



Ministry of Energy & Mines Energy & Minerals Division Geological Survey Branch

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT [type of survey(s)] Rock Geochemical Sampling Program on J&L Property		TOTAL COST \$3,989.93
AUTHOR(S) PAUL COWLEY	SIGNATURE(S)	
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) MX-GEN-112		AR OF WORK 2017
STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) EVENT NUMBER 5653410; 201	7/JUN/19
PROPERTY NAME_J&L		
CLAIM NAME(S) (on which work was done) 399181 and 398402		
COMMODITIES SOUGHT_AU, AG, ZN, PB		-
MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN 082M 003		
MINING DIVISION_ REVELSTOKE	NTS 082M-08E	
ATITUDE 51.283 ° LONGITUDE	118.133 •	' (at centre of work)
DWNER(S)		
HUAKAN INTERNATIONAL MINING INC.	2)	
MAILING ADDRESS 890-580 HORNBY STREET		
VANCOUVER, BC, V6C 3B6		
OPERATOR(S) [who paid for the work]	-	
LILIAKAN INTERNATIONAL MINING ING	2)	
	-7	
MAILING ADDRESS		
890-580 HORNBY STREET		
VANCOUVER, BC, V6C 3B6		
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structur	e, alteration, mineralization, size and attitude):
Limestone, phyllite, Lower Cambrian, Hamill Group, Badsho		te-galena-arsenopyrite
Main and Yellowjacket deposits, NW striking, 55deg NE dip	ping	
REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMEN	T REPORT NUMBERS 19469	

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			ļ
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for)			
Soil			
Silt			
Rock8; A	u; 33 element ICP	399181 and 398402	\$3,989.93
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying	· · ·		
Petrographic			- 1
Mineralographic			1
Metallurgic			
PROSPECTING (scale, area)			1
PREPARATORY/PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)		·	
Road, local access (kilometres)/trail			
Trench (metres)			. 10
Underground dev. (metres)			
Other			
		TOTAL COS	\$3,989.93

BC Geological Survey Assessment Report 36873

ASSESSMENT REPORT

ROCK GEOCHEMICAL SAMPLING PROGRAM ON J&L PROPERTY REVELSTOKE, BRITISH COLUMBIA CANADA

PREPARED FOR



890-580 Hornby Street Vancouver, BC, V6C 3B6 Canada

By

Mr. Paul Cowley, P.Geo

Date: August 24, 2017 Updated: May 7, 2018

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1.0 SUMMARY

The J&L Property represents one of the largest undeveloped polymetallic deposits in British Columbia. The property is 35 kilometres north of Revelstoke, British Columbia, Canada. The property consists of 18 mineral tenure claims and 10 crown granted claims for a total of 2,950.74 hectares. The property was owned for many years by the T. Arnold estate and was optioned to Merit Mining Corp. (Merit) in 2007. In August 2010, Merit exercised its option by advancing cash payments and share issuances, giving the Company 100% unencumbered interest in the J&L property. In December 2010, the Company changed its name to Huakan International Mining Inc. (Huakan).

The property lies strategically within a geologically attractive lithologic package that hosts numerous mineral deposits. The property itself has two known and significant precious and polymetallic mineral deposits. The Main Zone is a shear hosted replacement deposit overprinting a pre-existing silver-lead-zinc deposit (the Yellowjacket). The sheeted sulphide vein system is composed of banded massive and stringer arsenopyrite-pyrite-sphalerite-galena mineralization with appreciable content of gold and silver. The Main Zone has been traced on surface by prospecting, trenching and soil sampling for a strikelength of over 3 kilometres and traced by drilling for 1.5 kilometres strikelength and by 0.8 kilometres downdip. The Main Zone generally dips about 60 degrees to the northeast with an average true thickness of 2.5 metres but can reach 15 metres true thickness.

The Yellowjacket deposit is a very siliceous sphalerite-galena (Zn-Pb-Ag) stratabound carbonate replacement deposit that sub parallels and is in the immediate hanging wall of the Main Zone. The Yellowjacket per se is believed to be the remains of its former self, the majority of which was cut and remobilized into the Main Zone by a major shear zone. The Yellowjacket occurs in a series of lenticular bodies each up to 8 metres thick focused along stratigraphic contacts.

Several major mining companies have explored and advanced the J&L deposits since the 1890s. There are a total of 311 diamond drill holes that have been completed on the property from 1983 to present. This translates to 31,186 metres of drilling. The two most significant assets on the property are the 2.3 kilometres long 830 drift that has exposed the Main Zone for approximately 0.8 kilometres in length as well as the 550 metre long 832 trackless drift that provides year round underground access to the 830 drift. Several raises and cross cuts have aided in the extraction of several bulk samples and drill stations for defining the deposits. The bulk samples have been used to conduct metallurgical testwork on the Main Zone mineralization. The Main Zone is a complex polymetallic deposit high in arsenic which creates a challenge in the production of saleable zinc and lead concentrates and the economic recovery of gold. Extensive metallurgical testing between the mid 1980's and 2006 and by Huakan in 2010 to 2012 have considered various options and regardless of the challenges have produced numerous effective options for acceptable recoveries of gold, silver, zinc and lead by making 3 separate concentrates, including using heavy media separation. Limited metallurgical testwork has been performed on the Yellowjacket Zone which appears to have a simpler metallurgy than the Main Zone.

In late 2010, the J&L property underwent renewed exploration activity by Merit/Huakan with the completion of a 60 hole 7,897 metre underground drill program focused on the Main Zone with the

objective of verifying historic drilling and sampling and infilling a 800 metre strike by 200 metre dip face of the Main Zone with 30 metre centers to support a NI 43-101 compliant resource. In 2011 and 2012 Huakan continued their efforts by doing 400 metres of tunneling and an additional 45 underground diamond holes in 9,724.85 metres on the Main Zone and Yellowjacket Zones. An updated NI 43-101 compliant resource was reported in a September 18, 2012 Huakan news release.

In 2017, Huakan conducted a short rock sampling program on the J&L property in the creek bed of McKinnon Creek during a low water period. A cluster of gossanous boulders atypical of the Main or Yellowjacket Zone mineralization (also upstream in McKinnon Creek) were located and sampled in McKinnon Creek to determine if a new precious or polymetallic metal zone may be present on J&L. The boulders hosted 1 to 4% disseminates of very fine-grained pyrite and black to dark grey metallic mineral. Eight samples were taken from these boulders. Results were disappointing with no elevations in gold, silver, lead or zinc.

It is apparent that both the Main Zone and the Yellowjacket have potential to expand their current dimensions as defined by the current drill pattern. The Main Zone, in particular, with its tabular predictable geometry and grade, has already a laterally extensive size defined by drilling and remains open in a number of directions. Its surface strikelength has been established to be in excess of 3 kilometres mostly to the southeast.

It is recommended to conduct a soil sampling program in the area of the northwest projection of the Main Zone and Yellowjacket to the immediate northwest of McKinnon Creek to be able to support the notion of the strikelength extension and further exploration for the Main Zone and Yellowjacket in that direction.

2.0 PROPERTY DESCRIPTION AND LOCATION

The J&L Property is located in southeastern British Columbia, approximately 32 air kilometres northeast of Revelstoke, BC. The property is within the 082M-030 NTS map sheet. Most of the exploration activity to-date is centered at latitude 51° 17' N, longitude 118° 08' W (5681943 m N, 420960 m E, UTM NAD 83) (see Figure 2.1).

There are two types of contiguous claims making up the J&L property - 18 mineral claims and 10 crown granted claims. The mineral claims cover approximately 2,786.69 ha and the crown granted claims cover an additional 164.05 ha. The mineral claims are listed in Table 2.1 and are illustrated in Figure 2.2. The Crown Grants are listed in Table 2.2.

Table 2.1 J & L Mineral Claims

Tenure Number	Claim Name	Good to Date	Mining Division
398402	J1	15/11/2019	Revelstoke
398403	J2	15/11/2019	Revelstoke
398404	J3	15/11/2022	Revelstoke
398405	J4	15/11/2022	Revelstoke
398406	J5	15/11/2022	Revelstoke
398407	J6	15/11/2022	Revelstoke
398408	J7	15/11/2022	Revelstoke
398409	J8	15/11/2018	Revelstoke
398410	J9	15/11/2022	Revelstoke
398411	J10	15/11/2022	Revelstoke
398412	J11	15/11/2022	Revelstoke
398413	J12	15/11/2022	Revelstoke
399179	Sage	15/11/2017	Revelstoke
399180	J13	15/11/2017	Revelstoke
399181	J14	15/11/2017	Revelstoke
399182	J15	15/11/2017	Revelstoke
401774	Brush	15/11/2017	Revelstoke
606405	Yellow Jacket	30/06/2018*	Revelstoke

Note: Claim status as of June 15, 2017,

^{*} assumes acceptance of this report with its work expenditures

Table 2.2 J & L Crown Granted Claims

Claim Number	Claim Name	Mining Division
L 14821	Goat Fraction	Revelstoke
L 14822	Goat No. 2 Fraction	Revelstoke
L14823	Goat No. 3 Fraction	Revelstoke
L 14824	Goat No. 4 Fraction	Revelstoke
L 14825	Goat No. 5 Fraction	Revelstoke
L 14826	Goat No. 6 Fraction	Revelstoke
L 14827	View Fraction	Revelstoke
L 14828	View No.2 Fraction	Revelstoke
L 14829	Creek Fraction	Revelstoke
L7408	Aberdeen	Revelstoke

Merit Mining Corp. entered into an option agreement dated April 13, 2007, whereby it may acquire a 100% undivided interest in the J&L property in consideration for share issuances and cash payments totaling \$10.79 million over a seven year period. In August 2010, the Company exercised the option by advancing the cash and share issuances to acquire a 100% undivided interest in the J&L property. There are no NSR royalties owing to any parties.

