DIAMOND DRILLING

AREA: BAD VERMILLION LAKE REPORT NO: 31

WORK PERFORMED FOR: Minnova Inc.

RECORDED HOLDER: Same as Above [xx]
: Other [ ]

Claim No.	Hole No.	Footage	Date	Note
K 812847	SR-02	321m	June/87	(1)
K 812848 & K 851619	SR-03	112m 92m	June/87	(1)
K 812837	SR-04	216m	June-Jul/87	(1)
K 851618	BR-01 BR-02	252m 312m	June/87 Aug/87	(1) (1)

NOTES: (1) #W8801-009, filed June/88

MINNOVA INC.

HOLE NUMBER: SR-02 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SWELL BAY
PROJECT NUMBER: PN35B
CLAIM NUMBER: B12847
LOCATION: SOUTH OF GRAVEL PIT

PLOTTING COORDS GRID: MINE CENTRE M.
NORTH: 425.00N
EAST: 18600.00E
ELEV:

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: -66° 0' 0"
LENGTH OF THE HOLE: 321.00m
START DEPTH: 0.00m
FINAL DEPTH: 321.00m

COLLAR GRID AZIMUTH: 360° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 327° 0' 0"

DATE STARTED: June 15, 1987
DATE COMPLETED: June 20, 1987
DATE LOGGED: June 20, 1987

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

PULSE EM SURVEY: YES
PLUGGED: YES
HOLE SIZE: BQ

CONTRACTOR: ST. LAMBERT DRILLING
CASING: 15 METERS (CHECK?)
CORE STORAGE: ROBINSON'S LANDING

PURPOSE: TEST PIT S. ANOMALY, 20 CHANNEL EM-37 (TOP OF MAFIC, BOTTOM OF S RHYO) AT A VERT. DEPTH OF 200m.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
50.00	-	-64° 0'	ACID	OK		-	-	-	-	-	
100.00	-	-62° 0'	ACID	OK		-	-	-	-	-	
150.00	-	-61° 0'	ACID	OK		-	-	-	-	-	
200.00	-	-60° 0'	ACID	OK		-	-	-	-	-	
250.00	-	-59° 0'	ACID	OK		-	-	-	-	-	
300.00	-	-58° 0'	ACID	OK		-	-	-	-	-	

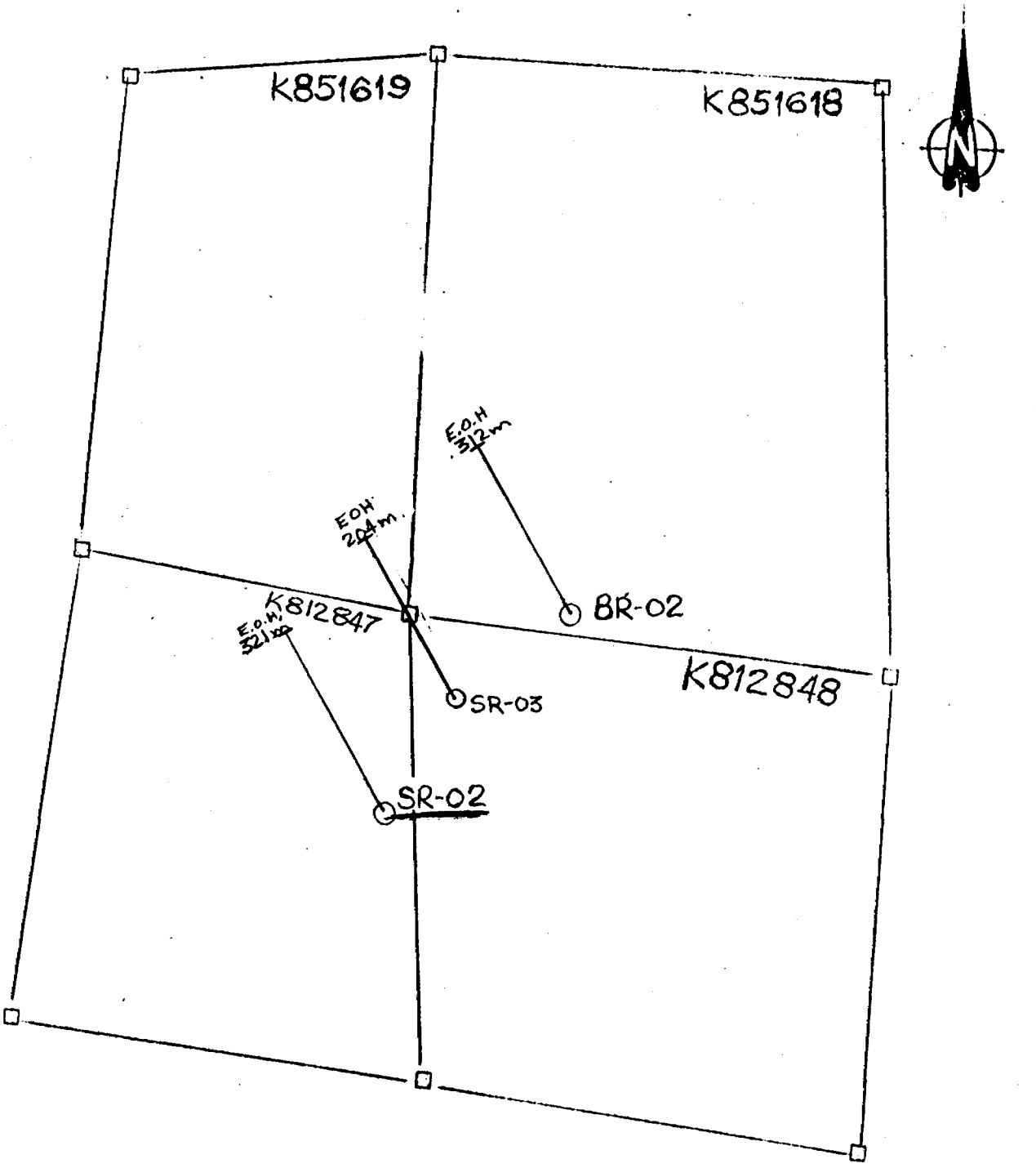
FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 / 15.00	OVERBURDEN «CASING»	Sand and gravel.				
15.00 / 34.70	GABBRO «GB»	Massive light to dark green and locally magnetic. Lighter sections cgr with needle amphiboles up to 1cm long. Darker sections mgr. Dark green, fgr mafic zones on a 1 to 3 meter scale are likely Xenoliths of altered mafic within gabbro near contact. These Xenoliths are cut by 5 to 10% erratic cm scale discontinuous Qtz-carb veins. Local strong epidote over 10 to 20cm. Sharp contact at 34.7 @	30		Trace to 1% diss Py.	
34.70 / 292.70	PERVASIVELY ALTERED MAFIC «PERV ALT MA»	Dark green, fgr and strongly foliated @..... Foliation defined by parallel alignment of micaceous chlorite. Weakly amygdaloidal, overall 1% mm to cm scale qtz amygs but also get 10 to 20cm zones containing up to 10% subrounded to elongated amygs. Rare local 30cm to 1 meter zones of relating weak SiO2 Sweat. Locally 1 to 2 meter zones of 5% erratic qtz-carbonate veining on a 2 to 5mm scale. 43.4-44.0 Dyke - mgr. 98.0-100.0 Dusting of 5% < 1mm white speckles. 107.7-108.0 Frothy flow - amygs. 113.2-113.5 Frothy flow - 60% qtz amygdules.	30	Strong to very strong chlorite (chlorite schist). At 56.0 Starting to get biotite. 62.0-63.5 Black chlorite zone (biotite?) «123.0-129.0 CHL SCHIST» Chlorite schist with silicified 10m zone.	Trace mm scale stringer Po + Py + Cpy + sphalerite. Locally 5 to 20% sulphides. 115.5-117.0 2 to 3% 2 to 5mm diss. bleby Py.	Intensity of sulphide mineralization increases downhole thru altered MAFIC unit.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		At 124.4 2cm wide qtz vein containing 5% Py.				
					[126.5-128.5] «~3% PO, PY» 2 to 3% stringer to bleby Po + Py 2% Po, 1% Py	
				[141.0-144.5] «CHL SCHIST» Chlorite schist.	2 to 3% Po + Py.	
		144.5-157.2 Intensely and size of amygdules has greatly increased zones from 1 to 5 meters containing up to 35% 2mm to 2cm subrounded to angular white qtz amygdules.				
					[151.0-151.1] «10% PO» 10% Po as wispy blebs aligned in stringers parallel to foliation.	
		[157.2-158.4] Silicified mafic. Mgr grey-green weakly foliated dyke. Moderately carbonated dyke (10% carbonate) 5-10% mm black biotite.		«SIL» Intense silicification.		
					At 163.5 1cm with zone of mm scale Po + Cpy veinlets.	
					At 165.0 3% Cpy associated with 1cm wide qtz vein at 30 degrees to CA.	
				174.0-175.3 Bleached - silicification.	[167.0-188.0] «2% SPHAL» 1 to 2% light honey brown sphalerite as fgr diss trains and threads (stringers) parallel to well foliated chlorite host. Sphalerite concentrated in 1 to 10cm wide zones spaced 0.3 to 2 meters apart	
					186.2 0.5 to 1cm sphalerite stringer.	
				[188.0-189.8] «BLEACHED CHL» Bleached chloritic zone.	[188.0-189.8] «5% STGR SPHALERITE» 5% fgr light honey brown disseminated and 1 to 5mm ragged stringers sub-parallel to fabric in chloritic schist.	
					193.4 0.5cm wide pale sphalerite stringer.	
					[198.5-199.5] «2-3% STRG SPHALERITE»	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
					2 to 3% fgr light brown stringer sphalerite.	
					At 198.5 0.5cm wide sphalerite stringers.	
					[226.3-228.1] «2% STRINGER PO» 5% stringer and elongated mm to 0.5cm scale elongated blebs of Po plus minor Py and trace Cpy.	
					[233.5-239.0] «2% STRINGER PO+TR SPHAL» 2% stringer to bleby Po plus minor associated fgr brown sphalerite Stringers up to 1.5cm.	
		237.0-243.0 Peppered with soft 10 to 30% brown to black Xlls that exhibit a yellow streak - black chlorite?				
					[239.0-244.0] «3% PY - PO» 2% stringer to diss Py plus 1% stringer Po	
					243.55-243.85 Minor Cpy, sphal, galena (< 1mm Xlls) with 3 to 5% Po + Py.	
					[256.5-264.0] «3-5% DISS PY» 3 to 5% diss mgr Py, locally in trains parallel to foliation (45 degrees to CA).	
		264.0-281.4 Dark green fgr mafic and well foliated a ..... Locally intensely amygdaloidal containing up to 30% 2mm to 2cm subrounded qtz amygdules within 0.5 to 1 meter zones. 5% mm to cm scale qtz veining sub-parallel to CA.	45	Very strong to moderate chlorite.	Overall 3 to 5% sulphides, mostly Py plus Po with trace sphalerite and Cpy. Locally up to 10% Py + Po. More altered-chloritic zones contain a greater concentration of sulphides. Mm to cm scale stringers of Po plus Py are aligned parallel or sub-parallel to foliation. Py is also visable as disseminations throughout and in trains parallel to foliation. Trace small Cpy splashes associated with Po stringers. Trace fgr brown disseminated grains of sphalerite (barely visible).	
		281.4-292.7				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		Green to grey fgr and intensely banded to foliated @	45	Strong to very strong (massive) chlorite. - local black chlorite/	Overall - 3% diss to stringer Py, 1-2% stringer Po.	Intensely banded texture may represent bimodal - felsic - mafic tuff (sed) at contact between MAFIC + QE'd Rhyo.
		Heterogeneous zone containing chloritized amygdaloidal mafic, pseudo felsic - mafic fragmental, 1 to 5mm scale bimodal banded Tuff?, massive grey hard felsic containing possible QES.				
		281.4-286.0 Fgr grey to green well foliated to pseudo banded chloritized and silicified mafic locally amygdaloidal, locally very soft then alternately very hard, pseudo banded.			5% diss to stringer Py.	
		Foliation and banding @	45			
		285.9-286.1 White qtz vein plus minor carbonated containing 8% cm scale stringer Po.				
		Sharp upper and lower contacts @	80			
		286.1-287.1 Soft dark green massive chlorite.			Trace sphalerite.	
		287.1-289.5 Fgr well foliated amygdaloidal mafic, pseudo-banded, alternate dark green and light grey silicified MA mm to cm scale bands.		Stong chlorite.	<5% PO, PY 3% stringer Po 2% diss to stringer Py Trace sphalerite.	
		Foliation @	45			
		289.5-292.7 Green to grey fgr and locally well banded, almost bedded looking to almost fragmental.		Moderate to strong chlorite.	5 to 8% as fgr disseminations 2mm to 5mm stringers and as cgr blebs in trains parallel to banding.	Possible sediment - bimodal tuff?
		Banding @	45			
292.70 TO 293.70	FELSIC DYKE «FD»	292.7-293.7 Felsic Dyke Grey, massive, fgr to mgr and hard. Sharp upper and lower contacts @	70			
		15% 2mm to 5mm anhedral mafic phenocrysts (chlorite).				
		293.7-296.0 Predominantly fgr grey felsic locally banded on cm scale.			5% Py as 2mm to 3cm wide stringers and fgr disseminations.	

