

**Ministry of Energy, Mines & Petroleum Resources**  
Mining & Minerals Division  
BC Geological Survey

**Assessment Report**  
**Title Page and Summary**

**TYPE OF REPORT [type of survey(s)]:** Technical, Geological and Geochemical

**TOTAL COST:** \$13138.00

**AUTHOR(S):** Morris A. Kaufman

**SIGNATURE(S):** Morris A. Kaufman

**NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):** none required

**YEAR OF WORK:** 2016

**STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S):** Event Number 5609287, 2016/JUL/05

**PROPERTY NAME:** Gus

**CLAIM NAME(S) (on which the work was done):** 504800, 504804

**COMMODITIES SOUGHT:** silver, gold, lead, zinc copper

**MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:** 19, 62

**MINING DIVISION:** Nelson

**NTS/BCGS:** 82F/3, BCGS 82F004

**LATITUDE:** 49 ° 02 ' 54 " **LONGITUDE:** 117 ° 14 ' 33 " (at centre of work)

**OWNER(S):**

1) Morris A. Kaufman

2) \_\_\_\_\_

**MAILING ADDRESS:**

10805 East 23rd Ave.

Spokane Valley, WA 99206-5677 USA

**OPERATOR(S) [who paid for the work]:**

1) Morris A. Kaufman

2) \_\_\_\_\_

**MAILING ADDRESS:**

10805 East 23rd Ave.

Spokane Valley, WA 99206-5677 USA

**PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):**

Property underlain by Paleozoic Laib fm., Nelway fm. and Active fm. respectively phyllites, limestones and argillites, intruded by felsic bodies. Sediments cut by The Black Bluff thrust fault and later transverse faults. Nelway limestone altered to dolomite breccia. Minor historic production of high grade silver-gold from Lone Silver and other old mines located along the thrust and other faults. Lone Silver ore shoots were in dolomite breccia containing lower grade mineralization.

**REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:** 34166, 33328, 32681, 27915, 27526, 27249, 26981, 26674, 26408, 25704, 25090, 27408, 24199, 23711, 23438, 22921, 23935, 18364, 11452, 10842

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping map old adit locations, and prep		504800	\$2800.00
Photo interpretation new workings map from old data			
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
Soil 71 Au, Ag, multi element ICP		504800, 504804	\$10,000
Silt			
Rock 3 Au, Ag, multi element ICP		504800	\$338
Other			
<b>DRILLING (total metres; number of holes, size)</b>			
Core			
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
<b>PROSPECTING (scale, area)</b>			
<b>PREPARATORY / PHYSICAL</b>			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
<b>TOTAL COST:</b>			<b>\$13138.00</b>

2016 Technical Exploration Report For The Gus Property  
Nelson M.D., B.C.

Title Page

Property Name      Gus

Mining Division    Nelson

Location            Latitude 49 02 54, Longitude 117 14 33

NTS Map Sheet     82 F/3, BCGS 82F004

Claim Owner        M. A. Kaufman, FMC 113753

Operators          M. A. Kaufman, Jack Denny, Robert Denny

Author of report    M. A. Kaufman

Report Year         2016

Claims worked on   504800, 504804

General Work  
Categories          Geological, Geochemical

Work Reported      Create new digital geochemical and mine workings  
maps, soils geochemical surveys

Pertinent related Assessment Reports: 34166, 33328, 32681, 27915, 27526, 27249, 26981, 26674, 26408, 25704, 25090, 24748, 24199, 23711, and 23438. Older reports when the current claim group was held under different claim names include 22921, 23935, 18364, 11452 and 10842. Particularly valuable are reports 22921, which provides a log of the one drill hole testing the East Gold Anomaly, 18364, which provides a map of an extensive soils geochemical survey covering large portions of the current property, carried out by Orvana Corp., and 10842, which describes the last entry into the Lone Silver mine workings.

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1: 500 scale Lone Silver Mine Workings Map

Cross section Lone Silver Mine Adit 1

1:5000 scale North Upland Geochem. Map

1:2500 scale Central Valley Geochem. Map 1:2000 scale West Geochem.  
Anomaly Map

1:1000 scale Lucky Strike Gold Anomaly Map

1:2000 scale West Geochem Anomaly Map

Note: The old property reports were done before the metric system was adopted. In this report, when I provide information from old reports, I sometimes use the original feet instead of metres.

Gus Claim Group, Nelson Mining Division  
British Columbia

Introduction/ Geological Summary

For up-to-date, comprehensive detailed information about the Gus Property, please refer to the 2016 Gus Property Report included with this assessment report. This assessment report only provides detailed description of the 2016 work.

The Gus Claim Group, which occupies 6.35 sq. km. in the Kootenay Arc region, is situated approximately 7.5 km NE of the Canada - U.S.A. Nelway border crossing. The west margin of the claims is along the west shore of Rosebud Lake. Access is by the Rosebud Lake Road, and then by a rough logging road starting just north of Rosebud Lake and going SE to the Lone Silver Mine, and then ENE to what we call the East Gold Anomaly. Beyond this area the road is overgrown, so that the Lucky Strike Mine can now only be reached by walking. One must have a key to access the logging road beyond a locked gate at the north end of Rosebud Lake. Otherwise, access is by walking only, or by the rough BC Hydro power line road south of Rosebud Lake.

In summary; the physiography of the property is characterized by northern and southern upland areas separated by a broad, northeasterly trending central valley. Bedrock is buried under moderate to deep glacial overburden, with only minor outcrop. The area is underlain by the Paleozoic Active, Nelway and Laib sedimentary formations, with thick sections of carbonaceous, silty limestone comprising the Nelway formation, and carbonaceous argillites with lesser limey beds dominating the Active formation. The Laib formation on the property is dominantly comprised of phyllite. The region is traversed by the northeasterly striking, southerly dipping Argillite and Black Bluff thrust faults along with transverse faults cutting the thrusts. Overturned folding has been caused by The Black Bluff fault, which marks the unconformable contact between the overlying, older Nelway formation and the younger Active formation. A small Tertiary, Coryell alkalic plug outcrops just southeast of the property, and similar sills or dykes cut the sediments in the southern upland.

Three mines on the property, Lone Silver, Davne and Lucky Strike, all located in the southern upland, have produced small amounts of very high grade silver/gold ore associated with galena, tetrahedrite, sphalerite and lesser pyrite in fault-vein and replacement deposits. The mines appear to be aligned roughly in the trend direction of the Black Bluff fault. The past productive Jersey lead-zinc and adjacent Emerald tungsten mines are located approximately 6.4 kilometres to the north of the Lone Silver Mine. At the Lone Silver mine, which is located on the leading edge of the Black Bluff fault, there is fine grained, difficult to see mineralization associated with dolomitic breccia and graphitic altered zones. Also, sporadic float and some small outcrops in what we call the East Gold Anomaly exhibit anomalous to high grade Au in silty limestone and limey argillite, some of which is almost invisible.

#### 2016 Work

The 2016 work consisted of a detailed investigation of all old government reports pertaining to the property, and preparation of a digital workings map for the Lone Silver Mine, based on these reports dating from the early 1900s to more recent. As well, new digital maps were prepared for what we call the West Geochem Anomaly, and Central Valley. Maps for the Lucky Strike Mine area and North Upland were updated to show new 2016 sampling.

The following sources were used to compile the Lone Silver map: BC Ministry of Mines Annual Reports 1909 – 1936 (particularly the 1936 Report, Pp. E 16-18) ; B.C. Dept. of Mines Bull 41 by Files and Hewlett and Aris Report 10842 by Percy Shepperd. The accompanying map is my compilation of information provided in the above cited reports. The adit numbers on the map are the same as shown in Bulletin 41.

Field work consisted of B horizon soils geochemical sampling along with minor rock sampling. The soils surveys were carried out in areas where the 1988 Corona Corp. geochemical survey came up with isolated gold anomalies which we have never followed up, and follow up on a Zn-Ag soils anomaly previously found in the North Upland.

Comments about The Lone Silver Mine and the new digital workings map.

For detail, please refer to 2016 Gus Property Report cited above.

The mine is located along the leading edge of the NE striking south dipping Black Bluff thrust fault, which forms an unconformable contact between overlying older Nelway limestone, and underlying younger Active Formation argillite. The Black Bluff fault is a regional structure, but its small exposure at the Lone Silver workings is the only place where it is seen on the whole Gus Property, all the rest of its trace being covered by deep overburden. Bull. 41 describes the Black Bluff fault at the mine as a chaotic system of faults and fractures with variable strikes and dips. It attributes the extensive dolomite breccia, and graphitic rock to alteration respectively of limestone and argillite related to the fault system.

As described in past reports, The Lone Silver mine produced high grade silver-gold ore, along with base metals from ore shoots occurring within Nelway formation dolomitic breccia within larger masses of breccia, which contain lower grade mineralization. Lesser production came from quartz veined shear zones in the Active formation.

Study of the old mine data indicates that the structure is probably far more complex than what is shown on published government maps. For example, the old workings data show sections of black argillite south of the unconformable contact between the Active formation argillite to the north with the Nelway limestone. At this point we do not know whether these argillites represent folded or faulted sections of the Active formation, or strata belonging to the Nelway formation.

A cross section of Adit 1 put together from an old written report describes , from the portal, a plus forty foot “basin” of almost flat dipping dolomitic breccia followed by fault induced steep dipping schistose argillite, followed again by another fault contact with steep dipping dolomitic breccia. Then in Adit 5, which is about 13 metres below Adit 1 Active formation argillite underlies the dolomitic breccia “basin”, probably along a flat thrust. And



then, in Adit 3 there is a long section of argillite extending southerly from the portal until it reaches a fault contact with dolomitic breccia.

Shepperd in Aris Report 10842 states that Adits 1 and 3 both follow narrow, steeply dipping, southerly striking mineralized shear zones. Possibly these could represent transverse faults which have caused the structural complexity mentioned above. He shows the larger stoped areas as irregular pockets off the shear zones or elongate bodies trending roughly easterly-westerly. Possibly, the larger stoped areas might follow faults crossing the narrow southerly shears in the general direction of the Black Bluff fault.

At Lone Silver Mine the past underground sampling is quite limited, but there were some impressive underground samples taken in 1936, and some highly anomalous silver samples taken in 1982. Report 10842 is probably correct in stating that the workings have been thoroughly high graded. But I am impressed by the amount of silver in the dolomitic breccia and graphitic argillite wall rock in places. I am also surprised that some highly anomalous silver assays, particularly in the eastern workings contain no other significant metals values.

