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SOIL GEOCHEMICAL SURVEY AND GEOLOGICAL DATA EVALUATION NUSWAT, CORE LODE 1 AND CORE LODE 2 MINERAL CLAIMS OMINECA MINING DIVISION TROITSA LAKE, B.C. NTS MAP SHEET 93 E/11 W LATITUDE 53°32' NORTH, LONGITUDE 127°23' WEST

Prepared for

PAYDAY RESOURCES INC.

ARCTEX ENGINEERING SERVICES

Paul Kallock Geologist

Locke B. Goldsmith, P.Eng. Consulting Geologist

GEOLOGICAL BRANCH ASSESSMENT REPORT

April 5, 1984



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APPENDIX: GEOCHEMICAL ANALYSIS

SOIL GEOCHEMISTRY MAPS: COPPER LEAD ZINC SILVER-GOLD ARSENIC

(Pocket inside back cover)

SOIL GEOCHEMICAL SURVEY AND GEOLOGICAL DATA EVALUATION NUSWAT, CORE LODE 1 AND CORE LODE 2 MINERAL CLAIMS OMINECA MINING DIVISION TROITSA LAKE, B.C. NTS MAP SHEET 93 E/11 W

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SUMMARY

The Nuswat, Core Lode 1 and Core Lode 2 mineral claims of Payday Resources Inc. are located in west-central British Columbia, 110 km south of Houston, B.C. The eastern part of the claim group is underlain by granodiorite of the late Cretaceous Troitsa Stock. Surrounding the stock and underlying the bulk of the claim group are volcanics of the Kasalka Group of Upper Cretaceous age. Soil geochemical surveys in 1983 confirm the presence of copper mineralization indicated in previous copper-molybdenum porphyry exploration. Furthermore, base metal and gold-arsenic enrichment in soils has been detected in felsic volcanics north and west of the stock. Geological mapping, expansion of the soil geochemical survey to the remainder of the claim, and a combined geophysical programme of magnetometer and VLF-EM are suggested as the next phase (Phase 2) of exploration. A cost of \$413,200 in Phases 2-5 is estimated.

INTRODUCTION

The Nuswat, Core Lode 1 and Core Lode 2 mineral claims are located on the south and west shore of Troitsa Lake in west-central British Columbia, 110 kilometres south-southwest of Houston, B.C. The claims are situated in the Omineca Mining Division, NTS map sheet 93 E/11 W. Co-ordinates 53°32'N latitude and 127°23'W longitude cross the property. Elevations range from 898 metres (2947 feet) at Troitsa Lake to 1863 metres (6110 feet) at the peak in the centre of the Nuswat claim. The property consists of 54 units, approximately 1350 hectares, and is owned by Payday Resources Inc.

<u>Claim Name</u>	Units	Record No.	Recording Date		
Nuswat	20	5202(5)	May 30, 1983		
Core Lode 1	16	5513(7)	July 12, 1983		
Core Lode 2	18	5514(7)	July 12, 1983		

The north shore of Tahtsa Lake, 16 km north of the claims, is the terminus of the nearest road. Helicopter transport from Houston, B.C., 110 km northeast of the property, is available.

The Troitsa Lake area, now partially covered by the Payday Resources Inc. claims, was first staked in 1966. Silver Standard Mines Ltd. carried out limited mapping, trenching and drilling in that year. In 1969, Aston Resources flew an airborne magnetic and electromagnetic survey in the area. Cerro Mining Company of Canada acquired the property in 1971 and detailed mapping was later carried out by Cawthorn (1973).

The Nuswat, Core Lode 1 and Core Lode 2 claims were staked in 1983. They cover the northern part of the mineralized intrusive which attracted the original exploration. Personnel of Arctex Engineering Services examined the property on July 9, 1983. A detailed soil survey later in the summer was carried out under the direction of J.G. Ager Consultants Ltd. and is the subject of this report.

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P. KALLOCK, Geologist

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April 1984 ARCTEX ENGINEERING SERVICES



P. KALLOCK, Geologist

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Locke B. Goldsmith, P. Eng., Consulting GeologistApril 1984ARCTEX ENGINEERING SERVICES



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SUMEE OF ONTERIO

KEY TO REGIONAL GEOLOGY

FROM COMPILATION BY P. VAN DER HEYDEN, 1982

STRATIFIED ROCKS

QUATERNARY

PLEISTOCENE AND RECENT



Glacial, alluvial, and fluvial deposits

CRETACEOUS

ALBIAN-CENOMANIAN(?)

KASALKA GROUP



Basal red conglomerate and sandstone. Minor dacitic to basaltic volcanics: green amygdaloidal flows, tuff and breccia,

Rhyolite to andesite flows, breccia, tuff and lahar.

minor bladed feldspar porphyry
MIDDLE ALBIAN

SKEENA GROUP

IKs

Micaceous sandstone, siltstone and shale, minor conglomerate

JURASSIC

UPPER BATHONIAN TO LOWER CALLOVIAN

m Ja si

BOWSER LAKE GROUP ASHMAN FORMATION: thin bedded shale, siltstone, sandstone, greywacke, limy shale. Minor chert pebble conglomerate and tuff

HAZELTON GROUP

MIDDLE BAJOCIAN



SMITHERS FORMATION: feldspathic volcanic sandstone, greywacke, tuff, breccia, tuffaceous sediments.

Minor conglomerate, limestone and flows

SINEMURIAN(?)



IELKWA FORMATION: variegated red, maroon, grey, green tuff, breccia and flows of basaltic to rhyolitic composition.

Lesser volcanic conglomerate, polymictic conglomerate, red mudstone, siltstone and argillite

April 1984

ARCTEX ENGINEERING SERVICES

GRANITOID ROCKS

PALEOCENE AND EOCENE



NANIKA INTRUSIONS: granite, granodiorite, quartzdiorite and quartzmonzonite, locally megacrystic. Lesser feldspar porphyry

CRETACEOUS

LATE CRETACEOUS (AND/OR EARLY TERTIARY KTd)



KASALKA INTRUSIONS: diorite, gabbro, microdiorite and syenodiorite



BULKLEY INTRUSIONS: porphyritic to equigranular granodiorite, quartzdiorite, monzodiorite and monzonite

MESOZOIC (AND/OR TERTIARY MTg)



Biotite hornblende and biotite granodiorite, quartzmonzonite and quartzdiorite. Lesser granitoid gneiss, migmatite. Commonly foliated and gradational into Pcg



Green, chloritized quartzdiorite and granodiorite, unfoliated to weakly foliated. Locally gradational into **Pd**

SYMBOLS

Geological boundary (defined,approximate,assumed)	
Drift boundary	
Fault (defined, approximate, assumed)	
Thrust or high angle reverse fault (defined, approximate, assumed).	
Bedding (horizontal,inclined,vertical)	
Foliation, schistosity (inclined,vertical)	
Minor fold axis, mineral lineation	
Sediment transport direction	
Anticline, antiform	
Syncline, synform	
Limestone, marbleIst	
Poorly understood areas	
Glacier, ice and snow	
Lake	
Fossil location	
Age date location	
BiBiotite	
H	te.Ma
WrWhole rock	

GEOLOGIC SETTING

Regionally, the Nuswat *et al.* claims lie within the Intermontane Belt, approximately 15 km east of the main granitic masses and metamorphics of the Coast Plutonic Complex. To the south and east, the Jurassic Hazelton Group, composed primarily of volcanics and lesser sediments, forms the basement or oldest rock units. Overlying the Hazelton Group in the claim area and to the north are sediments of the Lower Cretaceous Skeena Group and a thick sequence of subaerial volcanics of the Kasalka Group. Intimately related to Cretaceous vulcanism are various intermediate intrusions grouped as Bulkely or Kasalka type. Younger Nanika intrusions of Paleocene and Eocene age are also present in the region.

