BRITISH COLUMBIA

PROSPECTORS ASSISTANCE PROGRAM

MINISTRY OF ENERGY AND MINES

GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR:	1999/2000
REPORT #:	PAP 99-6
NAME:	BARBARA WELSH

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations 15 to 17, page 6.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

Name BARBARA WELSH Reference Number 99/2000 - P9

LOCATION/COMMODITIES

Project Area (as listed in Part A) McMURDO CREEK MINFILE No. if applicable 82N 009

Location of Project Area NTS 82N/3E Lat 51°-02'-18" N Long 117°-08'-42" W

Description of Location and Access ACCESS TO THE PROSPECTING AREA IS GAINED VIA THE SPILLIMACHEEN RIVER ROAD FROM PARSON; AT 46 km, TURN SOUTH ALONG THE McMURDO CREEK RD. TO A TRAIL HEAD AT 56 km.

Main Commodities Searched For Pb-Zn-Ag-Au-Cu (MASSIVE SULPHIDE REPLACEMENT)

Known Mineral Occurrences in Project Area RUTH VERMONT MINE 82N 008
CROWN POINT MINE 82N 009

WORK PERFORMED

1. Conventional Prospecting (area) 650 Ha — 20 ROCK SAMPLES
2. Geological Mapping (hectares/scale) 650 Ha, — 1:20,000 SCALE
3. Geochemical (type and no. of samples) STREAM SEDIMENTS — 30 SAMPLES, 12 ANALYSED
4. Geophysical (type and line km)
5. Physical Work (type and amount)
6. Drilling (no. holes, size, depth in m, total m)
7. Other (specify)

SIGNIFICANT RESULTS

Commodities Au Claim Name N/A

Location (show on map) UTM Lat. 5657350 N UTM Long 488100 E Elevation 1800 m

Best assay/sample type 435 ppb Au in stream sediment

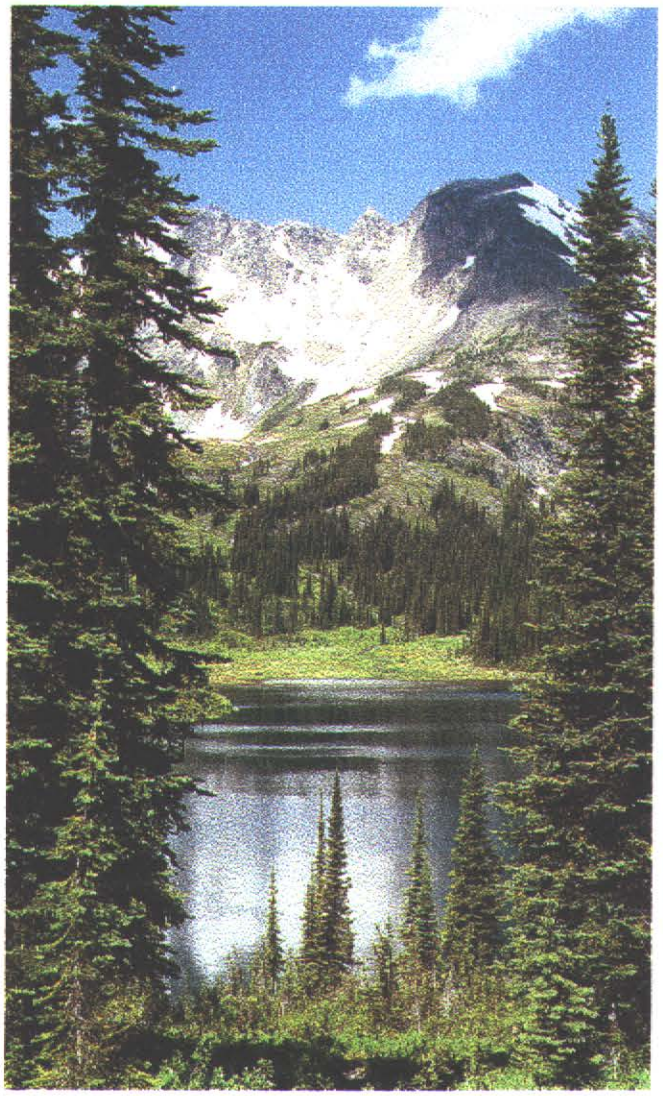
Description of mineralization, host rocks, anomalies STREAM SEDIMENTS DETECTED Au IN CREEK DRAINING A WELL-DEFINED BOWL, CAPPED BY LIMESTONE
- FOLLOWUP PROSPECTING FAILED TO LOCATE HARD-ROCK SOURCE.
- ALONG THIS SAME NW TREND, MINERALIZED LIMESTONE WAS FOUND IN THE VALLEY TO THE WEST OF SILENT MOUNTAIN, BUT ONLY MINOR SULPHIDES PRESENT.

