PAYLODE EXPLORATIONS LTD. 1983 EXPLORATION PROGRAM -7

TITLE PAGE

- I. General Nature of The Report:
 consists of the geological, geochemical and petrographic exploration for 1983 on Paylode Property.
- II. Specific Claims Involved:
 - 1. VIC Group 84 units (LAST 1 3676(6) 20 units, LAST 2 - 3677(6) - 20 units, LAST 3 - 3678(6) - 20 units, LAST 8 - 3683(6) - 20 units, LAST 9 - 3684(6) - 1 unit, LAST 10 - 3685(6) - 1 unit, LAST 11 - 3686(6) - 1 unit, LAST 12 - 3687(6) - 1 unit)
 - 2. AB Group 32 units (LAST 4 3679(6) 18 units, LAST 5 - 3680(6) - 8 units, Delcon 1 - 1163(8) - 1 unit, Delcon 2 - 1164(8) - 1 unit, Delcon 3 - 1165(8) - 1 unit, Delcon 4 - 1166(8) - 1 unit, Delcon 5 - 1167(8) - 1 unit, Delcon 6 - 1168(8) - 1 unit)
 - 3. Mark Group 55 units (Blasti 3928(9) 15 units, Doreen 1 - 3843(8) - 20 units, Doreen 2 - 3916(8) - 20 units)
- III. Mining Division: Cariboo Mining Division
- IV. Specific N.T.S. Location: N.T.S. Reference Number 93H/4E
- V. Coordinates: 121°39' N longitude and 53°10' W latitude
- VI. Property Owner: Paylode Explorations Ltd.
- VII. Operator: Paylode Explorations Ltd.
- VIII. Geological Consultant: Steve Kocsis of Fortinski Geological Consulting Ltd.
 - IX. Author: Steve Kocsis

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X. Date Submitted: July 15-1983

GEOLOGICAL BRANCH ASSESSMENT REPORT

Summary

The 1983 exploration program for Paylode Explorations Ltd. consisted of geochemical and geological surveys. Most studies centred around the Mount Wiley and Hardscrabble Mountain area in attempt to locate a northeasterly striking fault and explore possibilities of affiliated mineralization.

Geochemical and geological work was conducted on unexplored portions of Paylode property.

Soil Samples were analysed for 30 elements and MIBK gold. Rock samples were collected for petrographic examination.

Using geochemical and geological data and open File 858 (Geological Survey of Canada), geological map by L. C. Struik, a geological map of Paylode property was constructed with the emplacement of the Hardscrabble-Wiley Fault.

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1.0 INTRODUCTION

1.1 Location and Access

The property can be located on topographical map N.T.S. #93H/4E. The centre of the property, designated Mount Wiley, lies on 121°39' N longitude and 53°10' W latitude. The nearest reference point is Wells. The property begins approximately 4 km NW of Wells and access is along Bowron Lake Road to Big Valley logging road or along Mosquito Creek road to Hardscrabble road. Wells can be reached via Highway 26, eighty-six km east of Quesnel, B. C.

Wells, population < 1,000, was constructed in the 1930's, promptly after the discovery and opening of the Cariboo Gold Quartz Mine. Wells is the sister city of early Barkerville where placer mining commenced in the early 1860's.

1.2 Property Nomenclature

Paylode Exploration Ltd. holds three major mineral groups totalling 211 units, each 500 m by 500 m. The groups are called the <u>AB Group</u>, 72 units, the <u>Vic Group</u>, 84 units, and the Mark Group, 55 units.

1.3 Access on the Property

The eastern section of the property is accessible by car along the Bowron Lake Road turnoff 2 km east of Wells, then northwest along the Big Valley logging road. Two Bit Creek can be reached, but 4-wheel drive is required to travel along the north section going west towards Sugar Creek. Sugar Creek logging road can be followed along the western section of the property to Hardscrabble Creek where you meet Hardscrabble road. Hardscrabble road runs into Mosquito Creek mining road that brings you back into Wells. Mosquito Creek road is passable by car, but further travel requires 4-wheel drive. Some slash line roads can be passable in the eastern section in areas presently logged.

1.4 Terrain

The properties of Paylode Exploration Ltd. lie within elongated northwesterly ridges, mainly extensions of Hardscrabble Mountain and Mount Wiley. The mountains reach elevations of 5,600 and 5,900 feet respectively.

The terrain slopes steeply to moderately anywhere from 900 feet per kilometer to 300 feet per kilometer with minor flat areas in the eastern section of the property.

Evidence of valley glacials, generally mountain or of high elevation genesis, is seen everywhere. Glacial run-off, drifts and moraines are common. Most steeply sloped areas are barren of glacial debris, making it ideal for geochemical soil tests. Valleys carved or widened by glaciers are presently occupied by shallow creeks. All creeks are crossable by foot. There are seven major creeks on the property: Hardscrabble, Cornish, Cafe, Stewart, Two Bit, Wiley and Sugar Creeks. Small spring run-offs are very common in steeply sloped areas.

1.5 Growth

All areas are densely to moderately covered with smallto medium-sized pine. Tall pine is seen in flatter areas, although most of the tall pine has been logged in the northeastern section of the property, leaving exposed ground. Deciduous trees are rare, but short willow occupies well moistured soil mainly along run-offs and along the banks of creeks. Banks of creeks and along run-offs are usually very shrubby and covered by deep, shoft layers of moss. Bedrock, boulders and gravel are covered by a thin layer of moss in all places.

1.6 General Soil Profile

The soil is easily divided into three main groups in The top section or "A" horizon is usually a this area. black or grey bituminous layer consisting of a massive root system contained by the mossy growth and abundant decaying tree trunk and branch fragments. Gravel is absent, but fragmented bedrock is evident on steeply sloped areas. The "B" horizon is collected for geochemical analysis. This horizon varies from a brown to red color, well mineralized when reddish colors are attained. There is usually very little decaying plant material in this horizon, but gravel is usually present or fragmented bedrock where near surface. Horizon "C" - either gravel or fragmented bedrock - is usually identifiable in the erosional stage and the boundary between "B" and "C" horizons is gradational, whereas "A" and "B" horizons consist of a sharp boundary. Generally the "<u>A</u>" layer is no more than six inches to two feet thick becoming thinner on steeper slopes. The "<u>B</u>" layer is usually no thicker than one foot except in flat lying areas. The soils on the property are mostly well drained and semidry after the spring run-off.

1.7 Sampling Technique

Geochemical soil samples are taken exclusively from the "B" horizon. As noted above, the "B" layer is accessible through usually no more than six inches to two feet of "A" horizon. The "B" layer is thin and care is taken not to retrieve fine material such as silt from the "C" layer or false anomalies may result in form of placer minerals. Approximately 500 grams are taken in 100 meter intervals along designated geochem lines. The samples are not screened and stored in a dry area. The geochem lines run parallel to the ridges and mountain faces in hope to locate soils mineralized by groundwater and run-off water derived in contact with mineralized bedrock. Anomalies (kicks) will have resulted from bedrock directly above from higher elevations. Samples are taken in shorter intervals where highly mineralized soil is visible. (Mineralization can be estimated by degree of red color resulting from iron oxidation.) The samples will be analyzed by Acme for 30 element ICP and MIBK gold.

1.8 Previous Exploration

Fifty-three silt samples were collected along creeks occupying Paylode Property. The work was conducted in 1981

and applied to work assessment. Each sample was analyzed by General Testing Laboratories for the following contents: gold, silver, copper, lead, zinc, molybdenum, arsenic, barium and tungsten. The concentration of the measured elements should reflect upon the relative amount of mineralization somewhere at a higher elevation along the creek within the bedrock.

From overall element concentrations, the following values should be considered as anomalous for this particular set of samples.

| Element | Symbol | Anomalous Threshold (ppm) |
|------------|----------|---------------------------|
| G-14 | b | 0,02 |
| Gold | Au | |
| Silver | Ag | 0.6 |
| Copper | Cu | 70.0 |
| Lead | Pb | 25.0 |
| Zinc | Zn | 125.0 |
| Molybdenum | Мо | 5.0 |
| Arsenic | As | 15.0 |
| Barium | Ba | 250.0 |
| Tungsten | W | 1.0 |

The following certificate of Assay (App.) consists of the results from the 1981 exploration program. Anomalous values are underlined and locations are marked on map Anomalous values are used as part of a guideline for the 1983 exploration program. Special interest is noted for gold concentrations in the Steep 1 and 2 claims and Doreen 2 claim and interests in lead-silver in the Cornish Lake area within LAST 3. Claims LAST 1, 2 and 8 hold promising readings for barium.

1.9 Regional Geology

The bedrock geology in the general district of Wells

is characterized by Devonian to Permian aged rock groups with some questionable Hadrynian towards the west. A large anticlorium structure strikes northwest across the area from points 121°30' longitude, 53°00' latitude and 122°00' longitude 53°08' latitude. Thereby, rocks generally dip comformably to the structure, dipping north, north of the structure and dipping southerly, south of the structure. Most rock formations strike northwest along with the anti-

clorium axis. This structure is thought to have occurred during the Devonian to Mississippian period accounting for regional and contact metamorphism of existing and older clastics and carbonates. During that period infiltration of volatile materials and gases, originating from probably a large granodiorite structure, into the surrounding country rock provided the genesis of most ore deposits. Although studies in the field show that there is a high probability that younger, Mississippian to Permian, basic intrusions (gabbro's and serpentinites) may be directly or be of a secondary affiliation with ore deposits. This affiliation will be discussed later with interests in mineralized and highly silicified rock south of the gabbroic intrusion seen atop Mount Wiley.

Nomenclature for the area can be divided into two groups - the Black Stuart Group (Hadrynian and/or Devonian to Mississippian) and the Slide Mountain Series, mainly the Antler Formation (Mississippian?, Pennsylvanian and Permian). See Section 2.2 for a legend of geology taken from map O.F. 858.

Geological Survey of Canada. The Black Stuart Group is mainly characterized with Metamorphized clastics and carbonates while the later, younger formations consist mostly of basic intrusions with minor metamorphic rocks. Map O.F. 858, Geological Survey of Canada, gives the best detailed description of bedrock geology in the Wells area. Other structures include northeasterly striking faults of Mississippian? to Permian age concentrated and perpendicular to one largely extended northwesterly striking fault of the same age running across the Jack of Clubs Lake.

2.0 PROPERTY GEOLOGY

2.1 Bedrock Geology on Paylode Property

Devonian to Mississippian aged rock is predominant in the area with some Ordivician argillites and limestone in the northeast section. Phyllites is the most common rock type on the western section of the property occupying DM_S (formation symbols are the same as described by L. C. Struik, 1977-1981, O.F. 858, Geological Survey of Canada). Limestone, quartzites and phyllites are all common in the eastern section of the property occupying MP_{Ω} .

Sometime between the Mississippian and Permian period, gabbroic sheets intruded the area. One of these sheets, MP_{AV} , is seen atop Mount Wiley. At the same time or shortly afterwards, the section was thrusted towards the southwest, and northeastly striking faults resulted. It is the purpose of this report to prove and clarify the locality of such a fault between Mount Wiley and Hardscrabble Mountain.

Generally less than 5% of bedrock is exposed and most geological contacts are approximated or assumed.

2.2 Legend of Rock Formations (O.F. 858, Geologial Survey of Canada)

Permian? and/or Triassic?

 PT_S

Grey and green slate and phyllite, olive and grey greywacke.

Mississippian?, Pennsylvanian and Permian

MPA

Antler Formation: MPAV; diorite, basalt, serpentinite,

gabbro, undifferentiated MP_{AS} , MP_{AS} ; olive and grey chert, black and green slate, greywacke MP_{AU} ; serpentinite, sheared mafic rocks.

Mississippian? to Permian?

MPR

Ramos Creek Succession: olive and grey micaceous quartzite, phyllite and slate, limestone, metatuff? MP_{RA}; phyllite, sckist, quartzite, calc-silicate rocks, MP_{RC}; limestone, calcareous quartzite, phyllite MP_{RP}; black siltite and slate, may be equivalent to DM_S. MP_{RS}; green olive and grey slate and phyllite, olive-grey grewacke, may be in part equivalent to H_0 .

MPDM

Dragon Mountain Succession: olive and grey micaceous quartzite and phyllite

MPη

Tom Creek Succession: olive grey micaceous quartzite, phyllite and schist

MP_D

Downey Creek Succession: olive and grey micaceous quartzite and phyllite, grey olive and green slate, limestone, marble, metatuff? MP_{DC}; limestone, marble, metatuff?, slate MP_A

Amphibolite

MPS

Dark grey sandy limestone, dark grey greywacke

MP_V

Foliated diorite and augite porphyry basalt, gabbroic rock includes undifferentiated db

Lower Mississippian

MGR

Greenberry Formation: grey crinoidal limestone, chert, slate

Devonian? and Mississippian?

DMS

Black siltite and phyllite, grey micaceous quartzite, limestone, minor metatuff? DM_{SB} ; greywacke, muddy conglomerate DM_{SG} ; quartzite, clast conglomerate, DM_{SC} ; limestone minor dolomite DM_{SM} ; grey micaceous quartzite, dark grey phyllite. DM_{S} ; quartzite, minor conglomerate DM_{SV} ; interbedded grey slate and green metatuff in part calcareous

Paleozoic?

 P_C

Orange weathered fuchsite bearing ankeritic carbonate

2.3 Petrographic Notes

See Figures 6 and 7 for rock sample locations on Paylode Property.

1a.Quartzite

Beds are striking 135° SE and dipping 60° S. Dark grey with orange weathering. Fine to coarse grain. Poorly sorted becoming a quartzitic conglomerate. Thin quartz veining is seen throughout (commonly less than 3 cm). Interbeds at 1b; quartzitic phyllite: olive grey with some orange weathering. MP_O; Downey Creek Succession of the Black Stuart Group.

2. Limestone

Beds are striking 135° SE and dipping 60° S. Sandy, argillaceous with abundant calcite veining 5 cm and less. MP_S or possibly MP_D; Downey Creek Succession of the Black Stuart Group.

3. Phyllite

Cleavage is striking 120° SE and dipping 5°S. Dark grey. Becoming slatey. Scattered pyrite cubes. Abundant quartz veining across cleavage less than 1 cm thick. 3f; Abundant floats of white to dark grey microlaminated chert. OM_{BS} of the Black Stuart Group.

6. Schist

Cleavage strking 110° SE and dipping 10° N with vertical sections and foliated sections. Fault contact along formation where sample 7 retrieved. Dark grey with some orange weathering. Some siliceous veins, 1 cm to 20 cm, parallel to the cleavage, are mineralized by dendritic and wirey pyrolusite (MnO_2) . Possible scaley native silver and black uraninite (UO_2) pending sample assays. MP_D of the Downey Creek Succession, but very similar to DM_S.

7. Slate

Cleavage is striking 100° SE and dipping 80° N. Olive grey to green MP_pof the Downey Creek Succession.

8. Quartzite

Beds are striking 140° SE and are mostly vertical. Olive grey. Micaceous - mainly sericite. Fine to medium grain. MP_D of the Downey Creek Succession and may be the extension of the quartzite formation at rock sample location 1.

9. Phyllite

Cleavage is striking 110° SE and dipping 85° S to vertical.

Grey becoming olive. Abundant scattered pyrite cubes. Interbedded with micaceous quartzite. Some calc-silica veining 10 cm and less. MP_D of the Downey Creek Succession.

10. Marble

Beds striking 110° SE and dipping 85° S to vertical Dark grey. MP_D of the Downey Creek Succession.

11. Limestone

Beds are striking 110° SE and dipping 85° S to vertical. Dark olive grey. Argillaceous. Micaceous. Abundant calcite veining. MP_D of the Downey Creek Succession.

12. Slate

Cleavage striking 120° SE and dipping 70° S. Dark grey becoming black. OM_{BS} of the Black Stuart Group.

13. Limestone

Striking 120° SE and beds dipping 75° N to vertical. Some foliated sections. Quartzitic with matrix planar. Some thin calcite veins running across the cleavage. 1 Emu: Mural Formation of the Cariboo Group.

14. Limestone

Beds are striking 120° SE and dipping 75° N to vertical Dark grey, argillaceous. Developing schistosity in places. Calcite veining up to 20 cm. thick. Traces of mineralization with sparsely scattered pyrite cubes. IEmu; Mural Formation of the Cariboo Group.

15. Limestone

Possibly a large float. Erratically striking beds 80 ° NE and dipping 75° S. White. Clean coarsely crystalline with some calcite veining. Hc; Cunningham Formation of the Cariboo Group or possibly IEmu.

16. Dolomite

Strike and dip unknown. Light to medium grey weathered light brown. Coarsely crystalline. Hc; Cunningham Formation of the Cariboo Group or possibly IGmu.

17. Phyllite

Cleavage striking 135°SE and dipping 80°S to vertical. Dark olive grey. Becoming slatey. MPo of the Downey Creek Succession.

18. Phyllite

Cleavage is striking 135°SE and dipping 80°S to vertical. Dark grey becoming black. Becoming a schist. MPo of the Downey Creek Succession or equivalent to Hi; Isaac Formation of the Cariboo Group.

