ARIS SUMMARY SHEET

District Geologist, Nelson — Off Confidential: 90.02.15

ASSESSMENT REPORT 18407 — MINING DIVISION: Fort Steele

PROPERTY: Bar
LOCATION: LAT 49 27 00 LONG 115 56 00
UTM 11 5477809 577315
NTS 082G05W

CAMP: 001 Purcell Belt (Sullivan)

CLAIM(S): Vine 55
OPERATOR(S): Goldpac Inv.
AUTHOR(S): Leask, J.M.
REPORT YEAR: 1989, 47 Pages
COMMODITIES
SEARCHED FOR: Zinc,Silver,Lead
KEYWORDS: Aldridge Formation,Conglomerate,Siltstone,Lamprophyre Dykes
WORK
DONE: Drilling
DIAD 450.0 m
Map(s) - 1; Scale(s) - 1:12 500
RELATED
REPORTS: 14548,14782
MINFILE: 082GSW049

ASSESSMENT REPORT

BAR PROPERTY

D.D.H. BAR 88-2

1650m - 2100m

N.T.S. 82 G/5 W

LATITUDE 49 DEGREES 27'N, LONGITUDE 115 DEGREES 56'W

FORT STEELE MINING DIVISION

Owner: Therm Exploration Ltd.

Operator: Goldpac Investments Ltd.

Author: John M. Leask

Hole Logged By: Gordon P. Leask and John M. Leask

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INTRODUCTION

The objective of this project is to find another economic massive sulphide deposit in the Aldridge Formation which hosts the immense Sullivan Zn-Pb-Ag deposit. The Sullivan horizon exists at depths of 900 meters to 2500 meters within the Bar Claims Group.

During 1988 diamond drill hole Bar 88-2 was initiated in order to test the Sullivan Time Horizon for a Sullivan type ore body.

The impetus for the project was the existence of a Controlled Source Audiomagnetotelluric anomaly at the approximate Stratigraphic level of the Sullivan within a geologic framework believed to be favourable for massive sulphide deposition.

The hole was drilled to a depth of 1650 meters during the months of April, May and June, and was continuing to 2000+ meters during July and August. This report is for work carried out on the property from July 7, 1988 to October 15, 1988 and covers the final 450 meters of drilling, from 1650 meters to total depth at 2100 meters. Technical problems were encountered on July 14 when the hole was at 1900 meters. Remedial measures required 6 weeks to clear the hole and advance beyond 1900 meters. Drill hole logging below 1650 meters was done by Gordon P. Leask and John M. Leask.

LOCATION, ACCESS AND PHYSIOGRAPHY

Diamond Drill Hole Bar 88-2 is located approximately 10 km. Southwest of Cranbrook, B.C., north of Lumberton Reservoir, at approximately the following co-ordinates:

Longitude 115 degrees 56'W
Latitude 49 degrees 27'N

Access to the drill site is by Highway 3-95, south from Cranbrook, then west on the Moyie River Forest Road for 4 km, then north on the Lumberton Mountain Lookout Road for 3 km.

Steep sided valleys with abundant cliffs both east and west of Lumberton Lookout Mountain characterize to topography. Elevations range between 870 meters A.S.L. and 1700 meters A.S.L. in the area of the claims.

Climate is that of the Rocky Mountain Trench rain shadow with annual precipitation of 40 centimeters. Snowpack in winter rarely exceeds 2 meters. Temperatures range from -40 degrees celsius in winter to +40 degrees celsius in summer.

i

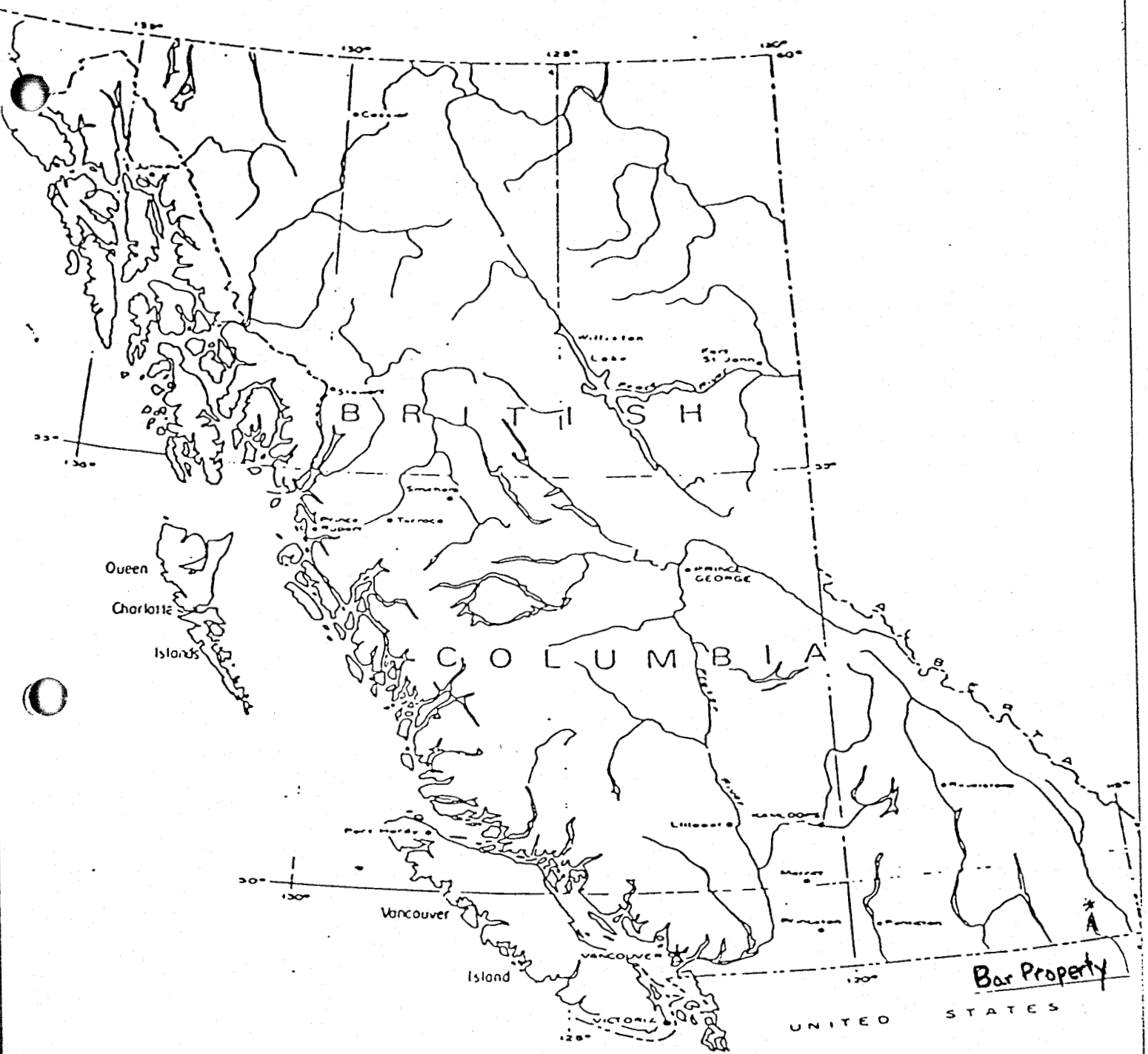


Fig.1

LEASK ASSOCIATES

LOCATION MAP

100 50 0 100 200
SCALE IN MILES

CLAIMS AND OWNERSHIP

All claims are located within the Fort Steele Mining Division and are owned by:

THERM EXPLORATION LTD.
808-525 SEYMOUR STREET
VANCOUVER, BC
V6B 3H9

CLAIM NAME	UNITS	RECORD NO.	RECORD DATE
Vine 55	18	1871	July 18, 1983
Bar 1	20	2015	November 10, 1983
Bar 6	16	2028	December 14, 1983
Bar 7	2	2029	July 3, 1984
Bar 8	1	2164	July 3, 1984
Bar 9	1	2165	July 3, 1984
Bar 10	1	2166	July 3, 1984
Bar 11	1	2167	July 3, 1984
Bar 12	18	2168	July 3, 1984
Bar 13	10	2169	July 3, 1984
Bar 14	1	2170	July 3, 1984
Bar 15	1	2171	July 3, 1984
Bar 16	1	2172	July 3, 1984
Bar 17	6	2354	February 20, 1985
Bar 18	3	2355	February 20, 1985
Bar19	18	3041	December 1, 1988
Belleville	Claim Grant		
Lookout	Crown Grant		

The location of the claims is shown on Figure 2 at a scale of 1:50,000.

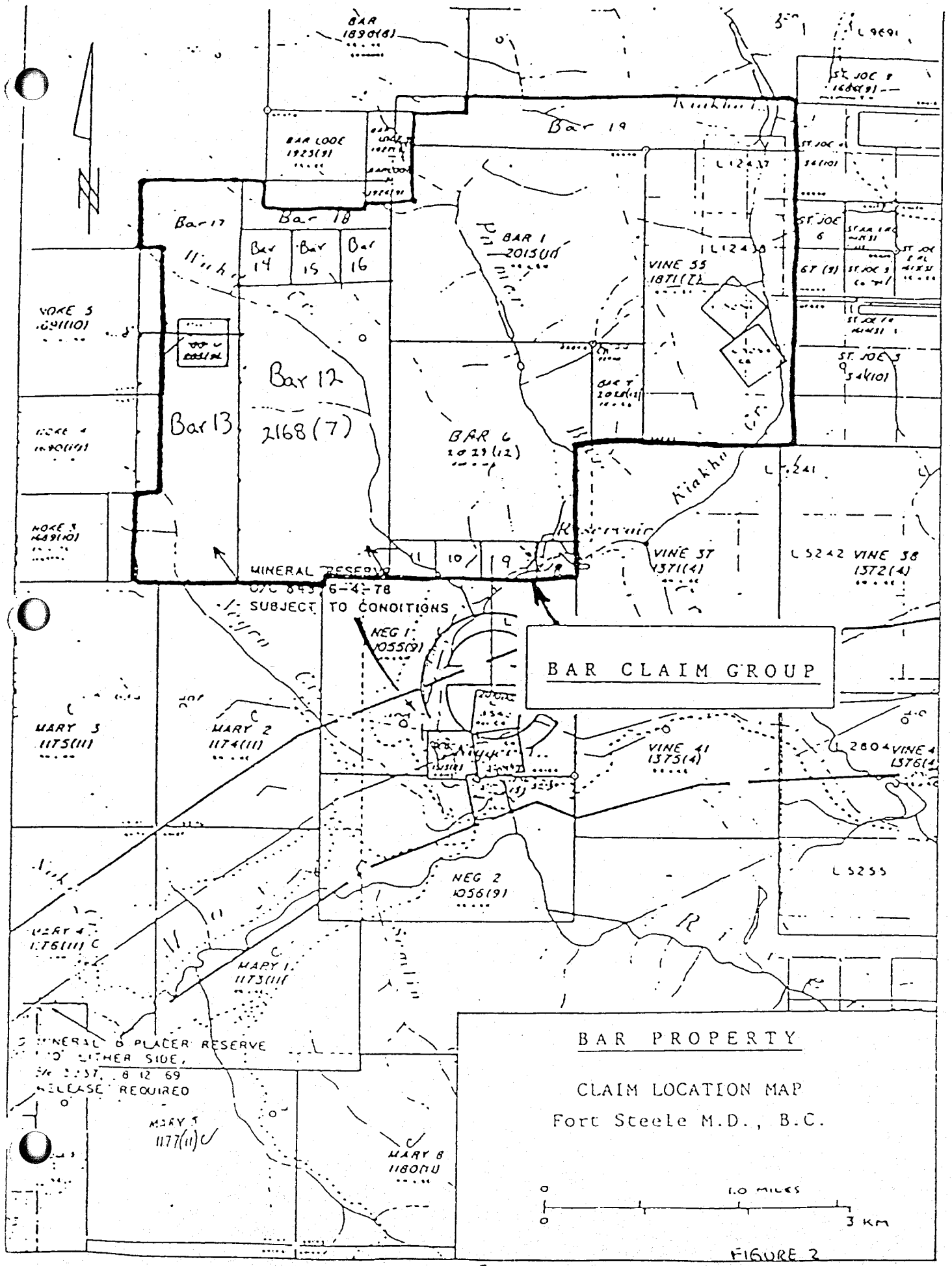

BAR CLAIM GROUP
BAR PROPERTY
CLAIM LOCATION MAP
Fort Steele M.D., B.C.
Bar 12
2168(7)
Bar 13
Bar 19
Bar 18
Bar 17
Bar 14
Bar 15
Bar 16
BAR 6
2023(12)
BAR 1
2013(11)
VINE 55
1871(12)
VINE 37
1371(4)
VINE 38
1372(4)
VINE 41
1373(4)
MARY 3
1175(11)
MARY 2
1174(11)
MARY 1
1173(11)
MARY 4
1176(11)
MARY 5
1177(11)
MARY 6
1180(11)
NEG 1
1055(9)
NEG 2
1056(9)
MINERAL RESERVE
O/C 843, 6-4-78
SUBJECT TO CONDITIONS
MINERAL & PLACER RESERVE
RELEASE REQUIRED
L 5242
L 5255
1.0 MILES
3 KM

FIGURE 2

HISTORY

Mining development of the district began with the discovery of a showing of Zn-Pb-Ag ore on the North Star Hill in 1891, followed by the discovery of the HU zone of the Sullivan orebody in 1892 just 4 kilometers northeast of North Star Hill. From the date of acquisition in 1909 by the Consolidated Mining and Smelting Company to the end of 1987 the Sullivan Min e produced 139,500,000 tons of ore containing 6.7% Pb, 5.8% Zn, and 2.2 oz/ton Ag. In total, the Sullivan orebody approached 180,000,000 tons of ore grading 12% Pb-Zn and 2 oz/ton Ag.

The St. Eugene vein orebody was located in 1893 some 50 kilometers south of the Sullivan Camp and 20 kilometers south of the Bar Claim Group.

The Bar property to this date has been explored by approximately 300 meters of underground workings aimed at developing several Zn-Pb-Ag-Au veins high in the Middle Aldridge Section.

In recent years exploration of the area has been advanced by the following developments:

- o Recognition in 1962 of varved markers, their potential use in stratigraphic control within the Middle Aldridge and subsequent potential for exploration.
- o Discovery of lead-zinc mineralized strata of the Sullivan Time Horizon beneath deep overburden at the Polaris prospect in 1971. This property is 10 kilometers south of the Sullivan Mine.
- o During October 1976, D. L. Pighin, a Cominco employed geologist/prospector discovered massive sphalerite-galena-

pyrrhotite boulders in a recently excavated road cut north of Moyie Lake. This discovery was protected as the Vine 1 claim, consisting of 20 units. Further excavation in the immediate vicinity of the boulder occurrence uncovered a very impressive vein with widths from 2 to 6 meters. As the Sullivan Time Horizon was known to exist a hundred meters or so below this new showing it was suggested that the sulphide vein was leakage from a bedded sulphide body below. Since 1976 nine drill holes have probed the Sullivan Horizon.

- Further geological work by Trygve Hoy, Leask and Associates, and Noranda geologists combined with Controlled Source Audio-magnetotelluric surveys, magnetotelluric surveys, and drilling resulted in the recognition of the Cranbrook graben, a north-south trending axial trough structure.

REGIONAL GEOLOGY

Regionally, the area is underlain by rocks of the Purcell Supergroup on the western flank of the Purcell Anticlinorium, a broad, slightly north plunging arch-like structure in Helikian and Hadrynian aged rocks. The oldest rocks exposed in the Purcell Anticlinorium are greenish, rusty weathering thin bedded siltites and quartzites of the Lower Aldridge formation. Overlying the Lower Aldridge is a monotonous section of Middle Aldridge quartz wackes, subwackes, and argillites some 3000+ meters thick. Within the Middle Aldridge formation, fourteen varved marker horizons can be correlated varve for varve over hundreds of kilometers. These represent the only accurate stratigraphic control A number of areally extensive diorite sills are present within the Lower and Middle Aldridge Formations. The Middle Aldridge is overlain by Upper Aldridge, 300 meters to 400 meters of thin fisile, rusty weathering argillite/siltite.

Conformably overlying the Aldridge Formation is the Creston Formation, comprising 1800 meters of grey, green and maroon, cross bedded and rippled marked platformal quartzites and mudstones. Kitchener-Siyeh Formation, which includes 1200 to 1600 meters of green-grey dolomitic mudstone and buff coloured mudstone are shallow water sediments overlying the Creston Formation and mark the end of Lower Purcell Time.

The upper portion of the Purcell supergroup consists of the Dutch

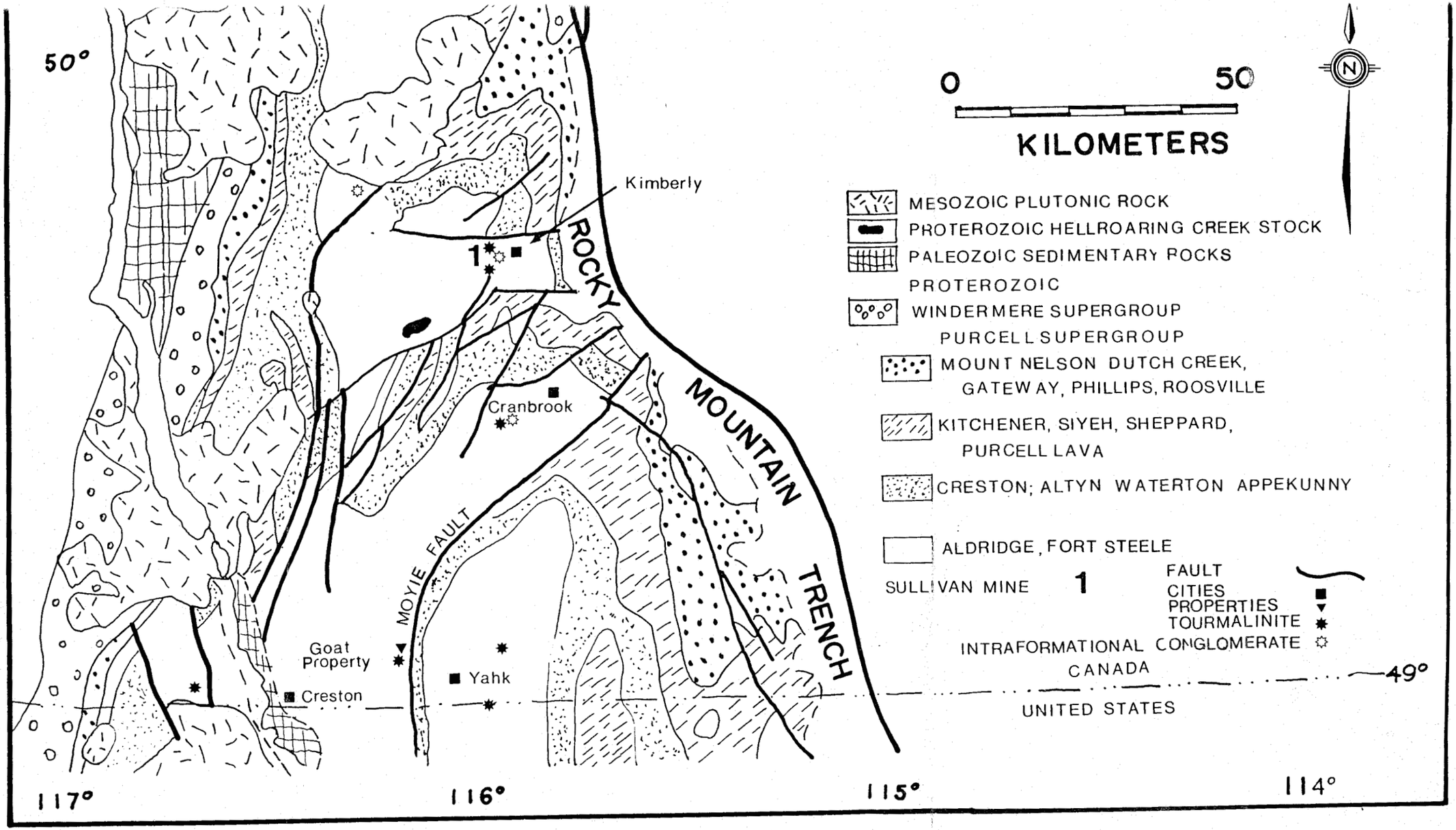


FIGURE 3 REGIONAL GEOLOGY

Creek and Mount Nelson Formations. Dutch Creek Formation consists of approximately 1200 meters of dark grey, calcareous mudstones. This marks the top of the Purcell Supergroup.

