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GOVERNMENT AGENT  
SMITHERS, B.C.

**SOIL AND ROCK GEOCHEMISTRY**

**OF THE**

**CHES MINERAL CLAIMS**

**OMINECA MINING DIVISION, BRITISH COLUMBIA**

**NTS 93F 5/E**

**LATITUDE 53 25'N  
LONGITUDE 125 42'W**

**OWNER OPERATOR**

**RALPH KEEFE**

**BY  
RALPH KEEFE**

**OCTOBER 23, 2000**

**GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT**

26,354

# **GEOLOGICAL SUMMARY REPORT CHES PROPERTY**

## **OMINECA MINING DIVISION NECHAKO MAP AREA - NTS 93F 5/E**

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## SUMMARY

A total of 18 bedrock samples, 1 silt sample and 39 soil samples were collected and analyzed from the Ches 1 -6 mineral claims which contain known Skarn and Stockwork Mineralized zones. The Bedrock samples were collected from new exposures created as a result of road construction. The soil samples were collected as part of a fill in survey through the previous grid of intense alteration, silicification and mineralization.

New showings discovered on Ches I and Ches II have exposed (3) separate structures of Massive Sulphides. VLF and MAG suggest much stronger mineralization of same to the West Side of a (90 by 10) metre rock quarry.

The limited soil-sampling program confirmed a previously known moderate to strong stockwork of Quartz Pyrite, Chalcopyrite, Scheelite-Molydenite veintlets approximately 200 metres to the East of the quarry. Previous rock samplings along the road on this stockwork graded; 52% Cu., .07% WO<sub>3</sub>, .06% MOS<sub>2</sub> and .15oz/ton Ag over 350 metres of intensely bleached and silicified hornfels.

This report documents the expenditures of \$ 3986.00 on the Ches 1 - 6 claims.

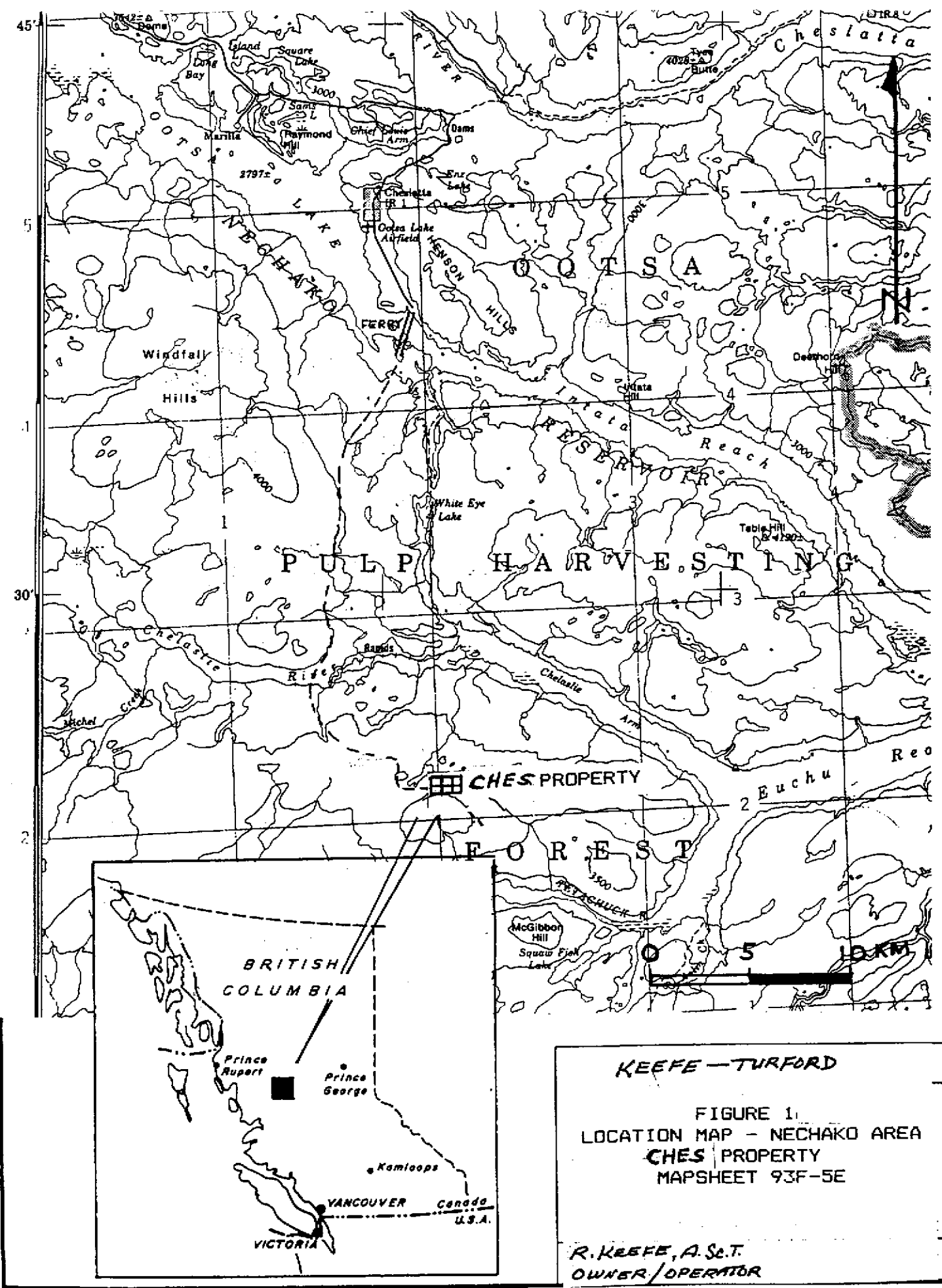
## LOCATION, PHYSIOGRAPHY AND ACCESS

The Ches mineral property is situated approximately 80 kilometers South of Burns Lake, B.C. Between the West End of Cheslaslie Arm and Tetachuck Lake. The claims are on N.T.S. map sheet NTS 93F 5/E at latitude 53 25'N and longitude 125 42'W.

The property can be reached by a total of 143 km of pavement and gravel roads from Burns Lake, B.C. A route log for access to the property is as follows:

- 1) From Highway 16 in Burns Lake thence South on Highway 35 for 24 Kilometers to the Francois Lake ferry. Cross ferry to the South side of Francois Lake.
- 2) Follow Southward on Keefe Landing Road for approximately 40 kilometers to Ootsa Lake.
- 3) Turn left on East Ootsa Road for approximately 48 kilometers to Fraser Lake Sawmills East Ootsa camp and barge crossing. Cross barge to South side of Ootsa Lake.
- 4) Take Cheslaslie main haul Road Southward to 31.2 kilometers to rock quarry on road.

The property is located at the height of land between Cheslaslie Arm and Tetachuck Lake in the Nechako Plateau at an elevation of 1220 meters. Low-lying hummocks typify the topography of the region.



