

**MS 1-4 Mineral Claims  
Prospecting-Geochem Report  
1999**

**Omineca Mining Division  
93N-12W  
55deg. 37min North Lat.  
125deg. 48min. East Long.**

**GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT**

**Author:L.B.Warren**

**26,400**

# Table of Contents

<u>Subject</u>	<u>Page #</u>
Introduction, location and Access	1
Location Map	2
History	3-4
Claims and Ownership	5
Claim Map	6
Regional Geology, Property Geology	7
Map Regional Geology	8
Map Legend Regional Geology	9
Observations, results, conclusions and Recommendations	11
Statement of Expenditures	15
Statement of Qualifications	16-17
List of References	18
<u>List Of Figures</u>	
Fig. #1 Property Geology	10
Fig. #1B Compilation Map South half	In Pocket
Fig. #2 Copper in soils	12
Fig. #3 Zinc in soils	13
Fig. #4 Lead in soils	14
<u>Appendix</u>	
Appendix #1 ICP soil results	appl

## **Introduction**

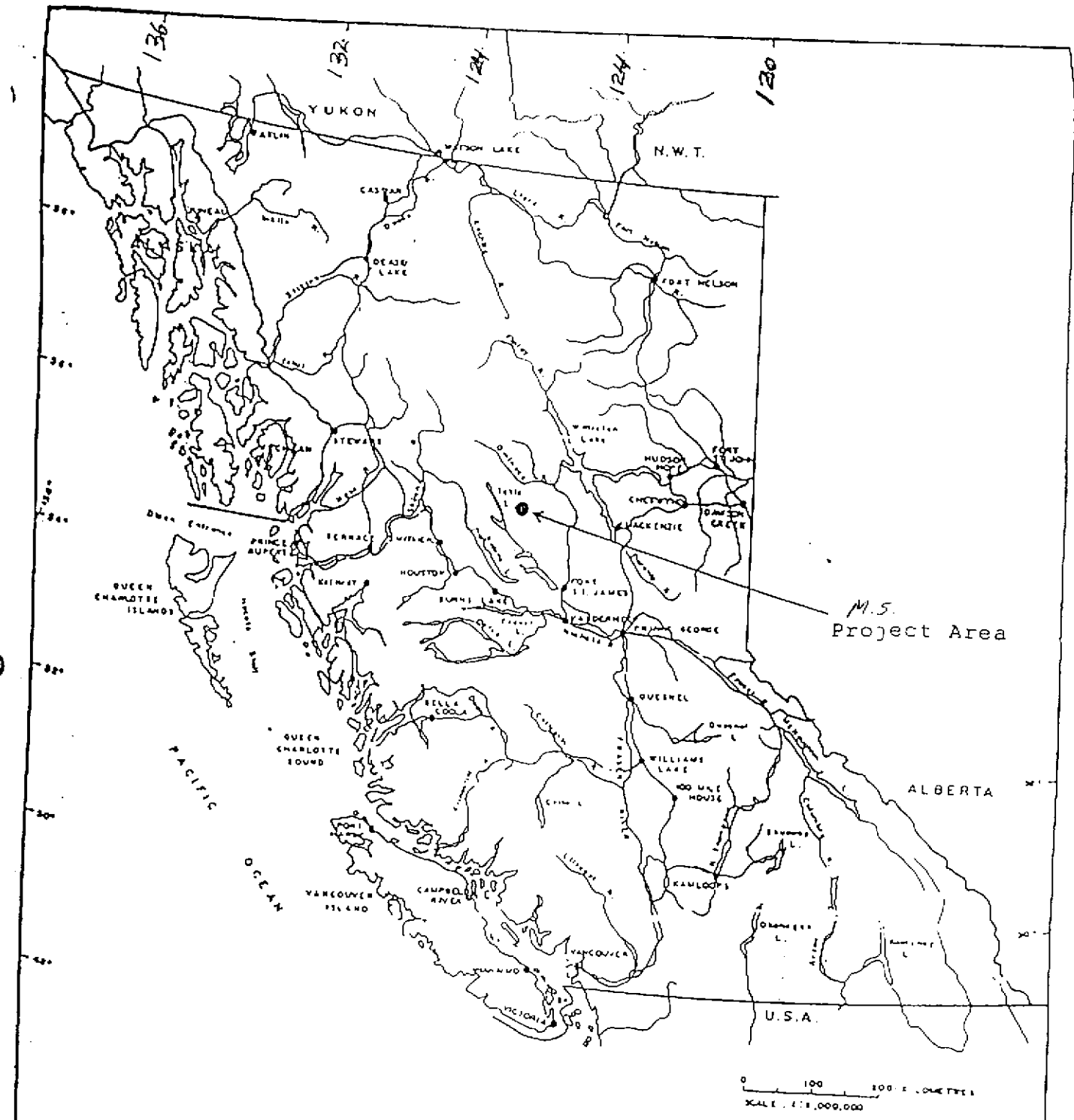
-2 new soil lines were established 50 metres north and 50 metres south of the Recon Grid line done in 1995 (Assessment Report #24658) totaling 21 samples.

-MS 1-4 claims were staked to cover the Recon soil geochem anomaly found in 1995.

-Prospecting of claim area revealed very poor rock exposure. Float found containing chalcopyrite/ Bornite/ Barite/ Pyrrhotite in altered ultramafic dike float was the only indication of mineralization in the Geochem grid area. (Figure #1)

## **Location and Access**

The MS 1-4 mineral claims are located 3.15 km from Mt. Bodine. Access is by helicopter only.



0 100 200 KILOMETRES  
SCALE: 1:1,000,000

REVISED	M.S. Project 1999	
	Location Map	
TITLE	SURVEY BY: LBW	DATE: NOV/99
DWG. No.	DRAWN BY: LBW	SCALE:
1	OFFICE:	

VA-48 (11/97)

## History

1974 - KENNCO EXPLORATION: Geochemical investigation of the area for volcanogenic deposits revealed anomalous Cu and Zn in stream silts from creeks draining felsic volcanic rocks making up the slopes of Mt. Bodine. Follow up EM and geologic surveys were apparently discouraging and Kennco allowed the claims to lapse.

1975 – McINTRYRE MINES: Staked the Ruth 1-4 claims to cover the Northeast slope of Mt. Bodine. They explored the area as part of a regional airborne EM survey and during geologic mapping discovered the Eureka copper-silver showing.

1978 – SHELL CANADA RESOURCES: Carried out a regional stream silt sampling survey throughout the general area and staked the Skye 1- 12 claims to cover some geochemical anomalies. – The results of McIntyre's earlier airborne survey showed a number of EM anomalies of the Skye claims.

