

520978

Ione Claim  
104N/11

*WTR  
not sales*

LODE INVESTIGATION  
of the  
IONE CLAIM GROUP  
ATLIN MINING DISTRICT, B.C

Submitted to:

OLIVER T. BERG  
Owner of Record

Prepared by:

Fred H. Meister  
Science Consultants Inc.

November, 1994

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## SUMMARY

The Ione Claim group lies within the Atlin Mining District in northern British Columbia and is a site of active placer production by Mr. Berg.

The claim group lies within the mapped unit of Kedahda cherts and argillites and a dark carbonaceous limestone of the Paleozoic Cache Creek Group. The Surprise Lake Batholith lies within a mile of the north boundary of the claim group and an outlier probably exists within the claim group on the north west end. Most of the placer production (300,000 oz) in the district is found within 8 kilometers of the Surprise Lake Batholith. I feel this intrusion is a major source of the gold mineralization in the district.

A minor occurrence of lode gold was found near the confluence of the O'Donnel and Sheep Creek on the north end of the claim group. This occurrence was associated with a sheared carbonaceous argillite with heavy silica and sulfide alteration.

A very significant occurrence of lode gold was found near the confluence of the O'Donnel and Providence Creek. Placer operations in the area found nuggets to  $3/4$  oz that were essentially pristine with dendritic, foil and wire shapes. This occurrence was restricted to placer operations just on and within a fractured dark carbonaceous limestone. Mylonitic zones and topography indicate graben like step faults suggesting that the gold occurrence is associated with vein systems within fault zones in the limestone. Placer production in this small area consisted of 200 oz in a vertically small zone largely within and on the faulted and fractured limestone.

I feel that future work should concentrate on the previous mentioned occurrence. Though limited in areal extent at present, the belt expressed by aero photography and ground mapping could be of the order of 4 kilometers in a northerly direction by  $1/3$  kilometer wide.

## LOCATION AND ACCESS

The property is located at the vicinity of 59-32N lat. and 133-15W long. The NTS Map Sheet P104N/11 was used.

A good gravel road exists for 15 kilometers from Atlin along the Surprise lake road to the Spruce Creek road and then on to an intersection with a bush road. The bush road, 28 kilometers, follows Spruce creek over a divide to Slate Creek and then on to the O'Donnell river valley to the intersection of Feather Creek and the headwaters of the O'Donnell. The 28 kilometer passage is rough though passable in long stretches at 8 kph. There is helicopter and fixed wing service out of Atlin and there is a 333 meter strip at the camp site.

## TECHNIQUES USED

Mapping and sampling location was accomplished by use of a GPS unit, aero-photography and topographic maps.

A portable proton magnetometer was used to determine if magnetic signatures correlated with observed mineralized occurrences.

Soil Hg geochemistry was used as an aide to exploration for blind mineralized zones, as well as correlation with observed mineralized zones.

Identification of rock and minerals was aided by hand lens and binoc-microscope examination as well as rudimentary reagents.

## CLAIMS

The IONE claim group consists of 52 claims centered on the upper O'Donnell and form a rectangular block 13 claims in the N-S direction and 4 in the E-W direction, extending from 1.5 kilometer south of the intersection of the O'Donnell and Providence creek to 1/2 kilometer north of the intersection of the O'Donnell and Carvill creek. The claims were recorded at the government office in Atlin and copies are included in the appendix.

## ENVIRONMENT AND TOPOGRAPHY

The leases occupy a broad alpine valley that forms the headwaters of the O'Donnell river. Slightly above timberline, vegetation is limited to large areas of sphagnum moss in the lowlands with brush to 8' of short leaved willow and arctic birch. Higher lands have a cover of moss and arctic grasses. The valley bottom is of the order of 1,100 meters with surrounding peaks in excess of 1,700 meters.

Local and regional topography is fault controlled with an overprint of glacial detritus that in turn is dissected by fluvial activity.

Game typical of the area are caribou, timber wolf, elk, sheep, grizzly, ptarmigan, beaver, moose and gopher.

Atlin Lake and Atlin are classified as semi-arid with a precipitation of 35 cm, at an elevation of 750 meters, and annual extremes of -40 to 25 celsius.

Actual operations at the camp extend from early June to about the 20th of September.

### EXPOSURES

Outcrop exposure is poor, approximately 5% Exposures of bedrock were generally limited to the steeper slopes of the mountains and flanks of the more active drainage systems. Stream bottoms were essentially covered with fluvial gravels and boulders. A veneer of glacial material covered the much of the hummocky terrain. Some areas had thick (to at least 23 meters) cover of glacial and fluvial material.