Supporting data must be submitted with this TECHNICAL REPORT

Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act*.

PROSPECTING REPORT

COVERING: McMURDO CREEK, GOLDEN M.D.
MINFILE 082N 008, 009
NTS 82N/3E
57 KM NW OF PARSON, B.C



BY: BARBARA WELSH
619 NORTH FORK ROAD, R.R. #1,
LUMBY, BC V0E 2G0
TEL: (250) 547 – 6642
E-MAIL: KRV@BCSYMPATICO.CA

PROSPECTING IN THE McMURDO CREEK AREA

A. Introduction

Prospecting was carried out in the area of McMurdo Creek, along strike from the Ruth Vermont mine and the old Crown Point mine, both of which lie along a well-developed mineralized trend hosted within a succession of northwest-trending calcareous slates, schists, and limestone. As well as encompassing both tributaries of McMurdo Creek – the Crown Point occurrence is located on the east tributary, and Silent Pass contains the west tributary – the prospecting area also included the top end of Caribou Creek, located to the west of McMurdo Creek and just east of Glacier National Park. In each location, the mineralized trend was found to continue, which was indicated by the orthophoto map. This was the basis for the prospecting proposal, and since Ruth Vermont and Crown Point are described as sedex deposits, it was hoped that similar mineralization could be found to the northwest. In the course of carrying out prospecting, this trend could be seen as a more easily-eroded layer within the stratigraphic sequence and often could be spotted on the peaks as a split or depression with hoodoos, or erosional pillars. This same topographical expression could be seen along Vermont Creek, just upstream from the Ruth Vermont minesite.

Prospecting activities included geological mapping and sampling, and gold panning and collection of stream sediments. Although the two minesites are currently covered by crown-granted tenures, they were both examined in detail and sampled in order to get a background on the style of mineralization and to see if there were changes along the trend.

Prospecting activity was focused on the following areas

1) Crown Point (MINFILE occurrence 082N 009) which consists of development on five different showings, the 'A', 'Rialto', 'B', 'Bluff', and 'C' showings. At the McMurdo cabin, located in the meadow at the base of the mountain and which was at one time the base camp for the mine, there was a stockpile of diamond drill core which was also examined and sampled.
2) Ruth Vermont (MINFILE occurrence 082N 008). The area around the main adit and the minesite were examined and samples of ore were collected. A stockpile of diamond drill core was also examined.
3) Silent Pass This was the most interesting area because there are no known mineral occurrences and no mineral tenures located there. This pass also accessed the headwaters of the Duncan River.
4) Caribou Creek This area was also interesting for the same reasons as Silent Pass, and it proved to contain mineralization that likely continues into Glacier National Park.

B. Summary of Prospecting Activity

1. Crown Point (MINFILE 082N 009)

The Crown Point mine, located at the head of the east tributary of McMurdo Creek and at the base of the Spillimacheen Glacier, can be accessed by means of an old mining road (now a hiking trail starting from the McMurdo cabin).

Fig. 1: View of the Crown Point mine (formerly Witwaterstrand Syndicate Ltd) from the meadow just north of the McMurdo cabin. The waste dump from the 'A' tunnel is visible from this meadow.

Two samples (#349923 and 349924) were collected along the road at the 1900m. and 1980 m elevation respectively. The first consisted of quartz veins containing disseminated pyrite. The second was a thinly-layered black shale with alternating layers of carbonate. This shale is very similar to the black mineralized shale found at Ruth Vermont. It contained pyrite cubes, 1-5 mm across, some of which have been partially replaced by pyrrhotite. However, silver values are less than 1 ppm and lead and zinc are insignificant.

The principal showing, the 'A' tunnel can be found at approximately the 2060 metre elevation, although the portal has caved in and access can no longer be obtained. There are remnants of a blacksmith's shop on the road just before the 'A' tunnel is reached. There is an old Ingersol-Rand compressor adjacent to the portal, and the remains of an ore-sorting shack with accompanying waste dump on the slope below. Some of this sorted material was sampled and is represented by samples # 349925 and 349926.

These two samples are primarily Pb-Ag replacement ore, hosted by limestone. They are very similar to a sample of split Ex diamond drill core, (#349916) found beside the McMurdo cabin, and consist of lenses of limestone replaced by sulphides and hosted by shale. Pyrite cubes are common. Zinc is almost absent, and the only other anomalous metals are gold and arsenic.

Beyond the 'A' tunnel, the road becomes a narrow trail that continues to the northwest. There are small open-cuts along the way, consisting of quartz veins hosted by phyllite. The sulphides are mostly pyrite and pyrrhotite and silver, lead and zinc numbers are very low, although arsenic and gold are quite high (gold was 4520 ppb and 4960 ppb for two of these samples). Samples #349927 to 349929 represent the different showings. The Crown Point deposit is most likely a vein-manto sulphide replacement deposit.

Other traverses in the area included the slope east of Crown Point and also an area to the north which contains small quartz veins in phyllite which typically contain pyrite. These are represented by samples #349922 and 349915, respectively.

2. Ruth Vermont Mine (MINFILE O82N 008)

Fig. 2: Main portal at the Ruth Vermont mine.

As the Ruth Vermont mine has been well-documented, only three samples of different mineralization types were collected, for the purposes of comparison to the other mineralization found to the northwest. These are

samples #349930 to 349932. In contrast to the Crown Point deposit and the disseminated mineralization found in Silent Pass, this ore is definitely massive sulphide (up to 60% sulphides, primarily galena) that has replaced limestone. Significant mineralization is also seen in well-mineralized quartz-carbonate veins that cross-cut the bedding at 15-20 degrees. Silver, lead, zinc, cadmium, and even copper exceeded the detection limits of the I.C.P., but it was not felt necessary to assay these metals for the reason noted above. Arsenic, antimony, gold and tungsten are also present in significant amounts. Black carbonaceous shales containing pyrite cubes, similar to those found at Crown Point, were found (represented by sample #349932), but replacement mineralization is much more well developed than at Crown Point.

Another feature observed at Ruth Vermont which was also seen elsewhere to the northwest, and is associated with mineralization, are the hoodoos which are illustrated by the photo below:

Fig. 3: View of the valley of Vermont Creek, upstream from the Ruth Vermont mine. Sharp erosional pillars composed of limestone are also seen in Silent Pass and are associated with gold mineralization.

3. Silent Pass

Several traverses were made through Silent Pass, because this was felt to be the most likely place to find any unexplored deposits within a noticeable carbonate layer that transected the area. This trend coincides with numerous small lakes located at the headwaters of Caribou Creek and several tributaries of McMurdo Creek. Silent Lake itself is a deep

sinkhole, which is unusual for a small alpine lake. However, as work progressed, it became clear that there are multiple carbonate layers within the schists and slates of the Horsethief Creek Group sediments, all conformable with the stratigraphy and trending northwest-southeast. One area in particular, located north of the pass, was detected by gold panning. This area is a well-defined bowl, lined by hoodoos, and drained by a single stream. Visible gold was recovered from the stream sediments, but unfortunately, this does not fit in at all with the operating theory of a well-defined trend containing mineralization. In fact, mineralization is widespread and of very limited extent, contained within scattered quartz veins and disseminated within carbonate layers.

In the pass, the main mineralized zone, located along the southern end of the lake and marked by a depression on the east side, showed fine disseminations of pyrite and sphalerite, with strong carbonate alteration in evidence. The host rock is a finely-layered schist with alternating layers of carbonate. Samples #349917-349921 represent the rocks of this zone. None of the results obtained were of ore-grade, although there was some anomalous zinc and copper present.

Fig.4: Silent Lake, from the north shore. The Spillimacheen Glacier is seen in the background. Samples were collected from the Target zone, both to the east and west of the lake.

The target zone, illustrated in the photo above can be seen to continue to the northwest, and is marked by hoodoos on the crest of Silent Mountain. Trace mineralization could be seen as fine disseminations in carbonate-rich schist.

On the other side of the pass, beside a swampy area located near the headwaters of the Duncan River, there are numerous small veins occurring within slates and carbonates, but none showing any continuity or width.

This flat swampy area lines up with a second northwest-trending carbonate-rich zone, illustrated in the photo below (labelled "#2 zone").

Fig. 5: West side of Silent Lake. Hill at the end of the lake represents the divide between the Duncan River and the Spillimacheen drainage.

C. Stream Sediment Sampling

Gold panning was carried out in numerous tributaries of McMurdo and Caribou Creeks, and silt samples were collected for analysis where indicated by panning. These samples are shown on the 1:50,000 scale map as SP-1 to SP-12, and represent samples # 349901 to 349912 on the analysis certificate. In the field, magnetite was a good indicator mineral, as it was found in the creeks draining the Crown Point deposit (where the highest gold assays from bedrock were obtained), as well as in the creek where visible gold was recovered. The gold-bearing creek sample yielded 435 ppb gold. The samples from creeks draining Crown Point were anomalous in gold, arsenic, lead, and zinc. Samples from Caribou Creek did not show anomalous results.

D. Conclusions

The prospecting proposal for this project was predicated on the classification of the Ruth Vermont and Crown Point deposits as sedex Pb-Zn-Ag deposits which occur along a well-developed northwest trend. The trend is most evident, but either other styles of mineralization have overprinted the syngenetic sedex deposits, or these deposits are not sedex deposits, but another kind of replacement (epigenetic) mineralization. It appears that the Ruth Vermont is the centre of the mineralization, and it becomes more fragmented, and less well-mineralized to the northwest, though richer in gold. The method of using stream sediment sampling as a reconnaissance method proved to be quite reliable in this area for detecting anomalous zones.

Rock Sample Descriptions – McMurdo Creek

Sample No.	Assay Tag	Location	Description
CP-1	349915	dead-end road, east of Cabin	rusty quartz vein in graphitic phyllite which has caused a Landslide. Cubes of pyrite, 3-6 mm, limonite staining, carbonate between bedding planes
CP-2	349916	d.d. core, Ex from Crown Point mine	lenses of limonite-stained carbonate, containing pyrite cubes within sulphide replacement of carbonate in phyllite schist host.
CP-3	349917	Silent Lake, east side	calcareous schist, rusty carbonate on weathered surfaces, contains disseminated pyrite.
CP-4	349918	Silent Lake, east side	white quartz vein, parallel to bedding within calcareous schist, containing fine-grained sulphides
CP-5	349919	Silent Lake, east side	schist, alternating with carbonate layers(rusty)
CP-6	349920	Silent Lake, south side	similar to CP-5, but more carbonate in layers, diss. galena, pyrite
CP-7	349921	Silent Lake, southwest	med.grained, dark grey to black schist, no carbonate, cubes pyrite, f.g. sphalerite
CP-8	349922	big trib. of McMurdo, (Beverly Peak)	phyllitic slate, CO3 layers, rusty weathering
CP-9	349923	Crown Point, 'A' showing	rusty quartz vein in slate, diss. pyrite, chalco, no CO3
CP-10	349924	Crown Point,'A' portal	dark grey, f.gr. schist, large cubes pyrite, partially replaced by chalco, gal., sph.