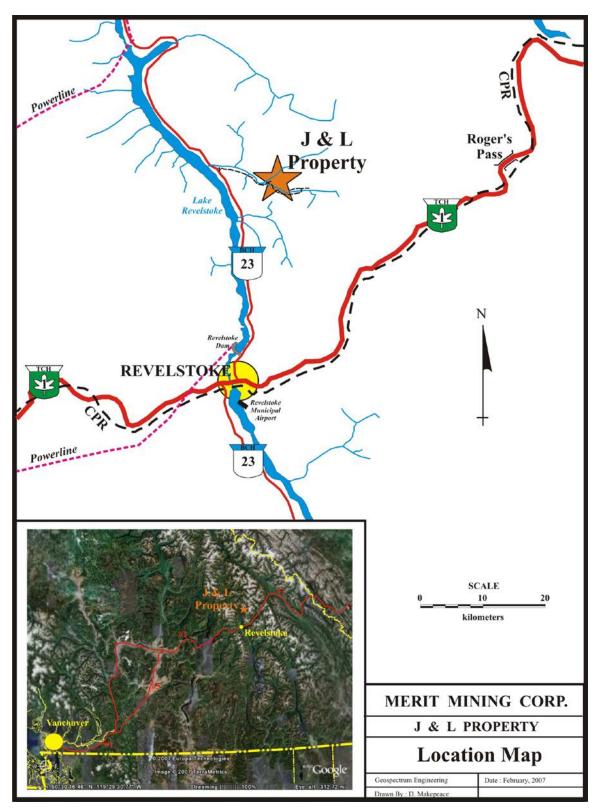


Figure 2.1 Regional Location Map

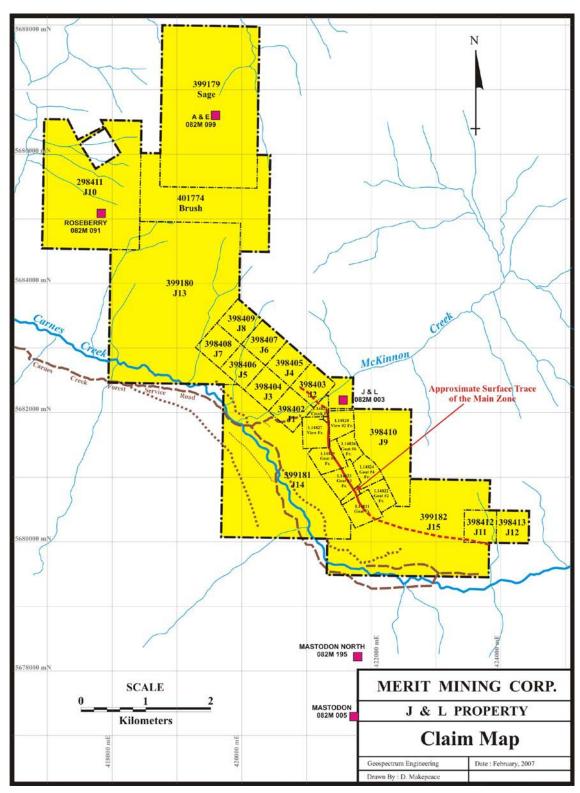


Figure 2.2 Claim Map, J&L Property

3.0 ACCESSIBILITY, CLIMATE, INFRASTRUCTURE AND PHYSIOGRAPHY

3.1 Accessibility

Vehicle access to the area is via Provincial Highway 23, 32 kilometres north of the town of Revelstoke, where Highway 23 intercepts the Carnes Creek Forest Service Road. The property is then reached by travelling eastward 13 kilometres along the Carnes Creek Forest Service Road before reaching the J&L mine camp. Travel time to camp is approximately 45 to 60 minutes from Revelstoke. The Forest Service Road is radio controlled, but currently is not being used for logging activities. Helicopter access from Revelstoke takes approximately 15 minutes.

Road access within the property is via four-wheel drive vehicle. Roads to the camp and the 832 Portal and laydown area are in good shape. The trail to the old 830 Portal area is only by foot due to some slumping. Several other forestry roads provide limited access to other parts of the property.

3.2 Climate

The summer weather is considered moderate with average temperatures between 16° to 30° celsius, with long stretches of sun and rain. The rain at times can be very heavy. The average precipitation is 65 cm/year. Winters are long and are characterized by heavy snowfalls (1 to 4 metres) with cool temperatures (-15°C to +5°C). Snowfall typically occurs between October and May at higher elevations and between November and April at lower elevations.

3.3 Local Resources

There is a large, skilled workforce of trades and technical professionals as well as equipment suppliers available throughout the region. The economy of Revelstoke is dependent on four primary sectors, which include forestry, tourism, transportation (mainly CP Rail) and public services.

3.4 Infrastructure

The property has several adits and numerous trenches. Only two (2) adits are accessible but are currently locked for safety requirements (830 Adit and 832 Adit). A camp and work shop/office is located in the immediate vicinity of the 832 portal, but currently not active. Electric power was produced by on-site diesel generators which were removed. Selkirk Helicopters sometimes use the property as a re-fueling station for their operations. A skid mounted fuel tank is located about 200 metres from the 832 portal on the Forest Service Road.

The nearest population center is the Town of Revelstoke (population approx. 8,500), which is located approximately 32 kilometres to the south of the property. Revestoke lies on the Trans-Canada Highway. The Canadian Pacific Railway runs through the town and a rail siding and load-out facility is present on the eastern end of the town (owned by Huakan). A short asphalt airstrip on the south side of town can accommodate small charter planes and helicopters.

The Revelstoke Dam on the Columbia River is 2 kilometres north of Revelstoke and produces power for a large portion of British Columbia. There are no powerlines running along Highway 23 although there is an underground telephone line.

There is a helicopter-accessible ski chalet located 5 kilometres east of the J&L property at the lower portion of the Durrand Glacier. It is used for heli-skiing in the winter and alpine hiking in the summer.

3.5 Physiography

The topography is characteristic of the Selkirk Mountains. The elevation ranges from 700 to 3,050 metres, mean sea level. The topographic relief is a result of recent alpine glaciation. Incised creeks such as McKinnon Creek created narrow valley floors while major creeks (i.e. Carnes Creek) exhibit a broader U-shaped appearance with potentially deep valley-bottom overburden. The talus covered slopes are steep, ranging from 28° to 40° while bedrock slopes range up to near vertical, depending on the lithology. Numerous avalanche chutes occur in the area. All of these conditions make traversing the property hazardous and time consuming. An avalanche chute occurs beside the 830 Portal which prompted the driving of the 832 Portal and trackless drift. The 832 Portal and trackless drift allows safe year round access to the underground network. Flat ground is limited on the property, however, there appears to be enough for a millsite and waste rock piles should the project advance to production. There is a tributary valley 3 kilometres upstream on Carnes Creek that might be servicable as a tailings facilities, but would require study to prove up.

The main watercourse on the property is Carnes Creek, which transects the area. Its source is the Durrand Glacier, which is east of the property. McKinnon Creek is a tributary of Carnes Creek and is a more juvenile watercourse that can change its flow volume rapidly. The area surrounding the intersection of McKinnon and Carnes Creeks has been the focus of the majority of the work over the life of the mineral property.

Vegetation on the property changes from alder, devil's club, stinging nettles and deadfalls in the valley floor, through stands of cedar, hemlock and minor fir on the mountainsides, to sub-alpine to alpine at approximately 1,980 metres elevation. The Carnes and Tumbledown Glaciers are immediately east of the property boundary.

4.0 HISTORY

The J&L area was first explored as early as 1865 when placer miners discovered gold in Carnes Creek. By 1896 two prospectors, Jim Kelley and Lee George, staked the first claims at the junction of Carnes and McKinnon Creeks, with earliest work (1896-1900) carried out at the Roseberry mineral zone, 5 kilometres northwest of where the J&L zone was later discovered. The property has been referred to as the J & L since its discovery by these two prospectors.

Development on the J&L Main Zone mineralization began in 1912 with the collaring of the 986 level portal (91 metres long) and 2 shallow shafts (each 46 metres deep). By 1924 metallurgical tests were attempting to resolve problems due to the high arsenical content of the ore. During 1924-27, Porcupine Goldfields Development and Finance Company completed 43 metres of

underground drifting on two levels. In 1925, Mr. E. McBean excavated 30 trenches and pits along the surface trace of the Main Zone on Goat Mountain. In the following year, 26 kilograms of Main Zone mineralized rock were shipped to the Department of Mines in Ottawa for metallurgical testing. By 1927, the Big Bend road had reached the mouth of Carnes Creek, improving the access to the property. The Geological Survey of Canada mapped the J&L area in 1928, under the direction of Dr. H. Gunning.