### HISTORICAL

The Atlin area has been an on-going placer mining area since the late 1800's. In the early 1900's the nearby ghost town of Discovery had a population of 10,000. At the present time the population is of the order of 300. Only 7 placer operation permits were applied for this last year.

Placer gold operations appear to be limited to the vicinity of the Surprise Lake Batholith in stream valleys, though not in the intrusive. To a large extent the valleys the writer visited were fault controlled. Maps indicating the location and production of the placers in general ran from 10 to 20 thousand ounces. The exception was Spruce Creek which had a total of 250,000 ounces, some of them operating underground. Spruce creek has produced nuggets to 85 ounces and many greater than a pound.

Lode gold deposits were mined in a small area just north and west of Atlin in ultrabasics associated with the east side of the NNW trending Nahlin Fault. the ultrabasics have been altered to Listwanite, complete with the spectacular green chrome mica, mariposite. This area is about 30 kilometers miles from the Berg Claims. Homestake looked at it in the recent past but has declined to resume operations.

Mr. John Noland, one of the most successful of the older

miners who sold his holdings on the Spruce Creek workings for 10 million dollars, had reportedly conducted operations near the junction of O'Donnel and Feather, both on the surface and underground during the period from 1919 to 1922. He, reportedly, sank a shaft 23 meters to bedrock in the O'Donnel near Feather creek. Relicts from his operation are still to be found.

In 1975 a churn drill was moved onto the property near the mouth of Feather creek and two holes were drilled to bedrock at 12 and 17 meters. Good values were reported immediately above a clay layer at near 5 meters and 33 cm to 1 meter above bedrock.

Mr. Berg became interested in the area in the late 70's and records indicate that he took possession of a number of placer claims in 1983, though he began placer operations in 1981.

In late 1983 Mockingbird Mines secured an option from Mr. Berg and proceeded to test the placer potential in the vicinity of the mouth of Feather Creek. Samples of .6 yds were taken to a depth of 5 meters, probably limited by the clay layer, under the direction of Pogasus Earth Sensing Corp. Gold values were reported though grade not stated. A statement was made that gold values should continue at depth. The option was dropped and the property returned to Mr. Berg.

#### REGIONAL GEOLOGY

The area according to the Iskut River 1:1,000,000 map 1418A, is within the Atlin Terrain that is fault bounded on the West with Jurassic eugeosynclinal greywackes etc.. Immediately to the east of the fault is a narrow belt of Missippian ultrabasics that has been altered to Listwanites. Significant gold has been mined associated with the ultrabasics N & W of the town Atlin.

The area to the east, and containing the Berg Claims is dominated by Permo-Missippian and to a large extent is mapped as Kedahda cherts, argillites and volcanic sandstones including the area of the Berg Claims. Large areas are mapped as Nakina metabasalts and tuffs. More minor areas are mapped as the Permo-Missippian Horsefeed Limestone. Even smaller areas are mapped as the Kedahda basalts.

In brief, a eugeosynclinal assemblage to the west with an uplifted miogeosynclinal block to the east with ultrabasics in a narrow belt at the fault zone on the west.

Intrusions in the area are mapped as the Cretaceous Surprise Lake Alaskite batholith to the north of the claim area and the Jurassic-Cretaceous McMaster Stock to the south. The Surprise Lake batholith is the more dominant and closest (within 1 mile)

Tertiary-Quaternary intrusions are suspected by the writer and are evidenced by an area mapped as an alkali flat within the town of Atlin that was examined and found to be a recent but inactive hot springs deposit complete with abundant friable travertine, in places, stained with malachite.

South of Atlin, is a settlement known as Warm Springs which has active hot springs.

On the upper reaches of Spruce creek near the divide is a one mile wide zone of marbleized limestone that has large grain size and is now white marble with fractures filled with black organic material. This zone of thermal marbleization is gradational and maintains all the characteristics of the unmetamorphosed limestone except grain size and color. Fracture surfaces in an near the marble zone evidence crusts of travertine, indicating hydrothermal activity.

The writer believes that this area is an area of a young tertiary intrusion that is as yet unroofed. It is within the highlands immediately to the west of the claim group.

#### LOCAL GEOLOGY

##### Lithologies

##### Sedimentary

Too a large extent, the area west of the O'Donnel is occupied by dark grey cherts and a carbonaceous argillite with a small area of massive dark grey carbonaceous limestone near Sheep creek in the northern area of the claim group.

##### Cherts:

The cherts appear to be thin bedded in general (8-12 cm). and appear to be somewhat parallel with the carbonaceous argillites, where a possible contact is observed. To say that it is true bedding is tenuous, since evidence of shearing and faulting is everywhere evident and the apparent bedding could be a result of tectonism. Strike and dip symbols on the included map indicate foliation but could be bedding.

The bedded cherts observed have a sucrosic texture indicating recrystalization has occurred.

Massive cherts occur on the hill just north of Providence creek. These massive cherts are buff colored and commonly contain up to 5% relict sulfides now represented as hematite cubes. Commonly they are highly fractured with abundant FEOX along fracture planes. Quartz veins, up to 5 cm were observed with abundant FEOX. These massive cherts also exhibited sucrosic

texture. I believe that these massive cherts could be the result of silica replacement of the massive limestone.

#### Carbonaceous argillites:

The carbonaceous argillites were always observed to be schistose and black with the plane of schistosity roughly paralleling the apparent bedding. Commonly they contain small veinlets of clear sugary qtz and sulfides and/or FEOX along shear planes. Quartz veinlets also occur crosscutting the plane of schistosity. Carbon content was high and on ignition would leave a white ash. Though not graphite I think that the metamorphic rank was high. Vitronite reflectance would be needed to ascertain the thermal maturity. The sulfides were represented as cubes or hematite cubes and were not subject to the forces causing the development of schistosity. I interpret the presence of sulfides and the euhedral quartz as siliceous and sulfide alteration after schistosity development. I feel that these carbonaceous argillites are the result of metamorphosis and tectonism of a preexisting organic rich mudstone that commonly exists in the Mississippian along with organic rich crinoidal limestones elsewhere in North America. The lack of competence of these units resulted in development of schistosity that is observed.

#### Massive limestones:

Approximately 15 kilometers to the west of the claim group is an outcrop of massive dark grey, organic rich, crinoidal limestone that was mapped as the Horsefeed limestone. Though incipient recrystallization exists, the crinoidal debris is still evident.

Massive limestones are found on the claim group near and in Dixie creek north of Sheep creek and in bluffs on the eastern side of the O'Donnell across from Feather creek where pristine gold was placer mined. These massive limestone are identical in color, massiveness and weathering to the previous mentioned Horsefeed. They differ from the Horsefeed in that these limestones have been subject to greater deformation resulting in pervasive internal imbrication and recrystallization. I believe that these limestones are Horsefeed limestone in which the crinoidal debris has been obliterated by severe tectonic deformation. They could be Kedahda Limestones but the reported intercalated volcanics were not observed.

Commonly the massive limestones exhibit siliceous zones along old fractures and small shears. Silica replacement is also found yielding a chert like product that is essentially identical in appearance to the unaltered limestone. Curiously, there is little development of the clinker like texture that usually is associated with silica replacement of limestone.



Sulfides in the form of pyrite cubes occur in the limestone, Sulfo-salts are also suspected from the odor of a fresh fracture surface where sulfides are seen. I feel that these sulfides postdate the tectonism since they show no sign of deformation.

### Igneous

Only one igneous exposure on the southern flank of the hill north of Providence is interpreted as in place. Hand lens and binoc microscope examination indicates that it is a fine grained porphyritic Monzonite, similar to the Surprise Lake Batholith located only about two kilometers to the north. The exposure, about 60 meters E-W and 30 meters N-S, exhibits none of the fracturing of the surrounding cherts and carbonaceous argillites. The hill, which extends to Sheep creek exhibits characteristic radial and concentric fracturing, as shown on the aero photography, that could be the result of an intruding mass from below. I believe that this hill is the result of an intrusive outlier of the Surprise Lake batholith that has yet to be unroofed.

Other areas of granitic angular blocks are found in the same area as the Porphyritic Monzonite, however, a lack of continuity would make identification as an outcrop tenuous.

### Metamorphic

No high rank metamorphic rocks were found. In most cases metamorphism seems to be expressed in terms of recrystallization of the cherts and limestones that could have been pressure related due to the intense deformation observed. True thermal metamorphism is only observed near the hill between Providence and Sheep creeks where siliceous fracture filling in the cherts has developed very fine grained biotite or phlogopite. This could be related to the suspected nearby intrusion of Monzonite.

### STRUCTURE

Regional studies in the area indicate thrusting from the south and west. One outcrop on the road into the property and in the Kedahda cherts evidenced intense folding indicating E-W compression. Structural generalities in the vicinity of the claim group are difficult due to the lack of outcrop and the complexity of apparent faulting and associated inconsistency of strike and dip. The following are only suggestions of possible structure:

0- The hill between Providence and Sheep creeks appears to be domal, and probably related to an unroofed intrusion.

0- The limestone blocks on the east side of the O'Donnell across from the mouth of Feather creek suggest graben like

faulting into the axis of the O'Donnel. This is overly simplistic since the west side of the O'Donnel is largely Kedahda cherts and carbonaceous Argillites.

O- The main channel of the O'Donnel forms diacontinuities in lithology, faults and fractures and most likely is the locale of a major fault system trending N-S, that intersects the Surprise Lake batholith.

The balance of the claim group can only be described as a highly faulted and sheared complex of Kedahda cherts and carbonaceous argillites with occasional blocks of the dark grey carbonaceous massive limestones that are probably fault bounded.

#### EXAMINATION OF CONCENTRATE TAILINGS

The following are offered as evidence of the source of the placer material mined.

A sample was taken from the placer concentrate tailings after hand picking. This sample represented the results of mining the fluvial gravels. A second sample of concentrate tailings was given to me in a small bottle that was unknown as to origin. Both concentrates were examined by binocular microscope.

#### Fluvial Concentrate

O- Light brown to black, very hard, uneven fracture, fragmental, some muscovite and quartz included. The most abundant mineral. Probably garnet, likely grossularite.

O- Hematite cubes, fairly abundant, alteration of pyrite

O- Brnsh black, hard, very rounded, brn strk, magnetic, Ilmenite?

O- Black, ovoid, non magnetic, hard, metallic sheen, Specularite? Minor

O- Metallic silver grey, irregular shapes and flattened flakes, harder than lead, ductile. Native silver. Minor

O- Black, hard, vitreous, good 90 degree clvg. Pyroxene

O- Metallic silver grey, crystal agglomerate surface, rounded hammered corners, hard, insol. nitric acid, sl sol cold aqua-regia, some show weak magnetic. Platinum, Osmoiridium?

O- Galena, scant

O- Native copper, scant

- 0- Columnar prismatic aggregates, hexagonal. Tourmaline
- 0- Gold, ovoid smooth flakes.
- 0- Cinnabar, intergrowth with silica and massive.

The above mineral descriptions, if correct, from the abundance of garnet would suggest tactites or skarn deposits. The Platinum group minerals, if correct, and the pyroxenes would suggest ultrabasic deposits. Though both exist in the district, known occurrences of ultra basics are tens of kilometers away?? The skarn type materials could possibly be transported from the contact zone of the Surprise Lake batholith to the north or from the vicinity of the suspected intrusive forming the hill south of Sheep creek.

The Ultra-basic material could be from an as yet unrevealed body within the upper O'Donnel drainage.

#### Unknown concentrate

This concentrate though of unknown origin is obviously from the vicinity of the exposure of black carbonaceous argillite with heavy included sulfides near the O'Donnel, Carvill, Sheep Creek intersections. Fragments of this material along with highly abundant sulfides were found.

The following mineral descriptions are in addition to those above.

- 0- Magnetite, abundant small euhedral grains.
- 0- Fluorite, frags, Minor
- 0- Steel grey, tetrahedral agglomerates. Tetrahedrite, Tennantite.
- 0- Native mercury
- 0- Gold, in addition to the gold described above, there are: small flakes that have obvious surface textures, other fragments are highly irregular and crystalline though small, other flakes with texture are heavily coated with iron oxide, one flake was totally coated with black material that when chipped off was combustible and probably organic. Many of the clean gold fragments were partially to totally covered with mercury.

The interpretive comments associated with the first sample apply here. Additionally, much of the gold described above is essentially pristine and has not been subject to transport and is related to the sulfide rich black carbonaceous argillite.

## TARGET DESCRIPTIONS

Two areas were found with lode gold potential. Others may well exist but as yet are not apparent.

### Target 1

The first and should be the highest priority for future work, is the location of the spectacular pristine gold found as a result of placer operations on the east bank of the O'donnel and across from the mouth of Feather creek.

The area was not exposed until mining operations on the eastern bank of the O'donnel revealed a dark carbonaceous limestone that was highly fractured. Mining the surface and the fractured limestone has yielded 200 oz of coarse pristine gold in a small area and shallow depth into the limestone. I was personally present during the mining of this material and can attest to the presence and type of gold mined. Mr. Berg states that this type of gold was only found while mining on the surface and within the limestone. Though quite rich Mr. Bergs equipment was not designed for this type of mining and the difficulties resulted in a small daily yield while attempting to mine within the limestone.

