	7439-92-1	
Selenium	ND	mg/L	0.10	1	08/20/14 15:45	08/22/14 00:01	7782-49-2	
Silver	ND	mg/L	0.050	1	08/20/14 15:45	08/22/14 16:39	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
	Leachate Method/Date: EPA 1311; 08/20/14 11:41 Initial pH: 8.77; Final pH: 1.56							
Mercury	ND	ug/L	0.60	1	08/20/14 15:38	08/21/14 10:39	7439-97-6	
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**3.6**	%	0.10	1		08/21/14 17:15		
8270 MSSV TCLP	Analytical Method: EPA 8270 Preparation Method: EPA 3520							
	Leachate Method/Date: EPA 1311; 08/20/14 09:48 Initial pH: 8.77; Final pH: 1.56							
1,4-Dichlorobenzene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:46	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:46	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:46	87-68-3	
Hexachlorobenzene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:46	118-74-1	
Hexachloroethane	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:46	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:46	95-48-7	
3&4-Methylphenol	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:46		
Nitrobenzene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:46	98-95-3	
Pentachlorophenol	ND	ug/L	230	1	08/20/14 10:23	08/21/14 17:46	87-86-5	
Pyridine	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:46	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:46	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	100	1	08/20/14 10:23	08/21/14 17:46	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	67	%.	35-125	1	08/20/14 10:23	08/21/14 17:46	4165-60-0	
2-Fluorobiphenyl (S)	60	%.	60-125	1	08/20/14 10:23	08/21/14 17:46	321-60-8	
Terphenyl-d14 (S)	78	%.	57-125	1	08/20/14 10:23	08/21/14 17:46	1718-51-0	
Phenol-d6 (S)	64	%.	48-125	1	08/20/14 10:23	08/21/14 17:46	13127-88-3	
2-Fluorophenol (S)	63	%.	49-125	1	08/20/14 10:23	08/21/14 17:46	367-12-4	
2,4,6-Tribromophenol (S)	74	%.	58-125	1	08/20/14 10:23	08/21/14 17:46	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 08/20/14 09:46							
Benzene	ND	ug/L	25.0	1		08/21/14 13:18	71-43-2	
2-Butanone (MEK)	ND	ug/L	125	1		08/21/14 13:18	78-93-3	
Carbon tetrachloride	ND	ug/L	25.0	1		08/21/14 13:18	56-23-5	
Chlorobenzene	ND	ug/L	25.0	1		08/21/14 13:18	108-90-7	
Chloroform	ND	ug/L	25.0	1		08/21/14 13:18	67-66-3	
1,4-Dichlorobenzene	ND	ug/L	25.0	1		08/21/14 13:18	106-46-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 106460 Red River Supply
Pace Project No.: 10277975

Sample: 0815WP03B **Lab ID: 10277975002** Collected: 08/15/14 08:48 Received: 08/16/14 09:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 08/20/14 09:46							
1,2-Dichloroethane	ND	ug/L	25.0	1		08/21/14 13:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	25.0	1		08/21/14 13:18	75-35-4	
Tetrachloroethene	ND	ug/L	25.0	1		08/21/14 13:18	127-18-4	
Trichloroethene	ND	ug/L	10.0	1		08/21/14 13:18	79-01-6	
Vinyl chloride	ND	ug/L	10.0	1		08/21/14 13:18	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%.	75-125	1		08/21/14 13:18	17060-07-0	
Toluene-d8 (S)	103	%.	75-125	1		08/21/14 13:18	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	1		08/21/14 13:18	460-00-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 106460 Red River Supply
Pace Project No.: 10277975

Sample: 0815WP03A **Lab ID: 10277975003** Collected: 08/15/14 08:46 Received: 08/16/14 09:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 08/20/14 11:41 Initial pH: 8.6; Final pH: 1.55							
Arsenic	ND	mg/L	0.10	1	08/20/14 15:45	08/22/14 00:08	7440-38-2	
Barium	**0.59**	mg/L	0.050	1	08/20/14 15:45	08/22/14 00:08	7440-39-3	
Cadmium	**0.018**	mg/L	0.015	1	08/20/14 15:45	08/22/14 16:46	7440-43-9	
Chromium	ND	mg/L	0.050	1	08/20/14 15:45	08/22/14 00:08	7440-47-3	
Lead	ND	mg/L	0.050	1	08/20/14 15:45	08/22/14 16:46	7439-92-1	
Selenium	ND	mg/L	0.10	1	08/20/14 15:45	08/22/14 00:08	7782-49-2	
Silver	ND	mg/L	0.050	1	08/20/14 15:45	08/22/14 16:46	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
	Leachate Method/Date: EPA 1311; 08/20/14 11:41 Initial pH: 8.6; Final pH: 1.55							
Mercury	ND	ug/L	0.60	1	08/20/14 15:38	08/21/14 10:41	7439-97-6	
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**3.7**	%	0.10	1		08/21/14 17:15		
8270 MSSV TCLP	Analytical Method: EPA 8270 Preparation Method: EPA 3520							
	Leachate Method/Date: EPA 1311; 08/20/14 09:48 Initial pH: 8.6; Final pH: 1.55							
1,4-Dichlorobenzene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 18:16	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 18:16	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 18:16	87-68-3	
Hexachlorobenzene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 18:16	118-74-1	
Hexachloroethane	ND	ug/L	100	1	08/20/14 10:23	08/21/14 18:16	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	100	1	08/20/14 10:23	08/21/14 18:16	95-48-7	
3&4-Methylphenol	ND	ug/L	100	1	08/20/14 10:23	08/21/14 18:16		
Nitrobenzene	ND	ug/L	100	1	08/20/14 10:23	08/21/14 18:16	98-95-3	
Pentachlorophenol	ND	ug/L	230	1	08/20/14 10:23	08/21/14 18:16	87-86-5	
Pyridine	ND	ug/L	100	1	08/20/14 10:23	08/21/14 18:16	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	100	1	08/20/14 10:23	08/21/14 18:16	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	100	1	08/20/14 10:23	08/21/14 18:16	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	63	%.	35-125	1	08/20/14 10:23	08/21/14 18:16	4165-60-0	
2-Fluorobiphenyl (S)	65	%.	60-125	1	08/20/14 10:23	08/21/14 18:16	321-60-8	
Terphenyl-d14 (S)	77	%.	57-125	1	08/20/14 10:23	08/21/14 18:16	1718-51-0	
Phenol-d6 (S)	62	%.	48-125	1	08/20/14 10:23	08/21/14 18:16	13127-88-3	
2-Fluorophenol (S)	60	%.	49-125	1	08/20/14 10:23	08/21/14 18:16	367-12-4	
2,4,6-Tribromophenol (S)	73	%.	58-125	1	08/20/14 10:23	08/21/14 18:16	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 08/20/14 09:46							
Benzene	ND	ug/L	25.0	1		08/21/14 13:33	71-43-2	
2-Butanone (MEK)	ND	ug/L	125	1		08/21/14 13:33	78-93-3	
Carbon tetrachloride	ND	ug/L	25.0	1		08/21/14 13:33	56-23-5	
Chlorobenzene	ND	ug/L	25.0	1		08/21/14 13:33	108-90-7	
Chloroform	ND	ug/L	25.0	1		08/21/14 13:33	67-66-3	
1,4-Dichlorobenzene	ND	ug/L	25.0	1		08/21/14 13:33	106-46-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 106460 Red River Supply
Pace Project No.: 10277975

Sample: 0815WP03A **Lab ID: 10277975003** Collected: 08/15/14 08:46 Received: 08/16/14 09:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 08/20/14 09:46							
1,2-Dichloroethane	ND	ug/L	25.0	1		08/21/14 13:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	25.0	1		08/21/14 13:33	75-35-4	
Tetrachloroethene	ND	ug/L	25.0	1		08/21/14 13:33	127-18-4	
Trichloroethene	ND	ug/L	10.0	1		08/21/14 13:33	79-01-6	
Vinyl chloride	ND	ug/L	10.0	1		08/21/14 13:33	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%.	75-125	1		08/21/14 13:33	17060-07-0	
Toluene-d8 (S)	104	%.	75-125	1		08/21/14 13:33	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	1		08/21/14 13:33	460-00-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 106460 Red River Supply
Pace Project No.: 10277975