**KEEFE - TURFORD**

FIGURE 1.  
 LOCATION MAP - NECHAKO AREA  
**CHES** PROPERTY  
 MAPSHEET 93F-5E

R. KEEFE, A. S. T.  
 OWNER/OPERATOR

## CLAIM TENURE AND OWNERSHIP

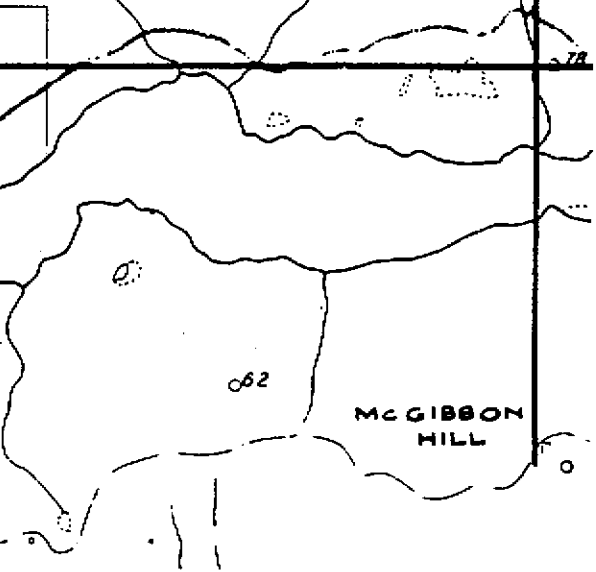
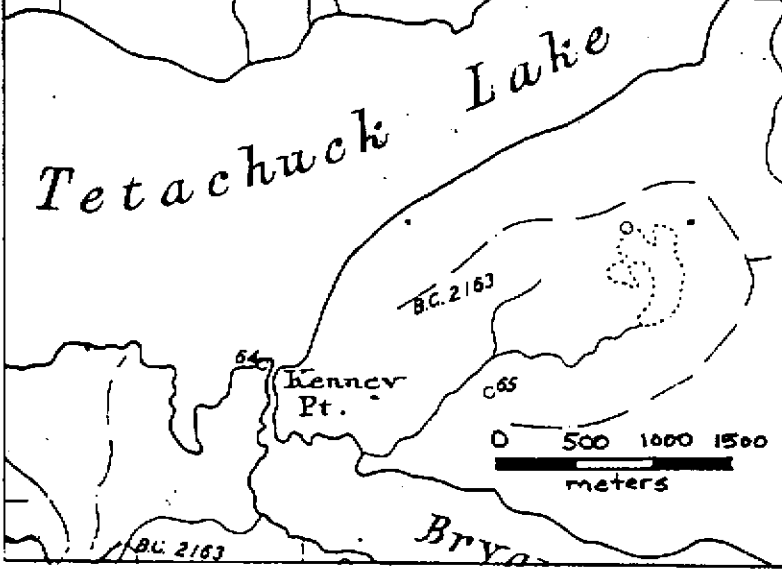
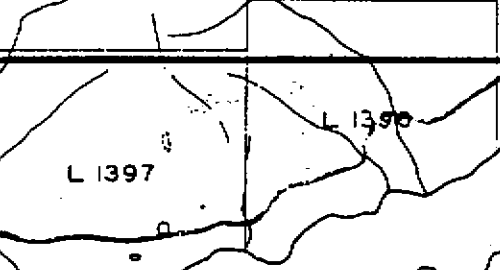
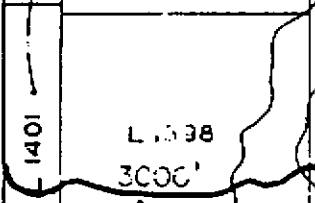
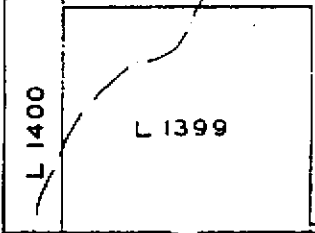
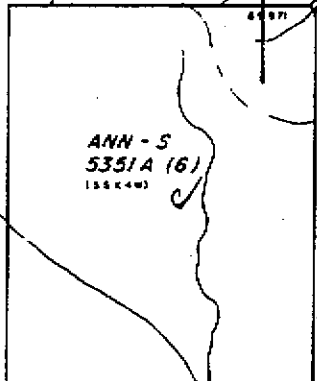
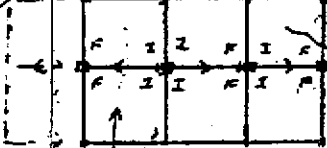
The Ches property consists of (6) two-post mineral claims. The claims are owned by Ralph Keefe of Francois Lake, B.C. The table below lists the status of the claims pending acceptance of this report. The location of the claims is plotted on map 2

Ches # 1	1	370836	July 27/2003
Ches #2	1	370837	July 27/2003
Ches #3	1	370838	July 27/2003
Ches # 4	1	370839	July 27/2003
Ches # 5	1	372673	Oct 5/2003
Ches # 6	1	372674	Oct 5.2003

Two additional claims namely Ches # 7 and Ches # 8 were staked on June 5/2000 (Not included in this report).



