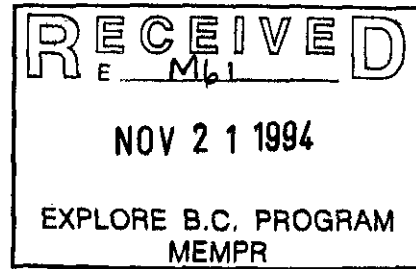


24608



IKS CLAIMS
1994 EXPLORATION and DRILL PROGRAM REPORT
NTS 104 B 9W

Property Owners: Adrian Resources Ltd.

Project Operator: Prime Resources Group Inc.

Submitted by:
D.L KURAN P. GEOL.
Sr. Project Geologist
Homestake Canada Inc.

OCTOBER 1994
Distribution: File Copy
Explore B.C. (2 copies)



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT



24,608

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SUMMARY

During the 1994 field season, a total of 3531.7 metres of NQ sized diamond drilling was completed in six holes testing two target areas on the IKS 1 mineral claim. All holes, with the exception of ADL94-39, which bottomed in a previously unknown mafic intrusive, were completed to target depth and penetrated the target stratigraphy. Down hole Pulse EM was completed on four of these holes.

Holes ADL94-35,36 and 37 tested a possible fault offset extension to a northwest trending zone of 21B style mineralization intersected during the 1990 Adrian drilling program. The stratigraphy intersected at this position of the Eskay Anticline is very similar to the Eskay mine site bimodal volcanic suite but is complicated by normal faults. No anomalous base or precious metal values were intersected. Down hole EM failed to detect any off-hole conductors.

The second target area, tested by holes ADL94-38, 39 and 40, is defined by an airborne magnetic and deep IP anomaly and is on the northeast facing limb of the Eskay Anticline. Based on drill results, 21B footwall rhyolite is represented by thin brecciated flows (ADL94-38) or thin tuffaceous mudstones (ADL94-40). Both felsic and mafic flow units are absent or are distal facies equivalents and indicate the east limb is not underlain by typical 21B type stratigraphy. No anomalous base or precious metal values were intersected. Down hole Pulse EM detected a weak off-hole conductor in hole ADL94-38.

The 1994 exploration program on the IKS 1 mineral claim did not discover any new zones of ore grade mineralization and did not intersect any indications of mineralization that warrant further work in the near future. Due to the lack of positive 1994 exploration results, no further work is recommended in 1995.

To October 20, 1994 Prime and Stikine have spent more than \$600,000 on the claims in 1994, which effectively vests their 50% interest in the property.

1.0 INTRODUCTION

1.1 LOCATION and ACCESS

The IKS 1 and 2 mineral claims are in the Iskut-Stikine about 83 km north of Stewart, B.C. (Fig. 1.1, 1.5.2) where they surround the north end of the Eskay Creek mine site. The Snip Deposit is 37 km west and the Sulphurets property less than 30 km southeast of the IKS claims. Access to the main Eskay camp is via a 60 km long gravel road which turns off highway #37 a few kilometres south of Bob Quinn.

1.2 PROPERTY TENURE

The property consists of 42 units or 1050 ha in three claims; the IKS 1, IKS 2, and Cal 5 (Fig. 1.2). The IKS 1, IKS 2 and Cal 5 claims are in good standing until 2000, 2004 and 1995 respectively.

Agreements and Title. Prime Resources Group Inc has the option to earn a 50% interest in the IKS claims from Adrian Resources Ltd. through expenditures of \$5,000,000 by November 13, 1994.

1.3 PHYSIOGRAPHY, VEGETATION and CLIMATE

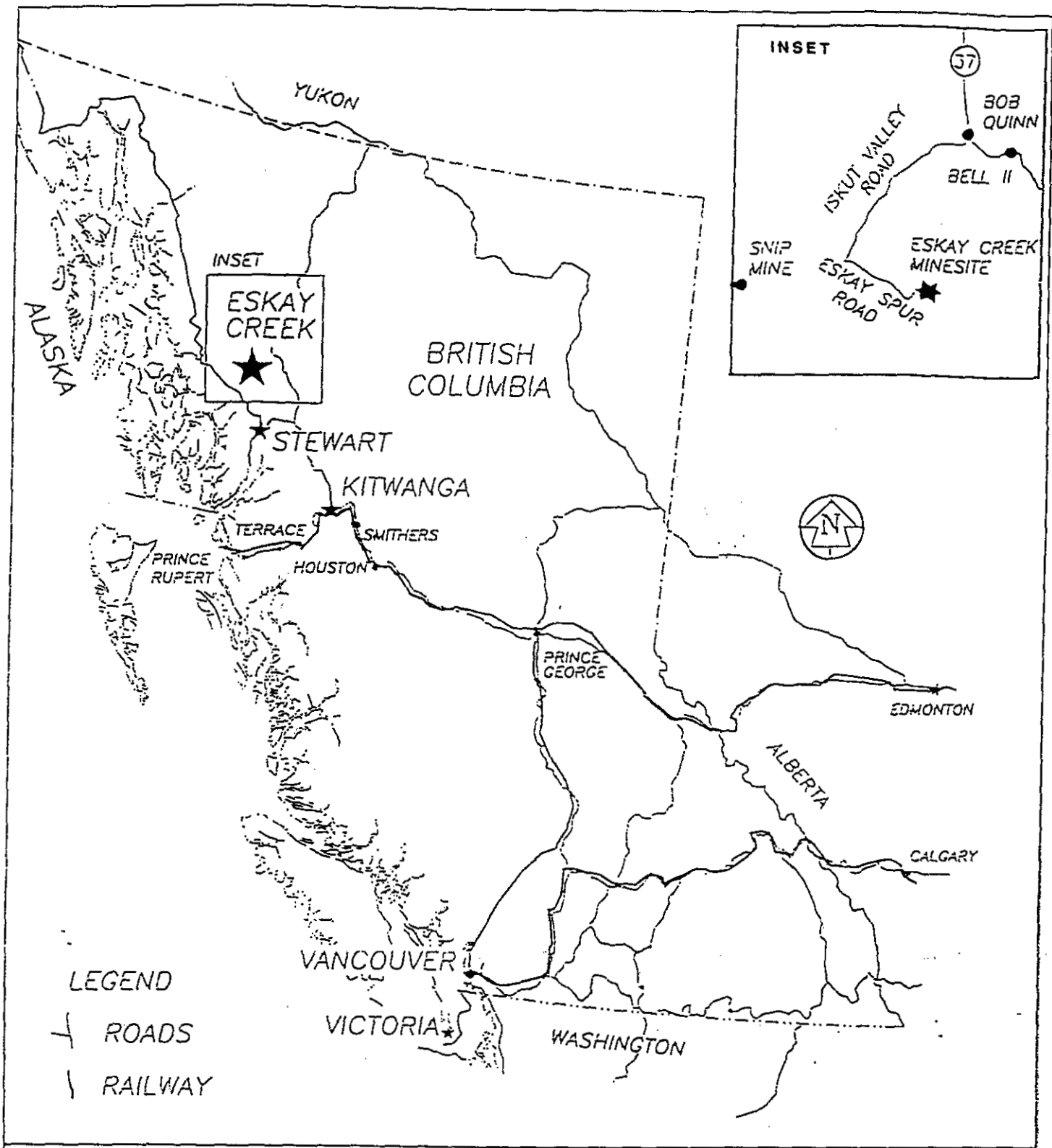
The IKS claims are located on a relatively gentle, east facing slope which is incised by the steep canyons of McKay and Ketchum Creeks. Elevations range from 650 m in the southeast to 1100 m in the northwest corner of the IKS 1.

Vegetation varies with elevation; mature timber prevalent at lower levels adjacent to main drainages, changes to alpine grasses and scrub balsam at higher elevations.

Annual precipitation in the area ranges from 2 to 3.5 m. Most falls between November and April, resulting in a 10 to 20 m accumulations of snow; heavy rains can be expected at almost any time during the remainder of the year.

1.4 HISTORY AND PREVIOUS WORK

Au-Ag showings were discovered by Tom MacKay in 1932 on the Tok and Kay claims of the Eskay Creek property. These claims are located in the central portion of the IKS 1 (Fig.1.2). Since 1932, 12 companies completed a variety of exploration programs on the Eskay property and between 1963 to 1987 Stikine Resources Ltd (formerly Consolidated Stikine Silver Ltd) did minor work while holding mineral title. In 1988 Calpine Resources Incorporated optioned the property and discovered the 21A Zone. Continued exploration to mid-1989 eventually resulted in the discovery of the 21B Zone. During this time, Prime acquired a controlling interest in Calpine and assumed



LEGEND

- ROADS
- RAILWAY

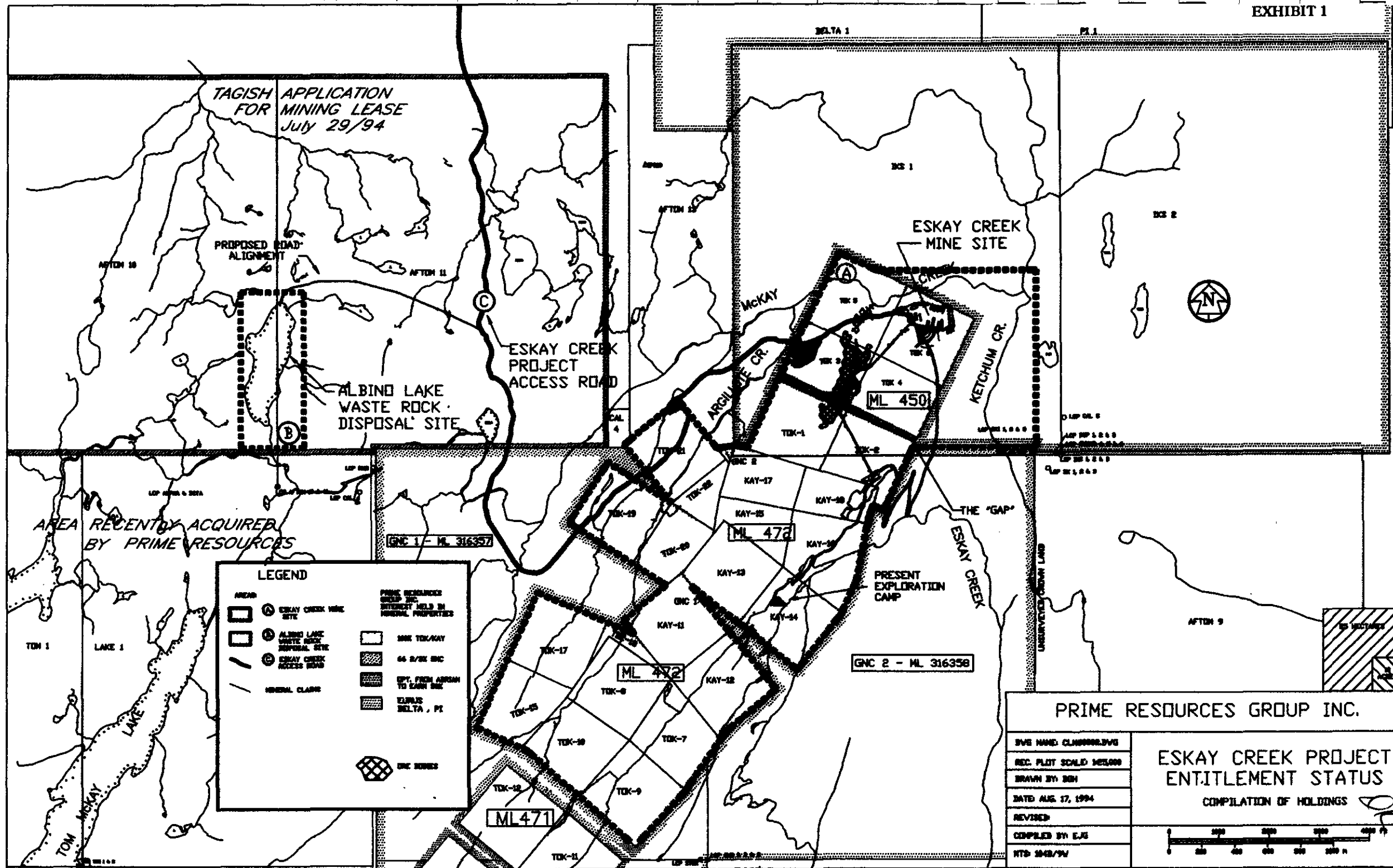


HOMESTAKE

1000-700 WEST PENDER STREET,
VANCOUVER, B.C. V6C 1G8

LOCATION MAP
ESKAY CREEK

OK



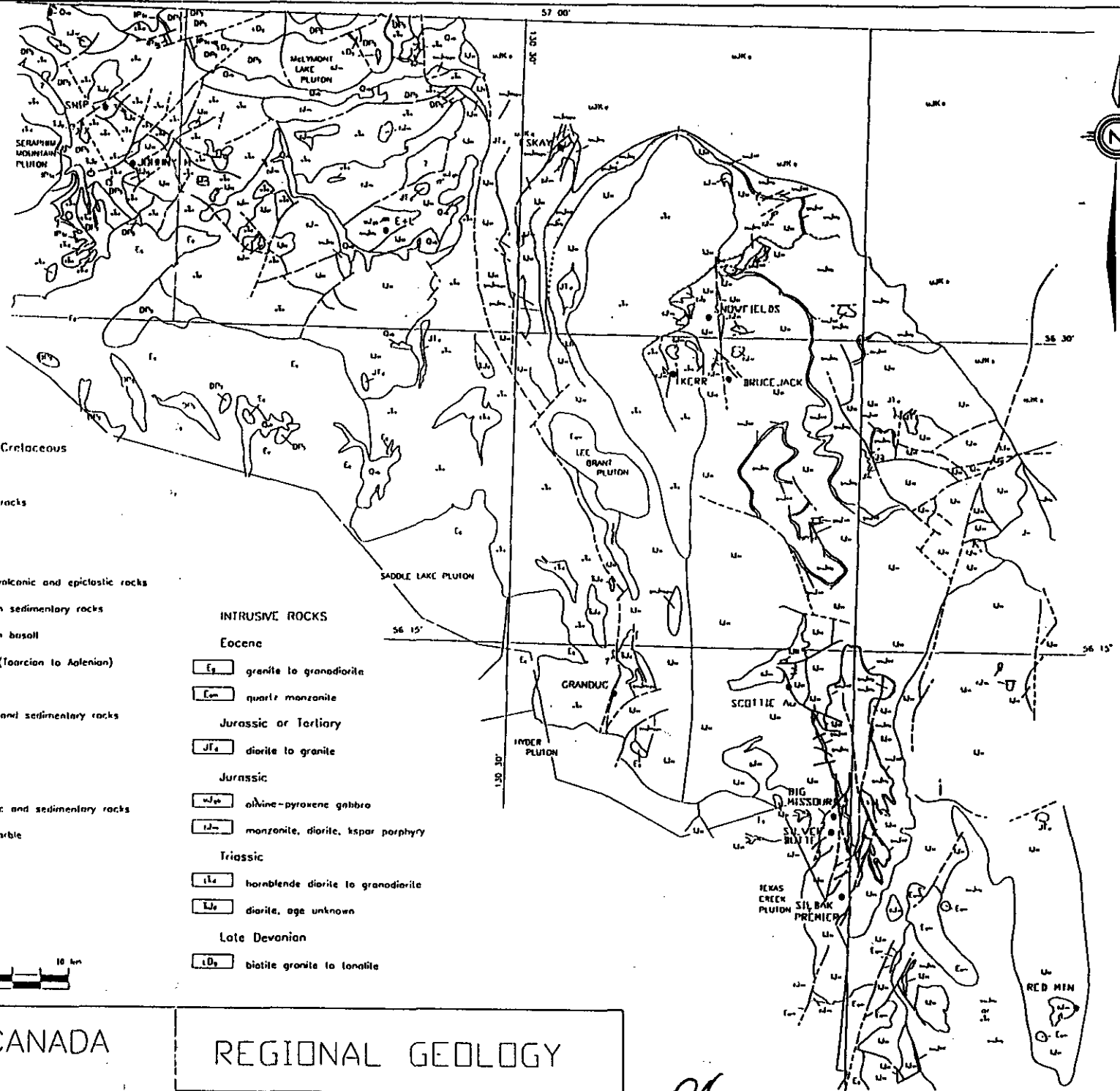
LEGEND

| | | | |
|--|--|--|-----------------------------|
| | ESKAY CREEK MINE SITE | | 66 2/3% GNC |
| | ALBINO LAKE WASTE ROCK DISPOSAL SITE | | OPT. FROM AFTON TO ESAY GNC |
| | ESKAY CREEK ACCESS ROAD | | TUNDRA DELTA, PT. |
| | MINERAL CLAIM | | GNC MINES |
| | PRIME RESOURCES GROUP INC. INTEREST HELD IN MINERAL PROPERTIES | | |
| | 50% TDK/KAY | | |

PRIME RESOURCES GROUP INC.

| | |
|---------------------------|---|
| DWG NAME: CLM0000.DWG | <p>ESKAY CREEK PROJECT ENTITLEMENT STATUS</p> <p>COMPILATION OF HOLDINGS</p> |
| REC. PLOT SCALE: 1:25,000 | |
| DRAWN BY: BSH | |
| DATE: AUG 17, 1994 | |
| REVISED: | |
| COMPILED BY: E.J.G. | |

NTS: 10/8/94



LEGEND

- Quaternary**
 [Q₁] Basalt flow, scoria
- Middle Jurassic to Lower Cretaceous**
 Howser Lake Group
 [WJK₁] Undivided sedimentary rocks
- Lower to Middle Jurassic**
 Hazelton Group
 [U₁] Undivided calcalkaline volcanic and epiclastic rocks
 [U₂] Salmon River Formation sedimentary rocks
 [U₃] Salmon River Formation basalt
 [U₄] Felsic volcanic rocks (Toarcian to Aptenian)
- Upper Triassic**
 [U₅] Stikini Group volcanic and sedimentary rocks
- Paleozoic**
 Stikine Assemblage
 [DPS] Undivided meta-volcanic and sedimentary rocks
 [R₁] White limestone and marble

INTRUSIVE ROCKS

- Eocene**
 [E₁] granite to granodiorite
 [E₂] quartz monzonite
- Jurassic or Tertiary**
 [JF₁] diorite to granite
- Jurassic**
 [J₁] olivine-pyroxene gabbro
 [J₂] monzonite, diorite, kspar porphyry
- Triassic**
 [T₁] hornblende diorite to granodiorite
 [T₂] diorite, age unknown
- Late Devonian**
 [LD₁] biotite granite to tonalite

HOMESTAKE CANADA
 INC

REGIONAL GEOLOGY

DATE: 1994 SCALE: 1:500 000 Fig. 1.5.2

OK

management of the Eskay Creek project. Later in 1989 International Corona Corporation (now Homestake Canada Inc.) acquired an equity position in Stikine.

As exploration activity mounted at Eskay, Arc Resources Group Ltd optioned the IKS claims from F. Schomig in 1988. Later that year Arc optioned the property to Adrian Resources Ltd. who completed airborne geophysics, mapping and sampling and follow-up ground geophysics by the end of 1989. At this time, a legal survey of the Tok claims led to the discovery of the "Gap". In 1990 Adrian optioned the property to Prime Resources Group Inc, Stikine Resources Ltd and Calpine Resources Incorporated who further drill tested the Gap, as well as possible northern, down plunge extensions to 21B style mineralization.

During the same period Calpine merged with Prime, and in late 1993, Prime acquired Stikine via an exchange offer of Prime shares for Stikine shares. This resulted in Prime holding 100% of the Eskay Creek property and an option to earn a 50% interest in the Adrian ground.

Since 1988, a total of 188,411 m in 743 surface diamond holes have been drilled on the Tok/Kay and IKS claims. They include;

| CLAIM | METRES | HOLE |
|---------|---------|------------------------------------|
| Tok-Kay | 167,000 | 708 holes (excluding underground) |
| IKS | 21,807 | 35 holes (excluding the Gap) |
| IKS Gap | 10,000? | approx. 50 holes or parts of holes |

1.5. REGIONAL GEOLOGY

Lower to Middle Jurassic, island arc, calc-alkaline volcanics, sediments and coeval intrusions of the Hazelton Group are the main host to mineralization at Eskay. Key units on the property include the Betty Creek Formation which has been subdivided into andesitic tuffs, conglomerate, lithic wackes and debris flows of the lower East Ridge Member and coarse intermediate epiclastic rocks and minor mudstone, limestone and conglomerate of the upper Eskay Creek Member.

Dacitic pyroclastic flows, tuffs and locally ignimbrites of the Mount Dilworth Formation overlie the Betty Creek Formation and are probably a key regional metallogenic marker.

Basaltic andesites, intercalated mudstones and two cycles of felsic volcanism of the Salmon River Formation overlie the Dilworth and are overlain by sediments of the Bowser Lake Group (Fig. 1.5.4, 1.5.1)

1.5.1 PROPERTY GEOLOGY

The bulk of the 21B Zone stratiform mineralization lies near the base of the contact mudstone at the top of the lower rhyolite of the Salmon River Formation (Fig.1.5.3). Other possible stratiform mineralization occurs above the stratigraphic position of the 21B Zone in the Hanging Wall Zone at the top of the contact mudstone. Discordant footwall mineralization occurs in the 109 and the Pumphouse/Pathfinder Zones where it may represent vent or feeder zones to the Hangingwall and 21B mineralization, respectively.

The various zones occur within the Eskay Anticline and plunge moderately across McKay Creek onto the IKS claims to the north (Fig.1.5.3) where they are covered by several hundred meters of post-mineral Bowser Group sedimentary rocks.

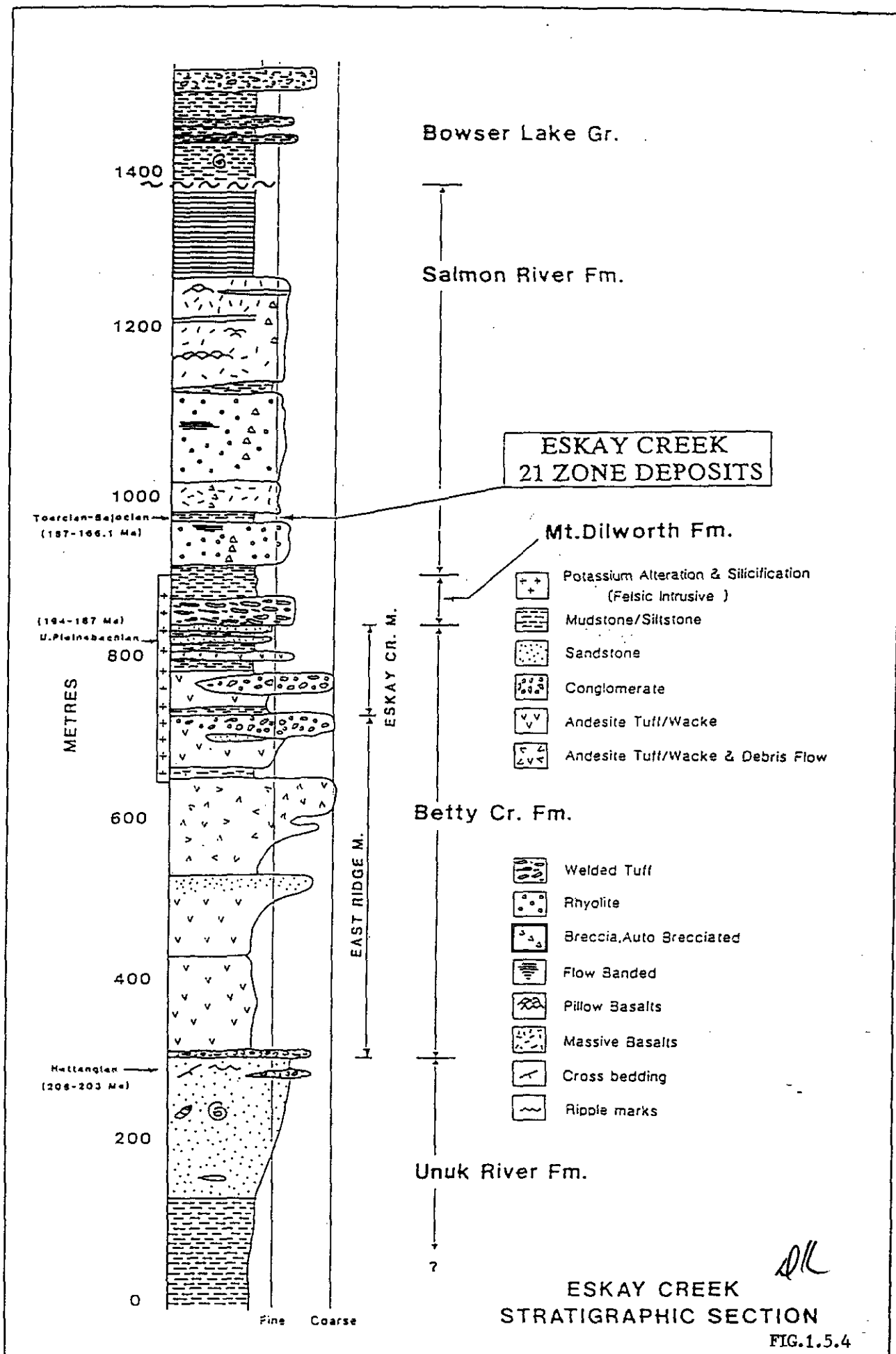
Regional scale fold hinges change from a dominantly northeast strike in Hazelton Group units south of McKay Creek to northwest in the younger Bowser Group units north of the Creek. An orthogonal fold event, east-west cross faults or a shallow angle fault between the two main rock units might account for this change in fold attitudes. Elevation isopleths of the top of the rhyolite intersected in drill holes on the IKS claims grossly mimic fold trends indicated in the overlying Bowser Group. This suggests fold events north of McKay Creek affected both Bowser and at least the top of the Hazelton Group strata. A better understanding of structural features in the Bowser Group units could be a useful aid to blind targeting of mineralization in the underlying Hazelton Group strata.

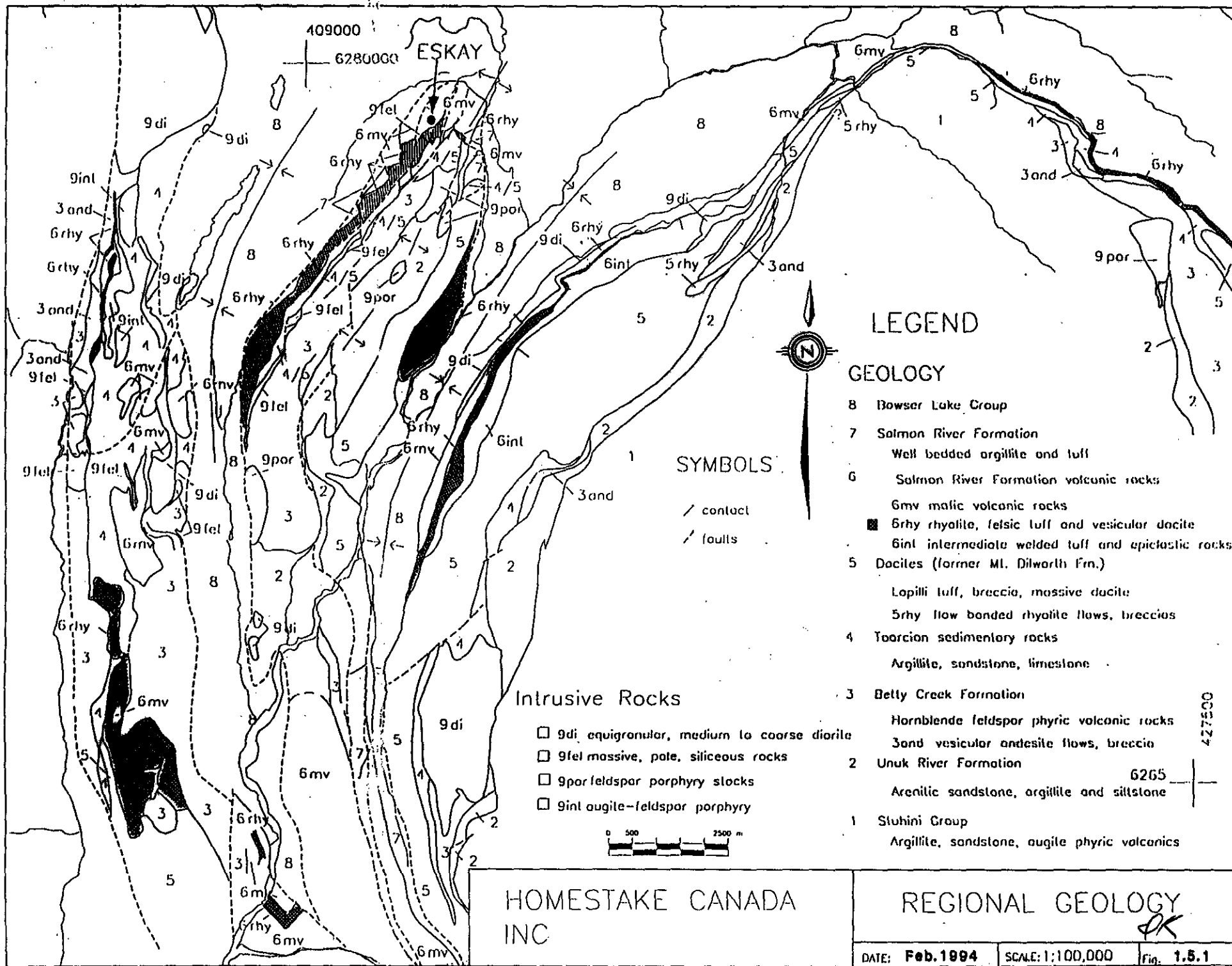
Reserves. Probable mineable reserves at Eskay are 1.08 million tonnes of 65.5 gpt Au, 2,930 gpt Ag, 5.6% Zn and 0.77% Cu, using a 0.4 opt Au cutoff, and 27% mining dilution (or 1.19 million tons of 1.91 opt Au, 85.5 opt Ag).

2.0 THE 1994 EXPLORATION PROGRAM

2.1 INTRODUCTION

From June 20 to October 14, 1994, a total of 3531.7 m of NQ sized diamond drilling was completed in six holes on the IKS 1 claim (Table 2.1). Down-hole pulse EM surveys were completed on all or parts of 4 holes.





LEGEND

GEOLOGY

- 8 Bowser Lake Group
- 7 Salmon River Formation
Well bedded argillite and tuff
- 6 Salmon River Formation volcanic rocks
6mv mafic volcanic rocks
6rhy rhyolite, felsic tuff and vesicular dacite
6int intermediate welded tuff and epiclastic rocks
- 5 Dacites (former Mt. Dilworth Frn.)
Lopilli tuff, breccia, massive dacite
5rhy flow banded rhyolite flows, breccias
- 4 Torcion sedimentary rocks
Argillite, sandstone, limestone
- 3 Betty Creek Formation
Hornblende feldspar phytic volcanic rocks
3and vesicular andesite flows, breccia
- 2 Unuk River Formation
Arenitic sandstone, argillite and siltstone
- 1 Stuhini Group
Argillite, sandstone, augite phytic volcanics

SYMBOLS

- / contact
- - - faults

Intrusive Rocks

- 9di equigranular, medium to coarse diorite
- 9fel massive, pale, siliceous rocks
- 9por feldspar porphyry stocks
- 9int augite-feldspar porphyry



HOMESTAKE CANADA
INC

REGIONAL GEOLOGY

DATE: Feb. 1994 SCALE: 1:100,000 Fig. 1.5.1

427500

OK

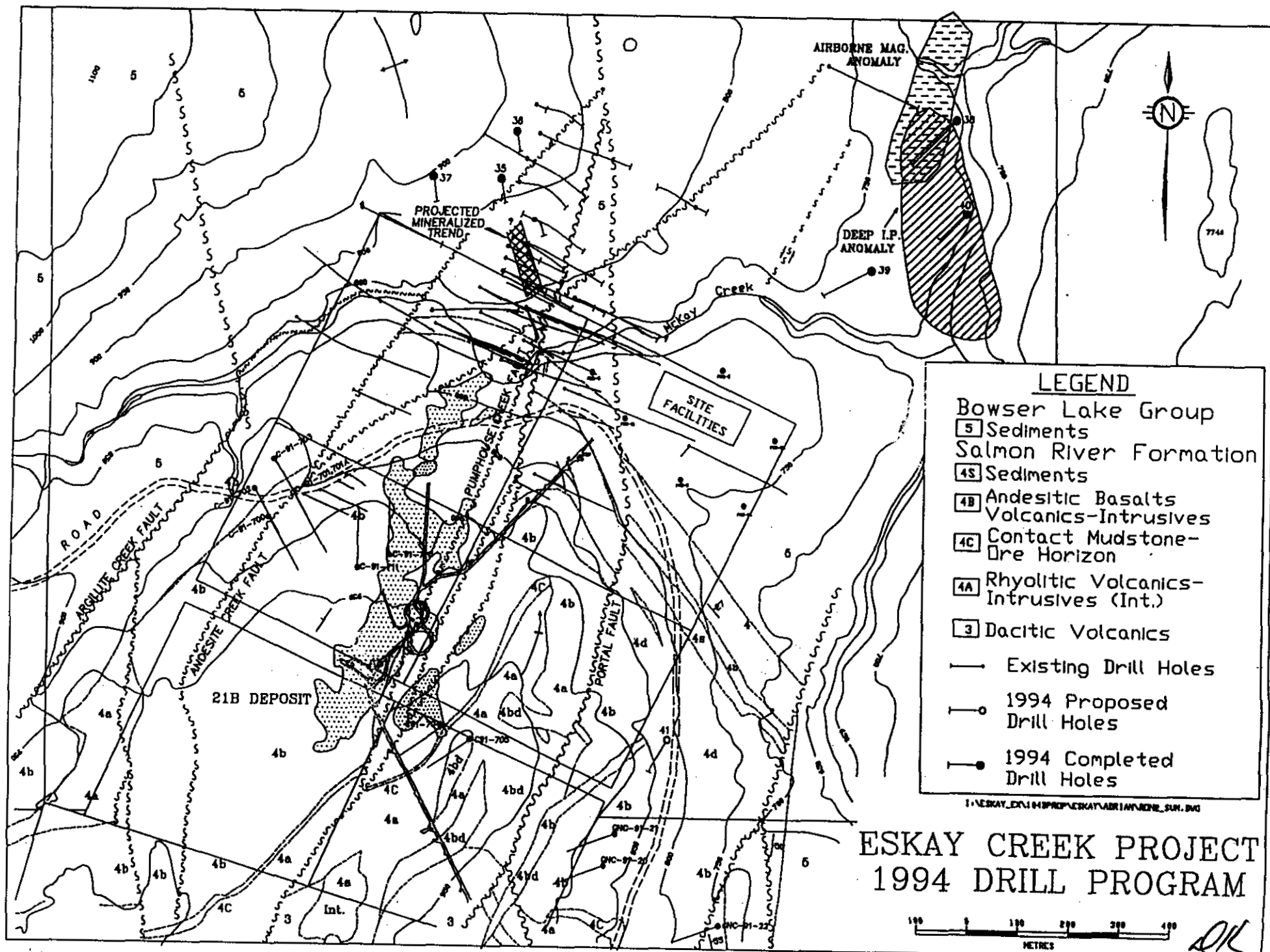


FIG.2.3.2

TABLE 2.1 1994 DRILL HOLE SUMMARY

| HOLE # | AZIMUTH* | DIP* | LENGTH m |
|--------------|----------|--------|----------------|
| ADL94-35 | 170 | -87.00 | 556.56 |
| ADL94-36 | 170 | -87.00 | 553.21 |
| ADL94-37 | 170 | -86.00 | 553.00 |
| ADL94-38 | 225 | -77.00 | 625.77 |
| ADL94-39 | 215 | -85.00 | 644.35 |
| ADL94-40 | 235 | -80.00 | 628.80 |
| TOTAL | | | 3561.70 |

A twenty person tent camp located on the GNC 1 claim about 1.4 km southwest of the IKS 1 and at km 56.2 on the Eskay Creek mine road provided accommodation for all personnel working on the program. Satellite communications were mainly via existing facilities at the old Eskay Creek exploration camp.

Northern Mountain Helicopters of Prince George B.C. were awarded a contract which required a Hughes 500D helicopter based at the camp. Advanced Drilling of Surrey B.C., were awarded the drill contract and utilized a Boyles 37A diamond drill in early parts of the program. A second drill was mobilized to the site by mid September to help complete the program on a more timely basis. Sperry Sun orientations were taken at 100 m intervals in all holes.

Geologically selected sample intervals were sawn or split and sent to Bondar Clegg and IPL laboratories, both of Vancouver. Samples were analyzed for Au, Ag by fire assay and Cu, Pb, Zn, As, Sb and Hg by ICP.

Geocoded core logs were entered directly into a portable computer enabling further processing by Micromine and Autocad software. The core was logged and stored at the core shack adjacent the old exploration camp. Core logs are in Appendix 1; assay certificates are in Appendix 2.

2.2 1994 PROGRAM

The 1994 program involved data compilation and interpretation of previous drill results and mapping on the Adrian ground to the north of the 21B Zone. This work indicated two areas, covered by 300 to 500 m of Bowser Group sediments, warranted drilled testing. They included Target One, a northwest mineralized trend on the west margin of the IKS claim and Target Two, an IP chargeability and magnetic anomaly on the east side of the IKS claim and north of the mill site area (Figs. 2.3.2a, 2.3.2).

To the south of Target One, analysis of data from previous drill holes allowed construction of elevation isopleths of the upper contact of the footwall rhyolite unit (Fig. 2.3.3). The contours were found to mimic structural trends based on surface maps of the overlying Bowser Group sediments and indicated similar deformation affected both the Hazelton and Bowser Group units. Major faults were also reconstructed to help estimate the direction and magnitude of offset of mineralized zones across the fault zones.

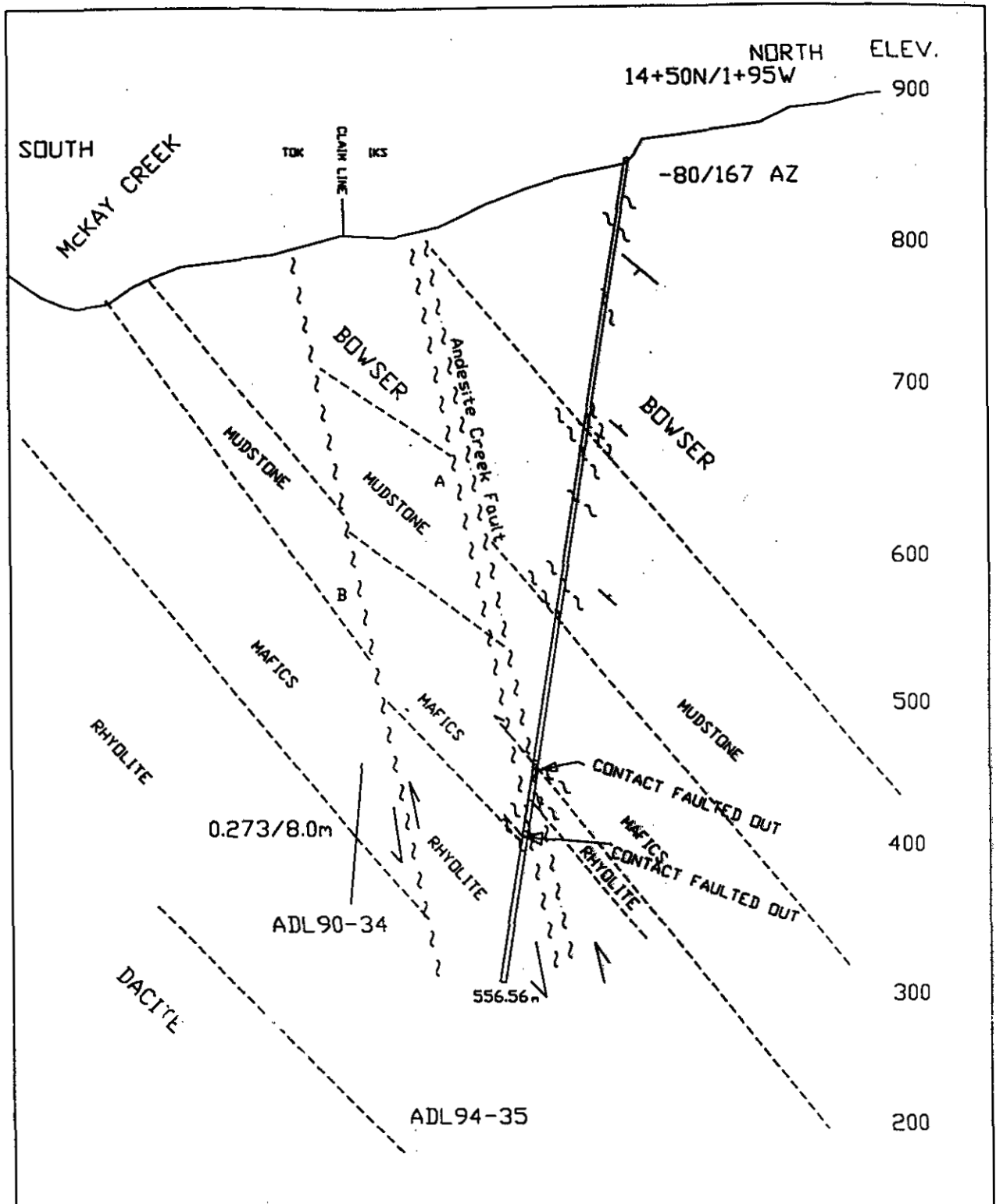
Three holes tested each of the two main target areas. Drill hole results are summarized on (Figs. 2.3.4 to 2.3.8) in the text as well as detailed sections (Figs. 2.3.4 to 2.3.9 in pocket). Detailed logs are in Appendix 1.

2.2.1 TARGET ONE

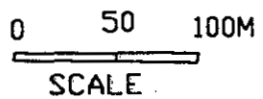
Target One, the northwest faulted extension of the mineralized trend intersected by 1990 drilling, was drill tested with three holes ADL94-35, 36 and 37 (Figs. 2.3.4,5 and 6).

Hole ADL94-35 was designed to intersect the proposed down dip extension of mineralization intersected in hole AD90-34. Hole 34 returned 0.273 opt Au over 8.0 m (Fig. 2.3.4) from a zone in the footwall of the Andesite Creek fault. The upper rhyolite contact isopleths were used to predict the offset caused by the Andesite Creek fault but did not predict a second deeper subparallel fault which appears to have a component of reverse movement of about 100 m. The contact zone on opposite sides of the Andesite Creek fault is severely faulted and thinned on the northwest side and displaced upwards on the southeast side of the fault.

Hole 94-35 intersected 198.0 m of Bowser Group silty mudstone overlying fault repeated mudstone and mafic flows and more typical bimodal mafic to felsic Salmon River Formation volcanics. Below these volcanics, the footwall rhyolite consists of a felsic, sand matrix, supported blocky ash flow which overlies flow breccias typical of the 21B mine stratigraphy. The rhyolite is strongly silicified, weakly sericitized and is unmineralized.

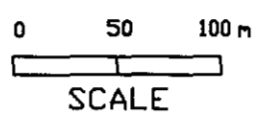
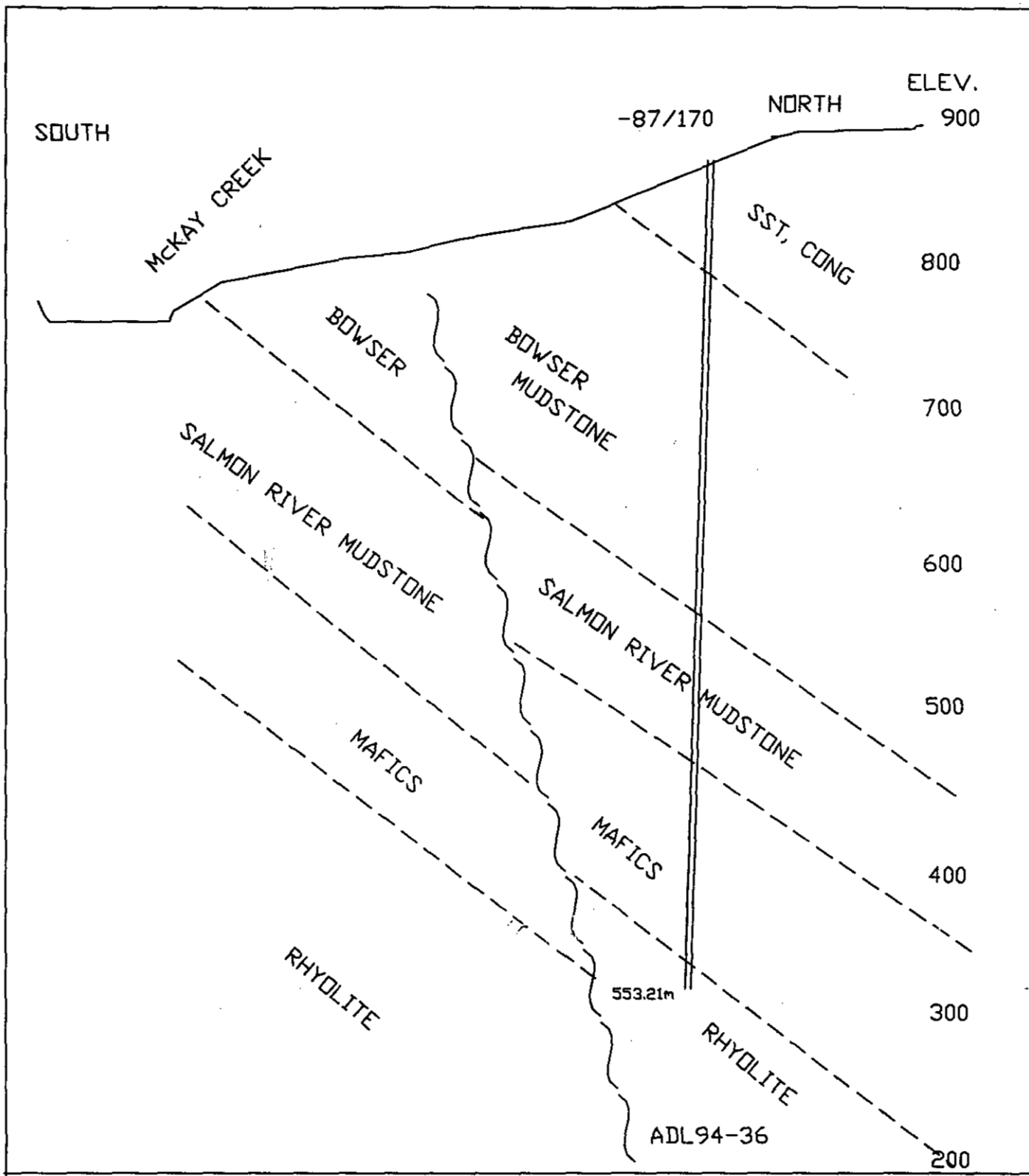


1994 ADRIAN DRILLING



DDH ADL94-35 *OK*

FIG. 2.3.4

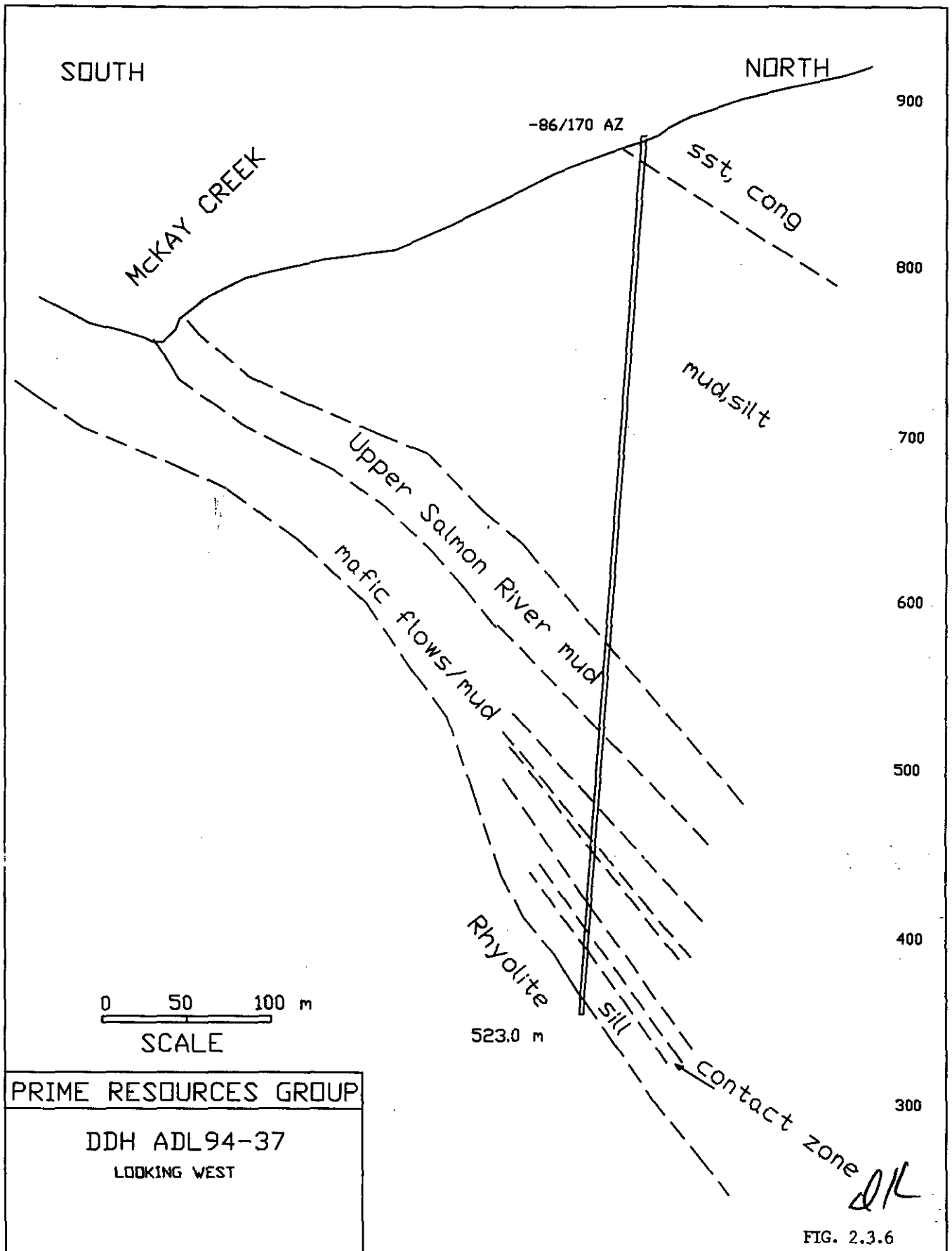


1994 ADRIAN DRILLING

DDH ADL94-36

DK

FIG.2.3.5



Pyritic sections of the upper Salmon River mudstones, intercalated middle Salmon River mudstone as well as the contact zone and footwall rhyolite were sampled. The highest Au value returned was 20 ppb; Cu, Pb, Zn, Ag, As Sb and Hg, were uniformly low.