19. Marble

Beds striking 115°SE and dipping 85°N. Light to medium grey with orange weathering = ankeritic. Siliceous in parts. Some slip and slide surfaces

suggesting faulting. Trace minerals include green colored malachite $(Cu_2CO_3(OH)_2)$ and tetrahedrite $(CuFe)_{12}(SbAs)_4S_{13})$. Interbedded with DM_S phyllite. P_C , probably part of the DM_S.

- 20. Quartz porphyry or other siliceous veining. Strike and dip unknown. Abundant invaded pyroxene probably resulting from gabbroic sheet at rock sample location 22. Trace with section of rich bournonite (PbCuSbS₃) with tetrahedrite ((CuFe)₁₂(SbAs)₄S₁₃). Probably same age as MP_{AV} and related to other quartz porphyry rhyolites (qp) in the northeast. Also, probably affiliated with the Hardscrabble-Wiley Fault again age equivalent to MP_{AV} .
- 21. Phyllite

Cleavage is striking 105° SE and dipping 45° N with some vertical sections. Dark grey becoming black. Becoming graphitic in some sections. Scattered cubic pyrite. Some sections becoming quartzitic. DM_S.

22. Gabbro

Sheet structure possible slightly thrusted and overturned from the northeast. MP_{AV} of the Antler Formation.

23. Phyllite

Dip and strike unknown. Abundant pyroxene indicates in close contact with gabbro intrusion. DM_{c} .

24. Phyllite

Cleavage striking 115° SE and dipping 88° N. Dark grey.

Some graphitic sections. Quartz veining is present but lenticular. Iron oxide staining is seen throughout. DM_c

25. Phyllite

Cleavage is striking 105° SE and Dipping 35° N. Dark grey. Slight graphitic soft texture. Minor traces of malichite $(Cu_2CO_3(OH)_2)$ and tetrahedrite $((CuFe)_{12}(SbAs)_4S_{13})$. DM_S.

26. Phyllite

Cleavage strikes 95° SE and dips 20° N. Same as 25. DM_c.

27. Quartzite

Strike and dip unknown. Light grey with abundant orange weathering on surface. Calcareous. Hi; Isaac Formation of the Cariboo Group.

28. Phyllite

Cleavage strikes 160° SE and dips 45° S to vertical - distortions near quartz injection. Black. DM_S.

29. Phyllite

Cleavage strikes 120° SE and dips 70° S. Dark grey. Slatey. $MP_{\rm D}$ of the Downey Creek Succession.

30. Phyllite

Cleavage strikes 120° SE and dips 70 - 80° N. Medium dark grey with slight olive. Quartzitic. Some pyritic patches. MP_{D} of the Downey Creek Succession.

3.0 GEOCHEMICAL EXPLORATION

3.1 Mount Wiley, Hardscrabble Mountain Area

1. W H Grid

3

A geological survey of the Wiley-Hardscrabble area shows promising indications of a traverse fault running between the two mountains. Between the summit of each mountain a highly silicified quartzite with fused grains and abundant quartz veining is seen (rock sample 20). Adjacent the quartzite formation, immediately north, a Devonian-Mississippian phyllite DMs exists. The phyllite dips and strikes accordingly as expected in the DM_S (striking SE, dipping North). The highly silicified quartzite shows traces of tetrahedrite (Cu,Fe)₁₂ (Sb As)₄S13 colored black and alterations to green malachite $Cu_2CO_3(OH)_2$. Tetrahedrite commonly occurs with lead-silver veins although silver composition of rock sample 20 is unknown until assay results are obtained. High silicification and traces of mineralizations suggests the existence of a local fault. The dip and strike of the silicified rock is unknown and subsequently the age of the rock cannot be determined at this time.

It was decided to run a geochemical grid over the area to determine the trend of the presumed fault. For reference a centre line or predicted placement of the fault was marked using a chain line (dashed line on geochem map). The reference line (C-line) commences on Hardscrabble Road on the L5 Geochem Line, at 121°39' 20" Longitude and 53°9'30" Latitude. The centre line runs for 1500

meters in the direction, 40° NE. At the 500 m, 750 m, 1,250 m and 1,500 m points along the centre line, soil samples were taken, labelled C500, C750, C1000, C1250 and C1500 respectively. At each one of these points, geochem lines were run perpendicular to the centre line, north and south of the centre line. Along the perpendiclar geochem lines, samples were taken every 15 m for 150 m north and 150 m south, with exception of 255 m south from the C1500 point. The geochem lines, starting with the one perpendicular to C500, were named 1, 2. 3, 4 and 5. Sample points on the northern half of geochem line 1 were labelled N1-15, N1-30, N1-45, etc. . . incrementing every 15 m and labelled in the same fashion for the remaining north and south geochem lines. With the 30 Element ICP Analysis on the geochem samples, different concentrations of elements reflecting on mineralization should define the trend of the fault. Further exploration of the area will be pending geochemical and assay results.

Doreen 1

i) D1 Geochem Line

Initial point (D1-0) 121°39'20" longitude and 53°12'25" latitude, the line strikes 315° NW extending 500 m. Sample points are every 100 m. All samples were taken atop a relatively thick glacial runoff bench, but evidence of surface water depicts^{2m} mineral transport from higher elevations. All

samples were visibly low in mineralization with the exception of a moderate-to-good red iron color in sample D1-1.

Blast 1

i) B1 Geochem Line

Initial point (B1-0) 121°35'45" longitude and 53°11'40" latitude, line striking 330° NW from samples B1-0 through to B1-16 were taken at 100 m intervals. Samples B1-0, B1-1, B1-2 and B1-3 were taken atop a dry river bed adjacent the ridge in interest. Samples B1-4 through to B1-16 were taken at the base of the ridge overlaid by a thin layer of glacial run-off debris. The Geochem Line runs west from point B1-16, one hundred meters to final sample point, B1-17.

ii) BB1 Geochem Line

Initial point (BB1-0) 121°36'40" longitude and 53°12'35" latitude, line strikes due west from samples BB1-0 to BB1-7 taken at 100 m intervals totalling 700 meters. Samples were atop a relatively deep glacial deposit so sampling was limited in this area. Phyllite is exposed in the area (see rock sample 3) and floats of thinly-layered chert is evident throughout. Limestone is exposed 1½ km northwest within the Two Bit Creek channel.

LAST 1 (Including LAST 9, 10, 11 & 12)

i) L1 Geochem Line

Initial point (L1-0) 121°34'45" longitude and

53°10'30" latitude, line strikes 330° NW with the initial point (L1-0) located on the southern end of the line. The line extends 1,200 m with samples taken every 100 m with the exception of sample L1-1.3 taken at 130 m. All samples were taken at the base of the ridge of interest with bedrock very shallow. Bedrock is exposed near point L1-0 (see rock samples 1 and 2), composed of quartzite and 150 m north there are sandy argillites and limestone.

ii) LLl Geochem Line

Initial point (LL1-0) 121°34'30" longitude and 53°9'40" latitude, line strikes 353° NW with the initial point (LL1-0) located on the southern end of the line. The line extends 1,700 m, with samples taken every 100 m with the exception of sample LL1-16.3 taken at 1,630 m. Bedrock is not exposed although abundent running surface water depicts bedrock is shallow. Bedrock exposure can be seen immediately north of the final sample points (see. rock samples 1 and 2) composed of quartzite. The LL1 Geochem Line strikes NW 315° for 200 m where samples LL1-18 and LL1-19 were retrieved below the ridge strattling an area earlier hydrauliced for placer gold.

LAST 2

i) L2 Geochem Line

Initial point (L2-0) 121°35'55" longitude and

53°10'15" latitude, 340° line striking NW. Sample collection started at south end of line all at 100 m intervals and one extra at the 430 meter point. Samples were marked as follows: L2-0, L2-1, L2-2, L2-3, L2-4, L2-4.3, L2-5. All samples were taken along a moderately sloping ridge atop a thin deposit of glacial run-off debris. Good iron red color is seen at the 430 meter point. There are no outcrops although abundant angular fragmented phyllite is seen within the overburden indicating an argillite formation below. Some quartz floats up to two feet in diameter are seen but are leached of what mineralization existed. The scattered phyllite is similar to rock sample 2 taken 1 km south.

LAST 4

i) L4 Geochem Line

Initial point (L4-0) 121°37'40" longitude and 53°8'15" latutude, line striking due east. Sample collection commenced on west end of line taken at 100 m intervals marked as follows: L4-0, L4-1, L4-2, L4-3, L4-4, L4-5 and L4-6 completing a 600 m line. All samples were taken atop glacial run-off - boulder clay overburden. Samples L4-2 through to L4-6 show a good iron red color. There are no bedrock exposures although phyllite is seen 1 km west of the area.

LAST 5

i) L5 Geochem Line

Initial point 121°39'30" longitude and 53°9'30" latitude, line striking 150° SE. Soil sampling commenced on northern end of line at intervals of 100 m marked as follows: L5-0, L5-1, L5-2, L5-3, L5-4 and L5-5., completing a 500 m line. Samples L5-0 through to L5-2 were taken immediately above bedrock composed of medium grey brown moderate to phyllite with highly-schistose development dipping approximately 45° to 60° in a northeasterly direction. Bedrock is the same as rock sample 1. Rock sample 1 is found with some beds of quartzite up to two meters thick. The quartzite is clean, containing some calcite and traces to moderate amounts of malachite and weathered alterations into cuprite. Geochem samples L5-3, L5-4 and L5-5 were taken atop thin glacial run-off gravel beds.

3.2 Discussion on Geochemical and Geological Data

Results from ICP Geochemical Analysis completed by Acme Analytical Laboratories Ltd. are listed in Appendix C. Readings are categorized as follows for the following elements:

| Au | Background | < 10 | ppb |
|----|------------|-------|-----|
| | Moderate | 10-15 | ppb |
| | Anomalous | > 20 | ppb |

| | • | | |
|----|------------|---------------|----------------|
| Ag | Background | <0.7 | ppm |
| | Moderate | 0.7-1.3 | ppm |
| | Anomalous | >1.3 | ppm |
| U | Background | ≺ 5 | ppm |
| | Anomolous | ≥ 5 | ppm |
| Th | Background | < 3 | ppm |
| | Anomolous | > 3 | ppm |
| ~ | | / | |
| Cu | Background | < 35 | ppm |
| | Moderate | 35-50 > 50 | ppm |
| | Anomaly | 2 50 | ppm |
| Pb | Background | 4 25 | ppm |
| | Moderate | 25-30 | ppm |
| | Anomaly | > 30 | ppm |
| Ni | Background | < 40 | ppm |
| | Moderate | 40-50 | ppm |
| | Anomaly | > 50 | ppm |
| Fe | Background | < 3.75 | 8 |
| | Moderate | 3.75-5.00 | 8 |
| | Anomaly | > 5.00 | 8 |
| As | Background | < 10 | ppm |
| | Moderate | 10-15 | ppm |
| | Anomaly | > 15 | ppm |
| _ | | | |
| La | Background | < 20 20 25 | ppm |
| | Moderate | 20-25 | ppm |
| | Anomaly | > 20 | ppm |
| Ba | Background | < 200 | ppm |
| | Moderate | 200-300 | \mathtt{ppm} |
| | Anomaly | > 300 | ppm |
| Mn | Background | < 300 | ppm |
| | Moderate | 300-600 | ppm |
| | Anomaly | > 600 | ppm |
| Cr | Background | < 40 | ppm |
| • | Moderate | 40-70 | ppm |
| | Anomaly | > 70 | ppm |
| | — | | |

Mount Wiley-Hardscrabble Mount (HW) Grid

Gold, silver, copper and uranium show anomolous values within the grid. Figures 11, 12, 13 and 14 show graphic illustrations of element occurrences in the

area. Anomalous values were placed on the 1:12,500 scale geological map, figure 16. The C-line, a designated line within the HW Grid, figure 15, closely follows a creek bed, thereby samples taken near and along the C-line lie atop relatively thick fluvial sediments. Anomalous values along or near the C-line may be false due to transported sediments. But, due to the steepness are derived from the Mount Wiley and Hardscrabble Mountain peaks. Samples further north and south of the C-line were taken directly atop bedrock in most cases and should directly reflect the geochemistry of the rock formation.

With anomalous values placed on figure 16, the assumed fault discussed in section 3.1 can be drawn in. Movement along the fault can be estimated by the offset occurrence of formation DM_{SB} north and south of the fault. Extension of the Hardscrabble-Wiley Fault

No other prominent anomalies are seen within the geochemical data with the exception of native Au in the LAST 11 claim. Sample L1-0 contains 6 ppm native Au. The area was hydrauliced for placer gold probably in the 1930's. Further study in the area revealed mineralization 200 m north of sample L1-0 located in rock sample 6. Here the slatey phyllite contains siliceous veins mineralized with pyrolusite (MnO_2) . Possible scaley native silver and black uraninite (UO_2) pending on sample assays. Placer tests within a small creek immediately adjacent

to the mineralized area reveals high concentrations of coarse gold. Some of the gold is wirey and very little water wear is evident. It is possible that the placer gold has derived from a near locality.

Rock samples 6 and 7, grey phyllite and olive slate show an unconforming contact between the two formations. The two formations strike and dip differently and foliation withing the grey phyllite suggests the presence of a fault. By extending the placement of the Hardscrabble-Wiley Fault, it crosses the location of rock samples 6 and 7. It is very possible that the fault in the LAST 11 claim belongs to the same fault system crossing through LAST 1 and LAST 8 claims.

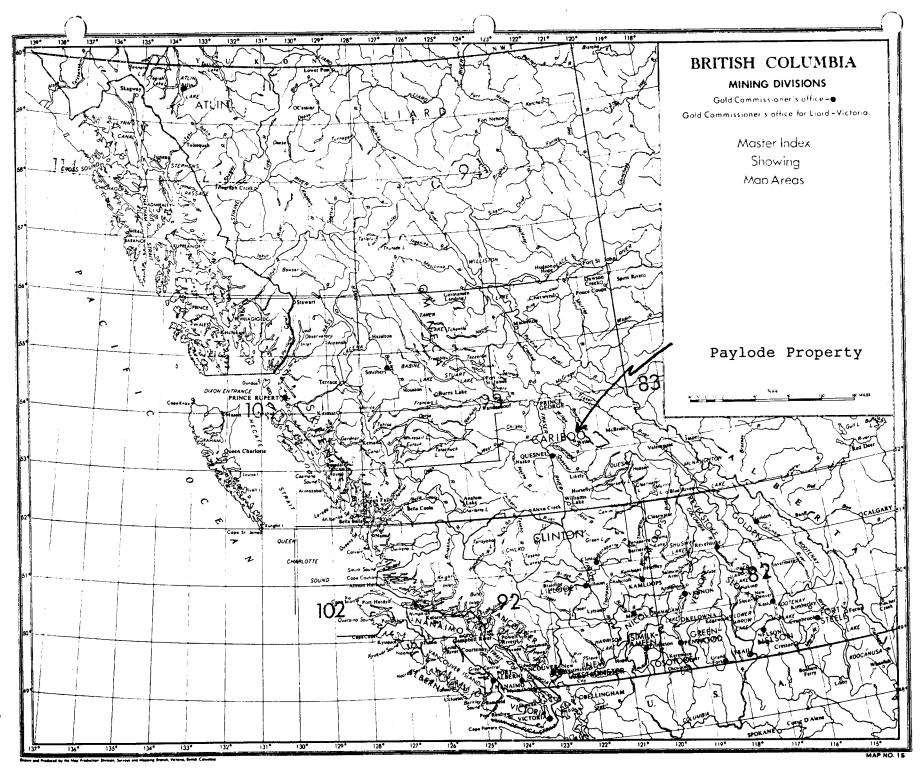
3.3 Recommendations for Further Exploration

Further exploration on Paylode Property should centre about the Hardscrabble-Wiley fault. It is here that geochemical and bedrock analyses shows mineralization affiliated with the fault. Special interests should be concentrated on Ag, Au, Cu and U.