Block faulting, ring and radial faults, and subsequent intrusion by dykes and/or hydrothermal fluids may have affected a large part of the area between Troitsa and Tahtsa lakes where a large caldera, 22 km in diameter, may have formed during Cretaceous vulcanism. The Payday Resources Inc. property may straddle the southern rim of this obscure collapse feature.

LOCAL GEOLOGY

Geologic mapping has not been carried out in the area subsequent to the recent claim staking. However, three sources of geologic information are available. In 1973, as part of a M.Sc. thesis, N.G. Cawthorn mapped the Troitsa Stock and environs in detail. In 1976, D.G. MacIntyre studied the Cretaceous rocks. Regional mapping in 1982 by P. van der Heyden shows a reclassification of the volcanic and sedimentary stratigraphy surrounding the intrusive stock. Rocks which had been included in the Jurassic Hazelton Group are now considered to be Cretaceous Skeena and Kasalka groups.

Stratigraphy

As shown on the geology map by van der Heyden (1982) which is included with this report, the oldest rocks within the claims belong to the Lower Cretaceous Skeena Group. They overlie with angular unconformity rock of the Jurassic Hazelton Group which outcrop beyond the claim boundaries. Green to grey amygdaloidal basalt flows are common near the base of the Skeena Group. Micaceous sandstone, siltstone and shale form the bulk of the Group. They are exposed in the northeast quarter of the Nuswat claim.

Overlying the Skeena Group with angular unconformity is the Kasalka Group of Upper Cretaceous age. MacIntyre (1976) has studied this group in detail in the Tahtsa Lake area and at the Coles Creek copper deposit which is 5 km east of the Payday Resources Inc. property. The Kasalka Group has been divided into three formations, all of which may be present at the Nuswat *et al.* claims. This however is based largely on reinterpretation of Cawthorn's 1973 detailed map using MacIntyre's 1976 divisions of the Kasalka Group as shown in the stratigraphic column on the following page.

In contact with the Troitsa Stock and extending northwestward up to 1000 m from the intrusive is a felsic igneous rock which may correlate to the Bergette Formation of the Kasalka Group. This is an important unit because it hosts many of the base metal and nearly all of the precious metal soil anomalies detected during the 1983 programme. This unit has previously been outlined and defined by Cawthorn (1973) as a rhyolite sill. MacIntyre (1976) referred to this unit as rhyodacite and quartz porphyry. The regional map by van der Heyden (1982) shows the felsic area as part of the Kasalka Group without formational distinctions. Division of older rocks into red and green volcanic units may or may not correspond to MacIntyre's Kasalka divisions which include a host of rhyodacitic to andesitic flows, tuffs and breccias.

A compositionally zoned intrusive stock occupies much of the Nuswat claim and the high glaciated peaks south of the claim. This stock is roughly circular in plan and intrudes west-dipping Kasalka Group volcanics. The core of the stock is coarse-grained biotite-hornblende quartz monzonite. Marginally the composition grades to a finer grained biotite-hornblende granodiorite. K/Ar dates place the intrusion into the Bulkley type, having a late Cretaceous age.

Near the north margin of the Core Lode 1 claim the southern edge of the Mt. Bolom Stock is exposed. Dates on this intrusive indicate a Paleocene/Eocene age. Composition of the eastern part of the stock is described by MacIntyre (1976) as pink porphyritic biotite-hornblende granophyre.

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STRATIGRAPHIC COLUMN - TROITSA LAKE AREA

KASALKA GROUP - UPPER CRETACEOUS

Bergette Formation

Rhyodacite flows, tuffaceous

Swing Peak Formation

Member C - Latite-andesite Member B - Stratified lahar, minor flows Member A - Porphyritic latite-andesite

Mt. Baptiste Formation

Welded lapilli-tuff Lapilli-tuff, tuff breccia Crystal and ash tuff Porphyritic dacite, rhyodacite

Basal pebble conglomerate, sandstone

SKEENA GROUP - LOWER CRETACEOUS

Sandstone, siltstone Shale, argillaceous siltstone Amygdaloidal basalt, flow breccia

HAZELTON GROUP - JURASSIC

Andesitic volcanic rocks

[From MacIntyre, 1976]

Numerous younger or penecontemporaneous dykes or intrusions which occur on the property are not shown in the column. They include:

PALEOCENE OR EOCENE

Nanika Intrusions (Mt. Bolom Stock) Porphyritic biotite-hornblende granophyre

UPPER CRETACEOUS OR LATER

Dykes

Quartz-porphyry rhyolite Lamprophyre Andesite Feldspar porphyry

Intrusions

Bulkley - Subdivision 2 - zoned diorite to quartz monzonite Subdivision 1 - porphyritic granodiorite

Kasalka - diorite to quartz diorite and rhyodacite

[From Cawthorn, 1973]

Not shown on the geology map within this report are numerous Upper Cretaceous or later dykes which are present within or near the margin of the Troitsa Stock. These dykes include feldspar porphyry, andesite, lamprophyre and quartz porphyry rhyolitic compositions. They have a pronounced northwest trend and may attain lengths up to 2134 m (7000') (Cawthorn, 1973).

Structure

Strata on the Payday Resources Inc. property maintains general northwest trends with gentle dips to the northeast and southwest except where more intense folding may occur near the intrusive.

A north 50° east fault bisects the Core Lode claims. Cawthorn (1973) has mapped part of this vertical fault which is marked by shearing and fracturing with quartz, jasper, and magnetite veining. Another fault mapped by Cawthorn (1973) trends north 50° west and extends from the granodiorite stock to the neck between Blanket Lakes. It follows a major drainage. Magnetic lows (Davidson) appear to follow each of these faults with the northwesterly trend ending at the junction with the northeasterly lineament.

Faulting may also be associated with many of the northwest-trending dykes. Structural ground preparation may have played an important role in mineral deposition.

Mineralization

Exploration during the 1960s and 1970s is thought to have been directed solely towards the copper and molybdenum associated with the Troitsa Stock and its related dykes. The most prominent dyke, termed Dyke A by Cawthorn (1973), traverses nearly the entire stock from southeast to northwest. It displays typical copper porphyry alteration including propylitic to potassic types. Sections of the dyke contained an average of 0.53% copper and 0.009%MoS₂ across 12.2 m (40'). Sulphides terminate abruptly in the host intrusive on either side of the feldspar porphyry dykes.

Alteration of the granodiorite-quartz monzonite of the stock is restricted to the central portion where some degree of secondary biotite, chlorite, and saussuritisation of plagioclase is present. Fracture-fill material in this area contains quartz, pyrite, chalcopyrite, and/or molybdenite in veins up to 2.5 cm (1"). Samples from an area 1524 m x 1067 m (5000' x 3500') in the central part of the stock (which may include the southern part of the Nuswat claim) consistently returned 0.1% copper. Other minerals which may be found in fractures or veins in this area include galena, sphalerite, calcite, rhodo-chrosite, epidote, chlorite, tourmaline, and stibnite (Cawthorn, 1973).

Faults noted in "Structure" should be investigated for alteration assemblages which could be suggestive of an epithermal gold-silver environment.

SOIL GEOCHEMICAL SURVEY

During the summer of 1983 a soil geochemical survey over the central part of the claims was begun. A grid was established with 150 metres of separation between east-west lines. Samples were collected from the B horizon at 50-metre stations along each line. A total of 420 samples were collected and analysed for copper, lead, zinc, silver, and arsenic by Acme Analytical Laboratories Ltd. of Vancouver, B.C. Seventy-eight samples were also analysed for gold. Geologically, the grid overlies part of the northern end of the granodiorite stock and the rhyodacite unit (Bergette Formation?) of the Kasalka Group. Soil geochemical maps are included in the pocket of this report.

Copper

Numerous, strongly anomalous, copper-enriched samples are present from the north to the southeast part of the grid. A high value of 5507 ppm copper was detected at 4+50N, 4E. The anomalous zone remains open to the northeast and south where several anomalies are overlain by glacial moraine. As stated by Cawthorn (1973), copper and molybdenum are associated with feldspar porphyry dykes. Also near the southern part of the grid, alteration and sulphide mineralization associated with the core of the stock may have been detected in the survey.

Lead

Significant lead in soils is restricted to the northwest third of the grid area, where six areas contain greater than 50 ppm. The anomalies appear to be underlain by rhyodacite of the Kasalka Group and are localized near fault zones, feldspar porphyry dykes or the granodiorite contact. A high value of 564 ppm lead was detected at 16+50N, 15+50W.

Zinc

Zinc enrichment in soils is quite similar to lead although several anomalies are slightly offset. A high value of 598 ppm zinc was detected at 16+50N, 12W. The other anomalies are also located in the north and west part of the grid, and again appear to be closely associated with the rhyodacite and its dykes and faults.

Silver

Soils with 1.0 ppm or greater silver are scattered sparsely across the grid area. The high value of 3.6 ppm silver was detected at 12N, 17W. Close comparison of the detailed geology as mapped by Cawthorn (1973) with anomalous silver in soils of the grid area may reveal source areas.

Firstly, several of the enriched soils in the west half of the grid area are underlain by rhyolite or rhyodacite and closely associated with northwesttrending feldspar porphyry dykes. However, at 9+00N, 16W a 3.2 ppm Ag anomaly appears to overlie the northwest-trending Blanket Lakes fault zone. The anomalous silver area which has coincident gold up to 145 ppb, on line 18N, is underlain by rhyolite or rhyodacite without extensive dykes or obvious faulting.

In the southeast grid area a north to northwest-trending linear silver anomaly appears to be underlain by granodiorite or quartz monzonite of the Troitsa Stock. It is sub-parallel and 200 to 400 metres east of the main quartz feldspar dyke (Dyke A of Cawthorn, 1973). An unmapped dyke or fault feature may be associated with the anomaly.

Gold

From the grid area 78 samples were analysed for gold. Parts of line 4+50N in the south grid area and four lines along the north were selected for analysis. A strong gold anomaly with values of 45 ppb or more is present in the north part of the grid area from 13+50N, 6W to 18N, 7+50W. Values range from 45 to 275 ppb gold. Rhyolite or rhyodacite of the Kasalka Group is thought to underlie the area. Feldspar porphyry dykes are also present and the area is adjacent to the Troitsa Stock.

Also of note is the sample at 9N, 16W where the northwest-trending Blanket Lakes fault may be present. Here 70 ppb gold is present. No other samples from this area were analysed for gold.

Arsenic

It appears that initial gold analyses correlate closely with arsenic. Values of 70 ppm arsenic or more are restricted to several zones in the western grid area. In order to define significant values more closely, a cumulative histogram and a logarithmic probability graph of arsenic soil values were constructed. Apparently, there are at least three populations of arsenic present on the Nuswat *et al.* claims. The greatest concentration of arsenic is associated with the Kasalka Volcanics. The Troitsa Stock is locally deficient in arsenic and gold. Values of 100 ppm or greater may be related to structurally prepared zones such as faults or dyke swarms within the upper parts of the Kasalka Group. Very strong arsenic anomalies of 200 ppm or more are located between 9N, 16W and 10+50N, 17W. At 15N, 13+50W, 1313 ppm arsenic may merge with other high values on line 16+50N.

SUMMARY OF SOIL GEOCHEMICAL TARGETS

Very strong copper soil enrichment stretches across the entire eastern part of the grid area with values up to 0.5%. Presumably molybdenum is also enriched in this zone. The area is underlain by granodiorite or quartz monzonite of the Troitsa Stock and associated dykes. Of particular note are areas of coincident silver enrichment such as 7+50N, 3+50E.

The areas to the north and east of the Troitsa Stock are particularly important because of the multiple base metal anomalies and arsenic-gold and silver enrichment. The felsic volcanic member of the Kasalka Group is the favoured host for these soil anomalies as are feldspar porphyry dykes and fault zones. All elements have open-ended anomalies trending north of the grid area. All elements including copper show soil enrichment in areas outside the Troitsa Stock.

CONCLUSIONS

The southern part of the Nuswat claim is underlain by granodiorite of the Troitsa Stock, a late Cretaceous Bulkley intrusion. Past exploration has been directed towards copper and molybdenum mineralization in this porphyry environment. The stock intrudes Upper Cretaceous volcanics of the Kasalka Group which underlie most of the Core Lode claims. A soil geochemical survey undertaken in 1983 has delineated part of the "copper porphyry" belt within the stock. Values of up to 5507 ppm have been detected in the soil. More importantly, base metal and gold-arsenic anomalies have been located north and west of the stock in areas underlain by felsic volcanics. Soils containing up to 3.6 ppm Ag, 275 ppb Au, and 1313 ppm arsenic have been detected. Dykes of feldspar porphyry such as those in the stock may be present in the volcanics. However, fault zones and rock unit contacts may also be important localizers of mineralization. Large portions of the claim block remain to be explored. Major fault zones are known to bisect the claims. The stratigraphy of the Kasalka Group, and in particular the felsic volcanics near the Troitsa Stock, have not been mapped since their reassignment by van der Heyden in 1982. Very little of Cawthorn's work in 1973 appears to have been directed towards mapping of mineralization and alteration outside of the Troitsa Stock.

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RECOMMENDATIONS

Geological mapping should be carried out over the entire claim block. Detailed examination should be directed towards the stratigraphic relationships and mineralization of the rhyodacite or rhyolite near the top of the volcanic pile. The presence of an epithermal vein system within the volcanics should be investigated. Cawthorn (1973) states that stibnite is present in vein material of the area. Antimony should be analysed in soil samples. The location of gold mineralization is important to the viability of the property. Gold should be analysed in the 1983 samples and in all future geochemical samples. Antimony is often associated with low temperature gold-bearing vein systems.

Besides geological mapping, the next phase of exploration should include:

- extension of the present grid to cover the entire claim area;
- soil sampling of the grid area;
- detailed soil sampling in areas of the 1983 anomalies;
- magnetometer and VLF-EM surveys of entire grid area; and,
- rock chip geochemistry of exposures in anomalous areas.

Phase 3 may include additional geochemistry and limited shallow diamond drilling of selected targets. Phase 4 could require a similar budget with emphasis on drilling of selected targets. Phase 5 would require extensive drilling.

COST ESTIMATE

Phase 1

Property acquisition, grid layout and soil geochemical survey, completed and documented by this report.