CHES PROPERTY



KEEFE - TURFORD  
FIGURE 2  
CLAIM MAP - CHES PROPERTY  
MAPSHEET 93F-5E  
R. KEEFE A.Sc.T.  
OWNER-OPERATOR



## REGIONAL GEOLOGY

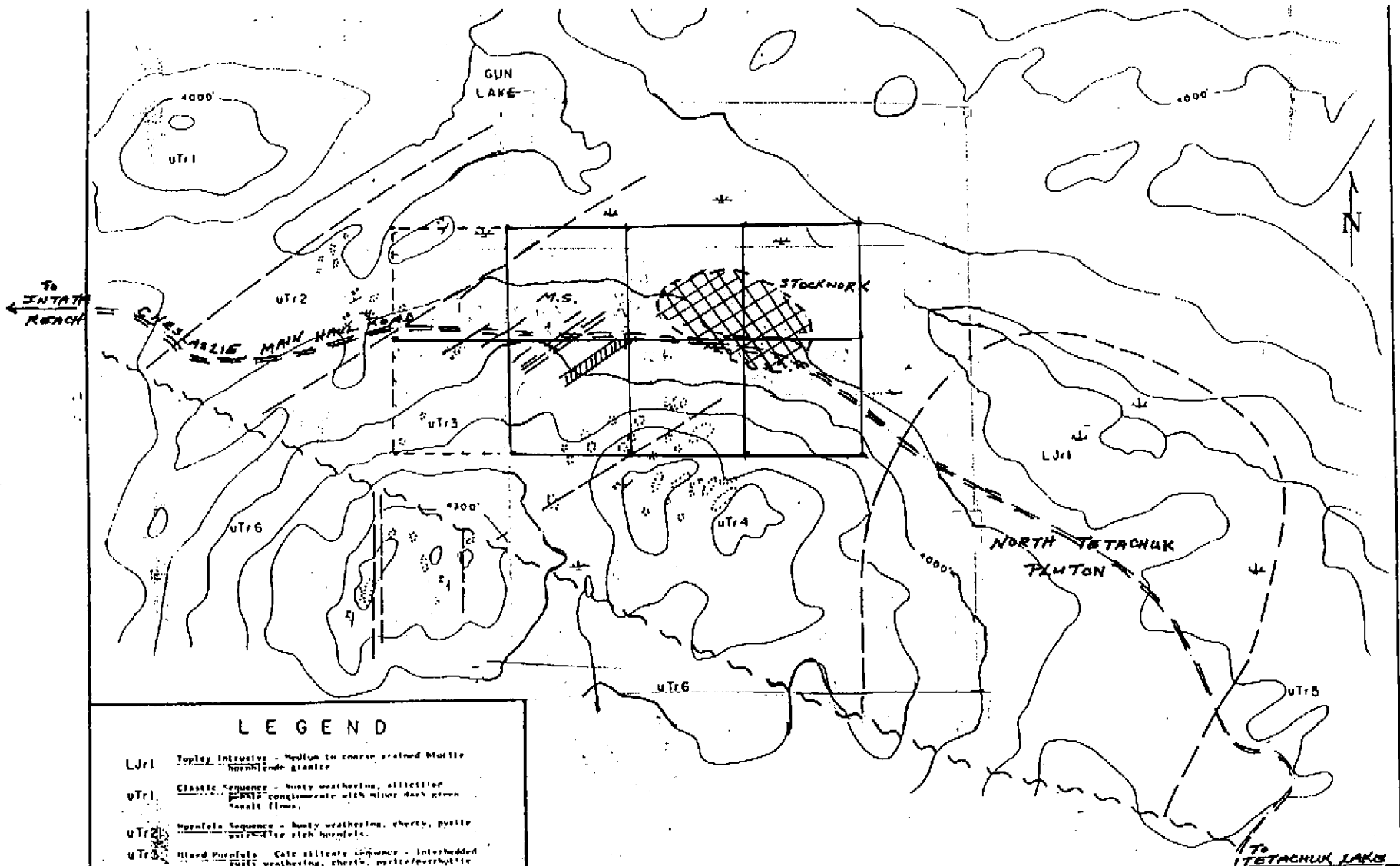
Moderate relief and large areas of thick overburden cover, characterize the Nechako Plateau. The area is underlain by Mesozoic Volcanic and Sedimentary rocks ranging in age from late Triassic (Takla group) to middle Jurassic (Hazelton Group) overlain by Eocene Volcanics (Ootsa Lake Group) and Miocene Plateau Basalts.

## PROPERTY GEOLOGY

Rocks of the Middle Jurassic Hazelton Group (Naglico and Entiako - Formation) appear to underlie the property. The dominant lithologies include a thick, steeply dipping succession of intensely hornfelsed and skarned limey siltstone and silty limestone bracketed by basic volcanics and intruded by a cretaceous Granitic plug (recently dated 79.76 MA) exhibiting volcanic arc affinities.

Several bands of Quartz - Garnet - Diopside - Pyrrhotite skarn with accessory pyrite - Scheelite - Chalcopyrite - Sphalerite mineralization occur on the property.

Cheslalsie main haul road has now exposed over 1 1/2 kilometers on intense alteration, silification and pyritization.



**LEGEND**

- LJr1 Topley Intrusive - Medium to coarse grained biotite hornfelsite granite
- UTr1 Classic Sequence - Rusty weathering, silicified quartzite conglomerate with minor dark green cherty flows.
- UTr2 Hornfels Sequence - Rusty weathering, cherty, pyrite weathering rich hornfels.
- UTr3 Mixed Hornfels - Calc silicate sequence - interbedded rusty weathering, cherty, perthite-perthite rich hornfels and perthite rich calc silicate chert with bands of quartz-garnet staurolite-perthite-schistose-chalcopyrite shales - UTr3a, UTr3b, UTr3c, UTr3d, UTr3e, UTr3f, UTr3g, UTr3h, UTr3i, UTr3j, and UTr3k.
- UTr4 Calc Silicate Sequence - Rusty weathering, perthite-rich calc silicate chert with minor interbedded cherty, pyrite-perthite rich hornfels.
- UTr5 Mixed Volcanic Sequence - Massive bedded, dark green perthite and siliceous flows. Massive bedded flows with minor light green perthite rich cherty hornfels.
- UTr6 Siltstone-Carbonate Sequence - Interbedded gray fine siltstone, silty limestone and thin bedded gray siltstone with minor quartz sandstone unit.
- Stockmark quartz-pyrite-schistose metamorphic zone.
- Outcrop
- ▲ Marsh
- Geological Contact (Unknown, Inferred)
- Fault
- ~ Contour Elevation