Mr. Berg mined the surface of the fractured limestone to the west for about 15 meters when it was lost. Apparently, down faulted, beyond the reach of his equipment.

Large blocks of the limestone form the eastern boundary of the O'Donnel. These blocks, appear to extend for about a kilometer both north and south of the mined area and may extend further but the glacial debris obscures most of the area. A traverse to the east about 200 meters reveals another old stream course with about the same N-S orientation that reveals the dark limestone on both flanks. Cross faults have caused the abandoned stream course to coalesce with the O'Donnel south of the mined area.

Examination of the northern end of the block in the cross fault area reveals extensive old shears that have been silicified to chert with the central zones of quartz. The strike of these old shears are roughly N-S and dip steeply to the west.

Close examination of the mined material on the bench revealed extensive fracturing of the limestone with abundant sucrosic vein quartz material associated with sulfides. The sucrosic vein quartz material is very similar to that found within the coarse gold nuggets. A few samples appear to be a mylonite of milled chert and dark grey limestone. Others appear to be undergoing argillic alteration with lighter colored clay development.

No visible gold was found in any of the samples taken. No gold was found in any of the samples assayed though anomalous base metals and Hg were found. However I am convinced that this is the source of the pristine coarse gold and that in the mining operation the gold residing on fracture surfaces was liberated and either was caught in the backhoe bucket or was lost in the unmined debris. Considering the nature of the material and the mining techniques used, far more could have been lost than the 200 oz found.

I interpret the observations as a parallel system of N-S faults that dip steeply to the west with occasional more E-W cross faults in a large area of the dark carbonaceous limestone. The fault system, almost graben like dip down and into the main channel of the O'Donnel which parallels the system and could be further mineralized at depth. The gold bearing silica and sulfide solutions have mineralized the faults and fractures yielding the observed coarse pristine gold found.

The extent of the potential fault mineralization is bounded by the predominant occurrence of the cherts and argillites on the western side of the O'Donnel and perhaps 300 meters to the east of the eastern bank of the O'Donnel. The extent to the north and south along the O'Donnel is at least one kilometer and maybe more but is not observable due to the extensive glacial deposits.

#### Target 2

The area occupied by the confluence of the O'Donnel, the Carvill and Sheep Creeks, is a complex faulted and sheared area that is readily apparent on the photographs. Intensive shearing has occurred that is N 60 E and dips 60 degrees to the south. A zone of shearing exists 50' wide consisting largely of sheared carbonaceous argillite. Veins of quartz (to 14") occurred parallel to the schistosity downstream within the limestone. This orientation parallels the orientation of the Carvill.

The black schistose argillite material was soft and greasy feeling on the surface yet obviously was in part siliceous. There was abundant (to 25%) sulfides present largely as pyrite but very pale in color. The sulfide was present as cubes (to 1/4"), as lenticular nodular accretions to 2" in length parallel to schistosity and as milled sulfide veinlets (1/16"). A garlic odor was evident on fracturing some of the pieces and the writer suspects sulfo-salts or arsenide group minerals are present.

Mr Berg had attempted to work the area in years past but was hampered by a lack of adequate water and poor recoveries due to choking of the sluice with sulfides while mining the sulfide shears. He reports that gold was recovered.

I am convinced that this is the site of the Unknown Tailings concentrate mentioned earlier, where black organic coated gold was found along with abundant sulfides.

Assays of the black sheared argillite yielded one sample with small but significant gold as well as anomalous base metals and arsenic.

Soil samples were collected for Hg geochemistry on a traverse transecting the area on 15 meter intervals. The Hg response was spiked with peaks to ten times background. This type of response is typical of mineralized shear zones in a shallowly covered area.

Though only one sample assayed significant gold, the facts that Mr. Berg did produce gold and that lode gold was found in the concentrate tailings prove that lode gold is present. It would be a mistake to ignore these findings.

#### Target 3

The hill between Providence and Sheep creeks is a potential target for skarn mineralization. This domal outcrop of cherts and silicified massive limestones is interesting. As mentioned previously, an outcrop of Monzonite is found on the southern flank and no doubt the hill is an area of a shallow unroofed intrusion. This is well worth prospecting for skarn deposits. The mineralization mentioned in Target two is located just on the northeast flank of the hill and may well be sourced by the intrusion.

#### Target 4

Soil samples were taken for Hg analysis on an E-W line from Providence Creek and extending across the O'Donnell valley and over the esker on the eastern flank of the valley. This line is essentially located on the northern boundaries of Ione claims 1 and 2.

The first ten samples were in a complex area of faulted Kedahda cherts and argillites, evidenced by the blocky hummocky terrain with an occasional outcrop. The analytic results were much the same as in Target 2 with spikes to 10 times background typical of shallow buried mineralized zones. The balance of the samples across the valley were spectacular, essentially saturating the instrument, possibly 50 to 100 times background.

The previous would be consistent with a massive mineralized sheared or fault zone that is on strike with the mineralized structures described in Target 1. If true, this would extend Target 1 by approximately 3 kilometers to the north.

## Recommendations

I recommend that a drilling program be initiated in the vicinity of Target 1. Target 1, the site of the spectacular coarse pristine gold is without doubt the richest and most localized of all the target areas. Given a successful discovery in this area, then the others would be worthy of further attention.

The first hole should be spudded approximately 27 meters west of the edge of the limestone bench discovered while mining the coarse gold. The hole should be angled 45 degrees down to the east. A drilled depth of at least 75 meters along the bore should be projected in order to intersect suspected faults and fault splinters that may be mineralized.

Given that the mineralized fault strikes generally N-S and dips 80 degrees to the west and that the depth to bedrock in the river valley is 22 meters, then bedrock in the vicinity of the fault face should be reached at about 31 meters. Should there be an additional block to the west of the present bench face then bedrock would be reached earlier.

A total of 6 holes should be planned. If the geometry is as discussed then the additional holes should be planned to the north and south of the initial hole and potentially further west to test further mineralization in the river valley.

The following is an estimate of cost based on 6 75 meter core holes.

500 meters drilling cost @ \$100/meter (including mob-demob)	\$50,000
Geologist 2 weeks supervision, logging, sampling (prof. fees only, expenses extra)	\$6,000
Assay @ \$15/sample, 100 samples	\$1,500
Misc. core boxes, shipping, sample supplies, etc.	<u>\$500</u>
Total	\$58,000

The above is only a minimum exploratory drilling program. If the effort leads to a discovery, then, of course, the drilling program should, logically, be expanded to a more exhaustive exploratory program.

Frederic H. Meister

Pres. Science Consultants Inc.

**APPENDIX I**  
**CLAIM RECORDS**



MAP NO. \_\_\_\_\_

SECTION 21

FILE NO. 319926

MINING RECEIPT NO. \_\_\_\_\_

RECEIVED AT \_\_\_\_\_

DATE OF RECEIPT \_\_\_\_\_

DO NOT WRITE IN THIS SHADED AREA

GOLD COMMISSIONER

MINING DIVISION

APPLICATION TO RECORD A 1 POST CLAIM

BRADLEY T. WHITE  
NAME OF LOCATOR

AGENT FOR OLIVER T. BERG  
NAME

BOX 4394  
ADDRESS

17 LORRIANE CR  
ADDRESS

WHITEHORSE Y.T.

ST. ALBERT ALBERTA

NIC  
TELEPHONE

712-375  
POSTAL CODE

(403) 449-3798 T8M-2R4  
TELEPHONE

VALID SUBSISTING F.M.C. NO. 125759

VALID SUBSISTING F.M.C. NO. 102156

F.M.C. CODE BT WHITE

F.M.C. CODE \_\_\_\_\_

hereby apply for a record of a 1 post claim for the location as outlined on the attached copy of mineral title plan and map

No. 104 N-11 E in the ATLIN Mining Division.

ACCESS: Describe how you gained access to the location; include references to roads, trails, topographic features, permanent landmarks, and a description of the legal post location

DROVE TRUCK TO THE FORKS OF DOMMEL CREEK AND FEATHER CREEK FORKS. MAP 10, S. 4 P. 15. 100M AHEAD.

I have securely fastened the metal identification tag, embossed with "LEGAL CORNER POST" to the legal corner post (or substitute post) and impressed the information on the tag.

