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1990 ASSESSMENT REPORT ON THE BABY GROUP OF CLAIMS

SLOCAN MINING DIVISION NTS 82F/14W LATITUDE: 49°55' LONGITUDE: 117°22'

FEBRUARY 1991

BY: DELBERT W. FERGUSON

GEOLOGICAL BRANCH ASSESSMENT REPORT

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INTRODUCTION

The year 1990 saw initial prospecting and trenching on the Baby Group of Claims. Two areas of interest were discovered on the BW claim. In the central portion of the BW claim block, a large 400 metre by 300 metre brecciated silica cap is exposed within the intrusive complex. Only stringer and disseminated pyrite has been found to date within this altered zone. The second area of interest is a one metre wide quartzcarbonate vein system found along outcrop exposed along the side of the BW access road, a few hundred metres northwest of the silica cap. High grade gold-silver mineralization is associated with north trending lamprophyre dykes, which cut through the granitic intrusive. This area was trenched in December 1990 and again in January 1991.

LOCATION and ACCESS

The Baby Claim Group is situate in the West Kootenay Region of Southeastern B.C., between the villages of Silverton and Slocan. The claims lie immediately east of Slocan Lake, approximately 3.5 kilometres south of Silverton, B.C. and 1.5 kilometres north of the Aylwin Creek (Willa) copper-gold-base metal deposit, currently being developed by Treminco.

The western claim block (BW) is transected by Highway #6, straddling the hump between Highway #6 and Red Mountain Road. A forest access road provides access off Highway #6 to the central portion of the western claim block. Recent logging activities provide four wheel drive access to the southeast portion of the western claim block.

The eastern claim block (BE) lies for the most part on lowlying swamp lands and gentle mountain slopes of Mount Twigg, east of the Red Mountain Road. The southeast portion of the claim block covers steep mountainous terrain. Access is by foot only, east of the Red Mountain Road.

PHYSIOGRAPHY

The Baby Claim Group is situate for the most part over the Red Mountain Plateau, above Slocan Lake. Elevations generally range from 2500 to 3500 feet a.s.l., except for the southeastern portion which reaches elevations of 4700 feet on the western slopes of Mount Twigg. From west to east across the claims, the terrain rises steeply from Slocan Lake and then levels off to hummocky and swampy landscape over the central portion of the claims. This area is bisected by southwest trending Vevey Creek. Further west the topography steepens across the lower slopes of Mount Twigg.

Much of the area is forested with stands of fir, hemlock, white pine and cedar. A significant amount of the BW claim block has been recently logged. Private residences are located on either side of the Red Mountain Road.



AREA HISTORY

The Baby Claim Group lies within the historic "Slocan Camp" which ranks second only to the Sullivan Mine in silver production. To the north, from Silverton to Sandon high grade silver-lead-zinc ores have been mined from deposits within the Slocan Sediments since the late 1800's. From the Baby Claims, south to Slocan, high grade silver-lead-zinc ores have been mined from deposits within the porphyritic granite of the Nelson Batholith since the late 1800's. These former mines with similar geology to the Baby's included the Ottawa, the Little Tim, the Enterprise and the Myrtle(Alma). The former Enterprise Mine reported similar associated lamprophyre dykes to what is seen on the Babys, but gold values are neglegible.

The former high grade silver-gold Republic No.2 property located approximately 3 miles north of Slocan City produced erratically from 1896 to 1952. This deposit was also hosted in porphyritic Nelson granite and had associated felsic and mafic dykes. The Morning Star, a small gold-silver producer is situate immediately east of Slocan City was hosted in hornblende diorite and felsic dykes.

The Galena Farm zinc-lead-silver deposit is a former producer lying on the northern boundary of the Baby claims. The orebearing veins here are hosted mainly in granitic rocks of the Nelson Batholith, near its northern contact with the Slocan Group Sediments. From 1900 to 1953, the Galena Farm produced 87,412 tons of ore (9.5 million lbs. zinc, 6.1 million lbs. lead 0.6 million ounces silver and 62 ounces gold).

The Willa Property, located 1 kilometre south of the Baby claims, is a 1 million ton copper-silver-gold deposit which has seen extensive development work since the late 1970's. Grades averaging 1.04% Cu, .27 oz/t Ag and .22 oz/t Au occur in a strongly altered and brecciated zone within the Nelson batholith and associated volcanics.

CLAIMS

The Baby Group of Claims are currently held by R.H. Murphy of Nakusp, B.C.

CLAIM NAME	NO.OF UNITS	RECORD NO.	RECORD DATE	EXPIRY DATE
BE	20	6263	FEB.21/90	FEB.21/1997
BW	12	6264	FEB.21/90	FEB.21/1996
	22 LINITE	- 900 45070	DEC (1976 ACD	FSI

GEOLOGY

The Baby Claims are underlain for the most part by feldspar porphyritic granite of the Cretaceous age Nelson batholith. This granite is a coarse grey to pinkish coloured rock that generally contains numerous white to flesh coloured phenocrysts of twinned alkali feldspar. The groundmass of the granite is generally coarse, hypidiomorphic, consisting of potash feldspar, plagioclase and quartz, with accessory hornblende and biotite. The batholith extends southward to beyond Castlegar and pinches out northward from the Baby claims. Metasedimentary rocks of the Slocan Series predominate to the north. The Valhalla Gneissic Complex covers the west side of Slocan Lake.

On the BW claim, the porphyritic granite locally exhibits moderate to strong chloritization with associated weak disseminated pyrite. A large brecciated silica body caps the hillside above Highway #6. It's approximate dimensions are 400 by 300 metres. Sugary to chalcedonic quartz has flooded through the host granite resulting in a brecciated fabric made up of subrounded clasts of bleached granite ghosts and angular limonitic fragments. Open cavities and vugs exhibit quartz and calcite crystal infillings. Strong limonitic staining along fractures is pervasive. Fracture coatings of manganese and hematite are also common. Stringer, disseminated and patches of pyrite mineralization are found locally within the silica body.

Approximately 1 kilometre up the forest access road from Hwy.#6 onto the BW claim, a one metre wide mineralized quartz vein system is exposed in the road cut over a strike length of 20 metres. The system strikes N30°E with a vertical dip. At least one mafic dyke is associated with the system, but the relationship is not clear. A silica-carbonate alteration package envelopes the system. Common minerals are silica, siderite, manganese, fuchsite and disseminated pyrite. Fluorite has also been noted. The zone is highly fractured with high-grade silver-gold bearing mineralization. Minerals identified are argentite, tetrahedrite, pyrite, galena and native silver. The strongly mineralized zone does not prevail along strike, but may rather be an ore shoot. The host granite has been chloritized over a locallized area.

1990 FIELD WORK

In 1990, a total of 10 days was dedicated to prospecting the BW claim block. The area prospected was underlain for the most part by relatively homogeneous porphyritic Nelson granite. Two areas of note received the most prospecting hours (Figure 2):

1) In the central portion of the BW claim block, a "silica cap approximately 400 metres by 300 metres in size, drapes over the hillside. Sugary to chalcedonic quartz has flooded through the host granite, with resultant subrounded clasts of bleached granite ghosts and angular limonitic fragments. Open cavities and vugs often exhibit quartz and calcite crystal infillings. Fracture coatings of limonite, manganese and hematite are common. Pyrite occurs locally throughout the breccia body.

A pyritized specimen from the silica cap showed 120 ppb Au (Sample#164-3). All other 30 elements analysed by ICP were not anomalous.

2) A few hundred metres to the northwest of the silica cap, a one metre wide quartz-carbonate vein system has been exposed in a road cut, over a strike length of 20 metres. The system strikes N30°E, with an apparent vertical dip. A mafic (lamprophyre) dyke, up to a metre wide, is associated with the system, but the relationship is not clear. In the silicatecarbonate alteration package, fuchsite (a chromium mica) is common, as is siderite, manganese and finely disseminated pyrite. Fluorite has been noted locally. The system is highly fractured and the host granite has been locally chloritized. On trenching, high grade gold-silver bearing minerals such as argentite, tetrahedrite, pyrite, galena and native silver were observed over a 20 metre strike length. Strong mineralization could not be followed along strike for any distance and the exposure may well be an ore shoot, plunging into the hillside.

A sample of the well-mineralized quartz veining assayed 27.03 grams per ton Au (.788 oz/t), 6860 grams per ton Ag (200.058 oz/t), .03% Cu, .810% Pb, and .39% Zn (Sample#164-1).

A sample of wall rock exhibiting quartz-carbonate-fuchsite alteration showed 135 ppb Au, 9.2 ppm Ag, 180 ppm As and strongly anomalous Mn, P and Sr. All other elements ran for 30 element ICP were not anomalous (Sample#164-2).

In December 1990, a DBN Cat was employed to open up the access road (snow removal) to the showing, and a Link Belt Excavator was moved in to trench the immediate vicinity. Approximately 170 metres of trenches were excavated in an attempt to establish the extent of the high grade mineralization (Figure 3). Estimated volume of trenching is 170m³. The main trench was established along the inside road ditch and remains open for natural drainage purposes. All other trenches have been reclaimed.

In January, 1991, 13 days were spent excavating the main trench in an attempt to examine the extent of ore-grade mineralization. Trenching showed that the mineralization is confined to a 20 metre strike length, although the quartzcarbonate shear-zone system continues along strike for some distance beyond the trenched area. The ore shoot most likely continues underground in this vicinity.

A high grade mineralized sample from the ore shoot assayed 199.9 gm/t Au (5.83 oz/t), 18,444 gm/t Ag (537.96 oz/t), 5.49% Pb and 21.76% Zn (Sample#11-1). High cadmium values were also recorded in the sample.

For determination of major elements and constituents within the quartz-carbonate vein(shear) system a sample was sent to Eco-Tech Labs for classical whole rock analysis and ICP total digestion (Sample#750-1). Results were sent to Cominco Labs for their perusal.



CONCLUSIONS

The silica cap present on the BW Claim block is the most encouraging target for a larger tonnage gold-silver deposit. A grid should be established over the area to provide a base for geological, prospecting and soil sampling programs. An Induced Polarization survey over the central portion of the claim block is also necessary to define future drilling targets.

The high grade gold-silver discovery provides encouragement for a small underground mining operation.

The BE Claim block requires initial reconnaissance prospecting and sampling.

REFERENCE

Little, H.W., 1960; Nelson Map Area, West Half, British Columbia (82F/W1/2), Geological Survey of Canada, Memoir 308

STATEMENT OF COSTS

PHASE 1 PROSPECTING.. R. ALLEN - 3 days @ \$150/day 450 = R. MURPHY - 1 day @ \$150/day 150 = D. FERGUSON - 6 days @ \$200/day = 12001700 .. \$ 1700.00 TRANSPORTATION ...(1200 km.@.25/km)...... \$ 300.00 TRENCHING .. DBN CAT - 4 hrs.@ 144.75/hr. = 579.00 Excavator - 16 hrs.@ 146.30/hr. =2340.80 Mobe & Demobe =1142.50 4062.30 .. \$ 4062.30 ANALYSIS \$ 166.69 SHIPPING CHARGES \$ 58.00 REPORT COSTS \$ 611.25 \$ 6898.24 TOTAL PHASE 1 COSTS PHASE 2 - JANUARY 1991 TRENCHING LABOUR .. R. MURPHY ..10days@150/day = 1500 R. ALLEN ..13days@150/day = 1950 D. HEIND .. 9days@300/day = 2700 D. FERGUSON. 6days@150/day = 900 7050 \$ 7050.00 MACHINERY .. D8 CAT - 16 hrs.@ 144.75/hr. = 2316.00 Excavator - 46hrs.@ 146.30/hr.= 6729.80 Compressor Truck & Drill - 32 hrs.@ 35/hr. = 1120.00Dump Truck - 24 hrs.@ 40/hr. = 960.00 Mobe 571.25 11697.05 ... \$11697.05 TRANSPORTATION .. (2400 km.@.25/km)..... \$ 600.00 \$19347.05 TOTAL PHASE 2 COSTS TOTAL PHASE 1 + PHASE 2 COSTS (to Feb.04/1991) \$ 26,245.29 ______

STATEMENT OF QUALIFICATIONS

I, Delbert Wells Ferguson, of Nakusp, Province of British Columbia, do hereby state that;

I am a practicing geologist.

I have practiced my profession for over 12 years throughout Canada.

I am a Fellow Member of the Geological Association of Canada.

I received an Honours B.Sc. Degree in Geology from the University of Western Ontario, London, Ontario, Canada in 1979.

This report was prepared by myself, based on work completed in 1990 and January 1991 on the Baby Group of Claims and on pertinent research material.

> Dated at Nakusp, B.C. this 4th day of February, 1991.

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APPENDIX 1

ANALYTICAL RESULTS



ASSAYING - ENVIRONMENTAL TESTING 10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

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JUNE 13, 1990

CERTIFICATE OF ANALYSIS ETK 90-164

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DEL W. FERGUSON 2731 - 10TH AVENUE S.E. SALMON ARM, B.C. V1E 2J1

SAMPLE IDENTIFICATION: 3 ROCK samples received JUNE 11, 1990

ET#	Description	AU (g/t)	AU (oz/t)	AG (g/t)	AG (oz/t)	CU (%)	PB (%)	ZN (%)
164 -	1 BABY 1	27.03 ×	.788	6860.0	200.058	.03	.810	.39
			100 100					

NOTE: * SAMPLE SCREENED & METALLICS ASSAYED

ECO-TECH LABORATORIES LTD. A JEALOUSE JUTI Ceftified Assayer B.0

SC90/K2

DEL FERGUSON - ETK 90-164

10041 EAST TRANS CANADA HWY. KAMLODPS, B.C. V2C 2J3 PHONE - 604-573-5700 FAX - 604-573-4557

2731 - 10TH AVENUE S.E. Salmon Arm, B.C. Vie 2J1

VALUES IN PPM UNLESS OTHERWISE REPORTED

JUNE 13, 1990

3 ROCK SAMPLES RECEIVED JUNE 11, 1990

ET#		DESCRIPTION	AU(ppb)	A6 /	AL(Z)	AS	. B	8A	BI CAC	2) CD	CO	CR	CU FE	(I) K(I)	LA	MG(Z)	HN	NO	NA(I)	NI	P	PB	S8	SN	SR 1	1(1)	U	۷	¥	Y	ZN
	22232		**********	22222		222222	=225222	222223		222222222	211111	======	*******																		
164	- 2	BABY 2	135	9.2	1.14	180	2	75	(5 6.0	04 <1	21	118	29 4.	.58 .19	10	2.41	1594	6	.02	76	1640	24	<5	<20	678	.01	40	62	<10	7	68
164	- 3	BABY 3	120	8.2	.23	20	·<2	55	(5.0	05 (1	2	320	71.	.21 .0	20	.02	50	27	.02	15	430	26	<5	<20	53	<.01	50	17	<10	3	31

NOTE: < = LESS THAN

SC90/KOK

ECO-TECH LABORATORIES LTD B.C. CERTIFIED ASSAYER



ASSAYING - ENVIRONMENTAL TESTING 10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JANUARY 23, 1991

CERTIFICATE OF ASSAY ETK 91-11

DEL. W. FERGUSON P.O. BOX 981 NAKUSP, B.C. VOG 1RO

SAMPI	LE I	DENT	IFICA		1 roc Proje	CK sample ECT: BA	e receivo BY 90	ed JAN 1	4, 1991		
ET#		۵)escri	otion	AU (g/t)	AU (oz/t)	AG (g/t)	AG (oz/t)	CU (%)	PB (%)	ZN (%)
11		1	BABY	4	199.9	5.83	18,444.	537.9	.17	5.49	21.76

ECO-TECH LABORATORIES LTD. Re JUTTA JEALOUSE B.C. Certified Assayer

CC. R. H.Murphy Box 404 Nakusp, B.C. VOG 1RO

SC91/K1



ASSAYING - ENVIRONMENTAL TESTING 10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JANUARY 23, 1991

CERTIFICATE OF ANALYSIS ETK 91-11

DEL. W. FERGUSON P.O. BOX 981 NAKUSP, B.C. VOG 1RO

Sample	IDENTIFICATIO	IN: 1 ROC	ROCK sample received JAN 14, 1991 PROJECT: BABY 90													
ET#	Description	AS (ppm)(p	BI C opm)(ppm	DCU)(ppm)	HG (ppm)	MO (ppm)	PB (ppm)	SB (ppm)	SE (ppm)	ZN (ppm)						
11 -	1 BABY 4	323	(.01 98	8 > 1000	407	34	>1000	188.4	02،	> 1000						

NOTE: > - GREATER THAN < - LESS THAN

ECO-TECH LABORATORIES LTD. CLINTON S. AYERES LABORATORY MANAGER

CC. R. H.Murphy Box 404 Nakusp, B.C. VOG 1RO



ASSAYING - ENVIRONMENTAL TESTING 10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

τ

DECEMBER 7, 1990

CERTIFICATE OF ANALYSIS ETK 90-750

FERGUS CONSULTING INC. BOX 981 NAKUSP, B.C. VOG 1RO

ATTENTION: DEL FERGUSON

SAMPLE IDENTIFICATION: 1 ROCK sample received DECEMBER 5, 1990

ET#	Description	BaO	P205 Si02	MnO	Fe203	MgO	A1203	CaO	Ti02	Na02	K20 L	0.1.
750 - 1	BABY - 90	.02	.07 89.98	.04	1.76	.41	3.90	.59	.14	.11	1.02	1.70

NOTE: VALUES EXPRESSED IN PERCENT

ECO-TECH LABORATORIES LTD. JUTTA JEALOUSE B.C. CERTIFIED ASSAYER

SC90/K5

10041 BAST TRANS CANADA HVY. KAMLOOPS, B.C. V2C 2J3 PHONE - 604-573-5700 PAX - 604-573-4557

DECEMBER 17, 1990

VALUES IN PPN UNLESS OTHERWISE REPORTED

and the second secon

DEL FERGUSON - ETK 90-750

P.O. BOX 981 NAKUSP, B.C. VOG 1RO

PROJECT: BABY 90 1 ROCK SAMPLE RECEIVED DECEMBER 5, 1990

BT	DESCRIPTION	AG AL(%)	BA	BI CA	A(\$)	CD	CO	CR	CU FB(\$)	K(\$)	IG(\$)	NN	HO NA(\$)	NI	P	PB	SR T	I(%)	٧	Ï	Y	ZN
750 - 1	BARY - 90	11.6 2.82	120	====== 10	.66	=======================================	===== 	387	7 1.26	. 47	. 30	354	25 1.31	11 11	150 ISO	48	128	.02		<10	6	46

ECO-TECH LABORATORIES LTD. FRANK PEZZOTTI, A.SC.T. B.C. CERTIFIED ASSAYER

SC90/K5

APPENDIX II

Martin Strate Bran Tree

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1990 BABY WEST CLAIM PROSPECTING TRAVERSES

1990 BABY WEST CLAIM PROSPECTING TRAVERSES

Traverse#1(B.M.) - Hike up forest access road to Au/Ag showing 1a - porphyritic Nelson granodiorite (K-spars weathering out) 1b - same as 1a

1c - similar to 1a, but weak chlorite alteration of mafic minerals
1d - same as 1a

1e - mafic dyke and altered calc-silicate with fuchsite specks

1f - chloritized Nelson granodiorite

1g - narrow(2cm) mineralized quartz vein
(galena,tetrahedrite,pyrite)

1h - 1m wide quartz vein + associated silver/gold mineralization
 (shear zone -NE trending)

Traverse#2(D.F.) - Hike around hill top to trace outline of brecciated silica cap

2a - roadside outcrop showing brecciated ghost fragments of bleached granodiorite in a silica matrix - weak diss. py

- 2b breccia cap appears to peter-out, being surrounded on 3 sides by chloritized granodiorite
- 2c large angular boulders of chalcedonic breccia with quartzcrystalline vugs
- 2d chloritized granodiorite fragments in a silica-flooded matrix fragments are subrounded(approx. 10 cm in size)
- 2e silica-flooded cliffs with weak disseminated pyrite
- 2f strong silicified zone with chalcedonic veinlets
 (sericite flakes prevalent)
- 2g stong silicification (tight, near-vertical fractures) sericitized, bleached granodiorite fragments

Traverse#3(R.A.) - Hike down Vevey Creek from Line 39+00N
3a - unaltered porphyritic Nelson granodiorite
36 - same as 3a (float rocks in creek)
3c - same as 3a
3d - mostly mafic volcanic rocks in creek
3e - chloritized dioritic float in creek (diss. py)
3f - outcrop of weakly silicified granodiorite porphyry (sericite specks)
3g - dioritic outcrop (moderately chloritized)
Traverse#4(D.F.) - Hike along trend of mineralized shear zone
4a - pyritized calc-silicate with fuchsite (shear zone vertical) -associated quartz veining
4b - mafic dyke in sharp contact with chloritized granodiorite (no mineralization noted) - most of traverse in thick overburden
Traverse#5(D.F.) - Hike along ridge and swamps along Baseline
5a - weakly chloritized porphyritic Nelson granodiorite
5b - moderately chloritized Nelson granodiorite
5c - unaltered porphyritic Nelson granodiorite
Traverse#6(R.A.) - Hike along Line34+50N from claim line to highway
6a - unaltered porphyritic Nelson granodiorite
6b - moderately chloritized diorite?
6c - old hand pit in silica flooded area (moderate disseminated and veinlet pyrite (Mn + Fe staining)
6d - unaltered porphyritic Nelson granodiorite
6e - weak to moderately chloritized and bleached granodiorite cut by chalcedonic veinlets (weak to mod. diss.py)

Traverse#7(D.F.) - Hike along Line35+25N from claim line to highway

- 7a relatively unaltered porphyritic Nelson granodiorite
- 7b unaltered granodiorite
- 7c weakly chloritized granodiorite with few chalcedonic veinlets

Traverse#8(D.F.) - Hike along Line36+00N from claim line to highway

- 8a weakly chloritized Nelson granodiorite
- 8b same as 8a
- 8c brecciated silica zone with bleached granodiorite ghosts in a strongly silicified matrix (weak disseminated pyrite)
- 8d weakly chloritized granodiorite porphyry
- 8e unaltered granodiorite porphyry
- 8f chalcedonic veinlets in bleached granodiorite porphyry

Traverse#9(D.F.) - Hike along Line41+00N from baseline west, to highway and south along highway to forest access road

- 9a unaltered granodiorite porphyry
- 9b same as 9a
- 9c mafic volcanic outcrop
- 9d angular quartz vein float (mineralized with galena and tetrahedrite)
- 9e unaltered granodiorite porphyry subcrop
- 9f,9g,9h unaltered granodiorite porphyry

Traverse#10(R.A.) - Hike along Line40+00N to above highway and back along Line39+00N

- 10a unaltered granodiorite porphyry
- 10b chloritized granodiorite porphyry
- 10c mafic volcanic outcrop above road
- 10d unaltered granodiorite porphyry subcrop
- 10e mineralized quartz vein float(galena,tetrahedrite)
- 10f unaltered granodiorite subcrop
- 10g same as 10e
- 10h very fractured and broken granodiorite porphyry
- 10i unaltered granodiorite
- 10j same as 10i