QC Batch: MERP/11411 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 10277975001, 10277975002, 10277975003

METHOD BLANK: 1766033 Matrix: Water
Associated Lab Samples: 10277975001, 10277975002, 10277975003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.60	08/21/14 09:45	

METHOD BLANK: 1764603 Matrix: Water
Associated Lab Samples: 10277975001, 10277975002, 10277975003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.60	08/21/14 09:54	

METHOD BLANK: 1764604 Matrix: Water
Associated Lab Samples: 10277975001, 10277975002, 10277975003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.60	08/21/14 09:57	

LABORATORY CONTROL SAMPLE: 1766034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	15	14.1	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1766035 1766036

Parameter	Units	10276296001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	15	15	14.9	14.5	99	97	75-125	3	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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 106460 Red River Supply
Pace Project No.: 10277975

QC Batch: MPRP/48410 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Associated Lab Samples: 10277975001, 10277975002, 10277975003

METHOD BLANK: 1766024 Matrix: Water
Associated Lab Samples: 10277975001, 10277975002, 10277975003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	08/21/14 21:34	
Barium	mg/L	ND	0.050	08/21/14 21:34	
Cadmium	mg/L	ND	0.015	08/22/14 14:03	
Chromium	mg/L	ND	0.050	08/21/14 21:34	
Lead	mg/L	ND	0.050	08/22/14 14:03	
Selenium	mg/L	ND	0.10	08/21/14 21:34	
Silver	mg/L	ND	0.050	08/22/14 14:03	

METHOD BLANK: 1764603 Matrix: Water
Associated Lab Samples: 10277975001, 10277975002, 10277975003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	08/21/14 22:07	
Barium	mg/L	ND	0.050	08/21/14 22:07	
Cadmium	mg/L	ND	0.015	08/22/14 14:36	
Chromium	mg/L	ND	0.050	08/21/14 22:07	
Lead	mg/L	ND	0.050	08/22/14 14:36	
Selenium	mg/L	ND	0.10	08/21/14 22:07	
Silver	mg/L	ND	0.050	08/22/14 14:36	

METHOD BLANK: 1764604 Matrix: Water
Associated Lab Samples: 10277975001, 10277975002, 10277975003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	08/21/14 22:14	
Barium	mg/L	ND	0.050	08/21/14 22:14	
Cadmium	mg/L	ND	0.015	08/22/14 14:43	
Chromium	mg/L	ND	0.050	08/21/14 22:14	
Lead	mg/L	ND	0.050	08/22/14 14:43	
Selenium	mg/L	ND	0.10	08/21/14 22:14	
Silver	mg/L	ND	0.050	08/22/14 14:43	

LABORATORY CONTROL SAMPLE: 1766025

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	5	4.7	94	80-120	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ED_001822A_00018694-00012

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 106460 Red River Supply
Pace Project No.: 10277975

LABORATORY CONTROL SAMPLE: 1766025

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	mg/L	5	4.5	89	80-120	
Cadmium	mg/L	5	5.6	111	80-120	
Chromium	mg/L	5	4.5	90	80-120	
Lead	mg/L	5	4.9	97	80-120	
Selenium	mg/L	5	4.8	96	80-120	
Silver	mg/L	2.5	2.7	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1766026 1766027

Parameter	Units	10276296001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	5	5	4.6	4.6	93	93	75-125	0	30	
Barium	mg/L	0.57	5	5	5.0	4.9	88	87	75-125	1	30	
Cadmium	mg/L	4.2	5	5	9.6	9.4	109	104	75-125	3	30	
Chromium	mg/L	ND	5	5	4.5	4.4	89	88	75-125	0	30	
Lead	mg/L	ND	5	5	4.6	4.7	92	93	75-125	1	30	
Selenium	mg/L	ND	5	5	4.7	4.8	95	95	75-125	1	30	
Silver	mg/L	ND	2.5	2.5	2.6	2.6	104	104	75-125	0	30	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 106460 Red River Supply
Pace Project No.: 10277975

QC Batch: MPRP/48448 | Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 10277975001, 10277975002, 10277975003

