



**GEOCHEMICAL REPORT ON
THE ORO 1 - 26 MINERAL CLAIMS
YUKON TERRITORY
NTS 105-B-1**

091596

Latitude 60°12'N
Longitude 130°27'W

for

**MR. D. SCHELLENBERG
WATSON LAKE, Y.T.**

by

R. Darney, Geologist

Pamicon Developments Ltd.
Vancouver, B.C.

September, 1984

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 4290.55.

D A Emord

fo

Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

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1.0 INTRODUCTION

During July and October, 1983, the Oro 1-26 mineral claims were located by Mr. D. Schellenberg to cover an area of known lead-zinc occurrences within an area of favourable geology.

As a first phase of exploration, a geochemical soil sampling survey was undertaken during June and July, 1984, to give wide spaced coverage of the entire claims area.

The following report, written at the request of Mr. Schellenberg, is intended as a summary of the geochemical results obtained during the survey.

2.0 LOCATION AND ACCESS

The Oro claims are situated at 60°12' north latitude and 130°27' west longitude near the headwaters of Spencer Creek on NTS Sheet 105-B-1 in the southeastern Yukon Territory (Figure 1). Access to the property can be achieved by truck on a good gravel road running 16 km up Spencer Creek. The Spencer Creek road branches north from the Alaska Highway at Mile 692.

Watson Lake, Y.T., some 80 km to the east of Spencer Creek, has all facilities necessary for supplying an exploration program. The settlement of Rancheria at Mile 710 on the Alaska Highway is some 40 km from the property. Facilities are available for fuel, food and lodging at Rancheria.

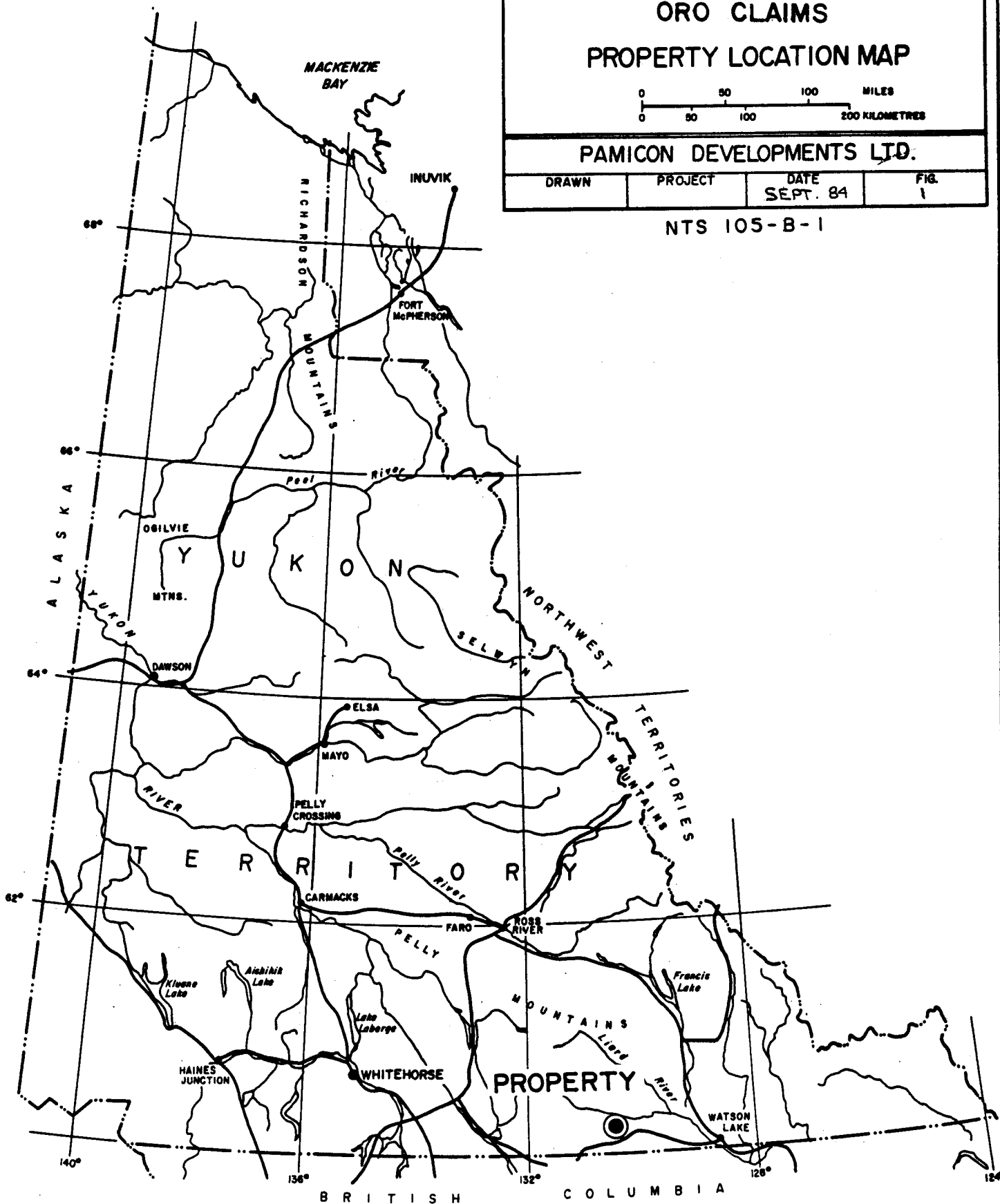
ORO CLAIMS PROPERTY LOCATION MAP



PAMICON DEVELOPMENTS LTD.

