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September 12, 2007

Mr. Russell Marsh
US Army Corps of Engineers
10 South Howard Street
CENAB-EN-HM (Attention: Marsh, Room 10040T)
Baltimore, Maryland 21203

RE: Semiannual Progress Report for the Phytoremediation Pilot Study (January to June 2007)
Old Sanitary Landfill, Fort Drum, New York
Contract Number: W912DR-05-D-0004, Delivery Order Number 003

Dear Mr. Marsh:

Malcolm Pirnie is pleased to submit our *Semiannual Progress Report for the Phytoremediation Pilot Study (January to June 2007)*. This progress report covers the work conducted at the existing SP03 phytoremediation plantation. The full-scale phytoremediation system, which was installed in June 2007, will be discussed under separate cover in early 2008. Enclosed with this progress report is the operation and maintenance report (Attachment 1) that was prepared by our subconsultant, SUNY College of Environmental Science and Forestry (SUNY-ESF).

DESCRIPTION OF MONITORING ACTIVITIES

Seep samples were collected from the existing SP03 phytoremediation plantation on May 24, 2007 and re-sampled on July 17, 2007. The existing plantation is located adjacent to the northeast corner of the Old Sanitary Landfill (OSL) Cell #2. The plantation is populated by willow shrubs that were planted in May 2001 as part of a pilot study that uses adaptive management practices. Seep sampling locations are described with respect to groundwater flow through the plantation and include an influent point, a mid-system point, and three effluent points (Figure 1).

The field crew observed that the water flow in May 2007 and July 2007 was relatively low compared to previous sampling events in the plantation. However, the seep water continued to pool around the planting boxes at the effluent #1 and #2 locations (refer to Attachment 2 for field notes). Seep samples were collected and water quality parameters were measured at each seep sampling location. Seep samples were collected in accordance with the *Environmental Investigation for Fort Drum Quality Assurance Program Plan* (Malcolm Pirnie, 2001) and were analyzed by a certified New York State laboratory; Katahdin Analytical Services (Westbrook, Maine; refer to Attachment 3 for their New York certification). Aqueous samples were analyzed for volatile organic compounds (VOCs) and total iron. Field-filtered samples (0.45 μm filter) were also analyzed by Katahdin Analytical Services for dissolved iron. In accordance with the *Scope of Services* (USACE, June 16, 2005), data validation was not performed. Reported aqueous concentrations were compared to the New York State Department of Environmental Conservation

(NYSDEC) *Ambient Water Quality Standards and Guidance Values* (Series 1.1.1, June 1998) Class C Surface Water criteria.

SEEP RESULTS

Figure 1 shows the five seep locations and summarizes the cumulative results for total VOC, total benzene, toluene, ethylbenzene, and xylene (BTEX), total semivolatile organic compounds (SVOC), and total iron. A complete list of detected compounds for the 2007 dataset is presented in Table 1 (refer to Attachment 3 for Katahdin Analytical Services Data Package) along with comparisons of the measured concentrations of these compounds to NYSDEC surface water standards. Figure 2 presents graphically the total VOC concentrations at the five sampling locations over time.

During the May 2007 sampling event, total VOC concentrations as well as the dissolved iron concentrations decreased from the influent point to the mid-system point but then increased at the effluent points. It is not uncommon during the pilot study to observe total VOC concentrations at effluent #1 that exceed the influent concentration because of additional surface water contributions from the western boundary of the existing SP03 plantation. However, the relatively elevated total VOC concentrations observed at effluent #2 during the May 2007 sampling event suggested that the pooling of seep water at effluent #1 could be influencing concentrations at the effluent #2 point, which is located approximately 10 feet from effluent #1 (refer to Figure 1). To verify this observation, seep samples were re-collected in July 2007 for VOC analysis. Sampling was postponed to July to assure that potential disturbances associated with the site preparation of the full-scale phytoremediation plantation did not impact sampling.

During the July 2007 sampling event, the total VOC concentration at the influent location was 1,100 µg/L, which was a factor of 3 greater than the influent concentration in May 2007. While the influent concentration tends to range from 300 µg/L to 400 µg/L, elevated total VOC concentrations at the influent have been observed in 2003 and 2005. Similar to the May 2007 sampling event, pooling of seep water was observed at effluent #1 and effluent #2, and total VOC concentrations decreased by half at the mid-system point followed by an increase in total VOC concentrations at the effluent points. (BTEX concentrations followed the same pattern and accounted for 70 to 80 percent of the total VOC concentration.) While total VOC concentrations at the effluent points did not exceed the corresponding influent concentrations, both effluent #1 and effluent #2 had total VOC concentrations equal to approximately 800 µg/L.

Conversely, total VOC concentrations at effluent #3 ranged from 5 µg/L to nondetected concentrations for the May and July 2007 sampling events. BTEX concentrations were not detected during either the May or July 2007 sampling events. Effluent #3 is located on the border of the SP03 seep approximately 10 feet from effluent #2 (refer to Figure 1). A small upland area between effluent #2 and effluent #3 is likely preventing the surface water from outside the existing plantation from impacting effluent #3. While phytoremediation is likely occurring in the

plantation, this small upland area is probably causing a preferential flow of SP03 seep water towards the effluent #1 and effluent #2 points and away from effluent #3, yielding the low total VOC concentrations.

PROBLEMS ENCOUNTERED AND RESOLVED

As discussed above, seep samples were re-collected in July 2007 to confirm the May 2007 total VOC concentrations observed in the existing SP03 plantation.

FUTURE MONITORING

In June 2007, site preparation and planting of the full-scale phytoremediation plantation was completed through the cooperative effort of Malcolm Pirnie, Inc., the United States Army Corps of Engineers (the client), Fort Drum Directorate of Public Works Environmental Division (the customer), SUNY-ESF (our subconsultant), and CAPE (our subcontractor). Consequently, future sampling events and operation and maintenance of the existing SP03 plantation will be discussed as part of the full-scale plantation annual progress report. According to the *Phytoremediation Pilot Study Work Plan* (Malcolm Pirnie, Inc., January 2007), seep sampling and SUNY-ESF operation and maintenance will be conducted twice a year and summarized together in one annual report. The next sampling event is planned for fall 2007, and the 2007 annual report is anticipated in early 2008. Willow biomass samples, which are anticipated to be collected every 3 years, will be incorporated into the annual report when sampled.

If you should have any questions on this report or future sampling, please feel free to call me at 914-641-2628 or Dr. AmyMarie Accardi-Dey at 914-641-2699.

Very truly yours,

MALCOLM PIRNIE, INC.

Scott E. Thompson, P.E.
Project Manager

cc: K. Goldstein, K. Roe, A. Accardi-Dey
See Distribution List

Attachments

Table 1:	Seep Sampling Results
Figure 1:	Seep Samples: Total BTEX, VOC, SVOC, and Iron Concentrations
Figure 2:	Total VOC Concentration versus Location
Attachment 1:	SUNY-ESF Plantation Maintenance Report
Attachment 2:	Field Memoranda from May and July 2007 Sampling Events
Attachment 3:	Katahdin Analytical Services Data Packages from May and July 2007 Sampling Events

Distribution List

3 Copies	US Army Corps of Engineers 10 South Howard Street CENAB-EN-HM (Attention: Marsh, Room 10040T) Baltimore, Maryland 21203
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2 Copies	SUNY Environmental Science and Forestry Attention: Dr. Christopher A. Nowak 215 Marshall Hall 1 Forestry Drive Syracuse, New York 13210

TABLES AND FIGURES

Table 1: Seep Sampling Results
Old Sanitary Landfill
Fort Drum, New York

Compound	Units	NYSDEC Class C Surface Water Quality Standard	Basis	Guidance Value	Basis	INFLUENT 11/12/2002 Result w/Qualifier	INFLUENT 2/28/2003 Result w/Qualifier	INFLUENT 6/16/2003 Result w/Qualifier	INFLUENT 8/18/2003 Result w/Qualifier	INFLUENT 11/7/2003 Result w/Qualifier	INFLUENT 5/11/2004 Result w/Qualifier	INFLUENT 10/22/2004 Result w/Qualifier	INFLUENT 6/3/2005 Result w/Qualifier	INFLUENT 9/27/2005 Result w/Qualifier	INFLUENT 4/27/2006 Result w/Qualifier	INFLUENT 11/2/2006 Result w/Qualifier	INFLUENT 5/24/2007 Result w/Qualifier	INFLUENT 7/17/2007 Result w/Qualifier
VOCs																		
Acetone	ug/L					ND	ND	28	ND	ND	8	8 J	27	3 J	29	26	18	15
Benzene	ug/L	10	H(FC)	210	A(C)	310	620	100	110	150	67	94	130	160	100	120	110	180
Bromomethane	ug/L					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ug/L					ND	13	ND	ND	ND	17	ND	6 J	ND	14	15	9 J	ND
n-Butylbenzene	ug/L					ND	ND	ND	ND	ND	0.4 J	5 J	ND	2 J	0.8 J	ND	1 J	5
Carbon Disulfide	ug/L					ND	100	110	190	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND
Chloromethane	ug/L					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodiflouromethane	ug/L					ND	ND	ND	ND	1 J	ND	0.4 J	ND	ND	ND	ND	ND	ND
cis- 1,2 Dichloroethene	ug/L					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans- 1,2 Dichloroethene	ug/L					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2- Dichloropropane	ug/L					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/L			17	A(C)	170	700	41	30	78	63	41	95	320	64	50	62	160
Naphthalene	ug/L			13	A(C)	20	100 B	7	14	2 BJ	24	11	36 B	54	19	11	31	68
Toluene	ug/L	6000	H(FC)	100	A(C)	20	69	ND	10	32	4 J	5	5	28	8	14	13	23
p-Isopropyltoluene	ug/L					NA	3 J	ND	ND	ND	2 J	2 J	ND	5 J	0.6 J	ND	ND	ND
Isopropylbenzene	ug/L			2.6	A(C)	ND	41	ND	ND	5	4 J	5 J	5	24	5 J	ND	5 J	9
1,4- Dichlorobenzene	ug/L	5*	A(C)			ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n- Propylbenzene	ug/L					NA	86	ND	ND	8	6	6	9	29	9	ND	8	16
1,3,5- Trichlorobenzene		5	A(C)			NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene		1	A(C)			NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene		40	A(C)			NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4- Trimethylbenzene	ug/L			33	A(C)	NA	500	9	15	24	58	30	57	200	51	34	62	160
1,3,5- Trimethylbenzene	ug/L					NA	140	ND	ND	2 J	8	8	ND	59	12	10	7	54
m+p- Xylenes	ug/L					240	1400 B	18	50	46	81	32	74	850	110	110	84	390
o- Xylenes	ug/L					95	430	13	26	38	41	22	7	380	24	44	30	23
Total Xylenes	ug/L			65 **	A(C)	335	1830	31	76	84	122	54	81	1230	134	154	110	413
Vinyl Chloride	ug/L					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total BTEX	**ug/L**					**835**	**3219**	**172**	**226**	**344**	**256**	**194**	**311**	**1738**	**306**	**338**	**299**	**776**
Total VOCs	**ug/L**					**855**	**4203**	**326**	**445**	**386**	**383**	**270**	**451**	**2114**	**446**	**434**	**440**	**1,103**
SVOCs																		
Phenol	ug/L	5***	E			NS	NS	NS	NS	5 J	ND	ND	ND	NS	NS	NS	NS	NS
Naphthalene	ug/L			13	A(C)	NS	NS	NS	NS	5 J	6 J	10 J	4 J	NS	NS	NS	NS	NS
2-Methylnaphthalene						NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	NS	NS	NS
Diethylphthalate	ug/L					NS	NS	NS	NS	3 J	ND	ND	ND	NS	NS	NS	NS	NS
Total SVOCs	**ug/L**					**NS**	**NS**	**NS**	**NS**	**13**	**6**	**10**	**4**	**NS**	**NS**	**NS**	**NS**	**NS**
Iron																		
Total Iron	ug/L	300	A(C)			NS	NS	NS	NS	221,000	275,000	308,000	80,100	61,400	12,600	60,000	138,000	NS
Dissolved Iron	ug/L					NS	NS	NS	NS	NS	NS	NS	NS	53,600	7,220	5,410	17,900	NS

J - Analyte detected below quantitation limits
B - Detected in lab blank analyzed concurrently with sample.
ND - Not Detected
NS - Not Sampled
NA - Not Analyzed

NYSDEC "Ambient Water Quality Standards and Guidance Values"
Class C Surface Waters (Series 1.1.1, June 1998)
A(C) = fish propagation (fresh waters)
H(FC) = human consumption of fish (fresh waters)
E = aesthetic (fresh waters)

Results that exceed the standards or guidance values are shaded.

* Applies to the sum of 1,2-, 1,3-, and 1,4-dichlorobenzene
** Applies to the sum of 1,2-, 1,3-, and 1,4-xylene
*** Applies to the sum of all unchlorinated phenolic compounds.
Methylene chloride and bis(2-ethylhexyl)phthalate (lab contaminants) not reported.

Table 1: Seep Sampling Results
Old Sanitary Landfill
Fort Drum, New York

Compound	Units	NYSDEC Class C Surface Water Quality Standard	Basis	Guidance Value	Basis	MID-SYSTEM 11/12/2002	MID-SYSTEM 2/28/2003	MID-SYSTEM 6/16/2003	MID-SYSTEM 8/18/2003	MID-SYSTEM 11/7/2003	MID-SYSTEM 5/11/2004	MID-SYSTEM 10/22/2004	MID-SYSTEM 6/3/2005	MID-SYSTEM 9/27/2005	MID-SYSTEM 4/27/2006	MID-SYSTEM 11/2/2006	MID-SYSTEM 5/24/2007	MID-SYSTEM 7/17/2007
						Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier
VOCs																		
Acetone	ug/L					ND	14	31	18	ND	2 J	14	32	3 J	47	27	57	33
Benzene	ug/L	10	H(FC)	210	A(C)	140	140	160	84	37	11	240	51	27	32	23	120	280
Bromomethane	ug/L					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ug/L					ND	16	ND	ND	ND	ND	ND	7 J	ND	17	11	21	18
n-Butylbenzene	ug/L					ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ug/L					ND	ND	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ug/L					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodiflouromethane	ug/L					ND	ND	ND	ND	0.4 J	ND	0.3 J	ND	ND	ND	ND	ND	ND
cis- 1,2 Dichloroethene	ug/L					5	2 J	ND	ND	1 J	0.7 J	0.3 J	ND	0.9 J	1 J	ND	ND	ND
trans- 1,2 Dichloroethene	ug/L					4 J	2 J	ND	ND	ND	0.5 J	0.1 J	ND	ND	0.8 J	ND	ND	ND
1,2- Dichloropropane	ug/L					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/L			17	A(C)	26	98	69	14	10	2 J	180	6	3 J	7	5	18	64
Naphthalene	ug/L			13	A(C)	ND	21 B	13	12	1 BJ	ND	43	2 JB	1 J	0.6 J	ND	4 J	18
Toluene	ug/L	6000	H(FC)	100	A(C)	3 J	18	10	6	1 J	0.2 J	19	0.9 J	0.9 J	2 J	ND	6	23
p-Isopropyltoluene	ug/L					NA	1 J	ND	ND	ND	ND	3 J	ND	ND	ND	ND	ND	ND
Isopropylbenzene	ug/L			2.6	A(C)	ND	5	ND	ND	1 J	0.8 J	10	0.7 J	2 J	1 J	ND	1 J	7
1,4- Dichlorobenzene	ug/L	5*	A(C)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n- Propylbenzene	ug/L					NA	9	ND	ND	1 J	0.6 J	14	ND	0.5 J	0.7 J	ND	0.7 J	ND
1,3,5- Trichlorobenzene		5	A(C)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene		1	A(C)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene		40	A(C)			ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND
1,2,4- Trimethylbenzene	ug/L			33	A(C)	NA	74	34	8	4 J	0.3 J	130	ND	3 J	2 J	ND	12	23
1,3,5- Trimethylbenzene	ug/L					NA	22	9	ND	0.8 J	ND	26	ND	ND	ND	ND	2 J	7
m+p- Xylenes	ug/L					12	230	89	44	10	0.4 J	290	ND	2 J	5 J	ND	28	50
o- Xylenes	ug/L					7	44	8	8	4 J	ND	28	ND	2 J	2 J	ND	21	21
Total Xylenes	ug/L			65 **	A(C)	19	274	97	52	14	0.4	318	ND	4 J	7 J	ND	49	71
Vinyl Chloride	ug/L					0.6 J	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total BTEX	**ug/L**					**188**	**530**	**336**	**156**	**62**	**13.6**	**757**	**57.9**	**34.9**	**48**	**28**	**193**	**438**
Total VOCs	**ug/L**					**198**	**696**	**573**	**194**	**71.2**	**18.5**	**999**	**100**	**45.3**	**118**	**66**	**291**	**544**
SVOCs																		
Phenol	ug/L	5***	E			NS	NS	NS	NS	3 J	ND	7 J	ND	NS	NS	NS	NS	NS
Naphthalene	ug/L			13	A(C)	NS	NS	NS	NS	2 J	ND	20	ND	NS	NS	NS	NS	NS
2-Methylnaphthalene						NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	NS	NS	NS
Diethylphthalate	ug/L					NS	NS	NS	NS	2 J	ND	ND	ND	NS	NS	NS	NS	NS
Total SVOCs	**ug/L**					**NS**	**NS**	**NS**	**NS**	**7**	**ND**	**27**	**ND**	**NS**	**NS**	**NS**	**NS**	**NS**
Iron																		
Total Iron	ug/L	300	A(C)			NS	NS	NS	NS	64,300	12,300	38,900	29,800	13,100	5,930	15,500	26,100	NS
Dissolved Iron	ug/L					NS	NS	NS	NS	NS	NS	NS	NS	11,300	2,590	7,190	9,810	NS

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** Applies to the sum of 1,2-, 1,3-, and 1,4-xylene
*** Applies to the sum of all unchlorinated phenolic compounds.
Methylene chloride and bis(2-ethylhexyl)phthalate (lab contaminants) not reported.

Table 1: Seep Sampling Results
Old Sanitary Landfill
Fort Drum, New York

Compound	Units	NYSDEC Class C Surface Water Quality Standard	Basis	Guidance Value	Basis	EFFLUENT #1 11/12/2002	EFFLUENT #1 2/28/2003	EFFLUENT #1 6/16/2003	EFFLUENT #1 8/18/2003	EFFLUENT #1 11/7/2003	EFFLUENT #1 5/11/2004	EFFLUENT #1 10/21/2004	EFFLUENT #1 6/3/2005	EFFLUENT #1 9/27/2005	EFFLUENT #1 4/27/2006	EFFLUENT #1 11/2/2006	EFFLUENT #1 5/24/2007	EFFLUENT #1 7/17/2007
						Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier
VOCs																		
Acetone	ug/L					ND	30	32	18	ND	10	5 J	51	4 J	26	39	120	47
Benzene	ug/L	10	H(FC)	210	A(C)	160	150	46	94	250	540	170	180	13	130	300	310	340
Bromomethane	ug/L					ND	ND	ND	ND	ND	ND	2 J	ND	ND	ND	ND	ND	ND
2-Butanone	ug/L					ND	19	ND	ND	ND	18	ND	18	ND	15	25	52	26
n-Butylbenzene	ug/L					ND	ND	ND	ND	ND	2 J	ND	ND	ND	0.5	ND	ND	ND
Carbon Disulfide	ug/L					ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND
Chloromethane	ug/L					ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodiflouromethane	ug/L					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis- 1,2 Dichloroethene	ug/L					3 J	2 J	ND	ND	ND	0.4 J	0.2 J	ND	ND	ND	ND	ND	ND
trans- 1,2 Dichloroethene	ug/L					2 J	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2- Dichloropropane	ug/L					0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/L			17	A(C)	40	30	8	17	54	310	50	12	0.8 J	74	69	120	84
Naphthalene	ug/L			13	A(C)	ND	7 B	6	13	23	120	19	50 B	1 J	23	16	41	60
Toluene	ug/L	6000	H(FC)	100	A(C)	15	23	ND	10	21	21	8	3 J	0.8 J	8	29	14 J	14
p-Isopropyltoluene	ug/L					NA	0.7 J	ND	ND	ND	4 J	ND	ND	ND	0.6	ND	ND	ND
Isopropylbenzene	ug/L			2.6	A(C)	ND	1 J	ND	ND	6 J	18	2 J	3 J	0.2 J	4 J	ND	6 J	7
1,4- Dichlorobenzene	ug/L	5*	A(C)			ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n- Propylbenzene	ug/L					NA	2 J	ND	ND	ND	35	ND	3 J	ND	5	ND	10 J	8
1,3,5- Trichlorobenzene		5	A(C)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene		1	A(C)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene		40	A(C)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4- Trimethylbenzene	ug/L			33	A(C)	NA	15	ND	7	55	230	49	17	2 J	64	74	70	87
1,3,5- Trimethylbenzene	ug/L					NA	5	ND	ND	ND	64	6	ND	ND	8	20	8 J	8
m+p- Xylenes	ug/L					120	89	6	35	180	670	130	8 J	7 J	130	240	110	120
o- Xylenes	ug/L					20	24	ND	8	27	73	10	5 J	3 J	30	40	21 J	10
Total Xylenes	ug/L			65 **	A(C)	140	113	6	43	207	743	140	13 J	10 J	160	280	130	130
Vinyl Chloride	ug/L					0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total BTEX	**ug/L**					**355**	**316**	**60**	**164**	**532**	**1614**	**368**	**208**	**24.6**	**372**	**678**	**575**	**568**
Total VOCs	**ug/L**					**361**	**400**	**98**	**202**	**616**	**2115**	**451**	**350**	**31.8**	**518**	**852**	**882**	**811**
SVOCs																		
Phenol	ug/L	5***	E			NS	NS	NS	NS	11	ND	8 J	ND	NS	NS	NS	NS	NS
Naphthalene	ug/L			13	A(C)	NS	NS	NS	NS	7 J	45	11	7 J	NS	NS	NS	NS	NS
2-Methylnaphthalene						NS	NS	NS	NS	ND	7 J	ND	ND	NS	NS	NS	NS	NS
Diethylphthalate	ug/L					NS	NS	NS	NS	2 J	ND	ND	ND	NS	NS	NS	NS	NS
Total SVOCs	**ug/L**					**NS**	**NS**	**NS**	**NS**	**20**	**52**	**19**	**7**	**NS**	**NS**	**NS**	**NS**	**NS**
Iron																		
Total Iron	ug/L	300	A(C)			NS	NS	NS	NS	130,000	46,200	76,900	238,000	12,100	22,100	17,400	49,200	NS
Dissolved Iron	ug/L					NS	NS	NS	NS	NS	NS	NS	NS	7,730	18,700	4,290	32,100	NS

J - Analyte detected below quantitation limits
B - Detected in lab blank analyzed concurrently with sample.
ND - Not Detected
NS - Not Sampled
NA - Not Analyzed

NYSDEC "Ambient Water Quality Standards and Guidance Values"
Class C Surface Waters (Series 1.1.1, June 1998)
A(C) = fish propagation (fresh waters)
H(FC) = human consumption of fish (fresh waters)
E = aesthetic (fresh waters)

Results that exceed the standards or guidance values are shaded.

* Applies to the sum of 1,2-, 1,3-, and 1,4-dichlorobenzene
** Applies to the sum of 1,2-, 1,3-, and 1,4-xylene
*** Applies to the sum of all unchlorinated phenolic compounds.
Methylene chloride and bis(2-ethylhexyl)phthalate (lab contaminants) not reported.

Table 1: Seep Sampling Results
Old Sanitary Landfill
Fort Drum, New York

Compound	Units	NYSDEC Class C Surface Water Quality Standard	Basis	Guidance Value	Basis	EFFLUENT #2 11/13/2002	EFFLUENT #2 2/28/2003	EFFLUENT #2 6/16/2003	EFFLUENT #2 8/18/2003	EFFLUENT #2 11/7/2003	EFFLUENT #2 5/11/2004	EFFLUENT #2 10/21/2004	EFFLUENT #2 6/3/2005	EFFLUENT #2 9/27/2005	EFFLUENT #2 4/27/2006	EFFLUENT #2 11/2/2006	EFFLUENT #2 5/24/2007	EFFLUENT #2 7/17/2007
						Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier	Result w/Qualifier
VOCs																		
Acetone	ug/L					3 J	NS	ND	ND	ND	7 J	10	81	7 J	42	15	30	41
Benzene	ug/L	10	H(FC)	210	A(C)	0.8 J	NS	ND	ND	4 J	80	43	190	120	48	100	230	290
Bromomethane	ug/L					ND	NS	ND	ND	ND	ND	2 J	ND	ND	ND	ND	ND	ND
2-Butanone	ug/L					ND	NS	ND	ND	ND	ND	ND	37	5 J	17	ND	14	22
n-Butylbenzene	ug/L					ND	NS	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	0.6 J	ND
Carbon Disulfide	ug/L					ND	NS	56	18	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ug/L					ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodiflouromethane	ug/L					ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis- 1,2 Dichloroethene	ug/L					0.5 J	NS	ND	ND	ND	ND	0.2 J	ND	0.4 J	ND	ND	ND	ND
trans- 1,2 Dichloroethene	ug/L					ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2- Dichloropropane	ug/L					ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/L			17	A(C)	0.3 J	NS	ND	ND	1 J	33	17	96	33	16	30	88	130
Naphthalene	ug/L			13	A(C)	ND	NS	ND	ND	2 JB	8	7	42 B	19	3 J	9	30	53
Toluene	ug/L	6000	H(FC)	100	A(C)	ND	NS	ND	ND	0.3 J	3 J	3 J	7	7	3 J	7	6	17
p-Isopropyltoluene	ug/L					NA	NS	ND	ND	ND	ND	ND	ND	0.3	ND	ND	ND	ND
Isopropylbenzene	ug/L			2.6	A(C)	ND	NS	ND	ND	ND	2 J	1 J	4 J	2 J	0.9 J	1 J	6	11
1,4- Dichlorobenzene	ug/L	5*	A(C)			ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n- Propylbenzene	ug/L					NA	NS	ND	ND	ND	2 J	ND	5	2 J	0.8 J	1 J	7	13
1,3,5- Trichlorobenzene		5	A(C)			ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene		1	A(C)			ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene		40	A(C)			ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4- Trimethylbenzene	ug/L			33	A(C)	NA	NS	ND	ND	0.8 J	13	20	50	36	2 J	22	65	72
1,3,5- Trimethylbenzene	ug/L					NA	NS	ND	ND	0.4 J	4 J	4 J	ND	3 J	ND	5	9	14
m+p- Xylenes	ug/L					0.7 J	NS	ND	ND	4 J	17	47	56	57	11	59	58	120
o- Xylenes	ug/L					0.3 J	NS	ND	ND	1 J	5	7	28	13	8	12	30	18
Total Xylenes	ug/L			65 **	A(C)	1 J	ND	ND	ND	5 J	22	54	84	70	19	71	88	138
Vinyl Chloride	ug/L					ND	NS	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND
Total BTEX	**ug/L**					**2.1**	**NS**	**ND**	**ND**	**10.3**	**138**	**117**	**377**	**230**	**86**	**208**	**412**	**575**
Total VOCs	**ug/L**					**5.6**	**NS**	**56**	**18**	**13.5**	**175**	**161**	**596**	**305**	**152**	**261**	**574**	**801**
SVOCs																		
Phenol	ug/L	5***	E			NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	NS	NS	NS
Naphthalene	ug/L			13	A(C)	NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	NS	NS	NS
2-Methylnaphthalene						NS	NS	NS	NS	ND	ND	ND	ND	NS	NS	NS	NS	NS
Diethylphthalate	ug/L					NS	NS	NS	NS	2 J	ND	ND	ND	NS	NS	NS	NS	NS
Total SVOCs	**ug/L**					**NS**	**NS**	**NS**	**NS**	**2**	**ND**	**ND**	**ND**	**NS**	**NS**	**NS**	**NS**	**NS**
Iron																		
Total Iron	ug/L	300	A(C)			NS	NS	NS	NS	93,800	49,300	208,000	90,700	61,600	6,830	16,600	62,000	NS
Dissolved Iron	ug/L					NS	NS	NS	NS	NS	NS	NS	NS	17,600	3,540	8,240	27,600	NS

J - Analyte detected below quantitation limits
B - Detected in lab blank analyzed concurrently with sample.
ND - Not Detected
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NYSDEC "Ambient Water Quality Standards and Guidance Values"
Class C Surface Waters (Series 1.1.1, June 1998)
A(C) = fish propagation (fresh waters)
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E = aesthetic (fresh waters)

Results that exceed the standards or guidance values are shaded.

* Applies to the sum of 1,2-, 1,3-, and 1,4-dichlorobenzene
** Applies to the sum of 1,2-, 1,3-, and 1,4-xylene
*** Applies to the sum of all unchlorinated phenolic compounds.
Methylene chloride and bis(2-ethylhexyl)phthalate (lab contaminants) not reported.

Table 1: Seep Sampling Results
Old Sanitary Landfill
Fort Drum, New York

Compound	Units	NYSDEC Class C Surface Water Quality Standard	Basis	Guidance Value	Basis	EFFLUENT #3 5/11/2004		EFFLUENT #3 10/21/2004		EFFLUENT #3 6/3/2005		EFFLUENT #3 9/27/2005		EFFLUENT #3 4/27/2006		EFFLUENT #3 11/2/2006		EFFLUENT #3 5/24/2007		EFFLUENT #3 7/17/2007	
						Result w/Qualifier		Result w/Qualifier		Result w/Qualifier		Result w/Qualifier		Result w/Qualifier		Result w/Qualifier		Result w/Qualifier		Result w/Qualifier	
VOCs																					
Acetone	ug/L					2	J	3	J	ND		ND		4	J	ND		5	J	ND	
Benzene	ug/L	10	H(FC)	210	A(C)	0.4	J	0.2	J	0.5	J	0.6	J	ND		ND		ND		ND	
Bromomethane	ug/L					ND		2	J	ND		ND		ND		ND		ND		ND	
2-Butanone	ug/L					ND		ND		ND		ND		ND		ND		ND		ND	
n-Butylbenzene	ug/L					ND		ND		0.8	JB	ND		ND		ND		ND		ND	
Carbon Disulfide	ug/L					ND		ND		ND		ND		ND		ND		ND		ND	
Chloromethane	ug/L					ND		ND		ND		ND		ND		ND		ND		ND	
Dichlorodiflouromethane	ug/L					ND		ND		ND		ND		ND		ND		ND		ND	
cis- 1,2 Dichloroethene	ug/L					ND		ND		ND		ND		ND		ND		ND		ND	
trans- 1,2 Dichloroethene	ug/L					ND		ND		ND		ND		ND		ND		ND		ND	
1,2- Dichloropropane	ug/L					ND		ND		ND		ND		ND		ND		ND		ND	
Ethylbenzene	ug/L			17	A(C)	1	J	0.2	J	0.3	JB	ND		ND		ND		ND		ND	
Naphthalene	ug/L			13	A(C)	ND		ND		1	JB	0.9	J	ND		ND		ND		ND	
Toluene	ug/L	6000	H(FC)	100	A(C)	ND		ND		ND		ND		ND		ND		ND		ND	
p-Isopropyltoluene	ug/L					ND		ND		1	JB	ND		ND		ND		ND		ND	
Isopropylbenzene	ug/L			2.6	A(C)	ND		ND		ND		ND		ND		ND		ND		ND	
1,4- Dichlorobenzene	ug/L	5*	A(C)			ND		ND		ND		ND		ND		ND		ND		ND	
n- Propylbenzene	ug/L					ND		ND		ND		ND		ND		ND		ND		ND	
1,3,5- Trichlorobenzene		5	A(C)			ND		ND		0.7	JB	ND		ND		ND		ND		ND	
Hexachlorobutadiene		1	A(C)			ND		ND		0.4	JB	ND		ND		ND		ND		ND	
Trichloroethene		40	A(C)			ND		ND		ND		ND		ND		ND		ND		ND	
1,2,4- Trimethylbenzene	ug/L			33	A(C)	0.9	J	1	J	ND		ND		ND		ND		ND		ND	
1,3,5- Trimethylbenzene	ug/L					0.3	J	ND		ND		ND		ND		ND		ND		ND	
m+p- Xylenes	ug/L					2	J	ND		ND		ND		ND		ND		ND		ND	
o- Xylenes	ug/L					0.2	J	ND		ND		ND		ND		ND		ND		ND	
Total Xylenes	ug/L			65 **	A(C)	2.2	J	ND		ND		ND		ND		ND		ND		ND	
Vinyl Chloride	ug/L					ND		ND		ND		ND		ND		ND		ND		ND	
Total BTEX	**ug/L**					**3.6**		**0.4**		**0.8**		**0.6**		**ND**		**ND**		**ND**		**ND**	
Total VOCs	**ug/L**					**6.8**		**6.4**		**4.7**		**1.5**		**4**		**ND**		**5**		**ND**	
SVOCs																					
Phenol	ug/L	5***	E			ND		ND		ND		NS		NS		NS		NS		NS	
Naphthalene	ug/L			13	A(C)	ND		ND		ND		NS		NS		NS		NS		NS	
2-Methylnaphthalene						ND		ND		ND		NS		NS		NS		NS		NS	
Diethylphthalate	ug/L					ND		ND		ND		NS		NS		NS		NS		NS	
Total SVOCs	**ug/L**					**ND**		**ND**		**ND**		**NS**		**NS**		**NS**		**NS**		**NS**	
Iron																					
Total Iron	ug/L	300	A(C)			14,000		15,700		4,320		702		126		2,040		1,940		NS	
Dissolved Iron	ug/L					NS		NS		NS		9.5	B	ND		292		9.2		NS	

J - Analyte detected below quantitation limits
B - Detected in lab blank analyzed concurrently with sample.
ND - Not Detected
NS - Not Sampled
NA - Not Analyzed

NYSDEC "Ambient Water Quality Standards and Guidance Values"
Class C Surface Waters (Series 1.1.1, June 1998)
A(C) = fish propagation (fresh waters)
H(FC) = human consumption of fish (fresh waters)
E = aesthetic (fresh waters)

Results that exceed the standards or guidance values are shaded.

