

87-13-15698

1/88

SOIL GEOCHEMISTRY
GALLO ET AL. MINERAL CLAIM GROUP
SLOCAN MINING DIVISION
RAPID CREEK, LARDEAU RIVER AREA, B.C.
NTS 82 K/6 E
LATITUDE 50°20'N, LONGITUDE 117°09'W

Prepared for
MURJOH RESOURCES LTD.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,698

FILMED

ARCTEX ENGINEERING SERVICES

Locke B. Goldsmith, P.Eng.
Consulting Geologist

January 9, 1987

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MAP: GOLD GEOCHEMISTRY	(Pocket inside back cover) ✓

SOIL GEOCHEMISTRY
GALLO ET AL. MINERAL CLAIM GROUP
SLOCAN MINING DIVISION
RAPID CREEK, LARDEAU RIVER AREA, B.C.

SUMMARY

Soil geochemistry did not define a target upon which concentrated exploration can be directed. A possible trend of elevated gold values may extend southwesterly; continued reconnaissance soil geochemistry is suggested to explore in this direction. A cost of \$10,000 is estimated.

INTRODUCTION

The property is located approximately 50 km by paved Highway 31 and gravel roads north northwesterly from the village of Kaslo, B.C. The former mining settlement of Poplar Creek at the confluence of Poplar Creek and Lardeau River is situated 1 km northeasterly from the southeastern corner of the claim block. Claims extend from Poplar Creek to Rapid Creek, a distance of some 4.5 km. A dirt road in Poplar Creek drainage passes through the southeastern corner of the property and from it a logging road extends northwesterly into the Calumet claim. The remainder of the property can be reached by foot or helicopter. Elevations range from 765 m (2500') in Poplar Creek to 2200 m (7200') on the western edge of the Mobbs claim.

<i>Claim Name</i>	<i>Units</i>	<i>Lot Number</i>	<i>Record Number</i>	<i>Record Date</i>
Mobbs	10		4715(6)	June 27, 1985
Gallo	6		4716(6)	" "
Calumet	15		4676(5)	May 17, 1985
Calumet 2	2		4832(10)	October 31, 1985
Calumet 3	1		4986(4)	April 28, 1986
Harry	1	6488	4987(3)	March 7, 1986
Coronation	1	7861	5000(4)	April 4, 1986

