

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 12.50	«OB»					
12.50 TO 15.90	CHERTY ASH «CHTY ASH»	Colour: creamy beige Grain Size: aphanitic to fine grained Weakly foliated @ rather textureless, very minor mottled appearance	60	Weakly sericite	Trace py along foliation planes	
15.90 TO 22.45	QUARTZ BIOT SCHIST, QUARTZITE	Colour: speckled light grey Grain Size: f.gr. Predominantly fine quartz with 15-20% individual to aggregate flakes of biotite weakly foliated 15.9-16.7 -quartz chlorite biotite calcite schist 2-3% incipient garnet 19.8-20.7 -massive medium grained granitic dyke 21.1-21.5 -rare quartz porphyroblasts 22.2-22.45 -quartz-chlorite calcite lower margin		Trace calcite veinlets		Dirty sandstones, siltstone
22.45 TO 25.95	QUARTZ PORPHYROBL. QTZ BIOTITE SCHIST	Colour: speckled light grey Grain Size: f. to c.gr. Same as previous unit but characterized by 3-4% 3-6 mm blue white quartz porphyroblasts, -weakly to moderately foliated @ 45-50 deg sharp lower contact parallel to foliation @	45			
25.95 TO 44.30	METASEDS BIOT, CHL QUARTZ SCHIST	Colour: streaky brown green Grain Size: f.gr. Well foliated chlorite and biotite rich layers, patchy more siliceous layers, minor hornblende; rare incipient garnets foliation @ 45-55 deg		Boudined discontinuous 1-2 cm quartz veins parallel to foliation common	Traces po, py except as noted below	Fine metamorphosed mudstone

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		Locally narrow black cherty and graphitic arg. 35.3-35.9 «ARG» -cherty argillite, black, foliated, very siliceous			32.4-37.9 -<1% po, py 35.3-35.9 «3-5% po» -3-5% wispy po parallel to foliation 37.8 -8 cm quartz vein, trace chalcopyrite	
44.30 TO 52.10	QUARTZ CHLORITE GNEISS	Colour: streaky, creamy, white green Grain Size: f.gr. Streaky, layered bounded quartz rich layers with layers of chlorite muscovite and minor biotite; well developed gneissic textured layering/foliation @ 44.3-45.1 -massive to weakly foliated quartzite	45		-trace py, po	Quartz rich sediments with muddy interbedds turbidites
52.10 TO 59.50	QUARTZ CHLORITE BIOTITE GNEISS	Colour: dark green Grain Size: f.gr. Well developed thin layered texture of <1 cm quartz rich layer and chlorite rich layers with minor biotite, muscovite and rare garnet foliation @ 45-55 deg less chlorite and more biotitic downhole			55.5-57.2 -1-2%, <1-1 mm tan diss. grains of sphalerite 57.2-59.0 -occasional 1-2 cm wide layers with <1-2% diss sp	Finer grained muddy siltstone, mafic component producing abundant chlorite turbidite
59.50 TO 63.00	QUARTZITE	Colour: creamy white Grain Size: f.gr. Massive to weakly foliated, 10% hornblende laths <0.5%, 1-2 mm garnets, some with white quartz halo				
63.00 TO 88.30	QUARTZ BIOT CHLORITE SCHIST	Colour; med. grey Grain Size: f. to m.gr. Streakly quartz rich layers with fine chlorite and biotitic lines parallel to foliation; quartz rich intervals prevail with less frequent <0.5			Traces of pyrite	Dirty siliceous interbedded sediments

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		<p>- 3 cm biotite, chlorite muscovite rich layers; occasional layers with 1-3 mm chlorite altered hornblende laths</p> <p>2-5 cm wide quartz layer possible quartz veins -boundined, discontinuous</p> <p>-gneissic layering at 55-60 deg</p>				
88.30 TO 145.10	QUARTZ BIOT SCHIST	<p>Colour: creamy green white Grain Size: f. to c.gr. 88.3-101.45 -fine grained siliceous metaseds wiht 10-15% coarser grained disseminated biotite and minor chlorite, weak - moderately foliated @</p> <p>101.45-120.95 -fine grained dirty siliceous metaseds, higher content of biotite and chlorite disseminated and as thin mica rich bands, locally calcite rich micaeous bands</p> <p>117.6-118.15 -coarse grained quartz-feldspar porphyroblastic</p> <p>120.95-145.1 -pervasive coarse granular texture locally 2-3% 1-2 mm feldspars, occasional <1-1 mm red garnets 15% biotite as <1 mm wide wisps and layers defining a weak foliation @ and as intergranular matrix</p> <p>133.75-134.9 -massive granitic dyke</p>	50 60		<p>-trace diss py, po</p> <p>-trace py</p>	<p>-coarse dirty sandstone</p>
	E.O.H.					

