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PROGRESS REPORT

PHASE I EXPLORATION
July, August, September, 1975

REST CREEK PROPERTY
Salmo, B.C.

for

SHALMAR RESOURCES LIMITED
256 A Simpson Road
Richmond, B.C.
V6X 2P9

by

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October 16, 1975

CONTENTS

INTRODUCTION

This report describes the work completed by Shalmar Resources Limited on the Rest Creek Property, Salmo, B.C., in the months of July, August, and September, 1975. The writer directly supervised all work on the property, and personally carried out the chaining, soil sampling, and VLF-EM surveying. A small camp was established at the former mine site, while the town of Salmo, 7 road-miles distant, was used for sample shipments, communications, evening meals, etc.

Geochemical soil sampling (lead, gold, silver, zinc, copper) and VLF-EM maps were prepared initially at a scale of 1"=400', while subsequent detailing was illustrated on a corrected grid at 1"=200'. The latter maps (6); a compilation map showing part of the underground workings, principal anomalies, and proposed drill holes; and a map of the expanded claim group accompany the report.

Direct expenditure for the work totalled approximately $23,000 to the end of September, and exploration is continuing on a reduced scale at the present time.

WORK COMPLETED

Line-cutting

In July, 16.3 miles of line were cut and picketted at 100-foot intervals, including 1.1 miles of north-south base-line (cut with a chainsaw), 2.6 miles of north-south tie-lines, and 12.6 miles of east-west cross-lines at 800-foot spacings. Chaining was by "topofil", and corrections were made for slope.

In September, an additional 6.4 miles of line were cut over anomalous areas on the above grid, including 2.0 miles of north-south tie-lines, and 4.4 miles of fill-in east-west cross-lines at 400-foot spacings.

In total, 22.7 miles of line were cut and picketted.

Soil, Silt, and Rock Sampling

On the initial 800-foot grid, 667 soil samples were taken with a grub hoe at 100-foot intervals over 12.6 miles of cross-line. B-zone soil development on the thin (say 10 feet, average) blanket of transported glacial debris generally was very good, and sample depth varied from a minimum of 4 inches to a maximum of 24 inches, averaging about 8 inches. In addition, 13 rock geochem samples were taken, and 17 large samples averaging 70 pounds were taken

from the mine dumps.

On the fill-in 400-foot grid, a further 230 soil samples (897 total) and 9 rock geochem samples (22 total) were taken over 4.4 miles of cross-lines.

In the course of expanding the crown-granted claim group by staking an additional 72 units in 4 claims (Rest 1 to 4), 8 stream sediment samples were taken.

All samples were analyzed for lead, silver, zinc, and copper; and anomalous values were established for the 800-foot grid (667 samples) by a combination calculation/graphical statistical technique. Through analysis for gold on a representative line (0N-119 samples), a close correlation was established between anomalous gold and lead soil values. All samples on the 800-foot and 400-foot grids in lead-anomalous areas subsequently were analyzed for gold (total 480 samples). Re-calculation of the values for anomalous gold using all of the samples yielded no significant changes from the initial calculation.

VLF-EM Survey

In spite of the very poor direction to the Jim Creek transmitter near Seattle, Washington, 260°, compared to the regional north-south strike of the sedimentary/volcanic/intrusive rock assemblage, the very strong signal, the low cost of the survey, and the substantial conductivity contrast dictated that the technique be assessed on a trial basis. The signal from the transmitter at Balboa, Panama, was too weak to be used.

Accordingly, 3.0 miles of the initial 800-foot grid were completed in the principal areas of anomalous soil values, with readings at 50-foot intervals. Data was filtered, and plotted and contoured on plan according to the method of Fraser (1969).

Because the conductor pattern appeared to correlate reasonably well with anomalous soil values, and suggested a generally northerly trend, an additional 6.5 miles of line were run on the 400-foot grid, for a total of 9.5 miles of EM-16 survey.

RESULTS AND DISCUSSION

Soil Sampling

Anomalous values for each of the elements analyzed are tabulated on the following page:

		Lead ppm	Gold ppb	Silver ppm	Zinc ppm	Copper ppm
Background	$\bar{x}$*	40	10-15	1.1	500	50
Weakly anomalous	$\bar{x}$+1s**	50	40-45	1.3	800	70
Moderately anomalous	$\bar{x}$+2s	60	150	1.5	1400	100
Strongly anomalous	$\bar{x}$+3s	80	600-500	1.8	2400	140

Soil in the area of the former Erie/Arlington mine is distinctly anomalous in lead, zinc, and gold; however, because of the mobility of zinc in the weakly acidic soil, it is not as useful as either lead or gold in targetting areas for follow-up testing. Silver is somewhat wider spread, but still correlates well with significant lead-gold anomalies. Copper is erratically distributed, and apparently is of little value in defining areas of interest.

The close association of lead and gold in the soil appears to reflect the similar association in mineralization from the former mine (Erie/Arlington), as well as from other mines and prospects in the district.

Contamination of the soil from surface dumps is not significant.

The up-dip surface expression of the main vein which was mined in the past appears to be indicated by anomalous lead and silver values at 0N - 10E to 4N - 10E. A possible northerly strike extension is indicated by anomalous lead and gold values at 8N-8E to 12N-8E.

The down-dip surface expression of the main vein may be indicated by anomalous lead and gold values at 12N-1E to 16N-0E and 1E.

As expectable, these probable soil expressions of the mineralized quartz vein(s) are relatively narrow and elongate.

Two broad zones of anomalous lead, gold, and silver values occur in the areas 4N to 16N/0E to 7W, and 4S to 12S/11E to 18E. These areas are almost wholly overburden-covered, and no source rocks have been identified. The downslope western margin of the former anomaly (northwest, or 10N/4W anomaly) coincides with the old Kenville workings which exposed sub-economic, narrow, auriferous quartz veining at the sheared contacts of argillite and acidic sills. Only one small pit, in shale, was found at the downslope east margin of the latter anomaly (southeast, or 8S/15E anomaly). Because the magnitude of these anomalies is generally greater than the anomalies over known veins, and the aerial extent of the anomalies is very much greater, diamond drilling is warranted to attempt to establish the grade of the source rocks. Stratigraphically, both anomalies may represent mineralization below, or in the foot-

* $\bar{x}$ = mean ** s = standard deviation

wall of the flat-lying ore zone mined in the past, and it is conceivable that the two areas may be connected. In the writer's opinion, drill-testing of this footwall area to search for repetitions of ore with depth would be warranted even without the favourable geochemical results.

Diamond drilling is preferable to bulldozer trenching for the following reasons: (1) Past attempts at trenching across the strike of the various lithologies have been unsuccessful, possibly partly because of equipment deficiencies (equipment too small, or inadequate ripper?), but also because the narrow granitic sills and dioritic flows or sills form resistant ribs in the argillaceous sediments which impede or prevent bulldozing without costly blasting. (2) Downslope trenches, necessary to crosscut the anomalies and lithologies, are unnacceptable from an environmental standpoint. (3) Surficial weathering of the shaley sediments to a depth of several feet, below a similar depth of glacial debris, necessitates bulldozing large trenches to yield the required continuous exposures; and, again, environmental considerations do not favour such trenching.

VLF-EM Survey

While the geologic significance of the strong VLF-EM conductors is uncertain because of the deficiency of outcrop and geological data, the correlation of the conductors and anomalous lead-gold values may be significant. Strong conductors occur at the discovery site (11E), and within the 10N/4W anomaly. No strong conductor is associated with the 8S/15E anomaly.

The shallow, west-dipping, basin-like sedimentary structure composed of variably bedded shales and argillites within the mine, proper, coincides with an area of generally low conductivity. A few other exposures of steeper dipping shale similarily have not yielded strong conductors. Possibly the strong conductors represent easterly or northeasterly striking faults and fracture systems in more competent, sill-like lithologies, the conductivity of which is emphasized by the 260° direction to the Jim Creek transmitter.

Dump Sampling

As detailed in the Appendix, 15 samples from 3 separate dumps yielded gold assays varying from 0.017 to 0.204 oz/T, and arithmetically averaged 0.101 oz Au/T. One other dump from the lowest 110 Level portal (cross-cut) yielded no significant values in 2 samples. Average weight of the samples was about 70 pounds.

Some mineralized quartz was evident in all of the samples with gold values. Geochemically, these samples are distinctly anomalous in lead and zinc.

Cyanidation tests on 3 of the dump samples using pulverized samples

(minus 100 mesh) of 10 assay-tons (approximately 300 grams) demonstrated very low recoveries, less than 10%, suggesting that the gold is intimately associated with the sulphide minerals and not in free or visible, and cyanide soluble, form. Carbon adsorption could account for a portion of the low recovery.

Rock Geochemistry and Silt Sampling

Assays for 22 rock geochem samples and 8 silt samples are tabulated in the Appendix. Only one large, selected sample of quartz veining containing 640ppb Au and 365ppm Pb from the Kenville trenches at the downslope west margin of the 10N/4W anomaly is consistent with the soil values. No outcrop of argillite was found within the combined lead-gold anomalies at either 10N/4W or 8S/15E, although it is probable that this rock type largely underlies the anomalies. A few of the silt samples contain anomalous lead-zinc values.

CONCLUSIONS AND RECOMMENDATIONS

1. The former Erie/Arlington mine produced over 75,000 tons of ore averaging more than 0.6 oz Au/T, and another 75,000 tons of dump and backfill material averages in the order of 0.1 oz Au/T. In its original state, the deposit hosted a small ore zone that could be economically mineable today by trackless techniques; and diamond drilling to test for parallel zones, hopefully of greater magnitude, is warranted. As shown on the accompanying plan, at least one vertical hole should be drilled within the mine area to test for repetitions of ore with depth.

2. In the initial phase of exploration, two broad areas of anomalous lead and gold soil values at least 800 feet by 600 feet, and centered at 10N/4W and 8S/15E were defined which also warrant evaluation by diamond drilling. These overburden-obscured anomalies could reflect equally broad zones of auriferous bedrock mineralization which might be exploitable by open pit techniques. At least one hole should be drilled on each of the anomalies.

3. Estimated cost of the recommended minimum 1600 feet of BQ wireline diamond drilling in 3 holes is $32,000, as follows:

Base cost 1600' @ $13 =	$20,800
Mobilization/demobilization, site preparation, core boxes, acid tests etc.	4,700
Supervision, transportation, assaying, core storage, etc.	6,500
Total	$32,000

E. A. Armstrong

CERTIFICATION

I, CHRISTOPHER MACKENDRICK ARMSTRONG of the City of Vancouver, Province of British Columbia, do hereby certify:

THAT I am a practicing Geological Engineer residing at 4085 West 29th Avenue, Vancouver, British Columbia, V6S 1V4, Canada.

THAT I am a registered Professional Engineer in good standing in the Provinces of British Columbia and Ontario.

THAT I received the degree of B.Sc. in Geological Engineering from Queen's University, Kingston, Ontario in 1960, and practiced my profession continuously in the period between leaving university in 1959 and returning to university in 1966.

THAT I enrolled in the Department of Mineral Engineering at the University of British Columbia in 1966, and in the period to 1969 completed course work and research work requirements in an M.A.Sc. program, specializing in bacterial/acid leaching systems; thesis writing was not completed; post graduate courses in economic geology and North American geology also were taken and completed.

THAT since leaving university in 1969, I have practiced my profession both as a Geological Engineer and as a Specialist/Advisor in ambient temperature/pressure leaching systems.

THAT the following is a true record of my employment and experience:

1957	4 mos. Junior Geologist. Noranda Mines Ltd. Noranda, Quebec.
1958	4 mos. Party Chief. Hollinger North Shore Exploration Co. Ltd. New Quebec and Labrador.
1959-1961	27 mos. Assistant Geologist. Pickle Crow Gold Mines Ltd. Pickle Crow, Ontario. Teck Corporation Ltd.
1961-1962	9 mos. Assistant Geologist. Willroy Mines Ltd. Manitouwadge, Ont.
1962-1964	28 mos. Chief Geologist. Metal Mines Ltd. Werner Lake, Ontario. Consolidated Canadian Faraday.
1964-1966	24 mos. Chief Geologist. Tegren Goldfields Ltd. Kirkland Lake, Ontario. Teck Corporation Ltd.
1967	6 mos. Project Geologist. McLeese Lake property, B. C. Geophysical Engineering & Surveys Ltd. Teck Corporation Ltd.
1969-1970	13 mos. Laboratory Manager, Chief Geologist, and Consulting Engineer. S. M. Industries Ltd. Vancouver, B. C.
1970-1975	5 yrs. Independent Consulting Engineer.

THAT I do not have any interest, direct, indirect, or contingent, in the securities or properties of SHALMAR RESOURCES LIMITED.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
C. M. ARMSTRONG

Dated at Vancouver this
16th Day of October, 1975

C. M. Armstrong, P.Eng.

APPENDIX

TELEPHONE: 980-1115

FRASER LABORATORIES LIMITED

1175 W 15th STREET • NORTH VANCOUVER, B.C.

C. M. Armstrong
4085 West 29th Ave.
Vancouver, B. C.

GEOCHEMICAL ANALYSIS

REPORT No: 75 - 170 DATE August 22, 1975.

SAMPLES FROM Bulk Samples - Salamo, B. C.

SAMPLE	Weight (lbs)	ppm Cu	ppm Ag	ppm Pb	ppm Zn	ppb Au	Au Oz/T
A	125	109	6.1	1210	1560	575	.017
B	72	118	10.8	2430	2690	7000	.204
C	51	220	6.9	2470	3100	1250	.036
D	43	229	14.8	3380	2840	5800	.169
E	63	216	9.2	2200	3310	3600	.105
F	73	143	8.8	2710	2670	1400	.041
G	54	169	11.7	2880	5100	2100	.061
H	51	138	12.8	3900	2890	4000	.117
I	71	228	14.0	4500	5350	5200	.152
J	42	220	10.9	3950	3260	3750	.109
K	66	139	7.6	2360	2680	1350	.039
L	72	172	10.9	3460	4200	3100	.091
M	100	218	10.2	2000	2970	3875	.113
N	114	233	13.0	2710	4050	4650	.136
O	79	241	10.3	2880	4550	4300	.125
P	52	87	2.0	40	725	10	
Q	60	74	2.8	475	970	130	.004
	1188 ÷ 17 =						
	70						

ASSAYER R. M. Samuels

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

TELEPHONE: 980-1115

FRASER LABORATORIES LIMITED
1175 W 15th STREET · NORTH VANCOUVER, B.C.

C. M. Armstrong
4085 W 29th Ave.
Vancouver, B. C.

GEOCHEMICAL ANALYSIS

REPORT No: 75 - 190 DATE October 3, 1975

SAMPLES FROM Arlington Gold - Salmo, B. C.

SAMPLE	CN- Soluble Au Oz / T	Au in Tails Oz / T	Total Au Oz / T	Au_F	
	c/o				
B	.0110 7.1	.145	.156	0.204	
H	.0010 8.6	.115	.116	0.117	
N	.0007 1.2	.0585	.059	0.136	

* Cyanide conc. - 10 lb/T
Retention Time - 48 hours

10 AT

ASSAYER R. M. Samuels

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GEOCHEMICAL ANALYSIS

REPORT No: 75 - 163 DATE July 31, 1975.

SAMPLES FROM Salamo - Rock Geochem

SAMPLE	ppb Au	ppm Cu	ppm Ag	ppm Pb	ppm Zn	ppm Ni
Por. 0N - 70E (64E)	-10	76	0.9	22	138	
MD 8S - 13 + 80W	10	360	1.2	20	78	
MD bx 15 + 85N - 20 + 80E	-10	41	0.6	19	47	
MD+py 15 + 85N - 20 + 90E	-10	48	0.6	27	80	
Rhy 16S - 18W	-10	11	0.1	11	17	
32S - 18W	-10	14	0.9	29	59	109
Dac+py 8N - 14E	-10	86	0.8	20	96	
Gr+py 16N - 0 + 85E	-10	60	0.8	21	77	
And 32S - 70E	-10	43	0.8	18	59	
Dior 32N - 73E	-10	13	0.8	21	79	
Arg+py 32N - 85E	-10	55	0.9	14	52	
Arg 32N - 90E	-10	103	1.3	28	720	
Graphitic schist 2N Main 1R	10	64	1.5	34	88	

ASSAYER R. M. Samuelo.

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

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4085 West 29th Ave.
Vancouver, B. C.

GEOCHEMICAL ANALYSIS

REPORT No: 75 - 192 DATE September 30, 1975.

SAMPLES FROM Arlington Gold - Salmo, B. C.

SAMPLE	ppm Cu	ppb Au	ppm Ag	ppm Pb	ppm Zn
Stream Sediments					
H - 1	63		1.2	122 -	1200
H - 2	66		1.0	139 -	450
H - 3	52		1.0	66	180
H - 4	68		0.8	50	410
H - 5	75		1.4	460 -	2400
H - 6	32		1.2	67	220
H - 7	59		1.0	49	480
H - 8	73		1.1	51	315
Rock Geochem					
Sh 1+10S 10+00E R - 2 -	61	10	1.1	80	505
Gr/apl 1+10S 10+00E R - 3 -	15	L 10	0.5	231 -	125
Dac-py'c 1S 14E R - 4	20	L 10	0.8	58	50
Rhy/trach 7+35S 17+00E R - 5 +	64	10	1.1	76	255
RHD-pyc 7+90N 3+60W R - 6 +	73	10	1.1	52	170
Apl 8+00N 6+20W R - 7 -	16	30	0.4	106 -	190
Graph sch 8+00N 6+20W R - 8 -	15	30	0.8	70	45
Qtz 150' N R - 9 +	19	640 -	1.0	365 -	130
Trach+py+ qtz 7+50N 11+00E R - 10 -	165	50 -	1.7	78	115

ASSAYER R. M. Samuels

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA