CORDILLERAN ENGINEERING LTD.

1980 GUINNESS TOWER, 1055 WEST HASTINGS STREET, VANCOUVER, B.C. V6E 2E9 TEL: (604) 681-8381

680985

December 19, 1991

Mr. A. F. Reeve
Barrier Reef Resources Ltd.
904 - 675 West Hastings St.
Vancouver, BC V6B 1N2

Dear Mr. Reeve:

FAIRFIELD MINERALS LTD.- SIWASH NORTH GOLD DEPOSIT
INFORMATION PACKAGE

Please find enclosed the following pertaining to the above:

- LONGITUDINAL SECTION IN THE PLANE OF ZONE B	1:1000
- MOTHER SHOOT - ZONE B CONTOUR AND SURFACE TOPOGRAPHY	1:500
- DIAMOND DRILL SECTIONS WITH GEOLOGY 2040E, 2090E, 2140E, 2190E, 2240E	1:500
- DIAMOND DRILL SECTIONS WITH RQD BARGRAPHS 2040E, 2090E, 2140E, 2190E, 2240E	1:500

(Bound):
- LOGISTICAL DATA
- SUMMARY OF SURFACE PANEL SAMPLE RESULTS
- SIWASH NORTH DRILL HOLE AND SURFACE SAMPLE RESULTS
- SECTION 2140E DRILL HOLE METALLICS ASSAYS AND ICP ANALYSES

Final versions of drill sections and zone plans for the remainder of the Siwash North deposit are being compiled and will be available in early February.

Should you have any questions please do not hesitate to call the undersigned.

Yours very truly

CORDILLERAN ENGINEERING LTD.

W. Jakubowski

W. Jakubowski, B.Sc.
Project Manager

WJJ/z
Encl: 2 sets

FAIRFIELD MINERALS LTD. December 18, 1991
SIWASH NORTH GOLD DEPOSIT
LOGISTICAL DATA

ACCESS
345 km east of Vancouver via the Okanagan Connector highway to Elkhart exit located 52 km from Merritt and 53 km from Westbank. The deposit is currently accessed by 10 km of gravel logging road from the Elkhart exit. A new logging road is planned for construction in 1992 by Weyerhaeuser Canada Ltd. which will cut this distance to approximately 2.5 km.

Approximate Snow Pack: 1 to 1.5m Nov. 15 to May 15

Motel accommodation (10 units), restaurant and gas station are located at the Elkhart exit.

ROAD DISTANCES
From Siwash North to Merritt / 3 phase power line: 60 km
" " " to Samatosum Mine: approx. 240km
" " " to Nickel Plate Mine: approx. 150km
" " " to Vancouver: 345km

DIAMOND DRILLING ON SIWASH NORTH
Total meterage 1989 to 1991: 12,529m in 107 holes; 71 HQ 36 NQ
Drill hole spacing approximately 50m X 50m within area 850m long by 300m deep

DRILL CORE SAMPLING
Core samples of quartz vein material were shipped in their entirety to Acme Analytical Labs in Vancouver and fire assayed using metallics methods. Minimum sample length was 50cm. Samples were also collected on either side of the quartz vein, split and fire assayed. All vein assays were diluted to 2.0m true width.

SURVEYING
All drill hole collars were professionally surveyed and Sperry Sun readings were taken down hole at approximately 40m intervals to determine drill hole deviations.
Elevation of Siwash North Portal Floor: 1630m

DATABASE
Drill hole data is stored on IBM compatible computers as ASCII files in the Placer Dome version Geolog format. Assay data is also stored as Supercalc 5 spreadsheets.
Trench assay data is stored as Supercalc 5 spreadsheets.
All drill sections are drafted using Generic Cadd 5 and are convertible to DXF format.

CORDILLERAN ENGINEERING LTD.

1980 GUINNESS TOWER, 1055 WEST HASTINGS STREET, VANCOUVER, B.C. V6E 2E9 TEL: (604) 681-8381

December 18, 1991

ELK PROPERTY - S I W A S H N O R T H

SUMMARY OF SURFACE *PANEL SAMPLE RESULTS

- Reported from West to East.
- Samples taken at approximately 5 m (16.4 ft) centres.
- All samples measured in field for true width.
- All assay results diluted to 2 m (6.6 ft) true width.

*Panel Sample: Continuous sheet 0.5 m wide (1.5 ft) by 0.5 m to 1.0 m (1.5 ft to 3.0 ft) in length by 2 cm (1 in) thick, varying from 10 kg to 30 kg (20 lbs to 60 lbs) in weight.

Trench	Sample Numbers	Total Samples	Cut No.	Sample Averages Over 2.0m (6.6') true width gm/tonne Au	oz/ton Au	
Area 1:						
SN8912	129P-131P	(3)	1	6.21	0.181	
SN8912	184P-186P	(3)	2	1.30	0.038	
SN8912	139P-141P	(3)	3	6.03	0.176	
SN8912	187P-189P	(3)	4	3.63	0.106	
SN891	14P, 15P, 16, 21P-23P, 24	(7)	5	11.28	0.329	
SN8912	175P-177P, 178P-180P, 88P-90P + Bulk Sample	(10)	6	18.27	0.533	
SN8912	94P-97P	(4)	7	3.02	0.088	
SN8912	191P, 192P	(2)	8	8.67	0.253	
SN8912	83P-86P	(4)	9	10.87	0.317	
SN8912	196P, 197P	(2)	10	5.25	0.153	
SN8912	125P-127P	(3)	11	4.01	0.117	
SN8912	62P-65P	(4)	12	2.98	0.087	
SN8912	208, 209P, 210P	(3)	13	3.87	0.113	
SN8912	50P-53P	(4)	14	5.01	0.146	
SN892	1, 2P, 3P, 4, 32P-36P	(9)	15	14.88	0.434	
SN8912	119P-121P	(3)	16	19.44	0.567	
SN8912	115P-117P	(3)	17	17.69	0.516	
SN8912	14P-16P, 17P, 18P, 21P-23P, 25P, 26P	(10)	18	22.25	0.649	
SN8912	107P-109P	(3)	19	16.63	0.485	
SN8912	6P-12P	(7)	20	24.34	0.710	
SN8912	104P-106P	(3)	21	7.37	0.215	
SN8912	211P, 212P	(2)	22	6.31	0.184	
SN8912	214P-216P	(3)	23	40.63	1.185	WEST TRENCH AREA
SN8912	181P-183P	(3)	24	14.09	0.411	
SN8912	1P-4P	(4)	25	7.54	0.220	
SN8912	101P-103P	(3)	26	21.22	0.619	
		(108)	26 cuts 460' 140m	11.66 Average	0.340 Average	

December 18, 1991
ELK PROPERTY - SIWASH NORTH
SUMMARY OF SURFACE PANEL SAMPLE RESULTS

Trench	Sample Numbers	Total Samples	Cut No.	Sample Averages Over 2.0m (6.6') true width gm/tonne Au	oz/ton Au	
Area 2:						
SN893	1, 2P, 3P,6-8P,10P-12P,13	(10)	1	43.54	1.270	WEST TRENCH AREA
SN901	4, 5, 6P, 7P	(4)	2	44.98	1.312	
SN901	13, 14P-16P	(4)	3	56.09	1.636	
SN901	23P-26P	(4)	4	33.22	0.969	
SN901	32, 33P-36P	(5)	5	29.97	0.874	
SN901	44, 45P-47P	(4)	6	38.16	1.113	
SN901	51P-54P	(4)	7	51.81	1.511	
SN901	61, 62P-64P	(4)	8	41.73	1.217	
SN901	71P-74P	(4)	9	31.20	0.910	
SN901	82P-84P	(3)	10	24.34	0.710	
SN894	1P-3P, 5P-7P, 9P-11P	(9)	11	51.94	1.515	
SN8913	35P-38P	(4)	12	16.05	0.468	
SN8913	63P-65P	(3)	13	6.00	0.175	
SN8913	39P-43P	(5)	14	32.47	0.947	
SN8913	66P-68P	(3)	15	28.25	0.824	
SN8913	44P-47P	(4)	16	20.33	0.593	
SN8913	69P-71P	(3)	17	31.37	0.915	EAST TRENCH AREA
SN8913	48P-51P	(4)	18	28.01	0.817	
SN8913	72P-75P	(4)	19	35.21	1.027	
SN8913	52P-55P	(4)	20	36.99	1.079	
SN8913	76P-79P	(4)	21	46.94	1.369	
SN8913	56P-59P	(4)	22	34.94	1.019	
		(97)	22 cuts 380' 116m	34.70 Average	1.012 Average	

December 18, 1991
ELK PROPERTY - SIWASH NORTH
SUMMARY OF SURFACE PANEL SAMPLE RESULTS

Trench	Sample Numbers	Total Samples	Cut No.	Sample Averages Over 2.0m (6.6') true width gm/tonne Au	oz/ton Au	
Area 3:						
SN8913	80P-82P	(3)	1	26.47	0.772	EAST TRENCH AREA
SN8913	60P-62P	(3)	2	8.19	0.239	
SN895	39P-41P, 43P-45P, 47P, 48P	(8)	3	26.71	0.779	
SN8913	85P-88P	(4)	4	6.93	0.202	
SN8913	3P-6P	(4)	5	19.85	0.579	
SN8913	94P-97P	(4)	6	7.37	0.215	
SN8913	15P-17P	(3)	7	10.25	0.299	
SN8913	104P-106P	(3)	8	12.44	0.363	
SN883	1P-3P	(3)	9	6.00	0.175	
SN8913	107P-109P	(3)	10	1.23	0.036	
SN8913	28P-32P	(5)	11	3.12	0.091	
SN8913	110P-112P	(3)	12	0.65	0.019	
SN896	38P	(1)	13	1.13	0.033	
SN902	2, 3P, 4P, 5	(4)	14	6.31	0.184	
SN902	8P, 9P, 10	(3)	15	7.92	0.231	
SN902	12, 13P, 14P, 15	(4)	16	5.52	0.161	
SN902	18P, 19P, 20	(3)	17	3.53	0.103	
SN902	22P-24P, 25	(4)	18	0.72	0.021	
SN902	26, 27P-30P	(5)	19	8.26	0.241	
SN902	32, 33P, 34P, 35	(4)	20	7.13	0.208	
SN902	37, 38P, 39P, 40	(4)	21	6.79	0.198	
SN902	43P-46P	(4)	22	7.34	0.214	
SN902	48, 49P-51P	(4)	23	4.94	0.144	
SN902	55P-57P, 58	(4)	24	4.01	0.117	
SN902	59, 60P-64P	(6)	25	8.78	0.256	
		(96)	25 cuts 440' 134m	8.06 Average	0.235 Average	

December 18, 1991
ELK PROPERTY - SIWASH NORTH
SUMMARY OF SURFACE PANEL SAMPLE RESULTS

Trench	Sample Numbers	Total Samples	Cut No.	Sample Averages Over 2.0m (6.6') true width gm/tonne Au	oz/ton Au
Area 4:					
SN903	67P-69P, 70	(4)	1	10.29	0.300
SN903	62, 63, 64P, 65P	(4)	2	6.31	0.184
SN903	59, 60P, 61P	(3)	3	34.29	1.000*
SN903	53, 54P-57P, 58	(6)	4	2.47	0.072
SN903	48, 49, 50P, 52P, 52	(5)	5	2.19	0.064
SN903	43, 44, 45P, 46P, 47	(5)	6	5.42	0.158
SN903	39, 40, 41P, 42P	(4)	7	13.89	0.405
SN903	34P, 35P, 36	(3)	8	10.05	0.293
SN903	22, 23P, 24P	(3)	9	25.68	0.749
SN903	16P-20P	(5)	10	3.91	0.114
SN903	12P-14P	(3)	11	5.42	0.158
SN903	8, 9P-11P	(4)	12	2.13	0.062
SN903	4, 5P-7P	(4)	13	4.11	0.120
SN903	1P-3P	(3)	14	5.35	0.156
		(56)	14 cuts 260' 79m	9.39 Average	0.274 Average

*cut from 2.772

S U M M A R Y:

Area 1	108 samples	26 cuts	140m 460'	11.66 gm/tonne Average 0.340 oz/ton Average
Area 2	97 samples	22 cuts	116m 380'	34.70 gm/tonne Average 1.012 oz/ton Average
Area 3	96 samples	25 cuts	134m 440'	8.06 gm/tonne Average 0.235 oz/ton Average
Averaged:	301 samples	73 cuts	390m 1280'	17.38 gm/tonne Au 0.507 oz/t Au
Area 4:	56 samples	14 cuts	79m 260'	9.39 gm/tonne Average 0.274 oz/ton Average
	357 samples	87 cuts	469m 1540'	

SIWASH NORTH DRILL HOLE AND SURFACE SAMPLE RESULTS

SIWASH NORTH DRILL HOLE AND SURFACE SAMPLE RESULTS

TRENCH /HOLE	ZONE	SECTN	FROM	TO	INT	AU gm/t	AU gm/t/2.0m	CU	PB	ZN	AG	AS	SB	BI
91- 100	A	2140E	56.35	56.85	.50	.10	.010	0	0	0	.00	0	0	0
91- 97	A	2140E	91.60	92.45	.85	1.44	.549	119	81	131	1.90	41	2	2
91- 98	A	2190E	103.45	104.10	.65	1.06	.171	34	40	110	.60	13	2	2
T90- 3	A	2405E	.00	.00		.00		0	0	0	.00	0	0	0
89- 8	A	2405E	13.50	14.50	1.00	.51		0	0	0	.00	0	0	0
89- 9	A	2405E	16.20	16.65	.45	7.34		0	0	0	.00	0	0	0
T88- 6	A	2440E	.00	.00		.00		0	0	0	.00	0	0	0
90- 35	A	2440E	7.50	8.00	.50	.79		106	74	71	1.00	74	2	2
90- 36	A	2440E	8.95	9.45	.50	11.14	2.640	371	78	52	7.50	35	2	14
90- 37	A	2440E	17.60	18.10	.50	.38	.030	51	49	52	.50	7	2	2
T90- 4	A	2490E	.00	.00		.00		0	0	0	.00	0	0	0
90- 39	A	2490E	24.85	25.50	.65	.21	.100	175	93	40	1.30	59	3	2
90- 40	A	2490E	36.45	36.95	.50	17.83	4.530	3,247	1387	415	25.80	551	235	13
90- 41	A	2490E	47.80	48.80	1.00	3.91	1.990	599	62	64	2.70	45	2	11
91- 87	A	2490E	60.75	61.25	.50	15.19	3.870	510	93	110	10.40	38	2	28
T90- 5	A	2540E	.00	.00		.00		0	0	0	.00	0	0	0
90- 42	A	2540E	15.60	16.45	.85	2.13	.930	263	82	165	3.60	156	2	6
90- 43	A	2540E	22.20	23.04	.84	2.23	1.200	501	194	38	8.30	156	14	6
90- 44	A	2540E	37.00	37.50	.50	1.41		82	57	41	1.40	26	3	2
90- 45	A	2540E	51.80	52.30	.50	.24	.010	0	0	0	.00	0	0	0
T89- 10	A	2590E	.00	.00		.00		0	0	0	.00	0	0	0
T89- 11	A	2640E	.00	.00		.00		0	0	0	.00	0	0	0
89- 7	A	2640E	41.02	41.58	.56	.10		0	0	0	.00	0	0	0
90- 50	A	2640E	54.85	55.35	.50	8.13		0	0	0	.00	0	0	0
T90- 8	A	2690E	.00	.00		.00		0	0	0	.00	0	0	0
T90- 9	A	2740E	.00	.00		.00		0	0	0	.00	0	0	0
90- 54	A	2740E	17.35	17.85	.50	.03		0	0	0	.00	0	0	0
90- 55	A	2740E	19.80	21.11	1.31	.00		0	0	0	.00	0	0	0
91- 110	A	2740E	41.45	42.03	.58	1.41		0	0	0	.00	0	0	0
T89- 12	B	1840E	.00	.00		.00		0	0	0	.00	0	0	0
91- 93	B	1840E	102.70	103.20	.50	3.84	.823	156	156	131	11.30	81	49	2
91- 94	B	1840E	168.50	169.00	.50	13.54	2.950	599	126	116	26.40	113	2	5
91- 95	B	1840E	229.80	230.30	.50	.31	.100	13	4	46	1.30	2981	4	2
T89- 12	B	1890E	.00	.00		.00		0	0	0	.00	0	0	0
91- 76	B	1890E	84.80	85.30	.50	2.13	1.030	0	0	0	.00	0	0	0
91- 77	B	1890E	147.45	148.35	.90	33.33	13.510	12,196	0	0	75.60	0	2	13
91- 96	B	1890E	188.55	189.05	.50	.72	.210	315	75	70	4.50	128	23	5
T89- 12	B	1940E	.00	.00		.00		0	0	0	.00	0	0	0
90- 19	B	1940E	38.73	39.45	.72	1.23	.480	265	0	0	17.60	0	3	2
90- 20	B	1940E	74.70	76.00	1.30	25.06	8.430	1,531	0	0	92.00	0	2	10
90- 69	B	1940E	125.50	126.00	.50	84.24	17.790	70	0	0	159.00	0	2	50
91- 82	B	1940E	178.45	178.95	.50	1.30	.340	170	0	0	10.50	0	15	2
T89- 12	B	1965E	.00	.00		.00	5.109	0	0	0	.00	0	0	0
T89- 12	B	1985E	.00	.00		.00	10.860	0	0	0	.00	0	0	0
89- 4	B	1985E	35.16	36.12	.96	9.19	5.110	358	0	0	22.30	0	2	2
89- 5	B	1985E	.00	.00		.00		0	0	0	.00	0	0	0
90- 68	B	1985E	142.80	143.30	.50	2.40	.583	340	0	0	9.20	0	2	3
91- 83	B	1985E	192.90	193.85	.95	4.25	1.890	329	0	0	10.00	0	2	2
T89- 12	B	2015E	.00	.00		.00	2.980	0	0	0	.00	0	0	0
T89- 12	B	2040E	.00	.00		.00	19.440	0	0	0	.00	0	0	0
90- 16	B	2040E	24.64	25.30	.66	17.79	5.794	309	0	0	49.10	0	2	6
90- 17	B	2040E	33.05	33.90	.85	2.54	1.269	866	0	0	5.60	0	2	4
90- 60	B	2040E	83.63	84.29	.66	3.09	.994	290	0	0	6.60	0	5	2
90- 67	B	2040E	129.40	129.90	.50	1.23	.274	207	0	0	6.00	0	2	2

SIWASH NORTH DRILL HOLE AND SURFACE SAMPLE RESULTS

TRENCH /HOLE	ZONE	SECTN	FROM	TO	INT	AU gm/t	AU gm/t/2.0m	CU	PB	ZN	AG	AS	SB	BI
91- 81	B	2040E	178.50	179.50	1.00	1.54	.686	1,048	0	0	40.00	0	261	4
T89- 12	B	2065E	.00	.00		.00	11.550	0	0	0	.00	0	0	0
T90- 12	B	2090E	.00	.00		.00	44.980	0	0	0	.00	0	0	0
90- 13	B	2090E	29.00	29.70	.70	27.67	9.086	3,435	0	0	35.50	0	3	4
91- 99	B	2090E	33.60	34.10	.50	21.63	6.103	2,890	643	291	45.20	3062	8	20
90- 14	B	2090E	44.70	45.20	.50	201.19	44.503	572	0	0	113.60	0	6	44
90- 66	B	2090E	97.10	97.50	.40	273.40	44.503	1,630	0	0	269.60	0	157	88
91- 78	B	2090E	138.50	139.00	.50	3.57	.720	355	0	0	9.20	0	4	2
91- 108	B	2090E	185.65	186.15	.50	91.54	21.394	4,315	531	307	224.10	140	2	53
91- 109	B	2090E	233.30	233.80	.50	28.59	5.794	1,066	378	1624	27.10	191	2	8
T90- 12	B	2115E	.00	.00		.00	38.160	0	0	0	.00	0	0	0
T89- 12	B	2140E	.00	.00		.00	51.920	0	0	0	.00	0	0	0
89- 1	B	2140E	30.09	30.38	.29	189.70	26.503	7,749	0	0	85.40	0	5	85
89- 2	B	2140E	27.54	28.30	.76	27.67	10.114	1,275	0	0	54.00	0	3	4
91- 75	B	2140E	36.90	37.45	.55	105.19	28.423	3,649	0	0	88.70	0	8	9
89- 3	B	2140E	44.65	45.43	.78	2.47	1.131	213	0	0	5.80	0	2	2
91- 100	B	2140E	103.70	104.20	.50	8.37	2.434	343	765	942	8.70	113	2	5
90- 65	B	2140E	112.80	113.70	.90	48.38	15.737	1,033	0	0	84.40	0	15	12
91- 79	B	2140E	157.54	158.19	.65	17.38	4.286	1,400	0	0	46.40	0	62	6
91- 97	B	2140E	196.30	196.80	.50	916.74	51.430	1,537	1305	89	686.60	249	3	769
91- 107	B	2140E	235.45	235.95	.50	85.03	17.452	178	248	465	61.70	106	2	36
T89- 13	B	2165E	.00	.00		.00	20.330	0	0	0	.00	0	0	0
T89- 13	B	2190E	.00	.00		.00	46.940	0	0	0	.00	0	0	0
90- 21	B	2190E	23.85	24.54	.69	13.23	4.526	369	0	0	3.70	0	2	11
90- 22	B	2190E	34.70	35.20	.50	2.13	1.234	173	0	0	1.90	0	2	3
90- 23	B	2190E	55.74	56.60	.86	1.41	.549	387	0	0	7.30	0	4	2
90- 64	B	2190E	106.45	107.20	.75	15.57	4.697	623	0	0	24.20	0	24	4
91- 80	B	2190E	151.29	151.79	.50	.48	.069	73	0	0	2.40	0	3	3
91- 98	B	2190E	193.50	194.15	.65	3.74	.517	356	1449	2080	5.90	156	7	4
T89- 13	B	2215E	.00	.00		.00	26.700	0	0	0	.00	0	0	0
T88- 3	B	2240E	.00	.00		.00	6.000	0	0	0	.00	0	0	0
90- 24	B	2240E	28.60	29.45	.85	7.10	3.330	956	0	0	14.80	0	6	5
90- 25	B	2240E	26.60	27.15	.55	1.06	.310	115	0	0	3.60	0	10	2
90- 26	B	2240E	63.60	64.20	.80	17.68	3.670	639	0	0	82.40	0	19	42
90- 63	B	2240E	109.90	110.40	.50	.34	.100	217	0	0	2.90	0	3	2
T90- 2	B	2265E	.00	.00		.00	6.310	0	0	0	.00	0	0	0
T90- 2	B	2290E	.00	.00		.00	8.260	0	0	0	.00	0	0	0
90- 27	B	2290E	36.15	36.65	.50	53.31	12.720	3,271	0	0	44.80	0	10	64
90- 28	B	2290E	59.05	59.55	.50	.89	.480	107	0	0	3.40	0	2	2
90- 29	B	2290E	81.25	81.75	.50	60.07	15.600	1,789	0	0	63.60	0	218	33
90- 62	B	2290E	147.00	147.50	.50	10.05	2.260	354	0	0	24.20	0	73	2
T90- 2	B	2315E	.00	.00		.00	4.940	0	0	0	.00	0	0	0
T90- 2	B	2340E	.00	.00		.00		0	0	0	.00	0	0	0
90- 30	B	2340E	25.30	25.85	.55	1.20	.377	132	0	0	13.20	0	2	9
90- 31	B	2340E	43.60	44.10	.50	16.15	4.697	222	0	0	15.40	0	2	9
90- 32	B	2340E	84.40	85.05	.65	1.10	.651	192	0	0	2.80	0	3	2
90- 33	B	2340E	109.90	110.50	.60	175.44	43.372	1,617	0	0	185.90	0	5	53
90- 61	B	2340E	164.70	165.35	.65	61.41	23.554	4,831	0	0	120.40	0	8	22
90- 74	B	2340E	175.50	176.00	.50	.82	.206	530	266	86	4.70	1335	5	2
91- 66	B	2340E	204.50	205.00	.50	5.79	1.406	291	634	787	7.60	186	6	10
T90- 3	B	2390E	.00	.00		.00	9.980	0	0	0	.00	0	0	0
T90- 3	B	2405E	.00	.00		.00	35.000	0	0	0	.00	0	0	0
89- 8	B	2405E	22.60	23.17	.57	40.25	10.697	1,171	0	0	43.50	0	3	27
89- 9	B	2405E	23.30	23.65	.35	11.90	3.463		0	0	30.50	0	0	0

SIWASH NORTH DRILL HOLE AND SURFACE SAMPLE RESULTS

TRENCH /HOLE	ZONE	SECTN	FROM	TO	INT	AU gm/t	AU gm/t/2.0m	CU	PB	ZN	AG	AS	SB	BI
89- 10	B	2405E	33.75	34.05	.30	2.54	.377		0	0	6.50	0		
90- 34	B	2405E	45.55	46.25	.70	3.60	1.269	366	0	0	4.90	0	2	3
90- 70	B	2405E	75.70	76.90	1.20	1.92	1.131	120	0	0	3.95	0	3	3
90- 71	B	2405E	105.10	105.80	.70	1.30	.651	74	0	0	1.80	0	3	2
91- 84	B	2405E	136.85	137.45	.60	.45	.171	98	198	302	1.50	61	4	2
91- 85	B	2405E	159.90	160.70	.80	.79	.789	149	332	1131	4.80	123	29	2
T90- 3	B	2422E	.00	.00		.00	10.050	0	0	0	.00	0	0	0
T90- 3	B	2440E	.00	.00		.00	.070	0	0	0	.00	0	0	0
90- 35	B	2440E	16.00	16.50	.50	15.26	3.810	698	0	0	19.80	0	4	10
90- 35	B	2440E	22.50	23.00	.50	5.04	1.300	558	0	0	9.40	0	2	2
90- 37	B	2440E	34.80	35.30	.50	2.88	2.190	294	142	104	4.10	28	4	4
91- 101	B	2440E	135.00	135.50	.50	2.64	.690	127	147	87	5.10	57	17	2
91- 102	B	2440E	163.10	163.60	.50	.07	.010	0	0	0	.00	0	0	0
T90- 3	B	2465E	.00	.00		.00	.620	0	0	0	.00	0	0	0
T90- 4	B	2490E	.00	.00		.00		0	0	0	.00	0	0	0
90- 39	B	2490E	34.90	35.40	.50	7.58	1.820	124	119	79	5.80	30	11	2
90- 40	B	2490E	48.30	49.10	.80	3.84	1.580	478	88	76	4.00	34	2	2
90- 41	B	2490E	57.75	58.25	.50	1.06	.310	746	248	153	4.60	81	4	4
91- 87	B	2490E	80.80	81.30	.50	67.92	17.010	981	325	125	64.80	108	4	81
T89- 8	B	2515E	.00	.00		.00	.620	0	0	0	.00	0	0	0
T90- 5	B	2540E	.00	.00		.00		0	0	0	.00	0	0	0
90- 42	B	2540E	29.50	30.00	.50	9.84	2.330	603	48	502	16.90	65	2	17
90- 43	B	2540E	31.53	32.13	.60	2.06	.650	0	0	0		0		
90- 44	B	2540E	48.60	49.10	.50	44.26	10.660	2,466	0	0	64.20	0	98	48
90- 45	B	2540E	64.20	64.70	.50	9.87	2.500	405	99	409	10.50	298	2	6
91- 103	B	2540E	84.25	84.75	.50	22.59	8.470	399	1051	114	98.50	1473	5	66
91- 105	B	2540E	92.80	93.30	.50	20.19	6.140	942	751	180	37.90	1468	34	28
T90- 5	B	2565E	.00	.00		.00		0	0	0	.00	0	0	0
T89- 10	B	2590E	.00	.00		.00		0	0	0	.00	0	0	0
90- 47	B	2590E	25.50	26.00	.50	5.14	1.230	123	0	0	12.60	0	2	13
90- 48	B	2590E	41.70	42.20	.50	.38	.140	120	21	52	.70	38	2	2
90- 49	B	2590E	54.50	55.00	.50	130.60	31.170	1,047	346	89	86.30	150	50	156
90- 72	B	2590E	73.15	73.65	.50	9.74	2.540	761	0	0	24.40	0	11	25
91- 88	B	2590E	84.90	85.40	.50	.17	.010	0	0	0	.00	0	0	0
91- 106	B	2590E	95.85	96.35	.50	7.13	1.780	817	870	70	39.50	164	18	47
T89- 14	B	2615E	.00	.00		.00		0	0	0	.00	0	0	0
T89- 14	B	2640E	.00	.00		.00		0	0	0	.00	0	0	0
89- 6	B	2540E	24.51	24.96	.45	9.15	2.331	1,672	532	72	33.50	145	24	17
89- 7	B	2640E	46.23	46.75	.52	2.02	.857	0	0	0	.00	0	0	0
90- 50	B	2640E	57.65	58.25	.60	22.42	9.257	696	382	94	29.90	265	15	30
90- 73	B	2640E	76.55	77.05	.50	5.55	2.126	478	370	95	10.50	145	11	12
91- 89	B	2640E	94.25	94.95	.70	10.11	3.669	187	487	1518	50.90	43	4	30
T89- 11	B	2665E	.00	.00		.00		0	0	0	.00	0	0	0
T90- 8	B	2690E	.00	.00		.00		0	0	0	.00	0	0	0
90- 52	B	2690E	46.80	47.30	.50	2.43	.620	68	0	0	3.90	0	2	6
90- 53	B	2690E	48.60	47.10	.50	5.83	1.470	228	0	0	14.10	0	2	3
91- 90	B	2690E	63.35	63.85	.50	108.17	27.090	379	0	0	72.10	0	5	100
91- 91	B	2690E	75.35	75.85	.50	.96	.270	315	253	137	3.40	80	6	3
91- 92	B	2690E	90.80	91.40	.60	.17	.070	185	137	91	2.40	46	39	4
T90- 10	B	2740E	.00	.00		.00		0	0	0	.00	0	0	0
90- 54	B	2740E	35.25	35.75	.50	.34	.100	69	0	0	1.40	0	2	2
90- 55	B	2740E	39.70	40.20	.50	9.91	3.530	529	0	0	8.00	0	2	9
91- 110	B	2740E	58.90	59.40	.50	9.50	2.220	0	0	0	.00	0	0	0
91- 111	B	2740E	68.25	68.79	.60	66.00	15.870	622	585	85	184.30	193	17	72

SIWASH NORTH DRILL HOLE AND SURFACE SAMPLE RESULTS

TRENCH /HOLE	ZONE	SECTN	FROM	TO	INT	AU gm/t	AU gm/t/2.0m	CU	PB	ZN	AG	AS	SB	BI
T90- 1	C	2090E	.00	.00		.00	.010	0	0	0	.00	0	0	0
90- 13	C	2090E	43.80	44.30	.50	21.15	5.210	0	0	0	35.20	0	0	0
91- 99	C	2090E	71.70	72.20	.50	16.83	3.460	2,460	67	515	37.60	925	2	14
T90- 1	C	2115E	.00	.00		.00	8.370	0	0	0	.00	0	0	0
T90- 1	C	2140E	.00	.00		.00	35.830	0	0	0	.00	0	0	0
89- 1	C	2140E	85.44	59.39	.95	18.31	5.230	0	0	0	.00	0	0	0
91- 75	C	2140E	100.20	100.70	.50	1.27	.270	0	0	0	1.60	0	0	0
91- 100	C	2140E	188.05	188.55	.50	14.16	3.290	0	0	0	.00	0	0	0
T90- 1	C	2190E	.00	.00		.00		0	0	0	.00	0	0	0
90- 21	C	2190E	83.90	54.40	.50	.14	.010	0	0	0	.70	0	0	0
T90- 1	C	2240E	.00	.00		.00		0	0	0	.00	0	0	0
90- 24	C	2240E	60.75	61.25	.50	.14	.010	0	0	0	1.10	0	0	0
90- 61	C	2340E	172.65	173.15	.50	5.79	1.543	0	0	0	.00	0	0	
90- 74	C	2340E	186.30	187.10	.50	12.34	4.663	4,954	0	0	9.90	0	17	14
91- 86	C	2340E	211.95	212.45	.50	15.74	3.806	1,767	0	0	22.60	0	7	23
T89- 7	C	2405E	.00	.00		.00	.100	0	0	0	.00	0	0	0
89- 8	C	2405E	34.65	34.95	.30	.03	.010	0	0	0	.00	0	0	0
89- 9	C	2405E	84.70	35.50	.90	.10	.010	0	0	0	.00	0	0	0
90- 34	C	2405E	50.65	51.30	.65	2.67	1.166	706	389	224	7.00	1243	3	2
90- 70	C	2405E	90.75	91.40	.65	5.01	1.886	0	0	0	.00	0	0	0
90- 71	C	2405E	137.10	137.60	.50	19.17	4.389	0	0	0	.00	0	0	0
91- 84	C	2405E	187.85	168.35	.50	18.07	4.629	1,251	0	0	30.90	0	2	80
91- 85	C	2405E	192.05	192.55	.50	18.03	4.594	6,010	0	0	73.20	0	5	60
T88- 6	C	2422E	.00	.00		.00		0	0	0	.00	0	0	0
T88- 6	C	2440E	.00	.00		.00	.050	0	0	0	.00	0	0	0
90- 35	C	2440E	27.70	28.20	.50	.14	.070	0	0	0	.00	0	0	0
90- 36	C	2440E	30.50	31.50	1.00	.03	.010	0	0	0	.00	0	0	0
90- 37	C	2440E	44.50	45.00	.50	52.22	11.860	1,659	385	221	20.30	52	68	51
91- 101	C	2440E	169.00	169.60	.60	7.75	2.370	1,566	2506	1081	46.40	379	42	61
91- 102	C	2440E	182.85	193.45	.60	25.78	7.750	1,007	1654	1504	28.90	124	5	24
T90- 4	C	2490E	.00	.00		.00		0	0	0	.00	0	0	0
90- 39	C	2490E	44.50	45.00	.50	.03	.010	0	0	0	.00	0	0	0
90- 40	C	2490E	57.50	58.00	.50	1.71	.390	0	0	0	.00	0	0	0
91- 87	C	2490E	80.00	90.50	.50	3.12	.820	526	453	527	27.30	618	9	13
T89- 8	C	2515E	.00	.00		.00		0	0	0	.00	0	0	0
T90- 5	C	2540E	.00	.00		.00		0	0	0	.00	0	0	0
90- 42	C	2540E	44.00	44.50	.50	1.10	.270	180	140	52	2.20	106	2	5
90- 43	C	2540E	45.51	46.10	.59	3.29	.990	347	135	96	40.70	105	2	3
90- 44	C	2540E	60.60	61.10	.50	36.00	9.120	399	230	24	91.00	51	2	191
90- 45	C	2540E	76.40	76.90	.50	10.59	3.910	1,047	534	268	20.70	92	75	33
91- 103	C	2540E	90.50	91.00	.50	3.36	.860	676	206	91	25.00	61	2	22
91- 105	C	2540E	102.75	103.25	.50	.07	.010	0	0	0	.00	0	0	0
T90- 5	C	2565E	.00	.00		.00		0	0	0	.00	0	0	0
T89- 10	C	2590E	.00	.00		.00		0	0	0	.00	0	0	0
90- 47	C	2590E	32.90	33.40	.50	6.07	1.440	388	213	61	4.30	51	4	3
90- 48	C	2590E	49.20	49.70	.50	2.50	.720	345	111	72	3.60	220	4	2
90- 72	C	2590E	82.71	82.97	.26	.00		0	0	0	.00	0	0	0
91- 88	C	2590E	98.60	99.10	.50	22.70	5.730	468	188	58	27.30	402	6	21
91- 106	C	2590E	109.80	110.30	.50	42.21	10.390	451	106	50	34.80	756	2	31
T89- 10	C	2615E	.00	.00		.00		0	0	0	.00	0	0	0
T89- 11	C	2640E	.00	.00		.00		0	0	0	.00	0	0	0
89- 6	C	2640E	35.33	35.63	.30	15.60	2.229	19	28	25	3.70	2	2	2
89- 7	C	2640E	56.35	56.80	.45	77.35	17.040	0	0	0	23.00	0	0	0
90- 50	C	2640E	87.21	67.57	.35	.00		0	0	0	.00	0	0	0

SIWASH NORTH DRILL HOLE AND SURFACE SAMPLE RESULTS

TRENCH /HOLE	ZONE	SECTN	FROM	TO	INT	AU gm/t	AU gm/t/2.0m	CU	PB	ZN	AG	AS	SB	BI
90- 73	C	2640E	82.14	82.65	.51	.00		0	0	0	.00	0	0	0
T89- 11	C	2665E	.00	.00		.00		0	0	0	.00	0	0	0
T90- 8	C	2690E	.00	.00		.00		0	0	0	.00	0	0	0
90- 52	C	2690E	63.85	64.35	.50	.10	.030	0	0	0	.00	0	0	0
90- 53	C	2690E	57.10	57.60	.50	.86	.200	0	0	0	.00	0	0	0
91- 90	C	2690E	76.25	77.00	.75	.79	.290	0	0	0	.00	0	0	0
91- 91	C	2690E	83.96	84.68	.72	.00		0	0	0	.00	0	0	0
91- 92	C	2690E	98.95	99.95	1.00	.07	.010	131	31	78	.80	29	58	2
90- 54	C	2740E	50.35	50.85	.50	.14	.010	0	0	0	.00	0	2	0
91- 110	C	2740E	70.80	71.00	.20	.00		0	0	0	.00	0	0	0
91- 111	C	2740E	82.55	83.95	1.40	1.03	.650	0	0	0	.00	0	0	0
T88- 6	D	2440E	.00	.00		.00		0	0	0	.00	0	0	0
90- 37	D	2440E	49.90	50.40	.50	1.78	.450	122	169	215	6.30	48	6	5
T89- 8	D	2490E	.00	.00		.00		0	0	0	.00	0	0	0
T89- 8	D	2540E	.00	.00		.00		0	0	0	.00	0	0	0
90- 43	D	2540E	51.70	51.80	.10	.00		0	0	0	.00	0	0	0
90- 44	D	2540E	65.60	66.10	.50	.51	.140	139	100	28	1.60	26	2	2
90- 45	D	2540E	83.40	83.90	.50	.03	.010	0	0	0	.00	0	0	0
91- 87	E1	2490E	103.88	104.16	.28	.00		0	0	0	.00	0	0	0
T89- 10	D	2590E	.00	.00		.00		0	0	0	.00	0	0	0
90- 47	D	2590E	40.50	41.00	.50	33.77	8.130	115	289	67	26.90	131	9	14
90- 48	D	2590E	56.20	56.70	.50	5.59	1.410	42	362	386	1.60	585	5	2
90- 49	D	2590E	77.50	78.00	.50	2.16	.790	118	107	122	1.80	89	2	6
90- 72	D	2590E	94.70	95.70	1.00	23.79	11.660	675	449	1490	19.00	700	4	25
91- 88	D	2590E	101.30	101.80	.50	23.73	7.370	1,154	401	165	55.10	156	9	2
T89- 11	D	2640E	.00	.00		.00		0	0	0	.00	0	0	0
89- 6	D	2640E	39.93	40.23	.30	21.29	3.017	0	0	0	.00		0	0
89- 7	D	2640E	60.96	61.26	.30	.24	.030	0	0	0	.00	0	0	0
90- 73	D	2640E	98.05	98.60	.55	.00		0	0	0	.00	0	0	0
91- 89	D	2640E	121.00	121.50	.50	2.71	.680	0	0	0		0		
90- 46	E1	2590E	9.60	10.10	.50	4.77	1.750	146	76	22	7.40	42	3	3
90- 47	E1	2590E	45.15	45.65	.50	5.86	1.470	239	127	50	7.70	91	2	9
90- 48	E1	2590E	66.70	67.20	.50	14.43	3.670	204	69	12	8.40	34	2	11
90- 72	E1	2590E	106.80	109.60	.80	.03		0	0	0	.00	0	0	0
91- 88	E1	2590E	123.28	123.42	.14	.00		0	0	0	.00	0	0	0
91- 106	E1	2590E	140.25	140.75	.50	.03		0	0	0	.00	0	0	0
89- 6	E1	2640E	45.43	45.88	.45	.21		0	0	0	.00	0	0	0
89- 7	E1	2640E	72.98	73.52	.54	5.90		0	0	0	.00	0	0	0
90- 50	E1	2640E	92.90	93.40	.50	.27		100	194	71	1.10	216	3	2
90- 73	E1	2640E	113.50	114.30	.80	2.98		337	169	46	11.50	149	7	7
91- 89	E1	2640E	130.75	131.25	.50	.10		0	0	0	.00	0	0	0
90- 52	E1	2690E	78.10	78.80	.70	.34		0	0	0	.00	0	0	0
90- 53	E1	2690E	72.80	73.30	.50	.03		0	0	0	.00	0	0	0
91- 90	E1	2690E	96.90	97.40	.50	.45		135	38	47	2.80	84	2	3
91- 91	E1	2690E	113.00	114.00	1.00	1.68		498	62	79	6.60	152	2	3
91- 92	E1	2690E	125.80	126.30	.50	15.67	4.491	126	12	39	16.50	26	19	11
90- 55	E1	2740E	58.27	58.52	.25	.00		0	0	0	.00	0	0	0
91- 110	E1	2740E	86.75	87.25	.50	.03		0	0	0	.00	0	0	0
91- 111	E1	2740E	100.85	101.35	.50	1.37		0	0	0	.00	0	0	0
91- 87	E2	2490E	108.30	108.80	.50	.27	.140	108	573	283	2.80	89	3	2
90- 47	E2	2590E	48.35	48.95	.60	1.71	.460	0	0	0	.00	0	0	0
90- 48	E2	2590E	72.50	73.00	.50	16.77	4.180	199	149	154	10.60	39	2	18
91- 88	E2	2590E	129.90	130.40	.50	.03	.010	0	0	0	.00	0	0	0
91- 106	E2	2590E	146.30	146.80	.50	.38	.140	124	84	136	2.10	34	37	3

SIWASH NORTH DRILL HOLE AND SURFACE SAMPLE RESULTS

TRENCH /HOLE	ZONE	SECTN	FROM	TO	INT	AU gm/t	AU gm/t/2.0m	CU	PB	ZN	AG	AS	SB	BI
89- 6	E2	2640E	47.34	48.12	.78	.07	.010	0	0	0	.00	0	0	0
89- 7	E2	2640E	76.50	76.90	.40	7.30	2.194	0	0	0	.00	0	0	0
90- 50	E2	2640E	98.30	98.80	.50	30.99	14.640	287	448	21	31.80	486	6	35
90- 73	E2	2640E	117.65	118.15	.50	35.45	8.983	60	2950	1597	17.00	35	37	2
91- 89	E2	2640E	135.80	136.65	.85	.03	.010	0	0	0	.00	0	0	0
91- 90	F	2690E	106.25	106.75	.50	28.18	6.560	401	77	27	27.50	172	2	8
91- 91	F	2690E	120.23	120.50	.27	.10		0	0	0	.00	0	0	0
91- 92	F	2690E	164.15	164.65	.50	.03		0	0	0	.00	0	0	0
91- 92	F	2690E	139.00	139.60	.60	.03		0	0	0	.00	0	0	0
91- 110	F	2740E	100.65	101.15	.50	.62		111	116	227	3.20	31	2	2
91- 111	F	2740E	112.10	112.60	.50	2.71		171	85	44	3.40	15	2	3
90- 43	Z	2540E	37.90	38.40	.50	9.53	2.300	505	365	72	7.20	65	7	10
89- 6	Z	2640E	30.30	30.69	.39	15.50	2.810	921	0	0	40.80	0	22	20

SECTION 2140E DRILL HOLE METALLICS ASSAYS AND ICP ANALYSES

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: OCT 27 1989
DATE REPORT MAILED: Nov. 6/89

ASSAY CERTIFICATE

NOV 0 7.

-100 MESH AU BY FIRE ASSAY FROM 1 A.T.
- SAMPLE TYPE: PULP + REJECT

SIGNED BY. C. Leong. D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

CORDILLERAN ENGINEERING FILE # 89-4280R3

SAMPLE#	AG** oz/t	SAMPLE wt. gm	AU-100 oz/t	NATIVE Au mg	AVG. oz/t
SND891-2	.01	3150	.003	ND	.003
SND891-4	.39	3200	.172	2.61	.196
SND891-5	.04	1870	.017	.23	.021
SND891-9	.88	3950	.445	12.12	.534

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: OCT 18 1989
DATE REPORT MAILED: Oct 25/89.

ASSAY CERTIFICATE

-100 MESH AU BY FIRE ASSAY FROM 1 A.T.
- SAMPLE TYPE: REJECT + PULP

SIGNED BY. C. Leong .. D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Cordilleran Engineering Ltd. PROJECT ELK #C89-67 FILE # 89-4280R

SAMPLE#	SAMPLE wt. gm	AU-100 oz/t	NATIVE Au mg	AVG. oz/t
SND891-3	2200	4.690	63.77	5.535

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: OCT 27 1989
DATE REPORT MAILED: Nov. 6/89...

NOV 0 7.

ASSAY CERTIFICATE

-100 MESH AU BY FIRE ASSAY FROM 1 A.T.
- SAMPLE TYPE: REJECT + PULP

SIGNED BY..C. Leong.. D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

CORDILLERAN ENGINEERING FILE # 89-4367R2

SAMPLE#	AG** oz/t	SAMPLE wt. gm	AU-100 oz/t	NATIVE Au mg	AVG. oz/t
SND891-12	.06	1400	.053	.16	.056
SND891-13	.39	1450	.246	2.96	.305
SND892-3	1.40	3050	.756	5.36	.807
SND892-5	.01	3250	.002	ND	.002
SND892-6	.03	1350	.005	ND	.005
SND892-7	.07	1850	.028	ND	.028
SND892-8	.01	2500	.001	ND	.001
SND892-9	.03	1980	.001	ND	.001
SND893-2	.16	2800	.060	.09	.061
SND893-3	.04	790	.006	ND	.006
SND893-7	.07	1450	.004	ND	.004
SND893-8	.09	1250	.028	ND	.028
SND893-9	.17	4000	.070	.31	.072
SND893-11	.10	1900	.014	ND	.014
SND893-12	.03	1850	.004	ND	.004
SND893-13	.03	2500	.011	.02	.011
SND893-16	.06	1170	.020	.02	.021
SND894-2	.29	6300	.047	ND	.047
SND894-3	.64	5400	.264	.75	.268

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: CORE PULE

DATE RECEIVED: NOV 20 1989 DATE REPORT MAILED: Nov 24/89 SIGNED BY. C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Cordilleran Engineering PROJECT ELK #C89-67 File # 89-4280R2

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
SND891-3	39	7749	723	308	85.4	40	19	150	14.63	313	5	180	1	4	7	5	85	2	.03	.005	2	85	.01	3	.01	11	.10	.01	.04	1
SND891-4	14	2957	292	248	12.4	20	5	1052	5.10	137	5	ND	4	4	8	14	10	5	.19	.062	6	44	.06	29	.01	6	.59	.01	.30	1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
SND891-9	4	146	365	261	30.5	4	7	1329	5.96	138	5	18	5	7	2	2	12	3	.21	.061	5	1	.07	7	.01	6	.30	.01	.20	1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
SND 891-13	9	133	44	115	10.7	17	12	1084	5.26	656	5	7	9	8	1	2	2	12	.29	.069	16	35	.15	48	.01	6	.58	.02	.27	1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
SND892-3	6	1275	189	178	54.0	5	12	684	9.17	211	5	44	4	6	4	3	4	3	.15	.048	7	2	.06	15	.01	3	.27	.01	.18	1
SND893-2	2	549	74	77	5.5	6	8	349	8.11	171	5	2	3	2	1	2	2	2	.15	.052	4	2	.04	20	.01	2	.29	.01	.21	1
SND893-9	1	213	200	57	4.4	3	5	99	4.29	95	34	3	4	10	1	2	2	1	.10	.035	4	1	.02	15	.01	7	.21	.01	.11	1
SND894-3	8	358	51	13	22.3	6	5	157	5.21	95	5	9	3	6	1	2	2	2	.13	.041	5	1	.04	12	.01	6	.24	.01	.14	1

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Ag** oz/t	SAMPLE wt. gm	AU-100 oz/t	NATIVE Au mg	AVG. oz/t
SND90-63-2	5	21	21	41	.5	12	3	627	1.73	3	5	ND	11	8	.2	2	2	11	.15	.033	29	25	.14	92	.03	2	.41	.04	.15	2	-	1150	.001	ND	.001
SND90-63-5	5	16	13	74	.4	9	7	1501	3.53	4	5	ND	6	12	.3	2	2	26	.32	.083	18	21	.35	128	.04	3	.76	.05	.27	1	-	1300	.004	.14	.007
SND90-63-6	6	27	40	107	.1	12	6	1630	2.79	5	5	ND	7	13	.2	2	2	14	.34	.082	21	18	.14	100	.02	27	.69	.05	.30	1	-	1050	.001	ND	.001
SND90-63-9	4	217	120	287	2.9	10	6	329	2.80	194	5	ND	6	14	4.6	3	2	4	.23	.073	11	12	.05	50	.01	3	.59	.01	.34	1	-	1350	.010	ND	.010
SND90-63-10	6	14	8	49	.1	9	7	709	1.89	9	5	ND	9	28	.2	2	2	19	.35	.080	21	22	.23	157	.05	6	.76	.04	.26	1	-	1250	.001	ND	.001
SND90-64-4	9	101	108	109	1.1	19	4	991	2.49	95	5	ND	8	3	.6	2	2	3	.09	.027	14	37	.05	61	.01	4	.39	.01	.26	2	-	1500	.012	.69	.025
SND90-64-6	7	51	74	100	1.3	18	6	711	2.33	29	5	ND	9	6	.3	2	4	8	.12	.030	20	31	.10	76	.02	5	.39	.03	.19	1	-	1300	.038	.22	.043
SND90-64-11	7	623	1443	2703	24.2	15	7	334	3.60	195	9	14	4	10	81.2	24	4	4	.14	.042	8	25	.04	31	.01	4	.37	.01	.21	1	.70	1350	.443	.53	.454
SND90-64-13	4	61	159	267	1.0	7	8	2287	3.94	9	5	ND	6	11	1.8	2	4	7	.32	.076	14	10	.12	151	.01	4	.48	.01	.27	2	-	1500	.036	ND	.036
SND90-65-4	4	22	191	254	.5	11	9	1224	2.75	8	5	ND	5	17	6.0	2	2	27	.40	.088	29	17	.33	219	.08	5	.81	.05	.32	1	-	1400	.002	ND	.002
SND90-65-6	4	48	6	69	.6	9	9	1878	3.30	41	5	ND	7	10	.2	2	3	14	.34	.085	24	20	.21	103	.02	4	.68	.03	.31	1	-	1100	.014	.13	.018
SND90-65-10	4	45	65	121	.4	9	8	2040	4.30	16	9	ND	7	14	.9	2	2	33	.38	.096	22	22	.37	233	.08	5	.80	.04	.43	1	-	1250	.003	ND	.003
SND90-65-14	6	1033	1497	1198	84.4	17	10	745	7.26	1531	12	71	4	5	30.3	15	12	7	.16	.047	9	30	.10	17	.01	5	.40	.01	.19	1	1.86	1700	1.395	.93	1.411
SND90-66-2	4	196	51	267	4.3	10	11	1812	4.18	832	5	3	6	10	6.0	2	4	20	.37	.096	17	22	.28	61	.04	4	.67	.03	.32	1	-	1300	.116	.04	.117
SND90-66-6	5	45	11	56	.3	12	8	1867	3.56	38	5	ND	6	16	1.4	2	2	30	.42	.089	29	21	.37	81	.03	4	.54	.05	.17	2	-	1450	.001	.03	.002
SND90-66-12	5	367	287	199	13.3	8	7	473	5.57	91	5	2	5	5	3.3	55	2	4	.21	.077	8	23	.09	21	.01	5	.51	.01	.32	1	-	1150	.099	.08	.101
SND90-66-13	12	1630	931	637	269.6	25	10	357	15.39	378	5	222	1	1	15.3	157	88	2	.04	.017	2	43	.02	4	.01	4	.15	.01	.11	1	7.45	1400	7.956	.85	7.974
SND90-66-14	6	127	203	316	1.2	14	7	1622	3.91	233	5	ND	6	8	2.8	10	2	7	.27	.074	13	18	.16	59	.01	2	.45	.02	.24	1	-	1450	.006	.04	.007
STANDARD C	19	62	43	134	7.4	73	32	1059	3.99	41	20	7	38	52	18.5	15	20	59	.47	.096	38	59	.90	183	.08	35	1.91	.06	.14	11	-	-	-	ND	-

Cordilleran Engineering Ltd. PROJECT ELK #D1 File # 91-2558 Page 3

1980 - 1055 W. Hastings S, Vancouver BC V6E 2E9 Submitted by: W. JAKUBOWSKI

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	SAMPLE wt. gm	AU-100 oz/t	NATIVE Au mg	AVG. oz/t
SND9175-4	3	3649	248	236	88.7	10	19	453	8.74	869	15	87	3	8	6.1	8	9	2	.13	.038	4	20	.05	17	.01	6	.38	.01	.28	1	1250	2.760	13.19	3.068
SND9175-6	4	116	91	125	1.3	9	7	951	3.48	28	5	ND	6	11	.5	2	2	17	.33	.062	18	16	.22	78	.04	3	.59	.04	.36	1	1200	.007	.05	.008
SND9175-14	3	49	33	27	1.6	5	13	748	5.87	1636	6	2	8	24	.2	4	2	7	.84	.053	10	14	.15	35	.01	5	.51	.03	.35	1	1100	.035	.08	.037
SND9176-8	7	468	44	48	4.7	11	5	508	3.56	80	5	2	5	11	.3	2	2	2	.29	.027	5	21	.10	35	.01	3	.29	.01	.22	1	1050	.058	.13	.062

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	SAMPLE wt. gm	AU-100 oz/t	NATIVE Au mg	AVG. oz/t
SND9175-19	7	255	431	1221	3.8	22	23	2876	6.55	126	5	ND	6	51	15.5	14	2	12	1.75	.093	13	20	.65	74	.01	3	.50	.01	.25	3	1100	.031	ND	.031
SND9177-4	12	12196	112	730	75.6	7	7	1070	5.70	67	5	31	6	20	20.2	2	13	3	.64	.050	6	14	.18	26	.01	3	.37	.01	.27	1	1100	.944	1.04	.972
SND9178-7	6	355	3976	1094	9.2	12	9	739	4.29	596	6	2	3	5	25.2	4	2	3	.14	.025	7	29	.08	40	.01	2	.27	.01	.17	1	1030	.103	.03	.104
SND9179-2	3	425	405	1500	4.7	9	6	1025	7.22	483	5	ND	6	4	41.1	6	2	2	.20	.058	5	27	.09	26	.01	2	.46	.01	.31	1	1050	.062	.16	.066
SND9179-6	4	1400	12399	7141	46.4	8	5	473	4.34	118	7	27	7	5	228.3	62	6	3	.15	.046	4	51	.05	18	.01	2	.31	.01	.24	2	1200	.431	3.14	.507

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	SAMPLE wt. gm	AU-100 oz/t	NATIVE Au mg	AVG oz/t
SND9196-2	7	176	25	44	3.8	12	9	1611	4.55	62	5	ND	8	15	.5	2	2	10	.49	.062	12	32	.27	51	.01	3	.69	.02	.28	1	800	.025	.11	.029
SND9196-9	10	315	75	70	4.5	12	17	908	8.01	128	5	ND	13	34	.9	23	6	14	.88	.174	31	14	.23	27	.01	5	.82	.02	.36	1	1100	.021	ND	.021
SND9196-13	7	69	9	59	.3	6	7	2845	3.17	63	5	ND	10	39	.7	2	2	7	1.60	.045	12	16	.34	46	.01	5	.40	.01	.24	1	1100	.002	ND	.002
SND9196-15	8	59	6	39	.7	9	7	1536	2.92	51	5	ND	11	26	.2	2	2	11	.90	.041	12	25	.25	114	.01	6	.37	.02	.19	1	1200	.005	ND	.005
SND9196-19	11	70	84	48	6.1	9	24	1216	5.22	323	5	ND	7	37	1.1	15	2	3	1.29	.035	6	19	.24	33	.01	5	.32	.01	.23	1	1000	.031	ND	.031
SND9196-22	7	80	46	91	3.1	11	9	2200	2.98	88	5	2	11	52	1.2	2	2	5	2.15	.031	7	28	.27	89	.01	7	.41	.01	.23	1	1000	.061	.12	.065
SND9197-2	5	51	102	561	.5	12	10	1592	3.30	30	5	ND	7	15	13.6	2	2	17	.36	.059	16	25	.16	91	.01	3	.61	.03	.24	1	1000	.016	.02	.017
SND9197-5	8	41	93	211	.1	15	10	1640	3.04	16	5	ND	8	12	1.8	2	2	15	.33	.067	19	37	.15	98	.01	5	.73	.03	.35	1	1000	.003	.02	.004
SND9197-7	6	119	81	131	1.9	13	14	1774	4.52	41	5	ND	6	8	1.1	2	2	7	.29	.059	10	25	.12	58	.01	5	.44	.01	.26	1	1200	.032	.43	.042
SND9197-8	9	293	63	246	2.1	16	16	2452	6.12	61	5	ND	9	9	4.5	2	2	10	.32	.060	15	41	.13	54	.01	3	.48	.02	.26	1	900	.004	ND	.004
SND9197-14	5	143	9	46	.3	9	9	1005	4.00	7	5	ND	22	11	.2	2	2	14	.28	.054	22	25	.26	81	.04	2	.58	.03	.30	1	900	.002	ND	.002
SND9197-15	10	368	8	59	.9	14	8	766	4.23	18	5	ND	13	12	.7	2	2	27	.31	.066	17	37	.41	119	.10	4	.77	.05	.40	1	1050	.008	.03	.009
RE SND9197-7	7	132	82	135	2.8	11	15	1768	4.61	37	5	ND	7	8	1.4	2	2	7	.29	.060	10	25	.12	57	.01	2	.45	.02	.27	1	-	-	ND	-
SND9197-18	7	495	545	808	7.2	11	13	789	5.61	1473	5	4	4	4	21.4	4	3	5	.15	.038	5	28	.06	26	.01	2	.28	.01	.19	1	1200	.112	.04	.113
SND9197-19	9	1537	1305	89	686.6	15	19	349	11.46	249	5	770	4	5	2.8	3	769	3	.12	.032	4	44	.05	15	.01	2	.37	.01	.22	1	1150	20.106	261.61	26.738

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	SAMPLE wt. gm	AU-100 oz/t	NATIVE Au mg	AVG. oz/t
SND91100-7	8	343	765	942	8.7	11	11	558	5.15	113	7	6	2	7	25.0	2	6	3	.21	.051	7	33	.06	23	.01	2	.44	.01	.26	1	800	.224	.54	.244

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL/ASSAY CERTIFICATE

Cordilleran Engineering Ltd. PROJECT ELK #D21 File # 91-4641 Page 3

1980 - 1055 W. Hastings S, Vancouver BC V6E 2E9 Submitted by: PAUL CONROY

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	SAMPLE wt. gm	AU-100 oz/t	NATIVE Au mg	AVG. oz/t
SND91100-14	6	115	71	78	7.3	19	13	1138	5.09	38	5	3	1	70	.4	2	3	72	1.94	.074	9	26	1.25	103	.11	2	1.35	.04	.69	1	1100	.413	ND	.413

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B U AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Cordilleran Engineering Ltd. PROJECT ELK #D17 File # 91-4270 Page 3

1980 - 1055 W. Hastings S, Vancouver BC V6E 2E9 Submitted by: PAUL CONROY

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	SAMPLE wt. gm	AU-100 oz/t	NATIVE Au mg	AVG. oz/t
SND91106-2	11	817	870	70	39.5	15	14	258	6.54	164	33	5	4	12	3.6	18	47	1	.04	.008	9	40	.01	17	.01	2	.23	.01	.18	1	1190	.196	.50	.208
SND91106-5	9	179	118	35	9.7	13	5	340	2.88	334	5	2	8	3	.6	2	6	1	.06	.014	8	34	.01	27	.01	4	.24	.01	.21	1	1350	.030	.66	.044
SND91106-6	2	357	129	65	6.6	10	2	518	2.46	549	5	ND	12	4	.6	2	10	3	.08	.016	12	24	.03	27	.01	2	.22	.01	.16	12	1100	.011	ND	.011
SND91106-8	6	451	106	50	34.8	11	9	324	6.56	756	5	32	8	3	.8	2	31	1	.05	.013	5	29	.01	18	.01	3	.23	.01	.20	1	1200	.826	16.66	1.231
SND91106-11	11	220	120	97	4.8	17	6	584	3.37	343	10	ND	10	5	1.0	2	4	2	.07	.016	12	46	.02	28	.01	2	.27	.02	.20	1	1450	.028	.41	.036
SND91106-16	6	124	84	136	2.1	11	4	857	2.33	34	5	ND	12	9	1.0	37	3	3	.10	.019	15	24	.05	52	.01	3	.21	.02	.14	12	1150	.009	.07	.011
SND91107-2	10	472	125	80	18.0	16	9	213	7.14	421	5	4	7	2	1.4	28	10	1	.06	.016	5	46	.02	19	.01	4	.29	.01	.25	1	1250	.212	1.04	.236
SND91107-6	5	437	693	4242	14.7	24	16	2100	4.82	117	5	7	4	27	117.9	8	3	17	.61	.112	19	35	.22	75	.01	3	.61	.01	.24	23	1100	.221	1.88	.271
SND91107-13	1	554	28	102	13.9	10	8	1415	5.59	20	5	6	5	10	1.6	2	9	17	.31	.058	13	19	.27	57	.05	2	.48	.02	.28	7	1330	.402	.03	.403
RE SND91106-16	6	122	80	130	2.2	10	4	821	2.21	30	5	ND	10	9	.9	34	2	3	.10	.018	14	22	.05	50	.01	2	.19	.02	.13	12	-	-	ND	-
SND91107-17	6	178	248	465	61.7	11	12	637	4.81	106	5	59	4	5	9.9	2	36	2	.15	.033	6	29	.05	22	.01	2	.29	.01	.21	2	1250	1.452	44.07	2.480
STANDARD C	18	58	41	132	7.1	70	32	1034	3.92	40	18	6	38	52	18.7	16	18	57	.48	.089	40	58	.88	176	.09	32	1.87	.06	.15	13	-	-	ND	-

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: CORE -100 MESH AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: SEP 10 1991 **DATE REPORT MAILED:** Sept 17/91. **SIGNED BY.** .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS