

83-#824-11645

10/89

ASSESSMENT REPORT

1983 Geochemical & Heavy Sediment Survey

KEEFER & CRYSTAL CLAIMS  
Keefer Lake Area, Vernon Mining Division

CLAIMS: KEEFER RECORD # 1157  
CRYSTAL RECORD # 1338

MAP: N.T.S. 82 L 1W

LATITUDE: 50°08'N; LONGITUDE: 118°19'W

OWNER: DEMUS PETRO CORP.  
201 - 845 Hornby Street,  
Vancouver, B.C. V6Z 1V1

OPERATOR: BURTON CONSULTING INC.,  
810 - 626 West Pender Street,  
Vancouver, B.C. V6B 1V9

OCTOBER 5, 1983

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,645**

**BURTON CONSULTING INC.**

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**INTRODUCTION**

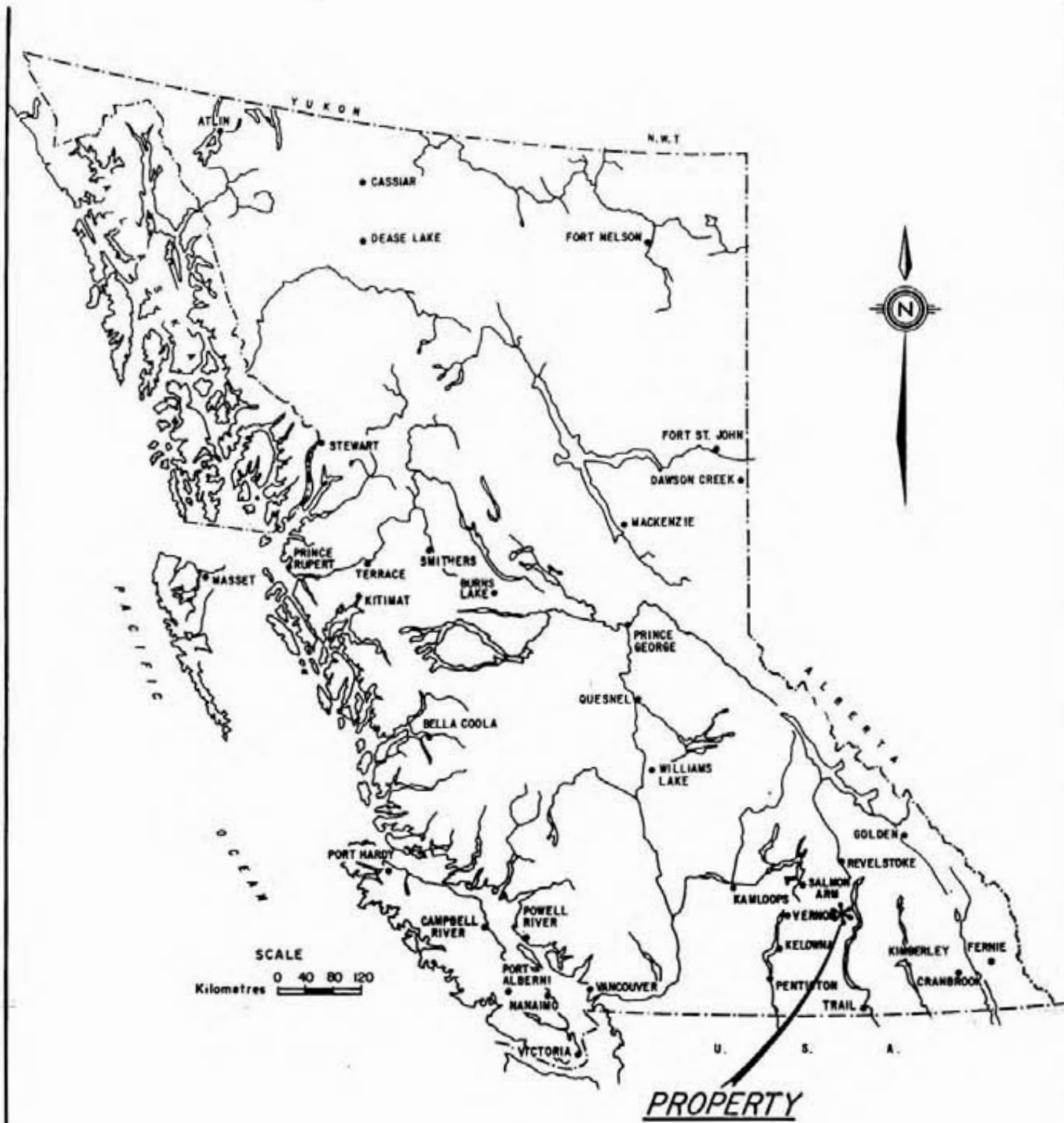
The Keefer & Crystal Claims are located 500 metres north of Keefer Lake 72 km. east of Vernon on Highway #6. At the summit of the Monashee Pass a gravel road connects to Keefer Lake. The road adjoins logging roads and skid trails on the north side of Keefer Lake continuing easterly to the north end of Holmes Lake.

Geological and Geochemical surveys were conducted by Ducanex Resources (1978 Assessment Report #5279) and by John McGoran, B.S.C. in 1982. The grid put in under John McGoran's supervision was extended to detail and expand coverage of the previously located anomalies. Soil samples collected along the road by Cominco and analysed by them are also plotted along the road from information supplied by them.

**CLAIMS INFORMATION**

KEEFER	Record # 1157	20 Units	Oct.'83
CRYSTAL	Record # 1338	12 Units	Nov.'83

**BURTON CONSULTING INC.**



DEMUS PETRO CORPORATION	
KEEFER & CRYSTAL CLAIMS	
MONASHEE PROPERTY	
VERNON M.D., B.C.	
<b>LOCATION MAP</b>	
NT.S' 82L/1W.	SCALE: 1 : 2,000
DRAWN BY: J. ZIEGLER	DATE: NOVEMBER, 1983
BURTON CONSULTING INC. 810 - 626 West Pender St., Vancouver, B.C. V6B 1V9	FIGURE NO.:

**DESCRIPTION OF WORK**

A total of 83 soil samples were taken on the Keefer and Crystal Claims. The existing grid was extended from 8 + 00 East to 1200 East on lines 1 + 50 south and 3 + 00 south. A tie line was established from 1 + 50 south 600 E to 4 + 50 S 6+ 00 E running north-south, Line 4 + 50 S was run from 6+00 E to 12 + 00 E. See Sample Location Map in Pocket.

Soil samples were taken using a shovel. Approximately 100 g of material taken from the "B" horizon was placed in Kraft paper bags and sent to Min En Labs in North Vancouver for processing. All sample sites were identified by sample number and flagged.

**ANALYTICAL PROCEDURE**

All the soil samples were analysed by Min En Laboratories, 705 West 15th Street, North Vancouver. Soils were pulverized to 100 mesh - then digested and analysed as follows:

Pb, Ag - nitric, perchloric digestion, analyzed by Atomic Absorption.

As - Spectrophotometric, Au aqua regia digestion, analyzed by Atomic Absorption.

Gold values are in parts per billion (ppb) whereas silver and arsenic are in parts per million (ppm).

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**GEOCHEMICAL RESULTS & INTERPRETATION****Gold:**

The values range from background levels of 10 P.P.B. to 70 P.P.B. These values are consistent with the results of J. McGoran's survey in 1982 on the repeated segments of the grid although somewhat lower.

**Arsenic:**

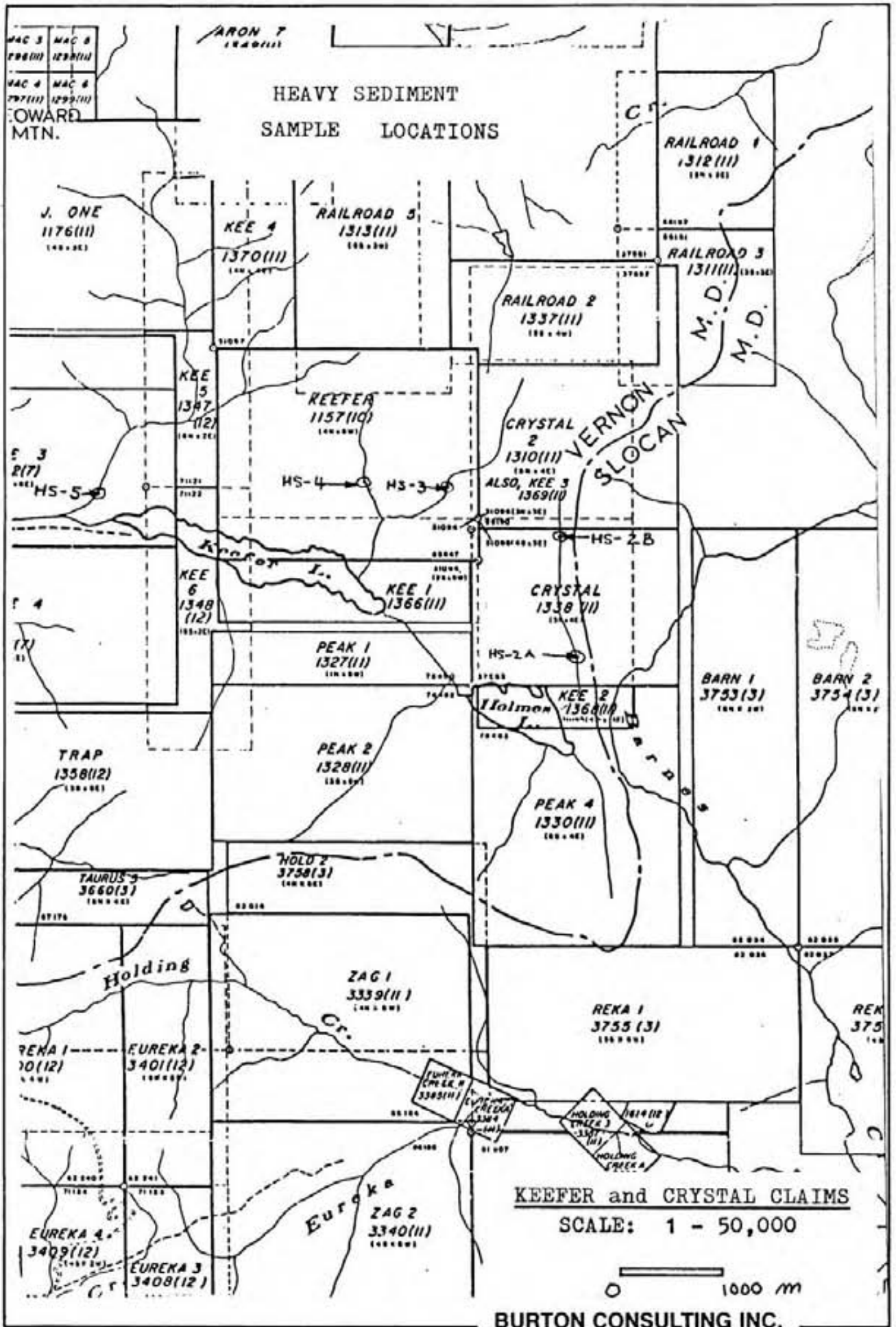
The values range from less than 1 P.P.M. to 310 P.P.M. Over 100 P.P.M is taken as anomalous, over 200 P.P.M. as strongly anomalous. Arsenic is used as a pathfinder mineral because of its association with gold. Two zones of co-incident anomalies of gold and arsenic occur at 750 E 300 S, and 950 E 300 S.

**Silver and Lead:**

The silver and lead values are at background levels throughout the sampled area and do not appear to be associated with the gold bearing mineralization.

**RECOMMENDATIONS:**

Further detail using an additional line at 600 E, 000 S to 1200 E at 25 m sample intervals is recommended. The remainder of the property should be soil sampled.





**HEAVY SEDIMENT SURVEY**

The creeks draining the Keefer and Crystal Claims were sampled with the following technique.

Using a Keene 2 1/2" suction concentrator sediments were drawn through a 2 1/2" venturi and expelled into a riffle box set up with 7° to 9° of slope. Heavy material settles in the riffles, light material washes through. At each location material was sampled continuously for 15 minutes. The resultant "heavies" were panned using a panning machine to recover concentrates which were assayed by Min-En Labs for gold. Five watercourses were sampled and labelled HS - 2a, 2b, 3, 4, 5.





Analytical Procedure

The concentrates were assayed for gold using standard fire assay techniques by Min-En Labs. Results are in the Appendix.

Results and Interpretation

Hs 2a sample is located south central on the Crystal Claim, Hs 2b is located north central on the same water course. Both samples show gold in the watercourse, the more northerly HS - 2b has the highest value obtained. Hillside prospecting, geological mapping, geochemical soil sampling along contour is recommended for follow up.

HS-3 and HS-4 show a lower gold value, further testing is required, followed by geochemical soil sampling. However, this target area appears weaker.

COST STATEMENT

A. SCHILDHORN, Sampler	
Sept. 9, 10, 11, 12, 12 incl.	
5 days @ \$125.00/day	\$ 625.00
J. ZIEGLER, Supervisor	
Sept. 9, 10, 11, 12, 13 incl., Oct. 4	
6 days @ \$210.00/day	1,260.00
Room: Sept. 9,10,11,12,13 incl	
Unit cost \$16.60/man day	156.03
Board: Sept. 9,10,11,12,13	
Unit cost \$28.20/man day	281.96
Transportation:	
4 x 4 rental 5 days @ \$40/day	200.00
Fuel	216.82
Equipment Rentals:	
Keene Concentrator 5 days @\$20/day	100.00
Gold Concentrator 5 day @\$17/day	85.00
Pump 5 days @ \$15/day	75.00
Supplies	86.00
Drafting Services	100.00
Geochemical Determinations:	
83 soils @ \$11.39	945.37
5 assays @ \$10.50	52.50
5 rock chip geochem @ \$11.39	56.95
	<hr/>
Total	4,240.63
Cost of Report	375.00
	<hr/>
Total Expenditure	\$4,615.63

BURTON CONSULTING INC.

STATEMENT OF QUALIFICATIONS

I have worked as a geotechnician for 18 years.

For the past 5 years as an associate and under the direction of Mr. Alex Burton, P. Eng.

  
\_\_\_\_\_  
J. A. ZIEGLER

209 - 1045 Haro Street,  
Vancouver, B.C.

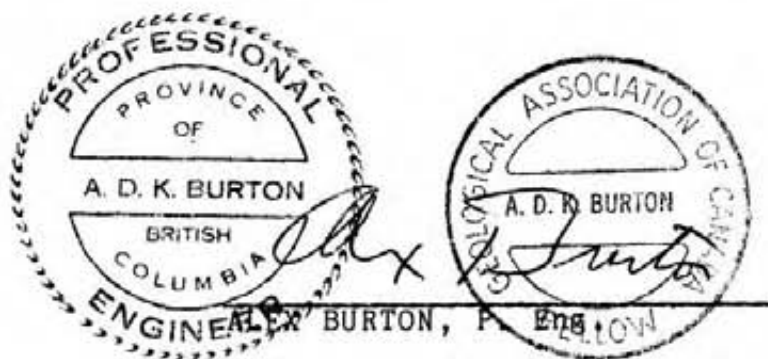
BURTON CONSULTING INC.

STATEMENT OF QUALIFICATIONS

I, Alex Burton do hereby certify that I am an independent Consulting Geologist with offices at 810 - 626 West Pender Street, Vancouver, B.C. V6B 1V9.

I FURTHER CERTIFY THAT:

1. I am a graduate geologist and a Registered Professional Engineer in B.C. with certificate No. 6262.
2. I am a member of the Association of Exploration Geochemists.
3. I am a fellow of the Geological Association of Canada.
4. I supervised the work on the Keefer and Crystal Claims carried out by Mr. John Ziegler, a geological technician in my employ.
5. I have examined the Keefer and Crystal Claims.



**BURTON CONSULTING INC.**





COMPAN Demus Petro

## GEOCHEMICAL ANALYSIS DATA SHEET

File No. 3-104PROJECT No.: Kefer Lake

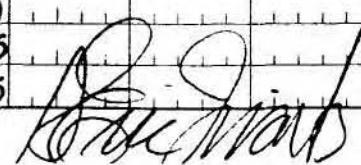
MIN - EN Laboratories Ltd.

DATE: Sept.705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-58141983.

ATTENTION:

Sample. Number	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	Mo	Cu	Pb	Zn	Ni	Co	Ag	Fe	Hg	As	Mn	Au				
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb				
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
K1			23					15			150		5			
2			19					13			56		5			
3			24					10			23		5			
4			27					10			34		5			
5			25					12			170		10			
6			23					11			200		10			
7			21					09			22		5			
8			16					11			84		5			
9			17					11			189		5			
10			16					11			44		5			
11			16					09			56		35			
12			14					09			78		10			
13			14					08			34		15			
14			20					11			114		5			
15			18					11			92		20			
16			19					10			76		5			
17			16					10			63		5			
18			17					09			82		15			
19			17					11			104		35			
20			18					10			88		10			
21			18					08			113		30			
22			16					07			16		15			
23			19					08			18		5			
24			17					10			58		10			
25			19					09			86		5			
26			16					09			13		5			
27			15					08			32		15			
28			16					08			18		10			
29			16					07			14		5			
K30			13					06			8		5			

CERTIFIED BY





COMPAL

Demus Petro

## GEOCHEMICAL ANALYSIS DATA SHEET

File No. 3-104

PROJECT No.: Keefer Lake

MIN - EN Laboratories Ltd.

DATE: Sept. 3705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1983.

ATTENTION:

Sample. Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	70	75	80	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
K 31			31				12			8		10				
32			34				15			40		10				
33			28				15			22		5				
34			27				12			10		15				
35			25				14			10		5				
36			20				0.9			2		5				
37			23				1.1			7		10				
38			16				1.0			8		5				
39			22				1.3			150		15				
40			25				1.4			122		45				
41			24				1.6			6.8		5				
42			25				1.1			9.8		70				
43			18				1.2			6.6		15				
44			20				1.2			132		30				
45			22				1.4			140		25				
46			23				1.2			80		5				
47			22				1.1			140		20				
48			27				1.4			310		50				
49			20				0.7			93		10				
50			25				1.2			152		5				
51			23				1.4			260		5				
52			no sample				.									
53			25				1.2			182		15				
54			24				1.8			200		10				
55			26				1.6			290		10				
56			20				1.4			112		30				
57			20				0.8			152		25				
58			24				1.2			124		15				
59			19				0.8			10		5				
K 60			20				1.0			104		10				

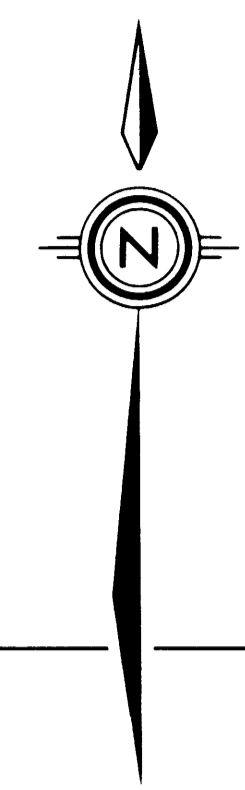
CERTIFIED BY





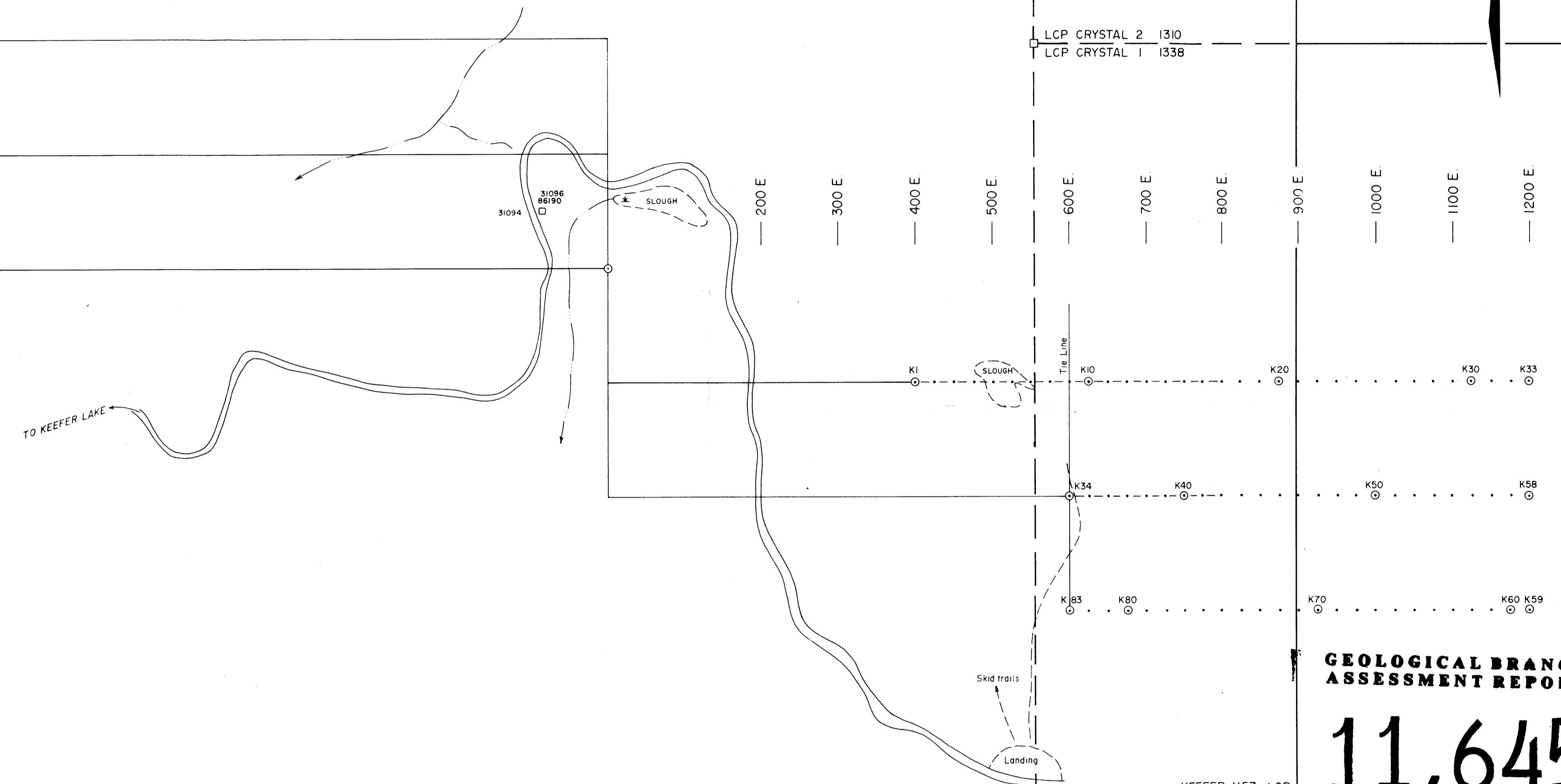






800 W  
700 W  
600 W  
500 W  
400 W  
300 W  
200 W  
100 W  
0+00  
100 E

L 300 N  
L 150 N  
BASELINE  
L 150 S  
L 300 S  
L 450 S

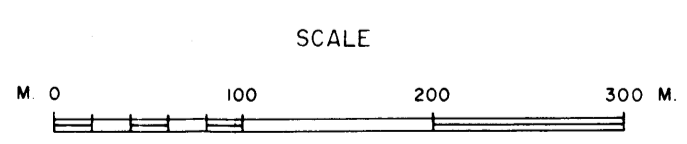


LCP CRYSTAL 2 1310  
LCP CRYSTAL 1 1338

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

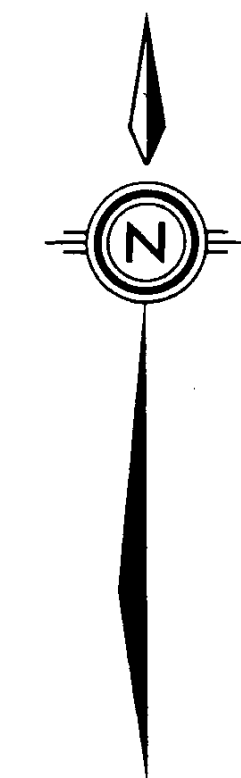
**11,645**

KEEFER 1157 LCP



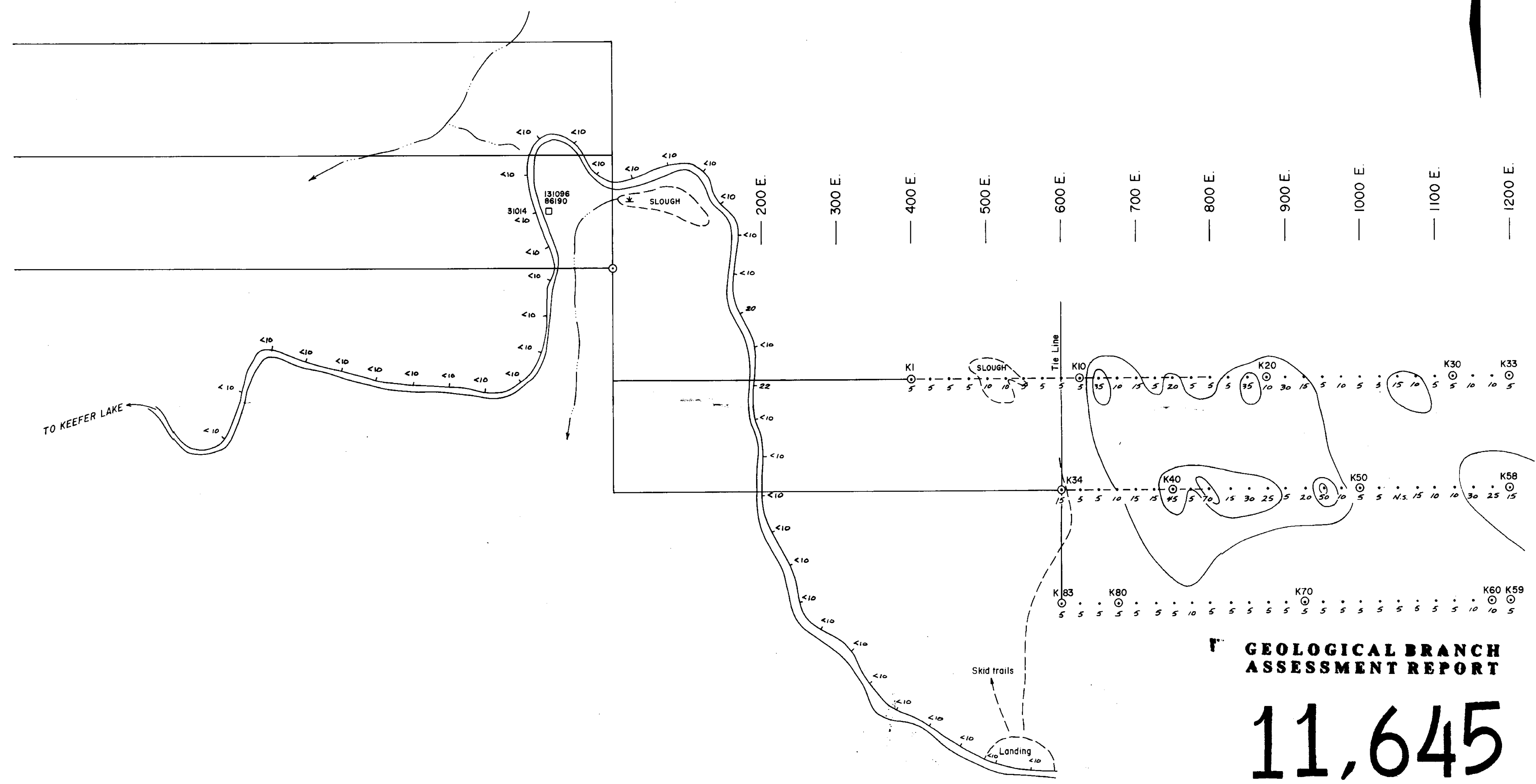
DEMUS PETRO CORPORATION	
KEEFER & CRYSTAL CLAIMS MONASHEE PROPERTY VERNON M.D., B.C.	
GEOCHEMICAL SURVEY SAMPLE LOCATION MAP	
NTS: 82L/1W.	SCALE: 1:4000
DRAWN BY: J. ZIEGLER	DATE: NOVEMBER, 1983
BURTON CONSULTING INC. 810 - 626 West Pender St., Vancouver, B.C., Canada, V6B 1V9	FIGURE NO.:





800 W. 700 W. 600 W. 500 W. 400 W. 300 W. 200 W. 100 W. 0+00 100 E.

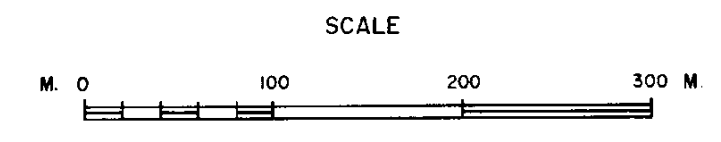
L. 300 N. —  
L. 150 N. —  
BASELINE —  
L. 150 S. —  
L. 300 S. —  
L. 450 S. —



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

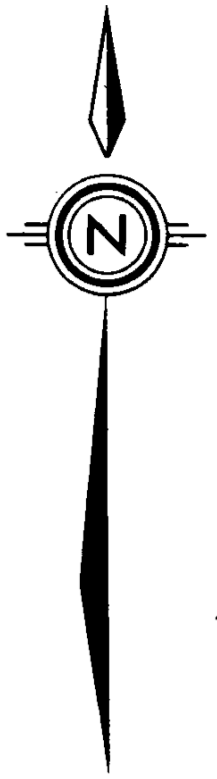
# 11,645

DEMUS PETRO CORPORATION	
KEEFER & CRYSTAL CLAIMS MONASHEE PROPERTY VERNON M.D., B.C.	
GEOCHEMICAL SURVEY GOLD (PPB)	
NTS: 82L/IW.	SCALE: 1: 4000
DRAWN BY: J. ZIEGLER	DATE: NOVEMBER, 1983
BURTON CONSULTING INC. 810 - 626 West Pender St., Vancouver, B.C., Canada, V6B 1V9	FIGURE NO.:

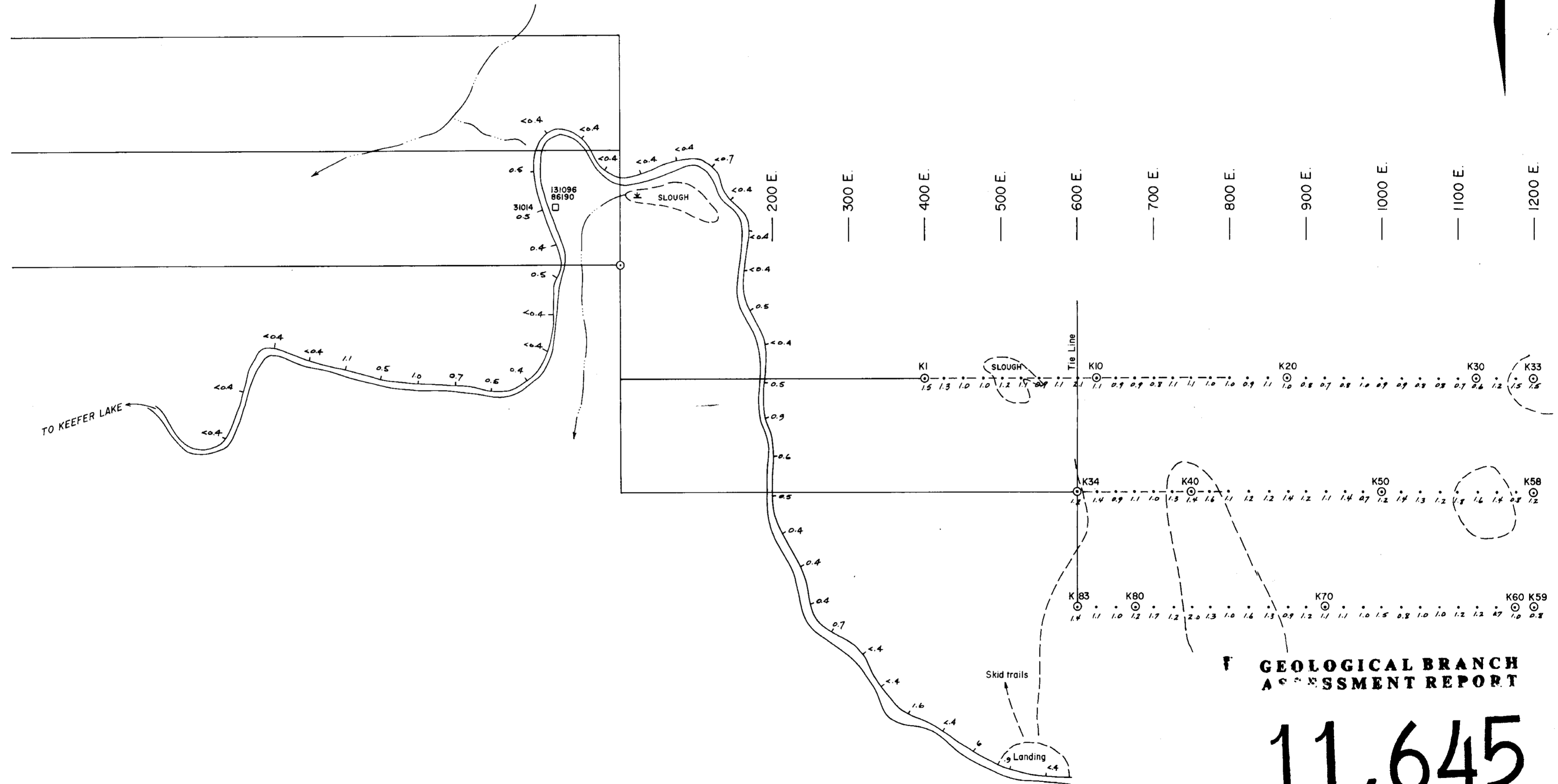




800 W. 700 W. 600 W. 500 W. 400 W. 300 W. 200 W. 100 W. 0+00 100 E.



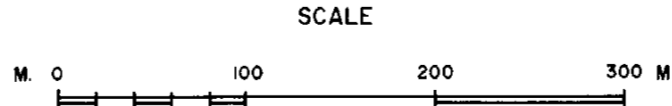
L. 300 N. —  
L. 150 N. —  
BASELINE —  
L. 150 S. —  
L. 300 S. —  
L. 450 S. —



TO KEEFER LAKE

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,645**



DEMUS PETRO CORPORATION	
KEEFER & CRYSTAL CLAIMS MONASHEE PROPERTY VERNON M.D., B.C.	
GEOCHEMICAL SURVEY SILVER (PPM)	
NTS: 82L/1W.	SCALE: 1:4000
DRAWN BY: J. ZIEGLER	DATE: NOVEMBER, 1983
BURTON CONSULTING INC. 810 - 626 West Pender St., Vancouver, B.C., Canada, V6B 1V9	FIGURE NO. :