

**BRITISH COLUMBIA**  
**PROSPECTORS ASSISTANCE PROGRAM**  
**MINISTRY OF ENERGY AND MINES**  
**GEOLOGICAL SURVEY BRANCH**

PROGRAM YEAR: 1998/99

REPORT #: PAP 98-46

NAME: JEREMY MARLOW

5

**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 Jeremy Marlow Reference Number 98/09 P100

**LOCATION/COMMODITIES**

Project Area (as listed in Part A) 82L-SE. MINFILE No. if applicable \_\_\_\_\_

Location of Project Area NTS " Lat \_\_\_\_\_ Long \_\_\_\_\_

Description of Location and Access By all assessable roads, on the mapsheet-

Main Commodities Searched For Industrial Minerals.

Known Mineral Occurrences in Project Area \_\_\_\_\_

**WORK PERFORMED**

1. Conventional Prospecting (area) Driving all roads and doing short traverses
2. Geological Mapping (hectares scale) Sampling outcrops and evaluating them
3. Geochemical (type and no. of samples) at home.
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 \_\_\_\_\_ Claim Name \_\_\_\_\_

Location (show on map) Lat \_\_\_\_\_ Long \_\_\_\_\_ Elevation \_\_\_\_\_

Best assay sample type \_\_\_\_\_

Description of mineralization, host rocks, anomalies Anything worth work was near to dwellings or the topography or stratigraphy, was wrong to possibly quarry any amount of material.

**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*.

**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 Jeremy Marlow Reference Number 98/99 P100

**LOCATION/COMMODITIES**

Project Area (as listed in Part A) 82L-5W. MINFILE No. if applicable \_\_\_\_\_

Location of Project Area NTS " Lat \_\_\_\_\_ Long \_\_\_\_\_

Description of Location and Access By all possible roads, on the mapsheet.

Main Commodities Searched For Industrial Minerals

Known Mineral Occurrences in Project Area \_\_\_\_\_

**WORK PERFORMED**

1. Conventional Prospecting (area) Driving all roads and doing short
2. Geological Mapping (hectares scale) traverses, sampling outcrops, then
3. Geochemical (type and no. of samples) evaluating samples at home.
4. Geophysical (type and line km) 1- whole rock and CEC, and exchangeable
5. Physical Work (type and amount) \_\_\_\_\_
6. Drilling (no. holes, size, depth in m, total m) \_\_\_\_\_
7. Other (specify) \_\_\_\_\_

**SIGNIFICANT RESULTS**

Commodities \_\_\_\_\_ Claim Name \_\_\_\_\_

Location (show on map) Lat \_\_\_\_\_ Long \_\_\_\_\_ Elevation \_\_\_\_\_

Best assay sample type \_\_\_\_\_

Description of mineralization, host rocks, anomalies Anything worth work was near to dwellings or the topography or stratigraphy was wrong to establish any kind of a quarry.

**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*.

5

**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 Jeremy Marlow Reference Number 98/99 P100

**LOCATION/COMMODITIES**

Project Area (as listed in Part A) 82 L 12 E MINFILE No. if applicable \_\_\_\_\_

Location of Project Area NTS \_\_\_\_\_ " \_\_\_\_\_ Lat \_\_\_\_\_ Long \_\_\_\_\_

Description of Location and Access All passable roads were drove on the mapsheet.

Main Commodities Searched For Industrial Minerals.

Known Mineral Occurrences in Project Area \_\_\_\_\_

**WORK PERFORMED**

1. Conventional Prospecting (area) Driving all roads and doing short traverses.
2. Geological Mapping (hectares/scale) \_\_\_\_\_
3. Geochemical (type and no. of samples) 3 Whole Rock / CEC and exchangeables.
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) Blowtorch testing.

**SIGNIFICANT RESULTS**

Commodities Perlite Claim Name Perl 1-4 and CYAN 1-2

Location (show on map) Lat 50° 33' 19.46" Long 5059' 19.45" Elevation 1180m. Perl.

Best assay/sample type White frothy glass on heating. 1250m CYAN

Description of mineralization, host rocks, anomalies Perl 1-4 Glassy breccia, some of which partially expands. However not very uniform.

CYAN 1-2. Expands up to 10x size to white frothy glass. Uniform good grade. Snow, so couldn't evaluate the discovery. Eocene

CYAN - Some Intrusives? Pacites. Flows.

**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.

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 Jeremy Marlow Reference Number 98/99 P100

LOCATION/COMMODITIES

Project Area (as listed in Part A) 82L 12W MINFILE No. if applicable \_\_\_\_\_

Location of Project Area NTS " Lat \_\_\_\_\_ Long \_\_\_\_\_

Description of Location and Access All useable roads on mapsheet.

Main Commodities Searched For Industrial Minerals.

Known Mineral Occurrences in Project Area \_\_\_\_\_

WORK PERFORMED

1. Conventional Prospecting (area) Groundsearch over 2 Km.
2. Geological Mapping (hectares/scale) 1 Km x 300 meters.
3. Geochemical (type and no. of samples) 13 whole rock analysis, 2 C-EC sand
4. Geophysical (type and line km) exchangeables, 1 Au. geochem and one 28 E.I.P.
5. Physical Work (type and amount) 2 Km grid.
6. Drilling (no. holes, size, depth in m, total m) \_\_\_\_\_
7. Other (specify) \_\_\_\_\_

SIGNIFICANT RESULTS

Commodities KAOLIN Claim Name KA0 1-5.

Location (show on map) Lat 50°37' Long 120°56' Elevation 650m.

Best assay/sample type Similar to Buse Lake. whole rock - low potassium and sodium.

Description of mineralization, host rocks, anomalies Arkosic sediments covered by basalts. Kaolin clasts in breccias to 4cm. On wide, long bench.

4. Geochemical. MAR 01. In the general area.

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.

5

**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 Jeremy Marlow Reference Number 98/99 P100

**LOCATION/COMMODITIES**

Project Area (as listed in Part A) 82 L 12 W MINFILE No. if applicable \_\_\_\_\_

Location of Project Area NTS " Lat \_\_\_\_\_ Long \_\_\_\_\_

Description of Location and Access All useable roads on mapsheet.

Main Commodities Searched For Industrial Minerals.

Known Mineral Occurrences in Project Area \_\_\_\_\_

**WORK PERFORMED**

1. Conventional Prospecting (area) Walking and following stratigraphy
2. Geological Mapping (hectares scale) taking samples and doing tests.
3. Geochemical (type and no. of samples) 3 Whole Rock 3 C.E.C. and Exchangeables
4. Geophysical (type and line km) 3-28 Element I.C.P.
5. Physical Work (type and amount) \_\_\_\_\_
6. Drilling (no. holes, size, depth in m, total m) \_\_\_\_\_
7. Other (specify) \_\_\_\_\_

**SIGNIFICANT RESULTS**

Commodities Montmorillonite. Claim Name Atto 1-2.

Location (show on map) Lat 50° 37' Long 120° 52' Elevation 600 meters.

Best assay/sample type 62 C.E.C. and a free swell of 80 ml.

Description of mineralization, host rocks, anomalies Tuffaceous sediments overlain by basalts. Sediments largely altered to montmorillonite. All Excess

**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.

**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 Jeremy Maslow Reference Number 98/99 P100

**LOCATION/COMMODITIES**

Project Area (as listed in Part A) 82 L 12 W MINFILE No. if applicable \_\_\_\_\_

Location of Project Area NTS \_\_\_\_\_ " \_\_\_\_\_ Lat \_\_\_\_\_ Long \_\_\_\_\_

Description of Location and Access All useable roads on map sheet.

Main Commodities Searched For Industrial Minerals.