1979- SHELL CANADA RESOURCES: Carried out ground follow-up work including horizontal loop shootback EM, soil sampling and geological mapping. A significant copper soil anomaly was discovered on the Skye 9 claim.

1979 – CANADIAN SUPERIOR: Optioned the Ruth 1-4 claims from McIntyre Mines but apparently did no field work.

1980 – CANADIAN SUPERIOR: Carried out a detailed geological mapping program . This work showed the Ruth 3 claim to be underlain by argillite on the northeast and felsic volcanics on the southwest. A large gossan zone formed by disseminated pyrite was mapped for 2000m along the contact on strike with the Eureka showing(Watkins, 1980).

1981 – SHELL CANADA RESOURCES: Optioned the Ruth claims and carried out a detailed soil geochemical survey. A significant copper-zinc anomaly, including the Eureka showing was discovered along the Gossan zone. A ground Crone horizontal loop shootback EM survey was performed over an attractive airborne anomaly but was negative.

1982 – Claims were allowed to lapse and were stake as the Sitlika Group by C. Graf.

1983 – C. Graf allowed most of the claims to lapse except for 2 units on Mt. Bodine which are still retained to Date.

1985-86 – Noranda staked a large block of ground to cover a series of airborne EM anomalies detected in a Aerodat survey (June 1985).

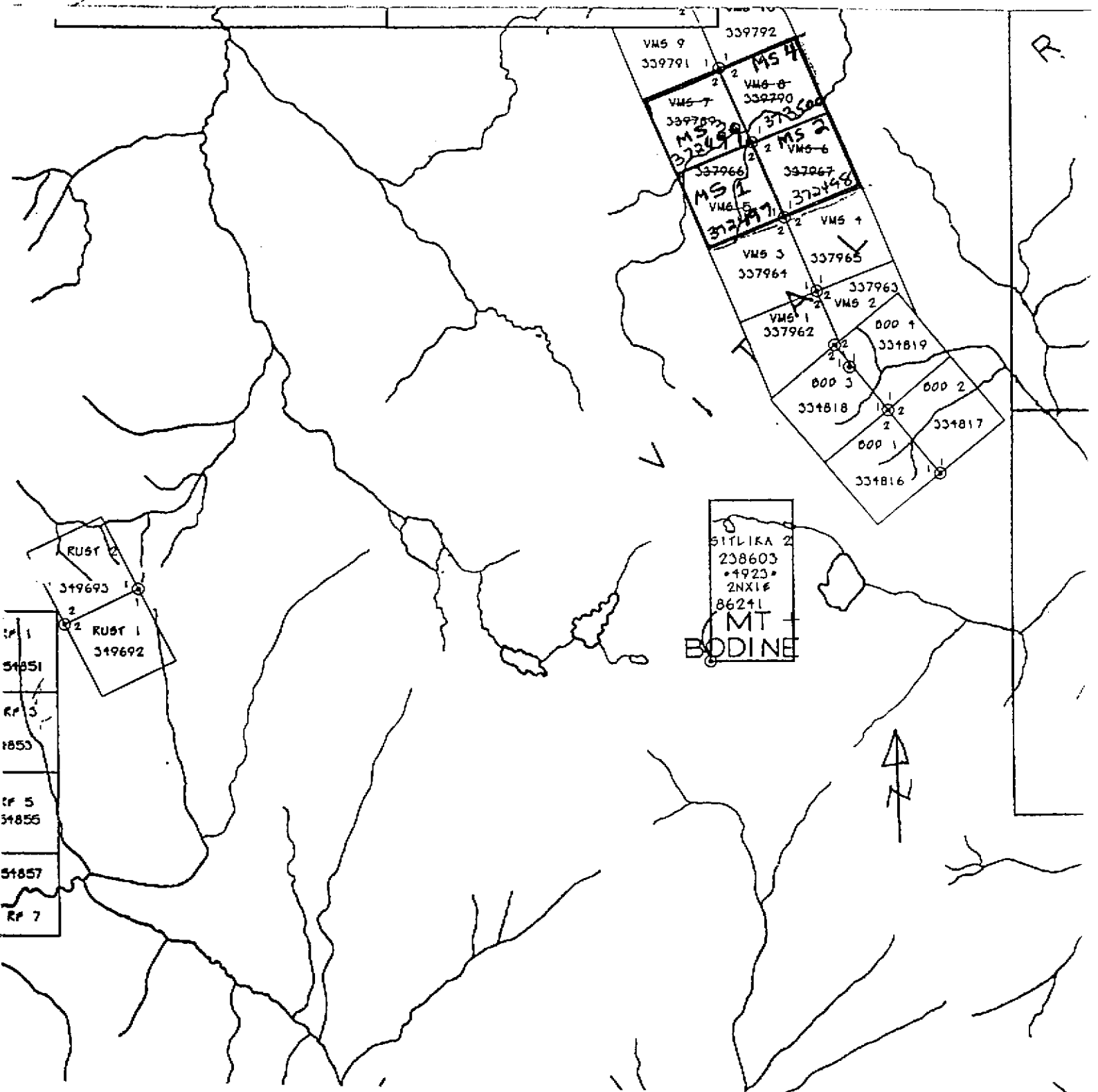
1989 – Several drill holes were drilled by Noranda Exploration testing various targets in the belt.

1994-95 – L.B. Warren and associates prospected belt.

1995 – Vent showing was found and as a result a large group of claims were staked. Prospecting of the eastern belt was undertaken and continues to date.

## Claims and Ownership MS Claim Group

<u>Claim Name</u>	<u>Tenure#</u>	<u>Expiry Date</u>	<u>Ownership</u>
MS 1	372497	20001008	L.B. Warren
MS 2	372498	20001008	L.B. Warren
MS 3	372499	20001008	L.B. Warren
MS 4	372500	20001008	L.B. Warren



0 500 1000 1500  
Scale: 1:31680  
CLAIM MAP 93N/12W  
MS 1-4  
Record No. 372497-500



## **Regional Geology**

The MS 1-4 claims are underlain by Upper Triassic to Lower Jurassic volcanic and sedimentary rocks of the Sitlika Assemblage which have been regionally metamorphosed to greenschist facies (Paterson, 1974). This assemblage is composed mainly of well foliated andesitic to rhyolitic pyroclastics and flows with lesser amounts of greywacke, siltstone and phyllite. The Sitlika volcanics are characterized by local development of sericite, quartz-sericite and chlorite schists. The Takla Fault separates the Sitlika rocks from the Tertiary Sustut Group to the west. The Permian Cache Creek rocks to the east are separated from the Sitlika by the Vital Fault and a serpentinite mélange. The Cache Creek Group is bounded to the east by the Pinchi Fault and the Jurassic Hogem Batholith.

## **Property Geology**

The MS claims are underlain by chlorite schist, greywacke, siltstone and phyllite of the Sitlika assemblage. Only minor outcrop were observed in the field due to heavy sub-alpine forest cover. No outcrop was observed in the area of the soil anomaly.

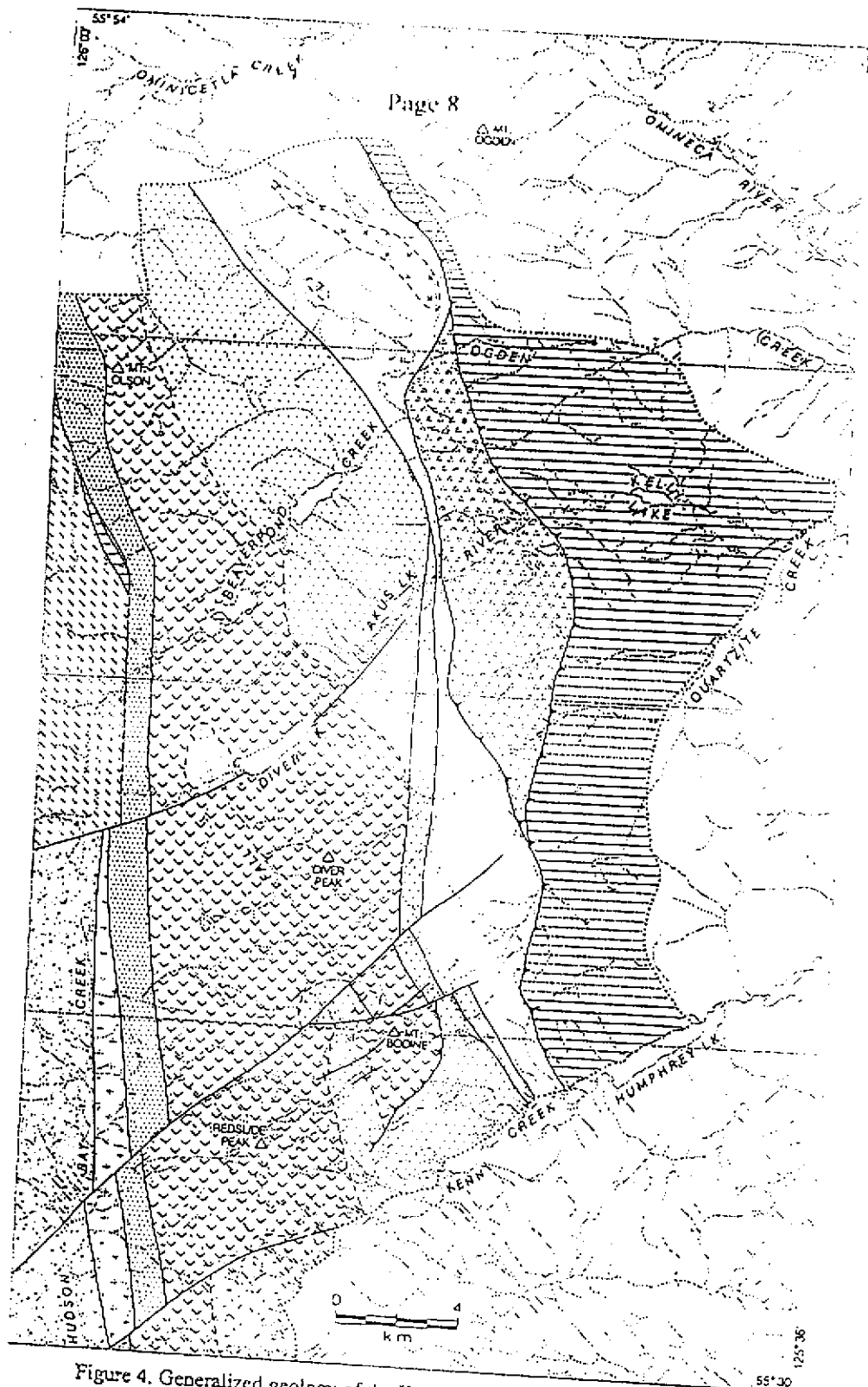
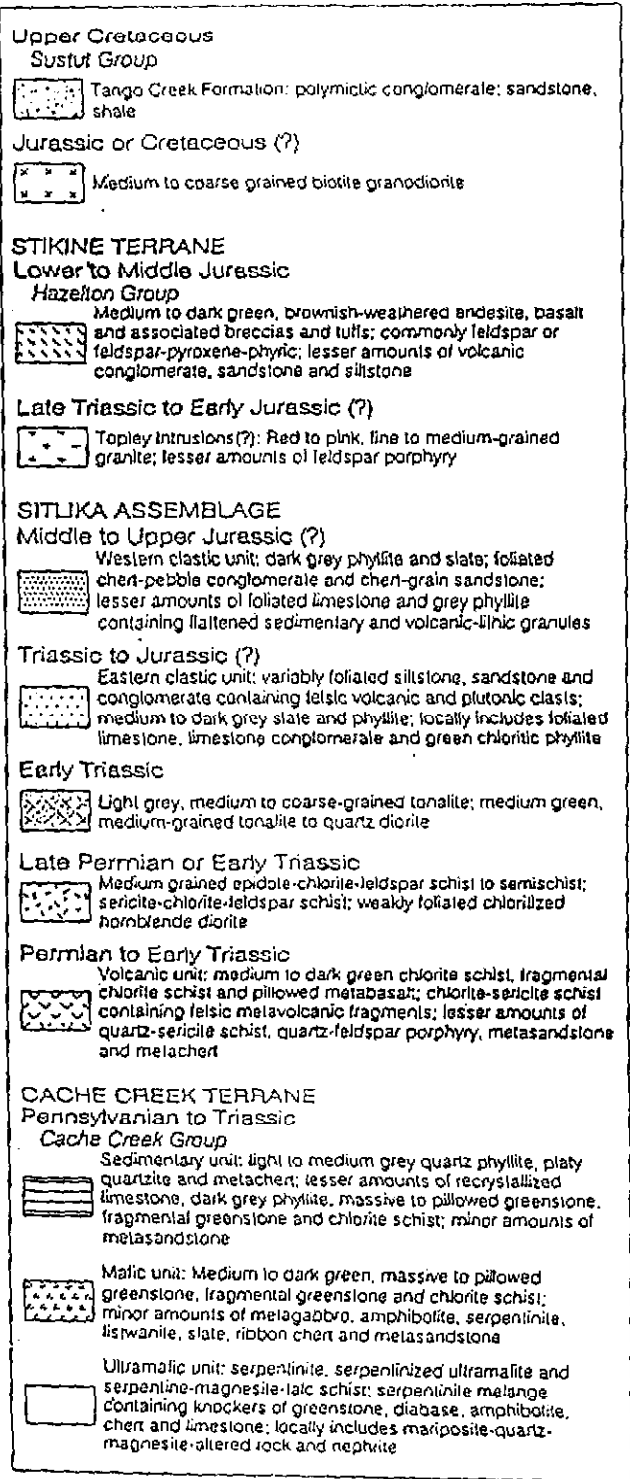


