

MINNOVA INC.
DIAMOND DRILL AND GEOPHYSICAL
ASSESSMENT REPORT ON THE
BAR PROPERTY
BARRIÈRE AREA
KAMLOOPS MINING DIVISION, BC

98/91

ARIS SUMMARY SHEET

District Geologist, Kamloops

Off Confidential: 89.02.12

ASSESSMENT REPORT 16996

MINING DIVISION: Kamloops

PROPERTY: Bar
LOCATION: LAT 51 16 21 LONG 120 00 00
 UTM 10 5684185 709259
 NTS 082M05W 092P08E
CLAIM(S): SC 3, Anna 2, Anna 8, Bar 5, Bar 11
OPERATOR(S): Minnova
AUTHOR(S): Gray, M.J.; Pirie, I.D.
REPORT YEAR: 1988, 77 Pages
COMMODITIES
SEARCHED FOR: Copper, Zinc, Lead, Gold, Silver
GEOLOGICAL
SUMMARY: The property is underlain by steeply dipping, northwest striking Devonian-Permian volcanic and sedimentary rocks of the Fennell Formation (SC and Anna Groups) and the Devono-Mississippian Eagle Bay Formation (Bar-B Group). Significant quartz-pyrite-sericite-albite alteration is associated with feldspar-quartz porphyry domes (Fennell Formation) and strong carbonate-sericite alteration in mafic volcanics (Eagle Bay Formation). Economic gold intersections have been intercepted in one feldspar-quartz porphyry dome.
WORK
ONE: Drilling, Geophysical
DIAD 829.3 m 8 hole(s); NQ
EMGR 36.5 km; HLEM
Map(s) - 5; Scale(s) - 1:2500
SAMP 282 sample(s); ME
MINFILE: 082M 218

LOG NO: 0217

RD.

ACTION:

12/88

FILE NO:

MINNOVA INC., WESTERN CANADA

01 February 1988

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,996

MINNOVA INC.

DIAMOND DRILL AND GEOPHYSICAL
ASSESSMENT REPORT ON THE

BAR PROPERTY

FILMED

BARRIERE AREA

KAMLOOPS MINING DIVISION, B.C.

SUB-RECORDER
RECEIVED

FEB 12 1988

M.R. # \$.
VANCOUVER, B.C.

92P/8E

51° 00' N

120° 00' W

PN 215

MICHAEL J. GRAY

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I. SUMMARY AND CONCLUSIONS

The SC, Anna, and Bar B claim groups are part of Minnova's Bar property located 15 - 18 km NNE and E of Barriere, B.C. (NTS82M/5W). They were staked by Minnova Inc. in 1983 and 1984.

The 1987 exploration programme consisted of 41 line km of Max Min II and 8 NQ diamond drill holes totalling 829.34m.

The Max Min survey picked up 3 strong conductors. The drill programme was designed to explore Au mineralization hosted by albite-silica alteration within FQP domes, and to explore for volcanogenic massive sulphide mineralization on the flanks of FQP domes. Significant results include 7.51g/T Au over 0.4m within the FQP dome and 10.0m of 1700ppm Zn hosted by tuffaceous cherts flanking the Anna dome.

II. INTRODUCTION

The Bar B, SC and Anna claims were staked by Minnova Inc. in 1983 and 1984. A joint venture was entered into with Chevron Canada Resources in 1985, with Minnova maintaining the position of operator. Previous work on the SC, Anna and Bar B groups has consisted of detailed geological mapping, lithogeochemical sampling, Max Min II surveys and 7 diamond drill holes. This report presents the results of a Max Min II and diamond drilling programme carried out on the claim groups in 1987.

II.1 LOCATION AND ACCESS

The Bar Property is within the Kamloops Mining Division, B.C. (See Figure 1).

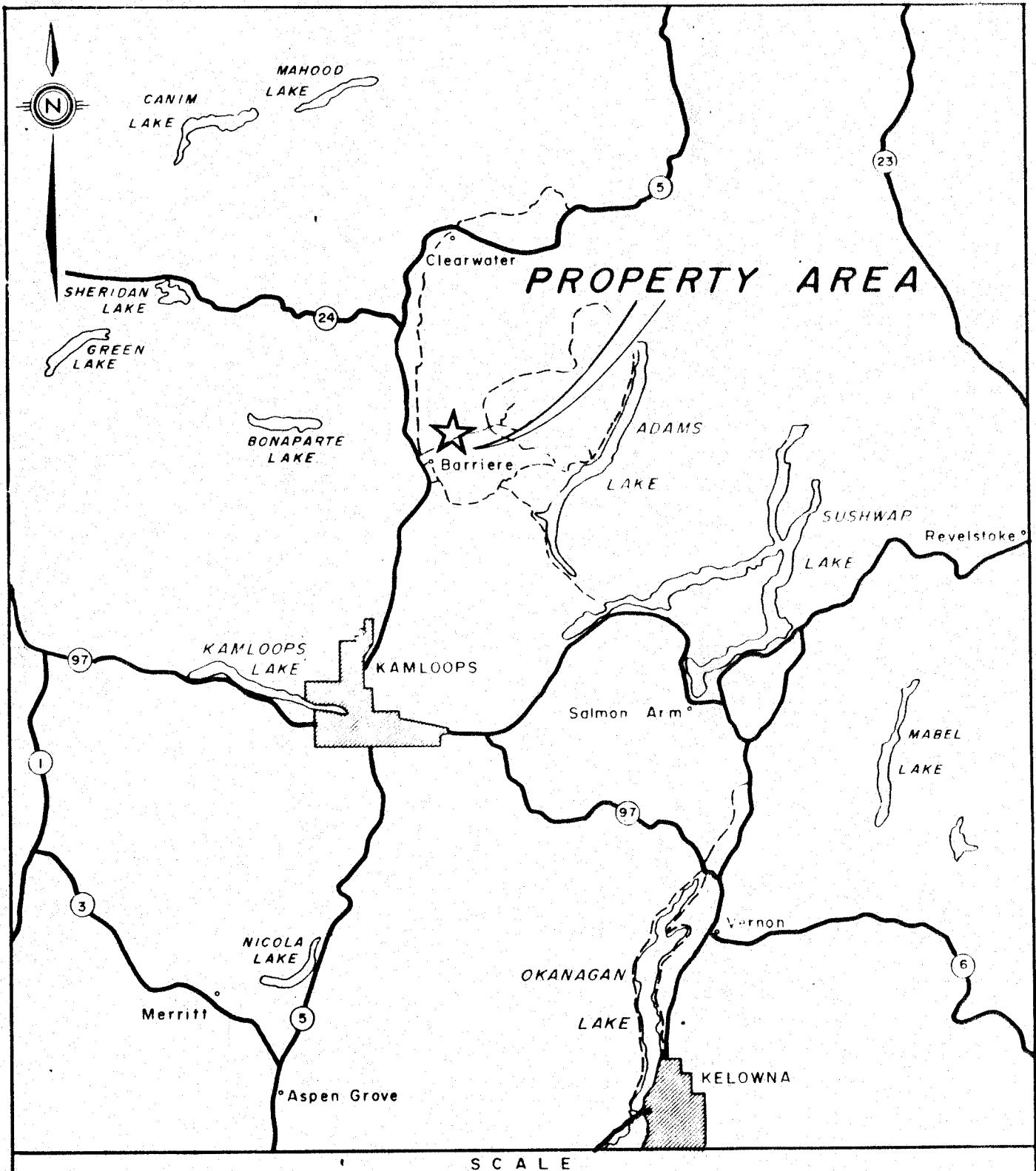
Access is by the East Barriere Lake road (8 km paved), then by logging roads North and South of the Barriere River. The property lies on moderate to gently sloping terrain, with good forest cover.

II.2 HISTORY

The Bar claims were staked in 1983 and 1984, based on reconnaissance work, to cover favourable stratigraphy between the Chu Chua massive sulphide deposit and the Rea Gold discovery. A number of prospecting programmes have been carried out on the Property over the years, but there is no evidence that any systematic exploration programme was attempted. In 1984, Minnova Inc. conducted reconnaissance mapping, and in 1985 and 1986 Max Min surveys, detailed mapping, lithogeochem and drilling.

II.3 TENURE

The Bar property consists of 6 claim groups, which total 515 units. Three of the groups are involved in this report. Pertinent claim data is listed in Table II.3. The claim configuration is shown in Figure 2.



BAR PROPERTY - LOCATION MAP -

JANUARY 1988

MINNOVA

FIGURE 1

BAR PROJECT

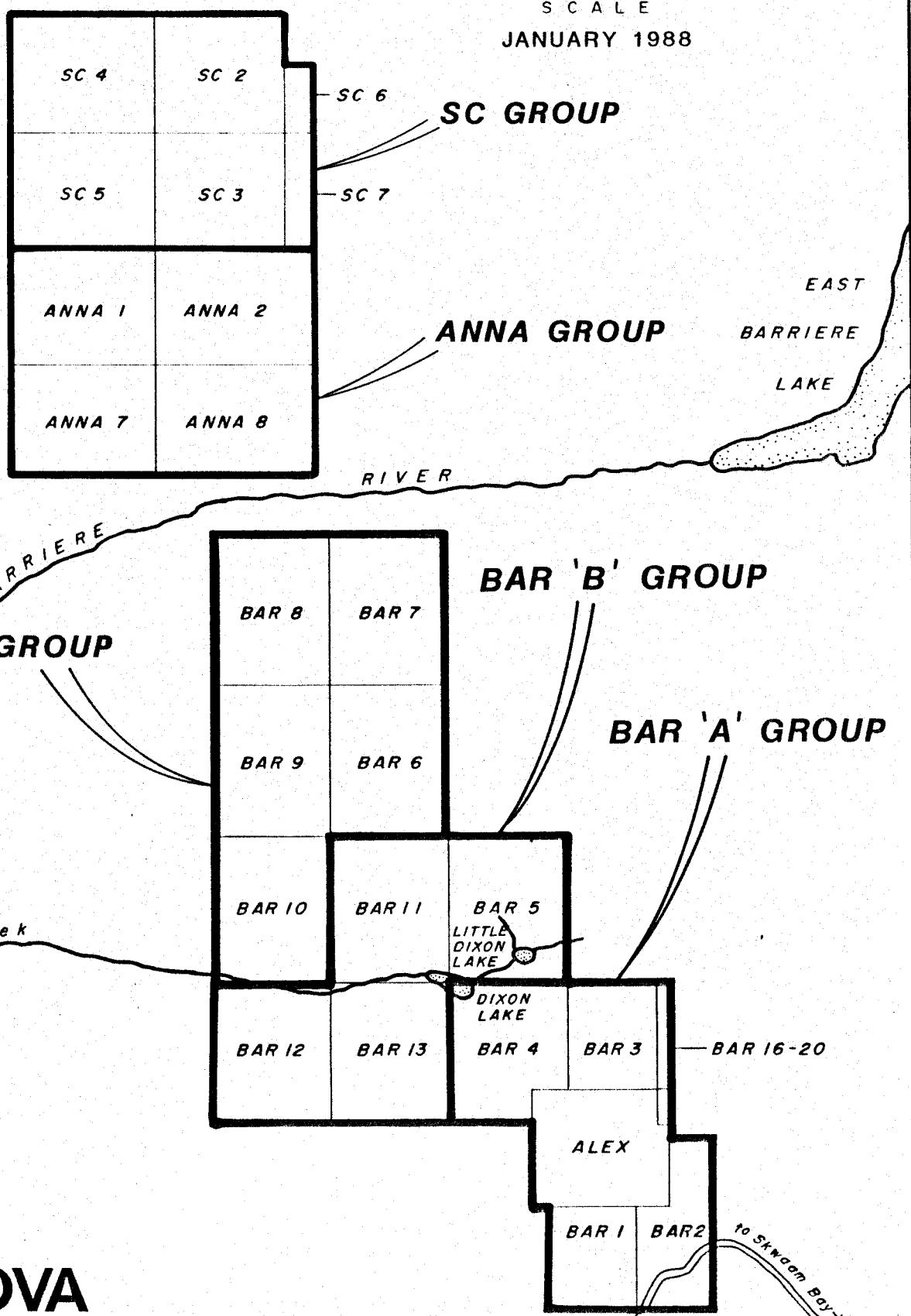
CLAIM CONFIGURATION

FIGURE 2

0 1 2 3 Km

SCALE

JANUARY 1988



MINNOVA

TABLE II.3 CLAIM TENURE

<u>Claim</u>	<u>No. of Units</u>	<u>Record No.</u>	<u>Group</u>	<u>Month</u>	<u>Expiry Date</u>
SC2	20	5561	SC	3	14 Mar 1991
SC3	20	5562	SC	3	14 Mar 1991
SC4	20	5640	SC	5	17 May 1991
SC5	20	5641	SC	5	17 May 1991
SC6	3	5906	SC	10	05 Oct 1992
SC7	6	5907	SC	10	05 Oct 1991
ANNA 1	20	5332	ANNA	12	28 Dec 1990
ANNA 2	20	5333	ANNA	12	28 Dec 1990
ANNA 7	20	5339	ANNA	12	28 Dec 1990
ANNA 8	20	5340	ANNA	12	28 Dec 1990
BAR 11	20	4974	BAR 'B' 11		18 Nov 1990
BAR 5	20	4980	BAR 'B' 11		18 Nov 1990
BAR 12	20	4981	BAR 'B' 11		18 Nov 1989
BAR 13	20	4982	BAR 'B' 11		18 Nov 1990

III. WORK CONDUCTED

The 1987 exploration programme included a Max Min II survey over a new ANNA group grid (36.5 line km) cut during June of 1987. Diamond drilling was conducted from 04 October to 22 October 1987, and consisted of 8 NQ holes for a total of 829.34 metres.

III.1 MAX MIN II SURVEY PROCEDURE

The Max Min II survey was carried out by MWH Consulting Ltd. Coil spacing was 150m and stations read at 25m intervals. Line spacing was 100m. The two frequencies selected for the survey were 444Hz and 1777Hz.

At each station, secant measurements were taken to correct for nominal coil spacing irregularities induced by rough terrain. The in-phase and out-of-phase values, read as a percentage of the primary field strength, were recorded for each of the frequencies.

IV. PURPOSE OF PROGRAMME

The Max Min II survey was used to identify conductive bodies or contacts in the ANNA GROUP area. The diamond drill programme was designed to test the flanks and cores of feldspar-quartz porphyry domes. The holes Bar-8 through Bar-13 tested the core of the SC3 dome for Au mineralization associated with albite-silica alteration zones (SC Group). Bar-14 and 15 tested the north flank of the ANNA group dome and Bar-16 tested the east flank of the Little Dixon Lake dome (Bar B group) for Zn-Cu-Ag-Au volcanogenic massive sulphide mineralization.

V. RESULTS

V.1 MAX MIN II SURVEY

The Max Min II survey covered the ANNA grid (north and south sheets). The accompanying maps (Figures 3-6) at 1:2500 scale for 444 and 1777Hz are located in the back pockets.

The ANNA north grid area (Figures 3 and 4) is electromagnetically active in the SE corner. A weak out-of-phase anomaly was identified between 88 + 00N, 100 + 50E and 85 + 50N, 101 + 50E, and a weak in-phase anomaly between 84 + 00N, 100 + 75E and 82 + 00N and 100 + 50E (on 1777Hz). At the east end of the grid (SE corner) there is a buildup to a positive shoulder, suggesting the coverage is approaching a significant conductor.

The ANNA south area (Figures 5 and 6) shows a strong conductor in the NW corner and west side of the grid on both 444 and 1777Hz. The strong conductor extends from 81 + 00N, 92 + 50E to 77 + 00N, 93 + 00E on both channels, and is picked up on 1777Hz, with minor breaks, to 68 + 00N, 92 + 50E. A second moderate-strong conductor was picked up on the east side of the grid between 72 + 00N, 103 + 00E and 68 + 00N, 101 + 50E (strong on 1777Hz, weak-moderate on 444Hz).

V.II DIAMOND DRILLING

Holes Bar-8 through Bar-13 tested albite silica alteration zones, within the SC3 FQP dome, for Au mineralization. The drill holes essentially follow-up a 1986 intersection of 4.45 g/T Au over 2.52 m (1986 Assessment Report). The 1987 programme returned a number of significant Au intersections, including 7.51 g/T Au over 0.4 m (see Appendix III for assay results).

Bar-14 tested the volcaniclastics and sediments on the Anna grid. The hole intersected a section of tuffaceous cherts and FQP dykes with disseminated sphalerite. An interval of 10.0 m returned an average of 1700 ppm Zn.

Bar-15 tested a pyritic stockwork within the Anna dome. The hole consists of Feldspar-quartz porphyritic rhyolite and minor sediments. No significant base or precious metal values were returned.

Bar-16 tested the east flank of a QFP dome in the Little Dixon Lake area. The hole collared in felsic tuffs, proceeded into a package of pyritic andesite tuffs/lapilli tuffs and finally ended in cherts. No significant base or precious metal values were returned.

VI. RECOMMENDATIONS

There exists good potential for Au mineralization in FQP domes and volcanogenic massive sulphide mineralization on their flanks on the SC, Anna and Bar B groups. It is therefore recommended that:

- i) the SC3 dome Au mineralization be pursued N and S along strike by tightly spaced geochem sampling followed by drilling;
- ii) the north flanking stratigraphy of the Anna dome, which includes the Zn-rich horizon, be followed-up by fill-in mapping and lithogeochem, then by trenching and drilling; and
- iii) the Little Dixon Lake pyritic intermediate volcanic stratigraphy flanking a QFP dome be followed-up by fill-in mapping and lithogeochem, then by trenching and drilling.

APPENDIX I

COST STATEMENTS

ITEMIZED COST STATEMENT

- DRILLING -

DIAMOND DRILLING (Frontier Drilling Ltd.)

Direct 829.34 m @ \$54.94 =	45,563.94
Materials, Manhours, etc. =	<u>12,059.08</u>
	57,623.02

**PREP OF TRAILS AND PADS
(Sparrow Enterprises - Chase, BC)**

WATER TRUCK (M. Purcha - Little Fort, BC)

221 hours @ \$45 per	9,945.00
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**ASSAYS AND GEOCHEM
(Min-En Labs - North Vancouver)**

SALARIES

M. Gray	25 days @ 250 per	
K. Sutherland	5 days @ 250 per	
D. Small	20 days @ 100 per	
A. Ross	5 days @ 150 per	
I. Pirie	3 days @ 400 per	11,450.00

TRUCK	30 days @ \$50 per	1,500.00
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FOOD AND ACCOMODATION	58 man days @ \$50 per	2,800.00
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FIELD EXPENSES		1,500.00
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MISCELLANEOUS (computer, typing, drafting, etc.)		1,500.00
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<u>TOTAL</u>		\$101,972.02
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ITEMIZED COST STATEMENT

- GEOPHYSICS -

LINECUTTING (Quest Canada Ltd.)	
36.5 km @ \$310.00/km	\$11,315.00
MAX MIN II SURVEY (MWH Consulting Ltd.)	
33.9 km, 9 days @ \$550.00/day	4,950.00
SUPERVISION	
K. Sutherland - 4 days @ \$250.00/day	1,000.00
TRUCK	
4 days @ \$50.00/day	200.00
FOOD AND ACCOMODATION	
4 days @ \$50.00/day	200.00
DRAFTING, COMPUTER, TYPING	
	1,500.00
REPORT PREPARATION	
5 days @ \$250.00/day	<u>1,250.00</u>
TOTAL	
	\$20,415.00

APPORTIONMENT

SC Group

direct drilling 459.62m of 829.34m = 55.4%	\$25,242.42
man hours, site prep, etc. @ 55.4%	<u>31,250.00</u>
TOTAL	56,492.50

ANNA Group

direct drilling 245.67m of 829.34m = 29.6%	\$13,486.93
man hours, site prep, etc. @ 29.6%	16,696.79
linecutting & Max Min survey	<u>20,415.00</u>
TOTAL	\$50,598.72

BAR B

direct drilling 124.05m of 829.34m = 15%	\$ 6,834.59
man hours, site prep, etc. @ 15%	<u>8,461.21</u>
TOTAL	\$15,295.80

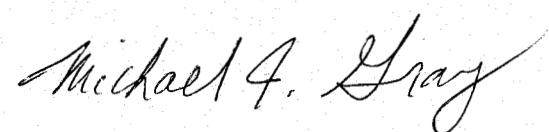
APPENDIX II
STATEMENTS OF QUALIFICATIONS (2)

STATEMENT OF QUALIFICATIONS

I, Michael J. Gray, of Vancouver, British Columbia hereby certify
that:

1. I graduated from the University of British Columbia with a Bachelor of Science Degree in Geology (1985).
2. I am a geologist employed on a temporary basis by Minnova Inc. of 400-311 Water St., Vancouver, B.C.
3. I have been practising my profession for the past 3 years and have been actively involved in mineral exploration for the past 7 years.
4. I have no financial interest in the claims involved in this report, or in Minnova Inc.

Dated at Vancouver, B.C. this ^{1st} day of February , 1988.