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
293.70 TO 321.00	QE'D RHYOLITE «QE'D RHYD» E.O.H.	Grey, fgr hard QE'd rhyolite containing 5% 2mm rounded blue QES. 293.7-296.0 Predominatly fgr grey felsic, locally banded on cm scale.		Weak to moderate chlorite.	Overall 3% diss to stringer Py + Po. 296.0-299.0 10% disseminated to stringer to bleby fgr Py. 302.5 to 303.9 7% Po and 3% Py as four distinct 1cm to 25cm wide MS stringers plus agt.	No spherulites!



SWELL BAY
DRILL PLAN

100 50 0 100

metres

MINNOVA INC.

HOLE NUMBER: SR-03 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SWELL BAY
PROJECT NUMBER: PN358
CLAIM NUMBER K812848 K 851619
LOCATION: GRAVEL PIT (S. ZONE)

K812848 112 M
K851619 92 M

PLOTTING COORDS GRID: MINE CENTRE
NORTH: 500.00N
EAST: 18700.00E
ELEV:

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: -52° 0' 0"
LENGTH OF THE HOLE: 204.00m
START DEPTH: 0.00m
FINAL DEPTH: 204.00m

COLLAR GRID AZIMUTH: 360° 0' 0"
COLLAR ASTRNOMIC AZIMUTH: 327° 0' 0"

DATE STARTED: June 26, 1987
DATE COMPLETED: June 29, 1987
DATE LOGGED: June 30, 1987

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
ROD LOG: NO

PULSE EM SURVEY: YES
PLUGGED: YES
HOLE SIZE: BQ

CONTRACTOR: ST. LAMBERT DRILLING
CASING: 9.65 METERS
CORE STORAGE: ROBINSON'S LANDING

PURPOSE: TO TEST OFF HOLE ANOMALY IN SR-02, 100 METERS TO THE EAST AND AT 100 METERS VERTICAL.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
50.00	-	-48° 0'	ACID	OK	
100.00	-	-46° 0'	ACID	OK	
150.00	-	-44° 0'	ACID	OK	
200.00	-	-40° 0'	ACID	OK	

