



Date Submitted: 04-Oct-13  
Invoice No.: A13-12015  
Invoice Date: 21-Oct-13  
Your Reference: NA44-24B

Cantex Mine Development Corp  
203-1634 Harvey Ave  
Kelowna BC V1Y 6G2

ATTN: Shadi Morton

## CERTIFICATE OF ANALYSIS

18 Pulp samples were submitted for analysis.

The following analytical package was requested: Code UT-7 Sodium Peroxide Fusion (ICP & ICPMS)

REPORT **A13-12015**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

### Notes:

CERTIFIED BY :

A handwritten signature in black ink, appearing to be "Emmanuel Esemé", written over a horizontal line.

Emmanuel Esemé , Ph.D.  
Quality Control

### ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or  
+1.888.228.5227 FAX +1.905.648.9613  
E-MAIL [Ancaster@actlabs.com](mailto:Ancaster@actlabs.com) ACTLABS GROUP WEBSITE [www.actlabs.com](http://www.actlabs.com)



## Activation Laboratories Ltd.

Report: A13-12015

Analyte Symbol	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf	Ho	In	K
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.01	5	10	3	3	2	0.01	2	0.8	0.2	30	0.1	2	0.3	0.1	0.1	0.05	0.2	0.1	0.7	10	0.2	0.2	0.1
Analysis Method	FUS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-Na2O2
KAR00011	0.29	10700	20	18	< 3	< 2	4.17	554	8.1	16.0	< 30	0.4	3000	1.0	0.7	0.4	14.8	2.1	1.8	68.8	< 10	0.3	1.2	0.1
KAR00027	7.59	< 5	< 10	317	< 3	< 2	8.66	< 2	94.2	47.7	60	0.6	85	5.2	2.7	3.1	8.85	24.4	8.0	3.8	< 10	1.0	< 0.2	1.0
KAR00048	0.72	6260	40	36	< 3	12	0.17	4	9.8	11.2	< 30	0.4	104	1.2	1.0	0.2	52.7	2.6	1.3	14.4	10	0.3	0.3	0.4
KAR063	1.15	154	30	111	< 3	8	12.7	< 2	22.6	104	50	1.9	109	0.5	0.5	0.3	12.9	2.3	1.2	3.7	< 10	< 0.2	0.2	1.3
KAR72	0.21	337	< 10	222	< 3	< 2	4.60	912	8.4	9.9	< 30	1.1	213	< 0.3	0.4	0.2	3.22	3.9	0.7	218	< 10	< 0.2	< 0.2	< 0.1
KAR00079	4.61	26	410	300	< 3	< 2	5.55	< 2	24.4	37.8	260	3.1	88	2.4	1.4	1.5	4.08	12.7	3.1	3.3	< 10	0.5	< 0.2	3.0
KAR00107	0.25	3430	10	9	< 3	901	0.19	75	9.2	13.6	< 30	0.1	6780	0.4	0.6	0.2	36.1	1.6	0.7	13.7	< 10	< 0.2	1.3	0.1
KAR00199	6.86	15	4230	18	4	< 2	5.38	< 2	61.5	188	60	0.3	304	10.4	6.6	2.9	9.41	18.4	10.4	5.0	< 10	2.1	0.3	0.1
KAR00228	0.06	504	10	14	< 3	14	0.39	< 2	69.0	19.7	500	0.2	80	0.7	0.5	0.5	5.64	0.4	2.5	3.3	< 10	< 0.2	< 0.2	< 0.1
KAR00236	2.34	53	90	81	< 3	< 2	8.26	3	70.8	85.8	210	1.5	28200	6.5	3.8	1.1	5.38	6.7	6.6	1.7	< 10	1.3	1.3	1.3
KAR00239	3.04	197	160	114	< 3	9	17.0	38	33.1	51.7	120	14.1	311	2.1	1.3	1.0	5.10	8.0	3.1	4.8	< 10	0.5	< 0.2	1.8
KAR00251	0.39	5010	30	5	< 3	48	0.09	82	20.5	14.3	< 30	0.6	2060	1.2	1.0	0.7	41.5	3.1	2.0	51.9	< 10	0.3	1.3	0.1
KAR46	0.82	4050	50	49	< 3	5	0.11	4	16.7	16.6	< 30	0.4	168	1.2	1.0	0.3	52.4	2.7	1.5	16.0	< 10	0.3	< 0.2	0.5
KAR00051	1.32	3710	120	32	< 3	16	0.17	3	11.1	9.7	< 30	0.5	129	4.2	2.3	0.5	51.4	4.1	3.7	14.4	< 10	0.8	0.2	0.7
KAR00088	2.41	229	60	182	< 3	9	0.06	< 2	12.2	11.6	40	1.0	15500	< 0.3	0.5	0.1	10.8	7.7	0.7	8.6	< 10	< 0.2	1.4	1.9
KAR00137	0.60	158	10	97	< 3	231	1.17	< 2	75.6	22.6	290	< 0.1	1960	3.1	1.4	1.9	24.6	2.4	6.0	3.8	< 10	0.6	0.4	< 0.1
KAR00175	0.49	865	210	36	< 3	42	3.43	< 2	20.3	82.0	110	0.2	199	2.1	1.4	0.3	47.8	3.8	2.2	12.2	< 10	0.5	1.8	0.3
KAR00252	0.69	3440	70	12	< 3	39	0.27	12	23.1	42.6	< 30	1.2	839	1.7	1.2	0.9	49.0	4.1	2.5	16.3	< 10	0.4	1.0	0.3

## Activation Laboratories Ltd.

Report: A13-12015

Analyte Symbol	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pr	Rb	S	Sb	Se	Si	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.4	3	0.01	3	1	2.4	0.4	10	0.005	0.8	0.1	0.4	0.01	2	0.8	0.01	0.1	0.5	3	0.2	0.1	6	0.1	0.01
Analysis Method	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS- Na2O2	
KAR00011	4.5	6	1.75	8740	2	< 2.4	5.3	30	0.052	16400	1.3	5.9	0.85	351	13.4	5.06	1.3	4.9	21	< 0.2	0.3	< 6	0.7	0.01
KAR00027	44.0	41	3.00	1230	< 1	48.4	44.7	50	0.235	17.5	11.2	20.5	0.13	< 2	< 0.8	20.9	8.1	< 0.5	670	4.2	1.2	< 6	4.4	1.92
KAR00048	4.8	4	0.21	3840	19	2.5	3.9	30	0.016	1470	1.1	16.9	0.02	730	< 0.8	2.38	0.9	< 0.5	5	0.8	0.3	< 6	1.6	0.04
KAR063	10.4	21	6.84	982	< 1	< 2.4	9.3	70	0.008	766	2.4	37.4	13.0	52	4.0	6.80	1.4	< 0.5	21	< 0.2	0.2	< 6	2.4	0.05
KAR72	5.0	< 3	2.06	5620	< 1	< 2.4	3.6	50	< 0.005	160000	1.0	2.4	5.11	98	12.6	0.69	0.6	< 0.5	15	< 0.2	0.1	< 6	0.9	< 0.01
KAR00079	10.5	41	2.03	1240	< 1	5.4	11.3	80	0.015	49.0	2.8	138	0.68	4	< 0.8	27.0	2.5	< 0.5	50	0.7	0.5	< 6	6.9	0.15
KAR00107	4.3	< 3	2.29	14200	< 1	< 2.4	3.9	30	0.008	11500	1.1	5.0	15.0	2210	0.8	4.59	0.7	4.8	4	< 0.2	0.1	< 6	1.1	0.01
KAR00199	28.9	12	2.37	3980	< 1	13.4	34.9	90	0.116	23.8	7.9	2.0	3.95	18	4.3	24.0	8.3	4.5	45	1.5	1.9	< 6	3.2	0.84
KAR00228	37.7	< 3	0.19	479	< 1	< 2.4	26.0	30	< 0.005	260	7.6	1.5	0.87	2	< 0.8	37.4	3.4	< 0.5	9	< 0.2	0.2	< 6	0.5	< 0.01
KAR00236	32.8	17	0.79	401	< 1	4.1	32.1	40	0.022	77.3	8.2	53.4	3.05	< 2	6.6	26.9	6.1	2.4	38	0.5	1.2	< 6	5.2	0.09
KAR00239	16.8	22	2.41	3460	2	5.3	15.6	100	0.042	563	3.9	79.3	0.08	27	< 0.8	12.7	3.1	< 0.5	43	2.1	0.5	< 6	6.4	0.14
KAR00251	9.8	< 3	0.09	24700	1	< 2.4	10.5	30	0.014	116000	2.7	7.0	1.11	121	< 0.8	0.81	2.1	2.1	26	< 0.2	0.3	< 6	1.4	0.02
KAR46	8.0	4	0.21	6430	18	< 2.4	6.3	30	0.017	837	1.9	18.8	0.11	31	< 0.8	2.51	1.2	1.4	9	< 0.2	0.3	< 6	2.1	0.03
KAR00051	5.1	10	0.29	4130	11	2.4	5.2	20	0.028	1680	1.3	28.7	0.02	36	< 0.8	3.54	1.9	< 0.5	< 3	0.3	0.8	< 6	2.6	0.07
KAR00088	7.0	28	0.31	67	10	3.2	4.4	30	0.066	194	1.4	63.3	2.39	21	20.1	31.5	0.7	3.2	< 3	0.5	0.1	< 6	4.0	0.12
KAR00137	51.0	7	0.02	965	2	< 2.4	37.9	50	0.651	314	10.2	0.5	16.6	102	42.6	22.3	6.1	5.5	28	< 0.2	0.8	< 6	1.7	0.02
KAR00175	5.6	< 3	0.43	639	9	2.9	9.4	260	0.029	866	2.5	7.7	0.14	135	< 0.8	2.40	2.2	28.1	5	1.1	0.4	< 6	3.0	0.03
KAR00252	9.1	< 3	0.36	48800	2	< 2.4	11.1	60	0.011	3130	2.9	15.0	0.02	37	< 0.8	1.88	2.6	< 0.5	51	< 0.2	0.4	< 6	1.4	0.02

Analyte Symbol	Tl	Tm	U	V	W	Y	Yb	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.1	0.1	5	0.7	0.1	0.1	30
Analysis Method	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2
KAR00011	0.7	0.1	18.2	< 5	20.6	8.7	0.7	192000
KAR00027	< 0.1	0.4	1.0	378	< 0.7	25.5	2.1	130
KAR00048	< 0.1	0.2	20.5	8	321	9.4	1.0	910
KAR063	8.7	< 0.1	1.5	< 5	1.1	4.9	0.4	630
KAR72	4.7	< 0.1	1.1	< 5	< 0.7	4.8	0.4	253000
KAR00079	0.5	0.2	1.2	34	45.7	13.9	1.1	250
KAR00107	0.2	< 0.1	1.5	< 5	< 0.7	5.2	0.5	13500
KAR00199	1.5	1.0	0.9	295	3.9	59.8	6.1	120
KAR00228	< 0.1	< 0.1	0.2	< 5	< 0.7	5.7	0.4	< 30
KAR00236	0.3	0.5	4.4	10	10.9	37.9	3.0	1060
KAR00239	1.0	0.2	4.5	23	25.4	12.4	1.1	20300
KAR00251	0.2	0.1	7.2	< 5	< 0.7	11.6	0.8	26300
KAR46	0.1	0.2	24.8	< 5	1.0	9.7	1.0	970
KAR00051	< 0.1	0.3	21.0	11	< 0.7	26.8	1.9	1220
KAR00088	0.3	< 0.1	2.6	104	< 0.7	4.2	0.7	230
KAR00137	3.3	0.2	5.8	85	< 0.7	18.7	1.0	50
KAR00175	7.6	0.2	5.8	9	18.8	15.9	1.5	210
KAR00252	< 0.1	0.2	4.7	14	62.2	15.6	1.2	6800

Quality Control																									
Analyte Symbol	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf	Ho	In	K	
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	
Detection Limit	0.01	5	10	3	3	2	0.01	2	0.8	0.2	30	0.1	2	0.3	0.1	0.1	0.05	0.2	0.1	0.7	10	0.2	0.2	0.1	
Analysis Method	FUS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-Na2O2	
GXR-1 Meas		461	20	825	< 3	1290	0.93	3	16.3	8.8	< 30	3.0	1230	4.6		0.7	25.3	15.4	4.3		< 10		0.8	< 0.1	
GXR-1 Cert		427	15.0	750	1.22	1380	0.960	3.30	17.0	8.20	12.0	3.00	1110	4.30		0.690	23.6	13.8	4.20		0.960		0.770	0.050	
GXR-4 Meas	6.97	107	< 10	1680	< 3	20	0.98	< 2	129	15.3	70	2.9	5850	2.7		1.7	3.06	20.2	5.4		< 10		< 0.2	4.0	
GXR-4 Cert	7.20	98.0	4.50	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	2.80	6520	2.60		1.63	3.09	20.0	5.25		6.30		0.270	4.01	
NIST 696 Meas	> 25.0										320														
NIST 696 Cert	28.9										321.0														
MP-1b Meas		20600				986	2.59	563									8.04						572		
MP-1b Cert		23000.00				954.0000	2.47	527.0000									8.19						565		
OREAS 101a (Fusion) Meas									1260				442	34.5	20.4	9.3	11.1		44.7			6.7		2.4	
OREAS 101a (Fusion) Cert									1396				434	33.3	19.5	8.06	11.06		43.4			6.46		2.34	
KAR00236 Orig	2.33	48	90	80	< 3	7	8.26	3	72.5	83.5	200	1.5	28000	6.5	3.8	1.1	5.37	6.7	6.7	1.5	< 10	1.3	1.2	1.3	
KAR00236 Dup	2.34	58	90	83	< 3	< 2	8.27	3	69.2	88.1	230	1.5	28500	6.6	3.8	1.1	5.39	6.7	6.5	1.8	< 10	1.3	1.3	1.3	
Method Blank	< 0.01	< 5	< 10	< 3	< 3	< 2	< 0.01	< 2	< 0.8	< 0.2	< 30	< 0.1	< 2	< 0.3	< 0.1	< 0.1	< 0.05	< 0.2	< 0.1	< 0.7	< 10	< 0.2	< 0.2	< 0.1	