DRAWN	PROJECT	DATE SEPT. 84	FIG. 1
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NTS 105-B-1



3.0 LIST OF CLAIMS

<u>Claim Name</u>	<u>Grant Number</u>	<u>Record Date</u>
Oro 1-8	YA70186-YA70193	July 5, 1983
Oro 9-14	YA70204-YA70209	July 6, 1983
Oro 15, 16	YA70210-YA70211	July 13, 1983
Oro 17-24	YA70194-YA70201	July 5, 1983
Oro 25, 26	YA70630, YA70631	October 3, 1983

(See Claims Location Map, Figure 2.)

4.0 TOPOGRAPHY AND VEGETATION

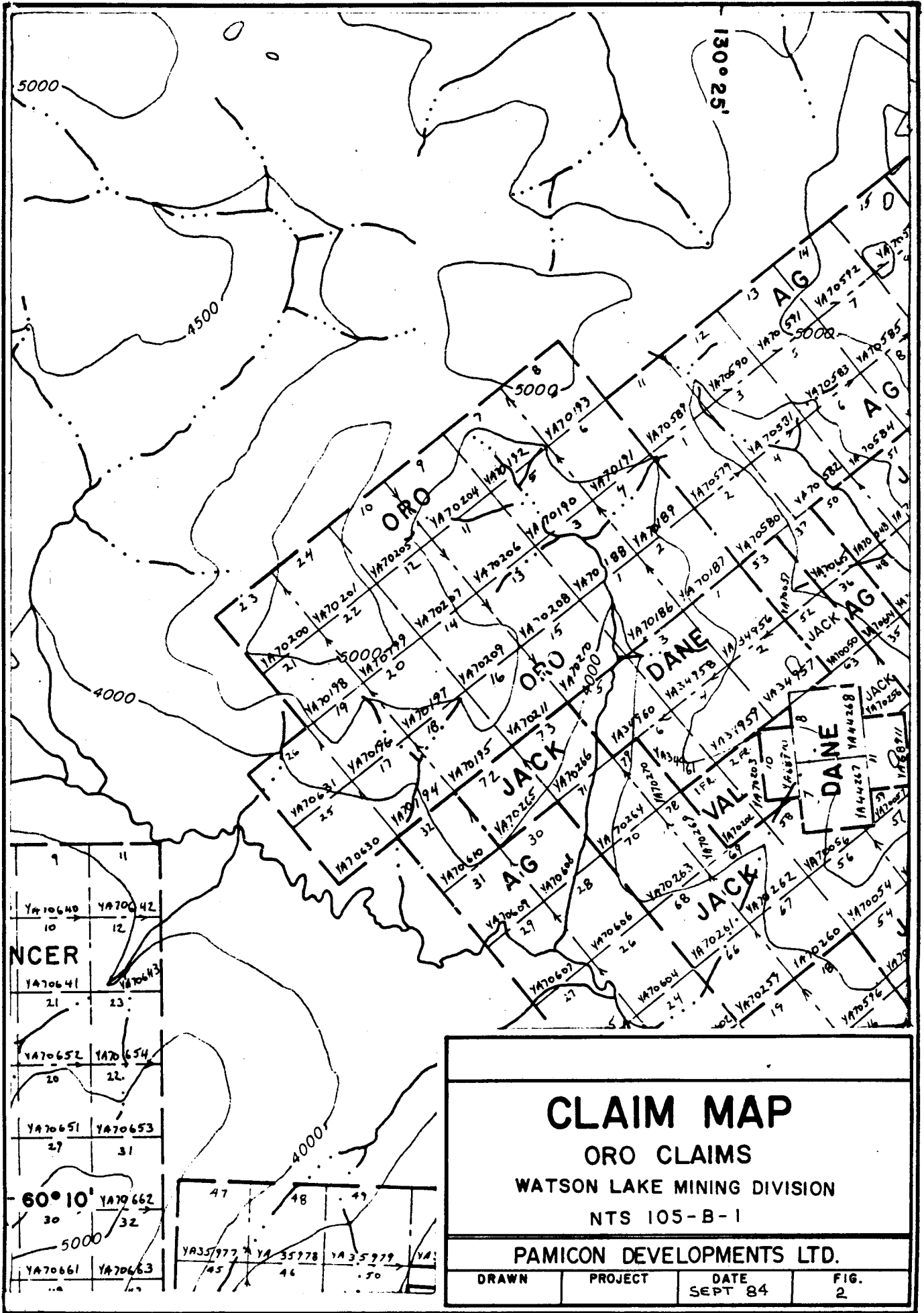
The claims cover the south and east slopes of a northwesterly trending ridge immediately north of the Spencer Creek valley.

Elevations within the claim boundaries range from 1150 m - 1550 m A.S.L. and local relief is moderate to rugged.

Timberline within the claims lies at approximately 1460 metres. Below timberline moderately thick stands of spruce, balsam, with dwarf birch and willow undergrowth predominate. Above timberline vegetation is sparse with only the occasional clump of dwarf birch, mosses and lichen.

5.0 REGIONAL GEOLOGY

The regional geology of the area is dominated by the northwesterly trending Cassiar Batholith which is exposed over an area of some 80 km by 19 km wide in the Wolf Lake map area (Map 10-1960 Geology, Wolf Lake, by W.H. Poole, 1951-1955, J.A. Roddick, L.H. Green, 1959). The batholith which intrudes Lower



9	11
YA70640	YA70642
10	12
YA70641	YA70643
21	23
YA70652	YA70654
20	22
YA70651	YA70653
27	31
60° 10'	YA70662
30	32
5000	
YA70661	YA70663
47	48
YA35977	YA35978
45	46
YA35979	YA35980
49	50

CLAIM MAP			
ORO CLAIMS			
WATSON LAKE MINING DIVISION			
NTS 105-B-1			
PAMICON DEVELOPMENTS LTD.			
DRAWN	PROJECT	DATE	FIG.
		SEPT 84	2

Cambrian to Devonian sediments and metasediments is Jurassic/Cretaceous in age and composed mainly of biotite quartz-monzonite and granodiorite. On its eastern margin, the intrusives have relatively simple contacts with northwesterly striking Cambrian sediments having a generally moderate dip to the northeast. The stratigraphy on the western margin is more complex with Cambrian to Devonian sedimentary rocks generally in fault contact with the batholith.

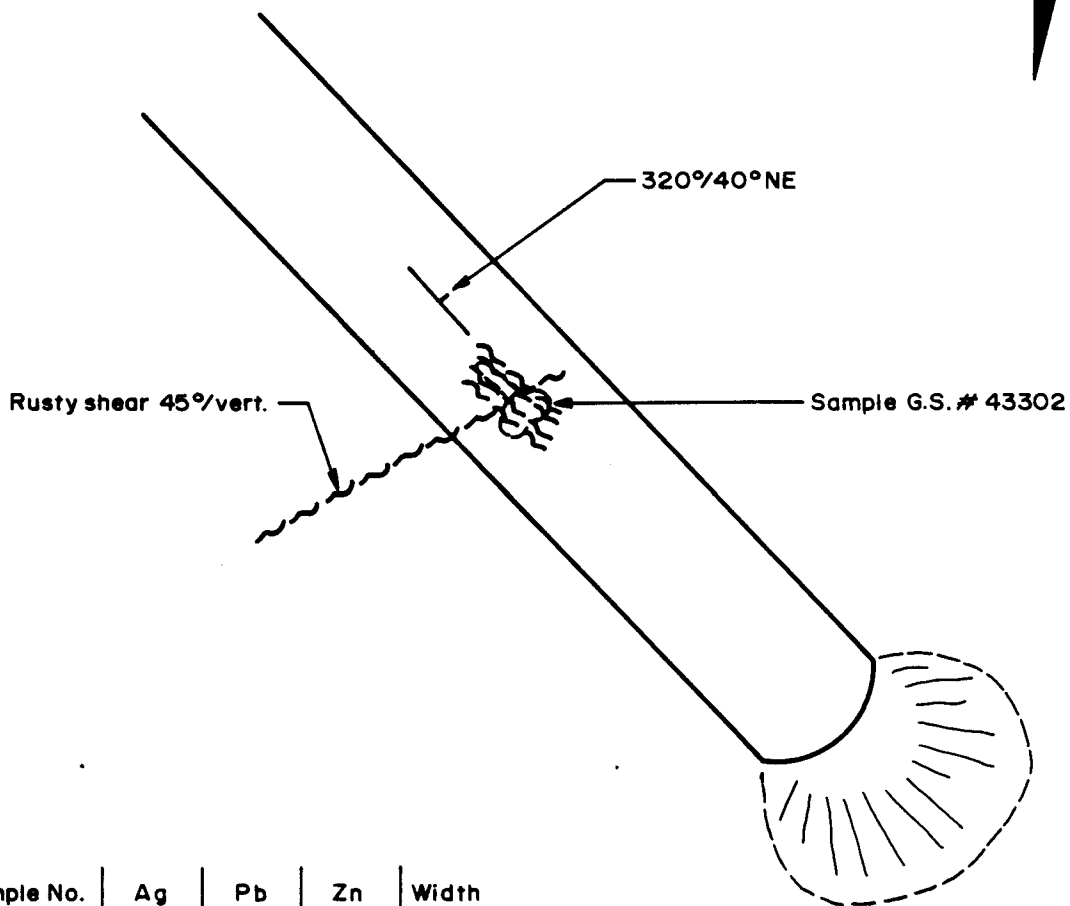
Locally, the Oro claims are underlain by a northwest striking, shallow northeast dipping section of Lower Cambrian limestones and phyllites.

In 1969, an exploration program under the direction of P.H. Sevensma, P.Eng. uncovered Ag, Pb, Zn mineralization within the present Oro 17 mineral claim (see Sketch Map, Figure 3). In the only documented information Dr. Sevensma says, "...an extremely encouraging assay was received from this narrow zone and together with its possibility of great length this becomes a showing of good merit." The assay reported was 42.1 oz/ton silver; 65.52% lead; 0.87% zinc across a width of six inches.

6.0 GEOCHEMISTRY

During the period June 29, 30 and July 1 to 4, 433 soil samples were collected on the Oro claims. The sampling was carried out along chain and compass lines at 750 foot (228 m) spacings parallel to the claim lines. Samples were collected at 200 foot (60 m) intervals and the stations flagged for future identification. The entire 26 claims were covered in this manner (Figures 4 and 5).

The samples were carefully selected from B horizon material 8 inches to 12 inches from surface and placed in kraft bags for drying. The samples were shipped to Acme Analytical Labora-



Sample No.	Ag	Pb	Zn	Width
43302	42.1	65.52	0.87	6"

After P.H. Sevensma; September, 1969

**ORO CLAIMS
SHOWING & TRENCH AREA**

PAMICON DEVELOPMENTS LTD.

DRAWN	PROJECT	DATE SEPT 84	FIG. 3
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tories Ltd., Vancouver, B.C. for lead-zinc analysis. A .500 gram sample is digested with 3 ml of 3:1:3 HCL to H NO₃ to H₂O at 90°C for 1 hour. The sample is diluted to 10 mls with water. The extracted metals are then determined by inductively coupled argon plasma methods.

7.0 DISCUSSION OF RESULTS

The results obtained from the sampling program are reported in ppm lead and ppm zinc. These results have been plotted on Figures 4 and 5 at a scale of 1:6000 or 1" = 500'. The lead values range from 13 ppm to 469 ppm, with background at approximately 45 ppm. Using a 90% cumulative frequency value of approximately 100 ppm lead as being anomalous, the contoured values show a large irregularly shaped anomalous region in the southwest portion of the claims area. The largest portion of the anomaly lies within the Oro 17 and 19 claims, although two distinct linear trends run northeasterly from the main anomaly for a distance of some 1400 metres.

The zinc values range from 21 ppm to 1301 ppm. At 90% cumulative frequency approximately 150 ppm zinc is considered to be anomalous. When contoured, a significant linear anomaly trending northeasterly is obvious within the southwest portion of the claims. The anomaly is quite extensive and is between 60 m and 240 m wide and some 2300 m long.

The lead values show good coincidence with the zinc values along much of the same linear zone described above.

The silver-lead-zinc showing described in the geology section of this report lies approximately 150 metres southwest of IP Oro 19 and 20. The position of the anomaly with respect to the mineralization suggests further exploration along the zone is necessary.

8.0 CONCLUSIONS

The Oro claims are underlain by a section of Lower Cambrian phyllites and interbedded limestones. Silver-lead-zinc mineralization returning favourable assay grades is known to occur within the property boundaries.

The recent geochemical survey has outlined large coincident lead-zinc anomalies closely related to the known mineralization. The shape and large extent of the anomalous zones indicates that the mineralization could be far more extensive than previously observed in the showing area.

Further exploration is necessary to fully explore the potential of the Oro claims.

9.0 RECOMMENDATIONS

A follow-up program including geological mapping, prospecting, geochemical sampling and trenching is necessary to provide the next phase of data required on the Oro group.

Initially, the pulps from the present values should be analyzed for silver which may provide better definition of the target area.

The ground program should then consist of detailed geologic mapping at 1:2000 scale with simultaneous prospecting of the present anomalous areas.

Geochemical sampling should be carried out on a 50 m x 50 m grid designed to cover the main northeasterly trending Pb-Zn anomaly. A permanent baseline should be cut and picketed from IP Oro 26 to IP Oro 3, a distance of some 2300 metres.

Samples should be analyzed for Ag, Pb, Zn.

Trenching of highly anomalous target areas and surface showings should be undertaken so reliable samples may be obtained for analysis.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read 'R. Darney', is positioned above the typed name.

R. Darney, Geologist

APPENDIX I

LIST OF PERSONNEL

Douglas Schellenberg Watson Lake, Y.T. June 29 and 30, July 1 to 4

John Robinson Vancouver, B.C. June 29 and 30, July 1 to 4

APPENDIX II

STATEMENT OF COSTS

Labour	\$ 1,800.00
Truck Rental	300.00
Support	240.00
Geochem Analysis	1,450.55
Report Preparation	<u>500.00</u>
	<u>\$ 4,290.55</u>

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH: 253-3158 TELEX: 04-53124

DATE RECEIVED JULY 10 1984

DATE REPORTS MAILED *July 13/84*

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DE5.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. Au DETECTION 3 ppm.
SAMPLE TYPE - SOIL

ASSAYER *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

SOVEREIGN METALS FILE # 84-1496

PAGE# 1

SAMPLE	PB ppm	ZN ppm
1-1	23	75
1-2	29	118
1-3	29	97
1-4	26	82
1-5	21	77
1-6	16	43
1-7	23	74
1-8	27	99
1-9	36	68
1-10	47	57
1-11	44	75
1-12	54	83
1-13	30	77
1-14	28	105
1-15	28	66
1-16	29	75
1-17	24	79
1-18	15	54
1-19	24	66
1-20	49	74
1-21	25	66
1-22	32	68
1-23	22	65
1-24	14	65
1-25	19	56
1-26	30	59
1-27	20	62
1-28	32	64
1-29	27	47
1-30	30	75
1-31	39	77
2-1	28	87
2-2	19	21
2-3	36	85
2-4	44	112
2-5	86	129
2-6	30	70
STD A-1	40	188

SAMPLE	PB ppm	ZN ppm
2-7	16	43
2-8	18	61
2-9	15	60
2-10	29	68
2-11	27	79
2-12	27	63
2-13	48	51
2-14	34	86
2-15	30	54
2-16	35	61
2-17	30	66
2-18	36	111
2-19	36	106
2-20	35	163
2-21	32	77
2-22	29	83
2-23	32	86
2-24	30	77
2-25	29	89
2-26	31	103
2-27	31	76
2-28	39	74
2-29	33	67
2-30	26	59
2-31	43	98
3-0	32	81
3-1	60	92
3-2	37	82
3-3	52	92
3-4	78	164
3-5	79	137
3-6	41	118
3-7	33	67
3-8	31	67
3-9	44	90
3-10	63	83
3-11	32	75
STD A-1	39	184

SAMPLE	PB ppm	ZN ppm
3-12	35	83
3-13	39	69
3-14	26	81
3-15	29	84
3-16	36	96
3-17	31	73
3-18	24	64
3-19	21	75
3-20	25	92
3-21	21	51
3-22	17	72
3-23	23	69
3-24	20	65
3-25	39	74
3-26	25	62
3-27	26	70
3-28	24	65
3-29	21	67
3-30	27	65
3-31	21	56
4-0	55	113
4-1	40	88
4-2	86	165
4-3	70	113
4-4	50	101
4-5	42	90
4-6	37	89
4-7	44	92
4-8	51	78
4-9	45	85
4-10	31	79
4-11	29	74
4-12	29	82
4-13	42	70
4-14	62	81
4-15	28	73
4-16	42	83
STD A-1	39	100

SAMPLE#	PB PPM	ZN PPM
4-17	68	76
4-18	30	77
4-19	25	62
4-20	37	73
4-21	30	72
4-22	30	77
4-23	27	75
4-24	34	46
4-25	44	94
4-26	29	67
4-27	20	77
4-28	33	67
4-29	19	64
4-30	38	67
5-1	57	75
5-2	46	81
5-3	82	115
5-4	66	95
5-5	76	112
5-6	89	118
5-7	101	242
5-8	191	328
5-9	81	114
5-10	80	109
5-11	37	74
5-12	56	79
5-13	90	95
5-14	38	63
5-15	52	97
5-16	45	94
5-17	45	85
5-18	44	69
5-19	76	127
5-20	99	125
5-21	54	79
5-22	32	64
5-23	29	85
STD A-1	38	104

SAMPLE	PB ppm	ZN ppm
5-24	40	96
5-25	36	92
5-26	36	57
5-27	37	67
5-28	43	75
5-29	50	88
5-30	24	77
5-31	44	96
6-1	65	139
6-2	66	150
6-3	62	105
6-4	74	113
6-5	54	119
6-6	140	286
6-7	191	383
6-8	323	515
6-9	96	96
6-10	45	94
6-11	58	74
6-12	49	79
6-13	56	85
6-14	30	78
6-15	62	75
6-16	59	90
6-17	74	76
6-18	76	82
6-19	108	88
6-20	66	90
6-21	83	92
6-22	95	110
6-23	77	80
6-24	342	111
6-25	58	79
6-26	60	77
6-27	56	71
6-28	33	72
6-29	25	52
STD A-1	38	184

SAMPLE	FB ppm	ZN ppm
6-30	47	78
6-31	22	75
7-1	79	99
7-2	77	122
7-3	123	401
7-4	92	104
7-5	81	85
7-6	59	72
7-7	110	107
7-8	92	184
7-9	45	92
7-10	39	96
7-11	46	113
7-12	47	128
7-13	59	159
7-14	40	121
7-15	50	151
7-16	31	99
7-17	32	88
7-18	63	91
7-19	59	104
7-20	50	109
7-21	50	107
7-22	44	80
7-23	248	114
7-24	85	168
7-25	47	81
7-26	37	85
7-27	35	99
7-28	35	91
7-29	42	115
7-30	22	15
7-31	70	78
8-1	77	93
8-2	69	112
8-3	113	128
8-4	79	128
STD A-1	40	188

SAMPLE	PB ppm	ZN ppm
8-5	102	118
8-6	99	137
8-7	70	146
8-8	141	250
8-9	141	257
8-10	40	112
8-11	24	78
8-12	54	111
8-13	46	115
8-14	52	119
8-15	40	100
8-16	24	80
8-17	28	83
8-18	66	113
8-19	107	163
8-20	96	129
8-21	58	89
8-22	97	111
8-23	30	102
8-24	22	98
8-25	221	112
8-26	44	124
8-27	31	64
8-28	36	105
8-29	26	63
8-30	13	48
8-31	23	83
9-1	129	120
9-2	119	98
9-3	167	125
9-4	107	125
9-5	43	71
9-6	65	100
9-7	94	151
9-8	65	119
9-9	91	201
9-10	66	267
STD A-1	40	184

SAMPLE	PB ppm	ZN ppm
9-11	90	286
9-12	70	299
9-13	22	135
9-14	84	168
9-15	42	183
9-16	80	133
9-17	38	118
9-18	32	116
9-19	33	93
9-20	28	94
9-21	20	35
9-22	24	83
9-23	30	71
9-24	20	58
9-25	31	61
9-26	32	77
9-27	41	98
9-28	51	108
9-29	35	90
9-30	35	96
9-31	27	68
10-1	79	164
10-2	179	134
10-3	131	114
10-4	142	162
10-5	89	149
10-6	95	122
10-7	93	114
10-8	86	112
10-9	89	132
10-10	159	286
10-11	98	197
10-12	76	132
10-13	76	119
10-14	22	71
10-15	38	65
10-16	32	83
STD A-1	39	186

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SAMPLE	PB ppm	ZN ppm
10-17	22	93
10-18	52	122
10-19	45	116
10-20	53	114
10-21	30	57
10-22	34	77
10-23	83	138
10-24	46	89
10-25	28	72
10-26	106	118
10-27	51	105
10-28	29	105
10-29	33	97
10-30	62	124
10-31	74	137
11-2	86	1301
11-3	46	116
11-4	105	451
11-5	177	107
11-6	56	105
11-7	67	96
11-8	135	90
11-9	98	138
11-10	252	407
11-11	116	125
11-12	58	192
11-13	36	98
11-14	58	94
11-15	36	108
11-16	55	110
11-17	28	82
11-18	30	83
11-19	44	67
11-20	30	97
11-21	27	97
11-22	33	99
11-23	80	114
STD A-1	39	188

SAMPLE#	PB PPM	ZN PPM
11-24	50	51
11-25	175	180
11-26	73	116
11-27	68	110
11-28	72	116
11-29	66	112
11-30	51	84
11-31	41	75
12-1	469	338
12-2	101	185
12-3	132	127
12-4	114	108
12-5	170	89
12-6	145	89
12-7	312	195
12-8	92	104
12-9	242	248
12-10	126	141
12-11	93	120
12-12	88	149
12-13	113	147
12-14	126	118
12-15	43	82
12-16	43	94
12-19	40	95
12-20	43	82
12-21	38	80
12-22	46	94
12-23	50	96
12-24	53	100
12-25	65	115
12-26	120	188
12-27	122	125
12-28	90	157
12-29	85	140
12-30	69	143
12-31	44	123
STD A-1	77	133

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SAMPLE	PB ppm	ZN ppm
13-1	504	244
13-2	95	108
13-3	81	110
13-4	62	100
13-5	148	164
13-6	49	103
13-7	32	109
13-8	119	192
13-9	97	164
13-10	373	700
13-11	117	174
13-12	230	187
13-13	53	96
13-14	49	106
13-15	43	93
13-16	59	89
13-17	37	86
13-18	40	86
13-19	41	81
13-20	63	125
13-21	46	100
13-22	68	126
13-23	139	502
13-24	85	164
13-25	64	153
13-26	69	65
13-27	65	85
13-28	142	173
13-29	12	47
13-30	104	154
13-31	122	186
14-1	37	82
14-2	37	90
14-3	32	85
14-4	30	71
14-5	37	78
14-6	65	411
STD A-1	38	189

SAMPLE	PB ppm	ZN ppm
14-7	75	170
14-8	57	119
14-9	75	127
14-10	45	72
14-11	62	114
14-12	99	190
14-13	43	68
14-14	73	106
14-15	73	288
14-16	48	82
15-1	66	115
15-2	44	106
15-3	64	155
15-4	48	82
15-5	467	234
15-6	115	99
15-7	65	81
15-8	80	313
15-9	64	83
15-10	122	87
15-11	57	97
15-12	77	159
15-13	83	107
15-14	38	61
15-15	34	76
15-16	38	82
STD A-1	39	186

091596

APPENDIX I

STATEMENT OF QUALIFICATIONS



I, ROBERT J. DARNEY, of R.R. #1, Sechelt, in the Province of British Columbia, DO HEREBY CERTIFY THAT:

1. I am a Geologist in the employment of Pamicon Developments Ltd. with offices at 215, 543 Granville Street, Vancouver, B.C.
2. I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology.
3. My primary employment since 1966 has been in the field of mineral exploration.
4. My experience has encompassed a wide range of geological environments and has allowed considerable familiarization of exploration techniques for both lode and placer deposits.
5. This report is based on field data generated during a 1984 geochemical survey conducted by Mr. D. Schellenberg on the Oro Claim.
6. I have no interest in the property described herein.

DATED AT VANCOUVER, BRITISH COLUMBIA, this 16 day of January, 1987.

A handwritten signature in cursive script that reads "R. Darney".

R.J. Darney, Geologist



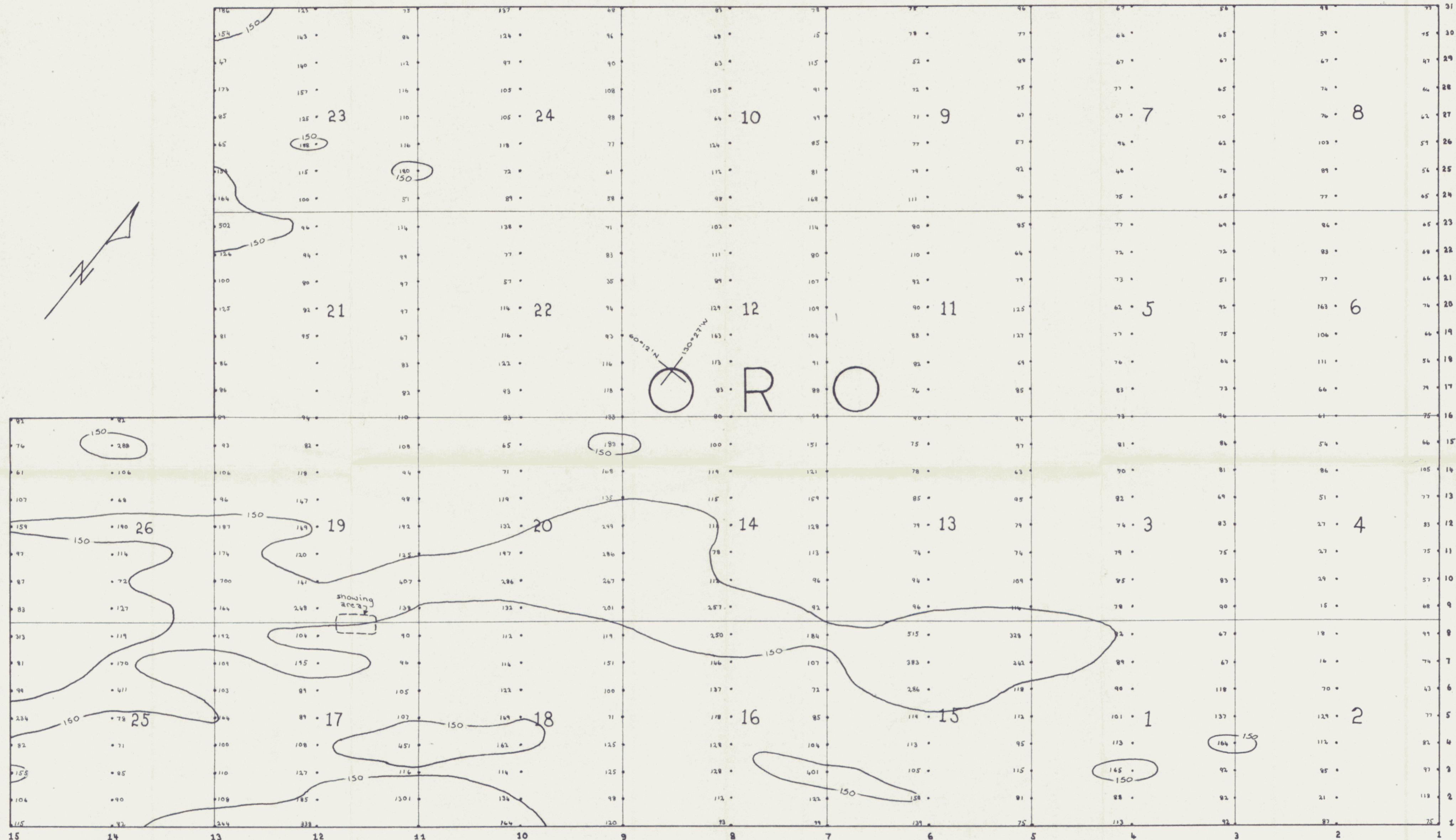
23	24	10 <u>ORO</u>	9	7	8	
21	22	12	11	5	6	
26	19	20	14	3	4	
25	17	18	16	15	1	2

----- GEOCHEM LINES (SAMPLES TAKEN EVERY 200 FT.)

TOTAL NO. OF SAMPLES - 435

CLAIM SHEET 105-B-1

0 1 2 3 4 5



SCALE - 1" = 500'
 - 1:6000

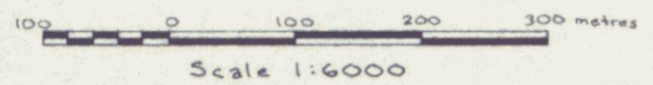
SOIL GEOCHEMISTRY

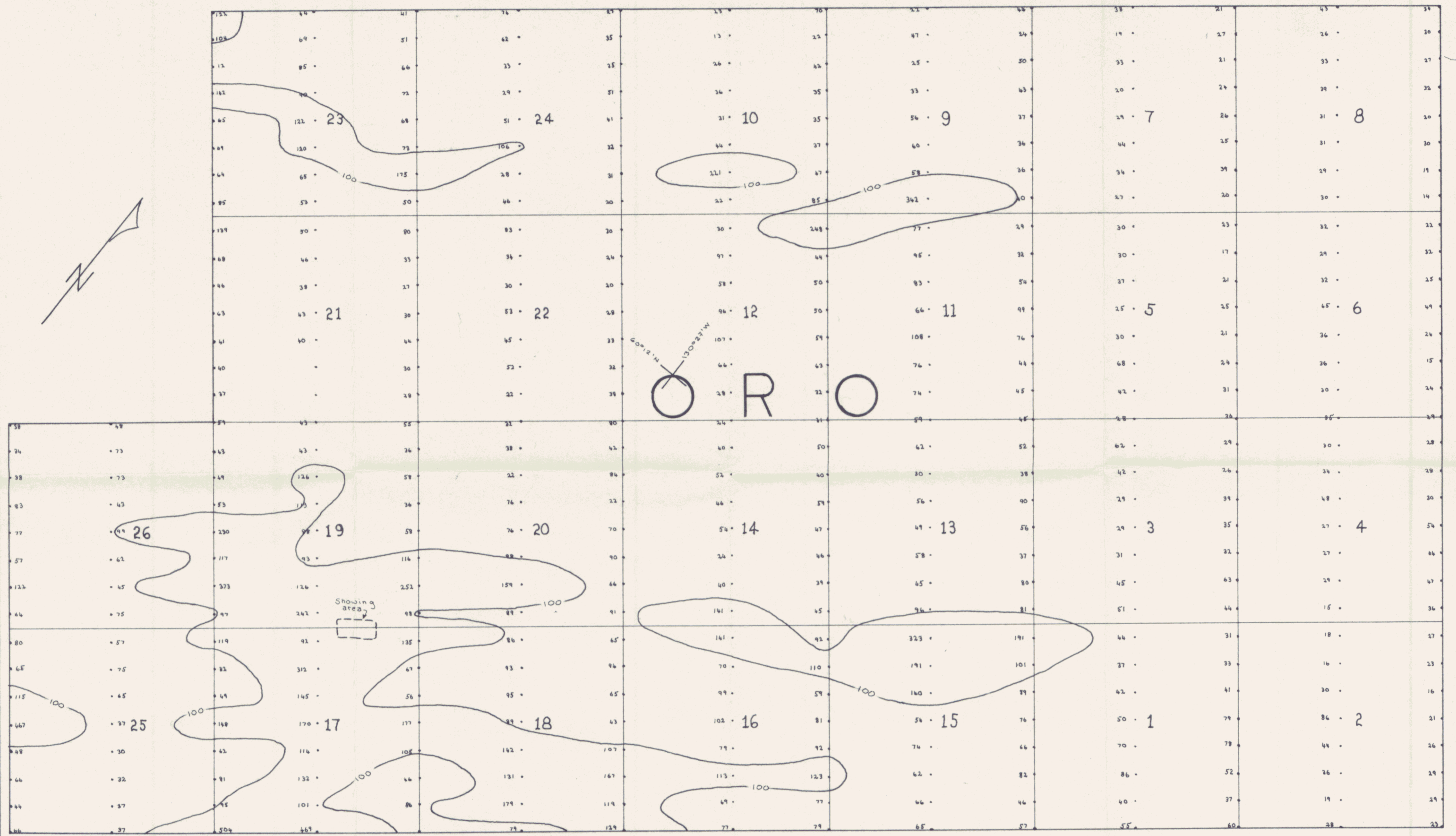
ZINC IN P.P.M. 091596

SPENCER CREEK AREA, YUKON

NTS 105 B/1

Longitude 130°27'W Latitude 60°12'N





SCALE - 1" = 500'
- 1:6000

SOIL GEOCHEMISTRY
LEAD IN P.P.M. 091596

SPENCER CREEK AREA, YUKON TER.
NTS 105 B/1

Longitude 130°27'W Latitude 60°12'N