SAMPLE DUPLICATE: 1767294

Parameter	Units	10278224010 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.7	10.2	5	30	

SAMPLE DUPLICATE: 1767295

Parameter	Units	10277685001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.4	12.4	0	30	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 106460 Red River Supply
Pace Project No.: 10277975

QC Batch: MSV/28253 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 10277975001, 10277975002, 10277975003

METHOD BLANK: 1766566 Matrix: Water
Associated Lab Samples: 10277975001, 10277975002, 10277975003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	25.0	08/21/14 10:08	
1,2-Dichloroethane	ug/L	ND	25.0	08/21/14 10:08	
1,4-Dichlorobenzene	ug/L	ND	25.0	08/21/14 10:08	
2-Butanone (MEK)	ug/L	ND	125	08/21/14 10:08	
Benzene	ug/L	ND	25.0	08/21/14 10:08	
Carbon tetrachloride	ug/L	ND	25.0	08/21/14 10:08	
Chlorobenzene	ug/L	ND	25.0	08/21/14 10:08	
Chloroform	ug/L	ND	25.0	08/21/14 10:08	
Tetrachloroethene	ug/L	ND	25.0	08/21/14 10:08	
Trichloroethene	ug/L	ND	10.0	08/21/14 10:08	
Vinyl chloride	ug/L	ND	10.0	08/21/14 10:08	
1,2-Dichloroethane-d4 (S)	%.	99	75-125	08/21/14 10:08	
4-Bromofluorobenzene (S)	%.	102	75-125	08/21/14 10:08	
Toluene-d8 (S)	%.	102	75-125	08/21/14 10:08	

LABORATORY CONTROL SAMPLE: 1766567

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	500	406	81	65-132	
1,2-Dichloroethane	ug/L	500	474	95	72-125	
1,4-Dichlorobenzene	ug/L	500	465	93	75-125	
2-Butanone (MEK)	ug/L	2500	2940	118	66-128	
Benzene	ug/L	500	441	88	73-125	
Carbon tetrachloride	ug/L	500	431	86	67-134	
Chlorobenzene	ug/L	500	467	93	75-125	
Chloroform	ug/L	500	448	90	70-127	
Tetrachloroethene	ug/L	500	416	83	69-128	
Trichloroethene	ug/L	500	429	86	75-125	
Vinyl chloride	ug/L	500	632	126	65-136	
1,2-Dichloroethane-d4 (S)	%.			100	75-125	
4-Bromofluorobenzene (S)	%.			99	75-125	
Toluene-d8 (S)	%.			104	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1766568 1766569

Parameter	Units	10277706001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	500	500	484	411	97	82	54-139	16	30	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 106460 Red River Supply
Pace Project No.: 10277975

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1766568 1766569

Parameter	Units	10277706001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	500	500	498	445	100	89	70-125	11	30	
1,4-Dichlorobenzene	ug/L	ND	500	500	518	457	103	90	67-125	13	30	
2-Butanone (MEK)	ug/L	ND	2500	2500	2900	2400	116	96	65-136	19	30	
Benzene	ug/L	ND	500	500	509	434	101	86	66-125	16	30	
Carbon tetrachloride	ug/L	ND	500	500	516	446	103	89	70-139	15	30	
Chlorobenzene	ug/L	ND	500	500	513	452	103	90	70-125	13	30	
Chloroform	ug/L	ND	500	500	509	437	102	87	66-130	15	30	
Tetrachloroethene	ug/L	ND	500	500	499	442	100	88	63-127	12	30	
Trichloroethene	ug/L	ND	500	500	503	428	101	86	32-150	16	30	
Vinyl chloride	ug/L	ND	500	500	629	534	126	107	62-138	16	30	
1,2-Dichloroethane-d4 (S)	%.						99	95	75-125			
4-Bromofluorobenzene (S)	%.						98	100	75-125			
Toluene-d8 (S)	%.						103	104	75-125			

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 106460 Red River Supply
Pace Project No.: 10277975

QC Batch: OEXT/26156 Analysis Method: EPA 8270
QC Batch Method: EPA 3520 Analysis Description: 8270 TCLP MSSV
Associated Lab Samples: 10277975001, 10277975002, 10277975003