Michael J. Gray
Exploration Geologist

STATEMENT OF QUALIFICATIONS

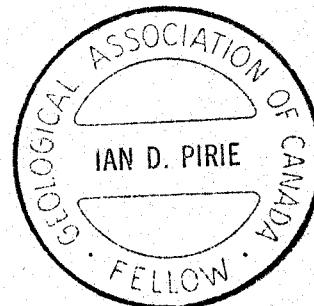
I, Ian D. Pirie certify that:

1. I am an Exploration Geologist residing at 4580 44B Ave., Delta, B.C.
2. I have a BSc (Hons) in Applied Geology from the University of Strathclyde, Glasgow, Scotland (1977) and a MSc (Geology/Geochemistry) from Queen's University at Kingston, Ontario (1980).
3. I have practised my profession since 1977.
4. I personally supervised the work reported herein.

Dated this 12th day of February, 1988.



Ian D. Pirie
Senior Geologist



APPENDIX III

Drill Logs

Core stored at warehouse in
Barrier. 705 West Barrier Town Rd
Min-En Labs did the analyses
~~test~~ by standard assay techniques.

HOLE NUMBER: BAR-8

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: **METRIC UNITS: X**

PROJECT NAME: BAR
PROJECT NUMBER: 215
CLAIM NUMBER:
LOCATION: SC3

PLOTTING COORDS GRID:

NORTH:

FAST:

FIFTEEN

ALTERNATE COORDS GRID: FIELD

NORTH: 97+87N

EAST: 102+ SE

ELEV: 1576.00

COLLAR DIP: -50° 0' 0"

LENGTH OF THE HOLE: 49.38e

WT DEPTH: 0.00m

AL DEPTH: 49.38

COLLAR GRID AZIMUTH: 266° 0' 0"

COLLAR ASTRONOMIC AZIMUTH:

DATE STARTED: October 4, 1987 COLLAR SURVEY: YES
DATE COMPLETED: October 5, 1987 MULTISHOT SURVEY: NO
DATE LOGGED: 0, 0 RRD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NO

CONTRACTOR: FRONTIER DRILLING LTD.
CASING: 1.22M LEFT IN
CORE STORAGE: BARRIER WH

PURPOSE: TESTS ALBITE-SILICA ALTERATION ZONE OF SC3 DOME 10M S AND 5M E OF BAR-3 AS FOLLOW UP TO AU INTER.

DIRECTIONAL DATA:

HOLE NUMBER: BAR-8

DRILL HOLE RECORD

LOGGED BY: N.J. GRAY

PAGE:

HOLE NUMBER: BAR-8

MINNOVA INC.
DRILL HOLE RECORD

DATE: 20-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 1.22	CASING					Overburden.
1.22 TO 49.38	RHY FQP INTR. (ALBITE- SILICA & SER-SILICA ZONE)	<p>Light-medium grey, White-grey, light green-grey. Aph-GM grained, F-m CX. Massive ffp rhyolite intrusive in albite-silica & ser-silica zone. Fp phenos 10-15% <1-4mm, avg. 1x2mm white tabular subhedral. Quartz eyes 3-5% <1-mm round light grey. GM light grey, - loc. white & loc. green, aph. Locally possibly QFP sections.</p>		<p>Hole collars in albite-silica zone then is gradually dominated by ser-silica alteration zone. Alteration identified includes:</p> <ul style="list-style-type: none"> i) silicif'n ii) albite-silica (wh bleached zones?) iii) quartz veins, 2 gen'n +/- calc iv) ser-silica <p>Perv silif'd GM TH-O(?)</p> <p>Quartz veins include 2 distinct gen'n, (A) W-S <1-3mm translucent, light grey loc stvk and (B) milky white 2-20mm thick VW-S quartz +/- py veins.</p> <p>ie) 1.22 - 2.22m: W-M (A); W (B).</p> <p>2.52 - 5.40m: S loc 1 stvk c/a 15 (A), W-M loc M-S (2.52 - 3.50m) 4-15mm c/a 10, 65deg.</p> <p>5.40 - 6.30m: S loc stvk (A), nil (B).</p> <p>6.30 - 10.50m: S-loc 1 (A), M loc S c/a 5-10deg.</p> <p>10.50 - 16.50m: M loc S stvk <<1mm thick inconspicuous veins. (A), nil (B)</p> <p>16.50 - 18.90m: M irreg 1-2mm (A), nil (B).</p> <p>18.90 - 25.00m: W <1-2mm (A). W-M 1-5cm thick c/a 15 and 70deg. (B). (Note at 22.50 c/a 10deg.)</p> <p>25.00 - 25.80m: M-S irreg. 1-2mm (A), M 3-8mm Wh-grey c/a 30 (B).</p> <p>25.80 - 27.75m: massive white quartz vein (B); include bleached stvk (A) fragments (15%) with in vein.</p> <p>27.75 - 33.00m: M-S <<1-mm (A); 2-10mm</p>	<p>Variable tr-10py as f-cg disseminated & py stringers.</p> <p>Loc tr-3% PO as FG blebs & patches.</p> <p>Loc disseminated <1 GA&Sph.</p> <p>ie) 1.22 - 2.22m: <1-1%py.</p> <p>2.22 - 2.57m: 1-2%py.</p> <p>2.57 - 4.00m: 3-SI disseminated & str, c/a 15deg. py.</p> <p>4.00 - 5.00m: 1-2%py.</p> <p>5.00 - 6.09m: 2-3% disseminated py.</p> <p>loc <1% PO @ 5.75 - 5.95</p> <p>6.09 - 6.32m: 3-5% disseminated py.</p> <p>6.32 - 7.17m: 2-3%py F-MG</p> <p>7.17 - 7.42m: 3-5% M-CG Py.</p> <p>7.42 - 9.50m: 1-2%py, loc.</p> <p><1 GA (?) @ 9.00m.</p> <p>9.50 - 11.20m: 3-5%py disseminated & minor 1-2mm thick str c/a 10deg.</p> <p>11.20 - 13.30m: <1-2%py disse.</p> <p>loc discor str. c/a 10deg, loc</p> <p>tr GA @ 13.00m.</p> <p>13.30 - 13.80m: <1-1%py, <1-1%PO.</p> <p>13.80 - 14.05m: BZ M-CG Py.</p> <p>irreg. str c/a 35-40deg.</p> <p>14.05 - 14.55m: 3% F-MG Py, TR-<1%PO.</p> <p>14.55 - 16.04m: TR-1ZPy,</p> <p><1-2% PO blebs.</p> <p>16.04 - 16.66m: TR Py.</p> <p>16.66 - 17.70m: TR-Py, TR-1Z PO.</p> <p>17.70 - 21.60m: TR-3ZPy (Ave 1Z),</p> <p><1-2% PO.</p> <p>21.60 - 22.00m: 3-5%Py F-CG</p> <p>22.00 - 22.30m: 1-2%Py FG,</p> <p>1Z PO blebs.</p> <p>22.30 - 22.65m 3-5%Py mainly CG</p> <p>within quartz veins (B) c/a 10deg.</p> <p>22.65 - 23.45m: Tr Py, 1-3% PO.</p> <p>23.45 - 23.90m: 2% FG Py, 1Z PO.</p> <p>23.90 - 25.20m: 2-3%Py, 1-2%PO.</p> <p>25.20 - 27.90m: <1-1%Py.</p> <p>27.90 - 29.00m: 2-3%FG disse. Py.</p> <p>29.00 - 31.09m: 3-5% F-CG</p>	<p>with limonitic frac. coatings.</p> <p>Note S HM fracture coatings with milky white quartz veins and whitish bleached/silicified alt'n.</p>

HOLE NUMBER: BAR-8

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

PAGE: 2

MINNOVA INC.
DRILL HOLE RECORD

DATE: 20-January-1988

HOLE NUMBER: BAR-B

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		White - light grey bleached/silicified sections - albite - silica. ie) 2.57 - 4.17 4.80 - 6.40 7.10 - 7.70 10.56 - 11.06 11.55 - 11.85 26.80 - 28.80 34.90 - 35.50 36.00 - 41.60 patchy - perv. 44.90 - 45.10 48.90 - 49.15 END OF HOLE		M-S c/a 0-10deg. (B). 33.00 - 33.40m: S stvk 1-3mm c/a 0-30deg. (A), nil (B). 33.40 - 34.85m: M-S loc stvk <1-2mm (A) nil (B). 34.85 - 39.00m: S loc M stvk <1-2mm (A) nil (B). 39.00 - 41.40m: S loc I <1-3mm c/a 0-40 (A), M-S 3-10mm c/a 0-10deg. 41.40 - 43.20m: M 1-2mm c/a 10 (A), W-M irreg (B). 43.20 - 45.45m: W-M <1-mm (A), W loc S 1-3mm +/- CALC c/a 0-20deg. (B). 45.45 - 47.40m: W <1-1 (A), nil (B). 47.40 - 49.38m: M-S loc discon stvk <1-mm (A), W loc M lcm, c/a 5deg. (B). Ser. alt'n as vague light green env. and perv. green castings. ie) 12.10 - 16.00m: M-S env. 16.00 - 23.40m: semi-perv. 33.40 - 34.20m: W env. 37.80 - 40.20m: W env. 45.50 - 48.90m: M env.	Py dissems + assoc. & grains. 31.09 - 31.74m: 1-2ZPy. 31.74 - 32.27m: 3-5ZPy F-CG mainly with quartz veins. 32.27 - 34.70m: 1-2ZPy, TR-1ZPO locally. 34.70 - 35.20m: 2-3ZPy. 35.20 - 38.00m: <1-2ZPy, loc TR Sph @ 36.95m. 38.00 - 38.40m: 2-3ZPy. 38.40 - 39.80m: <1-2% FG Py. 39.80 - 40.76m: 3-Loc 5ZPy. 40.76 - 41.10m: 2-3ZPy. 41.10 - 44.70m: <1-2ZPy, Loc (1-1ZPO @ 43.45-43.80m 44.70 - 45.10m: 2-3ZPy. 45.10 - 49.30m: <1-2ZPy, Loc TR-1Z PO @ 48.00 - 49.10.	

HOLE NUMBER: BAR-B

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

PAGE: 3

HOLE NUMBER: BAR-8

ASSAY SHEET

DATE: 27-January-1988

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL								COMMENTS
				AG ppm	AS ppm	B ppm	CU ppm	PB ppm	SB ppm	Zn ppm	AU ppb	AU g/T	Cu %	PB %	ZN %	AG g/T	
7734	1.22	2.50	1.28	.4	5	5	4	14	1	38	15						
7735	2.50	4.00	1.50	.6	5	3	6	23	1	26	145						
7736	4.00	5.50	1.50	.3	1	2	3	15	1	40	65						
7737	5.50	7.00	1.50	.2	7	2	4	13	1	24	60						
7738	7.00	8.50	1.50	.4	5	1	4	55	1	39	25						
7739	8.50	10.00	1.50	.3	1	1	4	20	1	49	70						
7740	11.50	13.00	1.50	.6	1	5	6	56	1	73	100						
7741	13.00	14.50	1.50	.8	12	5	11	47	1	49	1050	1.23					
7742	14.50	16.00	1.50	.4	3	3	5	11	1	45	50						
7743	16.00	17.50	1.50	.7	1	9	4	37	1	50	70						
7744	17.50	19.00	1.50	.5	3	6	3	18	1	46	30						
7745	20.50	22.00	1.50	.9	1	8	18	385	2	153	760	1.39					
7746	22.00	23.50	1.50	.5	2	5	13	59	1	77	30						
7747	23.50	25.00	1.50	.3	8	10	3	20	2	43	20						
7748	25.00	26.50	1.50	.2	13	9	2	28	1	47	5						
7749	26.50	28.00	1.50	1.0	24	2	5	213	3	42	10						
7750	28.00	29.50	1.50	.6	18	4	9	101	1	182	65						
7751	29.50	31.00	1.50	.8	15	3	5	23	2	93	90						
7752	31.00	32.50	1.50	.7	13	2	9	16	1	68	360						
7753	32.50	34.00	1.50	.4	4	5	9	26	1	150	180						
7754	34.00	35.50	1.50	.4	6	3	5	10	1	82	215						
7755	37.00	38.50	1.50	.1	2	1	6	31	1	59	60						
7756	38.50	40.00	1.50	.3	5	2	6	183	1	44	10						
7757	40.00	41.50	1.50	.3	5	5	4	64	1	51	20						
7758	41.50	43.00	1.50	.3	3	5	3	25	1	126	150						
7769	43.00	44.50	1.50	.3	11	1	3	10	1	46	5						
7770	44.50	46.00	1.50	.2	9	1	4	29	1	59	30						
7771	46.00	47.50	1.50	.2	6	1	2	18	1	44	20						

HOLE NUMBER: BAR-8

ASSAY SHEET

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HOLE NUMBER: BAR-8

GEOCHEM. SHEET

DATE: 27-January-1988

Sample	From (m)	To (m)	Length (m)	AL2O3	BA	CAO	FE2O3	K2O	MgO	MnO2	Na2O	SiO2	SR	TiO2	ZR	TOT	AG	AS	B	CU	PB	SB	ZN	AU	AU g/T
				%	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppb	ppb		
7942	10.00	11.50	1.50	12.30	.010	.03	2.18	.13	.05	.01	6.66	76.04	.01	.18	.013	97.62	.4	8	1	7	44	1	23	390	
7943	19.00	20.50	1.50	12.99	.072	.04	1.54	1.43	.14	.02	4.80	76.42	.01	.20	.014	97.69	.7	7	3	7	86	1	79	85	
7944	35.50	37.00	1.50	12.87	.007	.09	.95	.10	.06	.03	7.01	76.22	.01	.18	.013	97.53	.5	8	1	4	15	1	38	300	
7947	47.50	49.38	1.88	13.47	.067	.08	1.13	1.09	.10	.03	5.41	75.96	.01	.20	.019	97.56	.3	7	1	2	10	1	30	5	

HOLE NUMBER: BAR-8

GEOCHEM. SHEET

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HOLE NUMBER: BAR-9

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

METRIC UNITS: X

PROJECT NAME: BAR
PROJECT NUMBER: 215
CLAIM NUMBER:
LOCATION: SC3

PIOTTING COORDS. GRID:

NORTH:

NORTH

EAST
ELEV.

ALTERNATE COORDS GRID: FIELD

NORTH: 98± 6

EAST: 103± 3

ELEV: 1576

COLLAR NIP: -50° 0' 0"

LENGTH OF THE HOLE: 48.16

START DEPTH: 0.00

FINAL DEPTH: 10.16

COLLAR GRID AZIMUTH: 270° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 360° 0' 0"

DATE STARTED: October 6, 1987 COLLAR SURVEY: YES
DATE COMPLETED: October 7, 1987 MULTISHOT SURVEY: NO
DATE LOGGED: 0, 0 RRD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NO

CONTRACTOR: FRONTIER DRILLING LTD.
CASING: 0.61M LEFT IN HOLE
CORE STORAGE: BARRIER WH

PURPOSE: TEST SC3 ALBITE-SILICA-PY ALTERED RHYOLITE DOME 6M FROM AU INTERSECTION IN BAR-3

DIRECTIONAL DATA:

UNIT E MURKEDS. 989-9

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LOGGED BY: M.J. GRAY

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 0.61	CASING					
0.61 TO 48.16	RHY FBP INTR. -ALBITE SILICA ZONE-	<p>Lt.grey, loc greenish grey, also white veins. Aph+ga, F-MG CX</p> <p>Massive FBP Rhy intrusive in albite-silica zone. Fp phenos 10-15% <1-4mm (ave 2-3mm) tabular white subh phenos & 1-2mm laths.</p> <p>Qtz eyes 3-5% (ave 5%) <1-2mm, round lt. grey. (Qtz eyes difficult to disting without hand lens due to mx colour). Mx is light grey aph mainly silicified.</p> <p>Textures largely obscured at 0.61 - 12.00 m by qtz flooding.</p> <p>Note local QFP dominated sections, but no signs of intr. relationships.</p> <p>Bleached/silicified wh-grey areas with good (a) Stvk and (b) pyritic veins. Charz by blocky core and abundant limonite.</p> <p>0.90 - 3.10m 3.60 - 4.50m 6.00 - 8.50m 10.60 - 11.00m 16.50 - 18.70m 21.30 - 22.16m 38.85 - 39.10m 39.63 - 39.83m 40.50 - 41.30m 43.08 - 43.70m 44.25 - 44.35m 47.30 - 47.40m 47.75 - 48.16m</p> <p>Loc in situ & hydrothermal BX, minor rotation of frags.</p> <p>@ 3.70-4.00 26.50-26.80 BX veins</p> <p>END OF HOLE</p>		<p>Hole is considered to be part of the albite-silica zone (as defined by litho geochem on surface).</p> <p>Albite-silica alt'n character. include</p> <ul style="list-style-type: none"> (a) Semi pervasive-pervasive silicification, (b) qtz vein flooding/Stvk (c) Lt-grey whitish Aph Gm. <p>- Pervasive silicification TH-0, qtz veins include 2 generations; (A) early LT-M grey translucent, <1-10mm thick VFG - Cont-Disson (Note (A) includes 2 frac events) and (B) late cross cutting milky white 1-30mm veins as indiv. veins + Stvk floods.</p> <p>+/- Lim +/- Py, +/- Mn, +/- Ga.</p> <p>i.e. 0.61 - 1.45m:</p> <p>W-M <1mm.</p> <p>(A); a 10-15mm + SX-10% py, C/A 5</p> <p>(B) 1.45 - 3.10m: S-I, <1-4mm thick Stvk (A); a 10mm C.A.0-5 deg. (B)</p> <p>3.10 - 8.42m</p> <p>Vague M <1-2mm (A); S Stvk + Lim + local assoc py str C/A E/30 deg. (B)</p> <p>8.42 - 12.00m:</p> <p>S Loc I vague <1mm Stvk (A); W-M 10-20mm + CG Dis Py C.A.5 deg (B)</p> <p>12.00 - 25.29m:</p> <p>S-I <1mm- 3mm thick frac with qtz cont-discon +/- patches of carbonate (Mg) <<1mm frac & 2-3 mm C.A. 30-0 deg +/- Tr py +/- green cast ser env (A); nil apparent (B)</p> <p>25.20 - 26.50m:</p> <p><<1-1mm thick (A); W-M 1cm thick(A) + chl + py C/A 40 deg (B)</p> <p>26.50 - 28.29m:</p> <p>M <1-1mm (A); Nil (B)</p> <p>28.29 - 39.60m:</p> <p>M Loc S-I <1-1mm (A); W 1-2cm.thick +CG Py C.A. 0-10 deg. (B)</p> <p>39.60 - 41.60m:</p> <p>S Loc S-I Stvk <1-2mm (A); Nil (B)</p> <p>41.60 - 41.93:</p>	<p>Variable Tr-BZ py as CG diss'n. Diss within qtz veins along margins minor py <1-2mm str. Tr. po locally. Locally Tr-<1Z diss med brown - reddish sph, also Tr bluish metallic galena?</p> <p>i.e) 0.61 - 1.31m: 3-SX MG-Py, Diss+Str Diss (C.A. 5-30 deg) 1.31 - 3.00m: <1-2% py, diss 3.00 - 3.70m: 2-3% py, diss blebss, Tr Ga(?) 3.70 - 5.43m: <1-2% py, diss, blebs. 5.43 - 5.83m: 2-3% py, diss, str C.A. 10 deg; Tr Ga or Tet(?) 5.83 - 6.50: 1-2% py, Mg-Cg diss /clusters 6.50 - 7.97: 3% py, F-Cg, diss + blebs. 7.97 - 9.67: 1-2% py, <1-2% Po, diss F-MG 9.67 - 10.85m: <1% py, <1% Ga(?) 10.85 - 13.10m: 3-5% py, F-CGF diss along QV & 1-2mm Discon Str C/A 15 deg. Tr.Ga (?Blue) @ 11.7m, <1% sph.</p> <p>13.10 - 16.24m: 1-2% py, diss, Tr Po 1-3% grey-blk mineraal FG Diss 16.24 - 17.09m: 2-3% py, FG Diss 1-2% grey mineral 17.09 - 20.03m: <1-2% py, FG Diss loc 3% py 20.03 - 21.94m: 3-8% py (ave 5%) as irreg 1-2mm Str with qtz C/A 5-20, discon frac coatings, also diss.</p>	<p>Although the drill hole is in FBP from start to finish, distinct alt'n packages are readily distinguishable. Note dendritic env. on qtz vein margins.</p> <p>Along qtz vein & 1-2mm discon Str C/A 15 deg.</p> <p>Note 3-5Z dendritic knobby looking Mn as frac coatings and envelopes assoc. with (B), ie) 0.61 - 12.00m & locally throughout hole.</p> <p>Note: 60% recovery @ 0.61 - 3.0m.</p> <p>Note Black/grey metallic oxide 1% throughout hem??</p> <p>Note internal fract within (B) Gen'n. Also note blocky core/limonitic zones largely confined to white-bleached alt'n.</p>

HOLE NUMBER: BAR-9

MINNOVA INC.
DRILL HOLE RECORD

DATE: 19-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
				<p>Silicf/Bx crackle <1-1% (A); M?</p> <p>4-8mm +/- carbonate (B)</p> <p>42.33 - 45.17:</p> <p>S-I, 1-1mm Stvk (A); VW-W 5-10mm</p> <p>C/A10 deg (B)</p> <p>45.17 - 45.72m:</p> <p>Flood/massive (B)</p> <p>45.72 - 48.16m</p> <p>S-I <1-2mm Stvk (A); W 1-2cm C/A 5 deg</p> <p>+py + Lim (B)</p> <p>- W(?) perv ser as a lt greening cast</p> <p>.5-3cm irreg envelopes with fract, ie</p> <p>8.52 - 8.92m</p> <p>15.70 - 16.14m</p> <p>16.89 - 21.74m</p> <p>22.55 - 22.85m</p> <p>23.25 - 24.05m</p> <p>24.50 - 25.00m</p> <p>25.40 - 26.50 m + chl. env. with qtz.</p> <p>27.40 - 28.00m</p> <p>28.00 - 30.67 Perv green</p> <p>31.09 - 32.20m</p> <p>35.29 - 38.31m</p> <p>39.23 - 39.63m</p> <p>41.90 - 42.30m</p> <p>43.68 - 43.98m</p> <p>44.81 - 45.21m</p> <p>47.25 - 47.65m</p>	<p>21.94 - 25.00m:</p> <p><1% py, Fg Diss</p> <p>25.00 - 26.38m:</p> <p>2-3% Py, diss + discon Str loc</p> <p><1% sph patches 6x6mm @ 25.55</p> <p>26.38 - 26.98m:</p> <p>3-5% py, fracc filling M-CG py,</p> <p>C.A. 60 deg.</p> <p>26.98 - 29.66m</p> <p>1-2% diss py, loc Tr Sph 2x3mm grain</p> <p>29.80m</p> <p>29.66 - 32.33m:</p> <p><1-2% py diss, F-CG 1-2% blebs Po,</p> <p>loc <1% Ga (bluish) at 29.76m, loc</p> <p><1-1% Sph diss in veinlets @</p> <p>30.36 - 30.75m</p> <p>and with py</p> <p>32.33 - 33.70m:</p> <p>1-2% py, diss, loc <1% sph @ 32.44</p> <p>33.70 - 37.40m:</p> <p>3-5% py, diss + Str, 1-2mm, C/A 5deg.,</p> <p>loc 1-2% Po</p> <p>37.40 - 38.00m:</p> <p>2% py, blebs</p> <p>38.00 - 38.89m:</p> <p>3-5% py, diss in QV</p> <p>38.89 - 40.23m:</p> <p>1-2% py, FG Diss</p> <p>40.23 - 43.28m:</p> <p>2-3% py, Fg diss + diss in Str.</p> <p>43.28 - 44.81m:</p> <p><1-2% Sph in discon QV as</p> <p>dissem grains @ 43.50 - 43.05m</p> <p>44.81 - 48.16m:</p> <p><1-1% Fg-Cg diss py & <1-1% Po as</p> <p>F blebs.</p>	

HOLE NUMBER: BAR-9

DRILL HOLE RECORD

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HOLE NUMBER: BAR-9

ASSAY SHEET

DATE: 19-January-1988

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					Comments	
				AG ppm	AS ppm	B ppm	CU ppm	PB ppm	SB ppm	ZN ppm	AU ppb	AU g/T	CU Z	PB Z	ZN Z
7651	0.61	1.30	0.69	1.7	8	7	15	64	1	90	70				
7652	1.30	3.00	1.70	0.4	5	4	9	21	1	31	40				
7653	3.00	4.50	1.50	0.6	8	3	7	29	1	21	50				
7654	4.50	6.00	1.50	0.8	7	4	10	39	1	55	20				
7655	6.00	7.50	1.50	0.7	10	2	6	14	1	17	50				
7656	7.50	9.00	1.50	0.6	12	2	6	8	1	20	5				
7657	9.00	10.50	1.50	0.8	6	3	7	30	1	92	10				
7658	10.50	12.00	1.50	2.2	10	5	44	173	1	110	300				
7659	12.00	13.50	1.50	0.8	3	5	11	22	1	55	160				
7660	15.00	16.50	1.50	0.7	12	3	6	18	1	62	340				
7661	16.50	18.00	1.50	1.0	8	3	4	12	1	66	130				
7662	18.00	19.50	1.50	0.8	2	4	5	28	1	37	90				
7663	19.50	20.50	1.00	0.8	4	4	4	24	1	33	5				
7664	20.50	21.30	0.80	1.1	1	9	26	20	4	64	140				
7665	21.30	22.50	1.20	1.1	12	1	6	12	1	22	15				
7666	24.00	25.50	1.50	0.8	5	4	6	21	1	34	60				
7667	25.50	27.00	1.50	1.4	9	8	15	133	1	404	780	.80			
7668	27.00	28.50	1.50	1.1	16	3	6	20	1	41	200				
7669	30.00	31.50	1.50	0.9	40	5	13	16	1	267	790	.88			
7670	31.50	33.00	1.50	1.1	24	1	8	22	1	44	560				
7671	33.00	34.50	1.50	0.6	9	1	4	16	1	22	40				
7672	34.50	36.00	1.50	1.3	15	3	9	21	1	18	1600	3.35			
7673	35.00	37.50	1.50	0.8	11	2	8	21	1	32	670	.72			
7674	37.50	39.00	1.50	0.9	12	2	9	18	1	39	350				
7675	40.50	42.00	1.50	0.7	11	1	5	36	1	59	120				
7676	42.00	43.50	1.50	0.9	14	2	4	76	1	55	70				
7677	43.50	45.00	1.50	0.5	10	1	4	12	1	33	40				
7678	45.00	46.50	1.50	0.7	9	1	5	11	1	18	30				

HOLE NUMBER: BAR-9

ASSAY SHEET

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HOLE NUMBER: BAR-9

GEOCHEM. SHEET

DATE: 27-January-1988

Sample	From (m)	To (m)	Length (m)	AL2O3	BA	CAO	FE2O3	K2O	MgO	MnO2	Na2O	SiO2	SR	TiO2	ZR	TOT	Al6	As	B	Cu	Pb	SB	ZN	AU	AU
				%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	g/T	
7926	13.50	15.00	1.50	11.82	.006	.24	.92	.07	.08	.03	6.90	77.61	.01	.15	.008	97.85	0.4	9	2	5	12	1	21	60	
7927	22.50	24.00	1.50	12.87	.029	.12	1.14	.48	.11	.03	6.12	76.73	.01	.19	.011	97.85	0.4	2	1	5	19	1	28	5	
7928	28.50	30.00	1.50	12.08	.074	.10	2.73	1.43	.19	.12	3.94	76.94	.01	.19	.013	97.81	1.1	36	5	12	35	1	74	450	
7929	39.00	40.50	1.50	13.11	.034	.10	3.43	.48	.21	.11	6.05	74.11	.01	.18	.012	97.84	1.0	3	4	5	11	1	57	420	
7930	46.50	48.16	1.66	11.19	.017	.71	1.67	.29	.22	.07	5.60	77.99	.02	.17	.008	97.96	0.7	6	3	4	22	1	29	10	

HOLE NUMBER: BAR-9

GEOCHEM. SHEET

PAGE: 1

HOLE NUMBER: BAR-10

MINNOVA INC.
OPTICAL HOLE RECOR

IMPERIAL UNITS: **METRIC UNITS:** X

PROJECT NAME: BAR
PROJECT NUMBER: 215
CLAIM NUMBER:
LOCATION: SC3

PLATTING RECORDS GRID

GRID
NORTH
EAST
ELEV

ALTERNATE COORDS: GRID: FIELD

NORTH: 98+ 2
EAST: 101+5
ELEV: 1573

COLLAR DIP: -48° 0' 0"
OF THE HOLE: 61.56m
START DEPTH: 0.00m
FINAL DEPTH: 61.56m

COLLAR GRID AZIMUTH: 90° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 360° 0' 0"

DATE STARTED: October 7, 1987
DATE COMPLETED: October 8, 1987
DATE LOGGED: 0

COLLAR SURVEY: YES
MULTISHOT SURVEY: NO
BOD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NO

CONTRACTOR: FRONTIER DRILLING LTD.
CASING: 0.61M LEFT IN HOLE
CORE STORAGE: BARRIER WH

PURPOSE: TESTS ALBITE-SILICA ALTERATION ON SC3 DOME AS FOLLOW-UP TO BAR-3 AU INTERSECTION

DIRECTIONAL DATA:

HOLE NUMBER: BAR-10

DRILL HOLE RECORD

LOGGED BY: M.J. GRA

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MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: BAR-10

DATE: 19-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 0.61	CASING					
0.61 TO 61.56	RHY FQP INTR (ALBITE- SILICA & SER-SILICA ZONES)	Lt. grey, lt. green, loc med. - dark grey. Aph-GM Massive FQP Rhy intr. in the albite & sericite silica zone. Fp phenos 8-15%, (1-4mm, (ave 10%, 1x2mm) white tabular-lathlike, subhedral. Qtz eyes 3-8% (Ave 3-5%), (1-1mm round, lt. grey eyes. GM lt grey, loc whitish, loc green aph.		Hole collars in the albite-silica zone then proceeds into the seicite-silica alt'n zone.	Variable Tr-10% py as Fg disse, M-CG py disse in veins & irreg.py str +/- lim (<1-8mm. ie) 0.61 - 2.23m: 1-2Z diss Fg py 2.23 - 2.43m: 3-5Z diss Fg. & str C/A 45 deg, py 2.43 - 2.73m: 1-2Z Fg py 2.73 - 3.85m: 2-3Z py diss & selvage to qtz +/- calc veins. 3.85 - 4.76m: 1-2Z py, 1-3Z PO as bleb in Str qtz/ calc & diss blebs, loc. Tr Tet(?) 4.76 - 4.90m: 3Z py diss + diss in str C/A 0 deg, 2Z PO. 4.90 - 5.35m: <1-2Z py, tr - 1Z PO 5.35 - 5.50m: 3-5Z py F-Mg, disse +/Str. 5.50 - 5.87m: 10Z py irreg veins F-Cg C/A 15 deg 2-5mm 5.87 - 12.50m: Tr-<1Z py, Tr Ga @ 7.50m 12.50 - 12.80m: 1-3Z py diss with veins Fg loc 1-2Z PO.	
		Note BX @ 6.10 - 8.80m 15.20 - 17.50m 47.85 - 48.45m 49.50 - 49.55m		6.00 - 7.30m: S Loc I (<1-1mm (A), M 2-10mm C/A 90 - 65 deg. (B) 7.30 - 12.20m: W (A), W-M 1-3mm (B) 12.20 - 13.40m: S Loc I (<1-1mm (A), W-M 4-8mm C/A 45-70 deg (B) 13.40 - 15.94: W-M (A), W (B) 15.94 - 17.74m: M Loc S 1-2mm (A), M 2-20mm C/A	12.80 - 13.15m 3-5Z py as M- Cg diss & str 1-2mm C/A 45 deg. (Note Lim Boxwork) 13.15 - 14.94m: 1-2Z py, F-Cg, Tr Ga @ 13.15 - 13.45m 14.94 - 15.30m: 3Z Diss py fg in irreg frac. 15.30 - 15.90m: 1-2Z py. 15.90 - 19.95m: Tr <1Z py, loc <1Z sph & Ga @ 17.16 - 17.26m.	Note black/brown fibrous (?) mineral i in qtz vein 4mm thick @ 4.00m.
		END OF HOLE				

HOLE NUMBER: BAR-10

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: BAR-10

DATE: 19-January-1969

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
				45 & 80 deg. (B) 17.74 - 20.93m: M-S Loc S. Stuk <1-2mm (A); W 1-3mm C/A 70 - 45 deg(B) 20.93 - 22.00m: M Loc S <1-1mm (A); W-M 1-4mm C/A 80 deg (B) 22.00 - 25.88m: M Loc S <1-1mm grey C/A 80 degd (A); W 3-30mm, C/A 80 & 30 deg. Lim-rich (B) 25.88 - 26.53m: M (A), W-M 1-5mm, C/A 70 & 35 deg. (B) 26.53 - 28.05m: M (A), VW-W (B) 28.05 - 29.24m: S <1-1mm (A); M loc S 4mm C/A/ 70 (B). 29.24 - 29.84m: M-S <1mm (A), VW (B) 29.84 - 30.24m: M-S <1mm (A); M-S qtz +/- tour (?) +/- carb, 1-5mm C/A 80 - 55 deg.(B) 30.24 - 30.65m: S <1mm C/A 0 & 80 DEG. (A), nil (B) 30.65 - 32.30m: S Loc I stwk <1-1mm (A); a loc S 2-10mm C/A 80 & 60 deg. + py (B) (+/- Tour (?)) 32.30 - 33.15m: S Loc I <<1-1mm cont-discon (A); VW-W 2-25mm C/A 80 deg. (B) 33.15 - 33.72m: Vague <<1-1mm S (A), M&S 4-20mm C/A 70 - 80 deg. (B) 33.72 - 36.43m: M Loc S <1-1mm (A); 4-20mm ave 5mm W loc M @ 34.26m C/A 80 deg. (B) 36.43 - 39.40m: M <1 cont-discon (A); VW loc W-M (39.00 - 39.40) 4mm C/A 70 deg (B) 39.40 - 40.50m: M- loc S <1mm (A), M qtz-lim-py C/A 80 deg (B) 40.50 - 43.64m: M-Loc S <1-1mm (A), M & M-S white and greyish white qtz + black ox(?) + brown-green bladed min as selvage to veins C/A 75-80 deg, 1-10mm with	19.95 - 20.65m: 1-2Z Fg diss py. 20.65 - 21.16m: <1Z py 21.16 - 21.75m: 2-3Z F-m.g. disse 21.75 - 22.05m: Tr-<1Z py, 1Z PO 22.05 - 22.20m: 2-3Z py in irreg. frac. 22.20 - 22.50m: <1-1Z py. 22.50 - 23.10m: 2-3Z .py F-g along frac, 1-3Z blebby PO 23.10 - 23.25m: 5Z M-c.g. py as massive sections in 1cm thick (B) +/- calc vein, 1Z PO blebs. 23.25 - 23.97m: <1-2Z py irreg str & disse in sil'fn, 1-2Z PO 23.97 - 24.35m: 3-5Z M-c.g. py diss with qtz veins and sil'fn, <1Z PO 24.35 - 25.21m: Tr- <1Z py, <1Z PO 25.21 - 25.96m: 1-2Z py, 1-2Z PO blebs & irreg str C/A 0 deg. 25.86 - 27.00m: 2-3Z py F-g disse, loc <1-2Z PO blebs 27.00 - 27.15m: 3-5Z M-g py. 27.15 - 27.65m: Tr - <1Z py 27.65 - 29.10m: 2-3Z F-m.g. py loc <1 Tr PO @ 27.65 - 28.10m 29.10 - 30.93m: Tr-<1Z py, <1-2Z PO blebs 30.93 - 32.25m: 2-3Z py loc 5Z @ 31.85 m. Py-qtz 1 cm thick C/A 60 deg., <1Z PO mainly in ser alt'n. 32.25 - 33.15m: Tr-1Z py, Tr-1Z PO	

HOLE NUMBER: BAR-10

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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HOLE NUMBER: BAR-10

MINNOVA INC.
DRILL HOLE RECORD

DATE: 19-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
				lt. grey sili'n env. (B) 43.64 - 45.11m: S loc I, <1-2mm stwk(A); M 4-25mm (B). (50% milky white) 45.11 - 45.57m: M-S (A), W (B) 45.57 - 49.57m: S-I Stwk (A); W-M 3-30mm C/A 70 - 60 deg. (B) 49.57 - 49.97m: Massive milky white C/A 80 (B) 49.97 - 52.80m: S Loc I stwk (A); W-M Loc M 3-30mm C/A 80 - 60 deg (B) 53.80 - 56.69m: M-Loc S <<1-2mm C/A 30-80 deg. (A); VW-W 1cm thick C/A 75 deg (B) 56.69 - 57.80m: S loc. I (A) 1cm thick qtz + py, +/- Calc C/A 65 & 80 deg. (B) 57.80 - 59.00m: I-S stwk (A), W 1cm C/A 5 & 80 deg(B) 59.00 - 60.04m: S (A), Nil-VW (B) 60.04 - 61.56m: M-S cont-discon <<1-2mm (A), VW loc W-M 4mm C/A 65 deg. (B) - Black alt'n locally as patches, stwk along frac & semiperv sections, ie) 8.10 - 8.90: <SI patchy 10.30 10.60: 20% stwk 13.90 - 15.60: 30% patchy 16.00 - 18.00: semi perv. 18.00 - 18.30: 30% patchy 22.00 - 23.00: 10-20% stwk 59.75 - 59.95: 15% patchy White bleached/silicified sections, albitized(?) i.e. 1.25-1.40, 12.80 - 13.00m, 27.82 - 27.85, 28.07 - 28.45, 28.90 - 29.30, 31.4 - 31.50, 33.20 - 34.00, 34.40 - 34.95, 35.58 - 36.88, 39.95 - 40.30, 47.60 - 47.85, 48.35 - 48.50, 49.95 - 49.60, 49.97 - 50.07, 51.10 - 51.20, 51.57 - 52.00, 54.00 - 59.00 intermittent patches. - Sericite silica alt'n as lt-m green, perv. casting K-rich zone, crosscut by (B) gen'n qtz with light grey silf'	33.15 - 34.98m: 2-5% (ave.3%) py M-g, diss and irreg str, loc 1-2% PO @ 33.67, 34.17, loc. 3% C-g sph with py in 2 qtz veins C/A 80 Deg @ 34.28 - 34.40m. 34.90 - 35.58m: 2-3% py loc str. 35.59 - 36.38m: Tr-2% py, loc. 1Z PO. 36.38 - 37.38m: 2-3% Dissem. F-g Py, loc <1Z PO. 37.38 - 38.03m: (1-2% py, Tr - <1Z PO 38.03 - 38.50m: 1Z PO 38.50 - 39.70m: 1-2% PY; <1-2 LOC. 3% PO most of interval. 39.70 - 40.48m: 3-5% py as M-c.g str & Diss along Str & disse, i.e.) 38.55 1 cm thick C/A 75 deg. py str. 40.48 - 41.05m: 2-3% py F-g disse. 41.05 - 42.43m: <1-2% py. 42.43 - 42.93m: 2-3% py loc 5% f.g. py in grey sifl areas, loc <1Z py at 42.68m 42.93 - 43.84m: 1-2 loc 3% diss F-m-g. py, loc 1 sph @ 43.70m 43.84 - 44.14m: 2-3% py 44.14 - 44.81m: 1-2% py. 44.81 - 45.20m: 2-3% py, <1Z PO 45.20 - 49.00m: 1-2% loc 3% py, loc Tr Ga @ 46.27m 49.00 - 49.57m: 1-3% F-C.g py 49.57 - 49.92m: Tr-1Z py 49.92 - 50.60m: 3-5% py, C-m-g. disse. 50.60 - 50.90m: 1-2% py	Note Ser alt'n overprinted by qtz and silf'n env.

HOLE NUMBER: BAR-10

DRILL HOLE RECORD

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HOLE NUMBER: BAR-10

MINNOVA INC.
DRILL HOLE RECORD

DATE: 19-January-1983

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
				<p>env. ser gen perv style. Also as env to frac. i.e.)</p> <p>3.20 - 4.50m: W env.</p> <p>5.10 - 12.70m: Perv W</p> <p>13.20 - 14.70m: Perv W</p> <p>17.90 - 19.90m: Perv W</p> <p>21.60 - 28.00m: Perv W</p> <p>with 20% silt'f lt. grey</p> <p>29.15 - 33.20m: Perv W</p> <p>with 20% silt'd lt. grey</p> <p>33.62 - 35.62m: Perv W</p> <p>with 70% silt lt grey.</p> <p>35.62 - 39.77m: Perv W</p> <p>with 20% silt lt. grey</p> <p>40.50 - 40.70m: W-M Chl env. on S frac.</p> <p>41.25 - 42.50m: Perv W, 20% silt</p> <p>42.50 - 46.32m: Perv W, ser, 80% lt grey silt.</p> <p>46.32 - 49.37m: Perv W, 50% silt</p> <p>49.37 - 52.00m: W Perv, 90% silt</p> <p>52.00 - 57.50m: W Perv, (5 mm chl frac), 40% silt'f.</p> <p>57.50 - 59.00m: W Perv, 70% silt'd</p> <p>59.00 - 61.55m: W Perv, 20% silt'd - S. Chl along S frac 1mm, Black-dark green Chl C/A 2x45 deg @ 55.40 - 57.30,</p> <p>58.90 - 59.60, 52.00 - 52.60m</p>	<p>50.90 - 51.05m:</p> <p>3-5% C-m.g. py</p> <p>51.05 - 51.70m:</p> <p>2-3% F-c.g. py</p> <p>51.70 - 52.12m:</p> <p><1-2% py</p> <p>52.12 - 52.57m:</p> <p>2-5% as F-m.g. diss & 1-2mm C/A</p> <p>20 deg Str</p> <p>52.57 - 53.85m:</p> <p>1-2% F-m.g diss py, loc 1% PO @ 52.60m</p> <p>53.85 - 54.85m:</p> <p><1-2% py F-c.g. disse, 1-2% PO as</p> <p>ixiam blebs</p> <p>54.85 - 55.54m:</p> <p>1-3% py</p> <p>55.54 - 56.22m:</p> <p>1-2% py, 1-3% PO as blebs</p> <p>56.22 - 57.64m:</p> <p>3-5% py as F-mg diss, also 1-4mm thick py +/- qtz, +/- chl str (W-M)</p> <p>57.65 - 58.52m:</p> <p>Tr-2% py, loc. 1% PO @ 58.32 - 58.52</p> <p>58.52 - 58.72m:</p> <p>3-5% py F-mg diss, loc diss in str</p> <p>58.72 - 59.43m:</p> <p>1-3% Py diss. + irreg Py +/- qtz, +/- chl str, 1-2% PO as disse blebs</p> <p>59.43 - 59.68m:</p> <p>5% py as Mg diss prox to chl str.</p> <p>59.68 - 61.55m:</p> <p><1-2% py Fg disse, loc <1% PO @ 59.80 m.</p>	

HOLE NUMBER: BAR-10

DRILL HOLE RECORD

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HOLE NUMBER: BAR-10

ASSAY SHEET

DATE: 27-January-1986

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL										COMMENTS
				Ag ppm	As ppm	B ppm	Cu ppm	Pb ppm	SB ppm	Zn ppb	AU ppb	AU g/T	Cu %	PB %	ZN %	Ag g/T			
7761	0.61	1.50	0.89	2.3	3	4	9	250	1	423	40								
7762	1.50	3.00	1.50	0.3	1	2	4	12	1	35	120								
7763	3.00	4.50	1.50	0.8	9	2	6	84	1	58	400								
7764	4.50	5.60	1.10	0.7	1	2	10	27	1	77	310								
7765	5.60	6.00	0.40	2.5	5	7	45	67	4	59	5100	7.51							
7766	6.00	7.50	1.50	0.5	9	2	2	28	1	50	20								
7767	7.50	9.00	1.50	0.4	11	1	3	24	1	58	10								
7768	9.00	10.50	1.50	0.6	7	2	11	43	1	85	220								
7772	12.00	13.50	1.50	0.4	2	1	5	26	1	48	35								
7773	13.50	15.00	1.50	1.0	8	4	9	63	1	104	10								
7774	15.00	16.50	1.50	0.7	9	5	8	43	1	125	5								
7775	16.50	18.00	1.50	0.4	7	2	5	63	1	130	5								
7776	18.00	19.50	1.50	1.3	25	1	2	17	3	28	45								
7777	19.50	21.00	1.50	0.4	4	1	2	20	1	35	10								
7778	21.00	22.50	1.50	0.6	5	3	7	26	1	49	115								
7779	22.50	24.00	1.50	4.0	6	9	19	70	5	109	980	1.79							
7780	25.50	27.00	1.50	0.9	13	3	5	19	2	38	525								
7781	27.00	28.50	1.50	0.8	1	5	5	30	1	60	35								
7782	28.50	30.00	1.50	0.5	2	5	4	17	1	53	80								
7783	30.00	31.50	1.50	0.7	9	3	4	21	2	36	15								
7784	31.50	33.00	1.50	0.7	8	3	6	16	1	50	125								
7785	34.50	36.00	1.50	0.8	13	4	6	29	2	41	500								
7786	36.00	37.50	1.50	0.9	17	5	13	25	1	59	450								
7787	37.50	39.00	1.50	0.8	11	5	8	15	2	33	200								
7788	39.00	40.50	1.50	0.7	7	4	6	22	1	39	100								
7789	40.50	42.00	1.50	0.8	9	2	3	19	1	39	110								
7790	42.00	43.50	1.50	0.6	8	2	5	20	1	60	125								
7791	43.50	45.00	1.50	0.7	7	2	3	18	1	73	10								
7792	45.00	46.50	1.50	0.7	11	2	3	34	2	54	55								
7793	46.50	48.00	1.50	0.6	13	1	2	12	2	29	5								
7794	48.00	49.50	1.50	0.5	21	4	6	13	2	39	20								
7795	49.50	51.00	1.50	0.5	17	2	4	10	2	32	25								
7796	51.00	52.50	1.50	0.5	12	1	4	13	1	36	15								
7797	52.50	54.00	1.50	0.5	11	3	4	14	1	28	5								
7798	54.00	55.50	1.50	0.5	10	2	3	12	2	26	10								
7799	57.00	58.50	1.50	0.6	8	1	7	15	2	29	5								
7800	58.50	60.00	1.50	1.0	1	6	6	80	1	62	40								
7801	60.00	61.56	1.56	0.5	12	2	2	21	1	43	35								

HOLE NUMBER: BAR-10

ASSAY SHEET

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HOLE NUMBER: BAR-10

GEOCHEM. SHEET

DATE: 19-January-1986

Sample	From (m)	To (m)	Length (m)	AL2O3	BA	CAD	FE2O3	K2O	MgO	MnO2	Na2O	SiO2	SR	TiO2	ZR	TOT	Ag	As	B	CU	PB	SB	ZN	AU	AU
				%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	g/t	
7946	10.50	12.00	1.50	13.43	.184	.04	5.31	3.92	.28	.25	1.44	72.47	.01	.20	.016	97.55	.6	4	5	4	39	2	71	20	
7948	24.00	25.50	1.50	13.34	.116	.11	5.02	2.31	.27	.19	3.43	72.72	.01	.20	.012	97.72	.8	1	2	5	32	2	67	5	
7949	33.00	34.50	1.50	12.11	.051	.22	4.72	.79	.21	.09	5.13	74.10	.01	.19	.010	97.64	.9	13	1	7	54	2	443	315	
7950	55.50	57.00	1.50	12.59	.048	.56	5.22	.81	.32	.16	5.51	72.17	.02	.18	.008	97.59	.8	6	2	8	12	1	51	90	

HOLE NUMBER: BAR-10

GEOCHEM. SHEET

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MINNOVA INC

DRILL HOLE RECORD

HOLE NUMBER: BAR-11

IMPERIAL UNITS: METRIC UNITS:

PROJECT NAME: BAR
PROJECT NUMBER: 215
CLAIM NUMBER:
LOCATION: SC3

PLOTTING COORDS - GRID:

NORTH:
EAST:
ELEV:

ALTERNATE COORDS GRID: FIELD

NORTH: 98+25N
EAST: 102+25E
ELEV: 1564.00

COLLAR DIP: -50° 0' 0"

LENGTH OF THE HOLE: 79.85
START DEPTH: 0.00
FINAL DEPTH: 79.85

COLLAR GRID AZIMUTH: 270° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 260° 0' 0"

DATE STARTED: October 9, 1987
DATE COMPLETED: October 11, 1987
DATE LOGGED: Oct. 9

COLLAR SURVEY: YES
MULTISHOT SURVEY: NO
BAD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NO

CONTRACTOR: FRONTIER DRILLING LTD.
CASING: 0.61M LEFT IN HOLE
CORE STORAGE: BARRIER WH

PURPOSE: TESTS SC3 DOME ALBITE-SILICA ALTERATION ZONE NORTH END, 25M NORTH OF BAR-3

DIRECTIONAL DATA:

HOLE NUMBER: BAR-11

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 0.61	CASING					
0.61 TO 62.16	RHY FOP INTR (ALBITE- SILICA ZONE)	<p>Lt. grey, lt.green, whitish-grey. Aph-mx, Fine to medium grained CX.</p> <p>Massive FOP rhy intrusive in the albite-silica +/- Ser zone. FP 10-15%, <1-4mm (ave 2mm) subhedral, white. Qtz eyes 3-8%, ave 5%, <1-2mm (ave 1mm) round-oval lt.grey Mx Aph, silicified (?). FOP tex seen locally in less altered sections otherwise cloudy/indistinct.</p> <p>- Bleached/silicified white-grey sections with good S-I (A) stvk & (B) pyritic veins.</p> <p>Sections char' by blocky core & abundant lim +/- Mn frac coatings. ie) 3.65 - 4.35m, 4.80 - 5.70, 15.45 - 15.70, 16.20 - 17.50, 18.19 - 18.74 22.90 - 23.34, 28.65 - 29.10, 32.38 - 32.79, 40.50 - 41.60 M env</p> <p>44.40 - 45.25 M env</p> <p>47.25 - 49.50 W perv</p> <p>50.90 - 55.82 green mottled</p> <p>56.75 - 59.12 S perv green mottled</p> <p>Blk alt'n as patches & perv sections that discolour GM, ie)</p> <p>30.88 - 32.38 Perv</p> <p>32.79 - 32.99 Patchy 40%</p> <p>32.99 - 33.52 Perv</p> <p>33.72 - 34.02 Patchy 40%</p> <p>49.50 - 49.75 Patchy 30%</p>		<p>Interval is considered to be part of the albite-silica Zone. Albite-silica alt'n is characterized by (i) Semi perv +per silf'n, (ii) qtz vein flooding/stvk (iii) lt-grey loc lt-grey with aph gm.</p> <p>Perv silf'n TH-0 (?). Qtz veins include 2 generations; (A) and early lt-s grey translucent, <1-10 mm thick, V-f-g cont-discon +/- Stvk (Note (A) includes 2 frac events), and (B) a late cross-cutting milky white 1-30 mm veins +/- lim, +/- Mn, +/- py, +/- Ga, +/- sph, +/- cpy, +/- CaCO₃.</p> <p>Also calc +/- qtz 1-5mm veins (C) i.e) 0.61 - 3.65m: W 1mm (A) Vw-W 3-4mm +/- lim, +/- MN C/A 30 deg, 0 deg. (B) 3.65 - 4.97m: <1-2mm stvk C/A 30 deg- 0 deg. (A), W 3-8mm +/- lim, + py C/A 10 deg. (B) 4.97 - 6.50m: M loc S 1mm (A), M 2-15mm, 0-15 C/A +/- calc + py, + Lim. (B).</p> <p>6.50 - 7.00m: S <1-mm stvk (A), W 3mm C/A 5 deg. (B)</p> <p>7.00 - 12.50m: S Loc I stvk con-discon (A), VW Loc S (10.95m) C/A 0-20 deg (B), Loc M 10.95 - 10.55 Calc +/- qtz C/A 20 deg. (C)</p> <p>12.50 - 15.45m: M-S <1-mm loc stvk (A) M 5-10mm C/A 5-10 deg. (B)</p> <p>15.45 - 17.81m: S-I <1-mm stvk, 0-30 deg C/A (A), W-M 3-10mm, C/A 10 - 15 deg. (B)</p> <p>17.81 - 20.14m: M Loc S 1mm (A), W-M, 1cm 5-10 deg C/A + calc (B)</p> <p>20.14 - 21.74m: W-M, <1.1mm (A), W 4mm + calc (B).</p> <p>21.74 - 24.23m: S-I stvk <1-mm (A) W 5mm C/A 5-20 deg. (B) Loc W, 5mm + Ga C/A 0 (C).</p> <p>24.23 - 25.27m: Massive milky white vein (B), top C/A 25 deg., Bot 70 deg,</p>	<p>Variable Tr-5% py as F-mg loc CG disseminated subhedral grains, minor dissems along QV's, minor <1-3mm Str. Loc <1Z 1x2mm blebs of PO.</p> <p>Loc. Tr- <1Z sph as 1x1 to 5x5mm reddish brown grains proximal to or dissems within qtz +/- calc veins.</p> <p>Loc. Tr-1Z Ga as diss patches proximal to or within qtz and calc veins. (Poss some tetrahedrite)</p> <p>Sulphide intervals based on py content and the presence of PO. i.e.) 0.61 - 3.95m: <1-2% Fg py dissems, minor 1mm frac py; Tr Ga @ 3.25m 3.95 - 4.87m: 2-3% Fg diss py, also Mn-c.g diss within qtz veins (C/A 0 - 5 deg.)</p> <p>4.87 - 7.34m: <1-2% Fg py loc py + vuggy qtz veins.</p> <p>7.34 - 7.69m: 2-5% F-mg diss py blebs prox to frac, loc tr ga, sph.</p> <p>7.69 - 9.05m: <1-2% Fg diss py loc Tr Ga, <1Z sph @ 8.75M</p> <p>9.05 - 9.40m: 3-5% py Fg diss + Cg in qtz veins, <1Z Ga/sph.</p> <p>9.40 - 13.67m: 1-2% Fg diss py loc <1Z po @ 10.15 - 10.55, 10.80 - 11.00, 12.60 - 23.30m.</p> <p>13.67 - 14.07m: 3% py diss & discon str C/A 5 DEG, 2% po blebs.</p> <p>14.07 - 17.81m: <1-2% Fg, py, Loc 1Z sph @ 13.77, tr sph.</p> <p>15.50 - 15.80, 17.22 - 17.81</p> <p>Loc Tr-1Z Ga @ 14.07 - 14.87, 15.00 - 15.54, 16.04 - 16.39, 17.22 - 17.81</p> <p>17.81 - 18.16m: 2-5% py F.g diss + V-fg bands inqtz vein C/A 35 deg, 5% sph @ 17.96 within 1cm thick qtz vein.</p> <p>Also <1Z Ga, <1Z cpy.</p> <p>18.16 - 21.44m: <1-2% py dissems + discon str, loc 1Z sph @ 18.20, 20.14,</p> <p>21.74 - 22.34, Loc. 1-2% Ga @ 21.74 - 22.34</p> <p>21.44 - 24.23m: Tr -<1Z py, loc Tr</p>	<p>Note most base metal min'z is assoc with (B) qtz.</p>

HOLE NUMBER: BAR-11

MINNOVA INC.
DRILL HOLE RECORD

DATE: 19-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
				<p>central 30 cm includes py-sph-ga-cpy min'z.</p> <p>25.27 - 28.70m: M loc S stvk <1-2mm (A) VN-W 4-10mm C/A 20 to 30 deg.</p> <p>28.70 - 30.90m: S 1-3mm thick stvk (A)</p> <p>Note irreg. white silt'n as env.</p> <p>30.90 - 32.34m: W-M <1-2mm (A), M 2-3mm, C/A 20 deg. (B)</p> <p>32.34 - 32.84m: S-M <1-4mm (A) W 8mm C/A 20 deg. (B)</p> <p>32.84 - 34.41m: M-S <1-4mm (A)</p> <p>34.41 - 36.27m: M <1-2mm (A) W-M 1cm thick C/A 20 deg. (B)</p> <p>Note: B +/- Calc +/- Blk mineral.</p> <p>36.27 - 40.43m:</p> <p>W loc M 1-3mm C/A 20 deg. sim to above (B)</p> <p>40.43 - 40.90m: S 1-4mm stvk (A) W-M irreg. 2-10mm (B)</p> <p>40.90 - 41.20m: S Stvk Loc M <1-2mm C/A 5-20 deg (A); Loc VN 1 cm C/A 10-15 (B)</p> <p>41.20 - 47.40m: S Loc Stvk 1-3mm C/A 5 - 15 deg (A)</p> <p>S-I frac <1-1mm chl stvk, Loc W? (B) (Green)</p> <p>47.40 - 50.90m: W. Loc S Stvk <1-2mm (A); patchy chl on frac, loc with C/A 5 deg. (B)</p> <p>50.90 - 54.60m: Chl-Bl zone;</p> <p>S loc stvk <1-2mm (A), S-I frac/stvk chl irreg. veins <1-2mm med. green; w 1-3cm + calc C/A 5-10 deg. (B)</p> <p>54.60 - 56.99m: W-M? (A); M Massive 2-10 cm thick C/A 5-10 deg. (B)</p> <p>56.99 - 62.16m: Variably silicified locally Bx'ed interval. Apparent lt. grey patchy silt'n cross-cut by (A) (M-S Loc stvk 4-8mm cont-discon C/A 5 deg), (B) is M 1-2 cm thick C/A 5-10 deg. white veins +/- py.</p> <p>- Ser as lt-green env to frac/veins, loc perv as a green casting (ser=ssilica zone), ie)</p> <p>0.61 - 3.65 W env</p> <p>6.25 - 6.35 Patchy</p> <p>6.64 - 7.34 M env</p> <p>7.34 - 7.94 Perv</p> <p>7.94 - 8.44 W env</p>	<p>Ga/sph @ 22.90 - 23.30</p> <p>24.23 - 24.65m: 2% Cg, py, <1% cpy blebs.</p> <p>24.65 - 24.96m: 3-5% py, 3-5% Ga, 3-5% sph, <1% cpy as M-cg Diss and crude bands.</p> <p>24.96 - 25.32m: 2-3% Cg, py</p> <p>25.32 - 26.15m: 2-3% F-Cg diss py and 1 minor Str py C/A 10 deg.</p> <p>26.15 - 30.33m: 1-2% Diss F-m.g py loc 17 P0 @ 24.70, Tr <1% sph @ 27.80 - 28.04</p> <p>30.33 - 32.38m: Tr. py</p> <p>32.38 - 33.00m: 1% Cg-py</p> <p>33.00 - 37.28m: Tr - <1% py, Tr Ga @ 34.53 & 37.25 m, 2-5% Blk mineral.</p> <p>37.28 - 40.95m: Tr -1% py, loc. 37.28 - 38.08, 1% P0, Loc Tr Ga & sph @ 38.45 - 39.40m</p> <p>40.95 - 42.76m: 1-2% Py diss discon Str.</p> <p>42.76 - 43.00</p> <p>3-5% F6 Diss Py, loc Tr Ga, Cpy</p> <p>43.00 - 47.35m</p> <p>Tr - <1% py</p> <p>47.35 - 49.22m: 3-5% F-Mg. diss py + QV disse.</p> <p>49.22 - 51.30m: Tr-1% py</p> <p>51.30 - 52.42m: 1-2% loc 3% Fg diss + py-chl <1mm Str.</p> <p>52.42 - 55.27m: 3-5% py as F loc Cg diss, largely assoc. with qtz.</p> <p>55.27 - 55.65m: 1-2% py</p> <p>55.65 - 56.05m: 3% py Fg diss, Tr Tet(?) 2-3% grey mineral</p> <p>56.05 - 58.52m: 3-5% F-mg. diss py</p> <p>58.52 - 62.16m: <1-2% diss F-Mg py</p>	

HOLE NUMBER: BAR-11

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
				9.35 - 9.75 W env 10.45 - 11.75 W env 12.50 - 13.00, 13.50 - 14.70 M env 16.34 - 18.59 M env 21.20 - 22.86 Perv 22.80 - 23.34 M env 23.34 - 24.23 Perv 25.67 - 27.60 Perv 27.60 - 29.10 M-S Env. 29.10 - 30.86 Perv 33.64 - 40.63 Perv 40.63 - 47.15 Gen perv Cross cut by qtz veins/silicification 59.07 - 62.16 Perv.		
62.16 TO 79.85	ARGILLITE INTER- LAYERED WITH GREY WACKE LOC DEBRIS- FLOW (MINOR RHY CROSS CUTTING DYKES.)	Black to dark grey, Light to medium green dykes. Very fine to medium seds. Aph 6m fine to medium grained Cx in dykes. VW foliated well interlaminated argillite and silt stone and F-Mg Sst. Locally note debris flow units. Note intermittent Rhy dykes. Top CTC 10-15 deg. 62.16 - 63.55m W Lam'ed arg and silt, 1-5mm thick lams/lenses. (Soft sed deformed.) Bot CTC 65 deg. Layering 50 deg. 63.55 - 64.70 FQP Rhy dyke? (Sim to above Rhy unit) Bot CTC 80 deg. 64.70 - 66.20 Interlayered argillite, minor silt, locally contorted layering. Bot CTC 80 deg. Layering 45-80 deg. 66.20 - 68.02 FQP Rhy pseudo-Bx, poss dyke. Grey FQP silicified? Frags in a green FQP mx. Bot CTC approximately 30 deg. 68.02 - 79.85 Interlayered arg/silt/minor sst, Loc. minor debris flow @ 78.50 - 79.85 Layering 70 - 80 deg.	10 65 80 80 30	Minor VW 1-2mm cont-discont calc veinlets. Loc. M-S qtz in Rhy FQP dykes (?) S-I stvk (A) 4-2mm M 3-20mm (B) C/A 10-20 deg. Loc S 1-5mm qatz. Patchy silicifn(?) M Loc S 1-4 mm Blackish qtz veins C/A 30 deg S <1-1mm (A) qtz. Loc W/S calc & qts veins 1-3mm parallel to layering.	Tr-3% py, blebs/dissem in seds, Tr py, Tr ga, in Rhy FQP 1-2% py as 2-8mm blebs or frags (?) and disse. Tr py, Tr Ga. 2-3% py, frags (?) and disse. Tr, py.	Argillite is non conductive. Blocky core @ 68.02 - 70.00m 75.50 - 78.50m (at 68.35m) 1cm thick.