**KEEFE - TURFORD**

**CHES CLAIM GROUP**

**FIGURE 3**

**GEOLOGY AND ROAD LOCATION**

**R. KEEFE, A.Sc.T**  
OWNER - OPERATOR

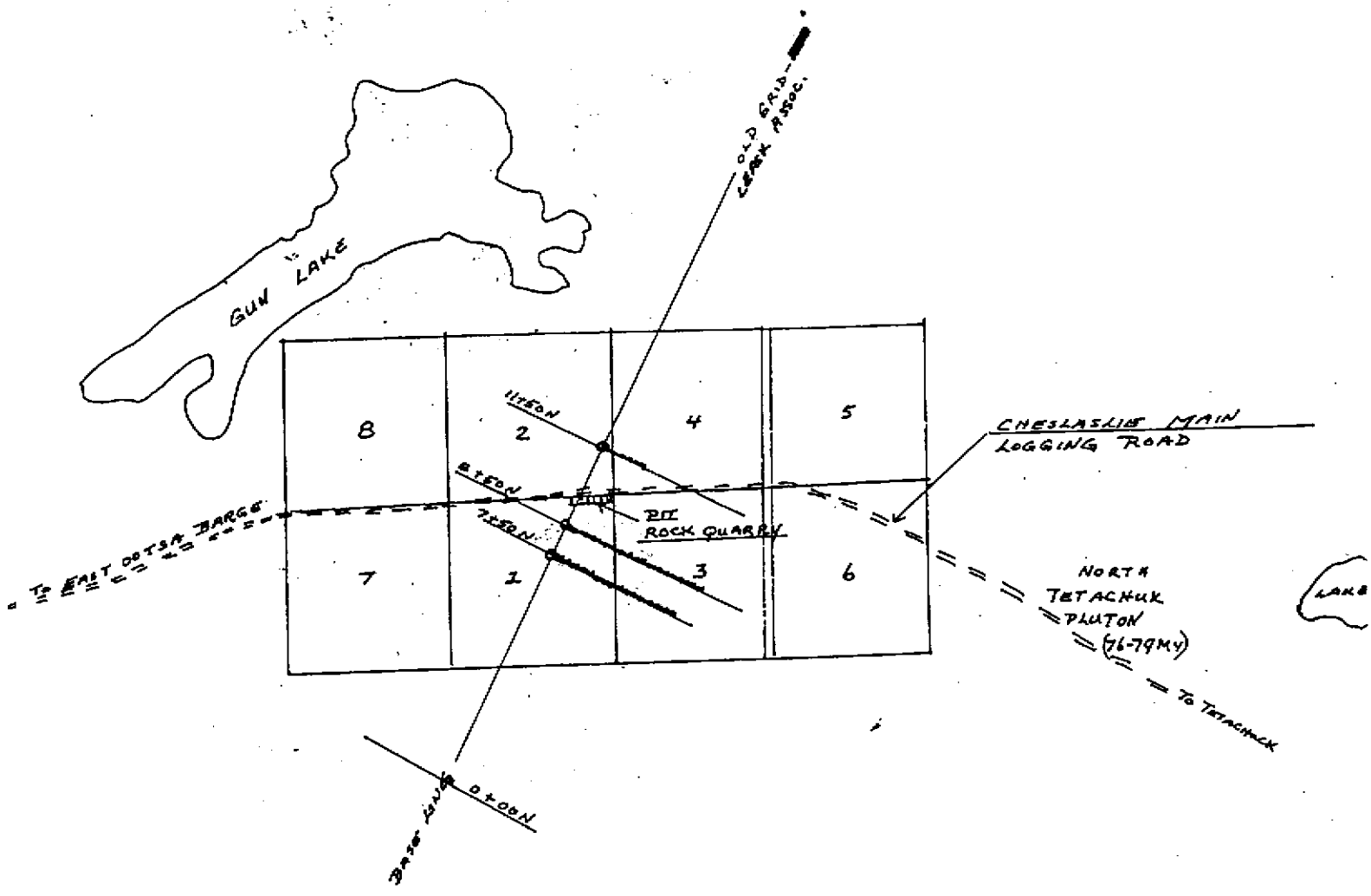


SCALE 1:20000

NTS 93F/15

CHES MINERAL CLAIMS

# 1 to 8 incl.



319000

320000

KEEFE - TURFORD

FIGURE 3A  
 LOCATION OF LEASK GEO-CHEM GR.  
 MAP SHEET 93F-5E  
 TAKEN FROM EXPIRED EXO PROPER  
 FILL IN SOIL SURVEY-CHES  
 R.KEEFE A.S.T. PROPERTY  
 OWNER-OPERATOR

## **THE CHES PROPERTY**

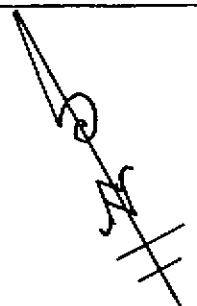
### **PREVIOUS EXPLORATION HISTORY**

Esso Minerals located a significant Cu-Zn anomaly in 1972 following a Regional Lake sediment study. Follow-up Geochemistry, Magnetometer and VLF-EM surveys were done. Although several anomalous areas of metal were confirmed, claims were allowed to elapse.

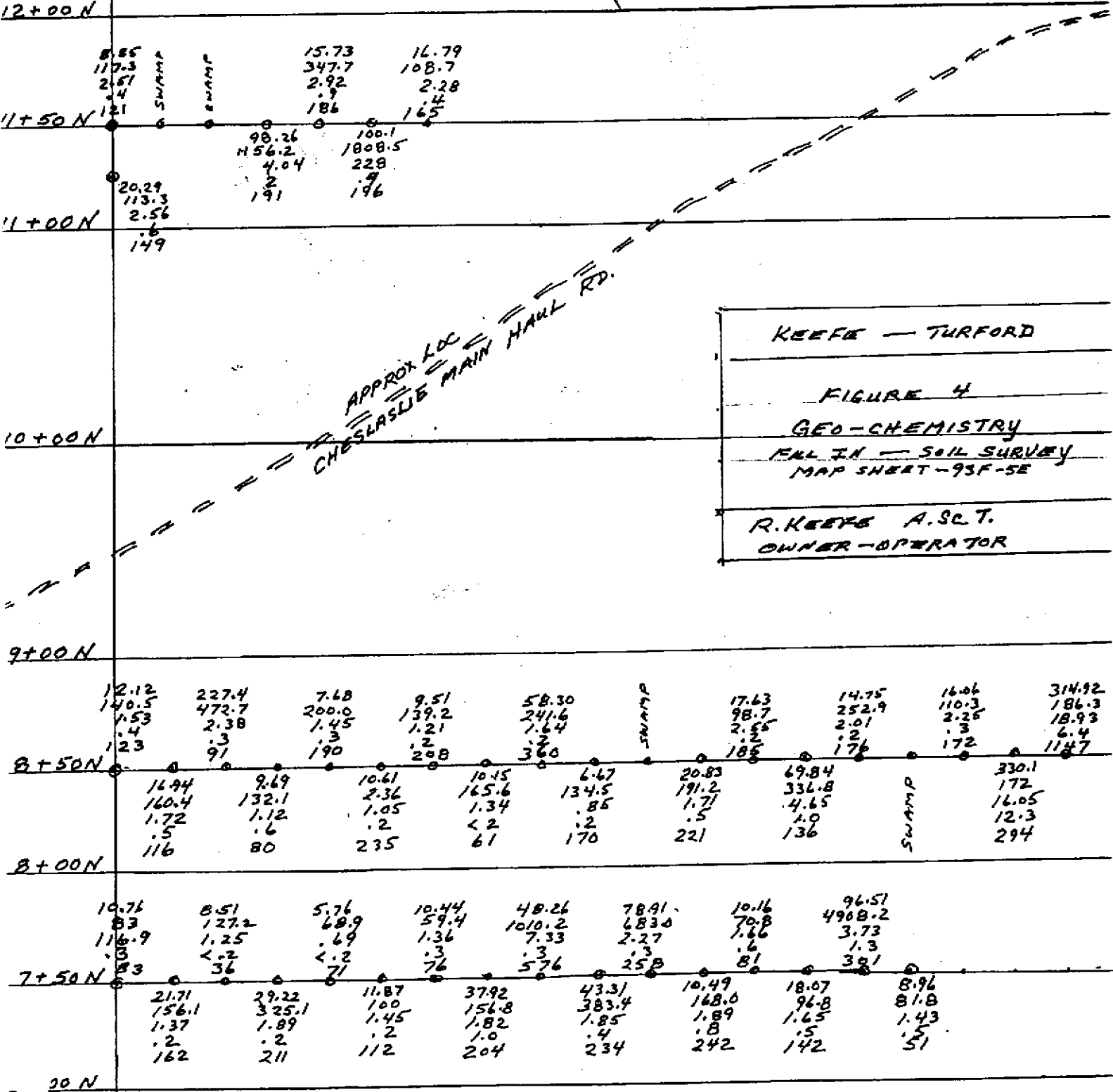
Logging road development in 1985 exposed skarn type mineralization resulting in the staking of the Esso property by Leask Associates. Additional Geo-chemistry, magnetometer and VLF-Em work was carried out. Several coincidental Geo-chemical and Geo-physical anomalies were located. A trenching and drilling program was thus slated, however this never came about and again the claims elapsed.

The Ches claims were staked in July 1999, as a result of additional road work plus the development of a rock quarry at 31.2 kilometers on the Cheslaslie main haul road.

