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GEOCHEMICAL  
PROSPECTING  
REPORT

ON

ST. EUGENE MINE

MOYIE, B.C.

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Fort Steele

MINING DIVISION

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Geologist

MINING ENGINEER

## NOTES ON PRELIMINARY MAP No-35

### GEOCHEMICAL PROSPECTING

The results received to date of spectrographic analyses by the Provincial Department of Mines on our pannings concentrates from Moyie are shown on the accompanying preliminary map.

Those on page one are from creek and side hill gravels and soil. These show a range of from less than 0.05% lead to 0.9% lead. Results of over 0.2 lead should indicate areas of mineralization and have significance in prospecting the area. The manganese values do not vary with the lead but they do show an areal distribution that may have some significance.

Sample 115 on Etna Creek, on the west side of the lake, gives a positive indication in an area where we anticipated there might be a good chance of finding a St. Eugene type vein. The other positive area, east of the John Dee property, is on open ground and I think we should stake this with a view to doing some serious prospecting. It is on the eastward extension of the St. Eugene veins.

On page two are pannings samples of the fines of certain mine dumps. We were trying in this way to get an indication of what elements or minerals would be useful indications in prospecting.

I believe we can work out a simple chemical field test for testing these pannings concentrates on the

spot, that would greatly increase the usefulness of the method and eliminate the cost of spectrographic analyses.

From these preliminary results it appears that it is a worthwhile way of prospecting in the Moyle area. A map showing the balance of the analyses will be sent when they are received

*A.S.*

Vancouver, B. C.

July 12th, 1949

OFFICE OF THE CHIEF ANALYST AND ASSAYER  
DEPARTMENT OF MINES  
VICTORIA, B. C.

July 7, 1949

SPECTROCHEMICAL ANALYSES MOYIE PANNINGS CONCENTRATES

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<u>Laboratory No</u>	<u>Submitter's Mark</u>	<u>Lead %</u>	<u>Manganese %</u>
2775 M	108 R	< 0.05	1.0
2776 M	111 R	0.05	1.0
2777 M	115 R	0.6	1.2
2778 M	119 R	< 0.05	0.6
2779 M	127 R	0.25	0.6
2780 M	128 R	0.3	0.6
2785 M	148 R	0.9	0.4
2786 M	149 R	0.8	0.5
2787 M	254 R	0.7	0.8
2788 M	256 R	0.15	1.2
2789 M	257 R	0.15	1.0
2790 M	258 R	0.05	1.0
2791 M	260 R	0.05	1.0
2792 M	269 R	< 0.05	0.4
2793 M	270 R	< 0.05	Trace
2794 M	274 R	0.15	0.4

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		<u>Lead %</u>	<u>Silver %</u>	<u>Tin %</u>	<u>Manganese %</u>	<u>Zinc %</u>
2781 M	132 R	>4.0 (Probably 30% or more)	0.5	0.03	2.0	
2782 M	134 R	>4.0 (Probably 30% or more)	0.5	0.03	0.6	0.1
2783 M	137 R	>4.0 (Probably 40% or more)	0.3	0.03	Trace	
2784 M	139 R	>4.0 (Probably 40% or more)	0.3	0.03	Trace	

NOTE: Results are semi-quantitative only, with estimates of amounts present, which may vary of amounts actually present.

Limits of sensitivity in procedure used: Zinc 0., Phosphorus 0.1, Boron 0.01, Manganese 0.1, Silver Lead 0.05.

(Signed) Ian H. Williams