* Applies to the sum of 1,2-, 1,3-, and 1,4-dichlorobenzene
** Applies to the sum of 1,2-, 1,3-, and 1,4-xylene
*** Applies to the sum of all unchlorinated phenolic compounds.
Methylene chloride and bis(2-ethylhexyl)phthalate (lab contaminants) not reported.

Effluent # 1

Date	Total VOC	Total BTEX	Total SVOC	Total Iron
11/12/2002	361	355	NS	NS
2/28/2003	400	316	NS	NS
6/16/2003	98.0	60.0	NS	NS
8/18/2003	202	164	NS	NS
11/7/2003	616	532	20.0	130,000
5/11/2004	2,120	1,610	52.0	46,200
10/21/2004	451	368	19.0	76,900
6/3/2005	350	208	7.00	238,000
9/27/2005	31.8	24.6	NS	12,100
4/27/2006	518	372	NS	22,100
11/2/2006	852	678	NS	17,400
5/24/2007	882	575	NS	49,200
7/17/2007	811	568	NS	NS

Effluent # 2

Date	Total VOC	Total BTEX	Total SVOC	Total Iron
11/12/2002	5.60	2.10	NS	NS
2/28/2003	NS	NS	NS	NS
6/16/2003	56.0	ND	NS	NS
8/18/2003	18.0	ND	NS	NS
11/7/2003	13.5	10.3	2.00	93,800
5/11/2004	175	138	ND	49,300
10/21/2004	161	117	ND	208,000
6/3/2005	596	377	ND	90,700
9/27/2005	305	230	NS	61,600
4/27/2006	152	86.0	NS	6,830
11/2/2006	261	208	NS	16,600
5/24/2007	574	412	NS	62,000
7/17/2007	801	575	NS	NS

Effluent # 3

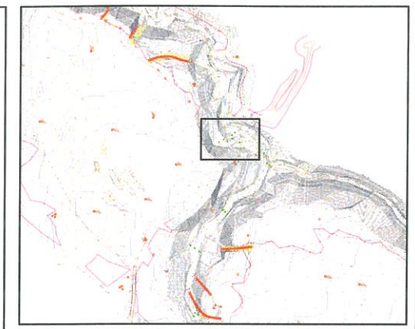
Date	Total VOC	Total BTEX	Total SVOC	Total Iron
5/11/2004	6.80	3.60	ND	14,000
10/21/2004	6.40	0.40	ND	15,700
6/3/2005	4.70	0.80	ND	4,320
9/27/2005	1.50	0.60	NS	702
4/27/2006	4.00	ND	NS	126
11/2/2006	ND	ND	NS	2,040
5/24/2007	5.00	ND	NS	1,940
7/17/2007	ND	ND	NS	NS

Influent

Date	Total VOC	Total BTEX	Total SVOC	Total Iron
11/12/2002	855	835	NS	NS
2/28/2003	4,200	3,220	NS	NS
6/16/2003	326	172	NS	NS
8/18/2003	445	226	NS	NS
11/7/2003	386	344	13.0	221,000
5/11/2004	383	256	6.00	275,000
10/22/2004	270	194	10.0	308,000
6/3/2005	451	311	4.00	80,100
9/27/2005	2,110	1,740	NS	61,400
4/27/2006	446	306	NS	12,600
11/2/2006	434	338	NS	60,000
5/24/2007	440	299	NS	138,000
7/17/2007	1,100	776	NS	NS

Mid-System

Date	Total VOC	Total BTEX	Total SVOC	Total Iron
11/12/2002	198	188	NS	NS
2/28/2003	696	530	NS	NS
6/16/2003	573	336	NS	NS
8/18/2003	194	156	NS	NS
11/7/2003	71.2	62.0	7.00	64,300
5/11/2004	18.5	13.6	ND	12,300
10/22/2004	999	757	27.0	38,900
6/3/2005	100	57.9	ND	29,800
9/27/2005	45.3	34.9	NS	13,100
4/27/2006	118	48.0	NS	5,930
11/2/2006	66	28.0	NS	15,500
5/24/2007	291	193	NS	26,100
7/17/2007	544	438	NS	NS



Overview Map - Scale: 1"= 600'

Legend

- Piezometer and Stream Gauge Location
- Seep Samples
- Biota Samples Collected in September 2005
- Influent Location Sampled in September 2005
- Sediment Samples Collected in October 2004
- Willow planting boxes
- Iron-Stained Soil Boundary
- OSL Creek
- Wetlands Boundary
- Deer Protection Fence
- Approximate Limits of Tree Clearing
- 10' Contour

Sample Location → **Parameter**

Effluent # 3

Date	Total VOC	Total BTEX	Total SVOC	Total Iron
5/11/2004	6.80	3.60	ND	14,000
10/21/2004	6.40	0.40	ND	15,700
6/3/2005	4.70	0.80	ND	4,320
9/27/2005	1.50	0.60	NS	702
4/27/2006	4.00	ND	NS	126
11/2/2006	ND	ND	NS	2,040
5/24/2007	5.00	ND	NS	1,940
7/17/2007	ND	ND	NS	NS

Date → **Concentration**

Concentrations in µg/L

ND - Not Detected
NS - Not Sampled

Notes:

(1) Topographical survey information obtained from CT Male and Associates November, 1998. Seep SP03 sample locations surveyed by Gymo, PC, December, 2001.

(2) Concentrations rounded to three significant figures when possible.

N
W E
S

SCALE: 1" = 20'

0 10 20 40 Feet

MALCOLM PIRNIE

US Army Corps of Engineers®

Data Gap Study to Support Corrective Measures Study Phytoremediation Pilot Study at the Old Sanitary Landfill

FORT DRUM, NEW YORK

SEEP Samples: Total BTEX, VOC, SVOC, and Iron Concentrations

Malcolm Pirnie, Inc.

FIGURE 1

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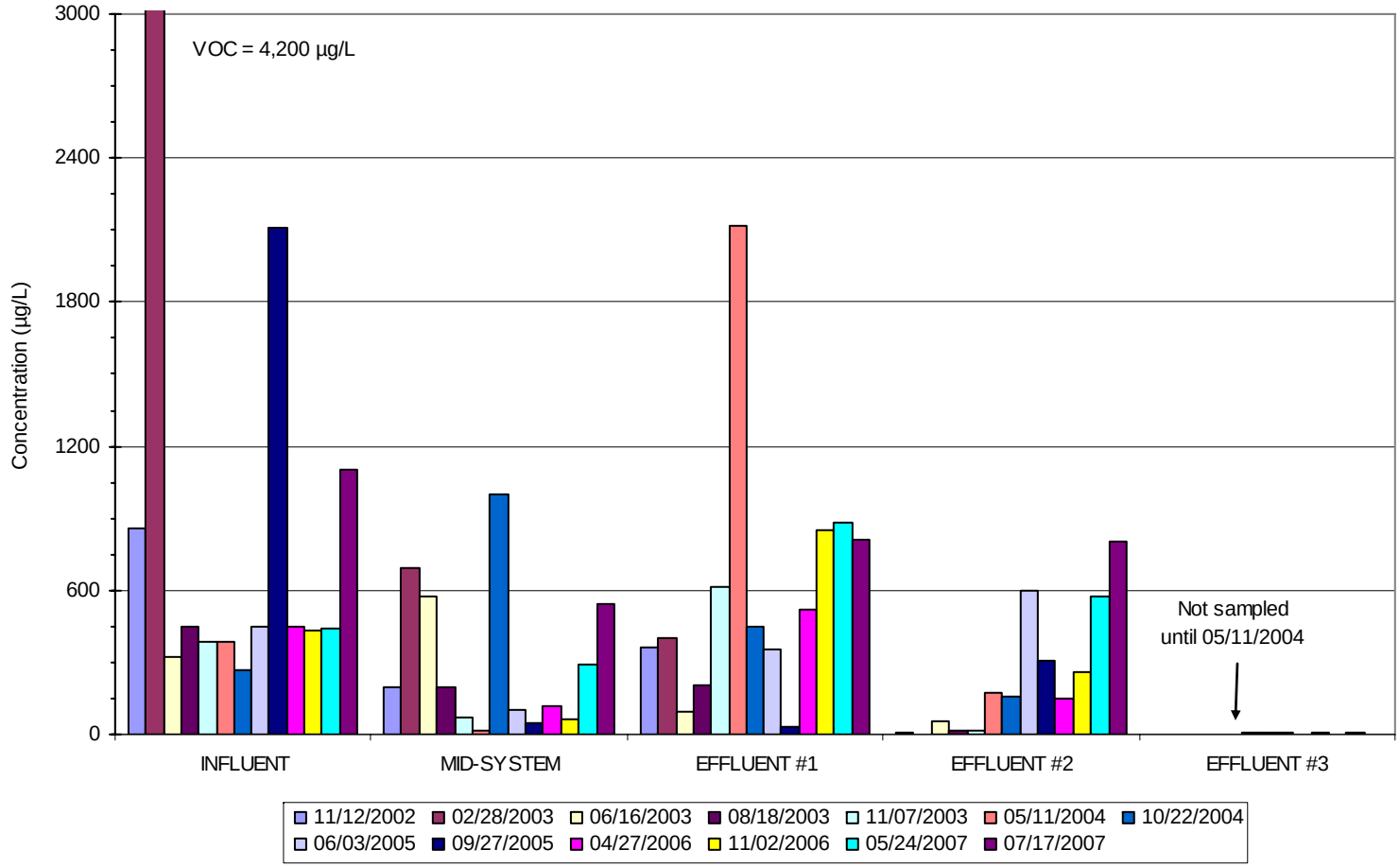

US Army Corps of Engineers

Total VOC Concentration versus Location

Malcolm Pirnie, Inc.

MALCOLM PIRNIE
INDEPENDENT ENVIRONMENTAL ENGINEERS, SCIENTISTS AND CONSULTANTS

Data Gap Study to Support Corrective Measures Study
Phytoremediation Pilot Study at the Old Sanitary Landfill,
Fort Drum, New York

FIGURE 2

ATTACHMENT 1
SUNY-ESF Plantation Maintenance Report

Semiannual Progress Report for January – June 2007

Phytoremediation Pilot Study at the Old Sanitary Landfill, Fort Drum, NY
Data Gap Study to Support Corrective Measures Study
Gasoline Alley Areas 1895, 1995, and 3805 and the Old Sanitary Landfill

And

Demonstrating Phytoremediation at the Old Sanitary Landfill, Fort Drum, New York

by

Christopher A. Nowak, Ph.D. (Principal Investigator)
State University of New York
College of Environmental Science and Forestry

Developed for

Malcolm Pirnie, Inc.

INTRODUCTION

A hardwood plantation phytoremediation system was installed at Fort Drum in May 2001 in the SP-03 area to support the Corrective Measures Study by Malcolm Pirnie, Inc. (Malcolm Pirnie). The SP-03 area is approximately 500 feet northeast of a light non-aqueous phase liquid (LNAPL) field and is defined by a seep that emerges from the northeast corner of Cell 2 of the inactive Old Sanitary Landfill (OSL). The State University of New York College of Environmental Science and Forestry (SUNY-ESF) was contracted to conduct the installation, operation, maintenance, and monitoring of the phytoremediation plantation. Additional information on the installation can be found in the Implementation Report (Malcolm Pirnie, July 27, 2001).

The goal of the project is to develop a phytoremediation system using plants suited to conditions the OSL. If a successful system is developed, then it will be expanded in future phases of work to a full-scale remedial system and integrated into a comprehensive remedial strategy. Two supporting objectives are planned to meet this goal: (1) test different clones of willow to learn which clone is best suited for success, and (2) test the innovative use of soil rings and planting berms/boxes as a site preparation approach in poorly and very poorly drained soils. Success will be measured as a clone's ability to survive and grow, reduced contaminant mass in the solid and aqueous phases, and reduced contaminant migration.

This report documents conducted work and associated results for January 1-June 30, 2007. Work was conducted in accordance with the Data Gap Study to Support Corrective Measures Study Work Plan for Gasoline Alley and the OSL, (Work Plan, Malcolm Pirnie, September 2001), the Subcontract Agreement between Malcolm Pirnie and SUNY-ESF dated

April 2001, and the work plan amendments dated April 15, 2003, June 25, 2004, May 2, 2005, and May 18, 2006. In general, there were no deviations from the work plans.

Summary of Recent Project Accomplishments

In spring 2003, we established 56 planting boxes (25 boxes, 10 x 2 foot in size, and 31 boxes, 5 x 2 foot in size) directly in the seep areas. We planted 1,215 willows in sets of 15 or 30 plants per box, which consisted of seven clones.

We installed twenty 5-foot long piezometers in summer 2003, one piezometer for each of the 20 large planting boxes. These piezometers were used to measure depth to water table twice in the summer of 2003, on a bi-weekly basis over the 2004 growing season, once each month during the 2004 fall dormant season, periodically in winter 2004-2005, once every 2 to 4 weeks from spring to fall 2005, and periodically in winter 2005 through to the present. In May 2005, three new piezometers were installed in southern edge of the SP-04 area, just north of, and adjacent to, the SP-03 phytoremediation area. The purpose of these new piezometers was two-fold: (1) determine flow paths of water north of the phytoremediation plantation; and (2) allow for measurements of water dynamics for comparison with the SP-03 area. Two stream gauges were also installed in May 2005 in the OSL Creek, which flows along the northeastern edge of the plantation. These stream gauges, plus two other pre-existing gauges from just upstream from the plantation area (outlet of unnamed creek) and five pre-existing monitoring wells on the side slopes surrounding the SP-03 area, have been used to periodically measure depth of water and depth to water tables on the same schedule as the original 20 piezometers (not measured in 2006 due to technical problems associated with access).

Measurements of survival and growth of the willow plants in each box were made in December 2006 and are reported in this semiannual report. Water table measurements made in 2007 will be reported in the next semiannual report.

PROGRESS DURING THIS REPORTING PERIOD (January – June 2007)

During this reporting period, we conducted three main activities: (1) monitored biomass production (results presented in this report); (2) monitored the plantations via measurements of depth to water table using the 23 piezometers and measurements of OSL Creek depth (four stream gauges) (results to be presented in the next semiannual report); and (3) operated and maintained the plantings.

Results from Analysis of 2006 Data on Biomass Production

Analyses of biomass production from the 2006 measurements were completed during the reporting period. Analyses focused on area-wide (SP-03 area) estimation of biomass using willow stem diameter measurements (December 2006) and a generalized biomass equations (over dry, metric tons per hectare; o.d.t per hectare).

Methods. Four 1.83-meter (6-foot) radius circular plots (area=1/385 acre) were established across the SP-03 area. Each circular plot was centered on an existing piezometers (piezometers: 8A, 32B, 42C and 52D), one in each of the four original planting blocks. All willow stems in the circular plot was measured for diameter and grouped by diameter class.

These classes included 0-5, 5-10, 10-20, and 20-25 mm categories. All stems greater than 25 mm diameter were not grouped by diameter class but instead were measured using a diameter tape at 30 cm (1-foot) above groundline, according to the data requirements for the generalized biomass equation. Biomass (oven dry grams) was estimated for each stem using the following equation (Ballard *et al*. 1999): -2.53553+EXP(2.66618*LN(diameter)) where EXP is an exponential transformation, LN is the natural logarithm, and diameter is the midpoint of the diameter class or the actual diameter of the measured stem.

Results. Biomass estimates for the SP-03 area averaged 5.5 o.d.t per hectare. Sampling plots around piezometers 8A, 32B, 42C, and 52D had biomass production estimated at 1.8, 13.3, 3.9, and 3.1 o.d.t per hectare, respectively.

Interpretation of Biomass Production Results

The average age of the willow plantation in the SP-03 area is 2.6 years (approximately 70 percent of the willow are 2 years old and 30 percent are 4 years old due to the various past planting and coppicing treatments). Average annual production of biomass is 2.1 o.d.t per hectare (5.5 o.d.t per hectare divided by 2.6 years). In comparison, similarly aged and scaled, intensively cultured willow as tested in the long-standing SUNY-ESF willow bioenergy trails (refer to www.esf.edu/willow) have been shown to average 8.4 to 11.6 o.d.t per hectare per year (Volk *et al*., 2006). SP-03 willows have produced only about 18 to 25 percent of the willows produced in these other SUNY-ESF willow plantations. The low production rates are likely due to the more hostile environment for growing willow in the SP-03 site (generally too wet and low in nutrients, even with the planting boxes).

The low-quality site conditions at the SP-03 area does not mean that the willows will not ever attain the level of biomass production as observed in other willow systems—it may just take more time. Evidence for this can be seen in the variation in plot measurements for biomass in the SP-03 area, which ranged to 13.3 o.d.t per hectare (or 5.1 o.d.t per hectare per year). The higher biomass production in the 32B sampling plot is associated with the plot having a significant presence of 4-year-old willow (refer to Photo 1). It may take the SP-03 area an added 5 years to reach the maximum biomass potential for the site, and this maximum should be relatively close to that observed in other willow plantations.

Biomass production is an important consideration for monitoring the level of success in the phytoremediation system because of how closely related it is to a key mechanism of phytoremediation—hydraulic control (pumping of water from the site through evapotranspiration), which is expected to be higher in a system with high annual biomass production compared to one with low annual biomass production.

When the SP-03 phytoremediation project began in spring 2001, it was projected that it would take 5 to 10 years before the system matured and maximum phytoremediation effects would take effect. It appears that, based on this past year's biomass production estimates, that the original estimates of time to maturity were generally correct.

Plantation Operations and Maintenance (O&M)

General state of the plantation was examined throughout the dormant season and early growing season. No problems were discovered in terms of pests. The plantation appears to be developing and performing as expected.

WORK PLANNED FOR THE NEXT REPORTING PERIOD (July - December 2007)

SP-03 Plantation Operations and Maintenance (O&M)

General state of the plantation will be examined periodically during the reporting period. Examinations will occur once per month, including assessment of the onset of pest problems (insect defoliation and herbivory from small and large mammals). Actions to control pests will be implemented if the pest develops into a problem for the success of the plantings.

SP-03 Monitoring

Depth to water table will continue to be measured periodically during the reporting period.

Water table measurements collected in 2007 in association with the SP-03 area will be entered into a database. Statistical analyses of these data will be completed by the next reporting period.

O&M and Monitoring the Phytoremediation Pilot Study

In June-July 2007, the expanded phytoremediation system from the SP-03 area throughout the unnamed creek drainage and downstream along the OSL Creek was installed by CAPE (contractor to Malcolm Pirnie), Malcolm Pirnie, and SUNY-ESF. Over 850 planting boxes and over 22,000 willow were installed in the Full Scale Phytoremediation Pilot Study. Early survival of the willow was monitored in July 2007. Monitoring water table dynamics will begin anew in the Full Scale Phytoremediation Pilot Study through: 1) regular and expanded monitoring of water table depths in established Fort Drum monitoring wells; 2) expanded OSL Creek gauging; 3) expanded use of untreated seeps as “controls” for phyto treated seeps; 4) establishment of a broad network of automated water table depth data loggers (n=18 automated pressure transducers in piezometers) in both SP-03 and the new phyto plantation systems; 5) installation of a SUNY-ESF on-site precipitation gauge; and 6) addition of a hydrogeologist as a SUNY-ESF team member who will aid in monitoring system design and analysis of water table dynamics.

An establishment report for the Full Scale Phytoremediation Pilot Study will be presented in the next semiannual report.

PROBLEMS

No problems were encountered during this reporting period, and none are expected for the next reporting period.

REFERENCES

Ballard, B.D., S.V. Stehman, R.D. Briggs, T.A. Volk, L.P. Abrahamson, and E.H. White. 1999. Aboveground biomass equation development for five Salix clones and one Populus clone. New

York Center for Forestry Research and Development, State University of New York College of Environmental Science and Forestry, Syracuse, NY: Misc. Report NYCFRD-99-01.

Volk, T.A., L.P. Abrahamson, C.A. Nowak, L.B. Smart, P.J. Tharakan, and E.H. White. 2006. The development of short-rotation willow in the northeastern United States for bioenergy and bioproducts, agroforestry and phytoremediation. Biomass and Bioenergy 30: 715-727.

Photo 1. A 4-year-old willow (see red arrow) in the SP-03 phytoremediation area. Photograph taken on May 16, 2007. Note that this willow is larger compared to the other willow stems in the photo, which are only 2 years old.

ATTACHMENT 2
Field Memoranda
from May 2007 and July 2007 Sampling Events

MALCOLM PIRNIE

INTEROFFICE CORRESPONDENCE

To: A. Accardi-Dey (0285810) Date: June 8, 2007

Copy: T. Akbas, WHI
S. Thompson, WHI

From: Kelley J. Roe, SYR

Re: **Old Sanitary Landfill (OSL) Phytoremediation System Performance Monitoring**

This memorandum summarizes the seep sampling activities performed as part of the OSL Phytoremediation System Performance Monitoring. Field work was conducted May 24, 2007. Surface water sampling was performed in accordance with United States Army Corps of Engineers (USACE) Contract No. W912DR-05-D-0004. Field activities were performed in accordance with procedures described in the Basewide Quality Assurance Project Plan QAPP *(Environmental Investigation for Fort Drum, Quality Assurance Program Plan, Fort Drum Military Installation, Fort Drum, New York*, Malcolm Pirnie, Inc., May 2001) and the *Data Gap Study (DGS) to Support Corrective Measures Study Work Plan* (Malcolm Pirnie, Inc. 2001).

General

Sampling activities were coordinated and performed by Malcolm Pirnie, Inc. personnel. All field activities and site access was coordinated with Fort Drum Public Works Environmental Division personnel and with various subcontractors working in several site areas.

OSL/SP03 Phytoremediation System Performance Monitoring

Seep sampling associated with the OSL/SP03 Phytoremediation System Performance Monitoring was conducted on May 24, 2007. The OSL/SP03 Phytoremediation System Monitoring is part of the Basewide Monitoring Event and is conducted within the existing phytoremediation plantation located in the seep SP03 area of the OSL. (The full-scale phytoremediation plantation is currently under construction and incorporates seep areas northwest of SP03 between the toe slope of OSL Cell 2 and OSL Creek, and seep areas along the perimeter of the unnamed creek, southwest from SP03.) Performance monitoring for the full-scale plantation will be conducted under a separate contract and is not included in the Basewide Monitoring Events.

Aqueous seep samples were collected at five locations within the SP03/Phyto System, consistent with historical OSL/SP03 System sample locations. Samples are identified as follows:

- *SP-03(Influent)*
- *SP-03(Midpoint)*
- *SP-03(Effluent #1)*
- *SP-03(Effluent #2)*
- *SP-03(Effluent #3).*

OSL/SP03 Phyto seep samples were collected for volatile organic compounds (VOC), total iron, and dissolved iron. Samples were submitted to Katahdin Analytical Laboratories, Scarborough, Maine. Samples collected for dissolved iron were field-filtered using a 45-micron filter. Compared to previous sampling events, the flow observed within the SP03 system during this round of sampling was low to average; although some pooled seepage was evident at the Effluent #1 and Effluent #2 locations, minimal *flow* was observed at these locations during the spring 2007 Event. Water quality parameters measured at each location and are presented in Table 1 (attached).

/kjr
Attachments

Table 1.
OSL/SP03 Phytoremediation Performance Sampling
May 2007
Fort Drum, New York

		Field Observations					Water Quality Parameters						
Sample Location/ID	**Sample Date**	**PID**	**Depth (feet)**	**Width (feet)**	**Stream Gauge**	**Location Identified in Field**	**Temp (^{0}C)**	**pH (s.u.)**	**Conduc-tivity (mS/cm)**	**Tur-bidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Oxidation-Reduction Potential**	**Laboratory Analysis/Comments**
SP03 (Effluent#3)	05/24/07	0.0	NA	NA	NA	Staked/ flagged	27.26	7.09	0.917	0.5	7.40	157	VOCs, total Iron, dissolved Iron
SP03 (Effluent#2)	05/24/07	0.0	NA	NA	NA	Staked/ flagged	21.48	10.21*	0.976	648	4.44	-128	VOCs, total Iron, dissolved Iron
SP03 (Effluent#1)	05/24/07	0.0	NA	NA	NA	Staked/ flagged	22.76	9.69*	0.778	242	5.21	-139	VOCs, total Iron, dissolved Iron
SP03 (Midpoint)	05/24/07	0.0	NA	NA	NA	Staked/ flagged	22.49	9.60*	0.935	0	4.37	-108	VOCs, total Iron, dissolved Iron/Iron bacteria or "floc"
SP03 (Influent)	05/24/07	0.0	NA	NA	NA	Staked/ flagged	21.39	9.28*	0.437	0	4.03	-87	VOCs, total Iron, dissolved Iron/Iron bacteria or "floc"

Notes: NA = Not Applicable.
* = pH measurements questionable, likely equipment error/faulty pH probe.

Katahdin ANALYTICAL SERVICES
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Scarborough, ME 04074
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Client	Contact	Phone #	Fax #
Malcolm Pirnie Inc	Terri Akkas	(914) 641-2414	(914) 641-2455

Address	City	State	Zip Code
104 Corporate Park Dr.	White Plains	NY	10602

Purchase Order # Proj #2118-106 Proj. Name / No. Fort Drum Basewide (Spring 07) Katahdin Quote #

Bill (if different than above) Address

Sampler (Print / Sign) Kelley J. Roe, et. al / Kelley J. Roe Copies To:

LAB USE ONLY WORK ORDER #: SA2548

KATAHDIN PROJECT NUMBER

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	ANALYSIS AND CONTAINER TYPE PRESERVATIVES: VOA (8260B) 3x40 mL vial/HCl	VOA (8260B) + MTBE 3x40 mL vial (HCl)*	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N
	TRIP BLANK 5/23/07	— / —	AQ	3	✓										
	SP052307	5/23/07 / 0900	AQ	3	✓										
	1395-MW28	/ 1135	GW	3	✓										
	1395-MWS1	/ 1215		3	✓										
	1395-MWS2	/ 1318		3	✓										
	1495-MW30	5/24/07 1250	GW	3	✓										
	1495-MW31	/ 1111		3	✓										
	1495-MWS3	/ 0923		3	✓										
	1495-MWS4	/ 1337		3	✓										
	1495-MWX	/ —		3	✓										
	BP052407	5/24/07 1600	AQ	3		✓									
	2140-MWX	/ —	GW	3		✓									
	2140-MW12	/ 1600		3		✓									
	2140-MW14	/ 1530		3		✓									
	2140-MW19	/ 1355		3		✓									
	2140-MW27	/ 1245		3		✓									

COMMENTS * BP052407 and 2140- samples should be reported as per NYState DEC STARS VOA, including MTBE.

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Kelley J. Roe		FedEx TRK #8592 06616091			05/25/07 1000
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
		05/25/07 1000			

ORIGINAL

Katahdin ANALYTICAL SERVICES
600 Technology Way
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Fax: (207) 775-4029

Cooler 1 of 1

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Client	Contact	Phone #	Fax #
Malcolm Pirnie Inc.	Terri Akbas	(914)641-2414	(914)641-2455

Address	City	State	Zip Code
104 Corporate Park Dr.	White Plains	NY	10602

Purchase Order # Proj # 2118-106 Proj. Name / No. Fort Drum Basewide (Spring 07) Katahdin Quote #

Bill (if different than above) Address

Sampler (Print / Sign) Kelley J. Roe, et. al. Kelley J. Roe Copies To:

LAB USE ONLY WORK ORDER #: SA2548

KATAHDIN PROJECT NUMBER

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	ANALYSIS AND CONTAINER TYPE PRESERVATIVES: Filt. ☐Y ☐N VOAs (8260B) 3x40 ml vial/HCl	Filt. ☐Y ☐N Total Iron 250 ml P./HNO3	Filt. ☒Y ☐N Dissolved Iron 250 ml P./HNO3	Filt. ☐Y ☐N VOAs (8260B)+MTBE* 3x40 ml vials/HCl	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N
	TRIP BLANK 5/24/07	- / -	AQ	3				✓						
	2140-SW01	5/23/07 1315	SW	3				✓						
	2140-SW02	/1245		3				✓						
	2140-SW04	/1145		3				✓						
	2140-SW08	/1215		3				✓						
	2140-SWOX	/-		3				✓						
	SP03 (Influent)	5/24/07 1725	SW	5	✓	✓	✓							
	SP03 (Midpoint)	/1720		5	✓	✓	✓							
	SP03 (Effluent #1)	/1715		5	✓	✓	✓							
	SP03 (Eff. #2)	/1710		5	✓	✓	✓							
	SP03 (Eff. #3)	/1705		5	✓	✓	✓							
		/												
		/												
		/												
		/												
		/												

COMMENTS

*2140 Surface Water samples to be reported as per (8260B) NY State DEC STARS list for VOA, including MTBE.

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Kelley J. Roe		FedEx TRK# 8592 0661 6091			
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

ORIGINAL

Location Fort Drum Date 5-23-07

Project / Client Fort Drum Basewide Sampling

2140 - SW01 → Balteria or precipitate 15' on either side of sample location (up and down stream)

1445 Water gauge at ASL See field gauging sheets for measurements and notes

1625 Water gauging at 1795 See field gauging sheets for measurements and notes

1830 Malcolm Pirnie off-site

Location Fort Drum Date 5-24-07

Project / Client Fort Drum Basewide Sampling Scale

800 Malcolm Pirnie on-site

815 Decontaminated pumps Calibrated minirae PIDs(2)

Weather: Sunny
Low: 70°F High: 85°F

Objective: Water gauging and groundwater sampling

900 Groundwater sampling at 1495 (Adam and Chris)

1000 Low flow sampling at 2140 (Kelley and Charise)

1430 Phyto sampling (Kelley, Adam, Chris and Charise)

1830 Malcolm Pirnie off-site

Location Fort Drum Date 5-24-07

Project / Client Fort Drum Baseweide

Monitoring

Sample ID	Date Time	pH s.u.	Cond ms/cm	Turb NTU	DO mg/L	Temp °C	ORP mV
SPO3 (Effluent #2)	5-24-07 1705	7.09	0.917	0.5	7.48	87.86	157
SPO3 (Effluent #3)	5-24-07 1710	10.31	0.976	648.0	4.44	81.48	-128
SPO3 (Effluent #4)	5-24-07 1715	9.69	0.778	348.0	5.81	83.76	-139
SPO3 (Mid point)	5-24-07 1720	9.6	0.935	Note: Iron floc	4.37	88.49	-108
SPO3 (Influent)	5-24-07 1725	9.28	0.937	Note: Iron floc	4.03	81.39	-87

Location Fort Drum Date 5-25-07

Project / Client Fort Drum Baseweide

Monitoring Scale

900 Maintain Airline on-site

Weather: Sunny Low: 75°F High: 88°F

930 Decontaminated equipment

945 Calibrated Minirae PIDs

1020 Well gauging at 3905

See file 10 gauging sheets for measurements and notes

MALCOLM PIRNIE

INTEROFFICE CORRESPONDENCE

To: S. Thompson (0285810) Date: July 19, 2007

Copy: T. Akbas, WHI
Kelley J. Roe, SYR

From: A. Accardi-Dey, WHI

Re: **Old Sanitary Landfill (OSL) Phytoremediation System Performance Monitoring**

This memorandum summarizes the seep sampling activities performed as part of the OSL Phytoremediation System Performance Monitoring. Field work was conducted on July 18, 2007. Surface water sampling was performed in accordance with United States Army Corps of Engineers (USACE) Contract No. W912DR-05-D-0004. Field activities were performed in accordance with procedures described in the Basewide Quality Assurance Project Plan QAPP *(Environmental Investigation for Fort Drum, Quality Assurance Program Plan, Fort Drum Military Installation, Fort Drum, New York*, Malcolm Pirnie, Inc., May 2001) and the *Data Gap Study (DGS) to Support Corrective Measures Study Work Plan* (Malcolm Pirnie, Inc. 2001).

OSL/SP03 Phytoremediation System Performance Monitoring

Sampling activities were performed by Kelley Roe and AmyMarie Accardi-Dey (Malcolm Pirnie, Inc.). Seep waters associated with the OSL/SP03 Phytoremediation System Performance Monitoring were re-sampled on July 18, 2007. The OSL/SP03 Phytoremediation System Monitoring is conducted within the existing phytoremediation plantation located in the seep SP03 area of the OSL.

Aqueous seep samples were collected at five locations within the SP03/Phyto System, consistent with historical OSL/SP03 System sample locations. Samples are identified as follows:

- *SP-03(Influent) – renamed as Zone A2 for the Full-Scale Plantation*
- *SP-03(Midpoint)*
- *SP-03(Effluent #1)*
- *SP-03(Effluent #2)*
- *SP-03(Effluent #3).*

OSL/SP03 Phyto seep samples were collected for volatile organic compounds (VOC). Samples were submitted to Katahdin Analytical Laboratories, Scarborough, Maine. Similar to the previous sampling event (May 2007), the flow observed within the SP03 system during this round of sampling was low to average; although some pooled seepage was evident at the Effluent #1 and Effluent #2 locations, minimal *flow* was observed at these locations during the spring 2007 Event. Water quality parameters measured at each location and are presented in Table 1 (attached).

/kjr
Attachments

Table 1.
OSL/SP03 Phytoremediation Performance Sampling
July 2007
Fort Drum, New York

		Field Observations					Water Quality Parameters						
Sample Location/ID	**Sample Date**	**PID**	**Depth (feet)**	**Width (feet)**	**Stream Gauge**	**Location Identified in Field**	**Temp (^{0}C)**	**pH (s.u.)**	**Conduc-tivity (mS/cm)**	**Tur-bidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Oxidation-Reduction Potential**	**Laboratory Analysis/Comments**
SP03 (Effluent#3)	07/18/07	0.0	NA	NA	NA	Staked/ flagged	20.50	7.95	0.902	3.4	3.25	-21	VOC
SP03 (Effluent#2)	07/18/07	0.0	NA	NA	NA	Staked/ flagged	17.59	9.05	1.150	17.2	0.95	-194	VOC
SP03 (Effluent#1)	07/18/07	0.0	NA	NA	NA	Staked/ flagged	20.45	8.85	0.867	25.8	4.10	-171	VOC
SP03 (Midpoint)	07/18/07	0.0	NA	NA	NA	Staked/ flagged	19.73	9.09	1.130	186	1.94	-190	VOC
SP03 (Influent)	07/18/07	0.0	NA	NA	NA	Staked/ flagged	19.30	8.91	0.854	211	5.94	-135	VOC

Notes: NA = Not Applicable.

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Tel: (207) 874-2400
Fax: (207) 775-4029

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Client: Malcolm Pirnie, Inc (Att: A. Accardi-Dey)	Contact: Amy Marie Accardi-Dey	Phone #: (914) 641-2699	Fax #: (914) 641-2455
Address: 104 Corporate Park Drive	City: White Plaines	State: NY	Zip Code: 10604
Purchase Order #: Proj # 2118-124	Proj. Name / No.: Phytoremediation Full Scale 2118124	Katahdin Quote #:	
Bill (if different than above):	Address:		
Sampler (Print / Sign): Amy Marie Accardi Dey & Kelley J. Roe		Copies To:	

LAB USE ONLY WORK ORDER #: SA3785

KATAHDIN PROJECT NUMBER

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	ANALYSIS AND CONTAINER TYPE PRESERVATIVES: VOC (8260B) 40ml vial / HCl	Total Iron 125 ml P. / HNO3	Hardness 125 ml P. / HNO3	Dissolve Lead 125ml P. / HNO3
	Zone A1-INF	7/17/07 1235 (1300)	SW	5	✓	✓	✓	✓
	Zone A2-INF	7/17/07 1515			✓	✓	✓	✓
	Zone B2-INF	7/17/07 1300			✓	✓	✓	✓
	Zone C2-INF	7/17/07 1125			✓	✓	✓	✓
	Zone D1-INF	7/17/07 1055			✓	✓	✓	✓
	Zone E1-INF	7/18/07 1320			✓	✓	✓	✓
	Zone F1-INF	7/18/07 1610			✓	✓	✓	✓
	Zone F2-INF	7/18/07 1550		1	✓	✓	✓	✓
	SP03-MID	7/17/07 1500		3	✓			
	SP03-EFF#1	7/17/07 1450		3	✓			
	SP03-EFF#2	7/17/07 1440		3	✓			
	SP03-EFF#3	7/17/07 1430		3	✓			
	DUPLICATE	7/18/07 —		5	✓	✓	✓	✓
	TRIP BLANK	7/10/07 0930	AQ	2	✓			

COMMENTS: Please note "SP03-Eff#1", VOA bottle #1, may be low on HCl (overfilled during Sampling)

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Kelley Roe	7/18/07 1900	FedEx TRK#	8592 0601 6117	7/18/07 1900	
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ORIGINAL

Location Fort Drum PHYTO Date 7/18/07

Project / Client Baseline/Influent Sampling K. Roe

(*) CONTINUED FROM "FORT DRUM FALL 2006 → "FIELD BOOK p. 137 (*)

Wednesday, July 18, 2007

- KJR on-site/Ft Drum – pu field supplies, prep/load @ on-site field office (Bldg 2166/Nash Pump/Lift Station)

Weather: part/full sun, very humid, 73°F-81°F, wind 0-5 mph WNW

- KJR continue/complete PHYTO BASELINE/INF SEEP SAMPLING @ Full-Scale Phyto Plantation.

- Determine best access/location for Influent sample locations w/in Full-Scale Plantation, Zones E1, F1, and F2 (within Unnamed Creek)

- Collect INF samples (& flag locations) for Zones E1, F1, and F2. Field parameters/notes recorded p. 137 of field book "FT DRUM FALL 2006 →"; additional notes:

1) ZONE F2 INF location is site of former "SP-01" seep sample location; collect duplicate "DUP" @ this location.

2) Field parameters/notes for ("old" phyto site) SP03 Mid, SP03 Eff #1, SP03 Eff #2, SP03 Eff #3 recorded this field-book, p. 25.; as well as *SP03 INF = same as ZONE A2 INF

Kaelyn Roe 7/18/07

Location Fort Drum PHYTO Date 7/18/07

Project / Client Baseline/Inf. Sampling K. Roe

Scale

Sample Location/ ID	Date/ Time	pH	µS/cm COND	NTU Turb	mg/L D.O.	°C TEMP	mV ORP	ppm PID	NOTES
SP03 Eff #3	7/17/07 1420	7.95	.902	3.4	3.25	20.50	-21	0.0	Historical Loc.
SP03 Eff #2	7/17/07 1440	9.05	1.15	17.2	0.95	17.59	-194	0.0	Historical Loc.
SP03 Eff #1	7/17/07 1450	8.85	.867	26.8	4.10	20.45	-171	0.0	Historical Loc.
SP03 Midpoint	7/17/07 1500	9.09	1.13	186	1.94	19.73	-196	0.0	Historical Location
ZONE A2-INF	7/17/07 1515	8.91	.854	211	5.94	19.30	-135	0.0	*Replaces "SP03 INF" Historical Loc.

- All Phyto Baseline samples Zones A1-F2 collected for VOAs, total Fe, hardness, and field-filtered for dissolved Pb.
- All SP03/Phyto locations re-sampled for VOAs (only)
- Duplicate collected @ ZONE F2 INF (same as historical SP01)
- All INF ~~loc~~ locations flagged temporarily → to be marked w/ more permanent stakes; proposed Effluent locations (for FALL 2007) chosen & marked w/ temp. flags. Will also be staked for more permanent markings.

Kaelyn Roe 7/18/07

ATTACHMENT 3
Katahdin Analytical Services Data Packages from May 2007 and July 2007 Sampling Events

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER
RICHARD F. DAINES, M.D.

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Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MS. DEBORAH J. NADEAU
KATAHDIN ANALYTICAL SERVICES INC
600 TECHNOLOGY WAY
SCABOROUGH, ME 04074

NY Lab Id No: 11121
EPA Lab Code: ME00019

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Acrylates	
Acrolein (Propenal)	EPA 624
Acrylonitrile	EPA 624
Amines	
2-Nitroaniline	EPA 8270C
3-Nitroaniline	EPA 8270C
4-Chloroaniline	EPA 8270C
4-Nitroaniline	EPA 8270C
Carbazole	EPA 8270C
Benzidines	
3,3' -Dichlorobenzidine	EPA 625
Benzidine	EPA 625
Chlorinated Hydrocarbon Pesticides	
4,4'-DDD	EPA 608
4,4'-DDE	EPA 608
4,4'-DDT	EPA 608
Aldrin	EPA 608
alpha-BHC	EPA 608
alpha-Chlordane	EPA 8081A
beta-BHC	EPA 608
Chlordane Total	EPA 608
delta-BHC	EPA 608

Chlorinated Hydrocarbon Pesticides	
Dieldrin	EPA 608
Endosulfan I	EPA 608
Endosulfan II	EPA 608
Endosulfan sulfate	EPA 608
Endrin	EPA 608
Endrin aldehyde	EPA 608
Endrin Ketone	EPA 8081A
gamma-Chlordane	EPA 8081A
Heptachlor	EPA 608
Heptachlor epoxide	EPA 608
Lindane	EPA 608
Methoxychlor	EPA 8081A
Toxaphene	EPA 608
Chlorinated Hydrocarbons	
1,2,4-Trichlorobenzene	EPA 625
2-Chloronaphthalene	EPA 625
Hexachlorobenzene	EPA 625
Hexachlorobutadiene	EPA 625
Hexachlorocyclopentadiene	EPA 625
Hexachloroethane	EPA 625
Chlorophenoxy Acid Pesticides	
2,4,5-T	EPA 8151A

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Chlorophenoxy Acid Pesticides	
2,4,5-TP (Silvex)	EPA 8151A
2,4-D	EPA 8151A
Dicamba	EPA 8151A
Dinoseb	EPA 8151A
Demand	
Biochemical Oxygen Demand	EPA 405.1
	SM 18-20 5210B
Carbonaceous BOD	SM 18-20 5210B
Chemical Oxygen Demand	EPA 410.4
	HACH 8000
Haloethers	
4-Bromophenylphenyl ether	EPA 625
4-Chlorophenylphenyl ether	EPA 625
Bis (2-chloroisopropyl) ether	EPA 625
Bis(2-chloroethoxy)methane	EPA 625
Bis(2-chloroethyl)ether	EPA 625
Microextractables	
1,2-Dibromo-3-chloropropane	EPA 8011
1,2-Dibromoethane	EPA 8011

Mineral	
Acidity	EPA 305.1
Alkalinity	EPA 310.1
	SM 18-20 2320B
Calcium Hardness	EPA 200.7
Chloride	EPA 300.0
	EPA 325.2
	SM 18-20 4500-Cl E
Fluoride, Total	EPA 340.2
	SM 18-20 4500-F C
Hardness, Total	EPA 200.7
Sulfate (as SO4)	EPA 300.0
	EPA 375.4
Nitroaromatics and Isophorone	
2,4-Dinitrotoluene	EPA 625
2,6-Dinitrotoluene	EPA 625
Isophorone	EPA 625
Nitrobenzene	EPA 625
Nitrosoamines	
N-Nitrosodimethylamine	EPA 625
N-Nitrosodi-n-propylamine	EPA 625
N-Nitrosodiphenylamine	EPA 625

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Nutrient	
Ammonia (as N)	EPA 350.1
	SM 18 4500-NH3 H
Kjeldahl Nitrogen, Total	EPA 351.2
Nitrate (as N)	EPA 300.0
	EPA 353.2
	SM 18-20 4500-NO3 F
Nitrite (as N)	EPA 300.0
	EPA 353.2
	SM 18-20 4500-NO3 F
Orthophosphate (as P)	EPA 300.0
	EPA 365.2
	SM 18-20 4500-P E
Phosphorus, Total	EPA 365.4
Phthalate Esters	
Benzyl butyl phthalate	EPA 625
Bis(2-ethylhexyl) phthalate	EPA 625
Diethyl phthalate	EPA 625
Dimethyl phthalate	EPA 625
Di-n-butyl phthalate	EPA 625
Di-n-octyl phthalate	EPA 625
Polychlorinated Biphenyls	
PCB-1016	EPA 608
Polychlorinated Biphenyls	
PCB-1221	EPA 608
PCB-1232	EPA 608
PCB-1242	EPA 608
PCB-1248	EPA 608
PCB-1254	EPA 608
PCB-1260	EPA 608
Polynuclear Aromatics	
Acenaphthene	EPA 625
Acenaphthylene	EPA 625
Anthracene	EPA 625
Benzo(a)anthracene	EPA 625
Benzo(a)pyrene	EPA 625
Benzo(b)fluoranthene	EPA 625
Benzo(ghi)perylene	EPA 625
Benzo(k)fluoranthene	EPA 625
Chrysene	EPA 625
Dibenzo(a,h)anthracene	EPA 625
Fluoranthene	EPA 625
Fluorene	EPA 625
Indeno(1,2,3-cd)pyrene	EPA 625
Naphthalene	EPA 625
Phenanthrene	EPA 625

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Polynuclear Aromatics	
Pyrene	EPA 625
Priority Pollutant Phenols	
2,4,5-Trichlorophenol	EPA 8270C
2,4,6-Trichlorophenol	EPA 625
2,4-Dichlorophenol	EPA 625
2,4-Dimethylphenol	EPA 625
2,4-Dinitrophenol	EPA 625
2-Chlorophenol	EPA 625
2-Methyl-4,6-dinitrophenol	EPA 625
2-Methylphenol	EPA 8270C
2-Nitrophenol	EPA 625
4-Chloro-3-methylphenol	EPA 625
4-Methylphenol	EPA 8270C
4-Nitrophenol	EPA 625
Pentachlorophenol	EPA 625
Phenol	EPA 625
Purgeable Aromatics	
1,2-Dichlorobenzene	EPA 601
	EPA 602
	EPA 624
	EPA 625
	EPA 8021B

Purgeable Aromatics	
1,2-Dichlorobenzene	EPA 8270C
1,3-Dichlorobenzene	EPA 601
	EPA 602
	EPA 624
	EPA 625
	EPA 8021B
	EPA 8270C
1,4-Dichlorobenzene	EPA 601
	EPA 602
	EPA 624
	EPA 625
	EPA 8021B
	EPA 8270C
Benzene	EPA 602
	EPA 624
	EPA 8021B
Chlorobenzene	EPA 601
	EPA 602
	EPA 624
	EPA 8021B
Ethyl benzene	EPA 602
	EPA 624
	EPA 8021B

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Purgeable Aromatics	
Styrene	EPA 8260B
Toluene	EPA 602
	EPA 624
	EPA 8021B
Total Xylenes	EPA 602
	EPA 624
	EPA 8021B
Purgeable Halocarbons	
1,1,1-Trichloroethane	EPA 601
	EPA 624
	EPA 8021B
1,1,2,2-Tetrachloroethane	EPA 601
	EPA 624
	EPA 8021B
1,1,2-Trichloroethane	EPA 601
	EPA 624
	EPA 8021B
1,1-Dichloroethane	EPA 601
	EPA 624
	EPA 8021B
1,1-Dichloroethene	EPA 601
	EPA 624

Purgeable Halocarbons	
1,1-Dichloroethene	EPA 8021B
1,2-Dichloroethane	EPA 601
	EPA 624
	EPA 8021B
1,2-Dichloropropane	EPA 601
	EPA 624
	EPA 8021B
2-Chloroethylvinyl ether	EPA 601
	EPA 624
	EPA 8021B
Bromodichloromethane	EPA 601
	EPA 624
	EPA 8021B
Bromoform	EPA 601
	EPA 624
	EPA 8021B
Bromomethane	EPA 601
	EPA 624
	EPA 8021B
Carbon tetrachloride	EPA 601
	EPA 624
	EPA 8021B
Chloroethane	EPA 601

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Purgeable Halocarbons	
Chloroethane	EPA 624
	EPA 8021B
Chloroform	EPA 601
	EPA 624
	EPA 8021B
Chloromethane	EPA 601
	EPA 624
	EPA 8021B
cis-1,3-Dichloropropene	EPA 601
	EPA 624
	EPA 8021B
Dibromochloromethane	EPA 601
	EPA 624
	EPA 8021B
Dichlorodifluoromethane	EPA 601
	EPA 624
	EPA 8021B
Methylene chloride	EPA 601
	EPA 624
	EPA 8021B
Tetrachloroethene	EPA 601
	EPA 624
	EPA 8021B

Purgeable Halocarbons	
trans-1,2-Dichloroethene	EPA 601
	EPA 624
	EPA 8021B
trans-1,3-Dichloropropene	EPA 601
	EPA 624
	EPA 8021B
Trichloroethene	EPA 601
	EPA 624
	EPA 8021B
Trichlorofluoromethane	EPA 601
	EPA 624
	EPA 8021B
Vinyl chloride	EPA 601
	EPA 624
	EPA 8021B
Purgeable Organics	
2-Butanone (Methylethyl ketone)	EPA 8260B
2-Hexanone	EPA 8260B
4-Methyl-2-Pentanone	EPA 8260B
Acetone	EPA 8260B
Carbon Disulfide	EPA 8260B
Vinyl acetate	EPA 8260B

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Residue	
Solids, Total	EPA 160.3
	SM 18-20 2540B
Solids, Total Dissolved	EPA 160.1
	SM 18-20 2540C
Solids, Total Suspended	EPA 160.2
	SM 18-20 2540D
Semi-Volatile Organics	
2-Methylnaphthalene	EPA 8270C
Benzoic Acid	EPA 8270C
Benzyl alcohol	EPA 8270C
Dibenzofuran	EPA 8270C
Wastewater Metals I	
Barium, Total	EPA 200.7
	EPA 200.8
Cadmium, Total	EPA 200.7
	EPA 200.8
	EPA 6020
Calcium, Total	EPA 200.7
Chromium, Total	EPA 200.7
	EPA 200.8
	EPA 6020
Copper, Total	EPA 200.7

Wastewater Metals I	
Copper, Total	EPA 200.8
	EPA 6020
Iron, Total	EPA 200.7
	SM 18-19 3500-Fe D
Lead, Total	EPA 200.7
	EPA 200.8
Magnesium, Total	EPA 200.7
Manganese, Total	EPA 200.7
	EPA 200.8
Nickel, Total	EPA 200.7
	EPA 200.8
	EPA 6020
Potassium, Total	EPA 200.7
Silver, Total	EPA 200.7
	EPA 200.8
Sodium, Total	EPA 200.7
Wastewater Metals II	
Aluminum, Total	EPA 200.7
	EPA 200.8
Antimony, Total	EPA 200.7
	EPA 200.8
Arsenic, Total	EPA 200.7

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Wastewater Metals II	
Arsenic, Total	EPA 200.8
	EPA 6020
Beryllium, Total	EPA 200.7
	EPA 200.8
Chromium VI	SM 18-19 3500-Cr D
Mercury, Total	EPA 1631E
	EPA 245.1
	EPA 7470A
Selenium, Total	EPA 200.7
	EPA 200.8
	EPA 6020
Vanadium, Total	EPA 200.7
	EPA 200.8
	EPA 6020
Zinc, Total	EPA 200.7
	EPA 200.8
	EPA 6020
Wastewater Metals III	
Cobalt, Total	EPA 200.7
	EPA 200.8
Molybdenum, Total	EPA 200.7
	EPA 200.8

Wastewater Metals III	
Molybdenum, Total	EPA 6020
Thallium, Total	EPA 200.7
	EPA 200.8
Tin, Total	EPA 200.7
Wastewater Miscellaneous	
Boron, Total	EPA 200.7
Bromide	EPA 300.0
Color	EPA 110.2
	SM 18-20 2120B
Cyanide, Total	EPA 335.3
	EPA 335.4
Hydrogen Ion (pH)	EPA 150.1
	SM 18-20 4500-H B
Oil & Grease Total Recoverable	EPA 1664A
Organic Carbon, Total	EPA 415.1
	EPA 9060
Phenols	EPA 420.1
Specific Conductance	EPA 120.1
	SM 18-20 2510B
Sulfide (as S)	EPA 376.1
Surfactant (MBAS)	SM 18-20 5540C
Total Recoverable Petroleum Hydrocarb	EPA 1664A

Sample Preparation Methods

EPA 3010A EPA 3510C EPA 3520C EPA 5030B

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All approved analytes are listed below:

Acrylates	
Acrolein (Propenal)	EPA 8260B
Acrylonitrile	EPA 8260B
Amines	
2-Nitroaniline	EPA 8270C
3-Nitroaniline	EPA 8270C
4-Chloroaniline	EPA 8270C
4-Nitroaniline	EPA 8270C
Carbazole	EPA 8270C
Benzidines	
3,3' -Dichlorobenzidine	EPA 8270C
Characteristic Testing	
Ignitability	EPA 1010
Chlorinated Hydrocarbon Pesticides	
4,4'-DDD	EPA 8081A
4,4'-DDE	EPA 8081A
4,4'-DDT	EPA 8081A
Aldrin	EPA 8081A
alpha-BHC	EPA 8081A
alpha-Chlordane	EPA 8081A
beta-BHC	EPA 8081A

Chlorinated Hydrocarbon Pesticides	
Chlordane Total	EPA 8081A
delta-BHC	EPA 8081A
Dieldrin	EPA 8081A
Endosulfan I	EPA 8081A
Endosulfan II	EPA 8081A
Endosulfan sulfate	EPA 8081A
Endrin	EPA 8081A
Endrin aldehyde	EPA 8081A
Endrin Ketone	EPA 8081A
gamma-Chlordane	EPA 8081A
Heptachlor	EPA 8081A
Heptachlor epoxide	EPA 8081A
Lindane	EPA 8081A
Methoxychlor	EPA 8081A
Toxaphene	EPA 8081A
Chlorinated Hydrocarbons	
1,2,4-Trichlorobenzene	EPA 8270C
2-Chloronaphthalene	EPA 8270C
Hexachlorobenzene	EPA 8270C
Hexachlorobutadiene	EPA 8270C
Hexachlorocyclopentadiene	EPA 8270C
Hexachloroethane	EPA 8270C

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Haloethers	
4-Bromophenylphenyl ether	EPA 8270C
4-Chlorophenylphenyl ether	EPA 8270C
Bis (2-chloroisopropyl) ether	EPA 8270C
Bis(2-chloroethoxy)methane	EPA 8270C
Bis(2-chloroethyl)ether	EPA 8270C
Metals I	
Barium, Total	EPA 6010B
	EPA 6020
Cadmium, Total	EPA 6010B
	EPA 6020
Calcium, Total	EPA 6010B
Chromium, Total	EPA 6010B
	EPA 6020
Copper, Total	EPA 6010B
	EPA 6020
Iron, Total	EPA 6010B
Lead, Total	EPA 6010B
	EPA 6020
Magnesium, Total	EPA 6010B
Manganese, Total	EPA 6010B
	EPA 6020
Nickel, Total	EPA 6010B
Metals I	
Nickel, Total	EPA 6020
Potassium, Total	EPA 6010B
Silver, Total	EPA 6010B
	EPA 6020
Sodium, Total	EPA 6010B
Metals II	
Aluminum, Total	EPA 6010B
	EPA 6020
Antimony, Total	EPA 6010B
	EPA 6020
Arsenic, Total	EPA 6010B
	EPA 6020
Beryllium, Total	EPA 6010B
Chromium VI	EPA 7196A
Mercury, Total	EPA 7471A
Selenium, Total	EPA 6010B
	EPA 6020
Vanadium, Total	EPA 6010B
Zinc, Total	EPA 6010B
	EPA 6020
Metals III	
Cobalt, Total	EPA 6010B

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Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MS. DEBORAH J. NADEAU
KATAHDIN ANALYTICAL SERVICES INC
600 TECHNOLOGY WAY
SCABOROUGH, ME 04074

NY Lab Id No: 11121
EPA Lab Code: ME00019

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE All approved analytes are listed below:

Metals III	
Thallium, Total	EPA 6010B
	EPA 6020
Miscellaneous	
Cyanide, Total	EPA 9012A
Nitroaromatics and Isophorone	
2,4-Dinitrotoluene	EPA 8270C
2,6-Dinitrotoluene	EPA 8270C
Isophorone	EPA 8270C
Nitrobenzene	EPA 8270C
Nitrosoamines	
N-Nitrosodi-n-propylamine	EPA 8270C
N-Nitrosodiphenylamine	EPA 8270C
Phthalate Esters	
Benzyl butyl phthalate	EPA 8270C
Bis(2-ethylhexyl) phthalate	EPA 8270C
Diethyl phthalate	EPA 8270C
Dimethyl phthalate	EPA 8270C
Di-n-butyl phthalate	EPA 8270C
Di-n-octyl phthalate	EPA 8270C
Polychlorinated Biphenyls	
PCB-1016	EPA 8082
PCB-1221	EPA 8082
PCB-1232	EPA 8082
PCB-1242	EPA 8082
PCB-1248	EPA 8082
PCB-1254	EPA 8082
PCB-1260	EPA 8082
Polynuclear Aromatic Hydrocarbons	
Acenaphthene	EPA 8270C
Acenaphthylene	EPA 8270C
Anthracene	EPA 8270C
Benzo(a)anthracene	EPA 8270C
Benzo(a)pyrene	EPA 8270C
Benzo(b)fluoranthene	EPA 8270C
Benzo(ghi)perylene	EPA 8270C
Benzo(k)fluoranthene	EPA 8270C
Chrysene	EPA 8270C
Dibenzo(a,h)anthracene	EPA 8270C
Fluoranthene	EPA 8270C
Fluorene	EPA 8270C
Indeno(1,2,3-cd)pyrene	EPA 8270C
Naphthalene	EPA 8270C

Serial No.: 32709

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify laboratory's accreditation status.

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER
RICHARD F. DAINES, M.D.

Expires 12:01 AM April 01, 2008
Issued April 01, 2007

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MS. DEBORAH J. NADEAU
KATAHDIN ANALYTICAL SERVICES INC
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SCABOROUGH, ME 04074

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EPA Lab Code: ME00019

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Polynuclear Aromatic Hydrocarbons	
Phenanthrene	EPA 8270C
Pyrene	EPA 8270C
Priority Pollutant Phenols	
2,4,5-Trichlorophenol	EPA 8270C
2,4,6-Trichlorophenol	EPA 8270C
2,4-Dichlorophenol	EPA 8270C
2,4-Dimethylphenol	EPA 8270C
2,4-Dinitrophenol	EPA 8270C
2-Chlorophenol	EPA 8270C
2-Methyl-4,6-dinitrophenol	EPA 8270C
2-Methylphenol	EPA 8270C
2-Nitrophenol	EPA 8270C
4-Chloro-3-methylphenol	EPA 8270C
4-Methylphenol	EPA 8270C
4-Nitrophenol	EPA 8270C
Pentachlorophenol	EPA 8270C
Phenol	EPA 8270C
Purgeable Aromatics	
1,2-Dichlorobenzene	EPA 8260B
	EPA 8270C
1,3-Dichlorobenzene	EPA 8260B
	EPA 8270C
Purgeable Aromatics	
1,4-Dichlorobenzene	EPA 8260B
	EPA 8270C
Benzene	EPA 8260B
Chlorobenzene	EPA 8260B
Ethyl benzene	EPA 8260B
Styrene	EPA 8260B
Toluene	EPA 8260B
Total Xylenes	EPA 8260B
Purgeable Halocarbons	
1,1,1-Trichloroethane	EPA 8260B
1,1,2,2-Tetrachloroethane	EPA 8260B
1,1,2-Trichloroethane	EPA 8260B
1,1-Dichloroethane	EPA 8260B
1,1-Dichloroethene	EPA 8260B
1,2-Dichloroethane	EPA 8260B
1,2-Dichloropropane	EPA 8260B
2-Chloroethylvinyl ether	EPA 8260B
Bromodichloromethane	EPA 8260B
Bromoform	EPA 8260B
Bromomethane	EPA 8260B
Carbon tetrachloride	EPA 8260B
Chloroethane	EPA 8260B

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KATAHDIN ANALYTICAL SERVICES INC
600 TECHNOLOGY WAY
SCABOROUGH, ME 04074

NY Lab Id No: 11121
EPA Lab Code: ME00019

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Purgeable Halocarbons

Chloroform	EPA 8260B
Chloromethane	EPA 8260B
cis-1,3-Dichloropropene	EPA 8260B
Dibromochloromethane	EPA 8260B
Dichlorodifluoromethane	EPA 8260B
Methylene chloride	EPA 8260B
Tetrachloroethene	EPA 8260B
trans-1,3-Dichloropropene	EPA 8260B
Trichloroethene	EPA 8260B
Trichlorofluoromethane	EPA 8260B
Vinyl chloride	EPA 8260B

Purgeable Organics

2-Butanone (Methylethyl ketone)	EPA 8260B
2-Hexanone	EPA 8260B
4-Methyl-2-Pentanone	EPA 8260B
Acetone	EPA 8260B
Carbon Disulfide	EPA 8260B
Vinyl acetate	EPA 8260B

Semi-Volatile Organics

2-Methylnaphthalene	EPA 8270C
Benzoic Acid	EPA 8270C
Benzyl alcohol	EPA 8270C

Semi-Volatile Organics

Dibenzofuran	EPA 8270C

Sample Preparation Methods

EPA 1311	EPA 3010A	EPA 3050B	EPA 3580	EPA 5035	EPA 3060A		
EPA 3540C	EPA 3550B	EPA 5030B	EPA 3545	EPA 3540C	EPA 3550B	EPA 5030B	
EPA 5035	EPA 3060A						

Serial No.: 32709

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NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER
RICHARD F. DAINES, M.D.

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MS. DEBORAH J. NADEAU
KATAHDIN ANALYTICAL SERVICES INC
600 TECHNOLOGY WAY
SCABOROUGH, ME 04074

NY Lab Id No: 11121
EPA Lab Code: ME00019

is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES ANALYTICAL SERVICES PROTOCOL
All approved subcategories and/or analytes are listed below:

CLP Semi-Volatile Organics
CLP Volatile Organics
CLP PCB/Pesticides
CLP Inorganics

Serial No.: 32710

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Katahdin
ANALYTICAL SERVICES

Cert. No. E87604

June 20, 2007

Ms. Terri Akbas
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains,NY 10602-0751

RE: Katahdin Lab Number: SA2548
Project ID: Fort Drum Basewide (Spring 07)
Project Manager: Mrs. Andrea Colby
Sample Receipt Date(s): May 25, 2007

Dear Ms. Akbas:

Please find enclosed the following information:

* Report of Analysis (Analytical and/or Field)
* Quality Control Data Summary
* Chain of Custody (COC)
* Login Report

A copy of the Chain of Custody is included in the paginated report. The original COC is attached as an addendum to this report.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact the project manager listed above. This cover letter is an integral part of the ROA.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in an attached technical narrative or in the Report of Analysis.

We appreciate your continued use of our laboratory and look forward to working with you in the future. The following signature indicates technical review and acceptance of the data.

Sincerely,

KATAHDIN ANALYTICAL SERVICES

Deborah J Nadeau
Authorized Signature

06/20/2007
Date

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
MALCOLM PIRNIE
USACOE
SA2548

Sample Receipt

The following samples were received on May 25, 2007 and were logged in under Katahdin Analytical Services work order number SA2548 for a hardcopy due date of June 20, 2007.

KATAHDIN Sample No.	MALCOLM PIRNIE Sample Identification
SA2548-1	TRIP BLANK 5/23/07
SA2548-2	SP052307
SA2548-3	1395-MW28
SA2548-4	1395-MWS1
SA2548-5	1395-MWS2
SA2548-6	1495-MW30
SA2548-7	1495-MW31
SA2548-8	1495-MWS3
SA2548-9	1495-MWS4
SA2548-10	1495-MWX
SA2548-11	BP052407
SA2548-12	2140-MWX
SA2548-13	2140-MW12
SA2548-14	2140-MW14
SA2548-15	2140-MW19
SA2548-16	2140-MW27
SA2548-17	TRIP BLANK 5/24/07
SA2548-18	2140-SW01
SA2548-19	2140-SW02
SA2548-20	2140-SW04
SA2548-21	2140-SW08
SA2548-22	2140-SWOX
SA2548-23	SP 03 (INFLUENT)
SA2548-24	SP 03 (INFLUENT)
SA2548-25	SP 03 (MIDPOINT)
SA2548-26	SP 03 (MIDPOINT)
SA2548-27	SP 03 (EFFLUENT#1)
SA2548-28	SP 03 (EFFLUENT#1)
SA2548-29	SP 03 (EFF.#2)
SA2548-30	SP 03 (EFF.#2)
SA2548-31	SP 03 (EFF.#3)
SA2548-32	SP 03 (EFF.#3)

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Andrea J. Colby**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SA2548 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with an "M" (software-generated) on the pertinent quantitation report.

8260B Analysis

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived for the full list of spiked compounds. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is not to take corrective action until the number of spiked analytes in the LCS that are outside of the QC limits is not greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

Sample SA2548-27 was initially analyzed at a dilution of 1:5 based on sample history, which is labeled with the suffix "DL". This sample was analyzed within analytical hold time and met all QC criteria. The sample was reanalyzed undiluted one day outside of the analytical hold time. The client was notified and informed the laboratory to proceed with narration.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Metals Analysis

The samples of Katahdin Work Order SA2548 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Aqueous Waste", SW-846, November 1986, Third Edition.

Inductively-Coupled Plasma (ICP) Atomic Emission Spectroscopic Analysis

Aqueous-matrix Katahdin Sample Nos. SA2548-(23-32) were digested for ICP analyses on 05/30/07 (QC Batch XE30ICW0) in accordance with USEPA Method 3010B.

ICP analyses of work order SA2548 sample digestates were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010B. All samples were analyzed within holding times and all analytical run QC criteria were met.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Operations Manager or the Quality Assurance Officer as verified by the following signature.

Leslie Dimond
6.20.07

Leslie Dimond
Quality Assurance Officer

DATA QUALIFIERS

U	Indicates the compound was analyzed for but not detected above the laboratory Practical Quantitation Limit.
*	Compound recovery outside of quality control limits.
D	Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.
E	Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
J	Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).
B	Organics- Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample. Metals- Indicates the analyte was detected in the sample at a concentration greater than the instrument detection limit, but less than the laboratory's Practical Quantitation Level.
N	Presumptive evidence of a compound based on a mass spectral library search.
A	Indicates that a tentatively identified compound is a suspected aldol-condensation product.
P	Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns.
MCL	Maximum Contaminant Level
NL	No limit
NFL	No Free Liquid Present
FLP	Free Liquid Present
NOD	No Odor Detected

ADDENDUM
ORIGINAL CHAIN OF CUSTODY

Katahdin ANALYTICAL SERVICES
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

Cooler 1 of 1

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Client	Contact	Phone #	Fax #
Malcolm Pirnie Inc	Terri Akkas	(914) 641-2414	(914) 641-2455

Address	City	State	Zip Code
104 Corporate Park Dr.	White Plains	NY	10602

Purchase Order # Proj #2118-106 Proj. Name / No. Fort Drum Basewide (Spring 07) Katahdin Quote #

Bill (if different than above) Address

Sampler (Print / Sign) Kelley J. Roe, et. al / Kelley J. Roe Copies To:

LAB USE ONLY WORK ORDER #: SA2548

KATAHDIN PROJECT NUMBER

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	ANALYSIS AND CONTAINER TYPE PRESERVATIVES: VOA (8260B) 3x40 mL vial/HCl	VOA (8260B) + MTBE 3x40 mL vial (HCl)*	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N
	TRIP BLANK 5/23/07	— / —	AQ	3	✓										
	SP052307	5/23/07 / 0900	AQ	3	✓										
	1395-MW28	/ 1135	GW	3	✓										
	1395-MWS1	/ 1215		3	✓										
	1395-MWS2	/ 1318		3	✓										
	1495-MW30	5/24/07 1250	GW	3	✓										
	1495-MW31	/ 1111		3	✓										
	1495-MWS3	/ 0923		3	✓										
	1495-MWS4	/ 1337		3	✓										
	1495-MWX	/ —		3	✓										
	BP052407	5/24/07 1600	AQ	3		✓									
	2140-MWX	/ —	GW	3		✓									
	2140-MW12	/ 1600		3		✓									
	2140-MW14	/ 1530		3		✓									
	2140-MW19	/ 1355		3		✓									
	2140-MW27	/ 1245		3		✓									

COMMENTS * BP052407 and 2140- samples should be reported as per NYState DEC STARS VOA, including MTBE.

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Kelley J. Roe		FedEx TRK #8592 06616091			05/25/07 1000
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
		05/25/07 1000			

ORIGINAL

Katahdin ANALYTICAL SERVICES
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

Cooler 1 of 1

CHAIN of CUSTODY

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Client	Contact	Phone #	Fax #
Malcolm Pirnie Inc.	Terri Akbas	(914)641-2414	(914)641-2455

Address	City	State	Zip Code
104 Corporate Park Dr.	White Plains	NY	10602

Purchase Order # Proj # 2118-106 Proj. Name / No. Fort Drum Basewide (Spring 07) Katahdin Quote #

Bill (if different than above) Address

Sampler (Print / Sign) Kelley J. Roe, et. al. Kelley J. Roe Copies To:

LAB USE ONLY WORK ORDER #: SA2548

KATAHDIN PROJECT NUMBER

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	ANALYSIS AND CONTAINER TYPE PRESERVATIVES: Filt. ☐Y ☐N VOAs (8260B) 3x40 ml vial/HCl	Filt. ☐Y ☐N Total Iron 250 ml P./HNO3	Filt. ☒Y ☐N Dissolved Iron 250 ml P./HNO3	Filt. ☐Y ☐N VOAs (8260B)+MTBE* 3x40 ml vials/HCl	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N
	TRIP BLANK 5/24/07	- / -	AQ	3				✓						
	2140-SW01	5/23/07 1315	SW	3				✓						
	2140-SW02	/1245		3				✓						
	2140-SW04	/1145		3				✓						
	2140-SW08	/1215		3				✓						
	2140-SWOX	/-		3				✓						
	SP03 (Influent)	5/24/07 1725	SW	5	✓	✓	✓							
	SP03 (Midpoint)	/1720		5	✓	✓	✓							
	SP03 (Effluent #1)	/1715		5	✓	✓	✓							
	SP03 (Eff. #2)	/1710		5	✓	✓	✓							
	SP03 (Eff. #3)	/1705		5	✓	✓	✓							
		/												
		/												
		/												
		/												
		/												

COMMENTS

*2140 Surface Water samples to be reported as per (8260B) NY State DEC STARS list for VOA, including MTBE.

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Kelley J. Roe		FedEx TRK# 8592 0661 6091			
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

ORIGINAL

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO No:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 05-JUN-2007 17:18
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-23
Client ID: SP 03 (INFLUENT)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39679
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
75-71-8	Dichlorodifluoromethane	U	5	1.0	5	5	0.3
74-87-3	Chloromethane	U	10	1.0	10	10	0.6
75-01-4	Vinyl chloride	U	10	1.0	10	10	0.6
74-83-9	Bromomethane	U	10	1.0	10	10	0.6
75-00-3	Chloroethane	U	10	1.0	10	10	0.5
75-69-4	Trichlorofluoromethane	U	5	1.0	5	5	0.4
60-29-7	Diethyl Ether	U	5	1.0	5	5	0.6
75-35-4	1,1-Dichloroethene	U	5	1.0	5	5	0.6
75-15-0	Carbon Disulfide	U	5	1.0	5	5	0.6
75-09-2	Methylene Chloride	U	5	1.0	5	5	2
67-64-1	Acetone		18	1.0	10	10	3
156-60-5	trans-1,2-Dichloroethene	U	5	1.0	5	5	0.6
1634-04-4	Methyl tert-butyl ether	U	5	1.0	5	5	0.5
75-34-3	1,1-Dichloroethane	U	5	1.0	5	5	0.4
108-05-4	Vinyl Acetate	U	5	1.0	5	5	0.5
156-59-2	cis-1,2-Dichloroethene	U	5	1.0	5	5	0.5
540-59-0	1,2-Dichloroethylene (total)	U	10	1.0	10	10	0.8
594-20-7	2,2-Dichloropropane	U	5	1.0	5	5	0.5
74-97-5	Bromochloromethane	U	5	1.0	5	5	0.5
67-66-3	Chloroform	U	5	1.0	5	5	0.4
56-23-5	Carbon Tetrachloride	U	5	1.0	5	5	0.5
109-99-9	Tetrahydrofuran	U	10	1.0	10	10	3
71-55-6	1,1,1-Trichloroethane	U	5	1.0	5	5	0.5
563-58-6	1,1-Dichloropropene	U	5	1.0	5	5	0.6
78-93-3	2-Butanone	J	9	1.0	10	10	3
71-43-2	Benzene		110	1.0	5	5	0.5
107-06-2	1,2-Dichloroethane	U	5	1.0	5	5	0.4
79-01-6	Trichloroethene	U	5	1.0	5	5	0.4
74-95-3	Dibromomethane	U	5	1.0	5	5	0.4
78-87-5	1,2-Dichloropropane	U	5	1.0	5	5	0.5
75-27-4	Bromodichloromethane	U	5	1.0	5	5	0.4
10061-01-5	cis-1,3-dichloropropene	U	5	1.0	5	5	0.4
108-88-3	Toluene		13	1.0	5	5	0.4
108-10-1	4-methyl-2-pentanone	U	10	1.0	10	10	2
127-18-4	Tetrachloroethene	U	5	1.0	5	5	0.6
10061-02-6	trans-1,3-Dichloropropene	U	5	1.0	5	5	0.4
79-00-5	1,1,2-Trichloroethane	U	5	1.0	5	5	0.5
124-48-1	Dibromochloromethane	U	5	1.0	5	5	0.3
142-28-9	1,3-Dichloropropane	U	5	1.0	5	5	0.3
106-93-4	1,2-Dibromoethane	U	5	1.0	5	5	0.3
591-78-6	2-Hexanone	U	10	1.0	10	10	2
108-90-7	Chlorobenzene	U	5	1.0	5	5	0.3
100-41-4	Ethylbenzene		62	1.0	5	5	0.3

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO No:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 05-JUN-2007 17:18
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-23
Client ID: SP 03 (INFLUENT)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39679
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
630-20-6	1,1,1,2-Tetrachloroethane	U	5	1.0	5	5	0.4
	m+p-Xylenes		84	1.0	10	10	1.0
95-47-6	o-Xylene		30	1.0	5	5	0.4
100-42-5	Styrene	U	5	1.0	5	5	0.3
1330-20-7	Xylenes (total)		110	1.0	15	15	1
75-25-2	Bromoform	U	5	1.0	5	5	0.4
98-82-8	Isopropylbenzene	J	5	1.0	5	5	0.4
108-86-1	Bromobenzene	U	5	1.0	5	5	0.4
103-65-1	N-Propylbenzene		8	1.0	5	5	0.4
79-34-5	1,1,2,2-Tetrachloroethane	U	5	1.0	5	5	0.6
108-67-8	1,3,5-Trimethylbenzene		7	1.0	5	5	0.4
95-49-8	2-Chlorotoluene	U	5	1.0	5	5	0.3
96-18-4	1,2,3-Trichloropropane	U	5	1.0	5	5	0.5
106-43-4	4-Chlorotoluene	U	5	1.0	5	5	0.3
98-06-6	tert-Butylbenzene	U	5	1.0	5	5	0.3
95-63-6	1,2,4-Trimethylbenzene		62	1.0	5	5	0.2
99-87-6	P-Isopropyltoluene	U	5	1.0	5	5	0.4
541-73-1	1,3-Dichlorobenzene	U	5	1.0	5	5	0.4
106-46-7	1,4-Dichlorobenzene	U	5	1.0	5	5	0.4
104-51-8	N-Butylbenzene	J	1	1.0	5	5	0.4
135-98-8	sec-Butylbenzene	U	5	1.0	5	5	0.5
95-50-1	1,2-Dichlorobenzene	U	5	1.0	5	5	0.3
96-12-8	1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5	0.6
108-70-3	1,3,5-Trichlorobenzene	U	5	1.0	5	5	0.4
87-68-3	Hexachlorobutadiene	U	5	1.0	5	5	0.6
120-82-1	1,2,4-Trichlorobenzene	U	5	1.0	5	5	0.4
91-20-3	Naphthalene		31	1.0	5	5	0.5
87-61-6	1,2,3-Trichlorobenzene	U	5	1.0	5	5	0.6
460-00-4	P-Bromofluorobenzene		90%				
2037-26-5	Toluene-D8		91%				
17060-07-0	1,2-Dichloroethane-D4		87%				
1868-53-7	Dibromofluoromethane		87%				

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SP 03 (INFLUENT)

Matrix: WATER **SDG Name:** SA2548

Percent Solids: 0.00 **Lab Sample ID:** SA2548-023

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-89-6	IRON, TOTAL	138000			P	1	100	5.20

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SP 03 (INFLUENT)

Matrix: WATER **SDG Name:** SA2548

Percent Solids: 0.00 **Lab Sample ID:** SA2548-024

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-89-6	IRON, DISSOLVED	17900			P	1	100	5.20

Bottle ID: A

Comments:

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO No:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 05-JUN-2007 17:49
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-25
Client ID: SP 03 (MIDPOINT)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39679
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
75-71-8	Dichlorodifluoromethane	U	5	1.0	5	5	0.3
74-87-3	Chloromethane	U	10	1.0	10	10	0.6
75-01-4	Vinyl chloride	U	10	1.0	10	10	0.6
74-83-9	Bromomethane	U	10	1.0	10	10	0.6
75-00-3	Chloroethane	U	10	1.0	10	10	0.5
75-69-4	Trichlorofluoromethane	U	5	1.0	5	5	0.4
60-29-7	Diethyl Ether	U	5	1.0	5	5	0.6
75-35-4	1,1-Dichloroethene	U	5	1.0	5	5	0.6
75-15-0	Carbon Disulfide	U	5	1.0	5	5	0.6
75-09-2	Methylene Chloride	U	5	1.0	5	5	2
67-64-1	Acetone		57	1.0	10	10	3
156-60-5	trans-1,2-Dichloroethene	U	5	1.0	5	5	0.6
1634-04-4	Methyl tert-butyl ether	U	5	1.0	5	5	0.5
75-34-3	1,1-Dichloroethane	U	5	1.0	5	5	0.4
108-05-4	Vinyl Acetate	U	5	1.0	5	5	0.5
156-59-2	cis-1,2-Dichloroethene	U	5	1.0	5	5	0.5
540-59-0	1,2-Dichloroethylene (total)	U	10	1.0	10	10	0.8
594-20-7	2,2-Dichloropropane	U	5	1.0	5	5	0.5
74-97-5	Bromochloromethane	U	5	1.0	5	5	0.5
67-66-3	Chloroform	U	5	1.0	5	5	0.4
56-23-5	Carbon Tetrachloride	U	5	1.0	5	5	0.5
109-99-9	Tetrahydrofuran	U	10	1.0	10	10	3
71-55-6	1,1,1-Trichloroethane	U	5	1.0	5	5	0.5
563-58-6	1,1-Dichloropropene	U	5	1.0	5	5	0.6
78-93-3	2-Butanone		21	1.0	10	10	3
71-43-2	Benzene		120	1.0	5	5	0.5
107-06-2	1,2-Dichloroethane	U	5	1.0	5	5	0.4
79-01-6	Trichloroethene	U	5	1.0	5	5	0.4
74-95-3	Dibromomethane	U	5	1.0	5	5	0.4
78-87-5	1,2-Dichloropropane	U	5	1.0	5	5	0.5
75-27-4	Bromodichloromethane	U	5	1.0	5	5	0.4
10061-01-5	cis-1,3-dichloropropene	U	5	1.0	5	5	0.4
108-88-3	Toluene		6	1.0	5	5	0.4
108-10-1	4-methyl-2-pentanone	U	10	1.0	10	10	2
127-18-4	Tetrachloroethene	U	5	1.0	5	5	0.6
10061-02-6	trans-1,3-Dichloropropene	U	5	1.0	5	5	0.4
79-00-5	1,1,2-Trichloroethane	U	5	1.0	5	5	0.5
124-48-1	Dibromochloromethane	U	5	1.0	5	5	0.3
142-28-9	1,3-Dichloropropane	U	5	1.0	5	5	0.3
106-93-4	1,2-Dibromoethane	U	5	1.0	5	5	0.3
591-78-6	2-Hexanone	U	10	1.0	10	10	2
108-90-7	Chlorobenzene	U	5	1.0	5	5	0.3
100-41-4	Ethylbenzene		18	1.0	5	5	0.3

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO No:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 05-JUN-2007 17:49
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-25
Client ID: SP 03 (MIDPOINT)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39679
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
630-20-6	1,1,1,2-Tetrachloroethane	U	5	1.0	5	5	0.4
	m+p-Xylenes		28	1.0	10	10	1.0
95-47-6	o-Xylene		21	1.0	5	5	0.4
100-42-5	Styrene	U	5	1.0	5	5	0.3
1330-20-7	Xylenes (total)		49	1.0	15	15	1
75-25-2	Bromoform	U	5	1.0	5	5	0.4
98-82-8	Isopropylbenzene	J	1	1.0	5	5	0.4
108-86-1	Bromobenzene	U	5	1.0	5	5	0.4
103-65-1	N-Propylbenzene	J	0.7	1.0	5	5	0.4
79-34-5	1,1,2,2-Tetrachloroethane	U	5	1.0	5	5	0.6
108-67-8	1,3,5-Trimethylbenzene	J	2	1.0	5	5	0.4
95-49-8	2-Chlorotoluene	U	5	1.0	5	5	0.3
96-18-4	1,2,3-Trichloropropane	U	5	1.0	5	5	0.5
106-43-4	4-Chlorotoluene	U	5	1.0	5	5	0.3
98-06-6	tert-Butylbenzene	U	5	1.0	5	5	0.3
95-63-6	1,2,4-Trimethylbenzene		12	1.0	5	5	0.2
99-87-6	P-Isopropyltoluene	U	5	1.0	5	5	0.4
541-73-1	1,3-Dichlorobenzene	U	5	1.0	5	5	0.4
106-46-7	1,4-Dichlorobenzene	U	5	1.0	5	5	0.4
104-51-8	N-Butylbenzene	U	5	1.0	5	5	0.4
135-98-8	sec-Butylbenzene	U	5	1.0	5	5	0.5
95-50-1	1,2-Dichlorobenzene	U	5	1.0	5	5	0.3
96-12-8	1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5	0.6
108-70-3	1,3,5-Trichlorobenzene	U	5	1.0	5	5	0.4
87-68-3	Hexachlorobutadiene	U	5	1.0	5	5	0.6
120-82-1	1,2,4-Trichlorobenzene	U	5	1.0	5	5	0.4
91-20-3	Naphthalene	J	4	1.0	5	5	0.5
87-61-6	1,2,3-Trichlorobenzene	U	5	1.0	5	5	0.6
460-00-4	P-Bromofluorobenzene		89%				
2037-26-5	Toluene-D8		92%				
17060-07-0	1,2-Dichloroethane-D4		86%				
1868-53-7	Dibromofluoromethane		90%				

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services
Client Field ID: SP 03 (MIDPOINT)
Matrix: WATER
SDG Name: SA2548
Percent Solids: 0.00
Lab Sample ID: SA2548-025

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-89-6	IRON, TOTAL	26100			P	1	100	5.20

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services
Client Field ID: SP 03 (MIDPOINT)
Matrix: WATER
SDG Name: SA2548
Percent Solids: 0.00
Lab Sample ID: SA2548-026

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-89-6	IRON, DISSOLVED	9810			P	1	100	5.20

Bottle ID: A

Comments:

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO No:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 08-JUN-2007 09:17
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-27
Client ID: SP 03 (EFFLUENT#1)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39792
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
75-71-8	Dichlorodifluoromethane	U	5	1.0	5	5	0.3
74-87-3	Chloromethane	U	10	1.0	10	10	0.6
75-01-4	Vinyl chloride	U	10	1.0	10	10	0.6
74-83-9	Bromomethane	U	10	1.0	10	10	0.6
75-00-3	Chloroethane	U	10	1.0	10	10	0.5
75-69-4	Trichlorofluoromethane	U	5	1.0	5	5	0.4
60-29-7	Diethyl Ether	U	5	1.0	5	5	0.6
75-35-4	1,1-Dichloroethene	U	5	1.0	5	5	0.6
75-15-0	Carbon Disulfide	U	5	1.0	5	5	0.6
75-09-2	Methylene Chloride	U	5	1.0	5	5	2
67-64-1	Acetone		110	1.0	10	10	3
156-60-5	trans-1,2-Dichloroethene	U	5	1.0	5	5	0.6
1634-04-4	Methyl tert-butyl ether	U	5	1.0	5	5	0.5
75-34-3	1,1-Dichloroethane	U	5	1.0	5	5	0.4
108-05-4	Vinyl Acetate	U	5	1.0	5	5	0.5
156-59-2	cis-1,2-Dichloroethene	U	5	1.0	5	5	0.5
540-59-0	1,2-Dichloroethylene (total)	U	10	1.0	10	10	0.8
594-20-7	2,2-Dichloropropane	U	5	1.0	5	5	0.5
74-97-5	Bromochloromethane	U	5	1.0	5	5	0.5
67-66-3	Chloroform	U	5	1.0	5	5	0.4
56-23-5	Carbon Tetrachloride	U	5	1.0	5	5	0.5
109-99-9	Tetrahydrofuran	U	10	1.0	10	10	3
71-55-6	1,1,1-Trichloroethane	U	5	1.0	5	5	0.5
563-58-6	1,1-Dichloropropene	U	5	1.0	5	5	0.6
78-93-3	2-Butanone		54	1.0	10	10	3
71-43-2	Benzene	E	330	1.0	5	5	0.5
107-06-2	1,2-Dichloroethane	U	5	1.0	5	5	0.4
79-01-6	Trichloroethene	U	5	1.0	5	5	0.4
74-95-3	Dibromomethane	U	5	1.0	5	5	0.4
78-87-5	1,2-Dichloropropane	U	5	1.0	5	5	0.5
75-27-4	Bromodichloromethane	U	5	1.0	5	5	0.4
10061-01-5	cis-1,3-dichloropropene	U	5	1.0	5	5	0.4
108-88-3	Toluene		16	1.0	5	5	0.4
108-10-1	4-methyl-2-pentanone	U	10	1.0	10	10	2
127-18-4	Tetrachloroethene	U	5	1.0	5	5	0.6
10061-02-6	trans-1,3-Dichloropropene	U	5	1.0	5	5	0.4
79-00-5	1,1,2-Trichloroethane	U	5	1.0	5	5	0.5
124-48-1	Dibromochloromethane	U	5	1.0	5	5	0.3
142-28-9	1,3-Dichloropropane	U	5	1.0	5	5	0.3
106-93-4	1,2-Dibromoethane	U	5	1.0	5	5	0.3
591-78-6	2-Hexanone	U	10	1.0	10	10	2
108-90-7	Chlorobenzene	U	5	1.0	5	5	0.3
100-41-4	Ethylbenzene		130	1.0	5	5	0.3

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO NO:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 08-JUN-2007 09:17
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-27
Client ID: SP 03 (EFFLUENT#1)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39792
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
630-20-6	1,1,1,2-Tetrachloroethane	U	5	1.0	5	5	0.4
	m+p-Xylenes		120	1.0	10	10	1.0
95-47-6	o-Xylene		24	1.0	5	5	0.4
100-42-5	Styrene	U	5	1.0	5	5	0.3
1330-20-7	Xylenes (total)		150	1.0	15	15	1
75-25-2	Bromoform	U	5	1.0	5	5	0.4
98-82-8	Isopropylbenzene		8	1.0	5	5	0.4
108-86-1	Bromobenzene	U	5	1.0	5	5	0.4
103-65-1	N-Propylbenzene		13	1.0	5	5	0.4
79-34-5	1,1,2,2-Tetrachloroethane	U	5	1.0	5	5	0.6
108-67-8	1,3,5-Trimethylbenzene		9	1.0	5	5	0.4
95-49-8	2-Chlorotoluene	U	5	1.0	5	5	0.3
96-18-4	1,2,3-Trichloropropane	U	5	1.0	5	5	0.5
106-43-4	4-Chlorotoluene	U	5	1.0	5	5	0.3
98-06-6	tert-Butylbenzene	U	5	1.0	5	5	0.3
95-63-6	1,2,4-Trimethylbenzene		78	1.0	5	5	0.2
99-87-6	P-Isopropyltoluene	J	1.0	1.0	5	5	0.4
541-73-1	1,3-Dichlorobenzene	U	5	1.0	5	5	0.4
106-46-7	1,4-Dichlorobenzene	U	5	1.0	5	5	0.4
104-51-8	N-Butylbenzene	J	1	1.0	5	5	0.4
135-98-8	sec-Butylbenzene	J	0.5	1.0	5	5	0.5
95-50-1	1,2-Dichlorobenzene	U	5	1.0	5	5	0.3
96-12-8	1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5	0.6
108-70-3	1,3,5-Trichlorobenzene	U	5	1.0	5	5	0.4
87-68-3	Hexachlorobutadiene	U	5	1.0	5	5	0.6
120-82-1	1,2,4-Trichlorobenzene	U	5	1.0	5	5	0.4
91-20-3	Naphthalene		51	1.0	5	5	0.5
87-61-6	1,2,3-Trichlorobenzene	U	5	1.0	5	5	0.6
460-00-4	P-Bromofluorobenzene		91%				
2037-26-5	Toluene-D8		90%				
17060-07-0	1,2-Dichloroethane-D4		91%				
1868-53-7	Dibromofluoromethane		92%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO No:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 05-JUN-2007 18:20
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-27DL
Client ID: SP 03 (EFFLUENT#1)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39679
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
75-71-8	Dichlorodifluoromethane	U	25	5.0	5	25	1
74-87-3	Chloromethane	U	50	5.0	10	50	3
75-01-4	Vinyl chloride	U	50	5.0	10	50	3
74-83-9	Bromomethane	U	50	5.0	10	50	3
75-00-3	Chloroethane	U	50	5.0	10	50	2
75-69-4	Trichlorofluoromethane	U	25	5.0	5	25	2
60-29-7	Diethyl Ether	U	25	5.0	5	25	3
75-35-4	1,1-Dichloroethene	U	25	5.0	5	25	3
75-15-0	Carbon Disulfide	U	25	5.0	5	25	3
75-09-2	Methylene Chloride	U	25	5.0	5	25	12
67-64-1	Acetone		120	5.0	10	50	16
156-60-5	trans-1,2-Dichloroethene	U	25	5.0	5	25	3
1634-04-4	Methyl tert-butyl ether	U	25	5.0	5	25	2
75-34-3	1,1-Dichloroethane	U	25	5.0	5	25	2
108-05-4	Vinyl Acetate	U	25	5.0	5	25	2
156-59-2	cis-1,2-Dichloroethene	U	25	5.0	5	25	3
540-59-0	1,2-Dichloroethylene (total)	U	50	5.0	10	50	4
594-20-7	2,2-Dichloropropane	U	25	5.0	5	25	2
74-97-5	Bromochloromethane	U	25	5.0	5	25	2
67-66-3	Chloroform	U	25	5.0	5	25	2
56-23-5	Carbon Tetrachloride	U	25	5.0	5	25	3
109-99-9	Tetrahydrofuran	U	50	5.0	10	50	14
71-55-6	1,1,1-Trichloroethane	U	25	5.0	5	25	2
563-58-6	1,1-Dichloropropene	U	25	5.0	5	25	3
78-93-3	2-Butanone		52	5.0	10	50	14
71-43-2	Benzene		310	5.0	5	25	2
107-06-2	1,2-Dichloroethane	U	25	5.0	5	25	2
79-01-6	Trichloroethene	U	25	5.0	5	25	2
74-95-3	Dibromomethane	U	25	5.0	5	25	2
78-87-5	1,2-Dichloropropane	U	25	5.0	5	25	3
75-27-4	Bromodichloromethane	U	25	5.0	5	25	2
10061-01-5	cis-1,3-dichloropropene	U	25	5.0	5	25	2
108-88-3	Toluene	J	14	5.0	5	25	2
108-10-1	4-methyl-2-pentanone	U	50	5.0	10	50	12
127-18-4	Tetrachloroethene	U	25	5.0	5	25	3
10061-02-6	trans-1,3-Dichloropropene	U	25	5.0	5	25	2
79-00-5	1,1,2-Trichloroethane	U	25	5.0	5	25	3
124-48-1	Dibromochloromethane	U	25	5.0	5	25	2
142-28-9	1,3-Dichloropropane	U	25	5.0	5	25	2
106-93-4	1,2-Dibromoethane	U	25	5.0	5	25	2
591-78-6	2-Hexanone	U	50	5.0	10	50	11
108-90-7	Chlorobenzene	U	25	5.0	5	25	1
100-41-4	Ethylbenzene		120	5.0	5	25	2

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO No:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 05-JUN-2007 18:20
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-27DL
Client ID: SP 03 (EFFLUENT#1)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39679
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
630-20-6	1,1,1,2-Tetrachloroethane	U	25	5.0	5	25	2
	m+p-Xylenes		110	5.0	10	50	5
95-47-6	o-Xylene	J	21	5.0	5	25	2
100-42-5	Styrene	U	25	5.0	5	25	2
1330-20-7	Xylenes (total)		130	5.0	15	75	6
75-25-2	Bromoform	U	25	5.0	5	25	2
98-82-8	Isopropylbenzene	J	6	5.0	5	25	2
108-86-1	Bromobenzene	U	25	5.0	5	25	2
103-65-1	N-Propylbenzene	J	10	5.0	5	25	2
79-34-5	1,1,2,2-Tetrachloroethane	U	25	5.0	5	25	3
108-67-8	1,3,5-Trimethylbenzene	J	8	5.0	5	25	2
95-49-8	2-Chlorotoluene	U	25	5.0	5	25	2
96-18-4	1,2,3-Trichloropropane	U	25	5.0	5	25	2
106-43-4	4-Chlorotoluene	U	25	5.0	5	25	2
98-06-6	tert-Butylbenzene	U	25	5.0	5	25	2
95-63-6	1,2,4-Trimethylbenzene		70	5.0	5	25	1
99-87-6	P-Isopropyltoluene	U	25	5.0	5	25	2
541-73-1	1,3-Dichlorobenzene	U	25	5.0	5	25	2
106-46-7	1,4-Dichlorobenzene	U	25	5.0	5	25	2
104-51-8	N-Butylbenzene	U	25	5.0	5	25	2
135-98-8	sec-Butylbenzene	U	25	5.0	5	25	3
95-50-1	1,2-Dichlorobenzene	U	25	5.0	5	25	2
96-12-8	1,2-Dibromo-3-Chloropropane	U	25	5.0	5	25	3
108-70-3	1,3,5-Trichlorobenzene	U	25	5.0	5	25	2
87-68-3	Hexachlorobutadiene	U	25	5.0	5	25	3
120-82-1	1,2,4-Trichlorobenzene	U	25	5.0	5	25	2
91-20-3	Naphthalene		41	5.0	5	25	2
87-61-6	1,2,3-Trichlorobenzene	U	25	5.0	5	25	3
460-00-4	P-Bromofluorobenzene		87%				
2037-26-5	Toluene-D8		90%				
17060-07-0	1,2-Dichloroethane-D4		87%				
1868-53-7	Dibromofluoromethane		89%				

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SP 03 (EFFLUENT#1)

Matrix: WATER **SDG Name:** SA2548

Percent Solids: 0.00 **Lab Sample ID:** SA2548-027

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-89-6	IRON, TOTAL	49200			P	1	100	5.20

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SP 03 (EFFLUENT#1)

Matrix: WATER **SDG Name:** SA2548

Percent Solids: 0.00 **Lab Sample ID:** SA2548-028

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-89-6	IRON, DISSOLVED	32100			P	1	100	5.20

Bottle ID: A

Comments:

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO No:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 05-JUN-2007 18:51
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-29
Client ID: SP 03 (EFF. #2)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39679
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
75-71-8	Dichlorodifluoromethane	U	5	1.0	5	5	0.3
74-87-3	Chloromethane	U	10	1.0	10	10	0.6
75-01-4	Vinyl chloride	U	10	1.0	10	10	0.6
74-83-9	Bromomethane	U	10	1.0	10	10	0.6
75-00-3	Chloroethane	U	10	1.0	10	10	0.5
75-69-4	Trichlorofluoromethane	U	5	1.0	5	5	0.4
60-29-7	Diethyl Ether	U	5	1.0	5	5	0.6
75-35-4	1,1-Dichloroethene	U	5	1.0	5	5	0.6
75-15-0	Carbon Disulfide	U	5	1.0	5	5	0.6
75-09-2	Methylene Chloride	U	5	1.0	5	5	2
67-64-1	Acetone		30	1.0	10	10	3
156-60-5	trans-1,2-Dichloroethene	U	5	1.0	5	5	0.6
1634-04-4	Methyl tert-butyl ether	U	5	1.0	5	5	0.5
75-34-3	1,1-Dichloroethane	U	5	1.0	5	5	0.4
108-05-4	Vinyl Acetate	U	5	1.0	5	5	0.5
156-59-2	cis-1,2-Dichloroethene	U	5	1.0	5	5	0.5
540-59-0	1,2-Dichloroethylene (total)	U	10	1.0	10	10	0.8
594-20-7	2,2-Dichloropropane	U	5	1.0	5	5	0.5
74-97-5	Bromochloromethane	U	5	1.0	5	5	0.5
67-66-3	Chloroform	U	5	1.0	5	5	0.4
56-23-5	Carbon Tetrachloride	U	5	1.0	5	5	0.5
109-99-9	Tetrahydrofuran	U	10	1.0	10	10	3
71-55-6	1,1,1-Trichloroethane	U	5	1.0	5	5	0.5
563-58-6	1,1-Dichloropropene	U	5	1.0	5	5	0.6
78-93-3	2-Butanone		14	1.0	10	10	3
71-43-2	Benzene	E	230	1.0	5	5	0.5
107-06-2	1,2-Dichloroethane	U	5	1.0	5	5	0.4
79-01-6	Trichloroethene	U	5	1.0	5	5	0.4
74-95-3	Dibromomethane	U	5	1.0	5	5	0.4
78-87-5	1,2-Dichloropropane	U	5	1.0	5	5	0.5
75-27-4	Bromodichloromethane	U	5	1.0	5	5	0.4
10061-01-5	cis-1,3-dichloropropene	U	5	1.0	5	5	0.4
108-88-3	Toluene		6	1.0	5	5	0.4
108-10-1	4-methyl-2-pentanone	U	10	1.0	10	10	2
127-18-4	Tetrachloroethene	U	5	1.0	5	5	0.6
10061-02-6	trans-1,3-Dichloropropene	U	5	1.0	5	5	0.4
79-00-5	1,1,2-Trichloroethane	U	5	1.0	5	5	0.5
124-48-1	Dibromochloromethane	U	5	1.0	5	5	0.3
142-28-9	1,3-Dichloropropane	U	5	1.0	5	5	0.3
106-93-4	1,2-Dibromoethane	U	5	1.0	5	5	0.3
591-78-6	2-Hexanone	U	10	1.0	10	10	2
108-90-7	Chlorobenzene	U	5	1.0	5	5	0.3
100-41-4	Ethylbenzene		88	1.0	5	5	0.3

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO No:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 05-JUN-2007 18:51
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-29
Client ID: SP 03 (EFF. #2)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39679
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
630-20-6	1,1,1,2-Tetrachloroethane	U	5	1.0	5	5	0.4
	m+p-Xylenes		58	1.0	10	10	1.0
95-47-6	o-Xylene		30	1.0	5	5	0.4
100-42-5	Styrene	U	5	1.0	5	5	0.3
1330-20-7	Xylenes (total)		88	1.0	15	15	1
75-25-2	Bromoform	U	5	1.0	5	5	0.4
98-82-8	Isopropylbenzene		6	1.0	5	5	0.4
108-86-1	Bromobenzene	U	5	1.0	5	5	0.4
103-65-1	N-Propylbenzene		7	1.0	5	5	0.4
79-34-5	1,1,2,2-Tetrachloroethane	U	5	1.0	5	5	0.6
108-67-8	1,3,5-Trimethylbenzene		9	1.0	5	5	0.4
95-49-8	2-Chlorotoluene	U	5	1.0	5	5	0.3
96-18-4	1,2,3-Trichloropropane	U	5	1.0	5	5	0.5
106-43-4	4-Chlorotoluene	U	5	1.0	5	5	0.3
98-06-6	tert-Butylbenzene	U	5	1.0	5	5	0.3
95-63-6	1,2,4-Trimethylbenzene		65	1.0	5	5	0.2
99-87-6	P-Isopropyltoluene	U	5	1.0	5	5	0.4
541-73-1	1,3-Dichlorobenzene	U	5	1.0	5	5	0.4
106-46-7	1,4-Dichlorobenzene	U	5	1.0	5	5	0.4
104-51-8	N-Butylbenzene	J	0.6	1.0	5	5	0.4
135-98-8	sec-Butylbenzene	U	5	1.0	5	5	0.5
95-50-1	1,2-Dichlorobenzene	U	5	1.0	5	5	0.3
96-12-8	1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5	0.6
108-70-3	1,3,5-Trichlorobenzene	U	5	1.0	5	5	0.4
87-68-3	Hexachlorobutadiene	U	5	1.0	5	5	0.6
120-82-1	1,2,4-Trichlorobenzene	U	5	1.0	5	5	0.4
91-20-3	Naphthalene		30	1.0	5	5	0.5
87-61-6	1,2,3-Trichlorobenzene	U	5	1.0	5	5	0.6
460-00-4	P-Bromofluorobenzene		92%				
2037-26-5	Toluene-D8		90%				
17060-07-0	1,2-Dichloroethane-D4		86%				
1868-53-7	Dibromofluoromethane		88%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO No:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 06-JUN-2007 09:10
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-29DL
Client ID: SP 03 (EFF. #2)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39697
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
75-71-8	Dichlorodifluoromethane	U	10	2.0	5	10	0.6
74-87-3	Chloromethane	U	20	2.0	10	20	1
75-01-4	Vinyl chloride	U	20	2.0	10	20	1
74-83-9	Bromomethane	U	20	2.0	10	20	1
75-00-3	Chloroethane	U	20	2.0	10	20	0.9
75-69-4	Trichlorofluoromethane	U	10	2.0	5	10	0.7
60-29-7	Diethyl Ether	U	10	2.0	5	10	1
75-35-4	1,1-Dichloroethene	U	10	2.0	5	10	1
75-15-0	Carbon Disulfide	U	10	2.0	5	10	1
75-09-2	Methylene Chloride	U	10	2.0	5	10	5
67-64-1	Acetone		39	2.0	10	20	6
156-60-5	trans-1,2-Dichloroethene	U	10	2.0	5	10	1
1634-04-4	Methyl tert-butyl ether	U	10	2.0	5	10	1
75-34-3	1,1-Dichloroethane	U	10	2.0	5	10	0.8
108-05-4	Vinyl Acetate	U	10	2.0	5	10	1
156-59-2	cis-1,2-Dichloroethene	U	10	2.0	5	10	1
540-59-0	1,2-Dichloroethylene (total)	U	20	2.0	10	20	2
594-20-7	2,2-Dichloropropane	U	10	2.0	5	10	0.9
74-97-5	Bromochloromethane	U	10	2.0	5	10	1
67-66-3	Chloroform	U	10	2.0	5	10	0.7
56-23-5	Carbon Tetrachloride	U	10	2.0	5	10	1
109-99-9	Tetrahydrofuran	U	20	2.0	10	20	5
71-55-6	1,1,1-Trichloroethane	U	10	2.0	5	10	0.9
563-58-6	1,1-Dichloropropene	U	10	2.0	5	10	1
78-93-3	2-Butanone	J	20	2.0	10	20	5
71-43-2	Benzene		230	2.0	5	10	1
107-06-2	1,2-Dichloroethane	U	10	2.0	5	10	0.8
79-01-6	Trichloroethene	U	10	2.0	5	10	0.8
74-95-3	Dibromomethane	U	10	2.0	5	10	0.8
78-87-5	1,2-Dichloropropane	U	10	2.0	5	10	1
75-27-4	Bromodichloromethane	U	10	2.0	5	10	0.8
10061-01-5	cis-1,3-dichloropropene	U	10	2.0	5	10	0.8
108-88-3	Toluene	J	6	2.0	5	10	0.9
108-10-1	4-methyl-2-pentanone	U	20	2.0	10	20	5
127-18-4	Tetrachloroethene	U	10	2.0	5	10	1
10061-02-6	trans-1,3-Dichloropropene	U	10	2.0	5	10	0.8
79-00-5	1,1,2-Trichloroethane	U	10	2.0	5	10	1
124-48-1	Dibromochloromethane	U	10	2.0	5	10	0.7
142-28-9	1,3-Dichloropropane	U	10	2.0	5	10	0.6
106-93-4	1,2-Dibromoethane	U	10	2.0	5	10	0.6
591-78-6	2-Hexanone	U	20	2.0	10	20	4
108-90-7	Chlorobenzene	U	10	2.0	5	10	0.6
100-41-4	Ethylbenzene		85	2.0	5	10	0.6

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO NO:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 06-JUN-2007 09:10
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-29DL
Client ID: SP 03 (EFF. #2)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39697
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
630-20-6	1,1,1,2-Tetrachloroethane	U	10	2.0	5	10	0.7
	m+p-Xylenes		54	2.0	10	20	2
95-47-6	o-Xylene		28	2.0	5	10	0.9
100-42-5	Styrene	U	10	2.0	5	10	0.6
1330-20-7	Xylenes (total)		82	2.0	15	30	2
75-25-2	Bromoform	U	10	2.0	5	10	0.8
98-82-8	Isopropylbenzene	J	4	2.0	5	10	0.8
108-86-1	Bromobenzene	U	10	2.0	5	10	0.7
103-65-1	N-Propylbenzene	J	6	2.0	5	10	0.7
79-34-5	1,1,2,2-Tetrachloroethane	U	10	2.0	5	10	1
108-67-8	1,3,5-Trimethylbenzene	J	7	2.0	5	10	0.7
95-49-8	2-Chlorotoluene	U	10	2.0	5	10	0.7
96-18-4	1,2,3-Trichloropropane	U	10	2.0	5	10	1.0
106-43-4	4-Chlorotoluene	U	10	2.0	5	10	0.7
98-06-6	tert-Butylbenzene	U	10	2.0	5	10	0.6
95-63-6	1,2,4-Trimethylbenzene		61	2.0	5	10	0.4
99-87-6	P-Isopropyltoluene	U	10	2.0	5	10	0.8
541-73-1	1,3-Dichlorobenzene	U	10	2.0	5	10	0.7
106-46-7	1,4-Dichlorobenzene	U	10	2.0	5	10	0.8
104-51-8	N-Butylbenzene	U	10	2.0	5	10	0.8
135-98-8	sec-Butylbenzene	U	10	2.0	5	10	1
95-50-1	1,2-Dichlorobenzene	U	10	2.0	5	10	0.7
96-12-8	1,2-Dibromo-3-Chloropropane	U	10	2.0	5	10	1
108-70-3	1,3,5-Trichlorobenzene	U	10	2.0	5	10	0.8
87-68-3	Hexachlorobutadiene	U	10	2.0	5	10	1
120-82-1	1,2,4-Trichlorobenzene	U	10	2.0	5	10	0.9
91-20-3	Naphthalene		26	2.0	5	10	1
87-61-6	1,2,3-Trichlorobenzene	U	10	2.0	5	10	1
460-00-4	P-Bromofluorobenzene		90%				
2037-26-5	Toluene-D8		91%				
17060-07-0	1,2-Dichloroethane-D4		90%				
1868-53-7	Dibromofluoromethane		92%				

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SP 03 (EFF. #2)

Matrix: WATER **SDG Name:** SA2548

Percent Solids: 0.00 **Lab Sample ID:** SA2548-029

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-89-6	IRON, TOTAL	62000			P	1	100	5.20

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SP 03 (EFF. #2)

Matrix: WATER **SDG Name:** SA2548

Percent Solids: 0.00 **Lab Sample ID:** SA2548-030

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-89-6	IRON, DISSOLVED	27600			P	1	100	5.20

Bottle ID: A

Comments:

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO No:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 05-JUN-2007 19:22
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-31
Client ID: SP 03 (EFF. #3)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39679
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
75-71-8	Dichlorodifluoromethane	U	5	1.0	5	5	0.3
74-87-3	Chloromethane	U	10	1.0	10	10	0.6
75-01-4	Vinyl chloride	U	10	1.0	10	10	0.6
74-83-9	Bromomethane	U	10	1.0	10	10	0.6
75-00-3	Chloroethane	U	10	1.0	10	10	0.5
75-69-4	Trichlorofluoromethane	U	5	1.0	5	5	0.4
60-29-7	Diethyl Ether	U	5	1.0	5	5	0.6
75-35-4	1,1-Dichloroethene	U	5	1.0	5	5	0.6
75-15-0	Carbon Disulfide	U	5	1.0	5	5	0.6
75-09-2	Methylene Chloride	U	5	1.0	5	5	2
67-64-1	Acetone	J	5	1.0	10	10	3
156-60-5	trans-1,2-Dichloroethene	U	5	1.0	5	5	0.6
1634-04-4	Methyl tert-butyl ether	U	5	1.0	5	5	0.5
75-34-3	1,1-Dichloroethane	U	5	1.0	5	5	0.4
108-05-4	Vinyl Acetate	U	5	1.0	5	5	0.5
156-59-2	cis-1,2-Dichloroethene	U	5	1.0	5	5	0.5
540-59-0	1,2-Dichloroethylene (total)	U	10	1.0	10	10	0.8
594-20-7	2,2-Dichloropropane	U	5	1.0	5	5	0.5
74-97-5	Bromochloromethane	U	5	1.0	5	5	0.5
67-66-3	Chloroform	U	5	1.0	5	5	0.4
56-23-5	Carbon Tetrachloride	U	5	1.0	5	5	0.5
109-99-9	Tetrahydrofuran	U	10	1.0	10	10	3
71-55-6	1,1,1-Trichloroethane	U	5	1.0	5	5	0.5
563-58-6	1,1-Dichloropropene	U	5	1.0	5	5	0.6
78-93-3	2-Butanone	U	10	1.0	10	10	3
71-43-2	Benzene	U	5	1.0	5	5	0.5
107-06-2	1,2-Dichloroethane	U	5	1.0	5	5	0.4
79-01-6	Trichloroethene	U	5	1.0	5	5	0.4
74-95-3	Dibromomethane	U	5	1.0	5	5	0.4
78-87-5	1,2-Dichloropropane	U	5	1.0	5	5	0.5
75-27-4	Bromodichloromethane	U	5	1.0	5	5	0.4
10061-01-5	cis-1,3-dichloropropene	U	5	1.0	5	5	0.4
108-88-3	Toluene	U	5	1.0	5	5	0.4
108-10-1	4-methyl-2-pentanone	U	10	1.0	10	10	2
127-18-4	Tetrachloroethene	U	5	1.0	5	5	0.6
10061-02-6	trans-1,3-Dichloropropene	U	5	1.0	5	5	0.4
79-00-5	1,1,2-Trichloroethane	U	5	1.0	5	5	0.5
124-48-1	Dibromochloromethane	U	5	1.0	5	5	0.3
142-28-9	1,3-Dichloropropane	U	5	1.0	5	5	0.3
106-93-4	1,2-Dibromoethane	U	5	1.0	5	5	0.3
591-78-6	2-Hexanone	U	10	1.0	10	10	2
108-90-7	Chlorobenzene	U	5	1.0	5	5	0.3
100-41-4	Ethylbenzene	U	5	1.0	5	5	0.3

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Fort Drum Basewide (Spring 07)
PO No:
Sample Date: 05/24/07
Received Date: 05/25/07
Extraction Date:
Analysis Date: 05-JUN-2007 19:22
Report Date: 06/14/2007
Matrix: WATER
% Solids: NA

Lab ID: SA2548-31
Client ID: SP 03 (EFF. #3)
SDG: SA2548
Extracted by:
Extraction Method: SW846 5030
Analyst: SKT
Analysis Method: SW846 8260B
Lab Prep Batch: WG39679
Units: ug/l

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
630-20-6	1,1,1,2-Tetrachloroethane	U	5	1.0	5	5	0.4
	m+p-Xylenes	U	10	1.0	10	10	1.0
95-47-6	o-Xylene	U	5	1.0	5	5	0.4
100-42-5	Styrene	U	5	1.0	5	5	0.3
1330-20-7	Xylenes (total)	U	15	1.0	15	15	1
75-25-2	Bromoform	U	5	1.0	5	5	0.4
98-82-8	Isopropylbenzene	U	5	1.0	5	5	0.4
108-86-1	Bromobenzene	U	5	1.0	5	5	0.4
103-65-1	N-Propylbenzene	U	5	1.0	5	5	0.4
79-34-5	1,1,2,2-Tetrachloroethane	U	5	1.0	5	5	0.6
108-67-8	1,3,5-Trimethylbenzene	U	5	1.0	5	5	0.4
95-49-8	2-Chlorotoluene	U	5	1.0	5	5	0.3
96-18-4	1,2,3-Trichloropropane	U	5	1.0	5	5	0.5
106-43-4	4-Chlorotoluene	U	5	1.0	5	5	0.3
98-06-6	tert-Butylbenzene	U	5	1.0	5	5	0.3
95-63-6	1,2,4-Trimethylbenzene	U	5	1.0	5	5	0.2
99-87-6	P-Isopropyltoluene	U	5	1.0	5	5	0.4
541-73-1	1,3-Dichlorobenzene	U	5	1.0	5	5	0.4
106-46-7	1,4-Dichlorobenzene	U	5	1.0	5	5	0.4
104-51-8	N-Butylbenzene	U	5	1.0	5	5	0.4
135-98-8	sec-Butylbenzene	U	5	1.0	5	5	0.5
95-50-1	1,2-Dichlorobenzene	U	5	1.0	5	5	0.3
96-12-8	1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5	0.6
108-70-3	1,3,5-Trichlorobenzene	U	5	1.0	5	5	0.4
87-68-3	Hexachlorobutadiene	U	5	1.0	5	5	0.6
120-82-1	1,2,4-Trichlorobenzene	U	5	1.0	5	5	0.4
91-20-3	Naphthalene	U	5	1.0	5	5	0.5
87-61-6	1,2,3-Trichlorobenzene	U	5	1.0	5	5	0.6
460-00-4	P-Bromofluorobenzene		85%				
2037-26-5	Toluene-D8		88%				
17060-07-0	1,2-Dichloroethane-D4		85%				
1868-53-7	Dibromofluoromethane		87%				

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SP 03 (EFF. #3)

Matrix: WATER **SDG Name:** SA2548

Percent Solids: 0.00 **Lab Sample ID:** SA2548-031

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-89-6	IRON, TOTAL	1940			P	1	100	5.20

Bottle ID: A

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SP 03 (EFF. #3)

Matrix: WATER **SDG Name:** SA2548

Percent Solids: 0.00 **Lab Sample ID:** SA2548-032

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	Adjusted PQL	Adjusted IDL
7439-89-6	IRON, DISSOLVED	9.2	B		P	1	100	5.20

Bottle ID: A

Comments:

Katahdin
ANALYTICAL SERVICES

Cert. No. E87604

August 9, 2007

Ms. AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains,NY 10602-0751

RE: Katahdin Lab Number: SA3785
Project ID: Phytoremediation Full Scale
Project Manager: Mrs. Andrea Colby
Sample Receipt Date(s): July 19, 2007

Dear Ms. Accardi-Dey:

Please find enclosed the following information:

* Report of Analysis (Analytical and/or Field)
* Quality Control Data Summary
* Chain of Custody (COC)
* Login Report

A copy of the Chain of Custody is included in the paginated report. The original COC is attached as an addendum to this report.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact the project manager listed above. This cover letter is an integral part of the ROA.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in an attached technical narrative or in the Report of Analysis.

We appreciate your continued use of our laboratory and look forward to working with you in the future. The following signature indicates technical review and acceptance of the data.

Sincerely,

KATAHDIN ANALYTICAL SERVICES

Deborah J. Nadeau
Authorized Signature

08/09/2007
Date

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
MALCOLM PIRNIE
PHYTOREMEDIATION FULL SCALE
SA3785

Sample Receipt

The following samples were received on July 19, 2007 and were logged in under Katahdin Analytical Services work order number SA3785 for a hardcopy due date of August 14, 2007.

KATAHDIN Sample No.	MALCOLM PIRNIE Sample Identification
SA3785-1	ZONE A1-INF
SA3785-2	ZONE A1-INF
SA3785-3	ZONE A2-INF
SA3785-4	ZONE A2-INF
SA3785-5	ZONE B2-INF
SA3785-6	ZONE B2-INF
SA3785-7	ZONE C2-INF
SA3785-8	ZONE C2-INF
SA3785-9	ZONE D1-INF
SA3785-10	ZONE D1-INF
SA3785-11	ZONE E1-INF
SA3785-12	ZONE E1-INF
SA3785-13	ZONE F1-INF
SA3785-14	ZONE F1-INF
SA3785-15	ZONE F2-INF
SA3785-16	ZONE F2-INF
SA3785-17	SP03-MID
SA3785-18	SP03-EFF#1
SA3785-19	SP03-EFF#2
SA3785-20	SP03-EFF#3
SA3785-21	DUPLICATE
SA3785-22	DUPLICATE
SA3785-23	TRIP BLANK

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Andrea J. Colby**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SA3785 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with an "M" (software-generated) on the pertinent quantitation reports.

8260B Analysis

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived for the full list of spiked compounds. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

The laboratory method blank WG41663-2 had a high recovery for the surrogate toluene-d8, which was outside the laboratory established acceptance limits. Since a high recovery would indicate a high bias and there were no target analytes detected above the PQL, the associated samples were not reanalyzed.

Sample SA3785-3DL had a recovery of 80% for the surrogate p-bromofluorobenzene, which is low and outside of the laboratory established acceptance limits of 81-117%. Since the undiluted analysis had acceptable surrogate recoveries, the dilution was not reanalyzed.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Metals Analysis

The sample of Katahdin Work Order SA3785 was prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Aqueous Waste", SW-846, November 1986, Third Edition.

Inductively-Coupled Plasma (ICP) Atomic Emission Spectroscopic Analysis

Aqueous-matrix Katahdin Sample Nos. SA3785-(1-16, 21, and 22) were digested for ICP analysis on 07/20/07 (QC Batch XG20ICW1) in accordance with USEPA Method 3010B.

ICP analyses of work order SA3785 sample digestates were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010B. All samples were analyzed within holding times and all analytical run QC criteria were met.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Operations Manager or the Quality Assurance Officer as verified by the following signature.

Leslie Dimond
8.9.07

Leslie Dimond
Quality Assurance Officer

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the laboratory Practical Quantitation Limit.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).

or

J Used for Pesticide/Aroclor analyte when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

(Refer to BOD Qualifiers Page for BOD footnotes)

U	Indicates the compound was analyzed for but not detected above the laboratory Practical Quantitation Limit.
E	Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
J	Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).
I-7	The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
A-4	Please refer to cover letter or narrative for further information.
MCL	Maximum Contaminant Level
NL	No limit
NFL	No Free Liquid Present
FLP	Free Liquid Present
NOD	No Odor Detected
H1	Please note that the regulatory holding time for pH is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. pH for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
H2	Please note that the regulatory holding time for DO is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. DO for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
H3	Please note that the regulatory holding time for sulfite is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Sulfite for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
H4	Please note that the regulatory holding time for residual chlorine is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Residual chlorine for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

ADDENDUM
ORIGINAL CHAIN OF CUSTODY

Katahdin ANALYTICAL SERVICES
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Client: Malcolm Pirnie, Inc (Att: A. Accardi-Dey) | Contact: Amy Marie Accardi-Dey | Phone #: (914) 641-2699 | Fax #: (914) 641-2455

Address: 104 Corporate Park Drive | City: White Plaines | State: NY | Zip Code: 10604

Purchase Order #: Proj. # 2118-124 | Proj. Name / No.: Phytoremediation Full Scale 2118124 | Katahdin Quote #:

Bill (if different than above): | Address:

Sampler (Print / Sign): Amy Marie Accardi Dey & Kelley J. Roe | Copies To:

LAB USE ONLY | WORK ORDER #: SA3785

KATAHDIN PROJECT NUMBER:

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C: ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	ANALYSIS AND CONTAINER TYPE PRESERVATIVES: VOC (8260B) 40 mL vial / HCl	Total Iron 125 mL P. / HNO3	Hardness 125 mL P. / HNO3	Dissolve Lead 125 mL P. / HNO3	Filt. ☐Y ☒N (all)	Filt. ☐Y ☐N (remaining)
Zone A1-INF	7/17/07 1235 1300	SW	5	✓	✓	✓	✓		
Zone A2-INF	7/17/07/1515			✓	✓	✓	✓		
Zone B2-INF	7/17/07/1300			✓	✓	✓	✓		
Zone C2-INF	7/17/07/1125			✓	✓	✓	✓		
Zone D1-INF	7/17/07/1055			✓	✓	✓	✓		
Zone E1-INF	7/18/07/1320			✓	✓	✓	✓		
Zone F1-INF	7/18/07/1610			✓	✓	✓	✓		
Zone F2-INF	7/18/07/1550			✓	✓	✓	✓		
SP03-MID	7/17/07/1500		3	✓					
SP03-EFF#1	7/17/07/1450		3	✓					
SP03-EFF#2	7/17/07/1440		3	✓					
SP03-EFF#3	7/17/07/1430		3	✓					
DUPLICATE	7/18/07/—		5	✓	✓	✓	✓		
TRIP BLANK	7/19/07/0930	AQ	2	✓					
	/								
	/								

COMMENTS: Please note "SP03-Eff#1", VOA bottle #1, may be low on HCl (overfilled during sampling)

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Kelley J. Roe	7/18/07 1900	FedEx TRK#	8592 0661 6117	7/18/07 1900	
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

ORIGINAL

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 18:15
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-1
Client ID: ZONE A1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone		41	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone	U	10	1.0	10	10
Benzene	E	900	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene		57	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene	E	690	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 18:15
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-1
Client ID: ZONE A1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes	E	2100	1.0	10	10
o-Xylene		45	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)	E	2200	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene		46	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene		95	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene	E	240	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene	E	680	1.0	5	5
P-Isopropyltoluene		10	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene		21	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene	E	320	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		114%			
1,2-Dichloroethane-D4		106%			
Toluene-D8		116%			
P-Bromofluorobenzene		110%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 16:41
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-1DL
Client ID: ZONE A1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	50	10	5	50
Chloromethane	U	100	10	10	100
Vinyl chloride	U	100	10	10	100
Bromomethane	U	100	10	10	100
Chloroethane	U	100	10	10	100
Trichlorofluoromethane	U	50	10	5	50
Diethyl Ether	U	50	10	5	50
1,1-Dichloroethene	U	50	10	5	50
Carbon Disulfide	U	50	10	5	50
Methylene Chloride	U	50	10	5	50
Acetone		170	10	10	100
trans-1,2-Dichloroethene	U	50	10	5	50
Methyl tert-butyl ether	U	50	10	5	50
1,1-Dichloroethane	U	50	10	5	50
Vinyl Acetate	U	50	10	5	50
cis-1,2-Dichloroethene	U	50	10	5	50
1,2-Dichloroethylene (total)	U	100	10	10	100
2,2-Dichloropropane	U	50	10	5	50
Bromochloromethane	U	50	10	5	50
Chloroform	U	50	10	5	50
Carbon Tetrachloride	U	50	10	5	50
Tetrahydrofuran	U	100	10	10	100
1,1,1-Trichloroethane	U	50	10	5	50
1,1-Dichloropropene	U	50	10	5	50
2-Butanone	U	100	10	10	100
Benzene		960	10	5	50
1,2-Dichloroethane	U	50	10	5	50
Trichloroethene	U	50	10	5	50
Dibromomethane	U	50	10	5	50
1,2-Dichloropropane	U	50	10	5	50
Bromodichloromethane	U	50	10	5	50
cis-1,3-dichloropropene	U	50	10	5	50
Toluene		50	10	5	50
4-methyl-2-pentanone	U	100	10	10	100
Tetrachloroethene	U	50	10	5	50
trans-1,3-Dichloropropene	U	50	10	5	50
1,1,2-Trichloroethane	U	50	10	5	50
Dibromochloromethane	U	50	10	5	50
1,3-Dichloropropane	U	50	10	5	50
1,2-Dibromoethane	U	50	10	5	50
2-Hexanone	U	100	10	10	100
Chlorobenzene	U	50	10	5	50
Ethylbenzene		620	10	5	50

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 16:41
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-1DL
Client ID: ZONE A1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	50	10	5	50
m+p-Xylenes		2700	10	10	100
o-Xylene	U	50	10	5	50
Styrene	U	50	10	5	50
Xylenes (total)		2700	10	15	150
Bromoform	U	50	10	5	50
Isopropylbenzene	U	50	10	5	50
Bromobenzene	U	50	10	5	50
N-Propylbenzene		80	10	5	50
1,1,2,2-Tetrachloroethane	U	50	10	5	50
1,3,5-Trimethylbenzene		220	10	5	50
2-Chlorotoluene	U	50	10	5	50
1,2,3-Trichloropropane	U	50	10	5	50
4-Chlorotoluene	U	50	10	5	50
tert-Butylbenzene	U	50	10	5	50
1,2,4-Trimethylbenzene		720	10	5	50
P-Isopropyltoluene	U	50	10	5	50
1,3-Dichlorobenzene	U	50	10	5	50
1,4-Dichlorobenzene	U	50	10	5	50
N-Butylbenzene	U	50	10	5	50
sec-Butylbenzene	U	50	10	5	50
1,2-Dichlorobenzene	U	50	10	5	50
1,2-Dibromo-3-Chloropropane	U	50	10	5	50
1,3,5-Trichlorobenzene	U	50	10	5	50
Hexachlorobutadiene	U	50	10	5	50
1,2,4-Trichlorobenzene	U	50	10	5	50
Naphthalene		250	10	5	50
1,2,3-Trichlorobenzene	U	50	10	5	50
Dibromofluoromethane		81%			
1,2-Dichloroethane-D4		91%			
Toluene-D8		97%			
P-Bromofluorobenzene		96%			

Katahdin
ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-001
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE A1-INF	AQ	No(Total)	07/17/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
CALCIUM	65.2	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
HARDNESS	182.	mg/L	0.66	1	0.66	SM 2340-B	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
IRON	68.5	mg/L	0.100	1	0.1	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
MAGNESIUM	4.70	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

Katahdin ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-002
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE A1-INF	AQ	Yes(Dissolved)	07/17/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
LEAD	U 0.0050	mg/L	0.0050	1	0.005	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 20:05
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-3RA
Client ID: ZONE A2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone		15	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone	U	10	1.0	10	10
Benzene	E	230	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene		23	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene		160	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 20:05
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-3RA
Client ID: ZONE A2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes	E	420	1.0	10	10
o-Xylene		23	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)		440	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene		9	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene		16	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene		54	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene		160	1.0	5	5
P-Isopropyltoluene	U	5	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene		5	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene		68	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		117%			
1,2-Dichloroethane-D4		106%			
Toluene-D8		111%			
P-Bromofluorobenzene		105%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 17:16
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-3DL
Client ID: ZONE A2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	10	2.0	5	10
Chloromethane	U	20	2.0	10	20
Vinyl chloride	U	20	2.0	10	20
Bromomethane	U	20	2.0	10	20
Chloroethane	U	20	2.0	10	20
Trichlorofluoromethane	U	10	2.0	5	10
Diethyl Ether	U	10	2.0	5	10
1,1-Dichloroethene	U	10	2.0	5	10
Carbon Disulfide	U	10	2.0	5	10
Methylene Chloride	U	10	2.0	5	10
Acetone		49	2.0	10	20
trans-1,2-Dichloroethene	U	10	2.0	5	10
Methyl tert-butyl ether	U	10	2.0	5	10
1,1-Dichloroethane	U	10	2.0	5	10
Vinyl Acetate	U	10	2.0	5	10
cis-1,2-Dichloroethene	U	10	2.0	5	10
1,2-Dichloroethylene (total)	U	20	2.0	10	20
2,2-Dichloropropane	U	10	2.0	5	10
Bromochloromethane	U	10	2.0	5	10
Chloroform	U	10	2.0	5	10
Carbon Tetrachloride	U	10	2.0	5	10
Tetrahydrofuran	U	20	2.0	10	20
1,1,1-Trichloroethane	U	10	2.0	5	10
1,1-Dichloropropene	U	10	2.0	5	10
2-Butanone	U	20	2.0	10	20
Benzene		180	2.0	5	10
1,2-Dichloroethane	U	10	2.0	5	10
Trichloroethene	U	10	2.0	5	10
Dibromomethane	U	10	2.0	5	10
1,2-Dichloropropane	U	10	2.0	5	10
Bromodichloromethane	U	10	2.0	5	10
cis-1,3-dichloropropene	U	10	2.0	5	10
Toluene		18	2.0	5	10
4-methyl-2-pentanone	U	20	2.0	10	20
Tetrachloroethene	U	10	2.0	5	10
trans-1,3-Dichloropropene	U	10	2.0	5	10
1,1,2-Trichloroethane	U	10	2.0	5	10
Dibromochloromethane	U	10	2.0	5	10
1,3-Dichloropropane	U	10	2.0	5	10
1,2-Dibromoethane	U	10	2.0	5	10
2-Hexanone	U	20	2.0	10	20
Chlorobenzene	U	10	2.0	5	10
Ethylbenzene		130	2.0	5	10

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 17:16
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-3DL
Client ID: ZONE A2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	10	2.0	5	10
m+p-Xylenes		390	2.0	10	20
o-Xylene		19	2.0	5	10
Styrene	U	10	2.0	5	10
Xylenes (total)		410	2.0	15	30
Bromoform	U	10	2.0	5	10
Isopropylbenzene	U	10	2.0	5	10
Bromobenzene	U	10	2.0	5	10
N-Propylbenzene		12	2.0	5	10
1,1,2,2-Tetrachloroethane	U	10	2.0	5	10
1,3,5-Trimethylbenzene		45	2.0	5	10
2-Chlorotoluene	U	10	2.0	5	10
1,2,3-Trichloropropane	U	10	2.0	5	10
4-Chlorotoluene	U	10	2.0	5	10
tert-Butylbenzene	U	10	2.0	5	10
1,2,4-Trimethylbenzene		130	2.0	5	10
P-Isopropyltoluene	U	10	2.0	5	10
1,3-Dichlorobenzene	U	10	2.0	5	10
1,4-Dichlorobenzene	U	10	2.0	5	10
N-Butylbenzene	U	10	2.0	5	10
sec-Butylbenzene	U	10	2.0	5	10
1,2-Dichlorobenzene	U	10	2.0	5	10
1,2-Dibromo-3-Chloropropane	U	10	2.0	5	10
1,3,5-Trichlorobenzene	U	10	2.0	5	10
Hexachlorobutadiene	U	10	2.0	5	10
1,2,4-Trichlorobenzene	U	10	2.0	5	10
Naphthalene		59	2.0	5	10
1,2,3-Trichlorobenzene	U	10	2.0	5	10
Dibromofluoromethane		78%			
1,2-Dichloroethane-D4		91%			
Toluene-D8		91%			
P-Bromofluorobenzene		* 80%			

Katahdin ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-003
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE A2-INF	AQ	No(Total)	07/17/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
CALCIUM	87.4	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
HARDNESS	242.	mg/L	0.66	1	0.66	SM 2340-B	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
IRON	73.5	mg/L	0.100	1	0.1	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
MAGNESIUM	5.78	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

Katahdin ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-004
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE A2-INF	AQ	Yes(Dissolved)	07/17/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
LEAD	U 0.0050	mg/L	0.0050	1	0.005	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 19:19
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-5
Client ID: ZONE B2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone		81	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone		45	1.0	10	10
Benzene	E	760	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene		46	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene	E	240	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 19:19
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-5
Client ID: ZONE B2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes	E	580	1.0	10	10
o-Xylene		18	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)	E	600	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene		16	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene		27	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene		55	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene		190	1.0	5	5
P-Isopropyltoluene		5	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene	U	5	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene		90	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		113%			
1,2-Dichloroethane-D4		97%			
Toluene-D8		116%			
P-Bromofluorobenzene		99%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 17:51
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-5DL
Client ID: ZONE B2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	50	10	5	50
Chloromethane	U	100	10	10	100
Vinyl chloride	U	100	10	10	100
Bromomethane	U	100	10	10	100
Chloroethane	U	100	10	10	100
Trichlorofluoromethane	U	50	10	5	50
Diethyl Ether	U	50	10	5	50
1,1-Dichloroethene	U	50	10	5	50
Carbon Disulfide	U	50	10	5	50
Methylene Chloride	U	50	10	5	50
Acetone		100	10	10	100
trans-1,2-Dichloroethene	U	50	10	5	50
Methyl tert-butyl ether	U	50	10	5	50
1,1-Dichloroethane	U	50	10	5	50
Vinyl Acetate	U	50	10	5	50
cis-1,2-Dichloroethene	U	50	10	5	50
1,2-Dichloroethylene (total)	U	100	10	10	100
2,2-Dichloropropane	U	50	10	5	50
Bromochloromethane	U	50	10	5	50
Chloroform	U	50	10	5	50
Carbon Tetrachloride	U	50	10	5	50
Tetrahydrofuran	U	100	10	10	100
1,1,1-Trichloroethane	U	50	10	5	50
1,1-Dichloropropene	U	50	10	5	50
2-Butanone	U	100	10	10	100
Benzene		730	10	5	50
1,2-Dichloroethane	U	50	10	5	50
Trichloroethene	U	50	10	5	50
Dibromomethane	U	50	10	5	50
1,2-Dichloropropane	U	50	10	5	50
Bromodichloromethane	U	50	10	5	50
cis-1,3-dichloropropene	U	50	10	5	50
Toluene	U	50	10	5	50
4-methyl-2-pentanone	U	100	10	10	100
Tetrachloroethene	U	50	10	5	50
trans-1,3-Dichloropropene	U	50	10	5	50
1,1,2-Trichloroethane	U	50	10	5	50
Dibromochloromethane	U	50	10	5	50
1,3-Dichloropropane	U	50	10	5	50
1,2-Dibromoethane	U	50	10	5	50
2-Hexanone	U	100	10	10	100
Chlorobenzene	U	50	10	5	50
Ethylbenzene		230	10	5	50

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 17:51
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-5DL
Client ID: ZONE B2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	50	10	5	50
m+p-Xylenes		620	10	10	100
o-Xylene	U	50	10	5	50
Styrene	U	50	10	5	50
Xylenes (total)		630	10	15	150
Bromoform	U	50	10	5	50
Isopropylbenzene	U	50	10	5	50
Bromobenzene	U	50	10	5	50
N-Propylbenzene	U	50	10	5	50
1,1,2,2-Tetrachloroethane	U	50	10	5	50
1,3,5-Trimethylbenzene	U	50	10	5	50
2-Chlorotoluene	U	50	10	5	50
1,2,3-Trichloropropane	U	50	10	5	50
4-Chlorotoluene	U	50	10	5	50
tert-Butylbenzene	U	50	10	5	50
1,2,4-Trimethylbenzene		180	10	5	50
P-Isopropyltoluene	U	50	10	5	50
1,3-Dichlorobenzene	U	50	10	5	50
1,4-Dichlorobenzene	U	50	10	5	50
N-Butylbenzene	U	50	10	5	50
sec-Butylbenzene	U	50	10	5	50
1,2-Dichlorobenzene	U	50	10	5	50
1,2-Dibromo-3-Chloropropane	U	50	10	5	50
1,3,5-Trichlorobenzene	U	50	10	5	50
Hexachlorobutadiene	U	50	10	5	50
1,2,4-Trichlorobenzene	U	50	10	5	50
Naphthalene		60	10	5	50
1,2,3-Trichlorobenzene	U	50	10	5	50
Dibromofluoromethane		90%			
1,2-Dichloroethane-D4		90%			
Toluene-D8		90%			
P-Bromofluorobenzene		94%			

Katahdin
ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-005
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE B2-INF	AQ	No(Total)	07/17/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
CALCIUM	62.2	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
HARDNESS	176.	mg/L	0.66	1	0.66	SM 2340-B	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
IRON	83.5	mg/L	0.100	1	0.1	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
MAGNESIUM	4.96	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

Katahdin
ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-006
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE B2-INF	AQ	Yes(Dissolved)	07/17/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
LEAD	U 0.0050	mg/L	0.0050	1	0.005	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 19:52
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-7
Client ID: ZONE C2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone		25	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone		15	1.0	10	10
Benzene		170	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene		7	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene		80	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 19:52
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-7
Client ID: ZONE C2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes		110	1.0	10	10
o-Xylene		29	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)		140	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene		12	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene		13	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene		6	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene		52	1.0	5	5
P-Isopropyltoluene	U	5	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene	U	5	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene		35	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		112%			
1,2-Dichloroethane-D4		96%			
Toluene-D8		114%			
P-Bromofluorobenzene		97%			

Katahdin
ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-007
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE C2-INF	AQ	No(Total)	07/17/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
CALCIUM	50.8	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
HARDNESS	145.	mg/L	0.66	1	0.66	SM 2340-B	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
IRON	64.2	mg/L	0.100	1	0.1	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
MAGNESIUM	4.35	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

Katahdin
ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-008
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE C2-INF	AQ	Yes(Dissolved)	07/17/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
LEAD	U 0.0050	mg/L	0.0050	1	0.005	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 20:25
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-9
Client ID: ZONE D1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone	U	10	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone	U	10	1.0	10	10
Benzene	U	5	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene	U	5	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene	U	5	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 20:25
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-9
Client ID: ZONE D1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes	U	10	1.0	10	10
o-Xylene	U	5	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)	U	15	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene	U	5	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene	U	5	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene	U	5	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene	U	5	1.0	5	5
P-Isopropyltoluene	U	5	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene	U	5	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene	U	5	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		110%			
1,2-Dichloroethane-D4		94%			
Toluene-D8		111%			
P-Bromofluorobenzene		95%			

Katahdin
ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-009
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE D1-INF	AQ	No(Total)	07/17/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
CALCIUM	77.3	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
HARDNESS	215.	mg/L	0.66	1	0.66	SM 2340-B	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
IRON	9.85	mg/L	0.100	1	0.1	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
MAGNESIUM	5.44	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

Katahdin
ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-010
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE D1-INF	AQ	Yes(Dissolved)	07/17/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
LEAD	U 0.0050	mg/L	0.0050	1	0.005	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 20:57
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-11
Client ID: ZONE E1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone		24	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone	U	10	1.0	10	10
Benzene		22	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene		11	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene		110	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 20:57
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-11
Client ID: ZONE E1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes		200	1.0	10	10
o-Xylene		71	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)		270	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene		22	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene		47	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene		120	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene	E	330	1.0	5	5
P-Isopropyltoluene		25	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene		14	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene		110	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		112%			
1,2-Dichloroethane-D4		98%			
Toluene-D8		113%			
P-Bromofluorobenzene		100%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 17:55
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-11DL
Client ID: ZONE E1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	25	5.0	5	25
Chloromethane	U	50	5.0	10	50
Vinyl chloride	U	50	5.0	10	50
Bromomethane	U	50	5.0	10	50
Chloroethane	U	50	5.0	10	50
Trichlorofluoromethane	U	25	5.0	5	25
Diethyl Ether	U	25	5.0	5	25
1,1-Dichloroethene	U	25	5.0	5	25
Carbon Disulfide	U	25	5.0	5	25
Methylene Chloride	U	25	5.0	5	25
Acetone	U	50	5.0	10	50
trans-1,2-Dichloroethene	U	25	5.0	5	25
Methyl tert-butyl ether	U	25	5.0	5	25
1,1-Dichloroethane	U	25	5.0	5	25
Vinyl Acetate	U	25	5.0	5	25
cis-1,2-Dichloroethene	U	25	5.0	5	25
1,2-Dichloroethylene (total)	U	50	5.0	10	50
2,2-Dichloropropane	U	25	5.0	5	25
Bromochloromethane	U	25	5.0	5	25
Chloroform	U	25	5.0	5	25
Carbon Tetrachloride	U	25	5.0	5	25
Tetrahydrofuran	U	50	5.0	10	50
1,1,1-Trichloroethane	U	25	5.0	5	25
1,1-Dichloropropene	U	25	5.0	5	25
2-Butanone	U	50	5.0	10	50
Benzene		26	5.0	5	25
1,2-Dichloroethane	U	25	5.0	5	25
Trichloroethene	U	25	5.0	5	25
Dibromomethane	U	25	5.0	5	25
1,2-Dichloropropane	U	25	5.0	5	25
Bromodichloromethane	U	25	5.0	5	25
cis-1,3-dichloropropene	U	25	5.0	5	25
Toluene	U	25	5.0	5	25
4-methyl-2-pentanone	U	50	5.0	10	50
Tetrachloroethene	U	25	5.0	5	25
trans-1,3-Dichloropropene	U	25	5.0	5	25
1,1,2-Trichloroethane	U	25	5.0	5	25
Dibromochloromethane	U	25	5.0	5	25
1,3-Dichloropropane	U	25	5.0	5	25
1,2-Dibromoethane	U	25	5.0	5	25
2-Hexanone	U	50	5.0	10	50
Chlorobenzene	U	25	5.0	5	25
Ethylbenzene		160	5.0	5	25

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 17:55
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-11DL
Client ID: ZONE E1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	25	5.0	5	25
m+p-Xylenes		260	5.0	10	50
o-Xylene		65	5.0	5	25
Styrene	U	25	5.0	5	25
Xylenes (total)		330	5.0	15	75
Bromoform	U	25	5.0	5	25
Isopropylbenzene		27	5.0	5	25
Bromobenzene	U	25	5.0	5	25
N-Propylbenzene		61	5.0	5	25
1,1,2,2-Tetrachloroethane	U	25	5.0	5	25
1,3,5-Trimethylbenzene		150	5.0	5	25
2-Chlorotoluene	U	25	5.0	5	25
1,2,3-Trichloropropane	U	25	5.0	5	25
4-Chlorotoluene	U	25	5.0	5	25
tert-Butylbenzene	U	25	5.0	5	25
1,2,4-Trimethylbenzene		480	5.0	5	25
P-Isopropyltoluene	U	25	5.0	5	25
1,3-Dichlorobenzene	U	25	5.0	5	25
1,4-Dichlorobenzene	U	25	5.0	5	25
N-Butylbenzene	U	25	5.0	5	25
sec-Butylbenzene	U	25	5.0	5	25
1,2-Dichlorobenzene	U	25	5.0	5	25
1,2-Dibromo-3-Chloropropane	U	25	5.0	5	25
1,3,5-Trichlorobenzene	U	25	5.0	5	25
Hexachlorobutadiene	U	25	5.0	5	25
1,2,4-Trichlorobenzene	U	25	5.0	5	25
Naphthalene		98	5.0	5	25
1,2,3-Trichlorobenzene	U	25	5.0	5	25
Dibromofluoromethane		125%			
1,2-Dichloroethane-D4		117%			
Toluene-D8		119%			
P-Bromofluorobenzene		117%			

Katahdin ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-011
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE E1-INF	AQ	No(Total)	07/18/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
CALCIUM	50.8	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
HARDNESS	147.	mg/L	0.66	1	0.66	SM 2340-B	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
IRON	226.	mg/L	0.100	1	0.1	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
MAGNESIUM	4.89	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

Katahdin
ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-012
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE E1-INF	AQ	Yes(Dissolved)	07/18/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
LEAD	U 0.0050	mg/L	0.0050	1	0.005	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 21:29
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-13
Client ID: ZONE F1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone	U	10	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone	U	10	1.0	10	10
Benzene		7	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene		78	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene	E	820	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 21:29
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-13
Client ID: ZONE F1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes	E	1500	1.0	10	10
o-Xylene		74	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)	E	1600	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene		76	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene		140	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene	E	330	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene	E	830	1.0	5	5
P-Isopropyltoluene		11	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene		34	1.0	5	5
sec-Butylbenzene		7	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene	E	380	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		108%			
1,2-Dichloroethane-D4		95%			
Toluene-D8		113%			
P-Bromofluorobenzene		98%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 18:28
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-13DL
Client ID: ZONE F1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	50	10	5	50
Chloromethane	U	100	10	10	100
Vinyl chloride	U	100	10	10	100
Bromomethane	U	100	10	10	100
Chloroethane	U	100	10	10	100
Trichlorofluoromethane	U	50	10	5	50
Diethyl Ether	U	50	10	5	50
1,1-Dichloroethene	U	50	10	5	50
Carbon Disulfide	U	50	10	5	50
Methylene Chloride	U	50	10	5	50
Acetone	U	100	10	10	100
trans-1,2-Dichloroethene	U	50	10	5	50
Methyl tert-butyl ether	U	50	10	5	50
1,1-Dichloroethane	U	50	10	5	50
Vinyl Acetate	U	50	10	5	50
cis-1,2-Dichloroethene	U	50	10	5	50
1,2-Dichloroethylene (total)	U	100	10	10	100
2,2-Dichloropropane	U	50	10	5	50
Bromochloromethane	U	50	10	5	50
Chloroform	U	50	10	5	50
Carbon Tetrachloride	U	50	10	5	50
Tetrahydrofuran	U	100	10	10	100
1,1,1-Trichloroethane	U	50	10	5	50
1,1-Dichloropropene	U	50	10	5	50
2-Butanone	U	100	10	10	100
Benzene	U	50	10	5	50
1,2-Dichloroethane	U	50	10	5	50
Trichloroethene	U	50	10	5	50
Dibromomethane	U	50	10	5	50
1,2-Dichloropropane	U	50	10	5	50
Bromodichloromethane	U	50	10	5	50
cis-1,3-dichloropropene	U	50	10	5	50
Toluene		67	10	5	50
4-methyl-2-pentanone	U	100	10	10	100
Tetrachloroethene	U	50	10	5	50
trans-1,3-Dichloropropene	U	50	10	5	50
1,1,2-Trichloroethane	U	50	10	5	50
Dibromochloromethane	U	50	10	5	50
1,3-Dichloropropane	U	50	10	5	50
1,2-Dibromoethane	U	50	10	5	50
2-Hexanone	U	100	10	10	100
Chlorobenzene	U	50	10	5	50
Ethylbenzene		860	10	5	50

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 18:28
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-13DL
Client ID: ZONE F1-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	50	10	5	50
m+p-Xylenes		2100	10	10	100
o-Xylene		66	10	5	50
Styrene	U	50	10	5	50
Xylenes (total)		2200	10	15	150
Bromoform	U	50	10	5	50
Isopropylbenzene		65	10	5	50
Bromobenzene	U	50	10	5	50
N-Propylbenzene		130	10	5	50
1,1,2,2-Tetrachloroethane	U	50	10	5	50
1,3,5-Trimethylbenzene		340	10	5	50
2-Chlorotoluene	U	50	10	5	50
1,2,3-Trichloropropane	U	50	10	5	50
4-Chlorotoluene	U	50	10	5	50
tert-Butylbenzene	U	50	10	5	50
1,2,4-Trimethylbenzene		1200	10	5	50
P-Isopropyltoluene	U	50	10	5	50
1,3-Dichlorobenzene	U	50	10	5	50
1,4-Dichlorobenzene	U	50	10	5	50
N-Butylbenzene	U	50	10	5	50
sec-Butylbenzene	U	50	10	5	50
1,2-Dichlorobenzene	U	50	10	5	50
1,2-Dibromo-3-Chloropropane	U	50	10	5	50
1,3,5-Trichlorobenzene	U	50	10	5	50
Hexachlorobutadiene	U	50	10	5	50
1,2,4-Trichlorobenzene	U	50	10	5	50
Naphthalene		300	10	5	50
1,2,3-Trichlorobenzene	U	50	10	5	50
Dibromofluoromethane		113%			
1,2-Dichloroethane-D4		106%			
Toluene-D8		111%			
P-Bromofluorobenzene		108%			

Katahdin
ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-013
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE F1-INF	AQ	No(Total)	07/18/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
CALCIUM	56.5	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
HARDNESS	164.	mg/L	0.66	1	0.66	SM 2340-B	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
IRON	61.5	mg/L	0.100	1	0.1	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
MAGNESIUM	5.58	mg/L	0.050	1	0.05	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

Katahdin ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-014
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE F1-INF	AQ	Yes(Dissolved)	07/18/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
LEAD	U 0.0050	mg/L	0.0050	1	0.005	SW846 6010	7/20/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 20:37
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-15RA
Client ID: ZONE P2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone	U	10	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone	U	10	1.0	10	10
Benzene		11	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene		130	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene	E	200	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 20:37
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-15RA
Client ID: ZONE F2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes		280	1.0	10	10
o-Xylene		160	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)		440	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene		11	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene		15	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene		20	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene		110	1.0	5	5
P-Isopropyltoluene	U	5	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene	U	5	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene		44	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		102%			
1,2-Dichloroethane-D4		96%			
Toluene-D8		93%			
P-Bromofluorobenzene		94%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 19:00
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-15DL
Client ID: ZONE F2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	25	5.0	5	25
Chloromethane	U	50	5.0	10	50
Vinyl chloride	U	50	5.0	10	50
Bromomethane	U	50	5.0	10	50
Chloroethane	U	50	5.0	10	50
Trichlorofluoromethane	U	25	5.0	5	25
Diethyl Ether	U	25	5.0	5	25
1,1-Dichloroethene	U	25	5.0	5	25
Carbon Disulfide	U	25	5.0	5	25
Methylene Chloride	U	25	5.0	5	25
Acetone	U	50	5.0	10	50
trans-1,2-Dichloroethene	U	25	5.0	5	25
Methyl tert-butyl ether	U	25	5.0	5	25
1,1-Dichloroethane	U	25	5.0	5	25
Vinyl Acetate	U	25	5.0	5	25
cis-1,2-Dichloroethene	U	25	5.0	5	25
1,2-Dichloroethylene (total)	U	50	5.0	10	50
2,2-Dichloropropane	U	25	5.0	5	25
Bromochloromethane	U	25	5.0	5	25
Chloroform	U	25	5.0	5	25
Carbon Tetrachloride	U	25	5.0	5	25
Tetrahydrofuran	U	50	5.0	10	50
1,1,1-Trichloroethane	U	25	5.0	5	25
1,1-Dichloropropene	U	25	5.0	5	25
2-Butanone	U	50	5.0	10	50
Benzene	U	25	5.0	5	25
1,2-Dichloroethane	U	25	5.0	5	25
Trichloroethene	U	25	5.0	5	25
Dibromomethane	U	25	5.0	5	25
1,2-Dichloropropane	U	25	5.0	5	25
Bromodichloromethane	U	25	5.0	5	25
cis-1,3-dichloropropene	U	25	5.0	5	25
Toluene		180	5.0	5	25
4-methyl-2-pentanone	U	50	5.0	10	50
Tetrachloroethene	U	25	5.0	5	25
trans-1,3-Dichloropropene	U	25	5.0	5	25
1,1,2-Trichloroethane	U	25	5.0	5	25
Dibromochloromethane	U	25	5.0	5	25
1,3-Dichloropropane	U	25	5.0	5	25
1,2-Dibromoethane	U	25	5.0	5	25
2-Hexanone	U	50	5.0	10	50
Chlorobenzene	U	25	5.0	5	25
Ethylbenzene		280	5.0	5	25

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 19:00
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-15DL
Client ID: ZONE F2-INF
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	25	5.0	5	25
m+p-Xylenes		380	5.0	10	50
o-Xylene		200	5.0	5	25
Styrene	U	25	5.0	5	25
Xylenes (total)		580	5.0	15	75
Bromoform	U	25	5.0	5	25
Isopropylbenzene	U	25	5.0	5	25
Bromobenzene	U	25	5.0	5	25
N-Propylbenzene	U	25	5.0	5	25
1,1,2,2-Tetrachloroethane	U	25	5.0	5	25
1,3,5-Trimethylbenzene		27	5.0	5	25
2-Chlorotoluene	U	25	5.0	5	25
1,2,3-Trichloropropane	U	25	5.0	5	25
4-Chlorotoluene	U	25	5.0	5	25
tert-Butylbenzene	U	25	5.0	5	25
1,2,4-Trimethylbenzene		150	5.0	5	25
P-Isopropyltoluene	U	25	5.0	5	25
1,3-Dichlorobenzene	U	25	5.0	5	25
1,4-Dichlorobenzene	U	25	5.0	5	25
N-Butylbenzene	U	25	5.0	5	25
sec-Butylbenzene	U	25	5.0	5	25
1,2-Dichlorobenzene	U	25	5.0	5	25
1,2-Dibromo-3-Chloropropane	U	25	5.0	5	25
1,3,5-Trichlorobenzene	U	25	5.0	5	25
Hexachlorobutadiene	U	25	5.0	5	25
1,2,4-Trichlorobenzene	U	25	5.0	5	25
Naphthalene		40	5.0	5	25
1,2,3-Trichlorobenzene	U	25	5.0	5	25
Dibromofluoromethane		117%			
1,2-Dichloroethane-D4		105%			
Toluene-D8		109%			
P-Bromofluorobenzene		105%			

Katahdin ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-015
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE F2-INF	AQ	No(Total)	07/18/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
CALCIUM	52.9	mg/L	0.050	1	0.05	SW846 6010	7/21/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
HARDNESS	147.	mg/L	0.66	1	0.66	SM 2340-B	7/21/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
IRON	8.10	mg/L	0.100	1	0.1	SW846 6010	7/21/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
MAGNESIUM	3.60	mg/L	0.050	1	0.05	SW846 6010	7/21/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

Katahdin ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-016
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
ZONE F2-INF	AQ	Yes(Dissolved)	07/18/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
LEAD	U 0.0050	mg/L	0.0050	1	0.005	SW846 6010	7/21/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 22:34
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-17
Client ID: SP03-MID
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone		33	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone		18	1.0	10	10
Benzene	E	280	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene		23	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene		64	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 22:34
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-17
Client ID: SP03-MID
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes		50	1.0	10	10
o-Xylene		21	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)		71	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene		7	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene	U	5	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene		7	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene		23	1.0	5	5
P-Isopropyltoluene	U	5	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene	U	5	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene		18	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		110%			
1,2-Dichloroethane-D4		90%			
Toluene-D8		111%			
P-Bromofluorobenzene		92%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 19:37
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-17DL
Client ID: SP03-MID
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	10	2.0	5	10
Chloromethane	U	20	2.0	10	20
Vinyl chloride	U	20	2.0	10	20
Bromomethane	U	20	2.0	10	20
Chloroethane	U	20	2.0	10	20
Trichlorofluoromethane	U	10	2.0	5	10
Diethyl Ether	U	10	2.0	5	10
1,1-Dichloroethene	U	10	2.0	5	10
Carbon Disulfide	U	10	2.0	5	10
Methylene Chloride	U	10	2.0	5	10
Acetone		55	2.0	10	20
trans-1,2-Dichloroethene	U	10	2.0	5	10
Methyl tert-butyl ether	U	10	2.0	5	10
1,1-Dichloroethane	U	10	2.0	5	10
Vinyl Acetate	U	10	2.0	5	10
cis-1,2-Dichloroethene	U	10	2.0	5	10
1,2-Dichloroethylene (total)	U	20	2.0	10	20
2,2-Dichloropropane	U	10	2.0	5	10
Bromochloromethane	U	10	2.0	5	10
Chloroform	U	10	2.0	5	10
Carbon Tetrachloride	U	10	2.0	5	10
Tetrahydrofuran	U	20	2.0	10	20
1,1,1-Trichloroethane	U	10	2.0	5	10
1,1-Dichloropropene	U	10	2.0	5	10
2-Butanone	U	20	2.0	10	20
Benzene		280	2.0	5	10
1,2-Dichloroethane	U	10	2.0	5	10
Trichloroethene	U	10	2.0	5	10
Dibromomethane	U	10	2.0	5	10
1,2-Dichloropropane	U	10	2.0	5	10
Bromodichloromethane	U	10	2.0	5	10
cis-1,3-dichloropropene	U	10	2.0	5	10
Toluene		24	2.0	5	10
4-methyl-2-pentanone	U	20	2.0	10	20
Tetrachloroethene	U	10	2.0	5	10
trans-1,3-Dichloropropene	U	10	2.0	5	10
1,1,2-Trichloroethane	U	10	2.0	5	10
Dibromochloromethane	U	10	2.0	5	10
1,3-Dichloropropane	U	10	2.0	5	10
1,2-Dibromoethane	U	10	2.0	5	10
2-Hexanone	U	20	2.0	10	20
Chlorobenzene	U	10	2.0	5	10
Ethylbenzene		59	2.0	5	10

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 19:37
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-17DL
Client ID: SP03-MID
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	10	2.0	5	10
m+p-Xylenes		55	2.0	10	20
o-Xylene		16	2.0	5	10
Styrene	U	10	2.0	5	10
Xylenes (total)		70	2.0	15	30
Bromoform	U	10	2.0	5	10
Isopropylbenzene	U	10	2.0	5	10
Bromobenzene	U	10	2.0	5	10
N-Propylbenzene	U	10	2.0	5	10
1,1,2,2-Tetrachloroethane	U	10	2.0	5	10
1,3,5-Trimethylbenzene	U	10	2.0	5	10
2-Chlorotoluene	U	10	2.0	5	10
1,2,3-Trichloropropane	U	10	2.0	5	10
4-Chlorotoluene	U	10	2.0	5	10
tert-Butylbenzene	U	10	2.0	5	10
1,2,4-Trimethylbenzene		21	2.0	5	10
P-Isopropyltoluene	U	10	2.0	5	10
1,3-Dichlorobenzene	U	10	2.0	5	10
1,4-Dichlorobenzene	U	10	2.0	5	10
N-Butylbenzene	U	10	2.0	5	10
sec-Butylbenzene	U	10	2.0	5	10
1,2-Dichlorobenzene	U	10	2.0	5	10
1,2-Dibromo-3-Chloropropane	U	10	2.0	5	10
1,3,5-Trichlorobenzene	U	10	2.0	5	10
Hexachlorobutadiene	U	10	2.0	5	10
1,2,4-Trichlorobenzene	U	10	2.0	5	10
Naphthalene	U	10	2.0	5	10
1,2,3-Trichlorobenzene	U	10	2.0	5	10
Dibromofluoromethane		87%			
1,2-Dichloroethane-D4		98%			
Toluene-D8		100%			
P-Bromofluorobenzene		97%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 23:06
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-18
Client ID: SP03-EFF#1
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone		47	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone		26	1.0	10	10
Benzene	E	330	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene		14	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene		84	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 23:06
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-18
Client ID: SP03-EFF#1
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes		120	1.0	10	10
o-Xylene		10	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)		130	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene		7	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene		8	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene		8	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene		87	1.0	5	5
P-Isopropyltoluene	U	5	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene	U	5	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene		60	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		106%			
1,2-Dichloroethane-D4		90%			
Toluene-D8		110%			
P-Bromofluorobenzene		92%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 18:27
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-18DL
Client ID: SP03-EFF#1
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	25	5.0	5	25
Chloromethane	U	50	5.0	10	50
Vinyl chloride	U	50	5.0	10	50
Bromomethane	U	50	5.0	10	50
Chloroethane	U	50	5.0	10	50
Trichlorofluoromethane	U	25	5.0	5	25
Diethyl Ether	U	25	5.0	5	25
1,1-Dichloroethene	U	25	5.0	5	25
Carbon Disulfide	U	25	5.0	5	25
Methylene Chloride	U	25	5.0	5	25
Acetone		53	5.0	10	50
trans-1,2-Dichloroethene	U	25	5.0	5	25
Methyl tert-butyl ether	U	25	5.0	5	25
1,1-Dichloroethane	U	25	5.0	5	25
Vinyl Acetate	U	25	5.0	5	25
cis-1,2-Dichloroethene	U	25	5.0	5	25
1,2-Dichloroethylene (total)	U	50	5.0	10	50
2,2-Dichloropropane	U	25	5.0	5	25
Bromochloromethane	U	25	5.0	5	25
Chloroform	U	25	5.0	5	25
Carbon Tetrachloride	U	25	5.0	5	25
Tetrahydrofuran	U	50	5.0	10	50
1,1,1-Trichloroethane	U	25	5.0	5	25
1,1-Dichloropropene	U	25	5.0	5	25
2-Butanone	U	50	5.0	10	50
Benzene		340	5.0	5	25
1,2-Dichloroethane	U	25	5.0	5	25
Trichloroethene	U	25	5.0	5	25
Dibromomethane	U	25	5.0	5	25
1,2-Dichloropropane	U	25	5.0	5	25
Bromodichloromethane	U	25	5.0	5	25
cis-1,3-dichloropropene	U	25	5.0	5	25
Toluene	U	25	5.0	5	25
4-methyl-2-pentanone	U	50	5.0	10	50
Tetrachloroethene	U	25	5.0	5	25
trans-1,3-Dichloropropene	U	25	5.0	5	25
1,1,2-Trichloroethane	U	25	5.0	5	25
Dibromochloromethane	U	25	5.0	5	25
1,3-Dichloropropane	U	25	5.0	5	25
1,2-Dibromoethane	U	25	5.0	5	25
2-Hexanone	U	50	5.0	10	50
Chlorobenzene	U	25	5.0	5	25
Ethylbenzene		83	5.0	5	25

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 18:27
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-18DL
Client ID: SP03-EFF#1
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	25	5.0	5	25
m+p-Xylenes		120	5.0	10	50
o-Xylene	U	25	5.0	5	25
Styrene	U	25	5.0	5	25
Xylenes (total)		130	5.0	15	75
Bromoform	U	25	5.0	5	25
Isopropylbenzene	U	25	5.0	5	25
Bromobenzene	U	25	5.0	5	25
N-Propylbenzene	U	25	5.0	5	25
1,1,2,2-Tetrachloroethane	U	25	5.0	5	25
1,3,5-Trimethylbenzene	U	25	5.0	5	25
2-Chlorotoluene	U	25	5.0	5	25
1,2,3-Trichloropropane	U	25	5.0	5	25
4-Chlorotoluene	U	25	5.0	5	25
tert-Butylbenzene	U	25	5.0	5	25
1,2,4-Trimethylbenzene		83	5.0	5	25
P-Isopropyltoluene	U	25	5.0	5	25
1,3-Dichlorobenzene	U	25	5.0	5	25
1,4-Dichlorobenzene	U	25	5.0	5	25
N-Butylbenzene	U	25	5.0	5	25
sec-Butylbenzene	U	25	5.0	5	25
1,2-Dichlorobenzene	U	25	5.0	5	25
1,2-Dibromo-3-Chloropropane	U	25	5.0	5	25
1,3,5-Trichlorobenzene	U	25	5.0	5	25
Hexachlorobutadiene	U	25	5.0	5	25
1,2,4-Trichlorobenzene	U	25	5.0	5	25
Naphthalene		53	5.0	5	25
1,2,3-Trichlorobenzene	U	25	5.0	5	25
Dibromofluoromethane		85%			
1,2-Dichloroethane-D4		89%			
Toluene-D8		96%			
P-Bromofluorobenzene		101%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 23:38
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-19
Client ID: SP03-EFF#2
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone		41	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone		22	1.0	10	10
Benzene	E	320	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene		17	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene		130	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 29-JUL-2007 23:38
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-19
Client ID: SP03-EFF#2
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes		120	1.0	10	10
o-Xylene		18	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)		140	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene		11	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene		13	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene		14	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene		72	1.0	5	5
P-Isopropyltoluene	U	5	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene	U	5	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene		53	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		106%			
1,2-Dichloroethane-D4		89%			
Toluene-D8		109%			
P-Bromofluorobenzene		91%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 19:02
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-19DL
Client ID: SP03-EFF#2
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	25	5.0	5	25
Chloromethane	U	50	5.0	10	50
Vinyl chloride	U	50	5.0	10	50
Bromomethane	U	50	5.0	10	50
Chloroethane	U	50	5.0	10	50
Trichlorofluoromethane	U	25	5.0	5	25
Diethyl Ether	U	25	5.0	5	25
1,1-Dichloroethene	U	25	5.0	5	25
Carbon Disulfide	U	25	5.0	5	25
Methylene Chloride	U	25	5.0	5	25
Acetone		110	5.0	10	50
trans-1,2-Dichloroethene	U	25	5.0	5	25
Methyl tert-butyl ether	U	25	5.0	5	25
1,1-Dichloroethane	U	25	5.0	5	25
Vinyl Acetate	U	25	5.0	5	25
cis-1,2-Dichloroethene	U	25	5.0	5	25
1,2-Dichloroethylene (total)	U	50	5.0	10	50
2,2-Dichloropropane	U	25	5.0	5	25
Bromochloromethane	U	25	5.0	5	25
Chloroform	U	25	5.0	5	25
Carbon Tetrachloride	U	25	5.0	5	25
Tetrahydrofuran	U	50	5.0	10	50
1,1,1-Trichloroethane	U	25	5.0	5	25
1,1-Dichloropropene	U	25	5.0	5	25
2-Butanone	U	50	5.0	10	50
Benzene		290	5.0	5	25
1,2-Dichloroethane	U	25	5.0	5	25
Trichloroethene	U	25	5.0	5	25
Dibromomethane	U	25	5.0	5	25
1,2-Dichloropropane	U	25	5.0	5	25
Bromodichloromethane	U	25	5.0	5	25
cis-1,3-dichloropropene	U	25	5.0	5	25
Toluene	U	25	5.0	5	25
4-methyl-2-pentanone	U	50	5.0	10	50
Tetrachloroethene	U	25	5.0	5	25
trans-1,3-Dichloropropene	U	25	5.0	5	25
1,1,2-Trichloroethane	U	25	5.0	5	25
Dibromochloromethane	U	25	5.0	5	25
1,3-Dichloropropane	U	25	5.0	5	25
1,2-Dibromoethane	U	25	5.0	5	25
2-Hexanone	U	50	5.0	10	50
Chlorobenzene	U	25	5.0	5	25
Ethylbenzene		110	5.0	5	25

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 19:02
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-19DL
Client ID: SP03-EFF#2
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	25	5.0	5	25
m+p-Xylenes		120	5.0	10	50
o-Xylene	U	25	5.0	5	25
Styrene	U	25	5.0	5	25
Xylenes (total)		130	5.0	15	75
Bromoform	U	25	5.0	5	25
Isopropylbenzene	U	25	5.0	5	25
Bromobenzene	U	25	5.0	5	25
N-Propylbenzene	U	25	5.0	5	25
1,1,2,2-Tetrachloroethane	U	25	5.0	5	25
1,3,5-Trimethylbenzene	U	25	5.0	5	25
2-Chlorotoluene	U	25	5.0	5	25
1,2,3-Trichloropropane	U	25	5.0	5	25
4-Chlorotoluene	U	25	5.0	5	25
tert-Butylbenzene	U	25	5.0	5	25
1,2,4-Trimethylbenzene		68	5.0	5	25
P-Isopropyltoluene	U	25	5.0	5	25
1,3-Dichlorobenzene	U	25	5.0	5	25
1,4-Dichlorobenzene	U	25	5.0	5	25
N-Butylbenzene	U	25	5.0	5	25
sec-Butylbenzene	U	25	5.0	5	25
1,2-Dichlorobenzene	U	25	5.0	5	25
1,2-Dibromo-3-Chloropropane	U	25	5.0	5	25
1,3,5-Trichlorobenzene	U	25	5.0	5	25
Hexachlorobutadiene	U	25	5.0	5	25
1,2,4-Trichlorobenzene	U	25	5.0	5	25
Naphthalene		42	5.0	5	25
1,2,3-Trichlorobenzene	U	25	5.0	5	25
Dibromofluoromethane		91%			
1,2-Dichloroethane-D4		85%			
Toluene-D8		86%			
P-Bromofluorobenzene		92%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 16:06
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-20RA
Client ID: SP03-EFF#3
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone	U	10	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone	U	10	1.0	10	10
Benzene	U	5	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene	U	5	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene	U	5	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/17/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 16:06
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-20RA
Client ID: SP03-EFF#3
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes	U	10	1.0	10	10
o-Xylene	U	5	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)	U	15	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene	U	5	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene	U	5	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene	U	5	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene	U	5	1.0	5	5
P-Isopropyltoluene	U	5	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene	U	5	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene	U	5	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		84%			
1,2-Dichloroethane-D4		93%			
Toluene-D8		85%			
P-Bromofluorobenzene		85%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 30-JUL-2007 00:43
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-21
Client ID: DUPLICATE
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone	U	10	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone	U	10	1.0	10	10
Benzene		15	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene		180	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene	E	280	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 30-JUL-2007 00:43
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-21
Client ID: DUPLICATE
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes		380	1.0	10	10
o-Xylene	E	200	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)		590	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene		17	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene		24	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene		29	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene		140	1.0	5	5
P-Isopropyltoluene	U	5	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene	U	5	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene		42	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		104%			
1,2-Dichloroethane-D4		89%			
Toluene-D8		106%			
P-Bromofluorobenzene		90%			

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 19:32
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-21DL
Client ID: DUPLICATE
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	10	2.0	5	10
Chloromethane	U	20	2.0	10	20
Vinyl chloride	U	20	2.0	10	20
Bromomethane	U	20	2.0	10	20
Chloroethane	U	20	2.0	10	20
Trichlorofluoromethane	U	10	2.0	5	10
Diethyl Ether	U	10	2.0	5	10
1,1-Dichloroethene	U	10	2.0	5	10
Carbon Disulfide	U	10	2.0	5	10
Methylene Chloride	U	10	2.0	5	10
Acetone	U	20	2.0	10	20
trans-1,2-Dichloroethene	U	10	2.0	5	10
Methyl tert-butyl ether	U	10	2.0	5	10
1,1-Dichloroethane	U	10	2.0	5	10
Vinyl Acetate	U	10	2.0	5	10
cis-1,2-Dichloroethene	U	10	2.0	5	10
1,2-Dichloroethylene (total)	U	20	2.0	10	20
2,2-Dichloropropane	U	10	2.0	5	10
Bromochloromethane	U	10	2.0	5	10
Chloroform	U	10	2.0	5	10
Carbon Tetrachloride	U	10	2.0	5	10
Tetrahydrofuran	U	20	2.0	10	20
1,1,1-Trichloroethane	U	10	2.0	5	10
1,1-Dichloropropene	U	10	2.0	5	10
2-Butanone	U	20	2.0	10	20
Benzene		15	2.0	5	10
1,2-Dichloroethane	U	10	2.0	5	10
Trichloroethene	U	10	2.0	5	10
Dibromomethane	U	10	2.0	5	10
1,2-Dichloropropane	U	10	2.0	5	10
Bromodichloromethane	U	10	2.0	5	10
cis-1,3-dichloropropene	U	10	2.0	5	10
Toluene		170	2.0	5	10
4-methyl-2-pentanone	U	20	2.0	10	20
Tetrachloroethene	U	10	2.0	5	10
trans-1,3-Dichloropropene	U	10	2.0	5	10
1,1,2-Trichloroethane	U	10	2.0	5	10
Dibromochloromethane	U	10	2.0	5	10
1,3-Dichloropropane	U	10	2.0	5	10
1,2-Dibromoethane	U	10	2.0	5	10
2-Hexanone	U	20	2.0	10	20
Chlorobenzene	U	10	2.0	5	10
Ethylbenzene		260	2.0	5	10

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/18/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 31-JUL-2007 19:32
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-21DL
Client ID: DUPLICATE
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	10	2.0	5	10
m+p-Xylenes		360	2.0	10	20
o-Xylene		190	2.0	5	10
Styrene	U	10	2.0	5	10
Xylenes (total)		550	2.0	15	30
Bromoform	U	10	2.0	5	10
Isopropylbenzene		16	2.0	5	10
Bromobenzene	U	10	2.0	5	10
N-Propylbenzene		21	2.0	5	10
1,1,2,2-Tetrachloroethane	U	10	2.0	5	10
1,3,5-Trimethylbenzene		25	2.0	5	10
2-Chlorotoluene	U	10	2.0	5	10
1,2,3-Trichloropropane	U	10	2.0	5	10
4-Chlorotoluene	U	10	2.0	5	10
tert-Butylbenzene	U	10	2.0	5	10
1,2,4-Trimethylbenzene		140	2.0	5	10
P-Isopropyltoluene	U	10	2.0	5	10
1,3-Dichlorobenzene	U	10	2.0	5	10
1,4-Dichlorobenzene	U	10	2.0	5	10
N-Butylbenzene	U	10	2.0	5	10
sec-Butylbenzene	U	10	2.0	5	10
1,2-Dichlorobenzene	U	10	2.0	5	10
1,2-Dibromo-3-Chloropropane	U	10	2.0	5	10
1,3,5-Trichlorobenzene	U	10	2.0	5	10
Hexachlorobutadiene	U	10	2.0	5	10
1,2,4-Trichlorobenzene	U	10	2.0	5	10
Naphthalene		38	2.0	5	10
1,2,3-Trichlorobenzene	U	10	2.0	5	10
Dibromofluoromethane		118%			
1,2-Dichloroethane-D4		108%			
Toluene-D8		109%			
P-Bromofluorobenzene		105%			

Katahdin ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-021
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
DUPLICATE	AQ	No(Total)	07/18/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
CALCIUM	51.9	mg/L	0.050	1	0.05	SW846 6010	7/21/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
HARDNESS	144.	mg/L	0.66	1	0.66	SM 2340-B	7/21/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
IRON	7.99	mg/L	0.100	1	0.1	SW846 6010	7/21/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	
MAGNESIUM	3.54	mg/L	0.050	1	0.05	SW846 6010	7/21/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

Katahdin ANALYTICAL SERVICES

REPORT OF ANALYTICAL RESULTS

Client: AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, NY 10602-0751

Lab Sample ID: SA3785-022
Report Date: 8/8/2007
PO No.: 2188-124
Project: Phytoremediation Full Scale

Sample Description	Matrix	Filtered	Date Sampled	Date Received
DUPLICATE	AQ	Yes(Dissolved)	07/18/2007	07/19/2007

Parameter	Result	Units	Adjusted PQL	Dilution Factor	PQL	Analytical Method	Analysis Date	By	Prep Method	Prepped Date	By	QC	Notes
LEAD	U 0.0050	mg/L	0.0050	1	0.005	SW846 6010	7/21/07	EAM	SW846 3010	7/20/07	ALL	XG20ICW1	

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/10/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 30-JUL-2007 01:15
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-23
Client ID: TRIP BLANK
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	5	1.0	5	5
Chloromethane	U	10	1.0	10	10
Vinyl chloride	U	10	1.0	10	10
Bromomethane	U	10	1.0	10	10
Chloroethane	U	10	1.0	10	10
Trichlorofluoromethane	U	5	1.0	5	5
Diethyl Ether	U	5	1.0	5	5
1,1-Dichloroethene	U	5	1.0	5	5
Carbon Disulfide	U	5	1.0	5	5
Methylene Chloride	U	5	1.0	5	5
Acetone	U	10	1.0	10	10
trans-1,2-Dichloroethene	U	5	1.0	5	5
Methyl tert-butyl ether	U	5	1.0	5	5
1,1-Dichloroethane	U	5	1.0	5	5
Vinyl Acetate	U	5	1.0	5	5
cis-1,2-Dichloroethene	U	5	1.0	5	5
1,2-Dichloroethylene (total)	U	10	1.0	10	10
2,2-Dichloropropane	U	5	1.0	5	5
Bromochloromethane	U	5	1.0	5	5
Chloroform	U	5	1.0	5	5
Carbon Tetrachloride	U	5	1.0	5	5
Tetrahydrofuran	U	10	1.0	10	10
1,1,1-Trichloroethane	U	5	1.0	5	5
1,1-Dichloropropene	U	5	1.0	5	5
2-Butanone	U	10	1.0	10	10
Benzene	U	5	1.0	5	5
1,2-Dichloroethane	U	5	1.0	5	5
Trichloroethene	U	5	1.0	5	5
Dibromomethane	U	5	1.0	5	5
1,2-Dichloropropane	U	5	1.0	5	5
Bromodichloromethane	U	5	1.0	5	5
cis-1,3-dichloropropene	U	5	1.0	5	5
Toluene	U	5	1.0	5	5
4-methyl-2-pentanone	U	10	1.0	10	10
Tetrachloroethene	U	5	1.0	5	5
trans-1,3-Dichloropropene	U	5	1.0	5	5
1,1,2-Trichloroethane	U	5	1.0	5	5
Dibromochloromethane	U	5	1.0	5	5
1,3-Dichloropropane	U	5	1.0	5	5
1,2-Dibromoethane	U	5	1.0	5	5
2-Hexanone	U	10	1.0	10	10
Chlorobenzene	U	5	1.0	5	5
Ethylbenzene	U	5	1.0	5	5

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Malcolm Pirnie, Inc
Project: Phytoremediation Full Scale
PO No:
Sample Date: 07/10/07
Received Date: 07/19/07
Extraction Date:
Analysis Date: 30-JUL-2007 01:15
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: SA3785-23
Client ID: TRIP BLANK
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	5	1.0	5	5
m+p-Xylenes	U	10	1.0	10	10
o-Xylene	U	5	1.0	5	5
Styrene	U	5	1.0	5	5
Xylenes (total)	U	15	1.0	15	15
Bromoform	U	5	1.0	5	5
Isopropylbenzene	U	5	1.0	5	5
Bromobenzene	U	5	1.0	5	5
N-Propylbenzene	U	5	1.0	5	5
1,1,2,2-Tetrachloroethane	U	5	1.0	5	5
1,3,5-Trimethylbenzene	U	5	1.0	5	5
2-Chlorotoluene	U	5	1.0	5	5
1,2,3-Trichloropropane	U	5	1.0	5	5
4-Chlorotoluene	U	5	1.0	5	5
tert-Butylbenzene	U	5	1.0	5	5
1,2,4-Trimethylbenzene	U	5	1.0	5	5
P-Isopropyltoluene	U	5	1.0	5	5
1,3-Dichlorobenzene	U	5	1.0	5	5
1,4-Dichlorobenzene	U	5	1.0	5	5
N-Butylbenzene	U	5	1.0	5	5
sec-Butylbenzene	U	5	1.0	5	5
1,2-Dichlorobenzene	U	5	1.0	5	5
1,2-Dibromo-3-Chloropropane	U	5	1.0	5	5
1,3,5-Trichlorobenzene	U	5	1.0	5	5
Hexachlorobutadiene	U	5	1.0	5	5
1,2,4-Trichlorobenzene	U	5	1.0	5	5
Naphthalene	U	5	1.0	5	5
1,2,3-Trichlorobenzene	U	5	1.0	5	5
Dibromofluoromethane		106%			
1,2-Dichloroethane-D4		91%			
Toluene-D8		108%			
P-Bromofluorobenzene		90%			

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG41663-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: PHYTOREMEDIATION FULL SCALE SDG No.: SA3785

Lab File ID: T7033 Lab Sample ID: WG41663-2

Date Analyzed: 07/29/07 Time Analyzed: 1742

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS-T

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG41663-LCS	WG41663-1	T7031	07/29/07	1627
02	ZONE A1-INF	SA3785-1	T7034	07/29/07	1815
03	ZONE B2-INF	SA3785-5	T7036	07/29/07	1919
04	ZONE C2-INF	SA3785-7	T7037	07/29/07	1952
05	ZONE D1-INF	SA3785-9	T7038	07/29/07	2025
06	ZONE E1-INF	SA3785-11	T7039	07/29/07	2057
07	ZONE F1-INF	SA3785-13	T7040	07/29/07	2129
08	SP03-MID	SA3785-17	T7042	07/29/07	2234
09	SP03-EFF#1	SA3785-18	T7043	07/29/07	2306
10	SP03-EFF#2	SA3785-19	T7044	07/29/07	2338
11	DUPLICATE	SA3785-21	T7046	07/30/07	0043
12	TRIP BLANK	SA3785-23	T7047	07/30/07	0115
13					
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COMMENTS:

FORM IVVOA

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 29-JUL-2007 17:42
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: WG41663-2
Client ID: WG41663-Blank
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	1	1.0	1	1
Chloromethane	U	1	1.0	1	1
Vinyl chloride	U	1	1.0	1	1
Bromomethane	U	1	1.0	1	1
Chloroethane	U	1	1.0	1	1
Trichlorofluoromethane	U	1	1.0	1	1
Diethyl Ether	U	1	1.0	1	1
1,1-Dichloroethene	U	1	1.0	1	1
Carbon Disulfide	U	1	1.0	1	1
Methylene Chloride	U	5	1.0	5	5
Acetone	U	5	1.0	5	5
trans-1,2-Dichloroethene	U	1	1.0	1	1
Methyl tert-butyl ether	U	1	1.0	1	1
1,1-Dichloroethane	U	1	1.0	1	1
Vinyl Acetate	U	1	1.0	1	1
cis-1,2-Dichloroethene	U	1	1.0	1	1
1,2-Dichloroethylene (total)	U	2	1.0	2	2
2,2-Dichloropropane	U	1	1.0	1	1
Bromochloromethane	U	1	1.0	1	1
Chloroform	U	1	1.0	1	1
Carbon Tetrachloride	U	1	1.0	1	1
Tetrahydrofuran	U	5	1.0	5	5
1,1,1-Trichloroethane	U	1	1.0	1	1
1,1-Dichloropropene	U	1	1.0	1	1
2-Butanone	U	5	1.0	5	5
Benzene	U	1	1.0	1	1
1,2-Dichloroethane	U	1	1.0	1	1
Trichloroethene	U	1	1.0	1	1
Dibromomethane	U	1	1.0	1	1
1,2-Dichloropropane	U	1	1.0	1	1
Bromodichloromethane	U	1	1.0	1	1
cis-1,3-dichloropropene	U	1	1.0	1	1
Toluene	U	1	1.0	1	1
4-methyl-2-pentanone	U	5	1.0	5	5
Tetrachloroethene	U	1	1.0	1	1
trans-1,3-Dichloropropene	U	1	1.0	1	1
1,1,2-Trichloroethane	U	1	1.0	1	1
Dibromochloromethane	U	1	1.0	1	1
1,3-Dichloropropane	U	1	1.0	1	1
1,2-Dibromoethane	U	1	1.0	1	1
2-Hexanone	U	5	1.0	5	5
Chlorobenzene	U	1	1.0	1	1
Ethylbenzene	U	1	1.0	1	1

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 29-JUL-2007 17:42
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: WG41663-2
Client ID: WG41663-Blank
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	1	1.0	1	1
m+p-Xylenes	U	2	1.0	2	2
o-Xylene	U	1	1.0	1	1
Styrene	U	1	1.0	1	1
Xylenes (total)	U	3	1.0	3	3
Bromoform	U	1	1.0	1	1
Isopropylbenzene	U	1	1.0	1	1
Bromobenzene	U	1	1.0	1	1
N-Propylbenzene	U	1	1.0	1	1
1,1,2,2-Tetrachloroethane	U	1	1.0	1	1
1,3,5-Trimethylbenzene	U	1	1.0	1	1
2-Chlorotoluene	U	1	1.0	1	1
1,2,3-Trichloropropane	U	1	1.0	1	1
4-Chlorotoluene	U	1	1.0	1	1
tert-Butylbenzene	U	1	1.0	1	1
1,2,4-Trimethylbenzene	U	1	1.0	1	1
P-Isopropyltoluene	U	1	1.0	1	1
1,3-Dichlorobenzene	U	1	1.0	1	1
1,4-Dichlorobenzene	U	1	1.0	1	1
N-Butylbenzene	U	1	1.0	1	1
sec-Butylbenzene	U	1	1.0	1	1
1,2-Dichlorobenzene	U	1	1.0	1	1
1,2-Dibromo-3-Chloropropane	U	1	1.0	1	1
1,3,5-Trichlorobenzene	U	1	1.0	1	1
Hexachlorobutadiene	U	1	1.0	1	1
1,2,4-Trichlorobenzene	U	1	1.0	1	1
Naphthalene	U	1	1.0	1	1
1,2,3-Trichlorobenzene	U	1	1.0	1	1
Dibromofluoromethane		126%			
1,2-Dichloroethane-D4		116%			
Toluene-D8		*122%			
P-Bromofluorobenzene		111%			

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 07/29/07
Report Date: 08/02/2007
Matrix: WATER

Lab ID: WG41663-1
Client ID: WG41663-LCS
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.	%REC.	QC. LIMITS
Dichlorodifluoromethane	50	NA	82	* 164	20-143
Chloromethane	50	NA	50	99	34-132
Vinyl chloride	50	NA	59	119	48-136
Bromomethane	50	NA	35	69	52-129
Chloroethane	50	NA	47	93	43-146
Trichlorofluoromethane	50	NA	41	81	62-157
Diethyl Ether	50	NA	54	107	74-141
Tertiary-butyl alcohol	250	NA	267	107	10-152
1,1-Dichloroethene	50	NA	45	90	64-126
Carbon Disulfide	50	NA	53	106	59-136
Freon-113	50	NA	56	112	78-140
Iodomethane	50	NA	39	78	54-107
Acrolein	250	NA	257	103	42-156
Methylene Chloride	50	NA	46	92	63-122
Acetone	50	NA	50	101	15-160
Isobutyl Alcohol	1000	NA	1240	124	10-169
trans-1,2-Dichloroethene	50	NA	44	88	65-128
Allyl Chloride	50	NA	57	114	64-150
Methyl tert-butyl ether	100	NA	95	95	71-140
Acetonitrile	500	NA	544	109	40-164
Di-isopropyl ether	50	NA	53	105	77-135
Chloroprene	50	NA	52	104	82-133
Methacrylonitrile	500	NA	557	111	69-146
Propionitrile	500	NA	567	113	51-161
1,1-Dichloroethane	50	NA	45	89	74-135
Acrylonitrile	250	NA	264	106	67-144
Ethyl tertiary-butyl ether	50	NA	53	107	79-136
Vinyl Acetate	50	NA	48	96	57-139
cis-1,2-Dichloroethene	50	NA	46	92	75-117
1,2-Dichloroethylene (total)	100	NA	90	90	72-121
Methyl Methacrylate	50	NA	57	114	71-136
2,2-Dichloropropane	50	NA	49	97	55-140
Bromochloromethane	50	NA	47	94	80-132
Chloroform	50	NA	47	95	80-125
Carbon Tetrachloride	50	NA	49	98	76-123
Tetrahydrofuran	50	NA	43	86	38-157
1,1,1-Trichloroethane	50	NA	47	94	79-125
1,1-Dichloropropene	50	NA	45	90	80-125
2-Butanone	50	NA	49	98	45-184
Benzene	50	NA	49	97	71-125
Cyclohexane	50	NA	51	102	57-128
Ethyl Methacrylate	50	NA	60	121	73-134
Tertiary-amyl methyl ether	50	NA	57	113	78-133
1,2-Dichloroethane	50	NA	43	86	75-125
Trichloroethene	50	NA	46	91	78-118

FORM III VOA-1
T7031.D

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 07/29/07
Report Date: 08/02/2007
Matrix: WATER

Lab ID: WG41663-1
Client ID: WG41663-LCS
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.	%REC.	QC. LIMITS
Dibromomethane	50	NA	43	86	73-125
1,2-Dichloropropane	50	NA	50	99	78-127
Bromodichloromethane	50	NA	45	91	76-118
cis-1,3-dichloropropene	50	NA	44	89	84-125
1,4-Dioxane	1000	NA	1300	130	10-178
2-Chloroethylvinylether	50	NA	45	90	20-191
Toluene	50	NA	49	98	79-118
4-methyl-2-pentanone	50	NA	50	99	44-157
Tetrachloroethene	50	NA	46	92	71-137
trans-1,3-Dichloropropene	50	NA	47	94	89-137
1,1,2-Trichloroethane	50	NA	47	94	76-125
Dibromochloromethane	50	NA	47	94	77-119
1,3-Dichloropropane	50	NA	44	88	79-122
1,2-Dibromoethane	50	NA	47	93	78-124
2-Hexanone	50	NA	53	106	27-182
Chlorobenzene	50	NA	45	90	81-118
Ethylbenzene	50	NA	45	90	80-115
1,1,1,2-Tetrachloroethane	50	NA	45	91	79-118
Xylenes (total)	150	NA	136	91	85-114
m+p-Xylenes	100	NA	88	88	87-113
o-Xylene	50	NA	48	96	80-118
Styrene	50	NA	45	90	81-116
Bromoform	50	NA	47	94	69-129
Isopropylbenzene	50	NA	54	108	87-129
cis-1,4-Dichloro-2-Butene	50	NA	58	115	60-133
trans-1,4-Dichloro-2-Butene	50	NA	56	113	67-134
Bromobenzene	50	NA	46	92	83-112
N-Propylbenzene	50	NA	50	100	79-121
1,1,2,2-Tetrachloroethane	50	NA	46	93	68-133
1,3,5-Trimethylbenzene	50	NA	49	99	80-117
2-Chlorotoluene	50	NA	47	94	86-113
1,2,3-Trichloropropane	50	NA	46	92	63-133
4-Chlorotoluene	50	NA	46	92	84-117
tert-Butylbenzene	50	NA	53	106	78-122
Pentachloroethane	50	NA	62	125	64-135
1,2,4-Trimethylbenzene	50	NA	46	93	78-116
P-Isopropyltoluene	50	NA	51	101	79-123
1,3-Dichlorobenzene	50	NA	48	97	86-111
1,4-Dichlorobenzene	50	NA	49	98	78-118
N-Butylbenzene	50	NA	49	98	76-119
sec-Butylbenzene	50	NA	49	98	77-121
1,2-Dichlorobenzene	50	NA	45	89	86-113
1,2-Dibromo-3-Chloropropane	50	NA	44	88	63-133
1,3,5-Trichlorobenzene	50	NA	54	107	84-118
Hexachlorobutadiene	50	NA	43	87	70-114

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 07/29/07
Report Date: 08/02/2007
Matrix: WATER

Lab ID: WG41663-1
Client ID: WG41663-LCS
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: JSS
Analysis Method: SW846 8260B
Lab Prep Batch: WG41663
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.		%REC.	QC. LIMITS
1,2,4-Trichlorobenzene	50	NA	49		97	74-116
1,2,3-Trimethylbenzene	50	NA	56		112	85-124
Naphthalene	50	NA	46		91	64-121
1,2,3-Trichlorobenzene	50	NA	46		92	73-117
Methyl Acetate	50	NA	43		87	52-142
Methylcyclohexane	50	NA	65	*	129	83-125
1-Chlorohexane	50	NA	0.00	*	0	78-128
Total Alkylbenzenes	350	NA	347		99	60-140

FORM 4

VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

| WG41759-BLANK |

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: PHYTOREMEDIATION FULL SCALE SDG No.: SA3785

Lab File ID: T7053 Lab Sample ID: WG41759-2

Date Analyzed: 07/31/07 Time Analyzed: 1502

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS-T

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG41759-LCS	WG41759-1	T7051	07/31/07	1346
02	ZONE E1-INF	SA3785-11DL	T7058	07/31/07	1755
03	ZONE F1-INF	SA3785-13DL	T7059	07/31/07	1828
04	ZONE F2-INF	SA3785-15DL	T7060	07/31/07	1900
05	DUPLICATE	SA3785-21DL	T7061	07/31/07	1932
06	ZONE A2-INF	SA3785-3RA	T7062	07/31/07	2005
07	ZONE F2-INF	SA3785-15RA	T7063	07/31/07	2037
08					
09					
10					
11					
12					
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30					

COMMENTS:

FORM IVVOA

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 31-JUL-2007 15:02
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: WG41759-2
Client ID: WG41759-Blank
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	1	1.0	1	1
Chloromethane	U	1	1.0	1	1
Vinyl chloride	U	1	1.0	1	1
Bromomethane	U	1	1.0	1	1
Chloroethane	U	1	1.0	1	1
Trichlorofluoromethane	U	1	1.0	1	1
Diethyl Ether	U	1	1.0	1	1
1,1-Dichloroethene	U	1	1.0	1	1
Carbon Disulfide	U	1	1.0	1	1
Methylene Chloride	U	5	1.0	5	5
Acetone	U	5	1.0	5	5
trans-1,2-Dichloroethene	U	1	1.0	1	1
Methyl tert-butyl ether	U	1	1.0	1	1
1,1-Dichloroethane	U	1	1.0	1	1
Vinyl Acetate	U	1	1.0	1	1
cis-1,2-Dichloroethene	U	1	1.0	1	1
1,2-Dichloroethylene (total)	U	2	1.0	2	2
2,2-Dichloropropane	U	1	1.0	1	1
Bromochloromethane	U	1	1.0	1	1
Chloroform	U	1	1.0	1	1
Carbon Tetrachloride	U	1	1.0	1	1
Tetrahydrofuran	U	5	1.0	5	5
1,1,1-Trichloroethane	U	1	1.0	1	1
1,1-Dichloropropene	U	1	1.0	1	1
2-Butanone	U	5	1.0	5	5
Benzene	U	1	1.0	1	1
1,2-Dichloroethane	U	1	1.0	1	1
Trichloroethene	U	1	1.0	1	1
Dibromomethane	U	1	1.0	1	1
1,2-Dichloropropane	U	1	1.0	1	1
Bromodichloromethane	U	1	1.0	1	1
cis-1,3-dichloropropene	U	1	1.0	1	1
Toluene	U	1	1.0	1	1
4-methyl-2-pentanone	U	5	1.0	5	5
Tetrachloroethene	U	1	1.0	1	1
trans-1,3-Dichloropropene	U	1	1.0	1	1
1,1,2-Trichloroethane	U	1	1.0	1	1
Dibromochloromethane	U	1	1.0	1	1
1,3-Dichloropropane	U	1	1.0	1	1
1,2-Dibromoethane	U	1	1.0	1	1
2-Hexanone	U	5	1.0	5	5
Chlorobenzene	U	1	1.0	1	1
Ethylbenzene	U	1	1.0	1	1

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 31-JUL-2007 15:02
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: WG41759-2
Client ID: WG41759-Blank
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	1	1.0	1	1
m+p-Xylenes	U	2	1.0	2	2
o-Xylene	U	1	1.0	1	1
Styrene	U	1	1.0	1	1
Xylenes (total)	U	3	1.0	3	3
Bromoform	U	1	1.0	1	1
Isopropylbenzene	U	1	1.0	1	1
Bromobenzene	U	1	1.0	1	1
N-Propylbenzene	U	1	1.0	1	1
1,1,2,2-Tetrachloroethane	U	1	1.0	1	1
1,3,5-Trimethylbenzene	U	1	1.0	1	1
2-Chlorotoluene	U	1	1.0	1	1
1,2,3-Trichloropropane	U	1	1.0	1	1
4-Chlorotoluene	U	1	1.0	1	1
tert-Butylbenzene	U	1	1.0	1	1
1,2,4-Trimethylbenzene	U	1	1.0	1	1
P-Isopropyltoluene	U	1	1.0	1	1
1,3-Dichlorobenzene	U	1	1.0	1	1
1,4-Dichlorobenzene	U	1	1.0	1	1
N-Butylbenzene	U	1	1.0	1	1
sec-Butylbenzene	U	1	1.0	1	1
1,2-Dichlorobenzene	U	1	1.0	1	1
1,2-Dibromo-3-Chloropropane	U	1	1.0	1	1
1,3,5-Trichlorobenzene	U	1	1.0	1	1
Hexachlorobutadiene	U	1	1.0	1	1
1,2,4-Trichlorobenzene	U	1	1.0	1	1
Naphthalene	U	1	1.0	1	1
1,2,3-Trichlorobenzene	U	1	1.0	1	1
Dibromofluoromethane		112%			
1,2-Dichloroethane-D4		102%			
Toluene-D8		108%			
P-Bromofluorobenzene		98%			

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 07/31/07
Report Date: 08/02/2007
Matrix: WATER

Lab ID: WG41759-1
Client ID: WG41759-LCS
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.	%REC.	QC. LIMITS
Dichlorodifluoromethane	50	NA	127	* 254	20-143
Chloromethane	50	NA	63	127	34-132
Vinyl chloride	50	NA	66	133	48-136
Bromomethane	50	NA	41	83	52-129
Chloroethane	50	NA	53	106	43-146
Trichlorofluoromethane	50	NA	64	128	62-157
Diethyl Ether	50	NA	50	99	74-141
Tertiary-butyl alcohol	250	NA	251	100	10-152
1,1-Dichloroethene	50	NA	48	96	64-126
Carbon Disulfide	50	NA	54	108	59-136
Freon-113	50	NA	46	93	78-140
Iodomethane	50	NA	47	93	54-107
Acrolein	250	NA	243	97	42-156
Methylene Chloride	50	NA	52	103	63-122
Acetone	50	NA	54	108	15-160
Isobutyl Alcohol	1000	NA	1100	110	10-169
trans-1,2-Dichloroethene	50	NA	47	93	65-128
Allyl Chloride	50	NA	49	99	64-150
Methyl tert-butyl ether	100	NA	96	96	71-140
Acetonitrile	500	NA	481	96	40-164
Di-isopropyl ether	50	NA	54	107	77-135
Chloroprene	50	NA	46	93	82-133
Methacrylonitrile	500	NA	530	106	69-146
Propionitrile	500	NA	538	108	51-161
1,1-Dichloroethane	50	NA	50	101	74-135
Acrylonitrile	250	NA	242	97	67-144
Ethyl tertiary-butyl ether	50	NA	50	100	79-136
Vinyl Acetate	50	NA	51	102	57-139
cis-1,2-Dichloroethene	50	NA	48	95	75-117
1,2-Dichloroethylene (total)	100	NA	94	94	72-121
Methyl Methacrylate	50	NA	54	108	71-136
2,2-Dichloropropane	50	NA	46	92	55-140
Bromochloromethane	50	NA	54	108	80-132
Chloroform	50	NA	52	103	80-125
Carbon Tetrachloride	50	NA	51	103	76-123
Tetrahydrofuran	50	NA	46	93	38-157
1,1,1-Trichloroethane	50	NA	49	98	79-125
1,1-Dichloropropene	50	NA	47	94	80-125
2-Butanone	50	NA	52	103	45-184
Benzene	50	NA	52	104	71-125
Cyclohexane	50	NA	54	108	57-128
Ethyl Methacrylate	50	NA	59	118	73-134
Tertiary-amyl methyl ether	50	NA	54	108	78-133
1,2-Dichloroethane	50	NA	49	98	75-125
Trichloroethene	50	NA	48	96	78-118

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 07/31/07
Report Date: 08/02/2007
Matrix: WATER

Lab ID: WG41759-1
Client ID: WG41759-LCS
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.	%REC.	QC. LIMITS
Dibromomethane	50	NA	48	95	73-125
1,2-Dichloropropane	50	NA	54	108	78-127
Bromodichloromethane	50	NA	51	101	76-118
cis-1,3-dichloropropene	50	NA	50	100	84-125
1,4-Dioxane	1000	NA	1130	113	10-178
2-Chloroethylvinylether	50	NA	52	105	20-191
Toluene	50	NA	51	102	79-118
4-methyl-2-pentanone	50	NA	52	104	44-157
Tetrachloroethene	50	NA	44	88	71-137
trans-1,3-Dichloropropene	50	NA	52	105	89-137
1,1,2-Trichloroethane	50	NA	51	101	76-125
Dibromochloromethane	50	NA	52	104	77-119
1,3-Dichloropropane	50	NA	49	98	79-122
1,2-Dibromoethane	50	NA	51	102	78-124
2-Hexanone	50	NA	53	105	27-182
Chlorobenzene	50	NA	48	96	81-118
Ethylbenzene	50	NA	47	93	80-115
1,1,1,2-Tetrachloroethane	50	NA	50	99	79-118
Xylenes (total)	150	NA	143	95	85-114
m+p-Xylenes	100	NA	92	92	87-113
o-Xylene	50	NA	50	101	80-118
Styrene	50	NA	48	97	81-116
Bromoform	50	NA	51	103	69-129
Isopropylbenzene	50	NA	54	109	87-129
cis-1,4-Dichloro-2-Butene	50	NA	54	107	60-133
trans-1,4-Dichloro-2-Butene	50	NA	48	97	67-134
Bromobenzene	50	NA	49	98	83-112
N-Propylbenzene	50	NA	50	100	79-121
1,1,2,2-Tetrachloroethane	50	NA	48	97	68-133
1,3,5-Trimethylbenzene	50	NA	50	100	80-117
2-Chlorotoluene	50	NA	49	98	86-113
1,2,3-Trichloropropane	50	NA	47	95	63-133
4-Chlorotoluene	50	NA	49	97	84-117
tert-Butylbenzene	50	NA	53	106	78-122
Pentachloroethane	50	NA	63	125	64-135
1,2,4-Trimethylbenzene	50	NA	48	96	78-116
P-Isopropyltoluene	50	NA	51	102	79-123
1,3-Dichlorobenzene	50	NA	52	103	86-111
1,4-Dichlorobenzene	50	NA	52	103	78-118
N-Butylbenzene	50	NA	49	99	76-119
sec-Butylbenzene	50	NA	50	99	77-121
1,2-Dichlorobenzene	50	NA	48	96	86-113
1,2-Dibromo-3-Chloropropane	50	NA	44	89	63-133
1,3,5-Trichlorobenzene	50	NA	51	101	84-118
Hexachlorobutadiene	50	NA	46	93	70-114

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 07/31/07
Report Date: 08/02/2007
Matrix: WATER

Lab ID: WG41759-1
Client ID: WG41759-LCS
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41759
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.		%REC.	QC. LIMITS
1,2,4-Trichlorobenzene	50	NA	50		101	74-116
1,2,3-Trimethylbenzene	50	NA	53		106	85-124
Naphthalene	50	NA	45		90	64-121
1,2,3-Trichlorobenzene	50	NA	47		94	73-117
Methyl Acetate	50	NA	41		81	52-142
Methylcyclohexane	50	NA	51		102	83-125
1-Chlorohexane	50	NA	0.00	*	0	78-128
Total Alkylbenzenes	350	NA	351		100	60-140

FORM III VOA-1

T7051.D

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG41746-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: PHYTOREMEDIATION FULL SCALE SDG No.: SA3785

Lab File ID: Z4060 Lab Sample ID: WG41746-2

Date Analyzed: 07/31/07 Time Analyzed: 1227

GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS-Z

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG41746-LCS	WG41746-1	Z4058	07/31/07	1107
02	SP03-EFF#3	SA3785-20RA	Z4066	07/31/07	1606
03	ZONE A1-INF	SA3785-1DL	Z4067	07/31/07	1641
04	ZONE A2-INF	SA3785-3DL	Z4068	07/31/07	1716
05	ZONE B2-INF	SA3785-5DL	Z4069	07/31/07	1751
06	SP03-EFF#1	SA3785-18DL	Z4070	07/31/07	1827
07	SP03-EFF#2	SA3785-19DL	Z4071	07/31/07	1902
08	SP03-MID	SA3785-17DL	Z4072	07/31/07	1937
09					
10					
11					
12					
13					
14					
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16					
17					
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20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IVVOA

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 31-JUL-2007 12:27
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: WG41746-2
Client ID: WG41746-Blank
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
Dichlorodifluoromethane	U	1	1.0	1	1
Chloromethane	U	1	1.0	1	1
Vinyl chloride	U	1	1.0	1	1
Bromomethane	U	1	1.0	1	1
Chloroethane	U	1	1.0	1	1
Trichlorofluoromethane	U	1	1.0	1	1
Diethyl Ether	U	1	1.0	1	1
1,1-Dichloroethene	U	1	1.0	1	1
Carbon Disulfide	U	1	1.0	1	1
Methylene Chloride	U	5	1.0	5	5
Acetone	U	5	1.0	5	5
trans-1,2-Dichloroethene	U	1	1.0	1	1
Methyl tert-butyl ether	U	1	1.0	1	1
1,1-Dichloroethane	U	1	1.0	1	1
Vinyl Acetate	U	1	1.0	1	1
cis-1,2-Dichloroethene	U	1	1.0	1	1
1,2-Dichloroethylene (total)	U	2	1.0	2	2
2,2-Dichloropropane	U	1	1.0	1	1
Bromochloromethane	U	1	1.0	1	1
Chloroform	U	1	1.0	1	1
Carbon Tetrachloride	U	1	1.0	1	1
Tetrahydrofuran	U	5	1.0	5	5
1,1,1-Trichloroethane	U	1	1.0	1	1
1,1-Dichloropropene	U	1	1.0	1	1
2-Butanone	U	5	1.0	5	5
Benzene	U	1	1.0	1	1
1,2-Dichloroethane	U	1	1.0	1	1
Trichloroethene	U	1	1.0	1	1
Dibromomethane	U	1	1.0	1	1
1,2-Dichloropropane	U	1	1.0	1	1
Bromodichloromethane	U	1	1.0	1	1
cis-1,3-dichloropropene	U	1	1.0	1	1
Toluene	U	1	1.0	1	1
4-methyl-2-pentanone	U	5	1.0	5	5
Tetrachloroethene	U	1	1.0	1	1
trans-1,3-Dichloropropene	U	1	1.0	1	1
1,1,2-Trichloroethane	U	1	1.0	1	1
Dibromochloromethane	U	1	1.0	1	1
1,3-Dichloropropane	U	1	1.0	1	1
1,2-Dibromoethane	U	1	1.0	1	1
2-Hexanone	U	5	1.0	5	5
Chlorobenzene	U	1	1.0	1	1
Ethylbenzene	U	1	1.0	1	1

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 31-JUL-2007 12:27
Report Date: 08/02/2007
Matrix: WATER
% Solids: NA

Lab ID: WG41746-2
Client ID: WG41746-Blank
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

Compound	Flags	Results	DF	PQL	Adj.PQL
1,1,1,2-Tetrachloroethane	U	1	1.0	1	1
m+p-Xylenes	U	2	1.0	2	2
o-Xylene	U	1	1.0	1	1
Styrene	U	1	1.0	1	1
Xylenes (total)	U	3	1.0	3	3
Bromoform	U	1	1.0	1	1
Isopropylbenzene	U	1	1.0	1	1
Bromobenzene	U	1	1.0	1	1
N-Propylbenzene	U	1	1.0	1	1
1,1,2,2-Tetrachloroethane	U	1	1.0	1	1
1,3,5-Trimethylbenzene	U	1	1.0	1	1
2-Chlorotoluene	U	1	1.0	1	1
1,2,3-Trichloropropane	U	1	1.0	1	1
4-Chlorotoluene	U	1	1.0	1	1
tert-Butylbenzene	U	1	1.0	1	1
1,2,4-Trimethylbenzene	U	1	1.0	1	1
P-Isopropyltoluene	U	1	1.0	1	1
1,3-Dichlorobenzene	U	1	1.0	1	1
1,4-Dichlorobenzene	U	1	1.0	1	1
N-Butylbenzene	U	1	1.0	1	1
sec-Butylbenzene	U	1	1.0	1	1
1,2-Dichlorobenzene	U	1	1.0	1	1
1,2-Dibromo-3-Chloropropane	U	1	1.0	1	1
1,3,5-Trichlorobenzene	U	1	1.0	1	1
Hexachlorobutadiene	U	1	1.0	1	1
1,2,4-Trichlorobenzene	U	1	1.0	1	1
Naphthalene	U	1	1.0	1	1
1,2,3-Trichlorobenzene	U	1	1.0	1	1
Dibromofluoromethane		86%			
1,2-Dichloroethane-D4		89%			
Toluene-D8		93%			
P-Bromofluorobenzene		85%			

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 07/31/07
Report Date: 08/02/2007
Matrix: WATER

Lab ID: WG41746-1
Client ID: WG41746-LCS
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.		%REC.	QC. LIMITS
Dichlorodifluoromethane	50	NA	76	*	152	20-143
Chloromethane	50	NA	49		98	34-132
Vinyl chloride	50	NA	47		94	48-136
Bromomethane	50	NA	52		104	52-129
Chloroethane	50	NA	53		106	43-146
Trichlorofluoromethane	50	NA	57		114	62-157
Diethyl Ether	50	NA	47		94	74-141
Tertiary-butyl alcohol	250	NA	390	*	156	10-152
1,1-Dichloroethene	50	NA	51		102	64-126
Carbon Disulfide	50	NA	50		101	59-136
Freon-113	50	NA	42		84	78-140
Iodomethane	50	NA	82	*	165	54-107
Acrolein	250	NA	244		98	42-156
Methylene Chloride	50	NA	49		98	63-122
Acetone	50	NA	54		108	15-160
Isobutyl Alcohol	1000	NA	979		98	10-169
trans-1,2-Dichloroethene	50	NA	52		104	65-128
Allyl Chloride	50	NA	47		94	64-150
Methyl tert-butyl ether	100	NA	98		98	71-140
Acetonitrile	500	NA	518		104	40-164
Di-isopropyl ether	50	NA	61		122	77-135
Chloroprene	50	NA	45		90	82-133
Methacrylonitrile	500	NA	476		95	69-146
Propionitrile	500	NA	538		108	51-161
1,1-Dichloroethane	50	NA	50		101	74-135
Acrylonitrile	250	NA	246		98	67-144
Ethyl tertiary-butyl ether	50	NA	46		92	79-136
Vinyl Acetate	50	NA	48		95	57-139
cis-1,2-Dichloroethene	50	NA	50		101	75-117
1,2-Dichloroethylene (total)	100	NA	102		102	72-121
Methyl Methacrylate	50	NA	47		94	71-136
2,2-Dichloropropane	50	NA	49		99	55-140
Bromochloromethane	50	NA	53		106	80-132
Chloroform	50	NA	50		100	80-125
Carbon Tetrachloride	50	NA	49		98	76-123
Tetrahydrofuran	50	NA	52		103	38-157
1,1,1-Trichloroethane	50	NA	51		101	79-125
1,1-Dichloropropene	50	NA	48		96	80-125
2-Butanone	50	NA	55		110	45-184
Benzene	50	NA	48		96	71-125
Cyclohexane	50	NA	51		103	57-128
Ethyl Methacrylate	50	NA	49		98	73-134
Tertiary-amyl methyl ether	50	NA	50		101	78-133
1,2-Dichloroethane	50	NA	52		104	75-125
Trichloroethene	50	NA	52		105	78-118

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 07/31/07
Report Date: 08/02/2007
Matrix: WATER

Lab ID: WG41746-1
Client ID: WG41746-LCS
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.	%REC.	QC. LIMITS
Dibromomethane	50	NA	48	96	73-125
1,2-Dichloropropane	50	NA	50	99	78-127
Bromodichloromethane	50	NA	49	98	76-118
cis-1,3-dichloropropene	50	NA	50	101	84-125
1,4-Dioxane	1000	NA	545	54	10-178
2-Chloroethylvinylether	50	NA	52	103	20-191
Toluene	50	NA	46	93	79-118
4-methyl-2-pentanone	50	NA	49	98	44-157
Tetrachloroethene	50	NA	49	97	71-137
trans-1,3-Dichloropropene	50	NA	53	105	89-137
1,1,2-Trichloroethane	50	NA	47	94	76-125
Dibromochloromethane	50	NA	55	110	77-119
1,3-Dichloropropane	50	NA	50	101	79-122
1,2-Dibromoethane	50	NA	50	99	78-124
2-Hexanone	50	NA	50	101	27-182
Chlorobenzene	50	NA	50	100	81-118
Ethylbenzene	50	NA	48	97	80-115
1,1,1,2-Tetrachloroethane	50	NA	53	106	79-118
Xylenes (total)	150	NA	152	101	85-114
m+p-Xylenes	100	NA	105	105	87-113
o-Xylene	50	NA	48	95	80-118
Styrene	50	NA	53	106	81-116
Bromoform	50	NA	52	104	69-129
Isopropylbenzene	50	NA	54	107	87-129
cis-1,4-Dichloro-2-Butene	50	NA	55	111	60-133
trans-1,4-Dichloro-2-Butene	50	NA	52	104	67-134
Bromobenzene	50	NA	51	101	83-112
N-Propylbenzene	50	NA	51	102	79-121
1,1,2,2-Tetrachloroethane	50	NA	55	110	68-133
1,3,5-Trimethylbenzene	50	NA	47	94	80-117
2-Chlorotoluene	50	NA	51	102	86-113
1,2,3-Trichloropropane	50	NA	50	101	63-133
4-Chlorotoluene	50	NA	49	97	84-117
tert-Butylbenzene	50	NA	48	96	78-122
Pentachloroethane	50	NA	49	98	64-135
1,2,4-Trimethylbenzene	50	NA	52	104	78-116
P-Isopropyltoluene	50	NA	50	100	79-123
1,3-Dichlorobenzene	50	NA	50	100	86-111
1,4-Dichlorobenzene	50	NA	53	106	78-118
N-Butylbenzene	50	NA	50	99	76-119
sec-Butylbenzene	50	NA	52	105	77-121
1,2-Dichlorobenzene	50	NA	49	99	86-113
1,2-Dibromo-3-Chloropropane	50	NA	52	103	63-133
1,3,5-Trichlorobenzene	50	NA	48	97	84-118
Hexachlorobutadiene	50	NA	45	90	70-114

FORM III VOA-1
Z4058.D

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: Phytoremediation Full Scale
PO No:
Sample Date:
Received Date:
Extraction Date:
Analysis Date: 07/31/07
Report Date: 08/02/2007
Matrix: WATER

Lab ID: WG41746-1
Client ID: WG41746-LCS
SDG: SA3785
Extracted by:
Extraction Method: SW846 5030
Analyst: DMF
Analysis Method: SW846 8260B
Lab Prep Batch: WG41746
Units: ug/l

COMPOUND	LCS SPIKE	SAMPLE CONC.	LCS CONC.	%REC.	QC. LIMITS
1,2,4-Trichlorobenzene	50	NA	47	94	74-116
1,2,3-Trimethylbenzene	50	NA	48	95	85-124
Naphthalene	50	NA	49	98	64-121
1,2,3-Trichlorobenzene	50	NA	46	93	73-117
Methyl Acetate	50	NA	52	103	52-142
Methylcyclohexane	50	NA	48	95	83-125
1-Chlorohexane	50	NA	49	98	78-128
Total Alkylbenzenes	350	NA	350	100	60-140

Katahdin
ANALYTICAL SERVICES

PREPARATION BLANK REPORT

Sample ID PBWXG20ICW1 **Batch ID** XG20ICW1

Element Name	Result	Units	Flag	PQL	File
ALUMINUM	0.02	mg/L	U	0.30	IXG20A
ANTIMONY	0.0009	mg/L	U	0.0080	IXG20A
ARSENIC	0.0008	mg/L	U	0.0080	IXG20A
BARIUM	0.0004	mg/L	U	0.0050	IXG20A
BERYLLIUM	0.0001	mg/L	U	0.0050	IXG20A
BORON	0.0008	mg/L	U	0.100	IXG20A
CADMIUM	0.0001	mg/L	U	0.0100	IXG20A
CALCIUM	0.008	mg/L	U	0.050	IXG20A
CHROMIUM	0.0003	mg/L	U	0.0150	IXG20A
COBALT	0.0003	mg/L	U	0.0300	IXG20A
COPPER	0.0002	mg/L	U	0.0250	IXG20A
IRON	0.013	mg/L	J	0.100	IXG20A
LEAD	0.0009	mg/L	U	0.0050	IXG20A
MAGNESIUM	0.005	mg/L	U	0.050	IXG20A
MANGANESE	0.0008	mg/L	J	0.0050	IXG20A
MOLYBDENUM	0.0003	mg/L	J	0.0100	IXG20A
NICKEL	0.0009	mg/L	J	0.0400	IXG20A
POTASSIUM	0.09	mg/L	U	1.00	IXG20A
SELENIUM	0.002	mg/L	U	0.010	IXG20A
SILICON	0.03	mg/L	J	0.20	IXG20A
SILVER	0.0005	mg/L	U	0.0150	IXG20A
SODIUM	0.06	mg/L	J	1.00	IXG20A
STRONTIUM	0.0003	mg/L	U	0.100	IXG20A
THALLIUM	0.00062	mg/L	J	0.0150	FXG25A
TIN	0.0005	mg/L	U	0.100	IXG20A
TITANIUM	0.0003	mg/L	U	0.0150	IXG20A
URANIUM	0.00002	mg/L	J	0.00100	FXG25A
VANADIUM	0.0003	mg/L	U	0.0250	IXG20A
ZINC	0.0015	mg/L	J	0.0250	IXG20A

U The analyte was not detected in the sample at a level greater than the instrument detection limit.

J The analyte was detected in the sample at a concentration greater than the instrument detection limit, but less than the laboratory's Practical Quantitation Level.

H The analyte was detected in the sample at a concentration greater than the laboratory's acceptance limit.

Katahdin
ANALYTICAL SERVICES

LABORATORY CONTROL SAMPLE REPORT

Sample ID LCSWXG20ICW1 **Batch ID** XG20ICW1

Element Name	True Value	Result	Units	Recovery(%)	Flag	Limits (%)		File
ALUMINUM	2.00	2.13	mg/L	106.5%		80.	120.	IXG20A
ANTIMONY	0.500	0.516	mg/L	103.2%		80.	120.	IXG20A
ARSENIC	0.500	0.518	mg/L	103.6%		80.	120.	IXG20A
BARIUM	2.00	2.15	mg/L	107.5%		80.	120.	IXG20A
BERYLLIUM	0.0500	0.0536	mg/L	107.2%		80.	120.	IXG20A
BORON	0.500	0.514	mg/L	102.8%		80.	120.	IXG20A
CADMIUM	0.250	0.277	mg/L	110.8%		80.	120.	IXG20A
CALCIUM	2.50	2.66	mg/L	106.4%		80.	120.	IXG20A
CHROMIUM	0.200	0.215	mg/L	107.5%		80.	120.	IXG20A
COBALT	0.500	0.560	mg/L	112.0%		80.	120.	IXG20A
COPPER	0.250	0.255	mg/L	102.0%		80.	120.	IXG20A
IRON	1.00	1.08	mg/L	108.0%		80.	120.	IXG20A
LEAD	0.500	0.558	mg/L	111.6%		80.	120.	IXG20A
MAGNESIUM	5.00	5.48	mg/L	109.6%		80.	120.	IXG20A
MANGANESE	0.500	0.502	mg/L	100.4%		80.	120.	IXG20A
MOLYBDENUM	0.300	0.339	mg/L	113.0%		80.	120.	IXG20A
NICKEL	0.500	0.544	mg/L	108.8%		80.	120.	IXG20A
POTASSIUM	10.0	10.0	mg/L	100.0%		80.	120.	IXG20A
SELENIUM	0.500	0.522	mg/L	104.4%		80.	120.	IXG20A
SILICON	5.23	5.07	mg/L	96.9%		80.	120.	IXG20A
SILVER	0.0500	0.0514	mg/L	102.8%		80.	120.	IXG20A
SODIUM	7.50	8.27	mg/L	110.3%		80.	120.	IXG20A
STRONTIUM	0.500	0.546	mg/L	109.2%		80.	120.	IXG20A
THALLIUM	0.500	0.486	mg/L	97.2%		80.	120.	FXG25A
TIN	0.500	0.561	mg/L	112.2%		80.	120.	IXG20A
TITANIUM	1.00	1.04	mg/L	104.0%		80.	120.	IXG20A
URANIUM	0.100	0.0963	mg/L	96.3%		80.	120.	FXG25A
VANADIUM	0.500	0.517	mg/L	103.4%		80.	120.	IXG20A
ZINC	0.500	0.545	mg/L	109.0%		80.	120.	IXG20A

H Laboratory control sample recovery is greater than the laboratory's acceptance limit.

L Laboratory control sample recovery is less than the laboratory's acceptance limit.

Katahdin Analytical Services, Inc. **Sample Receipt Condition Report**

Client: Malcolm Pirnie	KAS PM: ASK	Sampled By: Client
Project:	KIMS Entry By: DJ	Delivered By: FEDEX
KAS Work Order#: SA3785	KIMS Review By: AM ✓	Received By: DJ
SDG #:	Cooler: 1 of 1	Date/Time Rec.: 071907 1020

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	X				
2. Chain of Custody present in cooler?	X				
3. Chain of Custody signed by client?	X				
4. Chain of Custody matches samples?	X				
5. Temperature Blanks present?	X				Temp (°C): 9.5
6. Samples received at < 6 °C w/o freezing? Ice or ice packs present? (Y) or N	X				Cooler temp. (°C): (if no temp blank) 0.6
7. Volatiles free of headspace? **Aqueous:** No bubble larger than a pea	X				
Soil/Sediment: Received in airtight container?				X	
Received in methanol?				X	
Methanol covering soil?				X	
8. Trip Blank present in cooler?	X				
9. Proper sample containers and volume?	X				
10. Samples within hold time upon receipt?	X				
11. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	X				
Sulfide - >9				X	
Cyanide – pH >12				X	
12. Corrective Action Report Filed?				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

Katahdin ANALYTICAL SERVICES
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Client: Malcolm Pirnie, Inc (Att: A. Accardi-Dey) | Contact: Amy Marie Accardi-Dey | Phone #: (914) 641-2699 | Fax #: (914) 641-2452

Address: 104 Corporate Park Drive | City: White Plains | State: NY | Zip Code: 10604

Purchase Order #: Proj. #2118-124 | Proj. Name / No.: Phytoremediation Full Scale 2118124 | Katahdin Quote #:

Bill (if different than above): | Address:

Sampler (Print / Sign): Amy Marie Accardi Dey & Kelley J. Roe | Copies To:

LAB USE ONLY | WORK ORDER #: SA3785 | KATAHDIN PROJECT NUMBER:

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP °C: ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	ANALYSIS AND CONTAINER TYPE PRESERVATIVES: VOC (8260B) 40ml vial / HCl	Total Iron 125 ml P. / HNO3	Hardness 125 ml P. / HNO3	Dissolve Lead 125ml P. / HNO3	Filt. ☐Y ☒N (all)	Filt. ☐Y ☐N (all)
Zone A1-INF	7/17/07 1235 (1300)	SW	5	✓	✓	✓	✓		
Zone A2-INF	7/17/07/1515			✓	✓	✓	✓		
Zone B2-INF	7/17/07/1300			✓	✓	✓	✓		
Zone C2-INF	7/17/07/1125			✓	✓	✓	✓		
Zone D1-INF	7/17/07/1055			✓	✓	✓	✓		
Zone E1-INF	7/18/07/1320			✓	✓	✓	✓		
Zone F1-INF	7/18/07/1610			✓	✓	✓	✓		
Zone F2-INF	7/18/07/1550			✓	✓	✓	✓		
SP03-MID	7/17/07/1500		3	✓					
SP03-EFF#1	7/17/07/1450		3	✓					
SP03-EFF#2	7/17/07/1440		3	✓					
SP03-EFF#3	7/17/07/1430		3	✓					
DUPLICATE	7/18/07/—		5	✓	✓	✓	✓		
TRIP BLANK	7/10/07/0930	AQ	2	✓					
	/								
	/								

COMMENTS: Please note "SP03-Eff#1", VOA bottle #1, may be low on HCl (overfilled during Sampling)

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
[signature]	7/18/07 1900	FedEx TRK#	8592 0661 6117	7/18/07 1900	[signature]
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

ORIGINAL

Katahdin ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jul. 19, 2007
02:27 PM

Login Number: SA3785

Account: MALPIR001
Malcolm Pirnie, Inc.

Project: MALPIRGAS001
Fort Drum Gas Alley

NoWeb

Primary Report Address:
AmyMarie Accardi-Dey
Malcolm Pirnie, Inc.
104 Corporate Park Drive

White Plains,NY 10602-0751

Primary Invoice Address:
Accounts Payable
Malcolm Pirnie, Inc.
P.O. Box 1240

White Plains,NY 10602-1240

Report CC Addresses:
Invoice CC Addresses:

Login Information

ANALYSIS INSTRUCTIONS	:	
CHECK NO.	:	
CLIENT PO#	:	2188-124
COOLER TEMPERATURE	:	0.6
DELIVERY SERVICES	:	FEDEX
EDD FORMAT	:	KAS047QC-XLS, KAS054-TXT, KAS081-XLS
MAIL DATE	:	
PM	:	AJC
PROJECT NAME	:	Phytoremediation Full Scale
QC LEVEL	:	II+ w/ narritive
REGULATORY LIST	:	USACOE
REPORT INSTRUCTIONS	:	Send copy of rpt and EDDs on CD.
SDG ID	:	
SDG STATUS	:	

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Comments
SA3785-1	ZONE A1-INF	17-JUL-07 12:35	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SM2340B-HARDNESS	13-JAN-08	125mL Plastic+HNO3	1
Aqueous	S	SW3010-PREP	13-JAN-08		
Aqueous	S	SW6010-CALCIUM	13-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW6010-IRON	13-JAN-08	250mL Plastic+HNO3	1
Aqueous	S	SW6010-MAGNESIUM	13-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW8260-S	31-JUL-07	40mL Vial+HCl	3

SA3785-2	ZONE A1-INF	17-JUL-07 12:35	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW3010-PREP	13-JAN-08		
Aqueous	S	SW6010-LEAD-DIS	13-JAN-08	250mL Plastic+HNO3	1

SA3785-3	ZONE A2-INF	17-JUL-07 15:15	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SM2340B-HARDNESS	13-JAN-08	125mL Plastic+HNO3	1
Aqueous	S	SW3010-PREP	13-JAN-08		
Aqueous	S	SW6010-CALCIUM	13-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW6010-IRON	13-JAN-08	250mL Plastic+HNO3	1
Aqueous	S	SW6010-MAGNESIUM	13-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW8260-S	31-JUL-07	40mL Vial+HCl	3

SA3785-4	ZONE A2-INF	17-JUL-07 15:15	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW3010-PREP	13-JAN-08		
Aqueous	S	SW6010-LEAD-DIS	13-JAN-08	250mL Plastic+HNO3	1

SA3785-5	ZONE B2-INF	17-JUL-07 13:00	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SM2340B-HARDNESS	13-JAN-08	125mL Plastic+HNO3	1
Aqueous	S	SW3010-PREP	13-JAN-08		
Aqueous	S	SW6010-CALCIUM	13-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW6010-IRON	13-JAN-08	250mL Plastic+HNO3	1
Aqueous	S	SW6010-MAGNESIUM	13-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW8260-S	31-JUL-07	40mL Vial+HCl	3

Login Number: SA3785

Account: MALPIR001 NoWeb
Malcolm Pirnie, Inc.

Project: MALPIRGAS001
Fort Drum Gas Alley

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Comments
SA3785-6	ZONE B2-INF	17-JUL-07 13:00	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW3010-PREP	13-JAN-08		
Aqueous	S	SW6010-LEAD-DIS	13-JAN-08	250mL Plastic+HNO3	1

SA3785-7	ZONE C2-INF	17-JUL-07 11:25	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SM2340B-HARDNESS	13-JAN-08	125mL Plastic+HNO3	1
Aqueous	S	SW3010-PREP	13-JAN-08		
Aqueous	S	SW6010-CALCIUM	13-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW6010-IRON	13-JAN-08	250mL Plastic+HNO3	1
Aqueous	S	SW6010-MAGNESIUM	13-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW8260-S	31-JUL-07	40mL Vial+HCl	3

SA3785-8	ZONE C2-INF	17-JUL-07 11:25	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW3010-PREP	13-JAN-08		
Aqueous	S	SW6010-LEAD-DIS	13-JAN-08	250mL Plastic+HNO3	1

SA3785-9	ZONE D1-INF	17-JUL-07 10:55	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SM2340B-HARDNESS	13-JAN-08	125mL Plastic+HNO3	1
Aqueous	S	SW3010-PREP	13-JAN-08		
Aqueous	S	SW6010-CALCIUM	13-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW6010-IRON	13-JAN-08	250mL Plastic+HNO3	1
Aqueous	S	SW6010-MAGNESIUM	13-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW8260-S	31-JUL-07	40mL Vial+HCl	3

SA3785-10	ZONE D1-INF	17-JUL-07 10:55	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW3010-PREP	13-JAN-08		
Aqueous	S	SW6010-LEAD-DIS	13-JAN-08	250mL Plastic+HNO3	1

SA3785-11	ZONE E1-INF	18-JUL-07 13:20	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SM2340B-HARDNESS	14-JAN-08	125mL Plastic+HNO3	1
Aqueous	S	SW3010-PREP	14-JAN-08		
Aqueous	S	SW6010-CALCIUM	14-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW6010-IRON	14-JAN-08	250mL Plastic+HNO3	1
Aqueous	S	SW6010-MAGNESIUM	14-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW8260-S	01-AUG-07	40mL Vial+HCl	3

SA3785-12	ZONE E1-INF	18-JUL-07 13:20	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW3010-PREP	14-JAN-08		
Aqueous	S	SW6010-LEAD-DIS	14-JAN-08	250mL Plastic+HNO3	1

SA3785-13	ZONE F1-INF	18-JUL-07 16:10	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SM2340B-HARDNESS	14-JAN-08	125mL Plastic+HNO3	1
Aqueous	S	SW3010-PREP	14-JAN-08		
Aqueous	S	SW6010-CALCIUM	14-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW6010-IRON	14-JAN-08	250mL Plastic+HNO3	1
Aqueous	S	SW6010-MAGNESIUM	14-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW8260-S	01-AUG-07	40mL Vial+HCl	3

Login Number: SA3785

Account: MALPIR001 NoWeb
Malcolm Pirnie, Inc.

Project: MALPIRGAS001
Fort Drum Gas Alley

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Comments
SA3785-14	ZONE F1-INF	18-JUL-07 16:10	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW3010-PREP	14-JAN-08		
Aqueous	S	SW6010-LEAD-DIS	14-JAN-08	250mL Plastic+HNO3	1

SA3785-15	ZONE F2-INF	18-JUL-07 15:50	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SM2340B-HARDNESS	14-JAN-08	125mL Plastic+HNO3	1
Aqueous	S	SW3010-PREP	14-JAN-08		
Aqueous	S	SW6010-CALCIUM	14-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW6010-IRON	14-JAN-08	250mL Plastic+HNO3	1
Aqueous	S	SW6010-MAGNESIUM	14-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW8260-S	01-AUG-07	40mL Vial+HCl	3

SA3785-16	ZONE F2-INF	18-JUL-07 15:50	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW3010-PREP	14-JAN-08		
Aqueous	S	SW6010-LEAD-DIS	14-JAN-08	250mL Plastic+HNO3	1

SA3785-17	SP03-MID	17-JUL-07 15:00	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW8260-S	31-JUL-07	40mL Vial+HCl	3

SA3785-18	SP03-EFF#1	17-JUL-07 14:50	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW8260-S	31-JUL-07	40mL Vial+HCl	3

SA3785-19	SP03-EFF#2	17-JUL-07 14:40	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW8260-S	31-JUL-07	40mL Vial+HCl	3

SA3785-20	SP03-EFF#3	17-JUL-07 14:30	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW8260-S	31-JUL-07	40mL Vial+HCl	3

SA3785-21	DUPLICATE	18-JUL-07 00:00	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SM2340B-HARDNESS	14-JAN-08	125mL Plastic+HNO3	1
Aqueous	S	SW3010-PREP	14-JAN-08		
Aqueous	S	SW6010-CALCIUM	14-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW6010-IRON	14-JAN-08	250mL Plastic+HNO3	1
Aqueous	S	SW6010-MAGNESIUM	14-JAN-08	250mL Plastic+HNO3	
Aqueous	S	SW8260-S	01-AUG-07	40mL Vial+HCl	3

SA3785-22	DUPLICATE	18-JUL-07 00:00	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW3010-PREP	14-JAN-08		
Aqueous	S	SW6010-LEAD-DIS	14-JAN-08	250mL Plastic+HNO3	1

SA3785-23	TRIP BLANK	10-JUL-07 09:30	19-JUL-07			14-AUG-07	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count
Aqueous	S	SW8260-S	24-JUL-07	40mL Vial+HCl	2

Total Samples: **23** ***Total Analyses:*** **77**