REFERENCE	
CU	10.76 P.P.M.
ZN	116.9 "
MO	1.42 "
W	.3 "
AG	83 PPB



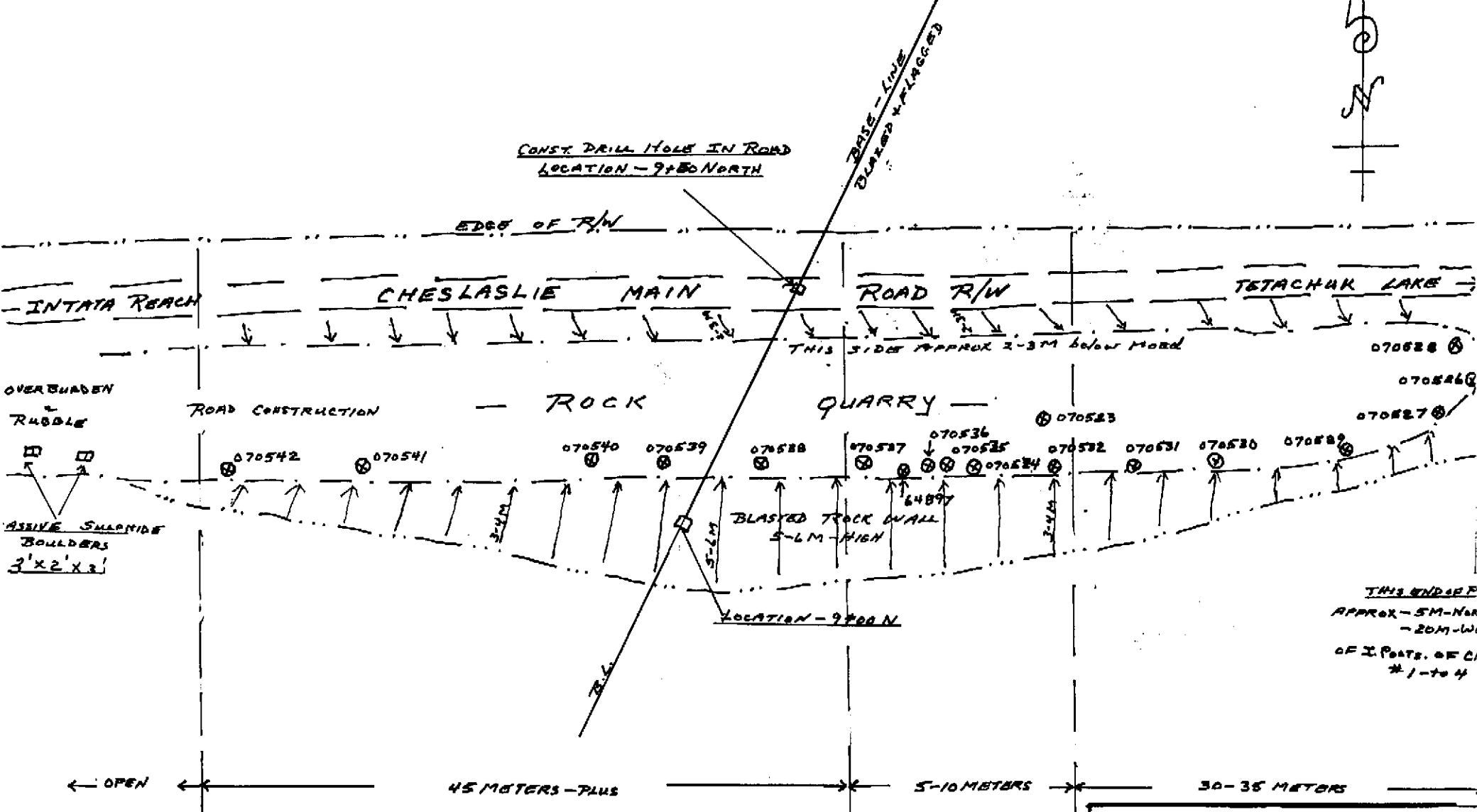
OLD BASE LINE  
 LEMASK ASSOCIATES  
 12+00 N  
 11+50 N  
 11+00 N  
 10+00 N  
 9+00 N  
 8+50 N  
 8+00 N  
 7+50 N  
 7+00 N  
 6+00 N  
 BASE LINE



KEEFE — TURFORD  
 FIGURE 4  
 GEO-CHEMISTRY  
 FALL 78 — SOIL SURVEY  
 MAP SHEET — 95F-5E  
 R. KEEFE A.S.C.T.  
 OWNER — OPERATOR

"CHE" PROJECT

ROUGH SKETCH MAP OF ROCK QUARRY



QUARRY DIMENSION - 90M X 10M

KEEFE - TURFORD

FIGURE 5  
ROCK - QUARRY  
MAP SHEET 93F-5E

R. KEEFE A.S.T.  
OWNER - OPERATOR

## SOIL AND ROCK GEOCHEMISTRY PROGRAM

The purpose of the prospecting was to extend and map the known area of mineralization, plus further confirmation of the large Cu., Zn., Mo., and anomaly lying to the immediate East End of the quarry.

The rock quarry has now exposed two separate structures of massive sulphides with lower grades of mineralization in between. A third structure is indicated as the equipment on site had rolled out boulders as large as 2/3 metre by 1 metre of massive sulphides lying to the west. A total of 18 samples were taken during mapping.

A limited infill soil survey was carried out using Leask associates grid of 1985. Baseline was located and re-established. Soil stations were established at 25 metre intervals. A total of 39 samples were collected and sent to Acme Analytical Laboratories for ICP analysis.



## RESULTS AND DISCUSSION

The soil ICP results are attached as appendix I. Fill in soil survey has confirmed the anomalous presence of Cu., Mo., and Zu., in the stockwork zone southeast of the quarry. Highest values were as follows; Zn -49088 ppm, Cu 315 ppm, and Mo 18 ppm. The average value of Ag over 39 samples was 197 ppb,. Much higher values were found previous on the grid lines to the east and north on this zone.

The bedrock ICP results are shown in appendix II. Several phases of mineralization were noted in the rock quarry. Commencing at the east end and going westward, the mineralization was as follows; (30 - 35) metres of fracture controlled and disseminated Cu, Mo, Zn & Wo<sub>2</sub>, (5 - 10 metres of Cu, Mo, Zn, and Wo<sub>2</sub> in more of a massive sulphide skarn assembly with visible chlorite, epidute and diopside (45)metres and open was a disseminated iron rich zone (pyrite-pyrrhetite) with massive sulphide bands containing Cu, Zn, Mo, and Wo<sub>2</sub>. Cu and Zn grades both exceeded 3% grade in the large massive sulphide boulders found in the rubble at the West End.

Intense alteration, silification and mineralization can be found along the main road running through the property for 1 1/2 kilometers.

## CONCLUSIONS AND RECOMMENDATIONS

A) Further in fill soil sampling is recommended in the quartz vein let stockwork zone. It is suggested that this zone could very well be underlain by a porphyry. Trenching is also a requirement.

B) Trenching westward of the quarry is required to follow the existence of known massive sulphides.

C) Additional in fill soils and trenching is required to investigate (2) separate Gold and Silver anomalies.

D) A minimum of 1200 meters of D.D.H. is required to determine the presence and grades of mineralization in the two currently identified zones.