The Aldridge basin hosts the world class Sullivan Pb-Zn-Ag deposit. It is believed the basin evolved as a deep intercratonic trough, analogous to the Guaymas Basin on the west coast of Mexico, as a result of tectonic activity along an ancient crustal spreading center. It is proposed that the Sullivan deposit is situated at the junction of a major penecontemperaneous transform fault (the Kimberley Fault) and an oceonic spreading center (rift zone). Transform faults are generated to relieve stresses in the crust induced during spreading.

Zones of spreading within the Aldridge are believed to be marked by albitization (sodium addition), gabbro feeder complexes, and tourmalinite, a mineral/rock type produced from replacement by boron-silica rich fluids of magmatic origin.

MODELLING

The model used in targetting DDH Bar-88-2 was that of a north-south trending graben in Lower Aldridge rocks linked to a penecontemperaneous transverse fault (Cranbrook Fault).

Recent studies have shown that massive sulphide deposits are now forming at the intersection of crustal centers and major transform fault fractures. Two present day sites are the Gulf of Afar and the Guaymas Basin.

The importance of these intersections between transform faults and spreading centers is three fold:

1. It causes down-faulting and graben development which forms the sub-basin necessary for thick accumulations of sulphides.
2. It halts the propogation of the spreading center allowing the "hot spot" to be focussed long enough to form a convective hydrothermal cell.
3. The Transverse Fault-Magma Chamber couplet is the heat sink-heat source necessary for convection with seawater recharge accomodated by the Transverse Fault fault system.

Typically a spreading centre is not a single linear fracture, rather, it is a zone one to several kilometers wide consisting of down dropped blocks.

The marginal growth faults of these blocks are the locus of hydrothermal activity and may be marked by sodium addition (albite alteration) and tourmalinization. Both alteration types support a close magmatic association for these deposits.

DRILL RESULTS

DDH-Bar 88-2 was drilling in a thick gabbro sill (Fors sill) July 7, 1988 at 1650 meters. The hole penetrated the lower sill-sediment contact at 1752 meters. From 1752 meters to 1853 meters intensely altered quartzite and siltite of the Middle Aldridge formation were encountered. Alteration consisted of silicification, albitization, tourmalinization and development of dalmationite; a rock type consisting of equigranular clots of biotite, albite, quartz and chlorite. From 1853 meters to 1904 meters, a massive bedded intraformational conglomerate was intersected. This unit consists of 30%-40% angular siltstone and sulphide clasts in a siltstone matrix. Clast size generally ranges from pebble to cobble size. A 10 meter thick, sulphide rich, massive bedded siltstone unit occurs within the central portion of the conglomerate. From 1905 meters to 1974 meters, a package of interbedded thick to massive bedded quartz wackes and quartz arenites, with thinly laminated siltstone predominate. These sediments are silicified with abundant pyrrhotite disseminations and laminations.

Below 1974 meters Lower Aldridge type thinly laminated pyrrhotite rich greenish siltstone predominates over thin to medium bedded quartzite. Two thin lamprophyre dykes were intersected at 1995 meters and are believed to be equivalent to the Minette dykes in the Sullivan Mine.

The drill core from DDH Bar 85-1 and DDH Bar 88-2 are stored in a warehouse in Cranbrook. No sections of DDH Bar 88-2 had been sent for assay as of the date of this report.

SUMMARY

DDH Bar 88-2 has encountered typical Aldridge rocks throughout, with a fining of the sequence at about 1300 meters. This lithologic change, interpreted as a transition from high energy turbidite deposition to low energy turbidite deposition, marked a period of tectonic dislocation and increased rate of turbidite deposition near Sullivan Time.

CONCLUSIONS

DDH Bar 88-2 encountered a thick succession of Middle Aldridge quartz wacke turbidites to 1300 meters where it entered the predominantly siltstone - quartz wacke assemblage correlated with the Lower-Middle Aldridge contact. At 1490 meters the top of a thick gabbro sill was intersected.

The base of the sill was hit at 1752 meters where it contacted an extremely altered, sulphide rich siltstone-quartz wacke sequence. Alteration types include tourmalinization, albitization, silicification, sericitization, and clots of albite, chlorite, and pyrite altered rocks. At 1853 meters the altered assemblage grades into a 50 meter thick siltstone-sulphide clast intraformational conglomerate. From 1904 meters to 1974 meters the sequence consists of medium to massive bedded quartz wacke with thinly laminated sulphide rich slumped siltstone. From 1974 meters to 2100 meters, thin bedded siltstones with subordinate quartz wacke

were encountered. Sullivan Time is placed at approximately 1910 meters.

The stratigraphy intersected has generally conformed with the original geological prognosis with local thickening of 15% over DDH Bar 85-1 indicated at the location.

STATEMENT OF EXPENDITURES

BAR EXPENSES FROM JULY 7

Man Days 113	
Total cost	$ 44,150.00
Food & Accommodation	1,791.46
Transportation	
Rentals	
Chev 3/4 ton 4x4 91 day	3,800.00
D&L Rentals	82.98
Mileage	
Jeep 4x4	2,652.60
Airfare	294.40
Fuel	1,253.82
Supplies	1,895.94
Misc.	1,430.60
Equip. Rentals (camera)	5,396.86
Drilling Costs	108,910.47
TOTAL	**$171,659.13**

STATEMENT OF QUALIFICATIONS

I, JOHN M. LEASK, do hereby certify that:

1. I am a geologist with residence at 843 West 15th Avenue, Vancouver, British Columbia, V5Z 1R8.

2. I am a graduate of the University of British Columbia with a Bachelor of Applied Science degree in Geological Engineering (1980).

3. I have been involved in mining exploration since 1979.

Respectfully submitted,

J. M. Leask

JOHN M. LEASK

STATEMENT OF QUALIFICATIONS

I, GORDON P. LEASK, do hereby certify that:

1. I am a geologist with residence at 192 West 23rd Avenue, Vancouver, British Columbia, V5Y 2G9.

2. I am a graduate of the University of British Columbia with a Bachelor of Applied Science degree in Geological Engineering (1985).

3. I have been involved in mining exploration as an independent since 1979.

GORDON P. LEASK

APPENDIX 1

DETAILED DRILL LOGS

DH BAR 88 CORE SIZE NX FROM 1575.00m TO 1647.00m LOGGED BY F.R. EDMUNDS DATE JULY 1988

DESCRIPTIVE LOG
Scale : 1 cm to 4 m

1575 m

1583.25 : 1 cm calcite-chlorite shear @ 20° to C.A.

1587.05 : Grain size and quartz content diminishes, and ferromagnesians appear darker (less chloritized). Occasional rounded bodies of lighter material as xenoliths to about 3×5 cm.

1590m to 1591.40 : Fractured core containing irregular, sharp, qtz-calcite veins as a coarse breccia. Few aggregates of pyrrhotite + chalcopyrite. Note fracturing produces angular fragments within qtz veins, unlike the wisps and vague boundaries overlying.

1590 m to 1603 m : Frequent short sections of angular, sharp-margin, irregular veining as above. Principally calcite, minor quartz, rare coarse pyrrh; occasional brown crystal (pale brown, hard, fibrous). Generally associated with chlorite slips between 20° and 45° to C.A.

1611.70 - 1612.00 : 1.5 cm calcite vein @ 13° to C.A.

1612.42 - 1612.57 : Calcite breccia @ 45° to CA containing pyrrhotite aggregate to 1 cm + tremolite (?) and speck chalcopyrite

1614.50 - 1625.00 : Gabbro is slightly chloritized, pale green, & calcveins to 1620 m. To 1625 m, the alteration is patchy.

1619.20 - 1619.50 : Zone of parallel chloritic slips @ 36° to C.A.

1619 m. By this point composition is medium-grained dioritic to granitzdiorite. Hornblende reduced.

1635.20 - 1635.70 : Set of chloritic fracture planes, 15° to 30° to C.A. centred on 1 cm calcite vein at 1635.06 @ ~20° to CA.

1640 m + : Streaky & patchy alternation of white felsic minerals with grey felsic minerals as matrix to euhedral hornblendes. Assume it is quartz versus feldspar, but may be simply clay alteration of feldspar = white. Ends 1659 m

GRAPHIC LOGS

GEOLOGY

1575.82
1579
1583
1587
1591
1595
1599
1603
1607
1611
1615
1619
1623
1627
1631
1635
1639
1643

1583.25
1587.05
calcite bx
1590.40
calcite po bx
1600.35
1607.82
LOST CORE
mis-late, not a fault.
1611.48
1625 m, pale green-chloritic alt^n of hornblende
chloritized, calc matrix at top.
Reduced hbl-bearing, dioritic comp.
Normal hbl gabbro - slightly chloritized. Medium grained

MINERAL

Pyrite Pyrrh Chalco

1575.82
Box 280
1581.10
Box 281
1586.86
Box 282
1592.33
Box 283
1597.76
Box 284
1603.25
Box 285
1612.00
Box 286
1617.40
Box 287
1622.08
Box 288
1628.78
Box 289
1634.83
Box 290
1640.45
Box 291

RUN

SHORT

#	INTERVAL
0.00	1579.17
3.35	
0.00	1582.52
6.10	
0.00	1588.62
1.83	
0.00	1590.45
4.26	
0.00	1594.71
5.79	
0.00	1600.50
6.10	
0.00	1606.60
4.88	
3.66	1611.48
1.52	
0.00	1613.00
6.10	
0.00	1619.10
6.10	
0.00	1625.19
6.10	
0.00	1631.09
4.25	
0.00	1635.56
5.79	
0.00	1641.35
6.10	

DH BAR 88 | CORE SIZE NX | FROM 1647.00 m TO 1685.00 m | LOGGED BY F.REDMUNDS | DATE JULY 1988

DESCRIPTIVE LOG

Scale: 1 cm = 4 m

1647m

1646.85: Zone of aggregates of coarse biotite including specks of pyrite @ 30° to C.A.

1654.95-1655.29: Zone of mild chloritic slip faces @ 25°-30° to C.A.

1656.77-1657.03; 1657.69-1657.95; 1658.13-1658.32: Abrupt zones of chloritization and calcite development centred on (<1 cm) veins of calcite (some of quartz) between 70° and 90° to C.A.

1659.10-1659.20: as above, @ 68° to C.A. thereafter, minor (1-3 cm) bands of the same to 1661.50.

1663.50: Chloritic slip face @ 38° to C.A. underlain by strong chloritization and irregular calcite clots to 4 cm.

1664.28: Set of calcite fractures @ 30° & 25° to C.A.

1670.89: Abrubt contact @ 64°, quite frozen, with fine-grained, diabasic chill-zone. Multiple intrusion???

Chloritic hornblende gabbro →

SCALE CHANGE

1675.76: Abrubt contact as above - apparently ~ perpendicular to C.A.

679.76-1680.00: Calcite-cemented shear zone @ ~ 15° to C.A., local development of epidote, biotite

680.06-1681.00: St3-biotite-chlorite + (acicular tourmaline or actinolite) zone. Fabric is of a shear zone, minerals are not aligned - later development

680.50-1681.00: Bodies of biotite, subrounded, to about 3 cm x 0.5 cm have been deformed within the quartz-feldspar biotite matrix. Origin???

Medium - coarse grained hornblende-gabbro.

GRAPHIC LOGS

GEOLOGY

1651 | 1655 | 1659 | 1663 | 1667 | 1671 | 1675 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84

Patches of dark/light felsic strongly defined @ 18° to C.A.

End of mild chloritization

1665m

Vague diabasic zones

1675.76

Well foliated, chloritic

Foliation increasingly biotitic, tuffaceous

Calcite + epidote

Actinolite or tourmaline

Biotite "nodules"

MINERAL

P | Carb. | Pyrite

BOX 292 | 1652.52 | BOX 293 | 1658.27 | BOX 294 | 1663.92 | BOX 295 | 1669.54 | BOX 296 | 1675.23 | BOX 297 | 1680.75 | BOX 298

RUN

SHORT

#	INTERVAL	SHORT	A
1647.44		3.97	
1651.41		0.00 / 4.26	
1655.67		0.00 / 6.10	85°
1661.77		0.00 / 6.10	
1667.87		0.00 / 6.10	64°
1667.96		6.10	25°
			24°
1680.06		0.00 / 6.10	15°
			20°

ANA

H BQR 88.2 CORE SIZE NX FROM 1685.00m TO _____ LOGGED BY F.R.EDMUNDS DATE JULY

DESCRIPTIVE LOG

HANGE → Scale : 1cm to 4m 1685m

START GPL/KEH LOGGING

Approximately 2cm wide quartz vein crossing core @ 45° to core axis chloritic selvages.

2cm wide Quartz veinlet with abundant chlorite

xm wide Q.V. no sulphides minor chlorite

otted "Leopard textured" sill 30-40% biotite blotches with abundant coarse chlorite, trailing to massive biotite chlorite sill

ill is mainly biotite + chlorite in composition white Q.V. ransects core at a high ∠ 80°?

Core ∠ to Sheal 75° talcose faces of shears. tremolite in shears. very thin

@ 1712.80m Q.V. with abundant chlorite trace chalcopyrite, Po.

massive gabbro sill

adly broken zone with chlorite on fracture planes 1.35m thick

onjugate fracture set

Calcite/Quartz vein ≈1cm thick

cm zone of calcite/chlorite alteration beneath.

xtensional Q.V. 3mm wide ss shears slickensided core broken for 40cm partially serisitized on the surfaces ∠40° fracture to axis

calcite epidote vein ≈1cm wide, narrow propyllitic alteration with granular rhodochrosite.

ottasic alteration surrounding calcite sericite veinlet sericite alteration after carbonate veining possible tourmaline crystals in veinlet?

RETE./SERICITE VEINLETS MORE DENSELY SPACED early quartz vein der calcite, weak potassic; silicification 1742.07m - 1743.57m

onjugate fracture set 40 & 45°

cite filled ≈<1mm wide fractures gabbro is more mafic d finer grained weak propyllitic potassic alteration the fractures this section has noticably less calphich Quartz calcite vein earlier than the fractures

sition zone - ≈60cm wide appears to be baked abundant po/chlorite with a fine grained sill, the contact with sediment

GRADATIONAL CONTACT BETWEEN DIAL & SEDIMENT

Po is disseminated up to 1% also within veinlets w/chalco

GRAPHIC LOGS

GEOLOGY

MINERAL

Galena Sphalerite Chalco Po Pyrite

RUN SHORT

ANA

INTERVAL

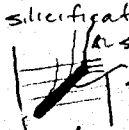
1686.58	BOX 299	55	0.00 / 6.10m	1686.15
	BOX 300		0.00 / 5.49m	1692.37m
	BOX 301		0.00	1697.86
	BOX 302		0.00	1703.76
	BOX 303		0.00	1710.06
	BOX 304		0.00	1716.15
	BOX 305		0.00	1722.25
	BOX 306		0.00 / 7.14m	1728.35
	BOX 307		0.00 / 6.10m	1730.48
	BOX 308		0.00 / 6.10m	1735.36
	BOX 309		0.00 / 6.10m	1741.46m
	BOX 310		0.00	1747.56
	BOX 311			1753.65

DDH BAR 88-2 CORE SIZE NQ FROM 1753.65m TO _____ LOGGED BY G.P.L. / K.E.H DATE July 12, 1988

DESCRIPTIVE LOG

SCALE 1cm = 1m

Contact zone - silicified wacke alteration (predating silicification cross cutting bedding)



- main rock mass has disseminated Po.

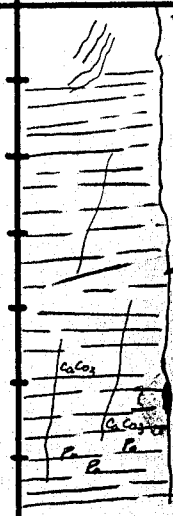
massive bedded quartz wacke with with blotchy Po + high angle irregular fractures with Po <1mm wide silicification appears to surround veinlets with Po

up to 2% disseminated Po →

Note: Bit marks give core a white/dark grey interfingering texture.

GRAPHIC LOGS

GEOLOGY



CONTACT ZONE BETWEEN SILL & SEDIMENT

massive pyrite veinlet 3mm wide crosses entire core 55° to C.A.

Po sulphide clast

MINERAL

Pyrite | Po | Sphal | Galena | Chalco | Albite | Silicif. | Potassic | Chlorite

BOX 311

BOX 312

BOX 313

RUN / SHORT

#	INTERVAL
Run	1753.65
6.10	
Run	1759.76
6.10	
Run	1765.85

DDH _____ CORE SIZE ____ FROM _____ TO _____ LOGGED BY EEH / GPL DATE July 13

DESCRIPTIVE LOG

SCALE 1 cm = 1 m

Qtz-wacke - massive bed of green-brown sediment 1-2% dissem po 1780.5 (2%), <1% Py thereafter, chloritic, fairly soft matrix to qtz grains

fractures 75° to C.A filled with calcite, fract 10° to C.A. with py/calcite

Qtzite - red brown colored f.g. silicified envelopes around irreg high angle fractures filled with calc. Steep fractures postdate shallow fractures. Red-brown color due to biot grains in qtzite

chloritic fractures 60° to C.A.

grainsize coarsening downhole, color more grey-brown (pos loss of biot or po)

f.g. py dissem throughout, no bedding planes seen

noticeably less fracturing

qtz-po veinlet (4mm) 55° to C.A. surrounded by irreg fract & silic v. localized

1786.35 - 1786.50 fine grained, denser appearance (possibly silicified)

high angle fract ± po (2mm), high angle fract ± qtz, py, black mineral (tourm?)

py dissem throughout, local silic

1788.41 - 1788.56 · qtz vein 1.1 cm wide with intergrown po ± cpy in the vein and filling wallrock fractures. silicified envelope. hale calcite in wallrock fract. Qtz vein 65° to C.A.

dissem py & po, massive, m.g., grey brown, minor fract (high angle) with calc and local py - fill

1789.63 - 1790.07 clasts up to 3mm long, imbricated, bedding 80° to C.A. same with black haloes

1790.48 - 1790.92 Series of fractures 25 to 45° to C.A. with silic'd seds btwn. Central zone of f.g. black mineral (poss. py or tourm)

py dissem in seds ± in zone, po dissem below

bedd 70° to C.A. 1-15mm wide 1790.80 - 1790.97 Biot Qtzite - Clean Qtzite

fract 50 to 60° to C.A. filled ± calc.

Grey qtz and Po bands 60° to C.A. // to calcite fractures

~~Interbedded spotted rock & clean qtzites~~ beds 1cm to 5 cm thick 10° to C.A. Thicker red-grey qtzite beds with clots of biot-po, narrow grey & blue-grey qtzites, f.g., bxsilic. fract // to bedding ± calc, mm high angle fract ū qtz, po, py fill and silicified envelopes. Fract 43° to C.A.

Sulfide replaced clasts at 93.43 and 93.65 2 cm x 3 x >4 in size in a bedded qtzite

~~Spotted texture~~ of biot-po clots in a blue qtz flooded matrix (mod silic).

High angle fractures filled ū py, po

Highly silicified 96.50 to 97.66. v.f.g. black mineral in hairline fractures and calcite in veinlets.

GRAPHIC LOGS

GEOLOGY — siltite, wacke, qtzite

1758 1759 1760 1761 1762 1763 1764 1765 1766 1767 1768 1769 1770 1771 1772 1773 1774

calc, po, calc. — gradational contact.

silic, calc., calc.

note: chcqt ± magnet for po

cut some to see if bedded

rubbled core ± incr py

po, calc

py, calc ± py — dissem po

calc, sericite, calc, blade material

qtz, po, fract

<1% py, po — dissem po, py (up to 3%)

calc, po fract.

qtz-po-py, black rim + fract fill, dissem po, py

po in fract in seds silic around fract

py, po

wedge of f.g. qtzite

rubbled core

MINERAL

Pyrite, Po, Chalco, Galena, Sphal, Sericite, Albitic, Silicic, Hematite, Chlorite

Box 312

Box 313

Box 314

RUN / SHORT

6.09 m — 1759.76

6.1 m — 1765.85

6.1 m — 1771.95

80°

70°

76°

A

| INTERVAL

DDH _____ CORE SIZE ____ FROM _____ TO _____ LOGGED BY KEH / GPL DATE July 14

DESCRIPTIVE LOG

SCALE 1cm = 1m

GRAPHIC LOGS

GEOLOGY

MINERAL

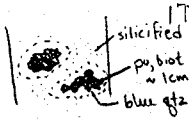
RUN / SHORT

A

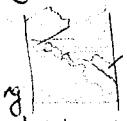
INTERVAL

1770.25 - 1778.75 Interbedded Leopard Rock, clean qtzites and biot qtzites

Silicified qtzite - clots of biot, po surrounded by a blue qtz haloe, entire rock is silicified. Fractures filled with po(?) & silicified selvages (high angle and v. shallow). Massive to 1771.50



Beds vary in thickness from 1mm to 5cm. 80 to 70° to C.A. Dark red-brown layers are coarser grained and contain up to 2% dissem py, po



1777.30 - sulfide alteration crossing bedding

silicified and later autobrecciated with calcite-sericite healing

1778.15 - 1779 Qtzite; red brown, f.g., sharp contact 15°, qtz-py vein

1779 - 1783.38 Qtzite; gray, medium grained massive qtzite bed. Py weakly disseminated throughout. 2% dissem. in local patches where the rock is weakly silic. High angle fractures filled with quartz, chlorite, py, po. Fractured and healed with calcite

NOTE: Silicification occurs in two forms. Selective along bedding and blotchy in coser beds. This silica has a blue color. Silic also occurs around fractures. It is more complete and clear.

1783.38 - 1785.05 - Weakly developed Leopard rock

Contact is gradational. Appears to be an alteration of biot bearing massive qtzite. Fractures at 1784.90 20° to C.A. filled with qtz sericite - wallrock highly silicified

1785.05 - 1785.15 Sharp contact to f.g. Qtzite interbedded with crse qtzites. Beds offset (reverse fault). Sulf alt'n of crs beds

1785.15 - 1785.41 Irreg fracture filled with qtz, po. Fractured with later sericite

1785.41 - 1787.20 - Qtzite; dk gray, f.g. small bands of poorly developed Leopard rock. High angle to vertical qtz fractures (dom sulfide = po)

1787.20 - Qtzite; light grey, medium grained lighter color may be due to bleaching (seen to crosscut bedding with fluid like nature) minor dissem po throughout

rubbled core

minor thin beds

5cm band ± dissem po

po, qtz

Box 315

Box 316

Box 317

80°

70°

6.1 m

1778.05

1784.15

DDH _____ CORE SIZE ____ FROM _____ TO _____ LOGGED BY GPL / KEH DATE July 14, 1988

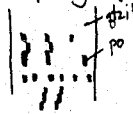
DESCRIPTIVE LOG

1787.20 - 1797.85 Qtzite

1791.40 - 1792.17 Intense silicification
Later fracturing 10° to C.A. with sericite healing
2 cm thick breccia ± v. angular silicified frags. Possible minor albitization predating silicification.

Gradational into weak Leopard rock development

1797.85 – 1799.29 Gradational contact to light grey po rich qtzite. Po occurs in vertical blocks offset horizontally. Possibly a dewatering feature
Qtzite is m.g. and grey. Fairly clean.



1799.29 - 1800.85 Qtzite; dark grey, m.g., massive clean even textured.

1800.85 - 1800.88 Leopard rock

1800.88 - 1803.59 Qtzite: dark grey, m.g., variable textured. Patches of dissem po (prob secondary). High angle fractures in qtz, po, tr chalco, tr gal. Bands of po 3 mm thick 55° to C.A. Dissem po up to 2%, tr. cpy.

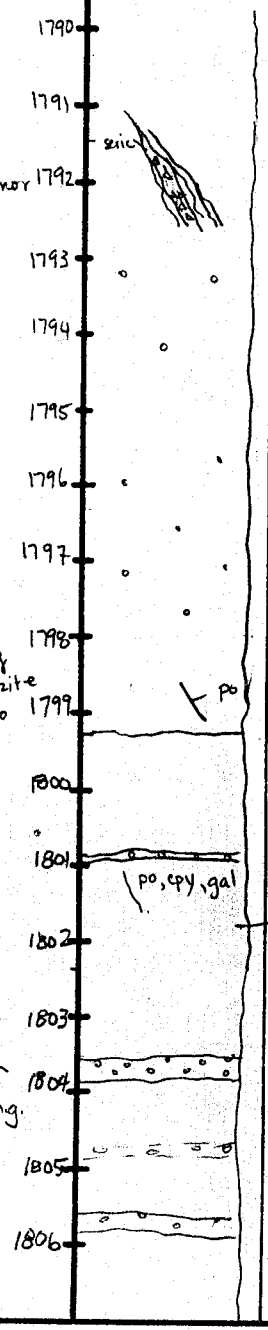
1803.59 - 1803.90 Leopard texture. tr cpy, po dissem

1803.90 - 1806.10 Qtzite with local Leopard texture. Gray, m.g.

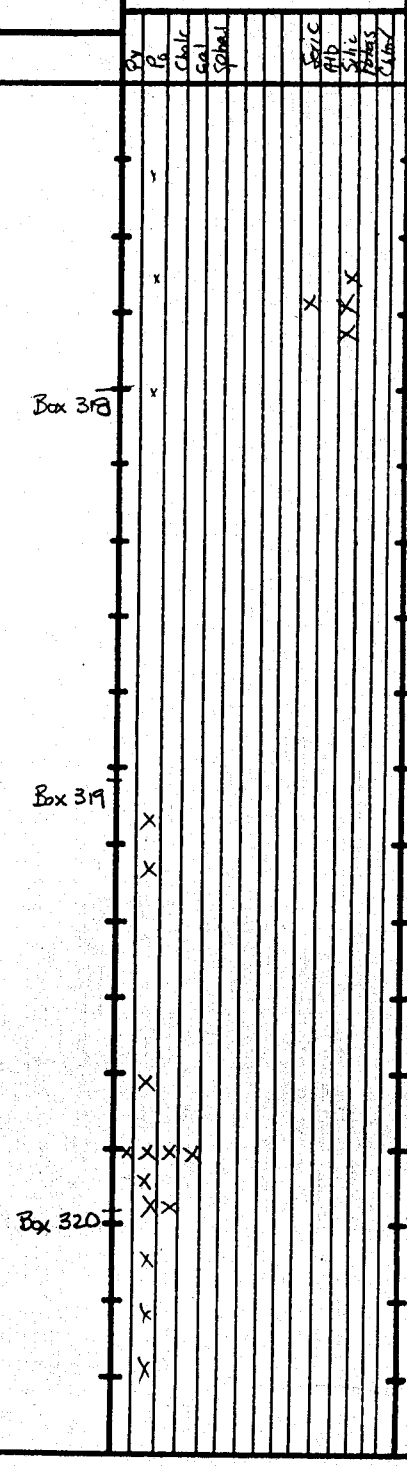
Note: high angle fractures are v. rare. Dissem po throughout

GRAPHIC LOGS

GEOLOGY



MINERAL



RUN / SHORT

#	INTERVAL
	1787.20
1792.24	
	1796.34
1802.49	
	1806.10

DDH _____ CORE SIZE ____ FROM _____ TO _____ LOGGED BY GPL/KEH DATE July 14, 1988

DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY	MINERAL	RUN: SHORT	#	INTERV

1806.10 - 1824.60

Chlorite-leopard Texture: red grey with patchy pale grey in albitized areas. Leopard texture cannot be seen in areas of albitization. Albitized blotches are rimmed by high po?-biot? disseminations.

rare high angle fractures filled with biot & po, others with calcite

Po weakly dissem throughout except in alb patches

1812.30 - 1812.60 Silicified, fract'd & finally healed ± calcite & tr. cpy

Silicification post dates Leopard texture

Bleached area - poss. albitization ± leopard texture preserved

Widely spaced hairline high angle fractures filled with po, biot. Fractures post date (offset) albitized patches

Grain size decreasing downhole

Pebble sized siltstone clasts
Silicified and fractured

1806 1807 1808 1809 1810 1811 1812 1813 1814 1815 1816 1817 1818 1819 1820 1821 1822

Po, cpy

Box 321 Box 322 Box 323

1808.54

1814.63

DDH B[illegible]-2 CORE SIZE N.Q. FROM 1822m TO 1838.41m LOGGED BY G.LEASK DATE 18/07/88

DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY	MINERAL: Py Po Chlor Cal Spar Sericite Alb Silic Pegs Chlor	RUN: SHORT #	INTERVAL
1806.10 - 1824.60 Qtzite - Leopard Texture	1822			
	1823			
	1824			
1824.60 - 1825.10 Tourmalinized Qtzite: black, fine grained	1825			
1825.10 - Qtzite: brown-grey, fine grained, local Leopard texture	1826			
	1827	Box 324		1826.82
medium grained quartzite ± 20% of rock is leopard textured, trace amount Po note. no high angle fractures.	1828	silicification		
	1829			
	1830			
	1831			
	1832	local albite lens		1832.92
grey medium grained Quarzite silicified locally	1833	disseminated Po possible Po clast leopard replacement texture	Box 325	
	1834	Po replacement disseminated; Py; chlorite on fracture planes		
	1835			
	1836			
	1837	Quartz shear; Qz, Py, Ab		
Silicified Quartzite, disseminated Po	1838		Box 326	837.00; 1838.41

