REPORT ON THE RECONNAISSANCE

GEOCHEMICAL SURVEY OF

THE KERO-LAREDO-PUMA PROPERTY Ollala, B.C.

N.T.S. 82 E/5 LAT. 49°20'N; LONG. 119°50'W OSOYOOS M.D.

Owner and Operator
GRAND NATIONAL RESOURCES INC.
#905 - 626 West Pender Street
Vancouver, B.C. V6B 1V9

Name of Claim	No. of Units	Record No.	Month of Record
Kero #1	1	1606	October
Kero #2	1	1607	October
Kero #3	1	1634	December
Kero #4	1	1635	December

Consultant & Author of Report: I. Borovic, P.Eng.

Field Work

June 11, 12, August 5, 6, 1985

Report:

September 24, 1985

GEOLOGICAL BRANCH ASSESSMENT REPORT

13,905

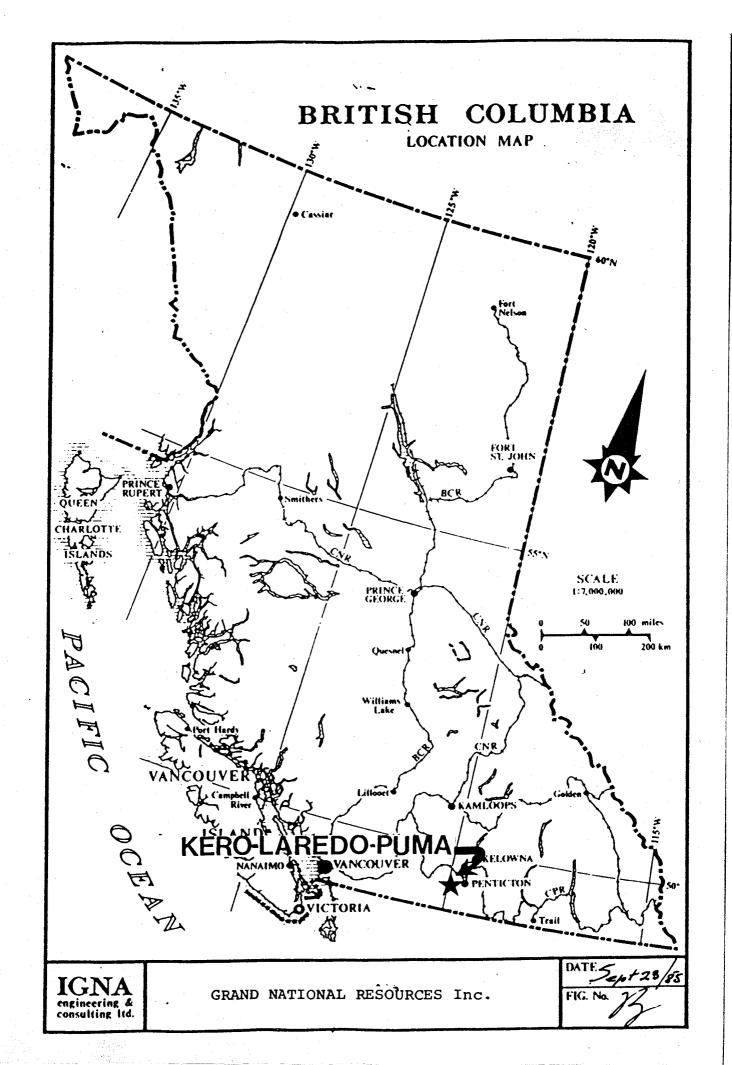


TABLE OF CONTENTS

	Page
INTRODUCTION	1
PROPERTY	1
SUMMARY OF GEOLOGY - STRUCTURE AND MINERALIZATION	4
HISTORY OF EXPLORATION AND WORK DONE	6
CONCLUSIONS AND RECOMMENDATION	17
BIBLIOGRAPHY	18
STATEMENT OF EXPENDITURES	19
CERTIFICATE	20
LIST OF ILLUSTRATIONS	
British Columbia, Location Map Fig. No. 1 - Kero-Laredo-Puma, Claim Map Fig. No. 2 - Geology (Little, H.W., 1961) Fig. No. 3 - Grid Location & Prospecting Traverses Fig. No. 4 - Geochemical Soil Survey Cu Fig. No. 5 - Geochemical Soil Survey Pb Fig. No. 6 - Geochemical Soil Survey Zn Fig. No. 7 - Geochemical Soil Survey Ag Fig. No. 8 - Geochemical Soil Survey Au Geochemical ICP Analysis	2 5 9 12 13 14 15 16 21-24

INTRODUCTION

Grand National Resources Inc. of Vancouver, B.C. intends to continue geological exploration of copper, gold, silver, lead and zinc-bearing structures on the Kero-Laredo-Puma claim located in British Columbia.

The following report presents a summary of information obtained from the published and unpublished reports listed in the Bibliography (page 18); from personal knowledge and experience gained during exploration work of the region where the property is located and from the results of the exploration work done on the property during the 1983, 1984 and 1985 exploration seasons.