Known Mineral Occurrences in Project Area \_\_\_\_\_

**WORK PERFORMED**

1. Conventional Prospecting (area) Walking all roads looking for
2. Geological Mapping (hectares/scale) opal, checking all outcrops.
3. Geochemical (type and no. of samples) \_\_\_\_\_
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 Precious Opal Claim Name Monte 1-2-34

Location (show on map) Lat 50° 30' Long 119° 55' 119° 58' Elevation 1525 meters.

Best assay/sample type veinlets of clear botryoidal opal?  
with colours. Good host rocks.

Description of mineralization, host rocks, anomalies Host rocks are vesicular  
lava similar to Okanagan Opals to the east.  
All Eocene.

**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*.

Summary of Prospecting Activities 1998

And

Technical Report.

Author: J. Marlow

December, 1998.



## Table Of Contents

Summary Of Prospecting Activities	Page 1
<u>Technical Report</u>	
Geology	Page 1
Prospecting	Page 1
Table 1.	Page 1
<u>Properties And Work Performed</u>	
1. Monte Property	Page 2
2. Perl Property	Page 2
3. Atto Property	Page 2
4. KAO Property	Page 3
5. CYAN Property	Page 3
Analysis And Testing	Page 3
Table 2.	Page 4
Appendix 1. Location Maps, Claims	
Appendix 2. Eco-Tech Analysis And Invoices	
Appendix 3. Pacific Soils Analysis	
Appendix 4. Receipts Over \$100.00	
Appendix 5. Maps And Sketches	

Summary of Prospecting Activities: In the 1998 field season, I obtained a prospectors grant to look for industrial minerals in project area 82L /5E, 82L /5W, 82L /12W, and 82L /12E. As a result of the grant, five industrial locations were discovered and subsequently staked.

Three of the discoveries are significant and the commodities are kaolinite, perlite and montmorillonite. (See Table 1). Two other claims, the Perl 1 - 4, (Pitchstone) and Monte 1 - 4, (Precious Opal) are not as exciting but have some exploration potential.

### **Technical Report**

Geology: The area is limited to outcrop exposure up and out of the main valleys and is largely till covered. The lower parts of the valleys expose Nicola volcanics and sediments overlain by Eocene basalt's, breccias, conglomerates and tuffs. In this stratigraphy, there are lot of amygdule zeolites, some clays, etc. Because of the relief, they are hard to trace or follow and are usually cut off by further volcanic activity.

The three claims that follow-up work was performed on, have good size and are laying so the topography is not a problem for quarrying.

Prospecting: Prospecting consisted of driving all accessible roads, and short traverses were done on areas of interest or where possible contacts might be exposed. Analysis done was composed mainly of Whole Rock Analysis and Cation Exchange Capacities and Exchangeables.

**Table 1.**

Claim Name	Tenure #	Commodity	N.T.S.	Longitude	Latitude	Expiry Date
Kao 1-4	363666-69	Kaolinite	82L12W			June,14/99
Monte 1-4	363975-78	Prec. Opal	82L12W			June,19/99
Kao 5	363979	Kaolinite	82L12W			July,2/99
Atto 1-2	364218-19	Montmorillonite	82L12W			July,2/99
Perl 1-4	367305-08	Pitchstone	82L12E			Nov,20/99
Cyan 1-2	367316-17	Perlite,Clays	82L12W 82L12E			Nov,21/99

### Properties and Worked Performed:

#### Monte Property.

The Monte claims were staked in June of 1998. Flashes of colors were observed in botryoidal veinlets of what may be opal or chalcedony. 3 days were spent searching for precious opal, however, there is a lot of overburden with roads being the best exposures. The veinlets are hosted in vesicular basalt, similar to the host rocks of the Okanagan Opals discovery to the east. The claims are located approx. 7km. and 8km. up Monte Hills rd. off Teakettle Valley rd. The area is either clearcuts with much overburden or thick bush. These claims will be prospected more in 1999, and evaluated to see if they will be held or let go of. The claims sit at approx. 1525 meters.

#### Perl Property

The Perl 1-4 claims were staked November 19, 1998. They were staked for the possible perlite potential. Some samples of the breccias frothed to brown glass and expanded up to five times when heated. Further prospecting, sampling and testing reveals the host rock to be more of a pitchstone breccia than a perlite, however, the rocks that partly swell cover a large area. Plans for 1999 include more sampling, testing and more emphasis put on the geology, specifically whether the hydration process is one where alteration is complete to produce an actual deposit or that the process is one of weathering. This property, I would like to evaluate or option off in 1999. The property is accessed by turning north at Falkland onto Chase Creek road, then west on the Paxton Valley road. At approx. 5.2km, turn left onto logging road and proceed 2.4km, then turn left. Continue approx. 1.1km and turn right. Go up road approx. 800 meters and turn left. Property sits from approx. 500 meters to 1.5km intermittent along road. It is at an elevation of approx. 1182 meters.

#### Atto Property

The Atto property is located just north of the junction of the Barnhartvale-Lower Robbins Range road at an elevation of 600 meters. Clay gouge on the main road and layered claystone is exposed in a recent cut above the road. The layered material was found to be colloidal and also absorbed oil. The property was staked on July 1, 1998.

This material seems to be of good grade montmorillonite. (See Appendix Atto 1-2-3). Although calcium is the dominant exchange ion, the total C.E.C. of 62 gives the property material enough potential to carry on a bigger program in 1999. The detrimental factors are houses in the immediate vicinity and basalt's overlaying the zone. However, it may be worth developing as the clay layers are at least six meters thick and there may be enough tonnage available for a small quarry. This would also depend if the material is soft to quarry without blasting. (See Appendix II for Sample locations and Sketch.)

#### 4. Kao Property

The Kao 1-4 claims were staked on June 13, 1998. The Kao 5 claims was staked on July 1, 1998. The property is accessed by Duck Range road approx. 1.2 km off the Kamloops-Vernon Hwy. The property is at an elevation of approx. 700 meters.

It is a low-grade Arkosic sedimentary kaolin deposit. It is very similar to the Buse Lake quarry situated approx. 12 km to the west. (See Whole Rock and Sketch). I will try to option this property. An assessment will be filed in 1999. The most detrimental factor here, again is the vicinity to houses.

#### 5. Cyan Property

This was the most exciting discovery I made this year but, unfortunately, there was snow to contend with and so I couldn't do much follow-up in regards to size, etc. The perlite was discovered by blowtorching samples at home. The outcrop was then revisited and re-sampled but because of snow and overburden, the size couldn't be defined. The rocks contacting on the west are mainly dacite clays but these couldn't be evaluated further. Whole Rock and C.E.C. were done on two samples. (See Analysis and Sketch. Appendix 3).

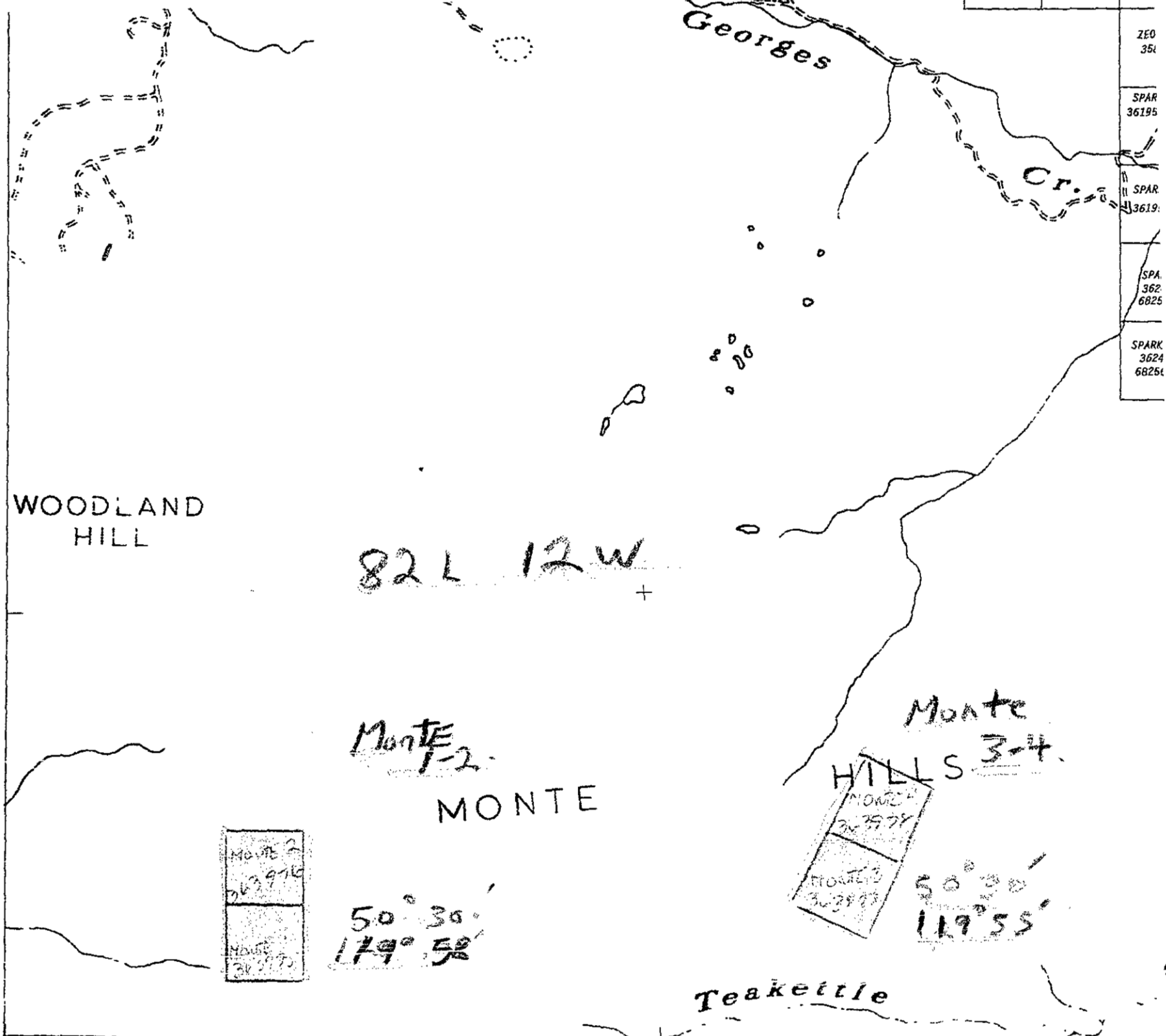
#### Analysis And Testing

Analysis consisted of Whole Rock Geo-chem which was done at Eco-Tech Laboratories in Kamloops. One Gold Geo-chem and four 28 element I.C.P. analysis were also done at Eco-Tech in Kamloops. Seven samples were analyzed for Cation-Exchange Capacity and the Exchangeables at Pacific Soils in Richmond.

In addition I did swelling tests with a blowtorch, usually at home because of the wind out on the property. (Cyn 01 puffs up to 10 times). I also did free swell tests for the more colloidal samples. The Atto 1 was the best sample and had a free swell of 8mL. The method was done using 2.5 grams of dry pulverized sample, adding slowly to 100mL of water in a cylinder and let sit for a day.

<u>Whole Rock</u> <u>Analysis</u>	<b><u>Table 2.</u></b> <u>28 Element I.C.P.</u>	<u>Au Geo-Chem</u>	<u>C.E.C. and</u> <u>Exchangeables</u>
Atto 01	Yes		Yes
Atto 02	Yes		Yes
Atto 03	Yes		Yes
Pin 01			Yes
MAR 01 (Martin Mountain)			
EST 02 (Perl- Estekelewan Mt.)			Yes
CYN 01			Yes
CYN 06			
KAO 01			Yes
KAO 02			Yes
KAO 03			
KAO 04			
KAO 05			
KAO 06	Yes	Yes	
KAO 07			
KAO 08			
KAO 09			
KAO 10			
KAO 11			
KAO 12			
KAO 13			

Appendix 1.



ZEO	354
SPAR	36195
SPAR	3619
SPA	362 6825
SPARK	3624 68254

WOODLAND  
HILL

5601024

82 L 12 W +

MONTE  
1-2

MONTE

50° 30'  
179° 58'

MONTE 2 362916
MONTE 362917

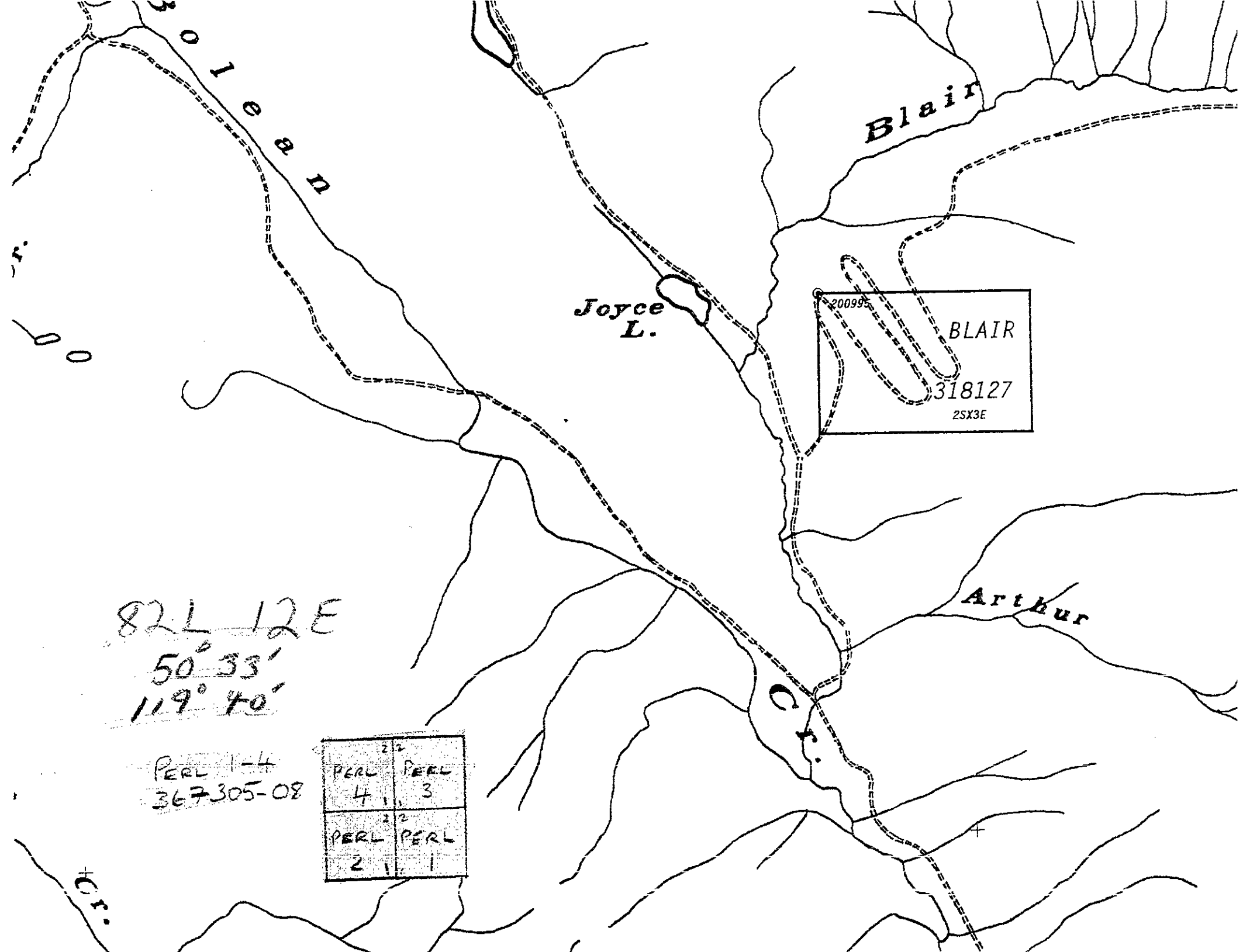
MONTE  
HILLS 3-4

MONTE 4 362918
MONTE 5 362919

50° 30'  
119° 55'

Teakettle

50°30'00"  
120°00'00"



Blair

Solemn

Joyce L.

20099  
BLAIR  
318127  
2SX3E

Arthur

C.R.

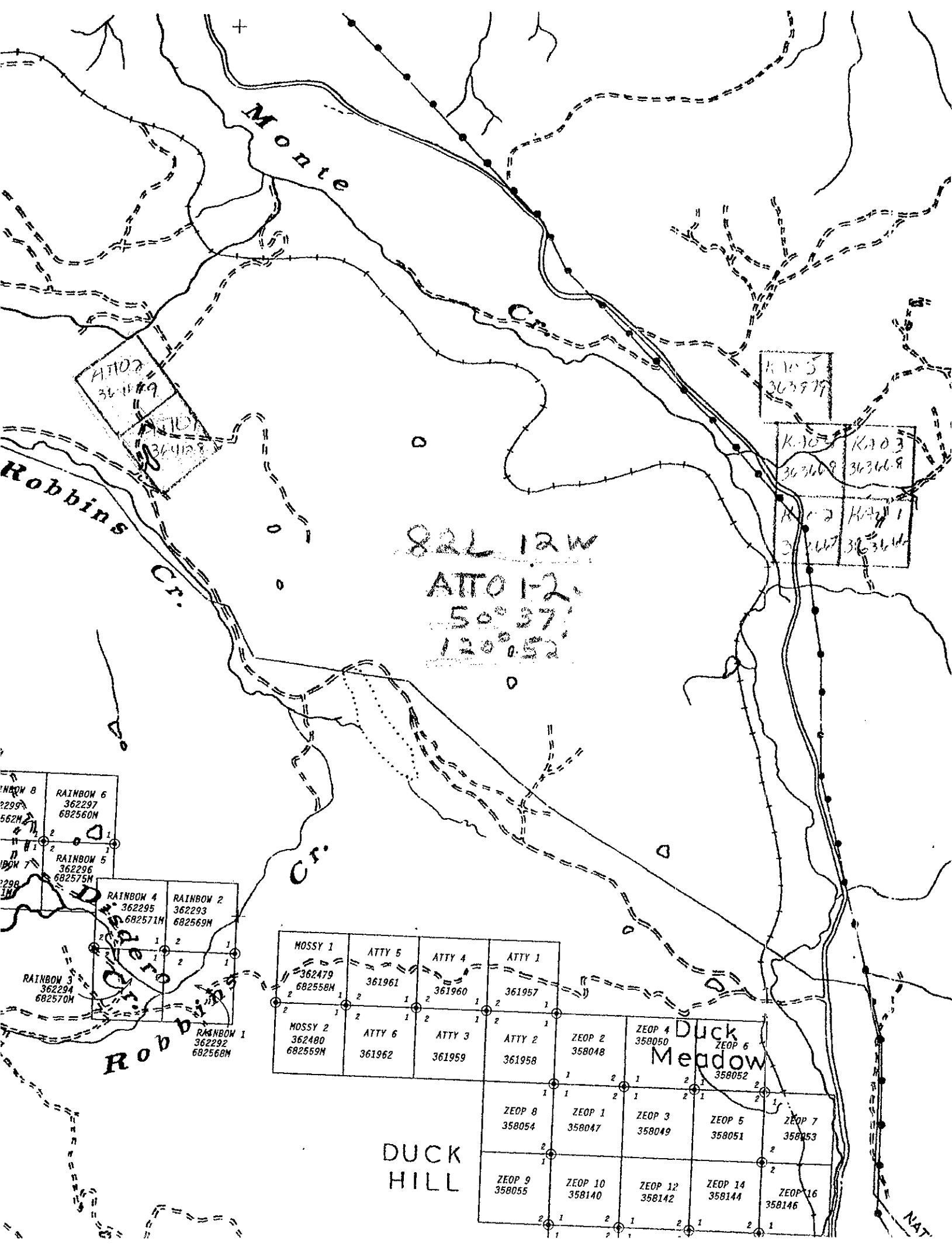
82 L 12 E  
50° 33'  
119° 40'

PERL 1-4  
367305-08

PERL	2	2
4	1	3
PERL	2	2
2	1	1

C.R.





ATTO 2  
364119  
ATTO 1  
364128

K.A. 5  
363679

K.A. 2 363668	K.A. 3 363668
K.A. 1 363667	K.A. 1 363664

82L 12W  
ATTO 1-2  
50° 37'  
120° 52'

RAINBOW 8 362295 682562M	RAINBOW 6 362297 682560M
RAINBOW 7 362298 682561M	RAINBOW 5 362296 682575M
RAINBOW 4 362295 682571M	RAINBOW 2 362293 682569M
RAINBOW 3 362294 682570M	RAINBOW 1 362292 682568M

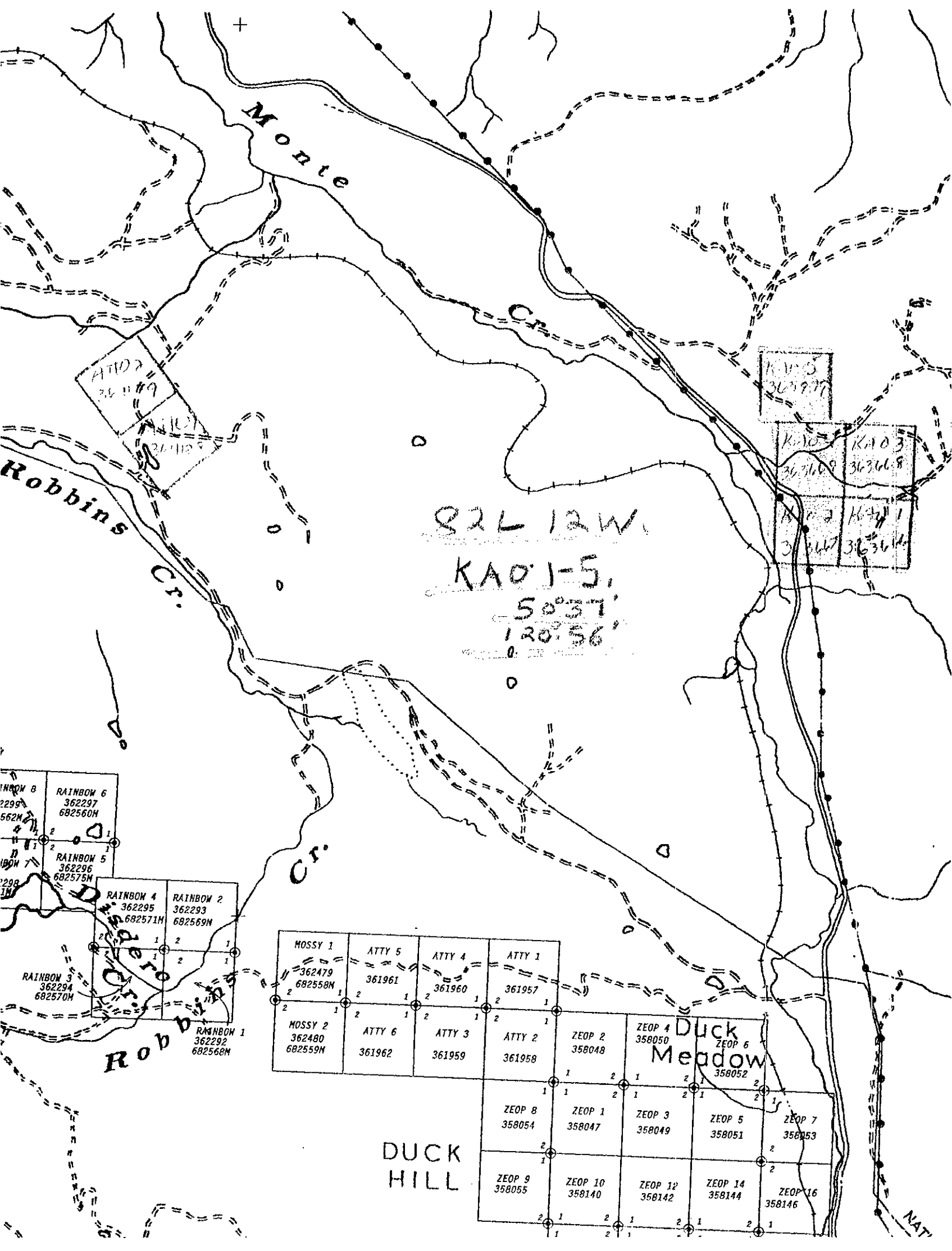
MOSSY 1 362479 682558M	ATTY 5 361961	ATTY 4 361960	ATTY 1 361957
MOSSY 2 362480 682559M	ATTY 6 361962	ATTY 3 361959	ATTY 2 361958