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MINNOVA INC.
DRILL HOLE RECORD

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		Fault Gouge @ 77.00 - 77.10 77.25 - 77.35 77.60 - 77.70 78.20 - 78.35			Loc. 5-8% py Diss Fg @ 76.80 - 77.25	

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ASSAY SHEET

DATE: 27-January-1988

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL								COMMENTS
				AG ppm	AS ppm	B ppm	CU ppm	PB ppm	SB ppm	Zn ppm	AU ppb	AU g/T	Cu %	PB %	ZN %	AG g/T	
7679	0.61	1.50	0.89	0.7	5	1	4	14	1	26	10						
7680	1.50	3.00	1.50	0.8	8	2	6	20	1	42	40						
7681	3.00	4.50	1.50	0.4	3	2	5	21	1	33	30						
7682	4.50	6.00	1.50	0.8	2	1	6	19	1	54	100						
7683	6.00	7.50	1.50	0.6	6	1	8	13	1	41	130						
7684	7.50	9.00	1.50	0.9	3	4	11	48	2	117	80						
7685	9.00	10.50	1.50	1.0	16	2	11	73	1	145	370						
7686	12.00	13.50	1.50	0.8	6	5	13	88	1	174	60						
7687	13.50	15.00	1.50	0.7	2	4	35	137	1	194	10						
7688	15.00	16.50	1.50	0.8	3	3	10	120	1	199	5						
7689	16.50	17.50	1.00	1.2	4	2	11	290	1	283	20						
7690	17.50	18.25	0.75	2.0	6	4	175	115	1	2996	180						
7691	18.25	19.50	1.25	0.8	6	3	10	40	1	107	365						
7692	19.50	21.00	1.50	0.9	8	1	40	66	1	1296	60						
7693	22.50	24.00	1.50	0.6	4	4	8	47	1	635	5						
7694	24.00	24.55	0.55	5.3	9	3	1324	318	4	4557	30						
7695	24.55	25.00	0.45	100.9	31	10	5316	38475	74	53527	85	.579	3.82	4.92	109.7		
7696	25.00	25.50	0.50	3.0	24	2	207	886	3	3567	320						
7697	25.50	27.00	1.50	1.3	11	5	62	303	1	593	400						
7698	27.00	28.50	1.50	0.4	3	3	12	62	1	104	5						
7699	28.50	30.00	1.50	4.1	4	6	26	75	9	68	10						
7700	30.00	31.50	1.50	1.3	2	5	11	55	3	60	5						
7701	31.50	33.00	1.50	1.3	3	1	12	42	4	57	10						
7702	33.00	34.50	1.50	1.0	7	1	10	60	2	57	20						
7703	34.50	36.00	1.50	1.2	1	1	9	74	2	40	5						
7704	37.50	39.00	1.50	0.6	2	2	6	63	1	208	10						
7705	39.00	40.50	1.50	0.7	1	2	7	42	1	55	30						
7706	40.50	42.00	1.50	0.7	8	3	6	61	1	63	40						
7707	42.00	43.50	1.50	0.5	1	1	10	50	1	157	150						
7708	43.50	45.00	1.50	0.6	5	2	6	39	1	41	20						
7709	45.00	46.50	1.50	0.5	3	1	5	24	1	46	10						
7710	46.50	48.00	1.50	0.7	9	1	6	30	1	32	70						
7711	48.00	49.50	1.50	1.0	8	1	5	16	1	20	290						
7712	49.50	51.00	1.50	0.2	3	2	4	24	1	45	5						
7713	52.50	54.00	1.50	0.5	14	1	4	40	2	38	1250	.61					
7714	54.00	55.50	1.50	0.2	7	1	3	15	1	19	70						
7715	55.50	57.00	1.50	0.1	12	1	2	15	2	10	5						
7716	57.00	58.50	1.50	0.5	11	1	3	35	1	13	100						
7717	58.50	60.00	1.50	0.4	8	1	4	21	1	13	5						
7718	60.00	61.50	1.50	0.7	9	1	2	35	1	21	40						
7719	61.50	62.15	0.65	0.5	1	2	13	32	1	54	5						
7720	63.55	64.70	1.15	1.0	6	1	3	32	1	24	5						
7721	67.20	68.02	0.82	0.6	11	2	5	31	1	42	5						
7722	68.02	69.50	1.48	0.8	66	6	38	61	7	185	20						
7723	69.50	71.00	1.50	0.7	35	5	32	39	3	153	10						

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ASSAY SHEET

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GEOCHEM. SHEET

DATE: 27-January-1988

Sample	From (m)	To (m)	Length (m)	AL2O3	BA	CAO	FE2O3	K2O	MgO	MnO2	Na2O	SiO2	SR	TiO2	ZR	TOT	Ag	As	B	Cu	Pb	SB	Zn	Au	Au g/T
				%	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppb		
7931	10.50	12.00	1.50	12.50	.031	.35	2.24	.63	.18	.08	5.69	75.90	.01	.18	.013	97.81	.9	7	2	6	106	1	74	10	
7932	21.00	22.50	1.50	15.05	.151	.11	2.81	2.99	.34	.07	3.32	72.61	.01	.22	.020	97.71	.9	3	6	10	157	1	288	5	
7933	36.00	37.50	1.50	13.34	.091	.38	1.94	1.73	.18	.05	4.30	75.44	.01	.20	.016	97.68	.4	3	2	6	34	1	44	5	
7934	51.00	52.50	1.50	14.73	.092	.13	1.64	2.00	.20	.02	4.57	74.19	.01	.21	.017	97.82	.3	7	2	8	21	1	46	30	
7935	66.20	67.20	1.00	13.37	.079	.42	1.15	2.45	.63	.02	3.48	75.95	.02	.19	.013	97.77	.6	14	1	8	54	1	43	5	

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GEOCHEM. SHEET

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MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: BAR-12

WILKINSON INCL
DRILL HOLE RECORD

IMPERIAL UNITS: **METRIC UNITS: X**

PROJECT NAME: BAR
PROJECT NUMBER: 215
CLAIM NUMBER:
LOCATION: SC3

PLOTTING COORDS GRID:
NORTH: EAST:
ELEV:

ALTERNATE COORDS GRID: FIELD
NORTH: 98+ 0
EAST: 102+40
ELEV: 1558

COLLAR DIP: -65° 0' 0"
OF THE HOLE: 99.67m
START DEPTH: 0.00m
FINAL DEPTH: 99.67m

COLLAR GRID AZIMUTH: 270° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 360° 0' 0"

DATE STARTED: 0, 0 COLLAR SURVEY: YES
DATE COMPLETED: October 13, 1987 MULTISHOT SURVEY: NO
DATE LOGGED: 0, 0 RRD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NO

CONTRACTOR: FRONTIER DRILLING LTD.
CASING: 5.65M LEFT IN HOLE
CORE STORAGE: BARRIERE WH

PURPOSE: TEST SC3 FQP RHYOLITE DOME ALBITE-SILICA ZONE 40M EAST OF BAR-3

DIRECTIONAL DATA:

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DRILL HOLE RECORD

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
5.65 TD 91.90	RHYOLITE BFP INTR. (IN SER & BLACK ALN ZONES)	<p>Light to medium dull green, Dark grey, black. Aph-Ga, Fine to medium grained Cx. Massive FBP rhyolite intrusive in ser-silica and black alt'n and albite-silica zones. Bot CTC 80 deg. sharp (chilled) FP 10-15% <1-4mm (ave 2mm) subhedral, white qtz eyes 3-8%, ave 5%, <1-2mm (ave 1mm) round-oval, light grey Mx aph, silicified(?)</p> <p>Local crackle Bx @ 5.65 - 6.10m</p> <p>Hydrothermal (?) Bx zone @ 46.00 - 48.25m, frags (30%) are rounded med grey BFP 1-8 cm, Mx is M-Lt. green aphyric. Similar narrow zones of Bx @ 53.00 - 53.70 (in situ looking)</p> <p>63.75 - 66.0, (Pseudobx?)</p> <p>79.85 - 80.50m (Insitu looking)</p>		<p>Hole collars in ser +/- silica alt'n zone and proceeds into a broad, black alt'n zone. Loc qtz veins of gen'n (B) present but < blocky density.</p> <p>Qtz veins include <<1-2mm light grey translucent veins (A) and milky white massive 2mm-10 cm (B) i.e.</p> <p>5.65 - 8.11: M <1mm (A), nil (B) 8.11 - 8.82: M (A), M 2-10mm +/- calc C/A 20-25 (B) 8.82 - 11.90: M Loc S (A), VW (B) 11.90 - 12.50: S C/A 0 deg. (A) W-M C/A 0-35 deg. (B) 12.50 - 19.00: W-M Loc S (A) VW (B) 19.00 - 28.50: W (A), N11-VW (B) 28.50 - 31.30: M Loc S <1-mm (A), VW 1-2mm C/A 30 deg. (B) 31.30 - 31.90: Massive white qtz vein C/A 45 deg (B) 31.90 - 34.00: W loc M (A) VW (B) 34.00 - 34.88: M (A), W-M 2-5mm C/A 30 deg. (B) 34.88 - 37.18: W-M (A), VW Loc S vein Bx @ (36.40 - 36.50) (B) 37.18 - 37.78: S irreg. <1-mm (A), W (B) 37.78 - 38.47: Massive wh vein C/A 45 deg. (B) 38.47 - 42.50: M Loc S <1-mm (A) qtz +/- calc 2-10mm C/A 30 deg. (B) 42.50 - 44.80: S Loc I <1-mm (A); M Loc S 1-5mm C/A 35 deg. (B) 44.80 - 46.70: M-S (A), M C/A 15 deg. (B)</p>	<p>Tr-10% py mainly as F-M disseminated, also disseminated within qtz +/- calc veins and along vein margins. Loc Tr - 1% Ga as disse, Tr - <1% diss and within BV's. Loc Tr PO, i.e.</p> <p>5.65 - 8.11: <1% Fg py 8.11 - 8.52: <1% py, 0.5% Ga as MG isolated grains within BV @ 8.17 8.52 - 9.20: Tr py 9.20 - 10.00: <1% py 10.00 - 11.85: Tr py 11.85 - 12.50: <1% - 2% py 12.50 - 15.73: Tr py 15.73 - 16.13: <1% py 16.13 - 17.80: Tr py 17.80 - 18.30: <1-2% py diss +diss in BV's 18.30 - 27.47: Tr py 27.47 - 28.92: <1% py loc. 1% Ga @ 28.52 - 28.82 28.82 - 29.52: Tr py 29.52 - 29.92: 2% Fg py, assoc with black stvk (?) 29.92 - 31.40: < 1% py 31.40 - 31.90: <1-2% F-Mg py, 1-2% Fg Ga, <1-1% sph assoc with qtz vein. 31.90 - 34.00: <1-3% py as Vfg diss and Mx to irreg Bx veinlets, sulphides appear to heal frags. 34.00 - 37.18: Tr <1 py, Loc tr Sph(?) @ 34.25 37.18 - 38.70: <1-2% diss py, Loc Tr sph @ 37.18 - 37.68, <1% Ga @ 37.18 - 37.40 38.70 - 40.23:</p>	<p>Note local gouge clay-chl sections at 69.85 - 70.05 m C/A 80 deg and ser-clay @ 80.50 - 80.75 (Fault).</p>

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DRILL HOLE RECORD

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MINNOVA INC.
DRILL HOLE RECORD

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
				46.70 - 47.80: W-M (A), VW-W (B) 47.80 - 52.27: S Loc I, Loc M (A), M Loc S C/A 25 deg. (B) 52.27 - 53.30: M-S (A), Nil (B) 53.30 - 58.20: M-S <1-1mm (A), W Loc M 2-50mm C/A 25-35 qtz +/- calc (B) 58.20 - 59.60: S (A), M-s 2-15mm qtz +/- calc, +/- py, C/A 0 & 30 deg (B) 59.60 - 69.00: S Loc I <(1-2mm (A), VW-W (B) 69.00 - 74.60: S Loc I Stwk (A) VW(B) 74.60 - 75.75: W-M (A), M Loc W 1-4mm thick (B) 75.75 - 80.50: S Loc I (A), Blocky VW (B) 80.50 - 91.90: W-M Loc <1-2mm cont and discon (A), Blocky 2-6mm C/A 0-20 deg (B).	1-3% diss py and diss within qtz and calc veins. 40.23 - 45.20: <1-12 py, Loc Tr-1Z Ga @ 40.23- 40.73 Loc.Tr sph @ 43.32m 45.20 - 46.00: 1-2% Py 46.00 - 51.45: Tr <1% py Loc Tr Ga @ 46.20, 47.75, 49.87-50, Loc. <1Z PO @ 49.30, loc Tr sph @ 50.17 - 50.47 51.45 - 52.42: 2-3% F-Mg py mainly diss within qtz + calc veins. 52.42 - 54.86: Tr - <1% py 54.86 - 55.65: 3-5% F-Cg py diss within (B) Qtz and selvage 55.65 - 55.80: 10% F-Mg in qtz - calc +/- Chl 10 cm (B) vein. 55.80 - 56.50: 1-2% Fg py 56.50 - 56.75: 2-3% py with 1mm (B) C/A 30 deg. 56.75 - 58.00: 3-5% F-Cg py diss + with qtz +/- calc veins. 58.00 - 59.00: <1-2% py 59.00 - 59.55: 5-8% M-Cg py as M-S py- qtz +/- cal veins 1-10mm thick 59.55 - 60.50: 2-3% py Fg disseminated. 60.50 - 61.00: 3-5% F-Mg. py with qtz veins and within Blc Bx Mx 61.00 - 61.68: 2% py 61.68 - 61.93: 3-5% F-Mg in Bx Mx 61.93 - 63.00 1-3% py 63.00 - 63.91: Tr py 63.91 - 67.36:	

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
					<p>(1-2% py, Loc Tr Sph grains @ 64.38m 67.36 - 67.81; 2-3% py with qtz. veins 67.81 - 68.67; Tr - <1% py Note 5% Mag/Hem patches 68.67 - 69.17; 2-3% py diss in with qtz veins Tr, sph, (?) 69.17 - 69.82; Tr py, 3% Mag/Hem 69.82 - 70.05; 2-3% py 70.05 - 74.00; Tr 1% py, Loc <1% Ga @ 71.00, 72.55, Loc.Tr <1% Sph @ 71.00, 73.25 - 73.50</p> <p>Ser as perv alt'n casting colour to GM ie) 5.65 - 14.00; Perv W-M 29.30 - 30.00; Perv W-M 37.00 - 39.00; Perv W-M with 20% silif'd, 20% B qtz. 39.00 - 43.28; Perv 80% silf 43.28 - 45.50; Perv M, 15% silf 45.50 - 46.20; Perv M, 80% silf 46.20 - 48.75; Perv M, 20% silf 48.75 - 52.20; Perv W-M, 80% silf 52.20 - 53.40; W Perv 10% silf 59.75 - 61.26; W-M Perv 20% silif'd 63.00 - 67.75; Perv W 15-50% silif'd 68.90 - 74.10; Perv W-M 10-20% silicf 76.25 - 78.25; Perv W 30-80% silif'd 78.25 - 80.77; Perv W 5% silif'd - Blk alt'n as stwks, pseudobx patches and perv alt'n of GM (qtz veins post-blk). Common sel ser/chl of</p>	Note Magnetite/Hem @ 68.10 - 69.82 as irregular angular frac controlled patch es up to 3x3cm with assoc Bx veinlets. Note how hem rims the mag patches C/A 40 deg (?)

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
				20% fp. Phenos assoc with blk alt'n ie) 6.05 - 6.45: 40% patchy 8.82 - 9.22: 40% patchy 14.60 - 16.63: Stvk 30-50% 16.93 - 20.75: Loc patchy - stvk 25% 20.75 - 23.63: Pseudobx 80% blk 23.63 - 26.52: Perv loc pseudobx 26.52 - 26.97: Patchy 25% 27.97 - 28.03: Stvk blk 20% 52.30:Tr Patchy 72.90:Tr Patchy 81.20 - 83.60: 30% patchy (corroded) 84.40 - 87.50: 25% patchy (corroded) 91.00 - 91.25: Perv frac cont (argillite influenced?) Perv silicification/bleaching/albite-silica loc assoc with (A) qtz, produces lt-grey - wh GM, ie) 11.90 - 12.50 39.00 - 40.23 40.83 - 42.34 43.00 - 43.25 45.40 - 46.00 49.57 - 49.87 50.40 - 52.20 53.42 - 59.75 61.40 - 62.90 74.25 - 76.00 77.30 - 78.70 VW-M frac with blk chl @ 38.50 - 43.28: W-M 53.00 - 61.20: VW-W 69.00 - 72.50: W 76.50 - 78.30: W Loc M	74.00 - 74.15 2% py 74.15 - 78.50 <1-2% py 78.50 - 83.60 Tr py 83.60 - 84.00 1-2% py with (B) qtz 84.00 - 91.90 Tr py	

HOLE NUMBER: BAR-12

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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HOLE NUMBER: BAR-12

MINNOVA INC.
DRILL HOLE RECORD

DATE: 19-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
91.90 TO 99.67	ARGILLITE	Dk grey - black, Loc medium grey. Very fine grained. Mod laminated, M foliated argillite with minor silty beds (5%) and tuffaceous beds (<5%). Layers 2-20mm thick ave, locally contorted, microfaulted. Note CTC with Rhy FQP is sharp, also includes 20cm of clay gouge. Layers 60-65 deg. END OF HOLE	Nil 60		1-3% FG Diss Py	Non Graphitic

HOLE NUMBER: BAR-12

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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HOLE NUMBER: BAR-12

ASSAY SHEET

DATE: 27-January-1988

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					Comments		
				AG ppm	AS ppm	B ppm	CU ppm	PB ppm	SB ppm	Zn ppm	AU ppb	AU g/T	Cu %	PB %	ZN %	
7802	5.65	7.50	1.85	0.7	1	7	11	64	2	93	15					
7803	7.50	9.00	1.50	0.7	4	4	13	70	2	84	5					
7804	10.50	12.00	1.50	0.6	10	4	6	36	3	30	5					
7805	12.00	13.50	1.50	0.4	9	2	6	29	3	33	10					
7806	13.50	15.00	1.50	0.7	10	2	7	31	2	35	5					
7807	15.00	16.50	1.50	0.6	10	1	6	26	2	38	15					
7808	28.50	30.00	1.50	0.8	2	5	9	61	2	124	25					
7809	30.00	31.30	1.30	0.6	1	5	8	37	2	89	85					
7810	31.30	31.90	0.60	3.9	4	3	27	716	4	1015	30					
7811	31.90	33.00	1.10	0.8	6	8	16	68	2	134	15					
7812	33.00	34.50	1.50	1.0	3	4	21	128	3	170	5					
7813	37.00	38.50	1.50	0.6	12	1	10	42	2	89	40					
7814	38.50	40.00	1.50	0.6	11	2	7	30	2	42	25					
7815	40.00	41.50	1.50	0.8	12	1	5	33	2	26	10					
7816	41.50	43.00	1.50	0.7	13	1	5	21	2	36	25					
7817	44.50	46.00	1.50	0.7	11	2	6	22	2	24	70					
7818	46.00	47.50	1.50	0.6	12	2	5	27	2	23	15					
7819	47.50	49.00	1.50	0.4	10	4	6	9	2	18	75					
7820	49.00	50.50	1.50	0.6	10	3	4	17	2	18	50					
7821	50.50	52.00	1.50	0.5	13	1	4	11	2	13	25					
7822	52.00	53.50	1.50	1.2	3	7	7	38	2	68	550					
7823	53.50	55.00	1.50	0.9	11	1	5	29	2	43	500					
7824	56.50	58.00	1.50	0.9	16	2	5	20	2	30	490					
7825	58.00	59.50	1.50	0.9	14	1	7	22	2	23	620					
7826	59.50	61.00	1.50	1.5	14	4	6	24	4	62	345					
7827	61.00	62.50	1.50	1.0	10	3	8	41	3	54	75					
7828	62.50	64.00	1.50	2.0	14	2	4	25	3	22	40					
7829	64.00	65.50	1.50	1.0	13	2	4	31	3	29	20					
7830	65.50	67.00	1.50	1.7	14	4	5	44	3	43	50					
7831	67.00	68.50	1.50	3.4	1	12	17	82	6	137	55					
7832	68.50	70.00	1.50	3.6	9	11	23	121	6	211	50					
7833	70.00	71.50	1.50	0.8	4	7	5	44	1	76	20					
7834	73.00	74.50	1.50	0.7	10	3	5	16	2	22	10					
7835	74.50	76.00	1.50	0.7	14	1	5	16	2	22	15					
7836	76.00	77.50	1.50	0.9	16	2	5	15	2	22	5					
7837	77.50	79.00	1.50	0.8	16	1	5	11	2	18	45					

HOLE NUMBER: BAR-12

ASSAY SHEET

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HOLE NUMBER: BAR-12

GEOCHEM. SHEET

DATE: 27-January-1988

Sample	From (m)	To (m)	Length (m)	AL2O3	BA	CAO	FE2O3	K2O	MgO	MnO2	Na2O	SiO2	SR	TiO2	ZR	TOT	Ag	As	B	Cu	Pb	SB	ZN	AU	AU g/T
				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb		
7953	9.00	10.50	1.50	12.66	.067	.06	2.57	1.74	.20	.10	4.49	75.62	.01	.21	.016	97.74	1.2	10	3	7	40	1	64	10	
7954	43.00	44.50	1.50	12.41	.037	.24	1.44	.73	.16	.05	5.49	77.60	.01	.20	.014	97.83	0.8	8	1	4	15	1	23	25	
7955	55.00	56.50	1.50	11.88	.005	1.06	4.43	.06	.37	.31	6.51	72.90	.02	.17	.015	97.74	1.5	16	1	6	21	3	30	990 1.03	
7956	71.50	73.00	1.50	12.10	.062	.37	2.93	1.48	.23	.19	4.48	75.75	.01	.18	.013	97.80	1.3	12	4	12	51	2	96	15	
7957	95.00	98.00	3.00	15.18	.150	1.83	6.53	4.02	2.43	.10	.56	65.74	.02	.84	.013	97.42	1.6	20	15	54	32	5	174	10	

HOLE NUMBER: BAR-12

GEOCHEM. SHEET

PAGE: 1

HOLE NUMBER: BAR-13

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: **METRIC UNITS: X**

PROJECT NAME: BAR
PROJECT NUMBER: 215
CLAIM NUMBER:
LOCATION: SC3

PLOTTING COORDS GRID
NORTH EAST ELEV

ALTERNATE COORDS GRID: FIEL
NORTH: 96+9
EAST: 102+6
ELEV: 15

COLLAR DIP: -55° 0' 0"
OF THE HOLE: 121.00m
START DEPTH: 0.00m
FINAL DEPTH: 121.00m

DATE STARTED: October 14, 1987 COLLAR SURVEY: YES
DATE COMPLETED: October 16, 1987 MULTISHOT SURVEY: NO
DATE LOGGED: 0, 0 RQD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NO

CONTRACTOR: FRONTIER DRILLING LTD.
CASING: 11.2BM LEFT IN HOLE
CORE STORAGE: BARRIERE WH

PURPOSE: TEST AREA WITH BEST AU SOIL ANOMALIES AND HIGHEST SULPHIDE CONTENT ON SURFACE

DIRECTIONAL DATA:

HOLE NUMBER: BAR-13

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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HOLE NUMBER: BAR-13

MINNOVA INC.
DRILL HOLE RECORD

DATE: 19-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 11.27	CASING OVER- BURDEN					
11.27 TO 30.30	RHY FOP INTRUSIVE (IN SER- SILICA ZONE)	Mainly lt. apple green, loc lt. grey, dark grey. Aph-GM, Cx, Fine to coarse grained. Massive FOP rhyolite intr. in the ser-silica zone. Fp 10-15%, 1-4mm (ave 2mm) white subhedral, loc fuzzy outlines qtz eyes 5-10%, 1-2mm (ave 1mm) round M-lt. grey qtz eyes. GM is aph, v. hard. Note: Whitish/bleach albite-silica (?) sections @ 18.59 - 18.70 19.09 - 19.69		Hole collars in ser-silica zone with minor albite-silica and blc alt'n to 30.30%. Sericite alt'n as perv. green cast. Loc alt'n env ie) 11.27 - 17.00: Perv 17.00 - 18.10: M. env 20.34 - 25.57: Perv Black, patchy perv alt'n with sel ser'z of some Fp, ie) 25.50 - 30.30: Patchy (40%) vague pseudobx. Note 25% of Fp serz, fuzzy outlines. - (A) qtz veins with loc S lt. grey translucent (1-1mm, ie) 11.27 - 16.50: W 16.50 - 19.65: M-S 19.65 - 26.37: W-M 26.37 - 30.30: VW	Py mainly as Fg diss locally coat fractures. Local Cg. py diss. Loc Tr Diss Ga, i.e.) 11.27 - 11.77 1-2 py 11.77 - 12.07 Tr py 12.07 - 13.00 2-3 py 13.00 - 13.40 Tr py 13.40 - 13.60 2-3 py on frac 13.60 - 19.09 (1-2 py, Loc Tr Ga @ 14.30 19.09 - 20.29 2-5% Fg.py diss also along frac 20.29 - 22.62 (1-2 py 22.62 - 22.92 5% F-Mg.py, irreg frac veins. 22.92 - 26.40 Tr-1Z py 26.40 - 26.80 3% Cg. diss py 26.80 - 30.30 Tr Py	Note Loc 1-3Z Grey mineral VVFG diss (hem?)
30.30 TO 30.40	SAND SEAM	Medium to light brown. Medium grained. Sand seam takes up approx. 30cm of space but core suggests 100% recovery between blocks..	33	N/A	N/A	Angular grains.
30.40 TO 49.26	RHY FOP INTR.	Dark grey, loc grey/green mottled. Aph-GM, Fine to coarse grained CX. Similar to above Rhy FOP intr. in black alteration zone. BOT CTC 70 deg. sharp		- Ser weak perv @ 30.40-33.50m, 38.30-39.30m, Perv W. - Black alt'n gen perv loc patchy, appears to be crosscut by irregular grey/green mottled frac/veins(?) with Sel Ser'z of 25% of the Fp, ie) 33.50 - 34.13: Perv with mottled veins. 34.13 - 38.30:	Tr py, loc <1Z diss'ed py along frac. Loc 3Z M-Cg diss py @ 48.60 - 49.00, also 49.20 - 49.26 @ CTC	

HOLE NUMBER: BAR-13

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: BAR-13

DATE: 19-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
				Patchy, local perv. 70% black 38.30 - 42.23: 5% patchy black 39.3-42.23m: Perv black 42.23 - 42.67: Patchy 50% black 42.67 - 49.00: Perv dark grey-black mottled, 10% grey-green pseudo Bx loc. VW qtz 1-2mm loc M veins, not significant TH-0.		
49.26 TO 53.40	ARGILLITE (GRAPHITIC)	Black. Very fine grained. Well-mod laminated black graphitic argillite. Layers 1-10mm ave, locally appear >3cm. BOT CTC Broken layering 75 deg.	75	Nil-Loc 1-2mm qtz veins// to sub// to layering.	2-3% Fg py as dissems and locally as 1mm frac C/A 45 deg. and blebs with qtz veins.	Extremely blocky from 49.37 - 53.94 Recovery 20-60% Highly conductive graphitic argillite.
53.40 TO 55.53	RHY QFP CROWDED XL T, MINOR F.T. TUFFACEOUS CHERT & LAPILLI TUFF	Light grey - green. Fine to medium grained Loc APH (chert) local lapilli. W foliated, thick layered Rhy Qfp crowded CX tuff with minor interlayered tuffaceous chert and Cx-Lithic T 53.40 - 54.40: Interlayered F. Rhyodac t and coarse QFP CX- Tuff. 5-10% qtz eyes up to 6mm, 10-15% FP 1-3mm 30% 2-3mm lapilli size whitish and blackish frags. 54.40 - 54.50: Massive lt. green tuffaceous chert. 54.50 - 55.53: Rhy crowded QFP CX T, unit fines downhole. 35% <1-mm qtz eyes. 30% 1-3mm FP, 35% sericitic MX. BOT CTC 280? broken. Layering 75 deg.	80 75	S ser perv in MX (excluding the chert).	Tr-1Z py as Fg diss'em and also local blebs.	

HOLE NUMBER: BAR-13

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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HOLE NUMBER: BAR-13

MINNOVA INC.
DRILL HOLE RECORD

DATE: 19-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
55.53 TO 56.36	ARGILLITE & INTER- LAYERED SLST	Dark to medium grey. Very fine grained. Well laminated argillite and siltstone. Individual layers 1-15mm thick, sharply layered. Locally contorted layering near BOT CTC Layering 80 deg. BOT CTC 70 deg sharp.		Nil	2-3% py, Vfg. diss, loc. <1 bands py.	Non conductive.
56.36 TO 58.55	RHYODAC ULTRAFINE T., MINOR INTER- LAYERED CX- LITHIC T.	Lt.to medium green. Ultra fine grained. M-C Cx, L-frags. W-M foliated, poorly layered Rhyodac ultrafine ash (BOZ) interlayered coarse QPF-lithic T (20%) BOT CTC 80 deg. Layering 70 deg,sharp	80 70	M Ser Perv TH-O	1-2% diss F-Mg py	
58.55 TO 82.05	ARGILLITE WITH MINOR RHYODAC T.	Black to dark grey. Loc. lt. green. Very fine grained, fine in tuffs. W foliated, well lam'ed argillite and siltstone, minor rhyodac T. Argillite is locally contorted, microfaulted, slump Bx. Flame structures indicate tops downhole, overturned. Rhyodac T layers have argillite bands/chips within them, fine qtz phryic. Tuffs at 64.26 -- 64.57 66.31 - 66.46 66.56 - 66.61 BOT CTC approx. 25 deg? Layering 80 deg. (30-90)		Loc. VW irreg 1-3mm qtz veins. S Ser'z in Rhyodac T. layers.	2-3% py as Fg disseminated within particu- lar bands/layers, loc 5-10% py M.g as lenses up to 3x1.5cm.	Apparently non-conductive. Layering C/A/ 80 deg. 58.55 - 69.00 40 deg. 69.00 - 81.00 60 deg. 81.00 - 82.05
82.05 TO 84.36	RHYODAC F. T. & ARGILLITE	Lt. green - Sl. grey and dark grey. Fine ash, V.f argillite. W foliated fine rhyodac F. tuff @ 82.05 - 82.77 Cx-Lithic T @ 83.22 - 84.36m (10%, 1-10mm argillite frags) 82.77 - 83.22: Argillite. BOT CTC 70 deg. Layering 55 deg.	25 80	M Ser'z of Rhyodac tuffs. Local VW 1-3mm irreg qtz veins.	1-2% py F-M.g disseminated local blebs TH-O.	Note: Rhyodac tuffs have 5% lam argillite frags.

HOLE NUMBER: BAR-13

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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HOLE NUMBER: BAR-13

MINNOVA INC.
DRILL HOLE RECORD

DATE: 19-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
84.36 TO 84.41	FAULT	Dark grey. Very fine grained. F-C frags. Narrow fault gouge zone. Fault 70-80 deg.		Clay carbon fault gouge.	2% Diss F.g py	
84.41 TO 121.00	ARGILLITE MINOR INTER LAYERED SLST & GREY WACKE	Black. Light to medium grey. Very fine grained. Generally well laminated thinly bedded argillite (85%), SLST (10%), Greywacke (5%). Similar to previous argillites. Locally debris flow textures. Layering variable. END OF HOLE	75	VW loc Mod i-2mm irreg qtz veinlets.	2-3% F.g py, loc 5-10% py in restricted 1-20mm layers. Loc V.f grained py in layers (<1-2mm thick, ie) 90.64m C/A 55 deg. Also loc blebs 3x10mm.	Layering C/A's 89.00 - 92.00 65 deg. 92.00 - 96.00 45 deg. Note: 115.00 - 121.00m End of hole Approximately 45% core recovery.

HOLE NUMBER: BAR-13

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					COMMENTS				
				AG ppm	AS ppm	B ppm	CU ppm	PB ppm	SB ppm	ZN ppm	AU ppb	AU g/T	CU Z	PB Z	ZN Z	AG g/T		
7724	11.28	12.00	0.72	0.6	1	8	17	44	1	67	10							
7725	12.00	13.00	1.00	0.5	3	7	9	28	1	45	5							
7726	13.00	14.50	1.50	1.2	5	1	6	34	1	41	40							
7727	14.50	16.00	1.50	0.3	9	2	5	10	1	36	90							
7728	16.00	17.50	1.50	0.3	5	1	5	11	1	22	40							
7729	17.50	19.00	1.50	0.3	17	1	4	12	1	22	5							
7730	20.50	22.00	1.50	0.4	14	1	8	23	1	47	5							
7731	22.00	23.50	1.50	0.3	9	3	7	40	1	79	10							
7732	25.00	26.50	1.50	0.6	4	1	2	27	1	39	10							
7733	26.50	28.00	1.50	0.4	12	1	4	24	1	45	20							
7759	49.26	50.90	1.64	2.7	66	11	55	24	10	568	10							
7760	50.90	53.40	2.50	1.5	40	10	48	22	5	371	5							

HOLE NUMBER: BAR-13

GEOCHEM. SHEET

DATE: 27-January-1988

Sample	From (m)	To (m)	Length (m)	AL2O3	BA	CAO	FE2O3	K2O	MgO	MnO2	Na2O	SiO2	SR	TiO2	ZR	TOT	As ppm	As ppm	B ppm	Cu ppm	Pb ppm	SB ppm	Zn ppm	Au ppb	Au g/T
7936	19.00	20.50	1.50	13.63	.018	.09	1.52	.30	.08	.03	6.85	75.08	.01	.19	.014	97.81	.4	14	1	5	8	1	20	355	
7937	23.50	25.00	1.50	13.40	.080	.11	2.01	6.88	.14	.04	2.16	72.80	.01	.20	.013	97.84	.5	6	2	4	21	1	34	5	
7938	34.00	37.00	3.00	13.55	.107	.08	1.59	2.49	.16	.03	3.04	76.49	.01	.18	.013	97.74	.5	9	2	5	25	6	51	5	
7939	54.50	55.53	1.03	14.20	.321	1.17	1.98	4.04	1.44	.03	.87	73.52	.02	.23	.017	97.83	.8	10	1	7	34	1	72	5	
7940	79.00	82.00	3.00	13.22	.165	1.53	4.48	3.62	1.98	.08	.51	71.29	.01	.62	.010	97.52	.8	10	10	47	32	2	165	5	
7941	100.00	103.00	3.00	14.85	.144	1.85	5.52	3.58	2.48	.07	.98	66.82	.02	.74	.013	97.08	.9	1	19	52	18	3	188	5	
7945	118.00	121.00	3.00	13.63	.122	2.41	5.82	3.35	2.41	.08	.49	67.95	.02	.82	.013	97.12	1.0	3	18	44	22	1	167	5	

HOLE NUMBER: BAR-13

GEOCHEM. SHEET

PAGE: 1

MINNOVA INC.
DRILL HOLE RECORD

HOLE NUMBER: BAR-14

IMPERIAL UNITS: **METRIC UNITS: X**

PROJECT NAME: BAR
PROJECT NUMBER: 215
CLAIM NUMBER:
LOCATION: SC3

PLOTTING COORDS GRID:
NORTH:
EAST:
ELEV:

ALTERNATE COORDS GRID: FIELD
NORTH: 85+
EAST: 90+
ELEV: 143

COLLAR DIP: 50° 0' 0"
H OF THE HOLE: 124.97m
START DEPTH: 0.00m
FINAL DEPTH: 124.97m

COLLAR GRID AZIMUTH: 270° 0' 0"

COLLAR ASTRONOMIC AZIMUTH:

DATE STARTED: October 18, 1987 COLLAR SURVEY: YES
DATE COMPLETED: October 20, 1987 MULTISHOT SURVEY: NO
DATE LOGGED: 0, 0 RRD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NO

CONTRACTOR: FRONTIER DRILLING LTD.
CASING: 3.97M LEFT IN HOLE
CORE STORAGE: BARRIERE WH

PURPOSE:

DIRECTIONAL DATA:

HOLE NUMBER: BAR-14

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

PAGE: 1

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 3.97	CASING OVER BURDEN					
3.97 TO 12.90	RHY FOP INTRUSIVE OR FLOW(?)	Medium to lt. grey-green. Aph-Mx. Fine to medium grained CX. Massive M fractured rhyolite FOP intrusive or flow (?). 3-8% FP phenos (<1-2mm ragged 1-5% qtz eyes <1-1mm round. BOT CTC unclear.		W 1-3mm qtz veins +/- py. Patchy vague silicif'n (a result of devit'n?)	Tr-1% py (2-3% py diss near BOT CTC)	Note lim on fractures to 14.00m
12.90 TO 18.18	TUFFACEOUS CHERT W/ QTZ EYES	Dull M. green. Aph - Very fine grained. Fine to medium CX. VW foliated massive looking tuffaceous chert with qtz eyes. Qtz eyes irreg distribution 1-5% <1-2mm lense-round shape. BOT CTC ?		Tr Ser VW 5-20mm milky whgite qtz veins +/- sph, C/A 65-45 deg.	2-5% py as F.g diss, blebs & discon Str +/- qtz veins Tr-4% Sph as diss <1-2mm grains, discon <1-mm thick veinlets sph is medium reddy brown, ie) 12.90 - 14.10: 3-5% py, 1-2% sph 14.10 - 15.04: 2-3% py, 2-3% sph, Tr cpy 15.04-15.50: 22 py, 1-3% sph, tr cpy 15.50 - 16.68: 2-3% py, 2-3% sph 16.68 - 18.18: 3-5% py, Tr cpy	
18.18 TO 22.11	RHY OP FLOW ?/ DYKE ?	Light dull green. Aph-GM. Fine to medium grained CX. Massive rhyolite Op flow? or dyke? 3-5% <1-2mm qtz eyes. CTC's do not show chills or clear crosscutting features. BOT CTC approx 90 deg. Rel sharp	90	Perv W-M ser'z as apple green casting. W 1-2cm thick milky white qtz veins C/A 45 - 60 deg.	1-3% F.g diss py, Mil-2% sph as above. Tr cpy. 18.18 - 18.89 2-3% py, 2% sph, Tr cpy 18.89 - 20.90 1-2% py, loc Tr 1% sph 20.90 - 22.11 <1-1% py, Tr <1% sph	
22.11 TO 29.22	RHYODAC FOP CX TUFF	Light to medium apple green. Very fine Aph Mx. Fine to coarse grained. Tr foliation, massive looking rel homogeneous rhyodac FOP CX tuff. FP phenos 10-20%, <1-3mm qtz eyes, <1-22mm 5-10%. General depletion of CX's down hole to below unit. BOT CTC TRANS.		W-S perv ser'z of Mx, Lt - Med apple green. Loc M-S irreg ser veinlets.	<1-1% fine grained disseminated py Loc <1-1% sph, Tr loc Ga @ 27.50 - 29.22	S ser with min'z section.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
29.22 TO 30.60	DAC TUFF/ TUFFACEOUS CHERT +/- Qtz EYES	Medium dull green. Very fine grained. Massive looking Dac tuff- tuffaceous chert, similar to 12.90 - 18.18m. Note 1-3% 1-2mm qtz eyes TH-0, poss py 3-8mm frags. BOT CTC approx. 65 deg.		Tr- VW Ser TH-0	1-3% py diss and round 3-8mm frags? Loc <1-1% diss <1x2mm sph TH-0	
30.60 TO 32.70	RHY QFP DYKE? (POSS F TUFF)	Light to medium apple green. Aph-GM. Fine to medium grained CX. Massive QFP Rhy dyke or poss. F.Tuff/CX Tuff GM APH, very hard, qtz eyes 3-5% <1-2mm FP phenos 1-3% <1-2mm also part of GM BOT CTC 40 deg?	65	W perv ser casting.	1-2% Diss py, blebby py with loc 1-2% blebby Po, Tr Cpy. <1-1% sph TH-0 with fract and as dissem	
32.70 TO 37.80	DAC FQP CX TUFF	Dark to medium green. Very fine grained MX Fine to coarse grained CX. W foliated, rel homog looking FQP rhyolite CX tuff. Qtz eyes 1-3% py <1-mm FP phenos <1-8mm, ave 1-2mm, 10-20%, subhedral white. Note: argillite-tuffaceous large frags near Bot CTC. BOT CTC 25 deg.	40	W-M perv ser'z of Mx, Loc strong ser @ 32.20m. Sel ser'z of FP phenos	Tr <1% py Loc. Tr sph??	Minor gouge at 35.50 m. C/A 10 deg.
37.80 TO 65.58	ARGILLITE TUFFACEOUS SLST	Black, med. grey. Light to med. grey/green. Very fine to fine grained. Mod - well interlaminated argillite (80%), silty tuff (10%), F.g SST (5%) F.Tuff (5%) Sediments are contorted as shown by variable core axis angles. 37.80 - 48.00: Interlayered arg and SLST/tuffaceous SLST 48.00 - 59.00: Argillite 59.00 - 61.00: F Dac T (?) and interlayered F silty tuff (10%) and argillite (15%). Note 2cm thick fragmental layer with cherty frags (?) 61.00 - 65.58 Argillite		Loc W 0.5-20cm thick milky white qtz veins C/A 80 deg (37.80 - 40.00) W-S ser in tuffaceous SLST layers.	2-3% F - Cg py, Loc 3-5% py as M-Cg bands/Str C/A 60-90 deg. Loc 1-3% Po +/- sph Tr sph loc ie) 38.20m, 43.60 (with Po)	ayering 38.00 C/A 15 deg. 41.00 C/A 0 deg. 42.50 C/A 10 DEG 46.00 C/A 15 DEG 51.00 C/A 35 DEG 53.00 C/A 35 DEG 58.00 C/A 60 DEG 59.50 C/A 65-30 DEG 61.00 C/A 45 DEG. Tops up @ 51.00

MINNOVA INC.
DRILL HOLE RECORD

DATE: 20-January-1988

HOLE NUMBER: BAR-14

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
65.58 TD 68.40	ARGILLITE WITH BFP BX LAYERS	Black & Med-Lt. Grey layers. Very fine grained Lap-Bx frags. Argillite mod layered with 2-8cm thick BFP rhy Bx layers (25%), poss repeated due to folding. In Bx layers, frags 50%, subangular 0.5cm - 8cm, ave. 1-2cm. Layering 10 deg. BOT CTC irreg. 40 deg.	10 40	Bleached frags in Bx layers.	2-8% M-C.g py mainly in QFP Bx bands/layers as dissems, Clusters within fragments and as discord str. Cluster of massive C-g py up to 5x8cm.	Minor graphitic coatings.
68.40 TO 70.70	RHYODAC FOP CX- LITHIC TUFF	Medium to light green. Very fine grained MX Fine to coarse grained CX Lap frags. VW foliated, poorly layered? Rhyodac FOP CX-Lithic T. 5-10% 1-5mm qtz eyes, round. 10-15% 1-4mm FP phenos 5-10% aphyric 4-10mm ser'z frags and BFP? Frags BOT CTC approx. 25 deg. Layering 30 deg?	25 30	W-M Ser MX & sel ser'z of phenos.	Tr-1% M-Cg py	Has a flow-banded-like texture. Note CX T blackens near base of interval with influx of argillite.
70.70 TO 72.20	ARGILLITE	Black-dark grey. Very fine grained. Well laminated/contorted argillite similar to 65.58 - 68.40 Layering 60-80 deg.		Nil.	2-5% py diss and M-C.g Str C/A 10 deg. 3mm thick.	
72.20 TO 73.30	RHYODAC FOP CXT LITHIC T.	Medium green. Aph, fine grained MX. Fine to med.grained CX. Similar to 68.40 to 70.70m with blackish sections (arg-rich) BOT CTC 45 deg.		W Ser	1-5% F-M.g py diss + 35 deg C/A Str.	
73.30 TO 75.16	ARGILLITE	Black. Very fine grained. Argillite similar to 70.70 - 72.20 BOT CTC 40 deg.? Layering approx. 55 deg.		Nil	1-3% F-C.g py	
75.16 TO 79.10	RHYODAC FOP CX LITHIC T	Med. green. Aph. Very fine grained MX Fine to medium grained CX, L-Frags. Similar to 68.40 - 70.70m BOT CTC 80 deg.	80	M-W perv ser'z. M irreg qtz fill fract <1-4mm thick. +/- BX.	1-2% py mainly dissems and loc Str C/A 60 deg. 2mm thick.	

HOLE NUMBER: BAR-14

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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HOLE NUMBER: BAR-14

MINNOVA INC.
DRILL HOLE RECORD

DATE: 20-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
79.10 TO 88.75	ARGILLITE MINOR TUFFACEOUS SLST	Black - lt. grey. Very fine to fine grained. Mod - well interlaminated argillite and SLST. Ave 0.5cm thick layers. BOT CTC 45 deg. Layering 45 deg.		Nil	2-5% py as 1-2mm discordant stringers and disse'm'n C/A 60 deg.	
88.75 TO 104.00	FAULT ZONE	Dark grey-green. Very fine - fine grained MX Fine to medium grained CX, Aph chert. Fault zone with Blk FP CX Tuff, tuffaceous chert, chert. BOT CTC fault. 30% broken core/gouge. 88.75 - 89.60: Argillite rich FP (15%) CX Tuff, Blk Mx. 89.60 - 89.70: Tuffaceous chert. Layering 65 deg. 89.70 - 92.04: Cherty argillite blk. 92.04 - 94.13: Argillite rich FP CX Tuff 94.13 - 94.30: Lt. grey chert 94.13 - 96.00: Argillite rich FP CX Tuff 96.00 - 100.38: Dac F Tuff Aphyric (50% gouge) Gouge 0-10 deg. 100.38 - 101.20: Lt. to med. grey chert 101.20 - 102.20: Dac F Tuff 102.20 - 103.00: Med. grey massive chert. 103.00 - 104.00: Dac FP CX T		M Ser M-Ser M-Ser M-I Ser Loc. 20cm qtz veins M Ser M-Ser	Tr-ZZ diss py Tr py Tr py Tr py 1-2% py Tr py Tr py	
104.00 TO 124.97	CHEM TUFFACEOUS CHEM & DAC T	Light grey and light green. Aph, very fine grained. 104.70 - 106.30: Layered chert and tuffaceous chert. Layered at 50 deg. 106.30 - 111.25: Dac T, tuffaceous chert	50	S-M Ser	Tr py Tr py	Evid for tops down by truncated chert bed. Blocky/minor gouge.

HOLE NUMBER: BAR-14

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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HOLE NUMBER: BAR-14

MINNOVA INC.
DRILL HOLE RECORD

DATE: 20-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		111.25 - 114.50: Light to medium grey massive chert. Layered at 60 114.50 - 124.97: Pale green F Dat T/tuffaceous chert. Layered at 60 deg.	60	W-M Ser'z	Tr py	

HOLE NUMBER: BAR-14

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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HOLE NUMBER: BAR-14

ASSAY SHEET

DATE: 9-February-1988

Sample	From (m)	To (m)	Length (m)	ASSAY SHEET												COMMENTS
				AG ppm	AS ppm	B ppm	CU ppm	PB ppm	SB ppm	Zn ppm	AU ppb	AU g/T	Cu Z	PB Z	ZN Z	AG g/T
7899	11.50	12.90	1.40	0.4	4	2	166	18	2	1047	5					
7900	12.90	14.00	1.10	0.3	53	3	268	11	3	1589	15					
7901	14.00	15.50	1.50	0.4	10	3	174	17	2	3460	10					
7902	17.00	18.50	1.50	1.3	19	4	656	23	3	344	10					
7903	18.50	20.00	1.50	1.6	9	1	117	37	2	1319	5					
7904	20.00	21.50	1.50	1.3	8	3	57	43	1	1127	5					
7905	21.50	23.00	1.50	0.9	8	3	70	13	1	338	5					
7906	24.50	26.00	1.50	1.0	10	3	48	14	2	25	5					
7907	26.00	27.50	1.50	1.2	11	3	37	79	1	56	10					
7908	27.50	29.00	1.50	0.9	9	4	17	29	2	248	5					
7909	29.00	30.50	1.50	0.7	3	4	152	19	2	2169	5					
7910	32.00	33.50	1.50	0.8	8	4	153	36	3	1433	5					
7911	33.50	35.00	1.50	0.9	8	6	33	18	2	277	5					
7912	36.50	38.00	1.50	0.9	8	3	21	45	1	156	5					
7913	38.00	39.50	1.50	0.6	59	4	28	23	3	177	10					
7914	39.50	41.00	1.50	0.8	38	7	40	58	3	232	5					
7915	41.00	42.50	1.50	0.6	68	10	54	67	1	169	5					
7916	42.50	44.00	1.50	0.5	31	10	44	98	2	199	10					
7917	45.50	47.00	1.50	0.8	5	10	37	33	2	96	5					
7918	65.58	67.10	1.52	0.7	1	11	33	53	1	122	10					
7919	67.10	68.60	1.50	1.0	3	9	17	92	2	241	5					

HOLE NUMBER: BAR-14

ASSAY SHEET

PAGE: 1

HOLE NUMBER: BAR-14

GEOCHEM. SHEET

DATE: 20-January-1988

Sample	From (m)	To (m)	Length (m)	AL203	BA	CAO	FE203	K2O	MGO	MNO2	NA2O	SiO2	SR	TiO2	ZR	TOT	AG	AS	B	CU	PB	SB	ZN	AU	AU g/T
				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb		
7971	6.00	9.00	3.00	11.71	.156	.13	1.91	6.67	.18	.02	.71	76.01	.01	.19	.015	97.71	.7	10	2	86	21	2	64	5	
7972	15.50	17.00	1.50	11.83	.121	.07	3.81	3.93	.45	.01	.10	76.82	.01	.19	.020	97.35	.8	21	3	295	16	3	3631	5	
7973	30.50	32.00	1.50	11.49	.140	.24	2.71	3.12	.63	.01	1.17	77.41	.01	.19	.015	97.13	.8	134	3	623	51	4	4193	10	
7974	35.00	36.50	1.50	19.44	.320	1.29	2.56	6.57	2.42	.05	.21	63.69	.01	.32	.032	96.90	.9	9	4	32	22	1	58	5	
7975	44.00	45.50	1.50																						
7976	68.60	70.60	2.00	17.34	.279	.38	2.54	4.74	2.88	.04	.60	68.32	.01	.28	.031	97.43	.7	5	12	8	63	2	78	5	
7977	94.30	95.55	1.25	18.09	.323	.17	2.89	4.24	4.53	.02	.38	66.43	.01	.29	.028	97.37	.5	9	20	15	21	4	87	5	
7978	111.25	114.25	3.00	5.69	.060	.86	.71	.78	1.25	.02	1.26	86.65	.01	.13	.005	97.40	.5	25	4	5	12	1	11	5	
7979	121.00	124.00	3.00	15.00	.318	.47	1.26	3.93	3.26	.02	.61	72.33	.01	.21	.007	97.43	.5	12	10	3	15	2	13	10	

HOLE NUMBER: BAR-14

GEOCHEM. SHEET

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HOLE NUMBER: BAR-15

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: **METRIC UNITS:**

PROJECT NAME: BAR
PROJECT NUMBER: 215
CLAIM NUMBER:
LOCATION: ANNA

PLOTTING COORDS GRID:

NORTH-

NORTH
EAST-

ELEV.

ALTERNATE COORDS GRID: FIELD

NORTH: 77±3

FAST: 96±5

ELEV: 1308.0

COLLAR DIP: -50° 0' 0"

LENGTH OF THE HOLE: 120.70

START DEPTH: 0.00

FINAL DEPTH: 120.70

COLLAR GRID AZIMUTH: 276° 8' 0"

COLLAR ASTRONOMIC AZIMUTH

DATE STARTED: October 20, 1987 COLLAR SURVEY: YES
DATE COMPLETED: October 22, 1987 MULTISHOT SURVEY: NO
DATE LOGGED: 0, 0 RRD LOG: NO

PULSE EM SURVEY: NO

PLUGGED: NO

HOLE SIZE: NO

CONTRACTOR: FRONTIER DRILLING LTD

CASING: 5.65M LEFT IN HOLE

CORE STORAGE: BARRIERE WH

PURPOSE: TESTS ANNA FQP DOME PYRITE STOCKWORK

DIRECTIONAL DATA:

HOLE NUMBER: BAR-15

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

PAGE:

HOLE NUMBER: BAR-15

MINNOVA INC.
DRILL HOLE RECORD

DATE: 21-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 3.04	CASING/ OVER- BURDEN					
3.04 TO 72.84	RHYODAC QFP FLOW (LOCAL FLOW-BX)	Lt. to med. dull grey-green, also dk. grey & dark grey-green. GM-APH. CX- Fine to very coarse grained. Massive locally flow-banded rhyolite QFP flow with flow Bx. Qtz eyes 5-15% (ave 5-10%), <1-mm (ave 2-3mm) med. grey, oval-rounded shape. FP phenos <5-15%, (ave 5-8%) 1-10x5mm (ave 2-3mm) tabular subhedral (note resorbed borders) locally display exsolution(?) Myrmakitic textures in large 8-10mm phenos. GM is Aph siliceous, locally flowbanded. ie) 45.00 - 47.00 Note Auto-BX/flow BX @ 57.75m, frags rounded/corroded, flowbanded.		Silicification as devitrif'n cloudy patches up to 10x10cm ave.3x3cm, locally 5-10% @ 29.00 - 32.00m	Tr Fg py TH-0 Loc <1% py. Loc <1% Po as blebs @ 63.00 - 65.00m and 1-2% Po @ 72.24 - 72.64 with irreg grey qtz. Tr Sph (?) @ 69.80m (will be tested in litho)	Litho: BCD #7951 4.00 - 7.00m Litho: BCD #7952 35.00 - 38.00 Litho: BCD #7961 67.00 - 70.00m Note blocky lim frac. coatings to 30m. Note GM lightens to medium to lt. green grey @ 57.00 - 70.00m
72.84 TO 75.12	RHY QFP FLOW WITH INTERFLOW/? CHERTY TUFF	Medium to dark, dull green and dark grey. Aph GM, very fine grained aph cherty tuff. Massive Rhy QFP flow with minor tuffaceous chert (?) fragments/layers (15%). BOT CTC ? Rhy QFP flow similar to above. Tuffaceous chert(?) bands are dark grey and greenish beige, and occur as frags char'z by contorted beds, chips of one bed comp'n inside another.		With irreg. 2-8mm qtz + Po +/- py veins heal crackle Bx veinlike areas, ie) 72.30 - 72.90m & 73.62 - 73.92	1% py TH-0 1-2% Loc 3% Po (with qtz) diss ie) 72.35 - 72.55	
75.12 TO 78.90	RHY QFP CX TUFF (POSS FLOW)	Dull, lt.green, also med-dark green. Aph MX, fine to coarse grained CX VW foliated massive Rhy QFP CX tuff(?) 5-15% qtz eyes <1-mm 10-15% fp phenos <1.6mm (ave 2-3mm) Note Aph-VF MX lt. dull green, ser'z? Similar unit to 81.38 - 119.40 BOT CTC 60-80 deg.	70	Tr Ser(?) poss M. casting 76.50 - 78.90. VW ,1-2mm qtz veinlets VW fract with imm Chl coatings.	Tr py, loc 1-2% py/Po @ 75.90m assoc with qtz vein.	

HOLE NUMBER: BAR-15

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

PAGE: 2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
78.90 TO 81.38	CHERTY TUFF, CHERTY ARGILLITE MINOR QFP CX TUFF	Dark grey, light green and med-dark green. Aph-Mx, Fine to coarse grained CX. VW-W foliated interlayered cherty tuff, (20%) cherty argillite(?) (70%), FBP CX tuff. (10%) 78.90 - 79.40: FOP Rhyodac Cx tuff, minor interlam cherty argillite/cherty t. 79.40 - 80.30: Well laminated-contorted cherty argillite and cherty rhyodac T. lams 4mm ave. thickness. 80.30 - 80.60: FOP Rhyodac Similar to 78.90 -79.40 with blk Mx- argillite? BOT CTC 10 - 20 deg. irreg. 80.60 - 81.38: Interlayered cherty argillite and cherty tuff, loc Bx (tectonic) @ 80.68 - 80.90 Top CTC irreg 60° Layering 60 deg.	60 60	M-s ser in FOP CX T. W-M in tuffaceous chert. W-M irreg. milky white qtz C/A 80-50 deg. TH-O S Ser	<1-3% py as F-M,g euhedral dissemin'. Tr Po, TH-O	
81.38 TO 119.40	RHYOLITE QFP CX TUFF, MINOR FRAGMENTS (POSS FLOW???)	Lt.dull, camf. green. Aph-very fine grained MX Fine to coarse grained CX L-frags. Vv foliated, massive rhyolite QFP CX-lithic tuff. Rel homogeneous probably thickly bedded with subtle variations denoted by % frags, size & shape and colour of qtz eyes, etc. Qtz eyes range 5-15% (ave (10-15%), 1-5mm (ave 1-3mm) subround-round lenses and round eyes, brownish grey and fractured lt. grey(2 modes?) Fp phenos range 3-15% (ave 5%) <1-8mm (ave(1-2mm) whitish tabular CX, loc. broken? MX consists of shandy(?) siliceous lt.green loc lt. grey material.		W loc W 1-8mm thick wh-lt.grey qtz veins C/A 60-50 deg. W density frac coated with dark green chl.	Tr loc <1% F.g diss py. Tr loc <1% F.g diss Po blebs.	Litho: BCD #7962 100.00 - 103.00 Note: Qtz eyes ave. size tends to decrease downhole, along with poss lower qtz eye content and increased % frags. Above comment seems to reflect variations in a single thick bed vs a general trend.
119.40 TO 120.70	RHYODAC QFP FLOW OR QFP CX T	Dark grey to green MX/GM Aph-Mx, fine to coarse grained CX Massive rel homogeneous looking rhyodac QFP flow or QFP CX T. Similar to Rel CX rich. 10-15% 1-3mm qtz eyes 5-10% <1-5mm FP phenos and 10% <<1mm FP phenos END OF HOLE		Loc W irreg 4-10mm qtz veins	Tr py	This interval was broken out mainly due to the contrast MX colour with the above interval.

HOLE NUMBER: BAR-15

ASSAY SHEET

DATE: 21-January-1988

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						Comments
				AG ppm	AS ppm	B ppm	CU ppm	PB ppm	SB ppm	Zn ppm	AU ppb	AU g/T	Cu Z	PB Z	ZN Z	AG g/T
7894	72.00	73.50	1.50	.6	1	10	13	13	2	72	5					
7895	73.50	75.00	1.50	.7	6	8	11	24	2	78	10					
7896	75.00	76.50	1.50	.7	5	5	7	25	2	84	10					
7897	78.75	80.25	1.50	.4	3	7	16	11	2	37	5					
7898	80.25	81.75	1.50	.4	1	9	9	13	2	49	5					

HOLE NUMBER: BAR-15

ASSAY SHEET

PAGE: 5

HOLE NUMBER: BAR-15

GEOCHEM. SHEET

DATE: 21-January-1988

Sample	From (m)	To (m)	Length (m)	GEOCHEM. SHEET																				
				AL2O3	BA	CAO	FE2O3	K2O	MgO	MnO2	NA2O	SiO2	SR	TiO2	ZR	TOT	Ag	As	B	CU	PB	SB	ZN	AU
				z	z	z	z	z	z	z	z	z	z	z	z	z	ppm	ppm	ppm	ppm	ppm	ppm	ppb	
7951	4.00	7.00	3.00	13.34	.092	1.00	1.88	2.21	.55	.02	4.27	74.04	.01	.29	.031	97.74	.5	15	3	8	13	2	12	5
7952	35.00	38.00	3.00	13.14	.066	1.44	3.43	2.50	1.21	.04	2.98	72.13	.01	.28	.028	97.25	.9	2	11	21	15	1	25	10
7961	67.00	70.00	3.00	13.75	.175	.88	2.80	3.20	1.02	.04	3.06	72.05	.01	.31	.029	97.32	.9	6	8	9	29	1	54	5
7962	100.00	103.00	3.00	13.58	.087	.57	2.31	3.86	.70	.03	2.96	73.26	.01	.29	.029	97.69	.7	8	3	6	28	4	38	5

HOLE NUMBER: BAR-15

GEOCHEM. SHEET

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HOLE NUMBER: BAR-10

MINNUVA INC.

IMPERIAL UNITS: METRIC UNITS:

PROJECT NAME: BAR
PROJECT NUMBER: 215
CLAIM NUMBER:
LOCATION: LITTLE DIXON LAKE

PLOTTING COORDS. GRID
NORTH
EAST
ELEV.

ALTERNATE COORDS GRID: FIELD
NORTH: 100+99N
EAST: 121+ 2E
ELEV: 1162.00

COLLAR DIP: -50° 0' 0"
LENGTH OF THE HOLE: 124.05m
START DEPTH: 0.00m
FINAL DEPTH: 124.05m

COLLAR GRID AZIMUTH: 225° 0' 0"

COLLAR ASTRONOMIC AZIMUTH

DATE STARTED: October 24, 1987 COLLAR SURVEY: YES
DATE COMPLETED: October 25, 1987 MULTISHOT SURVEY: NO
DATE LOGGED: 0, 0 RRD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NO

CONTRACTOR: FRONTIER DRILLING LTD.
CASING: 3.05M LEFT IN HOLE
CORE STORAGE: BARRIERE WH

PURPOSE: TESTS COINCIDENT MAXMIN II CONDUCTOR AND AG-ZN-PB SOIL ANOMALIES

DIRECTIONAL DATA

HOLE NUMBER: BAR-16

DRILL HOLE RECORD

LOGGED BY: M.J. GRAY

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HOLE NUMBER: BAR-16

MINNOVA INC.
DRILL HOLE RECORD

DATE: 21-January-1988

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 3.05	CASING/ OVER BURDEN					
3.05 TO 15.15	FAULT ZONE (IN RHYODAC T & F CX T)	Light to med. grey, also cream - green. Very fine grained ash, fine to medium grained CX. M foliated, variably M-I sheared, poorly-mod layered Rhyodac F Tuff & F. F+/- QP CX T (25%) in fault zone (15% gouge) characterized by a number of 10cm-60cm sections of gouge //to sub// layering. F+/- QP CX T is 15% imm Fp & 1-2%, 1-2mm grey qtz eyes. BOT CTC 80 deg.? Foliation 70-80 deg. Layering 80 deg.	80 75 80	M-S Ser'z TH-0, S-I Ser-Clay +/- talc in gouge sections. Loc S 3-20mm milky wh qtz veins in CX T sub// to fol'n @ 9.00 - 11.00m.	<1-3% V-F.g diss py blebs, loc 1mm py Str crosscut fol'n @ 35 deg.	Limonite in gouge/foliation. Note fault gouge at 13.80 - 14.80m Note blocky/poor recovery th- Note talc in fault gouge.
15.15 TO 18.65	ANDESITIC F TUFF	Buff/beige. Very fine grained to UF. M foliated, poorly laminated (?) Andesitic F-ultra fine T with local <1-2Z <1-mm wh-grey qtz eyes(?) Lamination (?) poss a banding produced by foliation as noted by zig-zagging of py band. Rel homog. unit Fol'n 80 deg. BOT CTC 80 deg. Layering ?75-80?	80 80 75	M/S S Ser'z TH-0 M bleached (?) Tr bright green mica Loc. M qtz +/- calc 21-12mm veins sub// fol'n.	<1-2% V-F.g py as <1mm blebs, minor <1mm bands gen // fol'n/layering. Loc S1 py @ 18.05 - 18.20 As V-F.g pyritic irreg. bands near qtz veins.	
18.65 TO 25.90	FAULT ZONE	Very lt.grey-green. Fine grained MX. Fine to medium grained CX. Fault gouge/Bx, blocky core in Dac-Rhyodac T/FP CX T. 18.65 - 19.05: Dac FP CX T 15-20% imm FP 19.05 - 23.46: Gouge 23.46 - 25.50: Rhyodac F. tuff 25.50 - 25.90: Gouge Gouge 90 deg. Fol'n 70 deg.	90 70	M-S Ser'z, S-I Ser-Clay in gouge sections.	1% py ave loc 2-3% py as 1-2mm irreg bands @ 24.50 - 25.00m	Note only 8X recovery @ 20.42 - 23.46m Note gouge @ 18.00 - 18.81, 19.21 - 23.46, 25.50 - 25.90

