

Prospecting and Geochemical Report

Hope 1-11

YB48348 - YB48358

Dawson Mining District

NTS 115P/14

Latitude 63°59' Longitude 137°15'



By:

Ron Berdahl

Box 5664

Whitehorse, YT Y1A 5L5

For work performed

Between

May 16 - 26, 1994

Claims Owned By:

R.S. Berdahl and Martin Knutson

c/o P.O. Box 5664

Whitehorse, Yukon Y1A 5L5

December 1994

093471

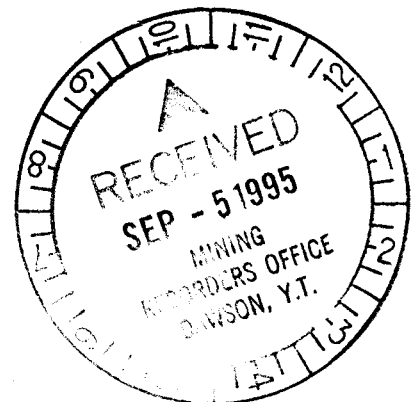


TABLE OF CONTENTS

Summary	3
1.0 Access and Location	4
2.0 History	4
3.0 Physiography and Vegetation	6
4.0 Geology	6
4.1 Regional Geology	6
4.2 Zetta Geology	6
4.3 Omega Geology	7
5.0 Mineralization	8
5.1 Zetta Property (Hope 1-8 & 11)	8
5.2 Omega Property (Hope 9 & 10)	10
6.0 Mineral Inventory	10
7.0 Methodology	11
8.0 Conclusions and Recommendations	11
9.0 Costs	13
References	13
Statement of Qualifications	14
Project Personnel	15

Attached Appendices

Appendix "A"	Location Map
Appendix "B"	Table of Formations
Appendix "C"	Geology Map/Sample Locations
Appendix "D"	Geochem Results

Summary

Two mineral showings (Zetta and Omega) discovered by Noranda in 1981 after follow-up of a regional geochemical survey, an argentiferous quartz-tourmaline greisen deposit was discovered. The deposit lies along the boundary of cretaceous multi-phase syenite intrusion and Ordovician sediments and metasediments. Drilling by Noranda (10 holes) in 1987 and Danra Resources (4 holes) in 1988, revealed a greisen zone along a northeast trending fault.

Two lapsed mineral properties with small mineral inventories were investigated during the 1994 season. Both deposits lie along the boundary of cretaceous multi-phase syenite intrusions and Ordovician sediments. Both were staked as Hope 1-11 claims. The Zetta is an argentiferous quartz-tourmaline greisen. The omega is a bedded barite deposit. Both were discovered in 1981 following regional geochemical survey follow-up.

The Zetta drilling by Noranda (10 holes) in 1987 and Danra Resources (4 holes) in 1988, revealed a greisen zone along a northeast trending fault.

The near vertical system has been traced along the strike for 260 metres and to a depth of 75 metres. A mineral inventory of 50,000 tonnes grading 13 opt Ag was outlined by the initial 10 drill holes. The zone is open at depth. Assay data suggests that the near surface portions of the vein has been heavily leached.

The Omega drilling by a joint venture (6 holes) in 1985 revealed a fault-bounded barite resource of 30,000 tons of barite of grades to 88 percent.

In 1994, work consisted of follow-up prospecting in order to delineate extensions of the Zetta zone and locate new mineralized structures along the geologic contacts. Several new anomalous zones were discovered. One showing (RP142) which assayed 200 ppm Ag 1.3 percent Pb, 663 ppm As and 230 ppm Sb may extend the Gash structure.

One kilometre to the southwest, the Awesome Creek cirque is the apparent source of anomalous quartz/tourmaline greisen mineralization (6.5 ppm Ag, 1.4% As, 1656 ppm Cu R4P1416).

1.0 Access and Location

The Zetta project is situated 110 km (66 miles) to the east of Dawson, Yukon at 63°59' north latitude and 137°17'30" west longitude. The Klondike Highway is approximately 35 kilometres (21 miles) to the southwest of the property. Clear Lake Road is situated about 20 kilometres (12 miles) to the southwest. Four kilometres (2.5 miles) to the north of the property is a winter cat trail along the Ross Creek Valley. The cat trail terminates at the barite deposit on Hope #9 and #10 (approximately, 5 kilometres east of the Zetta showing).

The four claim blocks are located in mountainous terrain within the Syenite Range and are best reached by helicopter from Barlow Dome on the Clear Creek Road, 20 kilometres (12 miles) to the southwest. Appendice "A" is a general location map of the property.

2.0 History

Silt sampling was initially undertaken in the area by Mattagami Lake Exploration Co. Ltd., in 1980 (Metcalf, 1980-Biczok, 1980). A significant arsenic anomaly of 200 ppm in a background of 2 ppm in the silt analysis prompted a return in 1981 to undertake follow-up sampling (Biczok, 1982). Additional silt sampling in 1982, together with detailed prospecting, located other arsenic anomalies and identified a possible source. (Jago, 1982).

Trenching and geological mapping identified greisen-type mineralization in altered quartzite float, (Jago, 1984). In 1983, trenching and stripping located outcrops with tourmaline-quartz sulphide mineralization. The best geo-chemical results gave 13 ounces per ton in silver.