PROPERTY (Fig. No. 1)

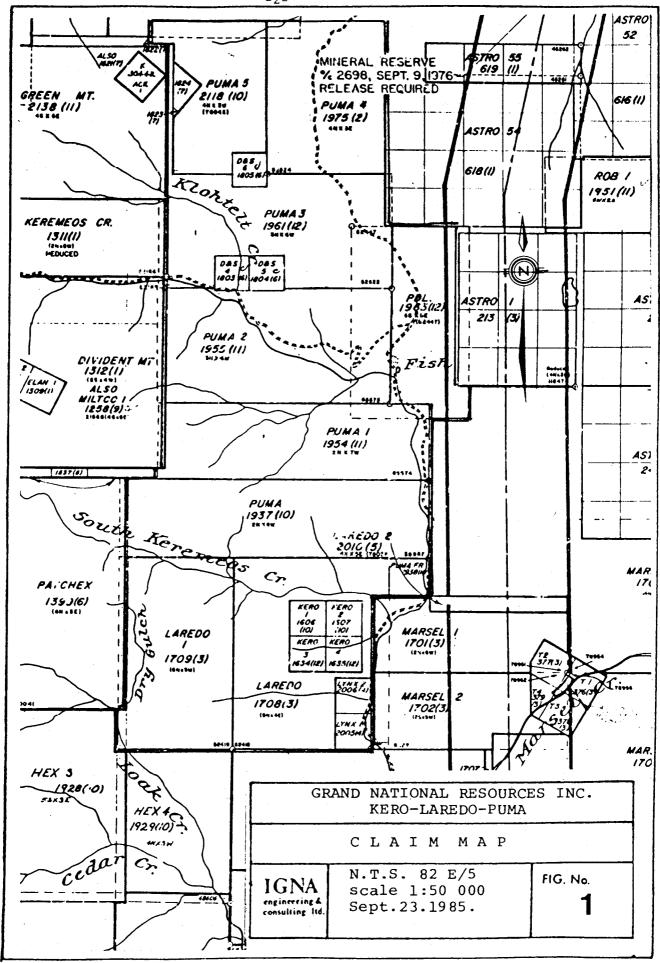
Location: Lat. 49°20' Long. 119°50' (N.T.S. 82E/5)

Kero-Laredo-Puma Group is located on Keremeos Creek and on the road to Apex Ski Area, about 12 km north of Keremeos.

Claims	No. of Units	Record No.	Re∞rd Date	Expiry Date
Kero 1	1	1606	Oct. 6/82	Oct. 6/85
Kero 2	1	1607		
Kero 3	1	1634	Dec. 14/82	Dec. 14/85
Kero 4	1	1635	u.	11
Laredo	20	1708	Mar. 31/83	Mar. 31/86
Laredo l	15	1709	u ,	Mar. 31/86
Puma	16	1937	Oct. 27/83	Oct. 27/86
Puma 1	14	1954	Nov. 25/83	Nov. 25/86
Puma 2	18	1955		Nov. 27/87
Puma 3	18	1961	Dec. 15/83	Dec. 15/87
Puma 4	12	1 97 5	Feb. 10/84	Feb. 10/88
Puma 5	12	2118	Oct. 5/84	Oct. 5/87
Puma 6	20	2243	June 25/8 5	June 25/86
PumaFr	1	1938	Oct. 27/83	Oct. 27/87
Lynx 1	1	2005)	Apr. 16/84	Apr. 16/88
Lynx 2	1	2006)	whr • 10/04	Apr. 10/00

Owner-Operator

Grand National Resources Inc. of #905-626 West Pender Street, Vancouver, B.C. V6B 1V9



Access

Via Hwy 3A about 6 km to the north from Olalla, a Keremeos Creek road turns west through the Indian Reserve and crosses the Kero-Laredo-Puma property 3 km from the intersection. The road crosscuts the property at its southeastern edge. The area of this year's exploration activity is reached by helicopter or walking up the mountain to the workings. Permission to build the access road was obtained.

Facilities and Services

The nearby settlement of Keremeos has good room and board facilities for accommodating the exploration crew. Major socioeconomic centres with schools, hospitals and heavy-duty equipment are available in Princeton--some 80 km to the west, and Osoyoos, about 80 km to the east on Hwy 3.

Property Resources

There is ample timber available on the property, water for drilling is available from the Keremeos Creek.

SUMMARY OF GEOLOGY - STRUCTURE AND MINERALIZATION

KERO-LAREDO-PUMA PROPERTY (Little, H.W. 1961 - Fig. 2)

General

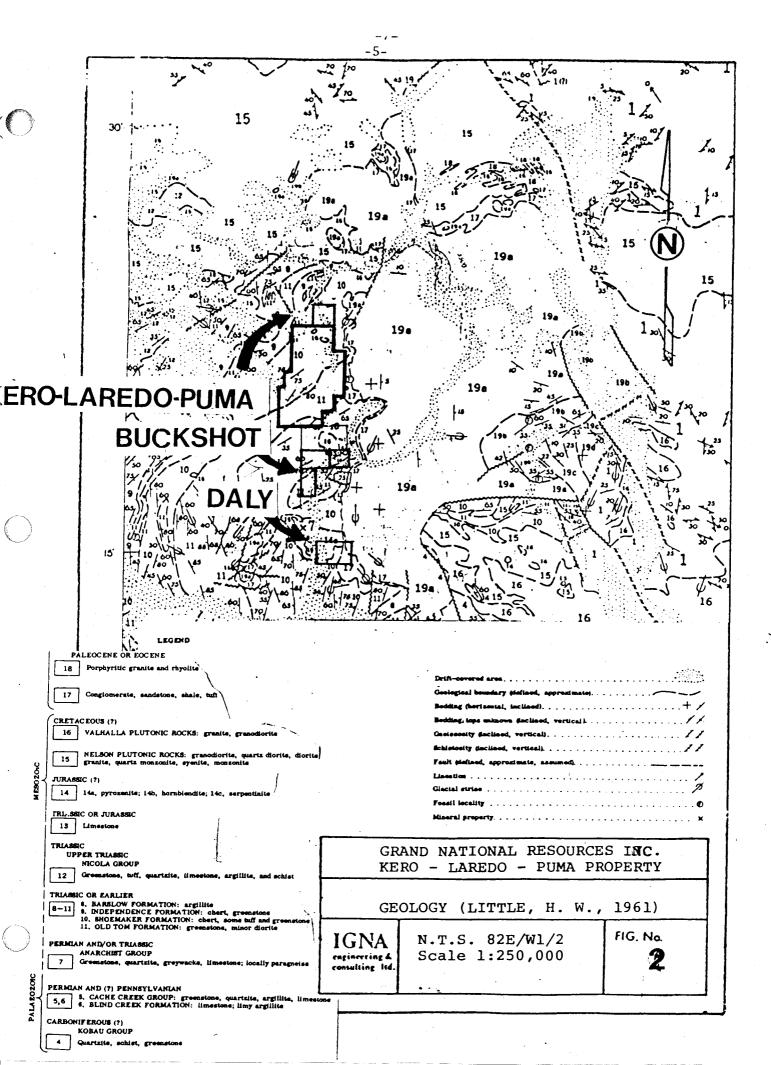
The property is underlain by cherts, tuffs, and greenstones of the Shoemaker and Old Tom formations of the Triassic or earlier age. Jurassic limestones also outcrop on the property. All these rocks were intruded by the cretaceous granites and granodiorites of the Nelson Plutonic complex.

Bedding strikes NE-SW with moderate to steep dips to SE, Paleocene sediments and Eocene volcanics are unconformably capping the older units.

Det ail

The Kero claims are underlain by altered volcanic, soft, cloritic and calcareous greenstones with pyrite, magnetite, silver, gold and copper mineralization.

The quartz veins are filling fractures and shears in the greenstones with general trend east-west with moderate dip to the south. The vein in the Kero adit is 8 to 50 cm wide and is widening down dip. Mineralization consists of pyrite and arsenopyrite.



HISTORY OF EXPLORATION AND WORK DONE

The mineral potential of the area of Kero-Laredo-Puma property was known and results of the past exploration recorded in the Annual Reports of the Ministry of Mines (B.C.) for 1899-1904, 1906, 1908 and 1928. Most of the existing underground workings and surface development was done before 1908. Complex mineralization composed mainly of pyrite and chalcopyrite, gold silver, lead and zinc occurs in scarns.

- 1964 The Kero claims were staked in 1964 by M. Schram of Olalla and trenching on the vein structure started.
- 1983 Grand National Resources Inc. became the owner of the Kero-Laredo-Puma property in 1983.

Geologist R. Kregosky examined the Kero adit in June 1983. In his report he wrote:

"The quartz vein in the Kero adit is a fracture/shear filling in the friable greenstone country rocks. The vein trends almost due east-west with a moderate dip to the north. The vein pinches and swells along dip and ranges from 8 cm on the back to 50 cm on the face of the drift. Here it appears to be widening down dip.

Mineralization consists of pyrite and arsenopyrite which generally would carry good gold values."

Three chip samples were taken from the vein:

- 1. 4851 across 50 cm, west wall at end of drift

 Ag .60 oz/ton

 Au .312 oz/ton
- 2. 4852 across 31 cm of vein, face of drift

 Ag 1.24 oz/ton

 Au 1.980 oz/ton
- 3. 4853 across 40 cm, east wall outside of portal Ag .15 oz/ton Au .279 oz/ton

In the late summer of 1983 the following work was done on the Kero-Laredo-Puma property as recommended by D.W. Pringle, P.Eng., in his August 1983 report.

The adit was cleaned and quartz vein structure opened, mapped and sampled.

The samples were assayed at Acme Analytical Laboratories Ltd. with the following results:

<u>Laredo Adit</u>	Sampli	ng Alamana ang Alamana	Pb %	Ag oz/ton	Au oz/ton	Zn %	Cu %	Cd %
East wall of adit Face east	65004	Across 21 cm	4.80	2.82	. 218	. 94		
of adit Face west	65005	Across 32 cm	4.72	1.56	.122	2.34		
of adit Ft. wall	65006	Across 20 cm	1.62	. 83	. 190	1.08		
face of adit Hanging wall	65007	Across 20 cm E side 15 cm	.17	.06	.037	.09		
E side	65008	of adit	.01	.01	.002	-		
West wall								
of adit 1st trench	65009	Across 20 cm Grab Laredo	4.55	1.30	. 297	2.29	. 20	.03
E of adit 2nd trench	65010	claims Grab Laredo	-	.05	.059	.08		
E of adit Near boundar	65011 y	claims Grab Laredo	-	.01	.058	.01		
of Laredo & Zach M . C.	65012	claims	-	.05	.010	-		

