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#12755  
7/85

ASSESSMENT REPORT

ON THE

MATSON CLAIMS

RECORD NOS. 849-854(7)

MISSION RIDGE - CARPENTER LAKE, BRITISH COLUMBIA

Centered near: Latitude 50.77 Deg. N: Longitude 122.21 Deg. W

(NTS: 92J/16E)

LILLOOET MINING DIVISION

for

ODESSA EXPLORATIONS INC.  
Suite 1205  
1166 Alberni Street  
Vancouver, British Columbia  
V6E 3Z3

by

NORMAND CHAMPIGNY, M.A.Sc., P. Eng. (B.C.)

26 July 1984

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,755**

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## SUMMARY

The MATSON Claims consisting of 12 unpatented lode mining claims are located 63 km west of the town of Lillooet, in the Lillooet Mining Division, British Columbia. An 10 m long adit and 4 small surface pits were completed by Paul Matson in the 1940's. Economic Pb-Zn-Ag mineralization occurs in quartz-calcite-galena-sphalerite-arsenopyrite-pyrite veins cutting sedimentary rocks of the Bridge River Group. The writer visited the property on July 15 and 16, 1984 and performed the following work.

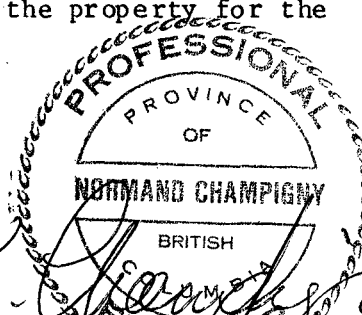
1. Orientation soil geochemical survey, 16 samples.
2. Orientation magnetometer and VLF surveys, 2 lines totalling 0.16 km
3. Lithochemical sampling and assaying, 9 samples.
4. Prospecting over an area of 0.1 square km.
5. Analysis:
  - 16 Soil samples - analysed for Pb, Zn, and As
  - 9 Rock samples - analysed for Pb, Zn, Ag, and Au

The nine mineralized samples taken from the adit and the four surface pits returned assay values ranging from 0.30 to 9.97 % Pb, 0.16 to 8.08 % Zn, 0.12 to 6.38 oz/st Ag, and .050 to .015 oz/st Au. The following facts make the Matson claims an attractive exploration target.

1. Economic Pb-Zn-Ag-Au mineralization is present in outcropping veins.
2. Mineralized veins have been traced along a strike length of 309 m. The vertical range of the mineralized veins is 186 m.
3. The Rexmount granite - Bridge River Group sediments contact zone, probably geologically favorable to the mineralization, occupies an important portion of the property.

Soil geochemistry and magnetometer survey are useful in defining the mineralized veins on the MATSON claims and is emphasised in the proposed exploration below.

A total of \$ 2,013.61 has been spent on the property for the 1983-1984 assessment year.

  
Normand Champigny, P.Eng. (B.C.)  
26 July 1984, Vancouver, B.C.

## INTRODUCTION

This report was prepared at the request of Odessa Explorations Inc. Inc., a mineral exploration company with its head office at Suite 1205, 1166 Alberni street, Vancouver, British Columbia. The writer visited the property on July 15 and 16 1984.

## LOCATION, ACCESS AND PHYSIOGRAPHY

The prospect consists of 12 unpatented lode mining claims, and is located about 63 km west of the town of Lillooet, British Columbia (Fig. 1). The claims are accessible from Lillooet by Road No. 40 to Mission Dam (51 km), and then to to Mission Pass (10 km). There a well maintained gravel road heads east and up hill. This road parallels the B.C. Hydro transmission line and comes to within 650 m of the southern limit of the property at a point 1.2 km from the junction with road No 40. A foot path of about 1.3 km leads to the adit.

The property is situated 4.5 km north of Shalalth, and the B.C. Rail railway track. The claims lie on the top of Mission Ridge. Elevation on the property ranges from 1600 m to 1950 m with an average slope angle of 25 degrees. Bedrock is well exposed on the Matson claims. Overburden thickness varies from 0 to 1.5 m.

## CLAIMS

The MATSON Claims have been staked in one contiguous group. Information on file with the Mining Recorder at the office of te Government Agent at Vancouver, British Columbia is as follows:

<u>CLAIM NAME</u>	<u>RECORD NO</u>	<u>MAP NO</u>	<u>RECORDED AT</u>
MATSON 1	849	92J/16E	Lillooet, B.C.
MATSON 2	850	92J/16E	Lillooet, B.C.
MATSON 3	851	92J/16E	Lillooet, B.C.
MATSON 4	852	92J/16E	Lillooet, B.C.
MATSON 5	853	92J/16E	Lillooet, B.C.
MATSON 6	854	92J/16E	Lillooet, B.C.
MATSON 7	2453	92J/16E	Lillooet, B.C.
MATSON 8	2454	92J/16E	Lillooet, B.C.
MATSON 9	2455	92J/16E	Lillooet, B.C.
MATSON 10	2456	92J/16E	Lillooet, B.C.
MATSON 11	2457	92J/16E	Lillooet, B.C.
MATSON 12	2458	92J/16E	Lillooet, B.C.

