

Gus Claim Group Nelson M. D., B. C.

Assessment Report

Oct., 2002

By M. A. Kaufman

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GEOLOGICAL SURVEY BRANCH ASSESSMENT FORMER

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Introduction

The Gus Claim Group (Gus 1 - 16) is located in the West Kootenays, approximately 7.5 km NE of the Canada - U.S.A. Nelway border crossing. The west margin of the claims is along the east shore of Rosebud Lake.

Access is by the Rosebud Lake Road and thence by a 4x4 logging road starting east of the SE part of Rosebud Lake and going ENE to the old Lone Silver Mine and beyond to an area which I call the East Gold Anomaly. During 1999, Mr. Frank Zmavac, owner of 40 acres of surface along the north shore of the lake, placed a locked gate barring access to the old mine/logging road. With the gate locked, the claims must be accessed by the B. C. Hydro line road which follows the east shore of Rosebud Lake, and joins the mine/logging road a short distance east of Zmavac's gate.

I have been actively exploring this area since the late 1980s, when I was contracting for Lacana (Corona). After Corona relinquished its claims, I reacquired the ground by staking. The exploration history of the area has been well covered in past assessment reports, and will only be briefly summarized here. Lacana (Corona) carried out extensive soils and rock geochemical surveys. This work discovered two main anomalous areas which I have designated as the East Gold Anomaly and the West Geochemical Anomaly mainly anomalous in lead and silver. In 1992 Orvana Minerals Corp. optioned the claims from Corona, and drilled one hole to test one locality on the East Gold Anomaly. The hole did not intersect economic grade, but there were widely scattered gold intercepts, some highly anomalous, found in altered limey argillite of the Nelway Formation. My work since 1994 has involved following up and extending the previous exploration by geochemical and geophysical exploration.

The 2002 work consisted of GPS surveying of critical showings, workings, old survey lines and claim posts in the East Gold Anomaly area, as well as sampling in the south central part of claim Gus 9, and mapping to the east and south on new claims Gus 14 and 15.

Previous assessment reports covering the Gus Claims are as follows; # 26674, 26408, 25704, 25090, 24748, 24199, 23711 and 23438.

Summary Geology

As the geology has been described in previous assessment reports, I will only provide a summary here.

Physiographically, much of the Gus Claim Group is traversed by a broad ENE trending shallow valley which appears to follow the trend of the thrust faults which have been mapped in this area. A narrow NNE trending swampy depression occupies the portion of the east gold anomaly where a coincidental EM conductor was found by Lloyd Geophysics. This low area is thought to be controlled by a "transverse fault". Both of these valleys probably contain relatively deep glacial overburden (say 3 metres or more). Small areas of bedrock are found in upland areas south of the main valley, and east, west and north of the swampy depression, but even most of the uplands are overburden covered.

The area is chiefly underlain by Lower Cambrian Laib Formation phyllites, Middle Cambrian Nelway Formation limestones and dolomites, and Middle Ordovician Active

Formation argillites, limestones and slates. The property is traversed by the NE trending SE dipping Black Bluff Thrust Fault, which has caused the section to be overturned. A package consisting of older Laib sediments underlain by younger Nelway sediments overlies still younger Active Formation sediments. The contact between the Nelway limey sediments and the underlying Active Formation argillite-phyllite probably marks the trace of the thrust, but the thrust zone appears to be imbricate and complex.

Minor production of very high grade gold-silver ores has been taken from three old mines situated on the property, the Lone Silver, Davne and Lucky Strike. The Lone Silver production was from irregular shoots of brecciated Nelway Formation dolomite and from underlying Active Formation phyllite. The mineralized zones occur right on the Black Bluff Thrust, and are probably controlled by it. Both the Davne and Lucky Strike Mines are on WNW striking, steep dipping narrow fissure veins cutting "upper plate" formations, respectively Nelway silty lime and Laib phyllite. Though the two mines are .5 km apart, they appear to be controlled by the same structure. Between the two mines is the NE trending swampy depression described above. Outcrops within the East Gold Anomaly show intersecting NNE and WNW fracturing. Small mineralized showings and anomalous metal values have been found along these fracture zones. The West Geochemical Anomaly shows anomalous Pb, Ag and Zn with some sporadic Au. It was found on a steep hillside WSW of the Lone Silver Mine, in an area of shallow soils covering "upper plate" Nelway limestone in places marbleized. Its probable cause are mineralized fractures probably closely following bedding. Note; the geochemical anomalies are located on the enclosed 1:5000 scale map.

Exploration to date has been predicated on the following conceptions.

As the Black Bluff thrust appears to be imbricate, it is possible that surface showings on or above it might indicate more significant mineralization associated with subjacent fracture zones.

Significant high grade mineralization might be found along the NNE fault zone indicated by geophysics under the swamp in the east gold anomaly area, and might continue further NE under overburden west of the west scarp edge of the outcrop area to the north of it. Such mineralization might be enhanced by WNW fracture intersections with the NE faulting. The whole East Gold Anomaly occurs in upper plate Nelway limestone and siltstone, so there is a possibility of mineralization at depth along the Black Bluff thrust.

Sultan Minerals, in its work in the Wilson Creek area located ENE of the Gus Claims, has found widespread highly anomalous zinc along with lesser silver and lead in soils overlying Active Formation argillites. The same stratigraphy should underlie the extensive, overburden covered ENE trending flat valley occupied by the northern portion of the Gus Claim Group. It is not known whether the Sultan anomaly is caused by formational or structurally controlled mineralization, but it does point to possible targets along the formational strike.

Discussion Of The 2002 Programme

GPS surveying in the East Gold Anomaly area was undertaken for the purpose of accurately locating key showings and workings, the old Orvana drill hole, critical, old survey line points and claim posts. GPS location of the old survey lines enables us to accurately locate the EM conductors detected in 1996. I believe that additional drilling is warranted in

this area, and with this information, drill sites can be better selected. The results of this work are shown on the enclosed 1 1000 scale map.

During 2002 loggers refurbished an old trail passing southward on claim Gus 9. Ditching of this road brought up some mineralized rock boulders, but did not expose any bedrock. Sampling of some of these boulders indicates weakly anomalous gold. Two rock types were sampled, one black argillite and the other quartzite. The black argillite probably represents road fill dumped in by the loggers, but the quartzite is thought to have come out of the bank of the ditch, and not to have been brought in by the loggers. However, there is no certainty whether the quartzite might be extraneous glacial material or be close to a bedrock source. A list of the assayed samples is provided in the appendix of this report.

Physiographically, this area occupies an extensive south trending saddle between two ENE trending ridges. GSC Map 1145A suggests that the Styx Creek transverse fault passes through this saddle. No outcrop was found in this saddle, and the dense clay overburden is probably two metres or more thick. Some small outcrops of Laib Formation phyllite along with some quartz float were found about 200 metres east of the saddle on the ridge to the ENE of it. To the south, along the powerline south of Eldorado Creek, there is outcrop of Laib Formation phyllite, which in places contains lenses and veins of quartz and/or carbonate. In places, such as the locality of sample 02-13, the quartz contains disseminated pyrite.

Results and Conclusions

In regard to the East Gold Anomaly-Davne-Lucky Strike Mine Area:

The GPS work shows that the Davne and Lucky Strike mines are exactly on strike with each other making it evident that they are on the same WNW-ESE fracture/fault zone. The mines, both of which produced small amounts of high grade gold-silver ore, are separated by 1/2 km of potentially mineralized structure. The mineralized structure appears to die out ESE of the Lucky Strike mine, but could be open WNW of the Davne in an area covered by overburden. No drilling has ever been reported around the mines or anywhere along the controlling structure. The East Gold Anomaly is probably caused by small Au/Pb/Ag showings associated with pyrite and tetrahedrite occurring along fractures oriented roughly in the same direction as the Davne-Lucky Strike structure intersecting with NE fractures roughly parallel to bedding of the Nelway Fm. limey argillites. GPS location of the old Orvana drill hole and gold showings NW of it, shows that the hole passed south of the showings. As discussed in previous assessment reports, the frequency of Au/Ag showings in bedrock and in the drill core, along with rock alteration (decalcification and muscovite/sericite) make the area favorable for further drilling.

In regard to the Saddle (Gus Claim 9) area:

Two samples of boulder material, both siliceous argillite or quartzite, brought up in the road building contained weakly anomalous gold. Sample 02-3 assayed 133 ppb Au and 02-12 assayed 45 ppb Au. As mentioned above, I believe that these boulders represent rock that was contained in the local overburden. Whether these boulders have a local bedrock source or represent rock from a glacial boulder field is conjectural. There is ,however, other evidence of gold in this area. Soils sampling by Lacana/Corona seen in their 1989 assessment report show a gold anomaly roughly in the same area as the boulders, and at the bottom of my Pionjar drill hole of last year (located about 150 metres south of the boulders) we picked up anomalous gold. So trenching is warranted, and will be

carried out.

In regard to the Laib phyllites mapped along the powerline trail on claims Gus 14 and 15:

The zones of quartz and /or carbonate lenses and veins deserve further investigation, as they do not appear to be a normal sedimentary or metamorphic feature. Perhaps they might represent alteration along imbricate thrust zones or along transverse faults.

M. A. Kaufman

M.a. Keufman

Oct. 1, 2002



Statement of Qualifications

I, M. A. Kaufman hereby state that I have worked as a mining geologist and mining engineer for 45 years.

I received an A, B, degree in geology from Dartmouth College in 1955, and an M. S. degree in geology and mining engineering from the University of Minnesota in 1957.

I am currently registered as a Professional Engineer/Geologist in the province of British Columbia.

From the period 1955 - 1965 I worked for the major companies Kennecott Copper Corp., Giant Yellowknife Gold Mines (Falconbridge), Kerr-McGee, and Hunting Survey Corp., Ltd. I then worked independently as a consultant and contractor, mainly for major companies. From 1969 through 1988, I was a principal of the consulting and contracting firm of Knox, Kaufman, Inc. From 1989 to present I have worked as an independent consultant and prospector.

M. A. Kaufman



	A	B	C) J	1992 : E - 1923	F G H
1	Gus Project	: 2002 Assays				
2						
3	Sample No.	GPS Location (NAD 83)	Au*	Other	Other	Lithology
4						
5	MK-02-2	0481603E,5432585N	1.6 ppb			float black argillite strong Fe/Ox
6	MK-02-3	0481603E,5432605N	133 ppb	97 PPM Mo		float light green(?) argillite or quartzite w/disem. pyrite
7	MK-02-4	0481603E,5432605N	19 ppb	25 PPM Mo	897 ppm As	float black argillite strong Fe/Ox
8	MK-02-8	0480400E,5432180N	1.3 ppb	1.8 ppm Ag		outcrop gray limey argillite w/dissem. pyrite
9	МК-02-9	0481603E,5432605N	2.7 ppb	24 pm Mo		float black argillite w/pyrite dissem. and in veinlets
10	МК-02-10	0481603E,5432592N	12 ppb	58 ppm W		float silicified green argillite or quartzite w/dissem. pyrite
11	MK-02-11	0481603E,5432592N	2.7 ppb			float highly siliceous gneissic quartzite w/dissem. pyrite
12	MK-02-12	0481603E,5432592N	45 ppb			float siliceous dark green quartzite(?) w thin limonite coated qtz veinlets
13	MK-02-13	0481952E,5432210N	3.8 ppb			outcrop gray Laib Fm. phyllite w/qtz lenses and veinlets w/ dissem. pyrite
14		: ; ;******				
15		-				
16	*refer to a	ssay repts, for all ICP re	esults			

	A second	B	C	D	E
1	Gus Project 2002 Asses	s. Rept. Waypoi	nt List		
2					
ં રે	Location*	Waypoint	Coordinates	(NAD 83)	Notes
4					
5	hole GX 1	44	0481737E	5432771N	Pionjar drill hole
6	EM line 0+210SE	32	0482260E	5433007N	
7	Au Showing	66	0482381E	5433046N	small hand driven pits
8	N Au showing	67	0482403E	5433110N	shallow trench
9	ORV DDH	68	0482399E	5432997N	diamond drill hole
10	Claim Post 1,2,3,4	69	0482473E	5433023N	
11	check waypt 44	74	0481727E	5432793N	
12	Davne Mine portal area	83	0482092E	5432990N	•
13	anomalous rock sample	84	0482153E	5433004N	cross fractured silty lime
14	Davne area open cut	85	0482134E	5432958N	exposed quartz lode
15	Davne area open cut	86	0482192E	5432932N	exposed quartz lode
16	check waypt 32	87	0482263E	5433013N	
17	Lucky Strike Mine	89	0482459E	5432823N	middle main workings
18	N end of swmp	90	0482354E	5432993N	Swamp/outcrop boundary
19	final post Gus 10/11	100	0481085E	5432819N	
20	LCP Gus 9	102	0481986E	5433020N	ана на постани и пост
21	LCP Gus 14/15		0481993E	5432555N	
22	Final Post Gus 14/15		0481989E	5432075N] - Ani mananana amina apamananana amina amina amina a si
23	LCP Gus 16		0481510E	5432051N	
24	Final Post Gus 16		0481509E	5432549N	
25		······································	•		
26	*locations can be seen of	on enclosed map	s (waypoints	not shown on m	laps)
27	** for GPS coordinates	of 2002 assay	samples refe	er to assay list	i

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MK-02-06 MK-02-07 MK-02-08 STANDARD DS3	17 2 2 10	152 1194 12 132	150 14 45 31	339 26 58 158	2.9 2.1 1.8 .3	42 106 12 36	23 393 5 14	816 287 300 788	4.84 14.61 1.49 3.33	19 147 5 32	<8 <8 <8 9	<2 <2 <2 <2	<2 <2 5 4	107 124 49 29	6.0 <.5 <.5 5.8	45 <3 <3 5	<3 5 <3 5	28 36 22 73	2.05 1.55 13.60 .54	.104 .204 .037 .084	2 4 10 17	16 16 25 183	.83 .36 7.35 .58	22 15 86 138	<.01 .15 .05 .09	3 6 <3 4	.24 1.28 .97 1.70	.06 .02 .02 .04	.15 .04 .38 .16	2 2 2 6	43.0 24.2 1.3 22.0
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MK-02-10	12	138	11	46	.7	16	13	412	4.45	17	<8	<2	<2	30	.5	<3	- 3	24	1.65 .07	51	11	.39	52	.06	<3 1	.08	.04	.08	58 1	2.1
MK-02-11	6	22	<3	14	<.3	42	7	143	.92	4	<8	<2	8	205	<.5	4	<3	69	3.03 .16	4 12	28	.19	68	.07	<33	5.12	.30	.06	2	2.7
MK-02-12	1	47	<3	28	<.3	37	16	386	2.40	14	<8	<2	6	40	<.5	<3	4	37	.92 .03	8 0	56	.85	52	.09	<3 1	.05	.08	. 16	34	4.8
MK-02-13	1	11	9	22	.5	11	4	788	1.87	3	<8	<2	2	793	<.5	<3	<3	3	15.57 .00	66	13	.33	10	<.01	<3	.24	.01	.03	3	3.8
STANDARD DS4	6	120	33	147	.5	35	12	782	3.09	24	9	<2	4	27	5.1	5	6	76	.53 .09	1 16	163	.58	146	.09	<3 1	.71	.04	.16	6 2	27.2

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11	Aug. 27	1/2 day	\$307.50	data comp/map prep	•
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