Deep overburden discourages further geochemical analyses along the fault in the LAST 8 and LAST 1 claims. Bedrock should be exposed near rock samples 6 and 7 and blasting to reveal a sufficient volume. Drilling should be considered afterwards. The same sould be completed with the area atop Mount Wiley and Hardscrabble Mountain although a road will have to be pushed in approximately 1,000 meters. The terrain is steep, but

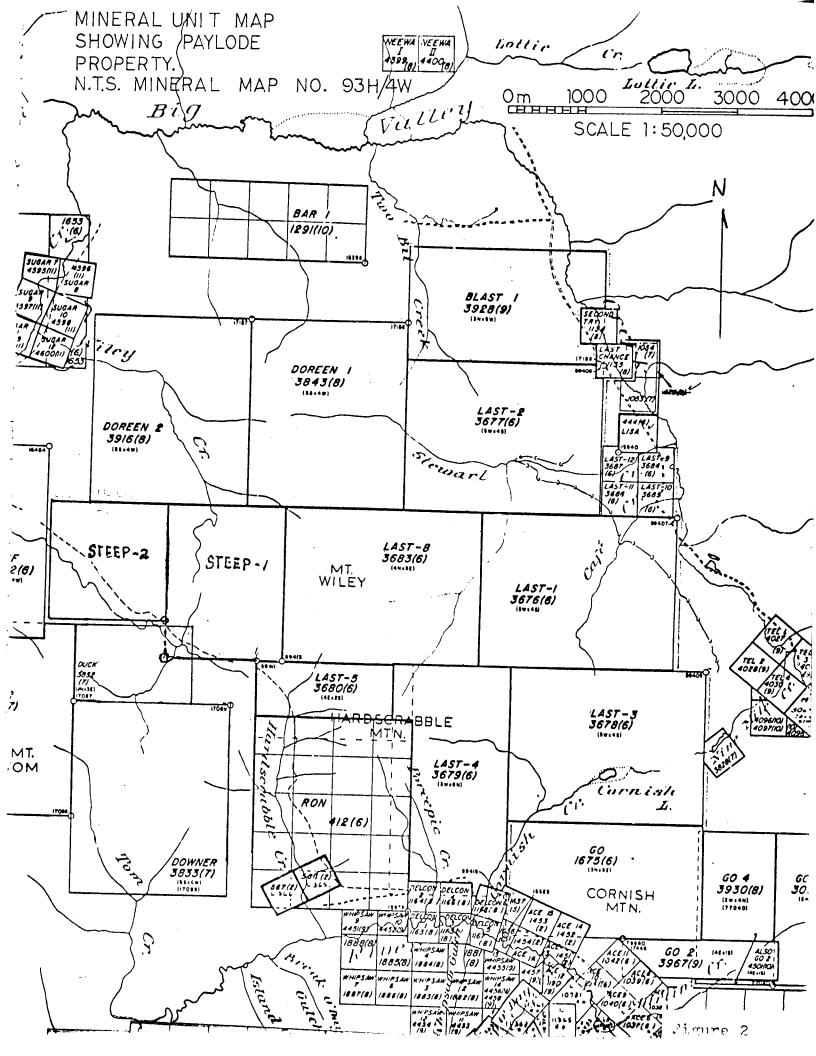
smooth and forest growth is sparce, ideal for road construction.

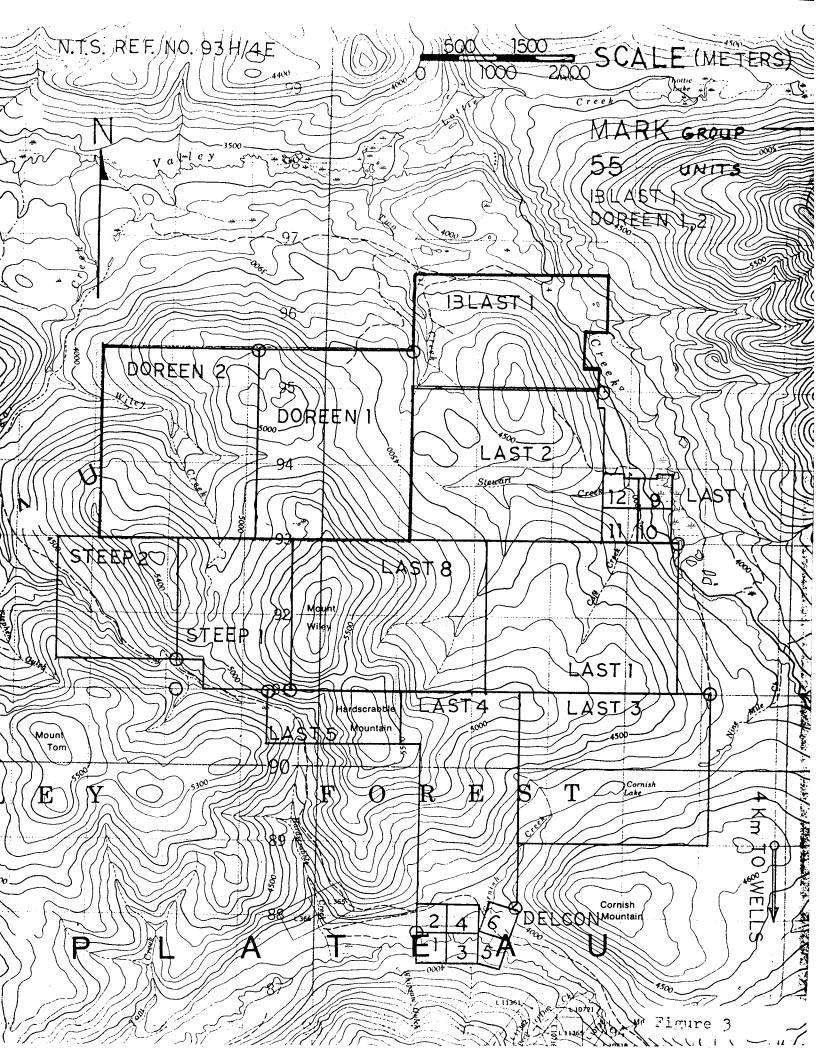
An attempt should be made to outline the mineralized zone using a magnetometer or possibly a simple Geiger counter if uranium deposits persist.

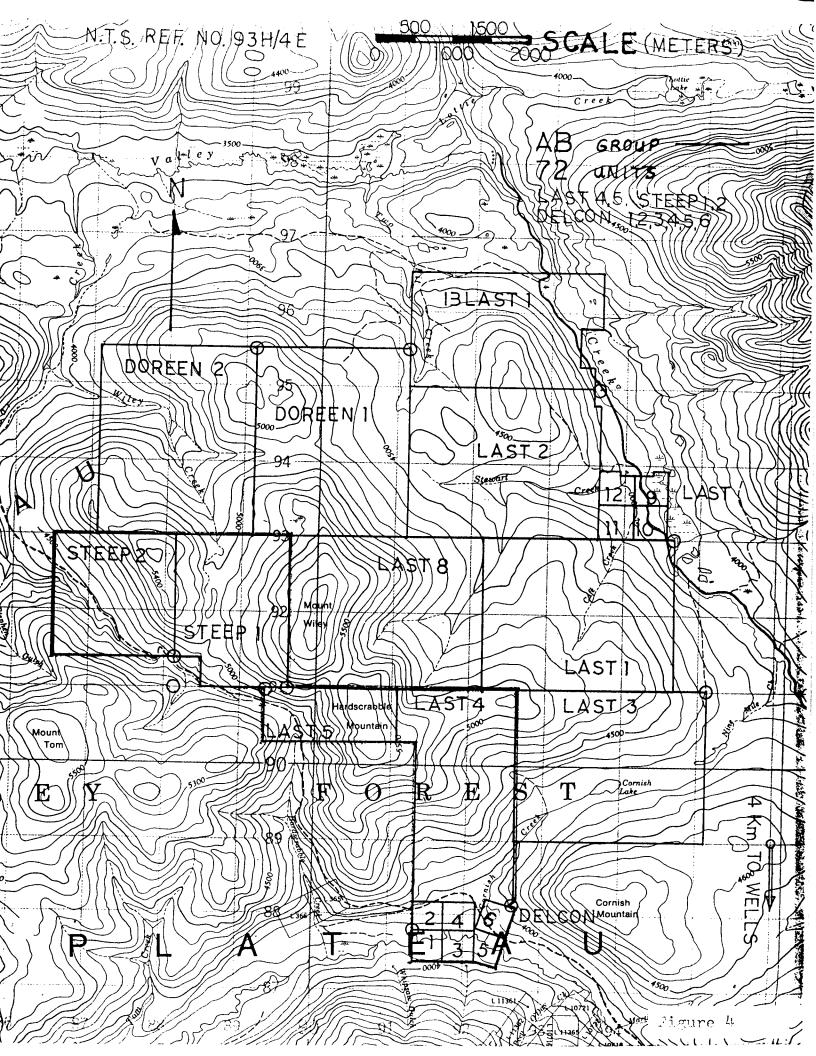


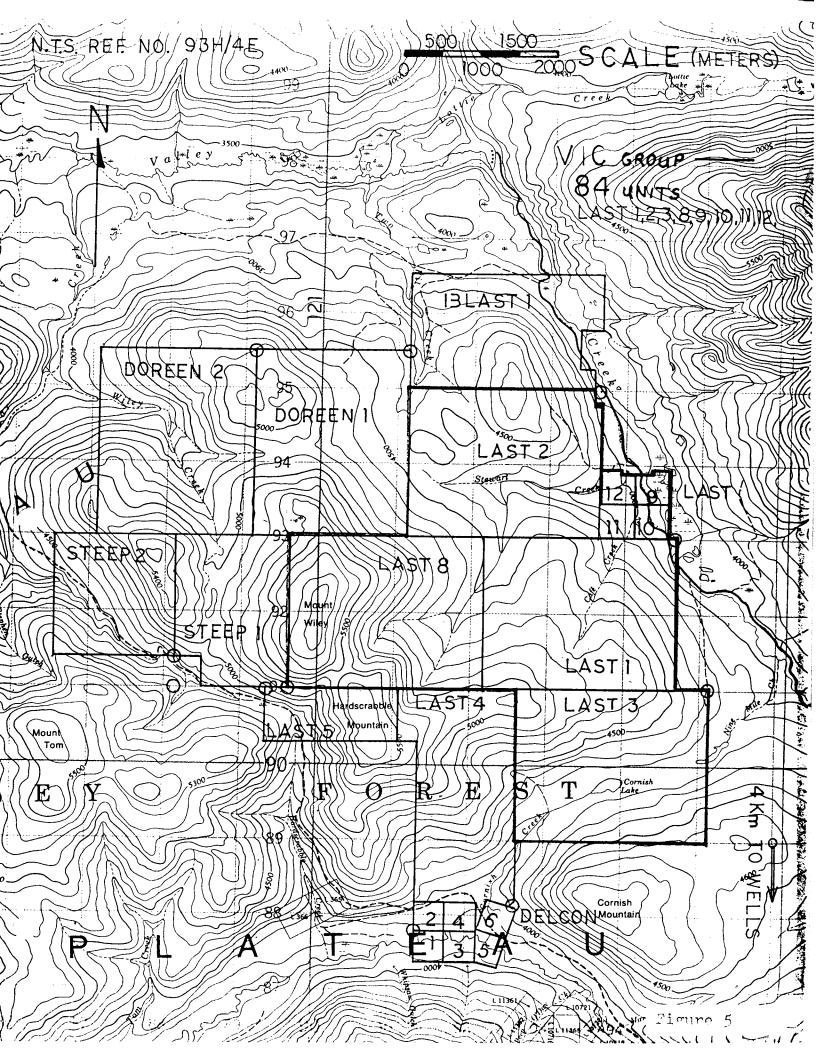
Figure

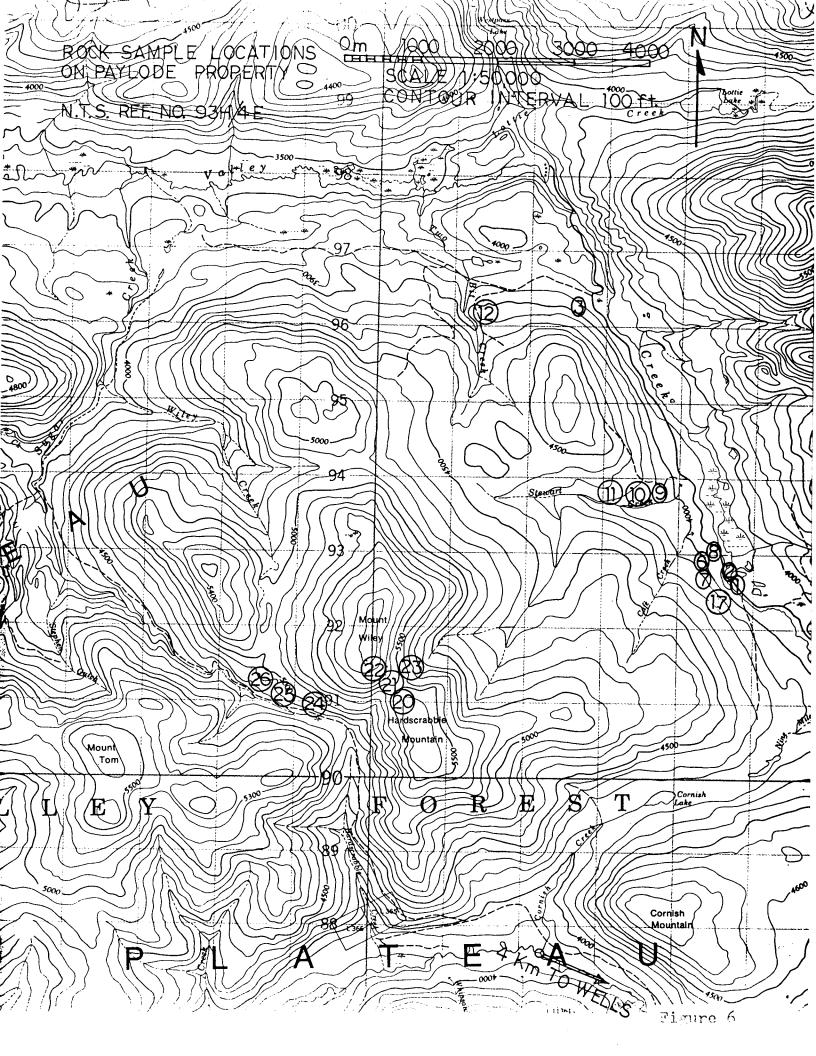
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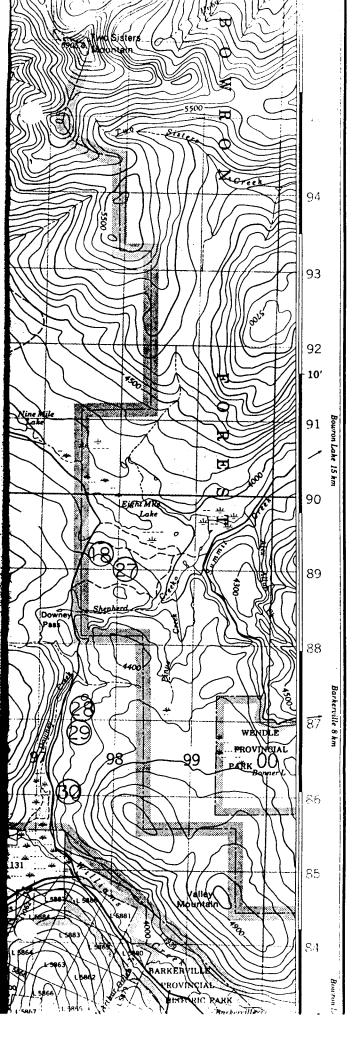












| Surveyed Line Tank | Ligne arpentee Reservoir |
|---|--|
| Water Water | Lau Chamie d'huar |
| | Chemin d'hiver |
| For a complete glossary so Pour un glossaire complet | |
| | |
| | |
| | INS ABRÉVIATIONS |
| | |
| | Abandonne, ée Cimetière |
| | Comté |
| | Élévateur |
| | |
| | Hópital |
| | Lot |
| | Micro-ondes Municipalité |
| P Post Office | Bureau de poste |
| PH Power House RCMP Royal Canadi | |
| - | Gendarmerie Royale Canadienne |
| Res Reservoir | Réservoir Station Poste de transformateurs |
| | ence Licence de sylviculture |
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| | Jack Contraction |
| | V |
| •• | y to obtain numerical values |
| | MEAN DECLINATION 1979 CENTRE OF MAP |
| Annual ch | ange decreasing 4.5 |
| | e pour obtenir les valeurs numériques |
| | MOYENNE APPROXIMATIVE : DE LA CARTE EN 1979 |
| Variation an | nuelle décroissante 4.5' |
| | |
| | |
| ÷ – · | DUSAND METRE |
| | NSVERSE MERCATOR GRID |
| | ZONE 10 E DE MILLE MÈTRES |
| | INIVERSEL DE MERCATOR |
| innia venat u | |
| | |
| | |
| GRID ZONE DESIGNATION. DÉSIGNATION DE | 100 000 m SQUARE IDENTIFICATION IDENTIFICATION DU CARRÉ |
| LA ZONE | DE 100 000 m |
| DU QUADRILLAGE: | EQ 59 |

EP

EXAMPLE OF METHOD USED

TO GIVE A REFERENCE TO NEAREST 100 METRES EXEMPLE DELA METHODE EMPLOYEE Page care process of the METAL SPEC

10U

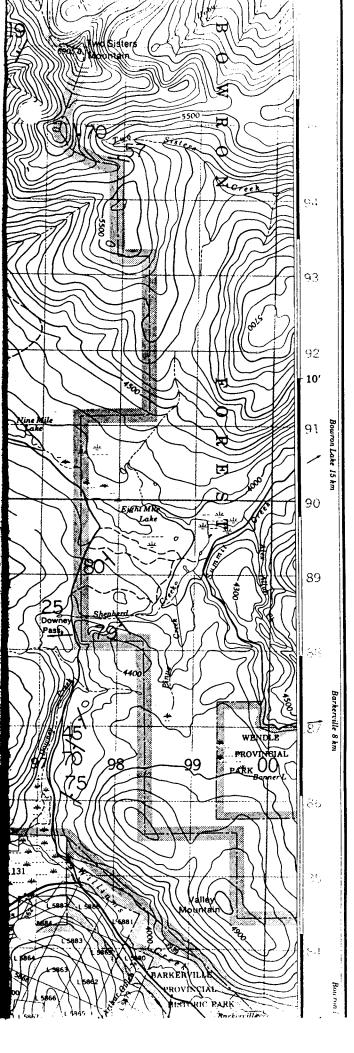
0m 1000 SCALE 1:50,000 CONTOUR INTERVAL 100 ft

Figure ?