Mr. T. Arnold acquired the crown granted claims in 1934. He, and subsequently his estate, has controlled these claims until August 2010 when Merit Mining Corp. exercised its option to own 100% interest in J&L. In addition, a number of peripheral mineral claims had been acquired and held as part of the estate. Between 1929 to 1933, significant development was completed on the A&E prospect, to the the northwest of the Main Zone.

In 1935, Raindor Gold Mines optioned the property and extended the 986 Level Adit an additional 152 metres on the Main Zone. In 1946, the two shafts were deepened, collectively to 117 metres. In 1952, Asarco optioned the property and completed several trenches on the Main Zone. In 1962 Westairs Mines Ltd optioned the J&L, A&E and Roseberry prospects. In 1965, Westairs Ltd. collared a new portal, the 830 Level (Tracked) Adit to explore the Main Zone. Its total length was 297 metres. This has become one of the major underground assets on the property. A road (12.4 kms) was finally built into the J&L property from the Big Bend road (now Hwy 23) that same year.

In 1980, Pan American Minerals leased the mineral property from T. Arnold. In 1981, the property was optioned by BP Minerals Ltd., Selco Division. and commenced a large surface exploration program. BP-Selco extended the 830 Level (Tracked) Adit an additional 1,333 metres of drift and cross cuts. They completed 64 underground drill holes (2,640 metres) over the next 4 years. In 1986 to 1987, Noranda Mines Ltd. optioned the property and completed metallurgical studies on the Main Zone. In 1987-88 Pan American Minerals extended the 830 Level (Tracked) Adit an additional 250 metres of drift and cross cuts and completed 4 raises totalling 120 metres.

Equinox Resources Ltd. optioned the property from Pan American in 1988 and completed 32 underground drill holes for a total of 2,985 metres between 1988 and 1989. They mined a 270 ton bulk sample from 3 TDBs (Take-Down-Back) for metallurgical studies. Cheni Gold Mines, became part of the joint-venture group in 1991 with the discovery of the Yellowjacket deposit from 32 surface drill holes. This new deposit lies in the hangingwall of the Main Zone and was considered a blind deposit (i.e. there is no surface evidence of the deposit although boulders of the Yellowjacket mineralization are present in McKinnon Creek). In 1991 Cheni also collared a new trackless 832 Adit (3.0 m x 3.5m) that ran 170 metres long, stopping short of linking to the 830 track drift.

Weymin Mining Corporation optioned the property through Equinox Resources Ltd., a subsidiary of Hecla Mining Corporation, in 1996. Three surface drill holes (503 metres) were completed and a 120 tonne underground bulk sample was retrieved from the 830 Level for metallurgical studies from six sample locations. In 1996, Weymin commissioned H.A. Simons of Vancouver to complete 2 detailed reports; "Technical Review of the J&L Property" and "Project Opportunities for the J&L Property". In March 1998, H. A. Simons completed the "McKinnon Creek Property

Scoping Study". Simons provided analyses of 6 cases, exclusively on the Main Zone. The Yellowjacket Zone was not analyzed. The two favoured cases were;

- 1. Base case @ 1,000 tpd with all processing at McKinnon Creek;
- 2. Base case @ 1,500 tpd, grind, float and pressure oxidize at Goldstream, required a 4 million tonne deposit. (Note: Goldtream facility was sold by International Bethlehem Mining Corp. to Barkerville Gold Mines in fall 2010 and the mill is planned to be relocated to Wells, BC in the summer 2011)

The capital costs for the scenarios above were \$81.7 million and \$115 million, respectively.

At metal prices of \$US 350 per oz Au (currently > \$1500), \$US 6 per oz Ag (currently > \$38.00 /oz, \$US 0.55/lb Zn (currently \$0.98/lb) and \$US 0.30/lb Pb (currently \$1.12/lb) and a \$Can to \$US Exchange Rate of 0.70 (currently 1.05) the following key economic analyses for the two scenarios were:

- 1. IRR of 13.8 and 18.0, respectively;
- 2. Net Cash Flow of \$75.7 million and \$103.8 million, respectively;
- 3. NPV @ 5% Discount Rate of \$36.0m and \$58.7m, respectively;
- 4. Operating costs/tonne of \$87/tonne and \$64/tonne, respectively;
- 5. Operating cost/oz Au Equivalent Recovered of \$242/oz EQ and \$180/oz EQ, respectively.

BacTech Mining Corporation optioned the property in 2004. BacTech carried out further metallurgical tests, engineering and environmental studies. A minor drilling program (2-3 holes) was carried out that year. Due to a collapse in the financials of BacTech, the drilling details have never been made available. The BacTech drill data is not considered significant, nor would the lack of this data be considered misleading to the interpretations, conclusions and recommendations by the authors.

Merit Mining Corp. entered into an option agreement with the Arnold Estate to acquire a 100% interest in the J&L property on April 13, 2007. In August 2007, a \$10.8 million program of surface diamond drilling, underground rehabilitation and development and underground diamond drilling was approved for the winter of 2007/spring 2008. By December 2007 a 40-man camp was installed, construction of a shop/mine dry complex was completed and mining equipment was procured. Rehabilitation of the 832 portal and underground development commenced in January 2008. The original 170 metre long Cheni 832 drift was slashed out to a 5 metre by 5 metre profile to allow for 30 tonne trucks. The 832 drift was extended a further 550 metres with the 5 metre by 5 metre profile and connected to the 830 track drift approximately 310 metres in from the 830 portal. This allowed for year-round underground access. This tunnelling was completed by September 2008 at which time the program was then suspended, due to financial constraints and a major downturn in world metal prices.

The Company as Merit Mining Corp. completed a 1,363 metre 9 hole surface drill program on the Yellowjacket Zone in November 2007 with the objective of verifying historic drilling over a portion of the Yellowjacket deposit. The program successfully achieved this objective by intercepting multiple zinc-lead-silver zones similar in grade and width to previous drilling.

Resumption of mineral exploration activity began in November 2010 with implementation of the 2010-2011 winter underground drill program aimed at verifying historic drilling and generate a NI43-101 resource estimate. The Phase 1 program was focused only on the Main Zone. The Phase 1 program was completed by early February 2011 with 60 BQTW (thin wall) core holes totaling 7,874 metres. A NI 43-101 compliant Mineral Resourcee Estimate was made by P&E Mining Consultants Inc. with an effective date of May 16, 2011. This was followed by a Preliminary Economic Assessment (PEA) authored by Micon International. In their report, the total estimated project life-of-mine capital expenditure amounts were \$299 million comprised \$264 million preproduction capital and \$35 million sustaining capital, including closure costs. Operating costs were estimated at \$113.27/t treated (mining, processing and G&A). The base case, using a gold price of \$1,320/oz, evaluated to an IRR of 26% before tax and 21% after tax. At the selected discount rate of 8%, the net present value (NPV8) of the cash flow was estimated at \$344 million before tax and \$202 million after tax.

In the fall of 2011, Huakan extended the 830 drift by 400 metres and followed with a 45 hole underground drill program in 2012 totaling 9,724.85 metres, extending the limits of the Main Zone downdip and to the southeast and did infill drilling on the Yellowjacket Zone. The 2012 drilling program resulted in an Updated Mineral Resource Estimate for the Main Zone and included for the first time a Mineral Resource Estimate for the Yellowjacket. An updated PEA has not been done on the current Mineral Resource

Table 4.1 Summary of J&L Drill Programs

Year	Drillholes	Total Metres	Company
1962-1967	U/G	183	Westairs Mines Ltd.
1983-1984	65 UG drill holes	2,640	BP Selco Ltd.
1987-1988	20 UG drill holes	1,914	Pan American Minerals
1988-1989	32 UG drill holes	2,985	Equinox Resources Ltd.
1990-1991	50 UG drill holes	13,889	Equinox Resources Ltd/
	27 SFC drill holes		Cheni Gold Mines Ltd.*
1997	3 UG drill holes	503	Weymin Mining Corp.
2006	2-4? UG holes	undisclosed	BACTECH Mining Corp.
2007	9 SFC drill holes	1,363	Merit Mining Corp.
2010-2011	60 UG drill holes	7,874	Merit/Huakan International Mining
2012	5 UG drill holes	9,724.85	Merit/Huakan International Mining

The author estimates that since the Main Zone's discovery a total of \$40 million has been spent on surface and underground exploration including drilling, development and the extraction of bulk samples. Of that, \$13 million has been spent between 1982 and 1991 alone. Figure 4.2 illustrates the underground workings that have been developed up to 2012.

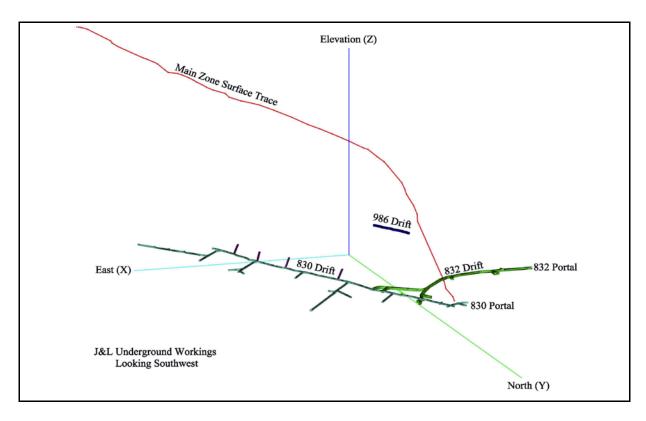


Figure 4.1 J&L Underground Workings

5.0 GEOLOGICAL SETTING

5.1 REGIONAL GEOLOGY

The property lies within the Selkirk Mountains near the north end of the Kootenay Arc, which is a complex sequence of northwest trending, east dipping Neoproterozoic to Lower Paleozoic metasedimentary and metavolcanic miogeosynclinal North American rocks (Logan et. al., 1996, 7 A & B). The belt is characterized by tight to isoclinal folds and generally west verging thrust faults. Greenschist grade regional metamorphism has affected most of the rocks in the map area. Recent mapping by provincial government geologists has outlined the regional geology of the area.

5.2 PROPERTY GEOLOGY

The J&L property is underlain by north to northwest striking, moderate to steeply east dipping metasediments and metavolcanic rocks of the Hamill and Lardeau Group and Badshot and Mohican Formation rocks. These units consist, for the most part, of sheared to intensely folded impure quartzites, quartz sericite to sericite to chlorite schists and phyllites, and grey banded to carbonaceous limestones.

The following is a brief description of the main geological units that are present on the J&L property. A stratigraphic column displaying the age relationships of units is presented below and in Figure 5.1.

STRATIGRAPHIC COLUMN

(after Logan, et.al.)

LOWER PALEOZOIC

Lardeau Group
Jowett Formation
Micaceous Quartzite
Index Formation (greenstone and black phyllite)

LOWER CAMBRIAN

Badshot Formation (limestone/marble)
Mohican Formation (quartzite, phyllite)

NEOPROTEROZOIC – LOWER CAMBRIAN

Hamill Group (quartzite, micaceous quartzite, phyllite)

Hamill Group

The Hamill Group rocks are predominantly interbedded medium brown to green-black sericitic and/or chloritic quartzites and phyllites with minor layers of argillite and graphite. This unit appears as the upper Hamill unit described by Logan et.al., and is probably Lower Cambrian in

age. Hamill group rocks form part of the footwall and hangingwall of the Main Zone deposit. The unit has a gradational upper contact with the Mohican/Badshot Formations.

Mohican Formation

The Mohican Formation is Lower Cambrian in age (Fritz et. al., 1991). This unit is located at the eastern and southern boundary of the original J&L claims. The eastern unit is in the hangingwall of the Main Zone. It is characterized as limonite-rich, sericitic chloritic calcareous phyllite and quartzite interlayered with narrow layers of marble. Logan describes the Mohican as a "transition between quartz-rich sediments of the Hamill Group and the carbonate-rich rocks of the Badshot Formation" (Logan et. al., 1997A).

Badshot Formation

The Badshot Formation is the most visible and distinctive lithologic unit within the claims. It is Lower Cambrian in age. This white to grey, fine to medium-grained limestone/dolomite/marble varies in its silica content. The Yellowjacket Zone is totally contained within this unit. The higher silica content of the Yellowjacket appears to be alteration specific to the Yellowjacket mineralizing system. The Main Zone crosscuts the Badshot Formation as observed in the 830 Tracked Drift. Several diamond drill holes display good grades and widths where the Main Zone cross-cuts the Badshot Formation. Thin interlayers of black graphite are seen within the Badshot at the 832 Level Portal.

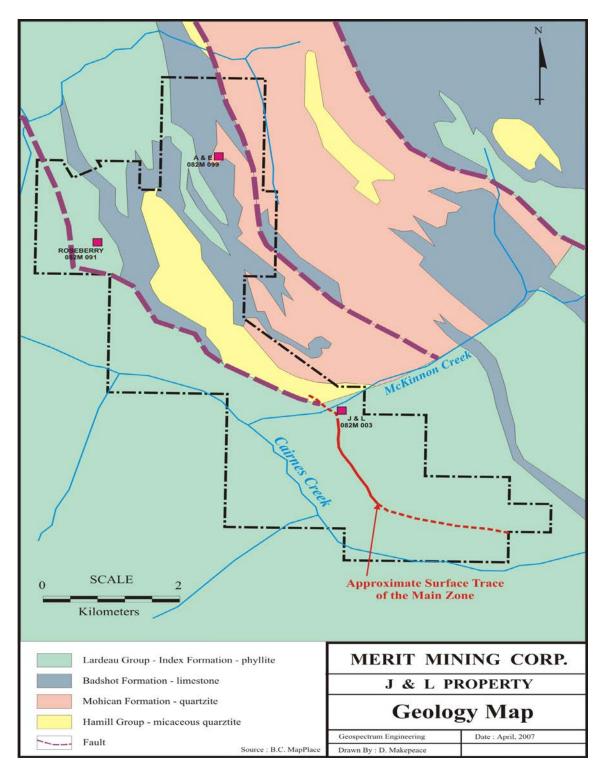


Figure 5.1 J&L Geology Map

Index Formation

The Index Formation can be subdivided into at least four units (i.e. black phyllite, marble, greenstone and quartz breccia), but only two have been identified on the property.

The black phyllite unit is in the footwall of the Main Zone. Logan has also traced the unit in the northern portions of the claims around the A & E showings. The unit can be calcareous and graphitic and may contain minor marble and quartzite layers.

The greenstone unit within the property is a series of diorite sills. The diorite is composed predominantly of coarse-grained chlorite and plagioclase feldspar. The closest sill is approximately 600 metres northwest of the North Zone Pit (approximately 500 metres northwest of the intersection of the Main Zone with McKinnon Creek). Another diorite sill is immediately east of the Roseberry showing. A third sill is at the summit of Goat Mountain.

Micaceous Quartzite Unit

This unit is predominantly at the western edge of the property and is well exposed along the Carnes Creek Forest Service Road. The unit is composed predominantly of quartzites to siliceous phyllites to quartz muscovite schists and may be loosely correlated to the Broadview Formation (Brown, 1991).

Jowett Formation

This unit is exposed in the first kilometre of the Carnes Creek Forest Service Road. It is an interlayered green metavolcanic and non-carbonaceous marble. This unit forms the hangingwall of the Columbia River Fault in the area of the claims.

5.3 LOCAL GEOLOGY

Proximal to the Main Zone, the lithological assemblage consists of phyllite and schist (87%), limestone (8%), quartzite (5%), and rare dykes as defined by core logging from the 2010/2011 drill campaign.

The phyllite and schist units are moderately to well foliated, consisting of variable amounts of sericite, chlorite, and quartz. Chlorite, though in minor amount, is considered the major contributor of the distinctive green hue in the units. Some banded sericite-chlorite-phyllite zones, ranging in width from 0.5 to 2.0 metres, have a distinctive brownish hue due to the presence of fine-grained biotite or phlogopite. Although the phyllite is highly sheared and strongly foliated, feldspar phenocrysts are noted in the core indicating a possible mixing of a volcanic and/or sedimentary protolith.

There are two types of limestone seen in core proximal to the Main Zone, namely carbonaceous limestone and banded limestone, varying in bands with widths from 1.0 to 20.0 metres. The carbonaceous limestone units are fine to medium grained, dark grey to black in color, weakly to moderately foliated, and intensely jointed. The banded limestone units are a light grey and medium

grey, medium-grained, moderately to well interbanded recrystallized limestone.

Quartzites are clean generally milky white in color, fine-grained and massive to weakly banded, with minor sericite and/or chlorite on foliation planes.

Rare dykes are present as late stage porphyritic intrusions. They are dark greyish green to brown in colour and medium-grained, composed of feldspar, quartz, and varying amounts of biotite. Only one dyke occurrence was seen in one drill hole from the 2010/2011 drill program. Its upper and lower contacts were sharp.

5.4 STRUCTURE

The dominant structure and lithologic fabric on the property strikes northwesterly (striking about 330°) and dips (about 50°) toward the northeast. Near the southern edge of the J&L crown granted claims the lithology changes strike to a more east-west orientation (striking about 290°) and dipping northeast (about 40°). This change may be part of the Carnes Creek anticline (Logan et. al., 1997A) or late stage deformation.

The rocks in the area are faulted and intensely folded. One penetrative foliation has been transposed on all rock types and is the most readily recognizable feature. One early stage foliation is observed in silicified phyllite or quartz schist. Early stage deformation features are rarely preserved due to intense folding and strong shearing.

The Badshot Formation in the vicinity of the known deposits is recumbently overturned (Logan et al., 1996, 1997A). This unit tends to flow under tectonic pressure and can form boudinage structures that can not be easily correlated with each other. Some structural folding can be seen underground but is not excessive and is usually confined to the Main Zone wall rocks and does not affect the Main Zone mineralization. Limestone is much more strongly folded than argillite or quartzite, and only locally where it is completely enclosed by deformed limestone, is the mineralization affected by folding.

Two thrust sheets have been identified in the project area striking northwesterly and dipping east (Logan et. al., 1997A). Otherwise, faulting is almost exclusively confined to the Main Zone. Barely visible slips with a thin smear of gouge have been observed running along portions of the Main Zone. Occasionally, the heaviest of these faults turn into either wall, carrying the mineralized zone with them. Displacement along the faults is generally minor.

The Main Zone is a shear hosted sheeted sulfide replacement deposit, which has overprinted a pre-existing carbonate hosted Ag-Pb-Zn deposit. The Ag-Pb-Zn bearing Yellowjacket is a remnant of that much larger pre-existing carbonate hosted deposit which has subsequently been modified (remobilized, augmented and replaced) by the Main Zone structure and mineralizing system. The Main Zone appears to lie within a high angle thrust fault and crosscuts lithology along strike at a low angle. The shear zone is preferably developed near the contact between the limestone and phyllite or between quartz-rich schist and phyllite. Limestone tends to occur on the footwall of the mineralized zone along about half of the exposed underground strikelength.

For much of the Main Zone exposed along strike in the underground, the zone is quite tabular with parallel sheeted massive and stringer sulphide bands but there are segments along strike where the banded massive sulphide units within the zone exhibit complex deformation textures. There is a number of indicators of shear sense, such as stretching lineation, rotated clasts, sheath folds, and asymmetric micro-folds. The asymmetrical folds indicate a dextral rotation.

5.5 MINERALIZATION

5.5.1 MAIN ZONE

The Main Zone is a structurally controlled precious metal and polymetallic base metal sheeted sulphide (Au-Ag-Pb-Zn-As) deposit. The deposit has quite a reliable and predictable geometry. The zone is sheet-like or tabular with an average dip of 55° to the northeast. The zone of sheeted massive and stringer sulphide veining has an average width of 2.5 metres but the sheeted sulphide veining can reach 15 metres in true thickness. The continuity of the zone is broken by its absence in a few places within narrow sections. The deposit comes to surface with a surface strike trace of at least 3.34 kilometres and a vertical extent of at least 0.8 kilometres. It is speculated that the Main Zone is linked to the Roseberry Prospect and may also be linked to the former Mastodon Mine. This would give a collective distance of 9 kilometres. Underground drifting has traced the deposit for 850 metres (830 Level) and drilling has traced the deposit for 1,400 metres. There remains good potential for additional resources on the Main Zone, which remains open in the down dip direction and along strike to the northwest and southeast. Extensive drilling has indicated a traceable continuous plane with virtually no fault offsets, cut-offs or fault drags zones. Exploration over the property life has confirmed persistent vertical and horizontal continuity although there is reference to an element of improved grade in en-echelon series of northwest plunging lenses that strengthen with depth.

The Main Zone is composed of closely spaced bands of massive sulphides which frequently coalesce at its widest parts. Individual bands, which are generally tabular, may die out along strike over 10's of metres but appear to resume in an adjacent band. Individual massive sulphide bands frequently range from 5 centimetres to 1 metre thick. Sulphide minerals include pyrite, pyrrhotite, gold-bearing arsenopyrite, iron-rich sphalerite (blackjack), galena, tetrahedrite and trace chalcopyrite. There are also traces of silver-lead-antimony and lead-antimony sulphosalts. The banding ranges from predominantly arsenopyrite (high gold), to mixed arsenopyrite and massive sulphides, to massive sphalerite with no arsenic present. Where the mineralization narrows, it is almost completely composed of arsenopyrite. Mineralization widens and sulphide assemblage is more diverse where it is in contact with or is completely enclosed by limestone. Between mineralized bands, the host rock has been altered (seritite-quartz) and contains disseminated mineralization or thin massive to stringer sulphide streaks.

Three distinct types of mineraliation have been noted. Type I mineralization is comprised of massive bands, lenses and sulfide stringers in a sericitic shear zone. Sulphides consist of medium to coarse grained pyrite, variously grain sized arsenopyrite, and fine-grained fracture-filled sphalerite and galena. Some coarse-grained pyrite and arsenopyrite display a brecciated texture. Type II mineralization is characterized by "milled" massive sulphide texture consisting of fine to coarse-grained, rounded to sub-rounded pyrite, arsenopyrite, quartz, and wall rock clasts in a very

fine grained sulphide matrix. The matrix is composed of fine-grained pyrite, arsenopyrite, sphalerite, galena and quartz. Clasts derived from the host rock such as phyllite and schist contain sulphide stringers, which in part may represent Type I form of mineralization. This milled feature is interpreted as a mylonite texture developed by reworking within a structurally active shear zone. Milled sulfides carry high values of gold, silver, lead and zinc, and elevated mercury and antimony.

Type III mineralization consists of narrow stringers and fine to medium disseminations of principally sphalerite, with lesser amounts of galena and pyrite and very little arsenopyrite. Sphalerite is red to honey yellow in color, seeming to replace limestone. Although Type III mineralization can reach widths of 6-10 metres, it appears to have limited extent both along the strike and vertically.

Gangue minerals to the Main Zone include quartz, calcite, siderite, sericite, chlorite and graphite.

The wall rock in the hanging wall and footwall is mostly composed of sericite chlorite phyllite, quartz sericite chlorite schist, and limestone. Phyllite and schist contain 1-5% pyrrhotite in the form of micro lenses on the foliation. An increase in pyrite development, concurrent with a sharp decrease in pyrrhotite, occurs in close proximity to the mineralized zone. Phyllite and schist are bleached due to sericitic alteration and silicification, resulting in apparent colour contrast between altered and unaltered rocks. Pervasive sericitization is extensively developed within the shear zone and its immediate hanging wall and footwall. The sericitic selvage ranges from 2 to 30 metres wide. Marblization occurs immediately at the contact between limestone and the margins of the mineralized zone, varying in width from 0.1 to 1 metre.

Pyrrhotite is disseminated ubiquitously throughout much of the non-mineralized rock in minor amounts. Trace amounts of chalcopyrite and pyrite are observed.

Sub parallel intermittant footwall and hangingwall zones of similar Type I, II and III occur proximal to the Main Zone. The HM1 zone lies approximately 5 metres to the hangingwall of the Main Zone. The HM2 zone lies approximately 20 metres to the hangingwall of the Main Zone. The FM1 zone lies approximately 5 metres to the footwall of the Main Zone and has a degree of continuity so that a resource can be calculated. The FM2 zone lies approximately 20 metres to the hangingwall of the Main Zone.

The September 18, 2012 Main Zone 43-101 compliant Measured and Indicated Resource @ NSR Cut-Off of \$110/tonne is 3.95Mt @ 5.68 g/t Au, 56.5 g/t Ag, 1.94% Pb and 3.56% Zn and Inferred Resource of 4.34Mt @ 4.16 g/t Au, 57.8 g/t Ag, 1.82% Pb and 2.72% Zn.

5.5.2 YELLOWJACKET ZONE

The Yellowjacket Zone is a stratabound carbonate hosted, lead-zinc-silver deposit that is generally sub-parallel to the Main Zone. It is located approximately 30 metres into the hangingwall rock of the Main Zone. The lead-zinc-silver mineralization is confined to multiple discrete zones related to siliceous carbonate units and focused at lithological contacts. The deposit does not outcrop but is defined only by drilling. Limited drilling (35 holes) has traced the deposit along strike for 500

metres but remains open laterally in both directions and at depth. The deposit appears to rake to the southeast at 30°.

The Yellowjacket deposit has no arsenic content. The mineralization is composed of patchy massive zinc-rich honey-coloured sphalerite (yellowjack) with minor medium-grained disseminated galena with elevated silver values. Other minerals include calcite, silica and minor sericite and siderite. Texturally, the mineralization can be foliated and/or laminated with sphalerite and galena running along cleavage surfaces. Other textures include brecciated or lacework patterns. Dolomite sections show discontinuous banding and are usually lower in grade.

The carbonate units hosting the Yellowjacket deposit may be occurring in the hinge of a recumbant isoclinal fold, fringed by phyllite and quartzite. The mineralization appears to thicken in the apparent fold hinge where darker coloured sphalerite and coarser and more abundant galena occurs. The Yellowjacket Zone is intensely silicified. Sericite has also been observed in core samples. Silicification also appears to intensify towards the apparent fold hinge. Fluorite is common in most mineralized sections, particularly near higher grade sections. Pyrite and pyrrhotite are present in low amounts.

The deposit was only discovered in 1991, late in the exploration history of the evaluation of the Main Zone.

The September 18, 2012 Yellowjacket Indicated Resource @ NSR Cut-Off of \$110/tonne is 1.00Mt @ 64.1 g/t Ag, 0.21 g/t Au, 2.77% Pb and 9.08% Zn. It is apparent that the Yellowjacket Zone has potential to expand beyond the limits of the current drill pattern.

5.5.3 OTHER SHOWINGS

The **Roseberry** showing lies on the J&L property (082M 091) 4.5 kilometres to the northwest of the Main Zone (see Figure 2). The polymetallic (Cu-Zn-Pb-Ag-Au) vein-type showing lies just below the contact of Lardeau graphitic schists and Badshot Formation limestones. Although it has been known for almost a century, it has received only minor surface exploration due to its remote location. The mineralization is composed of coarse disseminated to semi-massive arsenopyrite in discontinuous quartz carbonate veins hosted by intensely sheared graphitic schist. The mineralization resembles the Main Zone mineralization. Chip sampling of the Roseberry showing returned values such as 15.03 g/t Au and 37.4 g/t Ag across 0.3 metres.

The **A & E** showing lies on the J&L property (082M 099) 5 kilometres north of the Main Zone (see Figure 2) and 2 kilometres northeast of the Roseberry showing. The mineralization is related to sheared schistose zones with intense deformation and complex folding, interlayered with or in contact with limestone. This polymetallic (Ag-Pb-Zn-As) showing represents a series of three parallel mineralized zones similar to the Main Zone. One of the zones averaged 11.01 g/t Au, 356.7 g/t Ag, 10.75% Zn and 5.48% Pb from 4 muck samples. It is a narrow arsenical zone of massive sulphides. There are several hand-tooled short adits and surface showings that have traced the zone for 400 metres along strike and 160 metres vertically. It has not been drill tested at depth. The A & E prospect represents the potential for multiple parallel zones of mineralization.

The **Copper Zone** is located 100 metres to 150 metres in the footwall of the Main Zone. It is a narrow stringer sulphide zone hosted by quartzites and chloritic phyllites and schists, and has been traced for 320 metres horizontally and 90 metres vertically. Although it does not appear to return economic grades at surface, the showings are leached and weathered. A chip sample by Equinox returned 3.55 g/t Au, 21.7 g/t Ag and 0.19 % Cu over 1.0 metre. This zone could be tested further by diamond drilling.

6.0 2017 WORK PROGRAM

In 2017, Huakan conducted a one day rock sampling program on May 22, 2017 on the J&L property in McKinnon Creek during a low water period by P. Cowley, P.Geo. Approximately 800 metres of McKinnon Creek were examined for mineralized or gossanous boulders from its confluence with McCarron Creek, to 800 metres upstream from that confluence. A 10 metre by 25 metre cluster of gossanous boulders centered at 420,330E and 5,681,965N were identified in the creek bed approximately 400 metres upstream of the McCarron-McKinnon Creek confluence (see Figure 6.10). The boulders were not typical of the Main or Yellowjacket Zone mineralization which are also upstream in McKinnon Creek. The boulders that ranged in size from 30 cm to 1 metre in diameter were light tan to medium orange (gossanous) on the weathered surface and lighter coloured on the fresh surface. The boulders were highly siliceous with a fine-grained crystalline appearance. The boulders had 1-4% very fine-grained pyrite and dark grey metallic mineral disseminated and had occasional dark brown-red fracture surfaces. One sample had 1-2mm wide light grey quartz veinlets cross-cutting the boulder. Another sample had mediumgrained rounded to angular quartz fragments up to 30% in a fine-grained siliceous groundmass. The boulders were sampled to determine if a new precious or polymetallic metal zone may be present on J&L. Eight representative samples were taken from this cluster of boulders. Samples were placed in separate labeled plastic sample bags and transported to ALS Laboratory Ltd. at their North Vancouver, B.C. facilities for analytical work. Samples were analysed for gold by fire assay (30 gram aliquot) with AES finish as well as 33 element ICP from four acid digestion for associated metals. Results were disappointing with no elevations in gold, silver, lead or zinc. Gold values were between <0.001 and 0.003 ppm Au (Figure 6.1 shows gold results of each sample in ppm). The samples yielded high calcium and magnesium values. The program included two travel days (May 21 and May 23) from and to Vancouver and one overnight in Revelstoke, as the camp was no longer functional. Expenditures are outlined in Appendix I and analytical results are presented in Appendix III.

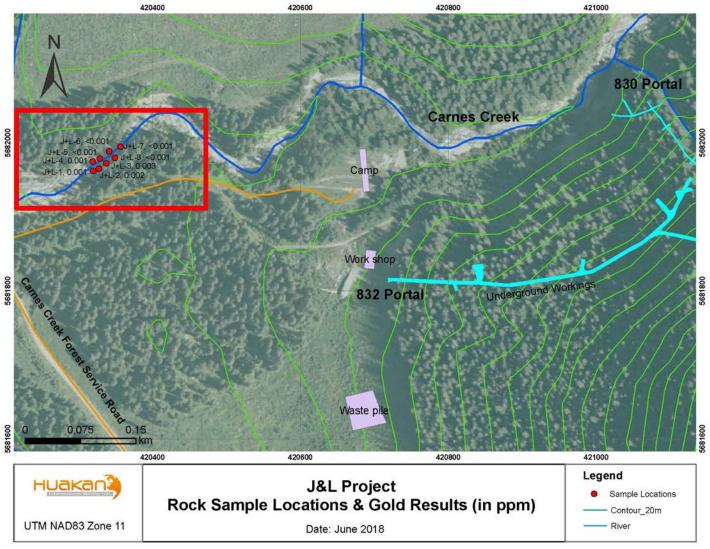


Figure 6.1 Rock Sample Locations & Gold Results

7.0 CONCLUSIONS AND RECOMMENDATIONS

The J&L property represents one of the largest undeveloped polymetallic deposits in British Columbia. The property is 35 kilometres north of Revelstoke, British Columbia, Canada. Huakan has a 100% unencumbered interest in the J&L property. In December 2010, the Company changed its name from Merit Mining Corp. to Huakan International Mining Inc.

The property has two known and significant precious and polymetallic mineral deposits. The Main Zone is a shear hosted replacement deposit overprinting a pre-existing silver-lead-zinc deposit (the Yellowjacket). The sheeted sulphide vein Main Zone system is composed of banded massive and stringer arsenopyrite-pyrite-sphalerite-galena mineralization with appreciable content of gold and silver. The Main Zone has been traced on surface for a strikelength of over 3 kilometres and traced by drilling for 1.5 kilometres strikelength and by 0.8 kilometres downdip. The Main Zone generally dips about 60 degrees to the northeast with an average true thickness of 2.5 metres but can reach 15 metres true thickness. The Main Zone was the focus of 2010-2012 drilling by Huakan resulting in an NI 43-101 resource estimate.

The Yellowjacket deposit is a very siliceous sphalerite-galena (Zn-Pb-Ag) stratabound carbonate replacement deposit that sub parallels and is in the immediate hanging wall of the Main Zone. The Yellowjacket per se is believed to be the remains of its former self, the majority of which was cut and remobilized into the Main Zone by a major shear zone. The Yellowjacket occurs in a series of lenticular bodies each up to 8 metres thick. The Yellowjacket received drilling in 2012 by Huakan, resulting in an NI 43-101 resource estimate.

The property has been explored by a number of mining companies by trenching, tunnelling and drilling. There are a total of 311 drill holes that have been completed on the property from 1983 to present. This translates to 31,186 metres of drilling. The 830 drift and related cross-cuts total 1.9 kilometres exposing the Main Zone for approximately 0.8 kilometres. The 550 metre long 832 trackless drift provides year round underground access to the 830 drift. Bulk samples have been taken to conduct metallurgical testwork on the Main Zone mineralization. The Main Zone is a complex polymetallic deposit high in arsenic which creates a challenge in the production of saleable zinc and lead concentrates and the economic recovery of gold. Extensive metallurgical testing between the mid 1980's and 2006 have considered various options and have produced numerous effective options for acceptable recoveries of gold, silver, zinc and lead by making 3 separate concentrates, including using heavy media separation. Limited metallurgical testwork has been performed on the Yellowjacket Zone which appears to have a simpler metallurgy than the Main Zone.

In late 2010, the J&L property underwent renewed exploration activity by Merit/Huakan with the completion of a 60 hole 7,897 metre underground drill program focused on the Main Zone with the objective of verifying historic drilling and sampling and infilling a 800 metre strike by 200 metre dip face of the Main Zone with 30 metre centers to support a NI 43-101 compliant resource. In 2011 and 2012 Huakan continued their efforts by doing 400 metres of tunneling and an additional 45 underground diamond holes in 9,724.85 metres on the Main Zone and Yellowjacket Zones. An updated NI 43-101 compliant resource was reported in a September 18, 2012 Huakan news release.

In 2017, Huakan conducted a one day rock sampling program on the J&L property in McKinnon Creek during a low water period. A cluster of gossanous boulders atypical of the Main or Yellowjacket Zone mineralization were located and sampled in McKinnon Creek to determine if a new precious or polymetallic metal zone may be present on J&L. The boulders hosted 1 to 4% disseminates of very fine-grained pyrite and black to dark grey metallic mineral. Eight samples were taken from these boulders. Results were disappointing with no elevations in gold, silver, lead or zinc.

It is apparent that the Main Zone and Yellowjacket have potential to expand its current dimensions. It is recommended to conduct a soil sampling program in the area of the northwest projection of the Main Zone and Yellowjacket to the immediate northwest of McKinnon Creek to be able to support the notion of the strikelength extension and further exploration for the Main Zone and Yellowjacket in that direction.

8.0 REFERENCES

Andrews, B.P., 1952, A Report on the J&L Gold-Silver-Lead-Zinc Prospect, Private Report

Arnold, T.E., 1982, J&L Lease: summary of the J&L to Mr. D.A. Hutton, Selco Mining Corp. Ltd.

BCMEMPR, Annual Reports 1905 (148-150), 1912 (144), 1915 (117), 1916 (193), 1922 (215), 1923 (232), 1924 (204), 1925 (258), 1926 (269), 1927 (290), 1946 (174), 1965 (204)

BCMEMPR Open Files (Commodity Specific): 1992-1, 1998-10, 1999-2, 1999-14, 2000-22

Beacon Hill Consultants Ltd., 1989, Equinox Resources Ltd., J&L Project Conceptual Mining Plan

Brown, F., Ewert, W. and Armstrong, T. 2011, Technical Report and Resource Estimate, J&L Property, Revelstoke, BC, June 23, 2011

Brown, R.L., Tippett, C.R. and Lane, L.S., 1978. Stratigraphy, Facies Changes, and Correlations in the Northern Selkirk Mountains, Southern Canadian Cordillera; *Canadian Journal of Earth Sciences*, Volume 15, pages 1129-1140

Brown, R.L., 1991. Geological Map and Cross Section, Downie Creek Map Area (82M/8); Geological Survey of Canada, Open File 2414, 1:50,000 map.

Candy, C., Pezzot, E.T., 1991. Report on a Transient Electromagnetic Survey, J&L Property *for* Equinox Resources Ltd.

Cowley, P.S., Rus, I.D., 2008. Diamond Drilling Assessment Report on the J&L Property for Merit Mining Corp (Assessment Report #29861)

Devlin, W.J., 1989. Stratigraphy and Sedimentology of the Hamill Group in the Northern Selkirk Mountains, British Columbia: Evidence for the Latest Proterozoic – Early Cambrian Extensional Tectonism; *Canadian Journal of Earth Sciences*, Volume 26, pp. 515-533

Fritz, W.H., Cecile, M.P., Norford, B.S., Morrow, D. and Geldsetzer. H.H.J., 1991. Cambrian to Middle Devonian Assemblages; in Geology of the Cordilleran Orogen in Canada, Geology of Canada, No. 4, Ch. 7,

pp. 153 - 218.

Fyles, J.T., 1966. Lead-Zinc Deposits in British Columbia in Tectonic History and Mineral Deposits of the Western Cordillera. *Canadian Institute of Mining and Metallurgy*, Special Volume 8, pp. 231-237

Fyles, J.T. and Waterland, T.M., 1966. Description of 1965 work program at J&L by Westairs Mines Limited, BCMEPR Annual Report, pp. 227-228

Fyles, J.T., 1970. The Jordan River Area, Near Revelstoke British Columbia; a Preliminary Study of Lead-Zinc Deposits in the Shuswap Metamorphic Complex, BCMEMPR Bulletin 57, 64 pgs

Gunning, H.C., 1928. Geology and Mineral Deposits of the Big Bend Map Area, British Columbia, Geological Survey of Canada Preliminary Report 1929A, pp. 136A-193A

Heard, R.T., 1981. Summary Report on the Arnold Mineral Prospect for Pan American Energy Corporation

Hoffin, G., 1991, Memorandum on the J&L Au-arsenopyrite, Pb, Zn Massive Sulphide Deposit *for* Cheni Gold Mines Inc.

Hope, K.G., 1966, Progress Report on the A&E and J&L Projects of Westairs Mines Limited

Hopkins, P.E., 1929, Report on the J&L Property, Carnes Creek for Piedmont Mines Limited

Hoy, T., 1984. J&L - A Stratabound Gold-Arsenic Deposit, Southeastern British Columbia BCEMPR Geological Fieldwork 1984, Paper 1985-1, pp. 101-104

Hoy, T., 1979. Geology of the Goldstream Area, British Columbia BCEMPR Bulletin 71, 49 pgs

Huakan International Mining Inc., 2012, Updated Mineral Resource Doubles Indicated Tonnes on Main Zone and Adds Yellowjacket Zone at the J&L Property, News Release September 18, 2012

Colpron, M. and Johnson, B.I. 1996. Northern Selkirk Project - Geology of the Downie Creek Map Area (82M/8); in Geological Fieldwork 1995, B. C. Ministry of Energy, Mines and Petroleum Resources, Paper 1996-1, pages 107 – 125.

Lechow, W.R., 1982. Airborne Electromagnetic Survey of the J&L Propects *for* Selco Incorporated by Questor Surveys Limited (Assessment Report 10664)

Logan, J.M. and Rees, C., 1997-A. Northern Selkirk Project - Geology of the LaForme Creek Area (NTS 082M/01); in Geological Fieldwork 1996, B. C. Ministry of Energy, Mines and Petroleum Resources, Paper 1997-1, pages 25 – 37.

Logan, J.M. and Friedman, R.M., 1997-B. U-Pb Ages From the Selkirk Allochthon, Seymour Arm Map Area, Southeast British Columbia (82M); in Geological Fieldwork 1996, B. C. Ministry of Energy, Mines and Petroleum Resources, Paper 1997-1, pages 17 - 23.

Makepeace, D.K., 1998, Report on the 1997 Exploration Program, McKinnon Creek Project *for* Weymin Resources Ltd. (Assessment Report 25,421)

Makepeace, D.K., 2007. J&L Property Technical Report (43-101) for Merit Mining Corp.

McClay, K.R., 1984. The structure of the J&L Polymetallic Sulphide Deposit, British Columbia, Private Report for BP Canada Ltd., Selco Division

McKinlay, F.T., 1987. Geology and Control of Sulphide Deposition of the J&L Massive Sulphide Deposit, Southeast British Columbia; unpublished M.Sc. thesis The University of Western Ontario

Muraro, T.W., 1966. Metamorphism of Zinc-Lead Deposits in Southeastern British Columbia in Tectonic History and Mineral Deposits of the Western Cordillera: Canadian Institute of Mining and Metallurgy, Special Volume 8, pp. 239-247

Meyers, R.E., Hubner T.B., 1989. An Update on the J&L Gold-bearing Polymetallic Sulphide Deposit; *in* Exploration in British Columbia, BCMEMPR, pp 81-89

Oliver, J.L., 1990. Geological Evolution of the J&L Gold-Silver-Lead Zinc Property, Revelstoke Mining Division 82M/8E Private Corporate Report *for* Placer Dome Inc., 49 pgs

Pegg, R., Jan.1983. A Summary Report on the J&L Option, Lead-Zinc-Gold-Silver Prospect, British Columbia, NTS 82M/8E, Private Corporate Report *for* BP-Selco Inc., 160 pgs

Pegg, R., Grant, B., March 1984. A Summary Report on the J&L Option, Lead-Zinc-Gold-Silver Prospect, British Columbia, NTS 82M/8E, Private Corporate Report *for* BP-Selco Inc., 72 pgs

Pegg, R., Grant, B., Feb.1985. A Summary Report on the J&L Option, Lead-Zinc-Gold-Silver Prospect, British Columbia, NTS 82M/8E, Private Corporate Report *for* BP-Selco Inc., 66 pgs

Pegg, R., Dec.1985. A Summary Report on the J&L Option, Lead-Zinc-Gold-Silver Prospect, British Columbia, NTS 82M/8E, Private Corporate Report *for* BP-Selco Inc., 55 pgs

Pegg, R., (1982-1985). Assessment Reports related to various physical, geological, geophysical and geochemical surveys carried out on J&L property *for* BP-Selco Inc. (Assessment Reports: 10939, 12616, 12634 and 14405)

Riddel, J.E., 1946, Preliminary Report on Raindor Gold Mines Limited

Smith & Dvorak, 1982, Dighem II Survey of the J&L Prospect

Squair, H., 1981. A Report on the J and L Lead-Zinc-Gold-Silver Prospect for Selco Mining Corp.

Starr, C.C., 1926, Report on Preliminary Examination of the J&L Mine, Revelstoke, BC

Starr, C.C., 1928, Report of Examination of the J&L Mine, Revelstoke, BC

Sullivan, J., 1967. Report on Westairs Mines Ltd. J&L Project. A private corporate report for Westairs Mines Limited.

Timmins, W.G., 1979, Geological Report on the J&L Project, Private Report for Stelladord Mines Ltd.

Weicker, R., 1989. A Summary Report on A&E Showings, J&L Property Private Corporate Report for

Equinox Resources Ltd. (see Assessment Report # 19454)

Weicker, R., 1990. Geochemistry and Hydrology Report on Carnes and McKinnon Creeks for Equinox Resources Ltd. (Assessment Report # 20716)

Weicker, R., 1991. Report on 1991 Summer Exploration Program, J&L Property for Equinox Resources Ltd. (see Assessment Report # 22004)

Weicker, R., 1991. Report on 1990-1991 Exploration Program, J&L Property for Cheni Gold Mines Inc.

Wheeler, J.O., 1964. Geology of the Big Bend Map Area, British Columbia Geological Survey of Canada, Paper 64-32, 37 pgs

Wright, J.H., Weicker, R.F., 1989. Completion Report on Phase I Exploration Program J&L Property, BC. Unpublished Report *for* Equinox Resources Ltd.

Wright, J.H., Weicker, R., Taal, T., 1989. Diamond Drilling and Metallurgical Testwork on the J&L Property *for* Equinox Resources Ltd. (Assessment Report # 19469) 59 pgs

Wynne, A., 1982, Summary Report of the Questor and Dighem Airborne Electromagnetic Surveys

Wynne, A., 1983, J&L Project – A Report on Ground Geophysical Survey

APPENDIX - I

COST STATEMENT

J&L PROPERTY 2017 SPRING ROCK GEOCHEMICAL SAMPLING PROGRAM

FIELD PERSONNEL	
P. Cowley – Geologist	
3 days@\$800/day - May 21 – May 23/17	\$ 2,400.00
FOOD AND ACCOMMODATION	\$ 229.30
\$101.30 food; \$128 accommodations	
VEHICLE RENTAL	\$ 259.00
3 days	
EQUIPMENT AND SUPPLIES	
Fuel & Lubes	\$ 200.43
LABORATORY ANALYSIS	\$ 301.20
8 x \$37.65 per sample	
REPORT PREPARATION	
P. Cowley 0.75 days@\$800/day	\$ 600.00
TOTAL	\$ 3,989.93

APPENDIX – II

STATEMENT OF QUALIFICATIONS

PAUL S. COWLEY, P.GEO.

I, Paul S. Cowley, P.Geo. of 5765 Westport Road, West Vancouver, BC, V7W 2X7,

do hereby certify that:

- 1. I am currently self-employed as a Consultant with Buena Tierra Developments Ltd. at the above address, which provided Geological Services to various companies.
- 2. I graduated with a Bachelor of Science (Hons.) degree in Geology, from the Univ. of British Columbia, Canada, in 1979.
- 3. I am a registered Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia, Canada, Registration Number 24350, since June 1999.
- 4. I have worked as a geologist for a total of 37years since my graduation from the University of British Columbia.
- 5. I am responsible for the preparation of this assessment report.
- 6. I am independent of Huakan International Mining Inc. I was Huakan's VP Exploration until spring 2014. During the period as VP Exploration with Huakan I supervised drilling programs on J&L from 2007 until 2012.

Dated at Vancouver, B.C. this 24th day of August, 2017 and further updated May 7, 2018.

"Signed"

Paul S. Cowley, P.Geo.

APPENDIX – III

ASSAY CERTIFICATE



ALS Canada Ltd.

2103 Dollarton Hwy North Vancouver BC V7H 0A7 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218 www.alsglobal.com

To: HUAKAN INTERNATIONAL MINING INC. 520 - 580 HORNBY ST. **VANCOUVER BC V6C 3B6**

Page: 1 Total # Pages: 2 (A - C) Plus Appendix Pages Finalized Date: 9- JUN- 2017

Account: MERIMI

CERTIFICATE VA17101889

Project: J+ L

This report is for 8 Rock samples submitted to our lab in Vancouver, BC, Canada on 24- MAY- 2017.

WILSON JIN

The following have access to data associated with this certificate:

P. COWLEY

SAMPLE PREPARATION							
ALS CODE	DESCRIPTION						
WEI- 21	Received Sample Weight						
LOG- 22	Sample login - Rcd w/o BarCode						
PUL- QC	Pulverizing QC Test						
PUL- 31	Pulverize split to 85% < 75 um						
CRU- 31	Fine crushing - 70% < 2mm						

	ANALYTICAL PROCEDUR	RES
ALS CODE	DESCRIPTION	INSTRUMENT
Au- ICP21	Au 30g FA ICP- AES Finish	ICP- AES
ME- ICP61	33 element four acid ICP- AES	ICP- AES

To: HUAKAN INTERNATIONAL MINING INC. **ATTN: P. COWLEY** 850-580 HORNBY STREET

VANCOUVER BC V6C 3B6

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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To: HUAKAN INTERNATIONAL MINING INC. 520 - 580 HORNBY ST. **VANCOUVER BC V6C 3B6**

CERTIFICATE OF ANALYSIS VA17101889

Page: 2 - A Total # Pages: 2 (A - C)
Plus Appendix Pages
Finalized Date: 9- JUN- 2017 Account: MERIMI

Project: J+L

									71-040-041		AND					
Sample Description	Method Analyte Units LOR	WEI- 21 Recvd Wt. kg 0.02	Au- ICP21 Au ppm 0.001	ME- ICP61 Ag ppm 0.5	ME- !CP61 Al % 0.01	ME- ICP61 As ppm	ME-ICP61 Ba ppm 10	ME- ICP61 Be ppm 0.5	ME- ICP61 Bi ppm	ME- ICP61 Ca % 0.01	ME- ICP61 Cd ppm 0.5	ME- ICP61 Co ppm	ME- ICP61 Cr ppm	ME- ICP61 Cu ppm	ME- ICP61 Fe % 0.01	ME- ICP61 Ga ppm 10
	LOR	0.02	0.001	0.5	0.01			0.5		0.01	0.5				0.01	10
J÷ L- 1		0.20	0.001	< 0.5	0.27	17	20	< 0.5	<2	0.06	< 0.5	<1	13	2	0.48	<10
J+ L- 2		0.30	0.002	<0.5	0.21	<5	70	< 0.5	2	19.65	< 0.5	<1	2	1	1.28	<10
J+ L- 3		0.12	0.003	< 0.5	0.52	<5	40	< 0.5	5	23.0	< 0.5	<1	7	2	0.99	<10
J+ L- 4		0.16	0.001	<0.5	0.13	<5	180	< 0.5	3	14.70	< 0.5	<1	3	1	0.46	<10
J+ L- 5		0.06	<0.001	<0.5	0.69	<5	60	<0.5	<2	9.91	<0.5	2	8	3	0.97	<10
J+ L- 6	104/A	0.10	<0.001	<0.5	0.35	<5	30	<0.5	<2	9.75	<0.5	<1	7	1	0.71	<10
]+ L- 7		0.16	< 0.001	< 0.5	0.01	<5	20	< 0.5	<2	19.05	< 0.5	<1	2	1	0.37	<10
J+ L- 8		0.08	<0.001	<0.5	0.53	<5	40	<0.5	<2	9.19	<0.5	2	6	2	0.88	<10

^{*****} See Appendix Page for comments regarding this certificate *****



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To: HUAKAN INTERNATIONAL MINING INC. 520 - 580 HORNBY ST. **VANCOUVER BC V6C 3B6**

Page: 2 - B Total # Pages: 2 (A - C)
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Finalized Date: 9-JUN-2017 Account: MERIMI

Project: J+L

CERTIFICATE	OF	ANALYSIS	VA17101889
	- 100		

		44.1								EKITFIC	AILU	FANAL	-1313	AW17.1	01889	
Sample Description	Method Analyte Units LOR	ME- ICP61 K % 0.01	ME-ICP61 La ppm 10	ME- ICP61 Mg % 0.01	ME- ICP61 Mn ppm 5	ME-ICP61 Mo ppm 1	ME- ICP61 Na % 0.01	ME- ICP61 Ni ppm 1	ME- ICP61 P ppm 10	ME- ICP61 Pb ppm 2	ME- ICP61 S % 0.01	ME- ICP61 Sb ppm 5	ME- ICP61 Sc ppm 1	ME- ICP61 Sr ppm 1	ME- ICP61 Th ppm 20	ME- ICP61 Ti % 0.01
J+L- 1 J+L- 2 J+L- 3 J+L- 4 J+L- 5		0.14 0.04 0.25 0.06 0.35	<10 <10 <10 <10 10	0.02 12.20 0.71 9.42 5.49	68 1200 224 942 269	1 1 1 <1 <1	0.01 0.11 0.03 0.01 0.08	1 1 2 1 3	20 90 130 230 150	22 6 18 2 11	0.09 0.05 <0.01 0.02 <0.01	<5 <5 <5 <5 <5	<1 1 1 <1 1	2 . 260 1035 79 117	<20 <20 <20 <20 <20	0.01 0.01 0.02 0.01 0.02
J+L-6 J+L-7 J+L-8		0.15 0.01 0.26	<10 <10 10	2.00 11.95 4.93	361 571 246	<1 <1 <1	0.06 0.01 0.08	<1 <1 2	50 120 70	9 6 10	<0.01 <0.01 <0.01	<5 <5 <5	1 <1 1	432 122 109	<20 <20 <20	0.01 <0.01 0.02



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Finalized Date: 9- JUN- 2017 Account: MERIMI

Project: J+L

							CERTIFICATE OF ANALYSIS VA17101889
Sample Description	Method Analyte Units LOR	ME- ICP61 TI ppm 10	ME- ICP61 U ppm 10	ME- ICP61 V ppm 1	ME-ICP61 W ppm 10	ME- ICP61 Zn ppm 2	
+ L- 1 + L- 2 + L- 3 + L- 4 + L- 5		<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	3 2 4 1 6	<10 <10 <10 <10 <10	2 39 9 10 19	
+ L- 6 + L- 7 + L- 8		<10 <10 <10	<10 <10 <10	2 1 4	<10 <10 <10	10 13 16	