





April 12, 2007

Matt Kelzenberg Alaska Railroad Corporation P.O. Box 107500 Anchorage, AK 99510

RE: Seward Coal Facility

Enclosed are the results of analyses for samples received by the laboratory on 04/02/07 18:00. The following list is a summary of the Work Orders contained in this report, generated on 04/12/07 15:34.

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

Work Order	<u>Project</u>	<u>ProjectNumber</u>	
BQD0033	Seward Coal Facility	None provided	

TestAmerica - Seattle, WA





11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244

1 1922 E. First Ave, Spokane, WA 99206-5302

509-924-9200 FAX 924-9290

9405 SW Nimbus Ave, Beaverton, OR 97008-7145

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503-906-9200 FAX 906-9210 907-563-9200 FAX 563-9210

2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

601 D133

CHAIN OF CUSTODY REPORT INVOICE TO: SAME CLIENT: HUSKA LANDOWD COSP REPORT TO: ARRC ADDRESS: 327 W SLIP Cresk AUS AUGL 4K 99501 TURNAROUND REQUEST in Business Days * Organic & Inorganic Analyses P.O. NUMBER: PRESERVATIVE PROJECT NUMBER: REQUESTED ANALYSES * Turnaround Requests less than standard may incur Rush Charges. SAMPLED BY: MATT KETTERS MATRIX # OF LOCATION / CLIENT SAMPLE COMMENTS WO ID CONT. (W, S, O) IDENTIFICATION DATE/TIME RECEIVED BY:





Alaska Railroad Corporation Seward Coal Facility Project Name:

P.O. Box 107500 Report Created: Project Number: None provided Anchorage, AK 99510 Project Manager: Matt Kelzenberg 04/12/07 15:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Sample #1	BQD0033-01	Other dry	03/28/07 12:02	04/02/07 18:00
Sample #2	BQD0033-02	Other dry	03/28/07 12:08	04/02/07 18:00
Sample #3	BQD0033-03	Other dry	03/28/07 12:14	04/02/07 18:00
Sample #4	BQD0033-04	Other dry	03/28/07 12:21	04/02/07 18:00
Sample #5	BQD0033-05	Other dry	03/28/07 12:26	04/02/07 18:00

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Alaska Railroad Corporation Seward Coal Facility Project Name:

P.O. Box 107500 Project Number: Report Created: None provided Anchorage, AK 99510 Project Manager: Matt Kelzenberg 04/12/07 15:34

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQD0033-01 (Sample #1)		Otl	her dry		Samp	oled: 03/2	8/07 12:02			
Antimony	EPA 6020	ND		2.14	mg/kg wet	1x	7D06027	04/06/07 12:42	04/09/07 09:47	
Arsenic	"	1.82		0.714	"	"	"	"	"	
Beryllium	"	ND		0.714	"	"	"	"	"	
Cadmium	"	1.97		0.714	"	"	"	"	"	
Mercury	EPA 7471A	ND		0.326	"	"	7D06053	04/06/07 16:24	04/09/07 13:36	
Nickel	EPA 6020	8.29		0.714	"	"	7D06027	04/06/07 12:42	04/09/07 09:47	
Selenium	"	ND		0.714	"	"	"	"	"	
Silver	"	0.786		0.714	"	"	"	"	"	
Thallium	"	ND		0.714	"	"	"	"	"	
BQD0033-01RE1 (Sample #1)		Otl	her dry		Samp	oled: 03/2	8/07 12:02			
Chromium	EPA 6020	4880		71.4	mg/kg wet	100x	7D06027	04/06/07 12:42	04/09/07 09:58	
Copper	"	2380		71.4	"	"	"	"	"	
Lead	"	86900		714	"	1000x	"	"	04/09/07 23:01	
Zinc	"	6800		714	"	100x	"	"	04/09/07 09:58	
BQD0033-02 (Sample #2)		Otl	her dry		Samp	oled: 03/2	8/07 12:08			
Antimony	EPA 6020	ND		2.27	mg/kg wet	1x	7D06027	04/06/07 12:42	04/09/07 09:52	
Arsenic	"	5.41		0.758	"	"	"	"	"	
Beryllium	"	ND		0.758	"	"	"	"	"	
Cadmium	"	1.81		0.758	"	"	"	"	"	
Mercury	EPA 7471A	ND		0.288	"	"	7D06053	04/06/07 16:24	04/09/07 13:39	
Nickel	EPA 6020	41.6		0.758	"	"	7D06027	04/06/07 12:42	04/09/07 09:52	
Selenium	"	ND		0.758	"	"	"	"	"	
Silver	"	ND		0.758	"	"	"	"	"	
Thallium	"	ND		0.758	"	"	"	"	"	
BQD0033-02RE1 (Sample #2)		Otl	her dry		Samp	oled: 03/2	8/07 12:08			
Chromium	EPA 6020	2630		75.8	mg/kg wet	100x	7D06027	04/06/07 12:42	04/09/07 10:09	
Copper	"	2540		75.8	"	"	"	"	"	
Zinc	"	6290		758	"	"	"	"	"	

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Alaska Railroad Corporation Project Name: Seward Coal Facility

P.O. Box 107500 Project Number: None provided Report Created:
Anchorage, AK 99510 Project Manager: Matt Kelzenberg 04/12/07 15:34

Total Metals by EPA 6000/7000 Series Methods

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQD0033-03 (Sample #3)		Oth	ner dry		Samp	oled: 03/2	8/07 12:14			
Antimony	EPA 6020	ND		152	mg/kg wet	100x	7D06027	04/06/07 12:42	04/10/07 15:47	RL1
Arsenic	"	ND		50.5	"	"	"	"	04/09/07 22:26	RL1
Beryllium	"	ND		50.5	"	"	"	"	"	RL1
Cadmium	"	ND		50.5	"	"	"	"	"	RL1
Chromium	"	4560		50.5	"	"	"	"	"	
Copper	"	756		50.5	"	"	"	"	"	
Mercury	EPA 7471A	ND		0.100	"	1x	7D06053	04/06/07 16:24	04/09/07 13:41	
Nickel	EPA 6020	ND		50.5	"	100x	7D06027	04/06/07 12:42	04/09/07 22:26	RL1
Selenium	"	ND		50.5	"	"	"	"	"	RL1
Silver	"	ND		50.5	"	"	"	"	"	RL1
Thallium	"	ND		50.5	"	"	"	"	"	RL1
Zinc	"	4890		505	"	"	"	"	"	
BQD0033-03RE1 (Sample #3)		Oth	ier dry		Samp	oled: 03/2	8/07 12:14			
Lead	EPA 6020	92400		505	mg/kg wet	1000x	7D06027	04/06/07 12:42	04/10/07 08:35	
BQD0033-04 (Sample #4)		Oth	ner dry		Samp	oled: 03/2	8/07 12:21			
Antimony	EPA 6020	ND		150	mg/kg wet	100x	7D06027	04/06/07 12:42	04/10/07 15:53	RL1
Arsenic	"	ND		50.0	"	"	"	"	04/09/07 22:38	RL1
Beryllium	"	ND		50.0	"	"	"	"	"	RL1
Cadmium	"	ND		50.0	"	"	"	"	"	RL1
Chromium	"	2760		50.0	"	"	"	"	"	
Copper	"	2470		50.0	"	"	"	"	"	
Mercury	EPA 7471A	ND		0.0949	"	1x	7D06053	04/06/07 16:24	04/09/07 13:44	
Nickel	EPA 6020	ND		50.0	"	100x	7D06027	04/06/07 12:42	04/09/07 22:38	RL1
Selenium	"	ND		50.0	"	"	"	"	"	RL1
Silver	"	ND		50.0	"	"	"	"	"	RL1
Thallium	"	ND		50.0	"	"	"	"	"	RL1
Zinc	"	6780		500	"	"	"	"	"	

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Sandra Yakamavich, Project Manager







Alaska Railroad Corporation Seward Coal Facility Project Name:

P.O. Box 107500 Project Number: Report Created: None provided Anchorage, AK 99510 Project Manager: Matt Kelzenberg 04/12/07 15:34

Total Metals by EPA 6000/7000 Series Methods

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Analyte	Method	Result	MDL*	MRL Units	Dil	Batch	Prepared	Analyzed	Notes
BQD0033-04RE1 (Sample #4)		Oti	her dry	Sa	mpled: 03/	28/07 12:21			
Lead	EPA 6020	55400		500 mg/kg we	t 1000x	7D06027	04/06/07 12:42	04/10/07 08:53	

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Conventional Chemistry Parameters by APHA/EPA Methods

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Analyte	Method	Result	MDL*	MRL Units	Dil	Batch	Prepared	Analyzed	Notes
BQD0033-05 (Sample #5)		Otl	ner dry	Sam	pled: 03/	28/07 12:26			
Hexavalent Chromium	EPA 7196A	ND		1.2 mg/kg wet	1x	7D10034	04/10/07 13:37	04/11/07 16:05	

TestAmerica - Seattle, WA





Alaska Railroad Corporation Project Name: Seward Coal Facility

P.O. Box 107500 Project Number: None provided Report Created:
Anchorage, AK 99510 Project Manager: Matt Kelzenberg 04/12/07 15:34

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7D06027	Soil Pre	paration Met	hod: EPA	3050B										
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits) Analyzed	Notes
Blank (7D06027-BLK1)								Extr	acted:	04/06/07 12	:42			
Beryllium	EPA 6020	ND		0.500	mg/kg wet	1x							04/09/07 08:53	
Lead	"	ND		0.500	"	"							"	
Arsenic	"	ND		0.500	"	"							"	
Cadmium	"	ND		0.500	"	"							"	
Chromium	"	ND		0.500	"	"							"	
hallium	"	ND		0.500	"	"							"	
line	"	ND		5.00	"	"							"	
Copper	"	ND		0.500	"	"							"	
lickel	"	ND		0.500	"	"							"	
antimony	"	ND		1.50	"	"							04/09/07 11:03	
elenium	"	ND		0.500	"	"							04/09/07 08:53	
ilver	"	ND		0.500	"	"							"	
LCS (7D06027-BS1)								Extr	acted:	04/06/07 12	:42			
opper	EPA 6020	44.1		0.500	mg/kg wet	1x		40.0	110%	(80-120)			04/09/07 08:59	
hromium	"	41.9		0.500	"	"		"	105%	"			"	
admium	"	43.6		0.500	"	"		"	109%	"			"	
eryllium	"	42.6		0.500	"	"		"	106%	"			"	
rsenic	"	42.6		0.500	"	"		"	106%	"			"	
elenium	"	41.1		0.500	"	"		"	103%	"			"	
ilver	"	43.5		0.500	"	"		"	109%	"			"	
ickel	"	43.3		0.500	"	"		"	108%	"			"	
ntimony	"	34.0		1.50	"	"		30.0	113%	"			04/09/07 11:09	
ead	"	42.5		0.500	"	,,		40.0	106%	"			04/09/07 08:59	
inc	"	43.8		5.00	"	,,		"	110%	"			"	
'hallium	"	40.6		0.500	"	"		,,	102%	,,			,,	
		10.0		0.500					10270					
Ouplicate (7D06027-DUP1)				QC Sourc	e: BQD0072-0)1		Extr	acted:	04/06/07 12	:42			
ntimony	EPA 6020	ND		1.81	mg/kg dry	1x	ND				NR	(30)	04/09/07 11:21	
elenium	"	ND		0.604	"	"	ND				NR	"	04/09/07 09:17	
ickel	"	13.7		0.604	"	"	11.9				14.1%	"	"	
opper	"	26.1		0.604	"	,,	26.4				1.14%		"	
hromium	"	14.4		0.604	"	"	14.2				1.40%		"	
admium	"	0.774		0.604	,,	,,	0.789				1.92%		,,	
ead	"	48.5		0.604	,,	,,	43.1				11.8%		,,	
lver	"	46.3 ND		0.604	"	,,	43.1 ND	-			20.4%		"	
	"	ND ND		0.604	"	,,	ND	_			2.99%		"	
eryllium	,,				,,	,,						(30)	,	
hallium		ND		0.604			ND				NR			
Arsenic	"	2.36		0.604	"	"	2.04				14.5%	"	"	

TestAmerica - Seattle, WA

Sandra Jallamerrich

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Sandra Yakamavich, Project Manager





Alaska Railroad Corporation **Seward Coal Facility** Project Name:

P.O. Box 107500 Project Number: Report Created: None provided Anchorage, AK 99510 Project Manager: Matt Kelzenberg 04/12/07 15:34

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7D06027	Soil Pre	paration Met	hod: EPA	3050B										
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (7D06027-DUP2)				QC Source	: BQD0072-	1RE1		Exti	racted:	04/06/07 12	:42			
Zinc	EPA 6020	376		30.2	mg/kg dry	5x	377				0.2669	% (30)	04/09/07 10:33	
Matrix Spike (7D06027-MS1)				QC Source	: BQD0072-)1		Exti	acted:	04/06/07 12	2:42			
Selenium	EPA 6020	50.0		0.665	mg/kg dry	1x	0.254	53.2	93.5%	(61-120)			04/09/07 09:11	
Cadmium	"	56.2		0.665	"	"	0.789	"	104%	(80-120)			"	
Chromium	"	68.7		0.665	"	"	14.2	"	102%	(30-163)			"	
Thallium	"	49.5		0.665	"	"	ND	"	93.0%	(75-120)			"	
Arsenic	"	52.1		0.665	"	"	2.04	"	94.1%	(57-125)			"	
Silver	"	52.4		0.665	"	"	0.202	"	98.1%	(54-126)			"	
Antimony	"	2.79		2.00	"	"	ND	39.9	6.99%	(10-120)			04/09/07 11:15	N
Beryllium	"	54.5		0.665	"	"	0.528	53.2	101%	(72-122)			04/09/07 09:11	
Copper	"	81.7		0.665	"	"	26.4	"	104%	(20-148)			"	
Lead	"	94.2		0.665	"	"	43.1	"	96.1%	(29-166)			"	
Nickel	"	66.7		0.665	"	"	11.9	"	103%	(35-150)			"	
Matrix Spike (7D06027-MS2)				QC Source	: BQD0072-	1RE1		Exti	racted:	04/06/07 12	:42			
Zinc	EPA 6020	444		33.3	mg/kg dry	5x	377	53.2	126%	(20-160)			04/09/07 10:27	
Post Spike (7D06027-PS1)				QC Source	: BQD0072-)1		Exti	acted:	04/06/07 12	2:42			
Chromium	EPA 6020	0.217			ug/ml	1x	0.0218	0.201	97.1%	(75-125)			04/09/07 09:05	
Copper	"	0.242			"	"	0.0404	0.202	99.8%	"			"	
Nickel	"	0.211			"	"	0.0182	0.199	96.9%				"	
Arsenic	"	0.212			"	"	0.00313	0.200	104%				"	
Beryllium	"	0.197			"		0.000810	"	98.1%				"	
Cadmium	"	0.201			"	"	0.00121	"	99.9%	"			"	
Selenium	"	0.191			"		0.000390	"	95.3%				"	
Thallium	"	0.180			"		0.000160	0.201	89.5%				"	
Lead	"	0.248			"	"	0.0662	0.199	91.4%	"			"	
Silver	"	0.194			"	"	0.000310	0.200	96.8%	"			"	
Post Spike (7D06027-PS2)				QC Source	: BQD0072-	1RE1		Exti	acted:	04/06/07 12	2:42			
Antimony	EPA 6020	0.103			ug/ml	5x	0.0000300	0.100	103%	(75-125)			04/09/07 10:21	
*						-				()				

TestAmerica - Seattle, WA







BOTHELL, WA 98011-8244 PH: (425) 420.9200 FAX: (425) 420.9210

Alaska Railroad Corporation Seward Coal Facility Project Name:

P.O. Box 107500 Project Number: Report Created: None provided Anchorage, AK 99510 Project Manager: Matt Kelzenberg 04/12/07 15:34

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

			Test	America -	Seattle, W	Α							
QC Batch: 7D06053	Soil Pre	paration Met	hod: EPA	7471A									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt REC	(Limits)	% RPD	(Limit	s) Analyzed	Notes
Blank (7D06053-BLK1)								Extracted:	04/06/07 1	6:24			
Mercury	EPA 7471A	ND		0.100	mg/kg wet	1x						04/09/07 11:44	
LCS (7D06053-BS1)								Extracted:	04/06/07 1	6:24			
Mercury	EPA 7471A	0.00487			mg/kg wet	1x		0.00500 97.4%	(80-120)			04/09/07 11:47	
LCS Dup (7D06053-BSD1)								Extracted:	04/06/07 1	6:24			
Mercury	EPA 7471A	0.00494			mg/kg wet	1x		0.00500 98.8%	(80-120)	1.43%	6 (20)	04/09/07 11:49	
Duplicate (7D06053-DUP1)				QC Source:	BQC0719-0	5		Extracted:	04/06/07 1	6:24			
Mercury	EPA 7471A	ND		0.116	mg/kg dry	1x	ND			9.29%	6 (30)	04/09/07 12:43	R4
Matrix Spike (7D06053-MS1)				QC Source:	BQC0719-0	5		Extracted:	04/06/07 1	6:24			
Mercury	EPA 7471A	0.00548			mg/kg dry	1x	0.000199	0.00500 106%	(70-130))		04/09/07 11:52	

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Alaska Railroad Corporation Project Name: Seward Coal Facility

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Anchorage, AK 99510 Project Manager: Matt Kelzenberg 04/12/07 15:34

Conventional Chemistry Parameters by APHA/EPA Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7D10034	Soil Pre	paration Meth	od: Speci	al Proce	dure							
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt REC	(Limits)	RPD (Lim	its) Analyzed	Notes
Blank (7D10034-BLK1)								Extracted:	04/10/07 13	3:37		
Hexavalent Chromium	EPA 7196A	ND		1.0	mg/kg wet	1x					04/11/07 16:05	
LCS (7D10034-BS1)								Extracted:	04/10/07 13	3:37		
Hexavalent Chromium	EPA 7196A	21		1.0	mg/kg wet	1x		25.0 84.0%	(80-120)		04/11/07 16:05	
Duplicate (7D10034-DUP1)				QC Source:	BQD0137-0)1		Extracted:	04/10/07 13	3:37		
Hexavalent Chromium	EPA 7196A	ND		1.1	mg/kg dry	1x	ND			25.0% (30)	04/11/07 16:05	R4
Matrix Spike (7D10034-MS1)				QC Source:	BQD0137-0)1		Extracted:	04/10/07 13	3:37		
Hexavalent Chromium	EPA 7196A	22		1.1	mg/kg dry	1x	0.7	27.5 77.5%	(75-125)		04/11/07 16:05	

TestAmerica - Seattle, WA

Sandra Yakamavich, Project Manager







Alaska Railroad Corporation Project Name: Seward Coal Facility

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Notes and Definitions

Report Specific Notes:

M2 - The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

R4 - Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.

RL1 - Reporting limit raised due to sample matrix effects.

Laboratory Reporting Conventions:

DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.

ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).

NR/NA Not Reported / Not Available

dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.

wet Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported

on a Wet Weight Basis.

RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).

MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.

MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported

as Estimated Results.

Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution

found on the analytical raw data.

Reporting - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and

percent solids, where applicable.

Electronic - Electronic Signature added in accordance with TestAmerica's Electronic Reporting and Electronic Signatures Policy.

Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory.

Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica - Seattle, WA

Limits

Signature

Sandra Yakamavich, Project Manager