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
25.90 TO 29.56	ANDESITE F. TUFF	Cream - SI green or buff/beige. Very fine to fine grained. M foliated, loc M layered andesite F. Tuff similar to 15.15 - 16.65m BOT CTC 70 deg. Gouge fol'n 80 deg.		M loc S ser'z. Minor 5mm thick VW qtz veins // fol'n.	2-3% V-F.g py as disse'm & cont-discon 1-2mm bands.	Note 15cm of gouge at BOT CTC
29.56 TO 41.30	AND-BSLT F.TUFF & CX-LITHIC TUFF	Lt grey-buff, loc. med. grey. Very fine to fine grained MX. Fine to medium grained CX. L-frags. M foliated, poorly layered and-bslt F.Tuff interlayered with FP +/- qtz eye(?) CX-Lithic tuff 30%) 29.56 - 29.81: andesite F Tuff 29.81 - 30.71: FP (25%) +/- qtz eye (<1%) CX-Lithic (10-15%) and-bslt Lithic frags felsic, stretched out along fol'n. 30.71 - 32.61: and-bslt F./ Tuff finely laminated 32.61 - 34.80: andesite F.I.-F FOP CX Tuff 34.80 - 36.46: and-bslt FP CX-Lithic T. Tr qtz eyes 36.46 - 39.10: andesite F. Tuff, Tr lma qtz eyes. BOT CTC 80 - 90 deg. Rel sharp fol'n 65 - 80 deg. Layering 85 deg. 39.10 - 39.60: Rhyodacc FOP CX-Lithic tuff 39.60 - 41.30: Dac F. Tuff		S Loc M Ser TH-O (Note MX is poss impure ser, due to WH argillaceous material produced from scratching). Loc wispy irreg bands of M.green chl (?) //sub// fol'n. ie) 32.15 - 32.61 (30%) 33.81 - 35.15 (50%) 40.50 - 40.70 (20%)	2-15% pyrite, ave 5-8% V-F.g brownish bronze py mainly as cont-irreg discon 1-10mm bands, ave 2-3mm. Loc MG py in carbonate(?) rich bands. Also occurs as disse'm loc assoc with qtz eyes(?). Loc Tr Cpy @ 36.36, Note 10-15% py @ 35.45 - 33.85, 38.70 - 38.90, 39.60 - 39.90, 32.55 - 32.61 (40%) 35.10 - 35.30.	Local gouge at 31.90 33.50 40.20 40.50 Note py is disse'm in CX-Lithic Tuffs vs VF.bands in fine tuffs.
41.30 TO 50.20	MAFIC (BSLT) LAPILLI-CX T - F. TUFF	Beige-straw yellow, Loc. lt.greenish yellow. Fine grained MX, Fine to very coarse grained CX. 2-20mm frags. M foliated/sheared rel homog looking (apart from alt'n) Mafic F tuff CX T., S bleached mafic tuff with brittle def'n of qtz veins producing "pseudo-qtz eyes". Pseudo Qtz eyes (?) <1-5%, eye shape <1-4mm, ave. <1-2mm. Fp phenos, loc. 1-5% 1-3mm BOT CTC 80 - 90 deg. Fol'n 90 deg.	85 90	- M Loc.W, Loc S 3-25mm lt.grey, fractured qtz veins //sub// fol'n. Veins loc broken up, poss boudined? Producing pseudo cataclastic textures. - Loc massive wh late 1-2cm qtz veins. - Tr green sericitic TH-O, loc 37 diss. bands @ 46.15 - 46.45m and 47.00 - 47.20m. - M Ser'z (?) TH-O Loc S wispy straw yellow bands perv-20Z Check Litho.	(1-2% disse'm F-g py (ave <1-1%)	Litho: BCD 7964 45.50 - 48.50

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DRILL HOLE RECORD

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		Layering ?80 deg?	80			
50.20 TO 60.30	DAC F TUFF/ TUFFITE(?)	Dark & light grey. Also lt. grey and lt-med green. Fine grained MX, Fine to coarse grained CX. Frags (<1-3cm) M-S foliated/sheared interbanded/shear banded Dac Tuff?? Tuffite banded appearance due to M-S qtz veins approx // fol'n that have been broken/ sheared with frags sheared out // fol'n (cata- clystic textures). Qtz veins busted into 3-30mm eyes (boudined?). BOT CTC 85 deg. Fol'n 85-90 deg Layering ?80-90 deg?	85	S Sel Ser either M-Dk grey or Lt. green <1-3mm wispy bands// fol'n (interfol'd with qtz) 20-30% poss Dk.grey-blkish band are argillite?? M-S 4-30mm thick lt. grey translucent & whitish qtz veins, C/A gen // fol'n.	Tr - 2% py V-F.g (ave <1% py) Loc. 2-3% py, V-F.g py @ 57.70 - 58.20	Minor gouge at 52.30 54.95 55.40 - 55.45
60.30 TO 64.66	RHYODAC(?) F TUFF MINOR F QFP CX T	Very lt.grey with greenish hue. Very fine grained and fine grained CX M foliated, mod layered rhyodac F Tuff (80%), F Rhyodac FP +/- qtz eye CX Tuff (20%). CX tuff layers 0.5cm - 5cm thick. Loc. 35mm thick bed. Similar unit to 15.15 - 18.65 FP +/- qtz ey CX Tuff bed @ 64.65 - 65.20 Fol'n 80-90 deg. Layering 80 deg. BOT CTC 85 deg.	85 85 85	M-S ser'z TH-O WV 5-10mm qtz veins C/A 45 deg.	3-15% V-Fg- Fg brown py as cont- discon (<1-4mm bands // layering (ave 1mm) minor diss'ed py. ave 3-8% py. Loc. 8-15% banded py & F tuff @ 64.50 - 64.60 and 65.80 - 66.44	Loc gouge @ 65.45m.
64.66 TO 69.50	FAULT ZONE	Lt. to med. grey Fine grained. Fault gouge - BX, blocky core in DAC(?) Tuffs of below unit. Gouge 65 deg?	80 85	S-I Ser-Clay	3-5% F.g diss py	Very blocky core/gouge approx 40% recovery
69.50 TO 73.16	ANDESITE FINE FP CX TUFF	Light grey. Fine grained loc.M. M-S foliated, REI homogeneous looking argillaceous (?) pyritic andesite fine FP CX tuff. Pseudo Qtz eyes (<1mm drawn out along fol'n (vague outlines) 10-25% (?). MX is argillaceous-sericitic. Fol'n 70-75 deg. Layering ? BOT CTC 60 deg.	75 60	S Ser(?) TH-O, material appears/feels argillaceous.	2-8% py as VF-g py as <1-3mm bands, some with qtz, also disse'mns. Note bands cont-discont zig-zag due to fol'n.	

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MINNOVA INC.
DRILL HOLE RECORD

DATE: 21-January-1988

FROM TD	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
73.16 TO 79.50	FAULT ZONE	Beige to lt.grey. Fine grained loc M. Fault gouge-Bx in the above interval of Dac-Rhyodac(?) tuffs. Gouge 50%, 50% S foliated/sheared. Shear 45-90 deg. BOT CTC 60-80 deg/	70	- S Clay/Ser TH-0 in gouge sections. - W Qtz veins 2-10mm locally broken up in gouge sections.	3-5% loc 8% py as <1-2mm cont-discon bands/lenses. Locally py (60%) qtz vein 8mm thick @ 75.00	
79.50 TO 93.60	ANDESITE TUFF, FINELY DTZ (?) PHYRIC (PYRITIC)	Very lt. grey (chalky look), Loc. lt.green. Very fine to fine grained. Fine grained CX M-S foliated, Rel homogeneous, locally crudely layered, andesite Tuff +/- F qtz eye CX T, Pyritic (argillaceous?) VF <1-mm pseudo qtz eyes TH-0 most of interval 1-10% (ave <5%) Fol'n 80-90 deg. BOT CTC tran'n Layering ? 85 deg..	85	M-S Ser TH-0 Local 1-3% bright green mica/sericite as clots and wispy green castings. ie) 85.05 - 86.80 banded 84.00 - 84.10 VW - W milky white 0.5 - 20cm veins C/A 80-60 deg. TH-0	3-12% (Ave 8% py) VF-g py as <1-5mm thick bands // and sub// the fol'n, also as disseminated blebs. i.e. 79.50 - 86.50 3-5% py 86.50 - 87.50 8-12% py 87.50 - 90.00 8% py 90.00 - 93.60 5-8% py	Layers of py are transposed in a zig-zag pattern.
93.60 TO 116.40	AND PYRITIC T/TUFFITE QTZ EYE CX TUFF, MINOR LAPILLI (?) TUFF	Pale beige - greenish. Very fine grained MX Fine - very coarse grained CX M foliated, crudely layered/thickly bedded andesite. Rhyodac pyritic F Tuff. F CX T, +/- tuffite(?) Note Mx is a conspicuous dull beige-green colour. Pseudo Qtz eyes <1-5%, <1-2mm Loc 4mm QP 3-5% @ 104.30 - 105.70 Minor lapilli tuff @ 110.40 - 110.70 Fol'n 85-90 deg. Layering 280 deg? BOT CTC ?	85 80	M-M Ser'z MX as semi-perv wispy beige-straw yellow band // to sub// foliation. VW-W 3-5mm qtz veins C/A 80-0 deg. locally boudined.	3-20% py V.F-g py similar to above. ie) 93.60 - 97.50 3-5% py 97.50 - 103.50 8-15% py 103.50 - 104.30 5-10% py 104.30 - 105.70 5% py 105.70 - 109.00 5-10% py 109.00 - 110.40 10-15% py 110.50 - 114.20 5-10% py 114.20 - 115.10 10% py 115.10 - 116.40 3-5% py	Note coarse QP could be sheared/ boudined qtz vein.
116.40 TO 124.05	AND-BSLT F.T., MINOR CX TUFF	Pale lt.green-grey. Lt.green-grey. Very fine grained. Medium to coarse grained CX M Loc S foliated, finely well laminated, locally mod layered andesite-bslt VF tuff with interlayered F-M QFP CX T, Coarse FP CX Tuff. 116.40 - 118.60: VF well laminated Rhyodac tuff 118.60 - 118.35: Rhyodac crowded QFP CX Lithic tuff (sharp CTC's)		- S Ser'z TH-0 +/- argillaceous material - Loc Tr 1% bright green @ 122.52 - 123.00 - VW qtz 2-10mm veins C/A45-60 deg.	Tr-3% py, VF-g, loc 5-8% py in coarse QFP CX tuff.	Note this interval broken out due to conspicuous drop in sulphide content and well laminated Tex.

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		10-15% <1-2mm FP 15-20% <1-2mm qtz eyes 5% Lithic frags (chert? felsic) 118.35 -120.30: VF well laminated Rhyodac tuff. 120.30 - 121.30: F-M QFPCX Tuff, qtz eyes up tp 10mm, poss lithic frags. 121.60 - 124.05: F FOP CX Tuff, Dacitic Layering 75 deg. Fol'n 80 - 90 deg.				

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DRILL HOLE RECORD

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ASSAY SHEET

DATE: 21-January-1988

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						Comments
				AG ppm	AS ppm	B ppm	CU ppm	PB ppm	SB ppm	Zn ppm	AU ppb	AU g/T	Cu Z	PB Z	ZN Z	AG g/T
7878	96.50	98.00	1.50	.9	24	8	74	33	1	93	5					
7879	98.00	99.50	1.50	1.0	10	8	71	37	2	71	10					
7880	99.50	101.00	1.50	1.1	8	10	70	38	2	62	10					
7881	101.00	102.50	1.50	1.1	5	11	72	29	2	70	5					
7882	102.50	104.00	1.50	.9	6	11	78	31	1	63	5					
7883	104.00	105.50	1.50	.9	14	8	75	30	2	57	10					
7884	107.00	108.50	1.50	1.0	5	11	72	29	2	74	5					
7885	108.50	110.00	1.50	1.0	16	6	60	22	2	47	5					
7886	110.00	111.50	1.50	1.1	19	6	50	28	3	92	5					
7887	111.50	113.00	1.50	.9	14	7	54	28	2	64	10					
7888	113.00	114.50	1.50	.9	14	7	68	48	2	49	5					
7889	114.50	116.00	1.50	.8	1	11	58	44	3	75	5					
7890	116.00	117.50	1.50	.9	21	14	60	28	2	91	10					
7891	119.00	120.50	1.50	1.2	24	5	52	37	1	43	5					
7892	120.50	122.00	1.50	1.0	15	5	68	38	2	60	5					
7893	122.00	123.50	1.50	1.0	8	7	28	31	2	65	5					

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ASSAY SHEET

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GEOCHEM. SHEET


DATE: 27-January-1988

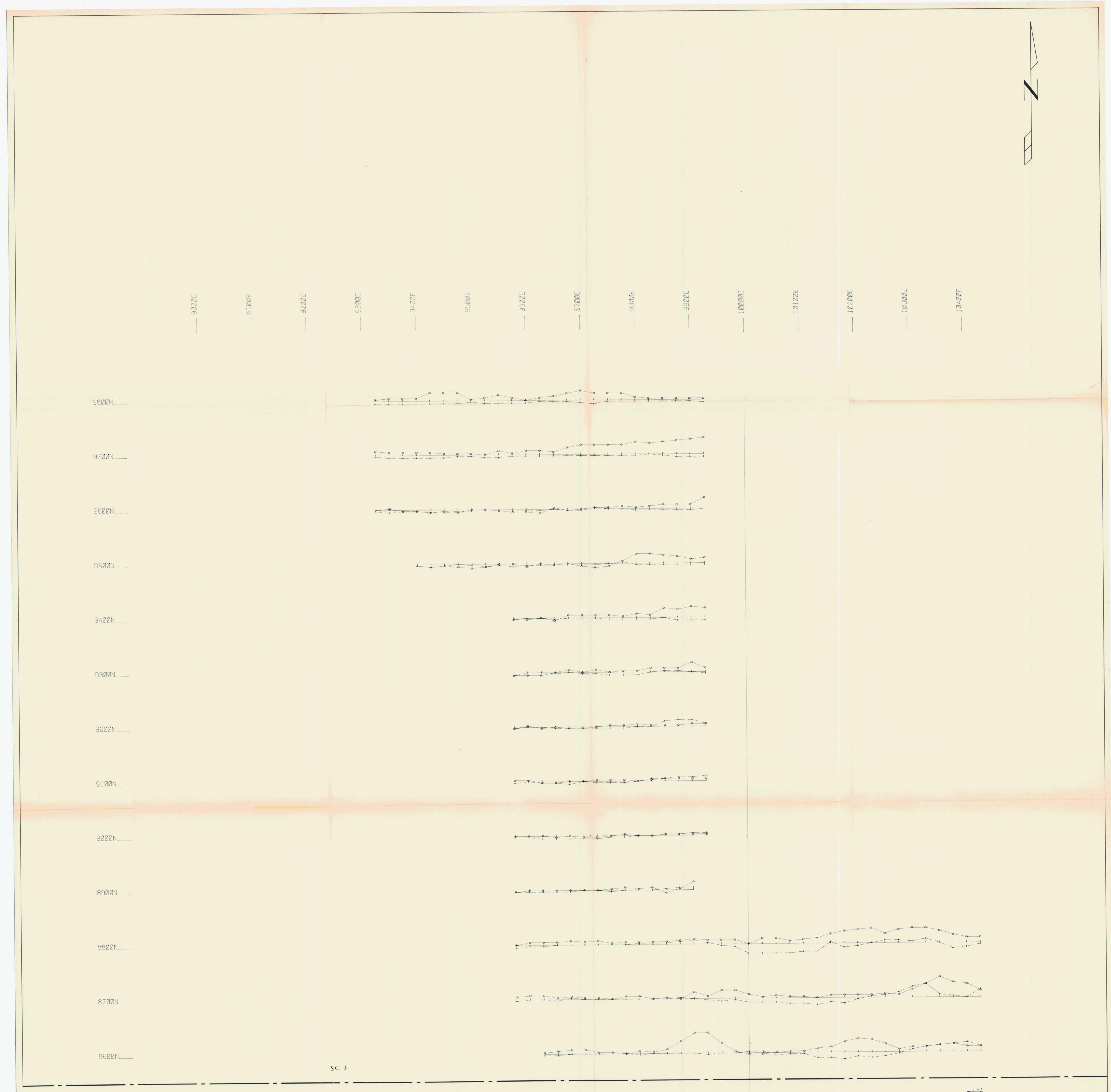
Sample	From (m)	To (m)	Length (m)	AL203	BA	CAO	FE203	K2O	MgO	MnO2	Na2O	SiO2	SR	TiO2	ZR	TOT	A6	AS	B	CU	PB	SB	ZN	AU	AU g/T
				%	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppb		
7958	6.00	7.50	1.50	13.89	.130	2.02	2.92	3.57	1.27	.08	.47	73.02	.02	.28	.014	97.69	.7	13	3	19	25	2	59	5	
7959	16.50	18.00	1.50	20.02	.158	3.79	10.04	4.77	2.69	.27	1.88	52.82	.03	.96	.007	97.45	.9	9	6	32	39	5	86	5	
7960	37.50	39.00	1.50	20.99	.138	2.64	7.59	3.73	1.36	.07	3.69	55.65	.03	1.44	.010	97.34	.8	14	7	186	36	1	125	5	
7964	45.50	48.50	3.00	16.86	.109	3.42	9.24	3.72	3.99	.20	1.03	56.49	.03	2.32	.010	97.41	1.0	28	7	212	27	4	68	5	
7965	57.00	60.00	3.00	12.77	.099	7.71	4.93	3.43	3.77	.14	.29	63.11	.04	.61	.013	96.89	1.3	18	5	28	34	2	49	5	
7966	71.00	72.50	1.50	17.96	.085	4.82	6.22	2.56	.91	.10	1.66	58.06	.04	1.11	.015	93.53	1.1	9	7	16	26	1	60	5	
7967	89.00	90.50	1.50	16.07	.059	6.46	7.47	3.32	2.44	.12	1.51	58.57	.03	1.01	.014	97.05	1.2	2	5	15	34	3	31	5	
7968	105.50	107.00	1.50	16.23	.036	7.31	9.11	2.54	2.59	.15	3.05	54.82	.04	.95	.011	96.82	1.0	18	10	77	40	2	66	5	
7969	117.50	119.00	1.50	12.88	.038	11.28	9.54	2.46	4.97	.24	.98	52.96	.03	1.60	.012	96.99	1.2	24	10	62	50	1	60	10	
7970	123.00	124.05	1.05	17.47	.064	6.57	8.05	3.67	2.92	.30	1.26	55.49	.03	1.13	.010	96.97	1.0	6	9	17	25	1	57	5	

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GEOCHEM. SHEET

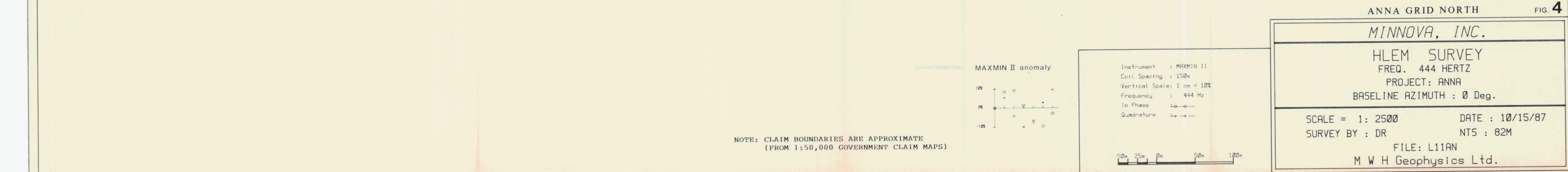
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




GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,996





MAXMIN II anomaly

1987 Drill hole location

NOTE: CLAIM BOUNDARIES ARE APPROXIMATE
(FROM 1:50,000 GOVERNMENT CLAIM MAPS)

Instrument : MAXMIN II
Cord Spacing : 150m
Vertical Scale : 1 on = 10%
Frequency : 1777 Hz
In Phase : +---+
Quadrature : +---+


20m 25m 30m 100m

ANNA GRID SOUTH

MINNOVA, INC.

HLEM SURVEY
FREQ. 1777 HERTZ
PROJECT: ANNA
BASELINE AZIMUTH : 0 Deg.

SCALE = 1: 2500 DATE : 10/14/87
SURVEY BY : DR NTS : 82M
FILE: HIANN
M W H Geophysics Ltd.



NOTE: CLAIM BOUNDARIES ARE APPROXIMATE
(PROM 1:50,000 GOVERNMENT CLAIM MAPS)

MAXMIN II anomaly



ANNA GRID SOUTH	
MINNOVA, INC.	
HLEM SURVEY	FREQ. 444 HERTZ
PROJECT: ANNA	BASELINE AZIMUTH : 0 Deg.
SCALE = 1: 2500	DATE : 10/14/87
SURVEY BY : DR	NTS : 82M
FILE: LIANN	M W H Geophysics