CP-11	349925	Crown Point	similar to CP-10, but more diss., f.gr. sulphides; galena, CO3 replacement
CP-12	349926	Crown Point, along trail	rusty, vuggy quartz vein, no sulphides or CO3
CP-13	349927	Crown Point, open cut	rusty, vuggy quartz vein, very heavy, pyrite, arsenopyrite
CP-14	349928	Crown Point, ore sort	similar to CP-13, but >5% sulphides (arseno)
CP-15	349929	Crown Point, 'B' showing	similar to CP-14, but fewer Sulphides
CP-16	349930	Ruth Vermont, d.d.core	med.gr. aggregate of sulphides (Pb-Zn), cubes pyrite in a f.gr. dark matrix
CP-17	349931	Ruth Vermont, main adit	quartz-CO3 vein, massive sulphide (25%), mostyly galena, sphal. pyrite
CP-18	349932	Ruth Vermont	massive galena (see photo) in fractured limestone
CP-19	349933	Caribou Creek	dark, f.gr.slate, diss. pyrite rusty along bedding planes
CP-20	349934	Caribou Creek	med.gr., dirty quartzite, foliated, rusty weathering, no CO3

Sample CP-18 (349932)

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: KETTLE RIVER VENTURES **

619 NORTH FORK RD., R.R. #1
LUMBY, BC
V0E 2G0

Project :
Comments: ATTN: BARBARA WELSH

Page Number : 1-A
Total Pages : 1
Certificate Date: 06-SEP-1999
Invoice No. : I9927123
P.O. Number :
Account : RIH

CERTIFICATE OF ANALYSIS A9927123

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %
349901	201	202	< 5	< 0.2	2.28	30	< 10	10	< 0.5	< 2	0.94	< 0.5	25	44	54	5.78	< 10	< 1	0.02	< 10	1.15
349902	201	202	< 5	< 0.2	1.53	46	< 10	< 10	< 0.5	< 2	0.13	< 0.5	20	33	48	5.91	< 10	< 1	0.01	< 10	1.05
349903	201	202	435	< 0.2	2.09	16	< 10	10	< 0.5	< 2	0.10	< 0.5	16	36	20	4.86	< 10	< 1	0.02	10	0.97
349904	201	202	< 5	< 0.2	1.81	32	< 10	10	< 0.5	< 2	0.17	< 0.5	22	33	32	5.67	< 10	< 1	0.02	< 10	0.91
349905	201	202	< 5	< 0.2	2.67	24	< 10	10	< 0.5	< 2	0.13	< 0.5	21	52	58	6.08	< 10	< 1	0.03	10	1.40
349906	201	202	10	< 0.2	1.18	98	< 10	10	< 0.5	< 2	0.22	< 0.5	27	29	61	7.83	< 10	< 1	0.03	< 10	1.23
349907	201	202	< 5	< 0.2	2.58	20	< 10	10	< 0.5	< 2	0.13	< 0.5	21	49	58	5.74	< 10	< 1	0.02	< 10	1.35
349908	201	202	15	< 0.2	0.78	82	< 10	< 10	< 0.5	< 2	0.25	< 0.5	23	21	54	6.58	< 10	< 1	0.01	< 10	1.00
349909	201	202	< 5	< 0.2	1.82	78	< 10	10	< 0.5	< 2	0.14	< 0.5	26	39	54	7.22	< 10	< 1	0.01	10	1.28
349910	201	202	< 5	< 0.2	2.05	20	< 10	10	< 0.5	< 2	0.13	< 0.5	18	38	41	4.84	< 10	< 1	0.01	20	1.01
349911	201	202	< 5	< 0.2	1.22	32	< 10	10	< 0.5	< 2	0.09	< 0.5	14	20	20	3.56	< 10	< 1	0.01	20	0.50
349912	201	202	< 5	< 0.2	2.51	24	< 10	10	< 0.5	< 2	0.14	< 0.5	20	46	52	5.38	< 10	< 1	0.02	10	1.24