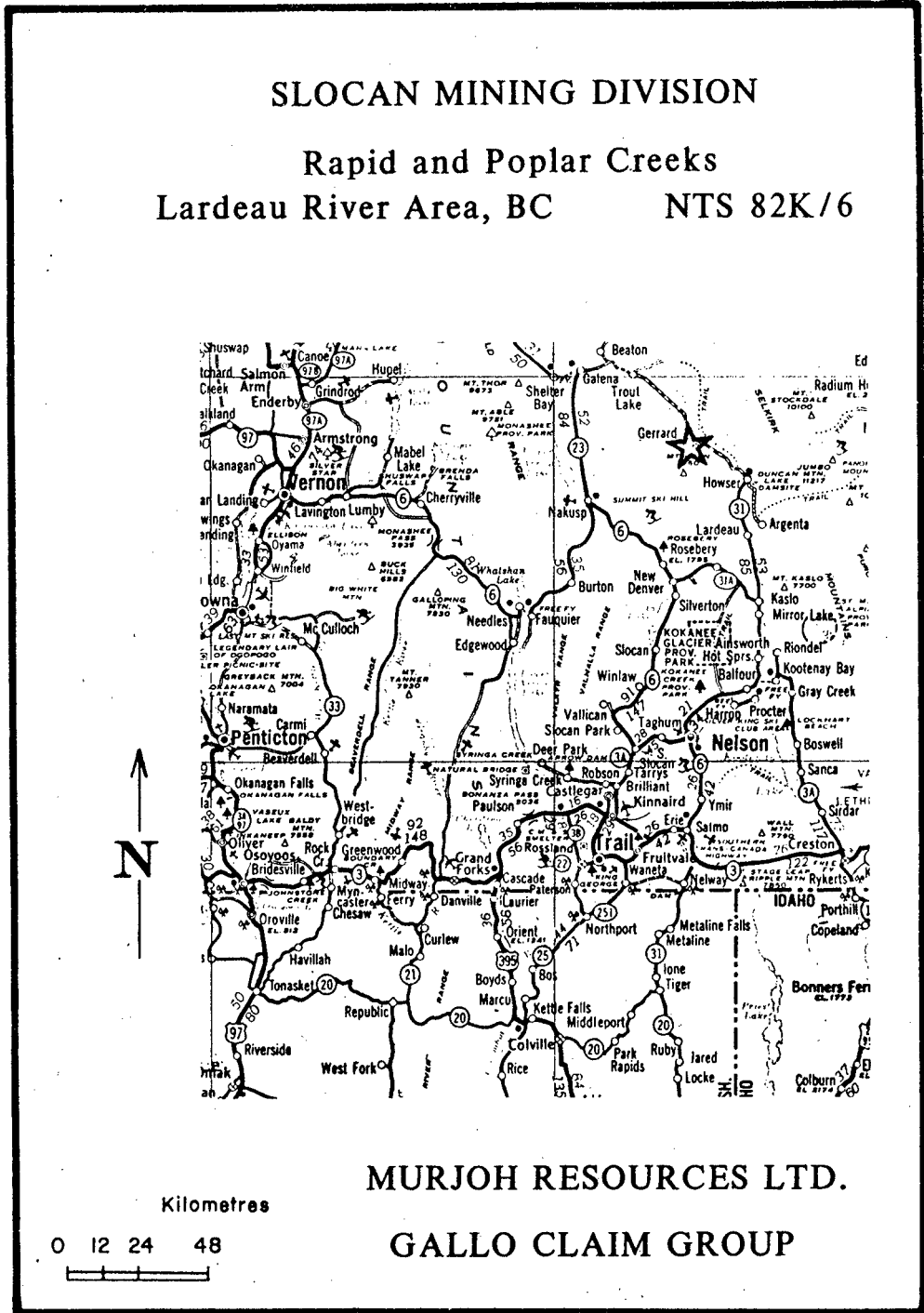
Total land holding is 36 units less irregularities in the boundaries amounting to approximately 4 units, for a net of 32 units or 800 hectares.

Exploration for gold has been undertaken in the immediate area since the late 1800's. No appreciable production has been recorded. Westmin Resources Ltd. has conducted extensive geological and geochemical surveys followed by diamond drilling near Poplar Creek (Meade, 1980a, b; Wojdak, 1981, 1982).

Soil sampling was conducted during September 1986. Approximately 6.8 km of grid was established and soil sampled.

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Rapid and Poplar Creeks Lardeau River Area, BC NTS 82K/6

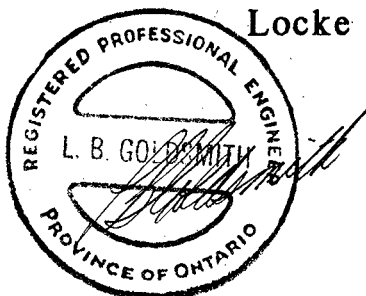


PROPERTY LOCATION MAP

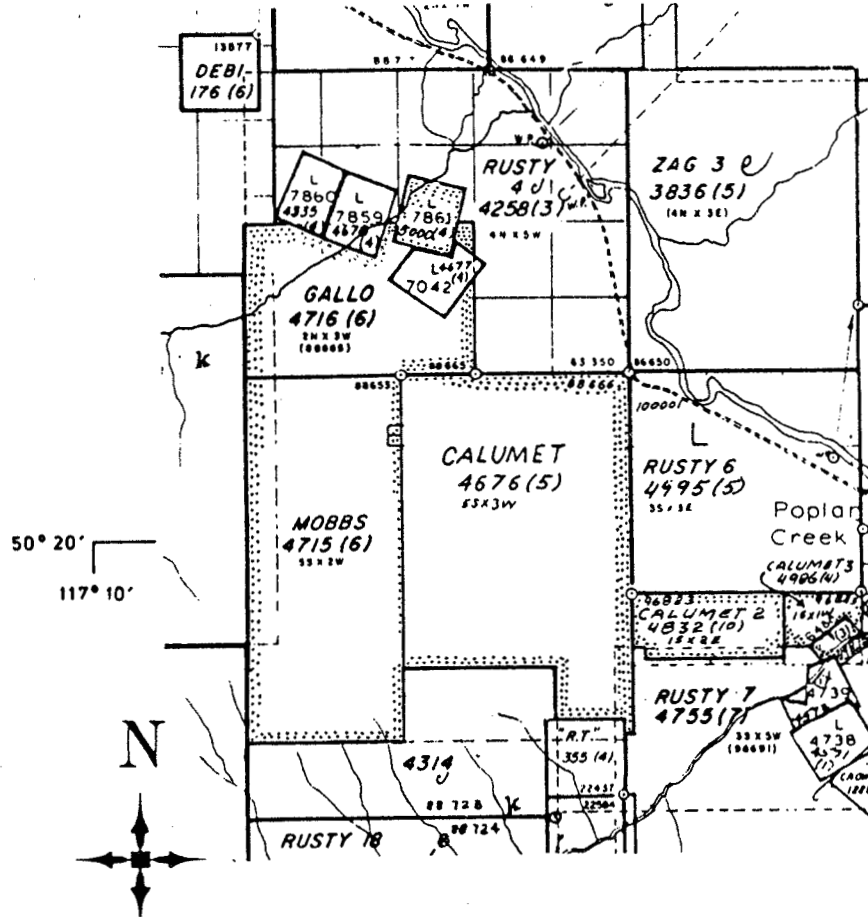
Locke B. Goldsmith, P.Eng., Consulting Geologist

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SLOCAN MINING DIVISION
 Rapid and Poplar Creeks
 Lardeau River Area, BC NTS 82K/6



1 : 50000
 METRES
 0 500 1000

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 GALLO CLAIM GROUP

CLAIM MAP



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November 1986

GEOLOGY

The area is underlain by Lower Paleozoic metavolcanics and metasediments of the Lardeau Group, probably of the Jowett (Index) and Broadview formations. Gold occurs in quartz veins, with or without carbonatization of wallrocks. One caved adit in the northeast corner of the Gallo claim contains quartz in veinlets as seen on the small dump. Otherwise no mineralized zones were observed on the property.

SOIL GEOCHEMISTRY

A narrow, elongate spade was used to collect 125 soil samples from 30 to 45 cm below organic debris. The only analysis performed was for gold. (Analytical procedure is included in the Appendix.) Coverage was concentrated in the western part of the property in areas that had not been sampled previously by Westmin.

Elevated gold values appear to form a discontinuous trend southwesterly from the vicinity of a pit and adit near 00+00 2+00S. This pattern is coincident with a small valley which drains northeasterly. The highest value of 135 ppb Au occurs at 9+00S 5+50W, in the southwest corner of the grid.

CONCLUSIONS

The pattern of slightly elevated gold values does not constitute a target upon which concentrated exploration should be focussed.

RECOMMENDATIONS

The soil survey might be extended westerly and southwesterly upslope to test the ground which lies along strike of the possible trend.

COST ESTIMATE

A budget of \$10,000 should be available to continue the soil geochemical survey.

Respectfully submitted,



Locke B. Goldsmith

Locke B. Goldsmith, P.Eng.
Consulting Geologist

Vancouver, B.C.
January 9, 1987

ENGINEER'S CERTIFICATE

LOCKE B. GOLDSMITH

1. I, Locke B. Goldsmith, am a Registered Professional Engineer in the Province of Ontario and the Northwest Territories, and a Registered Professional Geologist in the State of Oregon. My address is 301, 1855 Balsam Street, Vancouver, B.C.
2. I have a B.Sc. (Honours) degree in Geology from Michigan Technological University, a M.Sc. degree in Geology from the University of British Columbia, and have done postgraduate study in Geology at Michigan Tech and the University of Nevada. I am a graduate of the Haileybury School of Mines, and am a Certified Mining Technician. I am a Member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy, and a Fellow of the Geological Association of Canada.
3. I have been engaged in mining exploration for the past 28 years.
4. I have authored the report entitled, "Soil Geochemistry, Gallo et al. Mineral Claim Group, Slocan Mining Division, Rapid Creek, Lardeau River Area, B.C." dated January 9, 1987. The report is based upon fieldwork and research supervised by the author.
5. I have no ownership in the property, nor in the stocks of Murjoh Resources Ltd.
6. I consent to the use of this report in a prospectus, or in a statement of material facts related to the raising of funds.

Respectfully submitted,



Locke B. Goldsmith
Locke B. Goldsmith, P.Eng.
Consulting Geologist

Vancouver, B.C.

January 9, 1987

REFERENCES

- Burton, A. September 1983. 1983 Geochemical and Heavy Sediment Survey, Rusty 1, 2, and 3 Claims, Lardeau River Area, Slocan Mining Division, B.C. Private report for Hardy International Ltd. Assessment Report #11813.
- Linn, M. December 1985. Report on Calumet, Mobbs, Gallo, Calumet. Slocan Mining Division, Kootenay Land District, Poplar Creek, B.C. Private Report for Murjoh Resources Ltd., filed for assessment work.
- Meade, H.D. 1980a. Soil Geochemistry, Poplar Creek Project. Private Report for Westmin Resources Ltd. Assessment Report #8483.
- Meade, H.D. 1980b. Soil Geochemistry, Poplar Creek Project. Private Report for Westmin Resources Ltd. Assessment Report #8862.
- Wojdak, P.J. December 1981. Trenching and Diamond Drilling on Goldsmith Claim at Poplar Creek, B.C. Private Report for Westmin Resources Ltd. Assessment Report #9801 (3 parts). Includes geology and soil geochemistry.
- Wojdak, P.J. February 1982. Soil Geochemical Survey of North Star, Y.R.V., Broken Hill, and Coronation Mineral Claims. Private Report for Westmin Resources Ltd. Assessment Report #10129 (4 parts). Includes follow-up geochemistry and diamond drilling.

COST STATEMENT, 1986 PROGRAMME

Personnel:

L.B. Goldsmith, $\frac{1}{4}$ Nov. 20, $\frac{1}{4}$ Dec. 17, $\frac{1}{2}$ Jan. 9, $\frac{1}{2}$ 10, Total $1\frac{1}{2}$ days @ \$400/day	\$ 600.00	
G. Bennett, Sept. 19-22, total 4 days @ \$230/day	920.00	
I. Francis, Sept. 19-22, total 4 days @ \$230/day	920.00	
	<u>2,440.00</u>	\$ 2,440.00

Meals, Accommodation, Supplies:

$\$117.08 \div 8 \text{ man/days} = \$14.64/\text{man/day}$ 117.08

Transportation:

4x4 vehicle, 4 days @ \$45/day	\$180.00	
1230 km @ \$0.30/km	369.00	
Gas	82.70	
	<u>631.70</u>	631.70
$\div 4 = \$157.92/\text{day}$		

Analyses:

125 samples cost \$918.75 = \$7.35/sample 918.75

Report:

Drafting, typing, photocopying, materials 267.75

Total: \$ 4,375.28

APPENDIX

Gold F.A.-A.A. Combo Method ppb:

For low grade samples and geochemical materials, 10 gram samples are fused in litharge, carbonate and siliceous flux with the addition of 10 mg of Au-free Ag metal and cupelled. The silver bead is parted with dilute HNO₃ and then treated with aqua regia. The salts are dissolved in dilute HCl and analyzed for Au on an atomic absorption spectrophotometer.

Detection limit: 5 ppb

Copper, Lead, Zinc, Silver ppm:

1.0 gm sample is digested with perchloric-nitric acid (HClO₄-HNO₃) for approximately 2 hours. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Copper, lead, zinc and silver are determined by atomic absorption techniques. Silver and lead are corrected for background absorption.

Detection limit: Copper, Zinc - 1 ppm
Silver - 0.2 ppm
Lead - 2 ppm

Arsenic ppm:

A 1.0 gm sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with NaBH₄ and the arsenic content determined using flameless atomic absorption.

Detection limit: 1 ppm

Chemex Labs Ltd.

212 Brooksbank Ave.
North Vancouver, B.C.
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Phone: (604) 984-0221
Telex: 043-52597

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CERTIFICATE OF ANALYSIS

TO : GOLDSMITH, MR. L. B.

301 - 1855 BALSAM ST.
VANCOUVER, B.C.
V6K 3M3

CERT. # : A8618792-001-A
INVOICE # : 18618792
DATE : 7-OCT-86
P.O. # : NONE
GALLO

Sample description	Prep code	Au ppb FA+AA						
L0+00 3+00W	201	15	--	--	--	--	--	--
L0+00 3+50W	201	<5	--	--	--	--	--	--
L0+00 4+00W	201	35	--	--	--	--	--	--
L0+00 4+50W	201	15	--	--	--	--	--	--
L0+00 5+00W	201	5	--	--	--	--	--	--
L0+00 5+50W	201	<5	--	--	--	--	--	--
L0+00 6+00W	201	<5	--	--	--	--	--	--
L1+00S 3+00W	201	<5	--	--	--	--	--	--
L1+00S 3+50W	201	<5	--	--	--	--	--	--
L1+00S 4+00W	201	<5	--	--	--	--	--	--
L1+00S 4+50W	201	10	--	--	--	--	--	--
L1+00S 5+00W	201	10	--	--	--	--	--	--
L1+00S 5+50W	201	40	--	--	--	--	--	--
L1+00S 6+00W	201	85	--	--	--	--	--	--
BL 2S	201	80	--	--	--	--	--	--
L2+00S 0+50W	201	<5	--	--	--	--	--	--
L2+00S 1+00W	201	50	--	--	--	--	--	--
L2+00S 1+50W	201	5	--	--	--	--	--	--
L2+00S 2+00W	201	15	--	--	--	--	--	--
L2+00S 2+50W	201	<5	--	--	--	--	--	--
L2+00S 3+00W	201	10	--	--	--	--	--	--
L2+00S 3+50W	201	10	--	--	--	--	--	--
L2+00S 4+00W	201	<5	--	--	--	--	--	--
L2+00S 4+50W	201	<5	--	--	--	--	--	--
L2+00S 5+00W	201	<5	--	--	--	--	--	--
L2+00S 5+50W	201	10	--	--	--	--	--	--
L2+00S 6+00W	201	<5	--	--	--	--	--	--
L3+00S 0+00W	201	5	--	--	--	--	--	--
L3+00S 0+50W	201	20	--	--	--	--	--	--
L3+00S 1+00W	201	110	--	--	--	--	--	--
L3+00S 1+50W	201	<5	--	--	--	--	--	--
L3+00S 2+00W	201	15	--	--	--	--	--	--
L3+00S 2+50W	201	45	--	--	--	--	--	--
L3+00S 3+00W	201	5	--	--	--	--	--	--
L3+00S 3+50W	201	15	--	--	--	--	--	--
L3+00S 4+00W	201	5	--	--	--	--	--	--
L3+00S 4+50W	201	10	--	--	--	--	--	--
L3+00S 5+00W	201	15	--	--	--	--	--	--
L3+00S 5+50W	201	65	--	--	--	--	--	--
L3+00S 6+00W	201	5	--	--	--	--	--	--

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TO : GOLDSMITH, MR. L. B.

301 - 1855 BALSAM ST.
VANCOUVER, B.C.
V6K 3M3

CERT. # : A8618792-002-A
INVOICE # : I8618792
DATE : 7-OCT-86
P.O. # : NONE
GALLO

Sample description	Prep code	Au ppb FA+AA						
L6+00S 2+00W	201	30	--	--	--	--	--	--
L6+00S 2+50W	201	10	--	--	--	--	--	--
L6+00S 3+00W	201	<5	--	--	--	--	--	--
L6+00S 3+50W	201	<5	--	--	--	--	--	--
L6+00S 4+00W	201	10	--	--	--	--	--	--
L6+00S 4+50W	201	5	--	--	--	--	--	--
L6+00S 5+00W	201	<5	--	--	--	--	--	--
L6+00S 5+50W	201	<5	--	--	--	--	--	--
L6+00S 6+00W	201	10	--	--	--	--	--	--
L6+00S 6+50W	201	<5	--	--	--	--	--	--
L6+00S 7+00W	201	<5	--	--	--	--	--	--
L6+00S 7+50W	201	<5	--	--	--	--	--	--
L6+00S 8+00W	201	25	--	--	--	--	--	--
L6+00S 8+50W	201	<5	--	--	--	--	--	--
L7+00S 2+50W	201	15	--	--	--	--	--	--
L7+00S 3+00W	201	10	--	--	--	--	--	--
L7+00S 3+50W	201	100	--	--	--	--	--	--
L7+00S 4+00W	201	25	--	--	--	--	--	--
L7+00S 4+50W	201	35	--	--	--	--	--	--
L7+00S 5+00W	201	20	--	--	--	--	--	--
L7+00S 5+50W	201	5	--	--	--	--	--	--
L7+00S 6+00W	201	30	--	--	--	--	--	--
L7+00S 6+50W	201	35	--	--	--	--	--	--
L7+00S 7+00W	201	15	--	--	--	--	--	--
L7+00S 7+50W	201	<5	--	--	--	--	--	--
L7+00S 8+00W	201	30	--	--	--	--	--	--
L7+00S 8+50W	201	<5	--	--	--	--	--	--
L8+00S 2+50W	201	<5	--	--	--	--	--	--
L8+00S 3+00W	201	<5	--	--	--	--	--	--
L8+00S 3+50W	201	<5	--	--	--	--	--	--
L8+00S 4+00W	201	<5	--	--	--	--	--	--
L8+00S 4+50W	201	<5	--	--	--	--	--	--
L8+00S 5+00W	201	<5	--	--	--	--	--	--
L8+00S 5+50W	201	<5	--	--	--	--	--	--
L8+00S 6+00W	201	<5	--	--	--	--	--	--
L8+00S 6+50W	201	<5	--	--	--	--	--	--
L8+00S 7+00W	201	<5	--	--	--	--	--	--
L8+00S 7+50W	201	<5	--	--	--	--	--	--
L8+00S 8+00W	201	<5	--	--	--	--	--	--
L8+00S 8+50W	201	<5	--	--	--	--	--	--

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301 - 1855 BALSAM ST.
VANCOUVER, B.C.
V6K 3M3

CERT. # : A8618792-003-A
INVOICE # : 18618792
DATE : 7-OCT-86
P.O. # : NONE
GALLO

Sample description	Prep code	Au ppb FA+AA						
L9+00S 2+50W	201	<5	--	--	--	--	--	--
L9+00S 3+00W	201	20	--	--	--	--	--	--
L9+00S 3+50W	201	25	--	--	--	--	--	--
L9+00S 4+00W	201	10	--	--	--	--	--	--
L9+00S 4+50W	201	<5	--	--	--	--	--	--
L9+00S 5+00W	201	15	--	--	--	--	--	--
L9+00S 5+50W	201	135	--	--	--	--	--	--
L9+00S 6+00W	201	10	--	--	--	--	--	--
L9+00S 6+50W	201	40	--	--	--	--	--	--
L9+00S 7+00W	201	15	--	--	--	--	--	--
L9+00S 7+50W	201	<5	--	--	--	--	--	--
L9+00S 8+00W	201	25	--	--	--	--	--	--
L9+00S 8+50W	201	<5	--	--	--	--	--	--
L10+00S 0+00W	201	<5	--	--	--	--	--	--
L10+00S 0+50W	201	<5	--	--	--	--	--	--
L10+00S 1+00W	201	<5	--	--	--	--	--	--
L10+00S 1+50W	201	<5	--	--	--	--	--	--
L10+00S 2+00W	201	<5	--	--	--	--	--	--
L10+00S 2+50W	201	<5	--	--	--	--	--	--
L10+00S 3+00W	201	<5	--	--	--	--	--	--
L10+00S 3+50W	201	<5	--	--	--	--	--	--
L10+00S 4+00W	201	<5	--	--	--	--	--	--
L10+00S 4+50W	201	<5	--	--	--	--	--	--
L10+00S 5+00W	201	<5	--	--	--	--	--	--
L10+00S 5+50W	201	<5	--	--	--	--	--	--
L11+00S 0+00W	201	<5	--	--	--	--	--	--
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L11+00S 1+00W	201	25	--	--	--	--	--	--
L11+00S 1+50W	201	15	--	--	--	--	--	--
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L11+00S 2+50W	201	10	--	--	--	--	--	--
L11+00S 3+00W	201	<5	--	--	--	--	--	--
L11+00S 3+50W	201	<5	--	--	--	--	--	--
L11+00S 4+00W	201	<5	--	--	--	--	--	--
L11+00S 4+50W	201	<5	--	--	--	--	--	--
L11+00S 5+00W	201	10	--	--	--	--	--	--
L11+00S 5+50W	201	25	--	--	--	--	--	--
L11+50S 2+50W	201	10	--	--	--	--	--	--
L12+00S 0+00W	201	30	--	--	--	--	--	--
L12+00S 0+50W	201	20	--	--	--	--	--	--

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V6K 3M3

CERT. # : A8618792-004-A
INVOICE # : I8618792
DATE : 7-OCT-86
P.O. # : NONE
GALLO

Sample description	Prep code	Au ppb FA+AA						
L12+00S 1+00W	201	<5	--	--	--	--	--	--
L12+00S 1+50W	201	5	--	--	--	--	--	--
L12+00S 2+00W	201	<5	--	--	--	--	--	--
L12+00S 2+50W	201	<5	--	--	--	--	--	--
L12+50S 2+00W	201	<5	--	--	--	--	--	--

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GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,698

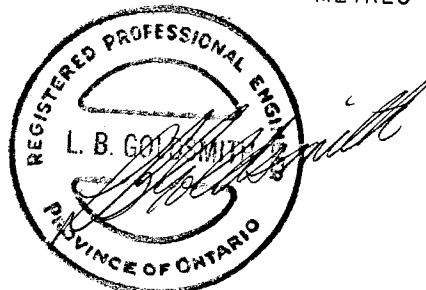
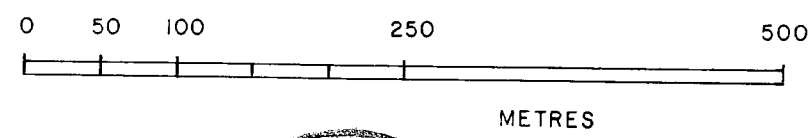
NTS 82K 6E

MURJOH RESOURCES LTD.
GOLD GEOCHEMISTRY
GALLO CLAIM GROUP
RAPID & POPLAR CREEKS
LARDEAU RIVER AREA, B.C.
SLOCAN MINING DIVISION

LOCKE B. GOLDSMITH, P.Eng.
CONSULTING GEOLOGIST

ARCTEX ENGINEERING SERVICES NOV. 1986

1: 5000



SOIL SAMPLES
○ <5 P.P.B.
○ 10 P.P.B.
○ 50 P.P.B.
Au

