RE'D FEB 12 2004

SEVERN TRENT STL

STL Sacramento
880 Riverside Parkway
West Sacramento, CA 95605

Tel: 916 373 5600 Fax: 916 372 1059
www.stl-inc.com

January 30, 2004

STL SACRAMENTO PROJECT NUMBER: G4A230201
PO/CONTRACT:

Loretta Tomlin
North Coast Labs
5680 West End Road
Arcata, CA 95521

Dear Ms. Tomlin,

This report contains the analytical results for the samples received under chain of custody by STL Sacramento on January 23, 2004. These samples are associated with your 0401391 project.

The test results in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4384.

Sincerely,

Karen Dahl
Project Manager

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STL Sacramento Quality Assurance Program

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- Sample Data Sheets
- Method Blank Reports
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WASTE, 8270C, phenols
Samples: 8, 9
- Sample Data Sheets
- Method Blank Reports
- Laboratory QC Reports

CASE NARRATIVE

STL SACRAMENTO PROJECT NUMBER G4A230201

General Comments

As discussed on 1/23/04, samples 0401391-2A & 0401391-3A contained 2 layers. Per Loretta's instructions on 1/23/04, both layers were analyzed for these two samples.

WASTE, 8270C, phenols

Sample 0401391-3A showed 2 low surrogate recoveries and the method blank showed 1 low surrogate recovery. Since this was a waste dilution analysis, no laboratory control samples were prepared.

There were no other anomalies associated with this project.

SEVERN TRENT STL

ACCREDITED IN ACCORDANCE WITH nelac

STL Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	Oregon	CA 200005
Arizona	AZ0616	Pennsylvania	68-1272
Arkansas	NA	South Carolina	87014001
California*	01119CA	Utah*	QUAN1
Connecticut	PH-0691	Virginia	00178
Florida*	E87570	Washington	C087
Georgia	960	West Virginia	9930C, 334
Hawaii	NA	Wisconsin	998204680
Louisiana*	01944	NFESC	NA
Nevada	CA 044	USACE	NA
New Jersey*	CA005	USDA Foreign Plant	37-82605
New York*	11666	USDA Foreign Soil	S-46613

*NELAP accredited. A more detailed parameter list is available upon request.

QC Parameter Definitions

QC Batch: The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

Method Blank: An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD): An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also used to evaluate the precision of the process.

Duplicate Sample (DU): Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

Surrogates: Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

Matrix Spike and Matrix Spike Duplicate (MS/MSD): An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

Isotope Dilution: For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

Control Limits: The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

Sample Summary
G4A230201

WO#	Sample #	Client Sample ID	Sampling Date	Received Date
F8F0C	1	0401391-1A	1/21/2004 09:50 AM	1/23/2004 10:15 AM
F8F0G	2	0401391-2A AQUEOUS	1/21/2004 11:15 AM	1/23/2004 10:15 AM
F8F0K	3	0401391-3A AQUEOUS	1/21/2004 10:40 AM	1/23/2004 10:15 AM
F8F0N	4	0401391-4A	1/21/2004	1/23/2004 10:15 AM
F8JKP	8	0401391-2A WASTE	1/21/2004 11:15 AM	1/23/2004 10:15 AM
F8JKR	9	0401391-3A WASTE	1/21/2004 10:40 AM	1/23/2004 10:15 AM

Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight

NORTH COAST LABORATORIES LTD.

Sub-Contract
Chain of Custody Record

Date Shipped: 1/22/04 **Carrier:** UPS

Air Bill #: _____ **Cooler #:** _____

Subcontractor: STLSAC
5755 8th St. East
Seattle, WA 98424

Phone: 253 922-2310
Attention Line: Sample Receiving

Send Results to: North Coast Labs
5680 West End Road
Arcata, CA 95521
Attn: Loretta Tomlin
(707) 822-4649

Relinquished By: (signature)	Date/Time	Received By: (signature)	Date/Time
	1/22/04 1530		1-23-04 1020
Relinquished By: (signature)	Date/Time	Received By: (signature)	Date/Time
Relinquished By: (signature)	Date/Time	Received By: (signature)	Date/Time

Analysis Request

NCL Sample #:	Sample ID:	Date Sampled:	Analysis / Matrix:
0401391-1A	DT-1	1/21/04 9:50:00 AM	PHENOLS-8270
0401391-2A	DT-2	1/21/04 11:15:00 AM	PHENOLS-8270
0401391-3A	DT-3	1/21/04 10:40:00 AM	PHENOLS-8270
0401391-4A	DUP	1/21/04	PHENOLS-8270
0401391-1B	DT-1	1/21/04 9:50:00 AM	HOLD
0401391-2B	DT-2	1/21/04 11:15:00 AM	HOLD
0401391-3B	DT-3	1/21/04 10:40:00 AM	HOLD

holding for possible further analyses

RECEIVED IN GOOD CONDITION UNDER COC
JAN 23 2004
INI GC

Special Instructions: Please include QC Data.....RUSH!!

Date Due: ~~1/28/04~~ 1/30/04 Rush Charges Authorized: yes Preservative: NONE

Return Chain of Custody to NCL

SEVERN TRENT STL

LOT RECEIPT CHECKLIST
STL Sacramento

CLIENT NORTH COAST PM KD LOG # 25002

LOT# (QUANTIMS ID) G4A230201 QUOTE# 29173 LOCATION W16A

	Initials	Date
DATE RECEIVED 1-23-04 TIME RECEIVED 1015	GC	1-23-04

DELIVERED BY
- ☐ FEDEX ☐ CA OVERNIGHT ☐ CLIENT
- ☐ AIRBORNE ☐ GOLDENSTATE ☐ DHL
- ☒ UPS ☐ BAX GLOBAL ☐ GO-GETTERS
- ☐ STL COURIER ☐ COURIERS ON DEMAND
- ☐ OTHER

CUSTODY SEAL STATUS ☐ INTACT ☐ BROKEN ☒ N/A

CUSTODY SEAL #(S) _____

SHIPPPING CONTAINER(S) ☐ STL ☒ CLIENT ☐ N/A

TEMPERTURE RECORD (IN °C) IR 1☐ 2 ☐ ☒ OTHER IR-3

COC #(S) _____

TEMPERATURE BLANK _____

SAMPLE TEMPERATURE 3°

COLLECTOR'S NAME: ☐ Verified from COC ☒ Not on COC

pH MEASURED ☐ YES ☐ ANOMALY ☒ N/A

LABELED BY.....

LABELS CHECKED BY.....

PEER REVIEW _____ ☒ NA

SHORT HOLD TEST NOTIFICATION

SAMPLE RECEIVING

WETCHEM ☒ N/A

VOA-ENCORES ☒ N/A

☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL ☒ N/A

☒ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES ☐ N/A

☐ Clouseau ☐ TEMPERATURE EXCEEDED (2 °-6 °C) ☒ N/A

☐ WET ICE ☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED ☐ PM NOTIFIED

Notes: _____

LEAVE NO SPACES BLANK. USE "N/A" IF NOT APPLICABLE. INITIAL AND DATE ALL "N/A" ENTRIES.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
)A *																				
*																				
___AGB																				
3Bs																				
50AGB																				
50AGBs																				
50AGBn																				
50AGBna																				
___AGJ																				
00AGJ																				
50AGJ																				
25AGJ																				
___CGJ																				
00CGJ																				
50CGJ																				
25CGJ																				
___PB/PJ																				
___PBn/PJn																				
500PB/PJ																				
500PBn/PJn																				
500PBna																				
500PBzn/na																				
250PB																				
250PBn																				
250PBna																				
250PBzn/na																				
___"CT																				
Encore																				
Folder/Filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

h = hydrochloric acid s = sulfuric acid na = sodium hydroxide n = nitric acid zn = zinc acetate

* Number of VOA's with air bubbles present / total number of VOA's

WATER, 8270C, phenols

NORTH COAST LABS

Client Sample ID: 0401391-1A

GC/MS Semivolatiles

Lot-Sample #...: G4A230201-001 Work Order #...: F8F0C1AA Matrix.....: WATER
Date Sampled...: 01/21/04 Date Received..: 01/23/04
Prep Date.....: 01/23/04 Analysis Date..: 01/27/04
Prep Batch #...: 4023413
Dilution Factor: 1.07 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
4-Chloro-3-methylphenol	ND	11	ug/L
2-Chlorophenol	ND	11	ug/L
2,4-Dichlorophenol	ND	11	ug/L
2,4-Dimethylphenol	ND	11	ug/L
2,4-Dinitrophenol	ND	54	ug/L
2-Methylphenol	ND	11	ug/L
3-Methylphenol & 4-Methylphenol	ND	21	ug/L
2-Nitrophenol	ND	11	ug/L
4-Nitrophenol	ND	54	ug/L
Pentachlorophenol	ND	54	ug/L
Phenol	ND	11	ug/L
2,4,5-Trichloro-phenol	ND	11	ug/L
2,4,6-Trichloro-phenol	ND	11	ug/L
4,6-Dinitro-2-methylphenol	ND	54	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	78	(35 - 105)
1,2-Dichlorobenzene-d4	77	(29 - 96)
2-Fluorobiphenyl	82	(42 - 105)
2-Fluorophenol	48	(11 - 74)
Nitrobenzene-d5	78	(44 - 102)
Phenol-d5	32	(11 - 47)
Terphenyl-d14	104	(51 - 127)
2,4,6-Tribromophenol	76	(37 - 117)

NORTH COAST LABS

Client Sample ID: 0401391-2A AQUEOUS

GC/MS Semivolatiles

Lot-Sample #...: G4A230201-002 Work Order #...: F8F0G1AA Matrix.....: WATER
Date Sampled...: 01/21/04 Date Received..: 01/23/04
Prep Date.....: 01/23/04 Analysis Date..: 01/27/04
Prep Batch #...: 4023413
Dilution Factor: 1.39 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
4-Chloro-3-methylphenol	ND	14	ug/L
2-Chlorophenol	ND	14	ug/L
2,4-Dichlorophenol	ND	14	ug/L
2,4-Dimethylphenol	ND	14	ug/L
2,4-Dinitrophenol	ND	70	ug/L
2-Methylphenol	ND	14	ug/L
3-Methylphenol & 4-Methylphenol	ND	28	ug/L
2-Nitrophenol	ND	14	ug/L
4-Nitrophenol	ND	70	ug/L
Pentachlorophenol	ND	70	ug/L
Phenol	ND	14	ug/L
2,4,5-Trichloro-phenol	ND	14	ug/L
2,4,6-Trichloro-phenol	ND	14	ug/L
4,6-Dinitro-2-methylphenol	ND	70	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	77	(35 - 105)
1,2-Dichlorobenzene-d4	77	(29 - 96)
2-Fluorobiphenyl	82	(42 - 105)
2-Fluorophenol	43	(11 - 74)
Nitrobenzene-d5	78	(44 - 102)
Phenol-d5	31	(11 - 47)
Terphenyl-d14	111	(51 - 127)
2,4,6-Tribromophenol	66	(37 - 117)

NORTH COAST LABS

0401391-2A AQUEOUS

GC/MS Semivolatiles

Lot-Sample #: G4A230201-002 **Work Order #:** F8F0G1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