ZEOP 2 358048	ZEOP 4 358050	ZEOP 5 358052
ZEOP 8 358054	ZEOP 1 358047	ZEOP 3 358049
ZEOP 9 358055	ZEOP 10 358140	ZEOP 12 358142
	ZEOP 14 358144	ZEOP 16 358146

DUCK HILL

Duck Meadow

NAT



Monte Cr.

Robbins Cr.

82L 12W.  
KAO 1-5.  
50.31'  
120.56'

RAINBOW 8 362297 682560M	RAINBOW 6 362297 682560M
RAINBOW 7 362296 682575M	RAINBOW 5 362296 682575M
RAINBOW 4 362295 682571M	RAINBOW 2 362293 682569M
RAINBOW 3 362294 682570M	RAINBOW 1 362292 682568M

MOSSY 1 362479 682558M	ATTY 5 361961	ATTY 4 361960	ATTY 1 361957
MOSSY 2 362480 682559M	ATTY 6 361962	ATTY 3 361959	ATTY 2 361958

ZEOP 2 358048	ZEOP 4 358050	ZEOP 6 358052
ZEOP 8 358054	ZEOP 1 358047	ZEOP 3 358049
ZEOP 9 358055	ZEOP 10 358140	ZEOP 12 358142
	ZEOP 14 358144	ZEOP 16 358146

DUCK HILL

Duck Meadow

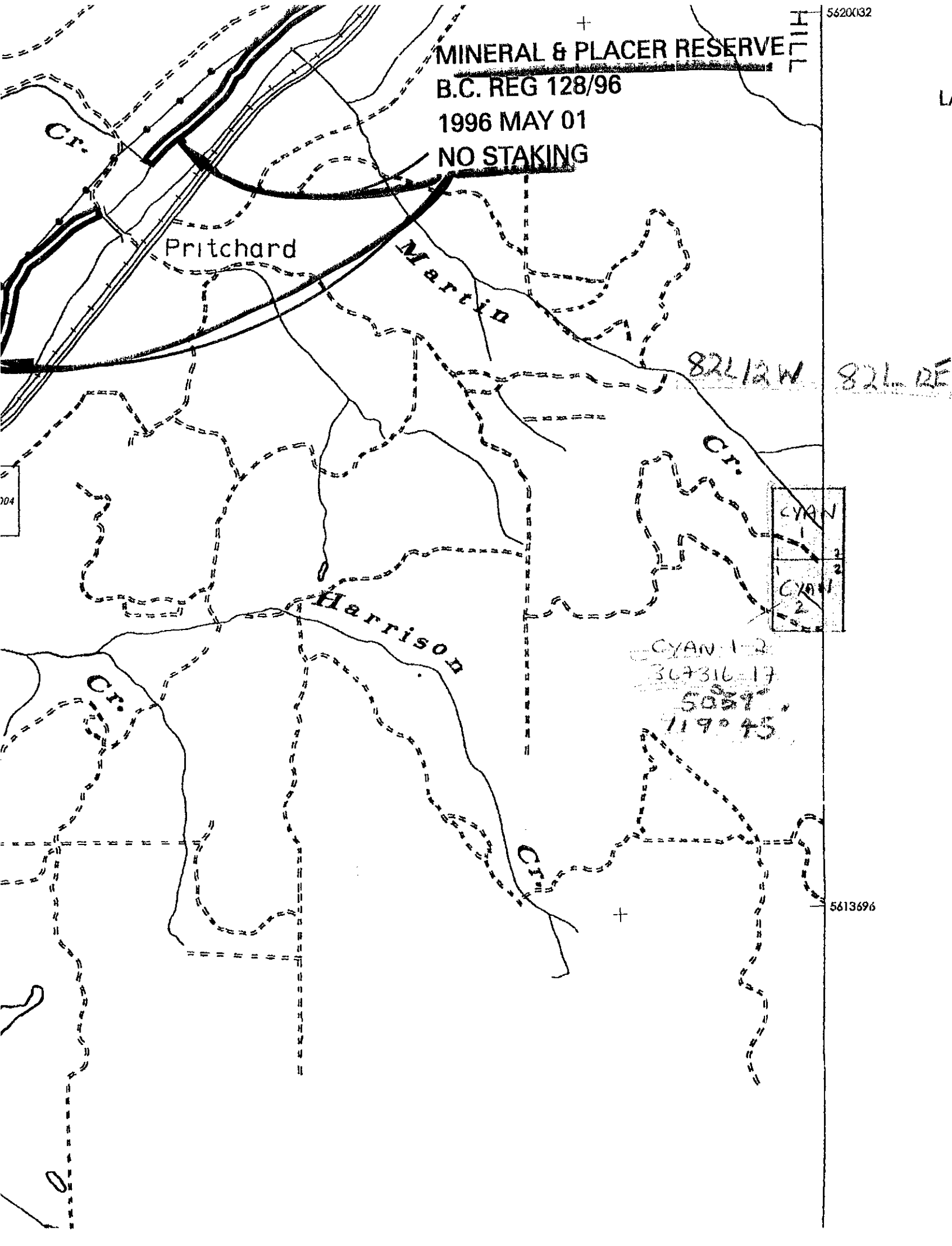
NAT

MINERAL & PLACER RESERVE

B.C. REG 128/96

1996 MAY 01

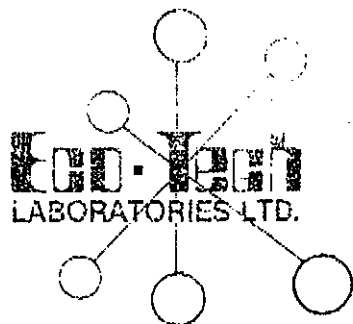
NO STAKING



CYAN	1	2
CYAN	1	2

CYAN 1-2  
 307316-17  
 5057  
 119° 45'

Appendix 2.