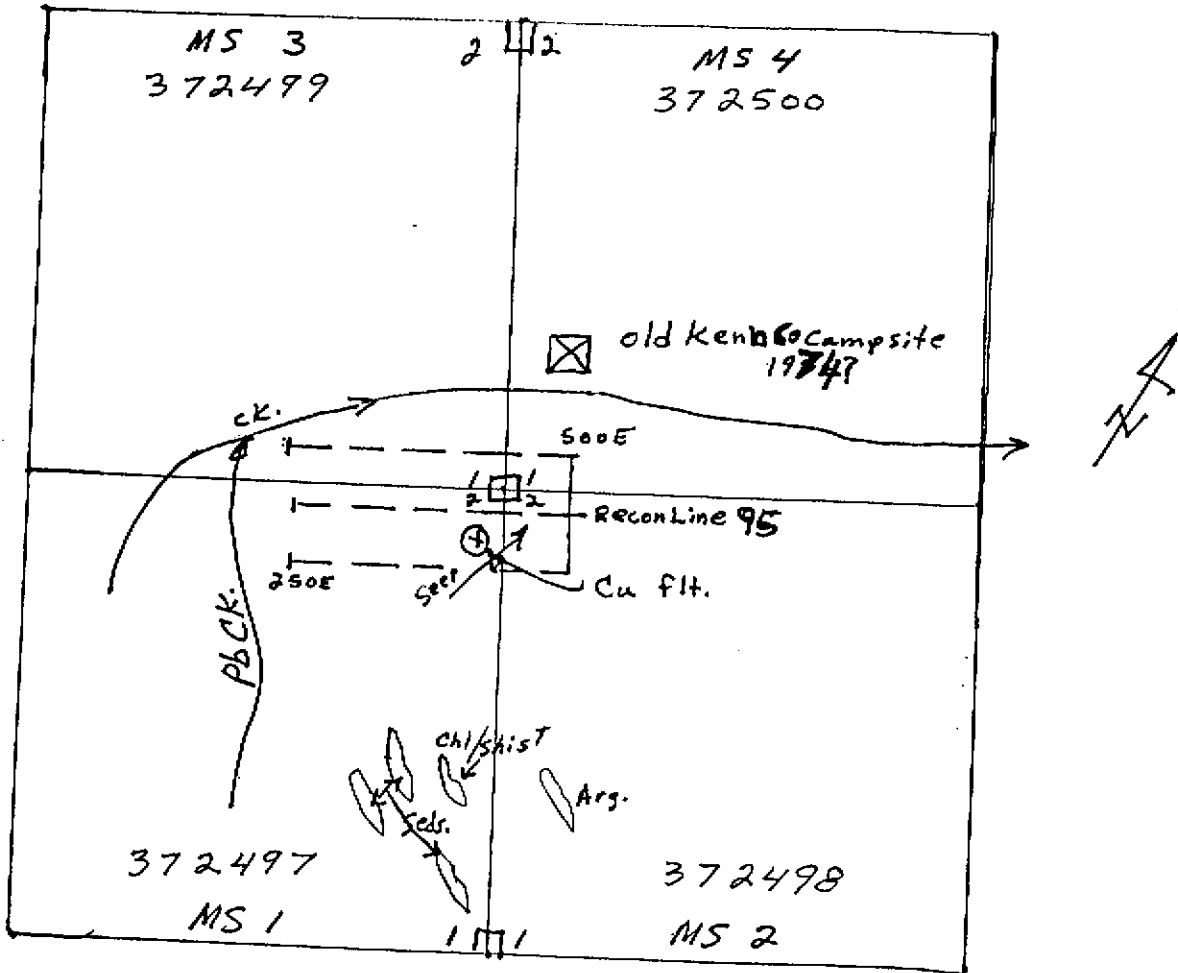
Figure 4. Generalized geology of the Kenny Creek - Mount Olson map area.

*Geological Fieldwork 1996  
Paper 1997-1*



Legend to accompany Figure 4.

# Property Geology



Rough Sketch  
Recon Soil Grid Area 1999  
B.W.

SCALE: 1:8000  
Sample Locations  
Geology Fig. 1

**Results Recon Soil Grid  
Mt. Bodine Area  
MS 1-4 Mineral Claims**

### **Observations MS Soil Grid**

A significant soil anomaly on the Recon soil line done in 1995 was examined on October 8 1999. We decided to extend the soil grid by placing a new line 50 metres north and 50 metres south of the original Recon soil line. The control point was Recon line station 100+00S-5+00E from this point we chained at 330 degrees for 50 metres to grid north station 50+00S-5+00E. Stations were then established at 25 metre intervals on a bearing of 240 degrees for 250 metres. Another line was established 50 metres grid south of the Recon soil line. Stations were established at 25 metre intervals on a bearing of 060 degrees for 250 metres.

### **Soil Geochemistry**

The samples were collected using a shovel and placing the sample in a kraft soil bag. The "B" horizon samples were taken at a depth of 20-30 cm, then shipped to TSL Assayers in Vancouver B.C.

A total of 21 samples were taken and ICP multielement analysis was performed. The results are plotted on fig. 2,3,4.

### **Results**

**Copper** – Copper values ranged from 1 ppm to 161 ppm fig. 2 is contoured at 100 ppm and 200 ppm. The original copper anomaly was extended to the north and south although not as strong.

**Zinc** – Zinc values range from 25 ppm to 2243 ppm fig. 3 was contoured at 500 ppm and 1000 ppm. A strong zinc soil anomaly was detected grid north and south of the original Recon Zinc anomaly.