NORTH COAST LABS

Client Sample ID: 0401391-3A AQUEOUS

GC/MS Semivolatiles

Lot-Sample #...:	G4A230201-003	**Work Order #...:**	F8F0K1AA	**Matrix.....:**	WATER
Date Sampled...:	01/21/04	**Date Received..:**	01/23/04		
Prep Date.....:	01/23/04	**Analysis Date..:**	01/27/04		
Prep Batch #...:	4023413				
Dilution Factor:	1.07	**Method.....:**	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
4-Chloro-3-methylphenol	ND	11	ug/L
2-Chlorophenol	ND	11	ug/L
2,4-Dichlorophenol	ND	11	ug/L
2,4-Dimethylphenol	ND	11	ug/L
2,4-Dinitrophenol	ND	54	ug/L
2-Methylphenol	ND	11	ug/L
3-Methylphenol & 4-Methylphenol	ND	21	ug/L
2-Nitrophenol	ND	11	ug/L
4-Nitrophenol	ND	54	ug/L
Pentachlorophenol	ND	54	ug/L
Phenol	ND	11	ug/L
2,4,5-Trichloro-phenol	ND	11	ug/L
2,4,6-Trichloro-phenol	ND	11	ug/L
4,6-Dinitro-2-methylphenol	ND	54	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	74	(35 - 105)
1,2-Dichlorobenzene-d4	75	(29 - 96)
2-Fluorobiphenyl	81	(42 - 105)
2-Fluorophenol	47	(11 - 74)
Nitrobenzene-d5	75	(44 - 102)
Phenol-d5	31	(11 - 47)
Terphenyl-d14	108	(51 - 127)
2,4,6-Tribromophenol	65	(37 - 117)

NORTH COAST LABS

0401391-3A AQUEOUS

GC/MS Semivolatiles

Lot-Sample #: G4A230201-003 **Work Order #:** F8F0K1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

NORTH COAST LABS

Client Sample ID: 0401391-4A

GC/MS Semivolatiles

Lot-Sample #...:	G4A230201-004	Work Order #...:	F8F0N1AA	Matrix.....:	WATER
Date Sampled...:	01/21/04	Date Received..:	01/23/04		
Prep Date.....:	01/23/04	Analysis Date..:	01/27/04		
Prep Batch #...:	4023413				
Dilution Factor:	1.16	Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
4-Chloro-3-methylphenol	ND	12	ug/L
2-Chlorophenol	ND	12	ug/L
2,4-Dichlorophenol	ND	12	ug/L
2,4-Dimethylphenol	ND	12	ug/L
2,4-Dinitrophenol	ND	58	ug/L
2-Methylphenol	ND	12	ug/L
3-Methylphenol & 4-Methylphenol	ND	23	ug/L
2-Nitrophenol	ND	12	ug/L
4-Nitrophenol	ND	58	ug/L
Pentachlorophenol	ND	58	ug/L
Phenol	ND	12	ug/L
2,4,5-Trichloro-phenol	ND	12	ug/L
2,4,6-Trichloro-phenol	ND	12	ug/L
4,6-Dinitro-2-methylphenol	ND	58	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	76	(35 - 105)
1,2-Dichlorobenzene-d4	76	(29 - 96)
2-Fluorobiphenyl	82	(42 - 105)
2-Fluorophenol	45	(11 - 74)
Nitrobenzene-d5	78	(44 - 102)
Phenol-d5	30	(11 - 47)
Terphenyl-d14	93	(51 - 127)
2,4,6-Tribromophenol	65	(37 - 117)

QC DATA ASSOCIATION SUMMARY

G4A230201

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 8270C		4023413	
002	WATER	SW846 8270C		4023413	
003	WATER	SW846 8270C		4023413	
004	WATER	SW846 8270C		4023413	
008	WASTE	SW846 8270C		4026429	
009	WASTE	SW846 8270C		4026429	

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: G4A230201 Work Order #...: F8GNL1AA Matrix.....: WATER
MB Lot-Sample #: G4A230000-413

Prep Date.....: 01/23/04
Analysis Date..: 01/27/04 Prep Batch #...: 4023413
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
4-Chloro-3-methylphenol	ND	10	ug/L	SW846 8270C
2-Chlorophenol	ND	10	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	10	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	10	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	50	ug/L	SW846 8270C
2-Methylphenol	ND	10	ug/L	SW846 8270C
2-Nitrophenol	ND	10	ug/L	SW846 8270C
4-Nitrophenol	ND	50	ug/L	SW846 8270C
Pentachlorophenol	ND	50	ug/L	SW846 8270C
Phenol	ND	10	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	10	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	10	ug/L	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	20	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	76	(35 - 105)
1,2-Dichlorobenzene-d4	74	(29 - 96)
2-Fluorobiphenyl	81	(42 - 105)
2-Fluorophenol	48	(11 - 74)
Nitrobenzene-d5	74	(44 - 102)
Phenol-d5	30	(11 - 47)
Terphenyl-d14	118	(51 - 127)
2,4,6-Tribromophenol	71	(37 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: G4A230201 Work Order #...: F8GNL1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G4A230000-413 F8GNL1AD-LCSD
Prep Date.....: 01/23/04 Analysis Date..: 01/27/04
Prep Batch #...: 4023413
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
4-Chloro-3-methylphenol	100	90.3	ug/L	90		SW846 8270C
	100	86.4	ug/L	86	4.4	SW846 8270C
2-Chlorophenol	100	88.2	ug/L	88		SW846 8270C
	100	81.8	ug/L	82	7.5	SW846 8270C
4-Nitrophenol	100	58.8	ug/L	59		SW846 8270C
	100	53.2	ug/L	53	10	SW846 8270C
Pentachlorophenol	100	89.3	ug/L	89		SW846 8270C
	100	86.6	ug/L	87	3.1	SW846 8270C
Phenol	100	44.0	ug/L	44		SW846 8270C
	100	42.0	ug/L	42	4.5	SW846 8270C
Acenaphthene	100	82.1	ug/L	82		SW846 8270C
	100	81.5	ug/L	82	0.74	SW846 8270C
1,4-Dichlorobenzene	100	78.2	ug/L	78		SW846 8270C
	100	72.9	ug/L	73	7.0	SW846 8270C
2,4-Dinitrotoluene	100	85.4	ug/L	85		SW846 8270C
	100	80.7	ug/L	81	5.7	SW846 8270C
N-Nitrosodi-n-propyl-amine	100	94.6	ug/L	95		SW846 8270C
	100	80.0	ug/L	80	17	SW846 8270C
Pyrene	100	101	ug/L	101		SW846 8270C
	100	106	ug/L	106	4.4	SW846 8270C
1,2,4-Trichloro-benzene	100	79.1	ug/L	79		SW846 8270C
	100	76.0	ug/L	76	4.0	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	84	(35 - 105)
	78	(35 - 105)
1,2-Dichlorobenzene-d4	83	(29 - 96)
	79	(29 - 96)
2-Fluorobiphenyl	90	(42 - 105)
	87	(42 - 105)
2-Fluorophenol	61	(11 - 74)
	59	(11 - 74)
Nitrobenzene-d5	89	(44 - 102)

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: G4A230201 **Work Order #...:** F8GNL1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: G4A230000-413 F8GNL1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	84	(44 - 102)
Phenol-d5	41	(11 - 47)
	36	(11 - 47)
Terphenyl-d14	103	(51 - 127)
	106	(51 - 127)
2,4,6-Tribromophenol	80	(37 - 117)
	73	(37 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: G4A230201 Work Order #...: F8GNL1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: G4A230000-413 F8GNL1AD-LCSD
Prep Date.....: 01/23/04 Analysis Date..: 01/27/04
Prep Batch #...: 4023413
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
4-Chloro-3-methylphenol	90	(58 - 111)			SW846 8270C
	86	(58 - 111)	4.4	(0-22)	SW846 8270C
2-Chlorophenol	88	(47 - 102)			SW846 8270C
	82	(47 - 102)	7.5	(0-25)	SW846 8270C
4-Nitrophenol	59	(10 - 82)			SW846 8270C
	53	(10 - 82)	10	(0-45)	SW846 8270C
Pentachlorophenol	89	(30 - 129)			SW846 8270C
	87	(30 - 129)	3.1	(0-24)	SW846 8270C
Phenol	44	(18 - 58)			SW846 8270C
	42	(18 - 58)	4.5	(0-30)	SW846 8270C
Acenaphthene	82	(54 - 112)			SW846 8270C
	82	(54 - 112)	0.74	(0-15)	SW846 8270C
1,4-Dichlorobenzene	78	(38 - 87)			SW846 8270C
	73	(38 - 87)	7.0	(0-50)	SW846 8270C
2,4-Dinitrotoluene	85	(58 - 119)			SW846 8270C
	81	(58 - 119)	5.7	(0-24)	SW846 8270C
N-Nitrosodi-n-propyl-amine	95	(42 - 122)			SW846 8270C
	80	(42 - 122)	17	(0-24)	SW846 8270C
Pyrene	101	(53 - 143)			SW846 8270C
	106	(53 - 143)	4.4	(0-27)	SW846 8270C
1,2,4-Trichloro-benzene	79	(44 - 93)			SW846 8270C
	76	(44 - 93)	4.0	(0-28)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	84	(35 - 105)
	78	(35 - 105)
1,2-Dichlorobenzene-d4	83	(29 - 96)
	79	(29 - 96)
2-Fluorobiphenyl	90	(42 - 105)
	87	(42 - 105)
2-Fluorophenol	61	(11 - 74)
	59	(11 - 74)
Nitrobenzene-d5	89	(44 - 102)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: G4A230201 **Work Order #...:** F8GNL1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: G4A230000-413 F8GNL1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	84	(44 - 102)
Phenol-d5	41	(11 - 47)
	36	(11 - 47)
Terphenyl-d14	103	(51 - 127)
	106	(51 - 127)
2,4,6-Tribromophenol	80	(37 - 117)
	73	(37 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

WASTE, 8270C, phenols

NORTH COAST LABS

Client Sample ID: 0401391-2A WASTE

GC/MS Semivolatiles

Lot-Sample #...: G4A230201-008 Work Order #...: F8JKP1AA Matrix.....: WASTE
Date Sampled...: 01/21/04 Date Received..: 01/23/04
Prep Date.....: 01/26/04 Analysis Date..: 01/27/04
Prep Batch #...: 4026429
Dilution Factor: 1 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
4-Chloro-3-methylphenol	ND	100	mg/kg
2-Chlorophenol	ND	100	mg/kg
2,4-Dichlorophenol	ND	100	mg/kg
2,4-Dimethylphenol	ND	100	mg/kg
4,6-Dinitro-2-methylphenol	ND	500	mg/kg
2,4-Dinitrophenol	ND	500	mg/kg
2-Methylphenol	ND	100	mg/kg
3-Methylphenol & 4-Methylphenol	ND	200	mg/kg
2-Nitrophenol	ND	100	mg/kg
4-Nitrophenol	ND	500	mg/kg
Pentachlorophenol	ND	500	mg/kg
Phenol	ND	100	mg/kg
2,4,5-Trichlorophenol	ND	100	mg/kg
2,4,6-Trichlorophenol	ND	100	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	97	(20 - 130)
1,2-Dichlorobenzene-d4	112	(20 - 130)
2-Fluorobiphenyl	110	(50 - 150)
2-Fluorophenol	95	(50 - 150)
Nitrobenzene-d5	86	(50 - 150)
Phenol-d5	81	(50 - 150)
Terphenyl-d14	132	(50 - 150)
2,4,6-Tribromophenol	50	(50 - 150)

NORTH COAST LABS

0401391-2A WASTE

GC/MS Semivolatiles

Lot-Sample #: G4A230201-008 **Work Order #:** F8JKP1AA **Matrix:** WASTE

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				mg/kg

NORTH COAST LABS

Client Sample ID: 0401391-3A WASTE

GC/MS Semivolatiles

Lot-Sample #...: G4A230201-009	Work Order #...: F8JKR1AA	Matrix.....: WASTE
Date Sampled...: 01/21/04	Date Received..: 01/23/04	
Prep Date.....: 01/26/04	Analysis Date..: 01/27/04	
Prep Batch #...: 4026429		
Dilution Factor: 1	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
4-Nitrophenol	ND	500	mg/kg
Pentachlorophenol	ND	500	mg/kg
Phenol	ND	100	mg/kg
2,4,5-Trichloro-phenol	ND	100	mg/kg
2,4,6-Trichloro-phenol	ND	100	mg/kg
4-Chloro-3-methylphenol	ND	100	mg/kg
2-Chlorophenol	ND	100	mg/kg
2,4-Dichlorophenol	ND	100	mg/kg
2,4-Dimethylphenol	ND	100	mg/kg
4,6-Dinitro-2-methylphenol	ND	500	mg/kg
2,4-Dinitrophenol	ND	500	mg/kg
2-Methylphenol	ND	100	mg/kg
3-Methylphenol & 4-Methylphenol	ND	200	mg/kg
2-Nitrophenol	ND	100	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	100	(20 - 130)
1,2-Dichlorobenzene-d4	119	(20 - 130)
2-Fluorobiphenyl	117	(50 - 150)
2-Fluorophenol	38 *	(50 - 150)
Nitrobenzene-d5	90	(50 - 150)
Phenol-d5	83	(50 - 150)
Terphenyl-d14	131	(50 - 150)
2,4,6-Tribromophenol	43 *	(50 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

NORTH COAST LABS

0401391-3A WASTE

GC/MS Semivolatiles

Lot-Sample #: G4A230201-009 **Work Order #:** F8JKR1AA **Matrix:** WASTE

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				mg/kg

QC DATA ASSOCIATION SUMMARY

G4A230201

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 8270C		4023413	
002	WATER	SW846 8270C		4023413	
003	WATER	SW846 8270C		4023413	
004	WATER	SW846 8270C		4023413	
008	WASTE	SW846 8270C		4026429	
009	WASTE	SW846 8270C		4026429	

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: G4A230201 Work Order #...: F8J8Q1AA Matrix.....: WASTE
MB Lot-Sample #: G4A260000-429

Prep Date.....: 01/26/04
Analysis Date..: 01/27/04 Prep Batch #...: 4026429
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
4-Chloro-3-methylphenol	ND	100	mg/kg	SW846 8270C
2-Chlorophenol	ND	100	mg/kg	SW846 8270C
2,4-Dichlorophenol	ND	100	mg/kg	SW846 8270C
2,4-Dimethylphenol	ND	100	mg/kg	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	500	mg/kg	SW846 8270C
2,4-Dinitrophenol	ND	500	mg/kg	SW846 8270C
2-Methylphenol	ND	100	mg/kg	SW846 8270C
2-Nitrophenol	ND	100	mg/kg	SW846 8270C
4-Nitrophenol	ND	500	mg/kg	SW846 8270C
Pentachlorophenol	ND	500	mg/kg	SW846 8270C
Phenol	ND	100	mg/kg	SW846 8270C
2,4,5-Trichlorophenol	ND	100	mg/kg	SW846 8270C
2,4,6-Trichlorophenol	ND	100	mg/kg	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	200	mg/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	88	(20 - 130)
1,2-Dichlorobenzene-d4	102	(20 - 130)
2-Fluorobiphenyl	102	(50 - 150)
2-Fluorophenol	84	(50 - 150)
Nitrobenzene-d5	87	(50 - 150)
Phenol-d5	90	(50 - 150)
Terphenyl-d14	110	(50 - 150)
2,4,6-Tribromophenol	46 *	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

* Surrogate recovery is outside stated control limits.

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Chain of Custody

P. 1 / 1

LABORATORY NUMBER: 040139

Attention: FRANS LOWMAN
Results & Invoice to: SHN
Address: 812 West Wabash Avenue
Eureka, CA 95501
Phone: 441-8855
Copies of Report to:
Sampler (Sign & Print): [illegible]

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☐ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☐ Verbal ☐ By:__/__/__
Final Report: FAX ☐ Verbal ☐ By:__/__/__

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 003154
Project Name: FORMER SIMPSON REMAN
Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	PRESERVATIVE	CONTAINER	ANALYSIS: PCP/HCB CAN FOOD	ANALYSIS: PCP/HCB CAN FOOD	ANALYSIS: 8290 LIST 9	ANALYSIS: DIOXIN/FURAN
	DT-1	1-21-04	950	GW		6	X	X	X	H
	DT-2	1-21-04	1115			6	X	X	X	H
	DT-3	1-21-04	1040			6	X	X	X	H
	TB-1			⊘		1			X	
	DUP	1-21-04		GW		5	X	X	X	

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

DIOXIN/FURANS FOR REGULAR TURNAROUND. ANALYZE 1 SAMPLE ONLY FROM SAMPLE LOCATION WITH HIGHEST PCP. IF NO PCP DETECTED CALL FRANS LOWMAN TO DETERMINE WHICH SAMPLE TO RUN

cooler blank = 10.2°C

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
[illegible] 1/21/04	17:00	R. Thompson	1/21/04 1700

SAMPLE DISPOSAL
☐ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

REC'D FEB 2 2004

NORTH COAST LABORATORIES LTD.

January 30, 2004

SHN Consulting Engineers and Geologists
812 West Wabash Avenue
Eureka, CA 95501

Attn: Frans Lowman

RE: 003154, Former Simpson Reman

Order No.: 0401432
Invoice No.: 39824
PO No.:
ELAP No. 1247-Expires July 2004

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	DDA-1
01C	DDA-1
01F	DDA-1 (Dissolved)
02A	DDA-2
02C	DDA-2
02F	DDA-2 (Dissolved)

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s) | QA Unit | Jesse G. Chaney, Jr. Laboratory Director

5680 West End Road • Arcata California 95521-9202 • 707-822-4649 • FAX 707-822-6831

Printed on Recycled Paper

Date: 30-Jan-04
WorkOrder: 0401432

ANALYTICAL REPORT

Client Sample ID: DDA-1 **Received:** 1/22/04 **Collected:** 1/22/04 15:15
Lab ID: 0401432-01A

Test Name: TPH as Diesel/Motor Oil **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel	ND	50	µg/L	1.0	1/26/04	1/28/04
TPHC Motor Oil	ND	170	µg/L	1.0	1/26/04	1/28/04

Client Sample ID: DDA-1 **Received:** 1/22/04 **Collected:** 1/22/04 15:15
Lab ID: 0401432-01C

Test Name: TPH as Gasoline **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas	ND	50	µg/L	1.0		1/28/04

Client Sample ID: DDA-1 (Dissolved) **Received:** 1/22/04 **Collected:** 1/22/04 15:15
Lab ID: 0401432-01F

Test Name: ICAP Metals with Acid Digestion **Reference:** EPA 200.7

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Cadmium	ND	10	µg/L	1.0	1/23/04	1/26/04
Chromium	ND	10	µg/L	1.0	1/23/04	1/26/04
Nickel	ND	20	µg/L	1.0	1/23/04	1/26/04
Zinc	ND	20	µg/L	1.0	1/23/04	1/26/04

Test Name: Lead **Reference:** EPA 200.9

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Lead	ND	10	µg/L	1.0	1/23/04	1/27/04

Client Sample ID: DDA-2 **Received:** 1/22/04 **Collected:** 1/22/04 16:00
Lab ID: 0401432-02A

Test Name: TPH as Diesel/Motor Oil **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel	ND	50	µg/L	1.0	1/26/04	1/28/04
TPHC Motor Oil	ND	170	µg/L	1.0	1/26/04	1/28/04

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Date: 30-Jan-04
WorkOrder: 0401432

ANALYTICAL REPORT

Client Sample ID: DDA-2 **Received:** 1/22/04 **Collected:** 1/22/04 16:00
Lab ID: 0401432-02C

Test Name: TPH as Gasoline **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas	ND	50	µg/L	1.0		1/28/04

Client Sample ID: DDA-2 (Dissolved) **Received:** 1/22/04 **Collected:** 1/22/04 16:00
Lab ID: 0401432-02F

Test Name: ICAP Metals with Acid Digestion **Reference:** EPA 200.7

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Cadmium	ND	10	µg/L	1.0	1/23/04	1/26/04
Chromium	ND	10	µg/L	1.0	1/23/04	1/26/04
Nickel	25	20	µg/L	1.0	1/23/04	1/26/04
Zinc	22	20	µg/L	1.0	1/23/04	1/26/04

Test Name: Lead **Reference:** EPA 200.9

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Lead	ND	10	µg/L	1.0	1/23/04	1/27/04

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North Coast Laboratories, Ltd.

Date: 30-Jan-04

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0401432
Project: 003154, Former Simpson Reman

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-10705P** Batch ID: **10705** Test Code: **ICPX** Units: **µg/L** Analysis Date: **1/26/04 2:43:00 PM** Prep Date: **1/23/04**
Client ID: Run ID: **INICP1_040126B** SeqNo: **398384**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	10									
Chromium	ND	10									
Nickel	ND	20									
Zinc	15.69	20									J

Sample ID: **MB-10705A** Batch ID: **10705** Test Code: **PB200.9X** Units: **µg/L** Analysis Date: **1/27/04 12:27:00 PM** Prep Date: **1/23/04**
Client ID: Run ID: **INAA2_040127B** SeqNo: **398638**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	10									

Sample ID: **MB-1/27/04** Batch ID: **R27176** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **1/28/04 3:56:46 AM** Prep Date:
Client ID: Run ID: **ORGC8_040127A** SeqNo: **399117**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas	ND	50									

Sample ID: **MB-10711** Batch ID: **10711** Test Code: **TPHDMW** Units: **µg/L** Analysis Date: **1/27/04 11:00:33 PM** Prep Date: **1/26/04**
Client ID: Run ID: **ORGC7_040127B** SeqNo: **398817**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel	ND	50									
TPHC Motor Oil	ND	170									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 30-Jan-04

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0401432
Project: 003154, Former Simpson Reman

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-10705A** Batch ID: **10705** Test Code: **PB200.9X** Units: **µg/L** Analysis Date: **1/27/04 12:33:00 PM** Prep Date: **1/23/04**
Client ID: Run ID: **INAA2_040127B** SeqNo: **398639**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	39.21	10	40.0	0	98.0%	85	115	0			

Sample ID: **LCS-04039** Batch ID: **R27176** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **1/28/04 1:39:25 AM** Prep Date:
Client ID: Run ID: **ORGC8_040127A** SeqNo: **399114**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas	509.4	50	500	0	102%	81	126	0			

Sample ID: **LCSD-04039** Batch ID: **R27176** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **1/28/04 2:13:42 AM** Prep Date:
Client ID: Run ID: **ORGC8_040127A** SeqNo: **399115**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas	510.4	50	500	0	102%	81	126	509	0.198%	15	

Sample ID: **LCS-10711** Batch ID: **10711** Test Code: **TPHDMW** Units: **µg/L** Analysis Date: **1/27/04 8:21:33 PM** Prep Date: **1/26/04**
Client ID: Run ID: **ORGC7_040127B** SeqNo: **398814**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel	482.9	50	500	0	96.6%	68	132	0			
TPHC Motor Oil	1,071	170	1,000	0	107%	84	122	0			

Sample ID: **LCSD-10711** Batch ID: **10711** Test Code: **TPHDMW** Units: **µg/L** Analysis Date: **1/27/04 8:48:49 PM** Prep Date: **1/26/04**
Client ID: Run ID: **ORGC7_040127B** SeqNo: **398815**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel	510.4	50	500	0	102%	68	132	483	5.52%	15	
TPHC Motor Oil	1,056	170	1,000	0	106%	84	122	1,070	1.34%	15	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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707-822-4649 Fax 707-822-6831

Chain of Custody

P. 1 1

LABORATORY NUMBER: 0401432

Attention: FRANS LOWMAN
Results & Invoice to: SHN
Address: 812 West Wabash Avenue
Eureka, CA 95501
Phone: 441-8855
Copies of Report to:
Sampler (Sign & Print): J. Tyler / A. Melody

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☒ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☒ Verbal ☐ By: __/__/__
Final Report: FAX ☐ Verbal ☐ By: __/__/__

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 003154
Project Name: FORMER SIMPSON REMAN
Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	PRESERVATIVE	CONTAINER	ANALYSIS: TPHMO/D	ANALYSIS: TPHG	ANALYSIS: CAM 5 METALS
	DDA-1	1-22-04	1515	GW		6	X	X	X
	DDA-2	"	1600	GW		6	X	X	X

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

FILTER & PRESERVE METALS @ LAB

Cooler temp=9.4°C

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
[signature]	1645/1-22-04	[signature]	1645

SAMPLE DISPOSAL
☒ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

NORTH COAST LABS

Client Sample ID: 0401390-1A SLR-1S

GC/MS Semivolatiles

Lot-Sample #...: G4A230204-001
Date Sampled...: 01/21/04
Prep Date.....: 01/23/04
Prep Batch #...: 4023413
Dilution Factor: 1.1

Work Order #...: F0F1M1AA
Date Received..: 01/23/04
Analysis Date..: 01/27/04

Method.....: SW846 8270C

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
4-Chloro-3-methylphenol	ND	11	ug/L
2-Chlorophenol	ND	11	ug/L
2,4-Dichlorophenol	ND	11	ug/L
2,4-Dimethylphenol	ND	11	ug/L
2,4-Dinitrophenol	ND	55	ug/L
2-Methylphenol	ND	11	ug/L
3-Methylphenol & 4-Methylphenol	ND	22	ug/L
2-Nitrophenol	ND	11	ug/L
4-Nitrophenol	ND	55	ug/L
Pentachlorophenol	ND	55	ug/L
Phenol	ND	11	ug/L
2,4,5-Trichlorophenol	ND	11	ug/L
2,4,6-Trichlorophenol	ND	11	ug/L
4,6-Dinitro-2-methylphenol	ND	55	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	75	(35 - 105)
1,2-Dichlorobenzene-d4	75	(29 - 96)
2-Fluorobiphenyl	78	(42 - 105)
2-Fluorophenol	44	(11 - 74)
Nitrobenzene-d5	74	(44 - 102)
Phenol-d5	32	(11 - 47)
Terphenyl-d14	101	(51 - 127)
2,4,6-Tribromophenol	73	(37 - 117)

NORTH COAST LABS

Client Sample ID: 0401390-2A AQUEOUS SLR-2S

GC/MS Semivolatiles

Lot-Sample #...: G4A230204-002
Date Sampled...: 01/21/04
Prep Date.....: 01/23/04
Prep Batch #...: 4023413
Dilution Factor: 1.54

Work Order #...: F8F1Q1AA
Date Received..: 01/23/04
Analysis Date..: 01/27/04

Matrix.....: WATER

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
4-Chloro-3-methylphenol	ND	15	ug/L
2-Chlorophenol	ND	15	ug/L
2,4-Dichlorophenol	ND	15	ug/L
2,4-Dimethylphenol	ND	15	ug/L
2,4-Dinitrophenol	ND	77	ug/L
2-Methylphenol	ND	15	ug/L
3-Methylphenol & 4-Methylphenol	ND	31	ug/L
2-Nitrophenol	ND	15	ug/L
4-Nitrophenol	ND	77	ug/L
Pentachlorophenol	ND	77	ug/L
Phenol	ND	15	ug/L
2,4,5-Trichlorophenol	ND	15	ug/L
2,4,6-Trichlorophenol	ND	15	ug/L
4,6-Dinitro-2-methylphenol	ND	77	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	71	(35 - 105)
1,2-Dichlorobenzene-d4	70	(29 - 96)
2-Fluorobiphenyl	71	(42 - 105)
2-Fluorophenol	42	(11 - 74)
Nitrobenzene-d5	71	(44 - 102)
Phenol-d5	30	(11 - 47)
Terphenyl-d14	108	(51 - 127)
2,4,6-Tribromophenol	65	(37 - 117)

NORTH COAST LABS

0401390-2A AQUEOUS

GC/MS Semivolatiles

Lot-Sample #: G4A230204-002 Work Order #: F8F1Q1AA Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

NORTH COAST LABS

Client Sample ID: 0401390-2A WASTE SLR-2S

GC/MS Semivolatiles

Lot-Sample #...: G4A230204-004 Work Order #...: F8JKG1AA Matrix.....: WASTE
Date Sampled...: 01/21/04 Date Received..: 01/23/04
Prep Date.....: 01/26/04 Analysis Date..: 01/27/04
Prep Batch #...: 4026429
Dilution Factor: 1 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
4-Chloro-3-methylphenol	ND	100	mg/kg
2-Chlorophenol	ND	100	mg/kg
2,4-Dichlorophenol	ND	100	mg/kg
2,4-Dimethylphenol	ND	100	mg/kg
4,6-Dinitro-2-methylphenol	ND	500	mg/kg
2,4-Dinitrophenol	ND	500	mg/kg
2-Methylphenol	ND	100	mg/kg
3-Methylphenol & 4-Methylphenol	ND	200	mg/kg
2-Nitrophenol	ND	100	mg/kg
4-Nitrophenol	ND	500	mg/kg
Pentachlorophenol	ND	500	mg/kg
Phenol	ND	100	mg/kg
2,4,5-Trichloro-phenol	ND	100	mg/kg
2,4,6-Trichloro-phenol	ND	100	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	98	(20 - 130)
1,2-Dichlorobenzene-d4	115	(20 - 130)
2-Fluorobiphenyl	113	(50 - 150)
2-Fluorophenol	95	(50 - 150)
Nitrobenzene-d5	99	(50 - 150)
Phenol-d5	91	(50 - 150)
Terphenyl-d14	117	(50 - 150)
2,4,6-Tribromophenol	54	(50 - 150)

NORTH COAST LABS

0401390-2A WASTE

GC/MS Semivolatiles

Lot-Sample #: G4A230204-004 Work Order #: F0JRG1AA Matrix: WASTE

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

NORTH COAST LABS

Client Sample ID: 0401390-3A SLR-3S

GC/MS Semivolatiles

Lot-Sample #...: G4A230204-003
Date Sampled...: 01/21/04
Prep Date.....: 01/23/04
Prep Batch #...: 4023413
Dilution Factor: 1.03

Work Order #...: FBF1W1AA
Date Received..: 01/23/04
Analysis Date..: 01/27/04

Matrix.....: WATER

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
4-Chloro-3-methylphenol	ND	10	ug/L
2-Chlorophenol	ND	10	ug/L
2,4-Dichlorophenol	ND	10	ug/L
2,4-Dimethylphenol	ND	10	ug/L
2,4-Dinitrophenol	ND	52	ug/L
2-Methylphenol	ND	10	ug/L
3-Methylphenol & 4-Methylphenol	ND	21	ug/L
2-Nitrophenol	ND	10	ug/L
4-Nitrophenol	ND	52	ug/L
Pentachlorophenol	ND	52	ug/L
Phenol	ND	10	ug/L
2,4,5-Trichlorophenol	ND	10	ug/L
2,4,6-Trichlorophenol	ND	10	ug/L
4,6-Dinitro-2-methylphenol	ND	52	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Chlorophenol-d4	71	(35 - 105)
1,2-Dichlorobenzene-d4	70	(29 - 96)
2-Fluorobiphenyl	76	(42 - 105)
2-Fluorophenol	45	(11 - 74)
Nitrobenzene-d5	73	(44 - 102)
Phenol-d5	30	(11 - 47)
Terphenyl-d14	102	(51 - 127)
2,4,6-Tribromophenol	72	(37 - 117)

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355 1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Northcoast Laboratories
5680 West End Road
Arcata, CA 95521
Job#

Attn: Loretta Tomlin
Phone: (707) 822-4649
Fax: (707) 822-6831

Alpha Analytical Number: NOC04052105-01A
Client I.D. Number: 0405391-1A/MW-3

Sampled: 05/19/04
Received: 05/21/04
Analyzed: 05/27/04

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Phenol	ND	10 µg/L
2	2-Chlorophenol	ND	10 µg/L
3	2-Nitrophenol	ND	10 µg/L
4	2,4-Dimethylphenol	ND	10 µg/L
5	2,4-Dichlorophenol	ND	10 µg/L
6	4-Chloro-3-methylphenol	ND	20 µg/L
7	2,4,6-Trichlorophenol	ND	10 µg/L
8	2,4-Dinitrophenol	ND	100 µg/L
9	4-Nitrophenol	ND	50 µg/L
10	4,6-Dinitro-2-methylphenol	ND	100 µg/L
11	Pentachlorophenol	ND	50 µg/L

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-0089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

6/1/04
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Northcoast Laboratories
5680 West End Road
Arcata, CA 95521
Job#:

Attn: Loretta Topulin
Phone: (707) 822-4649
Fax: (707) 822-6831

Alpha Analytical Number: NOC04052105-02A
Client I.D. Number: 0405391-2A/MW-7

Sampled: 05/19/04
Received: 05/21/04
Analyzed: 05/27/04

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Phenol	ND	10 µg/L
2	2-Chlorophenol	ND	10 µg/L
3	2-Nitrophenol	ND	10 µg/L
4	2,4-Dimethylphenol	ND	10 µg/L
5	2,4-Dichlorophenol	ND	10 µg/L
6	4-Chloro-3-methylphenol	ND	20 µg/L
7	2,4,6-Trichlorophenol	ND	10 µg/L
8	2,4-Dinitrophenol	ND	100 µg/L
9	4-Nitrophenol	ND	50 µg/L
10	4,6-Dinitro-2-methylphenol	ND	100 µg/L
11	Pentachlorophenol	ND	50 µg/L

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

6/1/04
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Northcoast Laboratories
5680 West End Road
Arcata, CA 95521
Job#:

Attn: Lorotta Tomlin
Phone: (707) 822-4649
Fax: (707) 822-6831

Alpha Analytical Number: NOC04052105-03A
Client I.D. Number: 0405391-3A/MW-8

Sampled: 05/19/04
Received: 05/21/04
Analyzed: 05/27/04

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Phenol	ND	10 µg/L
2	2-Chlorophenol	ND	10 µg/L
3	2-Nitrophenol	ND	10 µg/L
4	2,4-Dimethylphenol	ND	10 µg/L
5	2,4-Dichlorophenol	ND	10 µg/L
6	4-Chloro-3-methylphenol	ND	20 µg/L
7	2,4,6-Trichlorophenol	ND	10 µg/L
8	2,4-Dinitrophenol	ND	100 µg/l
9	4-Nitrophenol	ND	50 µg/L
10	4,6-Dinitro-2-methylphenol	ND	100 µg/L
11	Pentachlorophenol	ND	50 µg/L

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

6/1/04
Report Date

Sub-Contract
Chain of Custody Record

Date Shipped: 5/20/04 Carrier: UPS

Air Bill #: _____ Cooler #: _____

Subcontractor: Alpha Analytical - Nevada
255 Glendale Ave. #21
Sparks, NV 89431-5778

Phone: 702-355-1044
Attention Line: Sample Receiving

Send Results to: North Coast Labs
5600 West End Road
Arcata, CA 95521
Attn: Loretta Tomlin
(707) 822-4649

Relinquished By: (signature)	Date/Time	Received By: (signature)	Date/Time
[illegible]	5/20/04 1500	Tamra Long	5/21/04 1205

Analysis Request

NCL Sample #:	Sample ID:	Date Sampled:	Analysis / Matrix:
0405391-1A	MW-3	5/19/04 12:00:00 PM	EPA 8270 - Phenols only NOC0405 2105-01
0405391-2A	MW-7	5/19/04 12:50:00 PM	EPA 8270 - Phenols only 02
0405391-3A	MW-8	5/19/04 1:50:00 PM	EPA 8270 - Phenols only 03

Special Instructions: Please include QC Data. ~~Report in ppb.~~

Date Due: 6/2/04 Rush Charges Authorized: No Preservative: None

Return Chain of Custody to NCL

NORTH COAST LABORATORIES LTD.
5680 West End Road · Arcata · CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

LABORATORY NUMBER: 0405390

Attention: Frans Lowman
Results & Invoice to: SHN
Address: 812 West Wabash Avenue
Eureka, CA 95501
Phone: 441-8855
Copies of Report to:
Sampler (Sign & Print): David R. Paine David R. Paine

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☒ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☐ Verbal ☐ By: __/__/__
Final Report: FAX ☐ Verbal ☐ By: __/__/__

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 003154
Project Name: Simpson Reman Facility
Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	8260 list 9 (ANALYSIS)	PCP/TCP (ANALYSIS)	Canadian Pulp (ANALYSIS)	phenols by 8270 (ANALYSIS)	PRESERVATIVE	CONTAINER
	MW-3	5/19/04	1200	GW	X	X	X	X	b	9
	MW-7	↓	1250	↓	X	X	X	X		
	MW-8		1350		X	X	X	X		
	DupP-1	↓	—	↓	X					

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

Cooler temp - 11.7° TB

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
David R. Paine David R. Paine	1424 5/19/04	Kristin Dompier	5/19/04 1425

SAMPLE DISPOSAL
☒ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus (Hand)

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

NORTH COAST LABORATORIES LTD.

February 12, 2004

SHN Consulting Engineers and Geologists
812 West Wabash Avenue
Eureka, CA 95501

Attn: Frans Lowman

RE: 003154, Former Simpson Reman

Order No.: 0402013
Invoice No.: 40045
PO No.:

ELAP No. 1247-Expires July 2004

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	DT-3 @ 6' (TCLP)
02A	SLR-3 @ 7.5' (TCLP)

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s) | QA Unit | Jesse G. Chaney, Jr. Laboratory Director

5680 West End Road • Arcata California 95521-9202 • 707-822-4649 • FAX 707-822-6831

Printed on Recycled Paper

CLIENT: SHN Consulting Engineers and Geologists
Project: 003154, Former Simpson Reman
Lab Order: 0402013

CASE NARRATIVE

TCLP Extraction Date: 2/4/03

PCP/TCP:
The PCP recovery for the matrix spike (MS) was outside of acceptance limits. The PCP recovery was within acceptance limits in the laboratory control sample/laboratory control sample duplicate (LCS/LCSD) indicating that the low recovery may be due to matrix effects.

The relative percent difference (RPD) for the laboratory control samples was above the upper acceptance limit for the surrogate. The RPD's were within the acceptance limits for PCP/TCP; therefore, the data were accepted.

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Date: 12-Feb-04
WorkOrder: 0402013

ANALYTICAL REPORT

Client Sample ID: DT-3 @ 6' (TCLP) **Received:** 1/22/04 **Collected:** 1/21/04 10:30
Lab ID: 0402013-01A

Test Name: Penta- and Tetrachlorophenol **Reference:** Canadian Pulp Report

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Tetrachlorophenol	ND	1.0	µg/L	1.0	2/6/04	2/10/04
Pentachlorophenol	1.1	0.30	µg/L	1.0	2/6/04	2/10/04
Surrogate: Dibromophenol	92.2	69.7-119	% Rec	1.0	2/6/04	2/10/04

Client Sample ID: SLR-3 @ 7.5' (TCLP) **Received:** 1/22/04 **Collected:** 1/21/04 16:00
Lab ID: 0402013-02A

Test Name: Penta- and Tetrachlorophenol **Reference:** Canadian Pulp Report

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Tetrachlorophenol	ND	1.0	µg/L	1.0	2/6/04	2/10/04
Pentachlorophenol	ND	0.30	µg/L	1.0	2/6/04	2/10/04
Surrogate: Dibromophenol	93.4	69.7-119	% Rec	1.0	2/6/04	2/10/04

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Printed on Recycled Paper

North Coast Laboratories, Ltd.

Date: 12-Feb-04

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0402013
Project: 003154, Former Simpson Reman

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-10786** Batch ID: **10786** Test Code: **PCPTW** Units: **µg/L** Analysis Date: **2/10/04 9:15:52 PM** Prep Date: **2/6/04**
Client ID: Run ID: **ORGC4_040210A** SeqNo: **401923**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachlorophenol	ND	1.0									
Pentachlorophenol	ND	0.30									
Dibromophenol	4.64	0.10	5.00	0	92.8%	70	119	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 12-Feb-04

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0402013
Project: 003154, Former Simpson Reman

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-10786** Batch ID: **10786** Test Code: **PCPTW** Units: **µg/L** Analysis Date: **2/10/04 9:36:44 PM** Prep Date: **2/6/04**
Client ID: Run ID: **ORGC4_040210A** SeqNo: **401924**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachlorophenol	4.339	1.0	5.00	0	86.8%	78	111	0			
Pentachlorophenol	1.397	0.30	1.50	0	93.2%	85	132	0			
Dibromophenol	8.90	0.10	10.0	0	89.0%	70	119	0			

Sample ID: **LCSD-10786** Batch ID: **10786** Test Code: **PCPTW** Units: **µg/L** Analysis Date: **2/10/04 9:57:38 PM** Prep Date: **2/6/04**
Client ID: Run ID: **ORGC4_040210A** SeqNo: **401925**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachlorophenol	4.419	1.0	5.00	0	88.4%	78	111	4.34	1.82%	15	
Pentachlorophenol	1.436	0.30	1.50	0	95.7%	85	132	1.40	2.71%	15	
Dibromophenol	4.68	0.10	5.00	0	93.5%	70	119	8.90	62.2%	15	R

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 12-Feb-04

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0402013
Project: 003154, Former Simpson Reman

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID **0402013-01AMS** Batch ID: **10786** Test Code: **PCPTW** Units: **µg/L** Analysis Date **2/10/04 10:18:27 PM** Prep Date **2/6/04**

Client ID: **DT-3 @ 6' (TCLP)** Run ID: **ORGC4_040210A** SeqNo: **401926**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachlorophenol	4.697	1.0	5.00	0.676	80.4%	78	111	0			
Pentachlorophenol	2.256	0.30	1.50	1.08	78.3%	85	132	0			S
Dibromophenol	4.56	0.10	5.00	0	91.1%	70	119	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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707-822-4649 Fax 707-822-6831

Chain of Custody

SOIL

P. 1 of

LABORATORY NUMBER: 0402013

Attention: FRANK LOWMAN
Results & Invoice to: SHN
Address: 812 West Wabash Avenue
Eureka, CA 95501
Phone: 441-8855
Copies of Report to:
Sampler (Sign & Print): R. Fuller

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☑ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☑ Verbal ☐ By: / /
Final Report: FAX ☐ Verbal ☐ By: / /

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 003154
Project Name: FORMER SIMPSON REMAN
Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	PRESERVATIVE	CONTAINER	PHENOLS - 8270	KPI/TCP CAN RUP.	8260 LIST 9
	DT-1 @ 6'	1-21-04	945	S		14			
	DT-2 @ 3.5'	1-21-04	1100						
	DT-3 @ 6'	1-21-04	1030						
	SLR-1 @ 3.5'	1-21-04	13:05	S					
	SLR-2 @ 6.5'	1-21-04	1525	S					
	SLR-3 @ 7.5'	1-21-04	1600						
	MW-7 @ 7'	1-22-04	1035						
	MW-8 @ 9'	1-22-04	830						
1						14	X	X	X
1							H	H	H
1							H	H	H
1							H	H	H
							H	H	H
							H	H	H
1							H	H	H
1							H	H	H

HOLD

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

HOLD ALL SAMPLES FOR POSSIBLE LOXHABILITY TEST USING DEIONIZED WATER AND AND SHAKING THE SAMPLE.

Cooler temp = 9.4°C

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
Josh Tyler	1645 1-22-04	[illegible]	1/22/04 1645

SAMPLE DISPOSAL
☐ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

NORTH COAST LABORATORIES LTD.

February 16, 2004

SHN Consulting Engineers and Geologists
812 West Wabash Avenue
Eureka, CA 95501

Attn: Frans Lowman

RE: 003154, Simpson Reman Facility

Order No.: 0402145
Invoice No.: 40124
PO No.:
ELAP No. 1247-Expires July 2004

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	MW-6
01D	MW-6
02A	MW-5
02D	MW-5
03A	MW-1
03D	MW-1
04A	MW-2
04D	MW-2
05A	MW-4
05D	MW-4
06A	MW-3
06D	MW-3
07A	MW-7
07D	MW-7
08A	MW-8
08D	MW-8
09A	Trip Blank
10A	DUP
10D	DUP

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s) | QA Unit | Jesse G. Chaney, Jr. Laboratory Director

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CLIENT: SHN Consulting Engineers and Geologists
Project: 003154, Simpson Reman Facility
Lab Order: 0402145

CASE NARRATIVE

PCP/TCP:
The PCP recovery for the matrix spike (MS) was outside of acceptance limits. The PCP recovery was within acceptance limits in the laboratory control sample/laboratory control sample duplicate (LCS/LCSD) indicating that the low recovery may be due to matrix effects.

The relative percent difference (RPD) for the laboratory control samples was above the upper acceptance limit for the surrogate. The RPD's were within the acceptance limits for PCP/TCP; therefore, the data were accepted.

EPA 8260B:
The 1,2-dichloroethane-d4 surrogate recoveries were above the upper acceptance limit for samples MW-2 and MW-8. All of the other surrogate recoveries were within the acceptance limits; therefore, the data were accepted.

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries were above the upper acceptance limits for bromomethane and chloroethane. These recoveries indicate that the sample results may be erroneously high. There were no detectable levels of the analytes in the samples; therefore, the data were accepted.

The LCSD recovery was above the upper acceptance limit for vinyl chloride. The LCS recovery was within the acceptance limits; therefore, the data were accepted.

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: MW-6 **Received:** 2/5/04 **Collected:** 2/5/04 11:40
Lab ID: 0402145-01A

Test Name: EPA 8260 **Reference:** EPA 5030B/8260B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Chloromethane	ND	2.0	µg/L	1.0		2/11/04
Vinyl chloride	ND	1.0	µg/L	1.0		2/11/04
Bromomethane	ND	1.0	µg/L	1.0		2/11/04
Chloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichlorofluoromethane	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Methylene chloride	ND	2.0	µg/L	1.0		2/11/04
trans-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Chloroform	ND	1.0	µg/L	1.0		2/11/04
Carbon Tetrachloride	ND	1.0	µg/L	1.0		2/11/04
1,1,1-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Benzene	ND	0.50	µg/L	1.0		2/11/04
1,2-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichloropropane	ND	1.0	µg/L	1.0		2/11/04
Bromodichloromethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
Toluene	ND	0.50	µg/L	1.0		2/11/04
Tetrachloroethene	ND	1.0	µg/L	1.0		2/11/04
trans-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
1,1,2-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Dibromochloromethane	ND	1.0	µg/L	1.0		2/11/04
Chlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Ethylbenzene	ND	0.50	µg/L	1.0		2/11/04
m,p-Xylene	ND	0.50	µg/L	1.0		2/11/04
o-Xylene	ND	0.50	µg/L	1.0		2/11/04
Bromoform	ND	1.0	µg/L	1.0		2/11/04
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1.0		2/11/04
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Surrogate: 1,2-Dichloroethane-d4	114	80-120	% Rec	1.0		2/11/04
Surrogate: 1,4-Dichlorobenzene-d4	85.8	80-120	% Rec	1.0		2/11/04
Surrogate: Dibromofluoromethane	107	80-120	% Rec	1.0		2/11/04
Surrogate: Toluene-d8	104	80-120	% Rec	1.0		2/11/04

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: MW-6 **Received:** 2/5/04 **Collected:** 2/5/04 11:40
Lab ID: 0402145-01D

Test Name: Penta- and Tetrachlorophenol **Reference:** Canadian Pulp Report

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Tetrachlorophenol	ND	1.0	µg/L	1.0	2/6/04	2/11/04
Pentachlorophenol	ND	0.30	µg/L	1.0	2/6/04	2/11/04
Surrogate: Dibromophenol	100	69.7-119	% Rec	1.0	2/6/04	2/11/04

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: MW-5 **Received:** 2/5/04 **Collected:** 2/5/04 11:55
Lab ID: 0402145-02A

Test Name: EPA 8260 **Reference:** EPA 5030B/8260B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Chloromethane	ND	2.0	µg/L	1.0		2/11/04
Vinyl chloride	ND	1.0	µg/L	1.0		2/11/04
Bromomethane	ND	1.0	µg/L	1.0		2/11/04
Chloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichlorofluoromethane	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Methylene chloride	ND	2.0	µg/L	1.0		2/11/04
trans-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Chloroform	ND	1.0	µg/L	1.0		2/11/04
Carbon Tetrachloride	ND	1.0	µg/L	1.0		2/11/04
1,1,1-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Benzene	ND	0.50	µg/L	1.0		2/11/04
1,2-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichloropropane	ND	1.0	µg/L	1.0		2/11/04
Bromodichloromethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
Toluene	ND	0.50	µg/L	1.0		2/11/04
Tetrachloroethene	ND	1.0	µg/L	1.0		2/11/04
trans-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
1,1,2-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Dibromochloromethane	ND	1.0	µg/L	1.0		2/11/04
Chlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Ethylbenzene	ND	0.50	µg/L	1.0		2/11/04
m,p-Xylene	ND	0.50	µg/L	1.0		2/11/04
o-Xylene	ND	0.50	µg/L	1.0		2/11/04
Bromoform	ND	1.0	µg/L	1.0		2/11/04
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1.0		2/11/04
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Surrogate: 1,2-Dichloroethane-d4	118	80-120	% Rec	1.0		2/11/04
Surrogate: 1,4-Dichlorobenzene-d4	85.3	80-120	% Rec	1.0		2/11/04
Surrogate: Dibromofluoromethane	108	80-120	% Rec	1.0		2/11/04
Surrogate: Toluene-d8	104	80-120	% Rec	1.0		2/11/04

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ANALYTICAL REPORT

Client Sample ID: MW-5 **Received:** 2/5/04 **Collected:** 2/5/04 11:55
Lab ID: 0402145-02D

Test Name: Penta- and Tetrachlorophenol **Reference:** Canadian Pulp Report

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Tetrachlorophenol	ND	1.0	µg/L	1.0	2/6/04	2/11/04
Pentachlorophenol	ND	0.30	µg/L	1.0	2/6/04	2/11/04
Surrogate: Dibromophenol	98.3	69.7-119	% Rec	1.0	2/6/04	2/11/04

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: MW-1 **Received:** 2/5/04 **Collected:** 2/5/04 12:00
Lab ID: 0402145-03A

Test Name: EPA 8260 **Reference:** EPA 5030B/8260B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Chloromethane	ND	2.0	µg/L	1.0		2/11/04
Vinyl chloride	ND	1.0	µg/L	1.0		2/11/04
Bromomethane	ND	1.0	µg/L	1.0		2/11/04
Chloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichlorofluoromethane	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Methylene chloride	ND	2.0	µg/L	1.0		2/11/04
trans-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Chloroform	ND	1.0	µg/L	1.0		2/11/04
Carbon Tetrachloride	ND	1.0	µg/L	1.0		2/11/04
1,1,1-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Benzene	ND	0.50	µg/L	1.0		2/11/04
1,2-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichloropropane	ND	1.0	µg/L	1.0		2/11/04
Bromodichloromethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
Toluene	ND	0.50	µg/L	1.0		2/11/04
Tetrachloroethene	ND	1.0	µg/L	1.0		2/11/04
trans-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
1,1,2-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Dibromochloromethane	ND	1.0	µg/L	1.0		2/11/04
Chlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Ethylbenzene	ND	0.50	µg/L	1.0		2/11/04
m,p-Xylene	ND	0.50	µg/L	1.0		2/11/04
o-Xylene	ND	0.50	µg/L	1.0		2/11/04
Bromoform	ND	1.0	µg/L	1.0		2/11/04
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1.0		2/11/04
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Surrogate: 1,2-Dichloroethane-d4	119	80-120	% Rec	1.0		2/11/04
Surrogate: 1,4-Dichlorobenzene-d4	85.6	80-120	% Rec	1.0		2/11/04
Surrogate: Dibromofluoromethane	109	80-120	% Rec	1.0		2/11/04
Surrogate: Toluene-d8	104	80-120	% Rec	1.0		2/11/04

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: MW-1 **Received:** 2/5/04 **Collected:** 2/5/04 12:00
Lab ID: 0402145-03D

Test Name: Penta- and Tetrachlorophenol **Reference:** Canadian Pulp Report

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Tetrachlorophenol	ND	1.0	µg/L	1.0	2/6/04	2/11/04
Pentachlorophenol	ND	0.30	µg/L	1.0	2/6/04	2/11/04
Surrogate: Dibromophenol	96.3	69.7-119	% Rec	1.0	2/6/04	2/11/04

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: MW-2 **Received:** 2/5/04 **Collected:** 2/5/04 13:00
Lab ID: 0402145-04A

Test Name: EPA 8260 **Reference:** EPA 5030B/8260B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Chloromethane	ND	2.0	µg/L	1.0		2/11/04
Vinyl chloride	ND	1.0	µg/L	1.0		2/11/04
Bromomethane	ND	1.0	µg/L	1.0		2/11/04
Chloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichlorofluoromethane	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Methylene chloride	ND	2.0	µg/L	1.0		2/11/04
trans-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Chloroform	ND	1.0	µg/L	1.0		2/11/04
Carbon Tetrachloride	ND	1.0	µg/L	1.0		2/11/04
1,1,1-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Benzene	ND	0.50	µg/L	1.0		2/11/04
1,2-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichloropropane	ND	1.0	µg/L	1.0		2/11/04
Bromodichloromethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
Toluene	ND	0.50	µg/L	1.0		2/11/04
Tetrachloroethene	ND	1.0	µg/L	1.0		2/11/04
trans-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
1,1,2-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Dibromochloromethane	ND	1.0	µg/L	1.0		2/11/04
Chlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Ethylbenzene	ND	0.50	µg/L	1.0		2/11/04
m,p-Xylene	ND	0.50	µg/L	1.0		2/11/04
o-Xylene	ND	0.50	µg/L	1.0		2/11/04
Bromoform	ND	1.0	µg/L	1.0		2/11/04
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1.0		2/11/04
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Surrogate: 1,2-Dichloroethane-d4	122	80-120	% Rec	1.0		2/11/04
Surrogate: 1,4-Dichlorobenzene-d4	88.6	80-120	% Rec	1.0		2/11/04
Surrogate: Dibromofluoromethane	110	80-120	% Rec	1.0		2/11/04
Surrogate: Toluene-d8	101	80-120	% Rec	1.0		2/11/04

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: MW-2 **Received:** 2/5/04 **Collected:** 2/5/04 13:00
Lab ID: 0402145-04D

Test Name: Penta- and Tetrachlorophenol **Reference:** Canadian Pulp Report

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Tetrachlorophenol	ND	1.0	µg/L	1.0	2/6/04	2/11/04
Pentachlorophenol	ND	0.30	µg/L	1.0	2/6/04	2/11/04
Surrogate: Dibromophenol	96.5	69.7-119	% Rec	1.0	2/6/04	2/11/04

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: MW-4 **Received:** 2/5/04 **Collected:** 2/5/04 13:10
Lab ID: 0402145-05A

Test Name: EPA 8260 **Reference:** EPA 5030B/8260B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Chloromethane	ND	2.0	µg/L	1.0		2/11/04
Vinyl chloride	ND	1.0	µg/L	1.0		2/11/04
Bromomethane	ND	1.0	µg/L	1.0		2/11/04
Chloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichlorofluoromethane	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Methylene chloride	ND	2.0	µg/L	1.0		2/11/04
trans-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,2-Dichloroethene	1.5	1.0	µg/L	1.0		2/11/04
Chloroform	ND	1.0	µg/L	1.0		2/11/04
Carbon Tetrachloride	ND	1.0	µg/L	1.0		2/11/04
1,1,1-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Benzene	ND	0.50	µg/L	1.0		2/11/04
1,2-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichloropropane	ND	1.0	µg/L	1.0		2/11/04
Bromodichloromethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
Toluene	ND	0.50	µg/L	1.0		2/11/04
Tetrachloroethene	ND	1.0	µg/L	1.0		2/11/04
trans-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
1,1,2-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Dibromochloromethane	ND	1.0	µg/L	1.0		2/11/04
Chlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Ethylbenzene	ND	0.50	µg/L	1.0		2/11/04
m,p-Xylene	ND	0.50	µg/L	1.0		2/11/04
o-Xylene	ND	0.50	µg/L	1.0		2/11/04
Bromoform	ND	1.0	µg/L	1.0		2/11/04
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1.0		2/11/04
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Surrogate: 1,2-Dichloroethane-d4	119	80-120	% Rec	1.0		2/11/04
Surrogate: 1,4-Dichlorobenzene-d4	88.6	80-120	% Rec	1.0		2/11/04
Surrogate: Dibromofluoromethane	110	80-120	% Rec	1.0		2/11/04
Surrogate: Toluene-d8	105	80-120	% Rec	1.0		2/11/04

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ANALYTICAL REPORT

Client Sample ID: MW-4 **Received:** 2/5/04 **Collected:** 2/5/04 13:10
Lab ID: 0402145-05D

Test Name: Penta- and Tetrachlorophenol **Reference:** Canadian Pulp Report

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Tetrachlorophenol	ND	1.0	µg/L	1.0	2/6/04	2/11/04
Pentachlorophenol	ND	0.30	µg/L	1.0	2/6/04	2/11/04
Surrogate: Dibromophenol	94.6	69.7-119	% Rec	1.0	2/6/04	2/11/04

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: MW-3 **Received:** 2/5/04 **Collected:** 2/5/04 14:00
Lab ID: 0402145-06A

Test Name: EPA 8260 **Reference:** EPA 5030B/8260B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Chloromethane	ND	2.0	µg/L	1.0		2/11/04
Vinyl chloride	1.6	1.0	µg/L	1.0		2/11/04
Bromomethane	ND	1.0	µg/L	1.0		2/11/04
Chloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichlorofluoromethane	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Methylene chloride	ND	2.0	µg/L	1.0		2/11/04
trans-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,2-Dichloroethene	14	1.0	µg/L	1.0		2/11/04
Chloroform	ND	1.0	µg/L	1.0		2/11/04
Carbon Tetrachloride	ND	1.0	µg/L	1.0		2/11/04
1,1,1-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Benzene	ND	0.50	µg/L	1.0		2/11/04
1,2-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichloropropane	ND	1.0	µg/L	1.0		2/11/04
Bromodichloromethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
Toluene	ND	0.50	µg/L	1.0		2/11/04
Tetrachloroethene	ND	1.0	µg/L	1.0		2/11/04
trans-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
1,1,2-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Dibromochloromethane	ND	1.0	µg/L	1.0		2/11/04
Chlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Ethylbenzene	ND	0.50	µg/L	1.0		2/11/04
m,p-Xylene	ND	0.50	µg/L	1.0		2/11/04
o-Xylene	ND	0.50	µg/L	1.0		2/11/04
Bromoform	ND	1.0	µg/L	1.0		2/11/04
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1.0		2/11/04
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Surrogate: 1,2-Dichloroethane-d4	115	80-120	% Rec	1.0		2/11/04
Surrogate: 1,4-Dichlorobenzene-d4	88.3	80-120	% Rec	1.0		2/11/04
Surrogate: Dibromofluoromethane	109	80-120	% Rec	1.0		2/11/04
Surrogate: Toluene-d8	103	80-120	% Rec	1.0		2/11/04

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ANALYTICAL REPORT

Client Sample ID: MW-3 **Received:** 2/5/04 **Collected:** 2/5/04 14:00
Lab ID: 0402145-06D

Test Name: Penta- and Tetrachlorophenol **Reference:** Canadian Pulp Report

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Tetrachlorophenol	ND	1.0	µg/L	1.0	2/6/04	2/11/04
Pentachlorophenol	ND	0.30	µg/L	1.0	2/6/04	2/11/04
Surrogate: Dibromophenol	93.6	69.7-119	% Rec	1.0	2/6/04	2/11/04

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ANALYTICAL REPORT

Client Sample ID: MW-7 **Received:** 2/5/04 **Collected:** 2/5/04 14:40
Lab ID: 0402145-07A

Test Name: EPA 8260 **Reference:** EPA 5030B/8260B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Chloromethane	ND	2.0	µg/L	1.0		2/11/04
Vinyl chloride	77	1.0	µg/L	1.0		2/11/04
Bromomethane	ND	1.0	µg/L	1.0		2/11/04
Chloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichlorofluoromethane	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Methylene chloride	ND	2.0	µg/L	1.0		2/11/04
trans-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,2-Dichloroethene	4.2	1.0	µg/L	1.0		2/11/04
Chloroform	ND	1.0	µg/L	1.0		2/11/04
Carbon Tetrachloride	ND	1.0	µg/L	1.0		2/11/04
1,1,1-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Benzene	2.6	0.50	µg/L	1.0		2/11/04
1,2-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichloropropane	ND	1.0	µg/L	1.0		2/11/04
Bromodichloromethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
Toluene	ND	0.50	µg/L	1.0		2/11/04
Tetrachloroethene	ND	1.0	µg/L	1.0		2/11/04
trans-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
1,1,2-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Dibromochloromethane	ND	1.0	µg/L	1.0		2/11/04
Chlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Ethylbenzene	ND	0.50	µg/L	1.0		2/11/04
m,p-Xylene	ND	0.50	µg/L	1.0		2/11/04
o-Xylene	ND	0.50	µg/L	1.0		2/11/04
Bromoform	ND	1.0	µg/L	1.0		2/11/04
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1.0		2/11/04
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Surrogate: 1,2-Dichloroethane-d4	118	80-120	% Rec	1.0		2/11/04
Surrogate: 1,4-Dichlorobenzene-d4	86.2	80-120	% Rec	1.0		2/11/04
Surrogate: Dibromofluoromethane	107	80-120	% Rec	1.0		2/11/04
Surrogate: Toluene-d8	102	80-120	% Rec	1.0		2/11/04

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ANALYTICAL REPORT

Client Sample ID: MW-7 **Received:** 2/5/04 **Collected:** 2/5/04 14:40
Lab ID: 0402145-07D

Test Name: Penta- and Tetrachlorophenol **Reference:** Canadian Pulp Report

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Tetrachlorophenol	ND	1.0	µg/L	1.0	2/6/04	2/11/04
Pentachlorophenol	ND	0.30	µg/L	1.0	2/6/04	2/11/04
Surrogate: Dibromophenol	90.9	69.7-119	% Rec	1.0	2/6/04	2/11/04

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: MW-8 **Received:** 2/5/04 **Collected:** 2/5/04 14:55
Lab ID: 0402145-08A

Test Name: EPA 8260 **Reference:** EPA 5030B/8260B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Chloromethane	ND	2.0	µg/L	1.0		2/11/04
Vinyl chloride	6.6	1.0	µg/L	1.0		2/11/04
Bromomethane	ND	1.0	µg/L	1.0		2/11/04
Chloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichlorofluoromethane	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Methylene chloride	ND	2.0	µg/L	1.0		2/11/04
trans-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Chloroform	ND	1.0	µg/L	1.0		2/11/04
Carbon Tetrachloride	ND	1.0	µg/L	1.0		2/11/04
1,1,1-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Benzene	ND	0.50	µg/L	1.0		2/11/04
1,2-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichloropropane	ND	1.0	µg/L	1.0		2/11/04
Bromodichloromethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
Toluene	ND	0.50	µg/L	1.0		2/11/04
Tetrachloroethene	ND	1.0	µg/L	1.0		2/11/04
trans-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
1,1,2-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Dibromochloromethane	ND	1.0	µg/L	1.0		2/11/04
Chlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Ethylbenzene	0.70	0.50	µg/L	1.0		2/11/04
m,p-Xylene	1.7	0.50	µg/L	1.0		2/11/04
o-Xylene	ND	0.50	µg/L	1.0		2/11/04
Bromoform	ND	1.0	µg/L	1.0		2/11/04
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1.0		2/11/04
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Surrogate: 1,2-Dichloroethane-d4	121	80-120	% Rec	1.0		2/11/04
Surrogate: 1,4-Dichlorobenzene-d4	85.0	80-120	% Rec	1.0		2/11/04
Surrogate: Dibromofluoromethane	112	80-120	% Rec	1.0		2/11/04
Surrogate: Toluene-d8	101	80-120	% Rec	1.0		2/11/04

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Date: 16-Feb-04
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ANALYTICAL REPORT

Client Sample ID: MW-8 **Received:** 2/5/04 **Collected:** 2/5/04 14:55
Lab ID: 0402145-08D

Test Name: Penta- and Tetrachlorophenol **Reference:** Canadian Pulp Report

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Tetrachlorophenol	ND	1.0	µg/L	1.0	2/6/04	2/10/04
Pentachlorophenol	ND	0.30	µg/L	1.0	2/6/04	2/10/04
Surrogate: Dibromophenol	93.7	69.7-119	% Rec	1.0	2/6/04	2/10/04

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: Trip Blank **Received:** 2/5/04 **Collected:** 2/5/04 0:00
Lab ID: 0402145-09A

Test Name: EPA 8260 **Reference:** EPA 5030B/8260B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Chloromethane	ND	2.0	µg/L	1.0		2/11/04
Vinyl chloride	ND	1.0	µg/L	1.0		2/11/04
Bromomethane	ND	1.0	µg/L	1.0		2/11/04
Chloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichlorofluoromethane	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Methylene chloride	ND	2.0	µg/L	1.0		2/11/04
trans-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Chloroform	ND	1.0	µg/L	1.0		2/11/04
Carbon Tetrachloride	ND	1.0	µg/L	1.0		2/11/04
1,1,1-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Benzene	ND	0.50	µg/L	1.0		2/11/04
1,2-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichloropropane	ND	1.0	µg/L	1.0		2/11/04
Bromodichloromethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
Toluene	ND	0.50	µg/L	1.0		2/11/04
Tetrachloroethene	ND	1.0	µg/L	1.0		2/11/04
trans-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
1,1,2-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Dibromochloromethane	ND	1.0	µg/L	1.0		2/11/04
Chlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Ethylbenzene	ND	0.50	µg/L	1.0		2/11/04
m,p-Xylene	ND	0.50	µg/L	1.0		2/11/04
o-Xylene	ND	0.50	µg/L	1.0		2/11/04
Bromoform	ND	1.0	µg/L	1.0		2/11/04
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1.0		2/11/04
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Surrogate: 1,2-Dichloroethane-d4	108	80-120	% Rec	1.0		2/11/04
Surrogate: 1,4-Dichlorobenzene-d4	83.4	80-120	% Rec	1.0		2/11/04
Surrogate: Dibromofluoromethane	101	80-120	% Rec	1.0		2/11/04
Surrogate: Toluene-d8	107	80-120	% Rec	1.0		2/11/04

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: DUP **Received:** 2/5/04 **Collected:** 2/5/04 0:00
Lab ID: 0402145-10A

Test Name: EPA 8260 **Reference:** EPA 5030B/8260B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Chloromethane	ND	2.0	µg/L	1.0		2/11/04
Vinyl chloride	1.4	1.0	µg/L	1.0		2/11/04
Bromomethane	ND	1.0	µg/L	1.0		2/11/04
Chloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichlorofluoromethane	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
Methylene chloride	ND	2.0	µg/L	1.0		2/11/04
trans-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,1-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,2-Dichloroethene	13	1.0	µg/L	1.0		2/11/04
Chloroform	ND	1.0	µg/L	1.0		2/11/04
Carbon Tetrachloride	ND	1.0	µg/L	1.0		2/11/04
1,1,1-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Benzene	ND	0.50	µg/L	1.0		2/11/04
1,2-Dichloroethane	ND	1.0	µg/L	1.0		2/11/04
Trichloroethene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichloropropane	ND	1.0	µg/L	1.0		2/11/04
Bromodichloromethane	ND	1.0	µg/L	1.0		2/11/04
cis-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
Toluene	ND	0.50	µg/L	1.0		2/11/04
Tetrachloroethene	ND	1.0	µg/L	1.0		2/11/04
trans-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/11/04
1,1,2-Trichloroethane	ND	1.0	µg/L	1.0		2/11/04
Dibromochloromethane	ND	1.0	µg/L	1.0		2/11/04
Chlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Ethylbenzene	ND	0.50	µg/L	1.0		2/11/04
m,p-Xylene	ND	0.50	µg/L	1.0		2/11/04
o-Xylene	ND	0.50	µg/L	1.0		2/11/04
Bromoform	ND	1.0	µg/L	1.0		2/11/04
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1.0		2/11/04
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		2/11/04
Surrogate: 1,2-Dichloroethane-d4	118	80-120	% Rec	1.0		2/11/04
Surrogate: 1,4-Dichlorobenzene-d4	87.6	80-120	% Rec	1.0		2/11/04
Surrogate: Dibromofluoromethane	109	80-120	% Rec	1.0		2/11/04
Surrogate: Toluene-d8	104	80-120	% Rec	1.0		2/11/04

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Date: 16-Feb-04
WorkOrder: 0402145

ANALYTICAL REPORT

Client Sample ID: DUP
Lab ID: 0402145-10D

Received: 2/5/04 **Collected:** 2/5/04 0:00

Test Name: Penta- and Tetrachlorophenol **Reference:** Canadian Pulp Report

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Tetrachlorophenol	ND	1.0	µg/L	1.0	2/6/04	2/10/04
Pentachlorophenol	ND	0.30	µg/L	1.0	2/6/04	2/10/04
Surrogate: Dibromophenol	96.0	69.7-119	% Rec	1.0	2/6/04	2/10/04

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North Coast Laboratories, Ltd.

Date: 16-Feb-04

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0402145
Project: 003154, Simpson Reman Facility

QC SUMMARY REPORT

Method Blank

Sample ID: **MB 021004** Batch ID: **R27415** Test Code: **8260W** Units: **µg/L** Analysis Date: **2/11/04 9:13:00 AM** Prep Date:

Client ID: Run ID: **ORGCMS2_040210A** SeqNo: **402363**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	2.0									
Vinyl chloride	ND	1.0									
Bromomethane	ND	1.0									
Chloroethane	ND	1.0									
Trichlorofluoromethane	ND	1.0									
1,1-Dichloroethene	ND	1.0									
Methylene chloride	ND	2.0									
trans-1,2-Dichloroethene	ND	1.0									
1,1-Dichloroethane	ND	1.0									
cis-1,2-Dichloroethene	ND	1.0									
Chloroform	ND	1.0									
Carbon Tetrachloride	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									
Benzene	0.1209	0.50									J
1,2-Dichloroethane	ND	1.0									
Trichloroethene	ND	1.0									
1,2-Dichloropropane	ND	1.0									
Bromodichloromethane	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
Toluene	0.09245	0.50									J
Tetrachloroethene	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
1,1,2-Trichloroethane	ND	1.0									
Dibromochloromethane	ND	1.0									
Chlorobenzene	ND	1.0									
Ethylbenzene	0.1977	0.50									J
m,p-Xylene	ND	0.50									
o-Xylene	ND	0.50									

Qualifiers:
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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0402145
Project: 003154, Simpson Reman Facility

QC SUMMARY REPORT

Method Blank

Bromoform	ND	1.0										
1,1,2,2-Tetrachloroethane	ND	1.0										
1,3-Dichlorobenzene	ND	1.0										
1,4-Dichlorobenzene	ND	1.0										
1,2-Dichlorobenzene	0.1078	1.0										J
1,2-Dichloroethane-d4	1.08	0.10	1.00	0	108%	80	120	0				
1,4-Dichlorobenzene-d4	0.842	0.10	1.00	0	84.2%	80	120	0				
Dibromofluoromethane	0.986	0.10	1.00	0	98.6%	80	120	0				
Toluene-d8	1.06	0.10	1.00	0	106%	80	120	0				

Sample ID: **MB-10786** Batch ID: **10786** Test Code: **PCPTW** Units: **µg/L** Analysis Date: **2/10/04 9:15:52 PM** Prep Date: **2/6/04**

Client ID: Run ID: **ORGC4_040210A** SeqNo: **401923**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachlorophenol	ND	1.0									
Pentachlorophenol	ND	0.30									
Dibromophenol	4.64	0.10	5.00	0	92.8%	70	119	0			

Qualifiers:
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R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 16-Feb-04

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0402145
Project: 003154, Simpson Reman Facility

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-04070** Batch ID: **R27415** Test Code: **8260W** Units: **µg/L** Analysis Date: **2/10/04 8:00:00 AM** Prep Date:

Client ID: Run ID: **ORGCMS2_040210A** SeqNo: **402361**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	18.24	2.0	20.0	0	91.2%	70	130	0			
Vinyl chloride	24.67	1.0	20.0	0	123%	70	130	0			
Bromomethane	26.61	1.0	20.0	0	133%	70	130	0			S
Chloroethane	27.17	1.0	20.0	0	136%	70	130	0			S
Trichlorofluoromethane	24.00	1.0	20.0	0	120%	70	130	0			
1,1-Dichloroethene	21.01	1.0	20.0	0	105%	70	130	0			
Methylene chloride	21.14	2.0	20.0	0	106%	70	130	0			
trans-1,2-Dichloroethene	20.32	1.0	20.0	0	102%	70	130	0			
1,1-Dichloroethane	21.47	1.0	20.0	0	107%	70	130	0			
cis-1,2-Dichloroethene	19.71	1.0	20.0	0	98.6%	70	130	0			
Chloroform	21.76	1.0	20.0	0	109%	70	130	0			
Carbon Tetrachloride	20.21	1.0	20.0	0	101%	70	130	0			
1,1,1-Trichloroethane	21.09	1.0	20.0	0	105%	70	130	0			
Benzene	20.72	0.50	20.0	0	104%	70	130	0			
1,2-Dichloroethane	23.34	1.0	20.0	0	117%	70	130	0			
Trichloroethene	20.42	1.0	20.0	0	102%	70	130	0			
1,2-Dichloropropane	20.06	1.0	20.0	0	100%	70	130	0			
Bromodichloromethane	20.95	1.0	20.0	0	105%	70	130	0			
cis-1,3-Dichloropropene	20.06	1.0	20.0	0	100%	70	130	0			
Toluene	21.05	0.50	20.0	0	105%	70	130	0			
Tetrachloroethene	19.51	1.0	20.0	0	97.5%	70	130	0			
trans-1,3-Dichloropropene	21.47	1.0	20.0	0	107%	70	130	0			
1,1,2-Trichloroethane	21.24	1.0	20.0	0	106%	70	130	0			
Dibromochloromethane	19.53	1.0	20.0	0	97.7%	70	130	0			
Chlorobenzene	21.25	1.0	20.0	0	106%	70	130	0			
Ethylbenzene	21.88	0.50	20.0	0	109%	70	130	0			
m,p-Xylene	45.03	0.50	40.0	0	113%	70	130	0			
o-Xylene	20.66	0.50	20.0	0	103%	70	130	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0402145
Project: 003154, Simpson Reman Facility

QC SUMMARY REPORT

Laboratory Control Spike

Bromoform	16.43	1.0	20.0	0	82.1%	70	130	0
1,1,2,2-Tetrachloroethane	19.90	1.0	20.0	0	99.5%	70	130	0
1,3-Dichlorobenzene	19.03	1.0	20.0	0	95.2%	70	130	0
1,4-Dichlorobenzene	19.30	1.0	20.0	0	96.5%	70	130	0
1,2-Dichlorobenzene	19.22	1.0	20.0	0	96.1%	70	130	0
1,2-Dichloroethane-d4	1.04	0.10	1.00	0	104%	80	120	0
1,4-Dichlorobenzene-d4	0.903	0.10	1.00	0	90.3%	80	120	0
Dibromofluoromethane	0.968	0.10	1.00	0	96.8%	80	120	0
Toluene-d8	1.06	0.10	1.00	0	106%	80	120	0

Qualifiers:
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B - Analyte detected in the associated Method Blank

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0402145
Project: 003154, Simpson Reman Facility

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: **LCSD-04070** Batch ID: **R27415** Test Code: **8260W** Units: **µg/L** Analysis Date: **2/11/04 8:13:00 AM** Prep Date:

Client ID: Run ID: **ORGCMS2_040210A** SeqNo: **402362**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	19.92	2.0	20.0	0	99.6%	70	130	18.2	8.80%	20	
Vinyl chloride	27.75	1.0	20.0	0	139%	70	130	24.7	11.7%	20	S
Bromomethane	29.54	1.0	20.0	0	148%	70	130	26.6	10.5%	20	S
Chloroethane	28.84	1.0	20.0	0	144%	70	130	27.2	5.97%	20	S
Trichlorofluoromethane	25.38	1.0	20.0	0	127%	70	130	24.0	5.56%	20	
1,1-Dichloroethene	21.66	1.0	20.0	0	108%	70	130	21.0	3.04%	20	
Methylene chloride	22.49	2.0	20.0	0	112%	70	130	21.1	6.20%	20	
trans-1,2-Dichloroethene	21.99	1.0	20.0	0	110%	70	130	20.3	7.89%	20	
1,1-Dichloroethane	23.14	1.0	20.0	0	116%	70	130	21.5	7.48%	20	
cis-1,2-Dichloroethene	21.88	1.0	20.0	0	109%	70	130	19.7	10.4%	20	
Chloroform	23.20	1.0	20.0	0	116%	70	130	21.8	6.43%	20	
Carbon Tetrachloride	21.93	1.0	20.0	0	110%	70	130	20.2	8.18%	20	
1,1,1-Trichloroethane	22.78	1.0	20.0	0	114%	70	130	21.1	7.72%	20	
Benzene	22.29	0.50	20.0	0	111%	70	130	20.7	7.31%	20	
1,2-Dichloroethane	23.82	1.0	20.0	0	119%	70	130	23.3	2.04%	20	
Trichloroethene	22.02	1.0	20.0	0	110%	70	130	20.4	7.54%	20	
1,2-Dichloropropane	21.04	1.0	20.0	0	105%	70	130	20.1	4.79%	20	
Bromodichloromethane	21.93	1.0	20.0	0	110%	70	130	21.0	4.56%	20	
cis-1,3-Dichloropropene	20.74	1.0	20.0	0	104%	70	130	20.1	3.35%	20	
Toluene	23.25	0.50	20.0	0	116%	70	130	21.0	9.94%	20	
Tetrachloroethene	21.07	1.0	20.0	0	105%	70	130	19.5	7.71%	20	
trans-1,3-Dichloropropene	22.68	1.0	20.0	0	113%	70	130	21.5	5.50%	20	
1,1,2-Trichloroethane	23.34	1.0	20.0	0	117%	70	130	21.2	9.43%	20	
Dibromochloromethane	21.53	1.0	20.0	0	108%	70	130	19.5	9.71%	20	
Chlorobenzene	22.85	1.0	20.0	0	114%	70	130	21.2	7.28%	20	
Ethylbenzene	24.76	0.50	20.0	0	124%	70	130	21.9	12.3%	20	
m,p-Xylene	50.25	0.50	40.0	0	126%	70	130	45.0	11.0%	20	
o-Xylene	22.45	0.50	20.0	0	112%	70	130	20.7	8.28%	20	
Bromoform	18.67	1.0	20.0	0	93.4%	70	130	16.4	12.8%	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0402145
Project: 003154, Simpson Reman Facility

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

1,1,2,2-Tetrachloroethane	20.34	1.0	20.0	0	102%	70	130	19.9	2.18%	20
1,3-Dichlorobenzene	20.28	1.0	20.0	0	101%	70	130	19.0	6.37%	20
1,4-Dichlorobenzene	20.23	1.0	20.0	0	101%	70	130	19.3	4.66%	20
1,2-Dichlorobenzene	20.21	1.0	20.0	0	101%	70	130	19.2	5.00%	20
1,2-Dichloroethane-d4	1.01	0.10	1.00	0	101%	80	120	1.04	2.23%	20
1,4-Dichlorobenzene-d4	0.897	0.10	1.00	0	89.7%	80	120	0.903	0.684%	20
Dibromofluoromethane	0.941	0.10	1.00	0	94.1%	80	120	0.968	2.79%	20
Toluene-d8	1.11	0.10	1.00	0	111%	80	120	1.06	3.99%	20

Sample ID: **LCS-10786** Batch ID: **10786** Test Code: **PCPTW** Units: **µg/L** Analysis Date: **2/10/04 9:36:44 PM** Prep Date: **2/6/04**
Client ID: Run ID: **ORGC4_040210A** SeqNo: **401924**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachlorophenol	4.339	1.0	5.00	0	86.8%	78	111	0			
Pentachlorophenol	1.397	0.30	1.50	0	93.2%	85	132	0			
Dibromophenol	8.90	0.10	10.0	0	89.0%	70	119	0			

Sample ID: **LCSD-10786** Batch ID: **10786** Test Code: **PCPTW** Units: **µg/L** Analysis Date: **2/10/04 9:57:38 PM** Prep Date: **2/6/04**
Client ID: Run ID: **ORGC4_040210A** SeqNo: **401925**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachlorophenol	4.419	1.0	5.00	0	88.4%	78	111	4.34	1.82%	15	
Pentachlorophenol	1.436	0.30	1.50	0	95.7%	85	132	1.40	2.71%	15	
Dibromophenol	4.68	0.10	5.00	0	93.5%	70	119	8.90	62.2%	15	R

Qualifiers:
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R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

NORTH COAST LABORATORIES LTD.
5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

Attention: Frans Lowman
Results & Invoice to: SHN
Address: 812 West Wabash Avenue
Eureka, CA 95501
Phone: 441-8855
Copies of Report to:
Sampler (Sign & Print): David R. Paine David R. Paine

LABORATORY NUMBER: 0402145

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☒ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☐ Verbal ☐ By: __/__/__
Final Report: FAX ☐ Verbal ☐ By: __/__/__

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 003154
Project Name: Simpson Reman Facility
Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	8260 list 9	PCP/TCP	Carcodan Neip	Phenols by 8270	CONTAINER	PRESERVATIVE
	MW-6	2/5/04	1140	GW	X	X	X	X	9	b
	MW-5		1155		X	X	X	X		
	MW-1		1200		X	X	X	X		
	MW-2		1300		X	X	X	X		
	MW-4		1310		X	X	X	X		
	MW-3		1400		X	X	X	X		
	MW-7		1440		X	X	X	X		
	MW-8		1455		X	X	X	X		
	Trip Blank	2/5/04	—	—	X	X	X	X		
	DUP		—	GW	X	X	X	X		

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

Cooler temps = 10.1°C
10.9°C

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
David R. Paine David R. Paine	1525 2/5/04	[illegible]	2/5/04 1525

SAMPLE DISPOSAL
☒ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

MATRIX: DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT