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Northeastern B.C. Outcrop Samples

Occurrences of lead and zinc sulphides (as sphalerite and galena) have been reported in the Paleozoic carbonate rocks exposed in the Rocky Mountains of Northeastern B.C. One of the most well-documented and of current interest is the showing at Robb Lake (56° 55'N 123° 50'W) (see map).

Over the past 20 years, Gulf Oil Canada Limited has had field parties working in the Rockies of NE BC, measuring sections and collecting samples. GMCL analyzed the samples from two such sections, one north and one south of the Robb Lake showing to try and determine any changes in metal ion content around this showing. The two sections chosen were Redfern Lake (57° 22'N 123° 53'W) (sample 43-RL-A-S3 and 43-RL-B-53) approximately 33 miles north and Peace River (56° 03'N 123° 40'W) (samples 43-PR-F-53, 43-PR-G-53) approximately 60 miles to the south (see map). 948/05  
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The samples were split into two portions, one to be retained in storage, the other for assay. Samples were amalgamated (on the basis of lithology) to provide enough material for preparation by mechanical means. A total of 54 samples were assayed from the Redfern Lake section and 22 from the Peace River section. The table below shows the calculated mean and standard deviations (using N-1 weighting) for each element assayed.

<u>Section</u>	<u>Copper</u>		<u>Zinc</u>		<u>Lead</u>	
	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>
Redfern Lake*	7.43	7.18	9.14	5.31	20.14	4.63
Peace River	4.8	5.16	8.5	2.92	19.09	4.59
Both*	6.67	6.73	8.96	4.74	19.84	4.6

(value of 191 ppm copper not used in calculations)

On the premise that values greater than three times the standard deviation were anomalous, six such values were defined. The lead value occurred in dark shale, the zinc in the quartzite unit with the highest copper, two of the copper values were in quartzite units, one in a sandstone and one in a dolostone. The averages for each of the elements show little variation between sections and are overall fairly low - under 20 ppm. It is felt at this time that no further work is warranted on the outcrop samples available in B.C.

PAF/B

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