Sample 65009 was also spectrographically analyzed. The results are as follows:

Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm
8	2013	29909	16864	44.0	15	24	2483	3.67	49	3	6
Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	₽ %	La ppm	Cr ppm	Mg %	Ba ppm
2	72	270	33	2	9	6.17	. 02	2	3	1.50	21
Ti %	B ppm	Al %	Na %	K %	W ppm						
.01	3	. 17	•01	.05	2						

The exploration continued during September and early October. Main vein was sampled by D.W. Pringle, P.Eng. Results of assays again show good gold, silver and lead values:

Sample		Pb %	Zn %	Ag oz/ton	Au oz/ton	
3077 0	Face, hanging wall above Qtz shear			00	01.0	Greenstone with
70771		-		.09	.019	high Fe
30771	Face & shear zone					Centre of tunnel
	(width 60 cm)	. 74	-	1.99	. 131	(vein)
30772	Upper stringer	•				Uphill to SW
	(21 above)	2.05	. 35	. 95	.083	(hanging wall side)

In late October of 1983 a three-man crew drilled and blasted 10 trenches, successfully following mineralization in a northeasterly and southwesterly direction from the main vein showing in the old adit. The uncovered vein is from 20 to 30 cm wide (8" to 12"). It strikes about $70^{\circ}-260^{\circ}$ and has a strike length of 270 m. The vein is dipping at about 39° to the north eleven samples were assayed for lead, zinc, silver and gold. Following are the assay results:

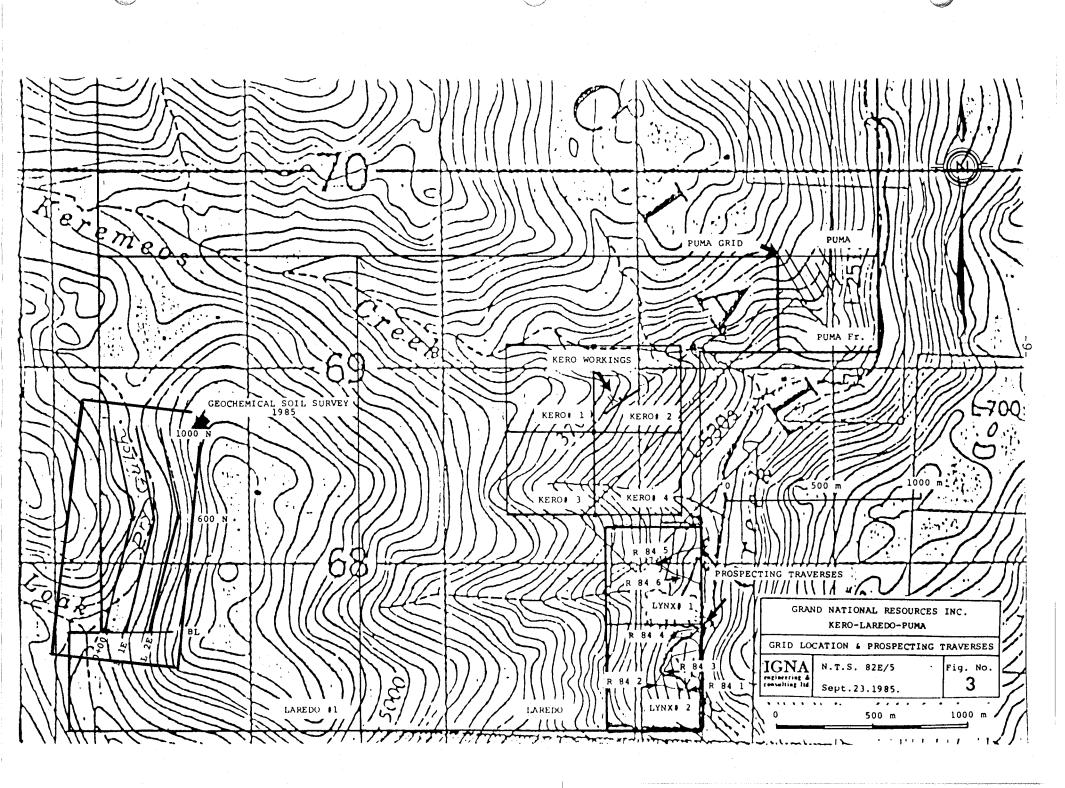
Sample	Remarks	<u>Pb %</u>	<u>Zn%</u>	Agoz/t	Au oz/t
65013 65014 65015 65016 65017 65018 65019 65047 65048 65049 65050	Adit - E. Wall across 8" Adit - Face (W.) " 8" Trench 1 10" Trench 2 - 2' strike + across 2" Trench 4 - West - across 8" Trench - East - " 12" Trench 5 - " 8 Trench 6 - " 12" Trench 3 - Grab of gossan Trench 2 - Hg. wall Adit - E. Wall (Ft. wall)	4.88 3.84 0,42 1.91 1.29 2.35 0.12 0.23	2.32 2.42 0.37 0.55 1.02 0.57 0.35 0.26	1.83 1.70 0.31 2.17 0.94 0.48 0.21 0.14 2.62 0.03 0.35	0.381 0.284 0.495 2.462 0.472 0.426 0.125 1.414 0.002 0.232
	· · · · · · · · · · · · · · · · · · ·				

The writer, assisted by Messrs. Moore & Rick Schram spent about ten days in the early fall of 1984 exploring the areas of Puma, Puma Fr, Lynx 1 and 2 and Kero 1-4 claims. The work comprised geological mappings VLF-EM and reconnaissance geochemical soil survey.