METHOD BLANK: 1765898 Matrix: Water
Associated Lab Samples: 10277975001, 10277975002, 10277975003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	100	08/21/14 10:50	
2,4,5-Trichlorophenol	ug/L	ND	100	08/21/14 10:50	
2,4,6-Trichlorophenol	ug/L	ND	100	08/21/14 10:50	
2,4-Dinitrotoluene	ug/L	ND	100	08/21/14 10:50	
2-Methylphenol(o-Cresol)	ug/L	ND	100	08/21/14 10:50	
3&4-Methylphenol	ug/L	ND	100	08/21/14 10:50	
Hexachloro-1,3-butadiene	ug/L	ND	100	08/21/14 10:50	
Hexachlorobenzene	ug/L	ND	100	08/21/14 10:50	
Hexachloroethane	ug/L	ND	100	08/21/14 10:50	
Nitrobenzene	ug/L	ND	100	08/21/14 10:50	
Pentachlorophenol	ug/L	ND	230	08/21/14 10:50	
Pyridine	ug/L	ND	100	08/21/14 10:50	
2,4,6-Tribromophenol (S)	%.	74	58-125	08/21/14 10:50	
2-Fluorobiphenyl (S)	%.	41	60-125	08/21/14 10:50	S0
2-Fluorophenol (S)	%.	65	49-125	08/21/14 10:50	
Nitrobenzene-d5 (S)	%.	66	35-125	08/21/14 10:50	
Phenol-d6 (S)	%.	65	48-125	08/21/14 10:50	
Terphenyl-d14 (S)	%.	72	57-125	08/21/14 10:50	

METHOD BLANK: 1765902 Matrix: Water
Associated Lab Samples: 10277975001, 10277975002, 10277975003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	100	08/21/14 11:20	
2,4,5-Trichlorophenol	ug/L	ND	100	08/21/14 11:20	
2,4,6-Trichlorophenol	ug/L	ND	100	08/21/14 11:20	
2,4-Dinitrotoluene	ug/L	ND	100	08/21/14 11:20	
2-Methylphenol(o-Cresol)	ug/L	ND	100	08/21/14 11:20	
3&4-Methylphenol	ug/L	ND	100	08/21/14 11:20	
Hexachloro-1,3-butadiene	ug/L	ND	100	08/21/14 11:20	
Hexachlorobenzene	ug/L	ND	100	08/21/14 11:20	
Hexachloroethane	ug/L	ND	100	08/21/14 11:20	
Nitrobenzene	ug/L	ND	100	08/21/14 11:20	
Pentachlorophenol	ug/L	ND	230	08/21/14 11:20	
Pyridine	ug/L	ND	100	08/21/14 11:20	
2,4,6-Tribromophenol (S)	%.	82	58-125	08/21/14 11:20	
2-Fluorobiphenyl (S)	%.	64	60-125	08/21/14 11:20	
2-Fluorophenol (S)	%.	71	49-125	08/21/14 11:20	
Nitrobenzene-d5 (S)	%.	73	35-125	08/21/14 11:20	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 106460 Red River Supply
Pace Project No.: 10277975

METHOD BLANK: 1765902 Matrix: Water
Associated Lab Samples: 10277975001, 10277975002, 10277975003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenol-d6 (S)	%.	72	48-125	08/21/14 11:20	
Terphenyl-d14 (S)	%.	78	57-125	08/21/14 11:20	