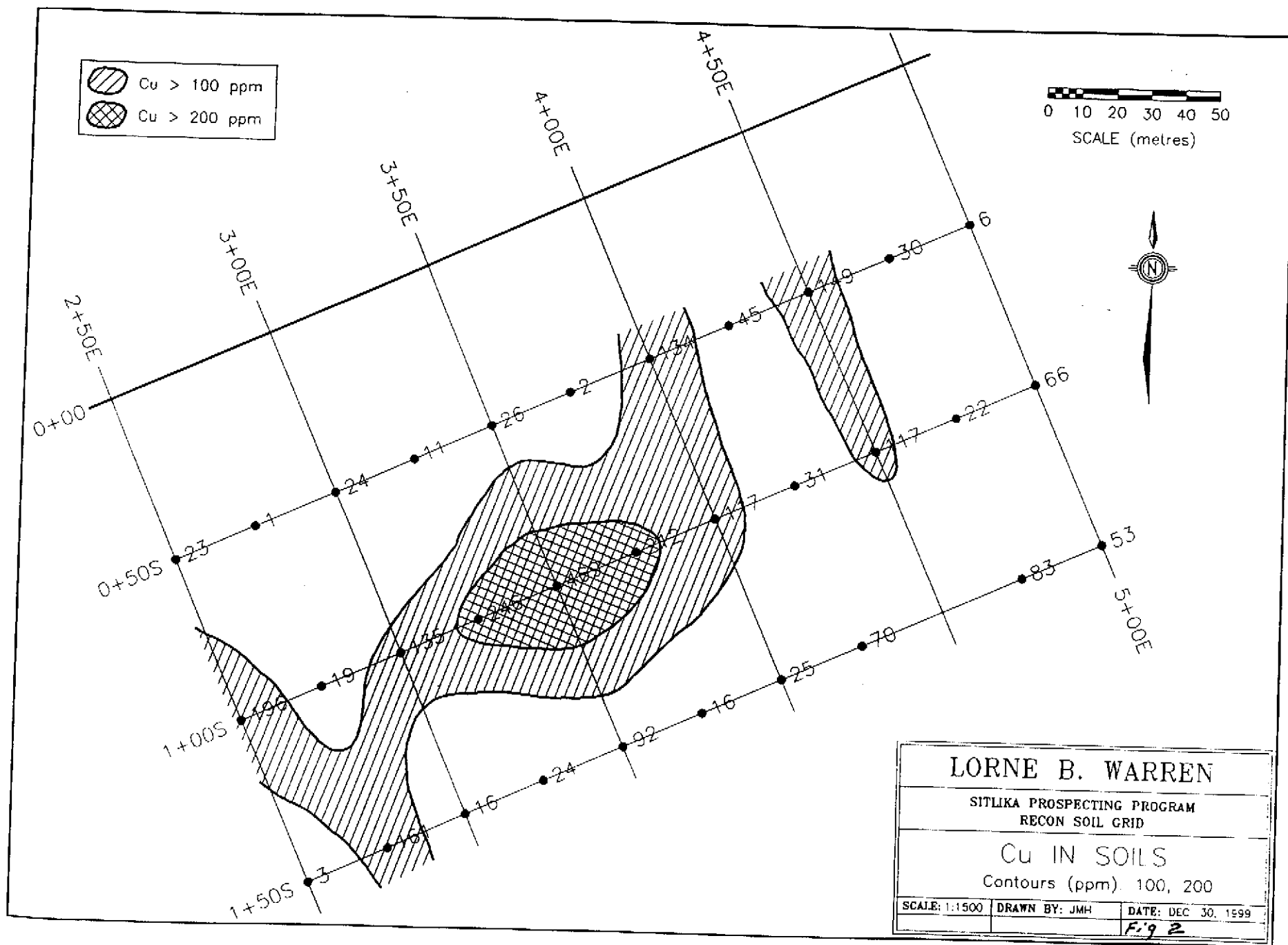
**Lead** – Lead values range from < 2 ppm to 50 ppm fig. 4 was contoured at 30 ppm and 60 ppm. A strong lead anomaly was detected grid north and south of the original Recon Lead anomaly.

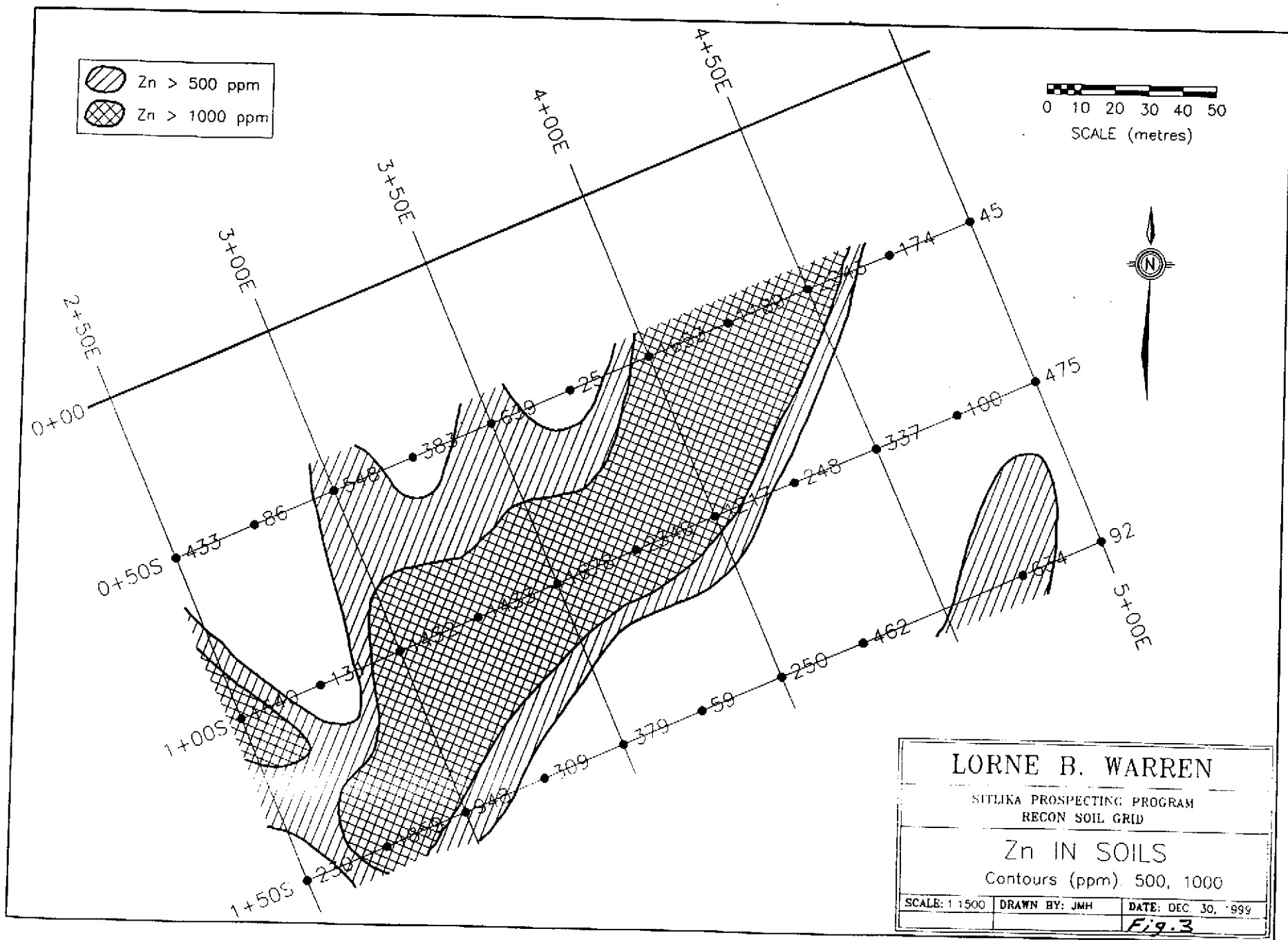
### **Conclusions**

The soil anomaly discovered expanded the original Recon soil anomaly to 100 metres in strike length. Showing similar strength in copper, zinc and lead values in the soil.

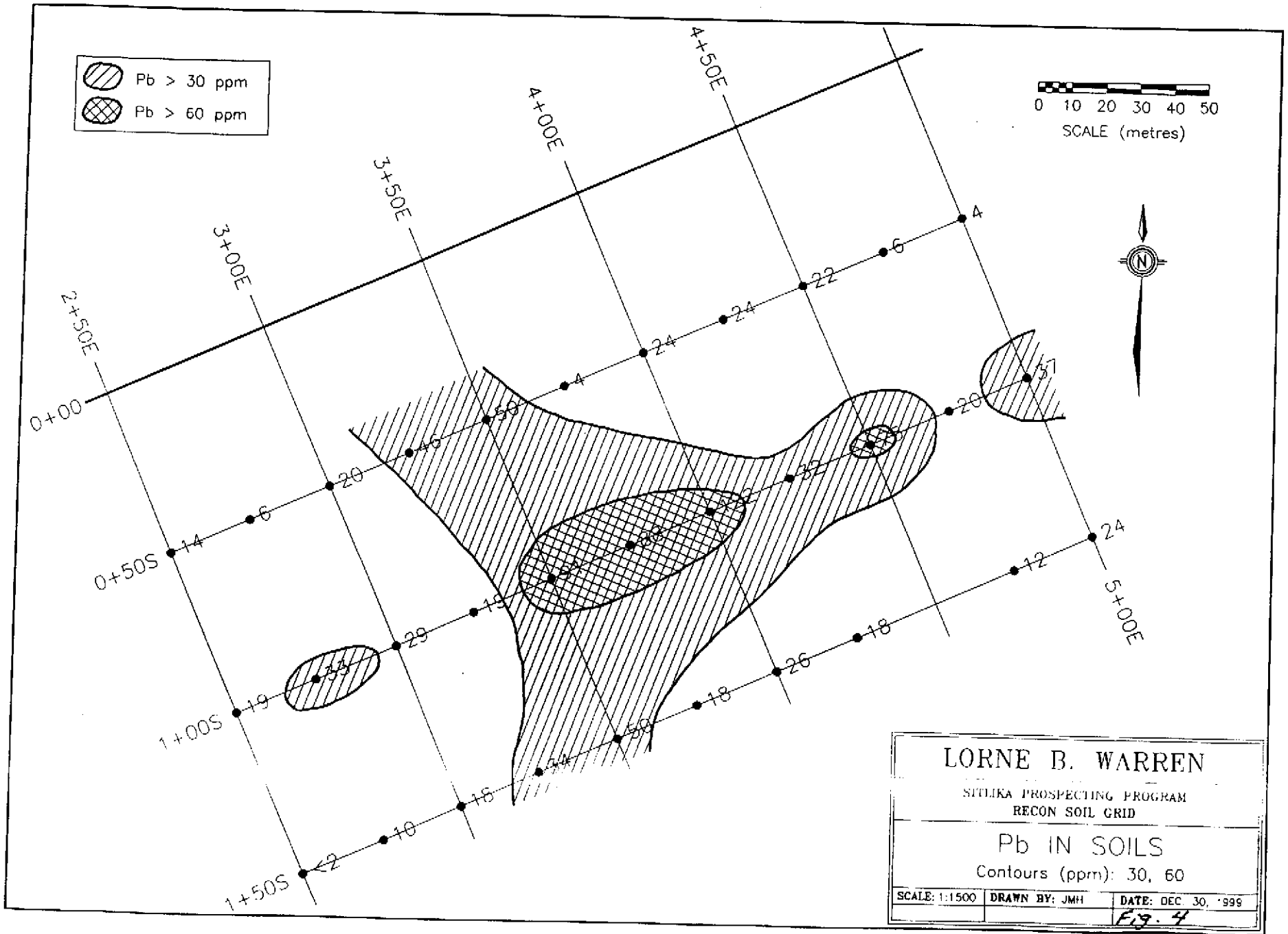
### **Recommendations**

A larger soil grid needs to be established north and south of the present soil anomaly. Hand trenching should be done over the highest soil values. VLF – EM survey over the anomalies should be undertaken.









## Statement of Expenditures

### Expenses

Wages and Benefits	
3 mandays @ \$200/day	\$ 600.00
Room and Board	
3 mandays @ \$75/day	\$ 210.00
Helicopter	
1 hour @ \$750/hour all inclusive	\$ 750.00
Assays	\$ 239.08
Report Writing	<u>\$ 400.00</u>
Total Project Cost for assessment purposes	\$2,199.08

## **Lorne B. Warren**

### **Statement of Qualifications**

1963 – Geological Assistant – Mastodon Highland Bell - Gordon Hilchey –  
Geologist - Dome Mountain Area.

1964 – Geological Assistant – Phelps Dodge Corp. Stikine area.

1965 – Prospector/Geological Assistant Native Mines.

1966 – 1971 – Full time field tech / line cutter/ Prospector Manex Mining  
Ltd. –M.J. Beley – Manager

1971 –1979 – Granby Mining Corp. – Field Supervisor, Office manager,  
Supervised Drill programs- Logged drill core and percussion drill cuttings.

1979 – Present – President and Manager of C JL Ent. Ltd. , Kengold Mines  
Ltd. And Angel Jade Mines Ltd. – Placer mining/contract exploration  
work/Full time prospecting.

## **Chris Warren**

### **Statement of Qualifications**

1990 – Completed the Smithers Exploration Group's Bush Skills course. Worked at Duckling Creek as a Geological assistant.

1991 – Assisted in the instruction of the Smithers Exploration Bush Skills course. Worked in Johanson Lake as a line cutter.

1992 - Assisted in the instruction of the Smithers Exploration Bush Skills course. Misc. claim staking jobs/ field assistant.

1993 – Worked at a placer operation as a loader operator and did misc. claim staking jobs/prospecting assistant.

1994 – Worked in Manson Creek area doing placer testing, running magnetometer/computer work/claimstaking/Prospector's Assistant.

1995 – Present – Worked full time for CJL Enterprises Ltd. – Claim staker/line cutter/camp construction/pro prospector.

## List of References

**Crosby, R.O. , 1977: Report on airborne geophysical surveys, Ruth mineral claims, Takla Lake Area, B.C. ; McIntyre Mines Ltd.; Open file assessment report No. 6578**

**Macleod, W.A. , 1979: Assessment report on geological and geochemical surveys, Skye 1, 3-7 claims, (July 1 – Aug. 27, 1979), Omineca Mining District, B.C. Shell Resources report. BCDM Sdd. Report No. 7642.**

**Macleod, W.A. , 1981: Report on geological, geochemical and geophysical surveys, Ruth 1-4, Skye 7 claims, BCDM Assessment report No. 9547.**

**Paterson, I.A. , 1974: Geology of the Cache Creek group and mesozonic rocks at the northern end of the Stuart Lake belt, central B.C. ; Geological Survey of Canada; paper 74-1, part B; pp. 31.**

**Fiona Childe: Geochronological and Radiogenic Isotopic Investigations of VMS Deposits within Accreted Terranes of the Canadian Cordillera.**

**Paul Schiarizza and Gary Payie B.C.G.S. Geological field work 1996, paper 1997-1.**

**1996 Warren/Angel Jade Mines – Assessment report No. 24658.**

## **Appendix 1**

### **Analytical Results 1999**

CJL Enterprises Ltd

Attention: L. B. Warren

Project: Diver Grid

Sample: soil

TSL Analytical Vancouver  
 8282 Sherbrooke St., Vancouver, B.C., V5X 4R6  
 Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 9V0439 SJ  
 Date : Nov-17-99

MULTI-ELEMENT ICP ANALYSIS  
 Aqua Regia Digestion

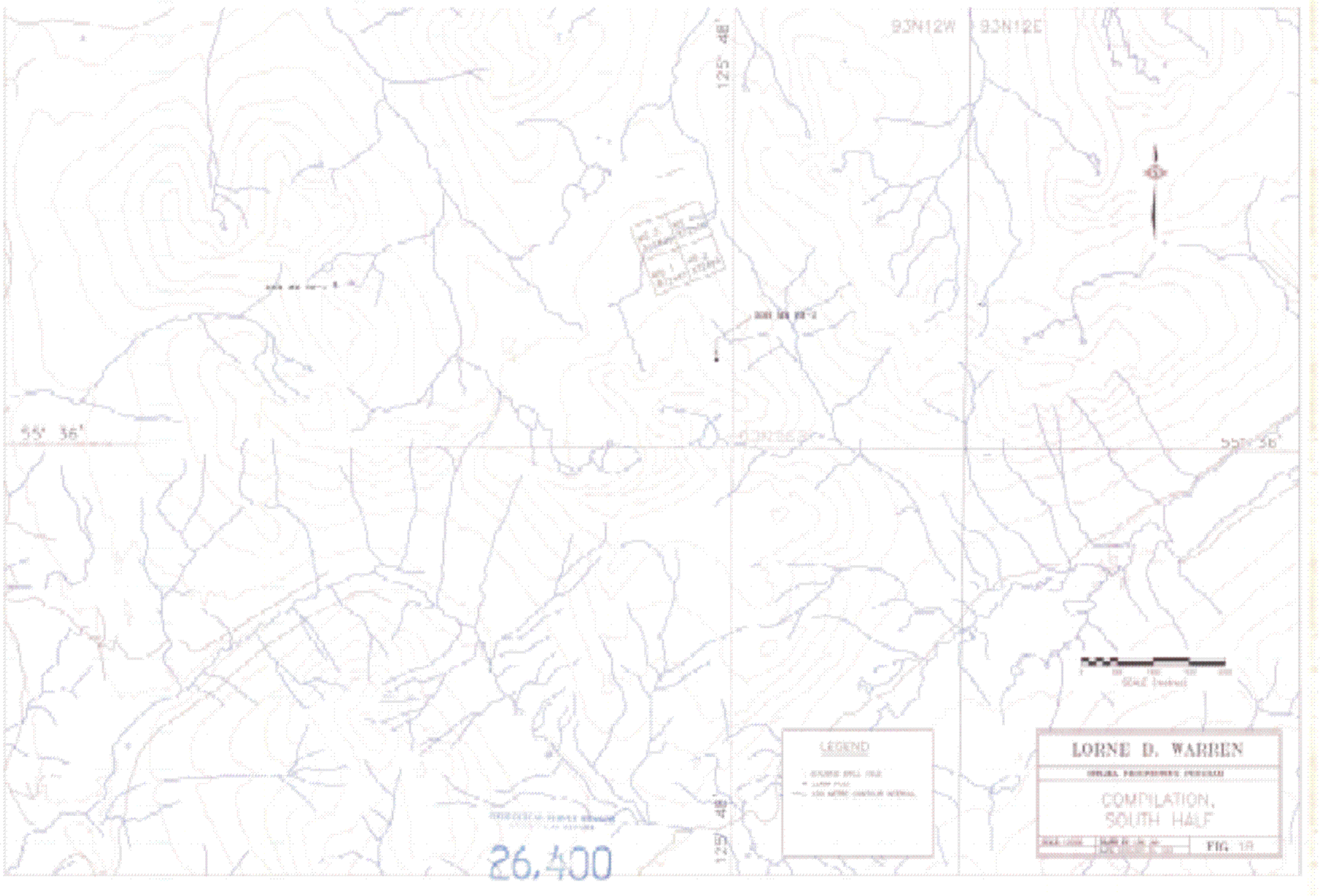
Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
LV0+50S 2+50E	<0.2	1.33	5	200	<0.5	<5	0.43	1	4	12	23	2.03	0.06	0.39	380	<2	0.01	7	480	14	<5	2	<10	44	0.06	34	<10	7	433	2
LV0+50S 2+75E	<0.2	0.74	<5	80	<0.5	<5	0.03	<1	2	5	1	0.74	0.03	0.15	80	<2	<0.01	1	140	6	<5	1	<10	5	0.05	21	<10	3	86	1
LV0+50S 3+00E	<0.2	1.35	<5	200	<0.5	<5	0.41	2	5	14	24	1.91	0.05	0.40	710	<2	0.01	8	500	20	<5	2	<10	36	0.10	41	<10	10	548	2
LV0+50S 3+25E	<0.2	1.77	5	110	<0.5	<5	0.48	1	8	22	11	5.68	0.05	0.78	610	<2	<0.01	11	400	46	<5	3	<10	35	0.18	63	<10	4	383	4
LV0+50S 3+50E	<0.2	2.01	10	120	<0.5	<5	0.60	1	8	19	26	5.12	0.04	0.39	375	<2	0.01	14	980	50	<5	3	<10	44	0.09	60	<10	20	639	4
LV0+50S 3+75E	<0.2	1.20	<5	40	<0.5	<5	0.05	<1	3	6	2	1.80	0.03	0.21	135	<2	<0.01	3	220	4	<5	2	<10	6	0.11	42	<10	4	25	1
LV0+50S 4+00E	<0.2	2.53	15	140	0.5	<5	0.60	6	12	32	134	4.18	0.08	0.77	2680	2	0.01	35	2080	24	<5	5	<10	46	0.04	38	<10	62	1653	5
LV0+50S 4+25E	<0.2	2.05	5	190	<0.5	<5	0.11	1	12	31	45	4.23	0.06	0.71	1265	<2	<0.01	13	620	24	<5	2	<10	14	0.03	46	<10	10	1189	2
LV0+50S 4+50E	<0.2	3.37	35	170	0.5	<5	0.95	4	15	45	149	5.73	0.07	0.88	2035	<2	0.01	49	1900	22	5	11	<10	80	0.05	70	<10	69	2243	6
LV0+50S 4+75E	0.2	2.09	5	200	<0.5	<5	0.67	<1	7	60	30	2.93	0.07	1.10	405	<2	0.01	14	840	6	<5	5	<10	62	0.11	56	<10	18	174	3
LV0+50S 5+00E	<0.2	1.83	<5	110	<0.5	<5	0.05	<1	4	34	6	2.45	0.03	0.44	195	<2	<0.01	6	370	4	<5	3	<10	6	0.03	77	<10	2	45	2
LV1+50S 2+50E	<0.2	1.76	<5	170	<0.5	<5	0.23	1	1	24	3	0.92	0.05	0.34	95	<2	0.01	4	450	<2	<5	2	<10	21	<0.01	50	<10	1	230	1
LV1+50S 2+75E	0.2	3.78	15	140	0.5	<5	0.93	9	9	40	161	3.53	0.05	0.53	1900	2	0.01	44	2840	10	<5	7	<10	64	0.01	26	<10	53	1859	6
LV1+50S 3+00E	<0.2	2.26	15	170	<0.5	<5	0.32	1	8	44	16	3.89	0.03	0.87	370	<2	<0.01	21	530	18	<5	4	<10	28	0.08	68	<10	7	948	3
LV1+50S 3+25E	0.2	1.28	15	110	<0.5	<5	0.71	1	6	18	24	3.00	0.04	0.47	320	<2	<0.01	10	710	34	<5	2	<10	56	0.06	37	<10	7	309	2
LV1+50S 3+50E	0.6	2.03	35	110	0.5	<5	0.83	<1	11	28	92	4.08	0.06	0.57	675	<2	0.01	31	860	50	<5	4	<10	62	0.06	39	<10	52	379	3
LV1+50S 3+75E	<0.2	1.68	10	40	<0.5	<5	0.02	<1	5	22	16	3.96	0.02	0.39	155	<2	<0.01	10	360	18	<5	3	<10	4	0.07	64	<10	1	59	2
LV1+50S 4+00E	<0.2	1.51	30	100	<0.5	<5	0.40	<1	11	32	25	4.09	0.03	0.86	445	<2	<0.01	25	430	26	<5	3	<10	28	0.07	51	<10	3	250	3
LV1+50S 4+25E	0.2	2.06	20	110	0.5	<5	0.71	<1	11	35	70	4.73	0.08	1.16	860	<2	0.01	31	1130	18	<5	7	<10	51	0.07	53	<10	54	462	4
LV1+50S 4+75E	0.2	1.87	20	110	0.5	<5	0.47	<1	9	34	83	4.15	0.10	0.96	590	<2	0.01	26	860	12	<5	5	<10	38	0.09	52	<10	37	634	6
LV1+50S 5+00E	1.2	2.31	<5	100	0.5	<5	0.04	1	10	39	53	6.80	0.06	0.66	365	<2	0.01	46	750	24	5	2	<10	25	0.02	56	<10	7	92	4
BLO+75E	<0.2	3.10	5	370	0.5	<5	0.52	<1	12	36	20	6.17	0.04	0.78	655	2	0.01	32	620	8	<5	5	<10	58	0.10	106	<10	4	144	6
WRS-1	<0.2	1.62	5	240	<0.5	<5	0.13	<1	9	51	12	4.98	0.05	0.40	475	2	0.01	28	1980	6	<5	3	<10	23	0.12	106	<10	3	98	5
WRS-2	<0.2	2.36	5	110	0.5	<5	0.11	<1	7	44	10	3.93	0.03	0.31	260	2	0.01	21	1480	<2	<5	3	<10	13	0.10	71	<10	4	127	4

- RECON GRID 99. 21 Samples.  
 - W.R. Alteration Zone 2 Samples.

A .5 gm sample is digested with 10 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H2O.

Signed: \_\_\_\_\_

*[Handwritten Signature]*



93N12W

93N12E

125° 48'

55° 36'

55° 36'

125° 36'

125° 48'

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

26,400

**LEGEND**

- BOUNDARY MARK
- WATER COURSE
- 100' AND 50' CORNER MARKS



**LORNE D. WARREN**  
 FEDERAL EMPLOYMENT PROGRAM  
 COMPILATION,  
 SOUTH HALF  
 DATE: 1958  
 BY: [unclear]  
 FIG. 17