Nuswat acquisition	\$ 11,000
Field labour	5,800
Camp and supplies	1,300
Travel	280
Helicopter	3,826
Analyses	2,312
Reporting and engineering	3,000
Total 1983 expenditures	\$ 27,518

Phase 2

Grid layout	\$ 3,000	•		
Soil geochemical survey	3,000		•	
Geological mapping	4,000	·		• • · ·
Ground geophysical surveys, including magnetometer and				
VLF-EM	2,000			
Geochemical analysis	4,000			
Camp and supplies	1,500	•		
Travel	1,000			
Helicopter	6,000			
Engineering and supervision	2,500			
Reporting	 3,000	•		
	30,000	•		
Contingencies @ 10%	3,000	•		
	33,000	•	\$ 33,00	0

Phase 3

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Rock and soil geochemical surveys	\$ 5,000	
Shallow diamond drilling, 250 m @ \$120/m	30,000	
Camp and supplies	3,000	
Travel	1,000	
Helicopter	8,000	
Assays, analyses	4,000	
Engineering and supervision	5,000	
Reporting	3,000	
	59,000	
Contingencies @ 20%	11,800	
	70,800 \$ 70,800	

Phase 4

Shallow diamond drilling, 250 m @ \$120/m	\$ 30,000
Camp and supplies	3,000
Travel	1,000
Helicopter	8,000
Assays	1,500
Engineering and supervision	4,000
Reporting	2,000
	49,500
Contingencies @ 20%	9,900
	59,400 59,400

Phase 5

Diamond drilling	programme, 1	000 m,		
allow \$120/m plu	s support and			
engineering				250,000
		Total	Phases 2-5	\$ 413 200

Results of each Phase should be compiled into an engineering report; continuance to the subsequent Phase should be contingent upon receiving favourable conclusions and recommendations from an Engineer.

LONS . Respectfully submitted, ASSOCIATION S. Collomite POLINCE OF ON PAUL KALLOCK 130 Paul Kallock Locke B. Goldsmith, P.Eng. Consulting Geologist Geologist FELLOW

Vancouver, B.C. April 5, 1984

GEOLOGIST'S CERTIFICATE

PAUL KALLOCK

I, Paul Kallock, do state: that I am a geologist with Arctex Engineering Services, 301, 1855 Balsam Street, Vancouver, B.C.

I Further State That:

- I have a B.Sc. degree in Geology from Washington State University, 1970. I am a Fellow of the Geological Association of Canada.
- 2. I have engaged in mineral exploration since 1970, both for major mining and exploration companies, and as an independent geologist.
- 3. I have co-authored the report entitled, "Soil Geochemical Survey and Geological Data Evaluation, Nuswat, Core Lode 1 and Core Lode 2 Mineral Claims, Omineca Mining Division, Troitsa Lake, B.C." The report is based on my fieldwork carried out on the property, and on previously accumulated geologic data.
- 4. I have no direct or indirect interest in any manner in either the property or securities of Payday Resources Inc., or its affiliates, nor do I anticipate to receive any such interest.
- 5. I consent to the use of this report in a prospectus or in a statement of material facts related to the raising of funds.

SOCIA PAUL KALLOG allock aul Kallock FELLOW Geologist

Vancouver, B.C. April 5, 1984 20

ENGINEER'S CERTIFICATE

- 1. I, Locke B. Goldsmith, am a Registered Professional Engineer in the Province of Ontario and a Registered Professional Geologist in the State of Oregon. My address is 301, 1855 Balsam Street, Vancouver, B.C.
- 2. I have a B.Sc. (Honours) degree from Michigan Technological University and have done postgraduate study in Geology at Michigan Tech, University of Nevada, and the University of British Columbia. I am a graduate of the Haileybury School of Mines and am a Certified Mining Technician. I am a member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy, and a Fellow of the Geological Association of Canada.
- 3. I have been engaged in mining exploration for the past 25 years.
- 4. I have co-authored the report entitled, "Soil Geochemical Survey and Geological Data Evaluation, Nuswat, Core Lode 1 and Core Lode 2 Mineral Claims, Omineca Mining Division, Troitsa Lake, B.C." dated April 5, 1984. The report is based upon fieldwork and research supervised by the author.
- 5. I have no ownership in the property, nor in the stocks of Payday Resources Inc.
- 6. I consent to the use of this report in a prospectus or in a statement of material facts related to the raising of funds.

S L. B Respectfully submitted, Coldmith S ANDE OF OHSP Locke B. Goldsmith, P.Eng. **Consulting Geologist**

Vancouver, B.C. April 5, 1984 21

REFERENCES

- Cawthorn, N.G. 1973. Geology and Petrology of the Troitsa Lake Property, Whitesail Lake Map Area, B.C. M.Sc. Thesis, Univ. of British Columbia.
- Davidson, D.A., P.Eng. and Woolverton, R., P.Eng. 1969. Geological, Geochemical and Geophysical Report on the OVP 1-36 and MK 1-60 Claims. Aston Resources Limited Assessment Report #2026.
- Hodder, R.W. and MacIntrye, D.G. 1979. Place and Time of Porphyry Type Copper-Molybdenum Mineralization in Upper Cretaceous Caldera Development, Tahtsa Lake, B.C. In: Papers on Mineral Deposits of Western North America. Nevada Bureau of Mines and Geology, Report 37, pp. 175-184.
- MacIntyre, D.G. 1976. Evolution of Upper Cretaceous Volcanic and Plutonic Centres and Associated Porphyry Copper Occurrences, Tahtsa Lake Area, B.C. Ph.D. Thesis, Univ. of Western Ontario.
- Mustard, D. K., P.Eng. 1971. Geochemical Survey, OVP & MK Mineral Claims, Troitsa Lake Property, Omineca Mining Division. Aston Resources Limited and Cerro Mining Company of Canada Ltd. Assessment Report #3253.
- Neugebauer, H. 1967. Geological Report on the Claims OVP #49-60, SW End of Troitsa Lake, B.C. Silver Standard Mines Ltd. Assessment Report #1091.
- van der Heyden, P. 1982. Geology of the West-Central Whitesail Lake Area, B.C. M.Sc. Thesis, Univ. of British Columbia.



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#1322 - 510 West Hastings Street, Vancouver, British Columbia V6B 1L8 Telephone (604) 681-2123

NUSVAT

Cost and Cost Estimates

Geochemical Survey Geophysical - Magnetometer

TABOUR: September 13 to September 25, 1983

Neil Brown5 daysSept. 19-235 @ \$150/day\$Andrew Wilkins3 daysAug. 19-213 @ \$150/day1Tenny Wilkins11 daysSept. 15-2511 @ \$150/day1Robert Holland2 days2 @ \$200/day1Jerry Brown13 daysSept. 13-2513 @ \$150/day1James Ager3 days3 @ \$200/day1James Ager3 days3 @ \$100/day1Camp Supplies13 days13 @ \$100/day1(includes complete camp, tents, food)sample bags, topo chain, etc.)1Travel - Smithers - Return795 Camp In Alpine1,131 Camp Out \$2,6862Alpine52,68621	
Andrew Wilkins 3 days Aug. 19-21 3 & \$150/day Tenny Wilkins 11 days Sept. 15-25 11 @ \$150/day 1, Robert Holland 2 days 2 @ \$200/day Jerry Brown 13 days Sept. 13-25 13 @ \$150/day 1, James Ager 3 days 3 @ \$200/day <u>Cerro Supplics</u> 13 days 13 @ \$100/day 1, (includes complete camp, tents, food) sample bags, topo chain, etc.) Travel - Smithers - Return <u>Helicopter</u> - Alpine \$ 760 Can West 795 Camp In Alpine 1,131 Camp Out \$2,686 2, During Stake Claims	sept. 19-23 5 8 \$150/day \$ 750
Tenny Wilkins 11 days Sept. 15-25 11 @ \$150/day 1, Robert Holland 2 days 2 @ \$200/day Jerry Brown 13 days Sept. 13-25 13 @ \$150/day 1, James Ager 3 days 3 @ \$200/day <u>Carro Supplies</u> 13 days 13 @ \$100/day 1, (includes complete camp, tents, food) sample bags, topo chain, etc.) Travel - Smithers - Return <u>Helicopter</u> - Alpine \$ 760 Can West 795 Camp In Alpine 1,131 Camp Out \$2,686 2, Dipine Stake Claims	Aug. 19-21 3 @ \$150/day 450
Robert Holland 2 days2 @ \$200/dayJerry Brown13 daysSept. 13-2513 @ \$150/day1,James Ager3 days3 @ \$200/day1,Cerrb Supplies13 days13 @ \$100/day1,(includes complete camp, tents, food) sample bags, topo chain, etc.)13 @ \$100/day1,Travel - Smithers - ReturnHelicopter - Alpine Signame 1,131760 Cam West Signame 2,6862,Alpine1,131Camp Out \$2,6862,	Sept. 15-25 11 @ \$150/day 1,650
Jerry Brown 13 days Sept. 13-25 13 @ \$150/day 1, James Ager 3 days 3 @ \$200/day Carro Supplies 13 days 13 @ \$100/day 1, (includes complete camp, tents, food) sample bags, topo chain, etc.) Travel - Smithers - Return Helicopter - Alpine \$ 760 Can West 795 Camp In Alpine 1,131 Camp Out \$2,686 2,	2 @ \$200/day 400
James Ager 3 days 3 @ \$200/day <u>Carro Supplies</u> 13 days 13 @ \$100/day 1, (includes complete camp, tents, food) sample bags, topo chain, etc.) Travel - Smithers - Return <u>Helicopter</u> - Alpine \$ 760 Can West 795 Camp In Alpine 1,131 Camp Out \$2,686 2,	Sept. 13-25 13 @ \$150/day 1,950
Camp Supplies 13 days (includes complete camp, tents, food) sample bags, topo chain, etc.) Travel - Smithers - Return <u>Helicopter</u> - Alpine \$ 760 Can West 795 Camp In Alpine 1,131 Camp Out \$2,686 2,	3 @ \$200/day 600
<pre>(includes complete camp, tents, food) sample bags, topo chain, etc.) Travel - Smithers - Return Helicopter - Alpine \$ 760 Can West 795 Camp In Alpine 1,131 Camp Out \$2,686 2, Bloing Stake Claims 1.</pre>	13 0 \$100/day 1,300
Travel - Smithers - Return <u>Helicopter</u> - Alpine \$ 760 Can West 795 Camp In Alpine 1,131 Camp Out \$2,686 2, Bloing Stake Claims	tents, food) , etc.) 400
Helicopter - Alpine \$ 760 Can West 795 Camp In Alpine 1,131 Camp Out \$2,686 2,	rn 280
Alpine 1,131 Camp Out \$2,686 2, Bloine Stake Claims 1.	760 795 Camp In
Alning Stake Claims	1,131 Camp Out 2,686 2,686
withing prave craring	e Claims 1,140

Report, drafting, copies

Assays

- 500 @ \$4.00

\$1	4,	806	
	1,	200	

2.000

James G. Ager, B.Sc.C

Pd Man. 21/84 # 11 \$ 8000,000 Pauday Resource

APPENDIX

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ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS, VANCOUVER B.C. PH:253-3158 TELEX:04-53124

ASSAYER

DATE RECEIVED OCT 13 1983

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DATE REPORTS MAILED

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2D AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.

THIS LEACH IS PARTIAL FOR: Ca, P, Mg, Al, Ti, La, Na, K, W, Ba, Si, Sr, Cr AND B. AU DETECTION 3 ppm. SAMPLE TYPE - SOIL

______ DEAN TOYE, CERTIFIED B.C. ASSAYER

J.G. AGER PROJECT # NUSWAT GROUP-NS FILE # 83-2545

PAGE# 1

A -

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SAMPLE	CU ppm	ррм Р.В	2N ppm	AG PPM	PDw HS
18N 10W 18N 7+50 18N 6W 16+50N 18W 16+50N 17+50	434 392 97 36 11	6 33 18 4 38	20 66 58 67 57	.4 .6 .2 .3 .2	16 55 14 12 7
16+50N 17 16+50N 16+50 16+50N 16 16+50N 15+50 16+50N 15	18 11 15 315 12	7 8 13 564 12	52 64 43 298 35	.2 .2 1.5 .1	11 12 12 59 4
16+50N 14+50 16+50N 14 16+50N 13+50 16+50N 13 16+50N 12+50	41 12 23 116 28	76 5 12 59 20	141 12 72 305 128	.5 .3 .4 .1	100 29 29 415 50
16+50N 12 16+50N 11+50 16+50N 11 16+50N 10+50 16+50N 10	61 118 71 65 68	46 55 42 44 31	598 170 131 103 78	.4 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5	279 209 103 253 205
16+50N 9+50 16+50N 9 16+50N 8+50 16+50N 8 16+50N 8 16+50N 7+50	112 380 178 187 374	38 35 68 64 84	95 84 115 81 72		117 107 119 68 109
16+50N 7 16+50N 6+50 16+50N 6 16+50N 5+50 16+50N 5	209 263 173 194 289	46 37 58 36 21	75 77 275 137 111	.4 1.6 .6 .1 .4	89 46 56 37 26
16+50N 4+50W 15N 17+50W 15N 17 15N 16+50 15N 16	227 37 71 8 60	49 12 21 8 1	103 74 114 41 82	.5 .4 .1 .1 .1	53 24 39 29 70
15N 15+50 15N_15W STD A-1	9 23 30	14 9 39	30 32 183	.2 .7 .3	20 20 20 20 20

•••								
	SAMPLE	- 1	CU ppm	FB Ppm	ZN ppm	AG ppm	AS ppm	
	15N 14+50W 15N 14W 15N 13+50W 15N 13W 15N 12+50W		6 29 77 23 46	6 17 101 12 16	9 34 116 30 51	.3 2 1.0 .3 .1	4 30 1313 41 52	
	15N 12W 15N 11+50W 15N 10+50W 15N 10W 15N 9+50W		48 7 38 38 40	13 5 36 34 38	52 15 196 131 211	.1 .1 .2 .3 .2	39 12 33 40 32	
	15N 9W 15N 8+50W 15N 8W 15N 6W 15N 5W		40 114 103 145 161	37 60 49 65 98	133 235 114 101 79	.4 .3 .4 .4	41 98 44 49 34	
	15N 4+50W 13+50N 18W 13+50N 17+50W 13+50N 17W 13+50N 16+50W		67 23 12 20 37	21 10 10 13 35	98 13 26 59 66	-2 -3 -1 -4 -7	34 38 28 24 97	
	13+50N 16W 13+50N 15+50W 13+50N 15W 13+50N 14+50W 13+50N 14W		29 13 11 21 12	13 9 10 57 18	74 40 57 68 68	$ \begin{array}{c} 2 \\ 1 \\ 1 \\ 2 \\ 1 \\ 3 \end{array} $	45 59 16 34 11	
	13+50N 13+50W 13+50N 13W 13+50N 12+50W 13+50N 12W 13+50N 11+50W		69 73 75 36 48	44 19 40 33 36	157 114 134 107 175	.3 .2 .3 .3 .2 .5	30 31 91 45 356	
	13+50N 11W 13+50N 10+50W 13+50N 10W 13+50N 9+50W 13+50N 9W		40 36 43 37 107	18 28 26 27 47	122 121 103 102 164	.3 .3 .4 .2	39 68 66 91 104	
	13+50N 8+50W 13+50N 8+20W STD A-1		40 49 30	40 27 39	100 86 183	.2 .1 .3	60 31 11	

J.G. AGER PROJECT # NUSWAT GROUP-NS FILE # 83-2565

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FAGE# 2

J.G.	AGER	PROJECT	# NUSW	AT GR	OUP-NS	FILE #	83-2565		PA
	SAMPLE		•	CU ppm	PB PPm	ZN ppm	AG ppm	AS ppm	
	13+50N 13+50N 13+50N 13+50N 13+50N	7+50W 7W 6+50W 6W 5+50W		20 25 150 140 122	42 26 69 83 97	117 94 149 106 116	.4 .5 .8 .4 .5	31 41 85 88 37	
	13+50N 13+50N 13+50N 13+50N 13+50N	5W 4+50W 4W 3+50W 3W		124 75 82 456 459	92 17 36 21 19	117 63 51 60 62	.500 .90 .50 .50	44 24 23 23	
	13+50N 13+50N 12N 180 12N 170 12N 170	2+50W 2W N P N		488 523 23 41 8	36 38 9 37 4	107 110 40 19 12	.8 .4 3.6 .3	33 38 17 8 3	
	12N 14 12N 13V 12N 11 12N 11V 12N 11V 12N 10	+50W M +50W M +50W		21 37 24 5 11	33 46 33 6 7	98 135 64 17 21	.7 .3 .4 .1 .2	82 26 28 4 6	
	12N 9W 12N 8+ 12N 7W 12N 5+ 12N 5+	50W 50W 15W		60 76 138 32 61	39 32 31 22 19	79 92 59 77 36	.2 2.5 .7 .5	129 100 20 19 18	
	12N 1+ 12+15N 12+15N 10+50N 10+50N	50W 6W 3+50W 9W 8+50W		102 8 44 8 9	30 4 15 4 21	86 14 52 8 43	.3 .1 .2 .2 .1	19 5 12 5	
	10+50N 10+50N 10+50N 10+50N 10+50N	7W 4+50W 2+50W 2E 2+50E		12 58 97 158 33	12 27 17 15 9	29 50 52 55 16		10 10 15 15 2	
	10+50N 10+50N STD A-	3E P 3+50E 1		121 87 30	15 15 38	39 56 179	.3 .1 .3	2 8 10	

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PAGE# 3

. HOEK PRODECT # NO					
SAMPLE	CU	PB	ZN	AG	AS
	ppm	ppm	Ppm	ppm	Ppm
10+50N 4E	97	20	63	.2	11
10+50N 4+50E	215	20	59	.5	11
9N 17W	73	36	177	.5	38
9N 13W	18	39	39	.0	8
9N 13W	73	50	177	2	15
9N 11W	136	32	81	1.4	4
9N 3E	8	4	8	.3	2
9N 3+50E	184	17	72	1.0	6
9N 4+50E	22	11	30	.3	8
7+50N 17+50W	13	15	67	.4	61
7+50N 16W P 7+50N 15+50W 7+50N 15W 7+50N 14+50W P 7+50N 13+50W	17 14 42 31 31	32 19 44 25 30	40 26 85 74 59	.7 .5 .3 .3	35 2 14 13 19
7+50N 13W	43	21	163	5400B	14
7+50N 12+50W	34	51	60		30
7+50N 11+50W	36	14	27		6
7+50N 11W	33	16	44		12
7+50N 10+50W	128	30	52		14
7+50N 10W 7+50N 8+50W 7+50N 8W 7+50N 7+50W P 7+50N 7W	181 294 42 33 98	28 15 13 14 22	68 40 22 40 48	.5 .5 .8 .8	8 19 2 9 9
7+50N 6+50W 7+50N 6W 7+50N 5+50W 7+50N 5W P 7+50N 4+50W P	37 111 195 113 90	16 22 26 21 20	39 94 71 55 50	- 2 - 3 - 1 - 9 - 8	8 10 14 5
7+50N 4W 7+50N 3+50W 7+50N 3W 7+50N 2+50W 7+50N 2W	55 71 81 31 139	16 17 44 23 19	33 31 67 42 50	.2 .9 .4 .5	2 5 8 10 8
7+50N 1+50W P	140	6	14	1.6	2
7+50N 1W	206	21	44	.4	7
STD A-1	30	38	182	.3	11

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J.G. AGER PROJECT # NUSWAT GROUP-NS FILE # 83-2565

PAGE# 4

G. AGER PROJECT # NUS	SWAT GROUP	-NS	FILE # 8	3-2565		PAGE# 5
SAMPLE	CU ppm	PB ppm	ZN ppm	AG ppm	AS ppm	
7+50N OE P 7+50N 2E P 7+50N 2+50E P 7+50N 3E 7+65N 12W P	61 43 447 25 35	11 20 20 12 41	56 62 100 45 106	.3 .9 .9 .8	8 11 6 5 14	
6N 1+50W 6N 0+50W 6N 0E 6N 1E 6N 1+50E	261 25 13 112 92	19 12 14 14 19	63 27 21 47 66	.3 .1 .1 .1	12 7 3 9 19	
6N 2E	30	20	20	.1	5	
6N 2+50E	35	19	66	.1	11	
6N 3E	82	25	56	1.0	5	
6N 4+50E	288	23	50	.5	4	
6N 5E	95	17	79	.4	12	
6N 5+50E	100	18	62	.4	8	
6N 6E P	88	25	80	.5	5	
6N 7E	28	21	74	.3	19	
6N 7+50E	27	17	53	.1	11	
6N 8E	152	28	61	.2	25	
6N 8+50E	93	22	43	.3	24	
6N 9E	59	30	53	.7	27	
6N 9+50E P	206	29	58	.2	24	
6N 10E	270	24	62	.5	18	
4+50N 0E	39	15	66	.1	18	
4+50N 0+50E	27	14	22	.2	2	
4+50N 1E P	30	16	42	.1	5	
4+50N 1+50E	52	25	125	.1	18	
4+50N 2E	19	13	69	.2	6	
4+50N 2+50E	30	17	34	.7	12	
4+50N 3E P	46	18	68	.6	6	
4+50N 3+50E	1672	14	76	1.2	14	
4+50N 4E	5507	28	52	.4	11	
4+50N 4+50E P	54	12	23	.2	5	
4+50N 5E	539	13	47	.3	10	
4+50N 5+50E P	139	15	49	. 1	15	
4+50N 6E F	53	10	15	. 4	5	
STD A-1	30	38	181	. 3	11	

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J.G.	AGER PROJECT # N	USWAT GROUP	-NS	FILE # 8	3-2565	PA	GE# 6
	SAMPLE	CU ppm	PB ppm	ZN ppm	AG ppm	AS ppm	
	4+50N 6+50E 4+50N 7E 4+50N 7+50E 4+50N 8E 4+50N 8+50E	45 252 201 98 17	13 36 32 21 6	50 100 87 93 28	297 97 97	8 32 28 6 9	
	4+50N 9E 4+50N 9+50E 4+50N 10E 3N 0E 3N 0+50E	202 49 130 12 41	18 12 19 11 12	51 44 57 19 11	.63 .3 .2 1.5	10 9 12 4 2	
	3N 1E 3N 1+50E 3N 2E 3N 2+50E 3N 3E	30 33 36 16 36	12 16 14 11 15	46 58 67 34 44	.4 .3 .1 .2 .4	10 19 20 4 11	
	3N 3+50E P 3N 4E 3N 4+50E 3N 5E 3N 5E 3N 5+50E	79 64 20 50 164	21 14 17 14 9	82 85 60 39 15	.2 .2 .6 1.7 2.0	17 19 13 3 2	
	3N 6E 3N 6+50E P 3N 7E P 3N 7+50E 3N 8E	44 114 58 39 297	16 14 27 12 17	61 23 75 17 20	.5 .3 .3 .6 1.3	11 4 20 2 7	
	3N 8+50E 3N 9E 3N 9+50E 3N 10E 1+50N 2+50W	86 50 47 53 53	19 18 18 21 10	132 82 90 115 34	. N - 1 . N -	26 22 23 26 9	
	1+50N 2W 1+50N 1W 1+50N 0+50W 1+50N 0E P 1+50N 0EA P	75 60 48 840 97	15 9 11 34 16	58 40 41 34 13	.4 .2 .1 .5	6 6 2 4 2	
	1+50N 0+50E P 1+50N 1E 1+50N 1+50E STD A-1	677 137 49 30	22 24 11 40	66 103 39 183		6 15 10 10	

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J.G.	AGER	PROJEC	T #	NUSWAT	GROUP	-NS	FILE #	83-2565		PAGE# 7
	SAMPLI	E		C P	:U рм	PB ppm	ZN ppm	AG ppm	AS ppm	
	1+50N 1+50N 1+50N 1+50N 1+50N	2E 2+50E 3+50E 4E 4+50E P			9 27 21 16 36	5 13 12 12 8	26 63 24 57 22		9 11 6 13 5	
•	1+50N 1+50N 1+50N 1+50N 1+50N	5E P 5+50E P 6E P 6+50E P 7E P		4 1	10 22 67 13 57	12 5 8 5 12	29 10 21 11 65	.1 .9 .9 .4 .2	6 2 20 13	
	1+50N 1+50N 1+50N 1+50N 1+50N	7+50E P 8E 8+50E 9E P 9+50E	•	1	49 85 63 05 63	8 24 20 27 22	62 90 77 98 74	.2 .4 .5 1.2 .3	12 50 41 59 37	
	1+50N 0+50N 0+50N 0+50N 0+50N	10E 0+50E P 1E 1+50E P 2E P		1	39 18 53 57 81	20 23 8 20	73 24 68 28 117	.6 .1 .3 .4 .2	23 14 29	
	0+50N 0+50N 0+50N 0+50N 0+50N	2+50E 3E 4+50E 5E 5+50E		2 4 4	86 19 28 48 15	12 12 17 21 31	48 25 53 59 48	.3 .7 .5 .7 .8	9 12 17 18 10	
	0+50N 0+50N 0+50N 0+50N 0+50N	7+50E 8E 8+50E P 9E 9+50E		4 4 4 1 1	00 22 34 74 88	31 29 27 9 20	53 48 59 42 67	1.2 .8 .7 .4 .6	12 10 13 9 20	
	0+50N 0N 2+5 0N 2W 0N 1+5 0N 0+5	10E 50W 50W 50W		1	43 63 59 67 23	16 14 11 13 12	47 50 45 52 26	• 4 • 4 • 4 • 4 • 4	11 11 18 16 16	
	ON 1+5 ON 2+5 STD A-	50E 50E -1			63 12 30	9 38 38	10 33 180	.7 .3 .3	2 14 10	

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J. G	. AGER PR	OJECT # NUS	SWAT GROU	JP-NS	FILE #	83-2565	FA	65
	SAMPLE		CU ppm	₽B ₽bw	ZN ppm	AG ppm	AS ppm	
	ON 3E ON 3+50E ON 4E P ON 4+50E ON 5E	F	20 192 36 20 4	14 20 9 3 2	52 72 33 15 5	. 1 . 4 . 6 . 7 . 2	13 21 5 2 2	
	ON 5+50E ON 6+50E ON 7E ON 7+50E ON 8E		501 87 63 108 96	37 17 15 23 13	58 49 29 50 32	1.1 .3 .2 .3 .4	15 13 14 12 12	
	ON 8+50E ON 9E ON 9+50E ON 10E O+505 6E		88 166 154 83 85	14 20 10 20 23	26 45 36 117 42	.4 .5 .2 .5 .5 .4	8 10 5 45 - 18	
	STD A-1		30	39	181	.3	11	

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E# 8

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PAGE# 1

DATE REPORTS MAILED /

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HOL TO HNO3 TO H2O AT 90 DE5.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. AU DETECTION 3 ppm.

SAMPLE TYPE - SOIL

PROJECT # NUSWAT FILE # 83-2777

DEAN TOYE, CERTIFIED B.C. ASSAYER

J.G. AGER

ASSAYER

SAMPLE	5		CU ppm	PB ppm	ZN ppm	AG ppm	AS ppm
18N 11 18N 11 18N 10 18N 94 18N 94	L+50W LW 2+50W +50W N		21 313 50 88 140	23 14 6 9 10	29 120 36 27 11	.3 .7 .2 1.9 1.2	132 119 24 27 15
18N 84 18N 8W 18N 7W 18N 64 18N 54	+50W V +50W +50W		446 949 174 214 256	24 24 14 32 21	74 76 50 109 94	1.2 1.4 1.3 .1 .3	59 34 11 28 15
18N 54 18N 44 15N 11 15N 74 15N 74) 50W 0 50W 		502 261 26 96 74	28 10 13 47 39	81 42 58 138 127	.3 .6 .1 .2 .2	16 19 27 33 33
15N 64 15N 54 12N 17 12N 16 12N 16	-50W -50W 7+50W 5+50W		125 177 30 19 10	74 77 23 15 18	127 111 92 87 56	.7 .4 .7 .4 .2	93 64 52 12 14
12N 15 12N 14 12N 13 12N 12 12N 12	5+50W IW 5+50W 2+50W 2W		18 9 31 57 39	162 43 30 63 54	157 34 80 182 182	.6 .9 .1 .2 .2	18 4 27 28 27
12N 10 12N 9+ 12N 84 12N 7+ 12N 6+	00 -500 - -500 -500		9 38 26 10 4	16 31 22 15 1	26 75 56 29 8	.3 .3 .2 .3 .1	18 72 17 9 2
12N 4+ 12N 44 12N 34 12N 34 12N 2+ 12N 14	-50W N I -50W		60 49 149 32 58	14 26 23 15 18	36 52 101 41 38	.9 .7 .3 .4 .2	2 12 24 6 12
12N 0+ 12N 0E STD A-	-50W -1	•	33 113 30	21 28 38	43 101 183	.4 .2 .3	9 19 10

No present.

J.G. AGER PROJECT #	NUSWAT	FILE	# 83-27	777	PAC	5E# 2
SAMPLE	CU ppm	₽B ppm	ZN ppm	AG ppm	AS Ppm	
10+50N 18W	8	14	18	. 2	19	
10+50N 17+50W	14	17	42	. 4	56	
10+50N 17W	21	19	105	. 2	434	
10+50N 16+50W	17	14	94	. 1	29	
10+50N 16W	25	22	163	. 1	42	
10+50N 15+50W	62	24	143	.2	26	
10+50N 15W	17	13	86	.1	20	
10+50N 14+50W	22	47	92	.4	5	
10+50N 14W	4	5	12	.1	3	
10+50N 13+50W	6	10	19	.2	10	
10+50N 13W 10+50N 12W 10+50N 11+50W 10+50N 11W 10+50N 10+50W	31 34 48 57 9	22 145 33 30 7	108 89 122 94 20	.4 .6 .3 .1 .2	8 35 23 23 23 3	· · · ·
10+50N 10W	5	25	17	.1	2	
10+50N 9+50W	14	10	26	.4	2	
10+50N 8W	43	23	58	.1	12	
10+50N 7+50W	15	15	111	.3	9	
10+50N 6+50W	23	14	34	.1	6	
10+50N 6W 10+50N 5+50W 10+50N 5W 10+50N 4W 10+50N 3+50W	23 22 57 80 27	17 20 22 30 17	44 32 74 79 29	- 1 - 1 - 6 - 6	17 14 14 13 7	
10+50N 3W	48	74	109	1.0	4	
10+50N 2W	77	14	37	.7	2	
10+50N 1+50W	47	14	46	.4	2	
10+50N 1W	432	17	52	.6	14	
10+50N 0+50W	387	14	82	.6	9	
10+50N OE	105	24	48	. 4	6	
10+50N 0+50E	104	25	81	. 2	7	
10+50N 1E	343	12	126	. 7	6	
10+50N 1+50E	170	21	72	. 1	10	
10+50N 5E	114	12	44	. 4	6	
9N 18W 9N 17+50W 9N 16+50W STD A-1	11 29 56 30	8 13 36 38	20 29 121 184		36 10 54 10	

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J.G. AGER	FROJECT #	NUSWAT	FILE	# 83-2	777	PAG	E# 3
SAMPLE		CU ppm	PB ppm	ZN ppm	AG ppm	AS ppm	
9N 16W 9N 15+50W 9N 15W 9N 14+50W 9N 14W		274 35 47 34 52	273 31 23 29 41	218 96 64 65 93	3.2 .3 .1 .2 .8	588 60 20 23 92	
9N 13+50W 9N 12+50W 9N 12W 9N 10+50W 9N 9+50W		6 4 73 90 30	3 7 29 83 13	15 7 142 50 55	.1 .1 .7 .9 .3	8 2 2 2 2 2 2 2 2 3 2 2 3 2 3 2 3 2 3 2	
9N 9W 9N 8+50W 9N 8W 9N 7+50W 9N 7W		65 105 12 65 24	17 21 8 21 12	108 104 14 61 41	.2 .1 .4 1.1 .4	11 13 3 2 2	
9N 6+50W 9N 6W 9N 5+50W 9N 5W 9N 5W 9N 4+50W		64 22 83 9 235	26 21 31 8 30	67 37 137 15 87	1 2 1.0 4 .4	11 2 2 2 10	
9N 4W 9N 3+50W 9N 3W 9N 2+50W 9N 2W		72 28 87 70 141	14 27 61 16 18	59 88 90 44 44	1.2 .5 .2 .3	2 11 3 6 8	
9N 1+50W 9N 1W 9N 0+50W 9N 0E 9N 0+50E		76 156 152 278 175	20 42 12 16 15	98 40 72 63 73		4 2 7 13 11	
9N 1E 9N 1+50E 9N 2E 9N 2+50E 9N 4E		181 109 29 46 14	15 15 8 15 13	81 73 20 24 21	.3 .3 .1 .5 .3	7 8 2 5 2	
9N 5E STD A-1		25 31	14 39	33 182	.4 .3	3 10	

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I.G. AGER PROJECT #	NUSWAT	FILE	# 83-27	777	PAG	5E# 4
SAMPLE	CU ppm	PB ppm	ZN ppm	AG ppm	AS ppm	
7+50N 18W 7+50N 17W 7+50N 16+50W 7+50N 14W 7+50N 9+50W	11 63 30 52 67	23 32 41 35 20	75 106 84 90 55	N44N4	56 33 22 16 13	
7+50N 9W 7+50N 0+50W 7+50N 0+50E 7+50N 1E 7+50N 1+50E	120 349 687 123 140	16 19 26 12 15	104 96 90 50 75	.3 1.2 .2 .1 .1	17 4 15 2 5	
7+50N 3+50E 7+50N 4E 7+50N 4+50E 7+50N 5E 6N 1W	195 51 81 349	25 20 18 27 18	30 65 117 86 83	3.0 .3 .4 .3	2 3 10 5 10	
6N 0+50E 6N 3+50E 6N 4E 6N 6+50E 4+50N 1W	209 57 44 29 39	22 20 17 11 8	64 42 74 65 43	.6 .4 .4 .1 .2	84489	
1+50N 1+50W 0+50N OE 0+50N 3+50E 0+50N 4E 0+50N 6E	83 36 15 229 168	12 9 11 20 17	66 21 18 73 51	мрчрл 	14 4 2 15 9	
0+50N 6+50E 0+50N 7E 0N 1W 0N 0E 0N 0+50E	69 320 82 14 32	17 31 17 21 11	43 65 80 27 66	.64 .22 .22	5 14 18 8 16	
ON 1E ON 2E 11+80N 5W STD A-1	8 505 30 30	12 51 24 38	23 14 48 184	.2 1.7 .3	3 12 14 11	

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ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS, VANCOUVER B.C. PH: 253-3158 TELEX:04-53124

DATE RECEIVED

DATE REPORTS MAILED May 19/3

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE TYPE : PULP

AUX - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

1211 DEAN TOYE, CERTIFIED B.C. ASSAYER ASSAYER J.G. AGER PROJECT # NUSWAT FILE # 83-2777 RE PAGE# 1 SAMPLE AU* PPB 18N 11+50W 5 18N 11W 45 18N 10+50W 5

18N 9+50W	5
18N 9W	5
18N 8+50W	80
18N 8W	145
18N 7W	5
18N 6+50W	5
18N 5+50W	5
18N 5W	5
18N 4+50W	5
15N 11W	5
15N 7+50W	20
15N 7W	15
15N 6+50W	65
15N 5+50W	70
10+50N 12W	5
9+00N 16W	70

J.G.	AGER	PROJECT	# NUSWAT	GROUP-NS	FILE#	83-2565

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SAMFLE	AU* PPB
13+50N 7W 13+50N 6+50W 13+50N 6W 13+50N 5+50W 13+50N 5W	5 45 85 15 10
13+50N 4+50W 4+50N 3E 4+50N 3+50E 4+50N 4E 4+50N 4+50E	ហ ហ ហ ហ ហ ហ
4+50N 5E 4+50N 5+50E 4+50N 6E 4+50N 6+50E 4+50N 7E	ទទទ
4+50N 7+50E 4+50N 8E 4+50N 8+50E 4+50N 9E 4+50N 9+50E	មលាមា
4+50N 10E 12N 7W	5 5

GEOC	GEOCHEMICAL ASSAY CERTIFICATE					
SAMPLE TYPE : PULP AU\$ - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.						
ASSAYER	DEAN	TOYE, C	ERTIFIED B.C.	ASSAYER		
J.G. AGER	PROJECT # NUSWAT	GROUP-NS	FILE# 83-2565	FAGE# 1		
	SAMPLE		AU* PPB			
	18N 10W 18N 7+50W 18N 6W 16+50N 16W		5 275 10 5			
	16+50N 15+50W		30			
	16+50N 15W 16+50N 14+50W 16+50N 14W 16+50N 13+50 16+50N 13W		5 5 5 5 5			
	16+50N 12+50 16+50N 12W 16+50N 11+50W 16+50N 11W 16+50N 10+50W		5 15 15 10 30			
	16+50N 10W 16+50N 9+50W 16+50N 9W 16+50N 8+50W 16+50N 8W		40 25 245 140 175			
	16+50N 7+50W 16+50N 7W 16+50N 6+50W 16+50N 6W 16+50N 5+50W		180 55 65 35 15			
	16+50N 5W 16+50N 4+50W 15N 11+50W 15N 10+50W 15N 10W		5 10 5 5 5			
	15N 9+50W 15N 9W 15N 8+50W 15N 8W		5 5 45 55			

140 446 949 392 174 214 97 200256 502 26 434 L 18 + 00 N 12 41 12 23 116 28 61 118 71 65 68 112 380 178 187 374 209 263 173 194 289 227 L16+50N ----LI5+00N 1 1 1 8 60 9 23 6 29 77 23 46 48 7 26 38 38 40 40 114 103 96 74 125 LI3+50N 23 12 20 37 29 13 11 21 12 69 73 75 36 48 40 36 43 37 107 40 49 20 25 150 140 122 124 75 821 456 459 488 523 CORE LODE I LI2+00N 23 30 41 19 10 18 8 21 9 31 37 57 39 24 5 11 9 38 60 76 26 10 138 4 3 32 DAID POST 3S 5W 8 14 21 17 25 62 17 22 4 6 31 L10+50N -11 29 73 56 274 35 47 34 52 6 18 4 73 73 136 90 - 9 + 00N 11 13 63 30 17 14 42 31 52 31 43 34 O 36 33 128 181 67 120/ 294 42 33 98 37 L7+50N barrier 7CORE LODE 2 Glacier