HOLE NUMBER: GR-1

ASSAY SHEET

DATE: 31-July-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS													COMMENTS					
				Cu %	Zn %	Pb %	Ag gm/T	Au gm/T	SiO2 %	TiO2 %	Na2O %	MgO %	Fe %	Cu ppm	Zn ppm	Pb ppm		Ag ppm	Au ppb	Ba ppm	Sb ppm	
10278	35.30	35.90	0.60												144	34	15	.7	2	124	1	
10276	55.50	56.35	0.85												143	29	7	.9	2	180	1	
10277	56.35	57.20	0.85												93	21	3	.9	1	203	1	

HOLE NUMBER: GR-2

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: GRIZ
PROJECT NUMBER: 248
CLAIM NUMBER: SAM 2
LOCATION: East Barriere Lake

PLOTTING COORDS GRID: Griz
NORTH: 4590.00N
EAST: 4810.00E
ELEV: 1060.00

ALTERNATE COORDS GRID:
NORTH: 48+10N
EAST: 45+90E
ELEV: 1060.00

COLLAR DIP: -44° 0' 0"
LENGTH OF THE HOLE: 142.30m
START DEPTH: 0.00m
FINAL DEPTH: 142.30m

COLLAR GRID AZIMUTH: ° ' "

COLLAR ASTRONOMIC AZIMUTH: 28° 0' 0"

DATE STARTED: July 20, 1991
DATE COMPLETED: July 21, 1991
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

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

CONTRACTOR: Frontier Drilling
CASING: 6.1 m, pulled
CORE STORAGE: Barriere Warehouse

PURPOSE: To test moderate IP chargeability high, mag high and Pb, Zn, Ba soil anomalies

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 6.10	<<OB>>					
6.10 TO 17.35	AMPHIBOLITE METAMORPH. MAFIC VOLCS	<p>Colour: dark green Grain Size: f.gr.</p> <p>6.1-9.0 -streaky dark green hornblende rich layers and creamy yellow beige, very siliceous layers, hornblende rich layers moderately magnetic</p> <p>11.7-12.1 -quartz rich interval chert/siliceous seds</p> <p>12.1-17.35 -moderately foliated, non magnetic, patchy quartz feldspar, no streaky texture like top of unit foliation @ 55-60 deg</p> <p>sharp lower contact parallel to foliation @</p>	55	<p>8.7-11.7 -irregular quartz chlorite veining, pervasive disseminated calcite complete quartz-biotite alteration of host</p> <p>10.3-11.0 -weak epidote with up to 3 cm epidote balls/fragments in last 15 cm</p>	<p>-5-7% po as large clots within quartz veins and fine disseminations within host 2-3% coarse brassy py</p> <p>10.2-11.7 -1-2% diss. py, minor coarse brassy py in qtz veins 10.8-11.7: 1-3% fine diss. magnetite</p>	6.1-9.0 = mag anomaly at collar
17.35 TO 20.70	CHERTY ASH	<p>Colour: creamy beige, greenish grey Grain Size: aphanitic to fine grained Weakly foliated, rare 1 mm round quartz eyes; very siliceous</p>			<p><1% very fine diss po, py</p> <p>Trace cp associated with po, py in qtz vein 19.2-19.4</p>	Same unit as in GR-1; 12.5-15.9
20.70 TO 27.05	QUARTZ BIOT SCHIST, QUARTZITE	<p>Colour: light grey Grain Size: f.gr. Fine, siliceous metaseds with 10-15% wispy biotite flakes defining moderate foliation @</p>	60			

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<1%, 1 mm pink garnets, weakly calcareous				
27.05 TO 31.15	QUARTZ PORPHYROBL. QUARTZ BIOT SCHIST	Colour: light grey Grain Size: f. to c.gr. Same as previous unit but characterized by 3-5% 3-5 mm quartz porphyroblasts sharp lower contact parallel to foliation @	60			Same unit as in GR-1 22.45-25.95
31.15 TO 63.40	QUARTZ MICA SCHIST/ GNEISS	Colour: greyish green Grain Size; f.gr. Moderate to well foliated, fine siliceous seds with pervasive fine muscovite, biotite and chlorite with weakly layered <1-3 cm mica rich layer of fine biotite muscovite and chlorite-muscovite 33.0-33.85 34.2-34.7 -feldspar phyrlic, 3-5%, 1 mm white feldspars		1-3 cm wide discontinuous quartz veins common	trace pyrite 34.85-34.96 -<1-1% diss cp, <1% diss po	Metamorphosed dirty siliceous fine sediments -similar to hole GR-1 44.3-59.5 -the biotite chlorite schist (mudstone) hosting mineralized argillite in hole GR-1 is absent in this hole metamo
63.40 TO 76.30	QUARTZITE	Colour: greenish white Grain Size: f.gr. Strongly siliceous, 7-10% diss. 1-2 mm green-black hornblende, weakly foliated defined by hornblende alignments and very fine muscovite partings, <1% garnet sharp lower contact @	65			clean siliceous siltstone/sandstone
76.30 TO 100.70	QUARTZ BIOT SCHIST	Colour: medium brown, green grey Grain Size; f.gr. Fine, siliceous metaseds with pervasive fine diss. biotite, muscovite and chlorite occasional mica rich layers <1-3 cm wide; patchy 5%, 1 mm white feldspar crystals		1-2 cm wide quartz veins common	trace py, cp within occasional qtz vein	

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		92.05-97.2 -<1-1%, 5-6 mm quartz porphyroblasts, weakly feldspar phyric				
100.70 TO 142.30	QUARTZ BIOTITE SCHIST	Colour: brownish green white Grain Size: c.gr. Pervasive coarse granular texture of quartz +/- feldspar with 15-25% intergranular anastomosing biotite defining a weak to moderate foliation @ 55-60 deg Occasional muscovite rich intervals wiht 1-2 mm biotite, possible hornblende		Rare <1-2 cm wide quartz veins 133.2 -10 cm white quartz vein	Trace diss py -10 cm 10% large po py clots	Identical to hole GR-1; 120.95-145.1
	E.O.H.					