## STATEMENT OF EXPENDITURES

ITEM	DAYS	COST
Truck @ \$75/day	4	300.00
ATV @\$40/day	4	160.00
Trailer/camp equip. @\$30/day	7	210.00
Groceries @\$30/day	7	210.00
Assaying 58 samples @\$21/per		1218.00
Reports		200.00
Wages @\$200/day	7	1400.00
Rental - 2way radio's	7	175.00
Powersaw @\$10/day	7	70.00
Other (maps, tags, flagging, hipchain string, misc.		43.00
TOTAL		\$ 3986.00

## CERTIFICATE

I Ralph Raymond Keefe of the Colleymount Road, Francois Lake, B.C. hereby declare the following to be true and correct;

1. I have successfully completed several courses in prospecting, Geology and Petrology.
2. Since 1986 I have been self-employed as a prospector and received a total of 10 prospecting grants from the Provincial Government.
3. I am a member in good standing as a Registered Science Technician.
4. I hold an interest in the Ches Mineral Claims.

  
Ralph R. Keefe A.S.C.T.

## BIBLIOGRAPHY

Tipper, H.W. (1963); Nechako River map area. Geological survey of Canada Memoir 324. 59 pp (map 1131A)

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Carter, N.G., (1977), Regional Setting of Porphyry Deposits in West Central British Columbia, Paper No. 22, CIM Special Volume No. 15, (Porphyry Deposits of the Canadian Cordillera).

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Friedman, R.M., Anderson, R.G., and Billes Berger, S.M., 2000; Late Cretaceous Ages for the Cheslaslie River and Tetachuck North Plutons, Northern Tetchuck Lake Map area, Central British Columbia; in Current Research 2000 -A Geological Survey of Canada.

## APPENDIX I

GEOCHEMICAL ANALYSIS CERTIFICATE

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Tl ppm	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm
99RLS008851	1.53	12.12	9.48	140.5	123	13.9	7.8	229	3.17	13.5	.3	1.0	1.4	12.1	.27	.56	.51	80	.12	.038	5.4	19.3	.27	90.4	.162	1.2	1.4	.008	.02	.4	.06	45	.3	.07	5.5
99RLS008852	1.72	16.94	9.24	160.4	116	11.6	6.2	259	2.51	8.1	.3	1.3	1.1	10.6	.33	.39	.49	68	.11	.035	5.1	17.6	.25	95.2	.146	1.2	2.01	.006	.02	.5	.06	48	.3	.04	5.5
99RLS008853	2.38	227.43	10.27	472.7	91	14.3	6.6	307	2.40	7.5	.7	2.7	1.3	30.5	1.43	.51	.75	61	.39	.026	14.0	17.2	.33	72.5	.156	1.1	1.59	.012	.03	.3	.10	45	.1	.11	5.0
99RLS008854	1.12	9.69	7.21	132.1	80	13.6	8.8	261	2.80	4.9	.4	.6	1.5	14.4	.28	.30	.22	75	.15	.067	7.2	19.7	.28	88.2	.148	1.2	2.07	.007	.04	.2	.05	38	.3	.04	5.4
99RLS008855	1.45	7.68	9.53	200.0	190	9.9	6.2	225	3.22	5.0	.4	.5	1.6	12.3	.83	.25	.21	85	.13	.110	6.2	23.2	.18	60.2	.156	1.2	2.61	.007	.03	.3	.05	53	.4	.04	7.2
99RLS008856	1.05	10.61	7.36	236.0	235	7.6	6.9	237	2.67	3.9	.3	58.6	1.3	13.0	1.18	.27	.19	74	.14	.089	6.1	15.5	.23	51.6	.127	1.1	1.70	.007	.04	.2	.04	39	.2	.02	5.3
99RLS008857	1.21	9.51	6.49	139.2	208	9.0	5.9	225	2.54	4.3	.4	1.6	1.5	15.4	.37	.28	.14	71	.17	.035	7.0	17.4	.25	79.3	.142	1.1	1.84	.009	.03	.2	.03	27	.2	.02	4.4
99RLS008858	1.34	10.15	7.02	165.6	61	8.1	6.8	511	2.30	3.3	.4	.5	1.4	27.0	.34	.36	.25	74	.51	.015	7.4	20.3	.47	49.4	.217	<1	1.18	.013	.04	<.2	.05	15	.2	.03	4.5
99RLS008859	1.64	58.30	7.27	241.6	360	12.4	6.4	506	2.52	5.6	.6	1.0	.6	66.3	2.49	.63	.38	61	1.70	.053	24.4	20.1	.27	105.1	.092	1.1	1.84	.011	.05	.2	.12	75	1.0	.06	5.1
99RLS008860	.85	6.67	6.77	134.5	178	7.0	4.6	205	2.52	3.7	.3	.4	1.3	12.7	.37	.27	.14	75	.15	.069	5.7	17.8	.21	53.3	.137	1.1	1.60	.007	.03	.2	.03	25	.2	.03	4.8
99RLS008862	1.71	20.83	6.50	191.2	221	11.3	10.2	491	2.93	4.8	.3	3.1	1.3	10.8	.70	.32	.63	81	.12	.095	5.1	23.8	.20	52.5	.145	1.1	1.93	.007	.03	.5	.06	46	.2	.07	5.3
99RLS008863	2.55	17.63	7.68	98.7	185	14.0	7.3	255	3.64	7.2	.4	.8	1.5	15.0	.35	.36	.22	106	.17	.047	6.6	26.0	.29	72.6	.175	1.2	2.02	.007	.03	.2	.04	57	.3	.05	5.8
99RLS008864	4.65	69.84	6.40	336.8	136	14.5	9.0	323	2.58	3.7	.5	1.0	1.5	28.3	1.11	.33	.24	69	.39	.016	8.1	20.1	.31	65.9	.164	<1	1.36	.009	.03	1.0	.05	26	.5	.04	4.2
99RLS008865	2.01	14.75	6.99	252.9	176	17.9	10.3	270	3.49	8.2	.4	.6	1.6	13.8	1.40	.37	.20	94	.14	.040	6.5	25.9	.28	77.1	.169	1.2	2.35	.007	.03	.2	.05	43	.3	.06	6.0
99RLS008867	2.25	16.06	7.21	110.3	172	8.8	6.4	230	3.01	8.7	.3	1.9	1.1	10.4	.34	.39	.74	85	.11	.035	6.2	23.3	.27	52.1	.167	<1	1.79	.007	.02	.3	.07	37	.3	.09	5.4
99RLS008868	16.05	330.10	9.75	172.0	294	14.9	13.6	384	3.32	21.2	.5	3.8	1.7	19.7	.37	1.04	1.00	81	.14	.032	8.0	24.9	.46	83.3	.162	1.2	2.00	.011	.04	12.3	.10	46	.7	.13	5.3
99RLS008869	18.93	314.92	11.92	186.3	1147	9.8	14.5	653	5.83	34.2	.4	1.8	1.3	25.5	.78	2.36	1.89	88	.22	.142	4.3	16.6	.42	45.6	.122	1.2	2.16	.008	.04	6.4	.11	80	1.3	.39	7.3
RE 99RLS008877	1.73	37.15	8.97	153.0	198	9.8	5.1	244	2.21	8.7	.3	7.0	.8	23.7	.24	.56	.59	57	.46	.024	5.4	14.9	.26	45.4	.123	1.1	1.09	.014	.02	.9	.06	19	.2	.08	3.7
99KFFS008870	1.42	10.76	8.65	116.9	83	7.7	6.6	429	2.07	6.4	.4	7.1	1.1	29.1	.37	.38	.29	58	.60	.016	7.0	16.9	.37	55.7	.172	1.1	1.14	.013	.03	.3	.07	27	.3	.03	4.2
99KFFS008871	1.37	21.71	8.13	156.1	162	9.8	7.3	506	2.53	16.3	.8	9.2	.9	36.2	.76	.39	.36	62	.89	.041	9.8	19.8	.33	78.0	.113	1.1	1.32	.014	.04	.2	.07	44	.6	.03	4.2
99KFFS008872	1.25	8.51	7.03	137.2	36	8.0	5.6	224	2.39	11.2	.3	10.4	1.0	19.7	.47	.31	.18	81	.34	.010	5.6	20.1	.22	48.9	.205	1.1	1.12	.009	.03	<.2	.05	16	.1	<.02	4.3
99KFFS008873	1.89	29.22	8.53	325.1	211	10.2	8.1	660	2.62	32.8	.7	11.8	1.3	25.0	1.29	.63	.35	63	.53	.028	8.6	15.8	.37	60.4	.134	1.1	1.41	.012	.03	.2	.10	44	.7	.02	4.5
99KFFS008874	.69	5.76	24.18	68.9	71	5.8	3.4	149	1.24	3.2	.3	13.6	.8	12.8	.19	.20	.60	44	.14	.010	5.1	11.4	.22	47.8	.140	1.1	1.09	.007	.02	<.2	.05	20	.1	.02	5.6
99KFFS008875	1.45	11.87	8.83	100.0	112	10.8	5.4	200	3.36	11.3	.3	31.3	1.4	13.0	.22	.40	.33	85	.13	.039	6.1	22.8	.26	79.8	.146	<1	2.14	.006	.02	.2	.05	51	.2	.07	5.8
99KFFS008876	1.36	10.44	7.41	59.4	76	10.9	5.3	187	2.91	9.8	.3	15.6	1.3	10.2	.16	.39	.21	78	.11	.058	5.0	25.7	.24	75.3	.149	<1	1.89	.006	.02	.3	.04	41	.2	.03	4.9
99KFFS008877	1.82	37.92	9.51	156.8	204	9.7	5.3	252	2.33	8.9	.3	5.3	.9	24.9	.27	.57	.53	58	.48	.025	6.0	17.0	.27	46.7	.128	1.1	1.12	.014	.02	1.0	.07	28	.2	.07	3.7
99KFFS008878	3.33	48.26	14.32	1010.2	576	16.7	10.3	1542	3.20	31.4	.8	4.1	1.9	36.4	6.29	1.54	.83	75	.84	.036	13.1	19.5	.35	77.0	.141	1.2	2.00	.014	.05	.3	.17	54	.9	.05	5.9
99KFFS008879	1.85	43.31	14.80	383.4	234	10.2	13.5	961	3.41	13.1	.4	19.4	1.1	30.6	2.81	.60	1.34	92	.43	.031	8.6	18.0	.52	54.2	.167	1.1	1.49	.012	.04	.4	.08	26	.3	.10	6.4
99KFFS008880	2.27	78.91	13.47	683.0	258	12.4	15.5	1532	3.24	11.9	.4	7.9	.9	34.3	6.45	.60	.72	81	.64	.043	9.7	23.5	.35	58.4	.155	1.1	1.43	.010	.04	.3	.12	33	.4	.07	6.0
99KFFS008882	1.89	14.19	10.49	168.0	242	6.1	5.3	302	2.99	13.6	.2	8.9	.9	11.1	1.14	.47	1.63	91	.12	.039	4.9	18.6	.25	40.7	.193	1.1	1.15	.008	.03	.8	.06	23	.1	.12	7.0
99KFFS008883	1.66	10.16	8.82	70.8	81	5.8	4.1	207	3.05	19.5	.2	9.4	.7	9.0	.35	.51	.80	102	.11	.028	3.8	16.5	.24	32.9	.191	<1	1.02	.006	.03	.6	.06	27	.2	.08	6.8
99KFFS008884	1.65	18.07	10.82	96.8	142	7.3	6.0	238	3.11	21.5	.3	33.7	1.1	12.3	.44	.57	.75	88	.12	.041	5.5	18.6	.27	39.9	.176	<1	1.49	.007	.03	.5	.08	32	.2	.09	6.4
99KFFS008885	3.73	96.51	15.24	4908.2	301	13.4	16.8	1559	4.48	90.6	.4	27.1	1.1	22.0	11.42	1.03	1.83	107	.35	.039	4.6	23.7	1.09	65.5	.254	1.2	2.45	.016	.06	1.3	.21	31	.4	.32	9.0
99KFFS008886	1.43	8.96	6.88	81.8	51	5.0	6.3	294	3.27	5.9	.1	15.4	.5	7.2	.27	.42	.69	168	.09	.022	3.0	16.6	.68	75.8	.374	<1	1.22	.012	.15	.5	.20	16	.1	.10	11.7
STANDARD DS2	13.58	126.59	29.87	159.8	259	35.7	12.3	799	3.09	57.5	20.4	195.4	3.4	28.0	10.99	10.46	11.04	78	.52	.085	16.5	161.9	.59	138.7	.116	2.1	1.70	.030	.16	7.4	1.86	234	2.6	1.94	