In the Lone Silver workings, except in the western adits, the sampled gold values are quite low, indicating to me that the overall high grade gold here came from a few small stopes. Gold values appear more impressive in samples from the Davne, Lucky Strike and East Gold areas.

Most production from the western adits came from irregular ore pockets hosted by Nelway dolomitic breccia, characterized by apparent low sulfide content. Ore minerals in the breccia are mainly galena, sphalerite and tetrahedrite. Much of the breccia wallrock is described as being copper stained, most likely after fine disseminated tetrahedrite. Lesser production came from from Active Formation argillite in lower Adit 5, which was characterized by high sulfide content (pyrite, galena, sphalerite, and chalcopyrite) with quartz found in narrow shear zones. I believe that the dolomitic breccias containing high grades described as "low sulfide" rock, contained more abundant very fine sulfides, difficult to see.

Comments about the Lucky Strike and Davne Mines. BC Ministry of Mines Annual Report 1938 Pp. 18-22.

During 1938 both mines were being developed with minor production. The mines are located 520 metres apart on highland areas separated by a linear northeasterly trending swampy depression (south of what we call The East Gold Anomaly). When one makes a projection of the southeasterly located Lucky Strike structure northwesterly toward the Davne Mine, they appear to be aligned. Both mines are characterized by very narrow fissures containing mainly galena and tetrahedrite with very high grade gold and silver values. For example, the two inch wide Davne fissure assayed in the range of 5.0 opt Au and 193.0 opt Ag.

The described Davne workings consist of a short inclined shaft following the mineralized fissure and two open cuts located respectively 60 and 135 feet southeast of the shaft. The 135 foot distant cut exposes a granular quartz zone about one metre wide, which contains sulfides assaying 374 ppb Au (my sampling). The report also mentions that in the Davne workings there are narrow dikes thought to be diorite, which, because of shearing, have gneissic texture. In my early investigation of the property (1987), I came across a southeasterly trending lower adit portal located approximately 100 metres northwest of the Davne inclined shaft, just south of the main road accessing the East Gold area, probably about 15 metres lower than the inclined shaft. Near this caved adit portal, there was a small pile of dark gray limestone cut by quartz and calcite veinlets with minor visible galena, undoubtedly from this working. A grab sample of this rock pile assayed 2.05 ppm Au, 165.5 ppm Ag, 970 ppm Zn and 32700 ppm Pb. The northwest projection of the Davne structure from this point goes under alluvial cover, where it should intersect the Black Bluff fault trace.

During 1938 the Lucky Strike showing was exploited to 6 metres depth by hand-steel trenching following the strike of the structure. The currently exposed main open cut (from one to two metres wide over a strike length of approximately 30 metres) was largely the result of this work. Beyond this shallow open cut to the southeast are a few shorter cuts exposing wider, sparsely mineralized quartz veins. The only other reported working was a short adit located on strike about 91 metres northwest of and 30 metres lower than the main open cut. Its small dump is comprised of Laib phyllite

with pyrite bearing bull quartz veins, but my assays were negative. As this working never came close to the trench area, the Lucky Strike mineralized zone has never been tested beyond roughly 6 metres depth. The 1938 investigation states that the mineralized zone is about 20 inches wide, and is comprised of parallel, vertical or steep north dipping narrow fissures and/or quartz veinlets following Laib formation phyllites. The veinlets contain mainly galena, tetrahedrite, sphalerite and chalcopyrite. The phyllite is reportedly weathered to 13 foot depth, and near-surface sulfides have been oxidized. Sampling across the structure indicated very high grade Au and Ag, commensurate with its published production numbers (1.3 opt Au and 34.0 opt Ag). Of interest were some wall rock samples of ordinary appearing phyllite which assayed 2.0 to 4.0 opt Ag with up to .02 opt Au. As well, were very sparsely mineralized quartz veins in phyllite which assayed .4 opt Au and 6.0 opt Ag, and larger quartz veins at the southeast end of the cuts, containing very little to no obvious sulfides which assayed from 1.4 to 1.84 opt Au with anomalous Ag. One 2007 chip sample taken of mineralized rock from the south wall of the open cut assayed 30.7 ppm Au, 1260 ppm Ag, 2.45% Pb, 5.2% Zn, 1.6% Cu and 50 ppm W.

### The 2016 Soils Sampling Results and Conclusions

The purpose of this work was to follow up previously reported anomalous gold assays from a 1989 Corona survey presented in Aris Report 18364. This had never been previously done. As well, we followed up and expanded a Zn-Ag anomaly found in our previous work on the North Upland area.

#### North Upland

Refer to accompanying North Upland Map, sample location list and assay certificates. (samples G16 015-036) on Line 5434200

A new line was sampled 200 metres south from previous line 5434400N to determine whether the Zn-Ag anomaly previously found on the northern extends to the south. It does.

Though overburden in this area is probably in the range of one to two metres deep, outcrop is very scarce. The few outcrops seen are argillite or

limey argillite, gray phyllite, and minor quartzite(float); all thought to be Active formation. Based upon available outcrop, it is impossible to come up with any structural picture. Our geochemical work from 2011 to 2016 has found extensive Zn and or Ag anomalous areas on the north part of the Gus property and extending northward and eastward. The overall trend of these anomalies appears to be northerly to northeasterly. Between the anomalous areas, Zn-Ag values drop to considerably lower levels, so my best guess is that the anomalous zones represent broad bands of sediments enriched in Zn-Ag. Possibly, within these broad anomalous areas there could be either strata-bound or structurally controlled zones of economic interest.

#### West Geochem. Anomaly

Refer to accompanying West Geochem. Anomaly Map, sample location list and assay certificates. (samples G16 001-014)

Two short north-south lines were sampled at the B horizon. Their purpose was to test locations where the old Corona survey showed anomalous gold near the south extremity of their survey. The Corona work was done by chain and compass, probably without topographic correction, long before GPS was available. So we could only guess about the true locations of their samples. With the exception of one elevated gold assay (.021 ppm), none of the samples were anomalous for any elements. Although, Corona sample locations are not accurately known, I would guess that the Corona samples might represent erroneous assays, or that their anomalous areas are isolated and small.

#### Central Valley Area

Refer to accompanying Central Valley Map, sample location list and assay certificates (samples G16-037 -049).

With significant ore occurrences and geochem anomalies within the Southern Upland and geochem. anomalies in the Northern Upland, it is not unreasonable to postulate mineralized areas under the deep overburden of the probably fault-controlled Central Valley. But this extensive area remains untested by any viable exploration methods. Our 2016 follow up around one

of the Corona isolated gold anomalies did find some elevated silver and copper, but there is nothing definitive. As well, four Pionjar core holes were drilled in 2002 along a north-south line to test soils east of the corona line. These holes encountered elevated amounts of zinc with some lead in sand/gravel, but nothing in the order of a strong anomaly. Because of the deep overburden covering the valley, it is questionable if conventional soils geochem. sampling is effective here.

### Lucky Strike Gold Anomaly

Refer to accompanying Lucky Strike Map, sample location list and assay certificates (samples G16-050- 071).

Three north south lines were sampled to follow up isolated gold anomalies found in the 1989 Corona survey. Only three anomalous samples were detected. G16-67 assayed 1.47 ppm Au, 5.1 Ag and 503 ppm Pb, and G16-68, assayed .032 ppm Au with anomalous Pb. Sample 67 being located close to the west end of the Lucky Strike trench, is likely influenced by proximity to mineralized waste rock. Sample 68, located 25 metres north and down a gentle slope from sample 67, could be caused by underlying anomalous rock, or could be by drainage or soil movement from the sample 67 location. If it is real it could indicate a width extension of the Lucky Strike mineralized zone.

Sample 53, which assayed .02 ppm Au might expand the Lucky Strike gold anomaly slightly to the east.

All of the other samples are negative. We had hoped to expand the Au soils anomaly significantly eastward, but were unsuccessful.

M. A. Kaufman, P. Eng.

June 30, 2016

Statement of Qualifications M. A. Kaufman

I, M. A. Kaufman hereby state that I have worked as a mining geologist for 60 years, with a short interruption for military service.

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 in the province of British Columbia.

From the period 1955 - 1965 I worked for the major companies Kennecott Copper Corp., Kerr-McGee Corp., Giant Yellowknife Gold Mines Ltd. (a Falconbridge company), and Hunting Survey Corp., Ltd. During 1963 I worked for the State of Alaska Division of Mines and Minerals. From 1965 to 1969 I worked independently as a consultant and contractor for major companies. From 1969 through 1989, I was a co-founder and a principal of the consulting and contracting firm of Perry, Knox, Kaufman, Inc. and its successor Knox, Kaufman, Inc. These companies specialized in carrying out mineral exploration and development projects for major mining and oil companies. From 1990 to present I have worked as an independent consultant and prospector.

M. A. Kaufman

Gus Claim Group, Nelson Mining Division  
British Columbia, 2016 Report

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Pertinent Past Reports.

Assessment Reports: 34166, 33328, 32681, 27915, 27526, 27249, 26981, 26674, 26408, 25704, 25090, 24748, 24199, 23711, and 23438. Older Assessment reports when the current claim group was held under different claim names include 22921, 23935, 18364, 11452 and 10842. Particularly valuable are reports 22921, which provides a log of the one drill hole testing the East Gold Anomaly, 18364, which provides data for an extensive soils geochemical survey covering large portions of the current property, , and 10842, which describes the last entry into the Lone Silver mine workings. Also: BC Ministry of Mines Annual Reports 1936 and 1938, and BC Dept. of Mines Bull 41 provide valuable geological and mines workings information.

Note: The old property reports were done before the metric system was adopted. In this report, when I provide information from old reports, I use the original feet instead of metres.

Gus Claim Group, Nelson Mining Division  
British Columbia

Location/History

The Gus Claim Group, which occupies 6.35 sq. km. in the Kootenay Arc region, is situated approximately 7.5 km NE of the Canada - U.S.A. Nelway border crossing, and 15 Km. south of Salmo. The west margin of the claims is along the west shore of Rosebud Lake. On Jan. 25, 2005 the old claim group comprised of mineral claims Gus 1 - 16 was converted to Mineral Claim Tenure # 504800. At this time a new claim, Gus 1 (Tenure # 504804) contiguous with 504800 on its west margin, was acquired. Situated within Tenure #504800 are three old mines (Lone Silver, Davne and Lucky Strike), which have produced small amounts of very high grade silver-gold ore.

Access is by the Rosebud Lake Road, and then by a rough logging road starting just north of Rosebud Lake and going SE to the Lone Silver Mine, and then ENE to an area which we have designated as the East Gold Anomaly, which is beyond the Davne Mine. The old road from East Gold to the Lucky Strike Mine is presently overgrown, so that it can only be reached by walking. One must have a key to access the logging road beyond a locked gate at the north end of Rosebud Lake. Otherwise, access is by walking, or by the rough BC Hydro line road south of Rosebud Lake.

Prior to my involvement with the property, there was sporadic mining activity from the early 1900s to World War II, and during 1962-1963. During 1981-1982 some of The Lone Silver workings were reopened and mapped, but no further work is evident since my first examination of the property in 1987, on behalf of Lacana Mining Corp.

After acquiring the property in 1988, Lacana (later Corona) carried out extensive soils and rock geochemical surveys. This work discovered four anomalous areas, which I have designated as the Lucky Strike Gold Anomaly, the East Gold Anomaly, the Saddle Area, and the West Geochemical Anomaly. In 1992 Orvana Minerals Corp. optioned the claims from Corona, and drilled one hole to test one locality on the East Gold Anomaly. This hole cut several anomalous gold intercepts found in altered



silty limestone of the Nelway formation. Orvana relinquished its option as the hole did not come up with economic mineralization. After Corona merged with Homestake, Homestake dropped the claims sight unseen. In 1994 I acquired some of the ground by staking, and subsequently expanded the holdings over several years. From 1994 through 2016 I have carried out geological, geochemical and geophysical work, excavator digging, and core drilling. The claims currently are valid until 2021.

### Summary Geology

The Gus Property, which is located within a very active area of past mining and present exploration, is contiguous on its north edge with Sultan Mineral's claims containing the historic Jersey Zn-Pb and Emerald Tungsten Mines, recently drilled by Margaux Resources Ltd. The district is tightly staked, but the 6.35 square kilometers Gus ground contains all of the obvious, known targets south of the Jersey, and would be adequate for operational purposes.

The physiography of the area is characterized by a central plus .5 kilometre wide, NE trending valley separating north and south upland areas. The valley is covered by deep glacial overburden, while the uplands are covered by overburden of variable depth with sparse outcrop areas.

The property is located within the Kootenay Arc where there is a northeasterly bend from the predominant north trend. The dominant lithologies are the Lower Cambrian Laib formation, consisting mainly of phyllites, the Middle Cambrian Nelway formation, consisting mainly of silty limestone, and the Middle Ordovician Active formation, consisting mainly of carbonaceous argillites with lesser limey units. Just south of the property is a small Tertiary Coryell alkaline stock, and within the southern upland, dikes and sills of highly sheared granodiorite and more felsic intrusive rocks are seen, often showing gneissic texture. The sedimentary section on the property is found within the overturned west limb of the extensive, northerly trending southerly plunging Sheep Creek anticline. The anticline has resulted

in steep northerly trending folding. It has been traversed by two northeasterly striking, southerly dipping thrust faults, the Argillite and the Black Bluff, which have resulted in northeasterly trending folding superimposed on the older folding. The thrusts are cut by steep dipping, northerly trending transverse faults. As a result of the Black Bluff fault, the sedimentary section is overturned. At the Lone Silver Mine, the only exposure of the fault on the property, the Black Bluff fault forms an unconformable contact between the overlying, older Nelway limestone and the underlying, younger Active strata.

#### Comments about the Black Bluff Fault.

The Black Bluff Fault has been mapped as a thrust as described in B.C. Div. of Mines Bull. 41 and it probably is, as is evidenced by recumbent folding south of the Lone Silver Mine. However, where its toe is exposed at surface, the dip of the fault is quite variable, often steep to the south, appearing more like a reverse fault than a thrust. A geologist, who did an experimental VLF EM survey crossing the trace of the fault under overburden west of the Lone Silver mine, has told me that the fault was detectable, and that his work suggested a steep dip. From my observations of some thrust faults in the Banff region of the Rockies, the thrusts often transcend from gentle to steep dip as they approach their leading edges. Possibly, this is what we are finding with the Black Bluff, or the fault plane might have been affected by later folding.

#### Nearby Mineralized Areas Compared to Gus

A report presented by Suzanne Paradis of the GSC at the 2006 Vancouver Exploration Roundup, cited several mines in the Kootenay Arc area as Irish Type Pb-Zn-Ag strata-bound sulfide bodies. These include the Reeves MacDonald and the Jersey Mines, which are respectively located 7.2 km WSW and 6.4 km NNE from the Lone Silver mine. Though the Jersey Pb-Zn deposit might be classified as Irish type strata-bound mineralization, the immediate area contains other occurrences, including the Emerald skarn tungsten mine, historically, the second largest tungsten producer in Canada. And underlying the Jersey-Emerald mines is a quartz stockwork

molybdenum occurrence associated with a subjacent granitic intrusion, which has been explored by Sultan Minerals Corp. Sultan has also found an intrusive related gold showing on the property as well as sedex Zn, Ag, Cu, Ba mineralization in Active Formation black argillite. In comparison to nearby areas, the mineralogy at the Gus mines differs in that the mineralized zones here contain almost ubiquitous tetrahedrite. The Gold/silver tenor is almost nil in the district's zinc-lead mines, while it is high at the Gus mines.

### Gus Mines and Geochemical Anomalies

The Gus's mines and anomalies, which are found along a 1.5 km ENE trend roughly following the direction of the Black Bluff thrust fault, are all located in the southern upland area. The mines are characterized by very high grade silver - gold accompanied by lead, zinc and copper.

#### Lone Silver Mine

Refer to accompanying Lone Silver Workings map

Production has been 236 tons averaging .55opt Au, 126.84 opt Ag, 2.5% Cu, 3.7% Pb and 2.5% Zn. The main productive periods were 1909-1916 and 1936-1941, with minor production during 1962-1963. During 1982 two of the old adits were reopened, and some sampling was accomplished. Production figures are from Aris Report 10842.

Interestingly, the mine is located on the surface trace of the Black Bluff thrust fault. BC Bulletin 41 describes the fault in the mine workings as a zone of chaotic faulting and fracturing with highly variable orientations. Upper plate tetrahedrite - galena ore occurs in shoots within dolomite breccia, which has been caused by alteration related to the faulting. Lower plate, pyritic high sulfide ore occurs in shear controlled quartz veins cutting argillite. Associated with both upper and lower plate mineralization are graphitic zones, which often contain anomalous silver/base metals values.

None of the Lone Silver adits are now accessible. The workings consist of six southerly trending, flat adits driven into a steep north

slope over an east-west distance of about 100 metres. Two of the adits extend more than 60 metres. Examination of old reports indicates that the adits have been high graded, but a number of assay samples, particularly of dolomitic breccia wall rock contain lower grade but interesting silver values along with sporadic gold. Aris Report 10842 states that the main Lone Silver adits followed narrow, steep dipping, southerly striking mineralized shear zones, and that the larger stoped areas were irregular pockets or more extensive linear shoots crossing the shear zones, and roughly following the northeasterly trend of the Black Bluff fault.

Almost all of the obvious mineralized specimens have been removed from the old dumps, leaving fine-grained gray muck. Two samples taken by indiscriminately digging test holes in the easternmost dump (from Adit #3) yielded anomalous silver assays. One of the samples, probably consisting of crushed dolomitic rock assayed 21 g/t Ag, and the other, probably composed of carbonaceous rock, assayed 50 g/t Ag. Both samples contained anomalous Pb-Zn, and the latter contained anomalous Cu and Sb. To the eye, this mineralized material could be classified as "noseeum." I am guessing that it contains finely disseminated galena, sphalerite and tetrahedrite. As these samples were taken from the toe areas of the dump, it is assumed that they represent rock from the farthest extent of the southeasterly trending adit.

The dolomitic breccia appears to be quite extensive. My sampling suggests that there is at least weakly anomalous silver, lead and/or zinc wherever this unit has been sampled, sometimes accompanied by copper and tungsten. The rock is leached and oxidized, possibly diminishing silver values. In addition, I have found in dump material another possible mode of mineralization in apparently barren graphitic rock, which is weakly to strongly anomalous in silver, and/or lead and/or zinc. Some of this rock exhibits a sheen probably indicative of invisible, abundant fine sulfides. I am not certain exactly what this graphitic material represents. It could be in discrete beds, or, possibly, highly sheared carbon-rich zones. The underground maps provided by Bull. 41 and Report 10842 indicate extremely complex structure. Bands of (Active Fm.?) black argillite are

found southeast of the mapped surface trace of the Black Bluff fault. This might be the result of complex folding and/or faulting, or possibly argillite beds within the Nelway package. The contact between argillite found in Adit 5, 13 metres lower than the overlying dolomite found in Adit 1, is most likely thrust related.

The workings maps in the eastern area, located more than 100 metres east from the western Adits 1 and 5, indicate that Adit 3 follows an extensive section of black argillite from its portal until it reaches a fault contact with dolomite breccia. Within this dolomite breccia an easterly-westerly trending stope about 30 metres long and 10 metres wide is shown. This mineralized zone appears to extend further east and upward to the Adit 4 area. The dolomite breccia terminates along a roughly easterly-westerly striking fault exposed by an extensive cross cut at the Adit 3 face located approximately 60 metres southeasterly from the portal.

Most production from the western adits came from irregular ore pockets hosted by Nelway dolomitic breccia, characterized by apparent low sulfide content. Ore minerals in the breccia are mainly galena, sphalerite and tetrahedrite. Much of the breccia wallrock is described as being copper stained, most likely after fine disseminated tetrahedrite. I believe that the breccia, because the sulfides are very grained contains considerably greater sulfide content than noticed by the early workers. Lesser production came from Active Formation argillite in lower Adit 5, which was characterized by high sulfide content (pyrite, galena, sphalerite, and chalcopyrite) with quartz found in narrow shear zones.

## Sampling

### Western Adits:

Limited sampling of parts of the workings described in the 1936 Annual Report shows some interesting assays. In Tunnel 1, on a stope wall about 30 feet from the portal, a vertical sample assayed as follows: A 26 inch sample of sheared dolomite assayed .01 opt Au, 71.0 opt Ag, 8.0% Cu, 7.0% Pb and 9.5% Zn. An underlying 14 inch sample of dolomite breccia assayed .12 opt Au, 5.0 opt Ag, .1% Cu, nil Pb and 3.0% Zn. And an underlying sample of

vein material assayed .9 opt Au, 33.5 opt Ag, 1.2% Cu, 3.0% Pb and 3.0% Zn.

Sheppard's 1982 Aris Report 10842 describes investigation of Tunnel 1 which they reopened at this time. Two samples of argillite from near the adit face contained weakly anomalous Ag with no Au, while one sample of dolomite breccia wallrock to the north assayed 1.2 opt Ag. Fyles and Hewlett reported similar results.

#### Eastern Adits:

Only two samples were taken from Adit 3, both near the eastern margin of the extensive, roughly easterly-westerly crosscut located at the face of the workings about 60 metres southerly from the portal. The samples, which were reported as sheared argillite, contained respectively 2.0 and 3.0 opt Ag. Two samples of dolomitic breccia from the portal area of Adit 4 showed weakly anomalous silver, and a sample of dolomitic breccia over 8 feet in the open cut east of Adit 4 assayed 6.87 opt Ag and .012 opt Au.

Sampling in #4 Adit, (labeled #2 in Sheppard's report) at the face of the drift, of copper stained quartz carried no Au, but 16.0 opt Ag. Sampling of dolomite breccia at this location assayed 1.0 opt Ag with no other values, and a sample of breccia at the roof of this adit at its collar assayed 2.4 opt Ag with no other values. It is interesting that the anomalous silver values here are not accompanied by other elements.

Adit 2 shown on the workings map is approximately 61 metres long, but none of the old reports provide any geological information pertaining to it. One sample of dolomite breccia taken by myself from the Adit 2 dump assayed .17 g/t Au and 4.14 opt Ag along with highly anomalous Pb, Zn, Cu and W.

#### Lucky Strike and Davne Mines. Refer to accompanying Lucky Strike Map

During 1938 both mines were being developed, providing minor production. The mines are located 518 metres apart on highland areas separated by a

linear northeasterly trending swampy depression (south of what we call The East Gold Anomaly). When one makes a projection of the southeasterly located Lucky Strike structure northwesterly toward the Davne Mine, they appear to be aligned. Both mines are characterized by very narrow fissures containing mainly galena and tetrahedrite with very high gold and silver values. For example, the two inch wide Davne fissure assayed in the range of 5.0 opt Au and 193.0 opt Ag. The Davne fissures cut Nelway Formation silty and carbonaceous limestone, while the Lucky Strike mineralized zone follows Laib formation phyllite.

The Davne workings consist of a short inclined shaft following the mineralized fissure and two open cuts located respectively 60 and 135 feet southeast of the shaft. The 135 foot distant cut exposes a granular quartz zone about one metre wide, which contains sulfides, mostly pyrite, assaying 374 ppb Au. The report also mentions that in the Davne workings there are narrow dikes thought to be diorite, which, because of shearing, have gneissic texture. In my early investigation of the property, I came across a lower, southeasterly trending adit (now caved) located approximately 100 metres northwest of the Davne inclined shaft, just south of the main road accessing the East Gold area, probably about 15 metres lower than the inclined shaft. Near this adit portal, there was a small pile of dark gray limestone cut by quartz and calcite veinlets with minor visible galena, undoubtedly from this working. A grab sample of this rock pile assayed 2.05 ppm Au, 165.5 ppm Ag, 970 ppm Zn and 32700 ppm Pb. The northwest projection of the Davne structure from this point goes under deep alluvial cover, where it should intersect the Black Bluff fault trace.

During 1938 the Lucky Strike showing was exploited to twenty foot depth by hand-steel trenching following the strike of the structure. The currently exposed main open cut (from one to two metres wide over a strike length of approximately 30 metres) was largely the result of this work. Reported production from this effort was 55 tonnes assaying 44.2 grams/t Au and 1166.0 grams/t Ag. Beyond this shallow open cut to the southeast are a few shorter cuts exposing wider, sparsely mineralized quartz veins. The only other reported working was an adit located on strike about 300 feet northwest of and 100 feet lower than the main open cut. The small adit dump indicates that it was far too short to reach under the open cut. This dump is comprised of Laib phyllite with pyrite bearing bull quartz veins, but assays

were negative. So, the trench area has never been tested beyond roughly 20 foot depth. The 1938 investigation states that the mineralized zone is about 20 inches wide, and is comprised of parallel, steep north dipping narrow fissures and/or quartz veinlets following Laib formation phyllites. The veinlets contain mainly galena, tetrahedrite, sphalerite and chalcopyrite. The phyllite is reportedly weathered to 13 foot depth, and near-surface sulfides have been oxidized. Sampling across the structure indicated very high grade Au and Ag, commensurate with its published production numbers. Of interest were some wall rock samples of ordinary appearing phyllite which assayed 2.0 to 4.0 opt Ag with up to .02 opt Au. As well, were very sparsely mineralized quartz veins in phyllite which assayed .4 opt Au and 6.0 opt Ag, and wider quartz veins at the southeast end of the cuts, containing very little to no obvious sulfides, which assayed from 1.4 to 1.84 opt Au with anomalous Ag. A 2007 sample taken of mineralized Laib phyllite wall rock from the south wall of the workings assayed 30 ppm Au and +100 ppm Ag.

There appears to be some possible metals dispersion away from the Lucky Strike mined shoot as indicated by a weak bulbous shaped gold soils anomaly in the area.

#### East Gold Anomaly

The East Gold Anomaly is situated just north of the above cited swampy depression. Satellite observation corroborated by a VLF EM survey suggest that the northeasterly trending, linear swamp is fault controlled. It is doubtful that this gold anomaly would ever have been recognized had Corona not carried out a soils survey. On cursory examination there is little evidence of mineralization, but gold assays as high as 11.0 grams/t have come from grab samples of ordinary appearing limey siltstone. The anomalous gold occurs with finely disseminated pyrite, often accompanied by galena, tetrahedrite and sphalerite.. The anomalies are found in an area of outcrop and shallow soil cover extending over a distance of 300 metres in a northeasterly direction. They occur in irregular pockets with no obvious orientation. The stronger zones, which are found at the south end of the area, are bounded by alluvial cover to the west. Outcrops within the East Gold Anomaly show steep E dipping NNE striking bedding intersected by steep dipping WNW fracturing. The predominant rock type is thinly



bedded Nelway silty limestone often showing subtle remobilized carbonate and fine micaceous minerals. In places, where WNW fracture zones are filled with carbonate minerals with lesser quartz, minor tetrahedrite, galena and pyrite is seen, mainly in the carbonate. When one closely examines these areas, there is in some localities subtle evidence of fine limonitic boxworks following the formational bedding.

A northwesterly oriented Orvana - 60 degree angle drill hole, which traversed the outcropping area just south of the anomalous area intersected thin bedded silty limestone and dolomitic limestone. Dike/sill swarms of sheared and pyritized felsic intrusive make up 20% of the rock from 50 to 95 metres down the hole, after which they comprise 50% of the rock. Minor fine disseminated pyrite was ubiquitous throughout the hole, with 1-3% pyrite, often accompanied by minor galena, tetrahedrite and sphalerite, occurring in shear and breccia zones containing calcite-quartz veinlets. Anomalous gold was found in four widely spaced zones from 143 feet to 451 feet down the hole. The anomalous intercepts are up to 16 feet wide with the best assay at 2.1 grams/t Au over 3 feet. It should be stated that Orvana spot assayed, and a lot of the core was never assayed. It is probable that the intersected mineralized intervals are oriented northeasterly following the predominant bedding direction. According to the Orvana drill log, the hole never reached the "lower plate" Active formation.

Two excavator pits dug through the overburden west of the outcrop area encountered respectively some silicified float which carried above background gold, and a jasperoidal vein which contained weakly anomalous lead. A third pit uncovered phyllite with no mineralization. One wonders what formation the phyllite found in the third pit might represent? If it is Laib Formation, it could indicate a transverse fault contact with the Nelway rocks immediately to the east.

### Saddle Area Geochemical Anomaly

The "Saddle Area", which is located approximately in the centre of the Gus property and 370 metres east from the Lone Silver Mine workings, is a north-south trending, 500 metre wide saddle between two ridges located respectively east and west of it. The whole saddle area, which is covered by

deep glacial overburden, is near and at the top of a moderate north facing slope. This area looks interesting geologically because it should be underlain by two intersecting major structures, the NE striking, south dipping Black Bluff thrust fault, and the northerly striking, steep dipping Styx Creek transverse fault.

The area is crossed by two old Corona soils lines, and has been explored by several excavator pits, one shallow "Pionjar" soils hole, and one diamond drill hole which failed to reach bedrock. Sample analyses from surface, pit bottoms and Pionjar holes indicate sporadic elevated to anomalous gold values, as well as silver and other elements. This area will be described in detail under the section describing targets.

### West Geochemical Anomaly

Refer to accompanying 2016 West Geochem Anomaly map

The West Geochemical Anomaly consists of an ENE trending, 450 metres long zone located about 200 metres SW of the Lone Silver Mine workings. The soils here are weakly to strongly anomalous in Pb, Ag and Zn with some sporadic Au. The anomalous areas are characterized by relatively narrow, northeast trending Ag and isolated Au zones surrounded by more extensive areas anomalous in Pb and/or Zn. The anomaly is situated on a steep north slope flattening to the north as it reaches the Central Valley. Soils on the steeper slopes are probably shallow (say less than one to two metres thick), but, as the slope becomes gentle to the north we are dealing with deep overburden of unknown thickness. On the accompanying map, the line between deep overburden to the north and shallower overburden would roughly follow Line 50S. The trace of the Black Bluff fault should pass southwesterly under the deep overburden north of the geochem. anomaly. So the anomaly appears to be located in the upper plate of the fault. It is possible that the anomaly might extend further north under the deep overburden. Along Corona Line 400W there is a protrusion of anomalous soils into the deep overburden area.

One very small outcrop is seen at the east end of the anomalous area, and some float and outcrop are found at its west extremity. The outcrops and float are in all cases dolomitized or marbleized Nelway limestone. The

eastern outcrop strikes northeasterly and dips steeply south, while the western outcrop strikes northeasterly and dips moderately to the south. The source of the anomaly is not certain. Possibly it could be mineralized fractures related to the Black Bluff Fault, or it could be dolomitic breccia similar to the altered rock found at the Lone Silver Mine, or some combination of both.

The scattered high gold anomalies found by Corona's 1988 work at the far south of the survey lines, could not be corroborated by our 2016 work. The Corona survey was done before GPS was available, so we had to make an educated guess as to the true anomalous locations. As our follow up was quite negative, I am satisfied that the Corona anomalous readings were either spurious or very isolated.

### North Upland Area

Refer to accompanying North Upland Map

Though overburden in this area is probably in the range of one to two metres depth, outcrop is very scarce. The few outcrops seen are all argillite or limey argillite with minor gray phyllite and quartzite, all thought to be Active formation. Based upon what we have seen it is impossible to come up with any structural picture. Our geochemical work from 2011 to 2016 has found extensive Zn and or Ag anomalous areas on the north part of the Gus property and extending northward and eastward. The overall trend of these anomalies appears to be northerly to northeasterly. Between the anomalous areas, Zn-Ag values drop to considerably lower levels, so my best guess is that the anomalous zones represent broad bands of sediments enriched in Zn-Ag. Possibly, within these broad anomalous areas there could be either strata-bound or structurally controlled zones of economic interest.

### Past Drilling at the Gus Property

To date only three holes have been drilled on the property. Two successfully tested bedrock, and one was lost in overburden. The hole

drilled by Orvana on the East Gold anomaly is described above.

A 2005 hole (G-1) was drilled southwesterly, parallel to stratigraphy, from the west side of the swamp to intersect at depth the southeasternmost Davne mineralized trench described above. With the exception of a narrow dike of sheared granitic rock, the hole was in carbonaceous limestone for its entire length. The limestone contained ubiquitous calcite veining and disseminated pyrite. The only anomalous assays were weakly anomalous copper associated with the granitic dike, and a narrow intercept of weakly anomalous gold at the depth projection of the Davne trench.

The third hole, drilled in 2005 (G-2), was designed to test the strong EM conductor in the Saddle area. Unfortunately the hole was lost at 37 metres depth before reaching bedrock, as a result of drillers not casing deep enough.

### Gus Property Specific Target Areas

#### Saddle - Lone Silver Mine - West Geochemical Anomaly Area

This target, which follows the Black Bluff Thrust trend for approximately one kilometre, is best discussed as three separate target areas. This target area has never been drilled, except for Hole G-2 which did not reach bedrock.

#### Saddle Area

Corona NW-SE soils geochem. survey line (400E) run through the saddle detected elevated to anomalous gold and lead values, the highest reading being 480 ppb Au. Subsequent testing by Pionjar soil coring found anomalous gold (102 ppb) at two metres depth in the one Pionjar hole drilled in the Saddle area, and excavator digging found sporadic elevated to weakly anomalous gold in some of the rock fragments dug up. Neither the Pionjar hole nor the excavator pits, which reached 5 metres depth, encountered bedrock. A 2013 E-W geochemical line sampling the Ah horizon failed to detect any anomalous readings over the Saddle. In summation, the

geochemical work here has indicated sporadic anomalous values. In 2004 a horizontal loop max min EM (HLEM) survey was conducted to test the Saddle Area. This work detected an extensive zone of conductivity over the target area. The anomaly is T shaped with a roughly N-S component following the postulated trend of the Styx Creek fault, and an ENE trending component marked by a very strong, northerly dipping conductor up to 50 metres wide found along the north margin of the overall anomaly. The ENE component, which follows the postulated strike of the Black Bluff Fault and the strata bedding, is open to the NE and SW. Possibly, its northerly dip might be explained by the anomaly being related to recumbent folding of a sedimentary unit, or a folded portion of the fault zone.

In 2005 a core drill was brought in to test this conductive zone with a - 45 degree hole. Unfortunately, the hole (G-2) was lost at 37 metres (approx. 25 metres vertical depth below surface) still in overburden. The hole was lost because the drillers failed to case it after seven metres. I believe that the hole then wandered off course until the drill could no longer turn in the clay overburden. So the true vertical depth reached is probably considerably less than 25 metres. The hole did return small amounts of the clay overburden containing small rock fragments. The rock fragments were pyritized and silicified gray/black argillite, which resembles the altered Active Formation argillite comprising the footwall ore at the Lone Silver Mine. Samples of these fragments, which were assayed, generally showed elevated to weakly anomalous gold. The last few metres from the bottom of the hole, which was comprised mainly of clay with a few small siliceous fragments were also assayed. Interestingly, both assays contained anomalous tungsten (up to +100 ppm), anomalous silver and weakly anomalous copper. So what we have in this broad target area are yet untested strong conductors, which I believe are caused by moderately to steeply dipping high carbon concentrations following the intersecting Styx Creek and Black Bluff faults.. At Adit 3 located 380 metres to the west, graphitic rock with fine disseminated sulfides contains anomalous silver and base metals. It appears to be an alteration feature often closely associated with dolomite breccia.

### Lone Silver Mine

In Aris Report 10842, Shepperd concluded that the existing workings have

been thoroughly high graded. He does note, though that the widespread anomalous dolomite breccia might provide a larger, lower grade target. He also stated that there has been no exploration down dip of the Black Bluff fault. Also, he noted that because of deep alluvium, other mineralized zones might be hidden.

As no drilling has been done here, and the workings are flat, drilling to test the southward down dip projection of the Black Bluff fault is a good exploration possibility. There are two problems though. First; we do not have a good handle on the structure. From the few outcrops seen and limited mapping underground, it appears that the dominant strata strike direction is east to northeast, and dips are predominantly moderate to the south (refer to Workings Map). However, the structure is probably far more complex than we can envision. For example, a cross section of Adit 1 which I put together based on historic mapping, indicates a gently dipping “basin” of dolomite breccia for 45 feet from the portal, followed by sharp folding related to faults. Also, historic mapping of Adit 3 shows an extensive section of argillite from the portal inward. This is difficult to explain if this argillite is Active formation unless the Black Bluff fault might be displaced by transverse faulting. The second concern is that the adits penetrate a steep north slope, and there would be some difficulty in drill access.

One lead that we do have with present information is the probability of a conductor detected under overburden at the western extremity of the EM survey done in the Saddle area. This anomaly was found a few metres downslope (north) from the toe of the Adit 3 dump. It could possibly be a westerly extension of the northeast component of the Saddle conductor located 380 metres to the east. A 2013 E-W Ah horizon geochem. line traversing several metres north of the EM line detected anomalous silver and base metals in three samples over a length of 100 metres. The westernmost sample could have been influenced by the dump, but the two eastern samples 50 metres apart could be coming from subsurface.

### West Geochem Anomaly

As mentioned above, this extensive anomaly could extend northward under deepening overburden into the central valley from its apparent north margin.

Except for the soils surveys, no meaningful exploration has been undertaken here. As described above, the anomaly is located in the upper plate of the Black Bluff Fault. It would be worthwhile to do EM work to try to find the leading edge of the fault under the deep overburden. Then we might have a drill target between the toe of the fault and the geochem. anomaly.

#### East Gold Anomaly

Neither the surface expression of the anomaly nor the Orvana drill hole indicate any obvious ore situations, but they do show enough “smoke” to possibly point to something nearby. The Orvana drill hole was sufficiently favourable to warrant follow up. A parallel offset hole crossing the swamp area south of the Orvana hole might be considered, as this would cross an area where a conductor has been detected by VLF EM surveying, possibly coincident with postulated transverse faulting. Also, the deeper anomalous gold intercepts in the Orvana hole actually lie under overburden cover of the central valley indicating possible potential under this extensive overburden covered area.

#### Davne – Lucky Strike Area

A single angle drill hole to cross the Lucky Strike mineralized structure at depth might be considered, as there has never been any drilling here.

#### Central Valley Area

With significant ore occurrences and geochem anomalies within the Southern Upland and geochem anomalies in the Northern Upland, it is not unreasonable to postulate mineralized areas under the deep overburden cover. But this extensive area remains untested by any viable exploration methods. I consider the Corona soils survey results covering this area to be questionable because of the depth and nature of the overburden. Our 2016 follow up around one of the their gold anomalies did find some elevated silver and copper, but there is nothing definitive. As well, four Pionjar core holes were drilled in 2002 along a north-south line to test soils east of the

corona line These holes encountered elevated amounts of zinc with some lead in sand/gravel, but nothing in the order of a strong anomaly.

## North Upland

The extensive zinc and/or silver soils anomalies detected thus far on widely spaced lines are of interest.

### Recommended Work

Although we have three established drill targets with current information (a repeat of Hole G-2 in the Saddle, a hole to cross the EM anomaly in the swamp south of the Orvana hole in the East Gold Anomaly, and a hole to test under the Lucky Strike workings), I would first recommend a high quality electromagnetic and magnetic survey, possibly airborne.

In the whole Saddle-Lone Silver-West Geochem. target it would be helpful if we could define the leading edge of the Black Bluff fault, which, except for a very small exposure at the Lone Silver Mine, is buried by deep overburden. Our limited EM work at the Saddle, and the VLF EM work carried out by another party north of the West Gechem. Anomaly indicates that fault traces are detectable as conductors. If we could detect the toe of the Black Bluff fault as well as transverse fault intersections, it could define good drill targets.

The proposed geophysical work might also be useful to delineate faults under the swamp immediately south of the East Gold Anomaly, at the Lucky Strike Mine, and in the Central Valley and North Upland..

The geophysical survey should be run in two directions, one set of lines with a northerly orientation across the predominant bedding and thrust fault strike, and the other easterly-westerly across the transverse fault direction.

An initial step in further exploring The North Upland would be more detailed further geochem. soils sampling.

M. A. Kaufman, P. Eng. June 27, 2016



Statement of Qualifications M. A. Kaufman

I, M. A. Kaufman hereby state that I have worked as a mining geologist for 60 years, with a short interruption for military service.

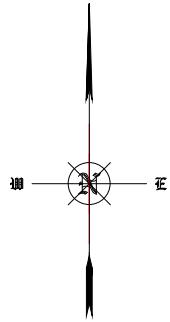
I received an A. B. degree in geology from Dartmouth College in 1955, and an M. S. degree in geology and mining engineering from the University of Minnesota in 1957.

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

From the period 1955 - 1965 I worked for the major companies Kennecott Copper Corp., Kerr-McGee Corp., Giant Yellowknife Gold Mines Ltd. (a Falconbridge company), and Hunting Survey Corp., Ltd. During 1963 I worked for the State of Alaska Division of Mines and Minerals. From 1965 to 1969 I worked independently as a consultant and contractor for major companies. From 1969 through 1989, I was a co-founder and a principal of the consulting and contracting firm of Perry, Knox, Kaufman, Inc. and its successor Knox, Kaufman, Inc. These companies specialized in carrying out mineral exploration and development projects for major mining and oil companies. From 1990 to present I have worked as an independent consultant and prospector.

M. A. Kaufman

	A	B	C
1	Gus Claims 2016 Costs		
2			
3			
4	MAK @ \$800/day	Data comp for	\$1,600.00
5		new maps	
6		Design 2016 project	\$800.00
7			
8		Field visit with contractors	\$1,600.00
9			
10		assay data comp	\$800.00
11			
12		design new maps with	\$800.00
13		draftsman	
14			
15		prep 2016 detailed Gus	
16		report	\$1,600.00
17			
18		prep assessment report	\$800.00
19			
20			
21	Contractors		
22	Jack and Bob Denny		\$2,378.20
23	ALS assays		\$129.63
24	ALS assays		\$1,805.88
25			
26	Drafting		
27	W. Reich		\$484.50
28	W. Reich		\$2.55
29			
30			
31	MK Field Expenses		
32	Mileage		
33	4x4 Toyota	432 km @ .56/km	\$241.92
34	Hotel		\$89.27
35	meals		\$6.84
36			
37	Total		\$13,138.79



GUS 7

GUS 5

LEGEND



Sample point showing  
 Au ppm, Ag ppm, Cu ppm  
 2016 Au assay results are in ppm.  
 Corona Au results are in ppb.  
 All other element results are in ppm.

482000 E.

GA  
 0-50  
 255  
 1005  
 2405

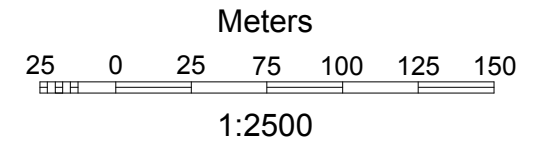
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 G16-041 -0.001, 0.4, 11  
 G16-042 -0.001, 0.4, 11  
 G16-043 -0.001, 0.4, 15  
 G16-044 -0.001, 0.5, 14  
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 G16-046 -0.001, 0.4, 14  
 G16-047 0.003, 0.4, 10  
 G16-048 -0.001, 0.2, 10  
 G16-049 0.003, 0.3, 22

180, 0.6, 36  
 1, 0.8, 68

CORNALINE 300 E

5,433,500 N.

swamp



GUS 8

GUS 3

**GUS CLAIM GROUP**  
 NELSON MINING DISTRICT, BRITISH COLUMBIA  
**CENTRAL VALLEY AREA**

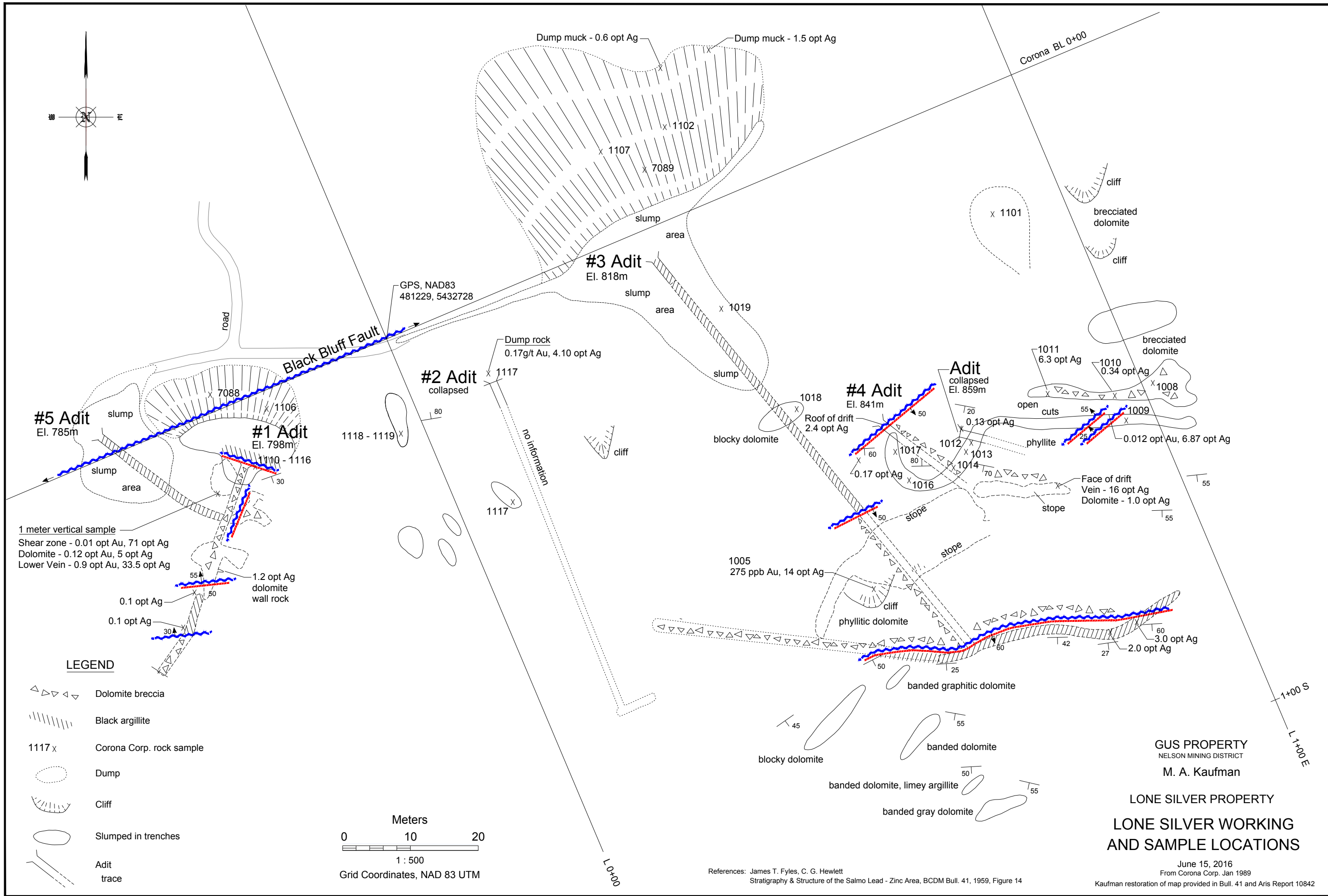
DRAWING RECORD

DATE	DESCRIPTION	BY
6/10/2015	Compilation	M.A. Kaufman

DRAWING NO.

Gus-central valley 6-10-2016.dwg

**PLATE**



1 meter vertical sample  
 Shear zone - 0.01 opt Au, 71 opt Ag  
 Dolomite - 0.12 opt Au, 5 opt Ag  
 Lower Vein - 0.9 opt Au, 33.5 opt Ag

0.1 opt Ag  
 0.1 opt Ag  
 1.2 opt Ag dolomite wall rock

**LEGEND**

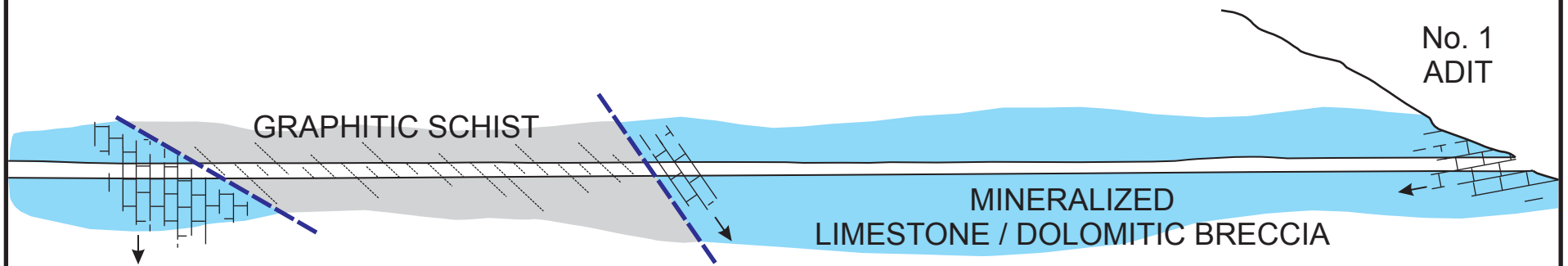
- Dolomite breccia
- Black argillite
- 1117 x Corona Corp. rock sample
- Dump
- Cliff
- Slumped in trenches
- Adit trace

Meters  
 0 10 20  
 1 : 500  
 Grid Coordinates, NAD 83 UTM

References: James T. Fyles, C. G. Hewlett  
 Stratigraphy & Structure of the Salmo Lead - Zinc Area, BCDM Bull. 41, 1959, Figure 14

GUS PROPERTY  
 NELSON MINING DISTRICT  
 M. A. Kaufman  
 LONE SILVER PROPERTY  
 LONE SILVER WORKING  
 AND SAMPLE LOCATIONS  
 June 15, 2016  
 From Corona Corp. Jan 1989  
 Kaufman restoration of map provided in Bull. 41 and Aris Report 10842

**GUS PROPERTY**  
NELSON MINING DISTRICT  
**SECTION OF ADIT 1**



Looking West

Scale 1" = 10'

— — — — — Fault zone  
← Dip

## Gus Rock Sample Descriptions

### And Notes

**GR16-01 481316E 5432715N** - The same cut as old sample 1005. What is described as a cliff is the upper edge of the cut. The phyllitic dolomite occurs above what appears to be an altered micaceous dyke striking 093 degrees AZ and dipping 75 degrees South. The more layered phyllitic dolomite is dark grey with lenses and stringers of lighter carbonates that appear to have minor sulphides with a minor amount of malachite. Best described as a grab sample as the more phyllitic material was selected.

**GR16-02 481330E 5432720N** - a band of white dolomitic mineralized breccia at least 15 cm wide striking 115 degrees AZ and dipping 70 degrees to the South on the foot wall of a long trench. The trench follows the East, or opposite side of the apparent micaceous dyke and goes from 481316E 5432724N to 481342E 5432707N. Dip and strike measurements may have been affected by surface slumping. Could be described as a chip sample as it is representative across the 15 cm.

**GR16-03 481342E 5432712N** - Outcropping grey fractured dolomite with calcite fracture fillings. There are not enough fractures for me to describe this as breccia. Grab sample.

**Notes** - The only outcropping areas that we could find in the areas suggested were sampled. The area you suggested is approximately 30 Meters North appears to be the same one that was sampled with 1005 and the 2016 sampling?

- The trails to levels #1, 2, 3 and 5 were cut out.

- The road to the Lucky Strike was cut out and can now be driven to 482200E 5433150N where there is a good turn-around.

Sample #	Gus Project		notes
	Easting	Northing	
<b>Soil</b>			
G16-001	480900	5432275	South Gold anomaly West line start
G16-002	480900	5432250	
G16-003	480900	5432225	
G16-004	480900	5432200	
G16-005	480900	5432175	
G16-006	480900	5432150	
G16-007	480900	5432125	end of line
G16-008	481150	5432275	South Gold anomaly East line start
G16-009	481150	5432250	
G16-010	481150	5432225	
G16-011	481150	5432200	
G16-012	481150	5432175	
G16-013	481150	5432150	
G16-014	481150	5432125	end of line
G16-015	480850	5434200	North powerline road line start
G16-016	480900	5434200	
G16-017	480950	5434200	
G16-018	481000	5434200	
G16-019	481050	5434200	
G16-020	481100	5434200	
G16-021	481150	5434200	
G16-022	481200	5434200	
G16-023	481250	5434200	
G16-024	481300	5434200	road @ 481322E
G16-025	481350	5434200	overgrown road @ 481360E
G16-026	481400	5434200	
G16-027	481450	5434200	
G16-028	481500	5434200	
G16-029	481550	5434200	
G16-030	481600	5434200	
G16-031	481650	5434200	
G16-032	481700	5434200	overgrown road @ 481700E
G16-033	481750	5434200	
G16-034	481800	5434200	
G16-035	481850	5434200	overgrown road @ 481853E
G16-036	481900	5434200	end of line. Old overgrown road @ 481905E
G16-037	481825	5433650	Swamp area line start
G16-038	481825	5433625	
G16-039	481825	5433600	
G16-040	481825	5433575	
G16-041	481825	5433550	
G16-042	481825	5433525	
G16-043	481825	5433500	overgrown road @ 5433500N
G16-044	481825	5433475	

G16-045	481825	5433450 stream @ 5433457N
G16-046	481825	5433425 overgrown road @ 5433426N
G16-047	481825	5433400
G16-048	481825	5433375
G16-049	481825	5433350 end of Swamp line
G16-050	482530	5432900 Lucky Strike line start
G16-051	482530	5432875
G16-052	482530	5432850
G16-053	482530	5432825 NE/SW overgrown road @ 5432840N
G16-054	482530	5432800
G16-055	482530	5432775
G16-056	482530	5432750 E/W overgrown road @ 5432760N
G16-057	482530	5432725
G16-058	482530	5432700 line end
G16-059	482650	5432700 Lucky Strike line start
G16-060	482650	5432725
G16-061	482650	5432750
G16-062	482650	5432775
G16-063	482650	5432800
G16-064	482650	5432825
G16-065	482650	5432850 E/W overgrown road @ 5432842N
G16-066	482650	5432875 line end
G16-067	482430	5432825 West end of trenching line start
G16-068	482430	5432850
G16-069	482430	5432875
G16-070	482430	5432900
G16-071	482430	5432925 line end

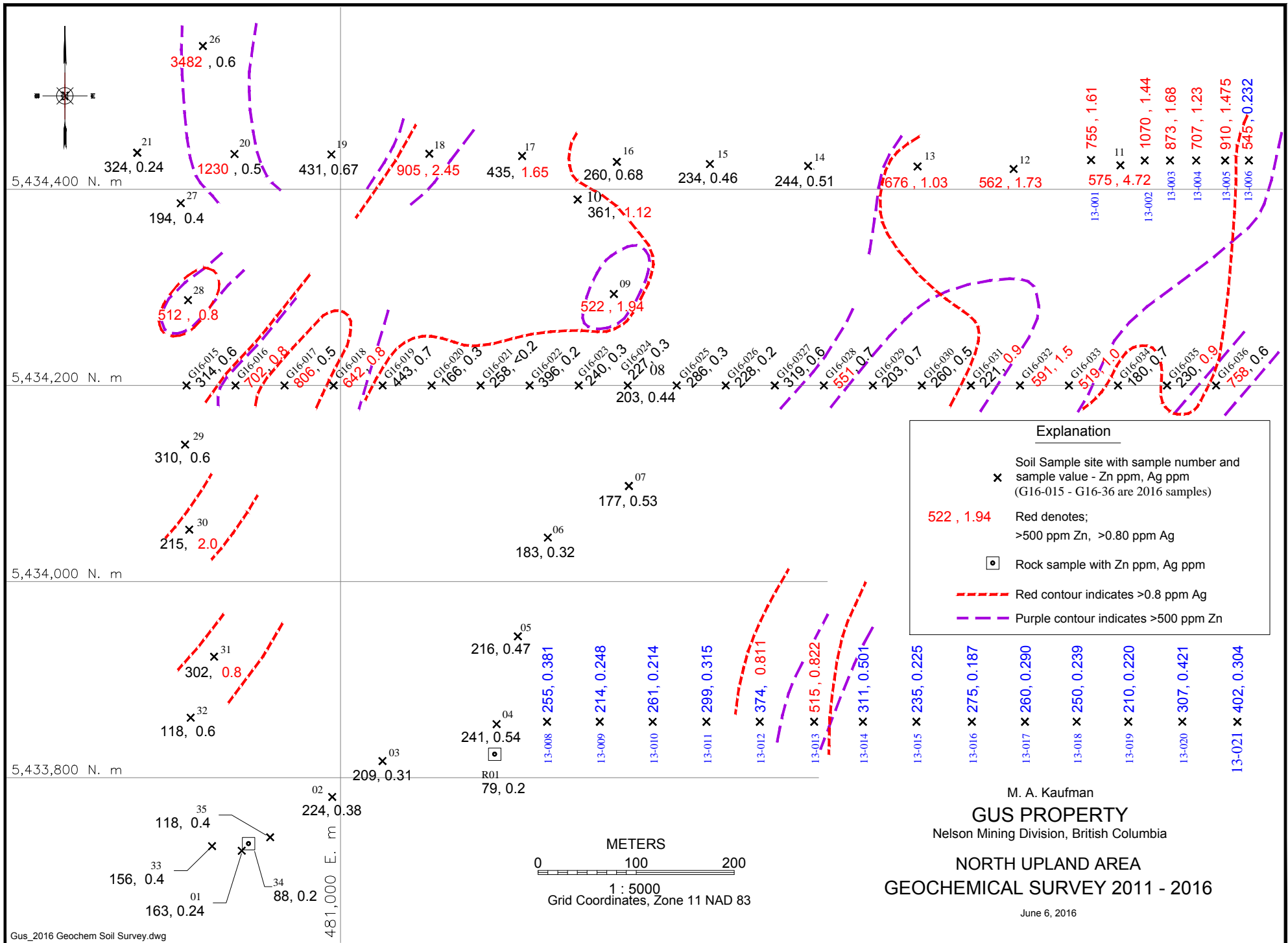
**Rock**

GR16-01	481316	5432715
GR16-02	481330	5432720
GR16-03	481342	5432712

**Lone Silver portal locations**

#1 level	481195	5432683
#2 level	481223	5432731
#3 level	481269	5432750
#4 level	481293	5432717
#5 level Slump	481177	5432734







LEGEND

Sample point showing  
 Au ppm, Ag ppb, Pb ppm, Zn ppm  
 2016 Au assay results are in ppm.  
 All pre 2016 Au results are in ppb.  
 All other element results are in ppm.

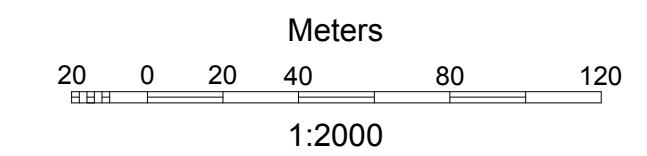
Area of outcrop

Area of float, close to source

All rock observed is dolomite lime at the localities west of 500 W, it is sandy dolomite.

MK-98-1 Rock sample assay:  
 Ag <0.1 ppm, Pb <5 ppm, Zn 8 ppm

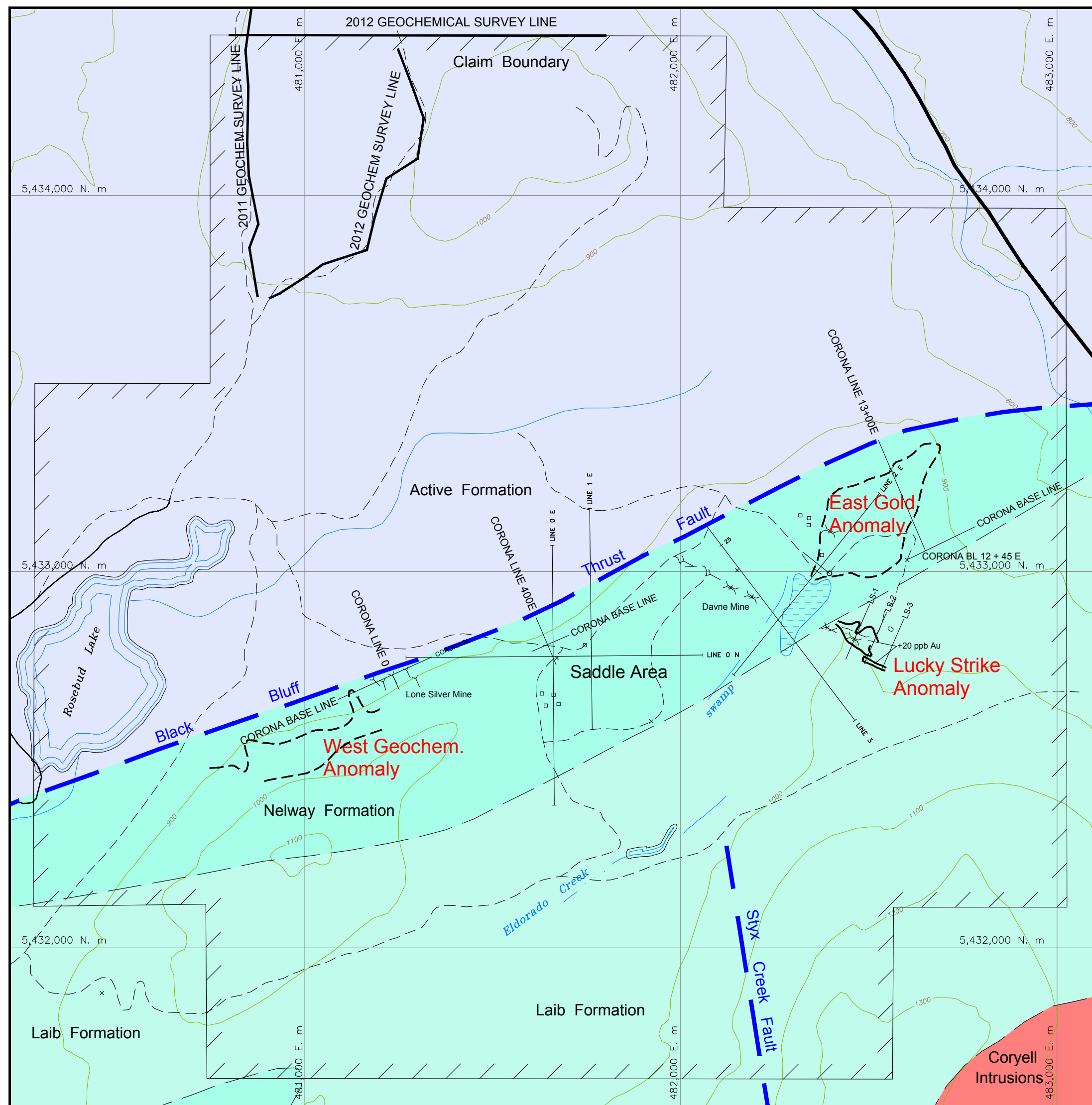
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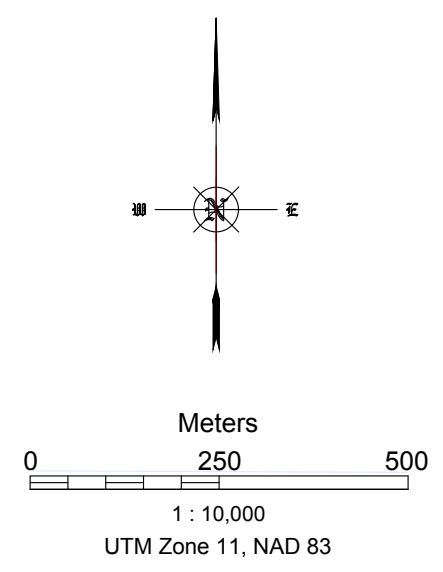
GUS CLAIM GROUP  
 NELSON MINING DISTRICT, BRITISH COLUMBIA  
 WEST GEOCHEM ANOMALY

DRAWING RECORD		
DATE	DESCRIPTION	BY
10/16/98	Compilation	M.A. Kaufman
6/9/2016	Additional samples	M.A. Kaufman

DRAWING NO. GUS-West Geochem Anom 6-9-2016.dwg  
**PLATE**



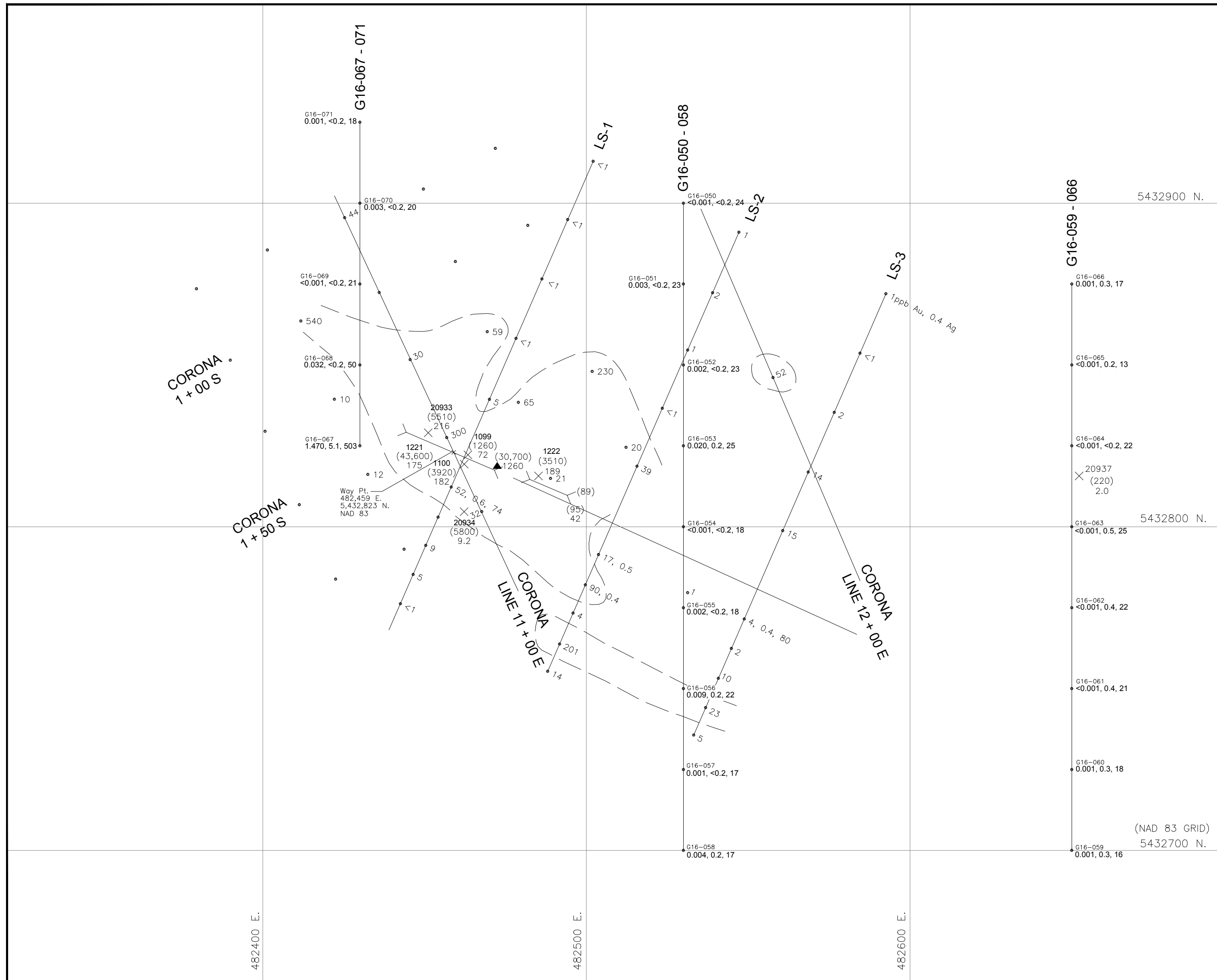
- EXPLANATION**
- Tertiary: Coryell alkaline intrusions
  - Cretaceous: Nelson granitic intrusions
  - Lower and middle Ordovician: Active Formation, argillite and limestone
  - Middle Cambrian: Nelway Formation, limestone and calcareous argillite
  - Lower Cambrian: Laib Formation, phyllite and argillite
  - Lower Cambrian: Reno and Quartzite Range Formations, predominantly quartzite and argillite
  - Contact
  - Thrust fault
  - Excavator prospect pits



M. A. Kaufman  
**GUS PROPERTY**  
 Nelson Mining Division, British Columbia  
**2012 REPORT**  
 SOILS GEOCHEMICAL SURVEYS  
 2011 AND 2012  
 Oct. 10, 2012

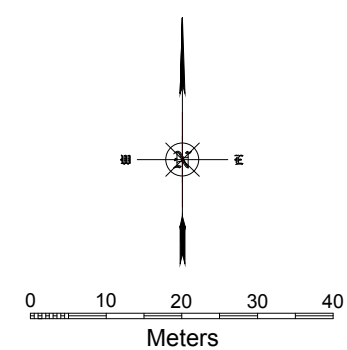






**LEGEND**

- 1222  
(3510)  
189  
Rock float sample  
Gold value in parentheses over Silver value.
- Anomalous bedrock sample  
This sample is on the south edge of the Lucky Strike Vein and adjacent phyllite wall rock.
- Soil samples +20 ppb Au, + 0.4 Ag  
Silver not shown on old Corona samples.
- Assay order; Au ppb, Ag ppm, Pb ppm  
(2016 Au sample values are in ppm)
- Gold soil anomaly >20 ppb
- Trench or open cut
- Way Pt.  
121  
GPS Way Point location



**GUS CLAIM GROUP**  
 NELSON MINING DIVISION, BRITISH COLUMBIA  
**LUCKY STRIKE MINE AREA**  
 SHOWING 2003 & 2016 GEOCHEM. SURVEY  
 AND 1988 CORONA CORP. GEOCHEM SURVEY  
FOR DETAILED GEOLOGICAL / GEOCHEM INFORMATION REFER TO 1996 COMPILATION MAPS WITH LEASE REPORT 24748.

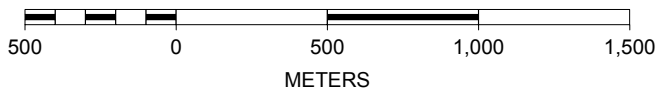
DRAWING RECORD		
DATE	DESCRIPTION	BY
10/03	Compilation	M.A. Kaufman
5/20/11	Compilation	M.A. Kaufman
6/10/16	2016 samples	M.A. Kaufman

DRAWING NO. **PLATE**  
 Lucky Strike-10m\_6-10-2016.dwg

# GUS claim 504800 & 504804



SCALE 1 : 25,000



Tenure Number	Type	Claim Name	Good Until	Area (ha)
<a href="#">504800</a>	Mineral		20211108	592.749
<a href="#">504804</a>	Mineral	Gus 1	20210125	42.334

Total Area: 635.083 ha