In 1983, 40 claims, numbered 1-40, were staked on the Dawson Silver Prospect by Noranda Exploration Company Limited, and 44 additional claims, numbered 41-84 were staked in 1984. This same year Noranda established a grid, and performed detailed and reconnaissance geological mapping, follow-up prospecting, trenching, soil sampling, a VLF electromagnetic survey, and 10 diamond drill holes for a total of 883 metres (2897 feet).

The results of this initial exploration program are significant. A 10-30 metre (33-98 feet) wide alteration zone containing important silver values was found and drill-tested along a strike length of 260 metres (850 feet) to a depth of 75 metres (250 feet).

In 1986, Noranda Exploration Company Limited, optioned the claims to Danra Resources Limited.

Danra drilled four holes in 1988 totalling 608.68 metres on the main Zetta zone. Hole #88-1 cut 3.2 m of 88.25 opt Ag @ 105.7m.

The barite deposit on Hope 9 and 10 were staked as Omega cl (YA65102) in July 1982 by Mattagami Lake ML and transferred to Noranda, which performed mapping and geochem and VLF EM surveys in 1983. In 1985, Technifluids L added more claims and performed gravity and geochem sampling, bulldozer trenching, drilled 7 holes (333 m) and studied the feasibility of barite production in a joint venture. (Minfile, 1994)

3.0 Physiography and Vegetation

The Syenite Range compromise rugged mountains rising to nearly 6300 feet from the valley bottom's elevation of 2600 feet. The area comprises a portion of the headwaters of the South Klondike River, Ross Cree and Lost Horses Creek.

Typical alpine vegetation exists above approximately 4500 feet. Below this is a typical northern boreal forest dominated by spruce (ssp) in the overstory and willow and dwarf birch in the understory, or just above treeline.

4.0 Geology

4.1 Regional Geology

The Zetta and Omega prospects are underlain by the Paleozoic Road River Formation, which consists of clastic and chemical sedimentary rocks of Ordovician age. These sedimentary rocks have been subjected to multi-phase plutonic intrusions of Cretaceous age monzonite to syenite. This Cretaceous pluton forms part of a 600+ kilometre (370+ mile) belt of mineralized stocks, plugs and dyke swarms that stretch from MacMillan Pass in the east to Dawson City, Yukon, in the west. Significant mineralization consisting of lead, zinc, silver, gold, tungsten, molybdenite, tin and antimony have been found associated with Cretaceous intrusions throughout this belt.

4.2 Zetta Geology

The Zetta mineralization tend toward the intrusive sediment/contact. This contact aureole is the result of the intrusion metamorphism of the Lost Horses Cretaceous syenite pluton into Ordovician sedimentary rocks. The contact is fractured and bleached with a light colour, vuggy appearance and gritty texture. It is irregularly faulted and also has several

sub-parallel faults, some of which are mineralized. They strike between 60° and 90° azimuth. (Gallow, 1988)

The effect of the intrusion and resultant contact metamorphism has changed the rocks into a highly fractured and hornfelsed condition. A secondary biotite was moderately developed (Jago, 1984). Pyrite and arsenopyrite occur along the contact resulting in a rusty, weathered appearance. Tourmaline, Muscovite, and very strong zones of bleached and sulphide mineralization occur along the contact. The sulphide minerals weather from a dull to bright green with yellow stain along joint planes and exposed surfaces>

According to Jago (1984), rock fragments are occasionally cemented together by the sulphide to form "arsenite-quartzite fault breccia."

Jago (1984) developed a "Table of Formations" for the geology in the Zetta Prospect grid area, which is found in Appendix "B".

4.3 Omega Geology

Two bedded barite occurrences have been located in a sequence of quartzite, slate, sandstone, shale and conglomerate of the Devonian-Mississippian Earn Group. Small Cretaceous syenite plutons outcrop 1.5 kilometres to the southwest and 2 to 4 kilometres in the northeast.

The main occurrence was tested with 6 drill holes and consists of finely laminated barite bed containing minor argillite interbeds. It is overlain by black graphitic argillite and underlain by a thin bedded mixture of barite, limestone and witherite. The bed ranges in true thickness from 4.9 to 38 m and is faulted off along strike and at depth. Drilling has outlined reserves of 30,000 tonnes. Because of the argillite interbeds, grade is variable (up to 88%) and some upgrading may be required before shipping. (Minfile, 1994).

5.0 Mineralization

5.1 Zetta Property (Hope 1-8 & 11)

The original exploration work undertaken on the Zetta project has outlined a structurally-controlled zone, 10-30 metres (33-98) feet wide, of kaolinite, hematite, limonite and talc alteration containing significant quartz-tourmaline greisen vein mineralization.

The mineralization essentially consists of: (1) stratiform barite, and (2) fractured, silver-bearing, tourmaline greisen vein and sulphide alteration zone. (Gallow, 1988)

(1) Barite: Stratiform barite has been mapped only in a cursory fashion. The prospecting and mapping of the barite has been defined by the discovery of two sites of "light-orange weathering, white, finely interlaminated barite and chert". (Jago, 1984) Barite found in soil samples coincides with a strong linear Cu, Zn and Ag soil anomaly. The anomaly has been traced for a length of 500 metres (1640 feet).

The 1994 program located a second barite horizon approximately 75 metres north of Noranda occurrence. Values of up to 2172 ppm Ba were obtained. The Ag, Pb, Cu and other values were sub-economic.

(2) Tourmaline Greisen Veins and Alteration: A mineral inventory in the greisen vein and alteration zone is approximately 50,000 tonnes grading 13 oz. Ag/tonne. The drilling indicated "that tourmaline veins are not continuous across the contact into the metasediments (although strong alteration and sporadic mineralization does occur) and that the vein structure is possibly stronger and more highly mineralized with sulphides at depth". (Jago, 1984, p. 35)

Two main mineralized structural zones have been recognized to date. One strikes at azimuth 060° and contains up to three parallel tourmaline-quartz sulphide greisen veins containing silver, antimony and tin. The second zone strikes at 090° azimuth.

The veins of the 060° structure are complex and are up to 1.5 metres (5 feet) in width with semi-continuous veins up to 3 metres (10 feet) in width. Kaolinite alteration that accompanies the veins is as much as 10 times the width of the tourmaline vein.

The 060° azimuth structural zone has been intersected along the strike for 150 metres (500 feet) and has been tested to a vertical depth of 100 metres (330 feet). It is still open vertically and possibly laterally since the alteration is strong.

Another possible structure, evident as a shallow, snow-filled depression, parallels the Zetta structures just south of the drill locations, approximately 100 metres.

A third mineralized structure, the Gash, runs approximately N 45°E. In 1994, mineralization was found along what may be the same structure 1.0 kilometres to the southwest (RP1420 and RP1450).

A quartz feldspar porphyry "dike" (unit 4(g)) parallels the contact, to the south, for a distance of over 2 kilometres and juxtaposes, or includes, greisen mineralization. Samples R4P1413-18 from this unit contain anomalous As (1.4 percent in R4P1416) and in Cu (1656 ppm #16) and Sb (119 ppm #19). Samples containing up to 15 percent sulphides ran 8014 ppm As, but only trace Ag (.9 ppm - R4P1418).

Similar looking griesen mineralization occurs on Pinnacle Ridge (Hope 5-8) in an apparent structure perpendicular to the syenite/sediment contact. The sampled material was slightly anomalous in Pb, As and Sb (R4P1435).

5.2 Omega Property (Hope 9 & 10)

Barite reserves at the Omega showing (Hope 9 and 10) have been calculated at 30,000 tonnes grading at up to 88%.

Sulfides may be present in black interbeds of chert argillite and barite on the deposit's margins. Although sulphurous smelling barites/shales/cherts returned sub-anomalous values, except in Strontium (R4P1425-1009 ppm Sr).

6.0 Mineral Inventory

A mineral inventory has been established by Noranda Exploration Co. Ltd., to be approximately 50,000 tonnes grading 13 oz. Ag/tonne. The mineralized zone is open at depth and possibly along strike. Surface leaching has resulted in a reduction in the silver grade from surface to a depth of 30 metres (100 feet), but the alteration continues to down dip, and the silver grades improve dramatically in the deeper, unleached portion of the zone. The structure continues along strike beyond the drill-tested portion. Additional drill testing will be required to prove an adequate tonnage for a viable economic deposit. Initial work in the area has shown that mineralization is associated with topographically defined lineaments.

Hope 9 and 10 covers the Omega Barite occurrence. The barite inventory is estimated at 30,000 tonnes of up to 88% Ba in a faulted-off bed ranging in true thickness from 4.9 to 38 m. Due to argillic interbedding some "upgrading" may be required prior to shipping (Minfile, 1994)

7.0 Methodology

Prospecting priorities were along geologic contacts, especially the intrusive/sedimentary units (map units 4 and 3, respectively) and structures. Most mineralization in the Zetta area can be traced to northeast trending structures. A trench was dug across the apparent contact of intrusions and sediments along Pinnacle Ridge (samples D4P1429-34). Overall, approximately 50 rock, soil and stream sediment samples were collected and 35 of these were sent for analysis at NAL in Whitehorse, using 30 element ICP (by IPL of Vancouver) and fire-assay gold.

General prospecting also concentrated north and south along the Gash structure, sampling of sulphide-rich zones in the Omega Barite deposit, along the intrusive contact and in the Awesome Creek cirque.

Panning was carried out on creeks draining the Lost Horses Creek stock in order to help ascertain the potential for Fort Knox-type deposit in the two mica "granite" intrusive.

8.0 Conclusions and Recommendations

The current mineral inventory of the Zetta occurrence stands at 50,000 tonnes grading at 13 opt Ag. The deposit is open, with potentially higher grades at depth. The Omega barite deposit is estimated to contain 30,000 tonnes of up to 88% barite.

In order to increase precious metal inventory, new showings were sought. Mineralization along the "Gash" structure has been extended, intermittently, for over 1 kilometre. As well, post-field season ground photo interpretation revealed a structure parallel and immediately north of the Zetta structure at approximately N 60 E.

Mineralized greisen at the headwaters of Awesome Creek associated with feldspar porphyry dikes are apparently sub-economic.