Hole ADL94-36, collared on the footwall side of the Andesite Creek fault, was designed to intersect a possible fault offset of the down rake extension of the mineralized trend defined by the 1990 drill results. The hole intersected 299.98 m of Bowser Group conglomerate, sandstone and mudstone before penetrating upper pyritic laminated mudstone, mafic flows and sills and the footwall rhyolite of the Salmon River formation. The contact mudstone, between 533.68 and 536.66 m, contains well laminated to bedded pyrite but no significant base or precious metals. Gold averages 30 ppb in the hole. The highest Au value in the hole of 191 ppb is from a 2.0 m interval (sample # 24450) of pyritic laminated mudstone within mafic flows. This interval occurs at 425.6 m depth, about 110 m above the position of the rhyolite and contact mudstone, and is also anomalous in Zn, Ag and Sb.

Hole ADL94-37, north of the previous holes, was designed to penetrate untested permissive ground at right angles to the stratigraphy, based on the upper rhyolite contact isopleth map. The hole intersected a bimodal Salmon River volcanic suite similar to that at the mine, which is overlain by 303.6 m of Bowser Group sediments. A 5.3 m section of contact mudstone contains altered rhyolite fragments and is separated from the footwall rhyolite by a mafic sill. This sill has weakly bleached and hardened the mudstone. The underlying rhyolite consists of strongly silicified black matrix breccias. No mineralization is present in the rhyolite.

The most significant assay in hole 37 is from the contact mudstone which returned 59 ppb Au and 1038 ppm Zn over 1.6 m.

2.2.2 TARGET TWO

Target Two, the area of the chargeability-magnetic anomaly located north of the mine site facilities, was tested with holes ADL94-38 to 41. Holes are summarized on Figures 2.3.7 to 2.3.8 and detailed sections are on Figures 2.3.7a to 9a.

Hole 38 tested the coincident magnetic and chargeability anomaly in the northeast corner of the IKS claim. It intersected 139 m of upper Salmon River ash and pyritic mudstone that is weakly anomalous in Au, Ag and Zn. The hole did not intersect mafic volcanics or intrusives, but did penetrate a 4.3 m of siltstone above the contact of rhyolite flow breccias and volcanoclastics rocks measuring 20.2 m thick. No obvious mineralization was noted and there were no significant values from sampled intervals. The magnetic anomaly remains enigmatic.

Holes 39 and 40 were drilled roughly on the same section with hole 40 near the centre of the chargeability anomaly, whereas 39 is southwest of the anomaly in a relatively untested area north of McKay Creek. Both holes penetrated significant thickness of upper Salmon River mudstone that contain laminated pyrite (Fig. 2.3.8). Lower parts of the holes are dramatically different.

SOUTHWEST

MAG. ANOMALY

NORTHEAST

IP ANOMALY

-77/220

KETCHUM CREEK

700

600

500

400

300

200

100

BOWSER
MUDSTONE/SILTSTONE

SALMON RIVER
ASH/MUDSTONE

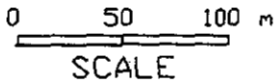
RHYOLITE

MUDSTONE

SST

SST/CONG

SILTSTONE



PRIME RESOURCES GROUP INC.

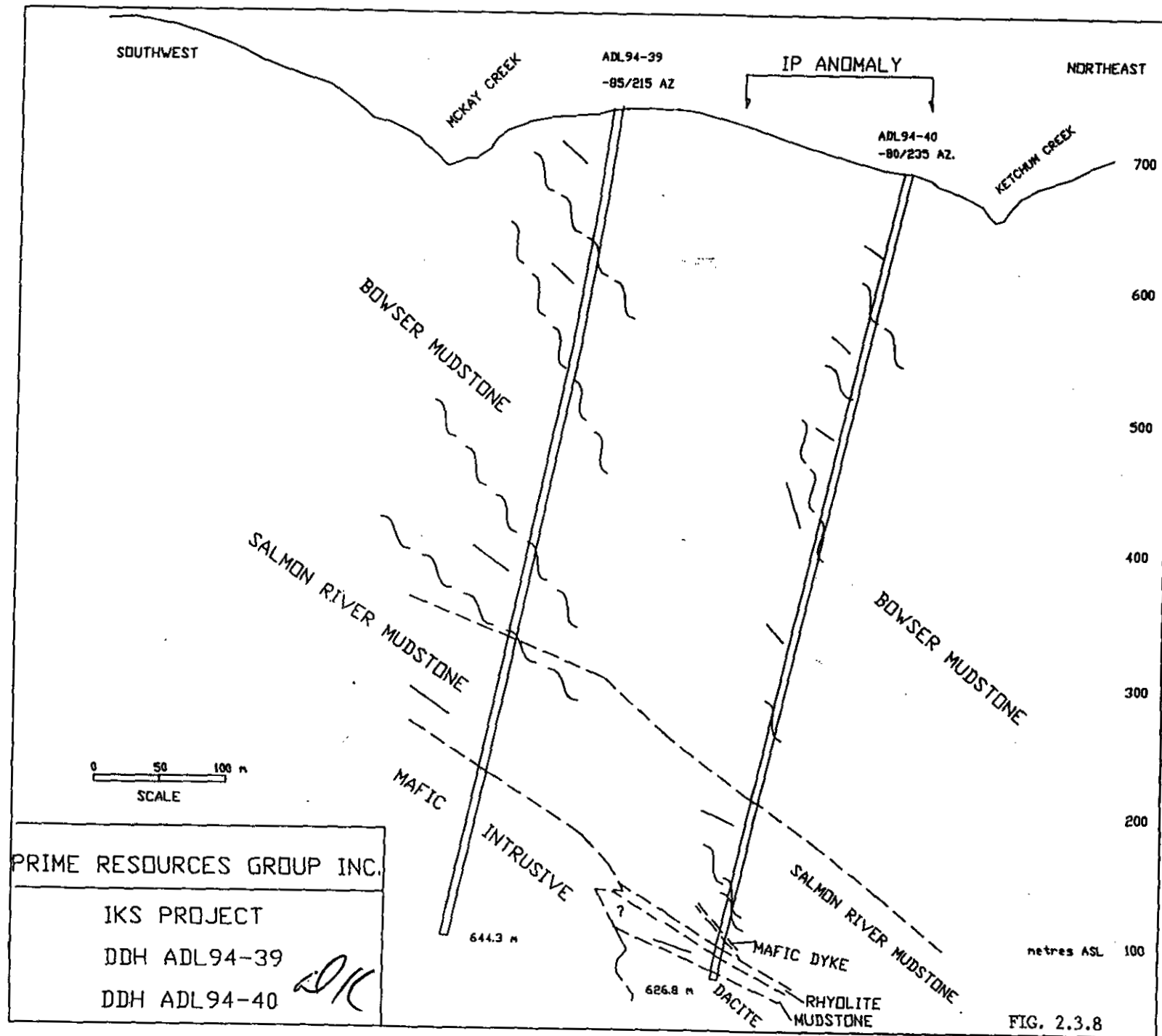
IKS PROJECT

DDH 94-38

OK

METRES ASL 0

FIG. 2.3.7



Hole 39 entered a mafic intrusive at 515 m and stayed in this unit until the end of the hole at 644 m. Hole 40 intersected 6.9 m of muddy felsic tuffs, then 15.4 m of underlying mudstones before penetrating a short distance into dacitic volcanics at the bottom of the hole. Mudstones below the rhyolite are weakly anomalous in Au, Zn and Sb. Neither hole contained obvious mineralized zones and assay results are low.

The IP chargeability anomaly probably reflects the abundant laminated pyrite in the upper Salmon River mudstone sequence.

3.0 GEOPHYSICS

Between October 9 and October 14, 1994, Delta Geoscience Ltd. Of Delta B.C conducted a down hole Pulse EM survey on four of the six 1994 drill holes. Prior to the survey, flush coupled PVC pipe was inserted into the holes to help prevent caving and loss of access. Computer strip logs of the various frequencies tested are in Appendix 4.

In Target One, holes ADL94-35 and 36 were probed. Hole 94-35 was tested from 230 m to 430 m, where the plastic pipe had been squeezed, preventing further penetration of the probe. This depth corresponds to the Andesite Creek fault zone. A minor conductor, detected at 415 m is the upper surface of the Andesite Creek fault Zone which truncates the contact zone.

Hole 94-36 was tested from 210 m to 360 m where again the plastic pipe was damaged by faulted ground located in the centre of the upper Salmon River mudstones. The pyritic contact zone could not be probed. No conductive material was detected in this hole.

In Target Two, holes ADL94-38 and 40 were probed. Hole 94-38 was tested throughout the entire length of the permissive stratigraphy between 320 and 600 m. A weak off-hole conductor at 590 m detected on the 1798 Hz channel probably reflects minor pyrite veins in the silty transition zone.

While probing, moderate pressure gas was noted escaping outside the plastic pipe in the hole. The gas, probably carbon dioxide, was expelled with bursts of water for a period of several minutes to a height of 15 m above the collar.

Hole ADL94-40 was tested between 200 and 500 m due to blockage of the pipe. The lower end of the survey tested the upper Salmon River mudstone but did not test contact zone strata. Weak-off hole noise was detected on the higher frequency at this depth.

4.0 WHOLE ROCK GEOCHEMISTRY

Rhyolite flows or tuffaceous equivalents were analyzed for major element oxides. Al_2O_3/TiO_2 ratios range from 97.5 to 160.9 which fit with the rest of the 21B footwall rhyolite values indicating a titanium depleted parent rock. The potassium is predictably low but the Na is lower than the 21B footwall rhyolites. Low MgO, indicates a lack of chloritic alteration characteristic of the 21B footwall alteration. Sample 9439593.0, from hole

ADL94-39 at 593.0 m, is a mafic intrusive that has similar chemistry to the Salmon River mafic flows overlying the 21B deposit and may be a feeder dyke. Whole rock analytical certificates are in Appendix 3.

5.0 CONCLUSIONS and RECOMMENDATIONS

The 1994 drilling program on the IKS 1 mineral claim tested two target areas for 21B style stratiform precious and base metal deposits. Testing of the Target One area on the western portion of the claim intersected typical 21B style bimodal mafic overlying felsic volcanics. The 21B "contact zone" stratigraphic interval in this target area is not mineralized and is fault complicated. No significant precious or base metal assays were returned from core. The footwall rhyolite is lithologically similar to rhyolites beneath the 21B deposit but lacks any mineralization and are only weakly sericite or chlorite altered.

Lithologies intersected in the Target Two area, on the east limb of the Eskay Creek Anticline indicate a significant change in stratigraphy from the 21B or Target One area. The thick hangingwall mafic flows are totally absent from the stratigraphy and the footwall rhyolite is represented by thin brecciated rhyolite, possibly flows (ADL94-38) or volcanoclastic distal equivalents containing intercalated felsic tuffs and silty mudstone(ADL94-40). The thick mafic intrusive intersected in the bottom of ADL 94-39 may mark the eastern boundary of a second order paleobasin which restricted the northward and eastward deposition of the volcanic lithologies hosting the 21 Zone deposits.

The lack of anomalous base or precious metal values, high density of mafic dykes, structural complications and depth to permissive stratigraphy downgrades the Target One area as a priority exploration target. A lack of thick bimodal volcanics of Salmon River downgrades the exploration potential of Target Two.

Bore hole geophysics failed to detect any off hole conductors which warrant further drill testing.



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STATEMENT OF QUALIFICATIONS

I. DAVID L. KURAN of 25630 Bosonworth Avenue, in the municipality of Maple Ridge, British Columbia, hereby certify that:

1. I am a graduate of the University of Manitoba(1978) and hold a B.Sc. in Geology.
2. I am a fellow of the Geological Association of Canada.
3. I am a Member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
4. I have been employed in my profession as an Exploration Geologist in Canada, U.S.A., and Mexico since graduation.
5. I am presently employed by Homestake Canada Inc. of 1000-700 West Pender St., Vancouver, B.C. as a Senior Project Geologist.
6. The work described in this report was personally supervised by the author in the field.
7. I consent to the use of this report concerning a portion of the 1994 diamond drilling program, carried out on the IKS mineral claims in the Skeena Mining Division for all corporate purposes relating to Prime Resources Group Inc., Homestake Canada Inc., and Adrian Resources Ltd.

Signed at Vancouver, British Columbia this day of November 1994.



DAVID L. KURAN, Geoscientist, F.G.A.C.

APPENDIX 1

CORE LOGS

HOMESTAKE CANADA

DIAMOND DRILL HOLE LOG

ADL9435

| | | | |
|--|----------------------------|-------------------------------|----------------------------------|
| PROJECT: Adrian 1994 | Date Commenced: JULY 26/94 | Contractor: ADVANCED DRILLING | Logged by: DLK Geotech by: JL |
| DRILL HOLE: ADL9435 | Date Completed: AUG. 8/94 | | |
| LENGTH: 556.56 | Core Diam: NQ | | |
| Collar Location | | | |
| Latitude: 20143.00 Departure: 22013.00 Elevation: 857.00 | | | |

S U M M A R Y

| | | DOWN HOLE SURVEYS | | | Method |
|---------------|------------------------------|-------------------|--------|--------|------------|
| | | Depth | Azim | Inclin | |
| 0.00-6.32 | CASING | | | | |
| 6.32-53.30 | LAMINATED MUDSTONE | 0.00 | 170.00 | -87.00 | BRUNTON |
| 53.30-123.05 | LAMINATED MUDSTONE | 91.00 | 0.00 | -90.00 | SPERRY SUN |
| 123.05-124.50 | SILTSTONE | 182.00 | 0.00 | -90.00 | SPERRY SUN |
| 124.50-131.00 | LAMINATED MUDSTONE | 275.00 | 249.00 | -87.20 | SPERRY SUN |
| 131.00-134.00 | INTERBEDDED MUDS./SILTSTONE | 365.00 | 232.00 | -86.50 | SPERRY SUN |
| 134.00-160.30 | LAMINATED MUDSTONE | 457.00 | 213.00 | -86.00 | SPERRY SUN |
| 160.30-170.35 | INTERBEDDED MUDS./SILTSTONE | 553.00 | 210.00 | -86.50 | SPERRY SUN |
| 170.35-185.30 | LAMINATED MUDSTONE | | | | |
| 185.30-198.00 | MASSIVE MUDSTONE | | | | |
| 198.00-257.60 | LAMINATED MUDSTONE | | | | |
| 257.60-263.96 | LAMINATED MUDSTONE | | | | |
| 263.96-313.90 | LAMINATED MUDSTONE | | | | |
| 313.90-322.80 | LAMINATED MUDSTONE | | | | |
| 322.80-323.50 | ANDESITE FLOW | | | | |
| 323.50-324.60 | LAMINATED MUDSTONE | | | | |
| 324.60-351.60 | ANDESITE PILLOW BRECCIA | | | | |
| 351.60-352.60 | MUDSTONE DEBRIS FLOW | | | | |
| 352.60-369.00 | ANDESITE FLOW | | | | |
| 369.00-372.70 | LAMINATED MUDSTONE | | | | |
| 372.70-381.00 | ANDESITE PILLOW BRECCIA | | | | |
| 381.00-393.90 | MASSIVE MUDSTONE | | | | |
| 393.90-398.00 | ANDESITE BRECCIA | | | | |
| 398.00-399.65 | MASSIVE MUDSTONE | | | | |
| 399.65-405.90 | ANDESITE BRECCIA | | | | |
| 405.90-408.70 | LAMINATED MUDSTONE | | | | |
| 408.70-410.00 | ANDESITE PILLOW BRECCIA | | | | |
| 410.00-411.15 | MASSIVE MUDSTONE | | | | |
| 411.15-413.45 | ANDESITE DYKE/INTRUSIVE | | | | |
| 413.45-415.75 | MASSIVE MUDSTONE | | | | |
| 415.75-437.10 | AUTOBRECCIATED RHYOLITE FLOW | | | | |
| 437.10-437.50 | ANDESITE DYKE/INTRUSIVE | | | | |
| 437.50-439.80 | AUTOBRECCIATED RHYOLITE FLOW | | | | |
| 439.80-444.50 | ANDESITE BRECCIA | | | | |
| 444.50-451.50 | ANDESITE DEBRIS FLOW | | | | |
| 451.50-454.80 | RHYOLITE BLOCKY ASH FLOW | | | | |
| 454.80-528.40 | AUTOBRECCIATED RHYOLITE FLOW | | | | |
| 528.40-545.50 | FLOWBANDED RHYOLITE FLOW | | | | |
| 545.50-556.56 | AUTOBRECCIATED RHYOLITE FLOW | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|---------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.00 | 6.32 | CASING | | | | | | | | | | | |
| 6.32 | 53.30 | LAMINATED MUDSTONE Aphanitic, dark gray, laminated, broken bedding 62°:fracturing 45° :Vns =1/m 1% qz veining - stockwork 1% pyrite - coatings Badly broken, well laminated to thinly bedded mudstone with interlaminated fine light grey very fine silty laminations. Bedding on the .5-2.0 cm scale. Interval contains numerous rubble zones with graphitic slip surfaces on fragments. Larger fault zones contain minor quartz and or carbonate veining. 1-2 cm silty bands show scoured bases and fine graded bedding. | | | | | | | | | | | |
| | 7.92-8.23 | Crushed zone, minor sand | | | | | | | | | | | |
| | 11.0-11.5 | 5% quartz/carbonate veining @30 deg. | | | | | | | | | | | |
| | 13.8 | Belmenite, bedding at 40 deg. | | | | | | | | | | | |
| | 17.1-17.8 | Crushed zone, 1% 2 mm quartz stringers | | | | | | | | | | | |
| | 23.5 | Fine graded silt beds @ 40 deg. | | | | | | | | | | | |
| | 27.9-28.05 | Fault zone, minor gouge, 25% quartz veins. | | | | | | | | | | | |
| | 34.5 | Beds @ 45 deg. | | | | | | | | | | | |
| | 36.3 | 20 cm cave. | | | | | | | | | | | |
| | 38.0 | 2x4 cm very fine grained pyrite concretion. | | | | | | | | | | | |
| | 39.2-39.7 | Sheared, moderate foliation @ 45 deg healed by fine quartz/carbonate veins. | | | | | | | | | | | |
| | <28.40-29.90> | Aphanitic, dark gray, rubbly, crushed bedding 30°:fracturing 15° Fra=30/m :Vns =3/m 1% silica alteration - microveins .1% chlorite alteration - coatings 1% qz veining - stockwork .5% carbonate veining - stockwork .2% pyrite - present Broken and rubble core, abundant slick surfaces, minor | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------|--------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | gouge. | | | | | | | | | | | |
| | | <32.00-33.50> Aphanitic, dark gray, rubbly, crushed Badly broken and rubbly, slickensides are graphite and carbonate. | | | | | | | | | | | |
| | | <45.80-53.30> Aphanitic, dark gray, rubbly, crushed :fracturing 15° Frs=50/m :Vns =6/m 5% silica alteration - present .1% chlorite alteration - coatings 1% carbonate alteration - coatings 5% qz veining - macroveins 2% carbonate veining - coatings 2% qz-carb veining - macroveins Thick section of rubble and gouge, numerous enastomosing qz breccia veins and veins. | | | | | | | | | | | |
| 53.30 | 123.05 | LAMINATED MUDSTONE Aphanitic, black, laminated, broken bedding 78°:qz carb veining 40° Frs=10/m :Vns =4/m 3% silica alteration - macroveins 1% clay alteration - present .5% graphite - coatings Thick unit of fine grained dark grey/black 1-3 cm beds. Unit fairly massive. Local sections are rhythmically banded black/dark grey at a .5-1 cm scale. Bedding swings to 20 deg. near faults but average 80 deg. | | | | | | | | | | | |
| | | 53.3 Beds @ 62 deg. | | | | | | | | | | | |
| | | 53.5-53.7 10% .5 cm qtz veins @ 30 deg. | | | | | | | | | | | |
| | | 58.60 Beds @ 15 deg. | | | | | | | | | | | |
| | | 59.0-60.7 Rubble, graphitic slip surfaces. | | | | | | | | | | | |
| | | 62.4 2 cm ribbon QC vein @ 20 deg. | | | | | | | | | | | |
| | | 62.7 Beds @ 50 deg. | | | | | | | | | | | |
| | | 63.2-64.1 Sheared zone, contorted beds, 15% stockwork qz veins and blebs. | | | | | | | | | | | |
| | | 66.0-66.15 Fault, graphitic slips @ 47 Deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|-------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 67.5 | Faint grain size difference defines bedding @ 90 deg. | | | | | | | | | | | |
| | 71.0 | 1 cm bed of laminated white carbonate overlying very fine greenish-grey silt @ 90 deg. | | | | | | | | | | | |
| | 71.7-71.8 | Quartz/carb breccia vein @ 83 deg, contains 1 mm brown sphalerite grain. | | | | | | | | | | | |
| | 72.0-73.0 | Broken core, 15% quartz/carbonate breccia vein healed. | | | | | | | | | | | |
| | 73.5 | 5 cm black sandy gouge @ 90 deg. | | | | | | | | | | | |
| | 79.0 | 1 cm very fine light grey beds @ 86 deg. | | | | | | | | | | | |
| | 80.5 | 6 cm qtz/carb breccia vein @ 90 deg. | | | | | | | | | | | |
| | 85.1 | Hairline faults are east-west trending, dipping south @ 35 deg and offset laminated beds on a cm scale down to the south. | | | | | | | | | | | |
| | 92.75 | 2 cm qtz vein @ 75 deg. | | | | | | | | | | | |
| | 93.2-94.0 | Trace fine pyrite disseminated along carbonate bearing silty beds. | | | | | | | | | | | |
| | 95.1 | 5 cm breccia vein, quartz on outside is earlier than light grey carbonate filled core. | | | | | | | | | | | |
| | 97.0 | 3 cm light grey slightly calcareous beds separated by 3 mm black mud @ 84 deg. | | | | | | | | | | | |
| | | Unit getting slightly coarser, lighter grey beds to 3 cm thick separated by 1 cm black mud beds are up to fine silt size. | | | | | | | | | | | |
| | 104.0 | 1 cm fine pyrite concretion, beds @ 78 deg. | | | | | | | | | | | |
| | 105.9-106.1 | Shear, broken core, graphitic slips @ 27 deg. | | | | | | | | | | | |
| | 108.0 | Shear, 30 cm broken core, graphitic slips @ 15 deg. | | | | | | | | | | | |
| | 109.0 | Beds @ 66 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|---------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 114.0-116.4 | Shattered, minor graphitic slips, 10% quartz vein healed. | | | | | | | | | | | |
| | 119.0 | Shear, broken core, graphitic slip surfaces. | | | | | | | | | | | |
| | 120.0 | Weak shear, carbonate breccia veins. | | | | | | | | | | | |
| | 120.8 | Beds @ 82 deg. | | | | | | | | | | | |
| | <55.90-58.20> | Aphanitic, black, rubbly, crushed :fracturing 62° Frs=30/m :Vns =2/m 1% silica alteration - microveins 1% clay alteration - present Badly fractured, minor clay gouge, graphitic slip surfaces are 80% bedding parallel. Lost core in void at 56.46. | | | | | | | | | | | |
| | <86.00-93.40> | Aphanitic, black, rubbly, broken bedding 72°:fault/gouge 15° Frs=60/m :Vns =2/m 2% silica alteration - present 1% clay alteration - present 1% graphite - coatings 3% qz veining - macroveins 2% carbonate veining - microveins Wide fault zone with numerous 20-40 cm graphitic gouge zones and minor quartz carbonate veins and stringers. Unit is moderately pervasively silicified. | | | | | | | | | | | |
| 123.05 | 124.50 | SILTSTONE Fine grained, dark gray, massive, graded bedding 80°:shear 37° Frs=8/m :Vns =6/m 6% silica alteration - macroveins 1% carbonate alteration - coatings 1% graphite - coatings 6% qz veining - macroveins 3% qz-carb veining - macroveins Massive medium to coarse grained siltstone. Rare .5 cm beds of mud @ 80 deg. Unit poorly graded. Bottom 30 cm is a ribboned qc vein @ 75 deg. | | | | | | | | | | | |
| 124.50 | 131.00 | LAMINATED MUDSTONE Aphanitic, dark gray, bedded, laminated | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | bedding 77°:fault/gouge 30° Frs=10/m :Vns =3/m 1% carbonate alteration - coatings 4% qz veining - macroveins 4% qz-carb veining - macroveins Finely laminated to banded interbedded black mudstone and fine dark grey siltstone. Unit broken and contains fault zone. | | | | | | | | | | | |
| | | <126.50-127.80> Aphanitic, black, rubbly, crushed fault/gouge 30° Frs=35/m :Vns =6/m 3% carbonate alteration - present 5% clay alteration - gouge 10% qz-carb veining - macroveins Fault zone, upper and lower graphitic slips and clay gouge @ 30 deg. Center of zone healed by qc breccia veins. | | | | | | | | | | | |
| 131.00 | 134.00 | INTERBEDDED MUDS./SILTSTONE Fine grained, dark gray, bedded, laminated bedding 77°:fracturing 30° Frs=5/m Rhythmically interbedded dark grey mudstone and light grey 1-3 cm fine graded silt beds. Bases of silty layers show good load casts, minor scours and cross beds all indicating tops are up hole. | | | | | | | | | | | |
| 134.00 | 160.30 | LAMINATED MUDSTONE Dark gray, bedded, laminated bedding 75°:fracturing 45° Frs=50/m 2% carbonate alteration - microveins 2% clay alteration - gouge 2% graphite - coatings 2% qz veining - macroveins 4% qz-carb veining - macroveins Thick section of well bedded, finely laminated interbedded fine mud and slightly silty mud. Contains rare .5 cm very fine light grey ashy layers with minor very fine pyrite. Interval is cut by several sheared zones and minor qc veins. Base of silty layers show loads and flames. | | | | | | | | | | | |
| | | 134.7 Bedding @ 76 deg. | | | | | | | | | | | |
| | | 135.7-136.0 Fault, rubble and gouge zone. | | | | | | | | | | | |
| | | 139.54 1 cm qc vein @ 50 deg, (60 to the north) has | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-----------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | tension tears adjacent indicating a motion of down to the south. | | | | | | | | | | | |
| | 141.25 | 3 mm pyrite lam. | | | | | | | | | | | |
| | 146.5 | Beds @ 56 deg. | | | | | | | | | | | |
| | 149.0 | Cross beds. | | | | | | | | | | | |
| | 150.4-150.7 | Rubble | | | | | | | | | | | |
| | 151.2 | 30 cm bedding parallel gougy shear @ 82 deg. | | | | | | | | | | | |
| | 154.0 | Beds @ 65 deg. | | | | | | | | | | | |
| | <155.10-160.30> | Aphanitic, black, rubbly, crushed fault/gouge 40°:qz_carb veining 45° Frs=50/m 4% clay alteration - gouge 4% graphite - coatings 4% qz-carb veining - macroveins Wide fault zone with narrow gouge zones of black graphitic clay hosting contorted qc veins and broken veins. Upper and lower contacts sharp @ 40 and 55 deg respectively. | | | | | | | | | | | |
| 160.30 | 170.35 | INTERBEDDED MUDS./SILTSTONE Black, bedded, laminated bedding 57°:fracturing 40° Frs=11/m 1% carbonate alteration - present .5% clay alteration - gouge 2% qz-carb veining - microveins Interbedded fine laminated mudstone and slightly calcareous graded light grey medium to fine silt. Silt beds 1-10 cm thick separated by 1-3 cm laminated mudstone. Bases of silt beds show loads, scours and minor cross beds. Unit is weakly sheared and contains numerous graphitic bedding parallel slick surfaces. Lower contact sheared and fault gouge. | | | | | | | | | | | |
| 170.35 | 185.30 | LAMINATED MUDSTONE Aphanitic, black, bedded, rubbly bedding 48°:fracturing 30° Frs=75/m 4% clay alteration - gouge 2% graphite - coatings 3% qz veining - macroveins | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 2% qz-carb veining - macroveins Poorly laminated, finely bedded mudstone. Unit badly fractured with numerous narrow gouge zones and minor qc veins. | | | | | | | | | | | |
| | | 170.35-170.6 Fault, graphitic gouge @ 50 deg. | | | | | | | | | | | |
| | | 173.8 5 cm gouge zone @ 80 deg. | | | | | | | | | | | |
| | | 174.4 4 cm light grey very fine ash band with 3% fine black particles. Basal 1 cm of this bed is a ribboned silica layer precipitated as part of the bed. Bedding @ 48 deg. | | | | | | | | | | | |
| | | 181.3 .5 cm light grey ash layer with .5 mm lams of fine silica @ 70 deg. | | | | | | | | | | | |
| | | <174.50-181.00> Fine grained, black, rubbly, graded bedding 43°:fracturing 30° Frs=75/m Wide fault zone containing abundant gouge zones, rubble and graphitic slip surfaces @ 38 deg. | | | | | | | | | | | |
| | | 177.2-177.4 Gouge, lost 60 cm core. | | | | | | | | | | | |
| | | <181.80-185.30> Aphanitic, black, rubbly, graded bedding 72°:fracturing 30° Frs=75/m :Vns =2/m 3% clay alteration - gouge 1% qz-carb veining - macroveins Fault zone, core badly broken, contains discrete zones of black clay gouge and graphitic slip surfaces. | | | | | | | | | | | |
| | | 182.3-182.7 Gouge | | | | | | | | | | | |
| | | 184.0 7 cm gouge in 60 cm broken core | | | | | | | | | | | |
| 185.30 | 198.00 | MASSIVE MUDSTONE Aphanitic, black, massive, rubbly bedding 75°:fracturing 34° Frs=50/m 4% silica alteration - macroveins 3% clay alteration - gouge 2% graphite - coatings 3% qz veining - macroveins | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | .5% carbonate veining - microveins Badly fractured and locally gouged massive mudstone. Unit contains numerous rubble zones and minor gouge zones with associated QC breccia veins. | | | | | | | | | | | |
| | | 186.0-186.2 Black gouge with 5 cm bounding quartz veins @ 78 deg. | | | | | | | | | | | |
| | | 189.8-190.2 Soft gougy sheared mudstone. | | | | | | | | | | | |
| | | 191.1-191.3 Rubble, gouge. | | | | | | | | | | | |
| | | 192.9-193.2 Rubble, gouge. | | | | | | | | | | | |
| | | 193.1-193.4 Rubble, clay gouge. | | | | | | | | | | | |
| | | 194.5-195.1 Rubble, gouge. | | | | | | | | | | | |
| | | 197.5-198.0 Gouge @ 82 deg. | | | | | | | | | | | |
| 198.00 | 257.60 | LAMINATED MUDSTONE Aphanitic, black, bedded, rubbly bedding 73°:fracturing 60° Frs=58/m :Vns =1/m 1% silica alteration - macroveins 2% clay alteration - gouge 3% graphite - coatings 1% qz veining - macroveins .5% pyrite - present Fairly well laminated to thinly bedded black mudstone with 20% 1-3 cm light grey silty beds. Interval contains rare .5 cm very fine grained pyrite beds, may be top of Upper Salmon River mudstones. Unit is broken with several narrow gouge zones. Unit contains several 7 cm laminated, granular carbonate beds which contain up to 10% pyrite. | 24401 | 217.90-218.40 | 0.50 | 3 | 0.1 | 37 | 186 | 49 | 38 | 1 | 8 |
| | | | 24402 | 236.40-236.90 | 0.50 | 3 | 0.1 | 22 | 229 | 41 | 11 | 1 | 3 |
| | | | 24403 | 253.80-254.30 | 0.50 | 8 | 0.1 | 13 | 193 | 26 | 9 | 1 | 3 |
| | | 203.5-203.9 Rubble, clay gouge. | | | | | | | | | | | |
| | | 205.6 .5 cm fine pyrite bed at 78 deg. | | | | | | | | | | | |
| | | 206.7-206.8 Rubble, clay gouge. | | | | | | | | | | | |
| | | 206.8-206.9 10 cm light grey finely laminated soft ash bed @ 80 deg. | | | | | | | | | | | |
| | | 207.2-207.4 Light grey very fine grained ash band. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|-------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 211.4 | Very fine laminated; light grey 6 cm ash bed @ 80 deg. Shows 3 mm scale offsets on micro faults. | | | | | | | | | | | |
| | 211.80 | 5 cm black gouge. | | | | | | | | | | | |
| | 212.0-212.1 | 10X 3 mm white quartz veins in rubble. | | | | | | | | | | | |
| | 213.6-214.3 | Rubble and gouge. | | | | | | | | | | | |
| | 217.93 | 8 cm laminated, graded granular carbonate bed with 10% fine euhedral disseminated pyrite @ 73 deg. | | | | | | | | | | | |
| | 220.9-221.4 | Rubble, minor broken quartz veins. | | | | | | | | | | | |
| | 221.6 | 1 cm spaced .5 cm ash bands @ 67 deg. | | | | | | | | | | | |
| | 224.5 | 21 cm pyritic beds. | | | | | | | | | | | |
| | 226.1 | Beds @ 38 deg. | | | | | | | | | | | |
| | 226.5 | Beds @ 87 deg. | | | | | | | | | | | |
| | 227.4-227.8 | Fault, sheared and gouged, 10% broken quartz veins. | | | | | | | | | | | |
| | 229.55 | 20 cm section of disrupted and fluidized beds. Broken and rotated laminated mudstone clasts to 1x2 cm in black non stratified mud matrix. | | | | | | | | | | | |
| | 229.2-229.7 | Fault, gouge and graphitic slips. Motion appears to be mostly bedding parallel @ 76 deg. | | | | | | | | | | | |
| | 230.4 | 5 cm clay gouge shear @ 52 deg. | | | | | | | | | | | |
| | 232.7 | Pyritic graded ash beds to 1 cm @ 46 deg. | | | | | | | | | | | |
| | 234.0-234.5 | Fault, fabric is bedding parallel @ 65 deg. | | | | | | | | | | | |
| | 236.65 | 7 cm graded heterolithic debris flow. Bed contains 60% .3 mm siliceous grains, 30% argillite clasts and 10% fine euhedral pyrite which grades up and decreases in content up. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-----------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 236.9-237.1 | Fault, contorted gouge with 5% broken QC veins. | | | | | | | | | | | |
| | 239.2 | 4 cm QC vein @ 85 deg. 1-2 mm spalerite vein. | | | | | | | | | | | |
| | 242.1-243.2 | Fault, black clay gouge and 5% broken qtz veins. | | | | | | | | | | | |
| | 246.1 | Pyritic ash bed @ 41 deg. | | | | | | | | | | | |
| | 247.7-248.7 | Fault, gouge @ 45 deg, normal to bedding. | | | | | | | | | | | |
| | 251.0 | Beds @ 61 deg. | | | | | | | | | | | |
| | 254.0 | 7 cm graded, laminated clastic bed containing 10% fine graded pyrite. | | | | | | | | | | | |
| | 255.0 | Beds @ 65 deg. | | | | | | | | | | | |
| | 256.6 | 10 cm b/w ribboned qtz. Vein in shear @ 60 deg. | | | | | | | | | | | |
| | <207.40-208.50> | Fine grained, black, rubbly, crushed fault/gouge 51° Fault zone, rubble, last 10 cm black clay gouge. | | | | | | | | | | | |
| 257.60 | 263.96 | LAMINATED MUDSTONE Gray, bedded, graded bedding 52°:fracturing 38° Frs=7/m :Vns =7/m .5% silica alteration - microveins .5% qz veining - microveins Rhythmically interbedded black mudstone and light grey sandy silt beds up to 10 cm. Silty beds show great cross beds and create loads, scours and flames in the mudstone intervals. Two directions of 1 mm carbonate fracture filling one normal to the beds and the other orthogonal, 20 deg off the strike of the beds. | | | | | | | | | | | |
| 263.96 | 313.90 | LAMINATED MUDSTONE Black, bedded, laminated bedding 46°:fracturing 34° Frs=5/m .5% qz veining - microveins | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------------|----|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | .5% pyrite - present Upper Salmon River pyjama beds. Interbedded soft fine grained light grey finely pyritic ash beds to 3 cm intercalated with laminated black carbonaceous mudstone. Rare 1-3 mm fine pyrite lamination. | | | | | | | | | | | |
| 270.0 | | Ash lams spaced at 1/10 cm @ 38 deg. | | | | | | | | | | | |
| 273.1 | | Slightly soft sed contorted silty ash lams @ 50 deg. | | | | | | | | | | | |
| 276.1 | | Beds @ 50 deg. | | | | | | | | | | | |
| 277.4-278.1 | | Fault, rubble gouge @ 30 deg. | | | | | | | | | | | |
| 280.1-280.5 | | Fault, rubble, clay gouge and contorted broken 1 cm pyrite lams. | | | | | | | | | | | |
| 282.3-282.9 | | Fault, rubble, minor gouge. | | | | | | | | | | | |
| 287.0 | | Beds @ 46 deg. | | | | | | | | | | | |
| 288.8-289.8 | | Fault zone, rubble, 20 cm gouge at top and bottom of interval. | | | | | | | | | | | |
| 290.4 | | 1 cm fine pyrite beds @ 68 deg. | | | | | | | | | | | |
| 291.2-291.5 | | Fault zone, rubble, gouge. | | | | | | | | | | | |
| 292.6-293.6 | | Fault zone, rubble, minor gouge. | | | | | | | | | | | |
| 294.0 | | Beds, laminations @ 83 deg. | | | | | | | | | | | |
| 297.5-298.2 | | Fault zone, all black gouge. | | | | | | | | | | | |
| 300.0 | | Beds @ 40 deg. | | | | | | | | | | | |
| 302-302.97 | | Fault, rubble, gouge | | | | | | | | | | | |
| 303.0-304.3 | | 1-2 cm ash bands are silicified to a pale blue color. | | | | | | | | | | | |
| 304.3-304.9 | | Fault, 20% qc veins, broken core and gouge. | | | | | | | | | | | |
| 306.0 | | Ash and fine pyrite bands @ 33 deg. | | | | | | | | | | | |
| 310.6 | | Beds @ 40 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--|--|--|-------------------------------|--|----------------------------------|---|----------------------------------|-----------------------------------|----------------------------|----------------------------------|
| | | 311.6-312.1 Shear, carbonate stringers. | | | | | | | | | | | |
| | | 313.2-313.9 Fault, black gouge. | | | | | | | | | | | |
| 313.90 | 322.80 | LAMINATED MUDSTONE Aphanitic, black, bedded, laminated bedding 57°:fracturing 15° Frs=5/m .5% silica alteration - present 5% pyrite - laminations Well laminated to thinly bedded black carbonaceous mudstone containing 2-10 mm fine light bluish grey ash and 1-4 mm very fine pyrite laminations. Unit shows minor soft sediment deformation. | 24404 24405 24406 24407 24408 24409 | 314.00-315.50 315.50-317.00 317.00-319.50 319.50-321.00 321.00-322.50 322.50-322.80 | 1.50 1.50 2.50 1.50 1.50 0.30 | 13 16 12 3 5 3 | 1.5 2.0 1.7 1.2 0.4 0.1 | 17 20 17 13 13 11 | 688 406 1338 991 881 277 | 67 68 78 75 70 35 | 48 70 112 65 52 27 | 2 1 2 1 1 1 | 30 31 47 42 51 32 |
| 322.80 | 323.50 | ANDESITE FLOW Fine grained, brown, vesicular, bleached contact 61°:fracturing 75° Frs=1/m 3% carbonate alteration - present 1% pyrite - microveins Fractured mafic, possibly a flow, upper contact is 1cm fine hyaloclastite underlain by 5 cm of fine amydules. Unit carbonate altered and weakly fractured, healed by fine pyrite. Lower contact sharp at 75 deg. | | | | | | | | | | | |
| 323.50 | 324.60 | LAMINATED MUDSTONE Fine grained, black, bedded, contorted bedding 50° Frs=3/m 3% carbonate alteration - present 6% pyrite - laminations Strongly calcareous, highly contorted intercalated light grey limy fine grained "ashy" material, black mudstone and fine pyrite laminations. .5 cm fragments of underlying mafic flow in lower 5 cm of unit. | 24410 | 323.50-324.60 | 1.10 | 3 | 0.1 | 7 | 233 | 28 | 25 | 0 | 16 |
| 324.60 | 351.60 | ANDESITE PILLOW BRECCIA Fine grained, greenish-brown, pillowed, hyaloclastic contact 40° Frs=5/m :Vns =3/m 4% carbonate alteration - present .5% qz veining - macroveins 1% carbonate veining - macroveins 2% pyrrhotite - disseminated | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 1% pyrite - patches Fairly thick pillowed flow with a brecciated top containing 30% interblock non stratified black carbonate and exfoliated chilled mafic fragments and hyaloclastic debris. The core of the flow is slightly coarser grained and darker green with no evidence of pillow formation. Pyrite occurs as thin fracture fillings and minor disseminations within the interblock sediment while pyrrhotite forms bladed crystals adjacent to the mafic blocks. | | | | | | | | | | | |
| | | 326.8-327.5 Sediment/hyaloclastite/shard interpillow debris. | | | | | | | | | | | |
| | | 330.0-331.1 As above. | | | | | | | | | | | |
| | | 345.0-347.6 Core of flow. | | | | | | | | | | | |
| | | 347.8-348.8 Shear zone, minor gouge, carbonate veins and rubble. | | | | | | | | | | | |
| | | 348.8-351.6 Flow bottom breccia. | | | | | | | | | | | |
| 351.60 | 352.60 | MUDSTONE DEBRIS FLOW Fine-coarse grained, black, Brecciated, hyaloclastic :fracturing 30° Frs=3/m :Vns =2/m 15% carbonate alteration - present .5% qz veining - macroveins 1% pyrrhotite - disseminated 1% pyrite - patches Interflow sedimentary unit composed of non-stratified black mudstone dark grey carbonate and bleached mafic clasts to 2 cm. | | | | | | | | | | | |
| 352.60 | 369.00 | ANDESITE FLOW Fine grained, greenish-brown, vesicular, bleached :fracturing 60° Frs=3/m :Vns =4/m .5% silica alteration - macroveins .2% chlorite alteration - present 6% carbonate alteration - present % qz veining - macroveins 3% carbonate veining - macroveins .5% pyrrhotite - disseminated .5% pyrite - disseminated Mafic flow, non pillowed, has brecciated top and bottom | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-----------------|--------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | with interblock carbonate and mud. Grain size ranges from aphanitic at the contacts to fine grained crystalline in the core. Carbonate alteration occurs as minor pervasive alteration and 5x7 cm structurally controlled patches. | | | | | | | | | | | |
| 369.00 | 372.70 | <p>LAMINATED MUDSTONE</p> <p>Fine grained, black, bedded, contorted bedding 60°:fracturing 60°</p> <p>Frs=3/m</p> <p>7% carbonate alteration - present</p> <p>5% qz-carb veining - macroveins</p> <p>3% pyrite - laminations</p> <p>Well laminated calcareous interflow mudstone. Contains 3% py as 3 mm fine grained lamination. Unit contains 5% 2-5 cm chilled mafic fragments.</p> | | | | | | | | | | | |
| 372.70 | 381.00 | <p>ANDESITE PILLOW BRECCIA</p> <p>Fine-coarse grained, greenish-brown, pillowed, Brecciated</p> <p>Frs=1/m</p> <p>3% carbonate alteration - present</p> <p>2% carbonate veining - macroveins</p> <p>.5% pyrrhotite - disseminated</p> <p>Brecciated pillow flow with 40% interblock non stratified calcareous black mud matrix. Unit contains sections of hyaloclastite in light grey carbonate matrix.</p> | | | | | | | | | | | |
| 381.00 | 393.90 | <p>MASSIVE MUDSTONE</p> <p>Black, massive, contorted bedding 41°:fracturing 30°</p> <p>Frs=3/m</p> <p>4% carbonate alteration - patches</p> <p>1% carbonate veining - microveins</p> <p>3% pyrite - laminations</p> <p>Fairly massive non stratified interflow calcareous mudstone package containing 5% 2-20 cm bleached and chilled mafic blocks and one boulder 1.6 m in diameter. Minor pyrite occurs as wispy disseminations defining bedding. Unit is calcareous with 2% 1 mm calcareous crystallites and light grey patchy carbonate.</p> <p>392.6 Pyrite beds @ 45 deg. Belmenite.</p> | | | | | | | | | | | |
| <386.80-388.40> | | <p>ANDESITE PILLOW BRECCIA</p> <p>Aphanitic, greenish-brown, pillowed, bleached</p> <p>Block of flow in mudstone. Carbonate altered with patchy carbonate as well.</p> | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 393.90 | 398.00 | ANDESITE BRECCIA Fine grained, greenish-brown, Brecciated, vesicular contact 45° Frs=3/m :Vns =3/m 5% carbonate alteration - interstitial 1% carbonate veining - microveins 1% pyrite - disseminated Brecciated, black carbonate healed, bleached, contains 3% very fine .5 mm dark amygdules. Open space filling by dark grey carbonate as rims filled by later white spary carbonate. | | | | | | | | | | | |
| 398.00 | 399.65 | MASSIVE MUDSTONE Fine grained, black, bedded, crystallites contact 46°:fracturing 30° Frs=3/m 5% carbonate alteration - present .5% carbonate veining - microveins 2% pyrite - patches Fairly massive, faint bedding defined by wispy fine pyrite and small poorly developed crystallites. Unit very calcareous. | | | | | | | | | | | |
| 399.65 | 405.90 | ANDESITE BRECCIA Fine grained, greenish-brown, Brecciated, vesicular :fracturing 45° Frs=3/m 3% carbonate alteration - interstitial 2% carbonate veining - macroveins 1% qz-carb veining - microveins 1% pyrite - disseminated Andesite breccia, numerous carbonate veins and patches. Unit contains narrow sections of black massive mudstone with poorly developed calcareous crystallites. | | | | | | | | | | | |
| 405.90 | 408.70 | LAMINATED MUDSTONE Aphanitic, black, bedded, crystallites bedding 40° Frs=3/m 3% carbonate alteration - pervasive 4% pyrite - laminations Well bedded at 5 cm spacing with 2-5 mm fine grained pyrite beds defining bedding. Unit contains 5% 1 mm poorly developed crystallites. Unit strongly calcareous to limy. | | | | | | | | | | | |
| 408.70 | 410.00 | ANDESITE PILLOW BRECCIA | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Fine grained, greenish-brown, Brecciated, vesicular :fracturing 50° Frs=4/m 5% carbonate alteration - interstitial 1% pyrite - patches Light grey-green, chilled and bleached vesicular mafic block (90%) with 10% interblock black limy mud and dark grey carbonate. Basal contact irregular with rounded brecciated blocks of chilled mafic in mudstone matrix. | | | | | | | | | | | |
| 410.00 | 411.15 | MASSIVE MUDSTONE Aphanitic, black, bedded, massive bedding 34°:fracturing 60° Frs=3/m :Vns =2/m 2% carbonate alteration - pervasive 2% carbonate veining - microveins 2% pyrite - laminations Poorly bedded black mudstone, contains slightly contorted and discontinuous .5 cm very fine grained pyrite bands. | | | | | | | | | | | |
| 411.15 | 413.45 | ANDESITE DYKE/INTRUSIVE Fine grained, greenish-brown, Brecciated, chilled margin contact 46° Frs=4/m :Vns =1/m 1% carbonate alteration - pervasive 1% carbonate veining - microveins Finely amygdular, chilled, very fine grained, brecciated with fine milled fragments in the 30% black mud matrix. | | | | | | | | | | | |
| 413.45 | 415.75 | MASSIVE MUDSTONE Fine grained, black, massive, rubbly Massive black mudstone with fine disseminated euhedral pyrite. Majority of interval is intense fault gouge. Rock fragments in gouge are strongly QC veined black silicified mudstone. 413.4-413.8 Massive mudstone. Upper contact chilled and bleached for 3 cm. | 24410 | 413.45-413.80 | 0.35 | 3 | 0.1 | 7 | 233 | 28 | 25 | 0 | 16 |
| | | <413.80-415.75> Aphanitic, dark gray, Brecciated, rubbly fault/gouge 53° Frs=75/m :Vns =30/m 10% silica alteration - microveins 1% carbonate alteration - microveins 10% qz veining - microveins | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 2% carbonate veining - microveins 1% pyrite - disseminated Intense fault, hangingwall of Andesite Creek Fault zone. | | | | | | | | | | | |
| 415.75 | 437.10 | AUTOBRECCIATED RHYOLITE FLOW Aphanitic, whiteish-yellow, Brecciated, rubbly :fracturing 47° Frs=30/m :Vns =6/m 20% silica alteration - pervasive 2% carbonate alteration - microveins 3% sericite alteration - selvages 3% clay alteration - gouge 5% qz veining - macroveins 3% carbonate veining - microveins 3% qz-carb veining - microveins 4% pyrite - disseminated Brecciated rhyolite flow. Contact zone faulted out. Interval badly broken to rubble containing narrow clay gouge sections. Locally displays pseudobreccia texture with fine matrix of pyrite and fine dark grey to black material. Unit contains 1% very fine fracture filling pyrite and 2% .5-2 mm euhedral grains and clumps of pyrite. Unit cut by numerous .2-2 cm QC veins which are cut by later .5 cm carbonate veins. Fragments and random patches 1-3 cm are replaced by off-white dolomite (3%). Unit is moderately silicified with minor light green sericite along fracture surfaces and in wall rock as selvages outside pyritic fractures. | 24411 | 413.80-415.80 | 2.00 | 6 | 0.1 | 9 | 240 | 26 | 70 | 0 | 13 |
| | | | 24412 | 415.80-416.30 | 0.50 | 9 | 0.1 | 12 | 197 | 36 | 86 | 1 | 11 |
| | | | 24413 | 416.30-417.30 | 1.00 | 20 | 0.1 | 27 | 137 | 5 | 162 | 1 | 3 |
| | | | 24414 | 417.30-418.80 | 1.50 | 11 | 0.1 | 16 | 113 | 6 | 68 | 0 | 3 |
| | | | 24415 | 418.80-420.30 | 1.50 | 14 | 0.1 | 15 | 99 | 8 | 173 | 0 | 3 |
| | | | 24416 | 420.30-421.80 | 1.50 | 14 | 0.1 | 22 | 147 | 8 | 334 | 0 | 3 |
| | | | 24417 | 421.80-423.30 | 1.50 | 6 | 0.1 | 24 | 166 | 6 | 80 | 0 | 3 |
| | | | 24418 | 423.30-424.80 | 1.50 | 3 | 0.1 | 36 | 128 | 26 | 153 | 0 | 3 |
| | | | 24419 | 424.80-426.30 | 1.50 | 3 | 0.1 | 20 | 110 | 6 | 62 | 0 | 3 |
| | | | 24420 | 426.30-427.80 | 1.50 | 3 | 0.1 | 12 | 113 | 10 | 38 | 0 | 3 |
| | | | 24421 | 427.80-429.30 | 1.50 | 3 | 0.1 | 10 | 60 | 6 | 30 | 0 | 3 |
| | | | 24422 | 429.30-430.80 | 1.50 | 3 | 0.1 | 10 | 286 | 8 | 181 | 0 | 3 |
| | | 416.05 30 cm clay gouge, lost 30 cm | | | | | | | | | | | |
| | | 416.3-416.7 Pseudobreccia healed with 3% fine pyrite. | | | | | | | | | | | |
| | | 417.3-418.8 Highly fractured, local gouge, minor open space quartz veins with fine euhedral calcite needles in openings. | | | | | | | | | | | |
| | | 419.7-419.9 Gouge, adjacent rhyolite is quartz flooded. | | | | | | | | | | | |
| | | 421.8-427.8 Dolomite replacement of <1 cm size fragments. | | | | | | | | | | | |
| | | 427.8-429.0 Rubble. Set of .5 cm QC veins @ 45 deg. 2% fine pyrite in black, possibly carbon coated fractures. | | | | | | | | | | | |
| | | 429.3-430.0 Rubble. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-------------|---|----------------|--------------------------------|--------------|--------|------------|----------|------------|--------|----------|--------|--------|
| | 432.0 | 5 cm sandy clay gouge seam @ 40 deg. Unit getting darker grey. | | | | | | | | | | | |
| | 432.5-435.6 | Sand faults, gouge, lost 1.6 m of core. clay gouge @ 434.5. | | | | | | | | | | | |
| 437.10 | 437.50 | ANDESITE DYKE/INTRUSIVE Aphanitic, pale brown, massive, Brecciated :fracturing 52° Frs=3/m :Vns =6/m 2X silica alteration - microveins 1X carbonate alteration - pervasive 2X qz veining - microveins .5X pyrite - disseminated Mafic dyke, chilled to very fine grain, upper and lower contacts brecciated and shattered. Set of chalcedonic silica veins @ 52 deg. | | | | | | | | | | | |
| 437.50 | 439.80 | AUTOBRECCIATED RHYOLITE FLOW Aphanitic, green, Brecciated, rubbly bedding 60°:fracturing 38° Frs=60/m :Vns =1/m 15X silica alteration - pervasive 1X chlorite alteration - present 10X sericite alteration - pervasive 3X pyrite - patches Interval badly fractured and rubble. Contains conspicuous bright green mica as patches and replacement of finer fragments. Unit contains bimodal pyrite as fine brassy inter-block patches and fine euhedral disseminations. | 24423 24424 | 437.50-438.30 438.30-439.80 | 0.80 1.50 | 3 3 | 0.1 0.1 | 23 31 | 153 153 | 5 8 | 73 57 | 0 0 | 3 3 |
| | 438.6-439.5 | Faulted, lost 40 cm. Lower contact is fault gouge. | | | | | | | | | | | |
| 439.80 | 444.50 | ANDESITE BRECCIA Fine grained, pale brown, Brecciated, rubbly :fault/gouge 40° Frs=100/m :Vns =3/m 10X silica alteration - macroveins 20X clay alteration - gouge 20X qz veining - macroveins 1X pyrite - disseminated Brecciated and badly faulted section of chilled mafic. No textures visible to determine flow/dyke. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 443.6-443.8 Rubble/ gouge. | | | | | | | | | | | |
| | | <439.80-441.00> Pale grey, crushed, rubbly 70% clay alteration - gouge 30% qz veining - macroveins 2% pyrite - disseminated Clay gouge, contains blocks of chilled mafic, lower 40 cm of interval consists of a broken white quartz vein with blocks of carbonate and mudstone. | | | | | | | | | | | |
| 444.50 | 451.50 | ANDESITE DEBRIS FLOW Fine-coarse grained, black, Brecciated, rubbly shear 38°:qz_carb veining 78° Frs=57/m :Vns =15/m 10% silica alteration - macroveins 10% carbonate alteration - microveins 20% clay alteration - gouge 10% qz veining - macroveins 10% carbonate veining - microveins Highly fracture and shattered section of massive mudstone which has been intruded by a mafic dyke resulting in 35% by volume of .5-7 cm chilled, carbonate altered, mafic blocks in a none stratified slightly pyritic mud matrix. Upper contact is 40 cm of fault gouge. Unit contains a stockwork of fine carbonate veins. Could possibly be contact mudstone intruded by a dyke. Interval contains 3% pyrite as fine to medium grained disseminations and as very fine brassy pyrite in the mudstone and 1% as replacements in the mafic fragments. | 24425 | 444.50-445.00 | 0.50 | 6 | 0.1 | 9 | 559 | 47 | 412 | 0 | 38 |
| | | | 24426 | 445.00-446.50 | 1.50 | 3 | 0.1 | 12 | 382 | 34 | 312 | 0 | 36 |
| | | | 24427 | 446.50-448.00 | 1.50 | 8 | 0.1 | 9 | 484 | 39 | 231 | 0 | 40 |
| | | | 24428 | 448.00-449.50 | 1.50 | 7 | 0.1 | 6 | 491 | 49 | 506 | 0 | 43 |
| | | | 24429 | 449.50-451.00 | 1.50 | 30 | 0.1 | 11 | 388 | 41 | 162 | 0 | 36 |
| | | 450.0-451.5 Rubble, minor gouge. | | | | | | | | | | | |
| 451.50 | 454.80 | RHYOLITE BLOCKY ASH FLOW Medium-coarse grained, gray, fragmental, monolithic bedding 33°:fracturing 70° Frs=3/m :Vns =5/m 40% silica alteration - pervasive 3% chlorite alteration - pervasive 2% sericite alteration - pervasive 1% qz veining - macroveins 2% pyrite - disseminated Clast supported blocky ash flow, 20% fine to coarse sand matrix, minor argillaceous contorted beds. Unit strongly silicified after minor chlorite/sericite. | 24430 | 451.00-452.50 | 1.50 | 3 | 0.1 | 10 | 78 | 4 | 21 | 0 | 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 454.80 | 528.40 | <p>AUTOBRECCIATED RHYOLITE FLOW Medium grained, pale gray, Brecciated, stylolitic Frs=1/m :Vns =3/m 70% silica alteration - pervasive 2% chlorite alteration - stockwork 1% sericite alteration - patches 3% kspcr alteration - matrix 1% graphite - present 2% qz-carb veining - macroveins Glassy rhyolite breccia, rotated flow banded fragments from 1-8 cm. Unit cut by .5 mm black carbon stylolitic sutures. Unit strongly silicified and glassy.</p> <p>Stained section @ 559.5 shows 3-5% K-spar in finely shattered matrix to breccia fragments.</p> <p>469.6-460.8 Wispy chlorite along foliation. Breccia finer, milled looking.</p> <p>Section of unit contains 3% 3 mm buckshot pyrite.</p> <p>477.0-480.0 Interval pale, whitish, probaby due to K-spar flooding of matrix.</p> <p>486.5 3 mm sandy chloritic shear @ 38 deg.</p> <p>486.5-487.9 Unit contains set of 1 mm carbonate filled veins @ 40 deg., locally leached out.</p> <p>486.9-487.1 Shear, minor fine rubble, adjacent chlorite alteration and 10% fine carbonate stringers.</p> <p>492.5-494.0 Rhyolite breccia, slightly more sericitic, interval has a sugary to granular texture.</p> <p>501.0 Corroded dolomite veins @ 10 deg.</p> <p>507.0-509.0 3% pyrite as .5-1 mm patches.</p> <p>512.3-514.4 10% qtz carb. veins.</p> <p>514.4-516.0 1% wispy chlorite @ 52 deg.</p> <p>525.5-527.3 0.5m strong chlorite alteration halo adjacent to mafic dyke from 526.4-526.9. Dyke contacts bleached at 60 deg.</p> | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-----------------|----|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| <464.60-464.70> | | ANDESITE DYKE/INTRUSIVE Fine grained, yellowish-brown, Brecciated, vesicular bedding 25° 2% carbonate alteration - present Hydrofracked, injected mafic sill/dyke. 1-4 cm subangular chilled finely vesicular mafic fragments surrounded by 1-2 mm subrounded rhyolite fragments in a black carbonaceous matrix. | | | | | | | | | | | |
| <465.80-466.20> | | ANDESITE DYKE/INTRUSIVE Fine grained, yellowish-brown, Brecciated, vesicular 1% pyrrhotite - disseminated; 60% 1-8 cm rounded, chilled finely vesicular mafic blocks from injection of the dyke. Mafic blocks are in a milled matrix of 1-3 mm subrounded rhyolite fragments. Interval has 1-2% disseminated pyrrhotite in matrix and rhyolite wall rocks. | | | | | | | | | | | |
| <467.00-468.10> | | ANDESITE DYKE/INTRUSIVE Aphanitic, yellowish-brown, massive, vesicular contact 85°:fracturing 50° Frs=1/m :Vns =3/m 5% carbonate alteration - pervasive 3% qz veining - macroveins 1% carbonate veining - microveins 2% pyrrhotite - disseminated Massive chilled, finely vesicular mafic dyke. | | | | | | | | | | | |
| <480.36-481.20> | | ANDESITE DYKE/INTRUSIVE Fine grained, grayish-brown, massive, vesicular contact 60°:fracturing 54° Frs=2/m 3% carbonate alteration - pervasive 1% carbonate veining - microveins .5% pyrite - microveins Massive fine grained, finely vesicular mafic sill. Minor chloritic alteration in adjacent rhyolite. | | | | | | | | | | | |
| <512.60-513.30> | | ANDESITE DYKE/INTRUSIVE Fine grained, yellowish-brown, massive, vesicular contact 35°:contact 40° Frs=1/m 4% carbonate alteration - pervasive | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Mafic sill. Uper contact bleached, chilled and finely vesicular. Upper contact @ 35 deg. Rhyolite wall rock chloritized and sericitized for 18 cm. | | | | | | | | | | | |
| 528.40 | 545.50 | <p>FLOWBANDED RHYOLITE FLOW</p> <p>Aphanitic, pale gray, flowbanded, massive bedding 48°</p> <p>Fra=2/m :Vns =1/m</p> <p>30% silica alteration - pervasive</p> <p>5% sericite alteration - patches</p> <p>1% qz veining - macroveins</p> <p>.5% pyrite - disseminated</p> <p>Light grey non-brecciated flow banded rhyolite. Flow bands show weak spherulitic growth giving a faint spotted appearance.</p> | | | | | | | | | | | |
| | | 537.0-538.4 Relic flow banding overprinted by chlorite and silica. Rhyolite has a bluish green cast, darkening to deep chlorite green adjacent to mafic sill. | | | | | | | | | | | |
| | | 538.4-538.7 Mafic sill, chilled, light greyish brown, finely vesicular. Lower contact at 55 deg. | | | | | | | | | | | |
| | | 538.7-539.2 Rhyolite medium green from chlorite adjacent to sill. | | | | | | | | | | | |
| 545.50 | 556.56 | <p>AUTOBRECCIATED RHYOLITE FLOW</p> <p>Aphanitic, gray, Brecciated, monolithic cleavage, foliation 57°:fracturing 80°</p> <p>Fra=4/m :Vns =10/m</p> <p>40% silica alteration - pervasive</p> <p>5% chlorite alteration - sheeting</p> <p>2% carbonate alteration - microveins</p> <p>3% sericite alteration - present</p> <p>2% graphite - disseminated</p> <p>1% qz veining - microveins</p> <p>X carbonate veining - microveins</p> <p>1% pyrite - disseminated</p> <p>Brecciated rhyolite flow, rotated flow banded fragments with pseudobrecciation disaggregating the larger fragments.</p> | | | | | | | | | | | |
| | | 527.2-523.5 Hairline carbonate veins @ 85 deg. | | | | | | | | | | | |
| | | 556.56 EOH. | | | | | | | | | | | |
| (eoh) | | | | | | | | | | | | | |

HOMESTAKE CANADA

DIAMOND DRILL HOLE LOG

ADL9436

| | | | | | |
|--|-------------------------|----------------------------|-------------------------------|--------|----------------|
| PROJECT: Adrian 1994 | | Date Commenced: AUG. 16/94 | Contractor: ADVANCED DRILLING | | Logged by: DGR |
| DRILL HOLE: ADL9436 | | Date Completed: AUG. 29/94 | | | Geotech by: JL |
| LENGTH: 553.21 | Core Diam: NQ | | | | |
| Collar Location | | | | | |
| Latitude: 20240.00 Departure: 22045.00 Elevation: 880.00 | | | | | |
| SUMMARY | | | | | |
| | | Depth | DOWN HOLE SURVEYS | | |
| | | | Azim | Inclin | Method |
| 0.00-3.05 | CASING | | | | |
| 3.05-3.75 | OVERBURDEN | 0.00 | 170.00 | -87.00 | BRUNTON |
| 3.75-5.40 | CONGLOMERATE | 91.00 | 0.00 | -90.00 | SPERRY SUN |
| 5.40-6.40 | SANDSTONE | 182.00 | 0.00 | -90.00 | SPERRY SUN |
| 6.40-9.10 | CONGLOMERATE | 275.00 | 249.00 | -87.20 | SPERRY SUN |
| 9.10-12.95 | SANDSTONE | 365.00 | 232.00 | -86.50 | SPERRY SUN |
| 12.95-13.85 | SANDSTONE | 457.00 | 213.00 | -86.00 | SPERRY SUN |
| 13.85-16.80 | MASSIVE MUDSTONE | 553.00 | 210.00 | -86.50 | SPERRY SUN |
| 16.80-20.50 | SANDSTONE | | | | |
| 20.50-64.90 | CONGLOMERATE | | | | |
| 64.90-84.12 | LAMINATED MUDSTONE | | | | |
| 84.12-278.50 | LAMINATED MUDSTONE | | | | |
| 278.50-299.98 | LAMINATED MUDSTONE | | | | |
| 299.98-333.68 | LAMINATED MUDSTONE | | | | |
| 333.68-390.15 | LAMINATED MUDSTONE | | | | |
| 390.15-405.12 | LAMINATED MUDSTONE | | | | |
| 405.12-421.60 | LAMINATED MUDSTONE | | | | |
| 421.60-430.38 | LAMINATED MUDSTONE | | | | |
| 430.38-438.56 | ANDESITE FLOW | | | | |
| 438.56-439.30 | MASSIVE MUDSTONE | | | | |
| 439.30-446.67 | ANDESITE FLOW | | | | |
| 446.67-447.80 | ANDESITE BRECCIA | | | | |
| 447.80-449.14 | ANDESITE FLOW | | | | |
| 449.14-450.60 | ANDESITE BRECCIA | | | | |
| 450.60-456.46 | ANDESITE FLOW | | | | |
| 456.46-458.69 | ANDESITE BRECCIA | | | | |
| 458.69-459.20 | CALCITE VEIN | | | | |
| 459.20-464.12 | ANDESITE PILLOW BRECCIA | | | | |
| 464.12-466.04 | ANDESITE FLOW | | | | |
| 466.04-468.70 | ANDESITE BRECCIA | | | | |
| 468.70-474.12 | ANDESITE FLOW | | | | |
| 474.12-477.71 | ANDESITE PILLOW BRECCIA | | | | |
| 477.71-495.08 | ANDESITE FLOW | | | | |
| 495.08-498.18 | MASSIVE MUDSTONE | | | | |
| 498.18-499.02 | ANDESITE BRECCIA | | | | |
| 499.02-502.20 | MASSIVE MUDSTONE | | | | |
| 502.20-509.97 | ANDESITE FLOW | | | | |
| 509.97-533.68 | ANDESITE PILLOW BRECCIA | | | | |

| | |
|---------------|--------------------------------|
| 533.68-536.66 | LAMINATED MUDSTONE *** |
| 536.66-540.34 | AUTOBRECCIATED RHYOLITE FLOW * |
| 540.34-541.42 | ANDESITE DYKE/INTRUSIVE |
| 541.42-550.57 | AUTOBRECCIATED RHYOLITE FLOW |
| 550.57-552.25 | ANDESITE DYKE/INTRUSIVE |
| 552.25-553.21 | AUTOBRECCIATED RHYOLITE FLOW |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------|-------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.00 | 3.05 | CASING | | | | | | | | | | | |
| 3.05 | 3.75 | OVERBURDEN | | | | | | | | | | | |
| 3.75 | 5.40 | CONGLOMERATE Medium-coarse grained, pale gray, heterolithic, graded bedding 40°:shear 30° Frs=4/m :Vns =1/m 1% qz-carb veining - microveins Graded, closely packed fine conglomerate to coarse sandstone. Unit contains 10% 3 cm mudstone rip-ups in lower portion. | | | | | | | | | | | |
| 5.40 | 6.40 | SANDSTONE Dark gray, massive contact 40° Frs=3/m Massive dark grey fairly well sorted gritty sandstone. Unit contains 2% 2-3 mm mudstone chips and white felsic lithoclasts. Lower contact gradational over 10 cm to underlying conglomerate unit, possibly a fine upper section to fine to coarse cycle. | | | | | | | | | | | |
| 6.40 | 9.10 | CONGLOMERATE Fine-coarse grained, pale gray, heterolithic, graded contact 74° Frs=4/m :Vns =1/m 5% silica alteration - pervasive Closely pecked fairly well sorted heterolithic pebble conglomerate. Clasts include mudstone, quartz, finely vesicular dacite and rare flow banded rhyolite. 11.8 10 cm sandy shear and qtz vein @ 52 deg. | | | | | | | | | | | |
| 9.10 | 12.95 | SANDSTONE Fine-coarse grained, dark gray, heterolithic, graded contact 46° Frs=15/m :Vns =2/m Poorly sorted well graded sandstone unit. Top 50 cm of interval is massive black mudstone grading down to dark grey sandstone containing 30% 1x2 cm angular black mudstone rip-ups. Interval grades down to coarse sandstone with 10% >5 cm mudstone cobbles. | | | | | | | | | | | |
| 12.95 | 13.85 | SANDSTONE Dark gray, heterolithic, graded | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------|-------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | contact 45°:bedding 45° Frs=7/m Graded sequence consisting of a black mudstone top, massive to finely laminated well sorted sandstone section and a coarse and base. Basal contact sharp at 45 deg. | | | | | | | | | | | |
| 13.85 | 16.80 | MASSIVE MUDSTONE Aphanitic, black, massive, rubbly Frs=30/m Badly shattered and slightly gouge massive mudstone. 16.5-16.8 Fault, rubble. | | | | | | | | | | | |
| 16.80 | 20.50 | SANDSTONE Fine-medium grained, gray, bedded, graded bedding 52°:contact 50° Frs=5/m :Vns =4/m Well sorted, faintly laminated poorly graded sandstone. | | | | | | | | | | | |
| 20.50 | 64.90 | CONGLOMERATE Medium-coarse grained, gray, heterolithic, graded :fracturing 30° Frs=4/m :Vns =1/m 2% silica alteration - pervasive 1% carbonate alteration - microveins .1% clay alteration - coatings 1% carbonate veining - microveins Thick unit of heterolithic, clast supported, weakly graded, pebble conglomerate. Clast population includes: 50% .5-1.5 cm well rounded light grey siliceous pebbles. 15% rounded perlitically fractured felsic volcanic, 5% rounded wacke cobbles, 20% 1-12 cm subangular mudstone cobbles and rare round 1-3 cm feldspar phytic intrusive pebbles. Matrix (10%) consist of fine to medium grained sand. 22.9 Clay coated slip @ 23 deg. 29.25 Clay coated slip @ 25 deg. 46.8 Shear with 7 cm quartz vein @ 45 deg. 53.6 Clay coated shear @ 10 deg. 64.8 Lower contact sheared @ 43 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------|--------|--|----------------|--------------------------------|--------------|----------|------------|----------|------------|----------|---------|--------|--------|
| 64.90 | 84.12 | LAMINATED MUDSTONE Black, laminated, bedded bedding 45°:fracturing 45° Frs=3/m 1% carbonate veining - microveins Very thick section of rhythmically banded at a .5-1 cm scale, black mudstone and light grey very fine silt. Thicker silty beds have scoured bases and minor cross bedding. Unit contains minor soft sediment slugs and rare 5 cm dia. Limy mud balls. 66.4-66.9 Rubble 67.3 Beds @ 45 deg. 77.6 Beds @ 47 deg. | | | | | | | | | | | |
| 84.12 | 278.50 | LAMINATED MUDSTONE Black, laminated, bedded bedding 50°:fracturing 60° Frs=6/m :Vns =3/m 1% carbonate alteration - interstitial .1% clay alteration - gouge 2% qz veining - microveins 1% carbonate veining - microveins 1% pyrite - laminations Similar to overlying unit except 60% of light grey lamination sare very fine ash beds and contain 5-10% very fine disseminated pyrite. Pyrite also occurs as very fine laminations by themselves or at the base of the ash lens. Unit may be the upper Salmon River; if so there is no structural detachment. Unit contains rare belmenites and minor graphitic shear zones. 10% of silty beds are calcareous. 89.6-89.8 3% fine laminated and disseminated pyrite @ 50 deg. 92.5-92.5 Shear, contorted ribboned with 1 mm qz veins @ 48 deg. 94.77 2 cm folded fine ash bed with pyritic base. Fold in "Z" configuration. 97.0 1 cm laminated carbonate/pyrite bed. | 24431 24432 | 117.70-118.20 182.00-183.10 | 0.50 1.10 | 18 11 | 0.4 0.2 | 15 11 | 212 104 | 45 41 | 40 9 | 2 2 | 3 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | MID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|-------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 97.6 | 10 cm graphitic fault gouge. | | | | | | | | | | | |
| | 98.6 | 5 cm carbonate bed @ 54 deg. | | | | | | | | | | | |
| | 102.4 | Beds @ 24 deg. | | | | | | | | | | | |
| | 103.83 | 3 cm graphitic gouge @ 47 deg. Unit containing less than 1% pyrite as fine disseminations in the silty/ash beds. | | | | | | | | | | | |
| | 105.0 | Beds @ 38 deg, Qtz fractures @ 90 deg. | | | | | | | | | | | |
| | 108.0-130.0 | Unit contains 3% quartz/carbonate veins to 1cm at all angles and minor broken and gouged core. Bedding angles are from 10-45 deg. | | | | | | | | | | | |
| | 108.5 | QC vein healed shear zone. | | | | | | | | | | | |
| | 109.5 | 3 cm medium grained light grey sand dyke @ 90 deg to bedding which is at 40 deg. | | | | | | | | | | | |
| | 111.3-111.8 | Fault, rubble and black clay gouge. | | | | | | | | | | | |
| | 114.9 | Fault, quartz healed, black gouge. | | | | | | | | | | | |
| | 118.0-118.4 | Section of 3 mm scale inter-banded fine ash, pyrite lens and black mudstone. | | | | | | | | | | | |
| | 119.0-119.6 | Fault, rubble and qtz breccia veins. | | | | | | | | | | | |
| | 120.6-120.8 | Fault, rubble. Quartz ribbon veins. | | | | | | | | | | | |
| | 123.1 | Beds @ 50 deg. | | | | | | | | | | | |
| | 124.0-125.0 | Broken core, rubble. | | | | | | | | | | | |
| | 127.0 | Beds @ 45 deg. | | | | | | | | | | | |
| | 131.5 | Beds @ 47 deg, silt beds are up to 2 cm at 7 per m. | | | | | | | | | | | |
| | 134.0-135.0 | Zone of bedding parallel ribboned and slightly contorted quartz/ carbonate veins. | | | | | | | | | | | |
| | 140.0 | 1 cm silt beds @ 56 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|-------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 144.0 | 10 cm graphitic gouge @ 60 deg. | | | | | | | | | | | |
| | 148.8 | 10 cm broken core, 10% qtz veins. | | | | | | | | | | | |
| | 151.25 | Soft sediment contorted silt lams. | | | | | | | | | | | |
| | 156.5 | Beds @ 56 deg. | | | | | | | | | | | |
| | 156.4-156.6 | Broken core, 5% qtz veins. | | | | | | | | | | | |
| | 159.4 | 1 cm pyrite bed @ 45 deg. | | | | | | | | | | | |
| | | 10 cm very fine light grey ash beds @ 162.1, 163.7, 164.4. | | | | | | | | | | | |
| | 166.4-167.5 | Sheared zone, 20% 1-3 mm contorted QC veins, minor sericite. | | | | | | | | | | | |
| | | Unit contains 1/m light grey finely laminated .5 cm thick carbonate beds with fine pyritic bases. | | | | | | | | | | | |
| | 174.0 | Beds @ 58 deg. | | | | | | | | | | | |
| | 182.6-183.1 | Graded sandy debris flow. Interval is coarse sand size at base and grades up to coarse silt at the top. The basal 5 cm contains 10% 1-2 mm detrital pyrite clasts. | | | | | | | | | | | |
| | | Silty beds up to 7 cm @ 3/m grading up from coarse silt at base to mud of overlying unit. Interval becoming broken with abundant graphitic bedding parallel slip surfaces. | | | | | | | | | | | |
| | 194.3-194.8 | Shear zone, rubble, minor black graphitic gouge. | | | | | | | | | | | |
| | 197.3 | Beds @ 43 deg. | | | | | | | | | | | |
| | 198.3-198.7 | Carbonate microvein healed weak shear zone. | | | | | | | | | | | |
| | 207.6-208.2 | Broken, sheared, minor gouge, 10% QC veins. | | | | | | | | | | | |
| | 248.3-249.6 | Bedding parallel shearing. | | | | | | | | | | | |
| | 263.6-268.5 | Broken core, 30 cm gouge @ 268.2. | | | | | | | | | | | |
| | 271.8 | Bedding @ 42 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 215.0-215.5 Broken core, minor shearing | | | | | | | | | | | |
| | | 223.5 10 cm carbonate breccia vein @ 45 deg. | | | | | | | | | | | |
| | | 229.5-230.4 Rubble, gouge. | | | | | | | | | | | |
| | | <202.70-202.60> Fine grained, blackish-white, rubbly, broken fracturing 60° Frs=80/m :Vns =10/m 20% silica alteration - macroveins 2% clay alteration - gouge 20% qz veining - macroveins Fault zone, rubble, black clay gouge, broken quartz veins. | | | | | | | | | | | |
| | | <236.70-248.60> LAMINATED MUDSTONE Fine grained, black, rubbly, crushed fracturing 40° Frs=50/m :Vns =5/m 10% silica alteration - macroveins 10% clay alteration - gouge 10% qz veining - macroveins Wide zone of crushed and gouged black laminated mudstone. Interval contains abundant gouge zones and graphitic shears. | | | | | | | | | | | |
| | | <274.10-278.50> LAMINATED MUDSTONE Fine grained, dark black, rubbly, crushed Strong shear zone. Interval contains 30% black graphitic gouge and 10% broken contorted quartz veins. | | | | | | | | | | | |
| | | <274.20-277.00> Fine-coarse grained, dark black, sheared, broken shear 34°:fracturing 57° Frs=30/m :Vns =5/m .1% chlorite alteration - vein 5% graphite - gouge 3% qz-carb veining - macroveins 1% pyrite - disseminated Broken and gougy zone within mudstone. | | | | | | | | | | | |
| 278.50 | 299.98 | LAMINATED MUDSTONE Dark black, laminated, bedded bedding 38°:fracturing 76° Frs=18/m :Vns =4/m .1% chlorite alteration - vein | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-------------------------|---|-------------------------|---|----------------------|---------------|-------------------|----------------|-------------------|----------------|----------------|-------------|-------------|
| | | 1% qz-carb veining - macroveins 1% pyrite - disseminated Graphitic and pyritic fracture coatings. Fairly massive in sections. Chlorite within quartz-carbonate veins with minor chalcopyrite. | | | | | | | | | | | |
| | 276.20-276.25 | Quartz-pyrite vein is 0.04 m thick and contains 50% pyrite. | | | | | | | | | | | |
| | 279.20-279.80 | Very rubbled zone. | | | | | | | | | | | |
| | 282.60-282.65 | Disseminated pyrite (10%) within mudstone bed. | | | | | | | | | | | |
| | 284.40, 287.35 & 287.40 | Pyritic beds. | | | | | | | | | | | |
| | <288.45-292.57> | Fine-coarse grained, dark black, sheared, broken shear 73°:fracturing 90° Frs=35/m :Vns =2/m .1% chlorite alteration - vein 5% graphite - gouge 1% qz-carb veining - macroveins 0.5% pyrite - coatings | | | | | | | | | | | |
| 299.98 | 333.68 | LAMINATED MUDSTONE Dark black, bedded, laminated fracturing 57°:bedding 42° Frs=11/m :Vns =1/m .5% graphite - coatings 2% pyrite - disseminated Well laminated, alternating black and dark grey beds. Numerous pyritic laminae. Rare clasts. | 24433 | 306.05-307.90 | 1.85 | 5 | 0.3 | 12 | 210 | 56 | 9 | 2 | 3 |
| | 306.05-307.90 | Interval with numerous sandy pyritic beds. | | | | | | | | | | | |
| | 308.76-309.22 | Crushed interval, minor gouge. | | | | | | | | | | | |
| | 324.00-325.00 | Load structures and graded beds support tops up. Alternating laminae of mud and siltstone. | | | | | | | | | | | |
| | 331.18-332.10 | Siltstone horizon with a 3 cm pyrite nodule. Possible concretion? | | | | | | | | | | | |
| 333.68 | 390.15 | LAMINATED MUDSTONE Dark black, laminated, bedded bedding 48°:fracturing 44° | 24434 24435 24436 | 333.69-335.74 335.74-337.11 337.11-337.81 | 2.05 1.37 0.70 | 5 18 12 | 0.2 0.3 0.2 | 10 14 15 | 536 495 202 | 66 61 51 | 15 15 13 | 2 2 2 | 3 3 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-----------------|--|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Frs=11/m :Vns =4/m 1% graphite - coatings 1% qz-carb veining - macroveins 2% pyrite - disseminated Very uniformly laminated mudstone; consistent core to bedding angles, consistent fractures. Pyritic laminae common but amount to only 1 or 2%. Light grey siltstone to sandstone forms interbeds with mudstone. Load features indicate tops up. | 24437 | 337.81-338.81 | 1.00 | 11 | 0.3 | 11 | 182 | 49 | 10 | 2 | 3 |
| | 333.68-338.81 | Several pyritic siltstone horizons. Disrupted pyrite bed at 335.68 m. Maximum thickness of bed was probably only 1 cm. | | | | | | | | | | | |
| | 342.90 | Disrupted pyrite bed 0.2 cm. | | | | | | | | | | | |
| | 354.63-354.78 | Irregular quartz-carbonate vein with local blocks of massive pyrite. | | | | | | | | | | | |
| | 371.48 | 1 cm thick pyritic bed within mudstone. | | | | | | | | | | | |
| | 381.45-383.84 | Load casts or graded beds noted within this interval support tops up. | | | | | | | | | | | |
| | <346.25-347.00> | Dark black, fractured Frs=100/m 5% graphite - gouge 1% pyrite - disseminated Only mud and sand recovered. Totally ground - no core. | | | | | | | | | | | |
| | <365.60-366.10> | Dark black, broken, fractured fault/gouge 57° Frs=100/m :Vns =3/m 10% graphite - gouge .5% qz-carb veining - microveins 1% pyrite - disseminated | | | | | | | | | | | |
| 390.15 | 405.12 | LAMINATED MUDSTONE Dark black, laminated, bedded bedding 54°:qz carb veining 58° Frs=12/m :Vns =7/m 3% qz-carb veining - macroveins 1% pyrite - laminations Load structures noted through-out. | | | | | | | | | | | |
| | 390.15-390.38 | Irregular quartz-carbonate vein. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-----------------|---|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 392.15 | 1 cm massive pyrite bed. | | | | | | | | | | | |
| 405.12 | 421.60 | LAMINATED MUDSTONE | 24438 | 405.12-406.12 | 1.00 | 18 | 1.5 | 14 | 260 | 55 | 50 | 2 | 39 |
| | | Dark black, bedded, veined | 24439 | 406.12-407.12 | 1.00 | 23 | 1.2 | 5 | 417 | 37 | 62 | 2 | 25 |
| | | bedding 9°:qz_carb veining 51° | 24440 | 407.12-408.72 | 1.60 | 29 | 0.8 | 10 | 407 | 36 | 55 | 2 | 22 |
| | | Fra=12/m :Vns =8/m | 24441 | 408.72-410.22 | 1.50 | 65 | 3.4 | 16 | 2282 | 125 | 155 | 2 | 62 |
| | | 2% graphite - gouge | 24442 | 410.22-411.72 | 1.50 | 69 | 3.6 | 13 | 619 | 89 | 84 | 2 | 51 |
| | | 4% qz-carb veining - macroveins | 24443 | 411.72-413.72 | 2.00 | 56 | 1.8 | 8 | 404 | 35 | 58 | 2 | 26 |
| | | 9% pyrite - laminations | 24444 | 413.72-416.00 | 2.28 | 115 | 2.5 | 15 | 150 | 54 | 47 | 2 | 29 |
| | | Mudstone with 30% pyritic siltstone interbeds. | 24445 | 416.00-418.00 | 2.00 | 42 | 1.1 | 22 | 447 | 46 | 43 | 2 | 26 |
| | | Quartz-carbonate veining has increased as gouge zone at | 24446 | 418.00-420.00 | 2.00 | 21 | 2.5 | 13 | 755 | 71 | 87 | 2 | 44 |
| | | 413.80 to 421.41 is approached. | 24447 | 420.00-421.60 | 1.60 | 36 | 3.1 | 30 | 740 | 74 | 77 | 2 | 33 |
| | 405.85 | 2 cm pyritic bed. | | | | | | | | | | | |
| | 407.05 | 3 " " " | | | | | | | | | | | |
| | 407.80 | 2 " " " | | | | | | | | | | | |
| | 408.70 | 4 " " " | | | | | | | | | | | |
| | 410.85 | 4 " " " | | | | | | | | | | | |
| | <413.80-421.41> | Black, sheared, veined shear 54° Fra=100/m :Vns =25/m 8% graphite - gouge 12% qz-carb veining - macroveins 10% pyrite - patches Rubbled and gouge of Andesite Creek Fault? Veining throughout. Veins are irregular, cross-cutting, discontinuous. | | | | | | | | | | | |
| 421.60 | 430.38 | LAMINATED MUDSTONE | 24448 | 421.60-423.60 | 2.00 | 21 | 2.6 | 17 | 748 | 66 | 51 | 2 | 8 |
| | | Dark black, bedded, laminated | 24449 | 423.60-425.60 | 2.00 | 19 | 2.2 | 9 | 1282 | 68 | 58 | 2 | 9 |
| | | bedding 46° | 24450 | 425.60-427.60 | 2.00 | 191 | 25.8 | 259 | 1183 | 132 | 53 | 4 | 135 |
| | | Fra=15/m :Vns =2/m | 24451 | 427.60-429.00 | 1.40 | 12 | 2.0 | 7 | 1379 | 67 | 78 | 2 | 19 |
| | | .1% graphite - coatings | 24452 | 429.00-430.38 | 1.38 | 8 | 0.1 | 7 | 353 | 40 | 21 | 2 | 3 |
| | | .1% qz-carb veining - macroveins | | | | | | | | | | | |
| | | 15% pyrite - laminations | | | | | | | | | | | |
| | | Well bedded pyritic mudstone. Few fossils at 423.25 m. | | | | | | | | | | | |
| | | Graded bedding indicates tops are up. | | | | | | | | | | | |
| 430.38 | 438.56 | ANDESITE FLOW | | | | | | | | | | | |
| | | Grayish-green, massive, pillow brecciated | | | | | | | | | | | |
| | | contact 69° | | | | | | | | | | | |
| | | Fra=7/m :Vns =3/m | | | | | | | | | | | |
| | | 1% chlorite alteration - amygdules | | | | | | | | | | | |
| | | 2% carbonate veining - macroveins | | | | | | | | | | | |
| | | 2% qz-carb veining - macroveins | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | .5% pyrite - macroveins Mafic flow with chilled upper contact and brecciated zones. Fragments and contacts at brecciated portion have chlorite amygdules. | | | | | | | | | | | |
| | | 436.92-437.22 Brecciated interval; muddy siliceous matrix. | | | | | | | | | | | |
| | | 436.86-437.08 As above. | | | | | | | | | | | |
| | | 438.33-438.52 Quartz-carbonate vein. | | | | | | | | | | | |
| 438.56 | 439.30 | MASSIVE MUDSTONE Fine-coarse grained, dark black, massive, clastic fracturing :qz_carb veining Frs=12/m :Vns =10/m .2% qz-carb veining - microveins 1% pyrite - clasts Massive mudstone with disseminated pyrite and pyrite growths around pyrite clasts. Mud between mafic flows. | | | | | | | | | | | |
| 439.30 | 446.67 | ANDESITE FLOW Grayish-green, massive, pillow brecciated qz_carb veining 67° Frs=6/m :Vns =2/m 5% chlorite alteration - pervasive .2% carbonate veining - microveins .5% qz-carb veining - macroveins .1% pyrite - macroveins Massive mafic flow with local coarse grained portions but is mostly fine grained and chloritic. | | | | | | | | | | | |
| 446.67 | 447.80 | ANDESITE BRECCIA Fine-coarse grained, dark green, brecciated, hyaloclastic Frs=3/m :Vns =1/m 5% silica alteration - pervasive 12% chlorite alteration - pervasive .5% qz-carb veining - macroveins Breccia between two flows (?) could be brecciated flow top. Jumble of fine grained fragments and shards. | | | | | | | | | | | |
| 447.80 | 449.14 | ANDESITE FLOW Dark green, massive, pillow brecciated contact 45°:qz_carb veining 70° Frs=2/m :Vns =1/m 1% silica alteration - matrix | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 4% chlorite alteration - pervasive .5% qz-carb veining - macroveins Bounded by brecciated intervals. | | | | | | | | | | | |
| 449.14 | 450.60 | ANDESITE BRECCIA Fine-coarse grained, dark green, Brecciated contact 90°:qz_carb veining 56° Frs=1/m :Vns =2/m 4% silica alteration - matrix 3% chlorite alteration - pervasive .5% qz-carb veining - macroveins 1% pyrite - disseminated Chloritic fragments in a dark green siliceous matrix. | | | | | | | | | | | |
| 450.60 | 456.46 | ANDESITE FLOW Grayish-green, massive contact 25°:qz_carb veining 64° Frs=2/m :Vns =3/m 4% silica alteration - pervasive 5% chlorite alteration - pervasive .5% qz-carb veining - macroveins .5% pyrite - disseminated Minor brecciated interval. 453.41-453.82 HABR as in 449.14 to 450.60m. | | | | | | | | | | | |
| 456.46 | 458.69 | ANDESITE BRECCIA Fine-coarse grained, pale green, Brecciated, bleached qz_carb veining 22° Frs=9/m :Vns =3/m 3% chlorite alteration - replaced phenocryst 2% qz-carb veining - macroveins Weakly bleached breccia with grey siltstone at top of interval. | | | | | | | | | | | |
| 458.69 | 459.20 | CALCITE VEIN Fine-coarse grained, pale green, veined Frs=8/m :Vns =1/m 90% carbonate veining - vein | | | | | | | | | | | |
| 459.20 | 464.12 | ANDESITE PILLOW BRECCIA Fine-coarse grained, grayish-green, Brecciated, pillow brecciated qz_carb veining 80° Frs=9/m :Vns =2/m 3% silica alteration - matrix 2% chlorite alteration - pervasive .5% qz-carb veining - macroveins | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|----------------|--------------------------------|--------------|---------|------------|--------|----------|----------|--------|--------|--------|
| | | .2% pyrrhotite - matrix Some pillow shapes with chilled margins and vesicular rims at start of interval. Pyrrhotite at 463.20 m. | | | | | | | | | | | |
| 464.12 | 466.04 | ANDESITE FLOW Greenish-gray, massive qz_carb veining 59° Frs=2/m :Vns =3/m 2% silica alteration - pervasive 5% chlorite alteration - pervasive .5% qz-carb veining - macroveins .1% pyrite - macroveins Chlorite occurs as amygdules, also occurs pervasively and after mafic minerals. | | | | | | | | | | | |
| 466.04 | 468.70 | ANDESITE BRECCIA Fine-coarse grained, grayish-black, Brecciated Frs=4/m :Vns =1/m 5% silica alteration - matrix 5% chlorite alteration - pervasive .1% qz-carb veining - macroveins .5% pyrite - matrix Pyrrhotite blebs and patches within matrix. | 24453 24454 | 466.04-467.45 467.45-468.70 | 1.41 1.25 | 10 8 | 0.1 0.1 | 1 4 | 99 90 | 42 32 | 5 3 | 2 2 | 3 3 |
| 468.70 | 474.12 | ANDESITE FLOW Fine-medium grained, grayish-green, massive, chilled margin qz_carb veining 53°:contact 25° Frs=3/m :Vns =8/m .1% carbonate veining - macroveins .5% qz-carb veining - macroveins 0.1% pyrite - disseminated Chilled and vesicular margin. 470.10-470.20 Hyaloclastic interval between flows. | | | | | | | | | | | |
| 474.12 | 477.71 | ANDESITE PILLOW BRECCIA Fine-coarse grained, grayish-green, pillowed, chilled margin contact 18° Frs=5/m :Vns =3/m 3% silica alteration - pervasive 8% chlorite alteration - pervasive .2% qz-carb veining - macroveins .1% pyrrhotite - matrix .1% pyrite - patches Chilled and vesicular pillows within a hyaloclastite and minor silty sediment. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| 477.71 | 495.08 | ANDESITE FLOW Fine-coarse grained, green, porphyritic, pillow brecciated cleavage, foliation 46° Frs=6/m :Vns =4/m 2% silica alteration - matrix 6% chlorite alteration - pervasive .5% carbonate veining - macroveins .1% qz-carb veining - macroveins .2% pyrrhotite - matrix .1% pyrite - patches Mostly massive flow with brecciated intervals and a coarse grained core. | 24455 | 478.60-479.43 | 0.83 | 6 | 0.1 | 4 | 87 | 38 | 3 | 2 | 3 |
| | | 478.60-479.43 Breccia with pyrrhotite patches; silicified rims on fragments. | | | | | | | | | | | |
| | | 484.51-489.06 Coarse grained, plagioclase phytic core of flow. | | | | | | | | | | | |
| | | 490.75-491.38 Breccia with siliceous matrix and disseminated pyrite. | | | | | | | | | | | |
| 495.08 | 498.18 | MASSIVE MUDSTONE Dark black, massive, veined contact 51°:qz_carb veining 52° Frs=12/m :Vns =15/m 3% silica alteration - pervasive 1% chlorite alteration - pervasive .1% carbonate veining - microveins 1% qz-carb veining - macroveins 3% pyrite - patches Mudstone overlies a breccia and underlies a massive flow. | | | | | | | | | | | |
| 498.18 | 499.02 | ANDESITE BRECCIA Medium-coarse grained, brownish-green, Brecciated Frs=1/m :Vns =1/m 4% silica alteration - matrix 1% chlorite alteration - pervasive .1% carbonate veining - microveins .5% qz-carb veining - macroveins | | | | | | | | | | | |
| 499.02 | 502.20 | MASSIVE MUDSTONE Fine-coarse grained, dark black, massive, Brecciated qz_carb veining 48°:contact 50° Frs=8/m :Vns =5/m 2% silica alteration - matrix 3% chlorite alteration - pervasive | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | .3% carbonate veining - microveins .3% qz-carb veining - macroveins 1% pyrite - patches Continuation of mudstone between flows. Contains several large mafic volcanic fragments. 499.65-500.10 Breccia fragments of mafic volcanics in mudstone. | | | | | | | | | | | |
| 502.20 | 509.97 | ANDESITE FLOW Fine-coarse grained, brownish-green, pillow brecciated, Brecciated qz_carb veining 36° Frs=8/m :Vns =12/m 2% silica alteration - pervasive 4% chlorite alteration - pervasive 4% qz-carb veining - macroveins .2% pyrite - patches Numerous dark silica veins cross-cut the mafic units. Locally the unit is coarsegrained. 503.85-504.10 Breccia fragments are rimmed in quartz and contained within a silica-carbonate-chlorite matrix. | | | | | | | | | | | |
| 509.97 | 533.68 | ANDESITE PILLOW BRECCIA Fine-coarse grained, green, chilled margin, pillowed Frs=6/m :Vns =8/m 1% silica alteration - pervasive 5% chlorite alteration - pervasive .1% sericite alteration - vein 1% carbonate veining - macroveins 2% qz-carb veining - macroveins .1% pyrite - patches Pillows, chilled margins, vesicular rims and hyaloclastic breccias noted. 513.95-514.42 Light green, waxy sericite-chlorite and carbonate veins. 516.38-516.75 Chloritic and sericitic hyaloclastic breccia between pillows. 518.97-519.11 As above. 520.88-521.12 As above. 521.41-521.60 As above. | 24456 | 523.65-524.63 | 0.98 | 4 | 0.1 | 6 | 196 | 43 | 5 | 2 | 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-----------------|---|-------------------------|---|----------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|-------------|----------------|
| | 523.65-524.63 | Sandstone beds, with 3% patchy and disseminated pyrrhotite, occur between mafic volcanics. Mafic volcanics have chilled margins. Breccia below this sediment is probably a flow-top breccia. | | | | | | | | | | | |
| | 528.76-528.96 | Chloritic and sericitic hyaloclastite between chilled portions of mafic volcanics. | | | | | | | | | | | |
| | 532.27-533.68 | Weakly bleached, chilled, pillowed mafic volcanics on top of mudstone. | | | | | | | | | | | |
| | <511.33-512.49> | Fine-coarse grained, pale green, rubbly fault/gouge Frs=100/m :Vns =3/m 1% chlorite alteration - pervasive 1% sericite alteration - pervasive 50% clay alteration - gouge 4% carbonate veining - macroveins | | | | | | | | | | | |
| 533.68 | 536.66 | LAMINATED MUDSTONE Dark black, laminated, crystallites bedding 58° Laminated mudstone with abundant pyrite laminations. Approximately 5% crystallites noted. Latter 0.40 m of interval has several bleached, chilled mafic volcanic fragments. Mafic volcanics are at the rhyolite contact. | 24457 24458 24459 | 533.68-535.05 535.05-535.72 535.72-536.66 | 1.37 0.67 0.94 | 18 28 14 | 0.4 0.5 0.4 | 20 24 12 | 876 677 392 | 60 50 26 | 173 217 319 | 2 2 2 | 28 34 27 |
| | <533.68-535.05> | 5% pyrite - laminations Few disrupted pyrite beds. More laminations towards end of interval. | | | | | | | | | | | |
| | <535.05-535.72> | 15% pyrite - laminations Silty pyrite beds. Semi-massive | | | | | | | | | | | |
| | <535.72-536.66> | 5% pyrite - disseminated Patchy and disseminated pyrite throughout. | | | | | | | | | | | |
| 536.66 | 540.34 | AUTOBRECCIATED RHYOLITE FLOW Fine-coarse grained, greenish-gray, Brecciated, crackled, crackle breccia cleavage, foliation 59°:cleavage, foliation 58° Frs=4/m :Vns =4/m | 24460 24461 24462 | 536.66-537.97 537.97-539.46 539.46-540.34 | 1.31 1.49 0.88 | 7 3 10 | 0.2 0.1 0.2 | 25 23 15 | 129 113 133 | 4 4 5 | 81 82 102 | 2 2 2 | 8 3 6 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--|--|--|----------------------------|--|----------------------------------|--------------------------------------|----------------------------|--------------------------------|----------------------------|----------------------------|
| | | 20% silica alteration - pervasive 3% chlorite alteration - matrix 15% sericite alteration - pervasive .3% graphite - coatings .1% carbonate veining - microveins 2% pyrite - matrix Some local pseudobreccia of intact rhyolite but mostly brecciated and weakly foliated, silicified sericitic rhyolite. | | | | | | | | | | | |
| | | <536.66-540.34> 3% pyrite - disseminated Disseminated within matrix and around fragments as very fine grained brassy sulphides. | | | | | | | | | | | |
| 540.34 | 541.42 | ANDESITE DYKE/INTRUSIVE Greenish-brown, chilled margin, crackled, crackle brecciated contact 75° Frs=4/m 1% silica alteration - matrix 4% chlorite alteration - pervasive 2% sericite alteration - matrix .1% qz-carb veining - microveins 1% pyrite - patches Bleached dyke intrudes rhyolite unit. | 24463 | 540.34-541.42 | 1.08 | 10 | 0.2 | 13 | 143 | 25 | 107 | 2 | 8 |
| 541.42 | 550.57 | AUTOBRECCIATED RHYOLITE FLOW Fine-coarse grained, pale gray, Brecciated, foliated cleavage, foliation 42°:cleavage, foliation 52° Frs=2/m :Vns =9/m 20% silica alteration - pervasive 3% chlorite alteration - pervasive 8% sericite alteration - pervasive 2% graphite - coatings 1% qz veining - macroveins .3% qz-carb veining - microveins Breccia of silicified sericitic and chloritic rhyolite. Weak foliation or orientation to fragments. Carbon and fine grained pyrite fills cracks and stylonite-like irregular fractures. Silica flooding has left rock looking translucent medium grey colour. | 24464 24465 24466 24467 24468 24469 | 541.42-542.92 542.92-544.42 544.42-545.92 545.92-547.42 547.42-548.92 548.92-550.57 | 1.50 1.50 1.50 1.50 1.50 1.65 | 1 4 1 1 3 3 | 0.2 0.2 0.3 0.2 0.2 0.1 | 19 16 29 16 16 19 | 94 99 100 124 113 145 | 3 6 4 2 8 4 | 20 48 29 5 8 21 | 2 2 3 3 3 3 | 3 3 3 3 3 3 |
| 550.57 | 552.25 | ANDESITE DYKE/INTRUSIVE Fine-coarse grained, greenish-brown, chilled margin, Brecciated cleavage, foliation 69° Frs=3/m :Vns =4/m 1% silica alteration - matrix | 24470 | 550.57-552.25 | 1.68 | 10 | 0.1 | 7 | 128 | 25 | 3 | 3 | 21 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 4% chlorite alteration - pervasive 2% sericite alteration - matrix .4% carbonate veining - macroveins As in previous DADK interval. | | | | | | | | | | | |
| 552.25 | 553.21 | AUTOBRECCIATED RHYOLITE FLOW Fine-coarse grained, gray, Brecciated contact 28° Frs=1/m 20% silica alteration - pervasive 3% chlorite alteration - pervasive 2% sericite alteration - pervasive .1% pyrite - patches As in previous RRBR interval. 553.21 metres is the END OF HOLE depth. The hole intersected 16.55 m of rhyolite beyond the target horizon. Hole ADL9435 intersected similar looking RRBR and assays of that material did not return any significant results. | 24471 | 552.25-553.21 | 0.96 | 7 | | 8 | 22 | 11 | 38 | 3 | 6 |
| (eoh) | | | | | | | | | | | | | |

10/21/94

HOMESTAKE CANADA

DIAMOND DRILL HOLE LOG

ADL9437

| | | | |
|----------------------|----------------------------|-------------------------------|----------------------------------|
| PROJECT: Adrian 1994 | Date Commenced: SEPT. 1/94 | Contractor: ADVANCED DRILLING | Logged by: DLK Geotech by: GR |
| DRILL HOLE: ADL9437 | Date Completed: SEPT.10/94 | | |
| LENGTH: 523.00 | Core Diam: NQ | | |

| | |
|--|--|
| Collar Location | |
| Latitude: 20150.00 Departure: 21890.00 Elevation: 895.00 | |

S U M M A R Y

| | | DOWN HOLE SURVEYS | | | Method |
|---------------|-------------------------------|-------------------|--------|--------|------------|
| | | Depth | Azim | Inclin | |
| 0.00-3.05 | CASING | | | | |
| 3.05-5.00 | SANDSTONE | 0.00 | 170.00 | -86.00 | BRUNTON |
| 5.00-9.40 | SANDSTONE | 91.00 | 168.00 | -87.00 | SPERRY SUN |
| 9.40-12.30 | CONGLOMERATE | 183.00 | 199.00 | -86.00 | SPERRY SUN |
| 12.30-15.60 | SANDSTONE | 274.00 | 209.00 | -86.00 | SPERRY SUN |
| 15.60-31.20 | SILTSTONE | 365.00 | 209.00 | -85.00 | SPERRY SUN |
| 31.20-36.90 | INTERBEDDED MUDS./SILTSTONE | 457.00 | 207.50 | -85.00 | SPERRY SUN |
| 36.90-48.00 | LAMINATED MUDSTONE | 523.00 | 200.00 | -85.00 | SPERRY SUN |
| 48.00-54.50 | INTERBEDDED MUDS./SILTSTONE | | | | |
| 54.50-91.60 | LAMINATED MUDSTONE | | | | |
| 91.60-101.65 | INTERBEDDED MUDS./SILTSTONE | | | | |
| 101.65-117.00 | LAMINATED MUDSTONE | | | | |
| 117.00-119.00 | SANDSTONE | | | | |
| 119.00-150.00 | LAMINATED MUDSTONE | | | | |
| 150.00-161.50 | INTERBEDDED MUDS./SILTSTONE | | | | |
| 161.50-303.60 | LAMINATED MUDSTONE | | | | |
| 303.60-333.70 | LAMINATED MUDSTONE | | | | |
| 333.70-382.80 | PILLOWED ANDESITE FLOW | | | | |
| 382.80-401.90 | LAMINATED MUDSTONE | | | | |
| 401.90-419.10 | ANDESITE BRECCIA | | | | |
| 419.10-424.70 | LAMINATED MUDSTONE | | | | |
| 424.70-456.78 | ANDESITE HYALOCLASTIC BRECCIA | | | | |
| 456.78-471.20 | ANDESITE FLOW | | | | |
| 471.20-474.20 | LAMINATED MUDSTONE | | | | |
| 474.20-476.70 | ANDESITE BRECCIA | | | | |
| 476.70-482.00 | LAMINATED MUDSTONE | | | | |
| 482.00-515.60 | ANDESITE DYKE/INTRUSIVE | | | | |
| 515.60-517.10 | AUTOBRECCIATED RHYOLITE FLOW | | | | |
| 517.10-518.30 | BLACK MATRIX RHYOLITE BRECCIA | | | | |
| 518.30-523.00 | RHYOLITE BLOCKY ASH FLOW | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------|-------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.00 | 3.05 | CASING | | | | | | | | | | | |
| 3.05 | 5.00 | SANDSTONE Gray, graded, clastic contact 60° Frs=4/m :Vns =3/m 10% silica alteration - microveins Fairly massive, poorly graded medium to coarse grained sandstone. | | | | | | | | | | | |
| 5.00 | 9.40 | SANDSTONE Gray, graded, bedded bedding 62°:contact 58° Frs=20/m :Vns =2/m 5% silica alteration - pervasive Unit consists of interbedded graded sandstone silty mudstone and minor conglomerate. Unit coarsens down to a fine conglomerate base. | | | | | | | | | | | |
| 9.40 | 12.30 | CONGLOMERATE Fine-coarse grained, gray, graded, heterolithic bedding 60°:contact 47° Frs=3/m :Vns =3/m 2% silica alteration - microveins Unit has a graded fine to coarse sandstone top grading down to a clast supported heterolithic cobble conglomerate at the base. | | | | | | | | | | | |
| 12.30 | 15.60 | SANDSTONE Gray, graded, heterolithic bedding 60° Frs=6/m :Vns =1/m 1% silica alteration - microveins Fine to coarse cycle with a fine sandy siltstone top grading down to a fine pebble conglomerate at the base. | | | | | | | | | | | |
| 15.60 | 31.20 | SILTSTONE Dark gray, bedded, laminated bedding 52°:fracturing 46° Frs=5/m 2% silica alteration - macroveins Banded to laminated at a 1-5 mm scale, unit consists of alternating beds of fine black muddy silt and light grey silt. Unit contains narrow sections of sheared and broken ground with minor gouge. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------|---------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 19.6 | 4 cm ribboned black/white qtz vein @ 53 deg. | | | | | | | | | | | |
| | 21.7-22.3 | Shear zone @ 38 deg, 3 cm clay gouge seam. | | | | | | | | | | | |
| | 26.2 | Beds @ 70 deg. | | | | | | | | | | | |
| | 28.0-28.4 | Fault, rubble, gouge. | | | | | | | | | | | |
| | 30.8 | 10 cm quartz vein stockwork. | | | | | | | | | | | |
| 31.20 | 36.90 | INTERBEDDED MUDS./SILTSTONE Aphanitic, dark black, bedded, laminated bedding 62° Frs=12/m 1% pyrite - laminations Faintly laminated for the most, local sections of well laminated mud/silt with minor pyrite laminations (34.6) @ 62 deg. | | | | | | | | | | | |
| | <32.30-34.00> | Aphanitic, black, rubbly, crushed Fault zone, lost core in sand. | | | | | | | | | | | |
| 36.90 | 48.00 | LAMINATED MUDSTONE Aphanitic, dark gray, bedded, laminated bedding 63° Frs=5/m .2% pyrite - laminations Finely laminate black mudstone containing 2-70 cm sections of very fine, soft sediment contorted light bluish grey finely laminated ash(?). Black mudstone sections contain minor fine laminated pyrite. | | | | | | | | | | | |
| | 46.0-46.3 | Quartz healed shear zone. | | | | | | | | | | | |
| 48.00 | 54.50 | INTERBEDDED MUDS./SILTSTONE Aphanitic, black, bedded, broken bedding 53°:fracturing 60° Frs=40/m :Vns =4/m 20% silica alteration - macroveins 20% qz veining - macroveins Mainly black massive mudstone with 1-5 cm silt to fine sand interbeds at 3/m. Unit badly broken with numerous rubble zones, graphitic slip surfaces and quartz vein healed breccias. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WTD | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------|---------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 54.50 | 91.60 | LAMINATED MUDSTONE Aphanitic, dark black, bedded, laminated bedding 57°:fracturing 15° Frs=5/m Thinly bedded at a 1-5 cm scale and internally laminated. Unit contains rare 1-4 cm light grey very fine ashy beds. Unit broken with numerous fault/shear zones. | | | | | | | | | | | |
| | 68.0-68.6 | Fault, rubble and gouge. | | | | | | | | | | | |
| | 74.7-75.1 | Fault, rubble, graphitic slips. | | | | | | | | | | | |
| | 77.1-78.3 | Fault, rubble, graphitic slips, broken carbonate veins. | | | | | | | | | | | |
| | 82.0 | 3 cm bedding parallel ribbon carbonate vein. | | | | | | | | | | | |
| | 85.4-85.7 | Fault, rubble, gouge @ 38 deg. | | | | | | | | | | | |
| | 86.4-87.2 | Fault, rubble, graphitic bedding parallel slips. | | | | | | | | | | | |
| | 88.3 | Beds @ 81 deg. | | | | | | | | | | | |
| | <89.60-91.60> | Aphanitic, black, rubbly, crushed fault/gouge 60° 30% clay alteration - gouge Fault @ 60 deg. Last 60 cm is black clay gouge. | | | | | | | | | | | |
| 91.60 | 101.65 | INTERBEDDED MUDS./SILTSTONE Aphanitic, gray, bedded, laminated bedding 74°:fracturing 38° Frs=5/m Black silty mudstone and light grey siltstone interbedded on a .5-3 cm scale. Silt beds show basal scours and weak cross bedding. Unit contains several shear zones with minor gouge. | | | | | | | | | | | |
| | 93.0-93.3 | Fault, rubble gouge | | | | | | | | | | | |
| | 95.4 | 5 cm bedding parallel @ 71 deg clay seam. | | | | | | | | | | | |
| | 97.7-98.3 | Fault, rubble and clay gouge @ 42 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-----------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 100.2-100.5 Fault, clay gouge. | | | | | | | | | | | |
| 101.65 | 117.00 | LAMINATED MUDSTONE Aphanitic, gray, bedded, laminated bedding 50°:fracturing 60° Frs=4/m Rhythmically interbedded on a .5 cm scale are black and grey mudstone beds with 20% .5 cm silt beds. | | | | | | | | | | | |
| | 105.0 | Bed @ 47 deg. | | | | | | | | | | | |
| | 110.0 | Beds @ 40 deg. | | | | | | | | | | | |
| | <115.80-116.70> | Aphanitic, gray, rubbly, crushed fault/gouge 45° Frs=45/m :Vns =1/m 1% silica alteration - macroveins 15% clay alteration - gouge Bedly broken and gouged @ 45 deg. | | | | | | | | | | | |
| 117.00 | 119.00 | SANDSTONE Fine grained, pale gray, massive, broken contact 50° Frs=30/m Massive fine grained sandstone with numerous black graphitic slip surfaces. | | | | | | | | | | | |
| 119.00 | 150.00 | LAMINATED MUDSTONE Aphanitic, dark gray, bedded, broken bedding 60°:fracturing 57° Frs=25/m 5% clay alteration - gouge 3% qz-carb veining - microveins Well bedded at a 1-3 cm scale, black muddy siltstone with interbedded .5 cm silt beds. Unit bedly broken with numerous fault/shear zones. | | | | | | | | | | | |
| | 119.2-120.2 | Rubble. | | | | | | | | | | | |
| | 121.5 | 10 cm black clay gouge in 50 cm rubble zone. | | | | | | | | | | | |
| | 128.5 | Beds @ 78 deg. | | | | | | | | | | | |
| | 129.5-130.0 | 3 cm size rubble. | | | | | | | | | | | |
| | 132.6-134.1 | 30% recovery in sandy fault. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 136.5-137.5 Fault zone, rubble, gouge. | | | | | | | | | | | |
| | | 143.5 Beds @ 60 deg. | | | | | | | | | | | |
| | | 146.6-147.0 Fault, 60% black sandy clay gouge. | | | | | | | | | | | |
| | | 147.5-148.3 38% recovery, broken ground. | | | | | | | | | | | |
| 150.00 | 161.50 | INTERBEDDED MUDS./SILTSTONE Gray, bedded, broken bedding 50° Frs=13/m Interbedded at a 1-5 cm scale, black silty mudstone and coarse light grey silt. Silt beds have scoured bases. To 152.4, unit is badly broken, with numerous graphitic slip surfaces at all angles. | | | | | | | | | | | |
| 161.50 | 303.60 | LAMINATED MUDSTONE Aphanitic, black, bedded, laminated bedding 50° Mainly black laminated mudstone with 10% 1 cm light grey silt beds and 1% .5 cm to 5 cm very fine grained ash beds which may have pyritic bases and thicken down unit. Unit contains thick section of badly broken and rubbled core. bedding generally at 50 deg but flatten to 30 down hole. | | | | | | | | | | | |
| | | 186.4-187.0 Fault, rubble, gouge @ 40 deg. | | | | | | | | | | | |
| | | 190.7-191.7 Fault, rubble, graphitic slips @ 57 deg. | | | | | | | | | | | |
| | | 195.7-196.0 Gouge, sand. | | | | | | | | | | | |
| | | 201.4 Silt beds @ 51 deg. | | | | | | | | | | | |
| | | 203.3-204.0 Fault, gouge and graphitic slips at all angles. | | | | | | | | | | | |
| | | 204.1 10 cm gougy shear @ 45 deg, 50 off strike from the beds. | | | | | | | | | | | |
| | | 206.0 10 cm light grey ash bed @ 60 deg. | | | | | | | | | | | |
| | | 227.5 3 cm ash bed @ 73 deg. | | | | | | | | | | | |
| | | 229.7-230.3 Fault, black graphitic gouge and rubble. | | | | | | | | | | | |
| | | 231.0 Beds at 43 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|----|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 231.5-232.3 Fault, gouge @ 32 deg. | | | | | | | | | | | |
| | | 233.0-235.6 Sheared zone. Core has 0 strength and is soft and saturated. | | | | | | | | | | | |
| | | 242.6-242.9 Sheared, 10% micro quartz veins. | | | | | | | | | | | |
| | | 248.7 Beds @ 20 deg. | | | | | | | | | | | |
| | | 253.4-253.8 Fine grained light grey ash bed @ 47 deg. Lower contact sheared @ 30 deg. | | | | | | | | | | | |
| | | Numerous hairline fractures offset beds on a cm scale. | | | | | | | | | | | |
| | | 261.7-262.7 Fault zone, gouge and rubble @ 50 deg. | | | | | | | | | | | |
| | | 263.3-264.4 Fault zone, gouge rubble, upper and lower contacts of zone @ 29 deg. | | | | | | | | | | | |
| | | 265.3 Beds @ 48 deg. | | | | | | | | | | | |
| | | 273.5 30 cm ash bed @ 43 deg. | | | | | | | | | | | |
| | | 280.7 Shear @ 30 deg. | | | | | | | | | | | |
| | | 282.5 40 cm coarse silt beds showing crossbeds @ 49 deg. | | | | | | | | | | | |
| | | 293.4 40 cm shear @ 50 deg. Graphitic slip surfaces. | | | | | | | | | | | |
| | | 291.0 Beds 10 deg. | | | | | | | | | | | |
| | | 297.8 2-5 mm silt laminations @ 42 deg. | | | | | | | | | | | |
| | | 298.1-299.7 Badly broken, rubble, broken quartz veins with graphitic contacts. | | | | | | | | | | | |
| | | <209.20-210.90> Aphanitic, black, rubbly, broken All rubble, fragments have graphitic slips on 2-3 surfaces. Minor gouge at 210.5. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | <216.70-226.70> Aphanitic, black, rubbly, broken Thick interval of rubble, graphitic gouge and minor black mud. | | | | | | | | | | | |
| | | <236.90-242.90> LAMINATED MUDSTONE Aphanitic, blackish-white, rubbly, sheared shear 20° Frs=12/m :Vns =20/m 20% silica alteration - microveins 2% clay alteration - coatings 20% qz veining - macroveins Section is sheared with a contorted fabric 10-30 deg. Sheared ground contains 20% fine ribboned qtz alternating with the mud in a gneissic fashion. | | | | | | | | | | | |
| | | <248.90-251.00> Aphanitic, blackish-white, rubbly, sheared shear 30°:contact 48° Frs=50/m :Vns =15/m 15% silica alteration - microveins Fault zone containing broken quartz veins in graphitic gouge and rubble. | | | | | | | | | | | |
| | | <285.80-291.50> LAMINATED MUDSTONE Aphanitic, blackish-white, sheared, rubbly shear 48° Moderately sheared and contorted. Interval contains 12% QC veins parallel to fabric @ 48 deg. | | | | | | | | | | | |
| 303.60 | 333.70 | LAMINATED MUDSTONE Aphanitic, black, bedded, laminated bedding 43° Frs=21/m :Vns =15/m 15% silica alteration - microveins 5% clay alteration - coatings 15% qz veining - microveins 5% carbonate veining - microveins 3% pyrite - laminations Upper Salmon River mudstone. Conspicuous "pyjama" beds consisting of basally pyritic very fine grey to bluish grey ash beds rhythmically interbedded with the black mudstone on a 1-3 cm scale. No large detachment fault is apparent. Unit contains minor grey silt lams. 308.6-309.4 Fault, rubble, graphitic gouge and 5% broken quartz veins. 322.0 Mud flames into ash beds @ 43 deg. | 24472 | 331.00-332.40 | 1.40 | 10 | 0.7 | 12 | 531 | 54 | 34 | 2 | 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 312.6-313.4 Fault gouge contains broken and rolled qtz vein fragments. Zone is bedding parallel @ 45 deg. | | | | | | | | | | | |
| | | 325.0-333.0 Beds swing from 45 to 80 deg at lower contact. Ash lams now contain up to 10% very fine pyrite. | | | | | | | | | | | |
| | | <315.00-321.40> LAMINATED MUDSTONE Aphanitic, blackish-white, sheared, contorted shear 32° Sheared zone with minor gouge and 15% broken and contorted quartz veins. | | | | | | | | | | | |
| 333.70 | 382.80 | PILLOWED ANDESITE FLOW Grayish-brown, pillowed, Brecciated fracturing 39° Frs=3/m :Vns =2/m 4% carbonate alteration - pervasive 2% qz veining - microveins 2% carbonate veining - microveins 3% pyrrhotite - patches 1% pyrite - blebs Thick pillowed flow with pillows ranging in size from 20 to 90 cm. Pillows have chilled and vesiculated selvages. Inter-pillow material consists of minor hyaloclastite in a black limy matrix. Interpillow material contains up to 10% pyrrhotite and 2% pyrite as blades and masses. Mafic material is moderately carbonate altered. | 24473 | 332.40-333.90 | 1.50 | 5 | 0.7 | 12 | 558 | 56 | 63 | 2 | 3 |
| | | 354.9-355.4 Hyaloclastites with 1-3 cm curved margined chilled vesiculated fragments. | | | | | | | | | | | |
| | | 371.5 15% Po over 7 cm as interblock matrix. | | | | | | | | | | | |
| | | 372.5 10% Po over 5 cm as matrix to hyaloclastic shatter breccia. | | | | | | | | | | | |
| | | 376.5 5% Po, 2% Py as infillings adjacent to pillow margin. | | | | | | | | | | | |
| | | 382.0-401.5 Core of flow, more massive and homogenous. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|-------------------------|---|----------------------|---------------|-------------------|---------------|-------------------|----------------|----------------|-------------|-------------|
| | | 401.5-408.3 Flow bottom breccia, minor pillows developed and hyaloclastite. | | | | | | | | | | | |
| 382.80 | 401.90 | LAMINATED MUDSTONE Aphanitic, black, bedded, laminated bedding 45°:fracturing 40° Frs=6/m 5X carbonate alteration - pervasive 2X carbonate veining - microveins 2X pyrrhotite - disseminated 5X pyrite - laminations Well laminated black mudstone with 20X 1 cm silty turbiditic beds containing 5-10% very fine pyrite and a trace of bladed pyrrhotite. Unit moderately calcareous. | | | | | | | | | | | |
| 401.90 | 419.10 | ANDESITE BRECCIA Fine grained, grayish-brown, Brecciated, bleached Frs=2/m 2X carbonate alteration - pervasive Fairly massive with a consistent grain size. Blocks have no chilled margins. Breccia is clast supported with 15X calcareous mud matrix. Mafics are slightly carb altered. | 24474 | 408.30-409.90 | 1.60 | 1 | 0.5 | 8 | 471 | 41 | 21 | 2 | 3 |
| 419.10 | 424.70 | LAMINATED MUDSTONE Aphanitic, black, bedded, crystallites bedding 60° Frs=3/m 2X carbonate alteration - pervasive 5X pyrite - laminations Well bedded at 1-3 cm, contains 7X py as 1-3 mm lams and disseminations in coarser silty beds. Contains large pillow boulder from 421.0-421.7. | 24475 24476 24477 | 419.10-421.00 421.70-423.20 423.20-424.70 | 1.90 1.50 1.50 | 5 14 20 | 0.5 0.6 1.1 | 6 10 13 | 496 805 980 | 40 61 78 | 24 39 60 | 2 2 2 | 3 3 6 |
| 424.70 | 456.78 | ANDESITE HYALOCLASTIC BRECCIA Grayish-brown, hyaloclastic, vesicular Frs=3/m 15X carbonate alteration - pervasive 1X qz-carb veining - microveins 2X pyrrhotite - disseminated 1X pyrite - disseminated Thick hyaloclastic breccia containing 10X 10 cm pillow fragments in a limy hyaloclastic breccia. 80% of fragments are chilled and finely vesicular, having curved fracture surfaces. Unit contains minor pyrrhotite in matrix of fine green hyaloclastic shards. From 453.5-456.78 unit contains less(20%) fine hyaloclastic | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|---|---|--------------------------------------|----------------------------|---------------------------------|---------------------------|----------------------------------|----------------------------|----------------------------|-----------------------|-------------------------|
| | | shards and more 1-5 cm mafic fragments in a grey carbonate matrix than above. | | | | | | | | | | | |
| 456.78 | 471.20 | ANDESITE FLOW Aphanitic, brown, Brecciated, bleached Frs=3/m ;Vns =3/m 8% carbonate alteration - pervasive 3% qz-carb veining - microveins Weakly brecciated, finely vesiculated mafic. Has no coarse core, is fragments supported and has 10% grey carbonate or black micrite matrix. | 24478 | 470.20-471.20 | 1.00 | 12 | 0.6 | 10 | 103 | 34 | 51 | 2 | 3 |
| 471.20 | 474.20 | LAMINATED MUDSTONE Aphanitic, black, bedded, crystallites bedding 40° Frs=2/m 10% silica alteration - pervasive 1% carbonate alteration - pervasive 1% pyrrhotite - blebs 2% pyrite - laminations Black mudstone with bedding defined by 3 mm layers of medium grey hard material, possibly silica after carbonate. Rock contains 20% poorly developed chrysothallite-like structure but are of the same hard material. Unit contains 3% pyrite in fine laminations and disseminations. | 24479 24480 | 471.20-472.70 472.70-474.20 | 1.50 1.50 | 16 50 | 0.8 1.1 | 15 17 | 657 481 | 54 57 | 30 54 | 2 2 | 3 8 |
| 474.20 | 476.70 | ANDESITE BRECCIA Fine grained, grayish-brown, Brecciated Frs=5/m 3% carbonate alteration - pervasive Fine grained, finely vesicular mafic breccia healed by grey and black muddy carbonate. Mafic blocks are slightly calcareous. | 24481 24482 | 474.20-475.70 475.70-476.70 | 1.50 1.00 | 8 20 | 0.7 1.2 | 6 9 | 100 164 | 31 39 | 35 60 | 2 2 | 3 3 |
| 476.70 | 482.00 | LAMINATED MUDSTONE Black, laminated, crystallites bedding 42° Frs=4/m 10% silica alteration - pervasive 2% chlorite alteration - present 2% carbonate alteration - present .1% pyrrhotite - disseminated 4% pyrite - disseminated Possibly contact mudstone. Unit is very hard and silicified and spotted looking with silica replaced crystallites and carbonaceous lams. Unit contains 3% fine | 24483 24484 24485 24486 24487 | 476.70-477.70 477.70-479.30 479.30-479.70 479.70-481.20 481.20-482.00 | 1.00 1.60 0.40 1.50 0.80 | 53 59 20 30 10 | 1.3 1.4 1.1 1.2 0.8 | 13 14 8 22 15 | 442 1038 113 709 144 | 58 57 51 49 15 | 52 71 70 71 52 | 2 2 2 2 2 | 9 11 3 17 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|---|---|--------------------------------------|----------------------------|---------------------------------|---------------------------|----------------------------------|----------------------------|----------------------------|-----------------------|-------------------------|
| 456.78 | 471.20 | shards and more 1-5 cm mafic fragments in a grey carbonate matrix than above. ANDESITE FLOW Aphanitic, brown, Brecciated, bleached Frs=3/m :Vns =3/m 8% carbonate alteration - pervasive 3% qz-carb veining - microveins Weakly brecciated, finely vesiculated mafic. Has no coarse core, is fragments supported and has 10% grey carbonate or black micrite matrix. | 24478 | 470.20-471.20 | 1.00 | 12 | 0.6 | 10 | 103 | 34 | 51 | 2 | 3 |
| 471.20 | 474.20 | LAMINATED MUDSTONE Aphanitic, black, bedded, crystallites bedding 40° Frs=2/m 10% silica alteration - pervasive 1% carbonate alteration - pervasive 1% pyrrhotite - blebs 2% pyrite - laminations Black mudstone with bedding defined by 3 mm layers of medium grey hard material, possibly silica after carbonate. Rock contains 20% poorly developed chryssallite-like structure but are of the same hard material. Unit contains 3% pyrite in fine laminations and disseminations. | 24479 24480 | 471.20-472.70 472.70-474.20 | 1.50 1.50 | 16 50 | 0.8 1.1 | 15 17 | 657 481 | 54 57 | 30 54 | 2 2 | 3 8 |
| 474.20 | 476.70 | ANDESITE BRECCIA Fine grained, grayish-brown, Brecciated Frs=5/m 3% carbonate alteration - pervasive Fine grained, finely vesicular mafic breccia healed by grey and black muddy carbonate. Mafic blocks are slightly calcareous. | 24481 24482 | 474.20-475.70 475.70-476.70 | 1.50 1.00 | 8 20 | 0.7 1.2 | 6 9 | 100 164 | 31 39 | 35 60 | 2 2 | 3 3 |
| 476.70 | 482.00 | LAMINATED MUDSTONE Black, laminated, crystallites bedding 42° Frs=4/m 10% silica alteration - pervasive 2% chlorite alteration - present 2% carbonate alteration - present .1% pyrrhotite - disseminated 4% pyrite - disseminated Possibly contact mudstone. Unit is very hard and silicified and spotted looking with silica replaced crystallites and carbonaceous lams. Unit contains 3% fine | 24483 24484 24485 24486 24487 | 476.70-477.70 477.70-479.30 479.30-479.70 479.70-481.20 481.20-482.00 | 1.00 1.60 0.40 1.50 0.80 | 53 59 20 30 10 | 1.3 1.4 1.1 1.2 0.8 | 13 14 8 22 15 | 442 1038 113 709 144 | 58 57 51 49 15 | 52 71 70 71 52 | 2 2 2 2 2 | 9 11 3 17 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-----------------|--|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | disseminated pyrite and 4% pyrite in discrete silty/turbiditic beds to 3 cm thick. | | | | | | | | | | | |
| | 477.2 | 7% pyrite in a slightly chloritic horizon. | | | | | | | | | | | |
| | 479.3-479.7 | Narrow mafic dyke with 3 cm quartz vein on fw side. | | | | | | | | | | | |
| | <481.20-482.00> | LAMINATED MUDSTONE Black, laminated, fragmental bedding 47° Frs=3/m 3% chlorite alteration - pervasive 2% carbonate alteration - present 3% sericite alteration - clasts .2% pyrrhotite - disseminated 3% pyrite - disseminated This interval contains rare 1-3 cm light grey strongly sericitized rhyolite fragments in a slightly chloritic mudstone. Unit contains very fine pyrite as flooding and weak laminations. | | | | | | | | | | | |
| 482.00 | 515.60 | ANDESITE DYKE/INTRUSIVE Fine grained, gray, massive, crystalline :fracturing 60° Frs=3/m 1% carbonate alteration - microveins 2% carbonate veining - microveins 2% qz-carb veining - macroveins Massive mafic dyke. Top 2.0 m are chilled and bleached and contains rare .5 cm chlorite filled vesicles. Unit gets coarser down section where .5-1 mm feldspar grains are visible. Unit contains several 10 cm qtz/carbonate veins and 1-2 cm grey carbonate veins. Bleached top section is weakly calcareous. Lower 1.4 m is fine grained, light brown and chilled. Lower contact has a 3 mm laminated chilled rind @ 45 deg. | 24488 | 482.00-483.00 | 1.00 | 6 | 0.6 | 7 | 100 | 33 | 58 | 2 | 3 |
| | 497.3-497.66 | White qc vein @ 53 deg. | | | | | | | | | | | |
| | 501.4-501.6 | White qc vein @ 60 deg. | | | | | | | | | | | |
| | 506.7 | 2cm shear @ 46 deg. | | | | | | | | | | | |
| 515.60 | 517.10 | AUTOBRECCIATED RHYOLITE FLOW Fine-coarse grained, pale gray, Brecciated, monolithic | 24489 | 515.60-517.10 | 1.50 | 5 | 0.2 | 17 | 119 | 6 | 17 | 2 | 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Frs=1/m 60% silica alteration - pervasive Rhyolite breccia, contains 85% fragments to 40 cm in a strongly silicified dark grey matrix. Can't tell if it is a clastic matrix. | | | | | | | | | | | |
| 517.10 | 518.30 | BLACK MATRIX RHYOLITE BRECCIA Black, Brecciated, fragmental bedding 47° Frs=1/m 60% silica alteration - pervasive 1% chlorite alteration - present 1% carbonate alteration - microveins Matrix supported unit containing 20% 1-3 cm rhyolite fragments and 40% contorted clasts of a silt sized material which could have been silty ash beds which have been disrupted. Unit strongly silicified. | 24490 | 517.10-518.30 | 1.20 | 7 | 0.3 | 22 | 116 | 9 | 20 | 2 | 3 |
| 518.30 | 523.00 | RHYOLITE BLOCKY ASH FLOW Gray, fragmental Frs=1/m 70% silica alteration - pervasive 2% chlorite alteration - present Poorly sorted, clast supported. Contains 80% massive to flow banded fragments from 3-10cm on a coarse sand sized matrix. Interval contains narrow, chilled mafic dyke. Lower contact from 522.8-523.0 is a mylonitic looking shear containing 3cm round mafic clasts. | 24491 | 518.30-519.80 | 1.50 | 50 | 0.4 | 21 | 117 | 6 | 24 | 2 | 3 |
| | | | 24492 | 519.80-520.70 | 0.90 | 23 | 0.5 | 4 | 90 | 14 | 100 | 2 | 3 |
| | | | 24493 | 520.70-522.20 | 1.50 | 5 | 0.4 | 9 | 72 | 4 | 31 | 2 | 3 |
| | | | 24494 | 522.20-523.00 | 0.80 | 14 | 0.5 | 17 | 74 | 7 | 59 | 2 | 6 |
| | 523.0 | EOK. | | | | | | | | | | | |
| (eoh) | | | | | | | | | | | | | |

10/21/94

HOMESTAKE CANADA

DIAMOND DRILL HOLE LOG

ADL9438

| | | | |
|----------------------|----------------------------|-------------------------------|----------------------------------|
| PROJECT: Adrian 1994 | Date Commenced: SEPT.11/94 | Contractor: ADVANCED DRILLING | Logged by: DLK Geotech by: GR |
| DRILL HOLE: ADL9438 | Date Completed: SEPT.21/94 | | |
| LENGTH: 625.77 | Core Diam: NQ | | |

| | |
|--|--|
| Collar Location | |
| Latitude: 20275.00 Departure: 22860.00 Elevation: 710.00 | |

S U M M A R Y

| | | DOWN HOLE SURVEYS | | | |
|---------------|------------------------------|-------------------|--------|--------|------------|
| | | Depth | Azim | Inclin | Method |
| 0.00-6.10 | CASING | | | | |
| 6.10-22.60 | INTERBEDDED MUDS./SILTSTONE | 91.00 | 221.00 | -79.00 | SPERRY SUN |
| 22.60-44.80 | SANDSTONE | 185.00 | 237.00 | -77.00 | SPERRY SUN |
| 44.80-108.81 | SANDSTONE | 285.00 | 237.00 | -76.00 | SPERRY SUN |
| 108.81-201.80 | LAMINATED MUDSTONE | 383.00 | 239.00 | -74.50 | SPERRY SUN |
| 201.80-296.30 | INTERBEDDED MUDS./SILTSTONE | 625.00 | 239.00 | -72.00 | SPERRY SUN |
| 296.30-311.30 | MASSIVE MUDSTONE | 0.00 | 225.00 | -77.00 | BRUNTON |
| 311.30-319.00 | MASSIVE MUDSTONE | | | | |
| 319.00-336.00 | INTERBEDDED MUDS./SILTSTONE | | | | |
| 336.00-373.60 | LAMINATED MUDSTONE | | | | |
| 373.60-444.30 | MASSIVE MUDSTONE | | | | |
| 444.30-517.00 | LAMINATED MUDSTONE | | | | |
| 517.00-583.00 | LAMINATED MUDSTONE | | | | |
| 583.00-587.30 | MASSIVE MUDSTONE | | | | |
| 587.30-594.00 | MUDDY TUFF | | | | |
| 594.00-602.70 | AUTOBRECCIATED RHYOLITE FLOW | | | | |
| 602.70-615.50 | AUTOBRECCIATED RHYOLITE FLOW | | | | |
| 615.50-616.20 | AUTOBRECCIATED RHYOLITE FLOW | | | | |
| 616.20-625.70 | LAMINATED MUDSTONE | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------|--------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.00 | 6.10 | CASING | | | | | | | | | | | |
| 6.10 | 22.60 | <p>INTERBEDDED MUDS./SILTSTONE Black, bedded, broken bedding 50°:fracturing 30° Fr=7/m Interbedded black banded mudstone and light grey silty sandstone. Silty beds are usually normally graded with coarser bottoms having scours and flames.</p> <p>6.1-8.2 Broken core</p> <p>14.3 Beds @ 50 deg.</p> <p>17.1 Beds @ 50 deg.</p> <p>21.0-22.6 Broken core, narrow (30 cm) sections of black graphitic gouge at 21.2 and 22.3.</p> | | | | | | | | | | | |
| 22.60 | 44.80 | <p>SANDSTONE Fine grained, gray, bedded, massive bedding 53°:fracturing 75° Fr=8/m :Vns =4/m 5% silica alteration - pervasive .1% clay alteration - gouge 4% qz-carb veining - microveins Thick, poorly bedded, fairly massive, well sorted. Unit contains 2X 1-4mm subrounded argillite clasts which increase in size and frequency towards the bottom. Unit contains several 20-50 cm shear zones with adjacent quartz flooding and minor sandy clay gouge.</p> <p>34.3-34.8 Shear, 20% quartz/carbonate veins, 5cm sandy gouge @ 75 deg at 34.6.</p> | | | | | | | | | | | |
| 44.80 | 108.81 | <p>SANDSTONE Fine-coarse grained, gray, bedded, graded bedding 60°:fracturing 38° Fr=6/m :Vns =4/m 2% silica alteration - pervasive .1% clay alteration - gouge 2% qz-carb veining - microveins Thick interval of cyclic, graded members consisting of 2-5 m thick sections having a mudstone or fine siltstone top, a graded sandy central portion and a sand matrix supported pebble to mudstone rip-up conglomeratic base. Unit</p> | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | contains several narrow shattered zones, primarily within the mudstone portions. | | | | | | | | | | | |
| | 56.9 | 1cm clay seam @ 47 deg. | | | | | | | | | | | |
| | 61.3 | 20 cm sheared gougy mudstone, fabric @ 48 deg. | | | | | | | | | | | |
| | 70.5 | Beds @ 75 deg. | | | | | | | | | | | |
| | 76.5 | Lamination in silty mudstone at top of cycle @ 82 deg. | | | | | | | | | | | |
| | 81.0 | Beds @ 81 deg. | | | | | | | | | | | |
| | 90.1 | Sharp basal contact of cycle between coarse sandstone and laminated mudstone @ 79 deg. | | | | | | | | | | | |
| | 100.0-100.8 | Broken core, rubble. | | | | | | | | | | | |
| | | Lower contact at 108.81 is faulted, 10 cm of gouge and 50cm of rubble. | | | | | | | | | | | |
| 108.81 | 201.80 | LAMINATED MUDSTONE Black, bedded, laminated bedding 79°:fracturing 78° Frs=5-9/m :Vns =3/m 2% carbonate alteration - pervasive 1% clay alteration - gouge 2% qz veining - microveins 2% carbonate veining - microveins 1% pyrite - laminations Thick section of laminated to thinly bedded black mudstone with silty interbeds which thin and become less frequent down hole and are replaced by very fine light grey ashy beds to 5cm thick. Coarse silty beds to 3cm thick at the top of the unit show scoured bases and minor cross bedding. Unit contains several zones of broken, rubbly core with minor gouge. | | | | | | | | | | | |
| | 121.5 | Broken core | | | | | | | | | | | |
| | 124.0-125.5 | Brecciated mudstone healed by 5% 1-3mm quartz stringers. | | | | | | | | | | | |
| | 128.5 | 1cm beds @ 83 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-----------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | From 134.0 to end of unit, unit contains .5-2cm light grey very fine grained ashy(?) laminations and minor very fine pyrite laminations to 2mm thick. | | | | | | | | | | | |
| | 136.0 | Beds @ 72 deg. | | | | | | | | | | | |
| | 147.0 | Beds @ 78 deg. | | | | | | | | | | | |
| | 149.7-150.6 | Broken core, graphitic slips and minor gouge. | | | | | | | | | | | |
| | 151.7-152.5 | Fault zone, broken core, graphitic slips. | | | | | | | | | | | |
| | 154.3-157.5 | Broken core. | | | | | | | | | | | |
| | 158.3-159.6 | Coarse sandy turbidite, fairly calcareous. | | | | | | | | | | | |
| | 159.6-160.5 | Unit contains several 2-4 cm granular, light grey limy beds. | | | | | | | | | | | |
| | 167.0 | 1 cm pyritic light grey ash bed @ 82 deg. | | | | | | | | | | | |
| | 176.6 | Ash beds @ 88 deg. | | | | | | | | | | | |
| | 179.5 | Beds @ 85 deg. | | | | | | | | | | | |
| | 182.0 | Black/ white ribboned quartz vein @ 10 deg. | | | | | | | | | | | |
| | 190.7-191.1 | Quartz healed brecciated mudstone. | | | | | | | | | | | |
| | 191.7 | Beds @ 45 deg. | | | | | | | | | | | |
| | 197.8 | 10 cm gougy shear | | | | | | | | | | | |
| | 199.4 | Beds @ 10 deg. | | | | | | | | | | | |
| | <184.50-186.10> | Fine grained, black, sheared, rubbly shear 68° Frs=50/m :Vns =3/m 10% clay alteration - gouge 3% qz veining - microveins Fault zone of graphitic gouge and rubble @ 65 deg.70 deg off strike of the beds. | | | | | | | | | | | |
| 201.80 | 296.30 | INTERBEDDED MUDS./SILTSTONE Gray, bedded, laminated bedding 75°:fracturing 38° Frs=3/m :Vns =3/m | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------------|----|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 2% carbonate alteration - pervasive 1% clay alteration - gouge 2% qz veining - microveins 2% carbonate veining - microveins Unit consists of black silty mudstone with interbedded fine to medium grained silt beds to 20cm thick which may truncate and cross cut the laminated mudstone. Unit is locally calcareous. | | | | | | | | | | | |
| 202.3 | | Bedding in mudstone @ 30 deg is truncated by sand bed @ 60 deg, 90 deg to strike. | | | | | | | | | | | |
| 210.4 | | Beds @ 78 deg. | | | | | | | | | | | |
| 215.0 | | Beds @ 90 deg. | | | | | | | | | | | |
| 221.6 | | Beds @ 65 deg. | | | | | | | | | | | |
| 226.5 | | Beds @ 40 deg. | | | | | | | | | | | |
| 232.0 | | Beds @ 43 deg. | | | | | | | | | | | |
| 233.0 | | Beds @ 55 deg. | | | | | | | | | | | |
| 236.9-236.6 | | Sand matrix supported well sorted at .5-1cm pebble conglomerate bed. | | | | | | | | | | | |
| 251.5 | | 15 cm quartz healed shear zone and 5 cm gouge @ 60 deg. | | | | | | | | | | | |
| 258.2 | | Beds @ 71 deg. | | | | | | | | | | | |
| 258.7-259.1 | | 30cm quartz/carbonate vein @ 36 deg. | | | | | | | | | | | |
| 262.7 | | Beds @ 78 deg. | | | | | | | | | | | |
| 264.7-265.3 | | Stockwork of 3mm QC veins at no preferred attitude. | | | | | | | | | | | |
| 265.7 | | 10 cm gouge shear @ 50 deg., 45 deg. off strike of beds. | | | | | | | | | | | |
| 275.4 | | Beds @ 60 deg. | | | | | | | | | | | |
| 277.4-278.0 | | Quartz carbonate healed shear zone. | | | | | | | | | | | |
| 281.0 | | Cross bedded silt beds @ 40 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-----------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 285.6 | Beds @ 55 deg. | | | | | | | | | | | |
| | 294.5 | Beds @ 62 deg. | | | | | | | | | | | |
| | <289.20-292.30> | Fine grained, black, rubbly, broken shear 40° Fra=50/m :Vns =15/m 10% silica alteration - macroveins 5% carbonate alteration - microveins 30% clay alteration - gouge 10% qz veining - microveins 5% carbonate veining - microveins Fault zone, broken quartz/carbonate veins in black graphitic gougy rubble. Footwall 75 cm is quartz/carbonate healed breccia. | | | | | | | | | | | |
| 296.30 | 311.30 | MASSIVE MUDSTONE Aphanitic, black, bedded, laminated bedding 65° Fra=4/m .1% pyrite - laminations Well laminated black/dark grey mudstone. Unit contains rare .5 cm silty beds. | | | | | | | | | | | |
| | 299.4 | 5 cm graphitic gouge shear @ 60 deg. | | | | | | | | | | | |
| | 302.5 | 2mm scale laminations @ 84 deg. | | | | | | | | | | | |
| | <306.40-311.30> | Fine grained, black, rubbly, broken bedding 78°:fracturing 75° Fra=40/m :Vns =20/m 10% silica alteration - microveins 10% carbonate alteration - microveins 5% clay alteration - gouge 20% qz-carb veining - microveins Badly broken and gouged. Shearing mostly bedding parallel. Interval contains 20 % stockwork qc veins. | | | | | | | | | | | |
| 311.30 | 319.00 | MASSIVE MUDSTONE Aphanitic, black, bedded, sheared bedding 52°:shear 35° Fra=40/m 5% silica alteration - microveins 5% carbonate alteration - microveins 10% clay alteration - gouge 10% qz-carb veining - microveins | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Faintly banded massive black mudstone. Unit badly broken, gouged and rubbly. Contains abundant graphitic slip surfaces at all angles. Unit contains 10 % fine broken qc stockwork. | | | | | | | | | | | |
| | | <316.30-319.00> Fine grained, black, rubbly, broken Fault zone, broken and gouged, 10% broken qc vein stockwork. | | | | | | | | | | | |
| 319.00 | 336.00 | INTERBEDDED MUDS./SILTSTONE Black, bedded, laminated bedding 78°:fracturing 75° Fra=5/m 1% clay alteration - coatings Interbedded black mudstone and 2-5cm 40cm spaced light grey siltstone. Bases of silty layers show good flames up and contain trace amounts of fine pyrite. | | | | | | | | | | | |
| | | 328.0 Beds @ 72 deg. | | | | | | | | | | | |
| | | 330.3-330.5 Shear zone with gouge and rubble @ 37 deg. | | | | | | | | | | | |
| 336.00 | 373.60 | LAMINATED MUDSTONE Aphanitic, black, bedded, laminated bedding 73° Fra=3/m 3% qz veining - microveins 5% qz-carb veining - microveins Well bedded, faintly laminated. bedding a a 3cm scale defined by 1mm black lens in the dark grey mudstone. Unit fairly solid and homogenous. | | | | | | | | | | | |
| | | 349.0-340.3 Fault zone, graphitic slips and minor black clay surfaces. | | | | | | | | | | | |
| | | 343.5 Beds @ 74 deg. | | | | | | | | | | | |
| | | Bedding in the unit gets less evident down section. | | | | | | | | | | | |
| | | 373.2-373.3 Fault zone, broken gougy rubble with broken ribbon qc veins. | | | | | | | | | | | |
| | | 373.0-373.6 Light grey ash bed with 2% very fine black grains. Unit is very fine grained and | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-----------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | massive. | | | | | | | | | | | |
| 373.60 | 444.30 | <p>MASSIVE MUDSTONE Aphanitic, black, bedded, laminated bedding 30°:fracturing 30° Fr=5/m 3% clay alteration - coatings 20% qz-carb veining - microveins Massive, poorly bedded black mudstone with rare light grey fine silty beds spaced at 1-m. Bedding in the interval swing from 78 deg near the top to 10 deg down hole approaching the disrupted quartz fracture healed shear zone reflecting fault drag on beds.</p> | | | | | | | | | | | |
| | 378.07 | Beds @ 70 deg. | | | | | | | | | | | |
| | 383.5 | Beds @ 60 deg. | | | | | | | | | | | |
| | 390.0 | Beds @ 47 deg. | | | | | | | | | | | |
| | 391.7 | Beds @ 28 deg. | | | | | | | | | | | |
| | 397.0 | Beds @ 15 deg. | | | | | | | | | | | |
| | 401.1-401.8 | QC healed shear zone @ 60 deg. | | | | | | | | | | | |
| | 407.7 | Beds @ 20 deg. | | | | | | | | | | | |
| | 425.0 | Beds @ 15 deg. | | | | | | | | | | | |
| | 429.0 | quartz healed breccia @ 40 deg. | | | | | | | | | | | |
| | 432.0 | quartz filled joints @ 77 deg. | | | | | | | | | | | |
| | 440.0-441.0 | 40% contorted quartz/ carbonate veins. | | | | | | | | | | | |
| | 441.2 | Beds @ 47 deg. | | | | | | | | | | | |
| | 443.3-444.2 | Highly contorted and QC veined. Lower contact of this interval has 10 cm of healed gouge. | | | | | | | | | | | |
| | <410.10-423.70> | <p>MASSIVE MUDSTONE Fine grained, black, contorted, veined bedding 20°:qz carb veining 30° Fr=5/m :Vns =30/m 20% silica alteration - microveins 20% carbonate alteration - microveins</p> | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------------|--------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 40% qz-carb veining - microveins Thick section of structurally disturbed rock. Interval heavily quartz/carbonate veined with contorted silty laminations at low(10-20) angles to the core. | | | | | | | | | | | |
| 444.30 | 517.00 | LAMINATED MUDSTONE Aphanitic, black, bedded, laminated bedding 60°:qz carb veining 38° Fr=2/m :Vns =5/m 5% silica alteration - macroveins 5% carbonate alteration - microveins 10% qz-carb veining - microveins 2% pyrite - laminations Well banded to laminated black mudstone with rhythmically banded 1-3 cm light grey variably pyritic ash bands. Unit is probably the top of the upper Salmon River mudstones. Unit contains local sections of QC veining. | | | | | | | | | | | |
| 445.5 | | Beds @ 50 deg. | | | | | | | | | | | |
| 448.4 | | 1-4 cm pyrite nodules. Bedding @ 46 deg. | | | | | | | | | | | |
| 451.7 | | 3mm scale laminations @ 70 deg. | | | | | | | | | | | |
| 456.0 | | Beds @ 59 deg. | | | | | | | | | | | |
| 456.1-459.3 | | Bedding contorted, interval contains 15% QC veins & quartz filled tension veins. | | | | | | | | | | | |
| 459.8 | | Beds @ 52 deg. | | | | | | | | | | | |
| 468.5 | | Beds @ 60 deg. | | | | | | | | | | | |
| 470.1-470.5 | | Fault zone, rubble, graphitic gouge @ 47 deg. | | | | | | | | | | | |
| 476.0 | | 3cm black clay gouge seam @ 45 deg. | | | | | | | | | | | |
| 477.5 | | Beds @ 70 deg. | | | | | | | | | | | |
| | | Unit well interbanded, "pyjama beds" on a 2-7 mm scale. Pyrite lams are scarce at 1/m. | | | | | | | | | | | |
| 491.3-491.6 | | Badly broken core. | | | | | | | | | | | |
| 494.1-494.4 | | Fault zone, 10 cm QC vein and 20 cm black sandy gouge. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-----------------|--------|--|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| 498.0 | | Beds @ 66 deg. | | | | | | | | | | | |
| <506.30-517.00> | | LAMINATED MUDSTONE Fine grained, blackish-gray, contorted, veined bedding 40°:qz carb veining 40° Frs=4/m :Vns =8/m 5% silica alteration - macroveins 5% carbonate alteration - microveins 2% clay alteration - coatings 10% qz-carb veining - microveins 2% pyrite - laminations Sheared and veined section of laminated mudstone. Broken pyritic ash lams to 1 cm are contorted, bedding ranges from 20-75 deg. Unit heavily AC veined, mostly bedding parallel and have been later contorted. | | | | | | | | | | | |
| 517.00 | 583.00 | LAMINATED MUDSTONE Black, bedded, laminated bedding 70° Frs=4/m 3% carbonate alteration - pervasive 2-7% pyrite - laminations Well bedded and banded black mudstone and light grey pyritic ash bands to 30 cm. Unit is variably calcareous with light grey limy mud sections. Interval very solid with no faults. Unit contains sections of 7% pyrite as 1-2mm thick pyrite lams spaced @ 3mm. | 24495 | 517.00-519.00 | 2.00 | 13 | 1.1 | 12 | 540 | 53 | 42 | 2 | 3 |
| | | | 24496 | 519.00-521.00 | 2.00 | 23 | 1.7 | 8 | 788 | 55 | 66 | 2 | 5 |
| | | | 24497 | 521.00-523.00 | 2.00 | 42 | 3.1 | 7 | 2000 | 82 | 112 | 2 | 11 |
| | | | 24498 | 523.00-525.00 | 2.00 | 15 | 2.1 | 10 | 1346 | 81 | 40 | 2 | 7 |
| | | | 24499 | 525.00-527.00 | 2.00 | 11 | 2.5 | 8 | 1278 | 79 | 35 | 2 | 7 |
| | | | 24500 | 527.00-529.00 | 2.00 | 8 | 1.6 | 11 | 1201 | 78 | 41 | 2 | 7 |
| | | | 24501 | 529.00-531.00 | 2.00 | 29 | 2.1 | 19 | 916 | 78 | 34 | 2 | 7 |
| | | | 24502 | 531.00-533.00 | 2.00 | 24 | 1.7 | 9 | 776 | 76 | 31 | 2 | 6 |
| | | | 24503 | 533.00-535.00 | 2.00 | 11 | 0.6 | 7 | 694 | 63 | 26 | 2 | 3 |
| | | | 24504 | 535.00-537.00 | 2.00 | 5 | 0.4 | 4 | 380 | 35 | 23 | 2 | 3 |
| | | | 24505 | 537.00-539.00 | 2.00 | 8 | 0.5 | 8 | 530 | 40 | 24 | 2 | 3 |
| | | | 24506 | 539.00-541.00 | 2.00 | 13 | 0.3 | 6 | 297 | 35 | 18 | 2 | 3 |
| | | 522.4 Fine pyrite laminations @ 83 deg. | 24507 | 541.00-543.00 | 2.00 | 24 | 1.0 | 14 | 747 | 53 | 25 | 2 | 3 |
| | | | 24508 | 543.00-545.00 | 2.00 | 16 | 0.5 | 8 | 361 | 50 | 17 | 2 | 3 |
| | | 529.0 Pyrite lams @ 62 deg. | 24509 | 545.00-547.00 | 2.00 | 22 | 0.3 | 17 | 545 | 46 | 20 | 2 | 6 |
| | | | 24510 | 547.00-549.00 | 2.00 | 15 | 0.2 | 11 | 165 | 12 | 11 | 2 | 3 |
| | | 538.5-539.0 Interval contains several .5-1cm gritty carbonate matrix pyritic turbidite beds @ 64 deg. | 24511 | 549.00-551.00 | 2.00 | 21 | 0.8 | 15 | 551 | 66 | 29 | 2 | 6 |
| | | | 24512 | 551.00-553.00 | 2.00 | 25 | 0.4 | 23 | 693 | 63 | 32 | 2 | 5 |
| | | | 24513 | 553.00-555.00 | 2.00 | 18 | 0.1 | 21 | 454 | 46 | 26 | 3 | 3 |
| | | | 24514 | 555.00-557.00 | 2.00 | 14 | 0.3 | 12 | 595 | 48 | 25 | 2 | 3 |
| | | 539.0 30 cm light grey limy bed. | 24515 | 557.00-559.00 | 2.00 | 11 | 0.6 | 16 | 801 | 60 | 28 | 2 | 5 |
| | | | 24516 | 559.00-561.00 | 2.00 | 18 | 0.8 | 24 | 889 | 71 | 38 | 2 | 7 |
| | | 546.8-548.6 Unit strongly silicified. | 24517 | 561.00-563.00 | 2.00 | 5 | 0.5 | 14 | 705 | 58 | 29 | 2 | 3 |
| | | | 24518 | 563.00-565.00 | 2.00 | 4 | 0.1 | 12 | 642 | 44 | 24 | 2 | 3 |
| | | 546.0 7cm laminated carbonate bed @ 63 deg. | 24519 | 565.00-567.00 | 2.00 | 4 | 0.6 | 8 | 828 | 60 | 30 | 2 | 3 |
| | | | 24520 | 567.00-569.00 | 2.00 | 8 | 0.7 | 13 | 931 | 62 | 32 | 2 | 3 |
| | | 566.5 2mm pyrite lams @ 68 deg. | 24521 | 569.00-571.00 | 2.00 | 6 | 0.1 | 18 | 619 | 78 | 29 | 2 | 3 |
| | | | 24522 | 571.00-573.00 | 2.00 | 7 | 0.1 | 19 | 381 | 57 | 21 | 2 | 3 |
| | | 576.0-576.5 60% laminated ash bands @ 62 deg, 2% py. | 24523 | 573.00-575.00 | 2.00 | 4 | 0.3 | 17 | 573 | 68 | 29 | 2 | 3 |
| | | | 24524 | 575.00-577.00 | 2.00 | 7 | 0.1 | 17 | 505 | 51 | 26 | 2 | 3 |
| | | 579.0-583.0 Unit still black fine grained, slightly less | 24525 | 577.00-579.00 | 2.00 | 43 | 0.3 | 16 | 571 | 56 | 28 | 2 | 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | UID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | laminated, moderately silicified. Interval contains 1% fracture filling pyrite. | 24526 | 579.00-581.00 | 2.00 | 8 | 0.9 | 12 | 471 | 61 | 24 | 2 | 5 |
| | | | 24527 | 581.00-583.00 | 2.00 | 16 | 1.5 | 23 | 485 | 67 | 40 | 2 | 7 |
| 583.00 | 587.30 | MASSIVE MUDSTONE Aphanitic, gray, massive, Brecciated bedding 65° Frs=3/m 30% silica alteration - pervasive 5% pyrite - stockwork Dark greyish brown massive faintly bedded silty mudstone. Unit very hard, possibly hornfelsed. Contains 3% fine pyrite as fracture fillings. May be equivalent to CTST unit, as in the right strat location. | 24528 | 583.00-585.00 | 2.00 | 37 | 1.2 | 17 | 453 | 44 | 122 | 2 | 11 |
| | | | 24529 | 585.00-586.50 | 1.50 | 9 | 0.1 | 3 | 22 | 7 | 161 | 2 | 9 |
| | | | 24530 | 586.50-587.30 | 0.80 | 5 | 0.1 | 6 | 36 | 6 | 80 | 2 | 7 |
| 587.30 | 594.00 | MUDDY TUFF Fine grained, gray, contorted, bedded bedding 60° Frs=3/m 30% silica alteration - pervasive 5% sericite alteration - pervasive 20% graphite - replaced phenocryst 1% pyrite - disseminated Unit consists of fragmental looking broken beds of very fine rhyolite ash in a dark grey to black mud matrix. Locally preserved 5cm beds of fine laminated ash are present. Felsic fragments have suffered moderate carbon alteration/replacement originating in the cores of the fragments. Unit has undergone moderate silica alteration after weak sericitization. | 24531 | 587.30-588.00 | 0.70 | 11 | 0.1 | 18 | 231 | 13 | 176 | 2 | 18 |
| | | | 24532 | 588.00-590.00 | 2.00 | 5 | 0.1 | 8 | 164 | 9 | 51 | 2 | 6 |
| | | | 24533 | 592.00-592.00 | 0.00 | 3 | 0.1 | 6 | 138 | 9 | 15 | 2 | 3 |
| | | | 24534 | 592.00-594.00 | 2.00 | 1 | 0.1 | 1 | 67 | 7 | 14 | 2 | 3 |
| | 590.0 | Ash beds @ 60 deg. | | | | | | | | | | | |
| 594.00 | 602.70 | AUTOBRECCIATED RHYOLITE FLOW Fine grained, black, Brecciated bedding 63° Frs=2/m 30% silica alteration - pervasive 2% chlorite alteration - replaced phenocryst 25% carbonate alteration - pervasive 30% graphite - pervasive 1% pyrite - disseminated Fine rhyolite breccia. Looks like a fine hyaoclastite but is heavily carbon replaced in the matrix. Unit consists of 2-5 flat subangular white rhyolite fragments in a black carbon matrix. Fragment boundaries are curved. Rock has a layered appearance, may represent a weak flow-top | 24535 | 594.00-596.00 | 2.00 | 3 | 0.1 | 14 | 134 | 7 | 14 | 2 | 3 |
| | | | 24536 | 596.00-597.50 | 1.50 | 2 | 0.1 | 2 | 106 | 7 | 3 | 2 | 3 |
| | | | 24537 | 597.50-598.70 | 1.20 | 1 | 0.1 | 3 | 33 | 5 | 6 | 2 | 3 |
| | | | 24538 | 598.70-600.70 | 2.00 | 15 | 0.1 | 3 | 17 | 4 | 3 | 2 | 3 |
| | | | 24539 | 600.70-602.70 | 2.00 | 7 | 0.1 | 5 | 49 | 6 | 10 | 2 | 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | hyaloclastic explosion breccia. Fragments larger than 3cm show relic flow banding. | | | | | | | | | | | |
| 602.70 | 615.50 | AUTOBRECCIATED RHYOLITE FLOW | 24540 | 602.70-604.70 | 2.00 | 17 | 0.1 | 20 | 162 | 5 | 5 | 2 | 3 |
| | | Fine-coarse grained, gray, Brecciated | 24541 | 604.70-606.70 | 2.00 | 43 | 0.1 | 7 | 121 | 5 | 5 | 2 | 3 |
| | | Frs=3/m | 24542 | 606.70-608.70 | 2.00 | 3 | 0.1 | 10 | 29 | 4 | 5 | 2 | 3 |
| | | 40% silica alteration - pervasive | 24543 | 609.30-611.30 | 2.00 | 2 | 0.1 | 3 | 84 | 6 | 9 | 2 | 3 |
| | | 3% chlorite alteration - replaced phenocryst | 24544 | 611.30-613.30 | 2.00 | 2 | 0.1 | 3 | 77 | 5 | 5 | 2 | 3 |
| | | 3% sericite alteration - pervasive | 24545 | 613.30-615.50 | 2.20 | 1 | 0.1 | 18 | 117 | 6 | 7 | 2 | 3 |
| | | 20% graphite - replaced phenocryst | | | | | | | | | | | |
| | | 1% pyrite - disseminated | | | | | | | | | | | |
| | | Rhyolite breccia, fragment supported. Fragments range from 1-9cm in a fine chippy carbon replaced matrix. Larger fragments are light pinkish white and are faintly flow banded. 5 % of the fragments are dark green, strongly chlorite altered. | | | | | | | | | | | |
| | | <608.70-609.30> ANDESITE DYKE/INTRUSIVE | | | | | | | | | | | |
| | | Fine-coarse grained, grayish-brown, Brecciated mafic dyke. Unit consists of 10cm subrounded fragments having a chilled 1cm rind and a matrix of fine hyaloclastic shards and minor pyrrhotite. | | | | | | | | | | | |
| 615.50 | 616.20 | AUTOBRECCIATED RHYOLITE FLOW | 24546 | 615.50-616.20 | 0.70 | 10 | 0.1 | 1 | 27 | 4 | 9 | 2 | 3 |
| | | Fine grained, black, Brecciated bedding 67° | | | | | | | | | | | |
| | | Frs=3/m | | | | | | | | | | | |
| | | 25% silica alteration - pervasive | | | | | | | | | | | |
| | | 15% graphite - pervasive | | | | | | | | | | | |
| | | .1% pyrite - disseminated | | | | | | | | | | | |
| | | Basal contact of the rhyolite. Interval consists of a weak expanded flow banded breccia in a black silty mud matrix. Unit is moderately carbon replaced. | | | | | | | | | | | |
| 616.20 | 625.70 | LAMINATED MUDSTONE | 24547 | 616.20-617.50 | 1.30 | 5 | 0.1 | 4 | 69 | 2 | 12 | 2 | 3 |
| | | Black, bedded, contorted | 24548 | 617.50-618.50 | 1.00 | 2 | 0.1 | 4 | 83 | 6 | 22 | 2 | 3 |
| | | bedding 64° | 24549 | 618.50-620.50 | 2.00 | 13 | 0.1 | 31 | 821 | 53 | 54 | 2 | 14 |
| | | Frs=5/m | 24550 | 620.50-622.50 | 2.00 | 9 | 0.2 | 40 | 692 | 74 | 48 | 2 | 13 |
| | | 5% silica alteration - pervasive | 24551 | 622.50-624.50 | 2.00 | 4 | 0.1 | 24 | 410 | 84 | 31 | 2 | 5 |
| | | 2% pyrite - laminations | 24552 | 624.50-625.70 | 1.20 | 5 | 0.1 | 5 | 556 | 60 | 17 | 2 | 3 |
| | | Black, variably pyritic mudstone with light grey silt beds increasing in thickness to 5cm downhole. Top 2.3 m is contorted and contains 5% subrounded indistinct felsic | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------|--------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | fragments. This upper interval contains up to 7% pyrite. | | | | | | | | | | | |
| | 520.5 | 3mm fine , slightly contorted pyrite bands @ 62 deg. | | | | | | | | | | | |
| (eoh) | 625.77 | EOK. | | | | | | | | | | | |

10/19/94

HOMESTAKE CANADA

DIAMOND DRILL HOLE LOG

ADL9439

| | | | |
|---|---|-------------------------------|----------------------------------|
| PROJECT: Adrian 1994 DRILL HOLE: ADL9439 LENGTH: 644.35 | Date Commenced: SEPT.16/94 | Contractor: ADVANCED DRILLING | Logged by: DLK Geotech by: GR |
| | Date Completed: SEPT.29/94 Core Diam: NQ | | |

| | |
|--|--|
| Collar Location | |
| Latitude: 19980.00 Departure: 22725.00 Elevation: 735.00 | |

S U M M A R Y

| | | DOWN HOLE SURVEYS | | | |
|---------------|-------------------------|-------------------|--------|--------|------------|
| | | Depth | Azim | Inclin | Method |
| 0.00-3.05 | CASING | | | | |
| 3.05-94.80 | LAMINATED MUDSTONE | | | | |
| 94.80-102.70 | MASSIVE MUDSTONE | 0.00 | 215.00 | -85.00 | BRUNTON |
| 102.70-399.40 | LAMINATED MUDSTONE | 91.00 | 224.00 | -84.00 | SPERRY SUN |
| 399.40-451.30 | LAMINATED MUDSTONE | 185.00 | 239.00 | -82.00 | SPERRY SUN |
| 451.30-475.50 | MASSIVE MUDSTONE | 183.00 | 232.00 | -82.00 | SPERRY SUN |
| 475.50-501.00 | LAMINATED MUDSTONE | 274.30 | 222.00 | -79.00 | SPERRY SUN |
| 501.00-502.50 | MUDSTONE DEBRIS FLOW | 365.00 | 219.00 | -79.00 | SPERRY SUN |
| 502.50-515.30 | LAMINATED MUDSTONE | 640.00 | 231.00 | -76.00 | SPERRY SUN |
| 515.30-644.35 | ANDESITE DYKE/INTRUSIVE | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|-----------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.00 | 3.05 | CASING | | | | | | | | | | | |
| 3.05 | 94.80 | LAMINATED MUDSTONE Aphanitic, black, bedded, laminated bedding 60°:qz carb veining 60° Fr=5/m :Vns =3/m 3% silica alteration - macroveins 5% carbonate alteration - present 3% qz-carb veining - macroveins 2% pyrite - laminations Laminated to finely interbedded black mudstone and light grey very fine locally pyritic ash bands to 3cm. Black mudstone contains slightly coarser beds of fine calcareous material. Ash beds have 3% very fine pyrite. Bedding swings from 45 deg to 90 deg. Unit contains several zones of shearing with associated qc veins with broken core, minor rubble and black graphitic gouge. | | | | | | | | | | | |
| | 11.5 | Beds @ 57 deg. | | | | | | | | | | | |
| | 14.3 | Beds @ 53 deg. | | | | | | | | | | | |
| | 16.1-17.0 | 60% ribbon qc veis @ 60 deg. | | | | | | | | | | | |
| | 19.5 | 1cm laminate , bedding parallel white carbonate vein or possibly recrystallized bed. | | | | | | | | | | | |
| | 20.0 | Belemnite | | | | | | | | | | | |
| | 24.0 | Beds @ 58 deg. | | | | | | | | | | | |
| | 34.0 | Beds @ 45 deg. | | | | | | | | | | | |
| | 35.1-36.0 | Broken core minor shearing. | | | | | | | | | | | |
| | 38.7 | Fibrous white carbonate in 2cm shear @ 5 deg. | | | | | | | | | | | |
| | | Light grey ash bands are increasing in thickness averaging 5-10cm. | | | | | | | | | | | |
| | 46.3 | 1 cm fine pyrite lam @ 53 deg. | | | | | | | | | | | |
| | 48.5-48.8 | Broken core. | | | | | | | | | | | |
| | 50.7 | Internally contorted bedding within 12 cm laminated ash band @ 50 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------|-------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 58.2-58.8 | Fault zone, rubble centred on 10 cm gouge at 58.6 | | | | | | | | | | | |
| | 60.5-60.9 | Shear zone @ 40 deg. | | | | | | | | | | | |
| | 64.3-64.0 | Shear, rubble @ 30 deg. | | | | | | | | | | | |
| | 68.0 | Bedding @ 78 deg. | | | | | | | | | | | |
| | 68.4-69.5 | Fault zone, rubble, gouge, quartz healed breccia. | | | | | | | | | | | |
| | 71.5-72.1 | Fault zone, rubble, black clay gouge. | | | | | | | | | | | |
| | 74.5-75.1 | Fault zone, rubble, black clay gouge. | | | | | | | | | | | |
| | 78.0 | Laminations @ 78 deg. | | | | | | | | | | | |
| | 80.5 | 1 cm clay shear @ 38 deg. | | | | | | | | | | | |
| | 83.7-84.4 | Shear zone, rubble, minor clay @ 30 deg. | | | | | | | | | | | |
| | 86.3-88.1 | Sheared, contorted beds with 10% bedding parallel QC veins 10 cm. | | | | | | | | | | | |
| | 89.7 | Beds @ 80 deg. | | | | | | | | | | | |
| | 90.7 | 10cm black sandy clay gouge seam @ 70 deg. | | | | | | | | | | | |
| | 93.8 | Beds @ 80 deg. | | | | | | | | | | | |
| | 94.6-94.8 | Shear zone, minor gouge, bedding parallel quartz veins. | | | | | | | | | | | |
| 94.80 | 102.70 | MASSIVE MUDSTONE Aphanitic, black, massive, laminated bedding 60° Frs=8/m 1% carbonate alteration - present Massive unit, bedding defined by faint light grey calcareous laminations. | | | | | | | | | | | |
| | 97.4 | 15 cm black clay gouge. | | | | | | | | | | | |
| | 100.7-101.0 | Broken core, minor shearing. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 102.70 | 399.40 | LAMINATED MUDSTONE Fine grained, black, bedded, laminated bedding 40°:shear 20° Frs=12/m :Vns =7/m 5% silica alteration - microveins 5% carbonate alteration - present 5% qz veining - macroveins 5% carbonate veining - macroveins 1% pyrite - laminations Laminated black mudstone. Bedding defined by 3cm spaced .3-1.5cm light grey variably calcareous silty ash bands. Pyrite content very low. Bedding angles vary from 0-90 deg. | | | | | | | | | | | |
| | 104.2 | Beds @ 75 deg. | | | | | | | | | | | |
| | 113.0 | Beds @ 88 deg. | | | | | | | | | | | |
| | 113.4-116.4 | Interval is moderately sheared, containing 30% contorted bedding parallel QC veins. | | | | | | | | | | | |
| | 118.0 | Beds @ 65 deg. | | | | | | | | | | | |
| | 119.4-121.5 | Interval is moderately sheared, contains 5% 2m contorted bedding parallel quartz carbonate veins and graphitic slips. | | | | | | | | | | | |
| | 122.5 | Beds @ 37 deg. | | | | | | | | | | | |
| | 124.0 | Beds @ 50 deg. | | | | | | | | | | | |
| | 127.7 | Beds @ 70 deg. | | | | | | | | | | | |
| | 131.7 | Beds @ 35 deg. | | | | | | | | | | | |
| | 133.0-137.0 | Beds @ 0-5 deg. | | | | | | | | | | | |
| | 141.6 | Beds @ 20 deg. | | | | | | | | | | | |
| | 153.0 | Beds @ 45 deg. | | | | | | | | | | | |
| | 158.3 | Rhythmically banded ash/mudstone beds @ 57 deg. | | | | | | | | | | | |
| | 167.0 | Beds @ 45 deg. | | | | | | | | | | | |
| | | Light grey layers are decidedly coarser silt and have less | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|-------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | ash component. | | | | | | | | | | | |
| | 175.8 | 10 cm laminated silty ash bed @ 47 deg. Thicker (>10cm) ash beds have a very fine pyrite nodule in the core. | | | | | | | | | | | |
| | 185.5 | Beds @ 60 deg. | | | | | | | | | | | |
| | 195.0 | 3cm graded ash bed @ 72 deg showing good flames up. | | | | | | | | | | | |
| | 199.7 | Bedding swung to 5 deg. | | | | | | | | | | | |
| | 201.0 | 50cm fault zone, rubble minor gouge | | | | | | | | | | | |
| | 205.3 | Silty ash beds @ 59 deg. | | | | | | | | | | | |
| | 209.7-210.3 | Shear zone, brecciated, quartz/carbonate stockwork healed. | | | | | | | | | | | |
| | 214.5-218.0 | Rhythmically black/dark grey mudstone, banded at .5-1.5 cm @ 57 deg. | | | | | | | | | | | |
| | 221.8-222.5 | Fault zone, rubble, graphitic slips contorted beds. | | | | | | | | | | | |
| | 224.0 | 1 cm silt beds @ 698 deg. | | | | | | | | | | | |
| | 232.5 | fine silty laminations @ 72 deg. | | | | | | | | | | | |
| | 239.5 | Rhythmically laminated mudstone @ 64 deg. | | | | | | | | | | | |
| | 244.0 | Ash beds @ 55 deg. | | | | | | | | | | | |
| | 247.1 | Ash/pyrite beds @ 52 deg. | | | | | | | | | | | |
| | 247.5-248.2 | Fault zone, broken cony, rubble, quartz healed breccias. | | | | | | | | | | | |
| | 250.3 | Beds @ 20 deg. | | | | | | | | | | | |
| | 252.0 | 5 cm black clay gouge @ 90 deg. | | | | | | | | | | | |
| | 256.0 | Beds @ 31 deg. | | | | | | | | | | | |
| | 258.5 | Silt beds @ 28 deg. Silt beds are less frequent at 3/m. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|-------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 262.5 | Beds @ 30 deg. | | | | | | | | | | | |
| | 271.0 | Beds @ 32 deg. | | | | | | | | | | | |
| | 275.0-275.9 | Fault zone, rubble, graphitic slips and 10% fine broken quartz veins. | | | | | | | | | | | |
| | 281.0 | 10cm quartz vein @ 48 deg. | | | | | | | | | | | |
| | 282.4 | 5cm graphitic gouge. | | | | | | | | | | | |
| | 284.6 | Beds @ 60 deg. | | | | | | | | | | | |
| | 290.7 | Beds @ 70 deg. Well banded. | | | | | | | | | | | |
| | 295.4 | Beds @ 65 deg. | | | | | | | | | | | |
| | 301.7-302.1 | Light grey silty bed @ 78 deg. | | | | | | | | | | | |
| | | Silty lams are getting further apart and less frequent, mudstone is well banded on a 1-3cm scale by 2mm black lams in the dark grey mudstone. | | | | | | | | | | | |
| | 312.0 | Beds @ 60 deg. | | | | | | | | | | | |
| | 317.8 | Cyclic .5 cm silt beds @ 71 deg. | | | | | | | | | | | |
| | 323.7 | Beds @ 60 deg. | | | | | | | | | | | |
| | 328.0 | Beds @ 51 deg. | | | | | | | | | | | |
| | 335.0 | 6cm laminated fine ash bed @ 72 deg. | | | | | | | | | | | |
| | 337.7-338.6 | Fault zone, badly broken, 30 % black clay gouge. | | | | | | | | | | | |
| | 341.0 | Silt lams @ 71 deg. | | | | | | | | | | | |
| | 343.7-344.6 | Fault zone, sheared and veined at 26 deg. | | | | | | | | | | | |
| | 345.8 | Fine silt lams @ 77 deg. | | | | | | | | | | | |
| | 346.8-347.4 | Fault zone, badly broken, minor clay gouge. | | | | | | | | | | | |
| | 350.3 | Ash beds @ 68 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-----------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 353.4 | Minor shear @ 30 deg, broken core, qtz veins and gouge. | | | | | | | | | | | |
| | 359.5 | Beds @ 64 deg. | | | | | | | | | | | |
| | 365.0 | Fine silt lams have scoured bases, minor cross bedding and are normally graded, tops up. | | | | | | | | | | | |
| | 368.5 | Beds @ 60 deg. | | | | | | | | | | | |
| | 370.9 | Weak shear @ 45 deg, 30% 2mm ribbon quartz veins, minor gouge. | | | | | | | | | | | |
| | 374.0 | Beds @ 55 deg. | | | | | | | | | | | |
| | 382.3 | Beds @ 63 deg. | | | | | | | | | | | |
| | 383.7 | Fault, broken core, graphitic slip surfaces. | | | | | | | | | | | |
| | 384.4 | Fault, 15cm black sandy gouge @ 45 deg, 50cm broken core. | | | | | | | | | | | |
| | 386.0-386.6 | Shear zone, healed by 10% 2mm white quartz veins @ 30 deg. | | | | | | | | | | | |
| | 387.4-387.9 | Fault zone, rubble, graphitic slips. | | | | | | | | | | | |
| | 388.6-389.2 | Fault zone, rubble, minor gouge. | | | | | | | | | | | |
| | 389.2-393.0 | Contorted beds. | | | | | | | | | | | |
| | 393.0-394.4 | Fault zone, rubble and gouge. | | | | | | | | | | | |
| | 395.0 | Beds @ 40 deg. Bedding plane graphitic slips. | | | | | | | | | | | |
| | 398.3-399.4 | Fault Zone. broken core. 15 cm gouge @ 398.7. | | | | | | | | | | | |
| | <182.30-185.10> | LAMINATED MUDSTONE Black, bedded bedding 63° Frs=3/m Thickly interbedded black mudstone and coarse grey siltstone beds ranging to 40 cm. | | | | | | | | | | | |
| 399.40 | 451.30 | LAMINATED MUDSTONE Black, bedded, laminated | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-----------------|---|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | bedding 64° Frs=6/m 5% carbonate alteration - present 7% pyrite - laminations Well laminated, thinly bedded black mudstone with abundant(20%) 1-3 cm pyritic light grey ash bands and 5-20 cm light grey limy beds. Unit is variably calcareous. Pyritic beds are slightly coarser grained and have scoured bases and are finely graded. | | | | | | | | | | | |
| | 401.5 | 5% diss. py above ash bed @ 65 deg. | | | | | | | | | | | |
| | 412.3 | .5 cm fine pyrite beds @ 60 deg. | | | | | | | | | | | |
| | 415.75 | Pyritic ash beds @ 58 deg. | | | | | | | | | | | |
| | 425.3 | Beds @ 58 deg. | | | | | | | | | | | |
| | 428.0 | Fine pyrite/ash lams in mudstone @ 78 deg. | | | | | | | | | | | |
| | | Box 79 from 428.89 to 434.95 was spilt during helicopter transport and is lost. | | | | | | | | | | | |
| | 434.9-451.3 | Unit very well laminated to moderately bedded @ 64 deg. Ash beds are up to 20cm thick and are finely graded and make up 40% of the rock, containing 1-2 % fine disseminated to laminated pyrite. | | | | | | | | | | | |
| | <420.50-421.10> | ANDESITE DYKE/INTRUSIVE Fine grained, grayish-brown, bleached, massive contact 30° Frs=1/m 3% carbonate alteration - pervasive Narrow, chilled mafic dyke with .5 cm chilled contact rind. | | | | | | | | | | | |
| 451.30 | 475.50 | MASSIVE MUDSTONE Black, bedded bedding 62° Frs=3/m 10% carbonate alteration - clasts 5% pyrite - disseminated Unit is bedded at a 10-20 cm scale defined by 4mm fine pyrite laminations. Unit also contains 2% patchy pyrite blebs. Interval contains three sections of fine, graded, light grey carbonate detritus. Units are poorly sorted, | 24453 | 461.70-462.20 | 0.50 | 10 | 0.1 | 1 | 99 | 42 | 5 | 2 | 3 |
| | | | 24454 | 467.30-468.00 | 0.70 | 8 | 0.1 | 4 | 90 | 32 | 3 | 2 | 3 |
| | | | 24455 | 474.60-475.50 | 0.90 | 6 | 0.1 | 4 | 87 | 38 | 3 | 2 | 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | consisting of 10% .5-1.5 subrounded light grey carbonate rich clasts or poorly developed concretions in a carbonate sand matrix and carry 2-4 % fine disseminated pyrite and as replacement of the carbonate clasts. | | | | | | | | | | | |
| | | 456.5 Fine pyritic beds @ 62 deg. | | | | | | | | | | | |
| | | 458.2 Beds @ 58 deg. | | | | | | | | | | | |
| | | 461.7-462.2 Carbonate debris, graded, 3% pyrite. | | | | | | | | | | | |
| | | 464.6 12 cm dia. light grey pyritized carbonate ball. | | | | | | | | | | | |
| | | 467.3-468.0 Carbonate debris, poorly sorted, graded, 2% very fine pyrite. | | | | | | | | | | | |
| 475.50 | 501.00 | LAMINATED MUDSTONE Black, bedded, laminated bedding 70°:bedding Frs=5/m :Vns =3/m 5% silica alteration - pervasive 7% pyrite - laminations Well bedded, intimately interbanded fine light grey ash, black mudstone and laminated kahki colored pyritic ash bands. Unit has been intruded by two fine chilled vesicular mafic sills. Bases of thicker pyritic ash beds are granular carbonate. | 24456 | 495.00-496.50 | 1.50 | 4 | 0.1 | 6 | 196 | 43 | 5 | 2 | 3 |
| | | | 24457 | 496.50-498.00 | 1.50 | 18 | 0.4 | 20 | 876 | 60 | 173 | 2 | 28 |
| | | | 24458 | 498.00-499.50 | 1.50 | 28 | 0.5 | 24 | 677 | 50 | 217 | 2 | 34 |
| | | | 24459 | 499.50-501.00 | 1.50 | 14 | 0.4 | 12 | 392 | 26 | 319 | 2 | 27 |
| | | 481.5 Beds @ 62 deg. | | | | | | | | | | | |
| | | 487.5 Laminations @ 75 deg. | | | | | | | | | | | |
| | | 495.9-496.2 White quartz breccia vein. | | | | | | | | | | | |
| | | 499.5 White qtz veins @ 20 deg. | | | | | | | | | | | |
| | | 499.8-500.0 Soft sediment brecciation via fluidization of laminated pyritic beds. Breccia has been healed by fine colloform pyrite. | | | | | | | | | | | |
| | | 500.0-501.0 Unit weakly silicified and hard, contains very fine hairlike stockwork of qtz. healed fractures. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-----------------|--------|--|---|---|--------------------------------------|-------------------------|---------------------------------|----------------------------|-------------------------------|------------------------|------------------------------|-----------------------|-----------------------|
| <488.70-489.30> | | ANDESITE DYKE/INTRUSIVE Fine grained, grayish-brown, bleached, vesicular contact 45° 4% carbonate alteration - pervasive Narrow mafic sill with 30 cm brecciated and chilled margins. Rock is variably calcareous. | | | | | | | | | | | |
| <490.40-495.00> | | ANDESITE DYKE/INTRUSIVE Fine grained, grayish-brown, massive, vesicular contact 46° Frs=2/m 4% carbonate alteration - pervasive Thick mafic sill, core contains 10% 1mm round black amygdules. Both contacts are chilled. Unit slightly calcareous. | | | | | | | | | | | |
| 501.00 | 502.50 | MUDSTONE DEBRIS FLOW Black, clastic, heterolithic Frs=5/m 10% silica alteration - pervasive 2% sericite alteration - pervasive 5-9% pyrite - clasts Top 20cm of unit contains light green sericitized fragments in a fine grained siliceous matrix. Remainder of the unit consists of variably pyritic light grey ash clasts to 3 cm and black pyritic mudstone fragments in a silicified mudstone matrix. Unit contains 7% pyrite as clasts and broken beds. 501.8 3 cm clay seam @ 38 deg. | 24460 | 501.00-502.50 | 1.50 | 7 | 0.2 | 25 | 129 | 4 | 81 | 2 | 8 |
| 502.50 | 515.30 | LAMINATED MUDSTONE Aphanitic, black, bedded, laminated bedding 65° Frs=10/m :Vns =3/m 5% silica alteration - pervasive 5% clay alteration - gouge 3% qz veining - microveins 2% pyrite - laminations Well bedded, pyrite laminated mudstone. Unit contains several narrow gougy shear zones. Lower portion of interval is bleached by underlying dyke. 502.8 Quartz healed breccia, adjacent mudstone is silicified. 504.5 Beds @ 70 deg. | 24461 24462 24463 24464 24465 | 502.50-504.00 504.00-505.50 505.50-507.00 507.00-508.50 508.50-510.00 | 1.50 1.50 1.50 1.50 1.50 | 3 10 10 1 4 | 0.1 0.2 0.2 0.2 0.2 | 23 15 13 19 16 | 113 133 143 94 99 | 4 5 25 3 6 | 82 102 107 20 48 | 2 2 2 2 2 | 3 6 8 3 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 505.1-505.4 Fault, 70% black gougy clay. | | | | | | | | | | | |
| | | 507.0-507.5 Fault, sheared broken core @ 60 deg. | | | | | | | | | | | |
| | | 508.5 Beds @ 70 deg., unit contains 1% disseminated pyrite and 1% laminated pyrite. | | | | | | | | | | | |
| | | <510.00-515.30> LAMINATED MUDSTONE Fine grained, pale gray, bedded, bleached bedding 75°:contact 80° Frs=3/m Well banded mudstone has been bleached to a light greyish brown. Relic bedding still visible, carbonate and pyrite are absent. | | | | | | | | | | | |
| | | 513.0 Beds @ 85 deg. Lower contact sharp at 80 deg. | | | | | | | | | | | |
| 515.30 | 644.35 | ANDESITE DYKE/INTRUSIVE Green, massive, bleached fracturing 20° Frs=2/m 2% chlorite alteration - coatings 3% carbonate alteration - microveins Thick conformable mafic sill. Upper contact and top 3 m bleached and chilled very fine grained to aphanitic. Unit coarsens down to a medium to coarse grained dioritic looking rock with clear 1-2mm felted feldspar laths at 554.0. Rock is extremely massive and homogeneous. Minor shears have chlorite/carbonate coated surfaces. | | | | | | | | | | | |
| | | 515.3-515.6 Top of unit contains 10% 2mm round black amygdules. | | | | | | | | | | | |
| | | 546.3-547.1 Shear @ 20 deg. Center contains 5cm carbonate/chlorite vein. From 559.2 downwards the unit becomes medium to coarse grained and more equigranular, less felted feldspars. | | | | | | | | | | | |
| | | 567.5-567.6 3cm shear @ 10 deg. minor green chloritic gouge. | | | | | | | | | | | |
| | | 580.8-581.3 Broken core, chloritic slips @ 20 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|-------|-------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 587.3 | Pyroxene no longer fresh, light brown with diffuse margins. gone to biotite plus chlorite. | | | | | | | | | | | |
| | 593.0 | Whole rock sample. | | | | | | | | | | | |
| | 605.18 | Texture still equigranular, coarse grained, brown biotite altered pyroxene to 3mm. Fracture surfaces are chlorite coated at 30-40 deg. | | | | | | | | | | | |
| | 614.7-615.7 | Broken core, chloritic slickensides at 30 deg. | | | | | | | | | | | |
| | 625.9 | Grain size slightly finer, averaging 1-2mm. | | | | | | | | | | | |
| | 632.2-632.5 | Broken core, Graphitic slips @ 15 and 35 deg. | | | | | | | | | | | |
| | 641.1 | 1 cm chlorite carbonate vein @ 30 deg. Trace pyrite on slickensides. | | | | | | | | | | | |
| (eoh) | 644.35 | EOH. | | | | | | | | | | | |

10/19/94

HOMESTAKE CANADA

DIAMOND DRILL HOLE LOG

ADL9440

| | | | |
|----------------------|----------------------------|-------------------------------|------------------|
| PROJECT: Adrian 1994 | Date Commenced: SEPT.16/94 | Contractor: ADVANCED DRILLING | Logged by: DLK |
| DRILL HOLE: ADL9440 | Date Completed: OCT.3/94 | | Geotech by: GRDB |
| LENGTH: 628.80 | Core Diam: NQ | | |

| | |
|--|--|
| Collar Location | |
| Latitude: 20090.00 Departure: 22930.00 Elevation: 695.00 | |

| SUMMARY | | DOWN HOLE SURVEYS | | | |
|---------------|-----------------------------|-------------------|--------|--------|------------|
| | | Depth | Azim | Inclin | Method |
| 0.00-3.05 | CASING | | | | |
| 3.05-237.50 | LAMINATED MUDSTONE | 0.00 | 235.00 | -80.00 | BRUNTON |
| 237.50-244.70 | SILTSTONE | 90.80 | 244.00 | -79.50 | SPERRY SUN |
| 244.70-271.60 | LAMINATED MUDSTONE | 183.00 | 241.00 | -79.00 | SPERRY SUN |
| 271.60-281.20 | INTERBEDDED MUDS./SILTSTONE | 274.00 | 247.00 | -76.00 | SPERRY SUN |
| 281.20-329.00 | LAMINATED MUDSTONE | 365.00 | 247.00 | -76.00 | SPERRY SUN |
| 329.00-375.80 | MASSIVE MUDSTONE | 548.00 | 246.00 | -73.50 | SPERRY SUN |
| 375.80-492.00 | LAMINATED MUDSTONE | | | | |
| 492.00-605.10 | LAMINATED MUDSTONE | | | | |
| 605.10-612.00 | MUDDY TUFF | | | | |
| 612.00-616.72 | LAMINATED MUDSTONE | | | | |
| 616.72-628.60 | LAMINATED MUDSTONE | | | | |
| 628.60-628.80 | DACITIC LITHIC TUFF | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|-----------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.00 | 3.05 | CASING | | | | | | | | | | | |
| 3.05 | 237.50 | LAMINATED MUDSTONE Black, bedded, laminated bedding 50°:fracturing 40° Frs=7/m :Vns =2/m 2% carbonate alteration - present .5% pyrite - laminations Well bedded to finely laminated. Unit contains 20 % 1-20cm light grey fine to medium grained silt beds and minor very fine laminated pyrite. | | | | | | | | | | | |
| | 6.7 | Beds @ 62 deg. | | | | | | | | | | | |
| | 9.8-10.4 | Fault. broken core, rubble and minor clay gouge. | | | | | | | | | | | |
| | 14.0 | Fine pyrite lams @ 68 deg. | | | | | | | | | | | |
| | 18.7-19.5 | Fault zone, broken core, graphitic slips. | | | | | | | | | | | |
| | 25.5 | Beds @ 70 deg. | | | | | | | | | | | |
| | 39.5-40.4 | Fault zone, rubble gouge, graphitic slips @ 30 deg. | | | | | | | | | | | |
| | 44.5 | Beds @ 70 deg. | | | | | | | | | | | |
| | 49.5 | Unit is rhythmically black/dark grey banded @ a 1cm scale @ 74 deg. | | | | | | | | | | | |
| | 57.0 | Beds @ 65 deg. | | | | | | | | | | | |
| | 63.5-64.2 | Broken core. | | | | | | | | | | | |
| | 66.15 | 15cm quartz healed breccia in 30 cm silt bed. | | | | | | | | | | | |
| | 70.0 | Beds @ 85 deg. | | | | | | | | | | | |
| | 75.5 | Beds @ 85 deg. | | | | | | | | | | | |
| | 81.4-82.1 | Contorted bedding, 10% quartz/carbonate stockwork veins. | | | | | | | | | | | |
| | 86.0 | Beds @ 58 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|-------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 93.5 | Laminated silty beds @ 34 deg. | | | | | | | | | | | |
| | 96.0 | Beds @ 35 deg. | | | | | | | | | | | |
| | 98.3-99.6 | Broken core, minor shearing and bedding parallel qtz. veins. | | | | | | | | | | | |
| | 104.0 | Beds @ 34 deg. | | | | | | | | | | | |
| | 104.5-104.9 | Broken core. | | | | | | | | | | | |
| | 107.5-120.6 | Beds @ 5-15 deg. | | | | | | | | | | | |
| | 121.0-122.0 | Fault zone, 60 % quartz carbonate veins, broken core and minor black gouge. | | | | | | | | | | | |
| | 123.5 | Beds @ 80 deg. | | | | | | | | | | | |
| | 128.5 | 30 cm quartz breccia vein. | | | | | | | | | | | |
| | 129.0 | Beds @ 78 deg. Unit has less silty ash beds and is dark grey with fine, 3mm black rhythmic bands. | | | | | | | | | | | |
| | 134.8 | Broken core. | | | | | | | | | | | |
| | 135.5 | Fine grey ash bands @ 78 deg. | | | | | | | | | | | |
| | 145.9 | Fine silt beds @ 5/2 @ 72 deg. | | | | | | | | | | | |
| | 153.7-154.2 | Laminated, graded coarse to fine silt. | | | | | | | | | | | |
| | 158.5-158.8 | Fault zone, broken core, minor gouge. | | | | | | | | | | | |
| | 164.9 | 10 cm gouged shear. | | | | | | | | | | | |
| | 168.8 | Beds @ 71 deg. | | | | | | | | | | | |
| | 173.7 | 1cm light grey slightly pyritic ash bands @ 70 deg. | | | | | | | | | | | |
| | 175.0-175.6 | Fault, strongly sheared and gouged. | | | | | | | | | | | |
| | 183.6-184.4 | Light grey ash bed @ 57 deg. | | | | | | | | | | | |
| | 190.5 | Beds @ 78 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|---------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 191.1-191.3 | Weakly sheared, silica healed. | | | | | | | | | | | |
| | 192.0-193.0 | Sheared, beds contorted, quartz stockwork. | | | | | | | | | | | |
| | 198.0 | Beds @ 65 deg. Unit rhythmically dark grey/black at a .5-1 m scale. Pyritic fine silt lams rare @ 1/2m. | | | | | | | | | | | |
| | 203.5 | Beds @ 61 deg. | | | | | | | | | | | |
| | 207.8 | Broken core. | | | | | | | | | | | |
| | 215.0 | Laminations @ 50 deg. | | | | | | | | | | | |
| | 217.8 | 10 cm bedding parallel shear @ 48 deg. | | | | | | | | | | | |
| | 220.5 | Broken core, minor gouge. | | | | | | | | | | | |
| | 226.0 | Beds @ 47 deg. | | | | | | | | | | | |
| | 235.0 | Beds @ 48 deg. | | | | | | | | | | | |
| | 236.9 | Graphitic slip @ 20 deg. | | | | | | | | | | | |
| | <88.00-93.00> | Aphanitic, black, Brecciated, broken Frs=50/m :Vns =7/m 10% clay alteration - gouge Strong fault, broken core, gouge, quartz veins @ 20 deg. | | | | | | | | | | | |
| 237.50 | 244.70 | SILTSTONE Fine grained, gray, massive, broken fracturing 47° Frs=35/m :Vns =15/m 10% silica alteration - microveins 5% clay alteration - gouge 10% qz veining - microveins 5% qz-carb veining - microveins Massive well sorted, poorly bedded siltstone. Unit has been highly sheared and broken containing numerous broken QC veins and quartz veins, minor gouge and abundant graphitic slip surfaces. | | | | | | | | | | | |
| 244.70 | 271.60 | LAMINATED MUDSTONE Aphanitic, black, bedded, laminated bedding 65°:fracturing 84° Frs=14/m :Vns =5/m 1% silica alteration - microveins | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 1% pyrite - laminations Well banded to laminated black mudstone. Unit contains <5% 1cm light grey slightly pyritic silt beds. | | | | | | | | | | | |
| | | 247.0 Laminations @ 50 deg. | | | | | | | | | | | |
| | | 249.2-249.7 Broken core. | | | | | | | | | | | |
| | | 258.3 Beds @ 60 deg. | | | | | | | | | | | |
| | | 254.8-255.2 Broken core, minor gouge. | | | | | | | | | | | |
| | | 267.8 10 cm bedding parallel shear @ 55 deg. | | | | | | | | | | | |
| | | 270.5 Beds @ 66 deg. | | | | | | | | | | | |
| 271.60 | 281.20 | INTERBEDDED MUDES./SILTSTONE Black, bedded bedding 60°:fracturing 60° Frs=4/m 1% qz-carb veining - microveins Interbedded at a 2-15 cm scale, black finely laminated mudstone and fine graded light grey silt beds. | | | | | | | | | | | |
| | | 273.2 Beds @ 57 deg. | | | | | | | | | | | |
| | | 276.0 Beds @ 52 deg. | | | | | | | | | | | |
| | | 278.9-281.2 Fault zone centred at 279.7 in 15 cm black clay gouge, bedding parallel at 50 deg. | | | | | | | | | | | |
| 281.20 | 329.00 | LAMINATED MUDSTONE Black, bedded, laminated bedding 60°:shear 40° Frs=7/m :Vns =3-7/m 3% silica alteration - microveins 1% clay alteration - gouge 5% qz-carb veining - microveins .2% pyrite - laminations Thick to thinly bedded well laminated black mudstone with 3-30 cm fine graded siltstone. Bedding ranges from 10 deg over short distances to 68 deg for the majority of the interval. Unit contains several minor shears and fault zones with minor gouge and associated quartz micro vein flooding. | | | | | | | | | | | |
| | | 281.5-284.0 Broken core 5% quartz/carbonate veins. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 292.0 | Fine laminations @ 60 deg. | | | | | | | | | | | |
| | 295.5-297.8 | 30% quartz stockwork, slightly contorted. | | | | | | | | | | | |
| | 297.8-298.6 | Fault Gouge, Massive black sandy clay gouge, lower contact at 46 deg. | | | | | | | | | | | |
| | 359.8-360.2 | Light grey finely graded silt bed @ 60 deg. | | | | | | | | | | | |
| | 302.6 | Beds @ 10 deg, offset on cm scale by hairline faults @ 90 deg. | | | | | | | | | | | |
| | 307.0 | Beds @ 45 deg. | | | | | | | | | | | |
| | 309.3-310.8 | Weakly sheared @ 20 deg, 40% fine white quartz carbonate beds. | | | | | | | | | | | |
| | 316.0 | Rhythmic 2mm silt beds spaced @ 3cm @ 60 deg. | | | | | | | | | | | |
| | 321.0 | 15 cm black gouge, 50 cm broken core with 10% quartz vein healing. | | | | | | | | | | | |
| | 328.8 | Beds @ 60 deg. | | | | | | | | | | | |
| 329.00 | 375.80 | MASSIVE MUDSTONE Aphanitic, black, bedded, massive bedding 58°:fracturing 30° Frs=4/m :Vns =1/m .2% qz-carb veining - microveins Massive, bedding defined by faint black lams in massive dark grey mudstone. Unit contains rare (1/2m) .5 cm fine silt band. Bedding regularly spaced at 5cm. | | | | | | | | | | | |
| | 333.1-333.3 | Broken core, graphitic slips. | | | | | | | | | | | |
| | 337.0 | Beds @ 63 deg. | | | | | | | | | | | |
| | 346.0 | .5 cm silt bed with flamed base showing tops up @ 62 deg. | | | | | | | | | | | |
| | 357.0 | Fine silt lam 57 deg. | | | | | | | | | | | |
| | 364.1 | Bedding @ 71 deg. | | | | | | | | | | | |
| | 372.5 | Lighter grey diffuse contacts to 10cm grey micrite. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|-------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 375.0 | Beds @ 65 deg. | | | | | | | | | | | |
| 375.80 | 492.00 | LAMINATED MUDSTONE Aphanitic, black, bedded, laminated bedding 72°:fracturing 38° Fr=5/m :Vns =3/m 2% silica alteration - microveins 1% carbonate alteration - present .5% clay alteration - gouge .2% pyrite - laminations Well bedded at 2-5cm thickness, having 3cm black mud beds and 2-5cm lighter grey mud beds with 5X 1-5 cm light grey silt beds @ 5/m. | | | | | | | | | | | |
| | 380.0 | Beds @ 57 deg, cleavage @ 10 deg, normal to beds strike. | | | | | | | | | | | |
| | 387.0 | Beds @ 71 deg. | | | | | | | | | | | |
| | 392.0-392.4 | Shear zone, strong fabric @ 50-75 deg, 40% quartz veining. | | | | | | | | | | | |
| | 400.0 | Beds @ 68 deg. | | | | | | | | | | | |
| | 403.9 | 7cm grades sandy silt bed @ 65 deg. | | | | | | | | | | | |
| | 406.6-407.1 | Quartz/carbonate healed shear zone @ 45 deg. | | | | | | | | | | | |
| | 413.7 | Beds @ 60 deg. | | | | | | | | | | | |
| | 419.1 | Graded silt bed @ 60 deg showing good flames up. | | | | | | | | | | | |
| | 425.7-425.9 | Ribbon quartz vein healed shear zone @ 47 deg. | | | | | | | | | | | |
| | 426.8 | 2 cm pyritic silt bed @ 80 deg. | | | | | | | | | | | |
| | 435.2 | Beds have swung to 30 deg. | | | | | | | | | | | |
| | 440.7 | Silt beds slightly contorted @ 30 deg. | | | | | | | | | | | |
| | 440.1-440.4 | Fault broken core, rubble, minor gouge. | | | | | | | | | | | |
| | 447.0 | Beds @ 10 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 451.0-451.5 Fault zone. | | | | | | | | | | | |
| | | 452.7 Beds @ 80 deg. Below fault, fine 2-5mm pyritic laminations are more frequent @ 4/m. | | | | | | | | | | | |
| | | 457.6 1cm pyritic lam @ 9) deg. | | | | | | | | | | | |
| | | 463.0 Beds @ 81 deg. | | | | | | | | | | | |
| | | 468.3 Fine silt laminations @ 78 deg. | | | | | | | | | | | |
| | | 472.6 7 cm graded ash bed @ 72 deg. | | | | | | | | | | | |
| | | 480.4-480.8 Fault, broken core, thin quartz beccia veins on contacts @ 37 deg. | | | | | | | | | | | |
| | | 482.3 Laminated pyritic bed, 3cm thick @ 68 deg. | | | | | | | | | | | |
| | | 482.3-492.0 Finely laminated black mudstone, bedding @ 70 deg. Lower contact is gradational, no fault involved. | | | | | | | | | | | |
| 492.00 | 605.10 | LAMINATED MUDSTONE | 24566 | 551.40-552.60 | 1.20 | 4 | 0.1 | 6 | 207 | 49 | 20 | 2 | 3 |
| | | Fine grained, black, bedded, laminated | 24567 | 552.60-553.50 | 0.90 | 6 | 0.2 | 19 | 440 | 38 | 24 | 2 | 3 |
| | | bedding 75°:shear 30° | 24568 | 553.50-554.50 | 1.00 | 6 | 0.4 | 11 | 713 | 48 | 23 | 2 | 5 |
| | | Fra=6/m | 24569 | 568.70-569.70 | 1.00 | 2 | 0.3 | 16 | 336 | 45 | 28 | 2 | 3 |
| | | 10% carbonate alteration - pervasive | 24570 | 569.70-570.80 | 1.10 | 1 | 0.1 | 10 | 182 | 21 | 24 | 2 | 3 |
| | | .5% clay alteration - gouge | 24571 | 580.00-582.00 | 2.00 | 4 | 1.3 | 15 | 1117 | 70 | 63 | 2 | 11 |
| | | 3% qz-carb veining - microveins | 24572 | 582.00-584.00 | 2.00 | 4 | 0.8 | 26 | 519 | 70 | 45 | 2 | 9 |
| | | 5% pyrite - laminations | 24573 | 584.00-586.00 | 2.00 | 3 | 0.8 | 16 | 240 | 28 | 24 | 2 | 6 |
| | | Top 20m of unit is well interbedded with fine cyclic light bluish grey ash and fine graded pyrite laminations. Unit contains wide moderate strength shear zone with contorted bedding and 5-10% ribbon quartz/carbonate veins. Unit is variably to highly calcareous. This is probably the Upper Salmon River mudstones. | 24574 | 586.00-588.00 | 2.00 | 11 | 1.0 | 19 | 650 | 46 | 38 | 2 | 11 |
| | | | 24575 | 588.00-590.00 | 2.00 | 8 | 0.8 | 20 | 491 | 47 | 46 | 2 | 8 |
| | | | 24576 | 590.00-592.00 | 2.00 | 10 | 0.7 | 22 | 449 | 47 | 36 | 2 | 12 |
| | | | 24577 | 594.50-596.50 | 2.00 | 8 | 0.4 | 19 | 436 | 42 | 29 | 2 | 5 |
| | | | 24578 | 596.50-598.00 | 1.50 | 9 | 0.8 | 16 | 139 | 53 | 29 | 2 | 9 |
| | | | 24579 | 598.00-599.50 | 1.50 | 12 | 1.1 | 16 | 357 | 54 | 30 | 2 | 7 |
| | | | 24580 | 599.50-601.00 | 1.50 | 22 | 1.0 | 19 | 468 | 60 | 39 | 2 | 11 |
| | | 492.0-496.3 Quiet, finely laminated grey ash, black mudstone and interbedded pyrite. Bedding @ 70 deg. | 24581 | 601.00-602.50 | 1.50 | 18 | 0.8 | 13 | 464 | 49 | 38 | 2 | 10 |
| | | | 24582 | 602.50-604.00 | 1.50 | 5 | 0.5 | 5 | 223 | 46 | 10 | 2 | 7 |
| | | | 24583 | 604.00-605.10 | 1.10 | 2 | 0.4 | 4 | 131 | 48 | 9 | 2 | 3 |
| | | 496.3-507.5 Shear zone, interval highly contorted, contains 5-10% white ribbon quartz/carbonate veins. Contains 50 cm black clay gouge sections centred @ 499.4, 503.5 and 506.5. Shearing is @ 30 deg. | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|-------------|--|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | 508.3 | 1mm thick 3mm spaced pyrite lams @ 84 deg. Unit slightly more massive, containing less ash lams but more .5-2cm pyrite beds. | | | | | | | | | | | |
| | 510.5 | Pyrite beds @ 90 deg. with mud flames up. | | | | | | | | | | | |
| | 523.3 | Laminated calcareous pyritic beds @ 70 deg. | | | | | | | | | | | |
| | 531.6 | Broken micritic lst beds, infilled by carbonate rich black mud. | | | | | | | | | | | |
| | 538.5 | Thinly bedded, carbonate rich layers in black mudstone. Beds @ 70 deg. | | | | | | | | | | | |
| | 540.2 | 10 cm light grey carbonate bed @ 62 deg. | | | | | | | | | | | |
| | 544.2 | 1 cm pyrite bed with flamed base @ 72 deg. | | | | | | | | | | | |
| | 546.9-547.2 | Shear zone, broken core, graphitic slips @ 30 deg. Unit getting very calcareous to limy. | | | | | | | | | | | |
| | 551.4-552.6 | Finely laminated brownish ash and pyrite lams, 3% fine pyrite. | | | | | | | | | | | |
| | 553.5-554.5 | Well laminated calcareous black mudstone with brownish grey finely pyritic ash bands to 2 cm. | | | | | | | | | | | |
| | 554.6-554.8 | Broken core, stretched out in box. | | | | | | | | | | | |
| | 556.6-558.0 | Fault zone, broken core, 20cm gouge @ 557.1. | | | | | | | | | | | |
| | 560.9-561.3 | Light grey well laminated ash bed @ 80 deg. | | | | | | | | | | | |
| | 563.3-563.6 | Light grey laminated ash (?) bed @ 78 deg. | | | | | | | | | | | |
| | 565.8 | Belemnite. | | | | | | | | | | | |
| | 566.7-567.9 | Fault zone, badly broken, 20 cm sections of black clay gouge @ 567.1 and 567.8. | | | | | | | | | | | |
| | 570.89 | Beds @ 85 deg. | | | | | | | | | | | |
| | 594.3-595.3 | Shattered and gouged black laminated mudstone. | | | | | | | | | | | |
| | 595.3-595.8 | Block of mafic, chilled, possible pillow | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|------|-----------------|---|--------|----------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | block. | | | | | | | | | | | |
| | 595.8-596.8 | Fault zone, badly crushed core, gouge. Bedding in blocks @ 75 deg. | | | | | | | | | | | |
| | 599.3 | 20 cm section of laminated light grey ash with 1% pyrite. | | | | | | | | | | | |
| | 602.3 | Fine pyrite laminations @ 90 deg. cut by .5cm irregular fracture filling pyrite. | | | | | | | | | | | |
| | 604.5-605.1 | Unit still pyrite laminated but has a more massive silty texture and grain size. Lower contact clear @ 82 deg. | | | | | | | | | | | |
| | <552.60-553.50> | MUDSTONE DEBRIS FLOW Black, contorted, clastic bedding 48°:bedding Frs=5/m 20% carbonate alteration - clasts 7% pyrite - patches Weakly bedded @ 48 deg, unit contains faint contorted internal laminations and 20% irregular shaped .5-3cm granular carbonate clasts. These clasts have been replaced by bimodal pyrite ranging from 10-100%. | | | | | | | | | | | |
| | <568.70-567.80> | GREYWACKE Fine grained, black, bedded, laminated bedding 78° Frs=4/m 25% carbonate alteration - present 3% pyrite - disseminated Well laminated dark grey fine carbonate rich dirty siltstone. Unit contains 3% very fine pyrite and 1% pyrite blebs to 5mm. May relate to carbonate sand horizons in hole 94-37. | | | | | | | | | | | |
| | 571.0 | Shear zone light grey gouge. | | | | | | | | | | | |
| | <571.30-595.80> | Fine grained, black, broken, crushed bedding 80°:fault/gouge 48° Frs=40/m 10% carbonate alteration - present 2% pyrite - laminations Fault zone. Interval consists of broken and gouged black laminated mudstone. Sections of core 5-15 cm long describe unit. Interval is very hard and brittle, possible | | | | | | | | | | | |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--------|---------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | silicification or hornfelsed by proximity to large dyke. Bedding attitudes range from 65-90 deg. Interval contains laminated pyritic ash beds. Conspicuous about this fault zone is the lack of veining. | | | | | | | | | | | |
| | | <591.90-594.30> ANDESITE DYKE/INTRUSIVE Grayish-brown, vesicular, chilled margin Frs=9/m 2% carbonate alteration - present Mafic sill, unit has vesicular top and brecciated base, may be a thin flow. Lower half badly broken core. | | | | | | | | | | | |
| 605.10 | 612.00 | MUDDY TUFF Dark gray, bedded bedding 84° Frs=3/m :Vns =1/m 30% silica alteration - present 1% carbonate alteration - 10% sericite alteration - pervasive Rhyolite package consists of a tuffaceous mudstone consisting of 60% fine ashy material intercalated with black slightly sericitic mudstone. Relic ash beds evident. Basal 5 cm is coarser, subrounded closely packed .5 cm rhyolite clasts. No part of this section of the rhyolite resembles a flow or hyaloclastite material. This portion of the stratigraphy on the east limb of the anticline is not permissive for a 218 style deposit. No mineralization of any style or hydrothermal alteration is evident. | 24584 | 605.10-606.60 | 1.50 | 2 | 0.3 | 1 | 6 | 3 | 3 | 2 | 5 |
| | | | 24585 | 606.60-608.10 | 1.50 | 1 | 3.0 | 4 | 3 | 2 | 3 | 2 | 2 |
| | | | 24586 | 608.10-609.60 | 1.50 | 3 | 0.5 | 1 | 5 | 4 | 3 | 2 | 3 |
| | | | 24587 | 609.60-611.10 | 1.50 | 1 | 0.3 | 1 | 3 | 3 | 3 | 2 | 3 |
| | | | 24588 | 611.10-612.00 | 0.90 | 3 | 0.3 | 1 | 4 | 5 | 3 | 2 | 3 |
| | | 602.7 1mm ash beds @ 85 deg. | | | | | | | | | | | |
| | | 609.8 Layering @ 85 deg. | | | | | | | | | | | |
| | | 610.2-610.8 Shear zone, broken core, rubble, minor broken quartz veins. | | | | | | | | | | | |
| 612.00 | 616.72 | LAMINATED MUDSTONE Fine grained, dark gray, bedded, contorted bedding 75°:shear 25° Frs=30/m 2% chlorite alteration - pervasive 20% sericite alteration - pervasive 5% clay alteration - gouge | 24589 | 612.00-613.50 | 1.50 | 4 | 0.3 | 3 | 1 | 2 | 3 | 2 | 3 |
| | | | 24590 | 613.50-615.00 | 1.50 | 12 | 0.3 | 4 | 1 | 1 | 3 | 2 | 3 |
| | | | 24591 | 615.00-616.70 | 1.70 | 4 | 0.3 | 10 | 6 | 3 | 3 | 2 | 3 |

| FROM | TO | DESCRIPTION | Sample | INTERVAL | WID | Au ppb | Ag ppm | Pb ppm | Zn ppm | Cu ppm | As ppm | Hg ppm | Sb ppm |
|--------|--------|--|--|--|--|----------------------------------|--|----------------------------------|--|-----------------------------------|-----------------------------------|----------------------------|----------------------------------|
| | | 2X chlorite alteration - pervasive 20X sericite alteration - pervasive 5X clay alteration - gouge Mudstone unit below the rhyolite package resembles the upper contact, consisting of 20% irregular siliceous whips in a black slightly sericitic muddy tuff. Interval is highly sheared with minor gouge. Abundant graphitic slip surfaces @ 10-30 deg. | | | | | | | | | | | |
| 616.72 | 628.60 | LAMINATED MUDSTONE Aphanitic, black, bedded, lamirated bedding 60°:shear 30° Frs=30/m 30X clay alteration - gouge 3X pyrite - laminations Black well laminated mudstone and muddy siltstone with 10X 1cm irregular slightly pyritic silt beds. Lower contact sharp @ 82 deg. Unit badly broken and sheared with abundant gouge and rubble zones. Bedding between the shears ranges from 30-75 deg. | 24592 24593 24594 24595 24596 24597 | 617.70-618.70 618.70-620.70 620.70-622.70 622.70-624.70 624.70-626.70 626.70-628.60 | 1.00 2.00 2.00 2.00 2.00 1.90 | 43 68 69 19 34 60 | 1.0 1.4 1.8 0.6 1.3 1.4 | 24 28 33 18 29 43 | 770 930 1491 951 1262 557 | 72 86 100 14 29 64 | 75 93 103 52 99 93 | 2 2 2 2 2 2 | 39 56 53 29 47 58 |
| | | 622.0-623.6 Fault zone, all broken core and rubble with 30 X clay gouge. | | | | | | | | | | | |
| | | 626.3-626.6 Fault zone, toally crushed and gouged, adjacent graphitic slip surfaces @ 30 deg. | | | | | | | | | | | |
| 628.60 | 628.80 | DACITIC LITHIC TUFF Gray, bedded, heterolithic bedding 85° Frs=1/m 20X silica alteration - present 30X sericite alteration - pervasive 6X pyrite - matrix Granular textured, heterolithic fragmental-epiclastic. Unit contains 2X irregular vesicular dacite clasts. Matrix has been pyritized, containing 5X fine to colliform pyrite. | 24598 | 628.60-628.80 | 0.20 | 12 | 0.4 | 10 | 50 | 17 | 42 | 2 | 8 |
| (eoh) | | EOH. | | | | | | | | | | | |

APPENDIX 2

ASSAY CERTIFICATES



Bondar Clegg

Inchcape Testing Services

Geochemical
Lab
Report

REPORT: V94-00959.0 (COMPLETE)

REFERENCE:

CLIENT: HOMESTAKE MINERAL DEVELOPMENT COMPANY
PROJECT: 90704

SUBMITTED BY: D. KURAN
DATE PRINTED: 5-SEP-94

| ORDER | ELEMENT | NUMBER OF ANALYSES | LOWER DETECTION LIMIT | EXTRACTION | METHOD |
|-------|-------------|--------------------|-----------------------|-------------------|---------------------|
| 1 | AU30 Gold | 30 | 5 PPB | Fire Assay of 30g | ATOMIC ABSORPTION |
| 2 | Ag Silver | 30 | 0.2 PPM | HCL:HNO3 (3:1) | INDUC. COUP. PLASMA |
| 3 | Cu Copper | 30 | 1 PPM | HCL:HNO3 (3:1) | INDUC. COUP. PLASMA |
| 4 | Pb Lead | 30 | 2 PPM | HCL:HNO3 (3:1) | INDUC. COUP. PLASMA |
| 5 | Zn Zinc | 30 | 1 PPM | HCL:HNO3 (3:1) | INDUC. COUP. PLASMA |
| 6 | As Arsenic | 30 | 5 PPM | HCL:HNO3 (3:1) | INDUC. COUP. PLASMA |
| 7 | Sb Antimony | 30 | 5 PPM | HCL:HNO3 (3:1) | INDUC. COUP. PLASMA |
| 8 | Hg Mercury | 30 | 0.010 PPM | HCL:HNO3 (3:1) | COLD VAPOR AA |

| SAMPLE TYPES | NUMBER | SIZE FRACTIONS | NUMBER | SAMPLE PREPARATIONS | NUMBER |
|--------------|--------|----------------|--------|---------------------|--------|
| R. ROCK | 30 | 2 -150 | 30 | CRUSH/SPLIT & PULV. | 30 |

REPORT COPIES TO: MR. RON BRITTEN
MR. D. KURAN

INVOICE TO: MR. RON BRITTEN

Bondar-Clegg & Company Ltd.

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Bondar Clegg Inchcape Testing Services

Geochemical Lab Report

REPORT: V94-00959.0 (COMPLETE)

DATE PRINTED: 5-SEP-94

PROJECT: 90704

PAGE 1

| SAMPLE NUMBER | ELEMENT UNITS | Al3O3 PPB | Ag PPM | Cu PPH | Pb PPM | Zn PPM | As PPM | Sb PPM | Hg PPM |
|---------------|---------------|-----------|--------|--------|--------|--------|--------|--------|--------|
| R2 24401 | | <5 | <0.2 | 49 | 37 | 186 | 38 | 8 | 1.429 |
| R2 24402 | | <5 | <0.2 | 41 | 22 | 229 | 11 | <5 | 0.899 |
| R2 24403 | | 8 | <0.2 | 26 | 13 | 193 | 9 | <5 | 0.737 |
| R2 24404 | | 13 | 1.5 | 67 | 17 | 688 | 48 | 30 | 1.749 |
| R2 24405 | | 16 | 2.0 | 68 | 20 | 406 | 70 | 31 | 1.326 |
| R2 24406 | | 12 | 1.7 | 78 | 17 | 1338 | 112 | 47 | 1.855 |
| R2 24407 | | <5 | 1.2 | 75 | 13 | 991 | 65 | 42 | 1.224 |
| R2 24408 | | 5 | 0.4 | 70 | 13 | 881 | 52 | 51 | 1.328 |
| R2 24409 | | <5 | <0.2 | 35 | 11 | 277 | 27 | 32 | 0.776 |
| R2 24410 | | <5 | <0.2 | 28 | 7 | 233 | 25 | 16 | 0.158 |
| R2 24411 | | 6 | <0.2 | 26 | 9 | 240 | 70 | 13 | 0.260 |
| R2 24412 | | 9 | <0.2 | 36 | 12 | 197 | 86 | 11 | 0.619 |
| R2 24413 | | 20 | <0.2 | 5 | 27 | 137 | 162 | <5 | 0.871 |
| R2 24414 | | 11 | <0.2 | 6 | 16 | 113 | 68 | <5 | 0.424 |
| R2 24415 | | 14 | <0.2 | 8 | 15 | 99 | 173 | <5 | 0.265 |
| R2 24416 | | 14 | <0.2 | 8 | 22 | 147 | 334 | <5 | 0.369 |
| R2 24417 | | 6 | <0.2 | 6 | 24 | 166 | 80 | <5 | 0.315 |
| R2 24418 | | <5 | <0.2 | 26 | 36 | 128 | 153 | <5 | 0.490 |
| R2 24419 | | <5 | <0.2 | 6 | 20 | 110 | 62 | <5 | 0.368 |
| R2 24420 | | <5 | <0.2 | 10 | 12 | 113 | 38 | <5 | 0.320 |
| R2 24421 | | <5 | <0.2 | 6 | 10 | 60 | 30 | <5 | 0.220 |
| R2 24422 | | <5 | <0.2 | 8 | 10 | 286 | 181 | <5 | 0.355 |
| R2 24423 | | <5 | <0.2 | 5 | 23 | 153 | 73 | <5 | 0.151 |
| R2 24424 | | <5 | <0.2 | 8 | 31 | 153 | 57 | <5 | 0.203 |
| R2 24425 | | 6 | <0.2 | 47 | 9 | 559 | 412 | 38 | 0.418 |
| R2 24426 | | <5 | <0.2 | 34 | 12 | 382 | 312 | 36 | 0.317 |
| R2 24427 | | 8 | <0.2 | 39 | 9 | 484 | 231 | 40 | 0.385 |
| R2 24428 | | 7 | <0.2 | 49 | 10 | 491 | 506 | 43 | 0.416 |
| R2 24429 | | 30 | <0.2 | 41 | 11 | 388 | 162 | 36 | 0.371 |
| R2 24430 | | <5 | <0.2 | 4 | 10 | 78 | 21 | <5 | 0.122 |

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CERTIFICATE ANALYSIS

iPL 94I0802

2036 Columbia St
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Homestake Mineral Development Co
 Out: Sep 09, 1994 Project: 90704
 In: Sep 08, 1994 Shipper: Alex Walus
 PO#: Shipment: ID=COF7304

6 Samples
 0= Rock 0= Soil 6= Core 0=RC Ct 0= Pulp 0=Other
 Raw Storage: -- -- 03Mon/Dis -- -- --
 Pulp Storage: -- -- 12Mon/Dis -- -- --

[046814:36:36:49090994]
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Analytical Summary

| ## | Code | Met | Title | Limit | Limit | Units | Description | Element | ## |
|----|------|------|-------|-------|-------|-------|----------------------|----------|----|
| | | hod | | Low | High | | | | |
| 01 | 313P | FAAA | Au | 2 | 9999 | ppb | Au FA/AAS finish 30g | Gold | 01 |
| 02 | 721P | ICP | Ag | 0.1 | 100 | ppm | Ag ICP | Silver | 02 |
| 03 | 711P | ICP | Cu | 1 | 20000 | ppm | Cu ICP | Copper | 03 |
| 04 | 714P | ICP | Pb | 2 | 20000 | ppm | Pb ICP | Lead | 04 |
| 05 | 730P | ICP | Zn | 1 | 20000 | ppm | Zn ICP | Zinc | 05 |
| 06 | 703P | ICP | As | 5 | 9999 | ppm | As ICP 5 ppm | Arsenic | 06 |
| 07 | 702P | ICP | Sb | 5 | 9999 | ppm | Sb ICP | Antimony | 07 |
| 08 | 732P | ICP | Hg | 3 | 9999 | ppm | Hg ICP | Mercury | 08 |



INTERNATIONAL PLASMA LABORATORY LTD.

CERTIFICATE ANALYSIS

iPL 9410702

2036 Columbia St
 Vancouver, B.C.
 Canada V5Y 3E1
 Phone (604) 879-7878
 Fax (604) 879-7881

Client: Homestake Mineral Development Co
 Project: 90704 120 Core

iPL: 9410702 M

Out: Sep 09, 1994
 In: Sep 07, 1994

Page 1 of 4
 [046614:39:5] 94

Section 1 of 1
 Certified IC Assayer: David Chiu

| Sample Name | Au | Ag | Cu | Pb | Zn | As | Sb | Hg | Sample Name | Au | Ag | Cu | Pb | Zn | As | Sb | Hg |
|-------------|-----|-----|------|-----|-----|------|-----|-----|-------------|-----|-----|-----|-----|-----|-----|-----|-----|
| | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm | | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| 24431 | C | 10 | 0.4 | 45 | 15 | 212 | 40 | <5 | <3 | | | | | | | | |
| 24432 | C | 11 | 0.2 | 41 | 11 | 104 | 9 | <5 | <3 | | | | | | | | |
| 24433 | C | 5 | 0.3 | 56 | 12 | 210 | 7 | <5 | <3 | | | | | | | | |
| 24434 | C | 5 | 0.2 | 66 | 10 | 536 | 15 | <5 | <3 | | | | | | | | |
| 24435 | C | 18 | 0.3 | 61 | 14 | 495 | 15 | <5 | <3 | | | | | | | | |
| 24436 | C | 12 | 0.2 | 51 | 15 | 202 | 13 | <5 | <3 | | | | | | | | |
| 24437 | C | 11 | 0.3 | 49 | 11 | 102 | 10 | <5 | <3 | | | | | | | | |
| 24438 | C | 18 | 1.5 | 55 | 14 | 260 | 60 | 39 | <3 | | | | | | | | |
| 24439 | C | 23 | 1.2 | 37 | 5 | 417 | 52 | 25 | <3 | | | | | | | | |
| 24440 | C | 29 | 0.8 | 36 | 10 | 407 | 15 | 22 | <3 | | | | | | | | |
| 24441 | C | 65 | 3.4 | 125 | 16 | 2202 | 155 | 62 | <3 | | | | | | | | |
| 24442 | C | 69 | 3.6 | 89 | 13 | 619 | 81 | 51 | <3 | | | | | | | | |
| 24443 | C | 56 | 1.8 | 35 | 8 | 404 | 50 | 26 | <3 | | | | | | | | |
| 24444 | C | 115 | 2.5 | 54 | 15 | 150 | 47 | 29 | <3 | | | | | | | | |
| 24445 | C | 42 | 1.1 | 46 | 22 | 447 | 43 | 26 | <3 | | | | | | | | |
| 24446 | C | 21 | 2.5 | 71 | 13 | 755 | 87 | 44 | <3 | | | | | | | | |
| 24447 | C | 36 | 3.1 | 74 | 30 | 740 | 77 | 33 | <3 | | | | | | | | |
| 24448 | C | 21 | 2.6 | 66 | 17 | 748 | 51 | 8 | <3 | | | | | | | | |
| 24449 | C | 19 | 2.2 | 60 | 9 | 1202 | 56 | 9 | <3 | | | | | | | | |
| 24450 | C | 191 | 25.0 | 132 | 259 | 1103 | 55 | 135 | 4 | | | | | | | | |
| 24451 | C | 12 | 2.0 | 67 | 7 | 1379 | 78 | 19 | <3 | | | | | | | | |
| 24452 | C | 8 | 0.1 | 40 | 7 | 353 | 21 | <5 | <3 | | | | | | | | |
| 24453 | C | 10 | <0.1 | 42 | <2 | 99 | 5 | <5 | <3 | | | | | | | | |
| 24454 | C | 8 | <0.1 | 32 | 4 | 90 | <5 | <5 | <3 | | | | | | | | |
| 24455 | C | 6 | <0.1 | 30 | 4 | 117 | <5 | <5 | <3 | | | | | | | | |
| 24456 | C | 4 | <0.1 | 43 | 6 | 196 | 5 | <5 | <3 | | | | | | | | |
| 24457 | C | 18 | 0.4 | 60 | 20 | 1176 | 172 | 28 | <3 | | | | | | | | |
| 24458 | C | 20 | 0.5 | 50 | 24 | 677 | 217 | 34 | <3 | | | | | | | | |
| 24459 | C | 14 | 0.4 | 26 | 12 | 392 | 317 | 27 | <3 | | | | | | | | |
| 24460 | C | 7 | 0.2 | 4 | 25 | 129 | 81 | 0 | <3 | | | | | | | | |
| 24461 | C | 3 | 0.1 | 4 | 23 | 113 | 57 | <5 | <3 | | | | | | | | |
| 24462 | C | 10 | 0.2 | 5 | 15 | 133 | 192 | 6 | <3 | | | | | | | | |
| 24463 | C | 10 | 0.2 | 25 | 13 | 143 | 107 | 8 | <3 | | | | | | | | |
| 24464 | C | <2 | 0.2 | 3 | 19 | 94 | 28 | <5 | <3 | | | | | | | | |
| 24465 | C | 4 | 0.2 | 6 | 16 | 99 | 87 | <5 | <3 | | | | | | | | |
| 46055 | C | 126 | 0.1 | 92 | 51 | 100 | 120 | <5 | <3 | | | | | | | | |
| 46056 | C | 441 | 0.4 | 65 | 53 | 51 | 199 | <5 | <3 | | | | | | | | |
| 46057 | C | 96 | 0.1 | 71 | 17 | 54 | 53 | <5 | <3 | | | | | | | | |
| 46058 | C | 305 | 2.0 | 136 | 154 | 89 | 153 | <5 | <3 | | | | | | | | |

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



CERTIFICATE OF ANALYSIS
iPL 94I0802

2036 Columbia St
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7899

Client: Hanks Lake Mineral Development Co ID#: 94I0802
Project: 90704 6 Core

Out: Sep 09, 1994
In: Sep 08, 1994

Page 1 of 1
[046814:36:40:49090994]

Section 1 of 1
Certified BC Assayer: David Chiu

| Sample Name | Au ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | As ppm | Sb ppm | Hg ppm |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 24466 | C < 0.3 | 4 | 29 | 100 | 27 | < | < | |
| 24467 | C < 0.2 | 2 | 16 | 124 | 6 | < | < | |
| 24468 | C < 0.1 | 3 | 16 | 113 | 1 | < | < | |
| 24469 | C < 0.2 | 4 | 19 | 145 | 27 | < | < | |
| 24470 | C 10 0.2 | 25 | 7 | 128 | 100 | 21 | < | |
| 24471 | C 7 < | 11 | 8 | 122 | 38 | 6 | < | |

Min Limit 2 0.1 1 2 1 5 5 3
 Max Reported* 9999 99.9 20000 20000 20000 9999 9999 9999
 Method FAAS ICP ICP ICP ICP ICP ICP ICP

--No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 * = Estimate # = No Data



CERTIFICATE OF ANALYSIS
iPL 94I1601

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Client: Homestake Mineral Dev (Eskay)
Project: 90704 Adrian 23 Core

iPL: 94I1601 M

Out: Sep 20, 1994
In: Sep 16, 1994

Page 1 of 1
[048514:55:4] 94]

Section 1 of 1
Certified BC Assayer: David Chiu

| Sample Name | Au | Ag | Cu | Pb | Zn | As | Sb | Hg | Sample Name | Au | Ag | Cu | Pb | Zn | As | Sb | Hg |
|-------------|-----|-----|-----|-----|-----|------|-----|-----|-------------|-----|-----|-----|-----|-----|-----|-----|-----|
| | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm | | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| 24472 | C | 10 | 0.7 | 54 | 12 | 531 | 34 | <5 | <3 | | | | | | | | |
| 24473 | C | 5 | 0.7 | 56 | 12 | 558 | 63 | <5 | <3 | | | | | | | | |
| 24474 | C | <2 | 0.5 | 41 | 8 | 471 | 21 | <5 | <3 | | | | | | | | |
| 24475 | C | 5 | 0.5 | 40 | 6 | 496 | 24 | <5 | <3 | | | | | | | | |
| 24476 | C | 14 | 0.6 | 61 | 10 | 805 | 39 | <5 | <3 | | | | | | | | |
| 24477 | C | 20 | 1.1 | 78 | 13 | 980 | 60 | 6 | <3 | | | | | | | | |
| 24478 | C | 12 | 0.6 | 34 | 10 | 103 | 53 | <5 | <3 | | | | | | | | |
| 24479 | C | 16 | 0.8 | 54 | 15 | 657 | 30 | <5 | <3 | | | | | | | | |
| 24480 | C | 50 | 1.1 | 57 | 17 | 481 | 5 | 8 | <3 | | | | | | | | |
| 24481 | C | 8 | 0.7 | 31 | 6 | 100 | 35 | <5 | <3 | | | | | | | | |
| 24482 | C | 20 | 1.2 | 39 | 9 | 164 | 66 | <5 | <3 | | | | | | | | |
| 24483 | C | 53 | 1.3 | 58 | 13 | 442 | 52 | 9 | <3 | | | | | | | | |
| 24484 | C | 59 | 1.4 | 57 | 14 | 1030 | 71 | 11 | <3 | | | | | | | | |
| 24485 | C | 20 | 1.1 | 51 | 8 | 113 | 70 | <5 | <3 | | | | | | | | |
| 24486 | C | 30 | 1.2 | 49 | 22 | 709 | 71 | 17 | <3 | | | | | | | | |
| 24487 | C | 10 | 0.8 | 15 | 15 | 144 | 52 | <5 | <3 | | | | | | | | |
| 24488 | C | 6 | 0.6 | 33 | 7 | 100 | 58 | <5 | <3 | | | | | | | | |
| 24489 | C | 5 | 0.2 | 6 | 17 | 119 | 17 | <5 | <3 | | | | | | | | |
| 24490 | C | 7 | 0.3 | 9 | 22 | 116 | 20 | <5 | <3 | | | | | | | | |
| 24491 | C | 50 | 0.4 | 6 | 21 | 117 | 24 | <5 | <3 | | | | | | | | |
| 24492 | C | 23 | 0.5 | 14 | 4 | 90 | 100 | <5 | <3 | | | | | | | | |
| 24493 | C | 5 | 0.4 | 4 | 9 | 72 | 31 | <5 | <3 | | | | | | | | |
| 24494 | C | 14 | 0.5 | 7 | 17 | 74 | 59 | 6 | <3 | | | | | | | | |

Min Limit 2 0.1 1 2 1 5 5 3
 Max Reported* 9999 99.9 20000 20000 20000 9999 9999 9999
 Method FAAM ICP ICP ICP ICP ICP ICP ICP
 ---No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 X=Estimate Z Max=No Estimate



INTERNATIONAL PLASMA LABORATORY LTD.

CERTIFICATE OF ANALYSIS

iPL 94I2803

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7881

Client: Homestake Mineral Dev (Eskay)
Project: 90704 SB Core

Lot: 94I2803 M

Out: Oct 01, 1994
In: Sep 28, 1994

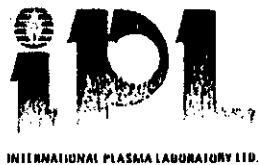
Page 1 of 2
[053109:00:3] 94]

Section 1 of 1
Certified IC Assayer: David Chiu

Handwritten signature/initials

Table with 18 columns: Sample Name, Au (ppb), Ag (ppm), Cu (ppm), Pb (ppm), Zn (ppm), As (ppm), Sb (ppm), Hg (ppm), and 9 corresponding columns for samples 24534-24552.

Min Limit 2 0.1 1 2 1 5 5 3
Max Reported* 9999 99.9 20000 20000 20000 9999 9999 9999
Method FAAA ICP ICP ICP ICP ICP ICP ICP
--No Test Ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pu/P U=Undefined m=Estimate/1000 Z=Estimate X=Max=No Estimate



CERTIFICATE OF ANALYSIS

iPL 94J0705

2036 Columbia St
 Vancouver, B.C.
 Canada V5Y 3E1
 Phone (604) 879-7878
 Fax (604) 879-7891

Client: Homestake Mineral Dev (Eskey)
 Project: 90704 13 Core

iPL: 94J0705

Out: Oct 09, 1994
 In: Oct 07, 1994

Page 1 of 1
 [056317:07:15:49100994]

Section 1 of 1
 Certified BC Assayer: David Chiu

| Sample Name | Au ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | As ppm | Sb ppm | Hg ppm |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 24553 | C < | 0.3 | 33 | 8 | 229 | 22 | < | < |
| 24554 | C < | 0.1 | 30 | 9 | 196 | 14 | < | < |
| 24555 | C 3 | 0.2 | 42 | 14 | 290 | 36 | 36 | < |
| 24556 | C 5 | 0.4 | 63 | 16 | 906 | 39 | 13 | < |
| 24557 | C 9 | 0.6 | 81 | 21 | 520 | 47 | 13 | < |
| 24558 | C 33 | 1.5 | 59 | 34 | 1178 | 48 | 26 | < |
| 24559 | C 31 | 0.9 | 44 | 22 | 948 | 65 | 21 | < |
| 24560 | C 16 | 0.7 | 22 | 18 | 377 | 50 | 16 | < |
| 24561 | C 61 | 1.8 | 51 | 44 | 1022 | 47 | 32 | < |
| 24562 | C 113 | 2.9 | 79 | 79 | 509 | 67 | 58 | < |
| 24563 | C 15 | 0.9 | 78 | 154 | 3402 | 27 | 12 | < |
| 24564 | C 14 | 0.5 | 77 | 85 | 1294 | 22 | 14 | < |
| 24565 | C 8 | 0.6 | 102 | 31 | 1340 | 40 | 6 | < |

Min Limit 2 0.1 1 2 1 5 5 3

Max Reported* 9999 99.9 20000 20000 20000 9999 9999 9999

Method FAAS ICP ICP ICP ICP ICP ICP ICP

--No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Sulf P=Pi H=Hedford E=Electrodepos



CERTIFICATE OF ANALYSIS
iPL 94J0706

2036 Columbia St
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7899

INTERNATIONAL PLASMA LABORATORY LTD

Client: Homestake Mineral Dev (Eskay)
Project: Adrian 33 Core

File: 94J0706

Out: Oct 09, 1994
In: Oct 07, 1994

Page 1 of 1
[056417:09:55:49100994]

Section 1 of 1
Certified DC Assayer: David Chiu

| Sample Name | | Au | Ag | Cu | Pb | Zn | As | Sb | Hg |
|-------------|---|-----|-----|-----|-----|------|-----|-----|-----|
| | | ppb | ppm | ppm | ppm | ppm | ppb | ppm | ppm |
| 24566 | C | 4 | 0.1 | 49 | 6 | 207 | 20 | < | < |
| 24567 | C | 6 | 0.2 | 30 | 19 | 440 | 24 | < | < |
| 24568 | C | 6 | 0.4 | 40 | 11 | 713 | 23 | 5 | < |
| 24569 | C | 2 | 0.3 | 45 | 16 | 336 | 20 | < | < |
| 24570 | C | < | < | 21 | 10 | 102 | 24 | < | < |
| 24571 | C | 4 | 1.3 | 70 | 15 | 1117 | 63 | 11 | < |
| 24572 | C | 4 | 0.8 | 70 | 26 | 519 | 45 | 9 | < |
| 24573 | C | 3 | 0.8 | 20 | 16 | 240 | 2 | 6 | < |
| 24574 | C | 11 | 1.0 | 46 | 19 | 650 | 3 | 11 | < |
| 24575 | C | 8 | 0.8 | 47 | 20 | 491 | 4 | 8 | < |
| 24576 | C | 10 | 0.7 | 47 | 22 | 449 | 33 | 12 | < |
| 24577 | C | 8 | 0.4 | 42 | 19 | 436 | 29 | 5 | < |
| 24578 | C | 9 | 0.8 | 53 | 16 | 139 | 29 | 9 | < |
| 24579 | C | 12 | 1.1 | 54 | 16 | 357 | 30 | 7 | < |
| 24580 | C | 22 | 1.0 | 60 | 19 | 460 | 39 | 11 | < |
| 24581 | C | 18 | 0.8 | 49 | 13 | 464 | 30 | 10 | < |
| 24582 | C | 5 | 0.5 | 46 | 5 | 223 | 10 | 7 | < |
| 24583 | C | 2 | 0.4 | 40 | 4 | 131 | 9 | < | < |
| 24584 | C | 2 | 0.3 | 3 | < | 6 | < | 5 | < |
| 24585 | C | < | 0.2 | 3 | 2 | 4 | < | < | < |
| 24586 | C | 3 | 0.5 | 4 | < | 5 | < | < | < |
| 24587 | C | < | 0.3 | 3 | < | 3 | < | < | < |
| 24588 | C | 3 | 0.3 | 5 | < | 4 | < | < | < |
| 24589 | C | 4 | 0.3 | 2 | 3 | 1 | < | < | < |
| 24590 | C | 12 | 0.3 | 1 | 4 | 4 | < | < | < |
| 24591 | C | 4 | 0.3 | 3 | 10 | 6 | < | < | < |
| 24592 | C | 43 | 1.0 | 72 | 24 | 770 | 75 | 39 | < |
| 24593 | C | 60 | 1.4 | 06 | 20 | 930 | 90 | 56 | < |
| 24594 | C | 69 | 1.8 | 100 | 33 | 1491 | 103 | 53 | < |
| 24595 | C | 19 | 0.6 | 14 | 18 | 951 | 57 | 29 | < |
| 24596 | C | 34 | 1.3 | 29 | 29 | 1262 | 99 | 47 | < |
| 24597 | C | 60 | 1.4 | 64 | 43 | 557 | 92 | 50 | < |
| 24598 | C | 12 | 0.4 | 17 | 10 | 50 | 40 | 8 | < |

Min Limit 2 0.1 1 2 1 5 5 3
 Max Reported* 9999 99.9 20000 20000 20000 9999 9999 9999
 Method FAAA ICP ICP ICP ICP ICP ICP ICP

--=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 X=Estimate Z Max=No Estimate
 International Plasma Lab Ltd. 2036 Columbia St. Vancouver BC V5Y 3E1 Ph:604/879-7878 Fax:604/879-7898

APPENDIX 3

WHOLE ROCK ANALYSIS

1



CERTIFICATE OF ANALYSIS
iPL 94J0704

2936 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 679-7878
Fax (604) 679-7898

Homestake Mineral Dev (Eskay)

Date: Oct 13, 1994 Project: 90704
In: Oct 07, 1994 Shipper: J Kuran

XC#: Shipments: ID=002440

Msg: Whole Rock Package

Document Distribution

| | | |
|------------------------|------------------|--|
| 1 Homestake Canada Inc | EV RT CC IN FX | |
| 1000 - 700 h Pandar St | 2 2 1 0 1 | |
| Vancouver | D, 30 50 BT BL | |
| BC VSC '88 | 0 0 0 0 0 | |
| ATT: J. Kuran | Ph: 604/684-2345 | |
| | Fx: 604/684-9E31 | |

5 Samples

R= Rock O= Soil S= Core
Raw Storage: -- -- 03Mon/Dis
Pulp Storage: -- -- 12Mon/Dis

O=RC Ct O= Fuip O=Other
-- -- --
-- -- --

[056216; 34; 33; 4310; 394]
Mon=Month Dis=Discard
Rtn=Return Arc=Archive

Analytical Summary

| # | Code | Me: | Title | Lim: | Limit | Units | Description | Element | # |
|----|------|-------|-------|------|-------|-------|------------------|-----------------|----|
| | | | | Low | High | | | | |
| 01 | 401P | WRock | S:O2 | 0.01 | 100.0 | % | S:O2 Whole Rock | SiO2 | 01 |
| 02 | 402P | WRock | TiO2 | 0.01 | 100.0 | % | TiO2 Whole Rock | TiO2 | 02 |
| 03 | 405P | WRock | Al2O3 | 0.01 | 100.0 | % | Al2O3 Whole Rock | Al2O3 | 03 |
| 04 | 409P | WRock | Fe2O3 | 0.01 | 100.0 | % | Fe2O3 Whole Rock | Fe2O3 | 04 |
| 05 | 402P | WRock | MgO | 0.0 | 100.0 | % | MgO Whole Rock | MgO | 05 |
| 06 | 406P | WRock | CaO | 0.0 | 100.0 | % | CaO Whole Rock | CaO | 06 |
| 07 | 41CP | WRock | Na2O | 0.0 | 100.0 | % | Na2O Whole Rock | Na2O | 07 |
| 08 | 403P | WRock | K2O | 0.0 | 100.0 | % | K2O Whole Rock | K2O | 08 |
| 09 | 404P | WRock | MnO | 0.01 | 100.0 | % | MnO Whole Rock | MnO | 09 |
| 10 | 408P | WRock | BaO | 0.01 | 100.0 | % | BaO Whole Rock | BaO | 10 |
| 11 | 411P | WRock | P2O5 | 0.01 | 100.0 | % | P2O5 Whole Rock | P2O5 | 11 |
| 12 | 517P | GeoSp | LOI | 0.01 | 100.0 | % | Loss on Ignition | Loss on Ignitio | 12 |
| 13 | 412P | WRock | Total | 0.01 | 105.0 | % | Total Whole Rock | Total | 13 |

P. 2

FAX 604-679-7898

iPL INTL PLASMA LAB.

Oct. 13 '94 16:27

En=Envelope # RT=Report Style CC=Copies IN=Invoice FX=Fax(1=Yes 0=No)
DL=Download 3D=3-1/2 Disk 5D=5-1/4 Disk BT=BBS Type BL=BBS(1=Yes 0=No)

Totals: 1=Copy 0=Invoice 0=3-1/2 Disk 0=5-1/4 Disk



CERTIFICATE OF ANALYSIS
iPL 94J0704

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

P. 3

Client: Homestake Mineral Dev (Eskey)
Project: 90704 5 Core

iPL: 94J0704

Out: Oct 13, 1994
In: Oct 07, 1994

Page 1 of 1
{056216:04:37:49101394}

Section 1 of 1
Certified BC Assayer: David Chiu

| Sample Name | SiO2 % | TiO2 % | Al2O3 % | Fe2O3 % | MgO % | CaO % | Na2O % | K2O % | MnO % | BaO % | P2O5 % | LOI % | Total % |
|-------------|--------|--------|---------|---------|-------|-------|--------|-------|-------|-------|--------|-------|---------|
| 9435 454.5 | 70.92 | 0.11 | 12.52 | 3.33 | 1.47 | 1.48 | 3.72 | 3.43 | 0.04 | 0.16 | < | 2.48 | 99.71 |
| 9436 546.5 | 64.99 | 0.11 | 17.70 | 3.73 | 2.98 | 0.35 | 4.66 | 3.42 | 0.04 | 0.40 | < | 2.79 | 101.08 |
| 9437 519.6 | 60.89 | 0.14 | 13.65 | 6.17 | 3.05 | 1.50 | 2.80 | 3.54 | 0.06 | 0.50 | < | 4.19 | 96.49 |
| 9438 603.0 | 80.70 | 0.07 | 9.60 | 1.28 | 0.26 | 0.28 | 2.12 | 4.33 | 0.01 | 0.62 | < | 1.38 | 100.80 |
| 9439 593.0 | 48.04 | 1.29 | 12.36 | 9.77 | 7.61 | 7.44 | 2.91 | 0.35 | 0.13 | 0.16 | 0.13 | 3.76 | 93.95 |

FAX 604-879-7898

iPL INTL PLASMA LAB.

Oct. 13 '94 16:27

Min Limit 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
Max Reported* 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 105.00
Method MRock MRock MRock MRock MRock MRock MRock MRock MRock MRock MRock MRock GeoSp MRock
---No Test ---Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Py1p U=Undefined e=Estimate/1000 %=Estimate X Max=No Estimate
International Plasma Lab Ltd. 2036 Columbia St. Vancouver BC V5Y 3E1 Ph: 604/879-7878 Fax: 604/879-7898

APPENDIX 4

GEOPHYSICAL RESULTS

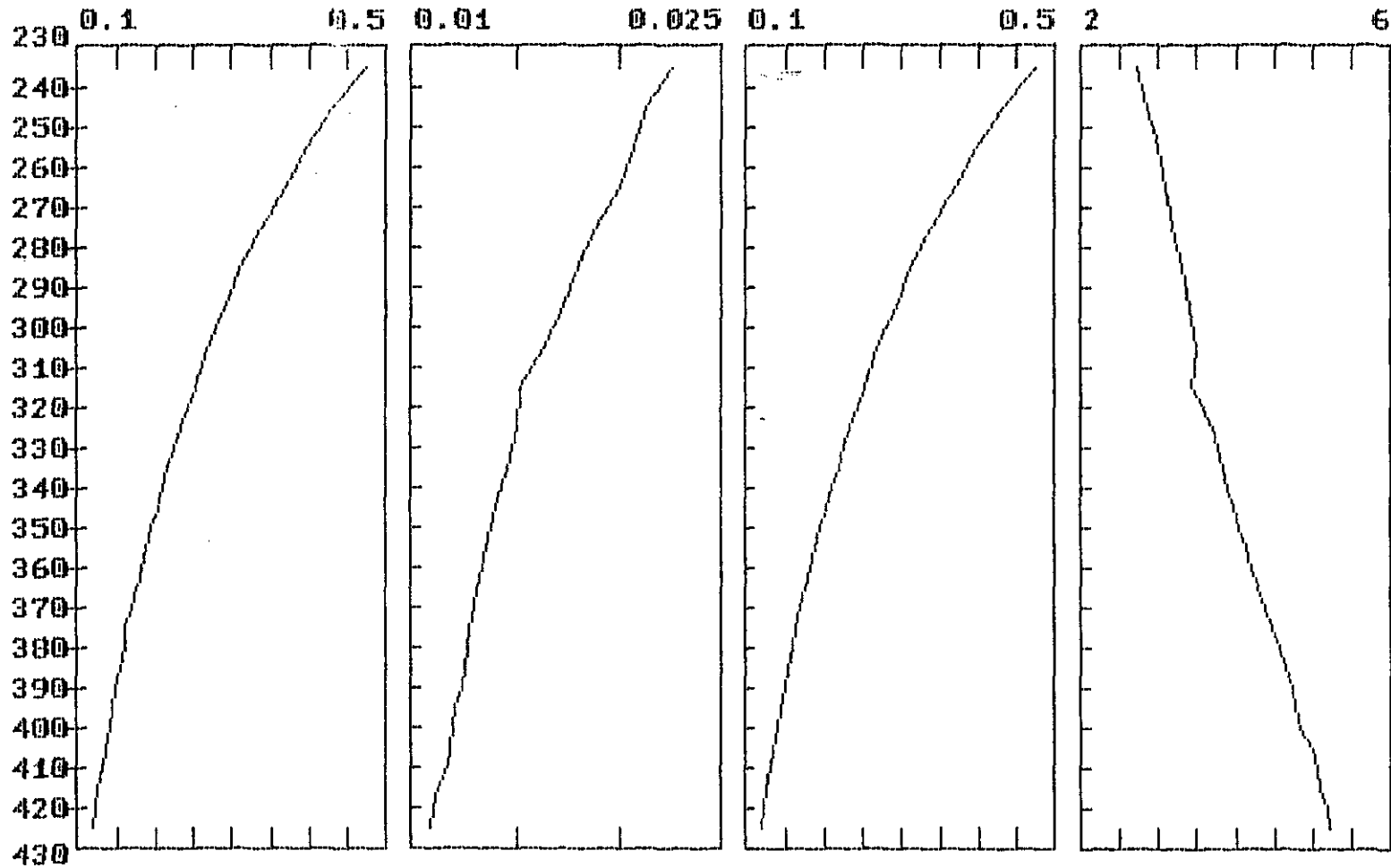
ESKAY BOREHOLE EM, DDH 35, 1994

IN PHASE

OUT PHASE

AMPLITUDE

PHASE



FREQUENCY: 70 Hz

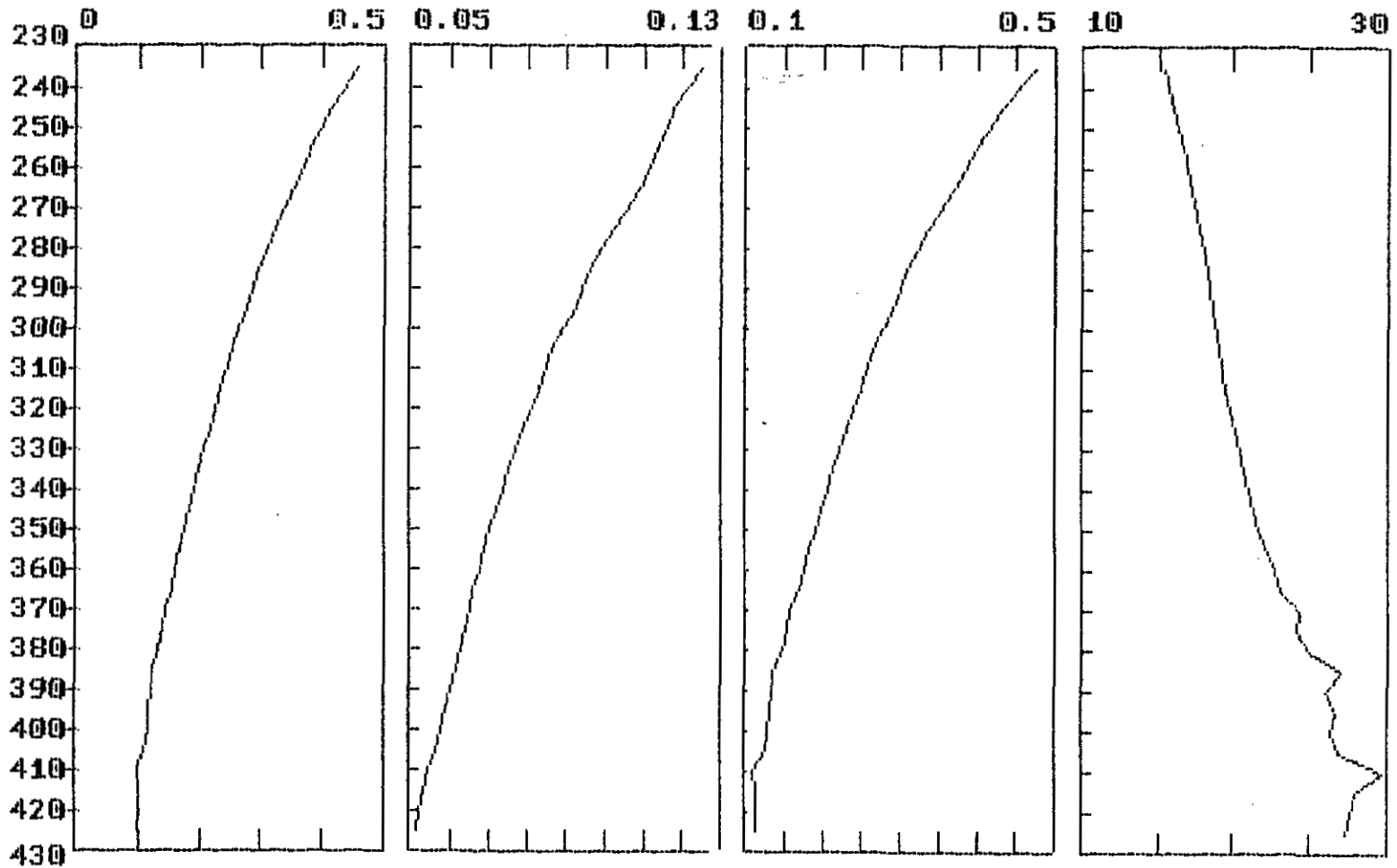
ESKAY BOREHOLE EM, DDH 35, 1994

IN PHASE

OUT PHASE

AMPLITUDE

PHASE



FREQUENCY: 449.6 Hz

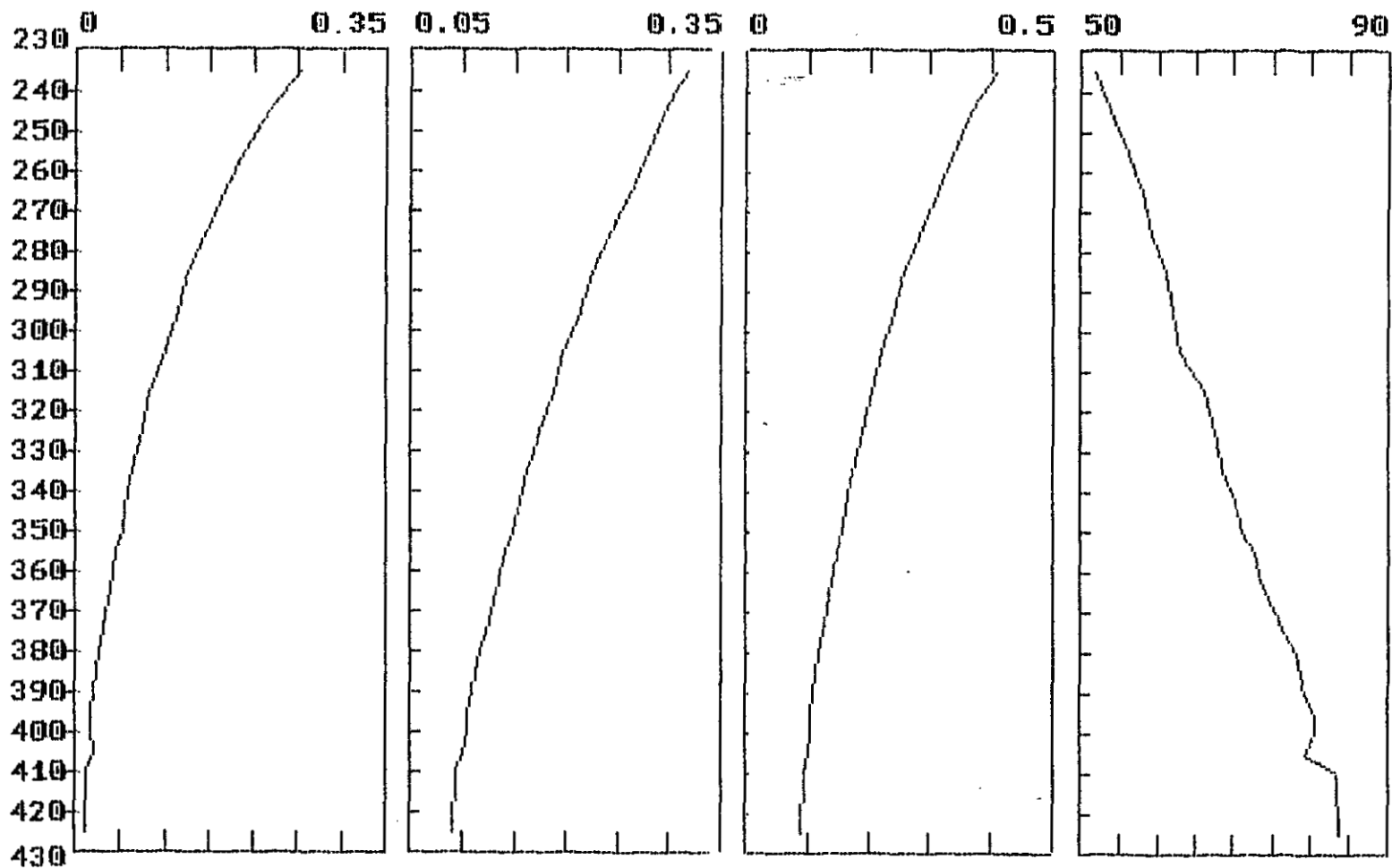
ESKAY BOREHOLE EM, DDH 35, 1994

IN PHASE

OUT PHASE

AMPLITUDE

PHASE



FREQUENCY: 1798 Hz

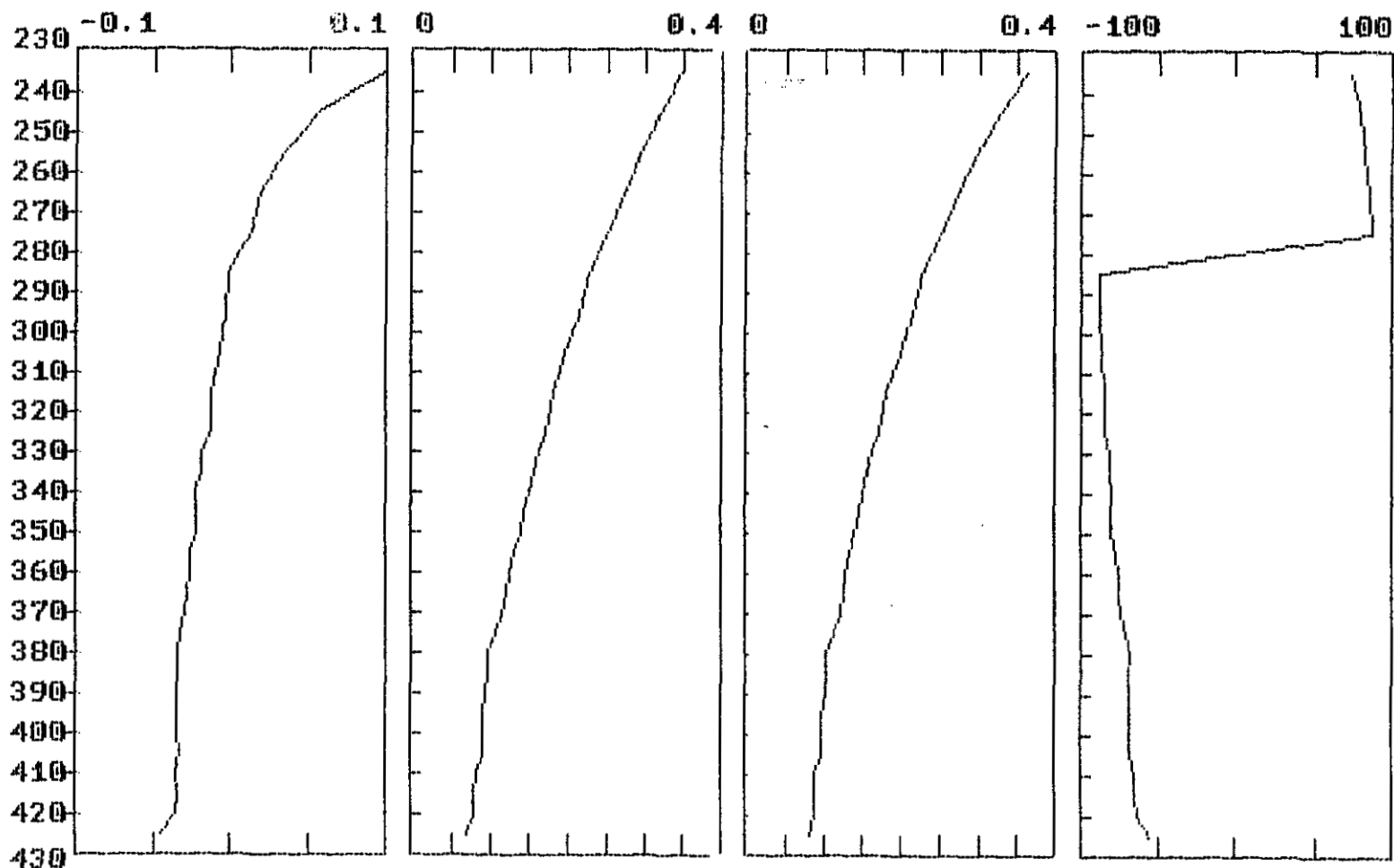
ESKAY BOREHOLE EM, DDH 35, 1994

IN PHASE

OUT PHASE

AMPLITUDE

PHASE



FREQUENCY: 2777 Hz

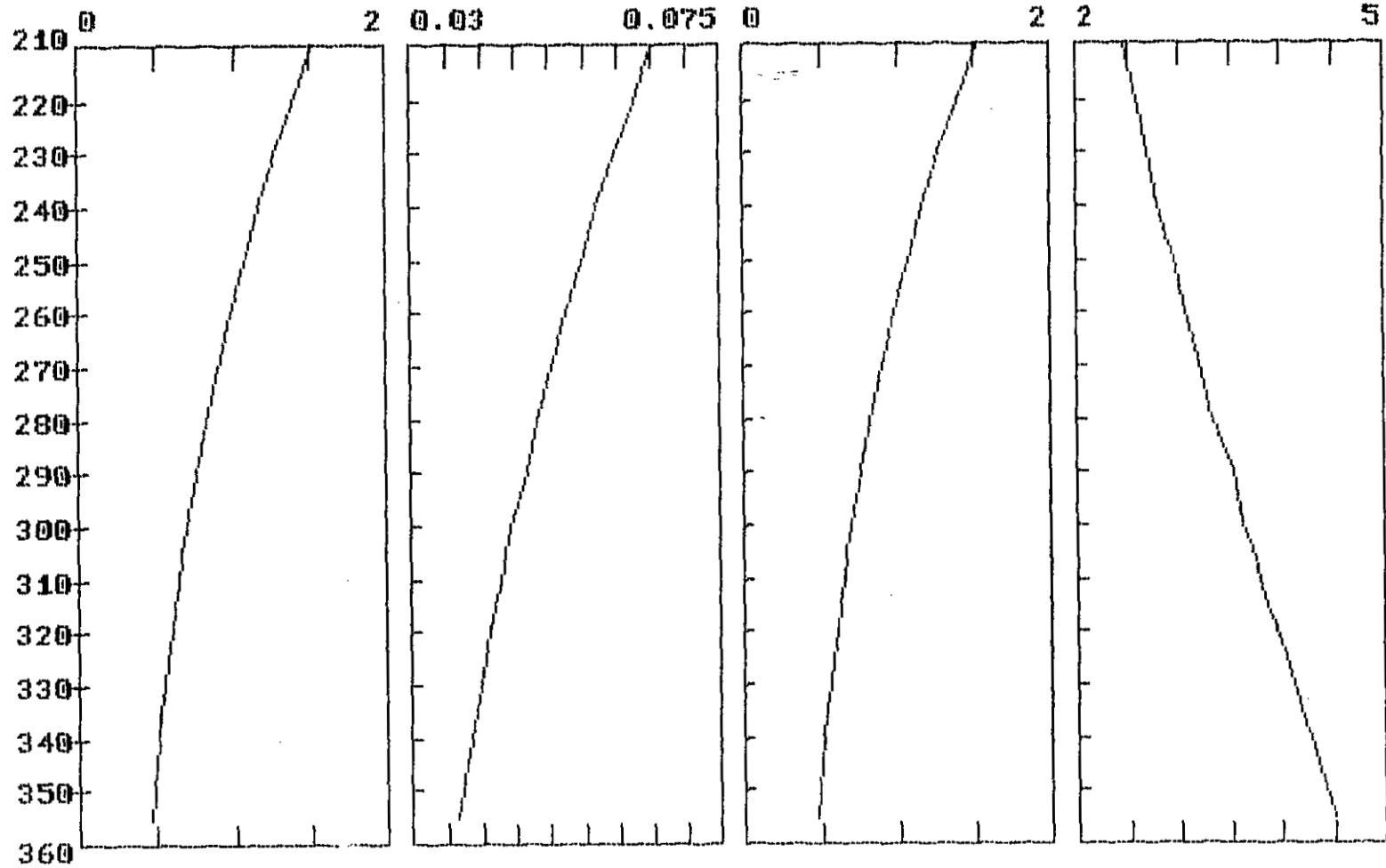
ESKAY BOREHOLE EM DDH 36, 1994

IN PHASE

OUT PHASE

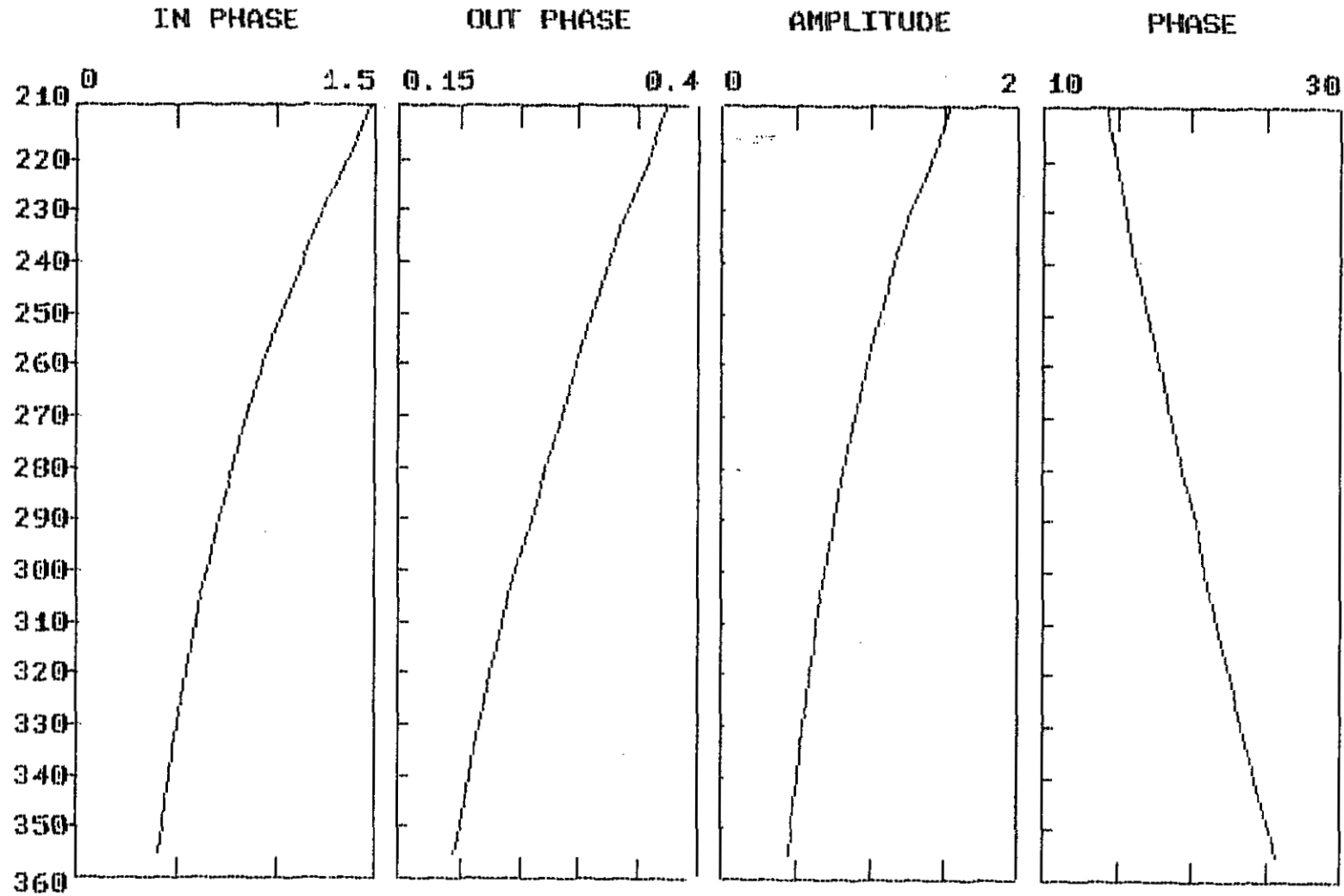
AMPLITUDE

PHASE



FREQUENCY: 70 Hz

ESKAY BOREHOLE EM DDH 36, 1994



FREQUENCY: 449.6 Hz

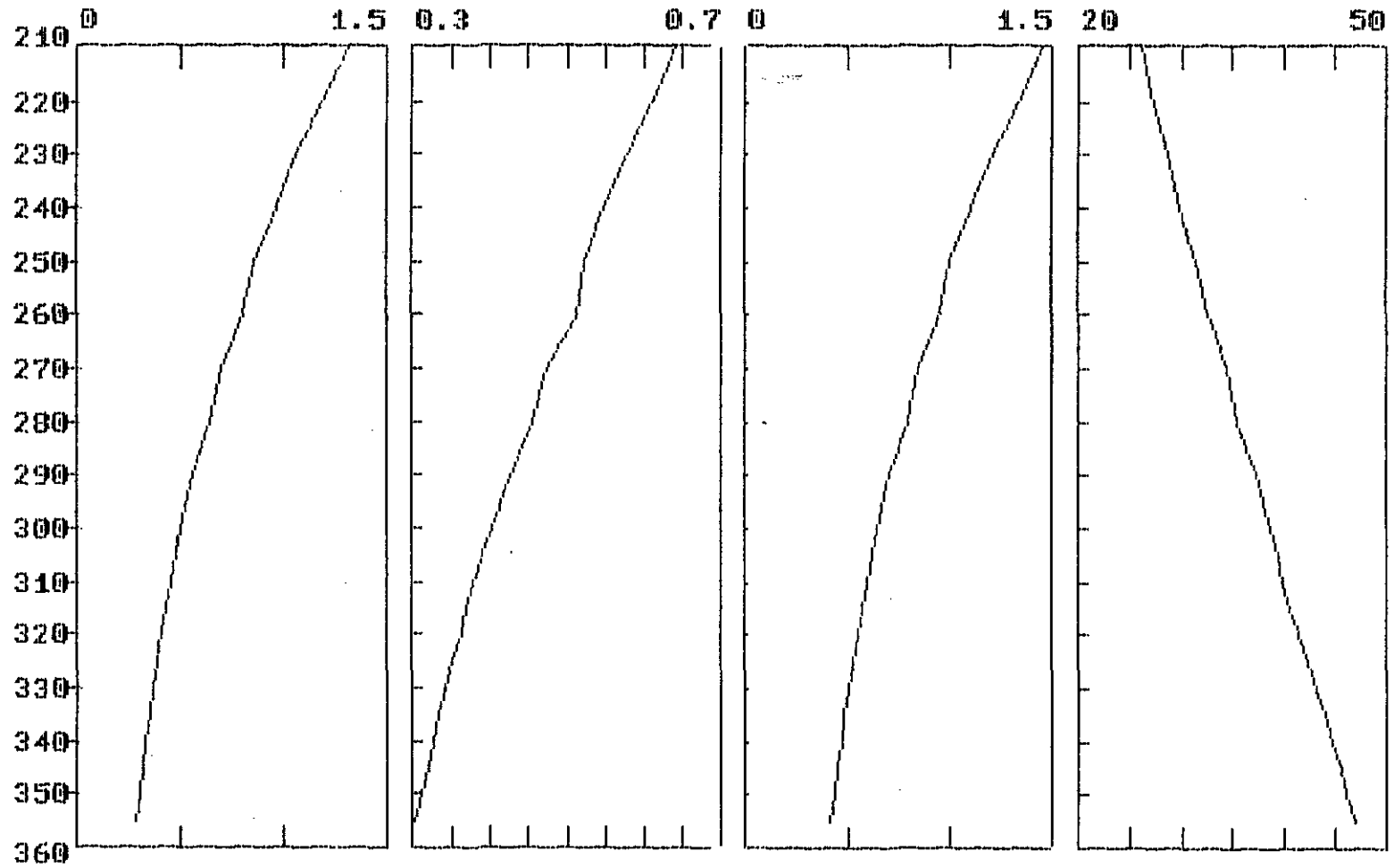
ESKAY BOREHOLE EM DDH 36, 1994

IN PHASE

OUT PHASE

AMPLITUDE

PHASE



FREQUENCY: 899.2 Hz

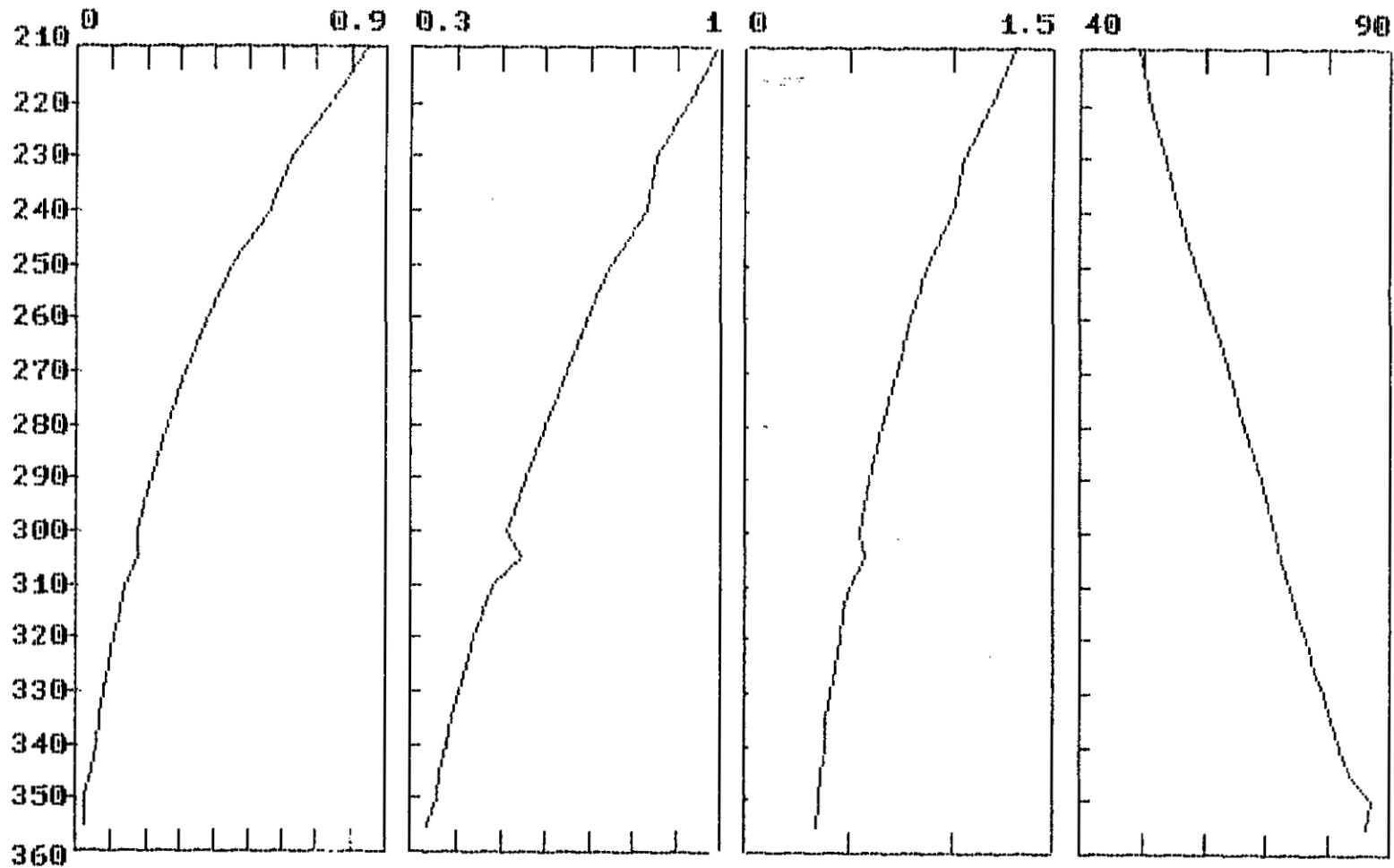
ESKAY BOREHOLE EM DDH 36, 1994

IN PHASE

OUT PHASE

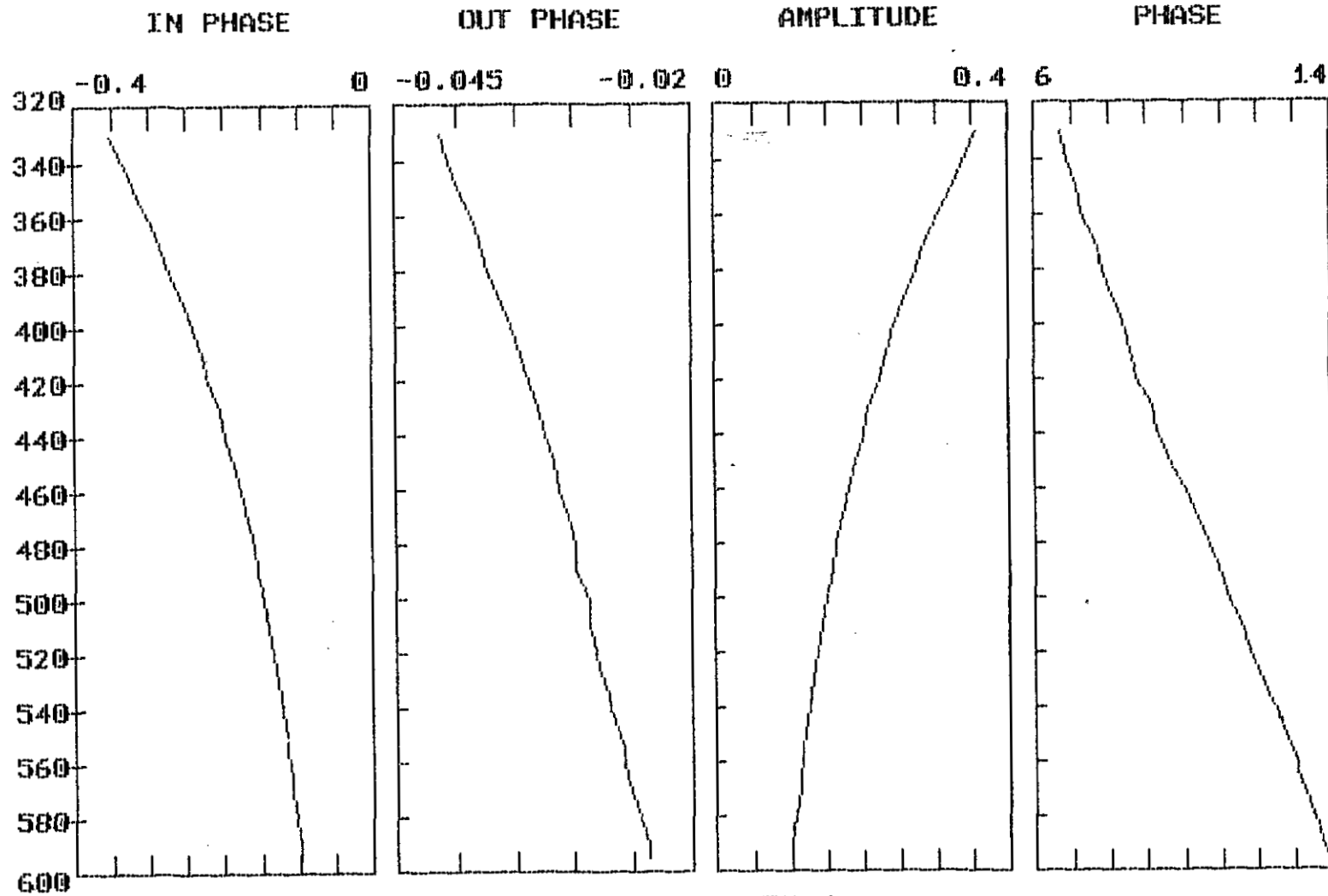
AMPLITUDE

PHASE



FREQUENCY: 1798 Hz

ESKAY BOREHOLE EM, DDH 38, 1994



FREQUENCY: 70 Hz

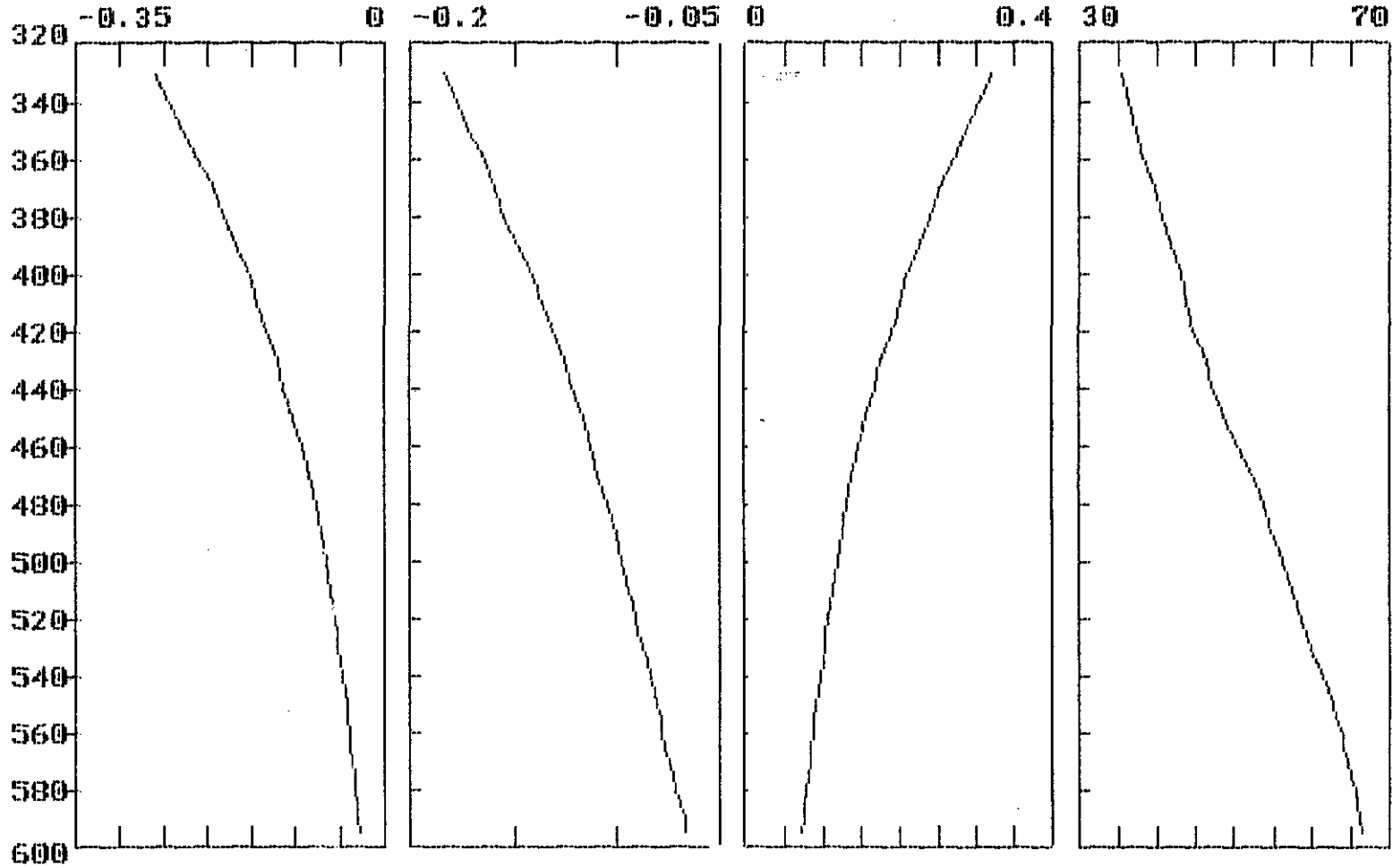
ESKAY BOREHOLE EM, DDH 38, 1994

IN PHASE

OUT PHASE

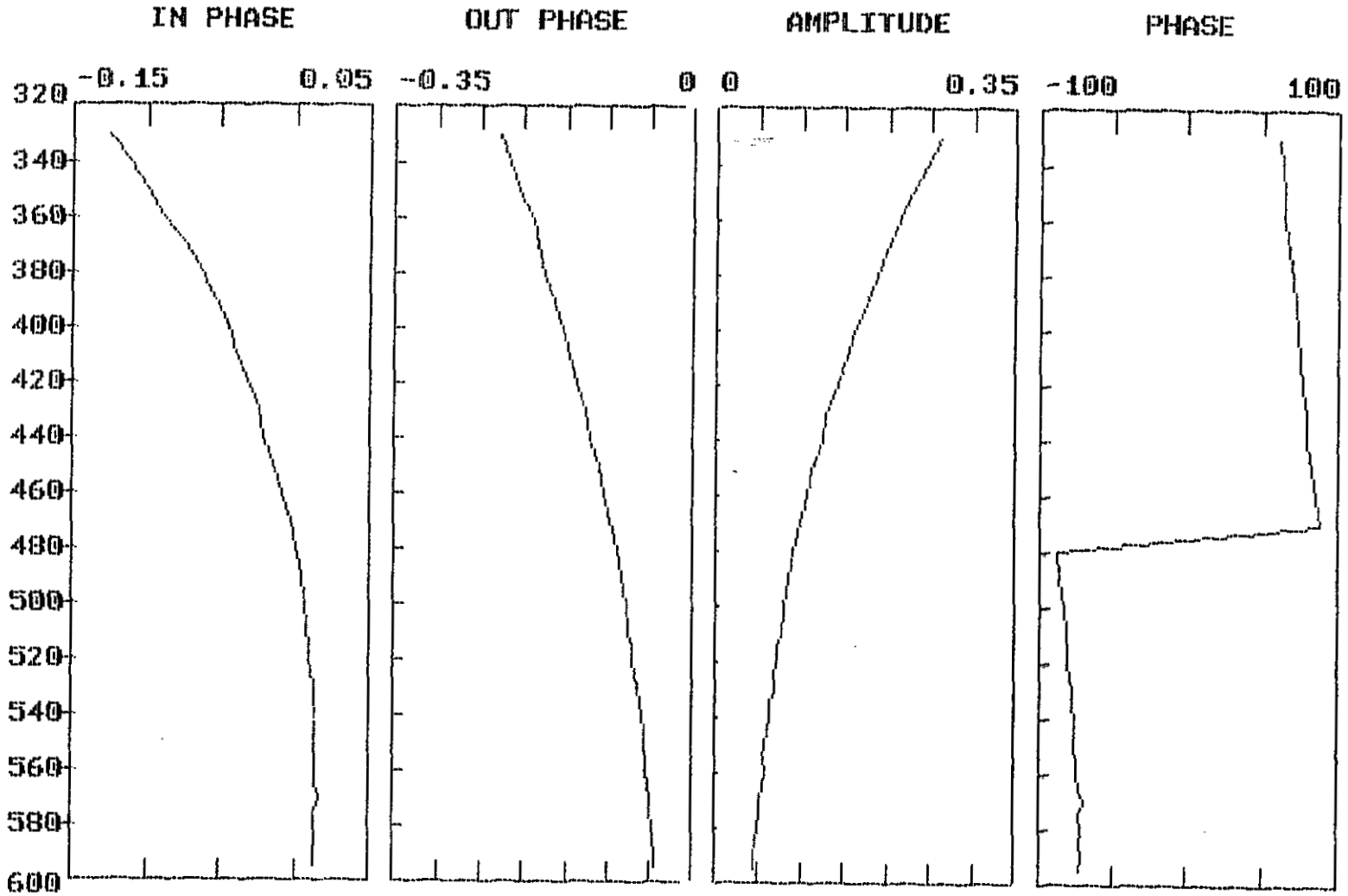
AMPLITUDE

PHASE



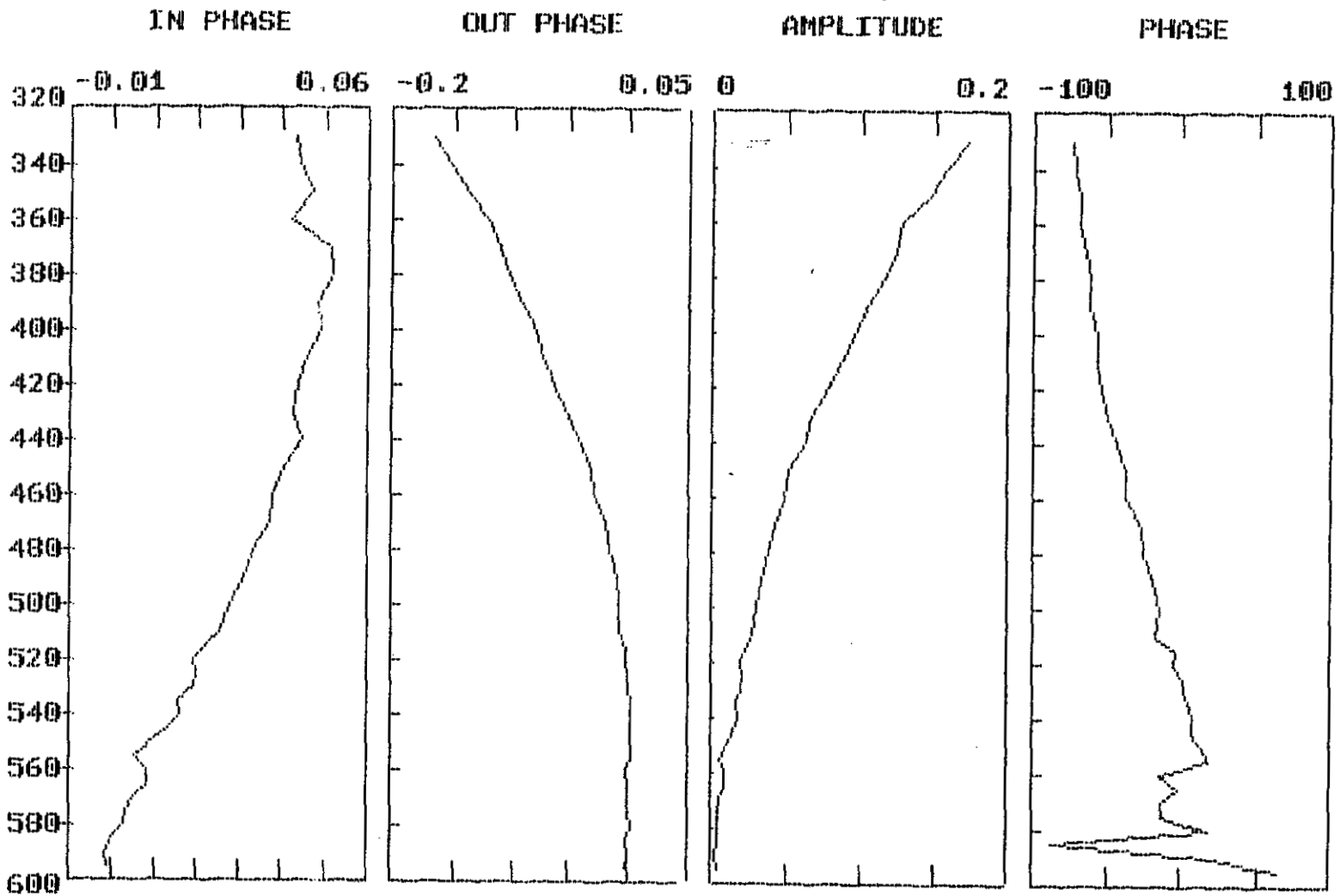
FREQUENCY: 449.6 Hz

ESKAY BOREHOLE EM, DDH 38, 1994



FREQUENCY: 899.2 Hz

ESKAY BOREHOLE EM, DDH 38, 1994



FREQUENCY: 1798 Hz

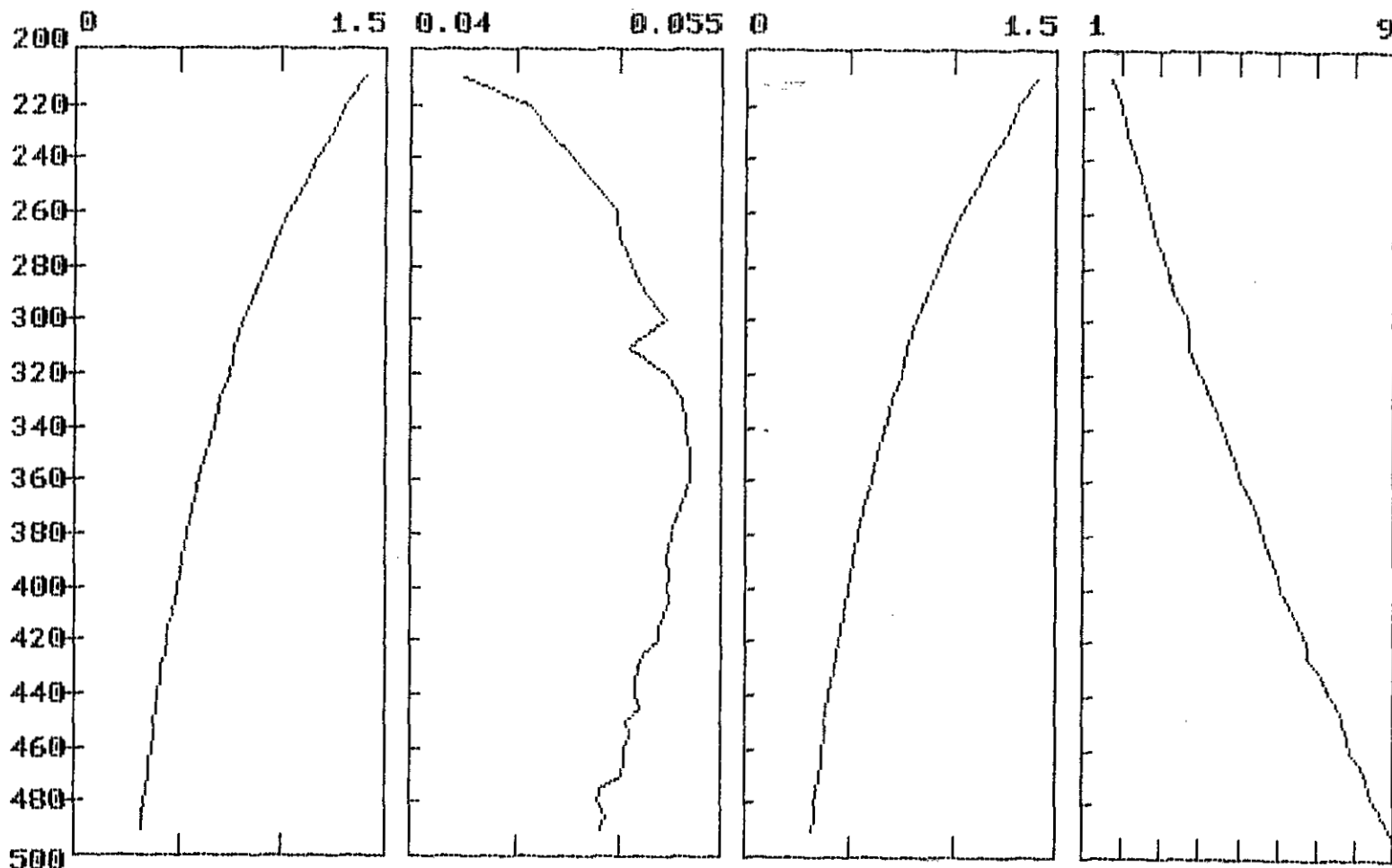
ESKAY BOREHOLE EM, DDH 40, 1994

IN PHASE

OUT PHASE

AMPLITUDE

PHASE



FREQUENCY: 70 Hz

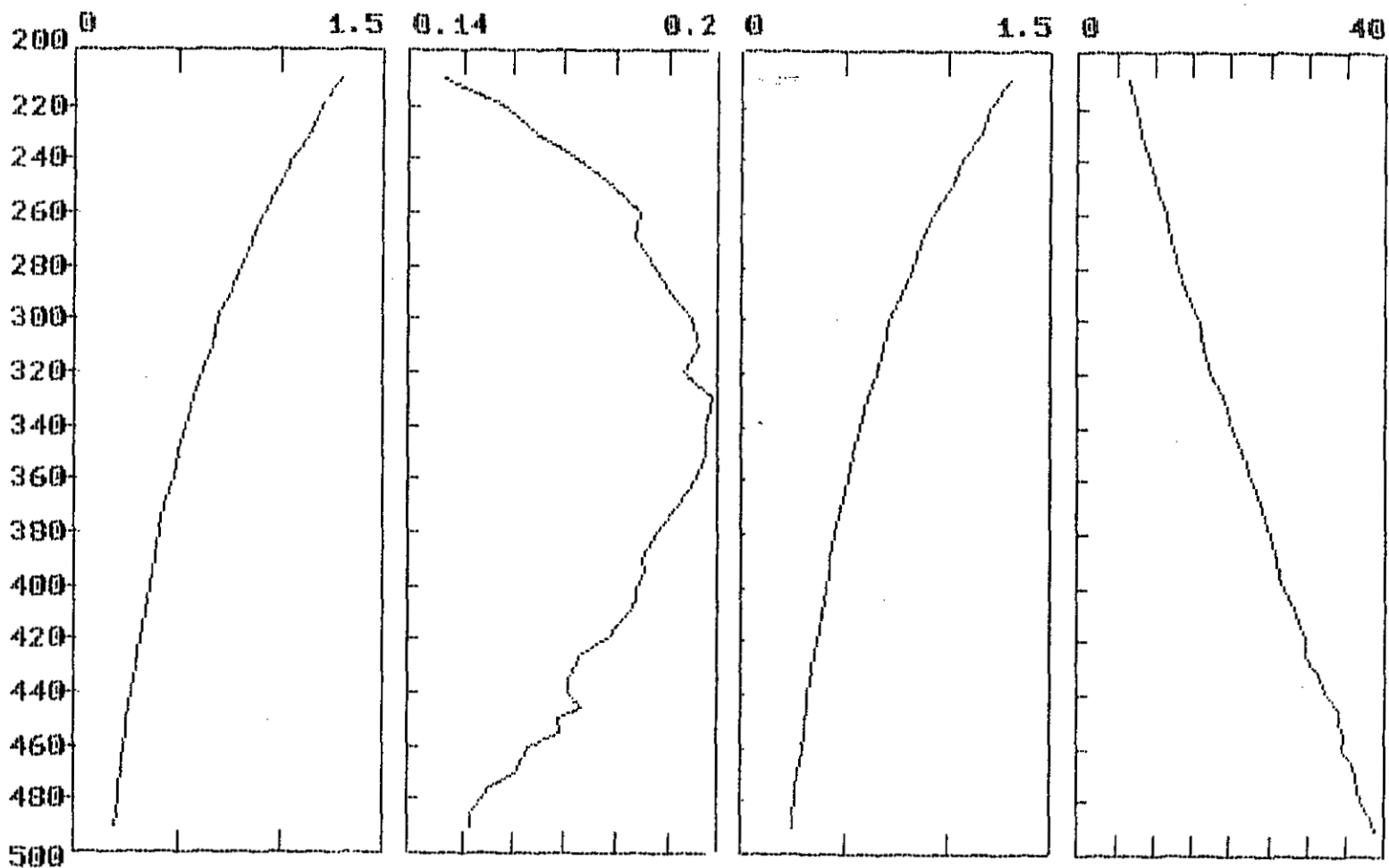
ESKAY BOREHOLE EM, DDH 40, 1994

IN PHASE

OUT PHASE

AMPLITUDE

PHASE



FREQUENCY: 449.6 Hz

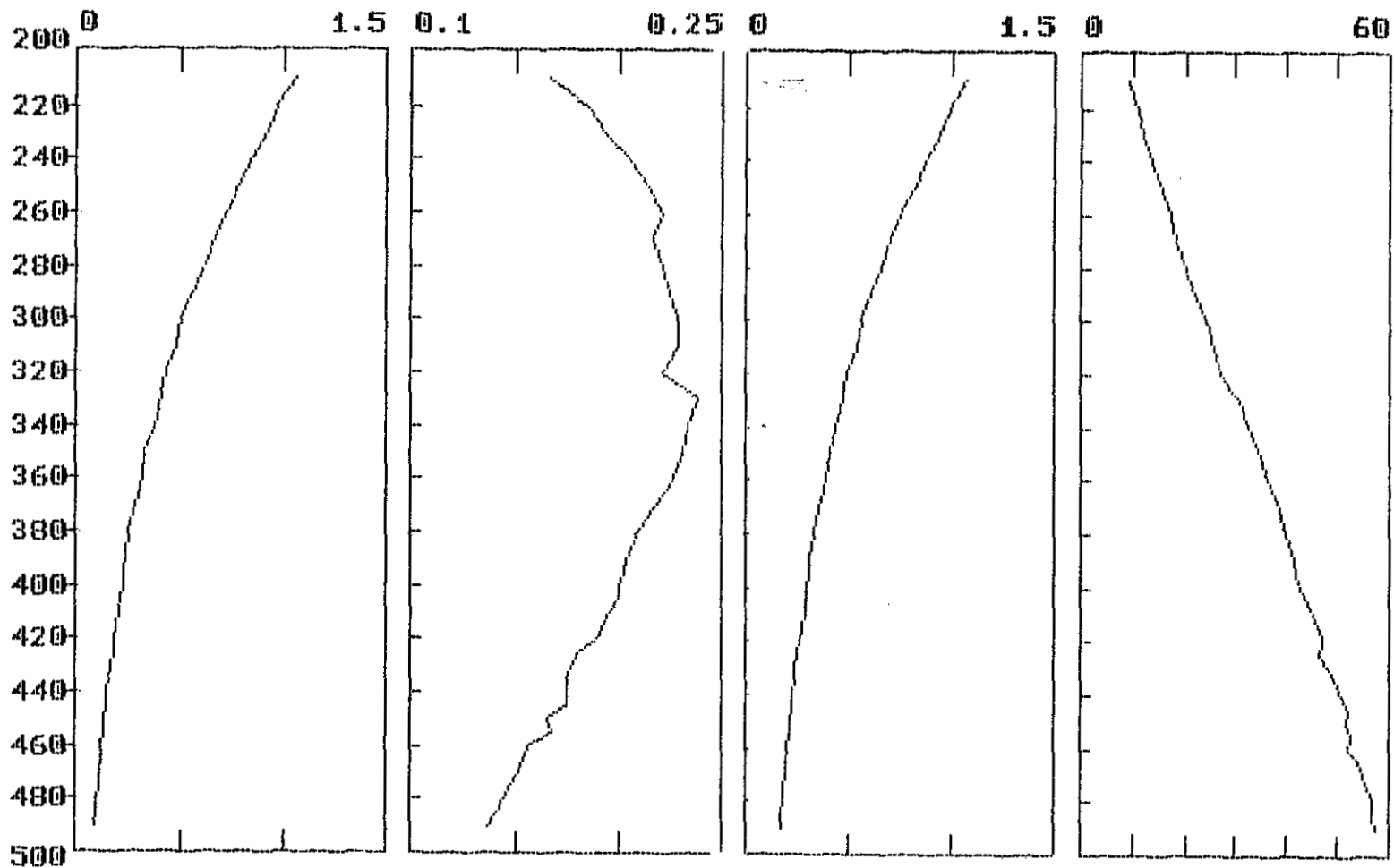
ESKAY BOREHOLE EM, DDH 40, 1994

IN PHASE

OUT PHASE

AMPLITUDE

PHASE



FREQUENCY: 899.2 Hz

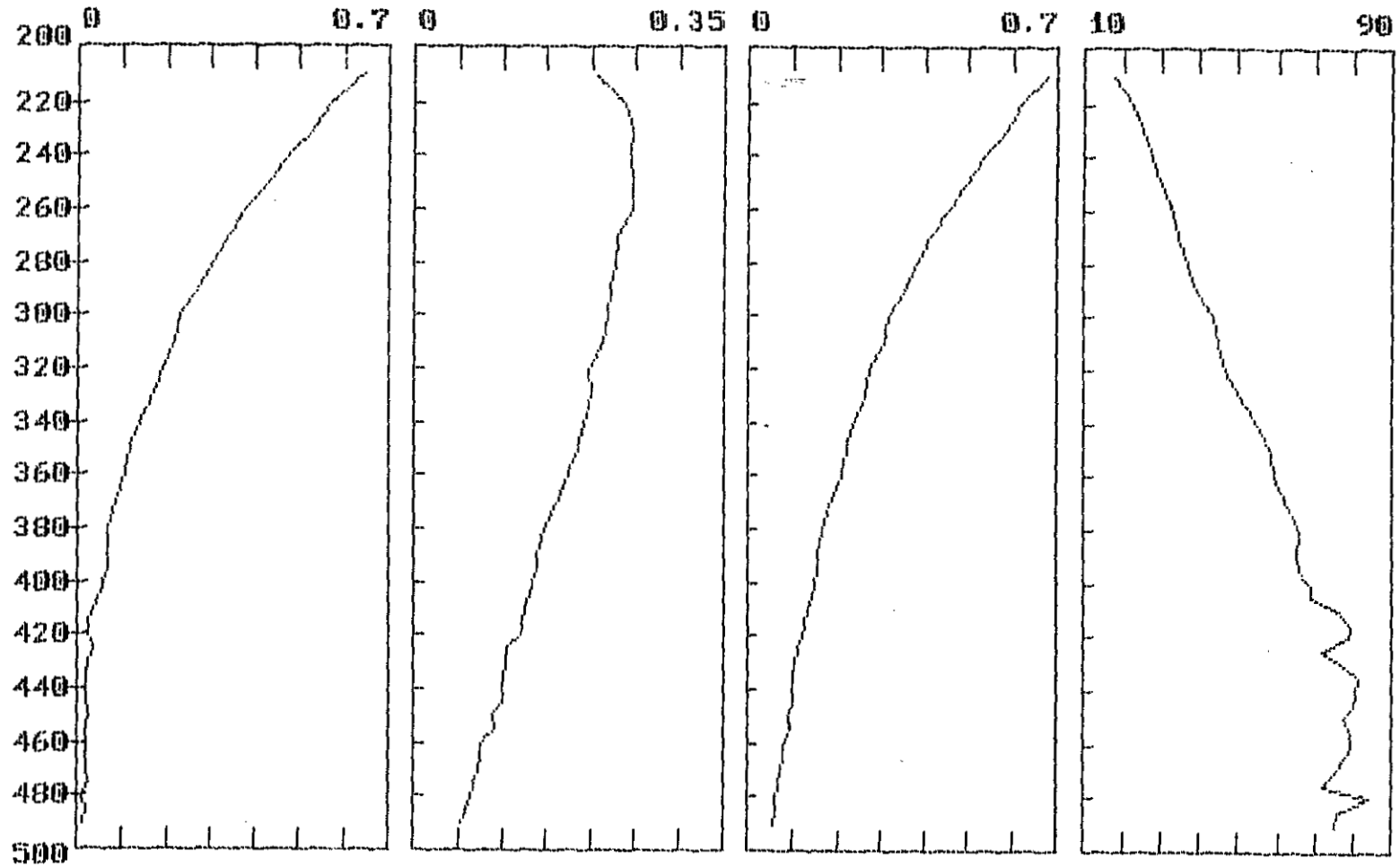
ESKAY BOREHOLE EM, DDH 40, 1994

IN PHASE

OUT PHASE

AMPLITUDE

PHASE



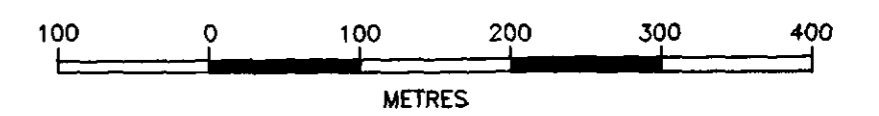
FREQUENCY: 1798 Hz

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LEGEND

- 6a 6b INTRUSIVES
 - 6a Pb from zircons (185-2ma)
 - Plag-hbl porphyritic monzo-diorite.
 - 6b Feldspar-phyric, siliceous, pyritic dykes/sills
 - 4d Unaltered mafic sills/dykes
- 5 BOWSER LAKE GROUP
BATHONIAN to CALLOVIAN (166.1-157.1)
Argillite, Lithic Arenite, Conglomerate
- 4b 4c SALMON RIVER FMN.
TOARCIAN to BAJOCIAN (187-166.1)
 - 4b Pillow basalts, hyaloclastite, debris flows, autobreccia with intercalated seds; mudstone, chert "HANGINGWALL mafic sequence"
 - 4c Flow banded, flow brecciated autobrecciated rhyolite with tuff and fragmental units. FOOTWALL RHYOLITE
- 3 MT. DILWORTH FMN. Zircon Pb 189
Heterolithic felsic fragmentals, tuffs vesicular dacite fragmentals, flows
- 2b 2a BETTY CREEK FMN.
U.PLEINSBACHIAN (194-187)
 - 2b ESKAY CREEK MEMBER—Intermediate coarse epiclastics, mudstone, andesitic derived conglomerate
 - 2a EAST RIDGE MEMBER—Andesitic congl block breccia debris flows.
- 1 UNUK RIVER FORMATION HETTANGIAN
Siliciclastic sediments, sandstones, siltstones, argillites

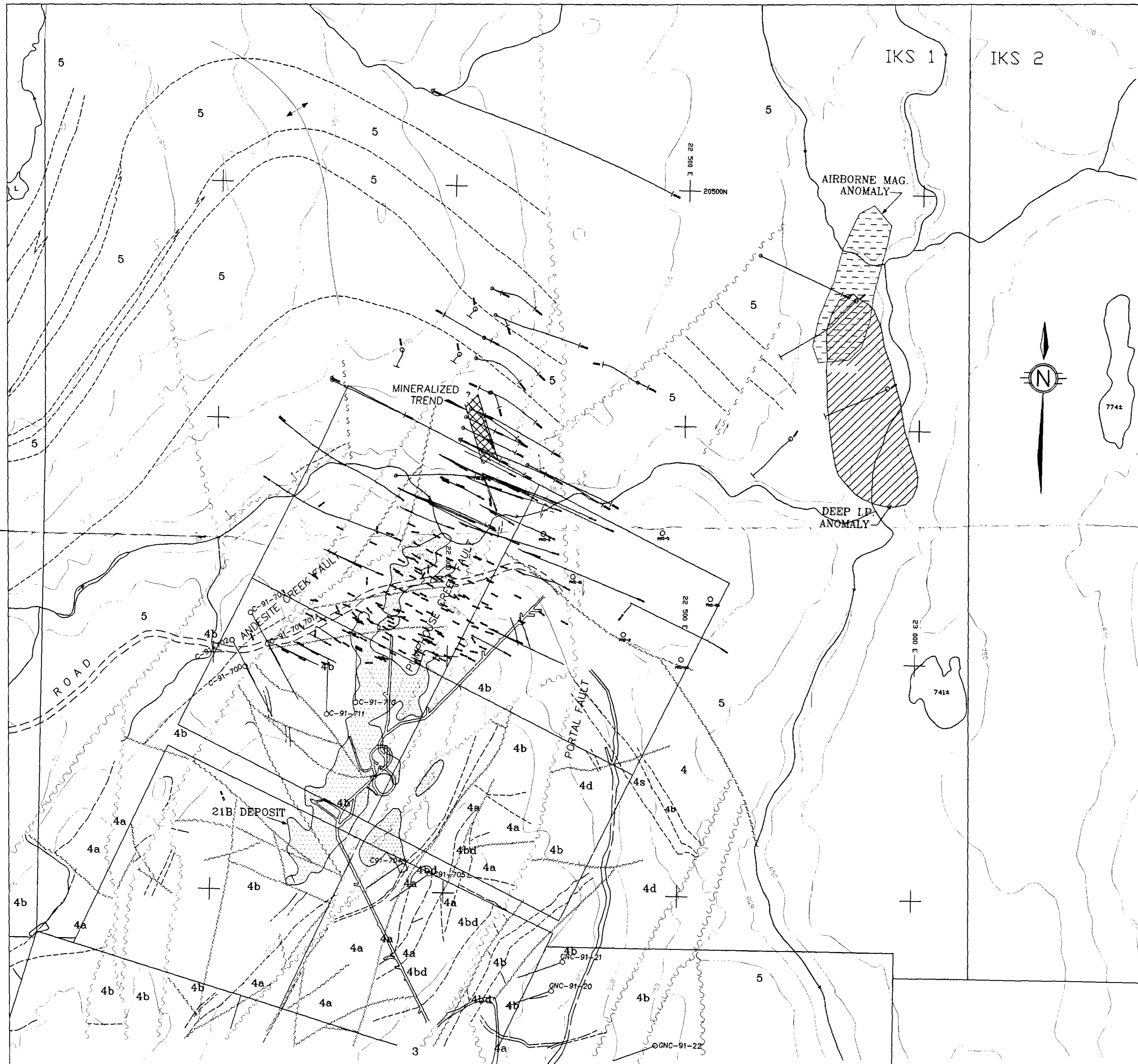
- 1994 Drill Holes
- Pre 1994 Drill Holes



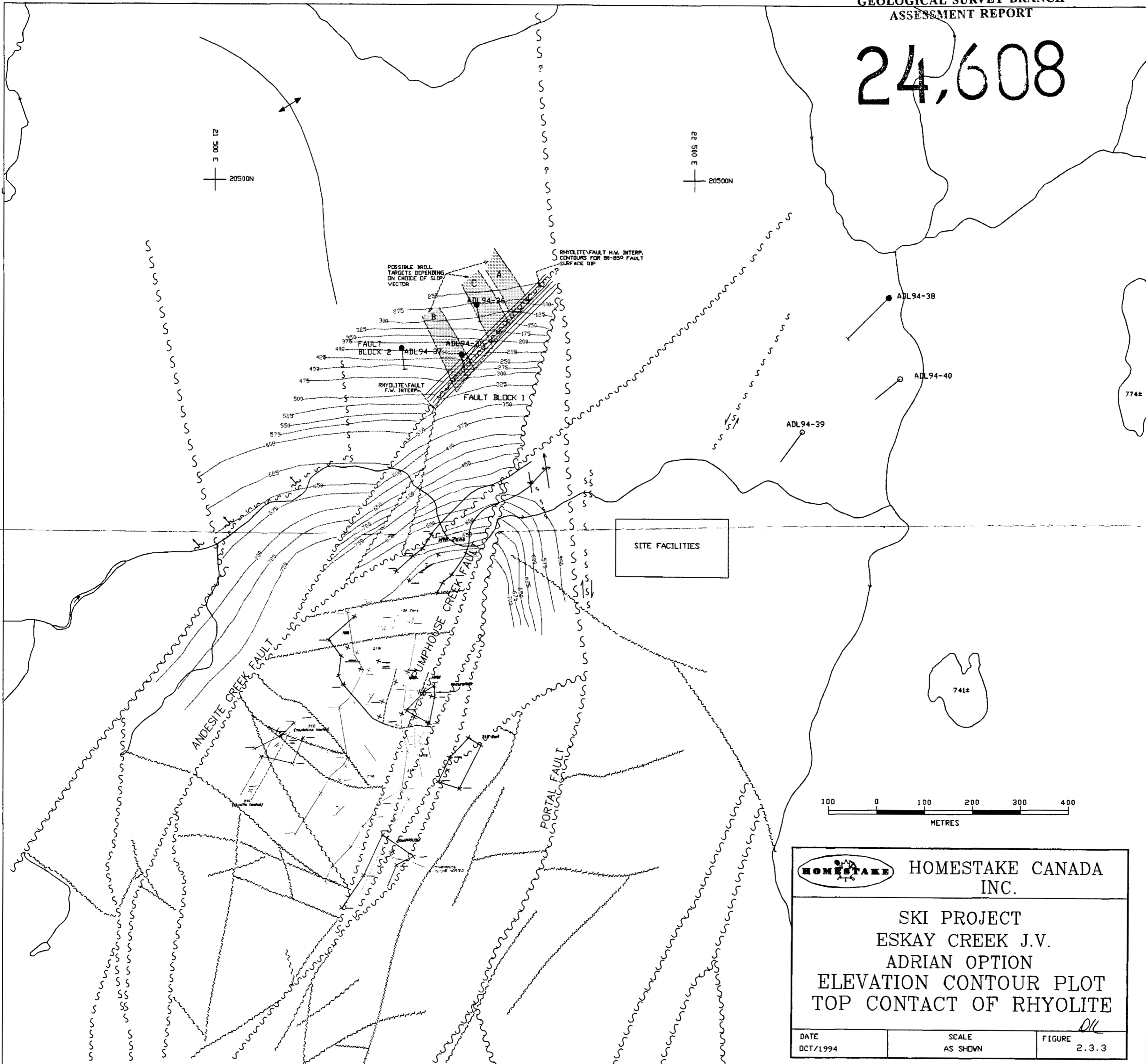
HOMESTAKE CANADA INC.


**SKI PROJECT
ESKAY CREEK J.V.
ADRIAN OPTION
1994 TARGET AND DRILL HOLE
LOCATIONS**

| | | |
|-------------------|-------------------|---------------|
| DATE OCT./1994 | SCALE AS SHOWN | FIGURE 2.3.2a |
|-------------------|-------------------|---------------|



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| | | |
|--|-------------------|-----------------|
|  HOMESTAKE CANADA INC. | | |
| SKI PROJECT ESKAY CREEK J.V. ADRIAN OPTION ELEVATION CONTOUR PLOT TOP CONTACT OF RHYOLITE | | |
| DATE OCT/1994 | SCALE AS SHOWN | FIGURE 2.3.3 |

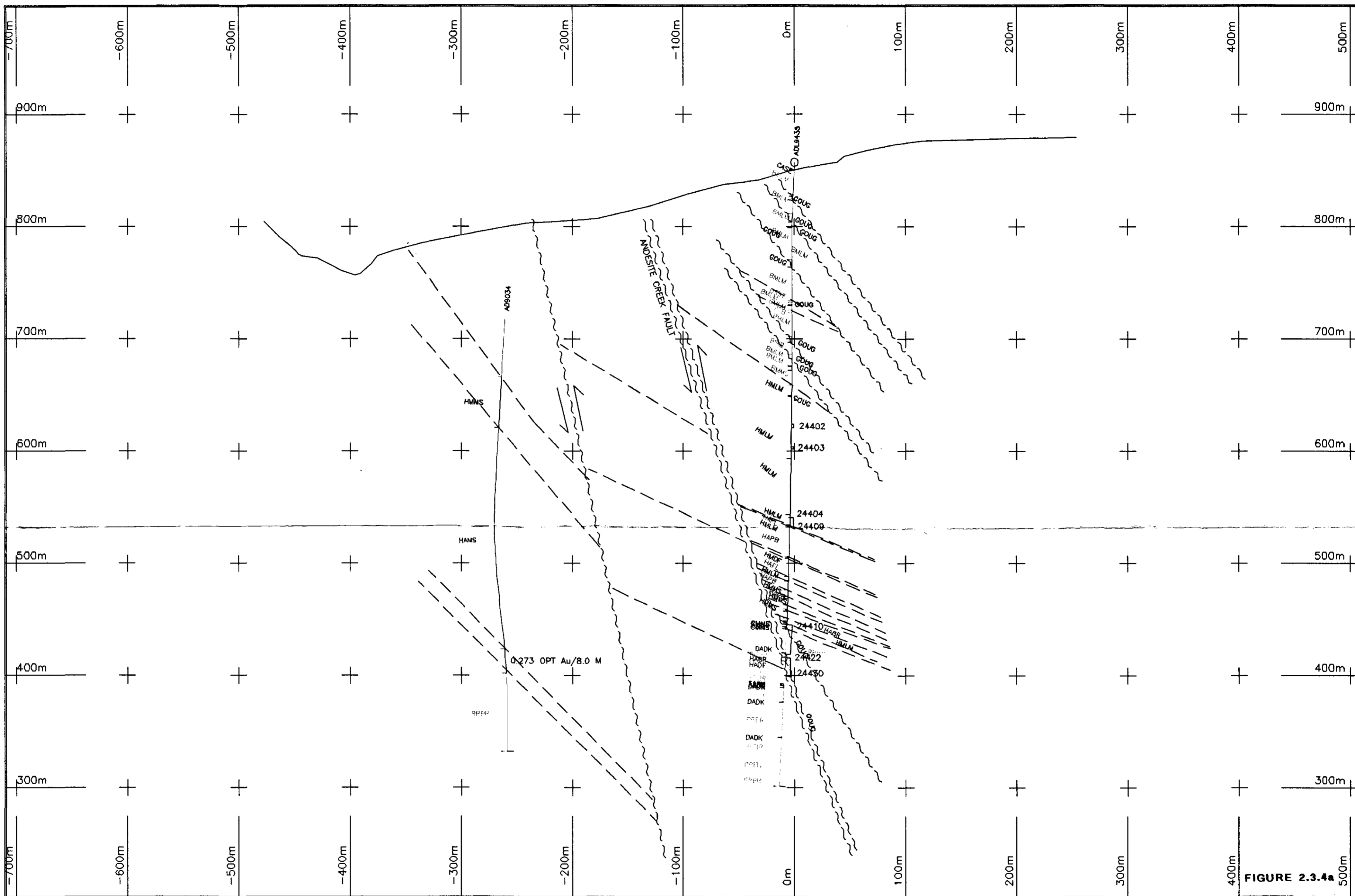


FIGURE 2.3.4a



NOTES :
 DADK andesite dike
 HA+ andesite flows, breccias
 HM+ flowier mudstones
 HNS+ sandstone, siltstone
 CT+ tuffe
 FD+ dacites
 CM+ mudstones

FM+ laminated mudstone
 HM+ greywacke, mudstones
 OVR overburden
 CA+ casing, caved zone
 VCAV calcite vein
 GOUG gouge

| | | |
|----------|----------|--------|
| SCALE | DATE | SHEET |
| as shown | 20/10/94 | 1 of 1 |
| | REF No. | |

SECTION VIEW LOOKING AZ. 260
 ADRIAN CLAIMS
 DDH ADL94-35

HOMESTAKE CANADA INC.
 Exploration Division

24612

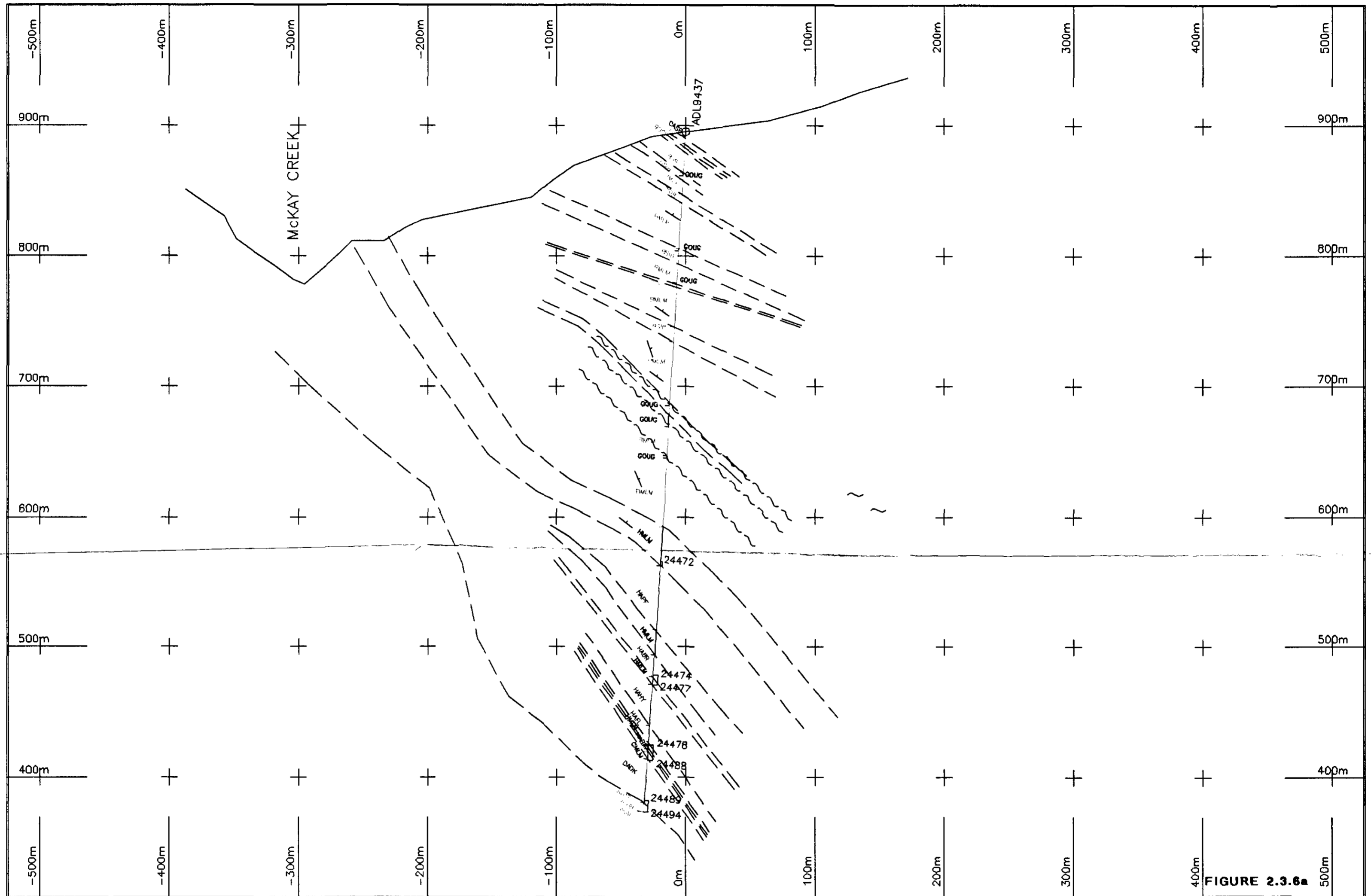

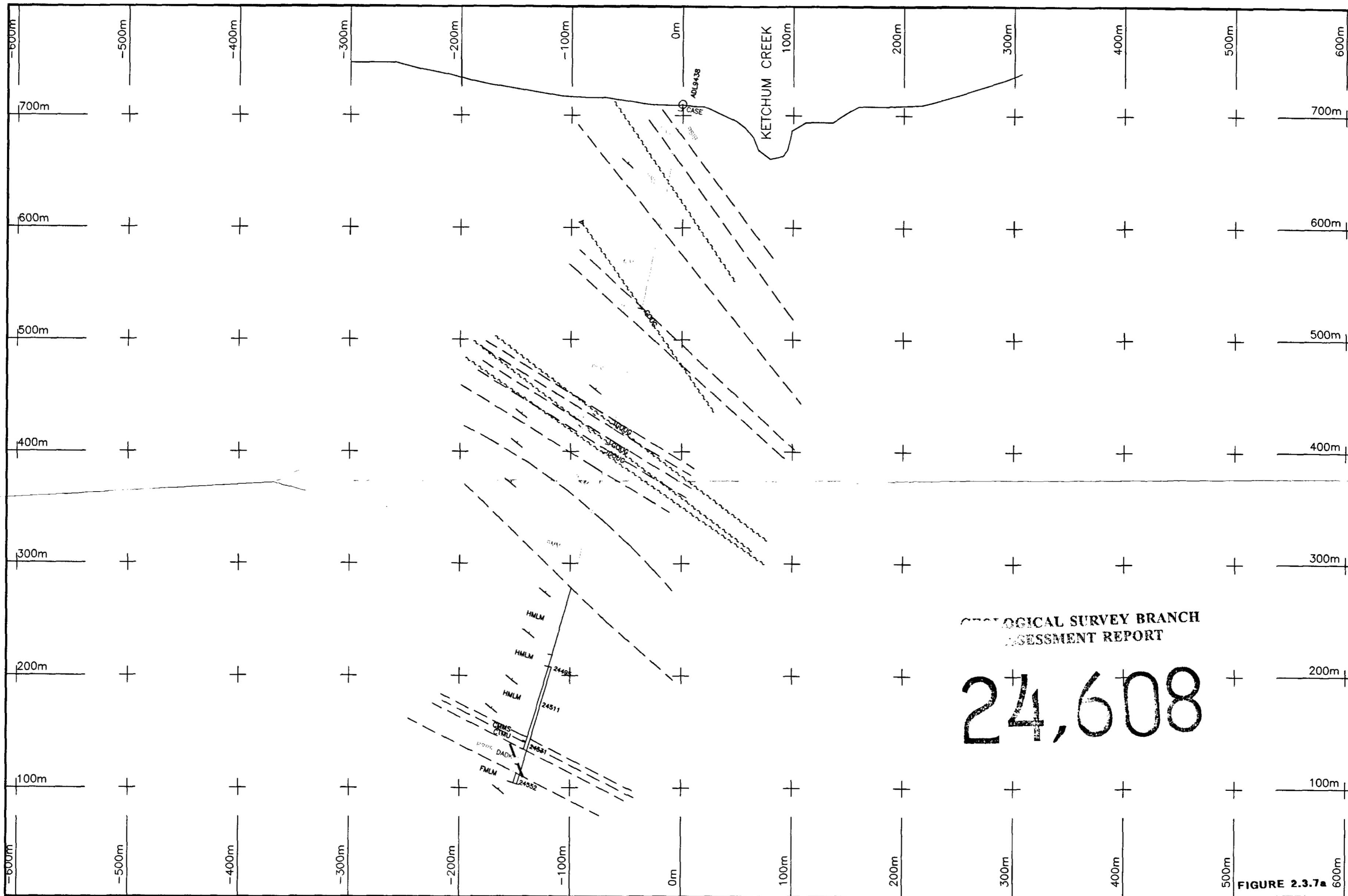


FIGURE 2.3.6a

| | | | | | | | |
|---|---|--|----------|----------|--------|---|---|
|  | NOTES : DADK myallite HA andesite dike HA andesite flows, breccias EOP andesite CT buffa FD dacite CM mudstones | FM laminated mudstone HM greywacke, mudstone OVER overburden CA casing, caved zone VCAV calcite vein GOUG gouge | SCALE | DATE | SHEET | SECTION VIEW LOOKING AZ. 260 1990/94 DRILLING ADRIAN CLAIMS DDH ADL94-37 | HOMESTAKE CANADA INC. Exploration Division |
| | | | as shown | 20/10/94 | 1 of 1 | | |
| | | | REF No. | | | | |
| | | | 0 155m | | | | |

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FIGURE 2.3.7a



NOTES:
 DADK andesite dike
 HA andesite flows, breccias
 CT tuffs
 FD dacites
 CM mudstones

FM laminated mudstone
 HM graywacke, mudstones
 OVER overburden
 CA casing, covered zone
 VCAV calcite vein
 GONG gouge

| | | |
|----------|----------|--------|
| SCALE | DATE | SHEET |
| as shown | 20/10/94 | 1 of 1 |
| REF No. | | |
| 0 180m | | |

SECTION VIEW LOOKING AZ. 310
 1990/94 DRILLING
 ADRIAN CLAIMS
 DDH ADL94-38

HOMESTAKE CANADA INC.
 Exploration Division

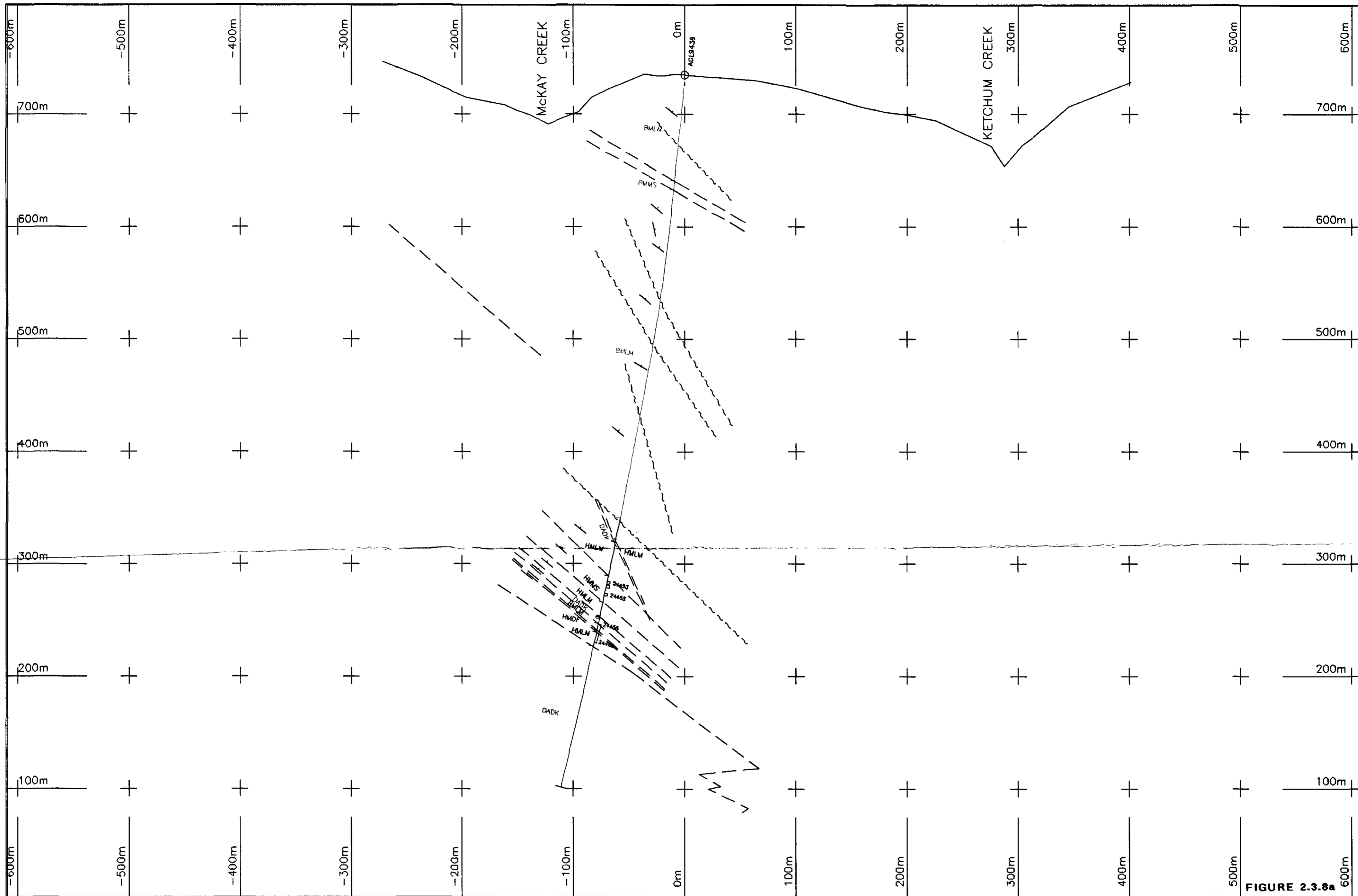


FIGURE 2.3.8a

| | | | | | | |
|--|---|--------------------------|-------------------------|------------------------|---|--|
| | NOTES : FM+ laminated mudstone HA+ andesite dike BN+ Bowser mudstones PS+ sandstone, siltstone CT+ tuffe FD+ dacites CN+ mudstones DADK andesite dike HA+ andesite flows, breccias BN+ Bowser mudstones PS+ sandstone, siltstone CT+ tuffe FD+ dacites CN+ mudstones FM+ laminated mudstone HMLM greywacke, mudstones OVER overburden COZ coaling, caved zone VCAV calcite vein GOUG gouge | SCALE as shown | DATE 20/10/94 | SHEET 1 of 1 | SECTION VIEW LOOKING AZ. 305 1990/94 DRILLING ADRIAN CLAIMS DDH ADL94-39 | HOMESTAKE CANADA INC. Exploration Division |
| | | | | | | |

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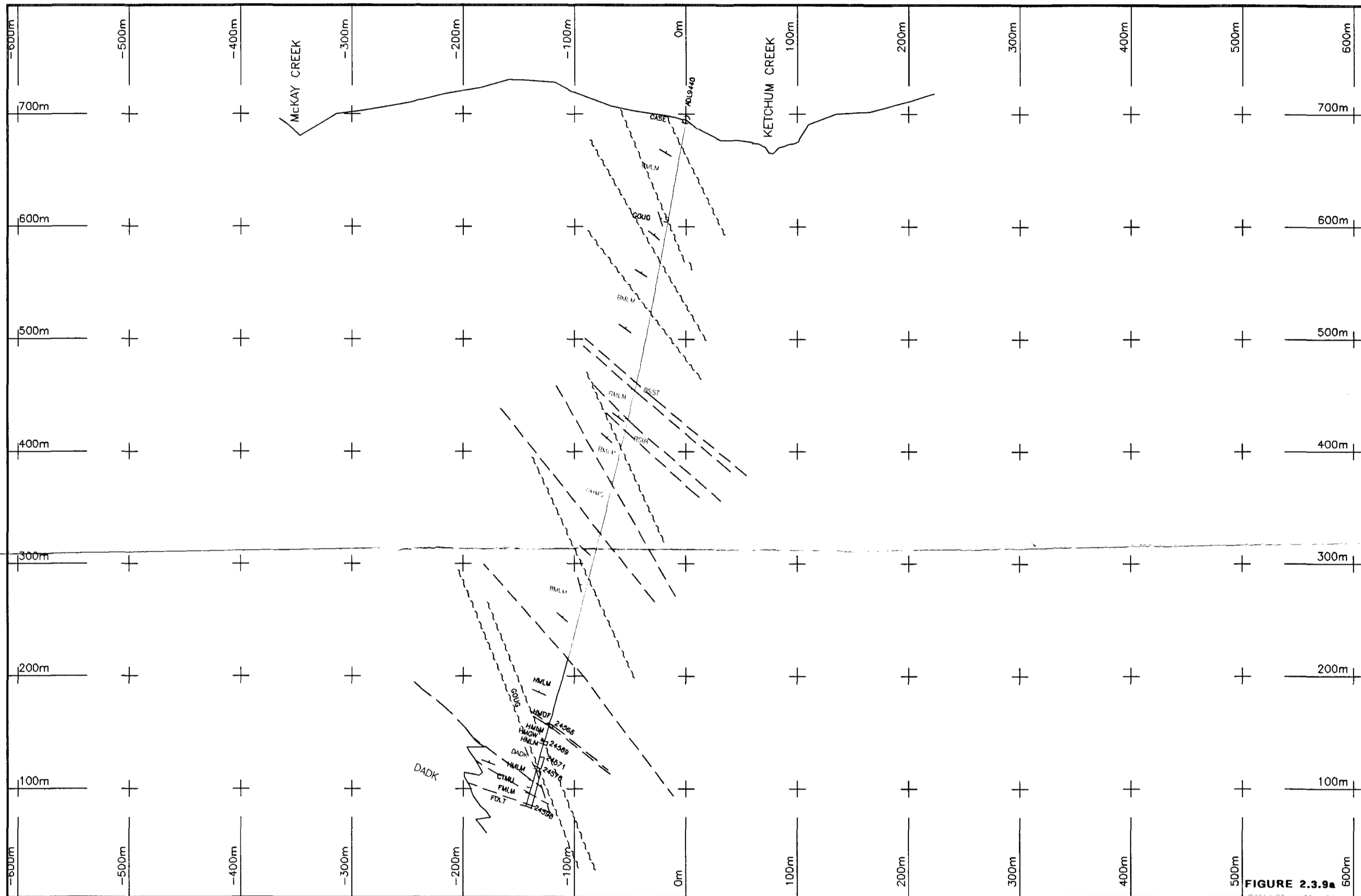


FIGURE 2.3.9a

| | | | | | |
|--|---|---|------------------------------|----------|---|
| | NOTES : DADK andesite dike HA* andesite flows, breccias FM* laminated mudstone HML* graywacke, mudstone CT* tuffa FD* dacites CM* mudstones | FM* laminated mudstone HML* graywacke, mudstone OVER overburden CA casing, caved zone VCA calcite vein GOU gouge | SCALE | DATE | SHEET |
| | | | as shown | 20/10/94 | 1 of 1 |
| | | | SECTION VIEW LOOKING AZ. 325 | | HOMESTAKE CANADA INC. Exploration Division |
| | | | 1990/94 DRILLING | | |
| | | | ADRIAN CLAIMS | | |
| | | | DDH ADL94-40 | | |

**GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT**

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