



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Sulte B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Sulte F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
North Slough 1	P3H0458-01	Soil	08/14/03 13:10	08/14/03 14:18
North Slough 2	P3H0458-02	Soil	08/14/03 13:15	08/14/03 14:18
Bybee Lake 1	P3H0458-03	Soil	08/14/03 13:25	08/14/03 14:18
Bybee Lake 2	P3H0458-04	Soil	08/14/03 13:30	08/14/03 14:18

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its

Crystal Jones, Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network** Page 1 of 17



 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223 425.420.9200 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210

20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Total Metals per EPA 6000/7000 Series Methods North Creek Analytical - Portland

	Reporting							
Analyte Result	Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
North Slough 1 (P3H0458-01) Soil				Sampled: 08/	14/03 Rece	ived: 08/14/	03	
Arsenic 6.45	0.446	mg/kg dry	1	EPA 6020	08/21/03	08/28/03	3080716	
Copper 33.4	1.79		n	.11	m.	n	11	
Lead 20.5	0.446		30	21	"	u	m.	
Mercury 0.109	0.0500	311	22.	EPA 7471A	08/18/03	08/18/03	3080557	
Nickel 21.9	0.893	30	22	EPA 6020	08/21/03	08/28/03	3080716	
Zinc 118	1.79			n	"	"	m.	
North Slough 2 (P3H0458-02) Soil				Sampled: 08/	14/03 Rece	ived: 08/14/	03	
Arsenic 5.06	0.394	mg/kg dry	1	EPA 6020	08/21/03	08/28/03	3080716	
Copper 30.5		"	11	u.		25	"	
Lead 15.3	0.394	n	"		10.	11.	**	
Mercury 0.0620	0.0463	30	,n	EPA 7471A	08/18/03	08/18/03	3080557	
Nickel 22.8	0.787	"	n	EPA 6020	08/21/03	08/28/03	3080716	
Zinc 159	1.57	"	n	24,	n.	<u>u</u>	11:	
Bybee Lake 1 (P3H0458-03) Soil				Sampled: 08/1	4/03 Rece	ived: 08/14/0	03	
Arsenic 7.49	0.424	mg/kg dry	1	EPA 6020	08/21/03	08/28/03	3080716	
Copper 41.2		"	11	u	II.	ж	11	
Lead 37.0	0.424	21	"	21	11.	W.	v	
Mercury 0.0793	0.0641		11	EPA 7471A	08/18/03	08/18/03	3080557	
Nickel 22.0	0.847		"	EPA 6020	08/21/03	08/28/03	3080716	
Zinc 145	1.69	"	"	m .	u	H.	n	
Bybee Lake 2 (P3H0458-04) Soil				Sampled: 08/1	4/03 Rece	ived: 08/14/0	03	
Arsenic 6.73	0.500	mg/kg dry	1	EPA 6020	08/21/03	08/28/03	3080716	
Copper 29.8		mg/kg dry	,,	"	"	"	"	
Lead 18.4		"		21				
Mercury 0.0467		n		EPA 7471A	08/18/03	08/18/03	3080557	
Nickel 22.2		"	11	EPA 6020	08/21/03	08/28/03	3080716	
Zinc 110	2.00	n	"	"	**	0.	н	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network** Page 2 of 17



 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200

 fax 503.906.9210

20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Organochlorine Pesticides per EPA Method 8081A

North Creek Analytical - Portland

		Reporting							
Analyte	Result	Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
North Slough 1 (P3H0458-01) Soil					Sampled: 08/	14/03 Rece	ived: 08/14/	03	
Aldrin	ND	6.70	ug/kg dry	1	EPA 8081A	08/19/03	08/21/03	3080605	
alpha-BHC	ND	6.70	"	"	"	"	11	"	
beta-BHC	ND	6.70	11	"	"	"			
delta-BHC	ND	6.70	"	н	"	"	**		
gamma-BHC (Lindane)	ND	6.70	11.	11.	n	"	W	11	
gamma-Chlordane	ND	6.70	16.		n	**	"	11	
alpha-Chlordane	ND	6.70	"	m.	**		11	iii	
Chlordane (tech)	ND	150	"	"	**	H	H.	ii.	
4,4'-DDD	ND	6.70	"						
4,4'-DDE	ND	6.70	"	"	10	"		ii.	
4,4'-DDT	ND	13.4	-"	2	n	"	08/21/03	ĬĆ.	R-05
Dieldrin	ND	6.70	"	1	**	n.	08/21/03	11	
Endosulfan I	ND	6.70	и.	"	n	W	11	TI .	
Endosulfan II	ND	6.70	11	"	n			u.	
Endosulfan sulfate	ND	6.70	11	"				n n	
Endrin	ND	6.70	iii	H.	"	'n	20	n.	
Endrin aldehyde	ND	6.70	11	îĉ	**	"	"	n	
Endrin ketone	ND	6.70		W.	"	n.	11		
Heptachlor	ND	6.70	TE.	11		ñ	ii.	n	
Heptachlor epoxide	ND	6.70	W	n	m .	W.	ii.	ŭ	
Methoxychlor	ND	13.4	**	2		"	08/21/03	"	R-05
Toxaphene	ND	200	116	1	11	"	08/21/03	0	
Surr: Decachlorobiphenyl	100 %	16-149							
Surr: 2,4,5,6-Tetrachloro-m-xylene	76.8 %	36-140							

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network Page 3 of 17



 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Organochlorine Pesticides per EPA Method 8081A

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
North Slough 2 (P3H0458-02) Soil					Sampled: 08/	14/03 Rece	ived: 08/14/	03	
Aldrin	ND	6.70	ug/kg dry	1	EPA 8081A	08/19/03	08/21/03	3080605	
alpha-BHC	ND	6.70	u	11	W	п	"	n	
beta-BHC	ND	6.70	**		11	n	31	п	
delta-BHC	ND	6.70	***	311	n	ĨĨ	n	ï	
gamma-BHC (Lindane)	ND	6.70	W	10		w	"	m	
gamma-Chlordane	ND	6.70	0	"		"	"	n	
alpha-Chlordane	ND	6.70	110	30	n.	**	31	n	
Chlordane (tech)	ND	150	***	0	n	11	30	n	
4,4'-DDD	ND	6.70			***	и	**	m .	
4,4'-DDE	ND	6.70	(0)	U	50	11	71	**	
4,4'-DDT	ND	13.4	W.	2	w		08/21/03	11	R-05
Dieldrin	ND	6.70	U	1	311	110	08/21/03	n	
Endosulfan I	ND	6.70		30	39	110	211	m	
Endosulfan II	ND	6.70	100	30	30	m.	0	W.	
Endosulfan sulfate	ND	6.70	"	31	(M)	115	"	"	
Endrin	ND	6.70	10	30	30	n .	***	**	
Endrin aldehyde	ND	6.70	"	Ü	30	n	"	"	
Endrin ketone	ND	6.70		39	70	11	"	11	
Heptachlor	ND	6.70		u	70	"	11	11	
Heptachlor epoxide	ND	6.70	u	.11	'n	и	n	n	
Methoxychlor	ND	13.4	11	2	11	n	08/21/03	"	R-05
Toxaphene	ND	200	:UE	1			08/21/03	n	
Surr: Decachlorobiphenyl	90.3 %	16-149					_		
Surr: 2,4,5,6-Tetrachloro-m-xylene	75.1 %	36-140							

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its

> North Creek Analytical, Inc. **Environmental Laboratory Network**

Page 4 of 17



 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Organochlorine Pesticides per EPA Method 8081A

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Bybee Lake 1 (P3H0458-03) Soil					Sampled: 08/1	4/03 Rece	ived: 08/14/0	03	
Aldrin	ND	6.70	ug/kg dry	1	EPA 8081A	08/19/03	08/21/03	3080605	
alpha-BHC	ND	6.70		"		"		m .	
beta-BHC	ND	6.70	"	"	n.	W.	."	"	
delta-BHC	ND	6.70	w	.00			n n	.11	
gamma-BHC (Lindane)	ND	6.70	n	n		"	***	11	
gamma-Chlordane	ND	6.70	22	21		"	39	m	
alpha-Chlordane	ND	6.70				n n	39		
Chlordane (tech)	ND	150	"	21	311		:n	22	
4,4'-DDD	ND	6.70			,,,	"			
4,4'-DDE	ND	6.70	,u	ži.		<i>n</i>	"	11	
4,4'-DDT	ND	13.4	"	2			08/21/03	**	R-05
Dieldrin	ND	6.70	"	1	ď	"	08/21/03	"	
Endosulfan I	ND	6.70					и ,	21	
Endosulfan II	ND	6.70		n	u		"		
Endosulfan sulfate	ND	6.70			**			"	
Endrin	ND	6.70	**	"		11	n	"	
Endrin aldehyde	ND	6.70	31	"	111	"		"	
Endrin ketone	ND	6.70		n		n	21	"	
Heptachlor	ND	6.70	"	"	211	"	"	"	
Heptachlor epoxide	ND	6.70		u.	**	"		"	
Methoxychlor	ND	13.4		2	**	"	08/21/03	**	R-05
Toxaphene	ND	200	"	1	"	"	08/21/03		
Surr: Decachlorobiphenyl	96.3 %	16-149							
Surr: 2,4,5,6-Tetrachloro-m-xylene	73.5 %	36-140							

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network** Page 5 of 17



 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223 425,420,9200 fax 425,420,9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509,924,9200 fax 509,924,9290

Portland

509.924.9200 fax 509.924.9290 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Organochlorine Pesticides per EPA Method 8081A

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Bybee Lake 2 (P3H0458-04) Soil					Sampled: 08/1	4/03 Rece	ived: 08/14/0	03	
Aldrin	ND	6.70	ug/kg dry	1	EPA 8081A	08/19/03	08/21/03	3080605	
alpha-BHC	ND	6.70	11	22		11		11	
beta-BHC	ND	6.70	39			11.	25	10	
delta-BHC	ND	6.70	U	"	b	ĬĬ.	n	11	
gamma-BHC (Lindane)	ND	6.70	**	21		n	"	D.	
gamma-Chlordane	ND	6.70	11	"	n	н	ii.	11	
alpha-Chlordane	ND	6.70	11		11	U	n	"	
Chlordane (tech)	ND	150	11	11	ii .	n	11	11	
4,4'-DDD	ND	6.70	11	"	10	11	n	11	
4,4'-DDE	ND	6.70	11	"		"	n		
4,4'-DDT	ND	13.4	ii	2	**	11.	08/21/03	11	R-05
Dieldrin	ND	6.70	"	1	"	10.	08/21/03	v.	
Endosulfan I	ND	6.70		"		<u>n</u>	"	0.	
Endosulfan II	ND	6.70		"	"	"		9	
Endosulfan sulfate	ND	6.70	,,	H	"	"	11.	72	
Endrin	ND	6.70	n	"	11	W	11	"	
Endrin aldehyde	ND	6.70	H	n	**	"	"	"	
Endrin ketone	ND	6.70	u	n	"	. "	n	11	
Heptachlor	ND	6.70	**	11	11		n	"	
Heptachlor epoxide	ND	6.70	n	**	H	W	11	11	
Methoxychlor	ND	13.4	**	2	311	n	08/21/03	11	R-05
Toxaphene	ND	200		1	ж	W.	08/21/03	н	
Surr: Decachlorobiphenyl	93.7 %	16-149	·				9		,
Surr: 2,4,5,6-Tetrachloro-m-xylene	73.5 %	36-140							

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network** Page 6 of 17



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Polynuclear Aromatic Compounds per EPA 8270M-SIM

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
North Slough 1 (P3H0458-01) Soil					Sampled: 08/1	14/03 Rece	ived: 08/14/0	03	
Acenaphthene	ND	13.4	ug/kg dry	1	EPA 8270m	08/18/03	08/20/03	3080555	
Acenaphthylene	ND	13.4	"	10	"	"	w	31	
Anthracene	ND	13.4	n	.0	"	n	w	"	
Benzo (a) anthracene	ND	13.4	21	30	"	"		31	
Benzo (a) pyrene	ND	13.4	"	***	**	"	'n		
Benzo (b) fluoranthene	ND	13.4		311		n			
Benzo (ghi) perylene	ND	13.4		**	.n-	n.			
Benzo (k) fluoranthene	ND	13.4		n	эт.	m .	22	22	
Chrysene	ND	13.4		31	"	n	**	n	
Dibenzo (a,h) anthracene	ND	13.4	**	"	"	"	**	m .	
Fluoranthene	ND	13.4		31	"	"	"	n	
Fluorene	ND	13.4	**		"	u	"	n	
Indeno (1,2,3-cd) pyrene	ND	13.4	"	m	"	"	n	H	
Naphthalene	ND	13.4		ж.	,,	ж.	"	π	
Phenanthrene	ND	13.4		"	"	".		"	
Pyrene	ND	13.4			"	"	n	**	
Surr: Fluorene-d10	105 %	40-150							
Surr: Pyrene-d10	131 %	40-150							
Surr: Benzo (a) pyrene-d12	124 %	40-150	*						
North Slough 2 (P3H0458-02) Soil					Sampled: 08/1	4/03 Rece	ived: 08/14/0	03	
Acenaphthene	ND	13.4	ug/kg dry	1	EPA 8270m	08/18/03	08/21/03	3080555	
Acenaphthylene	ND	13.4	**	n	"	n	"	"	
Anthracene	ND	13.4		n	"	n.	"	n	
Benzo (a) anthracene	ND	13.4	ж	11	"	n	"	"	
Benzo (a) pyrene	ND	13.4	**	ж	"	W.	n	и	
Benzo (b) fluoranthene	ND	13.4	II.			W.	n	H.	
Benzo (ghi) perylene	ND	13.4	"		"	m	m.	III	
Benzo (k) fluoranthene	ND	13.4	**	"	**	100		ж	
Chrysene	ND	13.4	,11	n	**		W.	11.	
Dibenzo (a,h) anthracene	ND	13.4	"	**	**	"	"	n.	
Fluoranthene	ND	13.4	11	n	**		"	n.	
Fluorene	ND	13.4	и	n	311	n	"	m.	
Indeno (1,2,3-cd) pyrene	ND	13.4	**	**	"	17	11	11	
Naphthalene	ND	13.4	n	**	"	100	"	111	
Phenanthrene	ND	13.4	**	"	"	100	и	"	
Pyrene	ND	13.4	11	n	"	"	n	W.	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network Page 7 of 17



 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223 425.420.9200 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Polynuclear Aromatic Compounds per EPA 8270M-SIM

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
North Slough 2 (P3H0458-02) Soil					Sampled: 08/1	14/03 Rece	eived: 08/14/	03	
Surr: Fluorene-d10	103 %	40-150							
Surr: Pyrene-d10	132 %	40-150							
Surr: Benzo (a) pyrene-d12	131 %	40-150							
Bybee Lake 1 (P3H0458-03) Soil					Sampled: 08/1	14/03 Rece	eived: 08/14/	03	
Acenaphthene	ND	13.4	ug/kg dry	1	EPA 8270m	08/18/03	08/21/03	3080555	
Acenaphthylene	ND	13.4	u	31	**	u	ï	"	
Anthracene	ND	13.4	n .	39	11	"	ĬĬ	**	
Benzo (a) anthracene	ND	13.4	**	311	11	11	Û	TI .	
Benzo (a) pyrene	ND	13.4	H			n	ïï	"	
Benzo (b) fluoranthene	ND	13.4	**		11	. 11	ü	"	R-08
Benzo (ghi) perylene	ND	13.4	n	n	111	Ü	ī	**	
Benzo (k) fluoranthene	ND	13.4	n	31	10	31	. "	**	R-08
Chrysene	ND	13.4	n	n	n	īī	n .	10	
Dibenzo (a,h) anthracene	ND	13.4		***	11	"	"	n	
Fluoranthene	ND	13.4	w	n	"	11	n n	11	
Fluorene	ND	13.4		n	10	**	n	w	
Indeno (1,2,3-cd) pyrene	ND	13.4		n	31	"	11	n	
Naphthalene	ND	13.4	11			"	**	. 11	
Phenanthrene	ND	13.4	"		30	н	"	11	
Pyrene	ND	9 13.4	·	"	.11	u	n		
Surr: Fluorene-d10	110 %	40-150							
Surr: Pyrene-d10	140 %	40-150							
Surr: Benzo (a) pyrene-d12	125 %	40-150							

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network** Page 8 of 17



 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223 425.420.9200 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Polynuclear Aromatic Compounds per EPA 8270M-SIM

North Creek Analytical - Portland

	D I.	Reporting	TT-1	D'I d'a	Mada	D1	A 1	David	NT
Analyte	Result	Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Bybee Lake 2 (P3H0458-04) Soil					Sampled: 08/1	4/03 Rece	ived: 08/14/0	03	
Acenaphthene	ND	13.4	ug/kg dry	1	EPA 8270m	08/18/03	08/21/03	3080555	
Acenaphthylene	ND	13.4	"		"	"	"	11	
Anthracene	ND	13.4	"		"	"	u	11	
Benzo (a) anthracene	ND	13.4	"	".			"	n.	
Benzo (a) pyrene	ND	13.4	11	N.		U	"	9.	
Benzo (b) fluoranthene	ND	13.4	"				"	11.	
Benzo (ghi) perylene	ND	13.4	11		**			"	
Benzo (k) fluoranthene	ND	13.4	**	11.	**		"	11	
Chrysene	ND	13.4	10	n	"	0	115	"	
Dibenzo (a,h) anthracene	ND	13.4	n	"	**	"	"	".	
Fluoranthene	ND	13.4	10.	u.			"	W.	
Fluorene	ND	13.4	n	"			**	9.	
Indeno (1,2,3-cd) pyrene	ND	13.4		n.	n	9	"	"	
Naphthalene	ND	13.4	11		20	Ü		II.	
Phenanthrene	ND	13.4	n	u.	n	n-		"	
Pyrene	ND	13.4	11.	Ü	n	"	11	"	
Surr: Fluorene-d10	105 %	40-150							
Surr: Pyrene-d10	136 %	40-150							
Surr: Benzo (a) pyrene-d12	133 %	40-150							

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network Page 9 of 17



 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

 425.420.9200 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290 Portland

9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210 20332 Empire Avenue, Sulte F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Percent Dry Weight (Solids) per Standard Methods North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
North Slough 1 (P3H0458-01) Soil		<u>-</u>			Sampled: 08/	14/03 Rece	ived: 08/14/	03	
% Solids	70.4	1.00%	by Weight	1	NCA SOP	08/19/03	08/20/03	3080631	
North Slough 2 (P3H0458-02) Soil					Sampled: 08/	14/03 Rece	ived: 08/14/	03	-
% Solids	68.6	1.00%	by Weight	1	NCA SOP	08/19/03	08/20/03	3080631	
Bybee Lake 1 (P3H0458-03) Soil					Sampled: 08/	14/03 Rece	ived: 08/14/	03	
% Solids	68.6	1.00%	by Weight	1	NCA SOP	08/19/03	08/20/03	3080631	
Bybee Lake 2 (P3H0458-04) Soil					Sampled: 08/	14/03 Rece	ived: 08/14/	03	1
% Solids	75.3	1.00%	by Weight	1	NCA SOP	08/19/03	08/20/03	3080631	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its

Crystal Jones, Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network** Page 10 of 17

BUBBEE NORTH SLOUGH #2 A BYBEE #2 North NORTH SLOUGH #1

SOIL/SEDIMENT SAMPLE LOCATIONS. 8/14/03.



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

METRO-REM

Nickel

Zinc

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Portland											
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch 3080557 - EPA 7471											
Blank (3080557-BLK1)				Prepare	d & Analy	zed: 08/18	8/03				
Mercury	ND	0.100	mg/kg							,	
LCS (3080557-BS1)		•		Prepare	d & Analy	zed: 08/18	8/03				
Mercury	1.11	0.100	mg/kg	1.00		111	80-120		•	•	
Duplicate (3080557-DUP1)	So	arce: P3H04	168-01	Prepare	d & Analy	zed: 08/18	8/03				
Mercury	0.0132	0.0714	mg/kg dry		ND				40		
Matrix Spike (3080557-MS1)	So	urce: P3H04	168-01	Ргераге							
Mercury	0.902	0.0806	mg/kg dry	0.868	ND	104	75-125				
Batch 3080716 - EPA 3050	<u></u> .										
Blank (3080716-BLK2)				Prepare	d: 08/21/0	3 Analyze	ed: 08/27/0	13			
Arsenic	ND	0.500	mg/kg								
Copper	ND	2.00	*								
Lead	ND	0.500	11								
Nickel	ND	1.00									
Zinc	ND	2.00	n								
LCS (3080716-BS2)				Prepare	d: 08/21/0	3 Analyzo	ed: 08/27/0	13			
Arsenic	10.0	0.500	mg/kg	10.0		100	80-120				
Copper	11.0	2.00	Ħ	10.0		110	80-120				
Lead	10.8	0.500	*	10.0		108	80-120				

10.0

10.0

11.1

9.92

1.00

2.00

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

111

80-120

80-120

Crystal Jones, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network Page 11 of 17



 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

 425.420.9200 fax 425.420.9210

 Pokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

Portland

509.924.9200 fax 509.924.9290 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210 20332 Empire Avenue, Sulte F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

METRO-REM

Zinc

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Total Metals per EPA 6000/7000 Series Methods - Quality Control

p	No:	<u>rth Creek</u>	Analyti	cal - Po	<u>rtland</u>					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3080716 - EPA 3050										
Duplicate (3080716-DUP1)	Soi	arce: P3H03	69-01	Ргераге	d: 08/21/0	3 Analyzo	ed: 08/27/0)3		
Arsenic	2.64	0.450	mg/kg dry		2.34			12.0	40	
Copper	53.3	1.80	**		50.6			5.20	40	
Lead	69.2	0.450	**		47.8			36.6	40	
Nickel	31.1	0.901	Ħ		21.6			36.1	40	
Zinc	327	1.80	**		383			15.8	40	
Matrix Spike (3080716-MS1)	Sou	rce: P3H03	69-01	Prepare	d: 08/21/0	3 Analyzo	ed: 08/29/0	3		
Arsenic	12.2	0.500	mg/kg dry	9.53	2.34	103	75-125			
Copper	84.3	2.00	*	9.53	50.6	>300%	75-125			
Lead	78.9	0.500	"	9.53	47.8	>300%	75-125			
Nickel	40.8	1.00	"	9.53	21.6	201	75-125	. •		
Zinc	353	2.00	"	9.53	383	-315	75-125			
Matrix Spike (3080716-MS2)	Son	ırce: P3H03	69-02	Prepare	d: 08/21/0	3 Analyze	ed: 08/29/0	13		
Arsenic	12.9	0.410	mg/kg dry	8.59	3.55	109	75-125			
Copper	84.4	1.64	Ħ	8.59	64.0	237	75-125			
Lead	75.9	0.410	11	8.59	57.8	211	75-125			
Nickel	39.0	0.820	11	8.59	23.7	178	75-125			•

8.59

>300%

75-125

380

1.64

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network** Page 12 of 17



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

425.420.9200 fax 425.420.9210

East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Organochlorine Pesticides per EPA Method 8081A - Quality Control

North	Creek	Analytical	l - Portland

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (3080605-BLK1)				Prenared: 08	3/19/03 Analyz	ed: 08/21/03	•
Aldrin	ND	6.70	ug/kg	Trepared. 0c	717/03 7 mary 2		
alpha-BHC	ND	6.70	H				
peta-BHC	ND	6.70	**				
lelta-BHC	ND	6.70	**				
amma-BHC (Lindane)	ND	6.70	Ħ			4	
amma-Chlordane	ND	6.70	**			4.	
lpha-Chlordane	ND	6.70	**				•
Chlordane (tech)	ND	150	**				
,4'-DDD	ND	6.70	**				
,4'-DDE	ND	6.70	**			:	
,4'-DDT	ND	6.70					
Dieldrin	ND	6.70	**				
ndosulfan I	ND	6.70	**			•	
ndosulfan II	ND	6.70	**				
ndosulfan sulfate	ND	6.70	*				
ndrin	ND	6.70	**				
ndrin aldehyde	ND	6.70	**				
ndrin ketone	ND	6.70	**				
[eptachlor	ND	6.70	**				
leptachlor epoxide	ND	6.70	**		•		
lethoxychlor	ND	6.70	**		,		
oxaphene	ND	200	**				
urr: Decachlorobiphenyl	32.3			33.3	97.0	16-149	
urr: 2,4,5,6-Tetrachloro-m-xylene	25.9		*	33.3	77.8	36-140	
.CS (3080605-BS1)				Prepared: 08	/19/03 Analyz	ed: 08/21/03	
ldrin	28.6	6.70	ug/kg	33.3	85.9	64-136	
amma-BHC (Lindane)	28.6	6.70	**	33.3	85.9	62-140	
4'-DDT	34.3	6.70	*	33.3	103	65-130	
ieldrin	28.5	6.70	*	33.3	85.6	70-135	
ndrin	29.7	6.70	#	33.3	89.2	65-135	
leptachlor	28.7	6.70	*	33.3	86.2	48-124	
urr: Decachlorobiphenyl	32.4		"	33.3	97.3	16-149	
urr: 2,4,5,6-Tetrachloro-m-xylene	26.9		*	33.3	80.8	36-140	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network** Page 13 of 17



 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

 425.420.9200 fax 425.420.9210

 425.420.9210 Fast 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290 Portland

Prepared: 08/19/03 Analyzed: 08/21/03

503,906,9200 fax 503,906,9210 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541,383,9310 fax 541,382,7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Organochlorine Pesticides per EPA Method 8081A - Quality Control

North Creek Analytical - Portland

			Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Source: P3H0458-01

Batch 3080605 - EPA 3550 Matrix Spike (3080605-MS1)

Aldrin	35.9	6.70 u	ıg/kg dry	47.4	ND	75.7	64-136				
gamma-BHC (Lindane)	38.2	6.70	**	47.4	ND	80.6	62-140				
4,4'-DDT	51.1	13.4		47.4	ND	108	65-130				
Dieldrin	37.5	6.70	**	47.4	ND	79.1	70-135				
Endrin	39.0	6.70	*	47.4	ND	82.3	65-135				
Heptachlor	36.8	6.70	**	47.4	ND	77.6	48-124				:
Surr: Decachlorobiphenyl	42.0		n	47.4		88.6	16-149		- 1		
Surr: 2,4,5,6-Tetrachloro-m-xylene	33.2		"	47.4		70.0	36-140			,	
Matrix Spike Dup (3080605-MSD1)	Sour	ce: P3H045	8-01	Prepare	d: 08/19/0	3 Analyz	ed: 08/21/0	03			
Aldrin	37.4	6.70 u	ıg/kg dry	47.4	ND	78.9	64-136	4.09	50		
gamma-BHC (Lindane)	40.6	6.70	**	47.4	ND	85.7	62-140	6.09	50		
4,4'-DDT	50.6	13.4	H	47.4	ND	107	65-130	0.983	50		
Dieldrin	40.3	6.70	*	47.4	ND	85.0	70-135	7.20	50		
Endrin	41.9	6.70	**	47.4	ND	88.4	65-135	7.17	50		
Heptachlor	40.1	6.70	**	47.4	ND	84.6	48-124	8.58	50		
Surr: Decachlorobiphenyl	46.4		"	47.4		97.9	16-149	<u>-</u>			
Surr: 2,4,5,6-Tetrachloro-m-xylene	35.8		,	47.4		75.5	36-140				

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network Page 14 of 17



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Quality Control

North Creek Analytical - Portland

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (3080555-BLK1)				Prepared: 08	/18/03 Analy:	zed: 08/20/03	 _
Acenaphthene	ND	13.4	ug/kg				
Acenaphthylene	ND	13.4	# .				
Anthracene	ND	13.4	*				
Benzo (a) anthracene	ND	13.4	*				
Benzo (a) pyrene	ND	13.4	. *				
Benzo (b) fluoranthene	ND	13.4					
Benzo (ghi) perylene	ND	13.4	w ·				
Benzo (k) fluoranthene	ND	13.4	**				
Chrysene	ND	13.4	**				
Dibenzo (a,h) anthracene	ND	13.4	11				
Fluoranthene	ND	13.4	n				
Fluorene	ND	13.4	**				
Indeno (1,2,3-cd) pyrene	ND	13.4	**				
Naphthalene	ND	13.4	**				
Phenanthrene	ND	13.4	"				
Pyrene	ND	13.4	H				
Surr: Fluorene-d10	81.8		"	83.3	98.2	40-150	
Surr: Pyrene-d10	98.6		"	83.3	118	40-150	
Surr: Benzo (a) pyrene-d12	99.3		"	83.3	119	40-150	
LCS (3080555-BS1)				Prepared: 08	/18/03 Analyz	zed: 08/20/03	
Acenaphthene	145	13.4	ug/kg	167	86.8	33-139	
Benzo (a) pyrene	178	13.4	**	167	107	45-149	
Pyrene	160	13.4	**	167	95.8	39-138	
Surr: Fluorene-d10	88.7		"	83.3	106	40-150	
Surr: Pyrene-d10	101		*	83.3	121	40-150	
Surr: Benzo (a) pyrene-d12	109		*	83.3	131	40-150	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network Page 15 of 17



 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223 425.420.9200 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland

503.906.9200 fax 503.906.9210 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Percent Dry Weight (Solids) per Standard Methods - Quality Control

North Creek Analytical - Portland

·	1101	ii Cicck Anaiyu	car - r c	n nanu _					
		Reporting	Spike	Source		%REC		RPD	
Analyte	Result	Limit Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 3080631 - Dry Weight									
Duplicate (3080631-DUP1)	Sour	ce: P3H0443-01	Prepare	d: 08/19/0	3 Analyz	ed: 08/20/0)3		
% Solids	75.0	1.00% by Weigh	:	75.1			0.133	20	
Duplicate (3080631-DUP2)	Sour	ce: P3H0443-02	Prepare	d: 08/19/0	3 Analyz	ed: 08/20/0)3		
% Solids	84.6	1.00% by Weight		85.0			0.472	20	
Duplicate (3080631-DUP3)	Sour	ce: P3H0443-03	Prepare	d: 08/19/0	3 Analyz	ed: 08/20/0)3		
% Solids	80.3	1.00% by Weight	:	80.3			0.00	20	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network** Page 16 of 17



East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

METRO-REM

Project: Soil Characterization

600 NE Grand Ave.

Project Number: None

Reported:

Portland, OR 97232

Project Manager: Elaine Stewart

09/03/03 09:45

Notes and Definitions

R-05 Reporting limits raised due to dilution necessary for analysis. Sample contains high levels of reported analyte, non-target analyte,

and/or matrix interference.

R-08 Due to matrix unable to resolve Benzofluoranthene isomers. Value reported only in Benzo(b) category represents Total

Benzo(b+k)fluoranthene.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%. dry

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network** Page 17 of 17



11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-9508 425-420-9200 FAX 420-9210 11115 E Montgomery Suite B, Spokane, WA 99206-4776 509-924-9200 FAX 924-9290 9405 SW Nimbus Ave, Beaverton, OR 97008-7132 503-906-9200 FAX 906-9210 20332 Empire Ave Suite F-1, Bend, OR 99701-5711 541-383-9310 FAX 382-7588 3209 Denali St, Anchorage, AK 99503-4030 907-334-9200 FAX 334-9210

CHAIN O										V	Vork O	rder #	: 13700	20
CLIENT: METRO - ELAINE ST	FEWART	INVO	DICE TO:	lair	nex S	tewa	rt				T	URNA	ROUND REQUEST	
REPORT TO: Elaine Stewart			1	1etro) Par	ks a	nd (nspace	s		in	Business Days *	
ADDRESS: Metro Parks and Greenspa		-			NE Gr					1	/ (Organic &	Inorganic Analyses	
7975 600 NE Grand Ave.	Fax: 797		}	ort	and	OR	9723	32=27	736		X 7	5	4 3 2 1	<1
PHONE: PORTIANDANK 9/232-2/30	1849	P.O. N	NUMBER:							$\prod l$	STD. I	etroleum	Hydrocarbon Analyses	
PROJECT NAME: Smith-Bybee			PRE	SERV	ATIVE						5	4	3 2 1 <1]
PROJECT NUMBER:				<u> </u>					<u> </u>		STD.			_
- C D / C			REQUES'	ΓED A	NALY	SES				_	01	HER	Specify:	
SAMPLED BY: Jeff Bory /SET		. .	١.,			,			l l .	L	* Turnarow	ed Requests I	less than standard may incur Rush	Charges.
CLIENT SAMPLE SAMPLING IDENTIFICATION DATE/TIME	See attac listed on				samp	ies	get	aıı	tests		MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	NCA WO ID
North Slough 1 8/14 1:10 pm										4	5071	Ì		
North Slough 2 8/14 1:15pm											Soil	{		
3 Bybee Lake 1 8/14 1:25pm											ें।	١		
4 Bybee Lake 2 814 1:30pm										2	5011	1		
5				<u> </u>										ļ <u>. </u>
6		-		<u> </u>						_ _				
7		-		ļ										ļ
8				ļ						_				
9	<u> </u>			ļ										
10				ļ		ł		112	مد	L	İ			,
RELEASED BY: ELOW SIEWARTERM: M	14	DATÉ:	1:35		RECEIV	ED BY	: 4		120				DATE: 8/	14
PRINT NAME: ELAINE STEWARTFIRM:	(ETRO	TIME:	<u>3-14-</u>	<u>03</u>	PRINT 1		كمخ	relf	Buc	% _c	FIRM:	SEL	TIME: / (*
PRINT NAME: A MELERON FIRM: S		DATE: TIME:	8/14/3	-	RECEIV PRINT 1	•	$\simeq u$	LICE	(C)	121	O DETRM-1	SICA	DATE: 8 / TIME: 14	1819
additional remarks: OCCREVIOS See attached paper	erwork								_				TEMP:	OF

Analytical Method Details - North Creek Analytical - Portland

Method	Analyte	MDL	MRL Units
Total Metals per EP	A 6000/7000 Series Methods		
in Soll		4	
EPA 6020	Arsenic	0.427	0.500 mg/kg dry wt
EPA 6020	Copper	0.955	2.00 mg/kg dry wt
EPA 6020	Lead	0.106	0.500 mg/kg dry wt
EPA 6020	Nickel	0.213	1.00 mg/kg dry wt
EPA 6020	Zinc	0.630	
EPA 7471A	Mercury	0.00496	2.00 mg/kg dry wt 0.100 mg/kg dry wt
	•		or too mgrag dry me
Organochlorine Pes	ticldes per EPA Method 8081A		
n Soil			
EPA 8081A	4,4'-DDD	2.00	6.70 ug/kg dry wt
EPA 8081A	4,4 -DDE	1.00	6.70 ug/kg dry wt
EPA 8081A	4.4'-DDT	2.00	6.70 ug/kg dry wt
PA 8081A	Decachlorobiphenyl		Surrogate
PA 8081A	2,4,5,6-Tetrachloro-m-xylene	,	Surrogate
olvnuclear Aromati	c Compounds per EPA 8270M-SIM		
n Soli			
PA 8270m	Benzo (a) anthracene	3.30	13.4 ug/kg dry wt
PA 8270m	Benzo (a) pyrene	3.30	13.4 ug/kg dry wt
PA 8270m	Benzo (b) fluoranthene	3.30	13.4 ug/kg dry wt
PA 8270m	Indeno (1,2,3-cd) pyrene	3.30	13.4 ug/kg dry wt
PA 8270m	Fluorene-d10	, 0.00	Surrogate
PA 8270m	Pyrene-d10		Surrogate
PA 8270m	Benzo (a) pyrene-d12		Surrogate

Analytical Method Details - North Creek Analytical - Portland

Method	Analyte	MDL	MRL Units
Total Metals per EP	A 6000/7000 Series Methods		
in Soil	· · · · · · · · · · · · · · · · · · ·	•	
EPA 6020	Arsenic	0.427	0.500
EPA 6020	Copper	0.955	0.500 mg/kg dry wt
EPA 6020	Lead	0.106	2.00 mg/kg dry wt
EPA 6020	Nickel	0.100	0.500 mg/kg dry wt
EPA 6020	Zinc	0.630	1.00 mg/kg dry wt
EPA 7471A	Mercury	0.00496	2.00 mg/kg dry wt 0.100 mg/kg dry wt
•	•	5.00 100	o. too mg/kg dry wr
Organochlorine Pes	ticides per EPA Method 8081A		
in Soll			
EPA 8081A	4,4'-DDD	2.00	6.70 ug/kg dry wt
EPA 8081A	4,4'-DDE	1.00	6.70 ug/kg dry wt
EPA 8081A	4,4'-DDT	2.00	6.70 ug/kg dry wt
EPA 8081A	Decachlorobiphenyl	2,00	Surrogate
EPA 8081A	2,4,5,6-Tetrachioro-m-xylene		Surrogate
	•		Dunogate
Polynuclear Aromat	ic Compounds per EPA 8270M-SIM		•
n Soil	•		
EPA 8270m	Benzo (a) anthracene	3.30	13.4 ug/kg dry wt
EPA 8270m	Benzo (a) pyrene	3.30	13.4 ug/kg dry wt
EPA 8270m	Benzo (b) fluoranthene	3.30	13.4 ug/kg dry wt
EPA 8270m	Indeno (1,2,3-cd) pyrene	3.30	13.4 ug/kg dry wt
PA 8270m	Fluorene-d10		Surrogate
PA 8270m	Pyrene-d10		Surrogate
EPA 8270m	Benzo (a) pyrene-d12		Surrogate
	V. F. V. T.		Surroyate

NORTH CREEK ANALYTICAL COOLER RECEIPT FORM

(Army Corp. compliant)

	ent: WCCVO	
1.	Please sign for receipt and opening of otl	ner
	By (print) Culle Fansholz (sign) Campal	2W
2.	Date samples received 8/14/3 Date opened: Same >	
3.	Delivered by:NCA courier FedExUPSCourierClient Airbill # if applicable (Put copy of shipping paper)	
4.	There were custody seals present, signed by c	
5.	Were the custody seals unbroken and intact at the date and time of arriv	val?YesNo
	Was ice used?yesno Type of ice: blue icegenerature (degrees C)7 (Raytek thermometer Digi-Therm (pr	
7.	Are custody papers sealed in a plastic bag and taped inside to lid?	Yes <u></u>
8.	Were custody papers filled out properly (ink, signed, etc.)? If "no" please specify:	/ YesNo
	Name of project Swith-Bybec (if applicable)	Yes No
10.	Initial and date for unpacking: (initials) date	81513
11.	Packing material: MA bubble wrap/bagstyrofoamcardboar	dother
12.	Were samples in bags?	Yes <u>×</u> No
13.	Did all containers indicated on the COC arrive? If "no" please indicate which containers were absent	Yes No
14.	Were all containers unbroken and labels in good condition? If "no" please indicate which containers	YesNo
15	. Were all bottle labels complete (ID, date, time, signature, etc.)?	Yes No
	Do the IDs, times, etc. agree with the COC? If "no" please indicate which containers	Yes No
16	. Are containers properly preserved for indicated analysis?	Yes No
17	. Is there adequate volume for the test(s) requested?	<u> </u>
18	. If voa vials were submitted, are they free of bubbles? N/A	Yes No
	. Log-in phase: Date samples were logged in: \(\frac{\infty}{2} \) (Sign) \(\frac{\infty}{2} \) (sign)	Project # R34045
	. Was the project manager notified of status? (Use back of form as a record)	Yes No