CERTIFICATION:

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: KETTLE RIVER VENTURES **

619 NORTH FORK RD., R.R. #1
LUMBY, BC
V0E 2G0

Project :
Comments: ATTN: BARBARA WELSH

Page Number :1-B
Total Pages :1
Certificate Date: 06-SEP-1999
Invoice No. :I9927123
P.O. Number :
Account :RIH

CERTIFICATE OF ANALYSIS A9927123

SAMPLE	PREP CODE		Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
349901	201	202	675	1	< 0.01	63	520	16	0.14	< 2	3	45	< 0.01	< 10	< 10	16	< 10	102
349902	201	202	745	< 1	< 0.01	61	500	20	0.12	2	3	7	< 0.01	< 10	< 10	12	< 10	102
349903	201	202	465	1	< 0.01	48	370	8	0.11	4	1	8	< 0.01	< 10	< 10	14	< 10	94
349904	201	202	545	1	< 0.01	49	380	14	0.85	< 2	2	10	< 0.01	< 10	< 10	13	< 10	86
349905	201	202	745	1	< 0.01	66	540	34	0.10	2	3	10	< 0.01	< 10	< 10	18	< 10	116
349906	201	202	1095	< 1	< 0.01	80	550	70	0.24	2	5	11	< 0.01	< 10	< 10	11	< 10	134
349907	201	202	745	< 1	< 0.01	65	510	54	0.07	< 2	3	9	< 0.01	< 10	< 10	17	< 10	102
349908	201	202	905	< 1	< 0.01	67	590	40	0.23	2	4	11	< 0.01	< 10	< 10	9	< 10	112
349909	201	202	940	1	< 0.01	75	510	20	0.20	< 2	4	9	< 0.01	< 10	< 10	15	< 10	124
349910	201	202	545	< 1	< 0.01	53	530	14	0.07	2	2	10	< 0.01	< 10	< 10	13	< 10	88
349911	201	202	225	< 1	< 0.01	36	250	18	0.05	2	1	11	< 0.01	< 10	< 10	9	< 10	86
349912	201	202	700	1	< 0.01	61	510	20	0.12	< 2	2	10	< 0.01	< 10	< 10	16	< 10	98

CERTIFICATION: _____

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: KETTLE RIVER VENTURES **

619 NORTH FORK RD., R.R. #1
LUMBY, BC
V0E 2G0

Project :
Comments: ATTN: BARBARA WELSH

Page Number :1-A
Total Pages :1
Certificate Date: 10-SEP-1999
Invoice No. :I9927122
P.O. Number :
Account :RIH

* PLEASE NOTE

CERTIFICATE OF ANALYSIS A9927122

SAMPLE	PREP CODE		As ppm	Sb ppm	Hg ppb	Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)
349915	205	226	12	0.2	10	< 0.2	3.01	80	< 0.5	< 2	5.49	< 0.5	12	215	6	6.01
349916	205	226	52	2.0	20	1.2	3.63	220	0.5	< 2	13.25	< 0.5	7	65	11	8.77
349917	205	226	10	< 0.2	20	0.4	2.61	100	< 0.5	< 2	1.36	< 0.5	5	276	5	1.36
349918	205	226	8	< 0.2	< 10	0.4	0.20	10	< 0.5	< 2	0.13	< 0.5	2	278	1	0.50
349919	205	226	20	< 0.2	10	0.6	3.03	110	< 0.5	< 2	1.68	< 0.5	8	292	13	2.22
349920	205	226	22	0.2	10	0.6	3.70	110	< 0.5	< 2	1.11	< 0.5	10	235	18	2.72
349921	205	226	32	< 0.2	20	0.6	11.25	260	0.5	< 2	0.28	< 0.5	29	126	69	10.75
349922	205	226	1	< 0.2	10	0.6	7.87	750	2.0	< 2	1.78	< 0.5	14	115	19	3.80
349923	205	226	29	< 0.2	10	0.6	0.17	20	< 0.5	< 2	8.95	< 0.5	3	160	3	7.10
349924	205	226	9	< 0.2	< 10	0.4	5.42	310	1.5	< 2	15.90	< 0.5	17	109	33	2.90
349925	205	226	218	84	10	60.4	10.70	490	2.0	< 2	6.18	2.5	25	125	97	6.92
349926	205	226	29	0.8	10	1.2	1.20	70	< 0.5	< 2	0.13	< 0.5	10	238	26	5.00
349927	205	226	1380	1.2	10	1.8	2.88	140	0.5	< 2	0.05	< 0.5	13	222	14	7.74
349928	205	226	>10000	3.8	10	1.4	0.43	30	< 0.5	< 2	0.04	< 0.5	12	286	14	9.90
349929	205	226	2350	0.8	< 10	0.2	2.02	270	< 0.5	< 2	0.07	< 0.5	3	318	5	1.48
349930	205	226	2830	150	260	>100.0	1.63	70	< 0.5	< 2	2.85	>500	8	160	617	16.95
349931	205	226	4200	>1000	530	>100.0	0.43	20	< 0.5	< 2	5.29	>500	5	115	4600	10.90
349932	205	226	1600	>1000	820	>100.0	0.11	< 10	< 0.5	Intf*	0.02	>500	< 1	153	>10000	3.90
349933	205	226	30	26	< 10	7.4	4.08	240	0.5	< 2	6.06	7.0	15	193	57	3.20
349934	205	226	9	8.2	< 10	2.2	3.06	150	0.5	< 2	3.39	0.5	10	276	17	2.17

* INTERFERENCE: HIGH Cu ON Bi & P.

CERTIFICATION: _____

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: KETTLE RIVER VENTURES **

619 NORTH FORK RD., R.R. #1
LUMBY, BC
V0E 2G0

Project :
Comments: ATTN: BARBARA WELSH

Page Number :1-B
Total Pages :1
Certificate Date: 10-SEP-1999
Invoice No. :I9927122
P.O. Number :
Account :RIH

* PLEASE NOTE

CERTIFICATE OF ANALYSIS A9927122

SAMPLE	PREP CODE	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)
349915	205 226	0.39	2.60	2300	< 1	0.17	41	650	14	174	0.04	27	< 10	70
349916	205 226	1.18	3.13	2220	< 1	0.35	16	200	412	308	0.03	30	50	72
349917	205 226	0.44	0.28	350	< 1	0.77	13	110	18	55	0.04	21	< 10	18
349918	205 226	0.04	0.05	155	< 1	0.03	5	30	6	9	< 0.01	3	< 10	4
349919	205 226	0.44	0.14	1240	< 1	0.93	22	90	16	75	0.05	29	< 10	22
349920	205 226	0.40	0.42	1080	< 1	1.17	28	230	12	68	0.06	32	< 10	50
349921	205 226	0.91	2.65	1040	< 1	3.04	84	1040	22	128	0.07	69	< 10	238
349922	205 226	2.78	1.02	645	< 1	0.42	36	470	18	169	0.35	88	< 10	58
349923	205 226	0.03	2.15	1625	< 1	0.01	6	40	20	114	< 0.01	4	< 10	54
349924	205 226	1.72	0.75	1915	< 1	0.33	43	1580	48	452	0.09	51	< 10	48
349925	205 226	3.09	1.47	1045	< 1	1.22	59	340	>10000	373	0.09	81	< 10	46
349926	205 226	0.34	0.08	670	< 1	0.09	26	80	140	22	0.01	12	< 10	40
349927	205 226	0.81	0.06	315	< 1	0.28	40	200	166	48	0.03	24	< 10	42
349928	205 226	0.13	0.02	130	< 1	0.04	36	70	154	16	< 0.01	5	< 10	48
349929	205 226	0.63	0.04	65	< 1	0.19	8	270	20	52	0.03	18	< 10	10
349930	205 226	0.63	0.87	6150	< 1	0.06	14	210	>10000	82	0.01	13	230	>10000
349931	205 226	0.17	1.72	8440	< 1	0.01	8	140	>10000	117	< 0.01	2	30	>10000
349932	205 226	0.04	< 0.01	50	< 1	< 0.01	3	Intf*	>10000	4	< 0.01	< 1	40	>10000
349933	205 226	1.18	0.64	900	< 1	0.54	29	450	924	221	0.08	44	< 10	782
349934	205 226	0.74	0.40	600	1	0.60	20	290	202	143	0.08	31	< 10	110

* INTERFERENCE: HIGH Cu ON Bi & P.

CERTIFICATION: _____ *

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: KETTLE RIVER VENTURES **

619 NORTH FORK RD., R.R. #1
LUMBY, BC
V0E 2G0

Project :
Comments: ATTN: BARBARA WELSH

Page Number :1
Total Pages :1
Certificate Date: 24-SEP-1999
Invoice No. :19929316
P.O. Number :
Account :RIH

CERTIFICATE OF ANALYSIS A9929316

SAMPLE	PREP CODE	Au ppb FA+AA
349916	244 --	15
349917	244 --	< 5
349918	244 --	< 5
349919	244 --	< 5
349920	244 --	< 5
349921	244 --	5
349925	244 --	70
349926	244 --	185
349927	244 --	4520
349928	244 --	4960
349929	244 --	175
349930	244 --	270
349931	244 --	1195
349932	244 --	870
349933	244 --	10
349934	244 --	< 5

CERTIFICATION:

RERUNS from A9927122

MORAINE
ICEFIELD
SILENT MTN
2600
2200
2100
2000
1900
1800
1700
1600
2300
2400
SCREE
CP-1
CP-2
CP-3
CP-4
CP-5
CP-6
CP-7
CP-8
CP-9
CP-10
CP-11
CP-12
CP-13
CP-14
CP-15
CP-16
CP-17
mk bottom
± 2038 (deep)
± 2114
± 2126
2308
McMURDO CABIN
BC 84035
96
SILENT PASS
MORAINE
SPILLIMACHEEN GLACIER
BROWN PT HUT
82M.005
1:20,000 TRIM
ROCK SAMPLE
BEVERLY PEAK
2766
GLACIER
2500
2600
2665

KADRYNIAN

HORSETHIEF CREEK GROUP

slate/phyllite with interbedded carbonate layers and lenses

- slate/phyllite
- carbonate schist
- limestone/slate interbeds

99-06 pg 25

SCALE: 1:50,000 NTS 82N/3

STREAM SEDIMENTS

●SP-1 SAMPLE SITE

✕ GOLD PANNING SITE

⊗ CP-1 ROCK SAMPLE

NTS 82N/3
SCALE: 1:50,000

PURCELL MOUNTAINS

SPILLIMACHEEN MOUNTAINS

Baird Lake

Spillimacheen

Caribou Peak

Caribou Creek

SP-10

SP-11

SP-12

CP-19

CP-20

McMurdo River

CP-8

SP-1

SP-2

SP-3

SP-4

SP-5

SP-6

SP-7

SP-8

SP-9

SILENT MOUNTAIN

Silent Lake

Cabin

Beverly Peak

Duncan River

Spillimacheen Glacier

Twin Towers Peak

Cony Peak

David Peak

Bobbie Burns Creek

Bennison Creek

5656000

5654000

1:20,000 ORTHOPHOTO 82N.005

TRACE OF MINERALIZED TREND
(OBLIQUE TO NW-TRENDING
FOLIATION OF SLATES)