

**Appendix E**  
**Background Soil Analysis**



ECE Sample 2  
ECE Sample 1  
ECE Sample 4  
ECE Sample 3

294 m

Imagery Date: Jul 4, 2007

Image © 2010 DigitalGlobe

© 2010 Google

20 T 520489 62 m E 7045401 47 m N elev 30 m

Google

Eye alt 1.05 km

Site Location: EAST COAST ENERGY, MACLELLAN'S BROOK  
Your C.O.C. #: B 29531

**Attention:**  
East Coast Energy Inc  
276 Foord St  
PO Box 940  
Stellarton, NS  
CANADA B0K1S0

Report Date: 2010/12/16

**CERTIFICATE OF ANALYSIS**

**MAXXAM JOB #: B0H8577**  
**Received: 2010/12/09, 16:14**

Sample Matrix: Soil  
# Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Metals Solid Avail. Unified MS - Npor	4	2010/12/14	2010/12/14	ATL SOP 00024 R5	Based on EPA6020A

\* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

*RB* *Griffith* /Rob Griffith

16 Dec 2010 09:22:13 -04:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

HEATHER MACUMBER, Bedford  
Email: [heather@maxxam.ca](mailto:heather@maxxam.ca)  
Phone# (902) 420-0203

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Total cover pages: 1

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Maxxam Job #: B0H8577  
 Report Date: 2010/12/16

East Coast Energy Inc

Project name: EAST COAST ENERGY, MACLELLAN'S BROOK

**ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)**

Maxxam ID		IC9482	IC9486	IC9487	IC9488	IC9488		
Sampling Date		2010/12/07	2010/12/07 12:30	2010/12/07	2010/12/07	2010/12/07		
COC Number		B 29531	B 29531	B 29531	B 29531	B 29531		
	<b>Units</b>	<b>ECE-01</b>	<b>ECE-02</b>	<b>ECE-03</b>	<b>ECE-04</b>	<b>ECE-04 Lab-Dup</b>	<b>RDL</b>	<b>QC Batch</b>

Metals								
Available Aluminum (Al)	mg/kg	8800	15000	9800	15000	14000	10	2358117
Available Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	2	2358117
Available Arsenic (As)	mg/kg	6	ND	ND	7	7	2	2358117
Available Barium (Ba)	mg/kg	31	76	82	70	66	5	2358117
Available Beryllium (Be)	mg/kg	ND	ND	ND	ND	ND	2	2358117
Available Bismuth (Bi)	mg/kg	ND	ND	ND	ND	ND	2	2358117
Available Boron (B)	mg/kg	ND	ND	ND	ND	ND	5	2358117
Available Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	0.3	2358117
Available Chromium (Cr)	mg/kg	14	10	6	15	16	2	2358117
Available Cobalt (Co)	mg/kg	10	ND	ND	47	42	1	2358117
Available Copper (Cu)	mg/kg	6	8	8	8	8	2	2358117
Available Iron (Fe)	mg/kg	27000	9900	1400	36000	36000	50	2358117
Available Lead (Pb)	mg/kg	23	20	23	57	49	0.5	2358117
Available Lithium (Li)	mg/kg	18	7	4	20	19	2	2358117
Available Manganese (Mn)	mg/kg	510	12	13	2000	1800	2	2358117
Available Mercury (Hg)	mg/kg	ND	ND	0.2	ND	ND	0.1	2358117
Available Molybdenum (Mo)	mg/kg	ND	ND	ND	ND	ND	2	2358117
Available Nickel (Ni)	mg/kg	10	3	5	7	7	2	2358117
Available Rubidium (Rb)	mg/kg	9	10	7	13	12	2	2358117
Available Selenium (Se)	mg/kg	ND	ND	ND	ND	ND	2	2358117
Available Silver (Ag)	mg/kg	ND	ND	ND	ND	ND	0.5	2358117
Available Strontium (Sr)	mg/kg	ND	ND	8	ND	ND	5	2358117
Available Thallium (Tl)	mg/kg	ND	0.1	ND	0.1	0.1	0.1	2358117
Available Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	2	2358117
Available Uranium (U)	mg/kg	0.3	0.5	0.8	0.5	0.5	0.1	2358117
Available Vanadium (V)	mg/kg	20	18	7	29	29	2	2358117
Available Zinc (Zn)	mg/kg	44	11	14	46	44	5	2358117

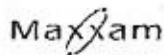
ND = Not detected  
 RDL = Reportable Detection Limit  
 QC Batch = Quality Control Batch

Maxxam Job #: B0H6577  
Report Date: 2010/12/18

East Coast Energy Inc

Project name: EAST COAST ENERGY, MACLELLAN'S BROOK

Package 1	15.0°C
Each temperature is the average of up to three cooler temperatures taken at receipt	
<b>GENERAL COMMENTS</b>	
Results relate only to the items tested.	



East Coast Energy Inc  
 Attention: Dan MacDonald  
 Client Project #:  
 P.O. #:  
 Site Location: EAST COAST ENERGY, MACLELLAN'S BROOK

Quality Assurance Report  
 Maxxam Job Number: DB0H8577

QA/QC Batch	Date Analyzed	Parameter	Value	Recovery	Units	QC Limits
Num Init	QC Type					
2358117	KGU	Matrix Spike [IC9488-01]				
		Available Aluminum (Al)	2010/12/14		NC	% 75 - 125
		Available Antimony (Sb)	2010/12/14	38 (f)	%	75 - 125
		Available Arsenic (As)	2010/12/14	92	%	75 - 125
		Available Barium (Ba)	2010/12/14	NC	%	75 - 125
		Available Beryllium (Be)	2010/12/14	87	%	75 - 125
		Available Bismuth (Bi)	2010/12/14	82	%	75 - 125
		Available Boron (B)	2010/12/14	43 (f)	%	75 - 125
		Available Cadmium (Cd)	2010/12/14	91	%	75 - 125
		Available Chromium (Cr)	2010/12/14	NC	%	75 - 125
		Available Cobalt (Co)	2010/12/14	NC	%	75 - 125
		Available Copper (Cu)	2010/12/14	88	%	75 - 125
		Available Iron (Fe)	2010/12/14	NC	%	75 - 125
		Available Lead (Pb)	2010/12/14	NC	%	75 - 125
		Available Lithium (Li)	2010/12/14	NC	%	75 - 125
		Available Manganese (Mn)	2010/12/14	NC	%	75 - 125
		Available Mercury (Hg)	2010/12/14	106	%	75 - 125
		Available Molybdenum (Mo)	2010/12/14	88	%	75 - 125
		Available Nickel (Ni)	2010/12/14	89	%	75 - 125
		Available Rubidium (Rb)	2010/12/14	NC	%	75 - 125
		Available Selenium (Se)	2010/12/14	75	%	75 - 125
		Available Silver (Ag)	2010/12/14	97	%	75 - 125
		Available Strontium (Sr)	2010/12/14	88	%	75 - 125
		Available Thallium (Tl)	2010/12/14	87	%	75 - 125
		Available Tin (Sn)	2010/12/14	92	%	75 - 125
		Available Uranium (U)	2010/12/14	86	%	75 - 125
		Available Vanadium (V)	2010/12/14	NC	%	75 - 125
		Available Zinc (Zn)	2010/12/14	87	%	75 - 125
	QC Standard	Available Aluminum (Al)	2010/12/14	79	%	75 - 125
		Available Arsenic (As)	2010/12/14	102	%	75 - 125
		Available Barium (Ba)	2010/12/14	104	%	75 - 125
		Available Chromium (Cr)	2010/12/14	83	%	75 - 125
		Available Cobalt (Co)	2010/12/14	93	%	75 - 125
		Available Copper (Cu)	2010/12/14	89	%	75 - 125
		Available Iron (Fe)	2010/12/14	93	%	75 - 125
		Available Lead (Pb)	2010/12/14	101	%	75 - 125
		Available Manganese (Mn)	2010/12/14	100	%	75 - 125
		Available Nickel (Ni)	2010/12/14	98	%	75 - 125
		Available Strontium (Sr)	2010/12/14	91	%	75 - 125
		Available Vanadium (V)	2010/12/14	100	%	75 - 125
		Available Zinc (Zn)	2010/12/14	97	%	75 - 125
	Spiked Blank	Available Aluminum (Al)	2010/12/14	89	%	75 - 125
		Available Antimony (Sb)	2010/12/14	88	%	75 - 125
		Available Arsenic (As)	2010/12/14	88	%	75 - 125
		Available Barium (Ba)	2010/12/14	92	%	75 - 125
		Available Beryllium (Be)	2010/12/14	87	%	75 - 125
		Available Bismuth (Bi)	2010/12/14	84	%	75 - 125
		Available Boron (B)	2010/12/14	88	%	75 - 125
		Available Cadmium (Cd)	2010/12/14	90	%	75 - 125
		Available Chromium (Cr)	2010/12/14	93	%	75 - 125
		Available Cobalt (Co)	2010/12/14	91	%	75 - 125
		Available Copper (Cu)	2010/12/14	91	%	75 - 125
		Available Iron (Fe)	2010/12/14	91	%	75 - 125
		Available Lead (Pb)	2010/12/14	93	%	75 - 125
		Available Lithium (Li)	2010/12/14	88	%	75 - 125

East Coast Energy Inc  
 Attention  
 Client Project #:  
 P.O. #:  
 Site Location: EAST COAST ENERGY, MACLELLAN'S BROOK

Quality Assurance Report (Continued)  
 Maxxam Job Number: DB0H8577

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits		
2358117 KGU	Spiked Blank	Available Manganese (Mn)	2010/12/14		87	%	75 - 125		
		Available Mercury (Hg)	2010/12/14		104	%	75 - 125		
		Available Molybdenum (Mo)	2010/12/14		92	%	75 - 125		
		Available Nickel (Ni)	2010/12/14		91	%	75 - 125		
		Available Rubidium (Rb)	2010/12/14		92	%	75 - 125		
		Available Selenium (Se)	2010/12/14		89	%	75 - 125		
		Available Silver (Ag)	2010/12/14		95	%	75 - 125		
		Available Strontium (Sr)	2010/12/14		92	%	75 - 125		
		Available Thallium (Tl)	2010/12/14		91	%	75 - 125		
		Available Tin (Sn)	2010/12/14		93	%	75 - 125		
		Available Uranium (U)	2010/12/14		88	%	75 - 125		
		Available Vanadium (V)	2010/12/14		96	%	75 - 125		
		Available Zinc (Zn)	2010/12/14		88	%	75 - 125		
		Method Blank		Available Aluminum (Al)	2010/12/14	ND, RDL=10		mg/kg	
				Available Antimony (Sb)	2010/12/14	ND, RDL=2		mg/kg	
				Available Arsenic (As)	2010/12/14	ND, RDL=2		mg/kg	
				Available Barium (Ba)	2010/12/14	ND, RDL=5		mg/kg	
				Available Beryllium (Be)	2010/12/14	ND, RDL=2		mg/kg	
				Available Bismuth (Bi)	2010/12/14	ND, RDL=2		mg/kg	
Available Boron (B)	2010/12/14			ND, RDL=5		mg/kg			
Available Cadmium (Cd)	2010/12/14			ND, RDL=0.3		mg/kg			
Available Chromium (Cr)	2010/12/14			ND, RDL=2		mg/kg			
Available Cobalt (Co)	2010/12/14			ND, RDL=1		mg/kg			
Available Copper (Cu)	2010/12/14			ND, RDL=2		mg/kg			
Available Iron (Fe)	2010/12/14			ND, RDL=50		mg/kg			
Available Lead (Pb)	2010/12/14			ND, RDL=0.5		mg/kg			
Available Lithium (Li)	2010/12/14			ND, RDL=2		mg/kg			
Available Manganese (Mn)	2010/12/14			ND, RDL=2		mg/kg			
Available Mercury (Hg)	2010/12/14			ND, RDL=0.1		mg/kg			
Available Molybdenum (Mo)	2010/12/14			ND, RDL=2		mg/kg			
Available Nickel (Ni)	2010/12/14			ND, RDL=2		mg/kg			
Available Rubidium (Rb)	2010/12/14			ND, RDL=2		mg/kg			
Available Selenium (Se)	2010/12/14	ND, RDL=2		mg/kg					
Available Silver (Ag)	2010/12/14	ND, RDL=0.5		mg/kg					
Available Strontium (Sr)	2010/12/14	ND, RDL=5		mg/kg					
Available Thallium (Tl)	2010/12/14	ND, RDL=0.1		mg/kg					
Available Tin (Sn)	2010/12/14	ND, RDL=2		mg/kg					
Available Uranium (U)	2010/12/14	ND, RDL=0.1		mg/kg					
Available Vanadium (V)	2010/12/14	ND, RDL=2		mg/kg					
Available Zinc (Zn)	2010/12/14	ND, RDL=5		mg/kg					
RPD [IC9488-01]		Available Aluminum (Al)	2010/12/14	4.8		%	35		
		Available Antimony (Sb)	2010/12/14	NC		%	35		
		Available Arsenic (As)	2010/12/14	NC		%	35		
		Available Barium (Ba)	2010/12/14	5.7		%	35		
		Available Beryllium (Be)	2010/12/14	NC		%	35		
		Available Bismuth (Bi)	2010/12/14	NC		%	35		
		Available Boron (B)	2010/12/14	NC		%	35		
		Available Cadmium (Cd)	2010/12/14	NC		%	35		
		Available Chromium (Cr)	2010/12/14	5.4		%	35		
		Available Cobalt (Co)	2010/12/14	11.5		%	35		
		Available Copper (Cu)	2010/12/14	NC		%	35		
		Available Iron (Fe)	2010/12/14	0.6		%	35		
		Available Lead (Pb)	2010/12/14	14.8		%	35		
		Available Lithium (Li)	2010/12/14	1.1		%	35		
Available Manganese (Mn)	2010/12/14	13.4		%	35				

East Coast Energy Inc  
 Attention:  
 Client Project #:  
 P.O. #:  
 Site Location: EAST COAST ENERGY, MACLELLAN'S BROOK

Quality Assurance Report (Continued)

Maxxam Job Number: DB0H8577

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
2358117	KGU RPD [IC9488-01]	Available Mercury (Hg)	2010/12/14	NC		%	35
		Available Molybdenum (Mo)	2010/12/14	NC		%	35
		Available Nickel (Ni)	2010/12/14	NC		%	35
		Available Rubidium (Rb)	2010/12/14	4.1		%	35
		Available Selenium (Se)	2010/12/14	NC		%	35
		Available Silver (Ag)	2010/12/14	NC		%	35
		Available Strontium (Sr)	2010/12/14	NC		%	35
		Available Thallium (Tl)	2010/12/14	NC		%	35
		Available Tin (Sn)	2010/12/14	NC		%	35
		Available Uranium (U)	2010/12/14	NC		%	35
		Available Vanadium (V)	2010/12/14	0.08		%	35
		Available Zinc (Zn)	2010/12/14	4.2		%	35

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.  
 Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.  
 QC Standard: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.  
 Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.  
 Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.  
 NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.  
 NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.  
 (1) Low recovery due to sample matrix.



East Coast Energy Inc. Soil Samples, Dec. 7th, 2010

Sample ID#	Sample Date	GPS Coordinates (NAD 83)	Description
ECE -01	Dec. 7 2010	529465 5045417	Light brown in color, claylike, medium moisture, fine grain size
ECE -02	Dec.7 2010	529465 5045444	Grey in color, compact clay, high moisture, fine grain size
ECE -03	Dec.7 2010	529465 5045417	Dark brown in color, sandlike, high moisture, medium granules
ECE -04	Dec.7 2010	529518 5045390	Light brown in color, clay sandy, medium moisture, fine to med. Grain med grain size.