The location of the MATSON is shown on Figure 2.

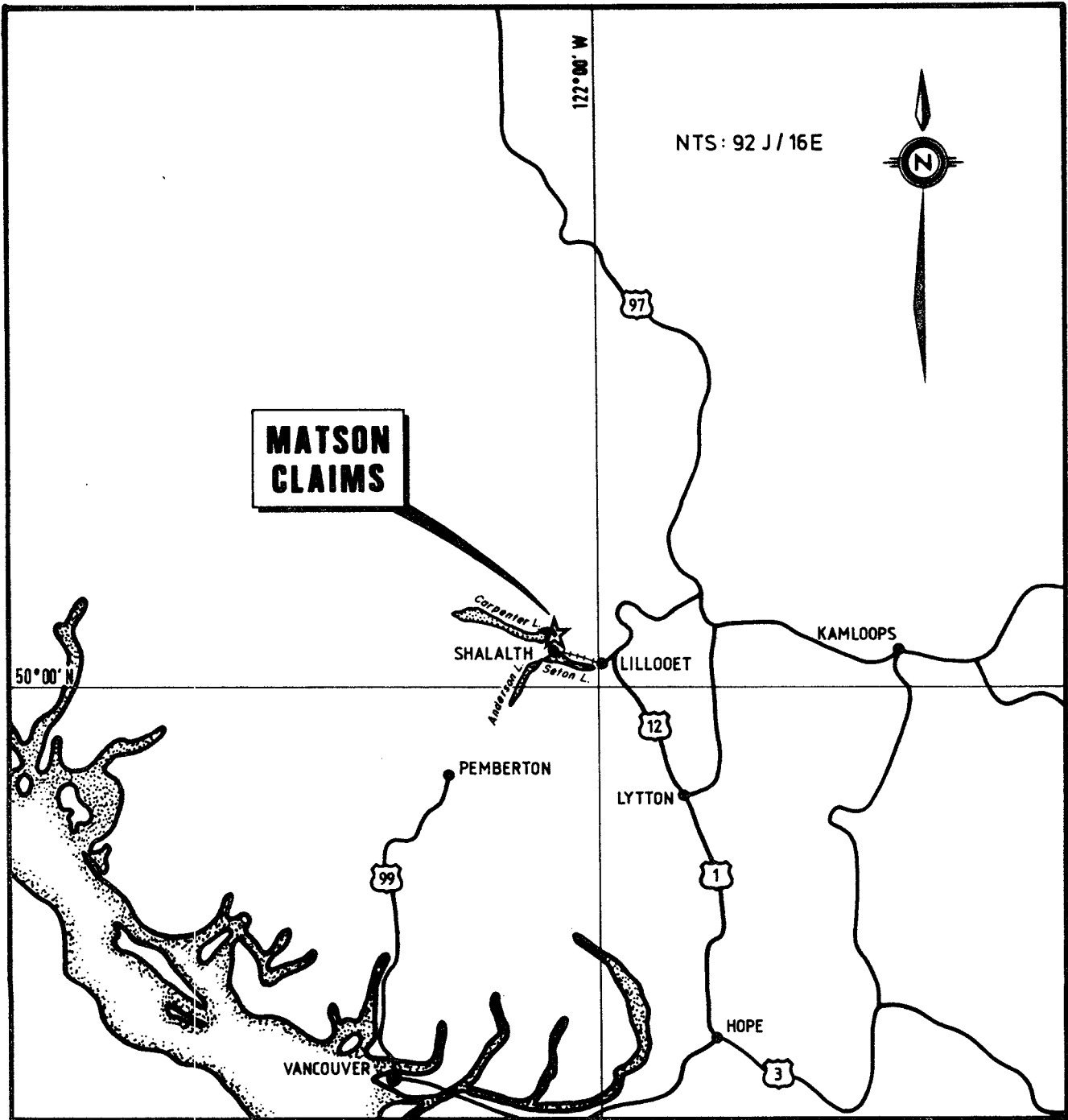
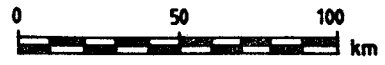