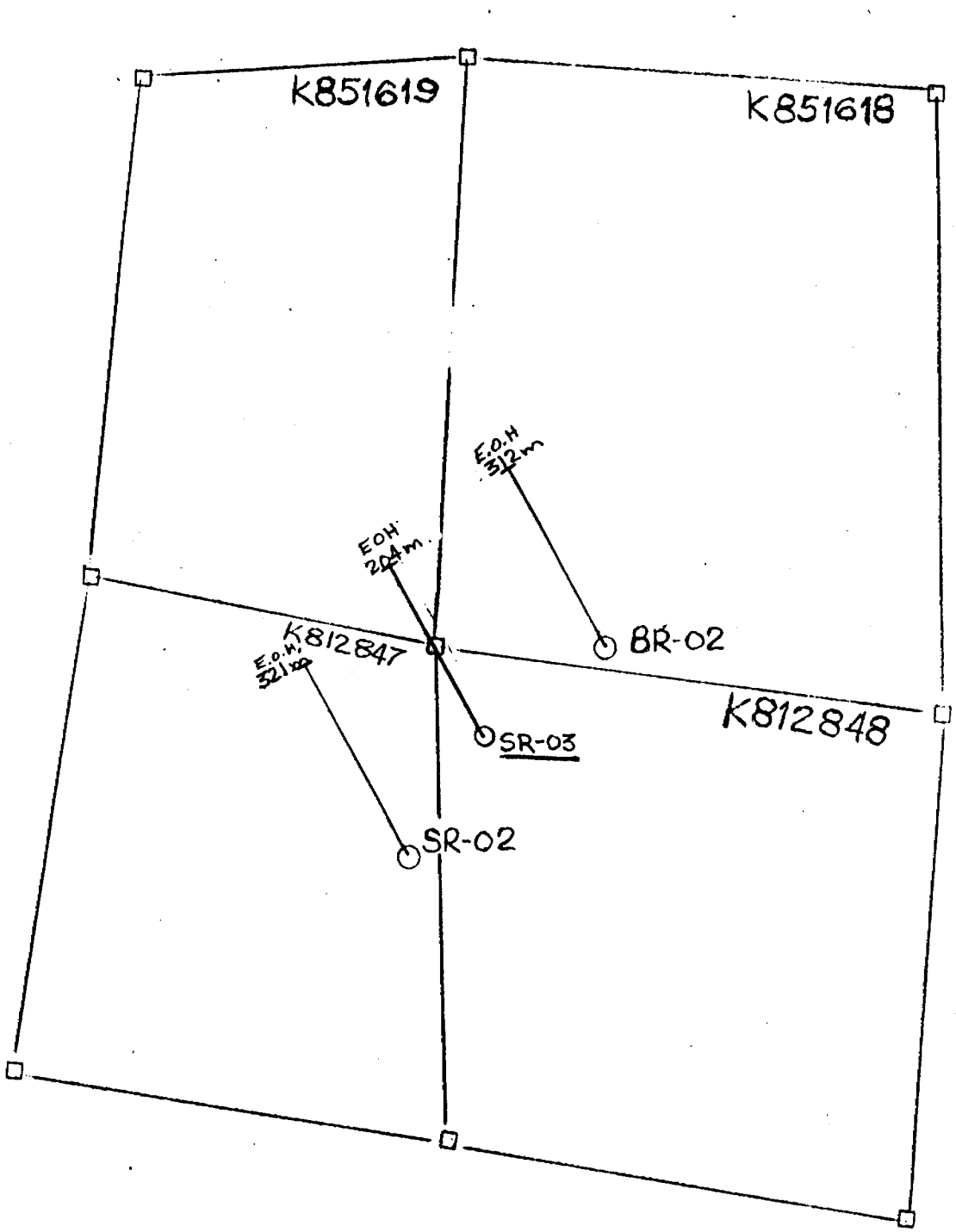
Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	

Ron Barnett.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00	OVERBURDEN					
TD	«CASING»					
9.00						
9.00	PERVASIVELY			«STG CHL»		
TD	ALTERED	Dark green, fgr weak to intensely foliated @	45	Strong to very strong chlorite	Trace diss to bleby Py.	
171.10	MAFIC		60	(chlorite schist).		
	«ALT MA»	Foliation defined by parallel alignment of chlorite (core breaks easily along this plane).				
		Amygdaloidal - with increased concentration of 2mm to 1cm qtz amygdules downhole thru unit. Only 1% amygs in first 75 meters.				
		10.0-12.0 5% 1mm to 1cm qtz-carb veining.				
					18.4-18.8 1 to 2% mm stringer Py Trace Po	
		26.0-57.5 Local white speckled texture in 1 to 3 meter zones containing 5 to 20% 1 to 2mm dusty white predominantly anhedral (rounded) Xtls - leucoxene?		51.8-52.0 Black chlorite (massive).	51.8-52.0 3-5% mm scale bleby stringer Py parallel to chlorite fabric.	
		54.0-56.0 Exhibits most intense texture described in section 26.0-57.5. 10-20% of white xtls exhibit a square or cubic habit.				
		59.5-60.1 Zone contains possible hyaloclastite flattened frags? plus a 5mm wide felsic looking folded band.				
					62.0-62.3 5% 2mm to 1cm elongated Py blebs.	
		62.5-63.0 Intermediated dyke. Brownish-grey mgr and weakly foliated, biotitic. Sharp contact at 62.5 with chloritic amyg MA @ ..	45	Moderate biotite (chl?) and carbonate		
		Sharp contact at 63.0 @	45			
		[63.0-80.0] Intensely chloritized MA, locally amygdaloidal.		«INT CHL»		
		79.0-92.0 Dark green soft chloritic and amygdaloidal containing intensely amygdaloidal zones from 30cm to 4 meters wide of 30 to 50% subrounded bluey		Very strong chlorite.	[79.0-90.8] «4% STGR PO, TR PY, TR CPY» 3-4% bleby stringer Po Trace Py	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		white 2mm to 1,5cm qtz amygs in massive dark green to light green (bleached) chlorite.			Trace splashy Cpy associated with Po stringers.	FROTHY FLOW!
		[90.4-92.0] «FROTHY FLOW» Intensely amygdaloidal pseudo-fragmental texture. Dark green 2cm x 3mm flatted pseudo frags (frags) define a foliation @	45		[89.0-89.4] «SMS, PO» 35 to 40% stock work stringer Po on a 2mm to 1cm scale. 1 to 2% Cpy splashes.	In hole conductor. Possible frothy fragmental flow.
		92.0-120.0 Med to light green fgr soft chloritized mafic, amygdaloidal - 2 to 5% 2mm to 1cm subrounded qtz amygs locally up to 15%.		Strong chlorite.	[102.5-110.0] «2% SPHAL +CPY STRINGERS» Overall 2% sulphides 1.5% dark brown sphalerite 0.5% Cpy predominatly as six discrete 3m-to 3cm stringers sphalerite stringer wide, sphal + Cpy (50:50) up to 1cm wide. Stringer at 55 degrees to CA.	
		105.3-105.5 Intensely bleached, pale and very soft.			[125.0-134.0] «2% PO, MINOR SPHAL» 2% Po, 0.25% Sphal Tr Cpy and Tr Py as discrete 1mm to 1cm ragged stringer	
					[125.0-129.5] «1% SPHAL» 1% sphal 3% po Tr Cpy	
					[127.4-127.5] 10% ragged mm to cm scale Po 4% stringer sphalerite 1% Cpy stringer	In hole anomaly!
					138.7-139.7 3 to 4% bleby to stringer Po + Py.	
		145.0-171.1 Dark green fgr altered weakly amygdaloidal mafic 3 to 5% erratically oriented qtz-carb veining. Locally moderately to strongly magnetic on a 1 meter to 5 meter scale (magnetite).		Strong chlorite.	< 1% diss Py minor Po.	
171.10 TO 204.00	QE'D RHYOLITE «QE'D RHYO» E.O.H.	Greeny grey relatively hard and massive, 1 to 2% tiny < 1mm blue QES. Locally weakly magnetic. Cut by 3 to 5% qtz and qtz-carb veins from 1mm to 5cm wide at various angles to CA.		Weak to moderated incipient chlorite.	Trace fgr diss Py.	
		Sharp contact at 171.1 @	45			

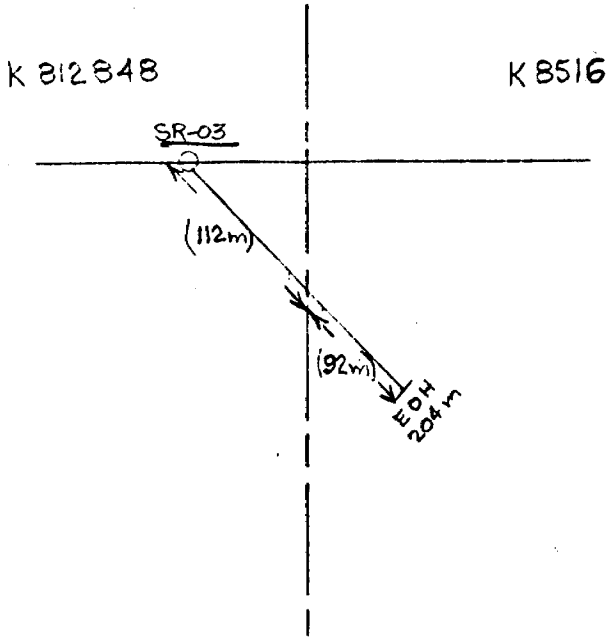
FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		Strong chlorite in MAFIC near contact.				
		198.4-201.1				
		Intermediate Lamprophyre Dyke.			2% fgr diss Py.	
		Greeny-grey massive relatively soft mgr dyke containing 25% 2mm to 1cm sub-rounded to angular to elongated mafic phenocrysts set in a mgr qtz carbonated rich matrix.			Bleby py associated with qtz veins.	
		5% qtz-carbonate veining.				
		Can't put a finger on either upper or lower contacts, gradational over 2 to 10cm.				



SWELL BAY
DRILL PLAN

100 50 0 100

metres



SWELL BAY
DRILL SECTION

100 50 0 100 m.

For Baltut.

HOLE NUMBER: SR-04

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SWELL BAY
PROJECT NUMBER: PN358
CLAIM NUMBER: 812837
LOCATION: GRAVEL PIT (N. ZONE)

PLOTTING COORDS GRID: MINE CENTRE
NORTH: 1225.00N
EAST: 19700.00E
ELEV:

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: -64° 0' 0"
LENGTH OF THE HOLE: 216.00m
START DEPTH: 0.00m
FINAL DEPTH: 216.00m

COLLAR GRID AZIMUTH: 180° 0' 0"
COLLAR ASTRNOMIC AZIMUTH: 147° 0' 0"

DATE STARTED: June 30, 1987
DATE COMPLETED: July 2, 1987
DATE LOGGED: July 2, 1987

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

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

CONTRACTOR: ST. LAMBERT DRILLING
CASING: 1.5m
CORE STORAGE: ROBINSON'S LANDING

PURPOSE: TO TEST EM-37 20 CHANNEL ANOMALY AT BASE OF LOCKHART LAKE QP.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
50.00	-	-64°64'	ACID	OK		-	-	-	-	-	
100.00	-	-63°63'	ACID	OK		-	-	-	-	-	
150.00	-	-63°63'	ACID	OK		-	-	-	-	-	
200.00	-	-63°63'	ACID	OK		-	-	-	-	-	
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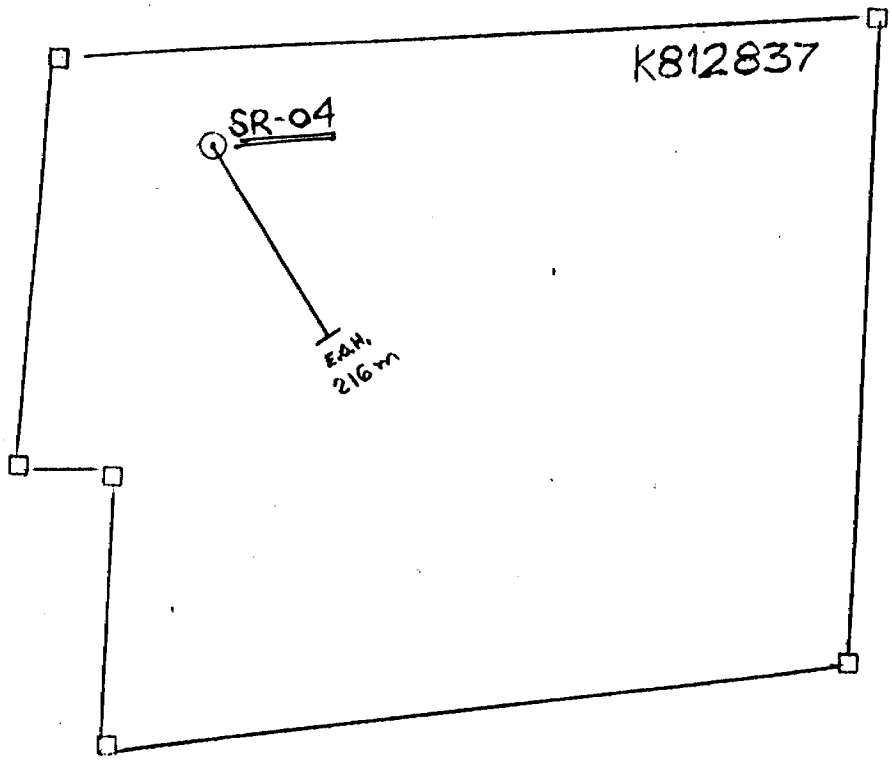
FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 / TO / 1.50	OVERBURDEN «CASING»					
1.50 / TO / 18.50	QUARTZ-QE'D GABBRO «QTZ GB»	Greeny-grey mgr massive and moderately hard. 5% 3mm sub-rounded blue QES and 5% 1 to 3mm sub to anhedral feldspar phenocrysts set in a fgr siliceous plus chloritic groundmass not magnetic. 16.3-16.8 Blocky rusty broken core - possible fault.		Moderate chlorite.		Could almost call it a QFP.
18.50 / TO / 21.10	QFP «QFP»	Bluey-green mgr massive and moderately soft. 25% 2 to 3mm blue QES and 25% euhedral to anhedral feldspar xtls set in a fgr siliceous - chloritic groundmass. Contact at 18.5 fairly sharp but irregular. Contact at 21.1 @	45	Moderate chlorite.		Could be phrase of QE'd Gb., but sure looks like QFP.
21.10 / TO / 135.80	QE'D RHYOLITE «QE'D RHYO»	Grey to greenish fgr massive and quite hard. Pseudo rice crispy spherulitic texture, more of a mini-cauliflower spherulitic texture. 1% tiny 1mm blue rounded QES. Locally 2 to 3% 1 to 2mm feldspar xtls. By 54 meters have developed good rice-crispy spherulitic texture. 45.0-49.1 «QP DY» QP-QFP Dyke. Bluey green mgr massive and hard, containing 34 to 40% 2 to 5mm foggy blue qtz pheno crysts and locally 20% andedral relict feldspar phenos. Contact at 45.0 gradational over 2cm. Sharp contact at 49.1 @	85	Moderate chlorite in matrix.	Trace Py as 2 to 5mm blebs and 2 to 3mm stringers.	
		49.1-52.0 «FELSIC DY» Felsic Dyke. Grey fgr massive and hard containing 15% 1 to 3mm euhedral black mafic needles (amphibole). Striations parallel to long axis of xtl easily visible. 5% 1 to 3mm wide qtz-carbonate veinlets. 50.5-50.9				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		Xenolith, inclusion of rice crispy spherulitic rhyolite.				
		Upper and lower contacts @	20			
		Blocky - broken core from 51.9 to 52.3 obscuring contact.				Possible shear or fault at contact between 2 dykes.
		51.9-53.4 Similar to section 45.0 to 49.1 but Qtz phenos and feldspar phenos less defined (more foggy) but still see relict blue QES.				
		54.0-67.0 Well developed rice-crispy spherulitic texture, trace small 1mm blue QES. 3 to 5% qtz and qtz-carb veining from 2mm to 4cm wide.				
		67.0-135.8 Grey fgr to agr hard massive QE'd Rhyolite. 2 to 3% 1 to 2mm blue QES. Pseudo - spherulitic texture has dissappeared. Minor - 1% 2mm to 2cm qtz - carb veining.		Weak incipient chlorite.		
		Contact at 135.8 erratic and graditional over 10cm but looks intrusive.				
135.80 TO 158.20	QE'D ANORTHOSITE «QE'D ANORTH»	Grey to pinky grey cgr and massive. 50 to 70% 2mm to 1cm anhedral to euhedral (tabular) pinky beige feldspar xtls in fgr grey matrix. 5 to 10% 2 to 3mm rounded deep blue QES. 3% 10cm scale white qtz and minor carbonate veining. Qtz veining cuts anorthosite host @.....	0-90			
		2 to 3% narrow 2 to 5mm erratically oriented qtz-carb veinlets.				
		140.5-145.8 Large Xenolith of QE'd Rhyolite.				
		At 140.5 contact red hematite? staining.				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
158.20 TO 173.50	QE'D RHYOLITE «QE'D RHYO»	Grey to greenish mgr grading downhole thru unit to fgr 163.0 meters, massive and hard containing 3 to 5% 1 to 2mm round blue QES. 2 to 3% 2mm to 1cm erratically oriented qtz-carb veins. Contact at 158.2 @	85			
		169.0-169.8 Q.P. zone within QE'D Rhyolite 40% 3mm to 4mm subrounded blue QES. Upper and lower contacts moderately foliated @ ..	35			
		171.6-172.3 30% dark grey - blackish elongated clots (frags?) in a fgr siliceous matrix, 5% 1mm blue QES. Upper and lower contacts @	35		171.6-172.3 «5% ST&R PO + 2% PY» 5% 2mm to 2cm erratic Po stringers 2% bleby stringer Py 172.2-172.3 20% stringer Po 5% stringer to bleby Py	Mini Shear Zone.
173.50 TO 187.70	AMYGDALOIDAL QE'D RHYOLITE «AMG QE'D RHYO»	Grey fgr massive and hard containing 10% 2mm to 3cm subhedral to elongated to blotchy white qtz-carbonate amygdules. 2% 1mm blue rounded QES. 187.6-186.8 Emerald green brecciated bed - green mineral very hard.		Unaltered (fresh).	Trace bleby Py. 20% fgr 1 to 3cm brecciated Pyrite veins.	Amygs give unit appearance of underlying mafic but colour hardness and QES differentiate it, presence of amygs also separate it from overlying QE'd Rhyo.
187.70 TO 188.90	MASSIVE SULPHIDES «MS»	Brassy fgr and banded 1mm to 3cm scale 80% sulphide, predominatly pyrite. 20% fgr felsic host. Contact at 187.7 @ ..... Contact at 188.9 @ ..... Banding (bedding ?) @	25 45 30	1% diss flakes of biotite.	187.7-188.9 «60% PY + 20% PO» 20% felsic host 60% fgr Py 20% fgr Po Crudely Zoned: --- 187.7-188.1 80% Py 20% host 188.1-188.9 50% Py, 30% Po, and 20% host	Barren sulphides looks like a bed.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
188.90 TO 216.00	ALTERED AMYGDALOIDAL MAFIC «ALT MA» E.O.H.	Greeny-grey fgr and soft locally well foliated to sheared @	20 45	188.9-216.0 «STGR CHL» Strong chlorite to very strong chlorite.	Minor (trace) local fgr stringer Py.	
		3% subrounded to irregular white to bluey qtz amygdules.				
		Locally up to 20% amygs over 0.5 meter sections.				
		5% erratic 1 to 3mm qtz carbonate veinlets.				
		Local 191.5 2cm wide felsic veins.				
		197.0-202.0				
		15% mm to cm scale felsic banding.				
		End of Hole.				