METHOD BLANK: 1766424 Matrix: Water
Associated Lab Samples: 10277975001, 10277975002, 10277975003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	100	08/21/14 11:49	
2,4,5-Trichlorophenol	ug/L	ND	100	08/21/14 11:49	
2,4,6-Trichlorophenol	ug/L	ND	100	08/21/14 11:49	
2,4-Dinitrotoluene	ug/L	ND	100	08/21/14 11:49	
2-Methylphenol(o-Cresol)	ug/L	ND	100	08/21/14 11:49	
3&4-Methylphenol	ug/L	ND	100	08/21/14 11:49	
Hexachloro-1,3-butadiene	ug/L	ND	100	08/21/14 11:49	
Hexachlorobenzene	ug/L	ND	100	08/21/14 11:49	
Hexachloroethane	ug/L	ND	100	08/21/14 11:49	
Nitrobenzene	ug/L	ND	100	08/21/14 11:49	
Pentachlorophenol	ug/L	ND	230	08/21/14 11:49	
Pyridine	ug/L	ND	100	08/21/14 11:49	
2,4,6-Tribromophenol (S)	%.	86	58-125	08/21/14 11:49	
2-Fluorobiphenyl (S)	%.	75	60-125	08/21/14 11:49	
2-Fluorophenol (S)	%.	75	49-125	08/21/14 11:49	
Nitrobenzene-d5 (S)	%.	79	35-125	08/21/14 11:49	
Phenol-d6 (S)	%.	76	48-125	08/21/14 11:49	
Terphenyl-d14 (S)	%.	82	57-125	08/21/14 11:49	

LABORATORY CONTROL SAMPLE: 1765899

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	500	307	61	56-125	
2,4,5-Trichlorophenol	ug/L	500	448	90	71-125	
2,4,6-Trichlorophenol	ug/L	500	462	92	70-125	
2,4-Dinitrotoluene	ug/L	500	548	110	73-125	CH
2-Methylphenol(o-Cresol)	ug/L	500	408	82	57-125	
3&4-Methylphenol	ug/L	500	418	84	61-125	
Hexachloro-1,3-butadiene	ug/L	500	333	67	58-125	
Hexachlorobenzene	ug/L	500	441	88	71-125	
Hexachloroethane	ug/L	500	305	61	53-125	
Nitrobenzene	ug/L	500	413	83	59-125	
Pentachlorophenol	ug/L	500	383	77	54-125	
Pyridine	ug/L	500	334	67	30-125	
2,4,6-Tribromophenol (S)	%.			73	58-125	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 106460 Red River Supply
Pace Project No.: 10277975

LABORATORY CONTROL SAMPLE: 1765899

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%.			58	60-125	S0
2-Fluorophenol (S)	%.			55	49-125	
Nitrobenzene-d5 (S)	%.			59	35-125	
Phenol-d6 (S)	%.			58	48-125	
Terphenyl-d14 (S)	%.			67	57-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1765900 1765901

Parameter	Units	10277878002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	ND	500	500	337	288	67	58	57-125	15	30	
2,4,5-Trichlorophenol	ug/L	ND	500	500	461	409	92	82	74-125	12	30	
2,4,6-Trichlorophenol	ug/L	ND	500	500	474	404	95	81	71-125	16	30	
2,4-Dinitrotoluene	ug/L	ND	500	500	581	499	116	100	75-125	15	30	CH
2-Methylphenol(o-Cresol)	ug/L	ND	500	500	399	286	80	57	58-125	33	30	M1,R1
3&4-Methylphenol	ug/L	ND	500	500	419	286	84	57	62-125	38	30	M1,R1
Hexachloro-1,3-butadiene	ug/L	ND	500	500	383	326	77	65	56-125	16	30	
Hexachlorobenzene	ug/L	ND	500	500	475	431	95	86	75-125	10	30	
Hexachloroethane	ug/L	ND	500	500	341	308	68	62	51-125	10	30	
Nitrobenzene	ug/L	ND	500	500	444	351	89	70	66-125	23	30	
Pentachlorophenol	ug/L	ND	500	500	412	349	82	70	44-125	17	30	
Pyridine	ug/L	ND	500	500	272	231	54	46	32-125	16	30	
2,4,6-Tribromophenol (S)	%.						74	58	58-125			
2-Fluorobiphenyl (S)	%.						67	52	60-125			S0
2-Fluorophenol (S)	%.						56	41	49-125			S0
Nitrobenzene-d5 (S)	%.						65	49	35-125			
Phenol-d6 (S)	%.						60	38	48-125			S0
Terphenyl-d14 (S)	%.						75	68	57-125			

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 106460 Red River Supply
Pace Project No.: 10277975

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

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.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 106460 Red River Supply
Pace Project No.: 10277975

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10277975001	**0815WP03C**	EPA 3010	MPRP/48410	EPA 6010	ICP/20629
10277975002	**0815WP03B**	EPA 3010	MPRP/48410	EPA 6010	ICP/20629
10277975003	**0815WP03A**	EPA 3010	MPRP/48410	EPA 6010	ICP/20629
10277975001	**0815WP03C**	EPA 7470A	MERP/11411	EPA 7470A	MERC/13114
10277975002	**0815WP03B**	EPA 7470A	MERP/11411	EPA 7470A	MERC/13114
10277975003	**0815WP03A**	EPA 7470A	MERP/11411	EPA 7470A	MERC/13114
10277975001	**0815WP03C**	ASTM D2974	MPRP/48448		
10277975002	**0815WP03B**	ASTM D2974	MPRP/48448		
10277975003	**0815WP03A**	ASTM D2974	MPRP/48448		
10277975001	**0815WP03C**	EPA 3520	OEXT/26156	EPA 8270	MSSV/10994
10277975002	**0815WP03B**	EPA 3520	OEXT/26156	EPA 8270	MSSV/10994
10277975003	**0815WP03A**	EPA 3520	OEXT/26156	EPA 8270	MSSV/10994
10277975001	**0815WP03C**	EPA 8260	MSV/28253		
10277975002	**0815WP03B**	EPA 8260	MSV/28253		
10277975003	**0815WP03A**	EPA 8260	MSV/28253		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

RUSH 8/15/14

Page: 1 of 1

8164MR

10277945

Section A Required Client Information:

Company:	CTEH
Address:	5120 Northshore Dr N.
	Little Rock, AR 72118
Email To:	klawrence@cteh.com
Phone: 501-801-8500	Fax:
Requested Due Date/TAT:	STD RUSH

Section B Required Project Information:

Report To:	klawrence@cteh.com
Copy To:	labresults@cteh.com
Purchase Order No.:	
Project Name:	Red River Supply
Project Number:	106460

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kabor Xiong
Pace Profile #:	33736

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: ND

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE START DATE	COMPOSITE START TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	8015 TPH GRO TCLP VOA	8015 TPH DRO/ORO TCLP SVOC	8270 SVOC TCLP Metals	8260 VOC RCI	TAL Metals 6010/Mercury TCLP Herbicides	Chloride, Sulfate, Fluoride	Herbicide 8151	Residual Chlorine (Y/N)	Pace Project No./Lab I.D.
1	0815WP03C	SL	C	8/15	0848	8/15	0850		3	3									X	X	X	X	X				10277945 001
2	0815WP03B	SL	C	8/15	0846	8/15	0848		3	3									X	X	X	X	X				002
3	0815WP03A	SL	C	8/15	0844	8/15	0846		3	3									X	X	X	X	X				003
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
COC: 0815WP	Molly Murdock / CTEH	8/15/14		[illegible] / Pace	8/16/14	9:20	1.3	Y	Y	Y
	Molly Murdock									

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Molly Murdock				
SIGNATURE of SAMPLER:	Molly Murdock — DATE Signed (MM/DD/YY): 08/15/14				

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-Feb-2007

ED_001822A_00018694-00022

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form**	Document Revised: 28Feb2014 Page 1 of 1
	Document No.: **F-MN-L-213-rev.09**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: CTEH

Project #: WO# : 10277975

10277975

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ SpeeDee ☐ Other:

Tracking Number: 8050 4838 2511

Custody Seal on Cooler/Box Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☑ Yes ☐ No

Thermom. Used: ☐ B88A9130516413 ☐ B88A912167504 ☑ B88A9132521491 **Type of Ice:** ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 1.3 **Cooler Temp Corrected (°C):** 1.3 **Biological Tissue Frozen?** ☐ Yes ☐ No ☑ N/A

Temp should be above freezing to 6°C **Correction Factor:** TRUE **Date and Initials of Person Examining Contents:** 8.16.14 SCH

				Comments:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☑ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested?	☑ Yes	☐ No	☐ N/A	7.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☑ N/A	11.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	12.
-Includes Date/Time/ID/Analysis Matrix: SL				
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☑ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	☐ Yes	☐ No	☑ N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	☐ Yes	☑ No		Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	14.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	15.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Karla Xiong **Date:** Aug 18, 2014

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)