Trenching across the intrusive/sedimentary contact on Pinnacle Ridge, failed to uncover mineralization. No testing of the northeast trending structures along the crest of Pinnacle Ridge, within the intrusive, occurred. This structure returned anomalous soil values for Noranda (11 ppm Ag P35371).

No gold was recovered from panning Syenite creek, which drains the "two mica" central core of the Lost Horses Stock. Despite the possible Fort Knox associations (stock age, pathfinder elements, et cetera) the mid-Cretaceous stock is not thought to be a favourable intrusive hosted gold target.

The following recommendations for further work on the Hope Claims/Zetta property are made by the author:

1. Detailed prospecting should be completed along the "Gash" structure extensions, especially near the headwaters of Cyanide Creek (R4_1420). Several trenches should be excavated along the lineament.
2. Tight grid soil samplings, trenching and prospecting should be undertaken on the structure paralleling and immediately south of the Zetta 1 structure.
3. Detailed prospecting should be completed on Pinnacle Ridge in the vicinity of Noranda's P-35368-71 soil anomalies. Several trenches should be excavated along the lineament.
4. Noranda's multi-element soil anomaly associated with the barite at the Zetta showing should be followed-up.

5. Drilling of the Zetta showing to extend the showing to the west, and down tip, needs to be completed. Step out drilling on continued 50m intervals is dependent upon the success of the initial phase of drilling.

9.0 Costs

Helicopter: (Trans-North)	1728.83
Vehicle: (Whitehorse/Dawson return 1000 kilometres @ .26/km)	260.00
Labour: (11 days @ \$200/day)	2200.00
Per diem: (11 days @ \$52.00/day)	572.00
Sample Analysis: (35 rock, soil and stream sediments)	<u>778.43</u>
	5539.26
11 Claims: (5 years @ \$100/claim x 11)	5500.00

References

Jago, B. 1984, Assessment Report for Noranda Exploration Inc., Zetta Property #091590.

Hogg, B. 1988, Assessment Report for Danra Resources, Zetta Property #062287.

Gallow, E. 1988, Assessment Report for Danra Resources, Zetta Property #092675

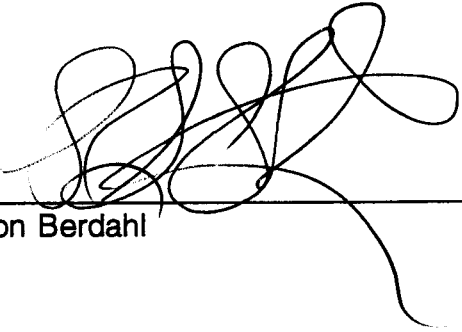
Yukon Minfile, 1994. DIAND Exploration and Geologic Services Division, 115P #045 and #047.

Statement of Qualifications

I, Ron Berdahl, declare that I am an independent prospector who has worked on the Hope_Claims during the 1994 field seasons.

I have taken several courses related to prospecting and make the bulk of my living directly from prospecting.

The data contained herein is true and accurate to the best of my knowledge.