SWELL BAY
DRILL PLAN

100 50 0 100

metres

HOLE NUMBER: BR-01

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SWELL BAY
PROJECT NUMBER: PN354
CLAIM NUMBER: K-B51618
LOCATION: GRAVEL PIT (N. ZONE)

PLOTTING COORDS GRID: MINE CENTRE
NORTH: 1025.00N
EAST: 19000.00E
ELEV:

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: -64° 0' 0"
LENGTH OF THE HOLE: 252.00m
START DEPTH: 0.00m
FINAL DEPTH: 252.00m

COLLAR AZIMUTH GRID: 180° 0' 0"
COLLAR ASTRNOMIC AZIMUTH: 147° 0' 0"

DATE STARTED: June 20, 1987
DATE COMPLETED: June 25, 1987
DATE LOGGED: June 25, 1987

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

PULSE EM SURVEY: YES
PLUGGED: YES
HOLE SIZE: BQ

CONTRACTOR: ST. LAMBERT DRILLING
CASING: 11.30 METERS
CORE STORAGE: ROBINSON'S LANDING

PURPOSE: TO TEST BARBER LAKE (GRAVEL PIT) NORTH ZONE AT A VERTICAL DEPTH OF 200 METRES.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
50.00	-	64° 0'	ACID	OK		-	-	-	-	-	
100.00	-	64° 0'	ACID	OK		-	-	-	-	-	
150.00	-	64° 0'	ACID	OK		-	-	-	-	-	
200.00	-	64° 0'	ACID	OK		-	-	-	-	-	
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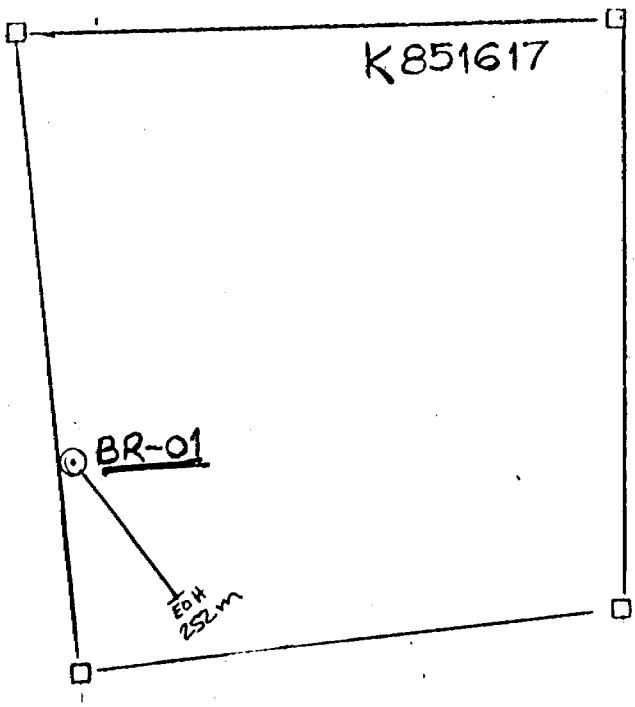
FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 10.70	OVERBURDEN «CASING»	Sand.				
10.70 TO 16.10	ANDRTHOSITE «ANORTH»	Grey-green to white cgr and massive containing 10-20%, 3mm bluish semi-reabsorbed QE'S (QE'D ANORTHOSITE). 40-50% 2 to 5mm anhedral white-pink feldspar xlls set in a fgr mafic matrix. 12.8-14.8 Lack of mafic component or intensely bleached, consists of mainly cgr. feldspar plus qtz cut by 5% 1 to 5mm chloritic mafic veinlets. Contact at 16.1 gradational over 10cm.				Definitely intrusive!
16.10 TO 129.00	QE'D RHYOLITE «QE'D RHYO»	Grey to greensih fgr and massive with a distinctive splotchy-mini cauliflower texture Locally 3 to 5% 1 to 3mm white qtz anygs. 17.6-18.0 Cgr anothosite dyke. 45.0-70.0 Cauliflower (pseudo spherulitic couliflower) texture becoming more defined downhole thru unit, by approximately 45 meters get individual cauliflower spherulits encased in chloritic matrix - 75% cauliflower spherulites and 25% chloritic matrix. 70.0-110.0 Start getting the appearance of small 1 to 3mm anhedral to subhedral feldspar phenocrysts. At 70 meters 2 to 3% felds Xlls, by 76 meters 10 to 15% felds Xlls. The combination of 2 to 3% blue QES and 10% feld Xlls define a micro QFP texture, these phenocrysts set in basically a fgr grey felsic ground mass with 20% chlorite (chlorite starting to look like pseudomorph often amphibole) - altered amphibole. 110.0-129.0 Greenish-grey fgr and massive containing 3 to 5% 1-3mm blue rounded QES.		Weak to moderate incipient wispy chlorite. Weak incipient chlorite. Local mm scale stringer chlorite at approximately 103 meters. Weak incipient chlorite.	Trace bleby Py. Local trace bleby Py.	Doesn't look like csuliflower & Rhyo - texture function of wispy chlorite. Could this be a fgr QE'D gabbro???

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		121.2-121.3 Qtz vein containing 20% chloritic inclusions.				
129.00 TO 161.40	ANORTHOSITE «ANORTH»	Pinky-beige very cgr massive feldspathic intrusive. 80% 3mm to 1.5cm anhedral to subhedral feldspar Xlls in a fgr moderately chloritic matrix. 133.3 to 134.8 Inclusion (xenolith) of QE'd rhyolite containing 10 to 20% 1mm violet-blue QES.(some quite angular) Anorthositic intrusive contains numerous QE'd inclusions from a fels cm to over 3 meters i.e. 144.2 to 147.8 QE'd Rhyo inclusive. Sharp but irregular upper and lower contacts.		Weak chlorite.		
161.40 TO 187.30	QE'D RHYOLITE «QE'D RHYO»	Grey, fgr, hard, massive and amygdaloidal containing 1% tiny (<1mm) round blue QES and 3 to 5%, 2mm to 2cm (loc 10%) ellipsoidal bluey qtz amygdules. 161.4-169.0 Heterogeneous contact zone with uphole anorthosite, mixture of cgr anorthosite (10%), mgr QE'd Rhyo (QP) containing up to 60% sub rounded to angular violet blue qtz Xlls, locally (168.0-169.0) @ ..... 166.8-167.3 White qtz vein. Sharp contact at 166.8 @ ..... Sharp contact at 167.3 @ ..... 187.2-187.3 Contact between QE'd Rhyolite and massive sulphides marked by 10cm moderately pyritic - biotiic? (MAFIC) zone containing trace diss fgr honey sphalerite	50 80 60	2 to 3cm wide massive soft green chlorite stringer at approximately 167.3.	3% bleby stringer Py. [168.5-168.8] «1-2% PY STRGS» 1 to 2% elongate blebs or discontinuous Py stringers parallel to foliation, associated with chlorite. [187.2-187.3] «2% PY» 2% bleby stringer Py. Trace sphalerite.	