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	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 ppm	W ppm	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm
99KFFS008887 400#	2.56	20.29	11.32	113.3	149	7.1	8.2	359	3.84	51.9	.3	33.0	.8	15.3	.58	.85	.95	140	.20	.033	6.2	19.9	.32	59.0	.253	1	1.23	.009	.05	.6	.10	27	.2	.12	9.6
99KFFS008888 400#	2.51	8.85	8.82	117.3	121	5.3	3.4	182	2.56	6.1	.2	10.2	.9	12.8	.46	.40	1.42	89	.12	.015	4.8	14.2	.19	52.6	.172	1	1.19	.006	.02	.4	.04	28	.2	.16	6.7
99KFFS008889 75#	4.04	98.25	8.51	1156.2	191	13.2	9.0	1003	2.46	3.6	.6	45.0	1.3	35.7	7.43	.43	.42	72	.59	.021	8.1	21.4	.46	49.6	.249	<1	1.18	.015	.04	.2	.14	41	.5	.03	5.5
99KFFS008890 100#	2.92	15.73	10.89	347.7	186	5.8	4.2	248	1.71	3.8	.3	13.0	.9	19.0	2.12	.23	.68	65	.24	.011	6.6	15.8	.23	47.4	.166	<1	.98	.009	.02	.9	.05	12	.2	.03	5.0
99KFFS008891 125#	8.09	100.14	12.18	1808.5	196	11.3	9.9	962	2.92	7.9	.5	10.9	.9	39.2	11.32	.95	1.57	72	.72	.041	7.2	16.5	.53	37.2	.152	1	1.43	.019	.06	.9	.11	38	1.0	.17	6.6
99KFFS008892 150#	2.28	16.79	8.85	108.7	165	10.1	6.4	247	2.77	8.1	.3	6.9	1.2	15.1	.82	.36	.53	93	.18	.026	6.4	22.1	.33	66.0	.192	<1	1.73	.008	.04	.4	.06	35	.2	.06	7.1
RE 99KFFS008892	2.25	17.77	8.49	110.1	159	10.8	6.7	259	2.91	7.7	.3	6.9	1.2	16.1	.77	.32	.46	97	.19	.025	7.0	22.0	.35	69.1	.203	1	1.82	.008	.04	.4	.06	25	.2	.05	7.0
STANDARD DS2	13.94	127.79	29.93	160.5	256	36.0	12.8	810	3.08	60.7	19.7	193.0	3.4	28.5	11.22	10.75	11.12	79	.53	.089	17.0	167.0	.59	140.8	.112	2	1.71	.030	.16	7.4	1.83	232	2.5	1.81	5.9

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

N.B.

SAMPLES MISSED

- LINE 850N-250E (SWAMP) NO "B" HORIZON
- " " - 375E " " " "
- " 1150N-025E " " " "
- " " - 050E " " " "



**APPENDIX II**

GEOCHEMICAL ANALYSIS CERTIFICATE



(Rock)

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	Au* ppb	Hg ppb
070526 DR	20	635	11	564	.9	2	5	569	2.99	<2	<8	<2	2	6	6.3	3	6	6	.27	.018	4	15	.45	18	.04	<3	.63	.09	.02	24	5	<10
070527 DR	4	148	7	539	<.3	4	3	197	1.53	5	<8	<2	2	6	6.3	<3	3	4	.25	.031	5	11	.16	42	.04	<3	.39	.09	.07	8	1	<10
070528 DR	12	149	84	197	.7	2	1	1006	.55	17	11	<2	<2	28	1.4	<3	4	3	3.27	.006	8	2	.10	39	<.01	<3	.58	.02	.23	2	1	<10
070529 DR	17	1178	6	118	1.6	4	4	265	2.10	13	<8	<2	<2	9	1.2	<3	<3	4	.37	.027	3	11	.22	14	.02	<3	.45	.07	.04	10	8	<10
070530 DR	6	134	6	47	<.3	6	3	309	1.58	4	10	<2	<2	6	.2	<3	<3	7	.36	.011	2	13	.32	22	.04	<3	.59	.10	.07	10	1	<10
070531 DR	3	95	3	27	<.3	4	3	274	2.02	6	8	<2	<2	8	<.2	<3	<3	6	.52	.014	4	12	.31	26	.04	<3	.60	.10	.08	11	1	<10
070532 DR	5	271	6	53	.6	5	3	322	2.57	<2	<8	<2	2	8	<.2	<3	<3	3	.47	.013	2	5	.22	21	.04	3	.45	.10	.04	9	1	<10
070533 DR	2	453	10	454	1.0	7	3	420	2.17	<2	11	<2	2	8	4.6	<3	8	14	.58	.029	3	22	.18	9	.06	<3	.44	.11	.05	24	2	<10
070534 DR	3	689	23	347	1.3	7	5	459	2.63	4	<8	<2	<2	12	2.5	<3	<3	23	.82	.038	4	9	.25	25	.08	5	.64	.10	.12	105	3	<10
070535 DR	13	243	11	613	.4	3	3	281	2.20	3	16	<2	2	13	6.5	<3	<3	8	.69	.039	3	8	.08	38	.07	6	.56	.10	.09	12	2	<10
070536 DR	6	12049	29	592	23.0	57	199	3774	13.41	82	<8	<2	3	22	9.6	<3	6	38	2.96	.135	4	25	.76	18	.09	9	1.99	.11	.09	1014	37	<10
RE 070536 DR	5	<del>11973</del>	<del>26</del>	<del>589</del>	<del>22.0</del>	<del>60</del>	<del>198</del>	<del>3767</del>	<del>13.42</del>	<del>77</del>	<8	<2	3	23	9.5	<3	<3	38	2.95	.135	4	24	.76	22	.09	<3	2.00	.11	.09	1026	41	<10
070537 DR	1	150	16	1617	.4	9	7	2929	.87	7	21	<2	4	39	14.4	<3	12	13	16.66	.060	3	3	.01	26	.06	3	.61	.12	.04	6	2	15
070538 DR	3	76	10	549	<.3	5	3	223	1.84	2	<8	<2	<2	10	7.3	<3	<3	8	.68	.024	3	13	.33	16	.06	<3	.73	.07	.08	13	2	10
070539 DR	9	1200	3	161	1.8	18	11	2000	4.49	<2	<8	<2	<2	9	<.2	5	<3	17	2.79	.070	4	12	.12	12	.05	10	1.05	.04	.01	1368	6	<10
070540 DR	8	803	14	103	2.0	48	104	1355	25.97	26	<8	<2	5	10	1.8	<3	4	13	1.02	.048	2	23	.13	17	.03	<3	.85	.06	<.01	2449	5	15
070541 DR	18	46	17	10256	<.3	8	8	1582	1.25	2	9	<2	<2	13	110.3	<3	<3	13	2.60	.047	3	19	.10	12	.09	<3	1.00	.08	.05	32	1	20
070542 DR	11	6277	<3	564	8.2	33	45	2652	17.05	24	<8	<2	3	5	8.8	<3	<3	40	2.55	.089	3	23	.17	3	.04	<3	.94	.03	.01	1709	29	<10
STANDARD C3/AU-R	26	67	36	164	5.5	36	11	781	3.29	54	26	2	21	28	23.5	19	21	79	.56	.085	19	164	.60	152	.08	20	1.81	.04	.15	20	553	920
STANDARD G-2	2	5	7	45	<.3	7	4	572	2.11	<2	11	<2	7	77	<.2	<3	<3	43	.68	.096	9	76	.62	238	.13	<3	1.02	.09	.48	2	<1	<10

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 2-2-2 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 MASSIVE SULFIDE AND LIMITED FOR NA K AND AL.  
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
- SAMPLE TYPE: ROCK AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. (10 gm) HG ANALYSIS BY FLAMELESS AA.  
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 2 1999

DATE REPORT MAILED: July 8/99

SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

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ACME ANALYTICAL LABORATORIES LTD.  
(ISO 9002 Accredited Co.)

PHONE (604) 253-3158 FAX (604) 53-1716



### GEOCHEMICAL ANALYSIS CERTIFICATE

(a) (Rock)



[REDACTED]

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	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	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	
64897	10.76	9109.07	6.88	1443.4	12511	38.2	31.9	2495	17.50	2.7	4.4	17.1	.2	2.1	13.32	.35	2.89	33.2	54	.038	1.2	22.2	.06	4.6	.038	<1	.89	.009	<0.1	368	3	62	226	21.8	.55	4.7
STANDARD DS2	14.40	135.09	31	171.5	54	38.7	13.3	847	3.31	65.5	22.0	206.8	3.1	32.2	11.48	9.98	11.63	84	.57	0.66	14.3	181.7	64	151.6	.120	2.1	.89	.040	.17	7.1	1.98	259	2.6	1.95	5.3	

30 GRAM SAMPLE IS DIGESTED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML WITH WATER, ANALYSIS BY ICP/ES & MS.  
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.  
- SAMPLE TYPE: ROCK

DATE RECEIVED: ~~XXXXXXXXXX~~ AUG 13 1999 DATE REPORT MAILED: *Aug 30 1999* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS