

NAME WHOLE ROCK ANALYSES - STDS

No.

Comparison to Accepted Values

015073

geochemists • assayers • analytical chemists

BONDAR-CLEGG & COMPANY LTD.

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B. C. V7P 2S2
PHONE: 985-0681

REPORT OF: _____ REPORT No. IT29 - 17

PROJECT: _____ DATE: February 8, 1979

REPORTED TO: Cyprus Anvil Mining Corp. PAGE 1

Sample Number	L.O.I.%	Sample Number	L.O.I.%	Sample Number	L.O.I.%	Sample Number	L.O.I.%
DC 1	1.7	1135	9.1	1917	2.1	3286	7.1
K0603	1.5	1138	7.2	1922	1.6	3287	5.5
K0604	1.8	1142	2.8	1926	3.5	3288	7.7
K0605	1.9	1166	4.2	3254	4.3	3289	4.9
K0606	2.0	1192	6.1	3256	5.5	3290	5.2
LM10B	2.7	1214	2.0	3258	5.1	3291	6.9
LM29A	3.2	1241	3.1	3260	6.8	3292	8.0
LM38A	1.8	1329	1.5	3261	6.4	3294	7.8
LM46A	1.6	1402	2.4	3262	6.0	3296	8.7
T 8	2.4	1413	7.1	3263	7.8	3298	5.5
173071	1.1	1458	8.9	3264	7.1	3300	5.3
20	3.4	1459	1.5	3265	7.8	3402	6.5
151	1.3	1480	8.8	3266	7.1	3412	7.0
366	1.5	1481	5.1	3267	8.2	3435	9.2
597	0.5	1487	3.8	3268	8.4	3353	1.8
692	3.3	1497	4.5	3269	8.6	3356	2.4
706	0.7	1505	8.0	3270	7.4	3359	11.2
711	2.2	1549	0.2	3271	5.8	3360	8.3
742	2.3	1552	<0.1	3272	5.4	3361	5.0
758A	12.6	1559	0.5	3273	6.0	3362	4.0
758B	10.5	1617	2.9	3274	5.2	3363	4.1
788	0.4	1684	3.6	3275	7.0	3364	3.4
812	0.8	1720	13.9	3276	5.6	3365	4.0
830	5.2	1739	5.1	3277	4.6	3366	5.6
844	4.4	1776	5.9	3278	5.8	3367	5.4
887	5.4	1778	5.5	3279	4.9	3368	4.9
905	3.3	1863	2.0	3280	4.0	3369	5.2
921	4.9	1897	3.9	3281	4.0	3370	4.1
987	2.9	1898	1.3	3282	4.1	3371	3.7
1025	1.2	1901	3.6	3283	5.2	3372	4.2
1080	3.6	1907	0.7	3284	5.0	3373	7.8
1129	4.5	1912	4.0	3285	3.8	3374	3.6

**BONDAR-CLEGG & COMPANY LTD.***geochemists • assayers • analytical chemists*1500 PEMBERTON AVENUE, NORTH VANCOUVER, B. C. V7P 2S2
PHONE: 985-0681REPORT OF: _____ REPORT No. IT29 - 17
PROJECT: _____ DATE: February 8, 1979
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Sample Number	L.O.I.%	Sample Number	L.O.I.%	Sample Number	L.O.I.%	Sample Number	L.O.I.%
3375	1.3	1127	6.6	1191	5.6	13725	4.8
3376	2.6	1128	2.5	1195	8.7	13726	4.7
3377	2.1	1133	5.2	1196	7.8	15751	5.1
3378	2.0	1144	4.0	1197	8.9	15752	5.9
3379	5.7	1152	4.9	1198	11.5	15753	7.3
3380	4.6	1153	6.8	1199	8.0	15754	5.8
3381	6.0	1154	7.8	1200	7.6	15755	6.4
3382	4.8	1155	9.6	1201	5.6	15756	5.1
3383	3.0	1156	9.0	1202	8.8	15757	7.0
3384	4.4	1157	8.6	1206	6.8	15758	7.8
3385	3.8	1158	6.0	1207	0.8	15759	8.1
3386	4.1	1160	5.0	1222	4.8	15760	5.9
3387	4.0	1161	7.4	1223	5.9	15761	5.1
3388	8.4	1163	7.6	1224	5.1	15762	2.2
3389	8.7	1164	5.8	1225	7.3	15763	4.2
3390	8.1	1165	6.3	1226	7.9	15764	4.3
3391	7.8	1166A	9.7	1227	5.9	15765	4.7
3392	8.4	1167	9.1	1228	7.3	15766	5.7
3393	9.2	1168	9.2	1229	8.0	15767	5.7
3511	5.4	1169	2.2	1230	7.2	15768	6.6
3519	8.3	1173	5.0	1231	6.0	15769	3.9
3525	8.1	1174	2.4	1232	9.4	15770	3.4
1115	0.7	1175	4.5	1233	7.1	15771	7.9
1116	5.5	1176	6.5	1234	0.9	15772	7.9
1118	7.7	1177	7.4	1235	7.5	15773	0.9
1119	12.0	1178	9.2	1236	7.4	15774	7.9
1120	9.1	1179	9.3	13718	3.9	15775	8.3
1121	9.3	1180	10.1	13719	6.4	15776	7.2
1122	7.8	1181	8.0	13720	7.0	15777	8.0
1124	7.5	1182	2.0	13721	3.6	15778	9.0
1125	7.0	1183	0.7	13722	4.4	15779	6.3
1126	7.6	1184	6.4	13724	5.8	15780	7.2



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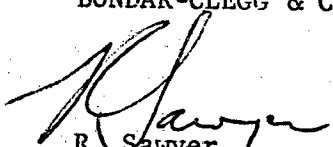
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**Sample
Number** **L.O.I.%**

15781	5.3
15782	4.3
15783	6.6
15784	6.2
15785	6.3
15786	7.2
15787	6.5
15788	5.9
15789	2.5
16305	5.2
16325	4.0
16331	1.5
19715	3.7
19716	3.2
19717	5.6
19718	5.9
19719	6.8
19720	6.2
19730	5.7
19738	7.1
19739	7.8
19740	6.3
19741	6.3
19742	6.6
19743	0.9
19745	6.8
19751	8.6
19760	7.0
19761	7.8

BONDAR-CLEGG & COMPANY LTD.


R. Sawyer
Chief Chemist

RS/sja

1977

01/11/80

CYPRUS ANVIL MINING CORPORATION

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GEOCHEMICAL DATA (PERCENT)

GROUP 2

SPECIMEN ID	C7902	C7903	C7907	C7904	C7905
ROCK TYPE	STDMRG-1	STDMRG-1	STDMRG-1	STDMRG-1	STDMRG-1
SEQUENCE NO	2019	2029	2040	2099	2108
SI O2	39.74	39.13	39.56	39.46	39.27
TI O2	3.85	4.07	4.49	4.08	4.08
AL2 O3	8.52	8.74	8.56	8.57	8.77
FE2 O3	9.12	8.74	8.87	8.87	8.98
FE O	8.57	8.39	8.67	8.67	8.41
MN O	.17	.17	.18	.17	.17
MG O	13.99	14.33	13.46	14.17	14.07
CA O	14.90	15.35	15.09	14.99	15.09
NA2 O	.81	.81	.82	.71	.82
K2 O	.20	.20	.25	.20	.20
P2 O5	.12	.06	.06	.10	.13
S	-.01	-.01	-.01	-.01	-.01
L.O.I.	0.	0.	0.	0.	0.
TOTAL	99.99	99.99	100.01	99.99	99.99

TRACE ELEMENT CHEMISTRY (PPM)

BA	-.01	-.01	-.01	-.01	-.01
CU	-.01	-.01	-.01	-.01	-.01
PB	-.01	-.01	-.01	-.01	-.01
ZN	-.01	-.01	-.01	-.01	-.01
CD	-.01	-.01	-.01	-.01	-.01
AG	-.01	-.01	-.01	-.01	-.01
CR	-.01	-.01	-.01	-.01	-.01
V	-.01	-.01	-.01	-.01	-.01
CO	-.01	-.01	-.01	-.01	-.01
NI	-.01	-.01	-.01	-.01	-.01
MB	-.01	-.01	-.01	-.01	-.01
Rb	-.01	-.01	-.01	-.01	-.01
SR	-.01	-.01	-.01	-.01	-.01
ZR	115.00	117.00	113.00	119.00	111.00
Y	0.	0.	0.	0.	0.

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CYPRUS ANVIL MINING CORPORATION

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GEOCHEMICAL DATA (PERCENT)

GROUP 2

SPECIMEN ID C7906

ROCK TYPE STDMRG-1

SEQUENCE NO 2117

SI O2	39.85
TI O2	4.07
AL2 O3	9.05
FE2 O3	8.95
FE O	8.39
MN O	.18
MG O	13.42
CA O	14.84
NA2 O	.86
K2 O	.25
P2 O5	.13
S	-.01
L.O.I.	0.

TOTAL 99.99

TRACE ELEMENT CHEMISTRY (PPM)

BA	-.01
CU	-.01
PB	-.01
ZN	-.01
CD	-.01
AG	-.01
CR	-.01
V	-.01
CO	-.01
NI	-.01
MB	-.01
RB	-.01
SR	-.01
ZR	115.00
Y	0.

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CYPRUS ANVIL MINING CORPORATION

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GEOCHEMICAL DATA (PERCENT)

GROUP 3

SPECIMEN ID	C1128	C1169	C1182	C15789
ROCK TYPE	STDMRG-1	STDMRG-1	STDMRG-1	STDMRG-1
SEQUENCE NO	3095	3125	3167	3215
SI O2	40.18	39.87	40.22	40.89
TI O2	3.69	3.59	3.63	3.48
AL2 O3	8.40	8.81	8.47	9.00
FE2 O3	17.42	18.45	18.58	17.99
FE O	-.01	-.01	-.01	-.01
MN O	.17	.15	.17	.17
MG O	13.84	13.73	13.78	13.29
CA O	15.37	14.14	13.99	14.11
NA2 O	.73	.86	.84	.80
K2 O	.15	.20	.20	.20
P2 O5	.04	.18	.10	.07
S	.06	.06	.05	.06
L.O.I.	0.	0.	0.	0.
TOTAL	100.05	100.04	100.03	100.06

TRACE ELEMENT CHEMISTRY (PPM)

BA	165.00	158.00	136.00	225.00
CU	130.00	140.00	135.00	141.00
PB	8.00	8.00	8.00	8.00
ZN	170.00	160.00	160.00	180.00
CD	0.	0.	0.	0.
AG	.20	.20	.20	.20
CR	390.00	380.00	380.00	390.00
V	560.00	580.00	520.00	470.00
CO	78.00	75.00	88.00	72.00
NI	160.00	148.00	190.00	160.00
MB	3.00	4.00	4.00	3.00
KB	12.00	11.00	8.00	7.00
SR	188.00	187.00	195.00	184.00
ZR	-.01	-.01	-.01	-.01
Y	-.01	-.01	-.01	-.01

GEOCHEMICAL DATA (PERCENT)

GROUP 2

SPECIMEN ID	C7902	C7903	C7907	C7904	C7905
ROCK TYPE	STDMRG-1	STDMRG-1	STDMRG-1	STDMRG-1	STDMRG-1
SEQUENCE NO	2019	2029	2040	2099	2108
SI O2	39.28	38.74	39.06	39.02	38.44
TI O2	3.81	4.02	4.43	4.03	3.99
AL2 O3	8.42	8.65	8.46	8.47	8.59
FE2 O3	9.02	8.65	8.76	8.77	8.79
FE O	8.47	8.30	8.56	8.57	8.24
MN O	.17	.17	.18	.17	.17
MG O	13.83	14.19	13.29	14.02	13.78
CA O	14.73	15.19	14.90	14.82	14.78
NA2 O	.80	.80	.81	.71	.80
K2 O	.20	.20	.25	.20	.20
P2 O5	.12	.06	.06	.10	.13
S	-.01	-.01	-.01	-.01	-.01
L.O.I.	1.15	1.01	1.26	1.11	2.10
TOTAL	100.00	99.98	100.02	99.99	100.01

TRACE ELEMENT CHEMISTRY (PPM)

BA	-.01	-.01	-.01	-.01	-.01
CU	-.01	-.01	-.01	-.01	-.01
PB	-.01	-.01	-.01	-.01	-.01
ZN	-.01	-.01	-.01	-.01	-.01
CO	-.01	-.01	-.01	-.01	-.01
AG	-.01	-.01	-.01	-.01	-.01
CR	-.01	-.01	-.01	-.01	-.01
V	-.01	-.01	-.01	-.01	-.01
CU	-.01	-.01	-.01	-.01	-.01
NI	-.01	-.01	-.01	-.01	-.01
MB	-.01	-.01	-.01	-.01	-.01
RB	-.01	-.01	-.01	-.01	-.01
SR	-.01	-.01	-.01	-.01	-.01
ZR	115.00	117.00	113.00	119.00	111.00
Y	0.	0.	0.	0.	0.

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CYPRUS ANVIL MINING CORPORATION

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GEOCHEMICAL DATA (PERCENT)

GROUP 2

SPECIMEN ID C7906

ROCK TYPE STDMRG-1

SEQUENCE NO 2117

SI O2	39.37
TI O2	4.02
AL2 O3	8.94
FE2 O3	8.84
FE O	8.29
MN O	.18
MG O	13.26
CA O	14.66
NA2 O	.85
K2 O	.25
P2 O5	.13
S	-.01
L.O.I.	1.21

TOTAL 100.00

TRACE ELEMENT CHEMISTRY (PPM)

BA	-.01
CU	-.01
PB	-.01
ZN	-.01
CD	-.01
AG	-.01
CR	-.01
V	-.01
CO	-.01
NI	-.01
MB	-.01
RB	-.01
SR	-.01
ZR	115.00
Y	0.

GEOCHEMICAL DATA (PERCENT)

GROUP 3

SPECIMEN ID	C1128	C1169	C1182	C15789
ROCK TYPE	STDMRG-1	STDMRG-1	STDMRG-1	STDMRG-1
SEQUENCE NO	3095	3125	3167	3215
SI O2	39.17	38.99	39.42	39.87
TI O2	3.60	3.51	3.56	3.39
AL2 O3	8.19	8.62	8.30	8.77
FE2 O3	16.99	18.04	18.21	17.54
FE O	-.01	-.01	-.01	-.01
MN O	.17	.15	.17	.17
MG O	13.49	13.43	13.51	12.96
CA O	14.99	13.83	13.71	13.76
HAZ O	.71	.84	.82	.78
K2 O	.15	.20	.20	.20
P2 O5	.04	.16	.10	.07
S	.06	.06	.05	.06
L.O.I.	2.44	2.14	1.95	2.43
TOTAL	100.00	99.99	100.00	100.00

TRACE ELEMENT CHEMISTRY (PPM)

BA	165.00	158.00	136.00	225.00
CO	130.00	140.00	135.00	141.00
PB	8.00	8.00	8.00	8.00
ZN	170.00	160.00	160.00	180.00
CD	0.	0.	0.	0.
AG	.20	.20	.20	.20
CR	390.00	380.00	380.00	390.00
V	560.00	580.00	520.00	470.00
CU	78.00	75.00	88.00	72.00
NI	160.00	148.00	190.00	160.00
MR	3.00	4.00	4.00	3.00
RB	12.00	11.00	8.00	7.00
SR	188.00	187.00	195.00	184.00
ZR	-.01	-.01	-.01	-.01
Y	-.01	-.01	-.01	-.01

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GEOCHEMICAL DATA (PERCENT)

GROUP 2

SPECIMEN ID	C7908	C7909	C7910
ROCK TYPE	STD SY-2	STD SY-2	STD SY-2
SEQUENCE NO	2053	2067	2079
SI O2	59.90	60.05	59.82
TI O2	.10	.15	.10
AL2 O3	11.96	12.43	12.19
FE2 O3	6.98	7.08	7.20
FE O	-.01	-.01	-.01
MN O	.32	.32	.27
MG O	2.49	2.58	2.57
CA O	8.77	8.49	8.56
NA2 O	4.29	4.04	4.48
K2 O	4.68	4.35	4.33
P2 O5	.52	.51	.48
S	-.01	-.01	-.01
L.O.I.	0.	0.	0.
TOTAL	100.01	100.00	100.00

TRACE ELEMENT CHEMISTRY (PPM)

BA	-.01	-.01	-.01
CU	-.01	-.01	-.01
PB	-.01	-.01	-.01
ZN	-.01	-.01	-.01
CD	-.01	-.01	-.01
AG	-.01	-.01	-.01
CR	-.01	-.01	-.01
V	-.01	-.01	-.01
CO	-.01	-.01	-.01
NI	-.01	-.01	-.01
MB	-.01	-.01	-.01
RB	-.01	-.01	-.01
SR	-.01	-.01	-.01
ZR	-.01	-.01	-.01
Y	-.01	-.01	-.01

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GEOCHEMICAL DATA (PERCENT)

GROUP 3

SPECIMEN ID	C1115	C1234	C1183
ROCK TYPE	STD SY-2	STD SY-2	STD SY-2
SEQUENCE NO	3084	3138	3182
SI O2	60.64	60.48	60.24
TI O2	.12	.13	.14
AL2 O3	12.17	12.06	11.93
FE2 O3	6.66	6.72	6.65
FE O	-.01	-.01	-.01
MN O	.31	.32	.32
MG O	2.70	2.63	2.73
CA O	8.55	8.14	8.52
NA2 O	4.22	4.52	4.61
K2 O	4.22	4.57	4.41
P2 O5	.41	.42	.46
S	.01	.02	.01
L.O.I.	0.	0.	0.
TOTAL	100.01	100.01	100.02

TRACE ELEMENT CHEMISTRY (PPM)

BA	477.00	482.00	424.00
CU	8.00	8.00	6.00
PB	86.00	90.00	84.00
ZN	245.00	223.00	245.00
CD	0.	0.	0.
AG	.20	.20	.20
CR	8.00	5.00	7.00
V	60.00	55.00	62.00
CO	27.00	22.00	26.00
NI	6.00	5.00	6.00
MB	4.00	2.00	3.00
KB	186.00	183.00	176.00
SR	232.00	244.00	235.00
ZR	269.00	262.00	-.01
Y	138.00	134.00	-.01

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CYPRUS ANVIL MINING CORPORATION

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GEOCHEMICAL DATA (PERCENT)

GROUP 2

SPECIMEN ID	C7908	C7909	C7910
ROCK TYPE	STD SY-2	STD SY-2	STD SY-2
SEQUENCE NO	2053	2067	2079
SI O2	59.19	59.48	59.22
Ti O2	.10	.15	.10
AL2 O3	11.82	12.32	12.06
FE2 O3	6.89	7.01	7.13
FE O	-.01	-.01	-.01
MN O	.32	.32	.27
MG O	2.46	2.55	2.54
CA O	8.67	8.41	8.47
NA2 O	4.23	4.01	4.44
K2 O	4.63	4.31	4.29
P2 O5	.51	.50	.48
S	-.01	-.01	-.01
L.O.I.	1.18	.95	1.00
TOTAL	100.00	100.01	100.00

TRACE ELEMENT CHEMISTRY (PPM)

BA	-.01	-.01	-.01
CU	-.01	-.01	-.01
PB	-.01	-.01	-.01
ZN	-.01	-.01	-.01
CO	-.01	-.01	-.01
AG	-.01	-.01	-.01
CR	-.01	-.01	-.01
V	-.01	-.01	-.01
NI	-.01	-.01	-.01
MB	-.01	-.01	-.01
RS	-.01	-.01	-.01
SR	-.01	-.01	-.01
ZR	-.01	-.01	-.01
Y	-.01	-.01	-.01

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CYPRUS ANVIL MINING CORPORATION

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GEOCHEMICAL DATA (PERCENT)

GROUP 3

SPECIMEN ID	C1115	C1234	C1183
ROCK TYPE	STD SY-2	STD SY-2	STD SY-2
SEQUENCE NO	3084	3138	3182
SI O2	60.22	59.94	59.82
Ti O2	.12	.13	.14
AL2 O3	12.08	11.95	11.84
FE2 O3	6.61	6.66	6.60
FE O	-.01	-.01	-.01
MN O	.31	.32	.32
MG O	2.68	2.61	2.71
CA O	8.49	8.07	8.46
NA2 O	4.19	4.48	4.58
K2 O	4.19	4.53	4.38
P2 O5	.41	.42	.46
S	.01	.02	.01
L.O.I.	.69	.88	.69
TOTAL	100.00	100.01	100.01

TRACE ELEMENT CHEMISTRY (PPM)

BA	477.00	482.00	424.00
CU	8.00	8.00	6.00
PB	86.00	90.00	84.00
ZN	245.00	223.00	245.00
CD	0.	0.	0.
AG	.20	.20	.20
CR	8.00	5.00	7.00
V	60.00	55.00	62.00
CO	27.00	22.00	26.00
NI	6.00	5.00	6.00
MB	4.00	2.00	3.00
RB	188.00	183.00	176.00
SR	232.00	244.00	235.00
ZR	269.00	262.00	-.01
Y	138.00	134.00	-.01

1979 Utah Rock Analysis Standards (Dry Basis)

MgO SiO₂ TiO₂ Al₂O₃ Fe₂O₃ FeO MnO MgO CaO Na₂O K₂O P₂O₅

Ruston Co

Sample	MgO	SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	Remarks
7901													
7902	37.74	3.85		8.51	9.12	8.57	0.17	13.99	14.90	0.81	0.20	0.12	
7903	39.13	4.07		8.74	8.74	8.38	0.17	14.33	15.35	0.81	0.20	0.04	
7904	39.46	4.08		8.57	8.71	8.67	0.17	14.17	14.99	0.71	0.20	0.10	
7905	39.27	4.08		8.77	8.96	8.41	0.17	14.07	15.09	0.81	0.20	0.14	
7906	39.87	4.07		9.05	8.95	8.39	0.18	13.43	14.85	0.85	0.25	0.14	
7907	39.56	4.49		8.56	8.87	8.67	0.18	13.46	15.09	0.80	0.25	0.04	
7908	39.22	3.69		8.51	8.36	8.61	0.17	13.49	14.68	0.72	0.18	0.08	Recommended
7909	60.05	0.15		12.43	7.08	0.31	0.31	2.58	8.49	4.04	4.35	0.50	
7910	59.64	0.10		12.15	7.18	0.27	0.27	2.56	8.53	4.47	4.32	0.49	
7911	60.07	0.15		12.15	6.34	0.32	0.32	2.66	8.03	4.37	4.52	0.44	Recommended
7912	57.90	0.10		11.96	6.98	0.31	0.31	2.49	8.77	4.28	4.68	0.52	
7913	OK			OK				OK					
7914	+			+				OK					
7915	OK			OK				OK					
7916	OK			OK				OK					
7917	OK			OK				OK					
7918	OK			OK				OK					
7919	OK			OK				OK					
7920	OK			OK				OK					
7921	OK			OK				OK					
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7923	OK			OK				OK					
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7942	OK			OK				OK					
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7996	OK			OK				OK					
7997	OK			OK				OK					
7998	OK			OK				OK					
7999	OK			OK				OK					
8000	OK			OK				OK					

Mg 1

STANDARDS

MRG

CLANK

7901	38.8	3.8	8.4	8.6	0.17	13.8	8.4	0.8	0.15	0.09	1.15	8.5	115	< 5
7902	39.2	3.8	8.4	9.0	0.17	13.8	14.7	0.8	0.2	0.12	1.15	8.45	115	< 5
7903	38.5	4.0	8.6	8.6	0.17	14.1	15.1	0.8	0.2	0.06	1.0	8.25	117	< 5
7904	38.7	4.0	8.4	8.7	0.17	13.9	14.7	0.7	0.2	0.10	1.1	8.5	119	< 5
7905	38.5	4.0	8.6	8.8	0.17	13.8	14.8	0.8	0.2	0.13	2.1	8.25	111	< 5
7906	39.2	4.0	8.9	8.8	0.18	13.2	14.6	0.8	0.25	0.13	1.2	8.25	115	< 5
7907	38.8	4.4	8.4	8.7	0.18	13.2	14.8	0.8	0.25	0.06	1.25	8.5	113	< 5

92.7
~~99.79~~ 98.64
 99.38 98.38
 99.17 98.07
 100.15 98.05
 99.51 98.31
 99.34 98.09

SiO₂ TiO₂ Al₂O₃ Fe₂O₃ MnO MgO CaO Na₂O K₂O P₂O₅ LOI FeO Zr Y

SY

SY-2 7908	60.1	0.1	12.0	7.0	0.32	2.5	8.8	4.3	4.7	0.52	1.2	-	-	-
7909	59.4	0.15	12.3	7.0	0.32	2.55	8.4	4.0	4.3	0.50	0.95	-	-	-
7910	59.4	0.1	12.1	7.15	0.27	2.55	8.5	4.45	4.3	0.48	1.0	-	-	-

101.54 100.34
 99.87 98.92
 100.60 99.60

Cyprus Anvil Mining Corporation

330, 355 Burrard Street
Vancouver, British Columbia
V6C 2G8
Telephone (604) 687-2586
Telex 04508594

February 8, 1977

Dr. R. H. McNutt
Department of Geology
McMaster University
Hamilton, Ontario

Dear Bob,

Doubtless you have gathered the reason for my protracted silence on analytical work. You are right, I have found somebody out here who is more competitive time and dollar wise than your lab and I have elected to go with them after considerable checking against a bank of eleven whole rocks that I have here.

Thanks very much for your assistance, hope to see you later this spring at the GAC.

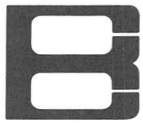
Yours very truly,

CYPRUS ANVIL MINING CORPORATION

D. S. Jennings

DSJ/cb

CYPRUS ANVIL



February 9, 1977

Mr. Dave Jennings
Cyprus Anvil Mining Corp.
330 - 355 Burrard Street
Vancouver, B.C.

Re-Analysis of 11 Pilot Samples

Sample	Cu*	Cu	Zn*	Zn	Ni*	Ni
173071	6	8	18	22	11	15
K 0603	7	6	250	260	11	14
604	18	12	240	250	11	16
605	135	128	185	190	190	188
606	-	28	-	188	-	10
LM 29A	18	12	8	13	13	12
38A	5	16	64	66	31	31
46A	-	10	109	110	23	19
10B	9	12	132	136	8	10
T 8	IS					
DC 1	IS					

* your values
IS denotes 'insufficient sample'

Ken.

P.S. We cannot easily improve on this data on solutions from whole rock analyses. On geochron solutions we should be $\pm 10\% \pm 2 \text{ ppm}^*$ at the $< 30 \text{ ppm}$ range.

Bondar-Clegg

<u>Element</u>	<u>Method</u>	<u>Precision</u>	<u>Accuracy</u>	<u>Detection Limit</u>	<u>Cost</u>	
Si	Gravimetric	± 1%	± 1%	100 ppm	# 6.50	
Ti	Colorimetric	"	"			
Al	AA	"	"			
Fe ⁺³	AA	"	"			
Fe ⁺²	AA	"	"			
Mn	AA	"	"	10 ppm	30.00	
Mg	AA	"	"			
Ca	AA	"	"			
Na	AE	"	"			
K	AE	"	"			
P	Grav/Color.	"	"	50 ppm	3.50	
S	Leico	"	"	20 ppm		
Cu	AA	± 10% max	± 10%	1-2 ppm.		
Pb	"	"	"			
Zn	"	"	"			
Cd	"	"	"			
Ag	"	"	"			
Ba	"	"	"			
Cr	AA (fusion)					10 ppm
V	AA (HF/HClO ₄ /HNO ₃ /HCl)					7 ppm
Co	AA				1-2 ppm	
Ni	AA					
Mo	AA			1-2 ppm		
Sn	XRF			1 ppm	2.00	
As	Color. (HNO ₃ /HClO ₄)			2 ppm	2.50	
Au	Fire assay HBr → mDBK			5 ppb	3.50	
Te	AA			0.5 ppm	4.00	
Sb	XRF			1 ppm	2.50	
Bi	AA (HNO ₃)			2 ppm	2.50	
Rb						
Sr						
Cu	Ni	} \$12.00				
Pb	Mo					
Zn	Rb					
Et	Sr					
Ag						
Ba						
Cr						
V						
Co						

KDSS

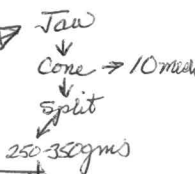
The next best thing to Uranium.

Bondar - Clegg : ^{Std.} Prep of anal. work \$1.25

Assay prep \$1.50
100 mesh

Sample :

\$3.00 to - 150 mesh



Analysis :

P - colorimetric

XRF - Ottawa

2 units Siebtechnik - Ring & Puck
\$4.00 1st
3.00 additional

\$30 for Si, Ti, Al, Mn, Fe + \$1.25 prep
Mg, Ca, Na, K
P, S
1 mo. turnaround

Van

AA - Al, Fe, Mg, Ca, Mn

Grav. Si,

Leuco S

Grav/color

KENTING

Color - Ti

A Emi NaK

KENTING EARTH SCIENCES LIMITED

contact Al Storey 1206, 330 Bay Street, Toronto, Ontario (416) 361-0452

	Method	Detection	Accuracy	Precision	Cost \$
As Co Cu Pb Zn Mo	acid HNO ₃ ↓ HCL	1-2 ppm.	± 10% rough rule of thumb	± 10% generally often ± 5%	\$1.25 + .50 + .25 cd/Ag
Ba	XRF				
Cr	Fusion → AA	10 ppm			\$2
Sn	XRF	1 ppm			\$2
As	HNO ₃ /HClO ₄ → color.	2 ppm			2.50
Au	Fine assay	5 ppb			3.50
Te	HBr → MIBK → AA	5 ppm			4.00
V	HF/HClO ₄ /HNO ₃ /HCL	2 ppm ± 5 ppm			2.00
Sb	XRF	1 ppm			2.00
Bi	HNO ₃ → AA	2 ppm (Hqrd)			2.50

XRF

Precision Si 2-3% to 15% Al MgO 10-12%
Ti = 5% All rest better

Accuracy - NO FUSION P & S = 10%

DL. Ti 5 ppm P 100 ppm
S 50 ppm

Vancouver

Precision 1% for 10 majors
Accuracy Excellent
DL 0
Ti 100 ppm
P 50 ppm
Mn 10 ppm
S 20 ppm

Si	}	\$30
Ti		
Al		
Fe		
Mn		
Mg		
Ca		
Na		
K		
P		
Cu	}	1.75
Pb		
Zn		
Cd		
Ag		
Ba	}	1.75
Be		
Fe + 2%		6.50
Co + Ni @		4.50

15-20 Whole rock standards

Seymour 2

3

PCC 1

GSP 1

99A US Bur. Commerce

All USGS Stds in Ottawa

PHONE CALL

Date 8 th Time 3:40

To Dave Jennings

WHILE YOU WERE OUT

Ken Bright

of _____

Phone 985-0631

Telephoned <input checked="" type="checkbox"/>	Please call <input checked="" type="checkbox"/>
Called to see you <input type="checkbox"/>	Will call again <input type="checkbox"/>
Wants to see you <input type="checkbox"/>	Returned your call <input type="checkbox"/>

MESSAGE _____

Operator Colleen

54-2

	<u>1</u>	<u>2</u>	<u>3</u>	<u>Recommended</u>	<u>Bondar-Clegg Ave (1-3)</u>
SiO ₂	60.30	60.20	60.10	60.09	60.20
TiO ₂	0.12	0.13	0.14	0.15	0.13
Al ₂ O ₃	12.16	12.00	11.90	12.15	12.00
Fe ₂ O ₃	6.62	6.69	6.63	6.29	6.65
MnO	0.31	0.32	0.32	0.32	0.32
MgO	2.68	2.62	2.72	2.69	2.67
CaO	8.50	8.10	8.50	8.00	8.37
Na ₂ O	4.20	4.50	4.60	4.35	4.43
K ₂ O	4.20	4.55	4.40	4.51	4.38
P ₂ O ₅	0.41	0.42	0.46	0.44	0.43
S	0.01	0.02	0.01	0.01	0.01
	<u>99.34</u>	<u>99.55</u>	<u>99.78</u>	<u>99.00</u>	<u>99.59</u>

54-3

	<u>1</u>	<u>2</u>	<u>3</u>	<u>Recommended</u>	<u>Bondar-Clegg Ave (1-3)</u>
SiO ₂	59.20	60.10	59.60	59.68	59.63
TiO ₂	0.13	0.14	0.13	0.15	0.13
Al ₂ O ₃	11.50	11.80	11.99	11.80	11.76
Fe ₂ O ₃	6.88	6.79	7.05	6.47	6.91
MnO	0.34	0.30	0.33	0.33	0.32
MgO	2.66	2.62	2.66	2.61	2.65
CaO	9.00	8.50	8.50	8.26	8.67
Na ₂ O	4.80	4.40	4.30	4.15	4.50
K ₂ O	4.40	4.35	4.15	4.24	4.30
P ₂ O ₅	0.52	0.49	0.65	0.54	0.55
S	0.06	0.05	0.04	0.05	0.05
	<u>99.49</u>	<u>99.54</u>	<u>99.40</u>	<u>98.31</u>	<u>99.47</u>

MRG-1

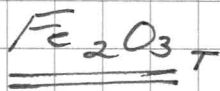
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Recommended</u>	<u>Bondar-Clegg Ave. (1-4)</u>
SiO ₂	39.20	38.90	39.40	40.00	39.24	39.38
TiO ₂	3.60	3.50	3.56	3.40	3.75	3.52
Al ₂ O ₃	8.20	8.60	8.30	8.80	8.56	8.48
Fe ₂ O ₃	17.00	18.00	18.20	17.60	17.80	17.70
MnO	0.17	0.15	0.17	0.17	0.17	0.17
MgO	13.50	13.40	13.50	13.00	13.51	13.35
CaO	15.00	13.80	13.70	13.80	14.72	14.08
Na ₂ O	0.71	0.84	0.82	0.78	0.71	0.79
K ₂ O	0.15	0.20	0.20	0.20	0.18	0.19
P ₂ O ₅	0.04	0.18	0.10	0.07	0.07	0.10
S	0.06	0.06	0.05	0.06	0.06	0.06
	<u>97.63</u>	<u>97.63</u>	<u>98.45</u>	<u>97.88</u>	<u>98.77</u>	<u>97.82</u>

Bondar - Clegg & Co. Ltd.

Standard Whole Rock
Evaluation

K₂O

<u>Sample</u>	<u>Standard</u>	<u>Bondar-Clegg</u>	<u>Δ_s^{8c}</u>
173071	3.05	2.95	-3.3%
<u>I-8</u>	5.40	4.55	-15.7%
<u>DC-1</u>	5.76	4.53	-21.4%
<u>KO-603 (54-2)</u>	4.52	3.95	-12.6%
<u>KO-604 (54-3)</u>	4.20	3.80	-9.5%
<u>KO-605 (MRG1)</u>	0.18	0.15	-16.7%
<u>KO-606</u>	1.09	0.95	-12.8%
<u>LM-10B</u>	3.52	3.30	-4.3%
<u>LM-29A</u>	2.08	1.50	-27.9%
<u>LM-38A</u>	2.24	1.95	-12.9%
<u>LM-46A</u>	4.14	4.80	+15.9%



<u>Sample</u>	<u>Standard</u>	<u>Bondar-Clegg</u>	<u>Δ_{BC}</u>
173071	2.91	3.1	+ 6.5%
<u>I-8</u>	4.58	4.1	> 10% (-10.5%)
DC-1	2.87	2.9	—
KO-603 (54.2)	6.34	5.85	- 7.7%
KO-604 (54.3)	6.45	6.2	- 3.9%
KO-605 (MRG1)	17.84	17.2	- 3.6%
<u>KO-606</u>	12.00	9.0	> 10% (-25%)
<u>LM-10B</u>	9.29	8.0	> 10% (-13.9%)
<u>LM-29A</u>	1.48	1.10	> 10% (-25.7%)
<u>LM-38A</u>	6.22	5.3	> 10% (-14.8%)
LM-46A	7.47	6.8	- 8.9%

S42, S43, MRG1

SiO_2 - excellent

TiO_2 - "

Al_2O_3 - "

Fe_2O_3 - good (systematically low)

MnO - excellent

MgO - excellent

CaO - good (systematically high)

Na_2O - good (no pattern)

K_2O - OK (systematically low) ✓

P_2O_5 - excellent

	<u>Standard</u>	<u>Bondar-Clegg</u>		
SiO ₂	60.07	59.7	excellent	
TiO ₂	0.15	0.16	excellent	
Al ₂ O ₃	12.15	12.4	excellent	
Fe ₂ O ₃	6.34	5.85	OK	-
MnO	0.32	0.31	excellent	
MgO	2.66	2.57	excellent	
CaO	8.03	8.90	OK	+
Na ₂ O	4.37	4.05	OK	-
K ₂ O	4.52	3.95	OK	-
P ₂ O ₅	0.44	0.39	excellent	
Sr <small>poor with Ca so hard to</small>	270	234	good	-
Rb <small>Very common</small>	220	164	poor	-
Pb	83	80	excellent	
Zn ✓	250	270	good	+
Cu ✓	7	10	good	+
Ni	11	20	fair	+

K0-604

SY3

	<u>Standard</u>	<u>Bondar-Clegg</u>		
SiO ₂	59.71	59.5	excellent	
TiO ₂	0.15	0.14	excellent	
Al ₂ O ₃	11.70	12.0	excellent	
Fe ₂ O ₃	6.45	6.2	good	-
MnO	0.33	0.32	excellent	
MgO	2.63	2.60	excellent	
CaO	8.30	9.10	fair	+
Na ₂ O	4.17	4.05	excellent	
K ₂ O	4.20	3.80	OK	-
P ₂ O ₅	0.55	0.45	good	-
Sr	310	250	fair	-
Rb	210	144	poor	-
Pb	135	105	fair	-
Zn	240	280	fair	+
Cu	18	10	poor	-
Ni	11	25	poor	+

	<u>Standard</u>	<u>Bondar-Clegg</u>		
SiO ₂	39.22	39.1	excellent	
TiO ₂	3.69	3.24	OK	-
Al ₂ O ₃	8.51	8.7	excellent	
Fe ₂ O ₃	17.84	17.2	good	-
MnO	0.17	0.15	good	-
MgO	13.49	14.2	good	+
CaO	14.68	14.3	excellent	
Na ₂ O	0.72	0.80	good	+
K ₂ O	0.18	0.15	OK	-
P ₂ O ₅	0.08	0.09	excellent	
Sr	270	158	poor	-
Rb	8	10	excellent	
Pb	12	10	excellent	
Zn	185	195	excellent	
Cu	135	140	excellent	
Ni	190	200	excellent	

173071 → LM 46A

- SiO₂ - excellent (slightly low on LM 29A, LM 38A, LM 46A)
- TiO₂ - OK (no pattern to fluctuations)
- Al₂O₃ - good (slightly high on LM 29A, LM 38A, LM 46A)
- Fe₂O₃ - fair (systematically low - may be OK @ conc < 3 wt%)
- MnO - good (slightly low on LM 29A, LM 38A, LM 46A)
- MgO - good (slightly low on LM 10B, LM 29A, LM 38A, LM 46A)
- CaO - excellent
- Na₂O - good (minor random fluctuations)
- K₂O - OK (systematically low)
- P₂O₅ - good (tendency to be low)
- Sr - good (minor fluctuations only)
- Rb - excellent
- Pb - excellent
- Zn - poor (systematically high)
- Cu - fair (generally high)
- Ni - poor (systematically high)

173071

	<u>Standard</u>	<u>Bondar-Clegg</u>	
SiO ₂	71.38	70.3	✓
TiO ₂	0.33	0.56	+
Al ₂ O ₃	14.65	14.5	✓
Fe ₂ O ₃	2.91	3.1	✓
MnO	0.03	0.02	✓
MgO	0.93	1.11	+
CaO	2.04	2.16	✓
Na ₂ O	4.40	4.15	✓
K ₂ O	3.05	2.95	✓
P ₂ O ₅	0.14	0.12	✓
Sr	253	279	✓
Rb	36	41	✓
Pb	5	10	✓
Zn <small>post</small>	18	40	+
Cu	6	10	✓
Ni	11	20	+

	<u>Standard</u>	<u>Bondar-Clegg</u>	
SiO ₂	68.62	68.5	✓
TiO ₂	0.68	0.51	-
Al ₂ O ₃	14.25	14.0	✓
Fe ₂ O ₃	4.58	4.1	✓-
MnO	0.07	0.05	✓
MgO	1.81	1.37	-
CaO	1.45	1.50	✓
Na ₂ O	2.84	2.66	✓
K ₂ O	5.40	4.55	--
P ₂ O ₅	0.15	0.17	✓
Sr	176	177	✓
Rb	82	73	✓
Pb	15	20	✓
Zn	71	87	✓
Cu	27	32	✓
Ni	9	19	+

DC 1

	<u>Standard</u>	<u>Bondar-Clegg</u>	
SiO ₂	71.88	71.2	✓
TiO ₂	0.48	0.43	✓
Al ₂ O ₃	13.67	13.5	✓
Fe ₂ O ₃	2.87	2.9	✓
MnO	0.04	0.02	✓
MgO	0.82	0.85	✓
CaO	1.65	1.84	✓+
Na ₂ O	2.70	2.81	✓
K ₂ O	5.76	4.53	--
P ₂ O ₅	0.13	0.12	✓
Sr	136.5	152	✓
Rb	123.8	125	✓
Pb	13.2	18	✓
Zn	33.0	60	++
Cu	11.8	15	✓
Ni	7.4	15	+

KO-606

	<u>Standard</u>	<u>Bondar-Clegg</u>	
SiO ₂	54.37	57.9	✓
TiO ₂	1.20	1.18	✓
Al ₂ O ₃	14.44	17.2	✓+
Fe ₂ O ₃	12.00	9.0	--
MnO	0.26	0.27	✓
MgO	0.96	1.00	✓
CaO	3.91	4.30	✓+
Na ₂ O	6.37	5.50	--
K ₂ O	1.09	0.95	✓-
P ₂ O ₅	0.28	0.27	✓
Sr	—	178	
Rb	—	33	
Pb	—	10	
Zn	—	190	
Cu	—	28	
Ni	—	25	

LM 10B

	<u>Standard</u>	<u>Bondar-Clegg</u>	
SiO ₂	62.71	63.1	✓
TiO ₂	1.02	1.12	✓+
Al ₂ O ₃	13.87	13.5	✓
Fe ₂ O ₃	9.29	8.0	--
MnO	0.10	0.12	✓
MgO	1.24	0.85	--
CaO	4.47	4.15	✓-
Na ₂ O	2.98	3.05	✓
K ₂ O	3.52	3.30	✓
P ₂ O ₅	0.68	0.41	--
Sr	252	229	✓-
Rb	68	50	✓-
Pb	23	25	✓
Zn	132	170	+
Cu	9	20	+
Ni	8	20	+

LM 29A

	<u>Standard</u>	<u>Bondar-Clegg</u>	
SiO ₂	57.77	54.2	-
TiO ₂	0.21	0.17	-
Al ₂ O ₃	23.05	25.0	+
Fe ₂ O ₃	1.48	1.10	-
MnO	0.07	0.07	--
MgO	1.07	0.60	--
CaO	9.39	9.10	✓
Na ₂ O	5.30	4.95	-
K ₂ O	2.08	1.50	-
P ₂ O ₅	0.05	0.06	✓
Sr	742	882	+
Rb	31	33	✓
Pb	2	15	++
Zn	8	20	+
Cu	18	15	✓
Ni	13	21	+

LM38A

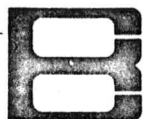
	<u>Standard</u>	<u>Bondar-Clegg</u>	
SiO ₂	58.96	57.0	✓-
TiO ₂	0.86	0.78	✓-
Al ₂ O ₃	18.90	20.2	✓+
Fe ₂ O ₃	6.22	5.3	--
MnO	0.16	0.06	--
MgO	1.90	1.63	✓-
CaO	7.07	7.50	✓+
Na ₂ O	3.68	3.90	✓+
K ₂ O	2.24	1.95	✓-
P ₂ O ₅	0.31	0.24	✓-
Sr	554	506	✓
Rb	33	27	✓
Pb	13	10	✓
Zn	64	90	+
Cu	5	20	++
Ni	31	40	✓

LM 46A

	<u>Standard</u>	<u>Bondar-Clegg</u>	
SiO ₂	64.16	62.4	✓ -
TiO ₂	0.90	0.92	✓
Al ₂ O ₃	14.87	16.0	+
Fe ₂ O ₃	7.47	6.8	-
MnO	0.10	0.07	✓ -
MgO	0.63	0.55	✓ -
CaO	4.01	3.76	✓
Na ₂ O	3.27	3.25	✓
K ₂ O	4.14	4.80	+
P ₂ O ₅	0.46	0.38	-
Sr	304	276	✓ -
Rb	63	77	✓ +
Pb	25	25	✓
Zn	108	110	✓
Cu	0	15	+
Ni	23	20	✓

ANALYSED WHOLE ROCK POWDERS

	<u>173071</u>	<u>I-8</u>	<u>DC-1</u>	<u>(SY-2)</u> <u>KO-603</u>	<u>(SY-3)</u> <u>KO-604</u>	<u>(MRG-1)</u> <u>KO-605</u>	<u>KO-606</u>	<u>LM-10B</u>	<u>LM-29A</u>	<u>LM-38A</u>	<u>LM-46A</u>
SiO ₂	71.38	68.62	71.88	60.07	59.71	39.22	56.37	62.71	57.77	58.96	64.16
TiO ₂	0.33	0.68	0.48	0.15	0.15	3.69	1.20	1.02	0.21	0.86	0.90
Al ₂ O ₃	14.65	14.25	13.67	12.15	11.70	8.51	16.44	13.87	23.05	18.90	14.87
Fe ₂ O _{3T}	2.91	4.58	2.87	6.34	6.45	17.84	12.00	9.29	1.48	6.22	7.47
Fe ₂ O ₃	-	-	-	2.31	2.46	8.36	2.96	-	-	-	-
FeO	-	-	-	3.61	3.61	8.61	8.13	-	-	-	-
MnO	0.03	0.07	0.04	0.32	0.33	0.17	0.26	0.10	0.07	0.16	0.10
MgO	0.93	1.81	0.82	2.66	2.63	13.49	0.96	1.24	1.07	1.90	0.63
CaO	2.04	1.45	1.65	8.03	8.30	14.68	3.91	4.47	9.39	7.07	4.01
Na ₂ O	4.40	2.84	2.70	4.37	4.17	0.72	6.37	2.98	5.30	3.68	3.27
K ₂ O	3.05	5.40	5.76	4.52	4.20	0.18	1.09	3.52	2.08	2.24	4.14
P ₂ O ₅	0.14	0.15	0.13	0.44	0.55	0.08	0.28	0.68	0.05	0.31	0.46
Nb	2.1	7.4	5.3	27 ?	145 ?	-		20.6	0.0	5.3	20.9
Zr	133.6	380.7	272.0	270	320	110 ?		692.7	6.2	327.1	636.2
Y	10.2	37.8	17.4	135	750	21 ?		43.9	1.1	24.5	47.0
Sr	253.0	176.1	136.5	270	310	270		252.1	742.3	553.6	304.2
U	2.4	0.0	0.0	290	640	0.4 ?		1.0	4.7	2.1	0.0
Rb	35.7	81.5	123.8	220	210	8 ?		67.7	31.2	32.6	62.8
Th	2.2	6.1	6.5	370 ?	980 ?	1 ?		9.1	0.1	4.3	6.5
Pb	5.1	14.8	13.2	83	135	12		23.2	2.1	12.6	24.5
Zn	18.4	71.2	33.0	250	240	185		132.3	8.1	64.0	108.2
Cu	5.8	27.2	11.8	7	18	135		8.8	17.6	4.5	0.0
Ni	11.2	8.7	7.4	11	11	190		8.4	12.8	30.6	22.6



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CERTIFICATE OF ANALYSES

TO Cyprus Anvil Mining Corp.

IT26 - 164

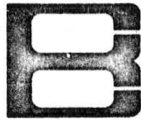
330 - 355 Burrard Street

December 21, 1976

Vancouver, B.C. V6C 2G8

MARKED	SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	Sr	Rb
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	ppm Percent	ppm Percent
DC 1	71.2	0.43	13.5	2.9	0.02	0.85	1.84	2.81	4.53	0.12	152	125
KO 603	59.7	0.16	12.4	5.85	0.31	2.57	8.90	4.05	3.95	0.39	234	164
604	59.5	0.16	12.0	6.2	0.32	2.60	9.10	4.05	3.80	0.45	250	144
605	39.1	3.24	8.7	17.2	0.15	14.2	14.3	0.80	0.15	0.09	158	10
606	57.9	1.18	17.2	9.0	0.27	1.00	4.30	5.50	0.95	0.27	178	33
LM 10B	63.1	1.12	13.5	8.0	0.12	0.85	4.15	3.05	3.30	0.41	229	50
29A	54.2	0.17	25.0	1.10	0.02	0.60	9.10	4.95	1.50	0.06	882	33
38A	57.0	0.78	20.2	5.3	0.06	1.63	7.50	3.90	1.95	0.24	506	27
46A	62.4	0.92	16.0	6.8	0.07	0.55	3.70	3.25	4.80	0.38	276	77
T 8	68.5	0.51	14.0	4.1	0.05	1.37	1.50	2.66	4.55	0.17	177	73
173071	70.3	0.56	14.5	3.1	0.02	1.11	2.16	4.15	2.95	0.12	279	41


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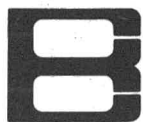
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December 21, 1976

PAGE 2

MARKED	Pb	Zn	Cu	Ni		L. O. I.						
	ppm XXXXXX	ppm XXXXXX	ppm XXXXXX	ppm XXXXXX	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
DC 1	18	60	15	15		1.7						
KO 603	80	270	10	20		1.5						
604	105	280	10	25		1.8						
605	10	195	140	200		1.9						
606	10	190	28	25		2.0						
LM 10B	25	170	20	20		2.7						
29A	15	20	15	21		3.2						
38A	10	90	20	40		1.8						
46A	25	110	15	20		1.6						
T 8	20	87	32	19		2.4						
173071	10	40	10	20		1.1						

R. Sawyer
.....
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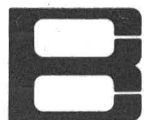
330 - 355 Burrard Street

December 21, 1976

Vancouver, B.C. V6C 2G8

MARKED	SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	Sr	Rb
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	ppm Percent	ppm Percent
DC 1	71.2	0.43	13.5	2.9	0.02	0.85	1.84	2.81	4.53	0.12	152	125
KO 603	59.7	0.16	12.4	5.85	0.31	2.57	8.90	4.05	3.95	0.39	234	164
604	59.5	0.16	12.0	6.2	0.32	2.60	9.10	4.05	3.80	0.45	250	144
605	39.1	3.24	8.7	17.2	0.15	14.2	14.3	0.80	0.15	0.09	158	10
606	57.9	1.18	17.2	9.0	0.27	1.00	4.30	5.50	0.95	0.27	178	33
LM 10B	63.1	1.12	13.5	8.0	0.12	0.85	4.15	3.05	3.30	0.41	229	50
29A	54.2	0.17	25.0	1.10	0.02	0.60	9.10	4.95	1.50	0.06	882	33
38A	57.0	0.78	20.2	5.3	0.06	1.63	7.50	3.90	1.95	0.24	506	27
46A	62.4	0.92	16.0	6.8	0.07	0.55	3.70	3.25	4.80	0.38	276	77
T 8	68.5	0.51	14.0	4.1	0.05	1.37	1.50	2.66	4.55	0.17	177	73
173071	70.3	0.56	14.5	3.1	0.02	1.11	2.16	4.15	2.95	0.12	279	41


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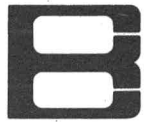
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December 21, 1976

PAGE 2

MARKED	Pb	Zn	Cu	Ni							
	ppm ppm	ppm ppm	ppm ppm	ppm ppm	Percent	Percent	Percent	Percent	Percent	Percent	Percent
DC 1	18	60	15	15							
KO 603	80	270	10	20							
604	105	280	10	25							
605	10	195	140	200							
606	10	190	28	25							
LM 10B	25	170	20	20							
29A	15	20	15	21							
38A	10	90	20	40							
46A	25	110	15	20							
T 8	20	87	32	19							
173071	10	40	10	20							

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TO Cyprus Anvil Mining Corp.

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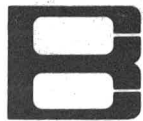
330 - 355 Burrard Street

December 21, 1976

Vancouver, B.C. V6C 2G8

MARKED	SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	Sr	Rb
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	ppm Percent	ppm Percent
DC 1	71.2	0.43	13.5	22.9	0.02	0.85	1.84	2.81	4.53	0.12	152	125
KO 603	59.7	0.16	12.4	5.85	0.31	2.57	8.90	4.05	3.95	0.39	234	164
604	59.5	0.16	12.0	6.2	0.32	2.60	9.10	4.05	3.80	0.45	250	144
605	39.1	3.24	8.7	17.2	0.15	14.2	14.3	0.80	0.15	0.09	158	10
606	57.9	1.18	17.2	9.0	0.27	1.00	4.30	5.50	0.95	0.27	178	33
LM 10B	63.1	1.12	13.5	8.0	0.12	0.85	4.15	3.05	3.30	0.41	229	50
29A	54.2	0.17	25.0	1.10	0.02	0.60	9.10	4.95	1.50	0.06	882	33
38A	57.0	0.78	20.2	5.3	0.06	1.63	7.50	3.90	1.95	0.24	506	27
46A	62.4	0.92	16.0	6.8	0.07	0.55	3.70	3.25	4.80	0.38	276	77
T 8	68.5	0.51	14.0	4.1	0.05	1.37	1.50	2.66	4.55	0.17	177	73
173071	70.3	0.56	14.5	3.1	0.02	1.11	2.16	4.15	2.95	0.12	279	41

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TO Cyprus Anvil Mining Corp.

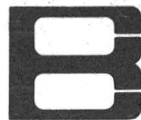
IT26 - 164

December 21, 1976

PAGE 2

MARKED	Pb	Zn	Cu	Ni								
	ppm Percent	ppm Percent	ppm Percent	ppm Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
DC 1	18	60	15	15								
KD 603	80	270	10	20								
604	105	280	10	25								
605	10	195	140	200								
606	10	190	28	25								
LM 10B	25	170	20	20								
29A	15	20	15	21								
38A	10	90	20	40								
46A	25	110	15	20								
T 8	20	87	32	19								
173071	10	40	10	20								

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CERTIFICATE OF ANALYSES

TO Cypress Anvil Mining Corp.

IT26 - 164

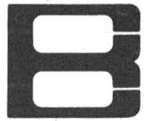
330 - 355 Burrard Street

December 21, 1976

Vancouver, B.C. V6C 2G8

MARKED	SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	Sr ppm	Rb ppm
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
DC 1	71.2	0.43	13.5	22.9	0.02	0.85	1.84	2.81	4.53	0.12	152	125
KD 603	59.7	0.16	12.4	5.85	0.31	2.57	8.90	4.05	3.95	0.39	234	164
604	59.5	0.16	12.0	6.2	0.32	2.60	9.10	4.05	3.80	0.45	250	144
605	39.1	3.24	8.7	17.2	0.15	14.2	14.3	0.80	0.15	0.09	158	10
606	57.9	1.18	17.2	9.0	0.27	1.00	4.30	5.50	0.95	0.27	178	33
LM 10B	63.1	1.12	13.5	8.0	0.12	0.85	4.15	3.05	3.30	0.41	229	50
29A	54.2	0.17	25.0	1.10	0.02	0.60	9.10	4.95	1.50	0.06	882	33
38A	57.0	0.78	20.2	5.3	0.06	1.63	7.50	3.90	1.95	0.24	506	27
46A	62.4	0.92	16.0	6.8	0.07	0.55	3.70	3.25	4.80	0.38	276	77
T 8	68.5	0.51	14.0	4.1	0.05	1.37	1.50	2.66	4.55	0.17	177	73
173071	70.3	0.56	14.5	3.1	0.02	1.11	2.16	4.15	2.95	0.12	279	41

CHIEF CHEMIST, WESTERN DIVISION



BONDAR-CLEGG & COMPANY LTD.

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.

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CERTIFICATE OF ANALYSES

TO Cyprus Anvil Mining Corp.

IT26 - 164

December 21, 1976

PAGE 2

MARKED	Pb	Zn	Cu	Ni								
	ppm Percent	ppm Percent	ppm Percent	ppm Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
DC 1	18	60	15	15								
KD 603	80	270	10	20								
604	105	280	10	25								
605	10	195	140	200								
606	10	190	28	25								
LM 10B	25	170	20	20								
29A	15	20	15	21								
38A	10	90	20	40								
46A	25	110	15	20								
T 8	20	87	32	19								
173071	10	40	10	20								

CHIEF CHEMIST, WESTERN DIVISION

THE TSL WHOLE ROCK ANALYSIS SYSTEM

Major Oxides in % SiO₂-Al₂O₃-Fe₂O₃-CaO-MgO-Na₂O-K₂O-TiO₂-MnO-P₂O₅-LOI

Minor Elements in ppm Cu-Pb-Zn-Ni-Co-Cd-Mo-Cr-Sb-V

The TSL whole rock analytical system by Inductively Coupled Argon Plasma (ICAP) has been in operation now for 12 months. We are more enthusiastic than ever with its potential as an exploration and research tool, and we are especially pleased with its wide acceptance. With many thousands of samples now behind us we have to admit to only one problem; we underestimated the demand so that deliveries were somewhat slower than expected. This problem has been corrected and we look forward to much improved delivery times for this year.

As we originally predicted the ICAP analytical technique has proven to be so accurate and reproducible that it has been accepted by research chemists, in universities and government institutions, who had previously found this type of analysis too expensive for general use.

At a price as low as \$14.00 per sample for large volume contracts (and only \$30.00 each for single samples) the ICAP analysis must be the bargain of the year.

Examples of the accuracy and reproducibility of the method can be found in the accompanying tables which compare TSL values with those recommended for International Rock Standards, replicate values for analyses of client samples, and TSL values with those of other laboratories. Also tabulated is statistical data for two International Standards and for a TSL "in house" control sample using values obtained during several different periods.

Although originally developed for silicate rocks our research has indicated that our ICAP procedure is also applicable to the analysis of such diverse materials as limestone, dolomites, iron-ores, coal-ash and fly-ash.

If you are having problems getting time on your own computer remember that we can supply the raw data on tape or floppy disc, report the data as ratios, make plots, give normative minerals etc.

For further information complete one of our mailing cards or phone Walter Grondin or Adrian Debnam at 625-1544 (Area Code 416).

NOTE: If you are unable to make use of this information please pass it on to a colleague who may be interested.

TECHNICAL SERVICE LABORATORIES, 1301 FEWSTER DRIVE,
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WHOLE-ROCK ANALYSIS

TSL now offers analysis of silicate rocks by ICAP. This analysis in general gives 10 oxides plus Loss on Ignition to produce a total of 98 - 100% for normal rock types (not ores). Minor economic elements in the same samples are also available at a small additional cost.

	<u>Whole Rock</u>	<u>Minor Elements *</u>
	SiO ₂ , Al ₂ O ₃ , CaO, MgO, Na ₂ O K ₂ O, Fe ₂ O ₃ , MnO, TiO ₂ , P ₂ O ₅ + LOI	Cd, Co, Cr, Cu, Ni, Mo, Pb, Sb, V, Zn
In any one calendar year:		
1 - 9 Samples	\$30.00	\$15.00
10 - 49 Samples	\$25.00	\$12.50
50 - 199 Samples	\$20.00	\$10.00
200 - 999 Samples	\$17.00	\$ 8.50
Over 1000 Samples	\$14.00	\$ 7.00

Note 1: If prior guarantee is given for the supply of a certain number of samples within a calendar year all samples will be charged at the rate indicated for the total number.

Note 2: Above prices include sample preparation, i.e. crushing and pulverising.

* Other minor elements are available upon request

Additional Elements - Separate Procedures

	<u>Ferrous Iron</u>	<u>Sulphur</u>	<u>Chloride</u>	<u>Fluoride</u>	<u>Carbon Dioxide</u>
1 - 9 Samples	\$10.00	\$10.00	\$12.00	\$12.00	\$10.00
10 - 49 Samples	\$ 8.00	\$ 9.00	\$10.00	\$10.00	\$ 9.00
50 - 199 Samples	\$ 7.00	\$ 8.00	\$ 8.00	\$ 8.00	\$ 8.00
200 - 999 Samples	\$ 5.50	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00
Over 1000 Samples (per calendar Year)	\$ 4.50	\$ 6.00	\$ 6.00	\$ 6.00	\$ 5.00

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ANALYSIS OF INTERNATIONAL STANDARDS AS ROUTINE UNKNOWN SAMPLES

	SARM-1 Granite (South Africa)		SARM-2 Syenite (South Africa)		SY-2 Syenite (Canada)	
	R.V.	TSL	R.V.	TSL	R.V.	TSL
SiO ₂	75.70	76.15	63.63	64.25	60.09	59.75
Al ₂ O ₃	12.08	12.11	17.34	17.31	12.15	12.13
Fe ₂ O ₃ (Total Fe)	2.00	1.94	1.40	1.44	6.29	6.37
CaO	0.78	0.75	0.68	0.69	8.00	7.99
MgO	0.06	0.06	0.46	0.50	2.69	2.85
Na ₂ O	3.36	3.32	0.43	0.39	4.35	4.60
K ₂ O	4.99	5.03	15.35	15.33	4.51	4.68
TiO ₂	0.09	0.10	0.04	0.05	0.15	0.15
MnO	0.02	0.00	0.01	0.00	0.32	0.34
P ₂ O ₅	-	0.04	0.12	0.16	0.44	0.43
LOI	0.59	0.50	0.31	0.30	0.92	0.90
Total	99.67	100.0	99.77	100.4	99.91	100.2

	GA Granite (France)		MRG - Gabbro (Canada)	
	R.V.	TSL	R.V.	TSL
SiO ₂	69.90	70.15	39.24	39.06
Al ₂ O ₃	14.50	14.62	8.56	8.72
Fe ₂ O ₃ (Total Fe)	2.81	2.70	17.80	17.66
CaO	2.45	2.42	14.72	14.95
MgO	0.95	0.95	13.51	13.40
Na ₂ O	3.55	3.41	0.71	0.77
K ₂ O	4.03	3.81	0.18	0.12
TiO ₂	0.38	0.36	3.75	3.73
MnO	0.09	0.07	0.17	0.16
P ₂ O ₅	0.12	0.09	0.07	0.07
LOI	0.98	1.12	1.00	1.00
Total	99.76	99.70	99.71	99.64

Note: R.V. = Recommended Value TSL = TSL ICAP Value

REPLICATE VALUES FOR CLIENT SAMPLES ANALYSED BY DIFFERENT OPERATORS 4 TO 6 WEEKS APART

	<u>SAMPLE A</u>		<u>SAMPLE B</u>		<u>SAMPLE C</u>		<u>SAMPLE D</u>		<u>SAMPLE E</u>	
	<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>
SiO ₂	51.20	51.31	54.80	54.96	49.93	49.87	54.94	54.94	49.72	49.98
Al ₂ O ₃	12.74	12.72	18.10	18.18	15.70	15.59	14.40	14.30	14.87	14.82
Fe ₂ O ₃ (T.Fe)	4.34	4.35	9.62	9.45	10.76	10.48	8.79	8.69	10.68	10.38
CaO	13.21	13.20	5.93	5.96	10.44	10.06	7.71	7.40	11.26	10.91
MgO	4.03	4.03	1.84	1.85	8.11	8.09	7.98	7.95	9.30	9.30
Na ₂ O	5.14	5.21	5.52	5.68	2.58	2.41	4.29	4.02	1.84	1.80
K ₂ O	1.27	1.23	0.72	0.85	0.65	0.88	0.87	1.07	0.64	0.71
TiO ₂	0.31	0.31	1.18	1.16	0.86	0.83	0.23	0.22	0.67	0.67
MnO	0.67	0.66	0.15	0.15	0.17	0.16	0.15	0.15	0.17	0.17
P ₂ O ₅	0.13	0.14	0.33	0.37	0.19	0.20	0.04	0.04	0.14	0.19
LOI	6.52	6.66	0.29	0.24	0.69	0.82	0.62	0.61	0.63	0.64
Total	99.56	99.82	98.47	98.84	100.18	99.39	100.01	99.38	99.91	99.61

	<u>SAMPLE F</u>		<u>SAMPLE G</u>		<u>SAMPLE H</u>		<u>SAMPLE I</u>		<u>SAMPLE J</u>	
	<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>
SiO ₂	45.44	45.60	48.68	48.21	65.39	65.69	68.68	68.55	73.86	74.20
Al ₂ O ₃	11.95	11.85	16.05	16.17	15.93	15.90	15.44	15.77	12.57	12.54
Fe ₂ O ₃ (T.Fe)	20.78	20.32	11.49	11.42	4.66	4.71	3.26	3.14	3.95	3.91
CaO	8.05	7.96	11.32	11.39	2.81	2.78	2.18	2.14	2.00	1.95
MgO	5.16	5.12	8.72	8.67	2.47	2.45	1.31	1.31	0.73	0.78
Na ₂ O	2.93	2.86	2.31	2.28	4.71	4.45	5.81	6.12	4.14	4.39
K ₂ O	0.62	0.69	0.31	0.41	1.86	1.81	1.04	0.91	1.02	0.98
TiO ₂	4.37	4.30	0.69	0.70	0.53	0.53	0.45	0.45	0.26	0.24
MnO	0.35	0.34	0.18	0.18	0.05	0.05	0.03	0.02	0.06	0.05
P ₂ O ₅	0.10	0.10	0.14	0.13	0.37	0.39	0.30	0.39	0.05	0.03
LOI	0.03	0.01	0.55	0.64	0.62	0.49	1.20	1.13	0.75	0.88
Total	99.78	99.15	100.4	100.2	99.41	99.25	99.70	99.92	99.38	99.96

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COMPARISON OF TSL WITH OTHER LABORATORIES

	<u>Sample 1</u>					<u>Sample 2</u>		
	<u>TSL</u>	<u>Lab A</u>	<u>Lab B</u>	<u>Lab C</u>	<u>Lab D</u>	<u>TSL</u>	<u>Lab A</u>	<u>Lab D</u>
SiO ₂	49.2	49.8	49.6	49.5	50.6	39.6	40.7	40.0
Al ₂ O ₃	12.8	13.5	13.8	13.1	13.3	4.1	4.0	3.7
Fe ₂ O ₃ (T.Fe)	14.2	13.0	14.2	14.4	13.3	8.9	9.2	8.2
CaO	9.6	9.7	9.4	9.8	9.9	2.9	3.0	3.3
MgO	7.2	6.6	7.1	6.9	7.5	34.3	35.2	35.1
Na ₂ O	2.24	2.16	2.32	1.72	1.12	0.16	0.13	0.07
K ₂ O	0.36	0.30	0.29	0.36	0.21	0.05	0.04	0.10
TiO ₂	0.91	0.87	0.89	0.89	0.84	0.20	0.19	0.14
MnO	0.22	0.23	0.21	0.19	0.23	0.13	0.15	0.15
P ₂ O ₅	0.10	0.05	0.08	0.09	-	0.03	0.01	-
LOI	2.45	3.8	2.5	2.8	2.9	8.5	7.3	9.3
Total	99.4	100.2	100.4	99.7	99.9	98.8	99.6	100.3

	<u>Sample 3</u>				<u>Sample 4</u>		
	<u>TSL</u>	<u>Lab A</u>	<u>Lab B</u>	<u>Lab D</u>	<u>TSL</u>	<u>Lab A</u>	<u>Lab E</u>
SiO ₂	41.7	42.4	40.6	43.3	39.4	38.6	40.1
Al ₂ O ₃	8.7	8.6	8.4	8.3	4.1	3.9	4.2
Fe ₂ O ₃ (T.Fe)	12.8	11.4	12.6	11.7	13.0	13.3	13.0
CaO	7.1	7.1	7.1	7.4	2.8	2.7	2.8
MgO	23.1	22.0	22.0	22.5	31.0	30.8	29.2
Na ₂ O	0.15	0.08	0.02	0.11	0.11	0.06	-
K ₂ O	0.04	0.03	0.12	0.04	0.04	0.03	0.03
TiO ₂	0.44	0.43	0.41	0.38	0.19	0.18	0.19
MnO	0.20	0.22	0.19	0.22	0.18	0.21	0.33
P ₂ O ₅	0.08	0.03	0.05	-	0.04	0.01	0.01
LOI	5.5	7.5	8.3	6.0	9.1	10.2	10.6
Total	99.9	100.2	99.8	100.0	100.0	99.5	100.0

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WHOLE-ROCK ANALYSIS BY ICAP

STATISTICAL DATA FOR INTERNATIONAL STANDARDS

	<u>(G - 2 (U.S.G.S.))</u>			<u>MRG-1 (G.S.C.)</u>			
	<u>Recommended Value %</u>	<u>38 ICAP Analyses</u> Mean S.D.		<u>Recommended Value %</u>	<u>38 ICAP Analyses</u> Mean S.D.		
SiO ₂	69.19	69.18	0.30	SiO ₂	39.24	39.22	0.28
Al ₂ O ₃	15.35	15.34	0.18	Al ₂ O ₃	8.56	8.71	0.15
Fe ₂ O ₃ (T.Fe)	2.67	2.69	0.06	Fe ₂ O ₃ (T.Fe)	17.80	17.80	0.14
CaO	1.98	1.87	0.09	CaO	14.72	14.76	0.16
MgO	0.77	0.76	0.01	MgO	13.51	13.54	0.09
Na ₂ O	4.06	4.14	0.23	Na ₂ O	0.71	0.72	0.06
K ₂ O	4.52	4.50	0.08	K ₂ O	0.18	0.17	0.02
TiO ₂	0.50	0.48	0.01	TiO ₂	3.75	3.75	0.02
MnO	0.04	0.02	0.005	MnO	0.17	0.16	0.008
P ₂ O ₅	0.14	0.12	0.03	P ₂ O ₅	0.07	0.06	0.03
LOI	0.56	0.45	0.06	LOI	1.00	0.92	0.02
Total	99.78	99.55	0.58	Total	99.71	99.81	0.68

STATISTICAL DATA FOR TSL "IN-HOUSE" CONTROL SAMPLE BM11

	<u>Data Accumulated</u> <u>July-August 1979</u> 18 runs		<u>Data Accumulated</u> <u>January 1980</u> 25 runs		<u>Data Accumulated</u> <u>February 1980</u> 19 runs	
	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>
SiO ₂	69.61	0.39	69.84	0.29	69.86	0.25
Al ₂ O ₃	15.13	0.20	15.41	0.15	15.33	0.16
Fe ₂ O ₃ (T.Fe)	3.03	0.13	2.81	0.06	2.82	0.04
CaO	2.38	0.14	2.48	0.07	2.46	0.03
MgO	1.18	0.13	1.15	0.06	1.12	0.04
Na ₂ O	4.44	0.14	4.53	0.10	4.56	0.15
K ₂ O	2.54	0.18	2.59	0.05	2.60	0.06
TiO ₂	0.35	0.01	0.35	0.01	0.36	0.01
MnO	0.04	0.01	0.02	0.01	0.03	0.01
P ₂ O ₅	0.14	0.02	0.12	0.02	0.13	0.02
LOI	0.60	0.02	0.58	0.03	0.60	0.03
Total	99.44	0.79	99.84	0.44	99.83	0.39

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WHOLE-ROCK DATA PROCESSING AND PLOTTING

TSL offers a full range of Data Processing and Plotting.

Data is processed on our in house DEC PDP-11 under the direct supervision of our geologist programmer. He has had considerable experience both in the field and in computer programming and application. We can therefore readily provide you with the customized processing you need.

The most common requests are for ratios and normative determinations. We have both CIPW and Baragar-Irvine normative programs available. The charges for these services are nominal at 10¢ per output line, with a minimum charge of \$5.00.

Our plotting capabilities include: contour maps, triangular graphs, bar graphs, line profiles, etc. We also can provide full colour contour maps plotted by an Applicon Colour Plotting system. Full colour plots of contour maps produce much greater clarity of the trends and anomalies than the contour lines alone.

It is difficult to give prices for computer work, since the cost is determined by the number of samples being processed at one time. Some approximate costs can be stated. For contour maps, the set-up costs would generally be about \$150.00, and the plotting cost for a map 30" x 30" approximately \$150.00. Full colour plots are approximately \$30.00 each, after the original set-up of about \$150.00. The colour plotter uses sheets of paper 22" x 34". Profiles, triangular maps, bar graphs, would be approximately \$30.00 each.

For writing programs to work non-standard requests for data processing the charge is \$40.00/hour, and typically we would expect to complete a simple program in one or two hours. Once written, the program would be kept, so such a charge is a one time cost.

For a more accurate evaluation of the typical costs of your program call John Burgener Jr. (416) 625-1544.

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