Quality Control																								
Analyte Symbol	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pr	Rb	S	Sb	Se	Si	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti
Unit Symbol	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.4	3	0.01	3	1	2.4	0.4	10	0.005	0.8	0.1	0.4	0.01	2	0.8	0.01	0.1	0.5	3	0.2	0.1	6	0.1	0.01
Analysis Method	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS- Na2O2
GXR-1 Meas	8.2	9	0.22	828	16	< 2.4	9.2	40	0.065				0.27	126	16.9		2.8	60.1	292	< 0.2	0.9	16	2.6	
GXR-1 Cert	7.50	8.20	0.217	852	18.0	0.800	18.0	41.0	0.0650				0.257	122	16.6		2.70	54.0	275	0.175	0.830	13.0	2.44	
GXR-4 Meas	70.8	12	1.68	178	333	12.1	45.2	40		55.3		160	1.80	5	5.7		6.1	5.8	225	1.0	0.6	< 6	24.0	
GXR-4 Cert	64.5	11.1	1.66	155	310	10.0	45.0	42.0		52.0		160	1.77	4.80	5.60		6.60	5.60	221	0.790	0.360	0.970	22.5	
NIST 696 Meas																								
NIST 696 Cert																								
MP-1b Meas					296					18700			13.6	52		18.0		14500						
MP-1b Cert					285					20910.000			13.79	54.0		16.79		16100.000						
OREAS 101a (Fusion) Meas	707		1.22	902	20		414		0.126		141						48.1				6.3		36.9	0.40
OREAS 101a (Fusion) Cert	816		1.23	964	21.9		403		0		134						48.8				5.92		36.6	0.395
KAR00236 Orig	33.6	17	0.79	393	< 1	3.4	33.4	40	0.021	77.5	8.4	52.7	3.09	3	5.8	27.0	6.3	1.3	37	0.5	1.2	< 6	5.9	0.09
KAR00236 Dup	32.0	17	0.79	410	< 1	4.8	30.8	50	0.023	77.0	8.1	54.0	3.02	< 2	7.3	26.9	5.9	3.5	39	0.5	1.2	< 6	4.4	0.09
Method Blank	< 0.4	< 3	< 0.01	< 3	< 1	< 2.4	< 0.4	< 10	< 0.005	< 0.8	< 0.1	< 0.4	< 0.01	< 2	< 0.8	< 0.01	< 0.1	< 0.5	< 3	< 0.2	< 0.1	< 6	< 0.1	< 0.01

**Quality Control**

Analyte Symbol	Tl	Tm	U	V	W	Y	Yb	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.1	0.1	5	0.7	0.1	0.1	30
Analysis Method	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2	FUS-MS- Na2O2
GXR-1 Meas	0.4	0.4	32.4	83	163	30.9		870
GXR-1 Cert	0.390	0.430	34.9	80.0	164	32.0		760
GXR-4 Meas	3.6	0.2	6.1	94	32.4	14.8	1.3	
GXR-4 Cert	3.20	0.210	6.20	87.0	30.8	14.0	1.60	
NIST 696 Meas				407				
NIST 696 Cert				403.0000				
MP-1b Meas					1040			148000
MP-1b Cert					1100.000			166700.00
OREAS 101a (Fusion) Meas		3.2	413	80		184	19.2	
OREAS 101a (Fusion) Cert		2.90	422	83		183	17.5	
KAR00236 Orig	0.3	0.5	4.6	9	11.1	36.9	3.0	1060
KAR00236 Dup	0.3	0.6	4.2	12	10.7	38.9	3.1	1050
Method Blank	< 0.1	< 0.1	< 0.1	< 5	< 0.7	< 0.1	< 0.1	< 30