ENTERED

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Date	Invoice #
06/15/2004	86663

June 2004

Bill To
NMED-HWB 2905 Rodeo Park Drive East, Bldg. 1 Santa Fe, NM 87505-6303 Client #: 810-128

P.O. No.	Terms	Project #	Project Name
850454519	Net 30	(None)	WIPP CME

Quantity	Description	Rate	Amount
4	Line 10b EPA 8260 Volatile Organic GC/MS	130.00	520.00T
1	Line 97 pH	10.00	10.00T
1	Line 20 Total Organic Halogens	65.00	65.00T
1	Line 116 Total Organic Carbon(TOC)	35.00	35.00T
2	Line 121 Total Dissolved Solids (TDS)	13.00	26.00T
2	Line 17 8270 Semi-Volatiles, GC/MS	225.00	450.00T
2	Line 36 (As, Ba, Cd, Cr, Pb, Hg, K, Tl, Se, Ag, Sb, Be, Ni, V, Ca, Mg)	155.00	310.00T
1	Line 120 Specific Conductance	15.00	15.00T
1	Line 122 Total Suspended Solids (TSS)	13.00	13.00T
1	Line 106 Specific Gravity (Density)	30.00	30.00T
	Remit to: Pinnacle Laboratories, Inc. 2709-D Pan American Freeway NE Albuquerque, NM 87107		

Accession #: 405108 Contract # 20-667-55-02459
Authorized By Carl Chavez

Sales Tax (5.8125%)	$85.68
Total	$1,559.68

040617

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **405108**
June 14, 2004

NMED-HWB
2905 RODEO PARK DR. EAST BLDG. 1
SANTA FE, NM 87505

Project Name WIPP CME
Project Number (NONE)

Attention: CARL CHAVEZ

On 05/19/04 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8260 and pH analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

All remaining analyses were performed by Severn Trent Laboratories, Inc. Pensacola, FL and Savannah, GA.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: NMED-HWB	PINNACLE ID	: 405108
PROJECT #	: (NONE)	DATE RECEIVED	: 05/19/04
PROJECT NAME	: WIPP CME	REPORT DATE	: 06/14/04

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
405108 - 01	1	AQUEOUS	05/19/04
405108 - 02	2	AQUEOUS	05/19/04
405108 - 03	3	AQUEOUS	05/19/04
405108 - 04	4	AQUEOUS	05/19/04
405108 - 05	5	AQUEOUS	05/19/04
405108 - 06	FB	AQUEOUS	05/14/04
405108 - 07	6	AQUEOUS	05/19/04
405108 - 08	7	AQUEOUS	05/19/04
405108 - 09	8	AQUEOUS	05/19/04
405108 - 10	9	AQUEOUS	05/19/04
405108 - 11	10	AQUEOUS	05/19/04
405108 - 12	11	AQUEOUS	05/19/04
405108 - 13	12	AQUEOUS	05/19/04
405108 - 14	TRIP BLANK	AQUEOUS	05/12/04

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GC/MS RESULTS

TEST	: VOLATILE ORGANICS EPA METHOD 8260B	PINNACLE I.D. :	405108
CLIENT	: NMED-HWB	DATE RECEIVED :	05/19/04
PROJECT #	: (NONE)	INSTRUMENT ID :	GCMS1
PROJECT NAME	: WIPP CME	ANALYST :	DSR

SAMPLE ID #	CLIENT ID	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
405108-01	1	AQUEOUS	05/19/04	N/A	06/02/04	1

PARAMETER (CAS#)	DET. LIMIT	RESULT	UNITS
Vinyl Chloride (75-01-4)	1.0	< 1.0	ug/L
Trichlorofluoromethane (75-69-4)	1.0	< 1.0	ug/L
1,1-Dichloroethene (75-35-4)	1.0	< 1.0	ug/L
Methylene Chloride (75-09-2)	1.0	< 1.0	ug/L
cis-1,2-Dichloroethene (156-59-2)	1.0	< 1.0	ug/L
1,1-Dichloroethane (75-34-3)	1.0	< 1.0	ug/L
trans-1,2-Dichloroethene (156-60-5)	1.0	< 1.0	ug/L
2-Butanone (78-93-3)	10	< 10	ug/L
Chloroform (67-66-3)	1.0	< 1.0	ug/L
1,2-Dichloroethane (107-06-2)	1.0	< 1.0	ug/L
1,1,1-Trichloroethane (71-55-6)	1.0	< 1.0	ug/L
Carbon Tetrachloride (56-23-5)	1.0	< 1.0	ug/L
Trichloroethene (79-01-6)	1.0	< 1.0	ug/L
1,1,2-Trichloroethane (79-00-5)	1.0	< 1.0	ug/L
Toluene (108-88-3)	1.0	< 1.0	ug/L
Tetrachloroethene (127-18-4)	1.0	< 1.0	ug/L
Chlorobenzene (108-90-7)	1.0	< 1.0	ug/L
m&p Xylenes (108-38-3, 106-42-3)	1.0	< 1.0	ug/L
o-Xylene (95-47-6)	1.0	< 1.0	ug/L
1,1,2,2-Tetrachloroethane (79-34-5)	2.0	< 2.0	ug/L
Isobutanol	20	< 20	ug/L

SURROGATE % RECOVERY	
1,2-Dichloroethane-d4	107 (76 - 114)
Toluene-d8	104 (88 - 110)
Bromofluorobenzene	108 (86 - 115)

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GC/MS RESULTS

TEST	: VOLATILE ORGANICS EPA METHOD 8260B	PINNACLE I.D. :	405108
CLIENT	: NMED-HWB	DATE RECEIVED :	05/19/04
PROJECT #	: (NONE)	INSTRUMENT ID :	GCMS1
PROJECT NAME	: WIPP CME	ANALYST :	DSR

SAMPLE ID #	CLIENT ID	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
405108-02	2	AQUEOUS	05/19/04	N/A	06/02/04	1