FIGURE 1

**LOCATION MAP  
OF THE MATSON CLAIMS  
LILLOOET MINING DIVISION, B.C.**

1:240,000



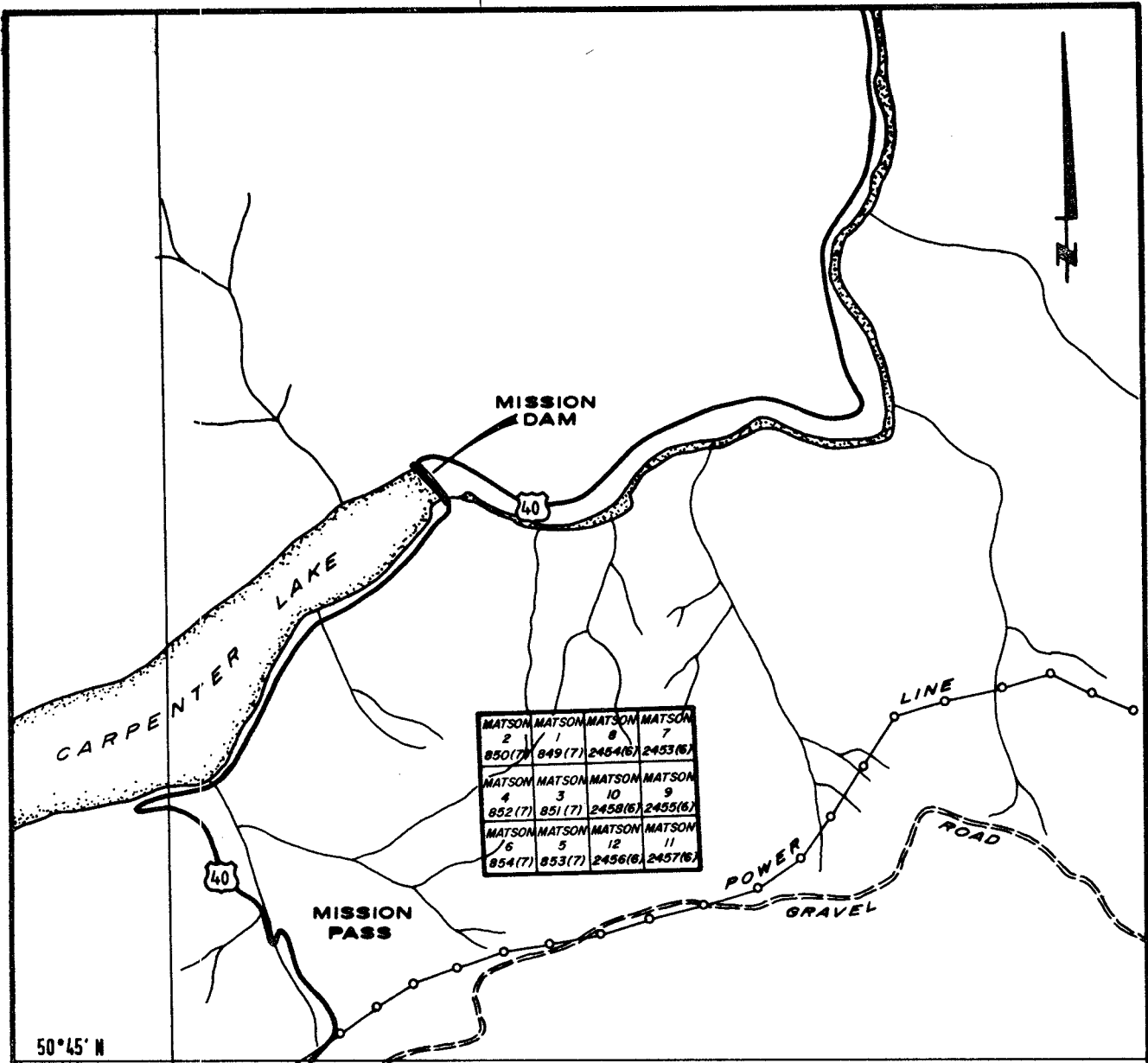


FIGURE 2:

**CLAIM MAP, MATSON CLAIMS**

**LILLOOET MINING DIVISION, BRITISH COLUMBIA**

1:50,000



## PREVIOUS EXPLORATION WORK

Galena-sphalerite bearing float samples were discovered in 1941 by Paul Matson, prospector, in creek beds at the base of Mission Ridge. The source of the mineralized boulders was traced to an outcropping, 1 ft thick sphalerite-galena vein at an elevation of 1650 m. A 10 m drive (4 m portal, and 6 m tunnel) was completed in 1948 to expose the Pb-Zn-Ag vein. A 2.5 kg ore sample taken from the adit in the 1940's assayed \$ 56/st (Paul Matson, personal communication 1984). Using metal prices of \$ 0.05/lb for Pb and Zn, and \$ 1.00/oz for Ag, and an average Pb-Zn grade of 15.0 % the Ag grade of that sample is 26.0 oz/st. A total of 6 surface pits were dug 50 to 150 m east of the drive. Only four of the six pits were found by the writer. The pits all have a very similar size. The average pit size is 2.5 m in the north-south direction, 1.5 m in the east-west direction, and 1.5 m depth.

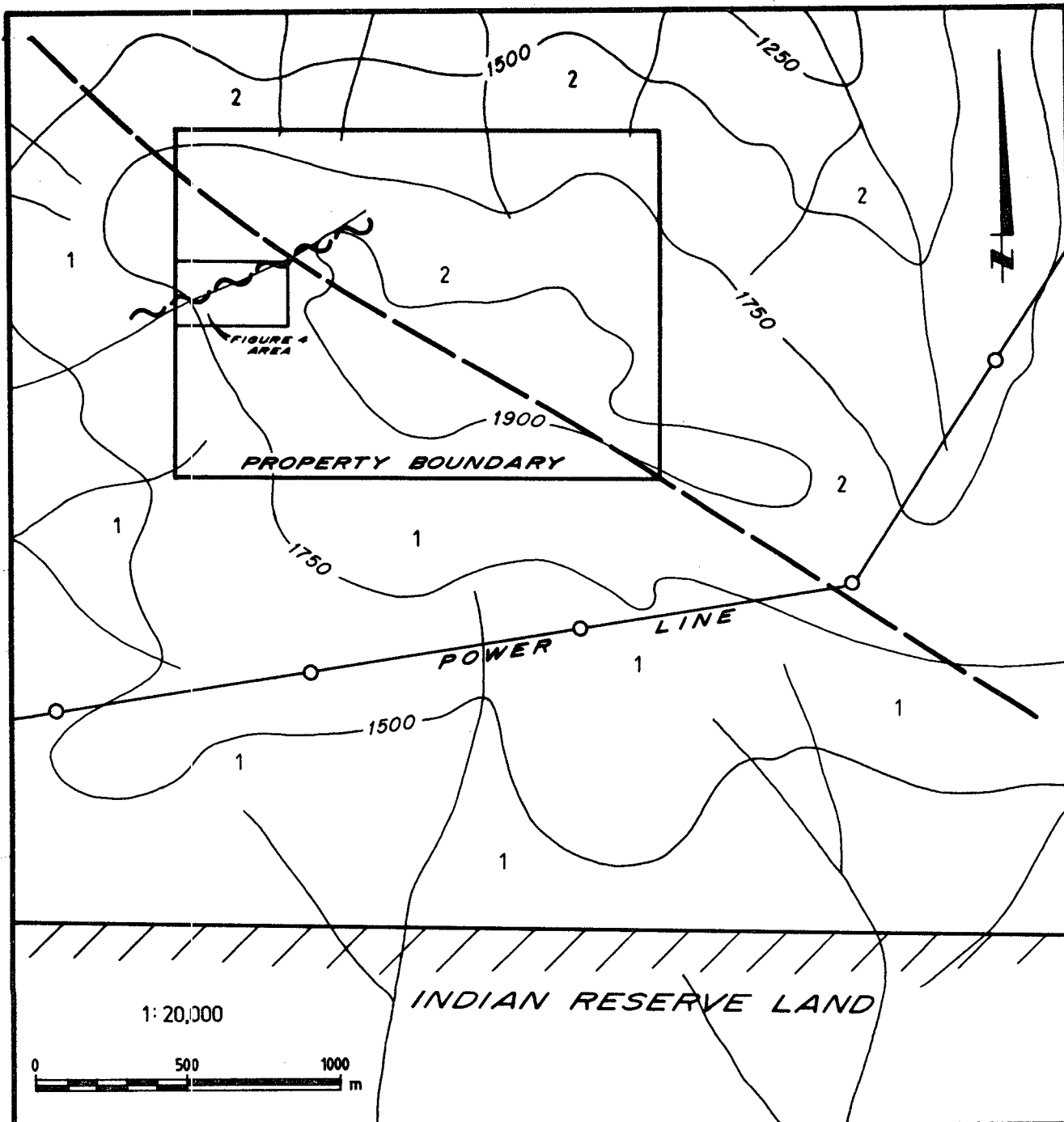
Rock sampling of the adit and surface pits (6 samples), soil geochemical sampling (219 samples, B-horizon) and geological mapping was carried out by John Schultz, P. Eng. in March 1967 for Benn Explorations Ltd. (NPL) (Schultz 1966-1967). All samples were analysed for Cu, Pb, Zn, and Mo by TSL Laboratories Ltd. The property was known at that time as the KING claims. Additional exploration work on the property is described in a report by S.J. Hunter dated September 16, 1967. 22 soil samples (B-horizon) and 8 rock samples were collected. The rock samples were analysed for Cu, Pb, Zn and Ag. The MATSON claims were subsequently dropped by Benn Explorations in 1967.

Jack Butula, prospector, staked six claims in 1970, and six additional claims in 1983. An assessment report regarding the MATSON claims 7 to 12 has been filed separately by Jack Butula.

The writer visited the property on July 13, 1981 (Champigny 1981). Three grab samples were taken and analysed for Pb, Zn, Cu, Ag, Au and Mo. The best values were 11.47 % Pb, 9.03 % Zn, 12.22 oz/st Ag and 0.16 oz/st Au.

## REGIONAL GEOLOGICAL SETTING

The MATSON Claims area is located at the western limit of the Intermontane Belt of the Canadian Cordillera. The boundary between the Coast Crystalline Belt and the Intermontane Belt is approximately 3 km southwest of the mineral property. Roddick and Hutchison (1973) have produced the most recent regional geological map of the area. Figure 3 shows the general geology of the MATSON Claims area. Volcanic and sedimentary rocks of the Bridge River Group (Middle Triassic and older (?)) are cut by the Rexmount Porphyry (Miocene (?)) (Roddick and Hutchison, 1973).



**FIGURE 3: GEOLOGY OF THE MATSON CLAIMS AREA  
LILLOOET MINING DIVISION, BRITISH COLUMBIA  
FROM RODDICK AND HUTCHISON (1978)**

**LEGEND**

- |  |  |
|--|--|
| <p><b>2</b> REXMOUNT PORPHYRY<br/>TERTIARY - MIOCENE ?</p> <p><b>1</b> BRIDGE RIVER GROUP<br/>TRIASSIC</p> | <p>——— GEOLOGICAL CONTACT<br/>APPROXIMATE</p> <p>~~~~~ FAULT, INFERRED</p> |
|--|--|



## GEOLOGY AND MINERALIZATION OF THE MATSON CLAIMS

On the MATSON Claims sedimentary rocks of the Bridge River Group are intruded by the Rexmount Porphyry granite (unit 2, Fig. 3). Sediments of Bridge River Group have been submitted to at least two episodes of deformation, the latest one which emplaced the rocks in a nearly vertical position. A major fault (normal ?) with a strike of 235 degrees and a sub-vertical dip, parallels the mineralized vein approximately 50 m north of it (Fig. 3).

Approximately 55 percent of the property is underlain by the Rexmount granite (Fig. 3; Hunter 1967). The granite-sediment contact is visible at the portal and in Pit 3. A close genetic relationship is apparent between the granite and the vein mineralization.

Pb-Zn-Ag-Au mineralization occur in veins striking from 75 to 180 and dipping 70 to 90 deg. The thickness of the veins varies from 0.1 (Pit 4) to 1 m (Drive). Mineralization has been traced along a strike length of 309 m. The vertical range of these mineralized veins is 186 m. Vein material consist of galena (5 to 15 percent), sphalerite (5 to 15 percent), arsenopyrite (5 to 20 percent) and pyrite (0 to 0.1 percent) in a gangue of quartz and calcite (60 to 80 percent). Surface oxidation of the galena and sphalerite has resulted in the developement of anglesite (Pb sulfate), and possibly cerusite (Pb carbonate) and smithsonite (Zn carbonate).

The high silver content can be possibly attributed to the presence of inclusions of tetrahedrite in galena. Native gold was not observed in hand specimen. Microscopic examination is recommended to determine the gold and silver mineralogy.

## 1984 EXPLORATION PROGRAM

The writer sampled the adit and the four surface pits shown on Figure 4. Nine mineralized samples were taken. The samples were crushed and ring pulverized. The -100 mesh fraction was retained for analysis. Au and Ag content was determined using fire assay (half assay ton) and a gravimetric finish. Pb and Zn content was determined using atomic absorption. The analyses were performed by Chemex Labs Ltd., Vancouver, B.C. The best results are from Pit 4 with 9.97 % Pb, 7.44 % Zn, 6.38 oz/st Ag, and .044 oz/st Au (Fig. 4; Appendix 2). The highest Au value is 0.150 oz/st and was obtained from a sample at the entrance of the adit (Fig. 4).

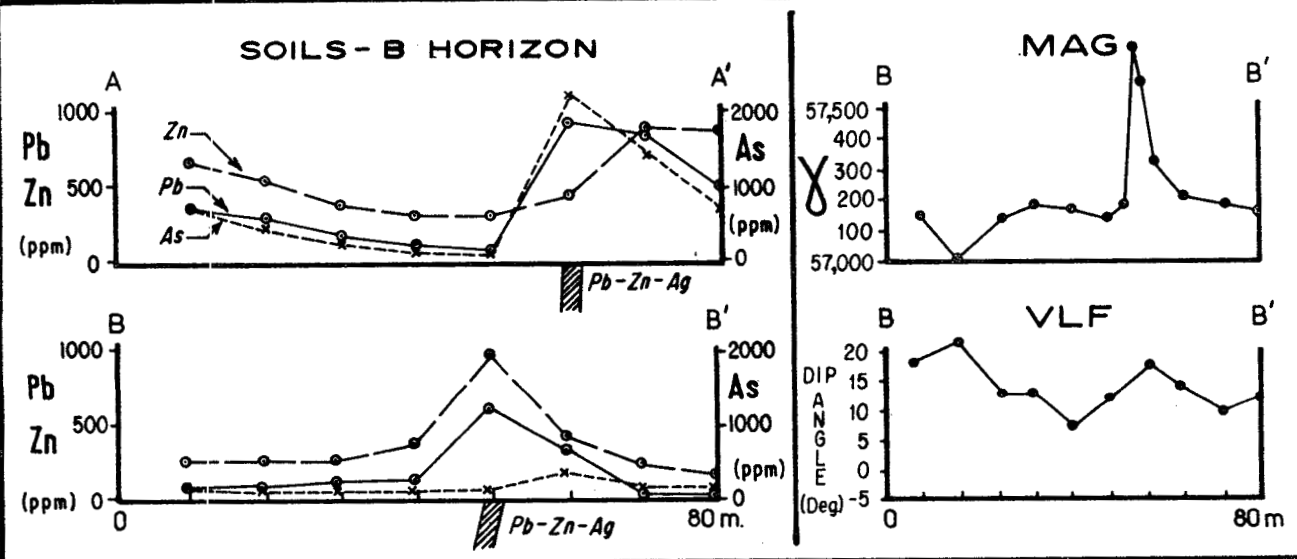
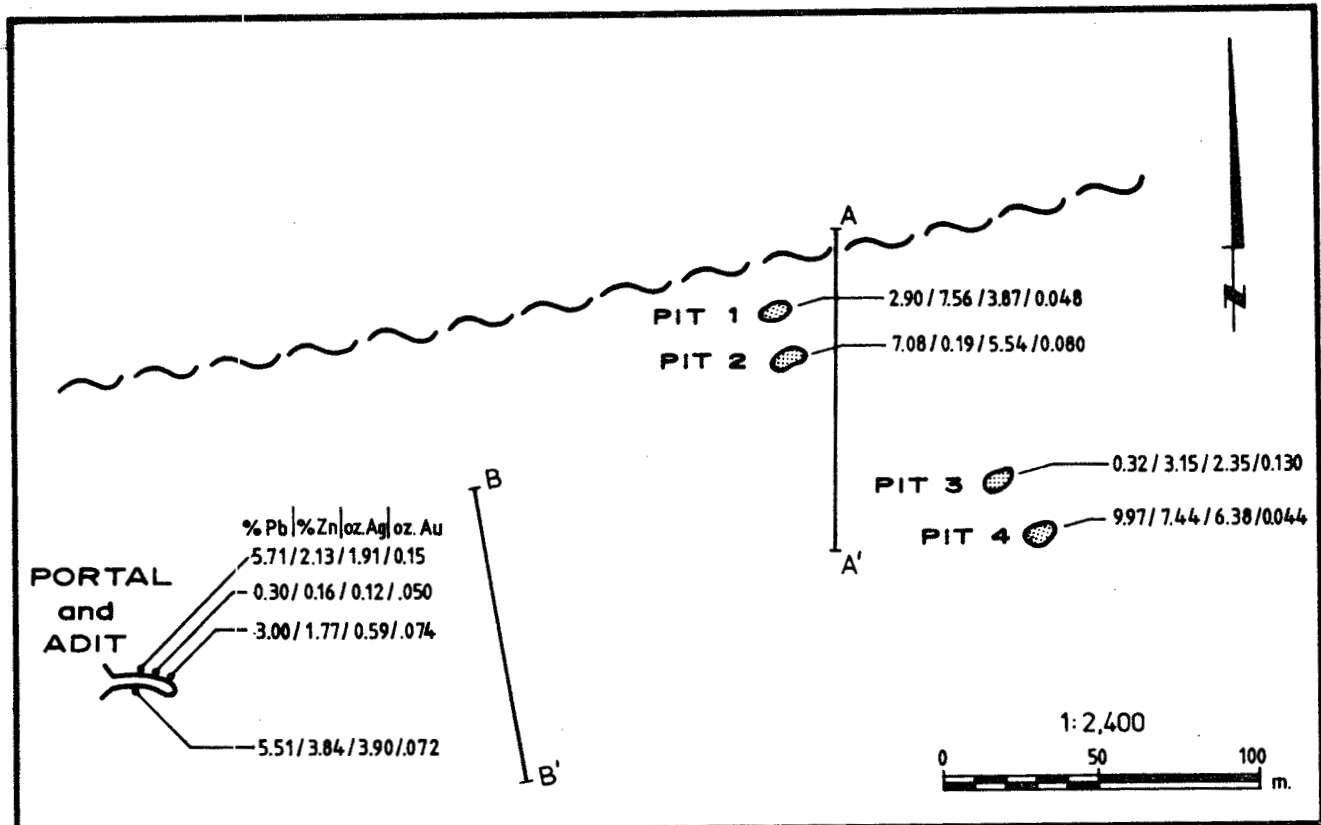
Orientation soil geochemical survey, magnetometer survey, and VLF survey were conducted with the survey lines perpendicular to the strike of the mineralized veins (lines A-A' and B-B' on Figure 4). These surveys were conducted to test their potential use in detecting the presence of the vein mineralization.

B-horizon soil samples were taken 10 m apart over a total distance of 160 m (2 lines of 80 m). The samples were oven dried and sieve through an -80 mesh screen. The samples were digested using a perchloric-nitric acid solution followed by atomic absorption analysis. Pb, Zn, As determination was done using atomic absorption on 1 g samples. The analyses were performed by Chemex Labs Ltd., Vancouver, B.C. The values are listed in Appendix 2 and element profiles are illustrated on Figure 4. A strong geochemical response over the mineralized veins is apparent for all three elements.

A Scintrex MP-2 instrument was used to carry out the magnetometer survey. Readings were taken every 10 m over a total distance of 160 m (lines A-A' and B-B' on Figure 4). More readings were taken in areas showing high values.

The gamma values shown on the profiles on Figure 4 represent measurements of the total intensity of the magnetic field. The values are relative and not corrected for diurnal variation. A positive magnetic response over the mineralized vein is apparent. It is possibly caused by the presence of small amounts of pyrrhotite with the other sulphides in the veins. A spacing of 5 m is necessary to show a positive magnetic response (Fig. 4).

An VLF survey was conducted over lines A-A' and B-B' using a RADEM VLF EM receiver manufactured by Crone Geophysics Ltd. The VLF Communication Broadcast station used is Seattle, Washington (24.8 K Hz). The dip angle of the resultant VLF field at each station is shown on Figure 4. No conductor is apparent.



**FIGURE 4: LOCATION MAP OF ADIT AND PITS, RESULTS OF LITHOGEOCHEMICAL, SOIL GEO-CHEMICAL, VLF AND MAGNETOMETER SURVEYS MATSON CLAIMS, LILLOOET MINING DIVISION, B.C.**

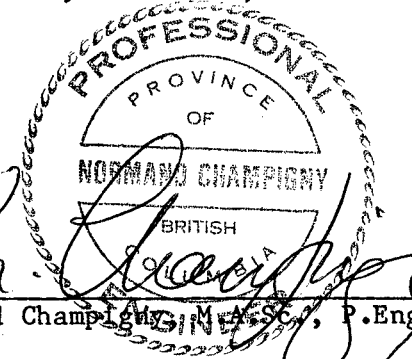
STATEMENT OF COST

The following breakdown reflects the costs of the exploration program completed on the MATSON Claims for the 1983-1984 assessment year, and described in this report.

WAGES		
3.0 days; \$ 240/day; July 14, 15, and 16	\$	720.00
FOOD AND ACCOMODATION		
3.0 days; July 14, 15, and 16		157.13
TRANSPORTATION (CAR RENTAL AND GAS)		
3.0 days; July 14, 15, and 16		126.97
GEOPHYSICAL INSTRUMENT RENTAL		
2.0 days; \$ 23/day; July 15, and 16		46.00
ANALYSIS		
16 Soil samples - analysed for Pb, Zn, and As \$ 8.15/sample		
9 Rock samples - analysed for Pb, Zn, Ag, and Au \$ 25.20/sample		
TOTAL COST		357.65
REPORT PREPARATION		
2.0 days; \$ 240/day; July 22, 25 and 26		480.00
DRAFTING		
6.0 hours; \$ 15/hour; July 24 and 25		90.00
SUPPLIES		35.86
TOTAL	\$	2,013.61

I certify this to be a correct statement of costs.

Respectfully submitted,

  
Normand Champigny, M.A.S.C., P.Eng.(B.C.)

## REFERENCES

- Champigny, N. 1981. Geological Examination of the MATSON Claims. Unpublished Report dated 23 July 1981, Odessa Explorations Inc. 3 p.
- Roddick, J. A., and Hutchison, W. W. 1973. Pemberton (East Half) Map-Area, British Columbia. Geological Survey of Canada, Paper 73-17, 20 p.
- Hunter, S. J. 1967. Report on the MATSON Claims. Unpublished report for Benn Explorations Ltd. (NPL) dated September 16, 1967.
- Schultz, J. 1966-1967. Unpublished compilation map of Soil Geochemical and Lithochemical data, Benn Explorations Ltd. (NPL).


APPENDIX 1

CERTIFICATE

I, NORMAND CHAMPIGNY, of the City of Vancouver, Province of British Columbia, hereby certify as follows:

1. I graduated with a degree of Bachelor of Applied Science, Geological Engineering, from Ecole Polytechnique, Montreal, Quebec, in 1979 and with a degree of Master of Applied Science, Geological Engineering, from the University of British Columbia, Vancouver, B.C. in 1981.
2. I am a registered Professional Engineer of the province of British Columbia.
3. I have practiced my profession in mineral exploration continuously since graduation.
4. I have no financial interest, directly or indirectly, in the securities of ODESSA EXPLORATIONS INC., Vancouver, British Columbia, or in the properties described in this report. I do not expect to receive or acquire any interest.
5. This report is based upon a fieldwork on the MATSON Claims on July 15 and 16, 1984 and a study of all available reports and published information.
6. Written permission is required from the writer to publish this report dated July 26, 1984 in any Prospectus or Statement of Material Facts.

DATED at Vancouver, Province of British Columbia  
this 26th day of July 1984.

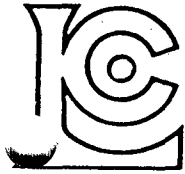
  
NORMAND CHAMPIGNY, M.A.Sc., P.Eng.(B.C.)

APPENDIX 2

ASSAY CERTIFICATES Nos.

A8413748-001-A : 9 rock samples

A8413749-001-A : 16 soil samples



# Chemex Labs Ltd.

Analytical Chemists      Geochemists      Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada      V7J 2C1  
Telephone: (604) 984-0221  
Telex:      043-52597

## CERTIFICATE OF ASSAY

TO : ODESSA EXPLORATIONS INC.

1205-1166 ALBERNI ST.  
VANCOUVER, B.C.  
V6E 3Z3

CERT. # : A8413748-001-A  
INVOICE # : I8413748  
DATE : 27-JUL-84  
P.O. # : NONE

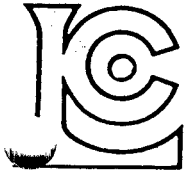
ATTN: LORCAN O'MELINN

Sample description	Prep code	Pb %	Zn %	Ag FA oz/T	Au FA oz/T		
AD 1	207	3.00	1.77	0.59	0.074	--	--
AD 2	207	0.30	0.16	0.12	0.050	--	--
AD 3	207	5.71	2.13	1.91	0.150	--	--
DU 1	207	8.52	8.08	0.53	0.032	--	--
PIT 1	207	2.90	7.56	3.87	0.048	--	--
PIT 2	207	7.08	0.19	5.54	0.080	--	--
PIT 3	207	0.32	3.15	2.35	0.130	--	--
PIT 4	207	9.97	7.44	6.38	0.044	--	--
PO 1	207	5.51	3.84	3.90	0.072	--	--

.....  
Registered Assayer, Province of British Columbia







# Chemex Labs Ltd.

Analytical Chemists      Geochemists      Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada      V7J 2C1

Telephone: (604) 984-0221  
Telex:      043-52597

## CERTIFICATE OF ANALYSIS

TO : ODESSA EXPLORATIONS INC.

1205-1166 ALBERNI ST.  
VANCOUVER, B.C.  
V6E 3Z3

CERT. # : A8413749-001-A  
INVOICE # : I8413749  
DATE : 25-JUL-84  
P.C. # : NONE

ATTN: LORCAN O'MELINN

Sample description	Prep code	Pb ppm	Zn ppm	AS ppm			
S01	201	115	320	180	--	--	--
S02	201	165	380	250	--	--	--
S03	201	288	530	450	--	--	--
S04	201	340	660	680	--	--	--
S05	201	95	325	160	--	--	--
S06	201	900	430	2200	--	--	--
S07	201	835	850	1400	--	--	--
S08	201	475	830	670	--	--	--
S09	201	92	280	180	--	--	--
S10	201	102	285	140	--	--	--
S11	201	127	280	110	--	--	--
S12	201	145	390	150	--	--	--
S13	201	603	1000	220	--	--	--
S14	201	320	425	400	--	--	--
S15	201	78	255	200	--	--	--
S16	201	31	177	43	--	--	--



Certified by Hart Bichler