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
187.30 / TO / 188.20	MASSIVE SULPHIDES «MS»	Fgr brassy massive sulphide bed. 70% sulphides, predominantly Po and 5 to 10% sgt 20% flesic 1mm to 1cm sub-rounded frags. Contact at 188.2 @.....	30		«65% PO, 5% PY, TR CP, 10% MT» Sulphide composition 65% fgr Po 5% diss Py minor < 1% Cpy 5 to 10% at xylls (< 1mm)	Very good conductor.
188.20 / TO / 188.70	SEDIMENT «SED»	188.2-188.7 Fgr banded grey to black sediment. Beds from 1cm to 10cm wide. Bedding @ ..... Black mafic beds composed of biotite and magnetite.	30	«BIO» Strong biotite.	Overall 5% magnetite, up to 10% magnetite in biotitic beds.	
188.70 / TO / 252.00	AMYGDA-LOIDAL MAFIC «MA» E.O.H.	Dark green fgr to agr., massive to locally foliated. 10% 1mm to 2cm subrounded qtz amygdules. At 190.7 1cm wide classic magnetite phritic pillow selvage 205.5-208.6 QE'd Dyke. Grey fgr hard and massive containing 10 to 15% irregular - lensoidal mafic phenocrysts altered to chlorite. 5% subrounded to irregular 2mm to 5cm Qtz blotches. Contact at 205.5 @ ..... Contact at 208.6 @ ..... 208.6-217.2 Dark green fgr massive amygdaloidal mafic, 5% 2mm to 2cm subrounded white qtz amygs. - locally 10% over 1 meter. 217.2-220.9 Same as section 205.5 to 208.6. Upper and lower contacts @ ..... 220.9-225.8 & 231.0-232.2 Classic hyaloclastite breccia 60 to 70% 2mm to 3cm irregular mafic frags in 30% fgr. lighter green matrix.	15 35 45	«FRESH» Weak to very local strong chlorite. - locally silicified. Weak incipient chlorite. Very weak chlorite.	Trace diss bleby Py.	Generally fresh looking mafic.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		Locally 20% subrounded anyg.				
				234.2-234.5 «CHL»		
		End of Hole.		Strong chlorite.		Only alteration observed in footwall.



SWELL BAY
DRILL PLAN

100 50 0 100

metres

HOLE NUMBER: BR-02

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SWELL BAY	PLOTTING COORDS GRID: M/C METRIC	ALTERNATE COORDS GRID:	COLLAR DIP: -65° 0' 0"
PROJECT NUMBER: PN354	NORTH: 500.00N	NORTH: 0+ 0	LENGTH OF THE HOLE: 312.00m
CLAIM NUMBER: K-851618	EAST: ~~18000.00E~~ 18800.00E wrong	EAST: 0+ 0	START DEPTH: 0.00m
LOCATION: GRAVEL PIT S. ANOM.	ELEV:	ELEV: 0.00	FINAL DEPTH: 312.00m

COLLAR AZIMUTH GRID: 360° 0' 0" COLLAR ASTRNOMIC AZIMUTH: 327° 0' 0"

DATE STARTED: August 1, 1987	COLLAR SURVEY: NO	PULSE EM SURVEY: YES	CONTRACTOR: ST. LAMBERT DRILLING
DATE COMPLETED: August 7, 1987	MULTISHOT SURVEY: NO	PLUGGED: YES	CASING: 7.30 METERS
DATE LOGGED: August 12, 1987	RQD LOG: NO	HOLE SIZE: BQ	CORE STORAGE: ROBINSON'S LANDING

PURPOSE: TO TEST INHOLE PULSE ANOMALY IN SR-03 & 20 CHANNEL EM-37 ANOMALY AT A VERTICAL DEPTH OF 200 METERS.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
50.00	-	63° 0'	ACID	OK		-	-	-	-	-	
100.00	-	62° 0'	ACID	OK		-	-	-	-	-	
150.00	-	59° 0'	ACID	OK		-	-	-	-	-	
200.00	-	55° 0'	ACID	OK		-	-	-	-	-	
250.00	-	46° 0'	ACID	OK		-	-	-	-	-	
300.00	-	37° 0'	ACID	OK		-	-	-	-	-	
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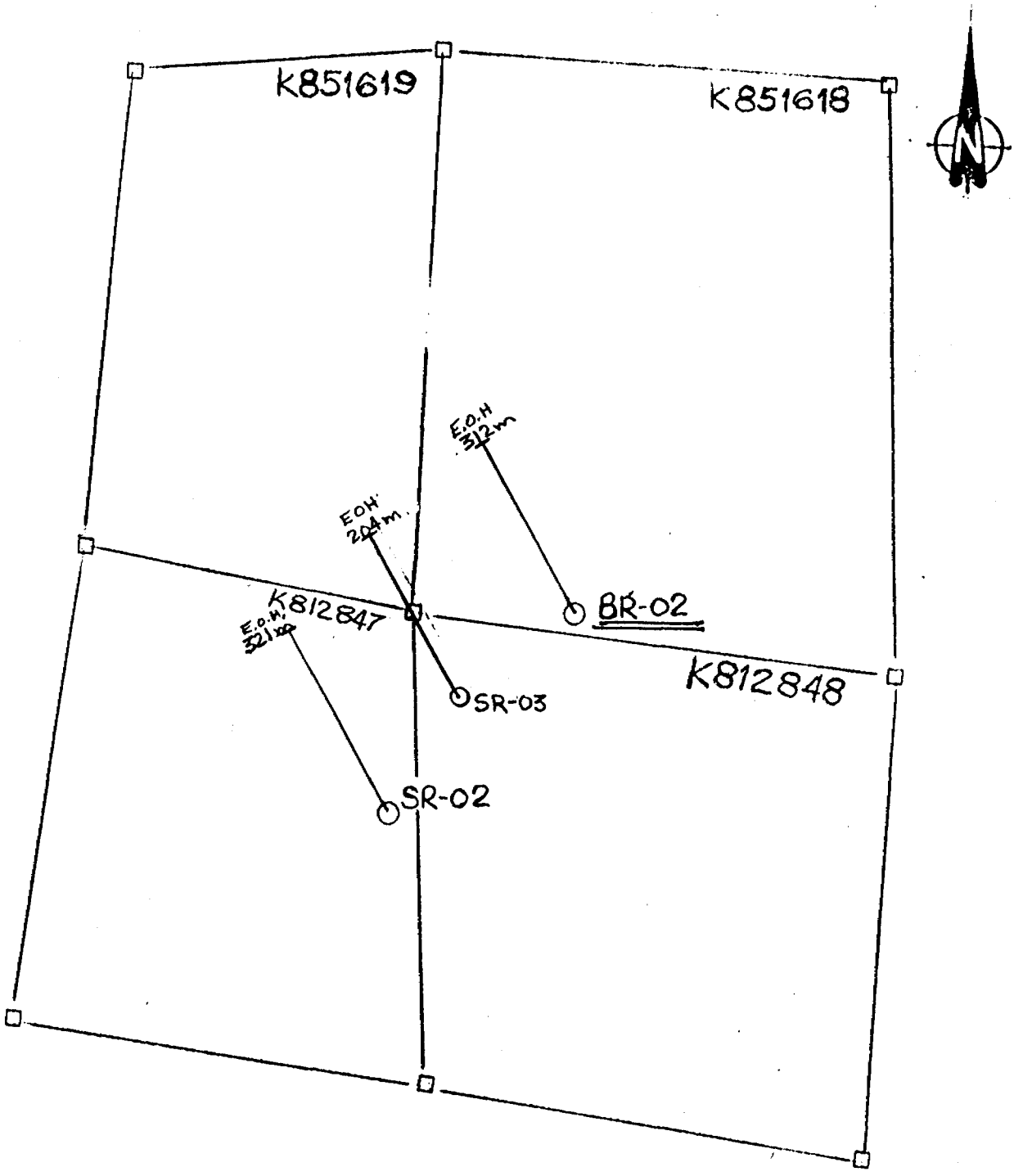
FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 6.50	OVERBURDEN «CASING»	Mud, Sand and Gravel.				
6.50 TO 288.70	PERVASIVELY ALTERED AMYGDA-LOIDAL MAFIC «ALT MA»	Dark green fgr very soft and well foliated @ .... Foliation defined by parallel alignment of micaceous chlorite. Overall 1 to 2% subrounded 2mm to 1cm bluey qtz amygdules, locally up to 20%.	30	Very strong chlorite to massive chlorite.		
		‡32.0-35.6‡ «LAMP DY» Lamprophyre Dyke. Massive mgr moderately soft containing 30% 1mm to 5mm anhedral biotite phenocrysts in amgr Qtz-chlorite matrix.		Strong chlorite.	2% diss Py.	
		‡38.0-71.0‡ 10%, locally up to 20% 1 to 5mm anhedral ghostly grey spots, predominantly flattened parallel to foliation; spots are very hard and look like qtz. and are relatively homogeneously distributed.		«DAL»		Spots are not amygs or spherulites possible cord. Xlls (DALM)?
		58.5-60.3 10 to 15% irregular 2 to 5mm scale qtz-carbonate veining.				
		71.0-112.0 Altered soft dark green mafic amygdules have dissappeared.		«CHL» Strong to very strong chlorite.	‡100.2-101.4‡ «CPY+PO+PY STRINGERS» 1 to 2% splashy Cpy 2% stringer Po 1% stringer Py	
					within this: 101.1-101.4 5% splashy stringer Cpy 3% stringer Po 2% stringer Py	
		‡116.0-140.0‡ Dark green vfgr weakly foliated to massive hard mafic, common concoidal fracture, not bleached, no amygdules.		«FRESH-SIL?» Silicification.		Window of Silicified Mafic. MSD-3180
		119.0-120.2 Soft Chloritic Zone.				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		140.0-152.3 Dark green fgr soft altered mafic. 5% 1 to 5mm erratic qtz-carbonate veinlets. 148.5-148.7 Very irregular bluey qtz veining. 50% qtz veining on a 1 to 5cm scale and 50% chlorite.		«CHL» Strong chlorite to chlorite schist.	Trace Cpy.	
		152.3-157.8 Silicified mafic, fgr. green and hard locally mgr looks fresh.		«SIL»		
		156.0-156.3 15% 3mm to 1cm elongated grey qtz qtz-carbonate spots with greeny-black halos - possibly amygdules		Silicification.		Window of fresh mafic plus silicification. MSD-3121
		157.8-180.0 Dark green soft fgr altered mafic, foliated @ ... 3% 2mm to 1cm erratic carbonate veining. Locally amygdaloidal. 178.7-179.1 Brecciated section - likely hyaloclastite.	40	«CHL» Strong to very strong chlorite. Strong chlorite.	Trace to 1% diss to mm scale stringer Py. 3% cgr Bleby to cubic Py.	
		180.0-181.0 «INT DY» Massive mgr Biotite Porphyritic Dyke, 10% 1 to 3mm anhedral Biotite Xlls. Sharp contact at 181.0 @	60			
		181.0-205.9 Dark green fgr, soft and well foliated @ ..... Locally amygdaloidal 1 to 3% 1mm to 5mm wide carbonate veinlets in first 2 meters.	45	«CHL» Very strong chlorite.	2% cgr bleby to cubic Py. 185.0-206.0 1% Po + Po + Py stringers and irregular splashy blebs. Trace sphalerite, Trace Cpy. 191.45-191.6 «5% SPH STRGS» Dark brown sphalerite stringers. 5% sphalerite 1% Py 198.0-198.5 «6% PO STRGS» 6% Stringer Po, 2% cgr Py Trace sphalerite	Conductive.
		206.0-214.0		«CHL»	206.0-214.0 «5% PO,2% PY,1% SPH STRGS»	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		Sulphide stringer zone within intensely altered mafic volcanic. Beginning of stringer zone at 206.0 marked by 3 to 4cm wide qtz vein.		Very stong chlorite. Black biotite associated with stringers.	Overall 8% sulphides as 1mm to 3cm stringers composed predominantly of Po and Py, some rich in brown sphalerite, local minor Cpy, possibly minor galena. Also 1mm to 1cm scale Po + Py blebs.	OFF HOLE (205 meters).
					At 206.0 - 3cm wide Po + Py stringer with minor Cpy and Galena?	Good conductor.
					206.2-206.4 «15% PO STRGS» SMS mainly as splashy network of Po stringer with minor sphalerite. 15% Po Trace to 1% sphalerite.	Good conductor.
					Over stringer zone: 5% stringer Po 2% stringer and diss Py 1% stringer and diss chocolate brown sphalerite. Sphalerite is found mainly in 3 stringers and vfgr disseminations.	
					At 207.45 - 0.5 to 1cm wide chocolate brown massive sphalerite stringer at 40 degrees to CA.	
					At 208.3- 2 to 3cm wide massive chlocolate at 40 degrees to CA.	
					At 212.3 - 0.5mm wide massive chocolate subparallel to CA.	
		214.0-222.0 Altered fgr green soft mafic.		«CHL»		
		215.0-217.0 25% 3mm to 2cm bluey-rounded qtz amygdules (frothy).		Very strong chlorite.	1 to 2% 1mm to 1cm wide Py and Po stringers. 1% Po 0.5% Py	
				222.0-226.0 «STRONG CHL» Strong chlorite.	222.0-226.0 1% diss cubic Py.	
					224.0-233.0 Moderate to strong magnetite.	
				233.3-234.0 «PATCHY SIL» «PATCHY SILICIFICATION»		

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		[234.0-288.7] «PILLOW BX» Pillow breccia - local hyaloclastite. Dark green to grey fgr. very soft to very hard, locally amygdaloidal (generally in 10 to 20cm zones). Heterogeneous alteration of intensely chloritic mafic and silicified mafic, zones of intense chloritization and silicification alternate on a 0.5 to 2 meter scale, often getting very sharp contacts between these two alteration types. Minor cm scale carbonate veining. Locally mm to cm scale chloritic spots (alteration) associated with light grey-bleached silicified patches.		Patchy strong chlorite alteranting with silicification. Stockwork chlorite silicification alteration.	[287.3-288.5] «5% PO STRGS» 5% sulphides predominately as 1 to 3cm wide lozenge shaped po blebs 4% Po, 1% Py At 287.8 - 3cm Po stringer.	Could call this white fragamet breccia! Frothy silicified zones could be pillow centres, chloritic zones possibly pillow selvages. Very Conductive.
288.70 TD 289.10	FELSIC SED TUFF «SED»	Grey fgr hard and banded (bedded) on a 1mm to 1cm scale. Relatively sharp upper and lower contacts @ ..... Bedding @	 50 45		«TR PY» Trace to 1% fgr diss Py.	
289.10 TD 289.70	SILICIFIED MAFIC «MA»	Greeny-grey to grey massive and hard. Bleached zone from 289.5-289.7 contains 20% 1mm to 2cm semi-irregular chloritic clots.		«SIL» Silicification.		
289.70 TD 290.30	FELSIC SED TUFF «SED»	Similar to section 288.7 to 289.1.			Trace to 1% fgr diss Py.	
290.30 TD 291.40	ALTERED MAFIC «ALT MA»	Dark green, fgr, predominantly soft and well foliated @ ..... Narrow windows of silicified mafic. 5 to 10% 1 to 5mm scale carbonate veining predominantly parallel to foliation.	 30	«CHL» Strong to patchy chlorite.	1% Py 2% bleby Po.	Chloritized contact zone.

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
291.40	QE'D			«UNALTERED»		
TO	RHYOLITE	Grey, fgr, hard and massive, containing 1% small		Weak incipient chlorite.	Overall trace to 1% diss Py plus	
312.00	«QE'D RHYD»	1mm rounded blue QES.			bleby Po.	
		Sharp chloritized contact at 291.4 @	45			
	E.O.H.	1 to 2% white barren 2cm to 5cm Qtz veining.			At 296.0 - 2cm zone containing 10%	
		1 to 2% mm scale qtz-carbonate veining.			irregular bleby Py.	
		End of Hole.				



SWELL BAY
DRILL PLAN

100 50 0 100

metres

Ontario Ministry of Northern Development and Mines

Report of Work

DOCUMENT No. W8801.009

Mining Act

Assessment files

Instructions – Supply required data on a separate form for each type of work to be recorded (see table below).
– For Geo-technical work use form no. 1362 "Report of Work (Geological, Geophysical, Geochemical and Expenditures)".