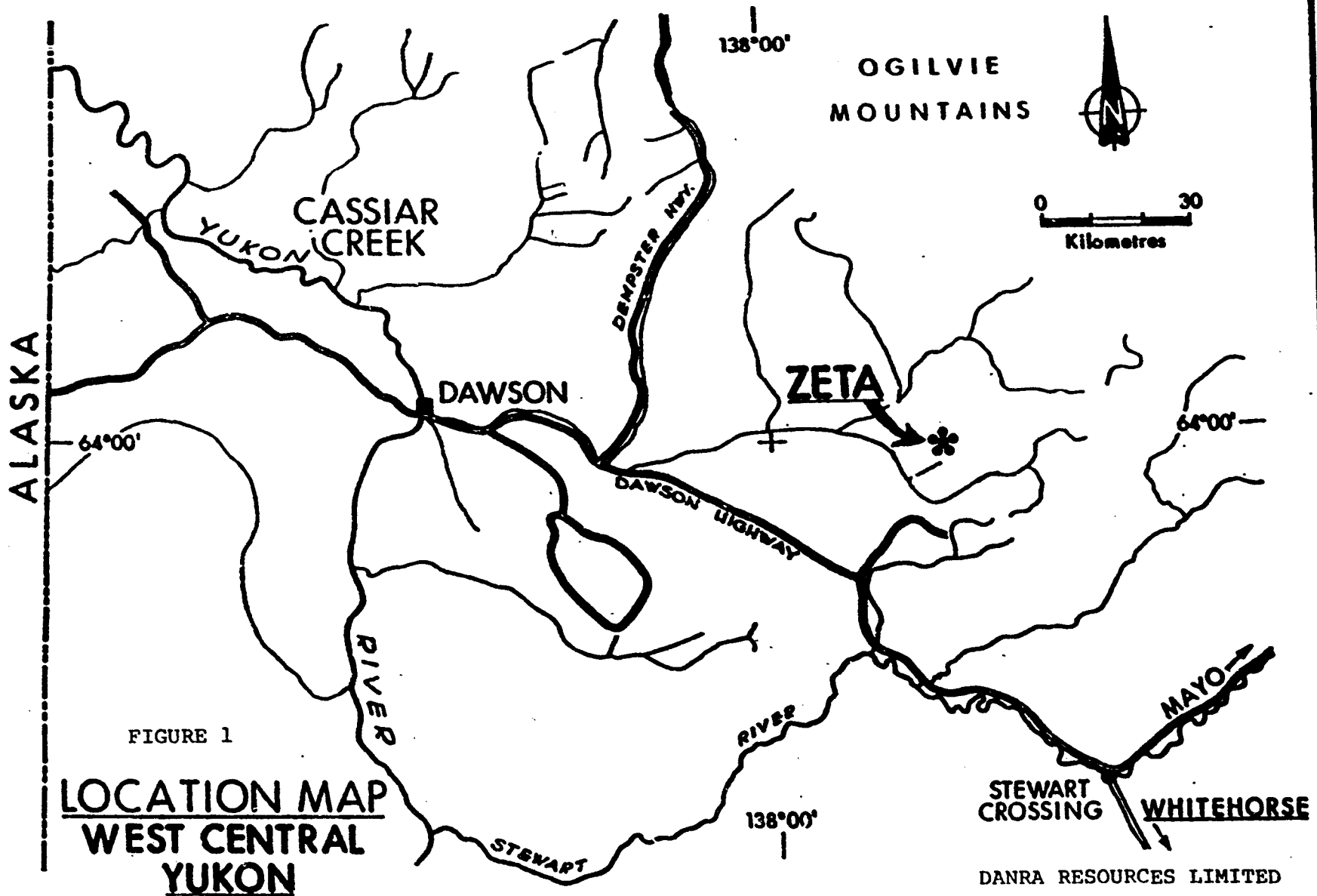


Ron Berdahl

Project Personnel

Personnel	Address	Time Period	Task
R. Berdahl	Whitehorse, YT	June 1994	General Prospecting Minor Trenching Report Writing

APPENDIX "A" LOCATION MAP



APPENDIX "B" TABLE OF FORMATIONS

TABLE ONE: TABLE OF FORMATIONS, SYENITE RANGE MAPPING

LEGEND

CRETACEOUS

4. Lost Horses Stock
 - a) Hornblende ± Biotite, K-feldspar-phyric Syenite

---Gradational Contact---

 - b) Biotite ± Hornblende, K-feldspar-phyric Syenite
 - c) Hornblende ± Biotite, K-feldspar-phyric Quartz-Syenite

---Gradational Contact---

 - d) Biotite ± Hornblende, K-feldspar-phyric Quartz-Syenite

---Gradational Contact---

 - e) Hornblende ± Biotite + Tourmaline Granite

---Gradational to Intrusive Contact---

 - f) Tourmaline-patch (Muscovite) Granite
 - I) Coarse grained
 - II) Fine grained

---Intrusive Contact---

 - g) Quartz - Feldspar Porphyry
 - h) Siliceous Phlogopite ± Quartz Porphyry
 - i) Orange-weathering Calcite Fault Gouge

---Intrusive Contact---

ORDOVICIAN (or later?)

3. Clastic Formation
 - a) Black shale with siliceous interbeds
 - b) Quartzite, minor conglomerate and shale
 - c) Green-grey quartzite with a volcanoclastic component
 - d) Light clastic Unit 1: Chert pebble conglomerate > quartzite > shale
 - e) Black Shale
 - f) Light clastic Unit 2: Lithic pebble quartzite > chert pebble conglomerate > beige quartzite
 - g) Black clastic Unit: Greywacke > Chert pebble conglomerate and coarse-grained quartzite
 - h) Buff sandstone/quartzite
 - i) Interbedded black shale and minor quartzite; local laminated barite and phosphatic shale
 - j) Black shale with interbedded chert
2. Carbonate Formation
 - a) Thinly laminated dolomitic limestone
 - b) Highly foliated graphitic schist
 - c) Very fine-grained dolomitic quartzite

ORDOVICIAN (or earlier?)

1. "Grit Unit"
 - a) Quartzite, slate, phyllite, limestone

APPENDIX "C" GEOLOGY MAP/SAMPLE LOCATIONS

Legend

FROM AR # 091590

B. Jago ; Nera

CRETACEOUS

4. Lost Horses Stock

- a Hornblende ± Biotite, K-feldspar-phyric Syenite

Gradational Contact

- b Biotite ± Hornblende, K-feldspar-phyric Syenite
- c Hornblende ± Biotite, K-feldspar-phyric Quartz-Syenite

Gradational Contact

- d Biotite ± Hornblende, K-feldspar-phyric Quartz-Syenite

Gradational Contact

- e Hornblende ± Biotite + Tourmaline Granite

Gradational Contact to Intrusive Contact

- f Tourmaline-patch (Orbicular?) Granite I) Coarse grained
II) Fine grained

Intrusive Contact

- g Quartz + Feldspar Porphyry
- h Siliceous Phlogopite ± Quartz Porphyry
- i Orange-weathering Calcite Fault Gouge

Intrusive Contact

ORDOVICIAN (or later?)

3.

- a Black shale with Siliceous Interbeds
- b Quartzite, minor conglomerate and shale
- c Green-grey Quartzite with a volcanoclastic component
- d Light Clastic Unit 1: Chert pebble conglomerate > Quartzite > Shale
- e Black Shale
- f Light Clastic Unit 2: Lithic Pebble Quartzite > Chert Pebble Conglomerate > Beige Quartzite
- g Black Clastic Unit: Greywacke > Chert Pebble Conglomerate and coarse grained Quartzite
- h Buff Sandstone/Quartzite
- i Interbedded Black Shale and minor Quartzite; local laminated Barite and Phosphatic Shale
- j Black Carbonaceous Shale with interbedded Chert

2.



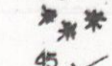

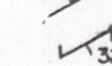


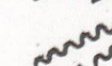
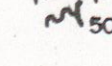
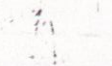
- a Thinly laminated Dolomitic Limestone
- b Highly Foliated Graphitic Schist
- c Very fine grained Dolomitic Quartzite

ORDOVICIAN (or earlier?)

1.

- a Quartzite, Slate, Phyllite, Limestone

Symbols

-  Geological contact (Defined, Interpreted/Approximate, Projected from drill hole data)
-  Outcrop or Outcrop Area
-  Talus, Pilescaper
-  Bedding (Inclined)
-  Jointing (Inclined)
-  Foliation (Inclined)
-  Lamination with plunge
-  Single vein with dip (Accompanied by vein description)
-  Parallel vein (Accompanied by vein description)
-  Fault, fracture or foliation zone (May be associated with a vein or vein system and shown with a vein description)

Vein Gangue

- Tour - Tourmaline
- Qtz - Quartz
- Carb - Carbonate
- Ct - Calcite
- Fl - Fluorite

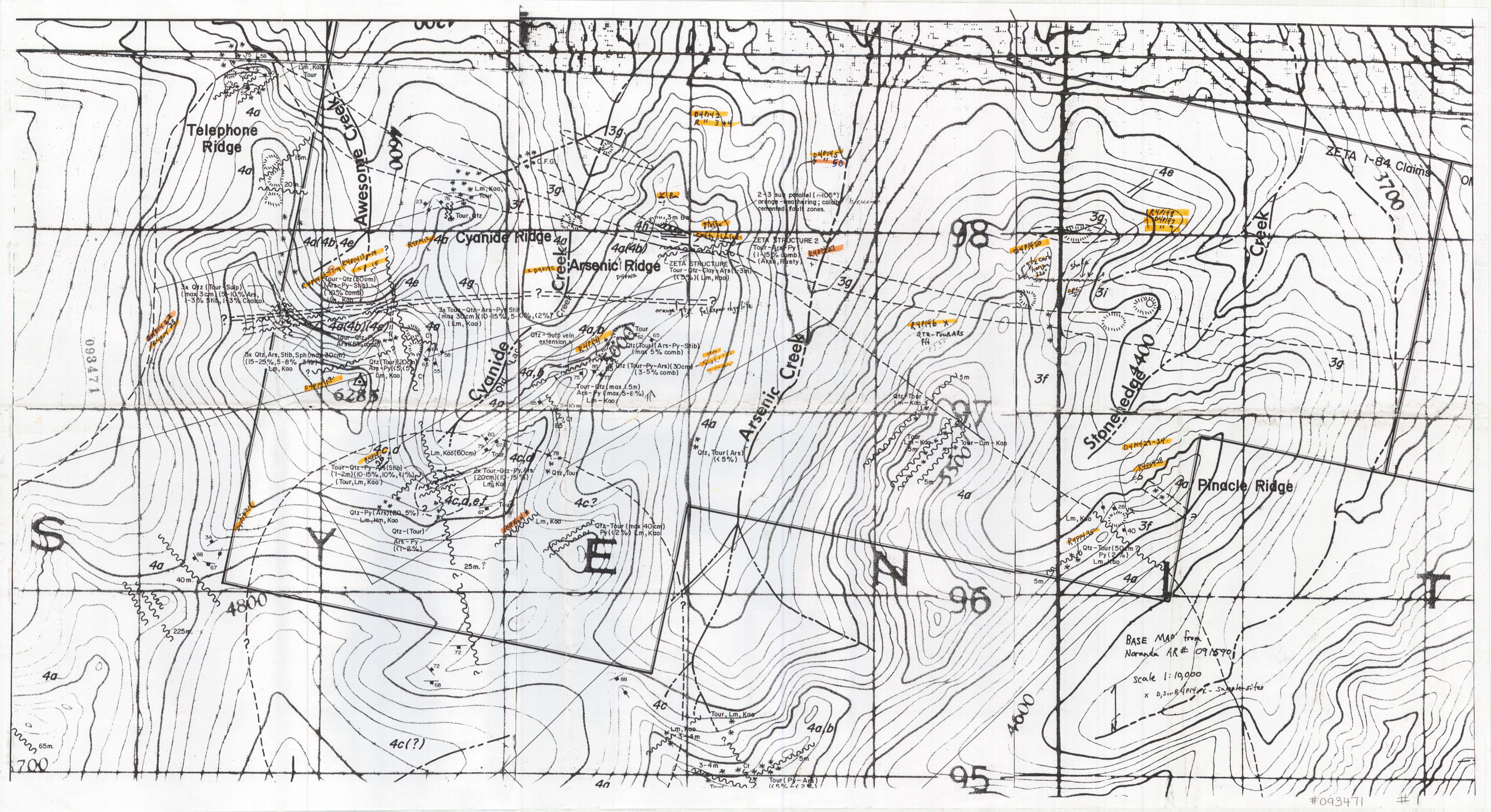
Economic Minerals

- Sulph - Sulphide
- Gn - Galena
- Ars - Arsenopyrite
- Stb - Stibnite
- Py - Pyrite

Alteration Minerals

- Fe - Iron
- Lim - Limonite
- Hm - Hematite
- Cly - Clay
- Tal - Talc
- Chi - Chlorite





Telephone Ridge

Awsome Creek

Cyanide Creek

Arsenic Creek

Creek

ZETA 1-84 Claims

Stone Edge 400

Pinnacle Ridge

BASE MAP from
Noranda AR# 091590
scale 1:10,000
x D.S. R. 4/14/50 - sample sites

4a

4a

4a

4a(4b, 4e)

4b

4c

4d

4e

4f

4g

4h

4i

4j

4k

4l

4m

4n

4o

4p

4q

4r

4s

4t

3x Qtz (Tour Sulph)
(max 3cm) (5-10% Ars,
-3% Stib, 1-5% Chalc)

Tour-Qtz (80cm)
(Ars-Py-Stib)
(10% comb)
Lm, Kao

3x Tour-Qtz-Ars-Py-Stib
(max 30cm) (10-15%, 5-10%, (2%)
(Lm, Kao)

3x Qtz, Ars, Stib, Sph (max 30cm)
(15-25%, 5-8%, 3-4%)
Lm, Kao

Tour-Qtz (20cm)
(Ars-Py) (5%)
Lm, Kao

Qtz-Sulph vein
extension

Tour-Qtz (max 1.5m)
Ars-Py (max 5-8%)
Lm-Kao

Qtz (Tour) (Ars-Py-Stib)
(max 5% comb)

Qtz (Tour-Py-Ars) (30cm)
(3-5% comb)

Qtz-Tour
Lm-Kao

Tour-Lm-Kao

Tour-Qtz-Py-Ars (Stib)
(1-2m) (10-15%, 10%, 1%)
(Tour, Lm, Kao)

2x Tour-Qtz-Py-Ars
(20cm) (10-15%)
Lm, Kao

Qtz-Py (Ars) (20%)
Lm, Hm, Kao

Qtz (Tour)
Ars-Py
(1-2%)
Lm, Kao

Qtz-Tour (max 40cm)
Py (2%) Lm, Kao

Qtz, Tour (Ars)
(5%)

Lm, Kao

Qtz-Tour (50cm)
Py (2%)
Lm, Kao

Tour, Lm, Kao

Tour (Py-Ars)
(5% (2%))

2-3 sur parallel (~105°)
orange-weathering; calcite
cemented fault zones.

ZETA STRUCTURE 2
Tour-Ars-Py
(1-15% comb)
(Ars, Rusty)

ZETA STRUCTURE
Tour-Qtz-Clay Ars
(3-5%) (Lm, Kao)

orange Qtz

orange Qtz

orange Qtz

orange Qtz

orange Qtz

orange Qtz

orange Qtz

orange Qtz

orange Qtz

orange Qtz

orange Qtz

093471

#093471 #

APPENDIX "D" GEOCHEM RESULTS

SAMPLE DESCRIPTIONS

Example R4P141: Prefix R - Rock Sample

D - Soil Sample

S - Stream Sediment Sample

4 - 1994; P14* - NTS Map Sheet Number - 115P14; 1 - Sample Number

** All Zetta/Hope Samples are P14, ignore other NTS numbers in geochem/assay results.*

<i>Sample #</i>	<i>Description</i>
R4P141	Orangish float from a 110° striking fault apparently associated with a porphoritic rhyolite, possible trace sulfides
R4P143	Light colored barite, no bedding evident
R4P144	Dolomitic 'quartz carbonate', possibly argillic alteration
R4P146	Limonitic quartz breccia/pebble conglomerate
R4P148	Orange to reddish quartz carbonate
R4P1412	Red, altered, knobby almost botryoidal quartz with visible sulfides in veinlettes and disseminations
R4P1413	Limonitic quartz tourmaline vein
R4P1414	Altered quartz tourmaline vein, no sulfides
R4P1415	Altered quartz tourmaline with visible sulfides
R4P1416	1" tourmaline vein with sulfides along a megacryst biotite feldspar porphory
R4P1418	Griesen float
R4P1420	Quartz, tourmaline, altered vein, 1-2 m wide

- R4P1423 Tourmaline float, without sulfides
- R4P1424 Altered tourmaline (Greisen)
- R4P1425 Cherty shale with calcite veinlets, heavy, probably baritic
- R4P1426 Orange quartz carbonate
- R4P1427 Quartz with amorphous grey material, within sediment/hornfels
- R4P1428 Argillically altered syenite
- R4P1435 Altered greissen, not unlike main showing

SOIL DESCRIPTIONS

- D4P142 Soil in gossanous felsemer containing borite
- D4P144 B horizon soil
- D4P145A B horizon soil
- D4P145B B horizon soil
- D4P147 Shale soil sample at quartz/carbonate/shale interface
- D4P149 Orange soil sample topographically above #7
- D4P1410 B Horizon soil
- D4P1411 B Horizon soil
- D4P1417 Soil from below altered quartz porphory sub crop
- D4P1419 Reddish soil from horn blend/biotite syenite boulder strewn area
- D4P1421 Red soil 1km south of #19
- S4P1422 Stream sediment sample
- D4P1429 From trench across structure

D4P1429-35 From trench across structure near and parallel to contacts

- 29 Orange brown soil with syenite cobbles - 9"
- 30 Brown soil with rusty pods over oragios then syenite - 1'
- 31 Clay at 2½ feet
- 32 Brown organic rich soil over orgenite
- 33 Clay soil at 1' under organics
- 34 Brown clay/soil with syenite rubble

22/07/94

Assay Certificate

Page 1

Ron Berdahl

WO#25272

Sample #	Au ppb
C-1(A)	<5
C-1(B)	<5
C-2	<6
R4D21	7
R4D91	16
R4D92	6
R4D93	10
R4D94	1158
R4D95	<5
R4D97	<5
R4P141	38
R4P143	<5
R4P144	<5
R4P146	<5
R4P148	<5
R4D910	966
R4D911	5
R4D912	<5
R4D913	11
R4D914	30
R4D915	26
R4D916	8
R4D917	<5
R4D919	5
R4D932	<5
R4D937	31
R4D938	11
R4D950	52
R4P1412	23
R4P1413	5
R4P1414 ✓	<5
R4P1415	<5
R4P1416 ✓	<5
R4P1418 ✓	<5
R4P1420	110

BEST ATTAINABLE IMAGE

Certified by



22/07/94

Assay Certificate

Page 2

Ron Berdahl

WO#25272

Sample #	Au ppb
R4P1423 ✓	<5
R4P1425	<5
R4P1426	<5
R4P1428	<5
R4P1435	<5
R4P1450	35
D4D96	36
D4D98	27
S4D99	26
D4P1496 ✓	<5
D4P1495(A)	9
D4P1497	8
D4P147	<5
D4P149	6
D4D918	12
D4P1410	7
D4D920	11
D4D922	<5
S4D923	24
S4D924	146
S4D925	10
S4D926	12
S4D927	29
S4D928	7
S4D929	14
S4D930	6
D4D931	12
D4D933	8
D4D934	9
D4D935	6
D4D936	<5
D4D939	6
D4P1411	7
D4P1417	<5
D4P1419	7

BEST ATTAINABLE IMAGE

Certified by



22/07/94

Assay Certificate

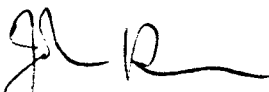
Page 3

Ron Berdahl

WO#25272

Sample #	Au ppb
D4P1421	12
D4P1422	6
D4P1429	<5
D4P1430	<5
D4P1431	7
D4P1432	<5
D4P1433	<5
D4P1434	<5

Certified by





INTERNATIONAL PLASMA LABORATORY LTD

CERTIFICATE OF ANALYSIS

iPL 94G1504

233 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Client: Northern Analytical Laboratories
Project: WO 25272 83 Pulp

iPL: 94G1504

Out: Jul 20, 1994
In: Jul 15, 1994

Page 3 of 3
[032015:27:03:49072094]

Section 1 of 1
Certified BC Assayer: David Chiu

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mb ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %	
SAD 927	P	<	11	8	36	17	<	<	1	<	<	0.1	8	26	99	21	49	50	324	14	29	1	1	0.07	0.84	0.55	1.95	0.64	0.04	0.04	0.07
SAD 928	P	<	13	3	48	<	<	<	1	<	<	0.3	9	26	108	<	49	45	487	11	38	1	1	0.07	0.98	0.68	1.83	0.77	0.05	0.04	0.07
SAD 929	P	0.3	50	6	85	11	<	<	2	<	<	0.6	15	46	139	<	68	62	465	7	40	1	1	0.05	1.51	0.92	2.99	1.12	0.07	0.04	0.09
SAD 930	P	<	15	2	50	5	<	<	1	<	<	0.2	8	25	95	<	51	40	291	8	39	1	1	0.06	0.94	0.71	1.56	0.73	0.04	0.04	0.07
SAP1422	P	0.1	17	8	60	5	<	<	2	<	<	<	9	13	124	<	26	43	330	31	20	1	1	0.09	1.07	0.42	1.96	0.49	0.10	0.04	0.14

Min Limit 0.1 1 2 1 5 5 3 1 10 2 0.1 1 1 2 5 1 2 1 2 1 1 1 1 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
 Max Reported* 99.9 20000 20000 20000 9999 9999 9999 9999 999 999 99.9 999 999 9999 999 9999 999 9999 9999 9999 9999 999 99 99 9.99 9.99 9.99 9.99 9.99 9.99 5.00 5.00
 Method ICP
 ---No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %-Estimate % Max=No Estimate
 International Plasma Lab Ltd. 2036 Columbia St. Vancouver BC V5Y 3E1 Ph:604/879-7878 Fax:604/879-7898