PARAMETER (CAS#)	DET. LIMIT	RESULT	UNITS
Vinyl Chloride (75-01-4)	1.0	< 1.0	ug/L
Trichlorofluoromethane (75-69-4)	1.0	< 1.0	ug/L
1,1-Dichloroethene (75-35-4)	1.0	< 1.0	ug/L
Methylene Chloride (75-09-2)	1.0	< 1.0	ug/L
cis-1,2-Dichloroethene (156-59-2)	1.0	< 1.0	ug/L
1,1-Dichloroethane (75-34-3)	1.0	< 1.0	ug/L
trans-1,2-Dichloroethene (156-60-5)	1.0	< 1.0	ug/L
2-Butanone (78-93-3)	10	< 10	ug/L
Chloroform (67-66-3)	1.0	< 1.0	ug/L
1,2-Dichloroethane (107-06-2)	1.0	< 1.0	ug/L
1,1,1-Trichloroethane (71-55-6)	1.0	< 1.0	ug/L
Carbon Tetrachloride (56-23-5)	1.0	< 1.0	ug/L
Trichloroethene (79-01-6)	1.0	< 1.0	ug/L
1,1,2-Trichloroethane (79-00-5)	1.0	< 1.0	ug/L
Toluene (108-88-3)	1.0	< 1.0	ug/L
Tetrachloroethene (127-18-4)	1.0	< 1.0	ug/L
Chlorobenzene (108-90-7)	1.0	< 1.0	ug/L
m&p Xylenes (108-38-3, 106-42-3)	1.0	< 1.0	ug/L
o-Xylene (95-47-6)	1.0	< 1.0	ug/L
1,1,2,2-Tetrachloroethane (79-34-5)	2.0	< 2.0	ug/L
Isobutanol	20	< 20	ug/L

SURROGATE % RECOVERY	
1,2-Dichloroethane-d4	107 (76 - 114)
Toluene-d8	102 (88 - 110)
Bromofluorobenzene	103 (86 - 115)

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GC/MS RESULTS

TEST	: VOLATILE ORGANICS EPA METHOD 8260B	PINNACLE I.D. :	405108
CLIENT	: NMED-HWB	DATE RECEIVED :	05/19/04
PROJECT #	: (NONE)	INSTRUMENT ID :	GCMS1
PROJECT NAME	: WIPP CME	ANALYST :	DSR

SAMPLE ID #	CLIENT ID	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
405108-03	3	AQUEOUS	05/19/04	N/A	06/02/04	1

PARAMETER (CAS#)	DET. LIMIT	RESULT	UNITS
Vinyl Chloride (75-01-4)	1.0	< 1.0	ug/L
Trichlorofluoromethane (75-69-4)	1.0	< 1.0	ug/L
1,1-Dichloroethene (75-35-4)	1.0	< 1.0	ug/L
Methylene Chloride (75-09-2)	1.0	< 1.0	ug/L
cis-1,2-Dichloroethene (156-59-2)	1.0	< 1.0	ug/L
1,1-Dichloroethane (75-34-3)	1.0	< 1.0	ug/L
trans-1,2-Dichloroethene (156-60-5)	1.0	< 1.0	ug/L
2-Butanone (78-93-3)	10	< 10	ug/L
Chloroform (67-66-3)	1.0	< 1.0	ug/L
1,2-Dichloroethane (107-06-2)	1.0	< 1.0	ug/L
1,1,1-Trichloroethane (71-55-6)	1.0	< 1.0	ug/L
Carbon Tetrachloride (56-23-5)	1.0	< 1.0	ug/L
Trichloroethene (79-01-6)	1.0	< 1.0	ug/L
1,1,2-Trichloroethane (79-00-5)	1.0	< 1.0	ug/L
Toluene (108-88-3)	1.0	< 1.0	ug/L
Tetrachloroethene (127-18-4)	1.0	< 1.0	ug/L
Chlorobenzene (108-90-7)	1.0	< 1.0	ug/L
m&p Xylenes (108-38-3, 106-42-3)	1.0	< 1.0	ug/L
o-Xylene (95-47-6)	1.0	< 1.0	ug/L
1,1,2,2-Tetrachloroethane (79-34-5)	2.0	< 2.0	ug/L
Isobutanol	20	< 20	ug/L

SURROGATE % RECOVERY	
1,2-Dichloroethane-d4	104 (76 - 114)
Toluene-d8	99 (88 - 110)
Bromofluorobenzene	101 (86 - 115)

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GC/MS RESULTS

TEST	: VOLATILE ORGANICS EPA METHOD 8260B	PINNACLE I.D. :	405108
CLIENT	: NMED-HWB	DATE RECEIVED :	05/19/04
PROJECT #	: (NONE)	INSTRUMENT ID :	GCMS1
PROJECT NAME	: WIPP CME	ANALYST :	DSR

SAMPLE ID #	CLIENT ID	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
405108-06	FB	AQUEOUS	05/14/04	N/A	06/02/04 **H1**	1

PARAMETER (CAS#)	DET. LIMIT	RESULT	UNITS
Vinyl Chloride (75-01-4)	1.0	< 1.0	ug/L
Trichlorofluoromethane (75-69-4)	1.0	< 1.0	ug/L
1,1-Dichloroethene (75-35-4)	1.0	< 1.0	ug/L
Methylene Chloride (75-09-2)	1.0	< 1.0	ug/L
cis-1,2-Dichloroethene (156-59-2)	1.0	< 1.0	ug/L
1,1-Dichloroethane (75-34-3)	1.0	< 1.0	ug/L
trans-1,2-Dichloroethene (156-60-5)	1.0	< 1.0	ug/L
2-Butanone (78-93-3)	10	< 10	ug/L
Chloroform (67-66-3)	1.0	< 1.0	ug/L
1,2-Dichloroethane (107-06-2)	1.0	< 1.0	ug/L
1,1,1-Trichloroethane (71-55-6)	1.0	< 1.0	ug/L
Carbon Tetrachloride (56-23-5)	1.0	< 1.0	ug/L
Trichloroethene (79-01-6)	1.0	< 1.0	ug/L
1,1,2-Trichloroethane (79-00-5)	1.0	< 1.0	ug/L
Toluene (108-88-3)	1.0	< 1.0	ug/L
Tetrachloroethene (127-18-4)	1.0	< 1.0	ug/L
Chlorobenzene (108-90-7)	1.0	< 1.0	ug/L
m&p Xylenes (108-38-3, 106-42-3)	1.0	< 1.0	ug/L
o-Xylene (95-47-6)	1.0	< 1.0	ug/L
1,1,2,2-Tetrachloroethane (79-34-5)	2.0	< 2.0	ug/L
Isobutanol	20	< 20	ug/L

SURROGATE % RECOVERY	
1,2-Dichloroethane-d4	102 (76 - 114)
Toluene-d8	99 (88 - 110)
Bromofluorobenzene	101 (86 - 115)

H1 = Sample was run past the 14 day hold time.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GC/MS RESULTS

TEST	: VOLATILE ORGANICS EPA METHOD 8260B	PINNACLE I.D. :	405108
CLIENT	: NMED-HWB	DATE RECEIVED :	05/19/04
PROJECT #	: (NONE)	INSTRUMENT ID :	GCMS1
PROJECT NAME	: WIPP CME	ANALYST :	DSR

SAMPLE ID #	CLIENT ID	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
405108-14	TRIP BLANK	AQUEOUS	05/12/04	N/A	06/02/04 **H1**	1