9/88

Name and Postal Address of Recorded Holder	Prospector's Licence No.
MINNOVA Inc.	T-556
SUITE 3970, P. O. BOX 91, COMMERCE COURT WEST, TORONTO, ONTARIO M5L 1C7	

Summary of Work Performance and Distribution of Credits

~~19,511.8~~ 17,797.28 Work Days Cr. claimed for Performance of the following work. (Check one only)

- ☐ Manual Work
- ☐ Shaft Sinking Drifting or other Lateral Work.
- ☐ Compressed Air, other Power driven or mechanical equip.
- ☐ Power Stripping
- ☒ Diamond or other Core drilling BQ
- ☐ Land Survey

Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.
K	629441	60.	K	629449	60.	K	670221	60.
	629442	60.		629450	60.		670222	60.
	629443	60.					670223	60.
	629444	60.		629476	60.			
	629445	60.		629477	60.		670225	60.
	629446	60.		629478	60.		670226	60.
	629447	60.		629479	60.		670227	60.
	629448	60.					670228	60.

see auto page

All the work was performed on Mining Claim(s): K629137, 629172, [illegible] K670225, K 695823, 695828, K777322, 777325 *

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

*K777333, 777334, 777337, 777338, K 812837, 812844, 812846, 812847, 812848, K 830403
K 844958, K 846559, K 851617, 8511618, 8511619, K 862225, K 863634, K 873627

WORK PERFORMED BY: ST. LAMBERT DRILLING CO. LTD., P.O. BOX 473, VALLEYFIELD, QUEBEC J6S 4V7

DURING THE PERIOD: JANUARY 9th, 1987 to AUGUST 7th, 1987

DRILL HOLE NUMBERS, DATES AND FOOTAGE/METERS DRILLED ARE LISTED ON A SEPARATE PAGE:

TOTAL METERS/FEET DRILLED 17,797.28 ~~19,529.12~~ Feet 5426 ~~5954~~ Meters x 3.28)

~~TO BE USED FOR THIS SUBMISSION 19,511.8 Feet~~

~~RETAINED FOR FUTURE SUBMISSION 17.32 Feet~~

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
RESEARCH OFFICE
JAN 29 1988
RECEIVED

KENORA
MINING DIV.
RECEIVED
JAN 15 1988
AM PM
1 2 3 4 5 6 7 8 9 10 11 12

Date of Report	Recorded Holder or Agent (Signature)
JANUARY 12, 1988	[signature]

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying		
FRANK BALINT c/o MINNOVA Inc. 2606 VICTORIA AVENUE, EAST, THUNDER BAY, ONTARIO		
P7C 1E7	Date Certified JANUARY 12, 1988	Certified by (Signature) [signature]

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific Information per type	Other Information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment. 629441	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment		
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Diamond or other core	Signed core log showing footage, diameter of		Work Sketch (as

JANUARY 12th, 1988 - MINNOVA Inc. LICENCE T-556

DIAMOND DRILLING ASSESSMENT FARRINGTON TOWNSHIP etal

CLAIM LIST cont'd

CLAIM NUMBER	DAYS
K 670229	60.
670230	60.
670231	60.
K 670232	60.
K 670384	60.
670385	60.
670386	60.
670387	60.
670388	60.
670389	60.
K 670390	60.
670391	60.
670392	60.
670393	60.
670394	60.
K 670395	60.
K 695817	60.
695818	60.
695819	60.
K 695820	60.
695821	60.
695822	60.
695823	60.
695824	60.
695825	60.
695826	60.
695827	60.
695828	60.
695829	60.
K 695830	60.

CLAIM NUMBER	DAYS
K 695831	60.
695832	60.
695833	60.
K 695834	60.
K 751312	100.
751313	100.
751314	100.
751315	100.
751316	100.
751317	100.
751318	100.
K 751319	100.
K 777322	100.
777323	100.
777324	100.
777325	100.
K 777326	100.
K 812834	140.
812835	140.
812836	140.
812837	140.
812838	140.
812839	140.
K 812840	140.
812841	140.
812842	140.
812843	140.
812844	140.
812845	140.

CLAIM NUMBER	DAYS
K 812846	140.
812847	140.
812848	140.
812849	140.
K 812850	140.
812851	140.
812852	140.
812853	140.
812854	140.
812855	140.
K 812856	140.
K 835126	~~122~~ 80.
835127	~~122~~ 80.
835128	~~122~~ 80.
835129	~~122~~ 80.
K 835130	~~122~~ 80.
835131	~~122~~ 80.
835132	~~122~~ 80.
835133	~~122~~ 80.
835134	~~122~~ 80.
835135	~~122~~ 80.
835136	~~122~~ 80.
835137	~~122~~ 80.
K 835138	~~122~~ 80.
K 842194	140.
842195	140.
842196	140.
K 842197	140.

...../

JANUARY 12th, 1988 MINNOVA Inc. LICENCE T-556

DIAMOND DRILLING ASSESSMENT - FARRINGTON TOWNSHIP etal

CLAIM NUMBER	DAYS
K 842198	140
842199	140
K 842200	140
K 844955	140
844956	140
844957	140
K 844958	140
K 846551	80 ~~122~~
K 846559	140
K 846560	140
K 851617	140
851618	140
851619	140
K 851620	140
K 854776	180
854777	180
854778	180
854779	180
K 854780	180
854781	180
K 854782	180
K 855201	140
855202	140
855203	140
855204	140
K 855205	140
K 855206	140
855207	140
855208	140
855209	140
855210	140
855211	140
855212	140
855213	140
855214	140
K 855215	140
K 862220	~~122~~ 81
862221	~~122~~ 81
862222	~~122~~ 81
862223	~~122~~ 81
862224	~~122~~ 81
862225	~~122~~ 81
K 862226	~~122~~ 81
K 863608	110
K 863609	110
K 863627	101.8
K 863634	140
K 939128	122
939129	122
K 939130	122
K 939131	122
K 939783	~~122~~ 80
939784	~~122~~ 80
K 939785	~~122~~ 80
K 939787	~~122~~ 80
939788	~~122~~ 80
939789	~~122~~ 80
K 939790	~~122~~ 80
939791	~~122~~ 80
939792	~~122~~ 80
939793	~~122~~ 80
939794	~~122~~ 80
K 939795	~~122~~ 80
K 939798	~~122~~ 80
K 939799	~~122~~ 80
K 965521	~~122~~ 80
965522	~~122~~ 80
965523	~~122~~ 80
965524	~~122~~ 80
965525	~~122~~ 80
K 965526	80.48 ~~122~~ 80

TOTAL 179 CLAIMS

MINNOVA

Minnova Inc.
Mining Innovation
2606 Victoria Avenue East
Thunder Bay, Ontario
P7C 1E7
Telephone (807) 623-1511
Telecopier (807) 623-7019

January 12th, 1988 LICENCE #T-556

List of Diamond Drill Holes, Drilling Dates, Claims Numbers and Meters Drilled for drilling submission of January 12th, 1988

HOLE NUMBER	CLAIM NUMBER(S)	DRILLING DATES	METERS DRILLED
BL-01	K777334/K777338	Feb.11 - 21, 1987	381
BL-02	K777337	Mar. 19 - Apr. 1, 1987	501
BL-03	K777337/K777338	Apr. 2 - 10, 1987	468
ML-02	K873627/K777333	Jan. 9 - 15, 1987	318
~~ML-03~~	~~K873627/K777333~~	~~Jan. 24 - Feb. 10, 1987~~	~~528~~
ML-05	K830403	May 4 - 6, 1987	174
ML-06	K846559	July 7 - 9, 1987	171
ML-07	K863634	July 9 - 10, 1987	144
SR-01	K812844/K812846	June 10 - 15, 1987	210
SR-02	K812847	June 15 - 20, 1987	321
SR-03	K812848/K851619	June 26 - 29, 1987	204
SR-04	K812837	June 30 - July 2, 1987	216
BR-01	K851618	June 20 - 25th, 1987	252
BR-02	K851618	August 1 - 7th, 1987	312
HS-01	K629137	May 25 - 26, 1987	48
HS-02	K629137	May 26 - 27, 1987	36
HS-03	K777325	May 27 - June 4, 1987	348
HS-04	K695823/777322	June 4 - 10th, 1987	306
HS-05	K695827	July 3 - 7th, 1987	178
HS-06	K862225/FF4261	July 12 - 18th, 1987	187
	Portion used for assessment on claim K862225 only		
	Hole length 349.7 meters		
HS-07	K670225	July 20 - 24th, 1987	423
HS-08	K629173/K629172	July 24 - 31st, 1987	228

TOTAL 5,954 Meters

5,954 Meters x 3.28 = 19,529.12 Feet/Days

To be used for this submission 19,518 Feet/Days