IDENTIFICATION POSTS \_\_\_\_\_

WAS \_\_\_\_\_

because \_\_\_\_\_

If a witness post was placed for the legal corner post \_\_\_\_\_

bearing from witness post to true position of legal corner post \_\_\_\_\_

at a distance of \_\_\_\_\_ meters \_\_\_\_\_

at a distance of \_\_\_\_\_ meters \_\_\_\_\_

Bearing from identification post to witness post \_\_\_\_\_

described at a distance of \_\_\_\_\_ meters \_\_\_\_\_

NOTE: Legal corner post must be placed on land, it is illegal to place any posts

LEGAL CORNER POST

TAG NO. 227124

CLAIM NAME JUNE 1

BY BRADLEY T. WHITE

F.M.C. NO. 125759

FOR OLIVER T. BERG

F.M.C. NO. 102156

DATE COMMENCED AUG 16, 1993

AT 11:30 AM

DATE COMPLETED AUG 11, 1993

TIME 7:00 PM

NUMBER OF CLAIM UNITS

N. 8 E. 2 W.

I have complied with all the formal and essential requirements of the Mineral Tenure Act in relation to the location of a post system and have attached a plan of the location on which the positions of the legal corner post and all other posts (and witness and identification posts if applicable) are indicated.

Bradley T. White  
Signature of Locator

RECEIVED  
GOVERNMENT  
ATLANTA  
AUG 16 1993  
MINING RECEIPT

MINING RECEIPT NO.

RECORDED DATE

RECEIVED BY

DO NOT WRITE IN THIS SHADED AREA

GOLD COMMISSIONER

MINING DIVISION

APPLICATION TO RECORD A 4 POST C' AIM

BRADLEY T WHITE NAME OF LOCATOR

AGENT FOR OLIVER T. BERG

BOX 4394 ADDRESS

17 LORRIANE CR ADDRESS

WHITEHORSE Y.T.

ST. ALBERT ALBERTA

NIL TELEPHONE YIA-3T5 POSTAL CODE

403 459-3798 TBM-2R4 TELEPHONE POSTAL CODE

VALID SUBSISTING F.M.C. NO. 128759

VALID SUBSISTING F.M.C. NO. 102156

F.M.C. CODE BT-WHITE

F.M.C. CODE

hereby apply for a record of a 4 post claim for the location as outlined on the attached copy of mineral titles reference map

No 104 N-11E in the ATLIN Mining Division

ACCESS

Describe how you gained access to the location; include references to roads, trails, topographic features, permanent landmarks, and a description of the legal post location

DRIVE TRUCK TO THE FORKS OF L'DONNELL CREEK AND PEATHER CREEK FORKS. MAP 104-N-11E LCP IS 100 M N OF FORKS.

I have securely fastened the metal identification tag embossed "LEGAL CORNER POST" to the legal corner post (or without post) and impressed this information on the tag

IDENTIFICATION POSTS NOT PLACED

LEGAL CORNER POST

TAG NO. 227134

WHERE

LOCATION

CLAIM NAME LONE # 2

If a well exposed and plainly marked legal corner post is being from within a post by true position of the corner post to a distance of... If a well exposed and plainly marked legal corner post is being from identification post to within a post by true position of a distance of... NOTE: Legal corner post can be substituted only to place any posts

LOCATION BRADLEY T WHITE

F.M.C. NO. 128759

AGENT FOR OLIVER T. BERG

F.M.C. NO. 102156

DATE COMMENCED AUG 6 1993

TIME 11:30 AM

DATE COMPLETED AUG 8 1993

TIME 3:45 PM

NUMBER OF CLAIM UNITS

N. 8 E. W. 2

I have complied with all the terms and conditions of the Mineral Claims Act and regulations pertaining to the location of a post claim and have attached a copy of the plan showing which the positions of the legal corner post and all corner posts (if applicable) and identification posts if applicable are indicated

RECEIVED GOVERNMENT AGENT AUG 17 1993 OFFICIAL RECEIPT TRANS #

Signature of Bradley T. White

DO NOT WRITE IN THIS SHADED AREA GOLD COMMISSIONER MINING DIVISION

PLICATION RECORD A 4 POST CLAIM

BRADLEY T. WHITE  
NAME OF LOCATOR  
BOX 4394  
ADDRESS  
WHITEHORSE S.T.  
NIL  
TELEPHONE  
91A-375  
POSTAL CODE  
VALID SUBSISTING F.M.C. NO. 128759  
F.M.C. CODE B.T. WHITE

AGENT FOR OLIVER T. BERG  
NAME  
#17 LORRIANE CR  
ADDRESS  
ST. ALBERT ALBERTA  
(403) 454-3798 T8N 2R4  
TELEPHONE  
POSTAL CODE  
VALID SUBSISTING F.M.C. NO. 102156 T8N 2R4  
F.M.C. CODE

hereby apply for a record of a 4 post claim for the location as outlined on the attached copy of mineral files reference map No. 104 N 11 E in the ATLIN Mining Division

ACCESS Describe how you gained access to the location, include reference to roads, trails, topographic features, permanent landmarks, and a description of the legal post location.

DRIVE TRUCK TO THE FORKS OF O'DONNELL CREEK AND FEATHER CREEK FORKS. MAP 104-N-11E LCP IS 100M N. OF FORKS AND 1000M E. OF FORKS

I have properly fastened the metal identification tag embossed "LEGAL CORNER POST" to the legal corner post (or witness post) and a stamped tag containing the following information on the tag:

LEGAL CORNER POST

TAG # 22735

CLAIM NAME ICONE #3

LOCATION BRADLEY T. WHITE

F.M.C. NO. 128759

AGENT FOR OLIVER T. BERG

F.M.C. NO. 102156

DATE COMMENCED AUG 8, 1993

TIME 5:30 PM

DATE COMPLETED AUG 11, 1993

TIME 8:00 PM

NUMBER OF CLAIM UNITS

5 S. E. W 4

I have complied with all the terms and conditions of the Mineral Tenure Act (Regulation) pertaining to the location of 4 post claims and have attached a plat of the location on which the positions of the legal corner post and all corner posts (and witness and identification posts if applicable) are indicated.

Bradley T. White  
Signature of Locator

IDENTIFICATION POSTS NOT PLACED

WPC \_\_\_\_\_  
Because \_\_\_\_\_  
If a witness post was placed for the legal corner post:  
Bearing from witness post to true position of legal corner post  
is \_\_\_\_\_ degrees  
at a distance of \_\_\_\_\_ metres.  
Bearing from identification post to witness post  
is \_\_\_\_\_ degrees and a distance of \_\_\_\_\_ metres.  
NOTE: Legal corner post can be witness post only if it was not found to place any posts

RECEIVED  
GOVERNMENT AGENT  
ATLIN  
AUG 12 1993  
NOT AN OFFICIAL RECEIPT  
CLAIM # \_\_\_\_\_  
REG. NO. \_\_\_\_\_

**APPENDIX II**  
**ASSAY RESULTS**

REPORT: V93-00678.4 ( COMPLETE )

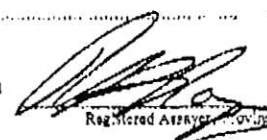
DATE PRINTED: 22-JUL-93

PROJECT: NONE GIVEN

PAGE 1

SAMP E NUMBER	ELEMENT UNITS	AU OPT	Ag OPT
R2 A+1		<0.001	<0.02
R2 A+2		<0.001	<0.02
R2 A+3		<0.001	<0.02
R2 A+4		<0.001	<0.02
R2 A+5		0.001	0.07
A+6		<0.001	0.04
R2 A+7		0.002	0.29
R2 A+8		0.003	0.23
R2 A+9		<0.001	0.07
R2 A+10		0.006	0.03
R2 A+11		<0.001	<0.02
R2 A+12		<0.001	<0.02
R2 A+13		<0.001	<0.02
R2 A+14		<0.001	<0.02
R2 A+15		<0.001	<0.02
R2 A+16		<0.001	<0.02
R2 A+17		<0.001	<0.02

*Target R*

  
Registered Attorney, Province of British Columbia

REPORT: V93-00678.0 ( COMPLETE )

DATE PRINTED: 27-JUL-93

PROJECT: NONE GIVEN

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM
R2 A+1		5	4	5	1	3.5	<0.2
R2 A+2		3	2	4	<1	2.0	<0.2
R2 A+3		49	6	34	1	13.0	0.5
R2 A+4		6	8	19	<1	1.5	0.7
R2 A+5		56	139	113	34	28.0	3.0
R2 A+6		31	15	175	8	<1.0	0.9
R2 A+7		265	486	41	41	149.0	5.9
R2 A+8		142	246	49	26	118.0	3.6
R2 A+9		141	58	67	21	17.0	2.6
R2 A+10		213	19	272	12	2.5	0.8
R2 A+11		8	5	5	2	2.6	0.6
R2 A+12		41	2	108	2	22.0	2.1
R2 A+13		39	4	30	2	13.0	0.9
R2 A+14		46	6	87	3	15.0	1.2
R2 A+15		36	6	42	3	<1.0	1.9
R2 A+16		5	<2	4	1	1.6	0.4
R2 A+17		52	7	73	2	16.0	1.4

target 2