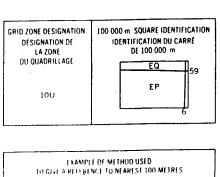
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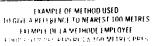
3000

4000



| String Boy | Eudore a transus |
|---|---|
| Surveyed Line Tank | Ligne arpentee Reservoir |
| Water | Eau |
| Winter Road | Chemin d'hiver |
| For a complete glossary see Pour un glossaire complet, v | |
| ABBREVIATION | S ABRÉVIATIONS |
| | Abandonné, ée |
| C Cemetery Conty | Cimetière Comté |
| E Elevator | Élévateur |
| Fy. Ferry | |
| H Hospital | Hôpital |
| L Lot | Lot Micro-ondes |
| Mun Municipality | Municipalité |
| | Bureau de poste Centrale électrique |
| RCMP Royal Canadian | Mounted Police |
| | Gendarmerie Royale Canadienne Réservoir ation Poste de transformateurs ice Licence de sylviculture |
| 1.00 or/ou 18 Mil Use diagram only | T.N. N.G. 23°52' orfou yate 23°52' orfou yate 23°52' orfou yate yate yate yate yate yate yate yate |
| APPROXIMATE I | MEAN DECLINATION 1979 ENTRE OF MAP nge decreasing 4.5 |
| DÉCLINAISON M AU CENTRE 1 | pour obtenir les valeurs numériques OYENNE APPROXIMATIVE DE LA CARTE EN 1979 uelle décroissante 4.5' |
| UNIVERSAL TRAN | USAND METRE SVERSE MERCATOR GRID |
| QUADRILLAGE | ONE 10 DE MILLE MÈTRES NIVERSEL DE MERCATOR |
| GRID ZONE DESIGNATION. | 100 000 m SQUARE IDENTIFICATION |
| DÉSIGNATION DE | IDENTIFICATION DU CARRÉ |
| LA ZONE DU QUADRILLAGE | DE 100 000 m |





N.T.S. REF. NO. 93H/4E STRIKE AND DIP OF ROCK FORMATIONS EAST OF PAYLODE PROPERTY

Sigure 8

CONTOUR INTERVAL 100 ft

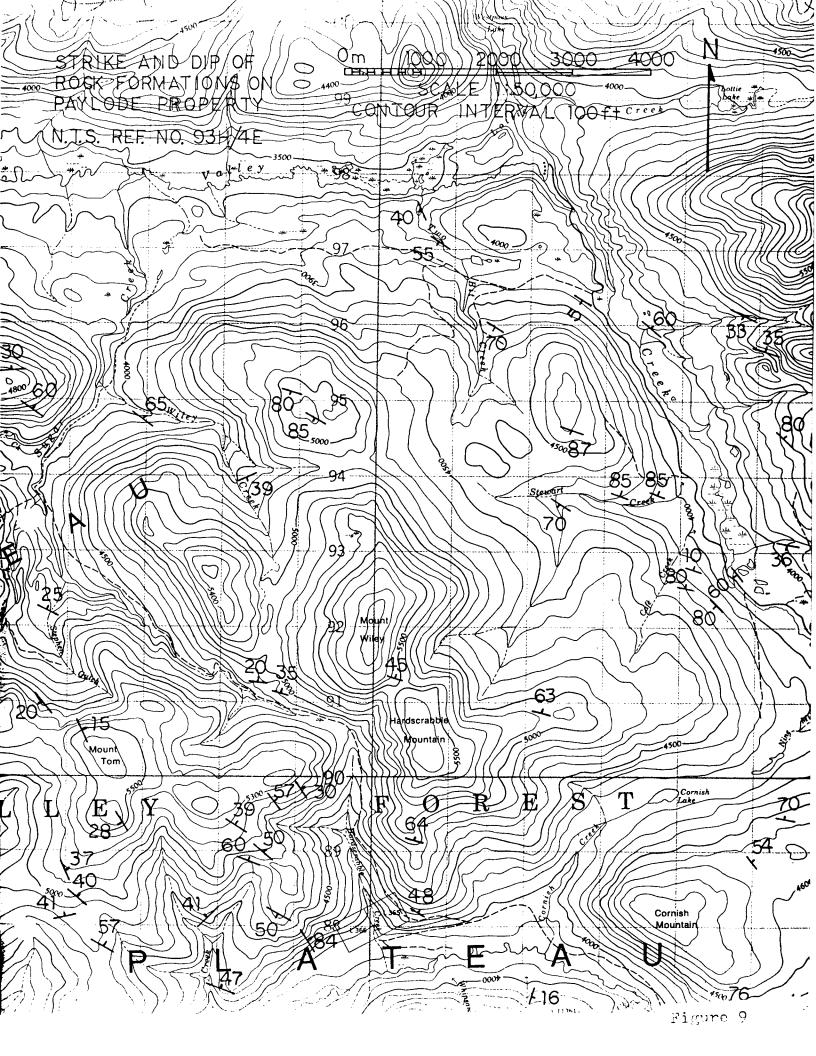
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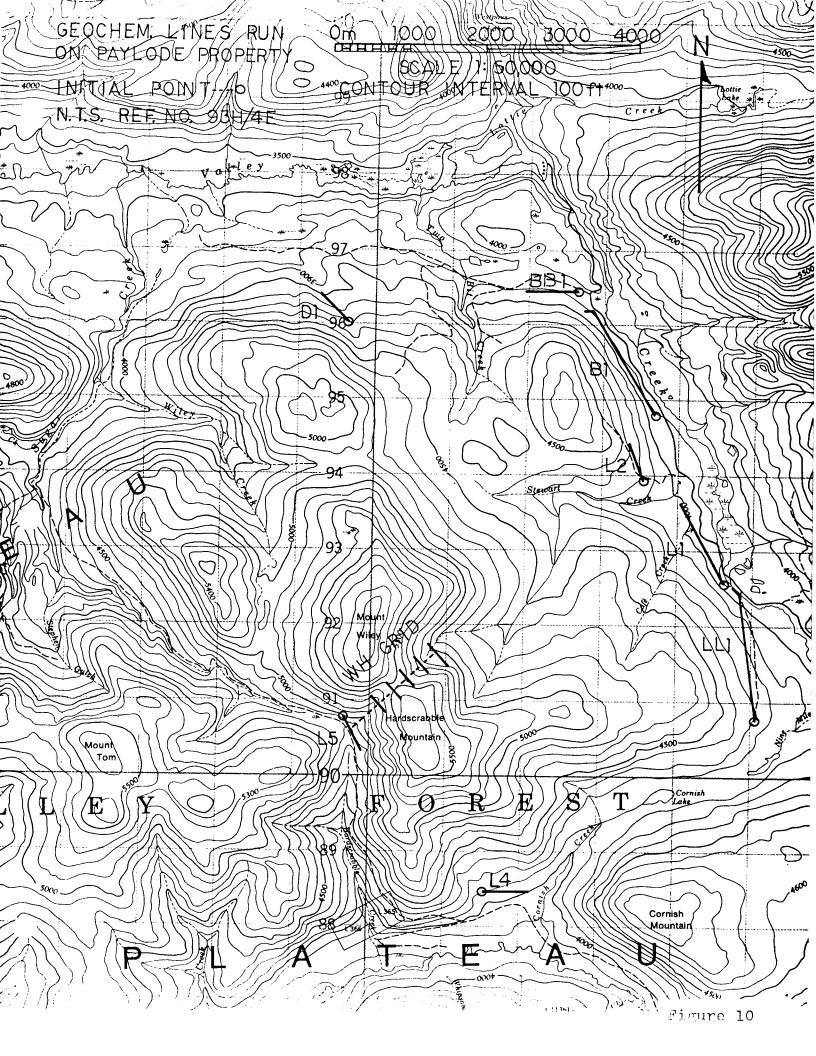
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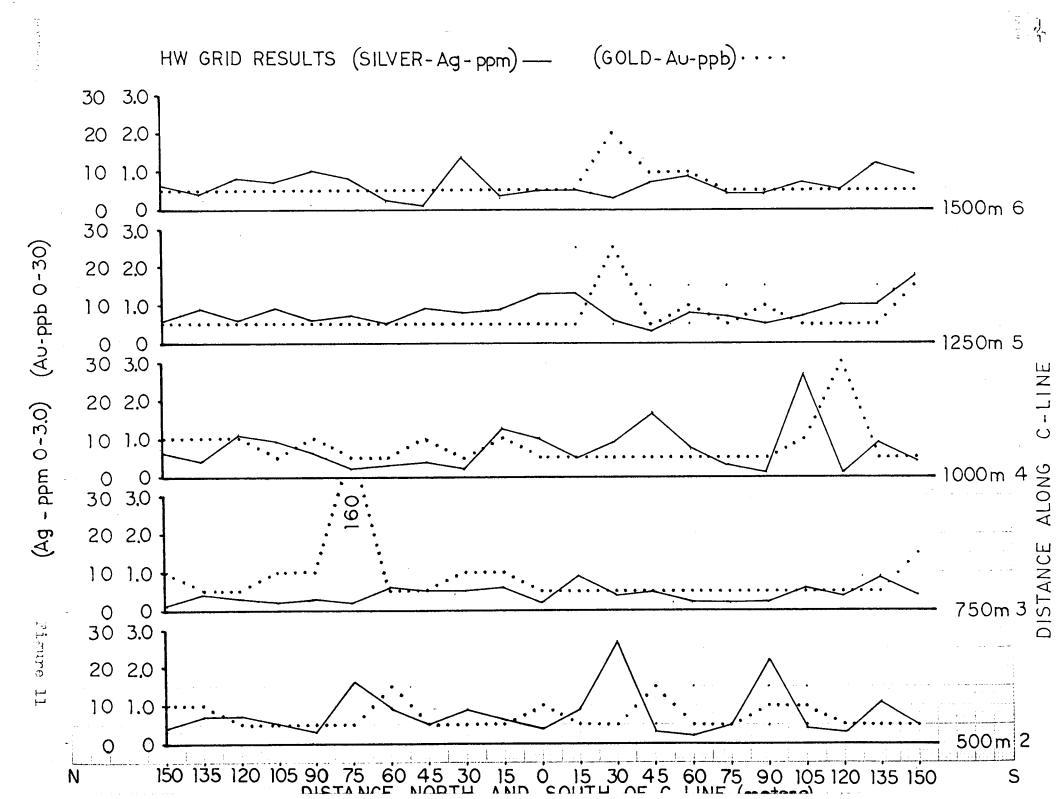
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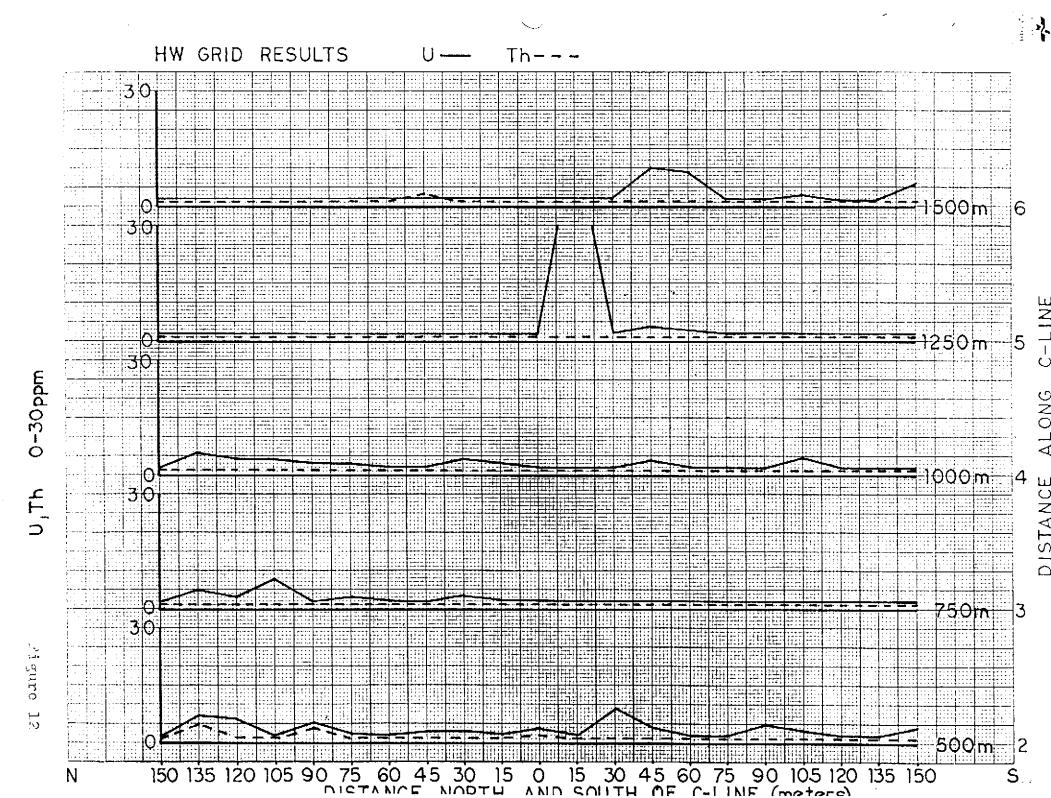
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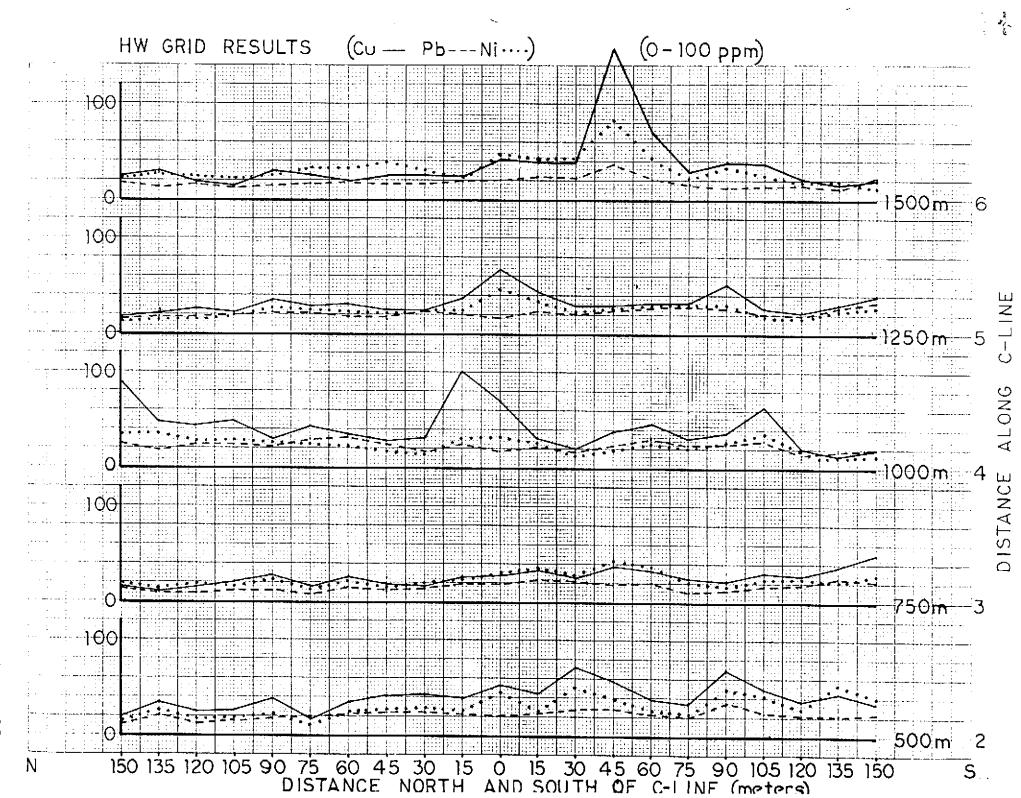
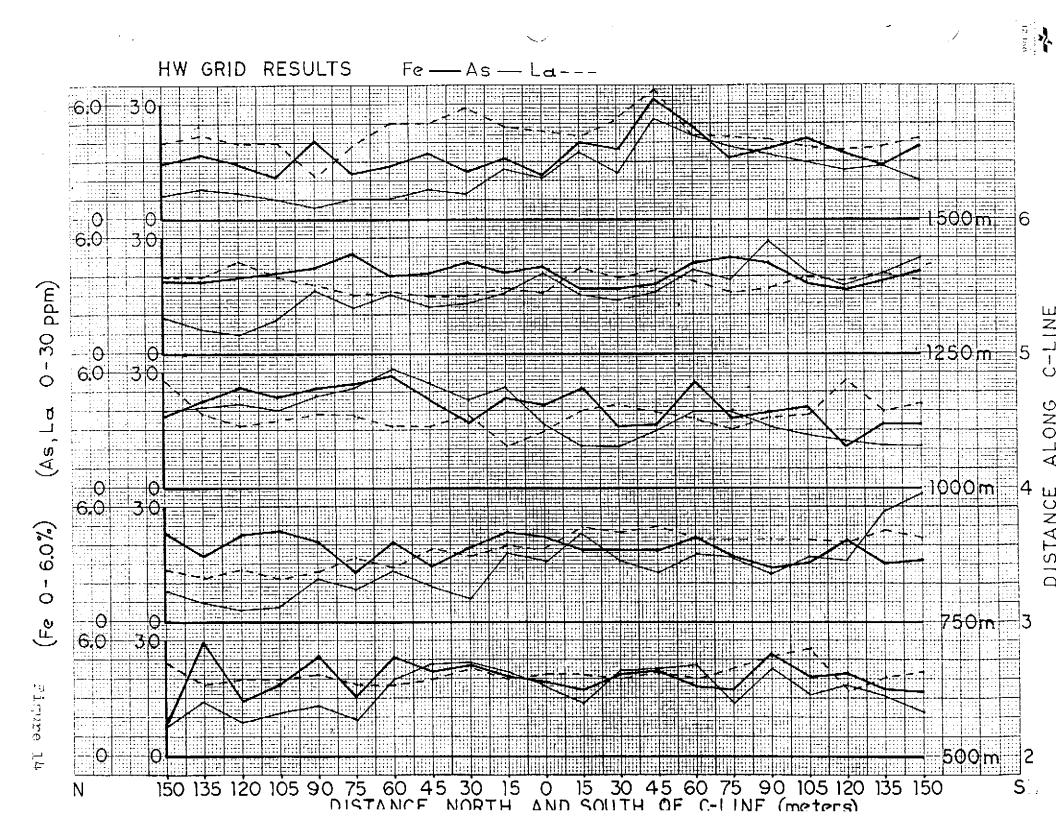


Figure 13



REFERENCES

Struik, L. C., Bedrock Geology, Wells Open File 858 (1977-1981) Geological Survey of Canada

Paylode Explorations Ltd., 1982 Exploration Program

Stanton, R. L., Ore Petrology, 1972 McGraw-Hill, Inc.