DDH _____ CORE SIZE ____ FROM 1838.41m TO _____ LOGGED BY G LEASK DATE 18/07/88

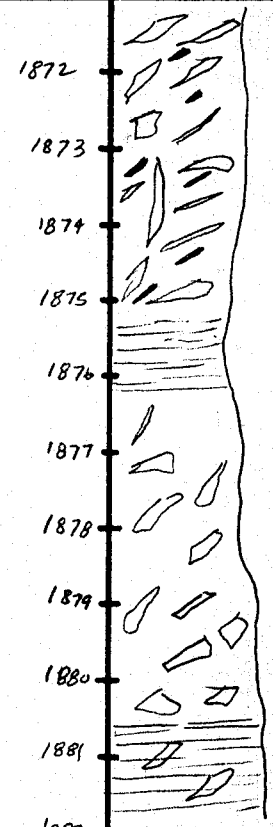
DESCRIPTIVE LOG	GRAPHIC LOGS			MINERAL	RUN / SHORT	#	INTERVAL
	GEOLOGY						
	1839					1838.41	
tourmalinized, fine grained siltite (only tourmalinite remains with 1% disseminated Py.	1840						
massive grey quartzite							
silicified crackle zone Py, Po in fracture infills	1841						
calcite in fracture veinlets	1842						
Silicified, medium grained quartzwacke	1842						
	1843			Box 327		1843.60	
1843m - 1847.60m Badly broken silicified quartzite with Py, Po on broken faces core came out very angular small pieces	1844		hair line fractures w/ Po, Py				
	1845						
	1846						
	1847						
				Box 328			
	1848						
	1849					1849.69	
Broken silicified quartzite, spotty albite poker chip cleavage	1850						
	1851						
	1852	Po dissemination possible replacement.					
	1853			Box 329		1853.05	
Begin fragmental. light grey siltite clast within a medium grained quartzite mass.	1854						

DDH BAC 85-2 CORE SIZE N.Q. FROM 1855m TO 1871m LOGGED BY G. LEASK DATE 15/07/88

DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY	MINERAL	RUN / SHORT	#	INTERVAL
fragmental. coarse grained quartz matrix angular fragments Po, disseminations within matrix grey fragmental clasts up to 3cm clasts range in size from 3cm to 3m intermixed with coarse grained quartzite with po disseminations * some clasts appear to be abundant black pyritic clasts. Py, Po clast make up 1% fragmental. Siltstone clasts within a quartzite matrix * clastic does not have similar sulphide characteristics as BAC 85-1 Hole.	1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866 1867 1868 1869 1870 1871 silicified ≈ 60cm disseminated Po in clast fine particle size clastic	Box 330 Box 331 Box 332		1855.48 1861.58m 1867.68	

DDH BAP 88.2 CORE SIZE NQ FROM 1871m TO 1888m LOGGED BY G. LEASK DATE 18/07/88

DESCRIPTIVE LOG	GRAPHIC LOGS			MINERAL		RUN / SHORT	AN #	AN INTERVAL
	GEOLOGY							



fragmental

1% pyritic clasts.

med grained grey quartz wacke fragmental

all clasts appear to be angular.

* matrix 60-70% fragments 30-40%.

Medium grained massive quartzite rare siltite clast

BOX 333

BOX 334

1873.78

1879.57

DDH BAR88-28 CORE SIZE NQ FROM 1869m TO 1886 m LOGGED BY G.LEASK DATE 1/09/88

DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY			MINERAL	RUN / SHORT	#	INTERVAL
fragmental abundant po in clasts and disseminated	1868 1869 1870 1871 Po 1872 1873 1874		Box 336				No Blocks.
fine grained quartzite with high % of silt size particles within the matrix	1875 1876		Box 337 1875.91m				
	1877 band of Po biotite and quartz. 1878						
fine grained quartzite with minor grey silty interlamination	1879 1880 1881					1879.57m	1880.79m
	1882		Box 338				
Bleached clean fine-med grained quartzite Pyrite in high angle fractures silty matrix quartzite	1883 1884 1885					1883.84m	

DDH BK88-2A CORE SIZE NQ FROM 1886m TO 1904m LOGGED BY G. LEASK DATE 7/04/88

DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY			MINERAL	RUN / SHORT #	INTERVAL
	1886					
	1887	Silica cemented fracture with trace sphalerite, pyrite frequent. 20cm thick	Box 339			1888.11
	1888					
	1889					
Biotite clast within fine-med grained thick bedded silty quartzites	1890					
	1891	abundant disseminated P_o				
	1892	Pyrite in high angle fractures	Box 340 1892.68m			1894.2m
Start clastic tiny quartz pebbles within grey medium grained quartzite	1893					
fragmental, abundant siltite clasts	1894	P_o				
P_o dissemination ± clasts	1895	Py				
≈ 3% overall sulphide	1896					
grey fine grained quartzite matrix	1897					
frequent biotite dissemination throughout.	1898		Box 341			
* clast size generally much finer than higher up hole.	1899					
	1900					1900.3m
	1901					
	1902					
	1903					
	1904		Box 342 1903.35m			

DDH BARBB-EA CORE SIZE NQ FROM 1904m TO 1922m LOGGED BY G. LEAHL DATE 11/09/93

DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY	MINERAL	RUN / SHORT	AN #	AN INTERVAL
light grey gritty banded siltstones.	1905				
massive fine grained quartzite.	1906			1906.40m	
silty quartzite, thin siltite laminations present dark; light band oscillations.	1907 — minor fragmental				
	1908				
	1909	BOX 343		1909.45m	
thinly laminated grey siltite, chloritic badly broken and cleaved	1910				
	1911				
	1912				
	1913				
silica cemented quartzite with abundant Po along fracture surfaces.	1914 — Po	BOX 344			
thinly laminated sheared gouged black siltite	1915 — small fault zone.			1915.55m	
Broken recemented by silica quartzite Black siltstone with white interbeds	1916				
	1917				
gritty grey siltstone.					
grey med grained quartzite with minor siltstone laminations of up to 2cm thick	1918 — siltite clast; Po trace	BOX 345		1918.60m	
high angle silica filled fractures med grained grey quartzite	1919 — red garnets				
	1920 — red garnets				
	1921 — garnet				

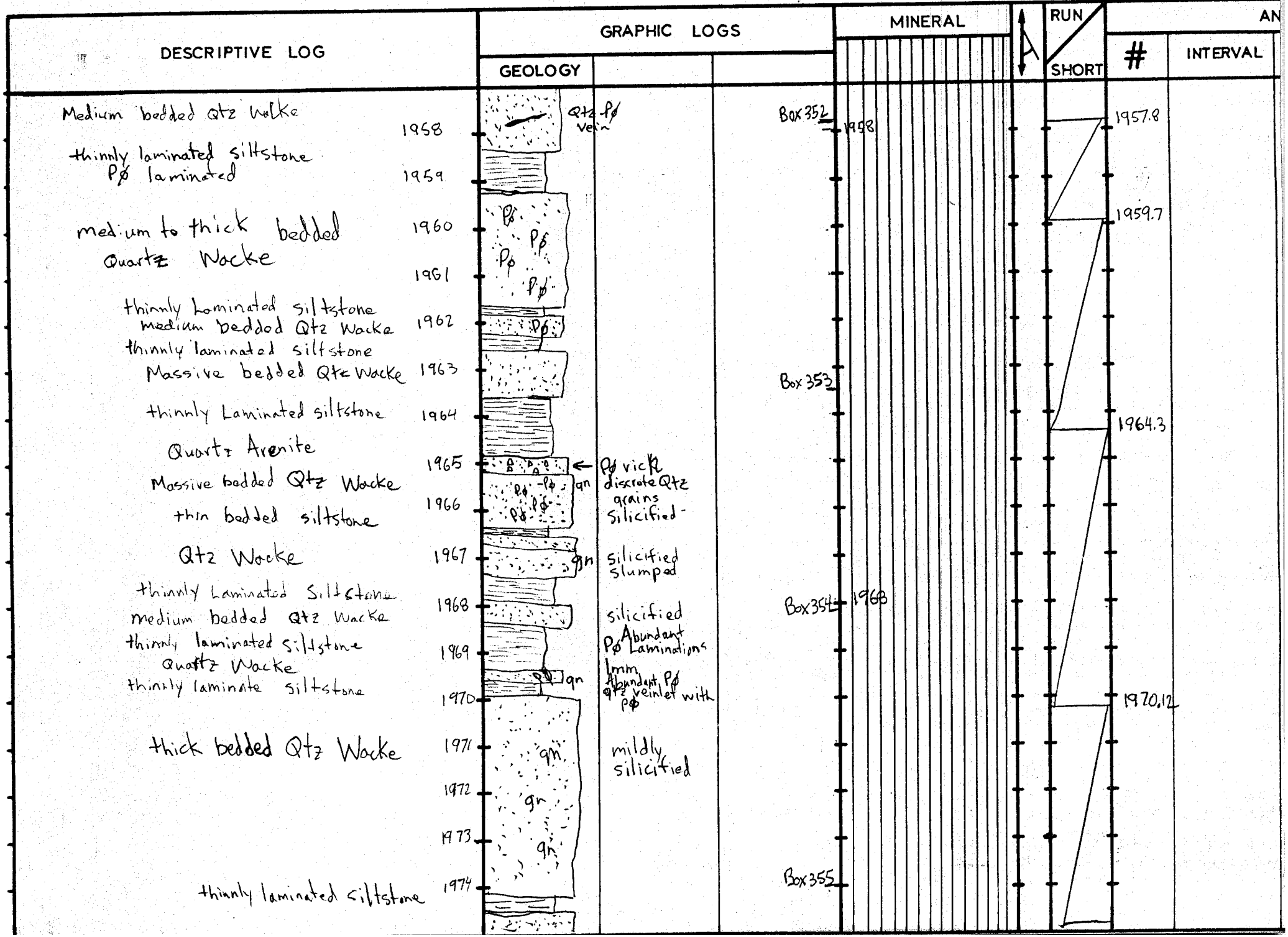
DDH BAR88-4A CORE SIZE NQ FROM 1922m TO 1940m LOGGED BY G. LEASK DATE 1/09/88

DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY	MINERAL	RUN / SHORT	#	INTERVAL
Grey med grained massive quartzite.	1923 garnet; 1924 garnet	Box 346 1923.78m			1923.78m
Interbeds of quartzite & siltites ½cm & greater laminations, silty quartzite Gritty siltite	1925, 1926, 1927, 1928				
thick grey quartz wacke. finely laminated grey/white siltstone. Lower aldridge Type Lithology	1929 Garnets	Box 347			1928.96
clean grey quartzite	1930, 1931, 1932, 1933				
	1934 garnet				
siltstone laminations in grey quartzite.	1935 garnet	Box 348 1935.06			1935.06m
3cm wide Q.V at base of sandstone garnets, galena, sphalerite, and Po present	1936 Q.V Py, P, Thal. galena.				
	1937 quart calcite vein with chalcopyrite & Po				
massive medium grained clean quartzite, locally garnets	1938, 1939				1939.43m
	Zone of silicification → 1940 Quartz vein with tourmaline crystals.				