ASSAYING  
 GEOCHEMISTRY  
 ANALYTICAL CHEMISTRY  
 ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 6T4 Phone (250) 573-6700  
 Fax (250) 673-4557

**WHOLE ROCK CERTIFICATE OF ANALYSIS AK98-215**

KAMLOOPS INDUSTRIAL MINERALS  
 PO BOX 1472  
 KAMLOOPS, BC  
 V2C 6L6

23-Jun-98

ATTENTION: CHUCK MARLOW

No of samples Received: 3  
 Sample Type: Rock  
 PROJECT #: None Given  
 SHIPMENT #: None Given

Values expressed in percent


ET #.	Tag #	BaO	P2O5	SiO2	MnO	Fe2O3	MgO	Al2O3	CaO	TiO2	Na2O	K2O	TOT.
1	KA0-01	0.15	0.55	48.68	0.13	5.25	8.02	12.99	5.17	0.94	3.27	3.02	7.86
2	KA0-02	0.05	0.47	33.95	0.18	6.39	7.09	10.45	13.03	0.75	0.87	1.66	23.09
3	KA0-03	0.17	0.54	48.39	0.14	6.56	8.64	13.03	5.39	0.83	3.30	2.93	7.99

**QC/DATA:**

Standard:

SY2	0.06	0.46	59.65	0.32	6.61	2.62	11.79	8.20	0.13	4.11	4.31	1.84
MR01	0.01	0.01	33.75	0.17	13.21	12.79	8.18	15.16	3.79	0.67	0.18	2.22

XLS/98  
 df/wr215

*per*   
 ECO-TECH LABORATORIES LTD.  
 Frank J. Pezzotti, A.Sc.T.  
 B.C. Certified Assayer



ASSAYING  
GEOCHEMISTRY  
ANALYTICAL CHEMISTRY  
ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 6T4 Phone (250) 573-5700  
Fax (250) 573-4557

**WHOLE ROCK CERTIFICATE OF ANALYSIS AK98-233**

KAMLOOPS INDUSTRIAL MINERALS  
PO BOX 1472  
KAMLOOPS, BC  
V2C 6L8

30-Jun-98

ATTENTION: CHUCK MARLOW

No of samples Received: 10  
Sample Type: Rock  
PROJECT #: Not given  
SHIPMENT #: Not given

Values expressed in percent

ET #.	Tag #	BaO	P2O5	SiO2	MnO	Fe2O3	MgO	Al2O3	CaO	TiO2	Na2O	K2O	I..O.I.
1	KAO-04	0.07	0.39	30.94	0.17	7.91	8.79	9.25	14.73	0.72	0.45	1.99	24.58
2	KAO-05	0.01	0.47	44.40	0.12	6.90	5.29	13.28	9.22	0.90	0.11	0.21	19.08
3	KAO-06	0.06	0.71	56.89	0.17	9.16	1.33	16.38	2.50	1.23	0.51	2.04	9.02
4	KAO-07	0.18	0.57	48.67	0.14	7.56	3.64	15.18	6.85	1.05	0.10	0.20	15.85
5	KAO-08	0.06	0.62	44.17	0.12	7.13	4.06	14.38	9.28	0.98	0.45	1.58	17.17
6	KAO-09	0.13	0.60	48.35	0.14	7.86	4.10	15.41	7.66	1.04	2.63	2.79	9.29
7	KAO-10	0.13	0.57	49.04	0.15	8.85	4.69	15.02	8.00	1.07	2.60	2.61	7.26
8	KAO-11	0.03	0.55	46.04	0.10	7.04	4.00	14.37	8.89	0.99	0.33	1.13	16.53
9	KAO-12	0.04	0.41	39.32	0.10	4.58	7.51	7.22	15.89	0.52	0.09	0.01	24.31
10	KAO-13	0.02	0.15	21.60	0.14	5.50	11.98	3.95	22.75	0.29	0.04	<0.01	33.67

QC/DATA:

Repeat #:

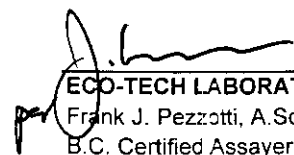
1	KAO-04	0.06	0.43	31.00	0.17	7.99	8.73	9.23	15.02	0.71	0.33	1.63	24.70
---	--------	------	------	-------	------	------	------	------	-------	------	------	------	-------

Resplit #:

1	KAO-04	0.07	0.42	30.81	0.17	8.03	8.47	9.19	14.88	0.70	0.31	1.93	25.02
---	--------	------	------	-------	------	------	------	------	-------	------	------	------	-------

Standard:

SY2		0.04	0.44	59.16	0.32	6.40	2.77	12.08	8.31	0.14	4.34	4.16	1.84
MRG1		0.01	0.06	38.55	0.17	17.84	13.24	8.53	14.87	3.59	0.77	0.16	2.22

  
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

XLS/98  
df/wr233

24-Sep-98

ECO-TECH LABORATORIES LTD.  
10041 East Trans Canada Highway  
KAMLOOPS, B.C.  
V2C 6T4

ICP CERTIFICATE OF ANALYSIS AK 98-558

KAMLOOPS INDUSTRIAL MINERALS  
PO BOX 1472  
KAMLOOPS, BC  
V2C 6L8

ATTENTION: CHUCK MARLOW

Phone: 604-573-5700  
Fax : 604-573-4557

No. of samples received: 3  
Sample type: Chip  
PROJECT #: None Given  
SHIPMENT #: None Given  
Samples submitted by: C. Marlow

Values in ppm unless otherwise reported

Et #.	Tag #	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	ATTO 1	0.4	1.09	10	155	5	0.83	<1	18	19	52	4.82	30	0.62	954	25	0.09	38	710	28	<5	<20	287	0.02	<10	59	<10	12	88
2	ATTO 2	<0.2	1.45	5	290	5	2.64	<1	16	28	31	4.71	30	0.71	1179	12	0.08	31	5350	12	<5	<20	340	0.04	<10	90	<10	15	67
3	PIN 01	<0.2	1.66	<5	105	<5	3.35	<1	30	58	16	4.69	20	2.20	998	4	0.09	88	2300	8	<5	<20	413	0.01	<10	93	<10	13	60

QC DATA:

Resplit:

1	ATTO 1	0.2	1.16	15	145	<5	0.82	<1	17	22	50	4.72	30	0.63	900	24	0.08	38	720	24	<5	<20	270	0.03	<10	60	<10	12	88
---	--------	-----	------	----	-----	----	------	----	----	----	----	------	----	------	-----	----	------	----	-----	----	----	-----	-----	------	-----	----	-----	----	----


Repeat:

1	ATTO 1	0.4	1.15	15	155	<5	0.83	<1	18	22	51	4.85	30	0.64	945	26	0.09	42	730	28	<5	<20	288	0.03	<10	61	<10	11	87
---	--------	-----	------	----	-----	----	------	----	----	----	----	------	----	------	-----	----	------	----	-----	----	----	-----	-----	------	-----	----	-----	----	----

Standard:

GEO'98		1.2	1.71	65	165	<5	1.73	<1	20	61	81	4.07	<10	0.95	698	<1	0.03	22	670	24	<5	<20	62	0.11	<10	76	<10	5	71
--------	--	-----	------	----	-----	----	------	----	----	----	----	------	-----	------	-----	----	------	----	-----	----	----	-----	----	------	-----	----	-----	---	----

df/552  
XLS/98

per   
 ECO-TECH LABORATORIES LTD.  
 Frank J. Pezzotti, A.Sc.T.  
 B.C. Certified Assayer

9-Jul-88

ECO-TECH LABORATORIES LTD.  
10041 East Trans Canada Highway  
KAMLOOPS, B.C.  
V2C 6T4

ICP CERTIFICATE OF ANALYSIS AK 88-233

KAMLOOPS INDUSTRIAL MINERALS  
PO BOX 1472  
KAMLOOPS, BC  
V2C 6L8

ATTENTION: CHUCK MARLOW

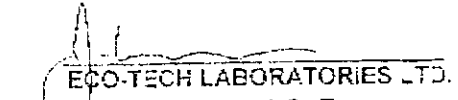
Phone: (250) 857-5700  
Fax: (250) 857-4557

No. of samples received: 10  
Sample type: ROCK  
PROJECT # NONE GIVEN  
SHIPMENT # NONE GIVEN  
Samples submitted by: J. MARLOW

Values in ppm unless otherwise reported

Et #	Tag #	Au(ppb)	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
3	KA906	5	<6.2	0.77	<5	155	10	1.69	1	24	135	18	6.87	<10	0.52	1333	8	0.01	28	2700	2	<5	<20	81	0.02	<10	185	<10	13	73

dm272R  
XLS/88

  
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer





ASSAYING  
GEOCHEMISTRY  
ANALYTICAL CHEMISTRY  
ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 6T4  
Phone (250) 573-5700 Fax (250) 573-4557  
email: ecotech@mail.wkpowerlink.com

**WHOLE ROCK CERTIFICATE OF ANALYSIS AK98-557**

KAMLOOPS INDUSTRIAL MINERALS  
PO BOX 1472  
KAMLOOPS, BC  
V2C 6L8

22-Sep-98

ATTENTION: CHUCK MARLOW

No of samples Received: 2  
Sample Type: Rock  
PROJECT #: None Given  
SHIPMENT #: None Given

Values expressed in percent

ET #.	Tag #	BaO	P2O5	SiO2	MnO	Fe2O3	MgO	Al2O3	CaO	TiO2	Na2O	K2O	L.O.I.
1	MAR 01	0.03	0.09	73.06	0.02	0.76	0.03	13.94	0.33	0.15	2.72	7.00	1.67
2	ESTO2	0.09	0.38	54.80	0.27	12.86	1.80	14.69	1.43	0.68	1.49	2.39	8.81

QC/DATA:


Repeat #:

1	MAR 01	0.04	0.07	72.63	0.02	0.79	0.05	13.99	0.32	0.14	2.76	7.44	1.75
---	--------	------	------	-------	------	------	------	-------	------	------	------	------	------

Standard:

SY2		0.04	0.42	59.67	0.32	6.26	2.53	12.01	8.06	0.09	4.32	4.44	1.84
MRG1		0.02	0.02	38.29	0.16	17.82	13.64	8.33	14.73	3.79	0.76	0.22	2.22

XLS/98  
df/wr557

per   
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer



ASSAYING  
GEOCHEMISTRY  
ANALYTICAL CHEMISTRY  
ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 6T4  
Phone (250) 573-5700 Fax (250) 573-4557  
email ecotech@mail.wkpowerlink.com

**WHOLE ROCK CERTIFICATE OF ANALYSIS AK98-558**

KAMLOOPS INDUSTRIAL MINERALS  
PO BOX 1472  
KAMLOOPS, BC  
V2C 6L8

22-Sep-93

ATTENTION: CHUCK MARLOW

No of samples Received: 3  
Sample Type: Rock  
PROJECT #: None Given  
SHIPMENT #: None Given

Values expressed in percent

ET #.	Tag #	BaO	P2O5	SiO2	MnO	Fe2O3	MgO	Al2O3	CaO	TiO2	Na2O	K2O	L.O.I.
1	ATTO 1	0.08	0.20	54.08	0.12	7.41	2.32	13.77	1.23	0.68	0.96	1.15	18.01
2	ATTO 2	0.09	0.97	53.61	0.14	6.54	1.72	12.55	4.22	0.65	1.25	0.58	17.68
3	PIN 01	0.10	0.51	46.30	0.12	6.93	3.91	14.85	6.12	0.96	1.67	2.04	16.49

QC/DATA:

Repeat #:

1	ATTO 1	0.07	0.15	53.84	0.11	7.43	2.41	13.74	1.46	0.69	0.98	1.25	17.87
---	--------	------	------	-------	------	------	------	-------	------	------	------	------	-------

Standard:

SY2		0.04	0.42	59.67	0.32	6.26	2.53	12.01	8.06	0.09	4.32	4.44	1.84
MRG1		0.02	0.02	38.29	0.16	17.82	13.64	8.33	14.73	3.79	0.76	0.22	2.22

XLS/98  
df/wr557

*Frank J. Pezzetti*  
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzetti, A.Sc.T.  
B.C. Certified Assayer



ASSAYING  
GEOCHEMISTRY  
ANALYTICAL CHEMISTRY  
ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy. R.R. #2 Kamloops, B.C. V2C 6T4  
Phone (250) 573-5700 Fax (250) 573-4557  
email ecotech@mail.wkpowerlink.com

## WHOLE ROCK CERTIFICATE OF ANALYSIS AK98-736

KAMLOOPS INDUSTRIAL MINERALS  
PO BOX 1472  
KAMLOOPS, BC  
V2C 6L8

8-Dec-98

ATTENTION: CHUCK MARLOW

No of samples Received: 6  
Sample Type: Rock  
PROJECT #: None Given  
SHIPMENT #: None Given

Values expressed in percent.

ET #.	Tag #	BaO	P2O5	SiO2	MnO	Fe2O3	MgO	Al2O3	CaO	TiO2	Na2O	K2O	L.O.I.
1	CYN-01	0.03	0.07	75.22	0.07	0.89	0.30	13.60	0.73	0.17	3.68	4.95	5.39
2	ATTO-1	-	-	-	-	-	-	-	-	-	-	-	-
3	ATTO-2	-	-	-	-	-	-	-	-	-	-	-	-
4	ATTO-3	0.11	0.31	71.11	0.02	4.94	1.01	8.83	1.62	0.49	0.90	1.82	8.84
5	CYN-06	0.07	0.07	72.29	0.04	1.01	0.33	13.97	0.51	0.18	3.48	6.79	1.27
6	PIN-01	-	-	-	-	-	-	-	-	-	-	-	-

QC/DATA:

Repeat #:

1	CYN-01	0.02	0.08	73.44	0.07	0.86	0.15	13.66	0.73	0.17	3.62	4.75	5.41
---	--------	------	------	-------	------	------	------	-------	------	------	------	------	------

Standard:

SY2	0.03	0.52	59.66	0.31	5.84	2.75	12.22	7.77	0.13	4.42	4.61	1.84
MRG1	0.01	0.10	59.56	0.17	17.13	13.17	8.69	14.36	3.67	0.79	0.15	2.22

XLS:98  
off:vr736

ECO-TECH LABORATORIES LTD.

Frank J. Pezzotti, A.Sc.T.

B.C. Certified Assayer

Appendix 3.

# PACIFIC SOIL ANALYSIS INC.

SOIL AND PLANT ANALYSES

*Kamloops Industrial Minerals*  
*Chuck Marlow* *Dec 18/98*

SAMPLE	C.E.C.	EXCHANGEABLE			
		CALCIUM	MAGNESIUM	SODIUM	POTASSIUM
( me / 100 gms )					
736-1 (4N1)	3.2	3.00	0.68	0.93	0.88
-3 AHO 1	62	18.75	15.75	.30	1.03
-3 2	62	34.00	18.50	.45	0.53
-4 3	36	23.25	5.55	2.38	1.73
-5 PIN1	46	19.00	26.25	.30	0.80



# PACIFIC SOIL ANALYSIS INC.

SOIL AND PLANT ANALYSES

July 27/98

Kamloops Industrial Minerals

SAMPLE	C.E.C.	EXCHANGEABLE			
		CALCIUM	MAGNESIUM	SODIUM	POTASSIUM
( me / 100 gms )					
26-2	41.1	11.0	7.00	0.88	3.50
27-2	57.1	17.8	6.00	4.25	18.30
J 215-001	30.4	11.8	9.75	1.55	.85
J -002	13.8	16.5	8.25	.12	.35
280-001	19.2	13.0	5.25	.28	.70
002	16.1	9.25	4.00	.95	1.25
003	22.3	11.3	4.75	.40	.73
004	22.3	21.3	4.75	.60	.73
005	17.0	18.5	5.00	.30	.68

\* Concentrated Sulphuric Acid \*

Na ← (ppm) → P

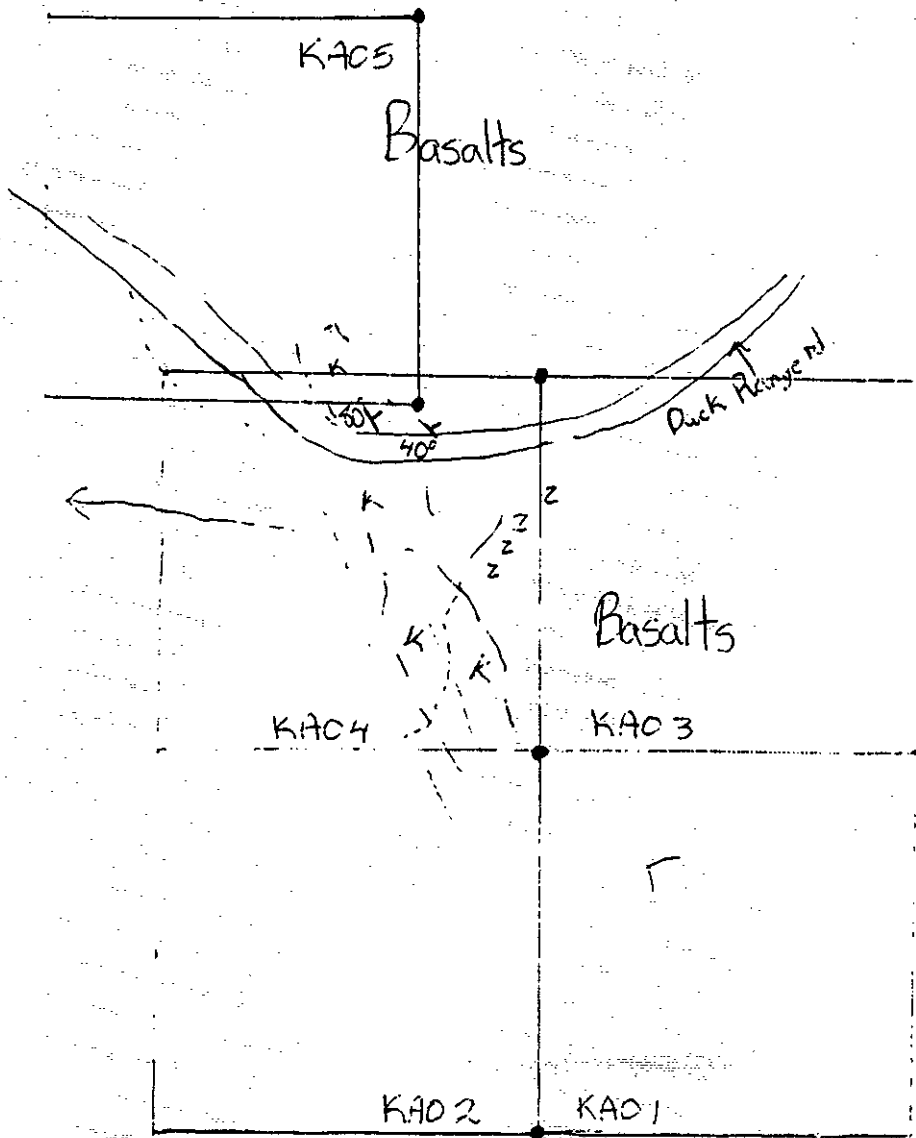
26-2		851
27-2	1010	

\* We are not capable of doing Total Mineral Analyses so we digested your sample in con. H<sub>2</sub>SO<sub>4</sub> to give you some idea of values, at **PSAI** *Leutherman*  
no charge to you.

Appendix 4.

## Appendix 5.





KAO 1-5

K - LENS

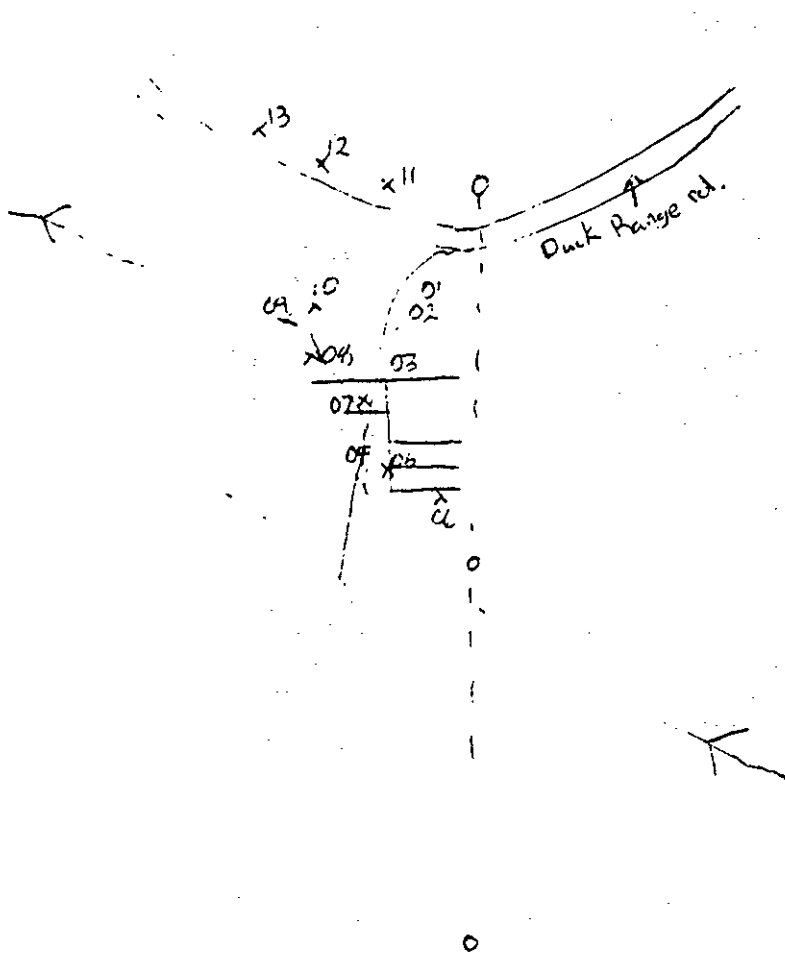
Z - Amygdale Zeolites  
in Basalts

K - Kaolin Rich  
Sedimentary Lens

Striking South-East

Dipping 40°-80°

North-East



KAO 1-5  
Grid and Sample Locations

- KAO 01 and 02 - Hanging Wall Zeolites Basalt.
- KAO-03 - Clay Gauge
- KAO-04 - Carbonate Rich Grab
- KAO-05 - 11. Main lens. At least 20 meters thick, 50 meters wide and 400 meters long.
- KAO-12 - Carbonate Rich layer.
- KAO-13 - Lowest Exposed Stratigraphy.