PARAMETER (CAS#)	DET. LIMIT	RESULT	UNITS
Vinyl Chloride (75-01-4)	1.0	< 1.0	ug/L
Trichlorofluoromethane (75-69-4)	1.0	< 1.0	ug/L
1,1-Dichloroethene (75-35-4)	1.0	< 1.0	ug/L
Methylene Chloride (75-09-2)	1.0	< 1.0	ug/L
cis-1,2-Dichloroethene (156-59-2)	1.0	< 1.0	ug/L
1,1-Dichloroethane (75-34-3)	1.0	< 1.0	ug/L
trans-1,2-Dichloroethene (156-60-5)	1.0	< 1.0	ug/L
2-Butanone (78-93-3)	10	< 10	ug/L
Chloroform (67-66-3)	1.0	< 1.0	ug/L
1,2-Dichloroethane (107-06-2)	1.0	< 1.0	ug/L
1,1,1-Trichloroethane (71-55-6)	1.0	< 1.0	ug/L
Carbon Tetrachloride (56-23-5)	1.0	< 1.0	ug/L
Trichloroethene (79-01-6)	1.0	< 1.0	ug/L
1,1,2-Trichloroethane (79-00-5)	1.0	< 1.0	ug/L
Toluene (108-88-3)	1.0	< 1.0	ug/L
Tetrachloroethene (127-18-4)	1.0	< 1.0	ug/L
Chlorobenzene (108-90-7)	1.0	< 1.0	ug/L
m&p Xylenes (108-38-3, 106-42-3)	1.0	< 1.0	ug/L
o-Xylene (95-47-6)	1.0	< 1.0	ug/L
1,1,2,2-Tetrachloroethane (79-34-5)	2.0	< 2.0	ug/L
Isobutanol	20	< 20	ug/L

SURROGATE % RECOVERY	
1,2-Dichloroethane-d4	99 (76 - 114)
Toluene-d8	99 (88 - 110)
Bromofluorobenzene	101 (86 - 115)

H1 = Sample was run past the 14 day hold time.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GC/MS RESULTS

TEST	: VOLATILE ORGANICS EPA METHOD 8260B	PINNACLE I.D. :	405108
CLIENT	: NMED-HWB		
PROJECT #	: (NONE)	INSTRUMENT ID :	GCMS1
PROJECT NAME	: WIPP CME	ANALYST :	DSR

SAMPLE ID #	BATCH	MATRIX	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
REAGENT BLANK	060204E	AQUEOUS	N/A	06/02/04	1

PARAMETER (CAS#)	DET. LIMIT	RESULT	UNITS
Vinyl Chloride (75-01-4)	1.0	< 1.0	ug/L
Trichlorofluoromethane (75-69-4)	1.0	< 1.0	ug/L
1,1-Dichloroethene (75-35-4)	1.0	< 1.0	ug/L
Methylene Chloride (75-09-2)	1.0	< 1.0	ug/L
cis-1,2-Dichloroethene (156-59-2)	1.0	< 1.0	ug/L
1,1-Dichloroethane (75-34-3)	1.0	< 1.0	ug/L
trans-1,2-Dichloroethene (156-60-5)	1.0	< 1.0	ug/L
2-Butanone (78-93-3)	10	< 10	ug/L
Chloroform (67-66-3)	1.0	< 1.0	ug/L
1,2-Dichloroethane (107-06-2)	1.0	< 1.0	ug/L
1,1,1-Trichloroethane (71-55-6)	1.0	< 1.0	ug/L
Carbon Tetrachloride (56-23-5)	1.0	< 1.0	ug/L
Trichloroethene (79-01-6)	1.0	< 1.0	ug/L
1,1,2-Trichloroethane (79-00-5)	1.0	< 1.0	ug/L
Toluene (108-88-3)	1.0	< 1.0	ug/L
Tetrachloroethene (127-18-4)	1.0	< 1.0	ug/L
Chlorobenzene (108-90-7)	1.0	< 1.0	ug/L
m&p Xylenes (108-38-3, 106-42-3)	1.0	< 1.0	ug/L
o-Xylene (95-47-6)	1.0	< 1.0	ug/L
1,1,2,2-Tetrachloroethane (79-34-5)	2.0	< 2.0	ug/L
Isobutanol	20	< 20	ug/L

SURROGATE % RECOVERY	
1,2-Dichloroethane-d4	98 (76 - 114)
Toluene-d8	98 (88 - 110)
Bromofluorobenzene	100 (86 - 115)

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

LABORATORY CONTROL SPIKE RESULTS

TEST	: VOLATILE ORGANICS EPA METHOD 8260B	PINNACLE I.D.	: 405108
BATCH	: 060204E	DATE ANALYZED	: 06/02/04
CLIENT	: NMED-HWB	UNITS	: ug/L (PPB)
PROJECT #	: (NONE)	INSTRUMENT ID	: GCMS1
PROJECT NAME	: WIPP CME	ANALYST	: DSR

COMPOUND	SPIKE ADDED	LCS RESULT	LCS % RECOVERY	QC LIMITS %RECOVERY
1,1-DICHLOROETHENE	50.0	49.7	99	61-145
BENZENE	50.0	51.2	102	76-127
TRICHLOROETHENE	50.0	49.6	99	71-120
TOLUENE	50.0	48.1	96	76-125
CHLOROBENZENE	50.0	49.8	100	75-130

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

TEST	: VOLATILE ORGANICS EPA METHOD 8260B	PINNACLE I.D.	: 405108
SPIKED SAMPLE	: 405108-01	DATE ANALYZED	: 06/02/04
CLIENT	: NMED-HWB	UNITS	: ug/L (PPB)
PROJECT #	: (NONE)	INSTRUMENT ID	: GCMS1
PROJECT NAME	: WIPP CME	ANALYST	: DSR

COMPOUND	SAMPLE CONC.	SPIKE ADDED	MS RESULT	MSD RESULT	MS %REC	MSD %REC	RPD	QC LIMITS RPD	QC LIMITS %RECOVERY
1,1-DICHLOROETHENE	<1.0	50.0	48.9	47.4	98	95	3	14	61-145
BENZENE	<1.0	50.0	51.2	51.4	102	103	0	11	76-127
TRICHLOROETHENE	<1.0	50.0	49.5	49.0	99	98	1	14	71-120
TOLUENE	<1.0	50.0	48.2	48.6	96	97	1	13	76-125
CHLOROBENZENE	<1.0	50.0	49.8	50.3	100	101	1	13	75-130

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GENERAL CHEMISTRY RESULTS

CLIENT	: NMED-HWB	PINNACLE I.D.	: 405108
PROJECT #	: (NONE)	DATE RECEIVED	: 05/19/04
PROJECT NAME	: WIPP CME	ANALYST	: BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
13	12	AQUEOUS	05/19/04	05/19/04

PARAMETER	UNITS	12
PH (150.1)	UNITS	7.0

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT	: NMED-HWB	PINNACLE I.D.	: 405108
PROJECT #	: (NONE)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: WIPP CME	DATE ANALYZED	: 05/19/04

PARAMETER	UNITS	PINNACLE I.D.	SAMPLE RESULT	DUP. RESULT	% RPD
PH	UNITS	405108-13	7.00	7.04	1

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Report

For: Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107
CC:

Order Number: C405589
SDG Number:
Client Project ID:
Project: 405108 NMHW-WIPP CME
Report Date: 06/07/2004
Sampled By: Client
Sample Received Date: 05/20/2004
Requisition Number:
Purchase Order:

Lance Larson, Project Manager
llarson@stl-inc.com

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Sample Summary

Order: C405589
Date Received: 05/20/2004

Client: Pinnacle Laboratories
Project: 405108 NMHW-WIPP CME

Client Sample ID	Lab Sample ID	Matrix	Date Sampled
5/405108-05	C405589*1	Liquid	05/19/2004 07:52
6/405108-07	C405589*2	Liquid	05/19/2004 08:10
7/405108-08	C405589*3	Liquid	05/19/2004 08:13
8/405108-09	C405589*4	Liquid	05/19/2004 08:24
9/405108-10	C405589*5	Liquid	05/19/2004 08:25
10/405108-11	C405589*6	Liquid	05/19/2004 08:29
11/405108-12	C405589*7	Liquid	05/19/2004 08:30

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-1	5/405108-05	Liquid	05/20/04	05/19/04 07:52	

Parameter	Units	Lab Sample IDs 05589-1
Total Organic Carbon (415.1)		
Total Organic Carbon	mg/l	<1.0
Dilution Factor		1
Analysis Date		05/26/04
Batch ID		TOW042
Analyst		WG

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-2	6/405108-07	Liquid	05/20/04	05/19/04 08:10	
05589-3	7/405108-08	Liquid	05/20/04	05/19/04 08:13	

Parameter	Units	Lab Sample IDs 05589-2	05589-3
Semivolatile Organic Compounds (8270C)			
2,4-Dinitrophenol	ug/l	<50	<50
2-Methylphenol (o-Cresol)	ug/l	<10	<10
3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	<10	<10
Pentachlorophenol	ug/l	<50	<50
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/l	<10	<10
1,4-Dichlorobenzene (p-Dichlorobenzene)	ug/l	<10	<10
2,4-Dinitrotoluene	ug/l	<10	<10
Hexachlorobenzene	ug/l	<10	<10
Hexachloroethane	ug/l	<10	<10
Nitrobenzene	ug/l	<10	<10
Pyridine	ug/l	<10	<10
Surrogate - 2-Fluorobiphenyl *	%	78 %	74 %
Surrogate - 2-Fluorophenol *	%	63 %	40 %
Surrogate - Nitrobenzene-d5 *	%	76 %	71 %
Surrogate - Phenol-d5 *	%	67 %	50 %
Surrogate - Terphenyl-d14 *	%	87 %	100 %
Surrogate - 2,4,6-Tribromophenol *	%	89 %	74 %
Dilution Factor		1	1
Prep Date		06/01/04	05/24/04
Analysis Date		06/02/04	05/27/04
Batch ID		ALW475	ALW450
Prep Method		3520C	3520C
Analyst		RDW	RDW
Quantitation Factor		1	1

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-4	8/405108-09	Liquid	05/20/04	05/19/04 08:24	
05589-5	9/405108-10	Liquid	05/20/04	05/19/04 08:25	

Parameter	Units	Lab Sample IDs 05589-4	05589-5
RCRA Metals (6010B)			
Arsenic	mg/l	<0.0050	<0.0050
Barium	mg/l	0.010	0.011
Cadmium	mg/l	<0.0050	<0.0050
Chromium	mg/l	<0.0050	<0.0050
Lead	mg/l	<0.0050	<0.0050
Selenium	mg/l	<0.010	<0.010
Silver	mg/l	<0.0050	<0.0050
Dilution Factor		1	1
Prep Date		05/24/04	05/24/04
Analysis Date		05/25/04	05/25/04
Batch ID		PW199	PW199
Prep Method		3010A	3010A
Analyst		GSP	GSP
Quantitation Factor		1.000	1.000
Mercury (7470A)			
Mercury	mg/l	<0.00020	<0.00020
Dilution Factor		1	1
Prep Date		05/27/04	05/27/04
Analysis Date		05/27/04	05/27/04
Batch ID		HGW057	HGW057
Prep Method		7470A	7470A
Analyst		JDE	JDE

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-4	8/405108-09	Liquid	05/20/04	05/19/04 08:24	
05589-5	9/405108-10	Liquid	05/20/04	05/19/04 08:25	

Parameter	Units	Lab Sample IDs 05589-4	05589-5
Metals (6010B)			
Antimony	mg/l	<0.050	<0.050
Beryllium	mg/l	<0.0030	<0.0030
Calcium	mg/l	710	700
Magnesium	mg/l	200	210
Potassium	mg/l	180	180
Nickel	mg/l	<0.0050	<0.0050
Thallium	mg/l	<0.010	<0.010
Vanadium	mg/l	<0.010	<0.010
Dilution Factor		1	1
Prep Date		05/24/04	05/24/04
Analysis Date		05/25/04	05/25/04
Batch ID		PW199	PW199
Prep Method		3010A	3010A
Analyst		GSP	GSP
Quantitation Factor		1.000	1.000

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-6	10/405108-11	Liquid	05/20/04	05/19/04 08:29	

Parameter	Units	Lab Sample IDs 05589-6
Suspended Solids (160.2)		
Suspended Solids	mg/l	30
Dilution Factor		1
Analysis Date		05/21/04
Batch ID		SSW060
Analyst		ST
Total Dissolved Solids (160.1)		
Total Dissolved Solids	mg/l	16000
Dilution Factor		1
Analysis Date		05/21/04
Batch ID		TDW047
Analyst		ST
Specific Conductance (120.1)		
Specific Conductance	umhos/cm	22000
Dilution Factor		1
Analysis Date		05/24/04
Batch ID		CDW014
Analyst		ST
Specific Gravity (ASTM 1429)		
Specific Gravity	g/ml	1.0
Dilution Factor		1
Analysis Date		06/02/04
Batch ID		SGX002
Analyst		CR

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-7	11/405108-12	Liquid	05/20/04	05/19/04 08:30	

Parameter	Units	Lab Sample IDs 05589-7
Total Dissolved Solids (160.1)		
Total Dissolved Solids	mg/l	16000
Dilution Factor		1
Analysis Date		05/21/04
Batch ID		TDW047
Analyst		ST

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-8	Method Blank	Liquid	05/20/04		
05589-9	Lab Control Standard % Recovery	Liquid	05/20/04		
05589-10	LCS Accuracy Control Limit (%R)	Liquid	05/20/04		
05589-11	Precision (%RPD) MS/MSD	Liquid	05/20/04		
05589-12	MS Precision Advisory Limit (%RPD)	Liquid	05/20/04		

Parameter	Units	Lab Sample IDs 05589-8	05589-9	05589-10	05589-11	05589-12
Suspended Solids (160.2)						
Suspended Solids	mg/l	<5.0	99 %	91-107	N/A	N/A
Dilution Factor		1				
Analysis Date		05/21/04				
Batch ID		SSW060	SSW060			
Analyst		ST				
Total Dissolved Solids (160.1)						
Total Dissolved Solids	mg/l	<5.0	105 %	68-120	N/A	N/A
Dilution Factor		1				
Analysis Date		05/21/04				
Batch ID		TDW047	TDW047			
Analyst		ST				
Specific Conductance (120.1)						
Specific Conductance	umhos/cm	<1.0	99 %	98-102	N/A	N/A
Dilution Factor		1				
Analysis Date		05/24/04				
Batch ID		CDW014	CDW014			
Analyst		ST				

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-8	Method Blank	Liquid	05/20/04		
05589-9	Lab Control Standard % Recovery	Liquid	05/20/04		
05589-10	LCS Accuracy Control Limit (%R)	Liquid	05/20/04		
05589-11	Precision (%RPD) MS/MSD	Liquid	05/20/04		
05589-12	MS Precision Advisory Limit (%RPD)	Liquid	05/20/04		

Parameter	Units	Lab Sample IDs 05589-8	05589-9	05589-10	05589-11	05589-12
RCRA Metals (6010B)						
Arsenic	mg/l	<0.0050	97 %	80-120	1 %	20
Barium	mg/l	<0.010	104 %	80-120	2 %	20
Cadmium	mg/l	<0.0050	98 %	80-120	1 %	20
Chromium	mg/l	<0.0050	101 %	80-120	1 %	20
Lead	mg/l	<0.0050	98 %	80-120	2 %	20
Selenium	mg/l	<0.010	89 %	80-120	2 %	20
Silver	mg/l	<0.0050	102 %	80-120	2 %	20
Dilution Factor		1				
Prep Date		05/24/04				
Analysis Date		05/25/04				
Batch ID		PW199	PW199		PW199	
Prep Method		3010A				
Analyst		GSP				
Quantitation Factor		1.000				
Mercury (7470A)						
Mercury	mg/l	<0.00020	101 %	80-120	8	20
Dilution Factor		1				
Prep Date		05/27/04				
Analysis Date		05/27/04				
Batch ID		HGW057	HGW057		HGW057	
Prep Method		7470A				
Analyst		JDE				

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-8	Method Blank	Liquid	05/20/04		
05589-9	Lab Control Standard % Recovery	Liquid	05/20/04		
05589-10	LCS Accuracy Control Limit (%R)	Liquid	05/20/04		
05589-11	Precision (%RPD) MS/MSD	Liquid	05/20/04		
05589-12	MS Precision Advisory Limit (%RPD)	Liquid	05/20/04		

Parameter	Units	Lab Sample IDs 05589-8	05589-9	05589-10	05589-11	05589-12
Metals (6010B)						
Antimony	mg/l	<0.050	102 %	80-120	3 %	20
Beryllium	mg/l	<0.0030	97 %	80-120	1 %	20
Calcium	mg/l	<0.50	99 %	80-120	2 %	20
Magnesium	mg/l	<0.50	97 %	80-120	2 %	20
Potassium	mg/l	<1.0	95 %	80-120	2 %	20
Nickel	mg/l	<0.0050	100 %	80-120	1 %	20
Thallium	mg/l	<0.010	99 %	80-120	1 %	20
Vanadium	mg/l	<0.010	102 %	80-120	1 %	20
Dilution Factor		1				
Prep Date		05/24/04				
Analysis Date		05/25/04				
Batch ID		PW199	PW199		PW199	
Prep Method		3010A				
Analyst		GSP				
Quantitation Factor		1.000				
Semivolatile Organic Compounds (8270C)						
2,4-Dinitrophenol	ug/l	<50	104 %	25-167	5	58
2-Methylphenol (o-Cresol)	ug/l	<10	73 %	39-110	12	64
3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	<10	74 %	43-106	10	69
Pentachlorophenol	ug/l	<50	74 %	52-119	5	71
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/l	<10	84 %	45-103	1	45
1,4-Dichlorobenzene (p-Dichlorobenzene)	ug/l	<10	82 %	41-100	5	46

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-8	Method Blank	Liquid	05/20/04		
05589-9	Lab Control Standard % Recovery	Liquid	05/20/04		
05589-10	LCS Accuracy Control Limit (%R)	Liquid	05/20/04		
05589-11	Precision (%RPD) MS/MSD	Liquid	05/20/04		
05589-12	MS Precision Advisory Limit (%RPD)	Liquid	05/20/04		

Parameter	Units	Lab Sample IDs 05589-8	05589-9	05589-10	05589-11	05589-12
Semivolatile Organic Compounds (8270C)						
2,4-Dinitrotoluene	ug/l	<10	90 %	64-122	4	38
Hexachlorobenzene	ug/l	<10	91 %	63-122	6	42
Hexachloroethane	ug/l	<10	81 %	33-105	4	48
Nitrobenzene	ug/l	<10	85 %	52-115	3	45
Pyridine	ug/l	<10	56 %	1-103	16	79
Surrogate - 2-Fluorobiphenyl *	%	68 %	86 %	47-120		
Surrogate - 2-Fluorophenol *	%	30 %	69 %	1-109		
Surrogate - Nitrobenzene-d5 *	%	65 %	85 %	36-120		
Surrogate - Phenol-d5 *	%	43 %	70 %	5-121		
Surrogate - Terphenyl-d14 *	%	88 %	98 %	51-131		
Surrogate - 2,4,6-Tribromophenol *	%	69 %	89 %	39-139		
Dilution Factor		1				
Prep Date		05/24/04				
Analysis Date		05/27/04				
Batch ID		ALW450	ALW450		ALW450	
Prep Method		3520C				
Analyst		RDW				
Quantitation Factor		1				

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-13	Reporting Limit (RL)	Liquid	05/20/04		

Parameter	Units	Lab Sample IDs 05589-13
Suspended Solids (160.2)		
Suspended Solids	mg/l	5.0
Total Dissolved Solids (160.1)		
Total Dissolved Solids	mg/l	5.0
Specific Conductance (120.1)		
Specific Conductance	umhos/cm	1.0
RCRA Metals (6010B)		
Arsenic	mg/l	0.0050
Barium	mg/l	0.010
Cadmium	mg/l	0.0050
Chromium	mg/l	0.0050
Lead	mg/l	0.0050
Selenium	mg/l	0.010
Silver	mg/l	0.0050
Mercury (7470A)		
Mercury	mg/l	0.00020
Metals (6010B)		
Antimony	mg/l	0.050
Beryllium	mg/l	0.0030
Calcium	mg/l	0.50
Magnesium	mg/l	0.50

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-13	Reporting Limit (RL)	Liquid	05/20/04		

Parameter	Units	Lab Sample IDs 05589-13
Metals (6010B)		
Potassium	mg/l	1.0
Nickel	mg/l	0.0050
Thallium	mg/l	0.010
Vanadium	mg/l	0.010
Semivolatile Organic Compounds (8270C)		
2,4-Dinitrophenol	ug/l	50
2-Methylphenol (o-Cresol)	ug/l	10
3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	10
Pentachlorophenol	ug/l	50
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/l	10
1,4-Dichlorobenzene (p-Dichlorobenzene)	ug/l	10
2,4-Dinitrotoluene	ug/l	10
Hexachlorobenzene	ug/l	10
Hexachloroethane	ug/l	10
Nitrobenzene	ug/l	10
Pyridine	ug/l	10

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
05589-14	Method Blank	Liquid	05/20/04		
05589-15	Lab Control Standard % Recovery	Liquid	05/20/04		
05589-16	LCS Accuracy Control Limit (%R)	Liquid	05/20/04		

Parameter	Units	Lab Sample IDs 05589-14	05589-15	05589-16
Semivolatile Organic Compounds (8270C)				
2,4-Dinitrophenol	ug/l	<50	119 %	25-167
2-Methylphenol (o-Cresol)	ug/l	<10	73 %	39-110
3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	<10	76 %	43-106
Pentachlorophenol	ug/l	<50	71 %	52-119
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/l	<10	80 %	45-103
1,4-Dichlorobenzene (p-Dichlorobenzene)	ug/l	<10	77 %	41-100
2,4-Dinitrotoluene	ug/l	<10	84 %	64-122
Hexachlorobenzene	ug/l	<10	80 %	63-122
Hexachloroethane	ug/l	<10	80 %	33-105
Nitrobenzene	ug/l	<10	83 %	52-115
Pyridine	ug/l	<10	51 %	1-103
Surrogate - 2-Fluorobiphenyl *	%	72 %	82 %	47-120
Surrogate - 2-Fluorophenol *	%	46 %	73 %	1-109
Surrogate - Nitrobenzene-d5 *	%	74 %	85 %	36-120
Surrogate - Phenol-d5 *	%	58 %	73 %	5-121
Surrogate - Terphenyl-d14 *	%	87 %	84 %	51-131
Surrogate - 2,4,6-Tribromophenol *	%	67 %	82 %	39-139
Dilution Factor		1		
Prep Date		06/01/04		
Analysis Date		06/02/04		
Batch ID		ALW475	ALW475	
Prep Method		3520C		
Analyst		RDW		
Quantitation Factor		1		

STL Pensacola
PROJECT SAMPLE INSPECTION FORM

SEVERN TRENT STL

Lab Order #: _____ Date Received: 5/20/04

1. Was there a Chain of Custody? (Yes) No*
2. Was Chain of Custody properly filled out and relinquished? (Yes) No*
3. Were all samples properly labeled and identified? (Yes) No*
4. Were samples received cold? (Criteria: 2° - 6°C: STL-SOP 1055) (Yes) No* N/A
5. Did samples require splitting or compositing♦? (Yes*) ~~No~~ 5/20
6. Were samples received in proper containers for analysis requested? (Yes) No*
7. Were all sample containers received intact? (Yes) No*
8. Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)*+ (Yes) No* N/A
9. Is there sufficient volume for analysis requested? (Yes) No* N/A *(Can)*
10. Were samples received within Holding Time? (REFER TO STL-SOP 1040) (Yes) No*
11. Is Headspace visible > ¼" in diameter in VOA vials?* Yes* No (N/A)
12. **Were Trip Blanks Received?** Yes No (N/A)
13. If sent, were matrix spike bottles returned? (Yes) No* N/A
14. If sent, were T-Handles returned? Yes No* (N/A)
15. If any issues, how was PM notified? PSIF ☐ Verbal ☐

Airbill Number(s): 1Z878168 01 4470 4001 **Shipped By:** (UPS) FedX HD BUS ABX

(HD – Hand Delivery)

Cooler Numbers & Temp(s) (°C): Client 5.4°c IR

(IE. 340L-4°C-CCK8 -- LIST THERMOMETER NUMBER FOR VERIFICATION)

Out of Control Events and Inspection Comments (list sample IDs/Tests where appropriate):

1-3. COC/Sample ID/COC discrepancy: _____

4. Insufficient Ice ☐ Delay in delivery ☐ Other ☐ _____
5. Samples were Split ☒ Composited ☐ Requested by: Client ☒ PM ☒ Other: 405108-11 must be split for Density soil
6. Improper Containers (ID/Size/desc): _____
7. Broken bottles/Test: _____
8. Incorrect pH: _____
9. Test/Matrix/Volume: _____
10. Out of Holding Time/Test: _____
11. VOA headspace >1/4"

(list ~ size) _____

List additional comments by above number: Extra volume for MS/MSD for 405108-04 for TOX 405108-05 for TOC, 405108-07 and -08 for 8270

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: MHS **Date:** 5/20/04 **Logged By:** UL **Date:** 20-MAY-04

♣ *Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples(pH, Dissolved O2, Residual Cl.) as out of hold time, therefore, these samples will not be documented on this PSIF.*

♦ *All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"*

\+ *All pH results for North Carolina, New York, and other requested samples are to be recorded on the pH log provided (STL-SOP 938).*

* *According to EPA, ¼" of headspace is acceptable in 40 ml vials requiring volatile analysis.*

SEVERN TRENT STL

Organic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
D	The result was obtained from a dilution.
E	The result exceeds the calibration range.
J	Estimated value because the analyte concentration is less than the reporting limit.
M	A matrix effect was present.
N	Presumptive evidence of a compound. The compound was identified qualitatively or as a Tentatively Identified Compound.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
P	Second-column or detector confirmation exceeded method criteria. Appropriate value is reported and data is flagged/qualified as instructed by method/regulation.
U or < or ND	The analyte was not detected.
*	The result is not within control limit(s).

Inorganic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
E	The reported value is estimated because of the presence of interference.
J	Estimated value because the analyte concentration is less than the reporting limit.
N	The spiked sample recovery is not within control limits.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
U or < or ND	The analyte was not detected.
*	Duplicate analysis not within control limits
M	The duplicate injection precision was not met.
S	The reported value was determined by the Method of Standard Addition (MSA).
W	Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance and post spike recovery is greater than or equal to 40%, the sample is flagged with a "W" and no further action is required.
+	The Standard Additions Correlation Coefficient is <0.995.
L	The result is not within control limit(s).

It is permissible to submit an Out-of-Control Events/Corrective Action form and/or Case Narrative in lieu of using above qualifiers.

When the laboratory receives a sample that does not meet EPA requirements for sample collection, preservation or holding time, the laboratory is required to reject the samples. The client must be notified and asked whether the lab should proceed with analysis. Data from any samples that do not meet sample acceptance criteria (collection, preservation and holding time), must be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF) in an unambiguous manner clearly defining the nature and substance of the variation. NPDES samples from North Carolina that do not meet EPA requirements for sample collection, preservation or holding time are non-reportable for NPDES compliance monitoring.

Abbreviations

ND	Not Detected at or above the STL Pensacola reporting limit (RL)
NS	Not Submitted
NA	Not Applicable
MDL	STL Pensacola Method Detection Limit
RL	STL Pensacola Reporting Limit
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)

Florida Projects Inorganic/Organic

Refer to FL DEP 62-160; Table 4 Data Qualifier Codes. FL DEP Rule 62-160, Table 1 lists the Florida sites which require data qualifiers.

Arizona DEQ Projects

Any qualified data submitted to Arizona DEQ (ADEQ) after January 1, 2001 must be designated using the Arizona Data Qualifiers as developed by the Arizona ELAC technical subcommittee. Refer to the ADEQ qualifier list.

Severn Trent Laboratories Inc.
STL Pensacola • 3355 McLemore Dr • Pensacola, FL 32514
Tel 850 474 1001 Fax 850 484 5315 • *www.stl-inc.com*

Revised/Effective: 1-23-04.

SEVERN TRENT STL

STL PENSACOLA
Certifications, Memberships & Affiliations

Alabama *Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)*

Arizona *Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)*

Arkansas *Department of Pollution Control and Ecology, (88-0689) (Environmental)*

California *Department of Health Services,* ***ELAP*** *Laboratory ID No. I-2510 (Hazardous Waste and Wastewater)*

Connecticut *Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater)*

Florida *DOH,* ***NELAP*** *Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)*

Florida *DEP/DOH CompQAP # 980156*

Illinois *Environmental Laboratory Accreditation Program (ELAP),* ***NELAP*** *Laboratory ID No. 200041 (Wastewater and Hazardous Waste)*

Iowa *Department of Natural Resources, Laboratory ID No. 367 (WW & UST)*

Kansas *Department of Health & Environment,* ***NELAP*** *Laboratory ID No. E10253 (Wastewater and Hazardous Waste)*

Kentucky *NR&EPC, Laboratory ID No. 90043 (Drinking Water)*

Kentucky *Petroleum Storage Tank Env Assurance Fund, Laboratory ID No. 0053 (UST)*

Louisiana *DEQ, LELAP,* ***NELAP*** *Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental)*

Maryland *DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)*

Massachusetts *DEP, Laboratory ID No. M-FL094 (Wastewater)*

Michigan *Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)*

New Hampshire *DES ELAP,* ***NELAP*** *Laboratory ID No. 250502 (Drinking Water & Wastewater)*

New Jersey *DEP&E,* ***NELAP*** *Laboratory ID No. FL006 (Wastewater and Hazardous Waster)*

North Carolina *DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater)*

North Dakota *DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Florida)*

Oklahoma *Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)*

Pennsylvania *Department of Environmental Resources,* ***NELAP*** *Laboratory ID No. 68-467 (Drinking Water & Wastewater)*

South Carolina *DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL)*

Tennessee *Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)*

Virginia *Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)*

West Virginia *DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater)*

EPA ICR *(Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031*

NFESC *(Naval Facilities Engineering Services Center)*

USACE *(United States Army Corps. of Engineers), MRD*

STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599

certlist\condcert.lst revised 11/14/03

Total Pages of Report 19

SEVERN TRENT STL

STL Savannah 5102 LaRoche Avenue - Savannah GA 31404 Telephone:(912) 354-7858 Fax:(912) 351-3673

Analytical Report

For: Mr. Lance Larson
STL Pensacola
3355 McLemore Drive
Pensacola, FL 32514
CC:

Order Number: S444631
SDG Number:
Client Project ID: C405589A
Project: NMHW
Report Date: 06/07/2004
Sampled By: Client
Sample Received Date: 05/26/2004
Requisition Number:
Purchase Order: C405589A

Gloria D. Fulwood

Gloria D. Fulwood, Project Manager
gfulwood@stl-inc.com
06/08/2004

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Sample Summary

Order: S444631
Date Received: 05/26/2004

Client: STL Pensacola
Project: NMHW

Client Sample ID	Lab Sample ID	Matrix	Date Sampled
4/405108-04	S444631*1	Liquid	05/19/2004 07:42

STL Savannah 5102 LaRoche Avenue - Savannah GA 31404 Telephone:(912) 354-7858 Fax:(912) 351-3673

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
44631-1	4/405108-04	Liquid	05/26/04	05/19/04 07:42	

Parameter	Units	Lab Sample IDs 44631-1
Total Organic Halogens (9020)		
Total Organic Halogens	mg/l	82*F14
Dilution Factor		1
Prep Date		06/02/04
Analysis Date		06/02/04
Batch ID		0602C

STL Savannah 5102 LaRoche Avenue - Savannah GA 31404 Telephone:(912) 354-7858 Fax:(912) 351-3673

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
44631-2	Method Blank	Liquid	05/26/04		
44631-3	Lab Control Standard % Recovery	Liquid	05/26/04		

Parameter	Units	Lab Sample IDs 44631-2	44631-3
Total Organic Halogens (9020)			
Total Organic Halogens	mg/l	<0.010	95 %
Dilution Factor		1	1
Prep Date		06/02/04	06/02/04
Analysis Date		06/02/04	06/02/04
Batch ID		0602C	0602C

Order Number: S444631

FL CER.T #E87052
These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.
Code of Federal Regulations, Title 40, Part 136; Washington DC, July 1, 1997.

*F14 = Repeated sample analysis demonstrates that the TOX amount on the secondary activated carbon column consistently exceeds 10 % of the two- column total TOX amount. This is apparently caused by weakly adsorbed organohalide components of the sample. Thus, the reported TOX concentration of this sample may be biased low.

Pinnacle Laboratories, Inc.

Interlab Chain of Custody

Date: 5/19/04 Page: 1 of 1

Network Project Manager: Jacinta Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107
(505) 344-3777 Fax (505) 344-4413

C405589

Need electronic data submitted with hardcopy of report.

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	TCLP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)	Ca, Mg, K, Sb, Be, Ni, Tl, V	TOC (415.1)	Gen Chemistry:	TSS, EC, Density	TDS	Volatile Organics GC/MS (8260)	TOX (9020B)	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8260 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270) See attached spectra list of compounds	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
4/405108-04	5/19/04	0742	AQ													X												
5/405108-05	↓	0752	↓								X																	
6/405108-07		0810																										
7/405108-08		0813																					X					
8/405108-09		0824			X					X													X					
9/405108-10		0825			X					X																		
10/405108-11		0829											X	X														
11/405108-12	↓	0830	↓											X														

PROJECT INFORMATION	
PROJECT #:	405108
PROJ. NAME:	NMHW
QC LEVEL:	STD IV
QC REQUIRED:	MS MSD BLANK
TAT:	STANDARD RUSH!!
DUE DATE:	6/2
RUSH SURCHARGE:	—
CLIENT DISCOUNT:	—
SPECIAL CERTIFICATION REQUIRED:	YES NO

SAMPLE RECEIPT	
Total Number of Containers	
Chain of Custody Seals	
Received Intact?	
Received Good Cond./Cold	
LAB NUMBER:	

COMMENTS:

SAMPLES SENT TO:	
PENSACOLA - STL-FL	X
ESL - OR	
ATEL - AZ	
ATEL - MARION	
ATEL - MELMORE	
EHL	
GEL	
U OF MIAMI	
WCAS	
WOHL	

RELINQUISED BY: 1.	RELINQUISED BY: 2.
Signature: Francine Tenorio Time: 1700	Signature: Time:
Printed Name: Francine Tenorio Date: 5/19/04	Printed Name: Date:
Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2.**
Signature: Linda L. Kitt Time: 1227	Signature: Time:
Printed Name: Linda L. Kitt Date: 5/20/04	Printed Name: Date:
Company STL-FL	Company

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 5/19/04 PAGE: 1 OF 2

PLL Accession #: 405108

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Carl Chavez

COMPANY: NMED-HWB
ADDRESS: 2905 Rodeo Park Dr. East, Bldg 1
Santa Fe, NM 87505
PHONE: 505-428-2518
FAX: 505-428-2567

BILL TO: Same as above
COMPANY: "
ADDRESS: "

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	TOX (9020B)	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐MTBE ☐TMB ☐PCE	~~8021 (TCL)~~ TOC (415.1)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐/DBCP ☐	8270 Semi Volatile Organics	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics ☐PBMS	8260 (~~TCL~~) Volatile Organics Full	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method1311)	Metals:		NUMBER OF CONTAINERS
1	5/19/04	7:24	H_2O	01															✓														3
2	5/19/04	7:28	H_2O	02															✓														2
3	5/19/04	7:31	H_2O	03															✓														2
4	5/19/04	7:42	H_2O	04			✓																										4
5	5/19/04	7:52	H_2O	05							✓																						4
CJC ~~6~~	~~5/19/04~~	~~8:10~~	~~H_2O~~																														
CJC ~~5/19/04~~			~~H_2O~~																														
		CJC	~~H_2O~~																														
FB	5/19/04	1435	H_2O	06															✓														2

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.:
PROJ. NAME: WIPP CME
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS: 17
CUSTODY SEALS: Y N NA
RECEIVED INTACT: Y N
BLUE ICE/ICE: Y N

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☑
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:
Please submit electronic analytical via e-mail to:
carl_chavez@nmenv.state.nm.us
Also, send hardcopy to above address.

RELINQUISHED BY: 1.
Signature: Melvin Balderman Time: 8:39
Printed Name: Melvin Balderman Date: 5/19/04
Company: WRES
See Reverse Side (Force Majeure)

RELINQUISHED BY: 2.
Signature: Carl Chavez Time: 14:40
Printed Name: Carl Chavez Date: 5/19/04
Company: NMED

RECEIVED BY: 1.
Signature: Carl Chavez Time: 8:38
Printed Name: Carl Chavez Date: 5/19/04
Company: NMED

RECEIVED BY: (LAB) 2.
Signature: Francine Tarvo Time: 1441
Printed Name: Francine Tarvo Date: 5/19/04
Pinnacle Laboratories Inc.

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 5/19/04 PAGE: 2 OF 2

PLI Accession #: 405108

STADIED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Carl Chavez

COMPANY: NMED - HWB

ADDRESS: 2905 Rodeo Park Dr. East, Bldg. 1
Santa Fe, New Mexico 87505

PHONE: 505-428-2518

FAX: 505-428-2567

BILL TO: Same as above.

COMPANY: "

ADDRESS: "

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	TDS	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐MTBE ☐TMB ☐PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐/DBCP ☐	8270C Semi Volatile Org.	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics ☐PBMS	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	PH	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method1311)	Metals:	TDS	NUMBER OF CONTAINERS
6	5/19/04	8:10	H_2O	07												✓																	2
7	5/19/04	8:13	H_2O	08												✓																	2
8	5/19/04	8:24	H_2O	09																													1
9	5/19/04	8:25	H_2O	10																											✓		1
10	5/19/04	8:29	H_2O	11																													1
11	5/19/04	8:30	H_2O	12			✓																										1
12	5/19/04	8:31	"	13																						✓							1
Trip Blank	5/12/04	1755	"	14														✓															2

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.:

PROJ. NAME: WIPP CME

P.O. NO.:

SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS	13
CUSTODY SEALS	Y N NA
RECEIVED INTACT	Y N
BLUE ICE/ICE	5.3°

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☑
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

Please submit electronic analytical via e-mail to: Carl_chavez@~~nmed~~ nmenv.state.nm.us

Also send hardcopy to above address.

RELINQUISHED BY: 1.

Signature: Melvin Balderrama Time: 8:37

Printed Name: Melvin Balderrama Date: 5/19/04

Company: WRES

See Reverse side (Force Majeure)

RELINQUISHED BY: 2.

Signature: Carl Chavez Time: 14:40

Printed Name: Carl Chavez Date: 5/19/04

Company: NMED

RECEIVED BY 1.

Signature: Carl Chavez Time: 8:38

Printed Name: Carl Chavez Date: 5/19/04

Company: NMED

RECEIVED BY: (LAB) 2.

Signature: Suzanne Tanio Time: 1441

Printed Name: Suzanne Tanio Date: 5/19/04

Pinnacle Laboratories Inc.