

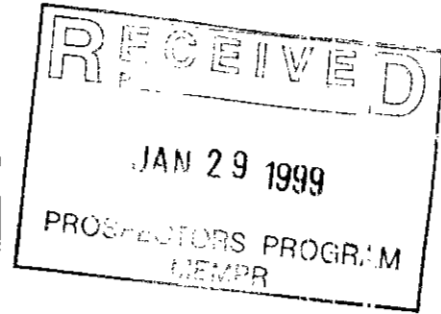
**BRITISH COLUMBIA**  
**PROSPECTORS ASSISTANCE PROGRAM**  
**MINISTRY OF ENERGY AND MINES**  
**GEOLOGICAL SURVEY BRANCH**

PROGRAM YEAR: 1998/99

REPORT #: PAP 98-47

NAME: CHUCK MARLOW

**BRITISH COLUMBIA  
PROSPECTORS ASSISTANCE PROGRAM  
PROSPECTING REPORT FORM (continued)**



Ministry of Energy and Mines  
Kamloops, B.C.  
FEB 5 - 1999  
Rec'd 15 to 17, page 6.

**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 Lester Charles Marlow Reference Number 98/99-P101  
 LOCATION/COMMODITIES ZEOP - 50°34' 119°55' 82L 12W  
 Project Area (as listed in Part A) MORDENITE MINFILE No. if applicable \_\_\_\_\_  
 Location of Project Area NTS 82L 12E-5E Lat 50°30' Long 119°39'  
 Description of Location and Access ZEOP - ROBBINS ORANGE ROAD - South off Barnhart Lake road!  
MORDENITE - OFF VERNON HWY 1 km. West of Falkland  
0.5 km on Estekudan mountain road  
 Main Commodities Searched For ZEOP - PRECIOUS OPAL ZEOLITES  
MORDENITE PRECIOUS OPAL ZEOLITES  
 Known Mineral Occurrences in Project Area \_\_\_\_\_

WORK PERFORMED	
1. Conventional Prospecting (area)	<u>Zeop. 15 sq km</u> <u>Mordenite 4 sq km</u>
2. Geological Mapping (hectares/scale)	<u>2 CEC and exchangeables.</u>
3. Geochemical (type and no. of samples)	<u>5 whole rock</u> <u>5 whole Rock Analyses.</u>
4. Geophysical (type and line km)	<u>5 CEC and Exchangeables.</u> <u>21 Multi-element I.C.P.</u>
5. Physical Work (type and amount)	<u>12 km grid.</u> <u>1 Process Development.</u>
6. Drilling (no. holes, size, depth in m, total m)	
7. Other (specify)	<u>Trenching</u> <u>Rep Sampling, Crushing</u> <u>Screening.</u>

**SIGNIFICANT RESULTS**

Commodities ZEOLITES Claim Name MORDENITE  
 Location (show on map) Lat 50°30' Long 119°39' Elevation \_\_\_\_\_  
 Best assay/sample type Good continuity and high affinity for  
metals, even in combinations.  
 Description of mineralization, host rocks, anomalies Zeolites in silicic tuffs, mudstones,  
lappili tuffs, rhyolitic ash, some chert layers, some  
apalitized areas. Aquagene breccias matrix is mordenite in  
overlying layers.

**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: L.C. Marlow  
January, 1999.

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### Summary of Prospecting Activities And Technical Report

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Diary

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Appendix 1- Location map, sketch map of grid and trenches.

Appendix 2- Eco-Tech analysis and invoices.

Appendix 3- Pacific Soils analysis and invoices.

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#### MORDENITE

Appendix 5- Location map, sketch map of sample locations.

Appendix 6- Eco-Tech analysis and invoices.

Appendix 7- Pacific Soils analysis and invoices.

## **ZEOP Property**

**Geology-** The Zeop property consists of tuffaceous sediments, partly altered to montmorillonite, and aquagene volcanics. The volcanics include conglomerates, breccias, basalts and vesicular lava flows. There is agate, opal, chalcedony and zeolites in amygdules of a lot of the rocks. They are all Eocene rocks.

Mapping proved to be of no use as the area is very broken up and except for the cliffs, lacks outcrop. If any showings would have been discovered, mapping would have been worthwhile, I am sure. Any zeolite rich tuffs that were found did not have any size to them. One thing that was found was blue agates. Some of which are up to 3 lbs. The opal that was found was common opal or brown opal.

**Prospecting-** The whole claim area and the immediate area around the claim was prospected. Prospecting consisted of walking all the roads and watching for opal, prospecting all outcrops that could be found and walking the creeks. The only samples that were taken were done for whole rock and C.E.C. to see if they had zeolite potential. They were taken along Robbins Range road in spots where it looked as if the tuff's had potential. (Light weight and being in a good quarry topography).

Unfortunately, analysis proved the samples to be of low grade. Siliceous areas were paid special attention for opal and also for possible gold mineralization. No quartz or sulfides were found and hence, no samples were taken for analysis.

### **Physical Work-**

#### **A: Grid**

Twelve kilometers of grid was established using mainly chain and compass. Pickets were set at 25 meter stations. The pickets were painted and had metal tags with station numbers on them. Orange ribbon was used and the lines were limbed and blazed with axes.

#### **B: Trenching**

Trenching was carried out for six days with a ten-foot depth Bobcat excavator. Several areas of interest were trenched and some of the trenches were filled in. The trenches left open were not more than a meter depth and will not be filled in until April or May.

**Analysis-** Samples Zeop 1-5 were analysed at Eco-Tech Laboratories in Kamloops for whole rock analysis. Although they had a fairly high alumina content, the alkali content was too high for cement. The samples were also sent to Pacific Soils Analysis in Burnaby and analysed for C.E.C. and Exchangeables.

## MORDENITE Property

**Geology-** The rocks consist of tuffaceous siltstones interbedded with mudstones, lapilli tuffs and tuff breccias of Eocene age. The whole sequence is at least 30 meters in thickness, 500 meters long, and from 100 meters to 500 meters wide. The whole deposit is zeolitized and there are several silica rich chert sedimentary horizons, some with common opal in them.

The deposit is underlain by volcanic basalts which are underlain by Nicola sediments. Aquagene breccias and olivine basalts overlie the deposit.

**Prospecting-** Prospecting was carried out on new roads. Olivine basalt weathered to almost sand over a big area. Prospecting was carried on the cliffs below and above the claims. Common opal and agate rich areas were found, but no precious opal was found. Sampling was also done from all over the deposit, up and down stratigraphy. This was used for analysis. The new road into the property, cancelled out my trenching program as they made cuts 25 meters deep.

**Sampling and Analysis-** Sampling was carried out from all over the deposit. The samples were later crushed, mixed and screened at home. 1/4 inch to 5/8 inch pieces were used for testing. There was no bias, opal rich material was included for a true average.

I figured this way I could possibly do environmental remedial work as a selective absorbant for heavy metals. If the material did not have to be separated out into high and low grades, it would make bulk sales easier. So, the idea was to establish the grade of the deposit for this market.

The analysis was carried out at Eco-Tech Laboratories in Kamloops. The 30 gram samples were soaked in 300 mL of various solutions for two hours. The samples were then washed three to four times with warm water, dried and analysed for whole rock for the non-metals and the I.C.P. of the solutions and the samples were taken. pH of the solutions before and after was also done. The samples were coded with what they were loaded with.

Samples 6A, 6B and 10A, 10B were used to unload samples 6 and 10, respectively. Distilled water was not used to wash the samples so values were probably lost during the process. Also, if they would have been in a column, the rinse would have kept any values that were on the outside of the pieces. (Large surface area).

**Discussion of Results-** Although the tests were crude they were affordable and I learned a lot. Some of these being very important. First off, unloading would have to be done with Potassium Chloride. Sodium Chloride and Calcium Chloride did not wash out the metals. It could be the solutions need to be made in stronger percentages.

One thing we noted was that only 25% of the moly solution was soaked up by the zeolites. When mixed with copper, the moly-copper solution is soaked up very well by the zeolites. When Cu, Zn, and Ca were mixed together, the zeolite seemed to pick up everything. It is also worth noting that when Fe and Zn were together, the zeolite took the Zn and 7000 ppm Fe.

The pH's of solutions were interesting also. More testing including column tests for heavy metals will be done, financing permitting. Also, heavier load tests of metals and non-metals in combinations will be done. I need to do more testing but I think the deposit can be used without differentiating the grades, just screened and sold bulk for heavy metal-ammonia traps.

Other Tests- On Oct. 1, I received the results of five C.E.C. and exchangeable analysis. All five samples were put in a kiln and taken to 1000 C° before being crushed to -200 mesh and analysed. The following are descriptions of samples and results. Sample 001 - Zeolite from Macabee which originally had a C.E.C. of 65. After the kiln, the C.E.C. dropped down to 0.8 C.E.C. Sample 002 - A green lapilli tuff from the Mordenite that originally had a C.E.C. of 35. After the kiln, the tuff had 0.27 C.E.C. Sample 003 - The "white ash" with a C.E.C. of 42. After the kiln, it still had 19.0 C.E.C. Sample 004 - A mix of green lapilli tuff and "white ash" which had a C.E.C. of 35 before the kiln. After the kiln, the mixture had 4.0 C.E.C. left. Sample 005 - The coarse fraction of a white bentonite from the Ben-Dia property near Upper Loon Lake. It had a C.E.C. of 32 before and 19.8 after the kiln.

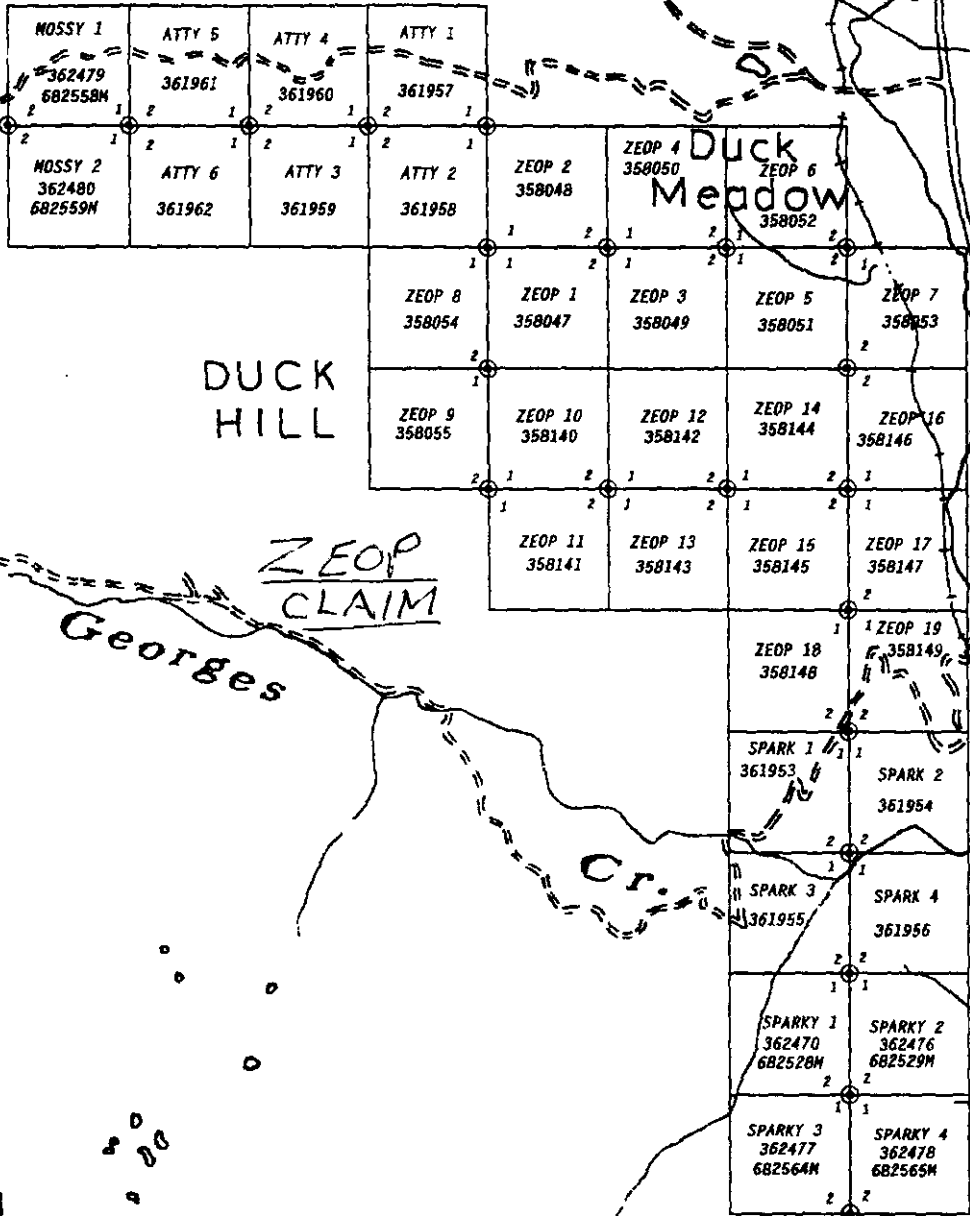
Based on this information and that Heulandite collapses at 400 C°. Samples 001 and 002 are Heulandites. Sample 003 is a mordenite. Sample 004 is a mix of heulandite and mordenite. Sample 5 is a zeolite with thermal durability.

## Appendix I



RAINBOW 2  
362293  
682569M

RAINBOW 1  
362292  
682568M



DUCK HILL

Duck Meadow

ZEOP CLAIM

Georges Cr.

NATURAL GAS PIPELINE

CANADIAN

HILLS  
MOWREY  
363978

E

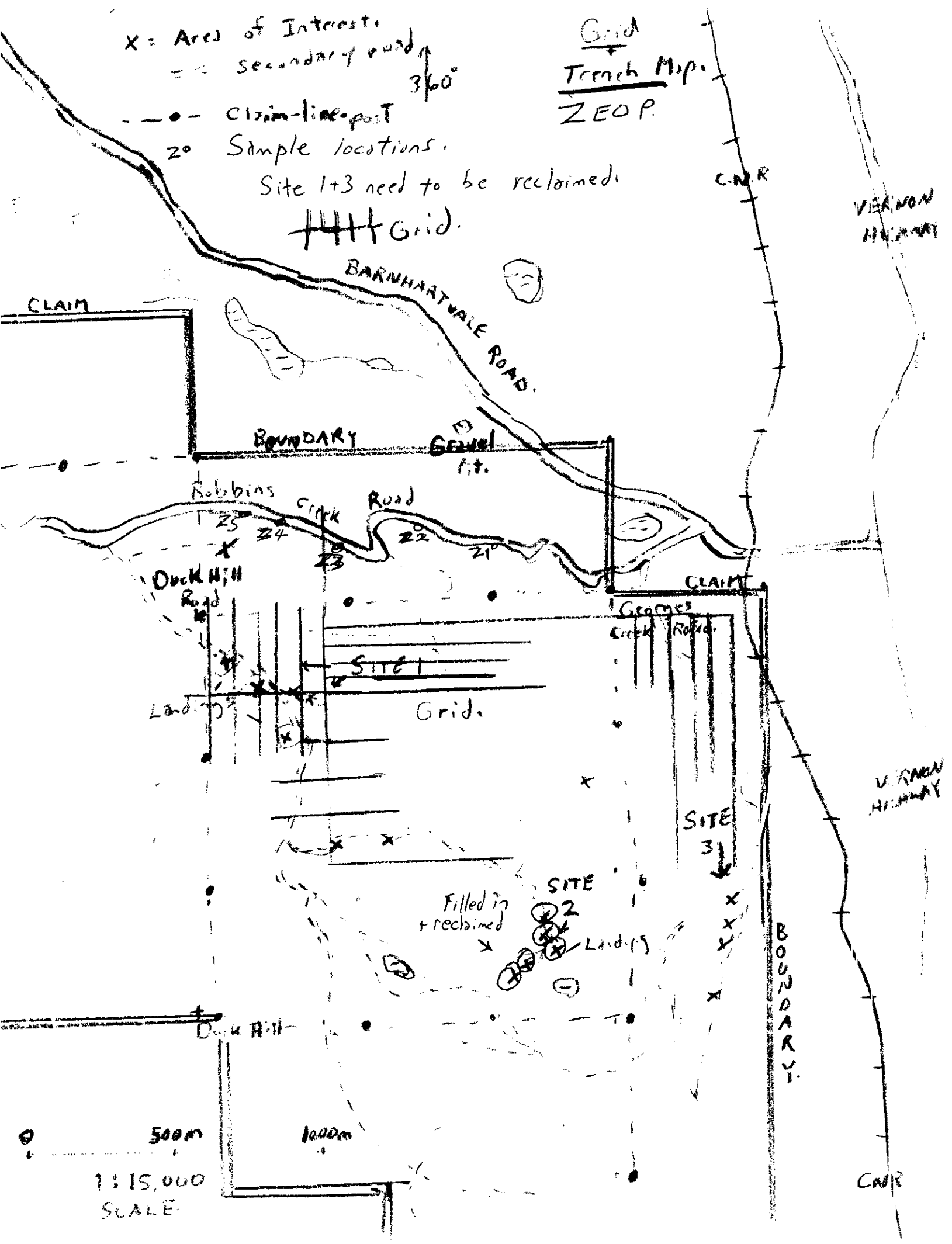
Cr.

X = Area of Interest  
 = Secondary road  
 3/60°  
 - - - - - claim-line-post  
 20 Sample locations.

Grid  
 Trench Map  
 ZEDP.

Site 1+3 need to be reclaimed.

Grid



500m  
 1000m  
 1:15,000  
 SCALE

## Appendix 2



**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 AK98-280**

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

9-Jul-98

**ATTENTION: CHUCK MARLOW**

No of samples Received: 5  
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	Zeop 1	0.15	0.48	55.98	0.11	7.12	1.18	16.35	5.12	0.93	3.64	3.30	5.65
2	Zeop 2	0.16	0.56	59.16	0.07	4.96	0.73	17.11	4.75	0.96	3.86	3.50	4.19
3	Zeop 3	0.13	0.51	53.09	0.23	8.84	1.20	17.17	5.67	1.28	3.23	2.47	3.18
4	Zeop 4	0.14	0.52	53.93	0.10	5.80	1.33	17.94	6.79	1.30	3.39	2.72	3.04
5	Zeop 5	0.10	0.41	48.89	0.13	5.40	2.87	14.73	10.19	1.03	2.71	1.93	1.60

**QC/DATA:**

**Resplit #:**

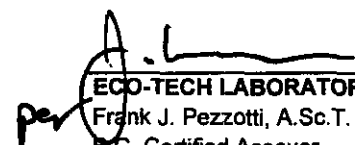
1	Zeop 1	0.16	0.51	56.20	0.11	7.33	1.05	16.19	5.17	0.94	3.42	3.24	5.68
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**Repeat #:**

1	Zeop 1	0.15	0.55	55.85	0.11	7.27	1.05	16.29	5.22	0.93	3.51	3.37	5.69
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**Standard:**

SY2	0.05	0.45	59.44	0.32	6.38	2.58	11.97	8.14	0.12	4.19	4.51	1.84
MRG1	0.01	0.04	38.21	0.17	18.31	12.83	8.27	15.30	3.77	0.68	0.20	2.22

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

XLS/98  
df/wr280

## Appendix 3

# 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

M. Hendrick

\* Concentrated Sulphuric Acid \*

Na ← (ppm) → P

26-2

851

27-2

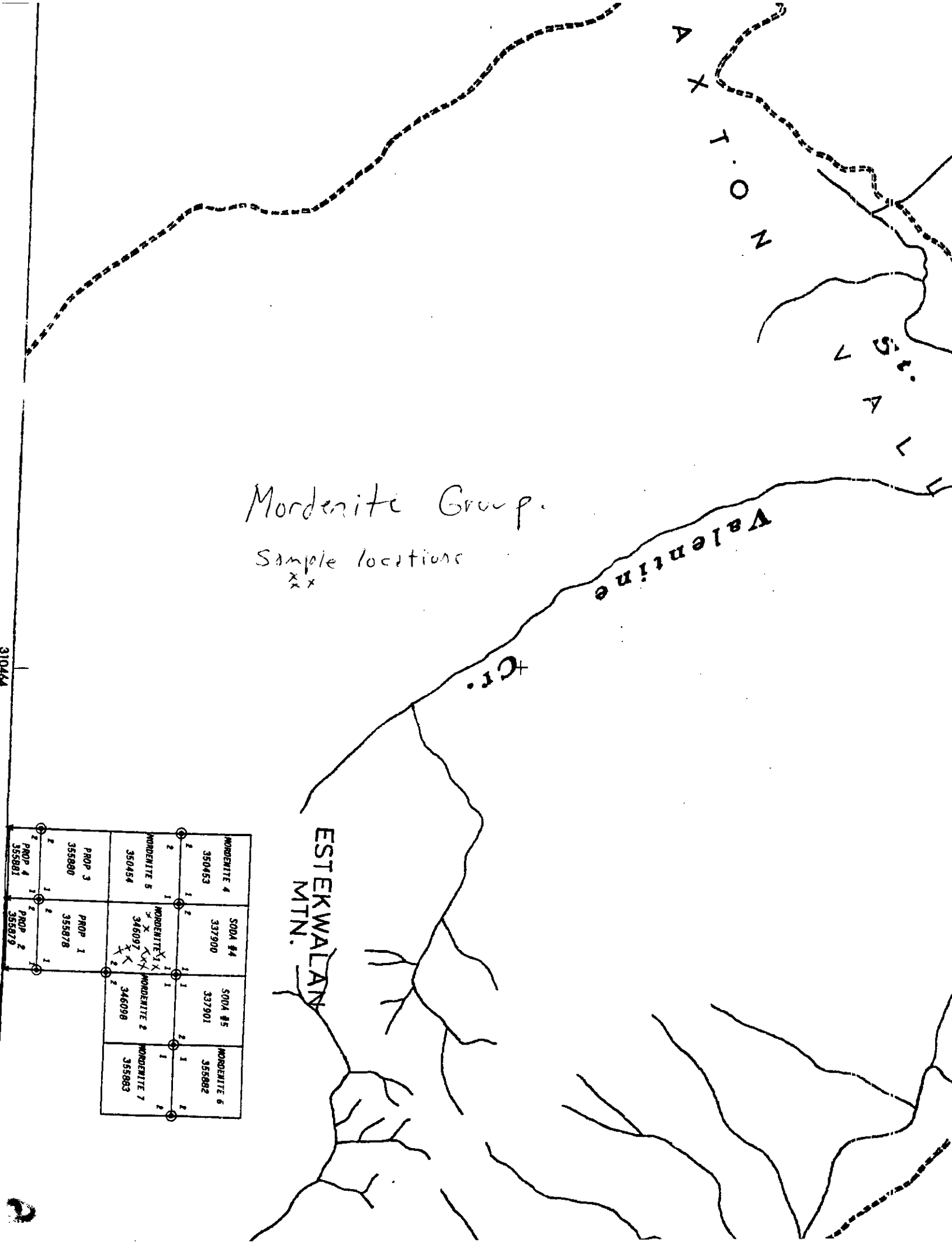
1010

\* 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** *Southeyman*  
no charge to you.

Ministry of Energy and Mines  
Kamloops, B.C.  
Rec'd FEB 5 - 1999

RECEIVED  
P  
JAN 29 1999  
PROSPECTORS PROGRAM  
MEMBR

Appendix 5



Mordenite Group.  
 Sample locations  
 x x

31044

Valentine Cr.

ESTERWALAN  
 MTN.

MORDENITE 4 350453	SODA #4 337900	SODA #5 337901	MORDENITE 6 355882
MORDENITE 5 350454	MORDENITE 1 346097	MORDENITE 2 346098	MORDENITE 7 355883
PROP 3 355880	PROP 1 355878		
PROP 4 355881	PROP 2 355879		



## Appendix 6

6-Feb-98

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

ICP CERTIFICATE OF ANALYSIS AK 98-27

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

ATTENTION: CHUCK MARLOW

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

*This was done before the grant.  
It is included to demonstrate that it  
will load metals.*

No. of samples received: 2  
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	ZEO-MET	<0.2	1.76	10	440	<5	0.76	<1	<1	28	33	0.63	<10	0.13	381	2	0.25	6	440	6	<5	<20	400	0.01	<10	10	<10	3	881

*The ZEO-MET ORIGINALLY went about 30 Zn. ↗  
I loaded it with trace element fertilizer with zinc.*

QC DATA:


Repeat:

1	ZEO-MET	<0.2	1.79	10	435	<5	0.77	<1	<1	27	32	0.63	<10	0.13	385	2	0.26	5	480	10	<5	<20	397	0.01	<10	10	<10	3	843
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Standard:

GEO'98		1.4	1.76	65	155	<5	1.86	<1	18	62	80	3.67	<10	0.98	660	<1	0.03	23	650	18	5	<20	58	0.09	<10	76	20	6	74
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df/27b  
XLS/98

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

22-Jan-99

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

ICP CERTIFICATE OF ANALYSIS AK 99-9

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

ATTENTION: CHUCK MARLOW

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

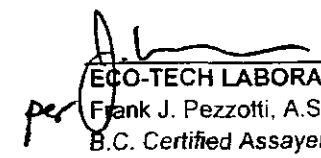
No. of samples received: 2  
Sample type: Solutions  
PROJECT #: None Given  
SHIPMENT #: None Given  
Samples submitted by: C. Marlow

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	SODCHL	<0.2	<0.01	<5	<5	<5	0.38	<1	<1	<1	<1	<0.01	<10	0.12	2	<1	>10	<1	10	<2	<5	<20	6	<0.01	<10	<1	<10	<1	<1
2	POTCHL	<0.2	<0.01	<5	17	<5	0.52	<1	4	1	7	<0.01	<10	0.11	12	<1	0.14	<1	<10	22	<5	80	17	<0.01	<10	<1	<10	12	<1
3	CALHYD	<0.2	<0.01	<5	<5	<5	0.99	<1	<1	<1	<1	<0.01	<10	<0.01	<1	<1	<0.01	<1	<10	<2	<5	<20	2	<0.01	<10	<1	<10	<1	<1
4	PHO205	<0.2	0.01	<5	<5	<5	0.02	<1	<1	<1	<1	0.01	<10	0.05	<1	<1	5.82	<1	>100	<2	<5	<20	2	<0.01	<10	1	<10	<1	<1
5	MORDZN	<0.2	0.03	<5	<5	<5	0.32	<1	<1	<1	<1	<0.01	<10	0.11	6	<1	0.05	<1	28	<2	<5	<20	3	<0.01	<10	2	<10	<1	153
6	MORDCU	<0.2	0.02	<5	<5	<5	0.25	<1	<1	<1	134	<0.01	<10	0.08	7	<1	0.02	<1	10	<2	<5	<20	3	<0.01	<10	2	<10	<1	4
7	MORDMO	<0.2	0.02	<5	<5	<5	0.03	<1	<1	<1	7	0.01	<10	0.02	<1	195	0.01	<1	<10	<2	<5	<20	3	<0.01	<10	<1	<10	<1	<1
8	MORDZNCU	<0.2	0.02	<5	<5	<5	0.19	<1	<1	<1	90	0.01	<10	0.06	2	1	0.01	<1	<10	<2	<5	<20	2	<0.01	<10	2	<10	<1	89
9	MORDCUMO	<0.2	<0.01	<5	<5	<5	0.19	<1	<1	<1	51	<0.01	<10	0.07	3	57	0.02	<1	<10	<2	<5	<20	2	<0.01	<10	1	<10	<1	<1
10	MORDFEZN	<0.2	0.05	<5	<5	<5	0.28	<1	<1	<1	8	0.08	<10	0.08	9		0.01	<1	<10	<2	<5	<20	3	<0.01	<10	2	<10	<1	84
11	MORDMNZN	<0.2	0.02	<5	<5	<5	0.26	<1	<1	<1	2	<0.01	<10	0.09	75	2	0.01	<1	<10	<2	<5	<20	3	<0.01	<10	2	<10	<1	74
12	MORDCU-ZNCA	<0.2	0.03	<5	<5	<5	0.33	<1	<1	<1	81	<0.01	<10	0.09	2	<1	0.02	<1	<10	<2	<5	<20	3	<0.01	<10	2	<10	<1	91

QC DATA:

Standard:	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
GEO'99	1.4	2.04	55	175	<5	1.98	<1	21	67	91	4.42	<10	1.07	745	<1	0.05	27	700	18	<5	<20	80	0.14	<10	87	<10	3	77

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

01/22/99 10:42 7200 070 4007 ECO TECH LAB.

01/22/99

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

ICP CERTIFICATE OF ANALYSIS AK 99-9

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: 2

Sample type: Pulps

PROJECT #: None Given

SHIPMENT #: None Given

Samples submitted by: C. Marlow

Values in ppm unless otherwise reported

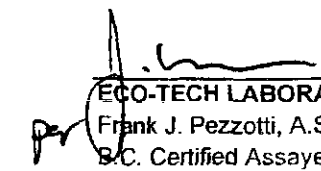
Et #.	Tag #	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	SODCHL	<0.2	1.53	5	215	10	0.46	<1	12	75	23	2.61	10	0.44	347	7	0.77	15	730	14	<5	<20	117	0.14	87	<10	4	24	
2	POTCHL	<0.2	1.69	10	235	10	0.62	<1	13	113	23	2.85	20	0.54	479	7	0.07	17	1310	14	<5	<20	127	0.15	94	<10	5	29	
3	CALHYD	<0.2	1.77	10	235	5	1.46	<1	11	51	22	2.77	10	0.55	303	4	0.07	16	800	14	<5	<20	136	0.16	<10	95	<10	4	27
4	PHO205	<0.2	1.84	10	325	10	0.70	<1	12	68	24	3.17	50	0.51	335	7	0.49	19	3370	16	<5	<20	265	0.15	<10	96	<10	5	27
5	MORDZN	<0.2	1.77	10	285	15	0.62	<1	12	41	24	2.95	20	0.58	360	4	0.07	18	970	16	<5	<20	155	0.17	<10	94	<10	5	152
6	MORDCU	<0.2	2.10	5	260	<5	0.77	<1	15	101	106	3.02	20	0.59	567	8	0.16	21	1090	18	<5	<20	171	0.16	<10	98	<10	5	38
6A	NACL	<0.2	2.32	10	315	<5	0.84	<1	16	208	79	3.39	20	0.64	659	16	0.77	26	1290	20	<5	<20	184	0.18	<10	108	<10	5	43
6B	CA(OH)2	<0.2	2.42	10	315	5	1.47	<1	18	164	90	3.63	20	0.74	744	10	0.25	28	1430	18	<5	<20	210	0.19	<10	99	<10	7	47
7	MORDMO	<0.2	1.75	15	230	10	0.71	<1	11	43	25	2.84	10	0.56	275	17	0.07	14	1020	16	<5	<20	137	0.16	<10	106	<10	4	24
8	MORDZN-CU	<0.2	1.76	5	150	5	0.80	<1	18	60	33	3.36	20	0.91	519	<1	0.10	23	1480	14	<5	<20	121	0.19	<10	102	<10	5	77
9	MORDCU-MO	<0.2	1.80	5	200	<5	0.62	<1	11	40	126	2.92	20	0.62	328	88	0.07	14	940	16	<5	<20	130	0.16	<10	99	<10	4	32
10	MORDFE-ZN	<0.2	2.66	15	255	15	0.67	<1	14	101	29	3.41	10	0.53	363	7	0.12	21	830	27	<5	<20	146	0.23	<10	104	<10	4	59
10A	NACL	<0.2	2.57	10	235	10	0.63	<1	14	177	29	3.32	10	0.50	394	11	0.68	24	890	22	<5	<20	134	0.24	<10	98	<10	3	49
10B	CA(OH)2	<0.2	2.69	10	250	15	1.21	<1	13	77	28	3.15	10	0.52	382	2	0.14	18	800	20	<5	<20	153	0.24	<10	98	<10	3	58
11	MORDMNL-ZN	<0.2	1.93	15	240	5	0.68	<1	13	46	23	3.33	20	0.57	455	4	0.07	18	1420	16	<5	<20	126	0.16	<10	107	<10	5	95
12	MORDCU-ZN-CA	<0.2	2.06	10	265	5	0.60	<1	13	66	62	2.88	20	0.57	370	3	0.08	20	1030	16	<5	<20	138	0.17	<10	93	<10	5	76
13	MORBRX	<0.2	2.46	<5	300	20	1.40	<1	26	24	27	3.83	30	2.45	607	<1	0.11	66	1040	16	10	<20	146	0.35	<10	61	<10	12	49

QC DATA:

Standard:

GEO'99	1.2	1.76	55	165	10	1.72	<1	19	59	80	4.04	<10	0.97	678	<1	0.03	26	640	24	<5	<20	62	0.12	<10	79	<10	2	67
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df/9/9p  
XLS/99

  
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

*Loaded.*

**WHOLE ROCK CERTIFICATE OF ANALYSIS AK99-9**

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

22-Jan-99

ATTENTION: CHUCK MARLOW

No of samples Received: 2

Sample Type:

PROJECT #: None Given

SHIPMENT #: None Given

Values expressed in percent


ET #.	Tag #	BaO	P2O5	SiO2	MnO	Fe2O3	MgO	Al2O3	CaO	TiO2	Na2O	K2O	%O.I.
1	SODCHL	0.07	0.22	70.91	0.06	4.64	1.25	9.42	1.91	0.52	2.22	1.12	7.66
2	DOTCHL	0.10	0.43	68.38	0.08	4.97	1.53	10.19	2.47	0.64	1.56	2.48	7.19
3	CALHYD	0.07	0.26	69.81	0.05	4.77	1.56	9.45	3.01	0.59	1.45	1.06	7.90
4	PHO205	0.09	0.54	68.04	0.06	5.57	1.57	9.73	2.49	0.58	1.90	0.93	8.11
13	MORBRX	0.09	0.54	52.69	0.12	8.00	5.46	15.29	6.71	1.14	2.40	1.25	6.32

**QC/DATA:**

Standard:

SY2	0.06	0.48	58.57	0.32	6.51	2.79	11.92	8.36	0.15	4.29	4.71	1.84
MRG1	0.01	0.06	38.05	0.16	17.85	13.61	8.26	14.70	3.69	0.71	0.68	2.22

XLS/99  
df/wr9

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

01/20/99 11:49 200 073 4007 ECO-TECH KAM. 0001

22-Jan-99

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

ICP CERTIFICATE OF ANALYSIS AK 99-9

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

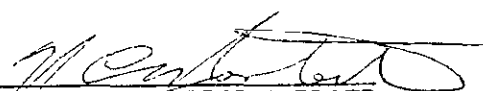
ATTENTION: CHUCK MARLOW

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

No. of samples received: 2  
Sample type: Solutions  
PROJECT #: None Given  
SHIPMENT #: None Given  
Samples submitted by: C. Marlow

Values in ppm unless otherwise reported

Et #.	Tag #	pH before	pH final
1	SODCHL	5.60	5.05
2	POTCHL	5.65	4.67
3	CALHYD	12.20	11.90
4	PHO205	9.05	7.88
5	MORDZN	1.42	1.50
6	MORDCU	1.44	1.48
7	MORDMO	9.48	8.98
8	MORDZN-CU	1.54	1.50
9	MORDCU-MO	1.80	2.18
10	MORDFE-ZN	1.32	1.27
11	MORDMN-ZN	1.38	1.44
12	MORDCU-ZNCA	1.35	1.40



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Appendix 7

