PROPERTY FILE
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Report on the Holdings of R.H. Stanfield

Fort Steele Mining Division, B.C.

Allen Geological Engineering Limited
601-325 HOWE STREET, VANCOUVER 1, B.C.

November 28, 1973

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ABSTRACT

The R.H. Stanfield properties are located 34 miles east of Cranbrook in southeastern British Columbia.

An excellent camp which can accommodate 50 men has been built on the property. In addition, equipment and tools for exploration and development requirements, and a large facility for maintaining same, are on the property.

Exploration has been carried on for some years, and to date four lead-silver and six copper-silver mineral deposits have been partially exposed. These lie in Precambrian formations favourable for the occurrence of large mineral deposits.

The world famous Sullivan mine of Cominco which is a silver-lead-zinc producer is located at Kimberly. The 750 ton per day copper-silver operation of Placid Copper is located just north of the Stanfield properties.

Recently, high-grade lead-silver deposits have been uncovered on the G and OK zones.

A geophysical survey has partially outlined a magnetic anomaly south-east of the G zone. Additional detailed investigations are warranted over this sizeable area since pyrrhotite (a magnetic mineral) is associated with the silver-lead-zinc orebody in the Sullivan mine.

Recent upward trends in price, and demand for lead, copper and silver, indicate high profit potential for production of same. It is recommended, therefore, that a major field programme be directed towards developing orebodies on the Stanfield properties of sufficient tonnage and grade to warrant production of these metals.

INTRODUCTION

The R.H. Stanfield properties were examined by the writer October 4th, 5th and 6th, 1973, and November 24th and 25th, 1973. Prior examinations of the mineral showings had been made July 9th and 10th, 1967.

The purpose of the examinations was to acquire all available information regarding the mineral deposits on the property.

The object of this report is to provide an up-to-date description of the extensive holdings, the mineralized zones uncovered to date thereon, and the potential of these lead-silver and copper-silver deposits.

LOCATION AND ACCESSIBILITY

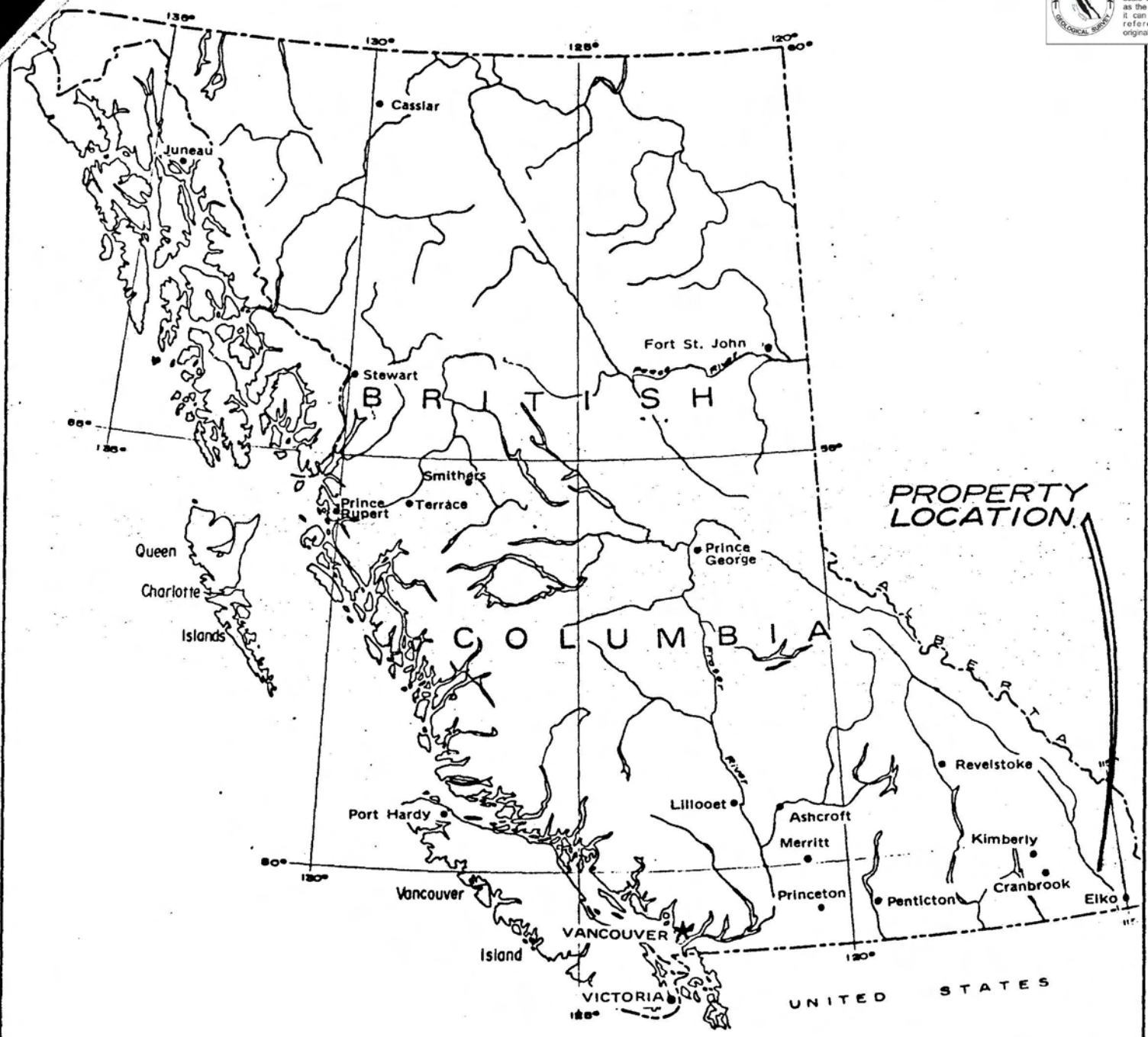
The property is located in southeastern British Columbia near the settlement of Galloway. It extends from the Rocky Mountain trench easterly up and over the west flank of the Lizard range of the Rocky Mountains. Cranbrook is 34 miles westerly via Highway # 3, and the U.S. Border crossing at Roosevelt is 30 miles to the south.

Geographic location is 49^{o} - 25' north latitude and 115^{o} - 10' west longitude.

Access is via Highway # 3 from Cranbrook which is the local supply centre. Canadian Pacific Railway and B.C. Hydro lines service the area.

HISTORY

The Crown Granted mineral claims were first held by Colonel S. Steele for whom the village of Fort Steele was named.



R.H. STANFIELD HOLDINGS

LOCATION MAP

SCALE: 1" = 136 Mls.

Drawn by	Date
Checked by	Drg no.

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ALTAIR drafting services ltd.

Work on some of the showings dates back to the late 1890's. Sorted copper-silver bearing material was shipped from the Strathcona-Empire deposit in 1936 and 1937.

Extensive rehabilitation by Stanfield and associates of surface and underground workings was completed in 1966 and 1967, when more than six holes were diamond drilled and an electromagnetic survey was conducted over a limited area.

In 1972, highgrade lead-silver mineralization was discovered on the Rossco group, and exploration has recently been concentrated on that area, namely trenching, stripping, core and churn drilling, as well as magnetometer, electromagnetic and reconnaissance induced polarization surveys.

About 2000 feet east of the lead-silver discovery a magnetic anomaly has recently been outlined. Significantly, the Sullivan mine has zones of magnetic mineralization associated with the orebodies, hence this new anomaly may represent a favourable zone which conceivably may be associated with lead-silver and/or copper-silver mineralization.

TOPOGRAPHY

The properties are located on the east side of the Rocky Mountain trench and easterly over the Lizard range which is ruggedly mountainous.

The floor of the trench is at elevation 3,000 and the peaks of the Lizard range are in excess of 6,000 feet above sea level.

Sand Creek near the southerly boundary and Little Sand Creek near the northerly part of the property flow through deeply incised V-shaped valleys. The connecting ridges are sharp and irregular. From the steep gulches numerous talus accumulations fan out into the trench.

The Sand, Little Sand and the Bull River flow southwesterly into the Kootenay River.

PROPERTY

CLAIMS GROUP		NO. OF CLAIMS	RECORD NUMBERS	RECORDED DATE
Beany	1-30	30	16100 - 16129	21 August 1970
Beany	31-40	10	16262 - 16271	1 September 1970
Coffee	1-44	44	16218 - 16261	1 September 1970
Bee Jay	1-4	4	17665 - 17668	1 November 1970
Mark	1-18	18	16130 - 16147	21 August 1970
Mark	29-40	12	16158 - 16169	21 August 1970
Sandy	1-20	20	13796 - 13815	10 July 1969
Sandy	27-36	10	13822 - 13831	10 July 1969
Sandy	35&36	2	13987 - 13988	29 July 1969
Rossco	1-14	14	7189 - 7202	3 December 1965
Rossco	43-48	6	7418 - 7419	15 December 1965
Sunbeam	1-22	22	19104 - 19125	4 May 1973
Sunbeam	24-31	8	19126 - 19133	4 May 1973
O	77-88	12	18553 - 18564	18 September 1972
B	1&2	2	18453 - 18454	5 September 1972
S	85-97	13	18545 - 18552	18 September 1972
R	71-82	12	18565 - 18576	18 September 1972
Pit	1-68	68	19227 - 19294	27 July 1973
Ross	1-4	4	4309 - 4312	20 June 1961
Ross	5&6	2	2695 - 2696	21 June 1956
Ross	7-10	4	2698 - 2701	22 June 1956
Ross	11-18	8	2702 - 2709	22 June 1956
Ross	19-23	5	6493 - 6497	25 June 1965
Ross	24&25	2	2763 - 2764	4 July 1956
Ross	26&27	2	6498 - 6499	22 June 1965
Ross	28-33	6	2714 - 2719	27 June 1956
Ross	34	1	6500	22 June 1965
Ross	35-38	4	4313 - 4316	20 June 1961
Ross	39-42	4	4313 - 4316	29 June 1962
Ross	43&48	2	6501 - 6502	22 June 1965
Ross	49&50	2	6678 - 6679	30 July 1965
Ross	51-61	19	7017 - 7035	12 November 1965
Ross	79-106	27	7151 - 7178	3 December 1965
Falls	1-10	10	13318 - 13327	17 July 1972
Alex	1-15	15	7221 - 7235	3 December 1965
Alex	16-27	12	7392 - 7403	15 December 1965
OK	1&2	2	2465 - 2466	16 April 1956
OK	3-6	4	2758 - 2761	4 July 1956
OK	7-10	4	3037 - 3040	24 June 1957
OK	11-36	26	6467 - 6492	22 June 1965
OK	49-52	4	6995 - 6998	1 November 1965
OK	57-65	9	7121 - 7129	16 November 1965
OK	66&67	2	17560 - 17561	28 September 1971
RH	1-4	4	27687 - 17690	5 November 1971
Surprise	1-6	6	7145 - 7150	1 December 1965
Sam	1-4	4	15735 - 15738	6 July 1970
Elk	1-10	10	17163 - 17172	22 July 1971
Bozo	33-46	16	14013 - 14028	29 July 1969
Bozo	33-46	14	14055 - 14068	6 August 1969
Heidi	45-54	10	17834 - 17843	28 December 1971
Treasure	1-8	8	6705 - 6712	9 August 1965
Treasure	9-20	12	7082 - 7093	18 November 1965
Don	1-6	6	6699 - 6704	9 August 1965
P	1-20	20	18179 - 18198	26 June 1972
Alpine	1-139	139	18634 - 18772	26 October 1972
Alpine	140-167	28	19295 - 19322	27 July 1973
Rimrock	1-4	4	18775 - 18778	30 October 1972
Rimrock	5-10	6	18852 - 18857	20 November 1972
Rimrock	11-20	10	18859 - 18868	12 December 1972
Rimrock	21-30	10	18869 - 18878	10 January 1973
Rimrock	31-57	27	18879 - 18905	24 January 1973
RH	10-25	16	17780 - 17795	16 December 1971
RH	26-57	32	17802 - 17833	28 December 1971
RH	58	1	18218	30 June 1972
RH	60-75	16	18163 - 18178	23 June 1972
RH	76-87	12	18206 - 18217	30 June 1972
RH	88-111	24	18260 - 18283	7 July 1972
Maple	1-4	4	19178 - 19181	20 June 1973
Lillea	1-4	4	11280 - 11283	24 June 1968

GEOLOGY

Introduction

Mineral deposits on the R.H. Stanfield properties are located on the west flank of the Rocky Mountains in the Precambrian Aldridge formation.

Normal faults strike northwesterly and dip southwesterly. Subsidiary faults strike northeasterly and dip northwesterly. Extensive displacement produced by the faulting brings Devonian and Mississippian formations in contact with the Precambrian strata.

Sulphide mineralization, discovered to date, contains lead-silver and copper-silver mineralization in strong fissure veins within Aldridge quartzite and argillite.

Stratigraphy

The R.H. Stanfield properties are underlain almost wholly by Aldrige and Creston Precambrian strata, and the mineral deposits exposed to date thereon are located within the Aldrige.

By a combination of extensive faulting and large synclinal downwarping Devonian and Mississippian formations lie across the southeasterly Precambrian strata from Sand Creek to the Elk River, and also in the Little Sand Creek and Bull River areas on the northwest. Otherwise the Precambrian strata dip gently to the northeast under the Devonian, Mississippian and younger rocks.

Aldridge Formation

This formation is composed of quartzite, argillaceous quartzite, argillite and siltstone. The strata range from finely banded to massive. Rusty weathering provides a distinctive appearance to these otherwise dark grey to black rocks. Near the faults and fissure veins they are altered to soft, schistose, light brown material.

Creston Formation

Lithologically similar to the underlying Aldridge quartzite, argillite and siltstone, this formation is characterized by bright purple and green weathering. Mud cracks and ripple marks are not uncommon.

Kitchener Formation

Brown - weathering dolomite, in places exhibiting a "dogs tooth" weathered surface, along with lesser argillite, quartzite and limestone in green and pruple hues make up this formation.

Gateway Formation

Grey and green argillite and siltstone, along with buff- and orange-weathering dolomite and minor quartzite constitute this formation.

Phillips Formation

This distinctive formation is composed chiefly of red quartzite with interbedded argillite and siltstone.

Rooseville Formation

Green argillite and siltstone, black and grey argillite and quartzite, orange - weathering grey dolomite and grey - weathering limestone constitute the Rooseville strata, and the top of the Precambrian in the area.

Burton Formation

Shale, sandstone, limestone on a basal conglomerate make up this Middle Cambrian formation.

Jubilee and Elko Formation

Massive grey dolomite constitutes these two Middle and Upper Cambrian formations.
On the southern part of the area under consideration, north of Elko, the Cambrian strata are underlain by Precambrian and overlain by Upper Devonian rocks.

Alexo, Fairholme and Palliser Formations

These Upper Devonian strata lie on basal beds of buff- and orange - weathering dolomite and sandstone. The Fairholme is chiefly fine-grained black and grey limestone along with shale and dolomite. The Alexo is sandstone argillite and limestone. The Palliser is massive mottled and nodular limestone and shale.

Exshaw, Banff and Rundle Formations

These Mississippian strata lie along the east flank of the Lizard Range and extend southwesterly over the older rocks. They also outcrop in the trench, west of the north end of the R.H. Stanfield holdings.
The Exshaw is made up of black shale and limestone. The Banff is chiefly dark limestone with silty to cherty facies. The Rundle is composed of grey crystalline to dark and fine-grained limestone.

Structure

The Aldridge, Creston and Kitchener formations extend from the floor of the Rocky Mountain trench easterly, forming the west flank of the Lizard Range of the Rocky Mountains. The formations are conformable, and dip gently to the east where major northwesterly trending faulting brings them in contact with Palaeozoic formations. On the south, the Sand Creek, Wigwam and auxiliary faults terminate the southerly trend of the three Precambrian formations. Near the Bull River, on the northwest of the area, a series of faults along the east side of the trench also bring Palaeozoics into contact with the Aldridge formations.

Within the Precambrian rocks on the R.H. Stanfield properties numerous zones of shearing show limited displacement and minimal drag folding or rock alteration. Associated with some of these shears are quartz, calcite, siderite with lead-silver or copper-silver sulphide mineralization. In some of these, the sulphides are almost pure galena or chalcopyrite.

Copper-Silver Mineral Deposits
1 Strathcona-Empire

On the steep slopes of the east wall of the Rocky Mountain trench this copper-silver deposit has been explored by four adit tunnels, on the Empire and Strathcona Crown Grants.

The first work, believed started in the 1890's, included surface trenching and the establishment of adit tunnels on a large fissure vein carrying excellent values in copper with some silver.

In 1937, a tramline connected the lowest portal at elevation 4,100 feet with the road at valley level from which high-grade shipments were made to the smelter.

The fissure vein, 6 feet to 40 feet in width, strikes north 65 degrees west and dips 70 to 80 degrees southwesterly. Four adit tunnels from 4,100 to 4,800 elevation have been driven on the vein, over a horizontal length of 500 feet.

Quartz with siderite, hematite, and some calcite contains blebs, lenses and lenticular masses of chalcopyrite, minor bornite and pyrite.

At and near the surface the fissure is stained dark reddish brown as a result of oxidation of siderite and hematite. The dark grey Aldridge argillite adjacent to the vein has been altered to a bleached light brown schist for several feet and this grades into unaltered but jointed argillite. The fissure vein has not been delimited.

The following are sample results from the vein:

SOURCE	LOCATION	WIDTH	CU %	AG oz/T	AU oz/T
B.C. Dept. Mines	# 1 dump	-	8.9	3.2	0.06
Cominco	-	-	2.0to5.8	0.7to3.0	Trto0.50
B.C. Macdonald	# 1 portal	0-3.5	1.31	0.40	Tr
	HW to FW	3.5-6.0	0.54	0.10	Tr
		6.0-18.0	2.74	0.70	0.01
B.C. Macdonald quoted from old reports	# 1 tunnel, complete	--	6.2	10.0	Tr
B.C. Macdonald	# 2 tunnel	6.0	0.70	0.10	Tr
	# 3 tunnel	4.5	1.35	0.10	Tr
	# 4 tunnel	3.0	0.52	0.10	Tr

2. Rex

The Rex showings are located on a small bedrock exposure in the Rocky Mountain trench, on the Ross 4 claim. This is 9,000 feet west of the Strathcona-Empire workings and 1½ miles north of the Stanfield camp by secondary road. Elevation is close to 2,800 feet above sea level.

The open cuts and shallow shaft were excavated during the early exploratory period, probably about 1900.

The vein at the Rex showings strikes north 65 degrees west and dips 70 degrees southwest. Brown to red weathering is prevalent and the quartz contains chalcopyrite and pyrite. Although not well exposed the mineralized fissure vein appears to be 6 to 8 feet wide.

A sample by B.C. Macdonald across 5 feet, assayed 2.39% copper, 1.7 ounces of silver and 0.01 ounces of gold per ton.

3. Dean = Ross 36

About one mile north of the Stanfield camp, and on the south side of the

Sand Creek road, on the Ross 36 claim, there is a rocky hummock projecting one hundred feet and more above the trench floor. Cross-cutting the Aldridge strata at this location is a quartz vein striking easterly and dipping steeply to the north. The vein is 2 to 5 feet wide. Sulphides of iron and copper are included with vein quartz, siderite, hematite and calcite. There is an 80 foot adit tunnel directed north 80^{o} east on the vein.

A second vein, exposed by a trench 300 feet east, strikes north 60 degrees west and is vertical. A sample by B.C. Macdonald, across 4.5 feet, assayed 0.5% copper and traces of silver and gold. Little work has been done at this location.

 # 4. Treasure Mar - Comet

Overlooking the settlement of Galloway, on the Treasure 1 claim there is a shaft and an adit. These old workings are in Aldridge argillite which strikes northwest and dips at a low angle northeast. The dumps contain massive pyrrhotite along with disseminated chalcopyrite. A detailed examination will necessitate some stripping, trenching and cleaining out the old workings.

 # 5. Don - Don 2

Outcrops of limey argillite of the Gateway formation lie on the south-easterly part of the Don claims near the hydro line. The strata strike north 30 west and are vertical.

One shaft and a series of trenches expose a fissure vein carrying chalcopyrite, malachite, and hematite in a gangue of quartz, siderite and barite. The vein lies with the bedding plane of the country rock.

One hole was drilled near the shaft in 1956 reportedly by Western Canadian Collieries and the zone was reportedly 30 feet wide and carrying chalcopyrite.

The reported length of the vein was one mile.

10. Rimrock - Burton

Two miles northwesterly from Elko, and 800 to 1,000 feet above the trench level, there are two adit tunnels driven northeasterly into the steep sidehill.

The upper tunnel is a drift at north 55 degrees east on a strong quartz-siderite-calcite vein in light grey silicified argillite of the Gateway formation.

In 1897 the upper adit tunnel was driven on high grade copper mineralization for 100 feet. Over the years this was extended to a total length of 300 feet. A 35-foot stope was mined from the back up a distance of 30 feet and shipments of copper-silver were made to a smelter. A winze was sunk to a depth of 40 feet below the tunnel floor.

The vein, with copper mineralization, was present up to 4 feet wide in both the top of the stope and bottom of the winze.

The vein is 2 to 8 feet wide, vertical and highly oxidized. It is composed of disseminations of siderite, calcite and mostly quartz. There are disseminations, veins and bunchy patches of chalcopyrite in the quartz. The vein is weathered and fractured, pits and irregular openings are heavily coated with limonite. Malachite and some azurite occur in fractures, vuggy fillings and coatings on the vein and wall rock.

There are two open cuts 75 and 85 feet above the upper adit tunnel. One 8-inch band of chalcopyrite was exposed in the upper trench.

A second adit was driven north 30 degrees east, 209 feet below the upper tunnel, but no vein similar to that in the upper tunnel was encountered. A survey is necessary to locate the relative positions of the two tunnels.

The British Columbia Minister of Mines Annual Reports for 1898 and 1917 report high grade material in the 30% copper range from selected material.

Recent samples assayed as follows:

No.	Sampled by	Width Feet	Copper %	Silver oz/T	Gold oz/T
Ore# 1	V. Gerlitz	Selected	27.54	Tr	0.010
1-S	A.R. Allen	4.5	0.84	0.29	0.007
2-S	A.R. Allen	6.0	3.40	0.12	0.005
3-S	A.R. Allen	7.5	0.93	0.09	0.005
4-S	A.R. Allen	2.5	2.02	0.21	0.007

At this time the inner 100 feet of the upper tunnel is caved.

Lead-Silver Mineral Deposits

Exploratory work has been done on four lead-silver deposits east and well above the level of the Rocky Mountain trench.

 # 6. Great Western

On the Maple # 1 claim, on the east side of Little Sand Creek a quartz vein carrying good galena has been investigated by an adit tunnel and several trenches. The tunnel follows the vein into the sidehill in Aldrige argillite at 95 degrees for 100 feet.

A surface cut, 20 feet above the tunnel, was sampled by D.L. Cooke, and this assayed 6.58% lead and 0.84 ounces of silver and 0.005 ounces of gold per ton, across 4 feet.

 # 7. G

Well above the trench, east of Little Sand Creek a strong shear zone has been exposed by intermittent trenches over a length of 3,600 feet. The shear cuts nearly flat lying Aldridge argillite and argillaceous quartzite. The main zone and subsidiary shears are oxidized and are evidenced by a light brown colouration. The shear gouge is grey to buff coloured and contains angular fragments of wall rocks. The zone is up to 40 feet wide. Associated parallel and cross shears are evident. The strike is variable, indicating warps and flexures but the dip is nearly vertical. Strikes of 50 to 80 degrees east have been noted. The general attitude, however, appears to be north 65 degrees east and vertical. The zone has been excavated to depths of 20 to 30 feet at several locations. At one of these where the zone is 16 feet wide, with a 4-foot central gouge section, there was a vein of massive galena.

Post mineral movement had cracked and displaced large blocks of the vein and when mined it was removed in chunks and fragments, some 4 feet across. About 15 tons has been stored at the site and the Stanfield camp. At this well exposed location the argillite beds on the north side of the shear contain thick members that are not evident on the south wall. Little or no distortion is evident on the north wall, but on the

south the strata show a moderate down turn. There is limonite within the crushed and altered zone associated with galena, and 2- to 4- inch veins of this extend along bedding planes 20 feet and more into the south wall.

A sample of the galena assayed 85.1% lead and 36.92 ounces of silver per ton, and a check sample assayed 84.02% lead and 37.9 ounces of silver per ton.

The shear zone has not been delimited and neither has it been thoroughly prospected. Investigations both easterly and westerly are warranted.

8. OK

Extensive surface stripping has exposed a strong shear zone on the OK 19 claim. Veins, irregular blebs and disseminations of galena are distributed throughout the altered and sheared argillite. The zone strikes easterly and is practically vertical. It appears similar to the G zone, structurally, mineralogically and stratigraphically. The galena in both zones has been fractured and displaced by post mineral movement within the shear zone. The width of the mineralized section in the OK zone appears to be about 40 feet.

Recently a trench has exposed the mineralized zone down the hillside about 300 feet to the east. A sample of galena with some wallrock and limonite coating assayed 42.8% lead, 20 ounces of silver per ton, 0.07% zinc, 0.03% copper and less than 0.01 ounces of gold per ton.

9. Burt

Old workings southwesterly from the Strathcona-Empire are now badly sloughed, but several open cuts and 2 adit tunnels reportedly were

excavated on a 2,000-foot quartz-siderite vein averaging 2½ feet wide. A sample from the vein reportedly assayed 6.5% lead, 3.4% zinc and 0.9 ounces of silver per ton.

INDUCED POLARIZATION SURVEY

Preliminary induced polarization surveys were conducted over part of the G zone in 1973 by Kenting Exploration Services Limited. Huntec Mark III and Newmont receivers were used. A study of results indicated that this technique was not applicable to the detection of mineral concentrations on this property because of the variations in composition of the argillaceous country rock.

ELECTROMAGNETIC SURVEY

A preliminary electromagnetic survey was conducted over the stripping and trenching in the area of the G zone, using a Scintrex SE 300 instrument.

Any notable configurations, using variations of station separations and frequencies, were interpreted as the result of effects caused by the various types of argillite, rather than metallic deposits.

The results of this test work show that the electromagnetic technique is not applicable to the search for ore deposits on these properties.

MAGNETOMETER SURVEYS

Two magnetometer surveys were conducted over two closely located areas of the Stanfield properties in 1973.

This work was carried out by Kenting Exploration Services Limited of Calgary, Alberta. In both areas the total magnetic field was recorded on a precession type proton G-816 instrument at 100-foot intervals along surveyed lines. After diurnal corrections were made the results were mapped on a scale of 400 feet per inch.

The smaller of the two areas was a part of the G lead-silver zone, including the main showing and the areas of trenching on each side of the shear zone. The results showed no indications of magnetic mineralization along with the lead-silver, and it was concluded that this technique was not applicable to the search for such mineralization is this area of the property.

On a larger area to the south a grid was surveyed on a 400 by 100-foot basis. This is shown on map # 3 which is included with the report. It is a triangular area extending from the hydro line north of Rosen Lake to the east side of the trench.

This area measures approximately 12,500 feet by 10,000 feet by 7,500 feet. The purpose of the survey was to conduct a gound test over an aeromagnetic anomaly shown on G.S.C. Aeromagnetic Map # 8464 G.

The magnetic base for the areas is 58,000 gammas. An anomaly ranging from 58,700 to 59,039 gammas was outlined on the surveyed area. The anomaly is approximately 9,000 feet long and open on the northeast end. The southerly part of it trends north 55 degrees east but swings to north 30 degrees east at the northerly end. The 950-foot high straddles line 44+00N. A section through this line was interpreted by Kenting Exploration Services Limited, using ribbon and tabular model fittings. They concluded that, under 100 feet of overburden, at station 22+50E a tubular or "dyke-like" body of magnetic mineralization, probably 50 to 150 feet wide, trends northeasterly and dips northwesterly at 45 degrees. They also noted that the aeromagnetic map indicates that this body has a length of approximately four miles.

If the causative mineral of this anomaly is pyrrhotite, the significance of discovery is self evident since, included with the lead-silver-zinc in the Sullivan mine at Kimberly, is a sizeable zone of pyrrhotite.

STRIPPING AND TRENCHING

The numerous copper-silver and lead-silver mineral zones exposed to date on the Stanfield holdings have all been extensively trenched intermittently along the strike to provide bedrock information of the deposits.

Large areas have also been stripped to bedrock at and near the mineralized areas to provide geological information. Also many miles of access roads have exposed bedrock for considerable distances and are important for prospecting and geological mapping.

ADIT TUNNELS

On the steep slopes of the Lizard Range the Strathcona-Empire adit tunnels are located at elevations 4,800, 4,600, 4,400 and 4,100 feet above sea level. The vein is opened up for 500 feet of length and 700 feet of depth by these tunnels. The upper adit is 80 feet long and the numbers 2 and 3 are 10 and 15 feet long. The number 4 tunnel was driven in overburden for 105 feet, then in bedrock 80 feet to the vein, which was drifted on 20 feet north and 39 feet south. A shallow winze was sunk from the north drift and the south drift was stoped to a height of 30 feet. The shipping ore came from the number 4 tunnel.

On the Maple # 1 claim, near the northerly end of the properties an adit tunnel was driven 80 feet on the Great Western vein. This quartz-siderite vein is 2 to 3 feet wide and contains galena-silver mineralization.

On the Ross # 36 claim, a 150-foot adit tunnel was driven on a 2 to 3 foot quartz vein carrying copper-silver mineralization.

Two adit tunnels, now caved, were driven on the OK # 2 claim.

Two tunnels were driven on the Rimrock copper-silver showings.

PROSPECT SHAFTS

On the Dean vein a shallow shaft was sunk on chalcopyrite-pyrite mineralization.

Two shallow shafts were sunk on the Don copper-silver showings.

A 25-foot shaft was sunk on copper-silver mineralization on the Rex zone.

At least two and probably more vertical winzes were driven on the Rimrock workings.

There is a shaft, reportedly in excess of 100 feet on the pyrrhotite-chalcopyrite mineralization on the Treasure vein.

DIAMOND DRILLING

Six BQ wireline holes were drilled to test the Rex vein. Total footage was 2,617 feet.

Two X-ray holes were drilled to intersect the Strathcona-Empire vein at shallow depths between the # 3 and # 4 adits.

Several "scout" holes from the roads were drilled on the OK 24 and 26 claims.

One hole was drilled near the shaft on the Don vein.

Hole # 73-1 was drilled vertically to 1123 feet, 25 feet south from the shear zone at the main large open cut on the G zone.

PERCUSSION DRILLING

Several holes were drilled at short intervals north of the G zone on the main showing. These were drilled to 300 feet and more. No significant lead-silver mineralization was encountered.

CAMP

An excellent camp is located one mile from Galloway. There is modern accommodation for 50 men. A large kitchen-dining arrangement includes a pleasant area for reading and relaxation.

There are five attractively furnished guest houses. There are parking spaces with service connections for up to ten house trailers.

There is a large shop equipped for all necessary mechanical work.

Ample water and electrical services are maintained.

EQUIPMENT

Wholly owned equipment is as follows:

Crawler tractors

2 Caterpillar D-7 units
1 A.C. 15A
1 A.C. 16A

One Massey-Ferguson front end loader and back hoe.

Compressors

1 500 c.f.m. LeRoy
1 125 c.f.m. Ingersoll Rand
1 90 c.f.m. Ingersoll Rand

Two welding outfits

Three Diesel 3-phase light plants.

Trucks

2-½ Ton, 4 4 pick ups
2-¾ Ton, 4 4 pick ups
1-5 Ton, Ford tandem dump truck
1-3 Ton, Dodge water truck
1 Crew bus

One underground diamond drill.

SUMMARY AND CONCLUSIONS

The R.H. Stanfield properties are located in southeastern British Columbia accessible via highway # 3 from Cranbrook or Fernie and highway # 93 from the United States. Local services include the Canadian Pacific Railway and East Kootenay hydro electric line.

A modern camp, one mile from Galloway, includes accommodation for 50 men, five guest houses, ten trailer spaces, equipment service and repair facilities.

The large group of 930 contiguous located claims and two Crown Granted claims extend from Rosen and Tie Lakes in the Rocky Mountain trench near the settlement of Galloway, easterly over the Lizard Range and into the valley of Sand Creek. To the south the 57-claim Rimrock group is 2 miles northwest of the village of Elko.

The properties are underlain by Precambrian rocks of the Aldridge, Creston and Gateway formations. These are faulted against younger Devonian and Pennsylvanian formations, but the mineral deposits are in the Aldridge and Gateway strata. These are in the Rocky Mountain trench and the mountains to the east. The trench deposits are fissure veins containing copper and silver and the mountain deposits contain lead-silver associated with strong zones of shearing. The copper-silver deposits strike northwesterly and dip steeply southwesterly to vertical. The mountain deposits strike easterly and are vertical.

Copper-silver ore was shipped from the Strathcona-Empire vein to the smelter in 1937. Otherwise all the mineralized zones have been partially exposed by trenches, shafts and tunnels and are in the prospect stage warranting additional surface and underground investigations.

Recent work has been in the northern part of the property on and near the G zone. This strong shear has been intermittently exposed for a length in excess of 3,000 feet. A vein of pure galena was discovered within this zone. Post mineral faulting had been intense and the vein was badly broken, to the extent that it was mined in fragments and angular blocks up to 4 feet across. The galena is unaltered by iron minerals within the zone which have been converted to limonite. A similar type of deposit has been partially opened up on the steep slopes north of Sand Creek on the OK 19 claim. This is in a 40-foot easterly trending shear zone. Veins, lenses and irregular masses of galena along with abundant limonite occur throughout the fractured and altered zone.

Geophysical investigations have been conducted over selected areas of the properties in order to ascertain which method is most practicable to detect new zones of mineralization and the extensions of the known deposits.

Electromagnetic, induced polarization and magnetic techniques have been attempted. Magnetic methods have been most successful and a large anomaly has been outlined southeast of the G zone.

The anomaly is 9,000 feet long, and may extend for several miles northeasterly. Where it peaks it is interpreted to be a tabular body containing a magnetic mineral, covered by 100 feet of overburden. It is considered probably 50 to 150 feet wide and dipping to the northwest at 45 degrees. If pyrrhotite is the causative mineral the importance of its discovery is evidenced by the fact that the Sullivan orebody at Kimberly contains, along with silver-lead-zinc, a sizeable body of pyrrhotite. The Sullivan is one of the world's famous mines. The Placid Copper Mine is operating at 750 tons per day adjacent to the Stanfield properties at Bull River.

It is concluded that the R.H. Stanfield holdings warrant extensive and vigorous exploratory and development programmes for the following reasons:

1. The properties cover a geologically favourable area. The Sullivan Mine at Kimberly, the Placid Copper mine near the north boundary, former producing properties such as the Estella and Kootenay King, and many attractive prospects, all are located in Aldridge argillite and quartzite and associated faulted and sheared rocks.

2. An excellent camp serves as a headquarters for personnel and a servicing centre for the mining equipment.

3. Access roads have been constructed to the many mineralized zones on the properties.

4. Four lead-silver and six copper-silver deposits have been partially outlined to date. All are good prospects and warrant thorough investigation. Unusually high-grade lead-silver mineralization has been exposed in the G and the OK zones.

5. A magnetic anomaly has been partially outlined, southeast of the G zone. Interpretation of this suggests that it is a sizeable zone. More important, if pyrrhotite is the mineral responsible for the magnetic variation, there may be associated lead-silver and other important minerals present as with the Sullivan orebodies at Kimberley.

6. The economics of mining is changing rapidly with increased demand and escalating metal prices.

When deemed adviseable, works programmes will be detailed, with time and costs schedules for selected projects on the Stanfield properties.

Respectfully submitted,

ALLEN GEOLOGICAL ENGINEERING LTD.

Per Alfred R. Allen

Alfred R. Allen, P. Eng.

601 - 325 Howe Street
Vancouver, B.C.
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