DDH BAR 80-2A CORE SIZE NQ FROM 1940m TO 1958m LOGGED BY G. L EASIC DATE 2/09/88

DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY			MINERAL	RUN / SHORT	#	INTERVAL
gritty siltstone with po laminations ½-1mm thick	1941 Po	garnet, local silicification and po blotches		Box 349			
	1942	tiny garnets					
fine silty interbeds in wacke.	1943						
finely laminated siltstone with po laminations	1944 Po						
fine grained quartzite with local siltstone beds.	1945						1945.73m
fine grained siltstone w minor layer Parallel siltstone - medium bedded	1946			Box 350			
	1947 Pφ						
thin bedded to medium bedded siltstone	1948 Pφ						
	1949 Pφ	Silicification					
	1950 Pφ						
Medium bedded Quartz Arenite with discrete Qtz grains	1951						1951.83m
	1952 Po			Box 351			
	1953						
medium bedded Quartzite w/ minor thin siltstone	1954 Pφ	Pervasively silicified					
	1955						
	1956 Pφ Pφ	silicified highly silicified					
medium bedded Quartz Arenite with minor thin Siltstone interbeds.	1957						
	1958			Box 352			1957.93m

DDH Bar 88-2A CORE SIZE NQ FROM 1957.8 TO 1975.0 LOGGED BY J. Leask DATE 9/09/88



DDH Bar 88-2A CORE SIZE NQ FROM 1975.0 TO 1993.0 LOGGED BY J.M.Leask DATE 09/88

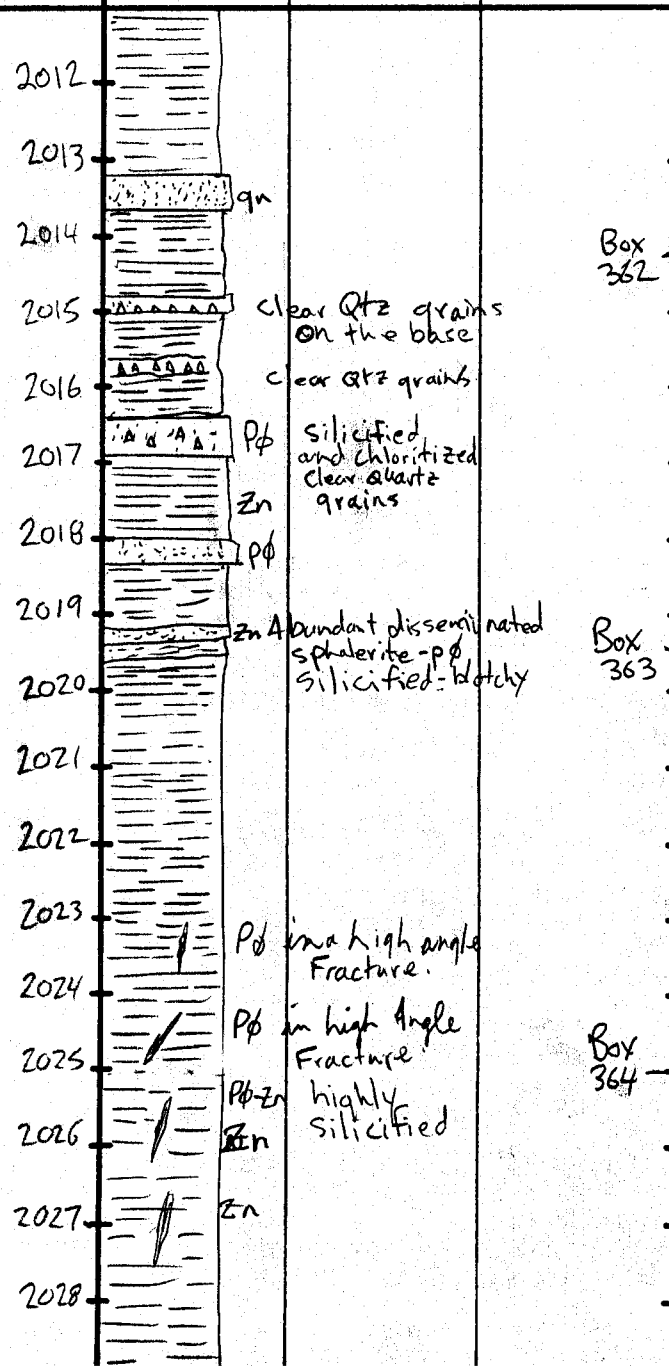
DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY	MINERAL	RUN: SHORT	#	INTERVAL
Thick bedded Qtz Wacke	qn siliceous				
thinly laminated siltstone 1976	narrow pϕ laminations				
Qtz Wacke					
thin to Medium bedded siltstone 1977	mud				
1978					
medium bedded Quartz Wacke					
1979					
medium bedded siltstone					
1980	mud pϕ Laminations qn	Box 356			
medium bedded siltstone					
1981	mud				
Quartz Wacke					
1982 Quartz Wacke				1982.?	
thinly Laminated	slumped thin pϕ Laminations				
1983 thick bedded Quartz Wacke	qn				
thin bedded Quartz wacke 1984	qn mud silicified				
thinly Laminated siltstone Qtz Wacke	abundant pϕ Laminations				
1985					
Quartz Wacke		Box 357			
thinly Laminated 1986 Siltstone-mudstone	slumping minor pϕ				
thick bedded Quartz Wacke 1987	pϕ slumping				
thin bedded quartz Wacke	slumping pϕ Laminations in				
1988	mud black mudstone				
medium bedded siltstones					
1989	some slumping				
thick bedded Qtz Wacke					
1990	pϕ slumped				
medium bedded Quartz Wacke					
thick bedded siltstone 1991	pϕ Laminations	Box 358			
thinly laminated siltstone					
Massive bedded Quartz Wacke 1992					
medium bedded siltstone	slumped				

DDH Bar 88-2 CORE SIZE NQ FROM 1993.0 TO 2011.0 LOGGED BY J.M. Leask DATE 7/09/88

DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY			MINERAL	RUN / SHORT	#	INTERVAL
thin to medium bedded siltstone thin bedded Quartz Wacke	1994	gn	Intensely silicified				
LAMPROPHYRE Dyke →			Mainly Biotite with feldspar phenocrysts. Chilled and fine grained on the margins				
thin to Medium Bedded Siltstone - Mudstone	1995						
Altered LAMPROPHYRE DYKE	1996		Mainly Biotite-Chlorite with Augite Phenocrysts				
			Box 359				
Medium to thick bedded Siltstone with minor Quartz Wacke Interbeds	1997						
	1998	gn					
	1999						
	2000						
Medium Bedded Quartz Wacke	2001						
thinly bedded Mudstone - thin to medium bedded siltstone	2002						
			Box 360				
siltstone bases - Mudstone tops minor Interbedded Quartz Wacke	2003						
	2004	gn					
	2005						
		gn					
	2006	Pø	minor disseminated Pø				
	2007						
	2008	Pø	in high angle Fracture				
			Box 361				
	2009		Siltstone Clast				
	2010	gn					

DDH Bar 88-2 CORE SIZE NQ FROM 2011.0 TO _____ LOGGED BY J.M. LEASK. DATE 7/09/88

DESCRIPTIVE LOG	GRAPHIC LOGS			MINERAL	RUN	AN
	GEOLOGY				LONG / SHORT	# / INTERVAL



thinnly laminated Mudstone with interbedded thin to medium bedded siltstone

medium bedded Quartz Wacke

Medium bedded Quartz Arenite

thin bedded siltstone - mudstone

Medium bedded Quartz Arenite

thin bedded Siltstone - Mudstone

Quartz Wacke

thin to medium bedded Siltstone with thinnly laminated mudstone

Box 362

Box 363

Box 364

DDH Bat 88-2 CORE SIZE NQ FROM 2029 TO 2047 LOGGED BY J.M. Lesk DATE Sept. 19th/88

DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY		MINERAL	RUN / SHORT #	INTERVAL
thin to medium bedded siltstone	2030	Box 365			
Medium bedded Quartzite	2031 qn				
	2032				
Thinly laminated siltstones	2033				
	2034				
	2035 Po Pb	Pyrrhotite in high Angle Fractures Slumped Features			
Thinnly laminated Reddish-brown Siltstones	2036	Box 366			
	2037				
Massive bedded Micritic Dolomite	2038				
	2039				
	2040 Py	Abundant Pyrite - disseminated and in veinlets			
	2041 Py				
	2042 Py	Extensively brecciated near the base			
thinnly laminated siltstone		Box 367			
medium bedded brown Quartzite	2043				
medium bedded brown Quartzite with thin siltstone interbeds	2044	Possibly? slates *			
thinnly laminated siltstone	2045				
Medium bedded Quartz Arenite	2046				
	2047				

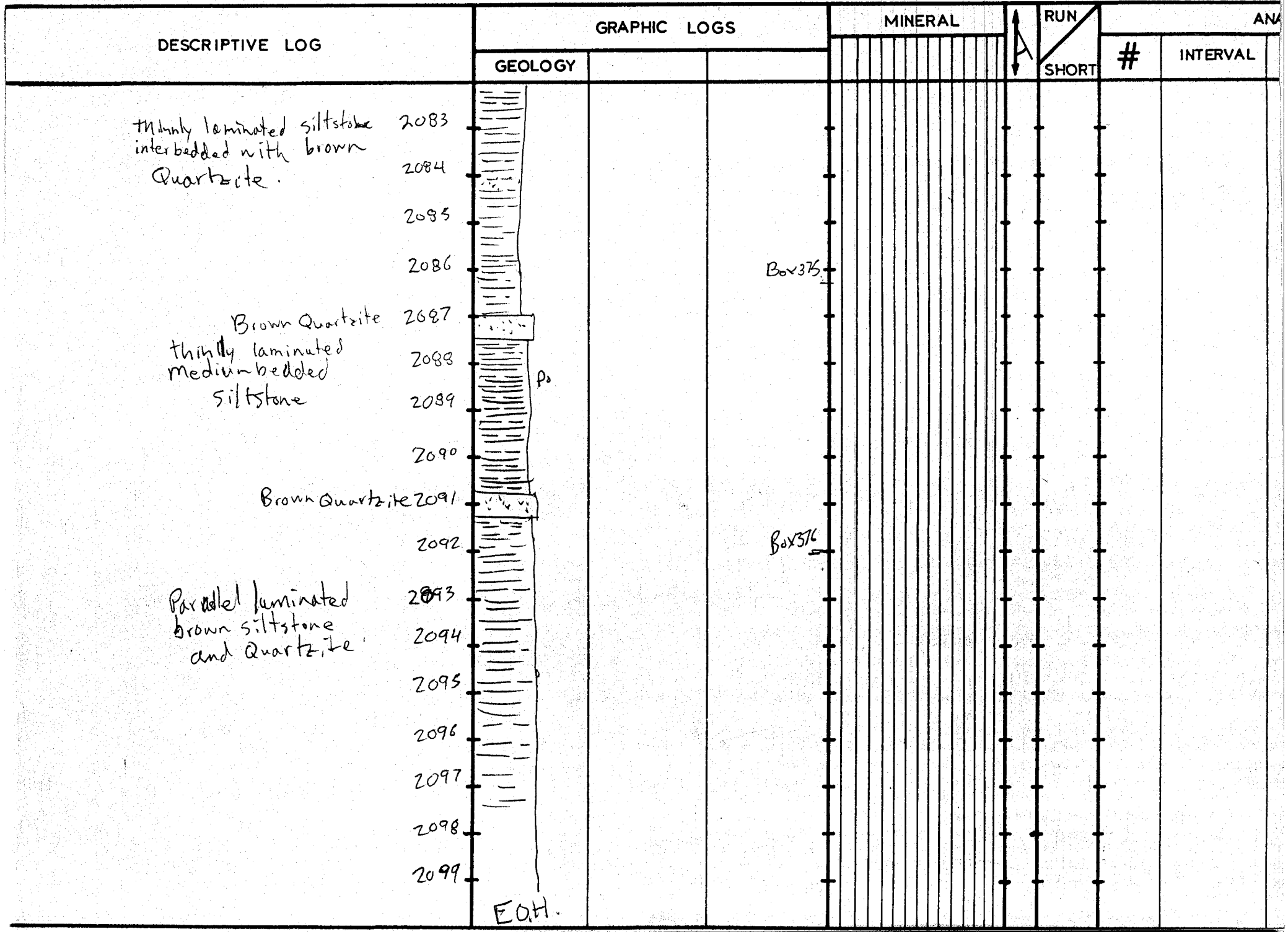
DDH Bar 882 CORE SIZE NQ FROM 2047m TO 2074 LOGGED BY J.M. Leask DATE Oct. 19/88

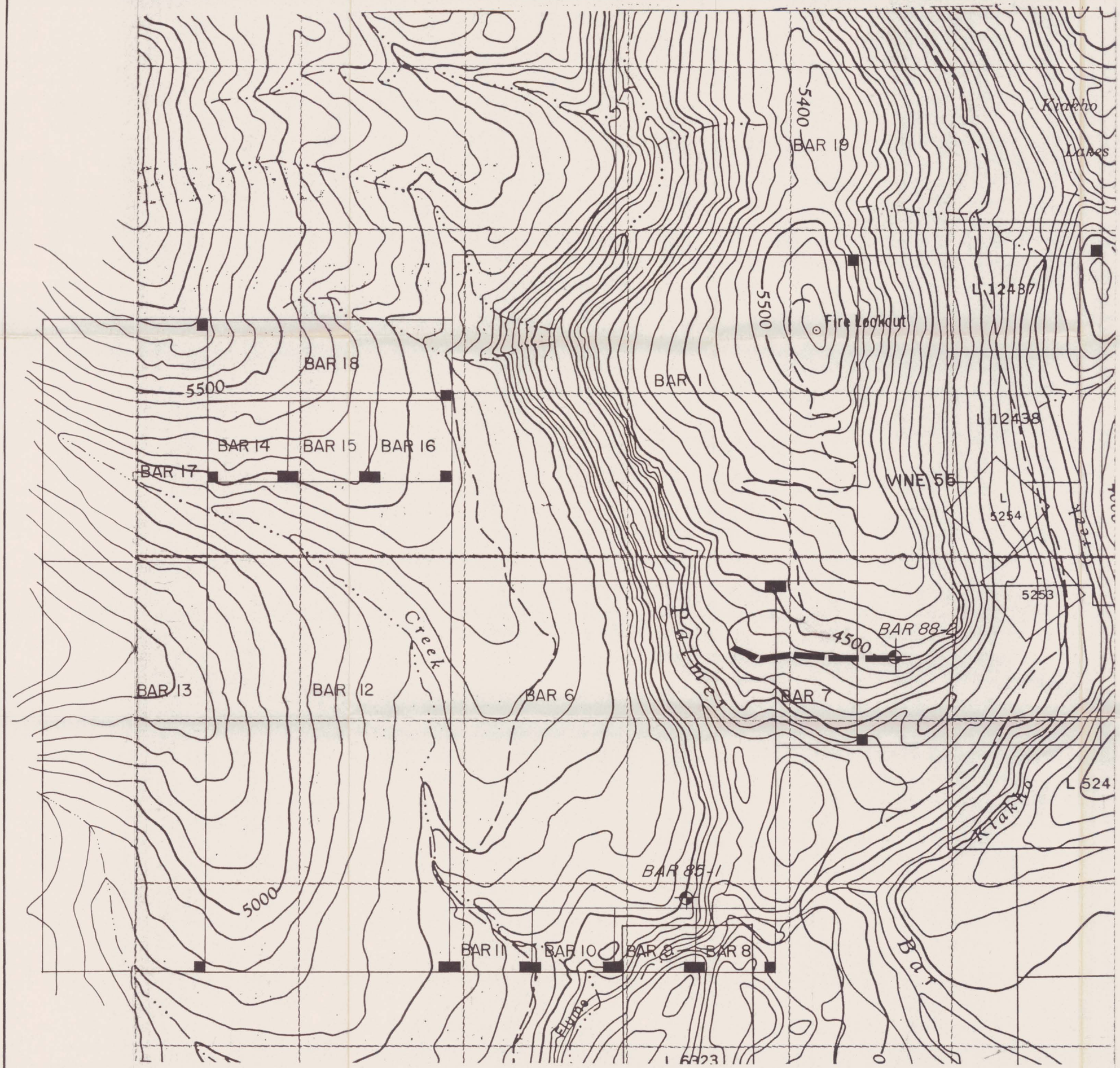
DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY	MINERAL	RUN / SHORT	AN #	AN INTERVAL
Thinnly laminated siltstone Thin bedded Quartzite	2048	Box 368			
Thinnly Laminated siltstones Medium bedded Quartzite	2049				
	2050				
Thinnly Laminated to medium bedded siltstone	2051				
	2052	Po Po chlorite on fractures			
Medium bedded Quartzite Thinnly laminated siltstone	2053				
Medium bedded Quartz Arenite	2054	siltstone clast			
		Box 369			
Thinnly laminated siltstone Thin bedded Quartz Arenite	2055				
	2056				
Thinnly Laminated siltstone	2057				
	2058				
Thick bedded Quartzite Quartz Arenite	2059	chloritized			
Brown Quartzite		mildly chloritized Box 370			
	2060				
Quartzite		qn silicified			
	2061	silicified Tourmalinized?			
Intraformational conglomerate Quartzite.	2062	slumped silicified			
	2063				
Thinnly laminated siltstone					

DDH Bar 88-2 CORE SIZE NQ FROM 2065m TO _____ LOGGED BY J.M. Lesk DATE Sept 17th/88

DESCRIPTIVE LOG	GRAPHIC LOGS: GEOLOGY	MINERAL	RUN / SHORT	#	INTERVAL
Thinnly Laminated siltstone	2065	Box 371			
	2066				
	2067				
	2068				
	2069				
	2070	Box 372			
Medium Bedded Brown Quartzite	2071				
	2072				
thinnly laminated to medium bedded Siltstone	2073				
	2074				
Medium Bedded Brown Quartzite.	2075	Box 373			
	2076				
Thick bedded Quartzite.	2077				
thinnly Laminated to medium bedded siltstone	2078				
	2079				
	2080	Box 374			
Granitic Sill	2081	Large Porphyroblasts of Quartz, Feldspar, Tourmaline, with clots of muscovite. Abundant disseminated Pyrite.			

DDH Bar 8C CORE SIZE NQ FROM 2083 TO 2100 LOGGED BY J.M. Leask DATE Sept 17th/88





N

LEGEND

- DRILL HOLE
- NEW ROAD
- CLAIM BOUNDARY
- LEGAL CORNER POST

GOLDPAC INVESTMENTS LTD.

DRILL HOLE LOCATION

BAR 88-2

SCALE : 1:12,500	DATE : JAN. 1989
NTS : 82 G/5W	FIGURE : 4