APPENDIX "A"

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ITEMIZED COST STATEMENT

| I. | Fees for Personnel (May 26 - June 19, 1983 | 3) | |
|------|--|--------------------------------|---------------------------------------|
| | Name <u>Title</u> Days | Rate Total | |
| | | \$350 \$8,400 \$350 \$ 700 | |
| | | \$ 92 <u>\$ 644</u> \$9,744 | \$ 9,744. |
| | | +- , | · · · · · · · · |
| II. | Travel to and from Property and During Wor | rk | |
| | 4x4 pickup truck (24 days) @ \$40/day | | 960. |
| | | | |
| III. | Accommodation and Living Expenses | | |
| | Personnel totalling 33 days' Room and Board at \$30/day | | 990. |
| | | | |
| IV. | Report Costs | | |
| | Two 1:12,500 scale maps drafted @ \$275 and \$350 | \$ 625 | |
| | | · | |
| | Other drafting | \$ 240 | , |
| | Typing | <u>\$ 185</u> 1,050 | 1,050. |
| v. | Disbursements | 21000 | _, |
| •• | | s 50 | |
| | Expendable Supplies | \$ 50 | |
| | Geochemical soil analyses (199 samples) @ \$16/sample | \$ 3,240 | |
| | Rock assays (2 samples) | | |
| | @ \$32/sample | \$ 64 | |
| | Photocopying and map reproduction | <u>\$ 150</u> \$ 3,468 | 3,468. |
| | | | \$16,212. |
| | | | · · · · · · · · · · · · · · · · · · · |

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APPENDIX "B"

QUALIFICATIONS OF THE AUTHOR

I, Stephen P. Kocsis, hereby certify that:

1. My residence address is 102 - 636 Meredith Road NE., Calgary, Alberta, T2E 5A8, and that I am a geological consultant by occupation and hold a free miner's licence, number 257714 (1983).

2. I studied the earth sciences at the University of Waterloo and hold a B.Sc. I have practiced my profession since February 1980 with Western Laboratory and Fortinski Geological Consulting out of Calgary, Alberta. I have been involved with the Wells Designated Area since June 1982.

3. I have completed this report under the supervision of Dave Dunn, geological representative of Lacana Mining Corporation.

4. I conducted the work described in this report.

ICP GEOCHEMICAL ANALYSIS

Ν.

A .500 GRAM SAMPLE IS DIGESTED WITH 3 NL OF 3:1:3 HCL TO HND3 TO H20 AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. THIS LEACH IS PARTIAL FOR: Ca,P,Mg,A).Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. AU DETECTION 3 ppm. AUX ANALYSIS BY AA FROM 10 GRAM SAMPLE. SAMPLE TYPE - 501L

DATE RECEIVED NE 21 1983 DATE REPORTS MAILED June 27/83 ASSAYER _ DEAN TOYE, CERTIFIED B.C. ASSAYER

LACANA FILE# 83-0878

| SAMPLE # | Na ppe | Сы рре | ₽b pp∎ | Zn pp∎ | Ag pp∎ | Xi pp∎ | Co pp m | Mn pps | Fe I | As pp= | U pp∎ | Au ppe | Th pp= | 5r ppu | Cđ pp∎ | Sb ₽p∎ | Ði ppæ | V ppe | Ca Z | P I | La ppe | Cr ppa | Mg Z | 8a pp∎ | Ti I | B pp∎ | A) Z | На 7 | K Z | ¥ ppe | Aut cob | |
|---|-----------------------|-----------------------------|--|-------------------------------|----------------------------|----------------------------|----------------------------|---------------------------------|--------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------|----------------------------|----------------------------|-----------------------------|--------------------------------------|---------------------------------|----------------------------|----------------------------|--------------------------------------|---------------------------------|---------------------------------|-------------|--------------------------------------|---------------------------------|---------------------------------|----------------------------|--------------------------|--|
| 81-0 81-1 81-2 91-3 81-4 | 1 1 1 1 | 21 35 24 22 27 | 15 24 14 15 15 | 61 120 86 68 76 | .1 .2 .4 .1 .2 | 31 39 35 33 39 | 11 17 12 14 15 | 345 750 354 439 413 | | 11 18 7 9 12 | 2 2 2 2 2 2 | ND NC ND ND ND | 4 2 2 3 4 | 20 46 31 24 16 | 1 1 1 1 | 2 2 2 5 | 2 2 3 3 3 | 41 57 49 46 57 | .44 1.07 .61 .62 .40 | .07 .15 .10 .07 .05 | 18 12 14 13 18 | 36 55 46 49 48 | .55 .52 .51 .63 .52 | 190 446 264 144 225 | .05 .05 .05 .07 .07 | 4 3 5 | 1.53 2.15 1.91 1.46 2.23 | .01 .01 .01 .01 .01 | .03 .04 .04 .04 .02 | 2 2 2 2 2 | 5 10 5 5 15 | |
| 91-5 91-6 91-7 91-9 91-9 | 1 1 1 1 | 18 18 25 121 25 | 20 16 17 21 19 | 95 71 69 152 53 | . .2 .1 .8 | 23 19 20 46 12 | 10 6 9 19 5 | 219 216 10 5 9 | 6.37 3.58 5.69 4.15 3.96 | 12 8 2 2 8 | 2 4 7 3 2 | ND ND ND ND ND | 4 3 2 2 2 | 6 29 31 12 | 3 1 1 1 1 | 2 2 2 4 3 | 4 2 4 3 2 | 72 67 105 58 71 | .15 .15 .54 .55 .16 | .05 .05 .08 .08 | 13 16 10 30 15 | 53 37 48 63 29 | . 48 . 35 . 31 . 52 . 19 | 105 184 483 557 372 | .10 .05 .15 .05 .05 | 2 2 3 | 2.50 1.82 1.80 2.12 1.23 | .01 .01 .01 .01 | .03 .05 .04 .05 .06 | 2 2 2 2 2 2 | 10 5 5 15 5 | |
| 81-10 81-11 81-12 81-13 81-14 | 1 1 1 1 | 23 38 13 12 28 | 12 18 1 9 11 15 | 103 77 55 66 79 | .2 .7 .7 .9 .1 | 30 31 22 15 33 | 11 9 7 5 12 | | 3.65 | 6 4 12 5 9 | 2 * 2 2 2 | ND ND ND ND | 3 2 3 2 3 | 22 21 7 8 10 | 1 1 1 1 | 2 2 2 2 2 2 | 3 2 3 3 | 82 50 121 57 69 | .36 .28 .21 .15 .20 | .05 .05 .17 .11 | 18 20 12 11 12 | 52 40 67 48 55 | . 62 . 56 . 35 . 30 . 50 | 342 514 167 139 98 | .06 .04 .10 .05 .07 | 3 2 3 | 2.37 1.68 2.35 2.96 2.89 | .01 .01 .01 .01 | .05 .07 .03 .04 .04 | 2 2 2 2 2 2 | 5 5 10 5 | |
| 81-15 91-14 81-17 981-0 881-1 | 1 1 1 1 | 36 21 13 14 44 | 19 19 18 10 18 | 92 79 63 50 91 | .3 .3 .5 .3 .1 | 37 20 17 12 39 | 12 7 6 5 14 | 14B 132 | 4.75 2.41 | 7 12 10 5 14 | 2 2 2 2 2 2 | ND ND ND ND | 4 3 4 2 4 | 8 25 5 8 19 | 1 1 1 1 | 4 2 4 2 2 | 2 2 2 2 2 2 | 43 54 57 50 56 | .19 .35 .11 .18 .42 | .07 .05 .07 .07 .07 | 20 17 16 18 16 | 42 37 52 25 46 | .56 .32 .30 .21 .71 | 258 245 135 333 381 | .05 .04 .04 .02 .07 | 2 2 3 | 1.96 1.79 2.42 1.18 1.94 | .01 .01 .01 .01 .01 | .04 .01 .03 .05 .07 | 2 2 2 2 2 | 5 5 5 10 | |
| 081-2 991-3.5 991-4.5 881-6 981-7 | 1 1 1 1 | 27 23 20 21 33 | 13 20 14 15 16 | 92 77 57 Bl 92 | .1 .2 .3 .4 .2 | 28 31 24 26 39 | 10 12 7 9 16 | 457 180 245 | | 8 11 2 5 5 | 2 2 2 2 2 2 | ND ND ND ND ND | J 2 3 3 3 | 9 4 10 15 | 1 1 1 1 | 2 2 2 2 2 2 | 2 2 2 2 2 2 | 93 79 77 72 57 | .21 .19 .16 .24 .33 | .13 .13 .05 .08 .07 | 13 14 13 13 13 | 62 43 49 50 48 | .50 .37 .47 .45 .63 | 270 231 225 295 280 | .06 .04 .09 .06 .07 | 2 2 3 | 2.77 1.78 1.91 2.22 2.27 | .01 .01 .01 .01 | .04 .05 .03 .05 | 2 2 2 2 2 | 5555 | |
| D1-0 01-1 01-2 D1-3 D1-4 | 2 2 2 2 4 | 38 43 36 27 59 | 18 15 20 12 13 | 111 133 99 86 121 | .5 .3 .6 .3 | 52 42 51 42 45 | 14 9 15 12 12 | 246 569 407 | 3.51 | 18 19 15 11 14 | 2 2 3 3 | ND ND ND ND ND | 2 2 3 4 2 | 17 15 30 31 29 | 1 1 1 1 | 3 2 2 2 4 | 2 2 2 2 2 | 44 46 39 48 49 | . 31 . 10 . 54 . 60 . 52 | .08 .D7 .09 .09 .09 | 22 16 20 19 17 | 44 44 40 50 | . 37 29 40 .59 52 | 185 310 407 269 593 | .03 .03 .03 | 2 2 3 | 1.65 2.13 1.55 1.37 1.85 | .01 .01 .01 .01 .01 | .06 .05 .05 .07 | 2 2 2 2 2 | 5 5 10 10 5 | |
| DL-5 L1-0 L1-1.3 L1-2 L1-3 | 6 1 1 1 | 41 23 44 25 13 | 17 27 35 24 14 | 124 65 131 68 41 | .7 .2 .1 .3 .1 | 49 33 49 19 12 | 18 11 16 9 5 | 297 632 355 | | 14 15 13 8 8 | 7 2 4 2 2 | ND ND ND | 2 2 3 2 2 2 | 34 9 16 12 6 | 1 1 1 1 | 3 2 4 2 2 | 2 2 2 2 2 | 42 98 66 33 59 | . 50 . 32 . 49 . 20 . 31 | . 10 . 06 . 08 . 08 | 22 15 20 19 16 | 45 64 52 24 29 | .52 .63 .59 .32 .20 | 456 125 220 139 132 | .03 .10 .10 .01 .10 | 2 2 2 | 1.50 2.23 2.03 1.45 1.10 | .02 .01 .01 .01 .01 | .07 .04 .05 .05 .04 | 2 2 2 2 2 | 5 10 10 10 5 | |
| LI-4 L1-5 STD A-1/AU 0.5 | 1 1 1 | 15 21 30 | 12 15 42 | 52 57 186 | · .2 .5 .3 | 23 19 35 | 8 9 13 | 771 | 3.23 3.09 2.93 | 3 5 9 | 4 2 2 | KD ND ND | 2 2 3 | 9 21 30 | 1 1 1 | 2 2 2 | 3 2 2 | 72 63 62 | .35 .48 .54 | .08 .05 .09 | 12 13 8 | 44 57 71 | . 44 . 30 . 71 | 108 2 50 278 | .07 .04 .08 | 2 | 1.57 1.60 2.13 | .01 .01 .02 | .03 .03 .20 | 2 2 2 | 5 5 540 | |

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APPENDIX "C

Ξ.

PAGE # 1

LACANA FILE# 83~0878

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.

| SAMPLE . | Mo | Cu | Pb | In | ÂQ | Ni | ٤a | ħn | fe | As | IJ | Au | Th | Sr | Cđ | Sb | Bi | U | Ca | p | La | Gr | Ma | Ba | т | в | *1 | Na | ĸ | 6 | |
|---|-----------------------|----------------------------|----------------------------|------------------------------|------------------------------|----------------------------|----------------------------|-----------------------------------|---------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|---------------------------|------------------|----------------------------|---------------------------------|----------------------------|----------------------------------|---------------------------------|----------------------------|----------------------------|--------------------------------------|--|---------------------------------|-------------|--------------------------------------|---------------------------------|---------------------------------|----------------------------|-------------------------|
| | ppn | pp∎ | ppm | ppa | ppe | ppa | ρρ∎ | ppe | 1 | ppe | ppæ | pp∎ | ρ p ø | ppe | ρ₽∎ | pp∎ | pp. | ppe | I | 1 | pp. | ppe | Mg 2 | ppe | Ti Z | 8 pp= | Al I | Na I | ž | 11 C 2 4 | Aul pob |
| L :-6 L:-7 L:-8 L:-9 L:-10 | 1 1 1 1 | 23 13 14 22 13 | 16 14 15 18 10 | 83 73 83 70 53 | .2 .3 .2 .2 .2 | 32 21 21 44 21 | 13 8 9 13 7 | 340 202 202 238 241 | 5.38 6.35 3.94 5.50 3.26 | 14 14 6 9 5 | 2 3 2 2 2 | ND ND ND ND ND | 3 4 2 4 2 | 16 19 12 9 8 | 1 1 1 1 | 2 3 2 2 3 | 2 2 2 2 2 | 81 85 65 72 89 | .41 .38 .32 .33 .52 | .14 .16 .23 .12 .06 | 21 16 16 15 13 | 61 55 50 70 55 | . 62 . 43 . 46 . 66 . 52 | 133 110 156 127 147 | .09 .09 .06 .10 .12 | 2 2 2 | 1.90 1.84 1.57 2.69 2.17 | .01 .01 .01 .01 .01 | .06 .04 .04 .03 .03 | 2 2 2 2 2 2 | 5 10 10 5 5 |
| L1-11 L1-12 L2-0 L2-1 L2-2 | 1 1 1 1 | 20 15 37 38 25 | 15 12 28 27 17 | 63 60 70 94 78 | 2 .1 .2 .3 | 25 20 44 44 38 | 8 20 24 14 | 190 | 3.81 .4.12 4.99 6.06 4.12 | 9 7 17 21 11 | 2 2 2 2 2 | ND ND ND ND ND | 2 2 2 3 | 9 8 40 15 22 | 1 1 1 1 | 3 2 2 5 3 | 2 2 2 2 2 | 61 79 52 72 74 | .28 .28 .97 .39 .59 | .09 .13 .10 .16 .05 | 15 17 20 18 30 | 45 44 57 60 94 | .38 .41 .56 .62 .52 | 100 128 199 200 205 | .06 .09 .04 .05 .05 | 2 2 2 | 2.01 1.69 2.02 2.28 2.01 | .01 .01 .01 .01 .01 | .03 .04 .05 .04 .05 | 2 2 2 2 2 | 5 5 5 10 |
| L2-3 L2-4 L2-4.3 L2-5 L4-0 | 1 1 1 1 | 32 44 36 40 16 | 19 22 21 20 21 | 78 73 72 100 37 | .2 .2 .1 .2 .2 | 65 54 55 42 12 | 22 21 20 15 6 | 687 723 723 895 160 | 4.59 4.31 4.62 3.46 3.52 | 19 13 9 5 13 | 2 2 2 2 2 | ND ND ND ND ND | 45433 | 36 28 16 30 7 | 1 1 1 1 | 6 4 2 2 2 | 2 2 2 2 2 2 2 | 60 62 72 44 44 | .91 .71 .43 .65 .12 | .13 .12 .10 .09 .08 | 33 25 26 24 15 | 67 54 66 49 26 | .85 .80 .71 .84 .20 | 266 207 210 332 59 | .04 .08 .08 .04 .05 | 2 4 3 | 1.85 1.83 2.47 1.78 1.08 | .01 .01 .01 .01 .01 | .08 .05 .04 .07 .03 | 22222 | |
| L4-1 L4-2 L4-3 L4-4 L4-5 | 1 1 1 1 1 | 25 41 22 22 24 | 17 29 20 19 18 | 72 91 66 71 84 | .3 .1 .1 .2 .2 | 28 35 22 27 33 | 12 17 11 12 13 | 610 426 309 | 5.73 4.14 5.15 2.95 3.52 | 10 13 17 9 17 | 2 2 5 2 3 | ND ND ND ND | 4 3 6 6 | L4 29 8 7 7 | 1 1 1 1 | 2 2 2 2 2 | 2 2 2 2 2 2 | 56 72 50 32 42 | .28 .59 .14 .11 .17 | .04 .06 .19 .04 .07 | 20 21 17 21 16 | 46 60 38 26 46 | .48 .73 .38 .43 .48 | 187 575 108 99 101 | .05 .06 .05 .05 | 3 2 3 | 2.03 2.40 1.74 1.51 2.74 | .01 .01 .01 .01 .01 | .06 .08 .04 .06 | 2 2 2 2 2 2 | 10 10 5 |
| L4-6 L5-0 L5-1 L5-2 L5-3 | 1 4 1 1 | 13 53 74 19 35 | 15 22 24 12 21 | 64 137 133 63 91 | .5 1.2 .5 .4 1.3 | 15 34 39 15 31 | 7 10 16 7 11 | 177 332 777 540 438 | 3.25 3.35 3.60 3.12 6.34 | 12 28 35 11 20 | 2 2 2 2 2 2 | ND ND ND ND | 6 2 2 2 2 | 5 36 16 8 7 | 1 1 1 1 | 2 2 2 2 4 | 2 2 2 2 2 | 36 30 35 41 63 | .09 .50 .10 .07 .10 | .06 .12 .13 .18 .12 | 21 18 27 23 17 | 32 23 21 27 47 | .28 .14 .20 .20 .38 | 82 261 166 192 156 | .03 .01 .01 .02 .02 | 2 2 3 | 1.94 .84 .95 1.26 2.08 | .01 .01 .01 .01 .01 | .03 .07 .05 .05 .07 | ~~~~ | 5 10 15 5 |
| L5-4 L5-5 LL1-0 LL1-i LL1-2 | 2 1 1 1 | 40 31 12 24 20 | 21 23 13 14 16 | 98 70 37 87 118 | .6 .5 .4 .2 .3 | 33 25 17 58 77 | 16 9 6 17 22 | 1132 280 212 901 1036 | 3.69 4.59 2.75 5.38 5.83 | 17 13 7 15 15 | 7 2 2 2 2 2 | ND ND ND ND | 2 3 2 3 2 | 70 15 6 9 23 | 1 1 1 1 | 2 2 2 2 2 2 | 2 2 2 2 2 | 44 58 56 69 87 | 1.04 .15 .07 .1B .41 | .12 .09 .08 .08 | 17 19 27 24 21 | | .60 .50 .26 1.03 1.32 | 385 111 152 266 254 | .02 .05 .02 .03 .04 | 4 2 3 | 1.76 1.68 1.26 2.94 3.09 | .01 .01 .01 .01 .01 | .07 .08 .04 .05 .04 | 2 2 2 2 2 2 | 5 10 10 5 |
| LL1-3 LL1-4 LL1-5 LL1-6 LL1-7 | 1 1 1 1 1 | 20 21 24 24 23 | 14 16 20 23 21 | 77 74 78 90 92 | .i .4 .3 .1 .2 | 43 42 50 47 47 | 13 12 19 22 15 | 822 | 4.62 5.31 5.26 4.93 5.71 | 4 13 6 10 7 | 2 3 2 5 | ND ND ND ND ND | 2 2 3 2 2 | 29 20 18 28 | 1 1 1 1 | 2 2 2 2 2 | 2 2 2 2 2 | 87 72 55 80 | .76 .45 .40 .56 .59 | .04 .10 .04 .05 .04 | 17 15 23 23 19 | 73 70 74 73 77 | .77 .75 .92 .92 .92 | 324 181 204 1 <i>5</i> 7 258 | .04 .07 .03 .04 .07 | 2 2 2 | 2.39 2.26 2.57 2.11 2.58 | .01 .01 .01 .01 .01 | .05 .04 .06 .05 | 2222 | 5 5 5 5 5 |
| ULI-0 STD A-1/AU 0.5 | 1 I | 30 30 | 20 20 | 85 188 | .5 .3 | 47 35 | 22 13 | 616 1069 | | 18 10 | 2 2 | ND Nd | 2 2 | 59 39 | 1 1 | 2 2 | 2 7 | 55 63 | .94 .66 | .0B .10 | 20 B | 78 74 | .70 .73 | 271 289 | .03 .08 | | 2.17 2.04 | .01 .02 | .06 .22 | 2 2 | 10 510 |

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|--|--------|-----------------------|----------------------------|----------------------------|-----------------------------|-----------------------------|----------------------------------|----------------------------|----------------------------------|--------------------------------------|--------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------|----------------------------|----------------------------|------------------------------------|----------------------------------|--------------------------------------|----------------------------|----------------------------|--------------------------------------|---------------------------------|---------------------------------|-------------|--------------------------------------|---------------------------------|---------------------------------|----------------------------|------------------------|-----|
| SAMPLE N | M P | | Cu pp= | Pb pp# | Zn ppe | Âg ppe | H1 ppa | Co pps | Mn ppu | · Fe Z | As ppn | рр# Ю_/ | Au ppm | Th ppe | Sr ppa | Cd ppe | Sb ppe | Bi ppe | Y ppe | Ca I | P Z | La ppu | Cr ' ppe | Hq Z | Ða ppn | Ti X | B pps | A] I | Na Z | K Z | N Pp∎ | Au I ppb | |
| LL1-9 LL1-10 LL1-11 LL1-12 LL1-13 | | t 1 1 1 1 | 30 42 36 28 30 | 19 17 23 12 27 | 80 76 75 55 | .2 .1 .7 .1 .1 | 42 44 31 46 46 | 18 19 10 19 19 | 846 976 270 692 1082 | 4.64 4.52 2.61 3.73 4.67 | 7 4 10 7 8 | 2 2 2 2 2 2 | ND ND ND ND ND | 2 2 4 4 | 37 30 56 16 43 | 1 1 1 5 | 2 3 2 2 2 | 2 2 2 2 2 2 | 66 79 49 6 9 65 | .64 .68 1.02 .65 .83 | .04 .06 .11 .06 .07 | 19 23 24 16 21 | 75 79 56 54 61 | .65 .66 .43 .76 .64 | 198 235 325 112 141 | .05 .07 .03 .14 .09 | 3 5 7 | 2.29 2.52 1.81 2.18 3.08 | .01 .01 .01 .01 | .04 .05 .07 .03 .03 | 2 2 2 2 2 | 5 5 15 5 | |
| LL1-14 LL1-15 LL1-16 LL1-16 LL1-18.3 LL1-17 | | 1 1 1 1 1 | 30 17 43 29 33 | 17 18 23 20 16 | 63 92 85 74 68 | .1 .1 .1 .1 | 41 25 37 37 40 | 17 10 17 16 16 | 543 260 630 379 635 | 3.45 5.48 3.94 5.56 3.79 | 12 8 16 2 | 2 2 2 2 2 2 | ND ND ND ND | 4 2 4 4 | 15 9 25 20 20 | 1 1 1 1 | 2 2 3 | 2 2 2 2 2 2 | 62 90 66 76 77 | .57 .27 .48 .50 .64 | .06 .09 .11 .07 .07 | 15 17 21 18 17 | 43 52 73 56 55 | .72 .51 .55 .65 .76 | 111 147 249 177 212 | .15 .12 .04 .10 .13 | 4 4 4 | 2.03 1.89 2.41 2.35 2.24 | .01 .01 .01 .01 .01 | .02 .03 .05 .04 .04 | 2 2 2 2 2 | 5 5 5 5 5 | |
| LLI-18 LLI-17 C-500 C-750 C-1000 | | l 1 2 2 6 | 19 24 55 28 69 | 13 15 21 19 27 | 66 86 74 78 140 | .1 .4 .2 1.0 | 23 33 46 30 32 | 7 15 17 13 11 | 249 629 691 805 673 | 3.57 4.15 3.82 4.42 4.38 | 2 7 18 16 16 | 2 7 4 2 2 | ND ND ND ND | 2 2 2 2 2 2 | 15 19 25 9 40 | 1 1 1 1 | 2 2 2 2 4 | 2 2 2 2 2 | 77 70 45 58 44 | .53 .58 .14 .07 .20 | .10 .11 .08 .07 .32 | 15 15 21 19 15 | 54 53 40 43 24 | .46 .65 .49 .44 .29 | 133 129 389 415 151 | .10 .09 .02 .02 .01 | 5 4 3 | 2.02 2.12 1.58 1.76 1.23 | .01 .01 .01 .01 .01 | .05 .03 .07 .06 .06 | 2 2 2 2 2 | 5 5 10 5 5 | |
| C-1250 C-1500 6N 15 6N 30 6N 45 | | 1 1 1 1 1 | 67 42 24 26 24 | 28 21 19 17 17 | 109 72 51 60 81 | 1.3 .5 1.4 .1 | 46 46 21 29 39 | 23 9 6 11 13 | 212 532 | 4.52 2.03 3.36 2.74 3.57 | 21 10 13 6 8 | 2 2 2 2 2 2 | ND ND ND ND | 2 2 2 2 3 | 35 15 8 20 11 | 1 1 1 1 | 2 2 2 2 2 2 | 2 2 2 2 2 2 | 44 36 43 39 42 | .46 .14 .06 .36 .17 | .14 .06 .05 .12 .05 | 16 23 24 29 25 | 39 60 24 46 41 | . 42 . 43 . 18 . 47 . 54 | 406 317 125 308 250 | .01 .01 .02 .01 .01 | 2 4 | 1.72 1.57 94 1.73 1.73 | .01 .01 .01 .01 .01 | .07 .07 .08 .07 .05 | 2 2 2 2 2 | 5 5 5 5 5 | |
| 6N 60 6N 75 6N 90 6N 105 6N 120 | | 1 1 1 1 | 19 25 30 15 18 | 20 17 13 12 16 | 74 72 61 40 42 | .2 .9 1.0 .7 .8 | 32 33 25 12 14 | 10 9 4 5 | 166 219 318 125 156 | 2.87 2.36 4.27 2.09 2.94 | 5 5 5 7 | 2 2 2 2 2 | ND ND ND ND | 2 2 2 2 2 2 | 11 16 14 9 8 | 1 1 1 1 1 | 2 2 2 2 2 2 | 2 2 2 2 2 2 | 47 34 66 62 62 | .21 .33 .21 .09 .06 | .03 .05 .08 .05 .06 | 25 19 11 20 20 | 43 42 38 21 24 | .68 .66 .45 .12 .11 | 230 252 120 128 91 | .02 .03 .07 .05 .03 | 4 | 1.82 1.67 1.96 .91 .95 | .0: .01 .01 .01 .01 | .05 .05 .06 .04 .05 | 2 2 2 2 2 | 5 5 5 5 5 | |
| 6N 135 6N 150 5N 15 5N 30 5N 45 | | 1 1 1 1 1 | 29 24 37 34 25 | 13 15 21 24 18 | 97 82 77 67 53 | .4 .9 .8 .9 | 28 24 24 24 24 17 | 11 11 10 10 7 | 846 863 823 473 265 | 3.52 2.96 4.23 4.79 4.06 | 8 6 16 13 12 | 2 2 2 2 2 2 | ND ND ND ND | 2 2 2 2 2 | 11 16 7 7 8 | 1 1 1 1 1 | 2 2 3 2 2 | 2 2 2 2 2 2 | 52 47 56 52 46 | .13 .24 .09 .04 .07 | .07 .07 .11 .17 .20 | 22 20 17 15 15 | 35 32 24 27 24 | .43 .42 .24 .19 .17 | 234 267 215 181 151 | .03 .07 .01 .01 .01 | 6 5 4 | 1.54 1.54 1.05 1.04 1.07 | .01 .01 .01 .01 .01 | .07 .06 .05 .04 .04 | 2 2 2 2 2 2 | 5 5 5 5 | |
| 5N 60 5N 75 5N 70 5N 105 5N 120 | | 1 2 2 2 1 | 31 29 35 22 26 | 18 21 22 19 18 | 63 71 76 58 52 | .5 .7 .6 .9 | 23 23 27 21 18 | 9 9 12 8 6 | 385 294 1263 517 300 | 3.87 5.22 4.57 4.13 3.98 | 15 12 17 9 5 | 2 2 2 2 2 2 | ND ND ND ND | 2 2 2 2 2 2 | 7 7 6 7 9 |) 1 1 1 | 2 2 3 2 2 | 2 2 2 2 2 2 | 38 58 46 44 56 | .05 .07 .05 .05 .04 | . 18 . 20 . 14 . 13 . 11 | 16 15 18 20 24 | 22 23 23 32 25 | -18 -24 -23 -28 -12 | 108 131 111 81 64 | .01 .01 .01 .02 .02 | 8 3 | .70 1.13 1.11 1.45 1.10 | .01 .01 .01 .01 .01 | .05 .05 .05 .05 .05 | 2 2 2 2 | 5 5 5 5 | |
| SN 135 SN 150 STD A-1 | | 2 1 1 | 21 17 30 | 18 17 40 | 54 44 185 | ,9 .6 .3 | 29 19 18 | 7 13 | 420 337 1054 | 3.80 3.82 2.91 | 6 9 10 | 2 2 2 | ND ND ND | 2 2 2 2 | 9 9 38 | 1 1 1 | 2 2 2 | 2 2 2 | 51 51 62 | .06 .06 .65 | .12 .19 .09 | 20 20 8 | 24 29 71 | .18 .19 .72 | 97 72 295 | .02 .02 .08 | | ,99 1.06 2.04 | .01 .01 .01 | .05 .05 .21 | 2 2 2 | 5 5 520 | |

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| SAMPLE U | No ppa | Cu ppe | Pb ppm | Zn ppe | Ag ppm | Ni ppo | Ca pp e | Нл рре | Fe. I | As pp# | U ppa | Au pp# | Th ppm | Sr pps | Cd pø∎ | Sb pp# | Bi ppe | V ppe | Ca I | P Z | ia ppm | Er pp= | Ng Z | 8a ppe | ī 1 | B ppa | A1 1 | Ka Z | K Z | i ppa K | Au I ppb |
|---|---------------------------------|-----------------------------|----------------------------|--------------------------------|-----------------------------|----------------------------|--------------------------|-----------------------------------|--------------------------------------|----------------------------|-----------------------|----------------------------|----------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|--------------------------------|--------------------------------------|---------------------------------|----------------------------|----------------------------|--------------------------------------|---------------------------------|---------------------------------|-------------|--------------------------------------|---------------------------------|---------------------------------|----------------------------|---------------------------|
| 4h 15 4h 30 4n 45 4h 60 4n 75 | 6 1 4 2 | 100 31 29 35 43 | 25 16 25 32 30 | 162 58 57 91 79 | 1.3 .2 .4 .3 .2 | 31 16 17 22 24 | 11 7 8 12 12 | 1267 182 255 630 321 | | 27 23 27 31 26 | 3 4 2 2 3 | ND ND ND ND | 2 2 2 2 2 2 | 24 7 7 8 9 | 1 1 1 1 | 6 2 6 4 | 2 7 3 2 2 | 37 50 37 49 55 | .14 .04 .05 .07 .09 | .23 .09 .11 .09 .10 | 11 17 16 16 18 | 17 17 16 21 25 | .15 .14 .17 .19 .20 | 140 80 87 104 136 | .01 .01 .01 .01 .01 | 2 2 | .88 1.20 1.25 1.29 1.34 | .01 .01 .01 .01 .01 | .06 .05 .05 .04 .05 | 2 2 2 2 2 | 10 5 10 5 5 |
| 4H 90 4N 105 4N 120 4N 135 4N 150 | 2 3 2 3 9 | 31 48 43 88 | 21 23 23 18 24 | 72 116 106 141 167 | .6 .9 1.1 .4 .6 | 25 29 25 35 32 | 8 13 10 9 9 | | 5.21 4.77 5.18 4.47 3.77 | 25 20 22 21 20 | 3 4 6 2 | ND ND ND ND ND | 2 2 2 2 2 2 | 9 21 26 10 8 | 1 1 1 1 | 4 3 2 2 3 | 2 5 4 3 2 | 85 55 64 71 56 | .09 .22 .34 .10 .07 | .08 .10 .12 .11 .16 | 19 17 16 19 27 | 38 34 32 41 25 | .32 .34 .40 .35 .16 | 185 292 331 171 138 | .04 .01 .01 .01 .01 | 3 4 | 1.50 1.80 1.89 1.50 .92 | .01 .01 .01 .01 .01 | .06 .08 .08 .08 .08 | 2 2 2 2 2 2 | 10 5 10 10 10 |
| 3N 15 3R 30 3N 45 3N 60 3N 75 | 2 1 1 1 | 27 17 17 27 15 | 19 14 13 15 8 | 68 48 44 61 44 | .6 .5 .6 .2 | 23 16 13 22 14 | 8 5 8 5 | 298 204 255 370 177 | 4.75 3.87 2.88 4.09 2.58 | 18 6 7 14 8 | 2 3 2 3 | ND ND ND ND ND | 2 2 2 2 2 2 | 9 11 8 14 12 | 1 1 1 1 | 3 2 2 4 2 | 3 2 2 4 3 | 59 67 65 80 70 | .07 .09 .10 .27 .15 | .07 .06 .08 .18 .06 | 20 17 19 14 17 | 51 39 26 44 29 | .40 .35 .23 .53 .35 | 120 96 124 97 89 | .03 .04 .04 .05 .05 | 3 4 3 | 2.07 2.01 1.09 1.51 1.21 | .01 .01 .01 .01 .01 | .06 .05 .06 .07 .05 | 2 2 2 2 2 | 10 10 5 5 160 |
| 3N 90 3N 105 3K 120 3N 135 3N 135 | 1 1 1 1 | 29 21 15 10 14 | 11 11 9 10 13 | 60 85 58 37 47 | .3 .2 .3 .4 .1 | 25 19 16 12 17 | 10 9 7 5 7 | 316 654 296 157 199 | | 11 4 3 5 8 | 2 B 3 5 2 | ND ND ND ND | 2 2 2 2 2 2 | 16 12 11 12 13 | 1 1 1 1 | 4 2 3 5 2 | 4 5 3 4 5 | 101 109 97 111 126 | .20 .17 .16 .17 .17 | .08 .11 .13 .06 .08 | 13 11 14 12 13 | 52 45 43 38 51 | .72 .52 .43 .35 .49 | 62 93 119 123 | .09 .13 .10 .17 .15 | 6 3 2 | 1,73 1,91 1,70 1,49 1,76 | .01 .01 .01 .01 .01 | .05 .05 .06 .04 .05 | 2 2 2 2 2 2 | 10 10 5 5 10 |
| 2N 15 2N 30 2N 45 2N 60 2N 75 | 2 2 2 2 2 | 38 42 41 36 16 | 22 24 24 23 20 | 86 90 84 77 45 | .6 .9 .5 .9 1.6 | 25 29 27 26 13 | 14 10 11 8 4 | 654 484 588 254 190 | 4.59 | 22 24 24 20 9 | 2 3 3 2 2 | ND ND ND ND ND | 2 3 2 2 2 | 19 10 10 10 10 | 1 1 1 1 | 2 4 2 3 2 | 3 3 3 2 | 64 52 58 53 53 | . 36 . 11 . 11 . 09 . 13 | .09 .10 .17 .10 .12 | 20 23 20 19 19 | 48 32 32 39 23 | . 28 . 33 . 35 . 35 . 22 | 688 165 137 118 179 | .02 .03 .03 .03 .03 | 3 5 4 | 1.74 1.23 1.28 1.60 1.07 | .01 .01 .01 .01 .01 | .07 .06 .07 .04 .06 | 2 2 2 2 2 2 | 5 5 15 5 |
| 2N 90 2N 105 2N 120 2N 135 2N 130 | 3 2 2 2 2 2 | 39 27 25 35 20 | 10 15 12 21 12 | 86 55 53 86 43 | .3 .5 .7 .7 | 22 15 16 25 11 | 8 5 5 8 | 429 190 116 267 97 | 5.90 | 13 11 9 14 8 | 5 2 4 7 2 | ND ND ND ND | 4 2 5 2 | 10 8 9 11 7 | 1 1 1 1 1 | 2 3 2 3 2 | 3 2 3 2 3 | 84 80 55 79 61 | .08 .06 .09 .08 .05 | .13 .11 .08 .18 .04 | 21 20 20 19 24 | 36 26 24 46 20 | .32 .21 .22 .45 .15 | 435 269 114 130 182 | .04 .03 .03 .04 .02 | 4 3 7 | 1.43 1.16 1.12 1.65 1.14 | .01 .01 .01 .01 .01 | .07 .06 .05 .05 .04 | 2 2 2 2 2 | 5 5 10 10 |
| 25 15 25 30 25 45 25 60 28 75 | 2 2 2 2 2 2 2 | 44 75 58 30 35 | 23 27 28 22 21 | 64 114 112 84 52 | 9 2.7 .3 .2 .5 | 22 53 39 24 19 | 10 18 19 9 7 | 917 1942 3443 709 390 | 4.32 4.32 | 14 23 23 24 14 | 2 9 4 2 2 | ND ND ND ND ND | 2 2 2 2 2 2 | 57 110 49 23 30 | 1 1 1 1 | 2 2 2 4 | 2 3 2 3 | 53 50 54 53 75 | . 44 . 90 . 40 . 29 . 25 | .10 .13 .12 .06 | 21 20 22 20 23 | 30 B1 38 22 24 | .24 .57 .38 .20 .20 | 618 B42 725 315 329 | .02 .02 .01 .02 .02 | 6 3 5 | 1.28 2.21 1.90 .88 1.28 | .01 .01 .01 .01 .01 | .07 .14 .09 .06 .08 | 2 2 2 2 2 2 | 5 5 15 5 5 |
| 25 90 25 105 STD A-1/AU 0.5 | 1 1 1 | 70 50 30 | 34 24 41 | 101 98 190 | 2.2 .4 .3 | 59 43 34 | 22 17 12 | 861 1207 1081 | 5.11 4.02 2.89 | 23 15 11 | 5 3 2 | ND ND ND | 2 7 2 | 77 42 38 | 1 1 1 | 2 2 2 | 5 3 2 | 63 50 63 | . 55 . 34 . 66 | . 11 . 08 . 10 | 26 29 8 | 59 40 73 | . 65 . 68 . 73 | 546 333 282 | .01 .03 .08 | 3 | 2.93 1.81 2.01 | .01 .01 .01 | - 16 . 11 . 21 | 2 2 2 | 10 10 540 |

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| SAMPLE # | No ppa | Cu pps | Pb pp = | Za ppe | Ag ppe | Ní ppe | Co ppe | ₩л рре | Fe 1 | As pps | U ppm | Au ppe | 7h ppa | Sr ppe | Cd ppe | Sb ppa | Bi ppe | V PP# | Ca I | P Z | La ppe | Cr ppa | Ng Z | Ba ppa | Ti I | B pp∎ | A) I | Ka I | K Z | ¥ PAT | Au‡ ppb |
|---|-----------------------|----------------------------|----------------------------------|-----------------------------|-------------------------------|----------------------------|----------------------------|------------------------------------|--------------------------------------|----------------------------|----------------------------|----------------------------|---------------------------------|----------------------------|-----------------------|----------------------------|-----------------------|----------------------------|--------------------------------------|---------------------------------|----------------------------------|----------------------------|--------------------------------------|----------------------------------|---------------------------------|--------------|--------------------------------------|---------------------------------|---------------------------------|----------------------------|--------------------------|
| 25 120 25 135 25 150 35 15 35 30 | 2 1 1 2 1 | 37 45 35 35 25 | 22 22 23 23 23 22 | 67 95 94 82 80 | .3 i.1 .5 .9 .4 | 28 55 41 36 26 | 9 16 15 16 12 | 281 811 1051 762 724 | 4.27 3.49 3.39 3.65 3.60 | 19 15 11 23 15 | 2 2 4 2 2 | ND ND ND ND | 2 2 2 2 2 2 | 10 70 44 21 16 | 1 1 1 1 1 | 2 2 2 2 2 2 | 2 2 2 2 2 | 57 39 36 48 49 | . 10 . 57 . 38 . 21 . 14 | .06 .07 .11 .06 .07 | 18 21 22 25 24 | 37 35 32 35 35 | . 42 . 58 . 52 . 42 . 40 | 128 280 255 1078 212 | .02 .01 .01 .02 .02 | 4 5 7 | 1.57 1.76 1.56 1.42 1.42 | .01 .01 .01 .01 .01 | .08 .07 .11 .06 .04 | 7 2 2 2 2 2 | 5 5 5 5 5 |
| 3\$ 45 3\$ 60 3\$ 75 3\$ 90 3\$ 105 | 1 2 1 1 2 | 38 34 25 22 32 | 19 20 15 16 18 | 110 90 61 52 66 | .5 .2 .2 .2 | 42 38 21 17 24 | 15 13 11 . 8 8 | 850 437 709 520 452 | 3.80 4.34 3.30 2.67 3.13 | 13 18 17 13 17 | 2 2 2 2 2 2 | ND ND ND ND | 2 2 2 2 2 | 22 18 9 8 9 | 1 1 1 | 2 2 2 2 2 2 | 2 2 2 2 2 | 44 47 45 41 42 | .19 .15 .08 .06 | .09 .08 .10 .04 .08 | 25 22 22 22 22 22 | 36 41 34 29 29 | .51 .56 .33 .29 .27 | 184 134 102 118 124 | .02 .02 .02 .01 | 6 4 4 | 1.60 1.71 1.57 1.34 1.27 | .01 .01 .01 .01 | .07 .07 .06 .06 | 2 2 2 2 2 2 | 5 5 5 5 5 |
| 38 120 35 135 35 150 45 15 45 30 | 2 2 1 1 | 29 38 48 33 20 | 18 25 21 22 19 | 66 75 66 45 | .4 .9 .4 .5 | 24 23 28 27 14 | 8 15 10 10 4 | | 4.17 3.00 3.25 5.14 3.23 | 16 29 35 11 11 | 2 2 2 2 2 | ND ND ND ND ND | 2 2 2 2 2 2 2 | 9 8 8 6 7 | 1 1 1 1 | 2 2 2 2 2 2 | 2 2 3 2 7 | 48 44 42 46 45 | .07 .05 .05 .04 .06 | .10 .10 .10 .07 .07 | 21 24 22 20 22 | 34 19 22 36 23 | .35 .12 .11 .35 .16 | 130 130 147 114 77 | .01 .01 .01 .01 .01 | 3 4 3 | 1.61 .91 .89 1.70 1.22 | .01 .01 .01 .01 .01 | .06 .06 .05 .05 .05 | 2 2 2 2 2 2 | 5 5 15 5 5 |
| 45 45 45 60 45 75 45 70 45 105 | 1 1 1 1 1 | 38 46 31 37 64 | 23 30 24 25 28 | 62 91 69 86 100 | 1.7 .7 .3 1.0 2.7 | 19 28 20 26 36 | | 764 991 1395 1770 1945 | 3.25 5.56 3.79 3.95 4.18 | 15 20 20 16 14 | 4 2 2 5 | ND ND ND ND | 2 2 2 2 2 2 | 9 12 15 25 19 | 1 1 1 1 | 2 2 2 2 2 2 | 2 4 2 2 2 | 43 40 44 50 42 | .07 .13 .13 .17 .13 | .07 .21 .14 .11 .10 | 19 19 20 18 19 | 23 22 22 24 32 | .18 .17 .15 .26 .33 | 282 1809 184 278 205 | .01 .01 .01 .01 .01 | 5 4 .4 | 1.46 .94 .95 E.23 L.97 | .01 .01 .01 .01 .01 | .05 .07 .07 .07 .07 | 2 2 2 2 2 | 5 5 5 10 |
| 45 120 45 135 45 150 55 15 55 30 | 1 1 1 5 | 18 14 20 45 30 | 14 19 20 25 21 | 43 38 41 85 64 | .1 .9 .4 1.3 .6 | 12 12 13 34 22 | 5 5 6 12 9 | 1139 | 2.19 3.26 3.33 3.53 3.49 | 12 11 11 15 14 | 2 2 2 54 2 | ND ND ND ND ND | 2 2 2 2 2 | 8 8 48 8 | 1 1 1 1 1 | 2 2 2 2 2 | 2 2 3 2 3 | 46 39 64 35 49 | .05 .05 .07 .43 .07 | .05 .07 .09 .20 .08 | 28 20 22 23 20 | 16 23 21 35 19 | .10 .19 .42 .31 .12 | 90 73 80 269 93 | .02 .01 .01 .01 .01 | 4 | .66 1.12 1.32 1.94 .76 | .01 .01 .01 .01 .01 | .05 .06 .06 .08 .06 | 2 2 2 2 2 2 | 30 10 5 5 25 |
| 55 45 55 60 55 75 55 90 55 105 | 1 1 2 1 1 | 31 34 35 52 27 | 24 27 27 26 21 | 75 80 72 97 61 | .3 .8 .7 .5 .7 | 23 30 25 36 19 | 9 12 9 19 7 | 771 253 | 3.64 4.67 5.11 4.78 3.98 | 16 22 19 30 21 | 4 3 2 2 2 2 | KD ND ND ND | 2 2 2 2 2 2 | 8 19 11 15 8 | 1 1 1 1 | 2 2 2 2 2 2 | 2 3 4 4 | 46 42 44 32 45 | .07 .16 .09 .13 .09 | .11 .13 .09 .09 .15 | 22 19 16 17 21 | 21 22 29 23 20 | . 18 . 22 . 20 . 29 . 17 | 96 182 154 158 161 | .01 .01 .01 .01 .01 | 4 | .82 1.00 1.19 1.03 .92 | .01 .01 .01 .01 .01 | .06 .07 .04 .06 | 2 2 2 2 2 2 | 5 10 5 10 5 |
| 5\$ 120 55 135 55 150 65 15 65 30 | 1 1 2 1 | 24 31 40 38 38 | 19 26 33 24 23 | 65 67 74 98 88 | 1.0 1.0 1.8 .5 .3 | 19 23 26 41 41 | 9 11 14 18 17 | 775 1448 1218 | 3.50 3.75 4.51 3.99 3.71 | :8 21 25 18 12 | 2 2 2 2 2 2 | ND Kđ ND ND ND | 2 2 2 2 2 2 | 10 8 5 30 25 | 1 1 1 1 1 | 2 2 2 2 2 2 | 2 3 3 2 4 | 42 42 41 41 45 | .14 .11 .04 .31 .26 | .14 .15 .16 .12 .10 | 19 21 19 22 26 | 20 21 24 38 45 | .18 .17 .17 .40 | 98 83 92 446 657 | .01 .01 .01 .01 .01 | | .64 .88 .97 1.58 1.94 | .01 .01 .01 .01 | .07 .06 .04 .08 .10 | 2 2 2 2 2 | 5 5 10 26 10 |
| 65 45 STD A-1/AU 0.5 | 2 1 | 158 31 | 37 43 | 137 188 | .7 .3 | B1 36 | 39 13 | 3044 1974 | 6.46 2.87 | 26 9 | 10 2 | ND ND | 2 2 | 26 38 | l I | 2 2 | š 2 | 71 63 | .26 .65 | .14 .07 | 34 8 | 114 73 | . 80 . 72 | 1 5 59 286 | .01 .09 | | 3.94 2.04 | .01 .01 | . 21 . 21 | 2 2 | 10 540 |

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|----------------|-----------|-----------|------------|-----------|-----------|-----------|-----------|-----------|------|------------|----------|-----------|-----------|-------------------|-----------|-----------|-----------|----------|---------|--------|-----------|-----------|---------|-----------|---------|----------|---------|---------|--------|-----------|------------|--|
| SAMFLE # | Но при | Cu P₽® | Pb. pps | Zn ppe | Ag ⊉p∎ | Nj ppa | Ca ppe | Mn Pp# | Fe | As ppn | Ŭ pp∎ | Au ppa | Th pp∎ | Sr pp n | Cd ppa | Sb pp∎ | Bı ppe | V ppa | Cə I | P Z | La ppe | Cr pp∎ | Xg I | Ba ppe | Ti Z | B ppa | EA X | Ka Z | K Z | N Appe | Au‡ pat | |
| 65 60 | 1 | 70 | 20 | 95 | .8 | 43 | 22 | 1591 | 4.67 | 2 2 | 9 | ND | 7 | 21 | 1 | | 7 | 51 | 97 | | ~~ | 50 | | | | | | | | | • | |
| 6S 75 | 1 | 28 | 16 | 62 | .4 | 22 | 9 | 849 | | 19 | 2 | ND | 5 | 10 | - | - | 2 | | .23 | .11 | 22 | 52 | .41 | 1002 | .01 | - 4 | 2.07 | .01 | .08 | - 2 | 5 | |
| 6S 90 | 1 | 40 | 13 | 75 | .4 | 35 | 10 | 404 | 3.54 | 17 | - | | | 10 | | | 2 | 42 | .08 | .07 | 21 | 24 | .20 | 233 | .01 | 3 | . 99 | .01 | .05 | 2 | 5 | |
| 65 105 | , | 37 | 15 | 66 | ., | 25 | | 332 | | 17 | | ND | 4 | - 11 | 1 | Z | 2 | 34 | . 12 | .06 | 19 | 32 | .38 | 140 | .01 | 3 | 1.36 | .01 | .06 | 2 | 5 | |
| 65 120 | ĩ | 21 | 15 | 46 | .5 | | | | | 15 | 2 | ND | 2 | | I | 2 | 3 | 39 | .05 | .07 | 18 | 42 | . 29 | 183 | .02 | 4 | 2.13 | .01 | . 06 | 2 | 5 | |
| | 1 | 11 | 17 | 10 | | 18 | 0 | 285 | 3.67 | 13 | 2 | NB | 2 | 6 | 1 | 2 | 2 | 35 | . 04 | . 06 | 19 | 26 | .23 | 79 | .01 | | 1.30 | .01 | 05 | ź | 5 | |
| 45 135 | 1 | 16 | 14 | 32 | 1.2 | 12 | | 388 | 2.76 | 10 | 3 | ND | , | Ŧ | | + | - | | | | | | | | | | | | | | | |
| 6S 150 | 1 | 19 | -21 | 50 | . 9 | 13 | , | 1175 | 3.79 | 13 | ÷ | | 2 | 5 | ţ | 2 | 2 | 32 | .04 | .06 | 19 | 21 | .19 | 83 | . 01 | 3 | 1.11 | .01 | . 03 | 2 | 5 | |
| 4S 165 | 1 | 18 | 12 | 36 | 1.3 | 16 | | | | | • | ND | | 0 | 1 | 2 | 3 | 59 | .04 | .12 | 21 | 20 | .10 | 62 | .02 | 4 | . 79 | .01 | 04 | Z | 5 | |
| 65 160 | | 17 | | | | | | 281 | 3.59 | - 14 | Z | ND | 2 | 6 | 1 | 3 | - 3 | 43 | .07 | - 14 | 19 | 26 | .19 | 82 | .01 | 4 | . 78 | .01 | .04 | 7 | 5 | |
| | | | 16 | 38 | 1.2 | 15 | 2 | | 4.06 | 10 | - 4 | ND | 2 | 5 | 1 | 2 | 2 | 50 | .03 | ,05 | 18 | 25 | . 20 | 85 | .01 | 5 | 1,16 | .01 | .04 | - | E E | |
| 65 195 | 1 | 40 | 20 | 59 | 2.0 | 24 | 11 | 2574 | 5.95 | 13 | 2 | ND | 2 | 6 | 1 | 2 | 5 | 58 | .05 | 19 | 17 | 28 | .23 | 138 | . 02 | | 1.12 | .01 | .05 | 5 | s S | |
| 65 210 | 1 | 10 | 10 | 15 | .3 | 1 | , | 357 | 1.29 | | | | | - | | _ | _ | | | | | | | | | | | | | • | * | |
| 65 225 | | . 19 | 17 | 39 | .5 | 15 | | | | | 4 | ND | Z Z | 5 | 1 | 2 | 2 | 28 | .03 | .05 | 23 | 10 | .06 | 80 | .01 | 2 | . 59 | .01 | .03 | 2 | 15 | |
| 6\$ 255 | | | | • • | | 15 | 3 | 354 | 3.29 | 20 | 2 | ЯD | 2 | 6 | 1 | 2 | 2 | 67 | .04 | . 15 | 21 | 19 | .14 | 82 | .02 | 3 | .70 | . 01 | .04 | 2 | ę | |
| | | 28 | 16 | 53 | . 7 | 20 | | | 4.42 | 8 | 6 | NÐ | 2 | 6 | 1 | 2 | 3 | 36 | .04 | .06 | 17 | 32 | . 28 | 111 | .01 | Ť | 1.15 | .01 | .04 | - | ĕ | |
| STD A-L/AU 0.5 | 1 | 30 | 40 | 186 | • 3 | 36 | 13 | 1057 | 2.89 | 10 | 2 | ND | 2 | 38 | L | 2 | 2 | 62 | . 65 | 09 | 8 | 72 | .72 | 283 | .08 | 7 | 2.01 | .01 | | 4 | 3 E+A | |
| | | | | | | | | | | | | | | | | | - | | | | | | -/- | 140 | | ' | 1.41 | 101 | . 21 | 4 | 510 | |

PAGE # 6



ACME ANALYTICAL LABORATORIES LTD. Assaying & Trace Analysis 852 E. Hestings St., Vancouver, B.C. V&A 1R6 Telephone : 253 - 3158

GEOCHEMICAL LABORATORY METHODOLOGY - 1983

Sample Preparation

1. Soil samples are dried at 60°C and sieved to ~80 mesh.

2. Rock samples are pulverized to -100 mesh.

Geochemical Analysis ICP

0.5 gram samples are digested in hot dilute aqua regia in a boiling water bath and diluted to 10 ml with demineralized water. Extracted metals are determined by Industively Coupled Argon Plasma (ICP).

Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cu, Cr, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

Geochemical Analysis for Au

10.0 gram samples that have been ignited overnite at 600° C are digested with hot dilute aqua regia, and the clear solution obtained is extracted with Methyl Isobutyl Ketone.

Au is determined in the MIBK extract by Atomic Absorption using background correction (Detection Limit = 5 ppb direct AA and 1 ppb grahite AA.)

GEOCHEMICAL SAMPLE LOCATIONS SOIL-"B"HORIZON

-

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X

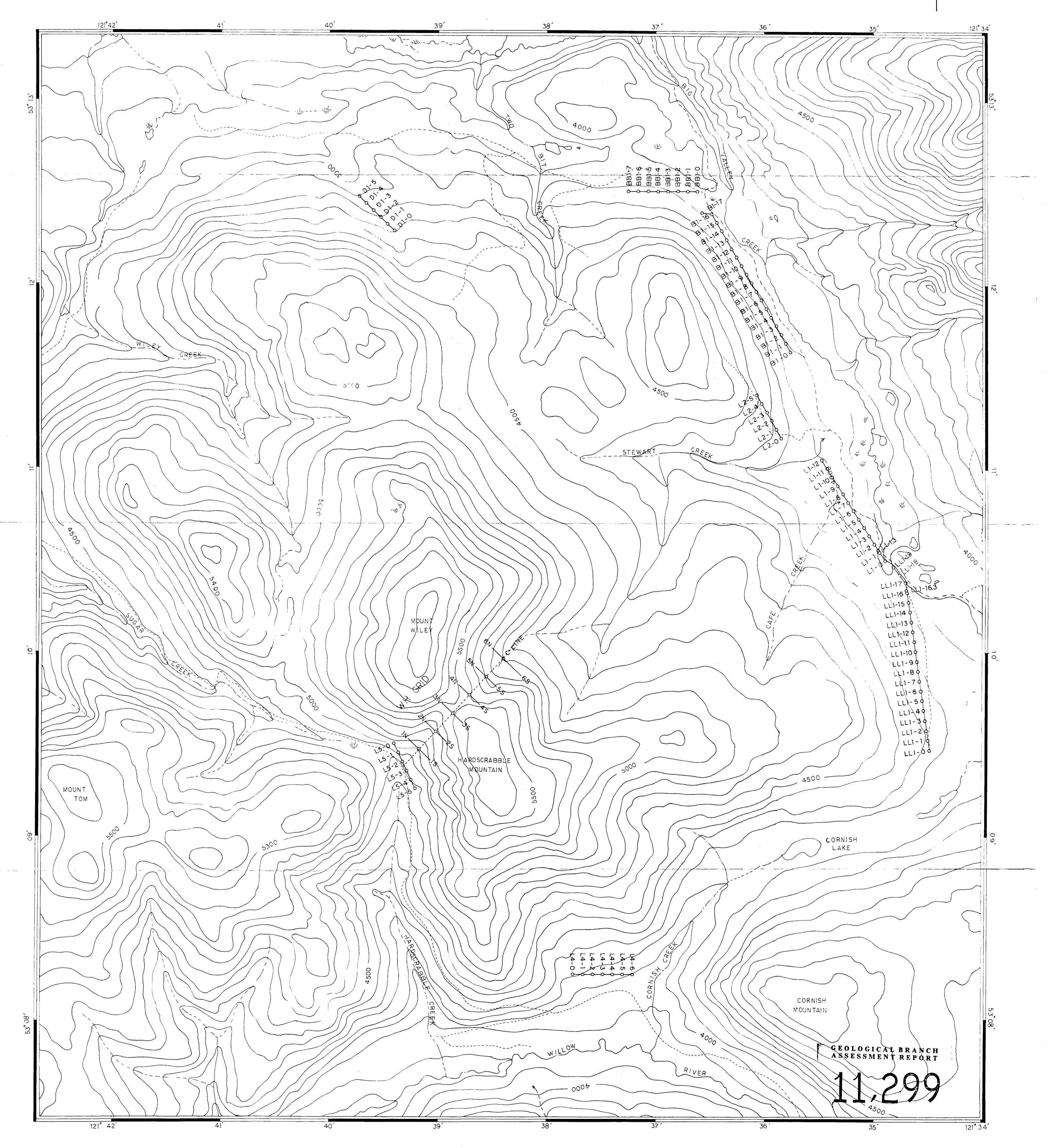
WH GRID......15m SAMPLE INCRIMENT NORTH AND SOUTH OF C-LINE ALONG LINES 1N,1S, 2N, 2S...etc.

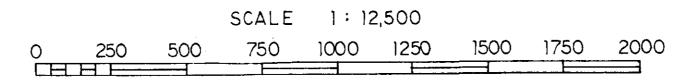


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N.T.S. REF. NO. 93H/4E

FIG. 15





METERS

PAYLODE EXPLORATIONS LTD

(JUNE 1983)

BEDROCK GEOLOGY ON PAYLODE PROPERTY

DESIGNATED AREA OF WELLS, N.T.S. REF. NO. 93 H/4W

Mi and

MP

AMPHIBOLITE

MPs

DARK GREY, SANDY LIMESTONE, DARK GREY GREYWACKE

M₽v

•

FOLIATED DIORITE AND AUGITE PORPHRY BASALT, GABBROIC ROCK INCLUDES UNDIFFERENTIATED db.

LOWER MISSISSIPPIAN

Mer

GREENBERRY FORMATION: GREY CRINOIDAL LIMESTONE, CHERT, SLATE.

DEVONIAN? AND MISSISSIPPIAN?

DMs 、 BLACK SILTITE AND PHYLLITE, GREY MICACEOUS QUARTZITE, LIMESTONE, MINOR METATUFF? DMs; GREYWACKE, MUDDY CONGLOMERATE. DMs; QUARTZITE, CLAST CONGLOMERATE. DM se; LIMESTONE, MINOR DOLOMITE. DM se; GREY MICACEOUS QUARTZITE, DARK GREY PHYLLITE. DM .; QUARTZITE, MINOR CONGLOMERATE. DM . ; INTERBEDDED GREY SLATE AND GREEN METATUFF IN PART CALCAREOUS.

39

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RAMOS CREEK SUCCESSION: OLIVE AND GREY MICACEOUS QUARTZITE, PHYLLITE AND SLATE, LIMESTONE, METATUFF? MPMA; PHYLLITE, SCHIST, QUARTZITE, CALC-SILICATE ROCKS. MPAC; LIMESTONE, CALCAREOUS QUARTZITE, PHYLLITE. MP., BLACK SILTITE AND SLATE, MAY BE EQUIVALENT TO DMS. MPAS; GREEN OLIVE AND GREY SLATE AND PHYLLITE, OLIVE-GREY GREYWACKE, MAY BE IN PART EQUIVALENT TO H.

MPom

PKs

MPA

MP

~**.*H**ttp**∜**_

×

DRAGON MOUNTAIN SUCCESSION: OLIVE AND GREY MICACEOUS QUARTZITE AND PHYLLITE.

GREY AND GREEN SLATE AND PHYLLITE, OLIVE AND GREY GREYWACKE.

ANTLER FORMATION: MPAY; DIORITE, BASALT, SERPENTINITE, GABBRO,

SLATE, GREYWACKE. MP. SERPENTINITE, SHEARED MAFIC ROCKS.

UNDIFFERENTIATED MPAS, MPAS; OLIVE AND GREY CHERT, BLACK AND GREEN

LEGEND OF ROCK FORMATIONS

MISSISSIPPIAN?, PENNSYLVANIAN AND PERMIAN

121°42′

PERMIAN? AND/OR TRIASSIC?

MISSISSIPPIAN? TO PERMIAN?

MP-

TOM CREEK SUCCESSION: OLIVE GREY MICACEOUS QUARTZITE, PHYLLITE AND SCHIST.

MP.

X

DOWNY CREEK SUCCESSION: OLIVE AND GREY MICACEOUS QUARTZITE AND PHYLLITE, GREY OLIVE AND GREEN SLATE, LIMESTONE, MARBLE, METATUFF? MPre; LIMESTONE, MARBLE, METATUFF?, SLATE

PALEOZOIC? Pد ORANGE WEATHERED FUCHSITE BEARING ANKERITIC

CARBONATE.

KEY

GEOLOGICAL CONTACT (DEFINED, APPROXIMATE, ASSUMED) CLEAVAGE (FIRST GENERATION; INCLINED, VERTICAL) • • • • • • • • • حسف FAULT (DEFINED, APPROXIMATE, ASSUMED) THRUST FAULT (DEFINED, APPROXIMATE, ASSUMED) BEDDING (INCLINED, VERTICAL)

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Ay

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121° 34́

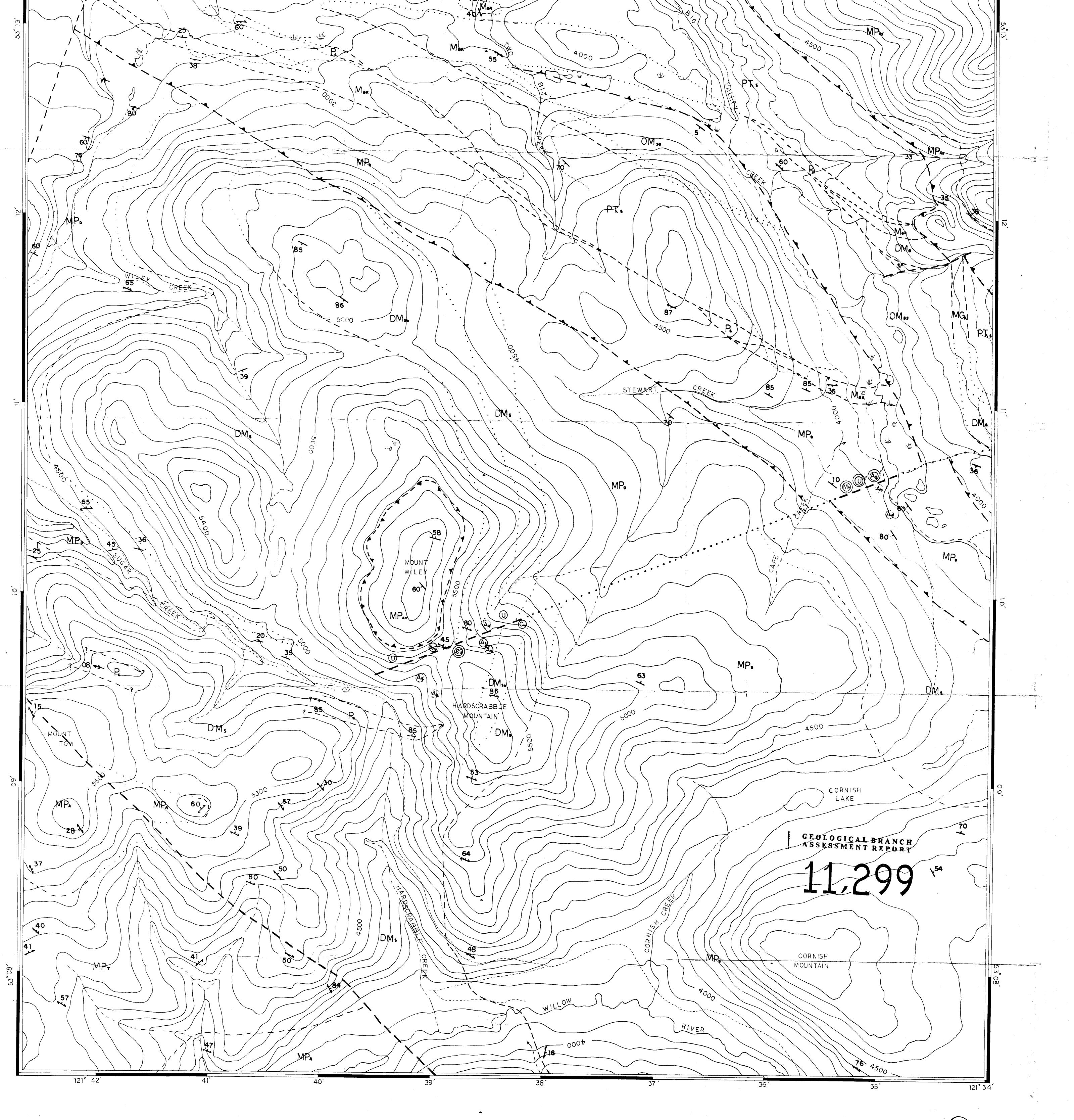
MINERALOGY

37

METALLIC COMPOSITS (BEDROCK LOCATION KNOWN).

(IDENTIFIED BY SOIL GEOCHEMISTRY) . . (POSSIBLE GLACIER OR STREAM TRANSPORT)

36 1



SCALE 1: 12,500 0 250 500 750 1000 1250 1500 1750 2000

METERS

FIG. 16