Results were encouraging and in

1985 early March of 1985 prospector M. Schram found "a lensoid, massive sulphide" (R. Kregosky, March 15, 1985) showing near the Dry Gulch grid lines. The showing was previously sampled and assay results indicated good copper values with some gold, silver, lead and zinc.

In March of 1985 Geologist R. Kregosky accompanied by an assistant, conducted reconnaissance VLF-EM survey on the Kero-Laredo area also in the area of Dry Gulch. The survey results indicated a number of E-W trending conductors. The detail description of this work is found in Kregosky's March 15, 1985 report.



In early June of 1985 three 1000 m lines were picketed and the last soil samples were collected in early August (Fig. No. 3 for grid).

The results of the 1985 geochemical soil survey are described as follows:

Geochemical Soil Survey (Fig. Nos. 4, 5, 6, 7, 8)

Sampling and Assaying

A soil sampling geochemical survey was carried out in order to define and later extend copper mineralized areas found near Dry Gulch at the western end of the Laredo #1 claim. Samples were taken at 25 and 50 m intervals on lines spaced at 100 m. Wherever possible samples were taken from poorly developed "B" horizon at a depth varying from 15 to 25 cm.

Complete pulverization of the soil samples followed by screening to -80 mesh and subsequent "AA" analysis were done by Tom Saundry, certified B.C. Assayer at Acme Analytical Laboratories Ltd., 852 East Hastings Street, Vancouver, B.C. V6A 1R6 (253-3158). Samples were analyzed for copper, silver, gold and on line 0+00 for zinc and lead also.

Results

Copper (Fig. No. 4)

Copper dispersion with background of 100 ppm is very high for the area. Anomalous values start at 200 ppm and values of 400 ppm and up are considered highly anomalous. The area representing values better than 200 ppm Cu is about 500 m (1,640') wide and open to the east and west. This very strong anomaly indicates very possible presence of copper mineralization in the underlying rocks.

Rock chip samples (Fig. No. 4) collected in the Dry Gulch area in early 1985 show the following results:

Sample No.	% Cu	oz/t Ag	oz/t Au
0554	0.85	0.11	0.001
0556	0.25	0.03	0.001
0557	2.29	0.30	0.030

Lead

Lead dispersion with background of 10 ppm is low and as yet inconclusive.

Zine

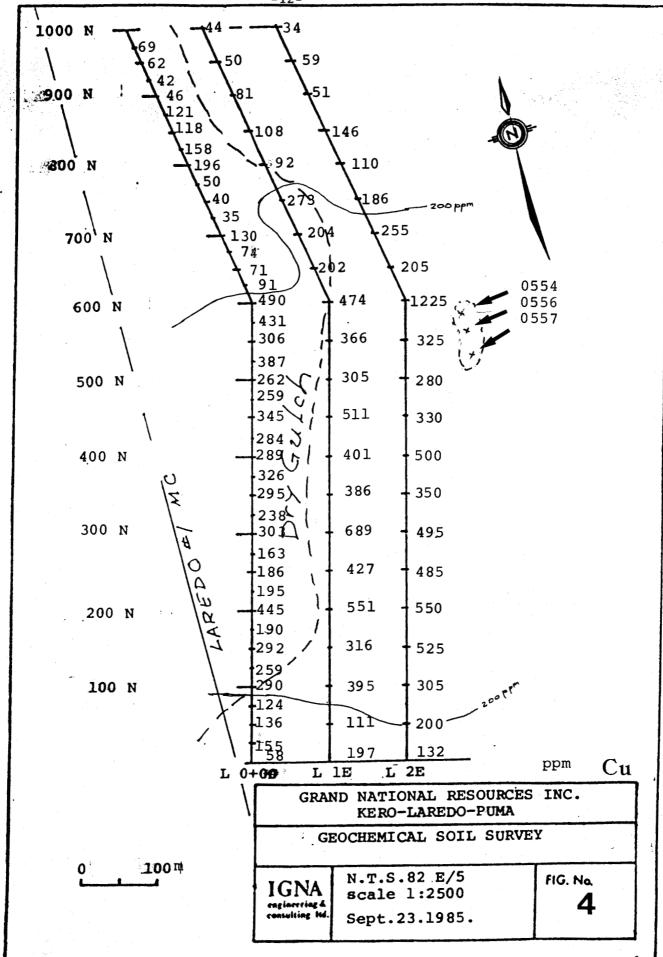
Zinc dispersion has the similar pattern and low anomalous values as lead. For a very mobile element such as zinc the values are too low.

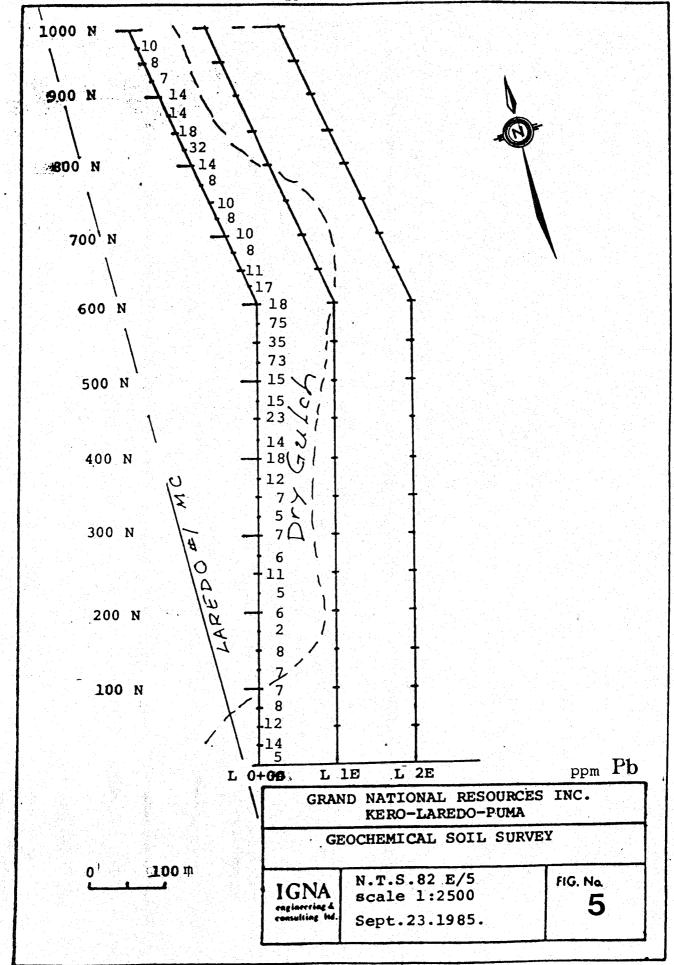
Silver

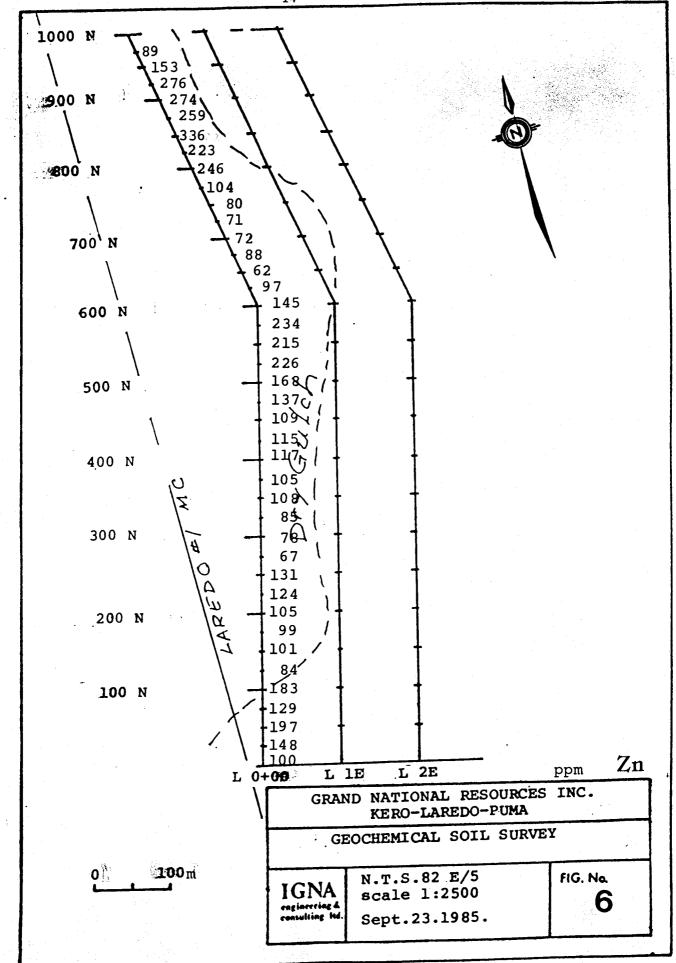
Silver values are low and dispersion relatively uniform, showing only slight increase on Line 0+00.

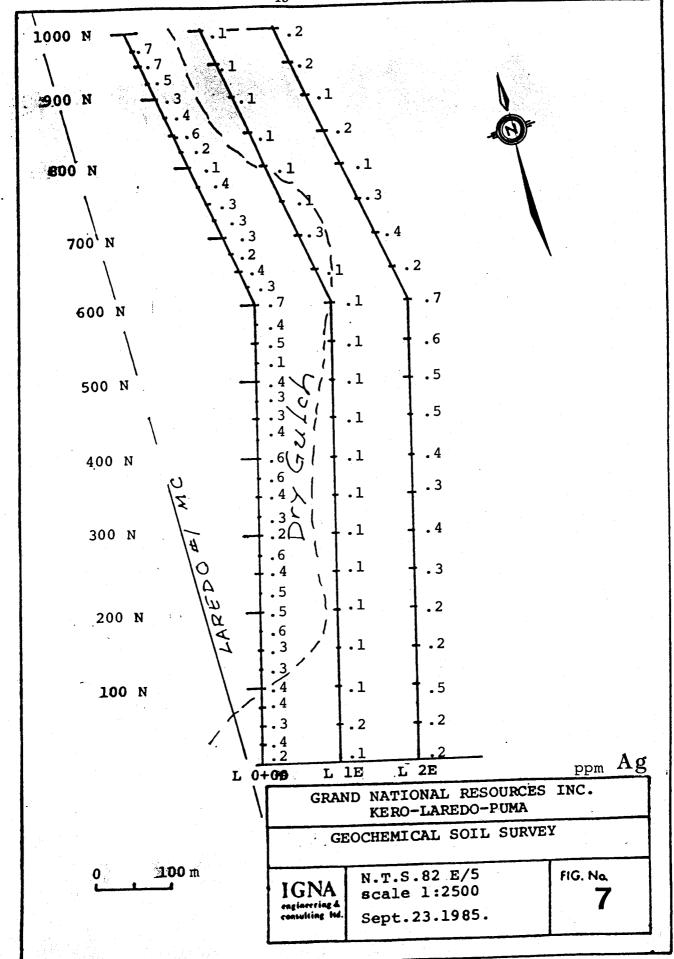
Gold

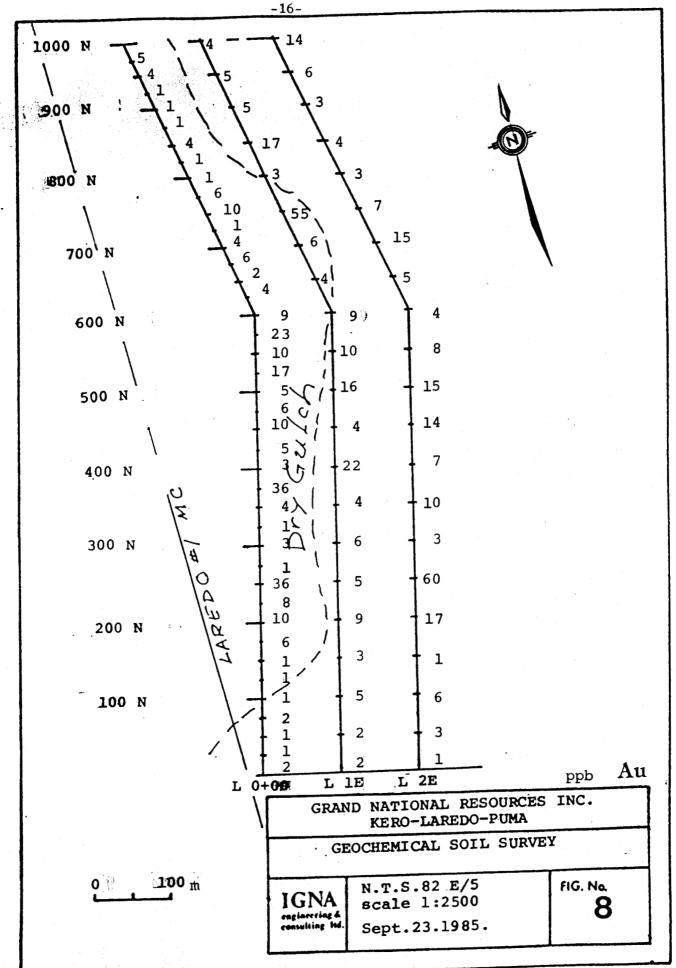
Gold shows background of about 10 ppb with the highest values going to 60 ppb. It does not seem to show any regular pattern but only that it is present in higher amounts very possibly coincidental with higher copper content.











CONCLUSIONS AND RECOMMENDATION

The geochemical survey conducted on the Kero-Laredo-Puma property was successful in showing that a strong copper anomalous zone of about 500 m width and open toward east and west exists.

In view of the positive results of this year's reconnaissance survey, the writer strongly recommends continuation of the geochemical soil survey program towards the east. The geochemical soil survey should be done in conjunction with VLF-EM and particularly with ground magnetic survey. If successful in delineating large copper anomaly, the IP survey should be done and anomalous areas tested by diamond drilling.

The following exploration program is recommended:

Phase I

Geochemical Soil Survey 30 km lines @ \$100/km line 600 samples @ \$9/sample	\$ 3,000 5,400
Geophysical Survey VLF-EM & Ground magnetic, 30 km lines @ \$150/km line IP Survey, 30 km lines @ \$250/km line	4,500 7,500
Transportation, room & board	6,000
Supervision of Report	6,000
Total Contingencies - 20%	\$ 32,400 6,480
Total Phase I	\$ 38,880
Phase II (dependent on Phase I success) Diamond Drilling	\$150,000

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Kregosky, R. (1985): Geophysical Report on the Kero-Laredo Group for Grand National Resources Inc.

Little, H.W. Map 6 - 1957 Kettle River, B.C. (82 $E/E_{\frac{1}{2}}$), 1953-1956.

Little, H.W. Map 15 - 1961 Kettle River, B.C. (82 E/W $\frac{1}{2}$), 1958 & 1959.

Minister of Mines. Annual Reports for 1899, 1904, 1906, 1908, 1928, 1933.

Pringle, D.W. Report on the Kero-Laredo Group, Keremeos Creek area, Cassel Group, South Rock Creek area and Jolly Jack group, Quesnel-Horsefly area (unpublished report), August 1983.

STATEMENT OF EXPENDITURES

The following is a breakdown of expenses incurred in carrying out the work in the area of Grand National's Kero-Laredo-Puma property during June and August and September 1985.

Р	е	rs	0	n	n	el

Geological engineer, supervisor Two field assistants

F	ام ا	ı	work	,
		u	WUIN	

Field work	
Grid picketing, soil sampling 8 man days @ \$100/man day	\$ 800.00
Truck rental, 4 days @ \$35/day Fuel	140.00 60.00
Assaying 81 samples @ \$8.65/sample	457.65
Report supervision Preparation, drafting, word processing	1,100.00
Total Expenditures	\$2,557.65

CERTIFICATE

- I, Ignacije Borovic, of the City of Vancouver, B.C., do hereby certify that:
 - 1. I have supervised the exploration work carried out in the area of the Kero-Laredo property located on South Keremeos Creek, north of Olalla, B.C.
 - 2. The expenditures claimed for the performance of the work are correct.

Respectfully submitted,

L Borovic, P.Eng.

Vancouver, B.C. September 24, 1985. CME ANALYTICAL LABORATORIES LTD. 2 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

JUNE 22 1985

DATE REPORT MAILED:

F'AGE

GEOCHEMICAL ICP ANALYSIS

.500 SRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HN03-H2D AT 95 DEG. C FOR DNE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.KG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM. SAMPLE TYPE: SOILS _ AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

> DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER ASSAYER:

	GRAND	NATIONA	IL.	FILE #	85~10	56
SAMPLE#		Cu PFM	Fb FFM	Zn FFM	Ag FFM	Au* FFB
LO 975N LO 950N LO 925N LO 900N LO 875N		69 62 42 45 121	10 8 7 14 14	89 153 267 274 259	.7 .7 .5 .0	5 4 1 1
LO 850N LO 825N LO 800N LO 775N LO 750N		118 158 195 50 40	18 32 14 8 10	005 220 245 104 80	.5 .2 .1 .4	4 1 1 6 10
L0 725N L0 700N L0 675N L0 650N L0 625N		35 130, 74 71 91	8 10 8 11 17	71 72 88 62 97	.33.24.3	1 4 6 2 4
LO 600N LO 57EN LO 550N LO 525N LO 500N		490 431 304 387 262	18 75 35 73 15	145 234 215 226 168	.7 .4 .5 .1	9 23 10 17 5
LO 475N LO 450N LO 415N LO 400N LO 375N		259 345 264 289 326	15 23 14 18 12	137 109 115 117	.3 .4 .6 .6	6 10 5 7 36
L0 350N L0 325N L0 300N L0 275N L0 250N		295 238 303 163 186	757 6 11	108 85 78 67 131	.4	4 1 3 1 36
LO 225N LO 200N LO 175N LO 150N LO 125N		195 445 190 292 259	28282	124 105 99 101 84	មាលមាល	8 10 6 1
LO 100N STD C/AL	0.5	290 59	7 42	183 127	.4 7.0	1 480

GRAN	D NATIONA	L	FILE	# 85-1	056	PAGE	ź
SAMPLE#	Cu FFM	Pb PPM	Zn PPM	Aq PPM	Au* PPB		
LO 75N LO 50N LO 25N LO 0N	124 136 155 58	8 12 14 5	129 197 148 100	.4	2 1 1 2	· •	

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ANALYTICAL LABORATORIES LTD. 2 E.HASTINGS ST. VANCOUVER B.C. V6A 1R6 IONE 253-3158 DATA LINE 251-1011 DATE REPORT MAILED:

DATE RECEIVED: AUG 14 1985

PAGE 1

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2D AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR KM.FE.CA.F.CR.MG.BA.TI.B.AL.MA.K.W.SI.ZR.CE.SM.Y.MB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: SOIL -80 MESH AUX, ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: Y DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER

GRAND NATION	AL	FILE # 35-1865			
SAMPLE#	Cu PFM	Ag FFM	Au* FFB		
1E 1000N 1E 750N 1E 900N 1E 850N 1E 800N	44 50 81 108 92	. 1 . 1 . 1 . 1	4 5 5 17 3		
1E 750N 1E 700N 1E 450N 1E 400N 1E 550N	273 204 202 474 366	.1 .3 .1 .1	55 / 6 4 9 10		
1E 500N 1E 450N 1E 400N 1E 350N 1E 300N	305 511 401 386 689	. 1 . 1 . 1 . 1	16 / 4 22 - 4 6		
1E 250N 1E 200N 1E 150N 1E 100N 1E 50N	427 551 316 395 111	.1 .1 .1 .1 .2	59550		
1E ON STD C/AU 0.5	197 59	7.0	2 480		

GRAND NATIONAL FILE# 85-2165 PAGE# 5 SAMPLE Cu Αg - Au* ppb PPM PPM 2E 1000N-A 34 14 2E 950N-A 59 . 2 6 . 1 :3 2E 900N-A 51 2E 850N-A .2 146 2E BOON-A 110 . 1 .3 2E 750N-A .3 7 186 255 . 4 15 2E 700N-A .2 2E 650N-A 205 - 5 2E 600N-A 1225 4 .7 2E 550N-A 8 325 .6 2E 500N-A .5 280 15 2E 450N-A 330 . 5 14 . 4 7 2E 400N-A 500 2E 350N-A 350 .3 10 2E 300N-A . 4 495 :3 2E 250N-A 485 .3 60 2E 200N-A 550 . 2 17 2E 150N-A 525 .2 1 2E 100N-A 305 .5 6 2E 50N-A 200 .2 3

132

. 2

2E ON-A