

824193

HOLE NUMBER: BAR 31

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: ZONE TYLOX 1989	PLOTTING COORDS GRID: LITTLE DIXON	ALTERNATE COORDS GRID:	COLLAR DIP: -45° 0' 0"
PROJECT NUMBER: 243	NORTH: 125.50N	NORTH: 125+50N	LENGTH OF THE HOLE: 100.00m
CLAIM NUMBER: DIXIE 2	EAST: 21.03E	EAST: 21+ 3E	START DEPTH: 0.00m
LOCATION: UPPER WIKIUP ROAD	ELEV: 1300.00	ELEV: 1300.00	FINAL DEPTH: 100.00m

COLLAR GRID AZIMUTH: 180° 0' 0" COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: October 10, 1989	COLLAR SURVEY: NO	PULSE EM SURVEY: NO	CONTRACTOR: FRONTIER
DATE COMPLETED: October 13, 1989	MULTISHOT SURVEY: NO	PLUGGED: NO	CASING: LEFT IN HOLE
DATE LOGGED: October 15, 1989	RQD LOG: NO	HOLE SIZE: NQ	CORE STORAGE: BARRIERE

PURPOSE: TO TEST A MODERATE AG ANOMALY ALONG A CONTACT BETWEEN FELSIC TUFFS AND ARGILLITE.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
48.50	-	0° 0'	ACID	OK		-	-	-	-	-	
61.00	-	0° 0'	ACID	OK		-	-	-	-	-	
100.00	-	0° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 3.05	«CASING»					
3.05 TO 23.90	«INT TUFF»	Pale grey, qtz.-feldspar phyric crystal tuff. Strong brecciation in places the result of hydrofracturing. Irregular blocks and fragments in black stringer matrix (chlorite ?). 4.4-4.45 orange and grey oxidized shear. 14.4-14.7 vuggy qtz. vn. rusty in vugs, no calcite 15.0-15.1 strongly oxidized. 15.1-15.15 calcite vn. 2cm thick, with qtz. clasts 15.50-15.6 5cm calcite vein, 5cm clay gouge. 18.1-18.5 rusty ankeritic spots between fractures. 20.2 2cm clay gouge. 23.0-23.9 decreased hydrofracturing. 23.5-23.9 possibly reworked tuff; poorly sorted, fine grained, feld clasts upto 5mm dia.	60 25 45 60 17	Weakly sericitic, minor clay, mod. calcareous (calcite + fe-carb) esp in matrix calcite stringers common. Black chlorite str. Moderately silicified into wallrock. Ankeritized.	Trace 1% pyrite.	3-4 not recovered. Thin blackish stringer matrix in places-chlorite? 11.3-14.3 litho'd. Small qtz. eyes (<5%) feldspar phenos.
23.90 TO 38.60	«GR ARG»	Black, fine grained, weakly to moderately graphitic, argillite. Well developed poker chip cleav. CLEAVAGE Some quartz veinlets appear to have been folded and rotated into the foliation. Brownish appearance is due to concentrations of pyrite.	80	Cut by 5% white quartz, conformable with foliation.	Very finely diss. py. Minor bands and stringers of pyrite (to 10%).	Fairly hard, competent. 32.6-35.6 litho sampled. Fracturing, discordant quartz veinlets increase as fault is approached.
38.60 TO 44.80	«FAULT ZONE»	Mixed soft and broken graphitic argillite and clay altered pale grey gritty clastic. Both are highly sheared. ↓38.6-40.5↓ «GR ARG» black graphite + white qtz. intensely sheared. ↓40.5-40.8↓ «GREY WCKE» pale grey, highly sheared. ↓40.8-44.6↓ «GR ARG» mod. graphitic, very poor recovery. ↓44.6-44.8↓ «GREY WCKE» Increasingly competent, may have lost more.	40	Strong clay gouge. Strong clay gouge.		38.6-40.5 20% recovery. 40.5-42.7 30% recovery. 42.7-44.8 15% recovery.
44.80 TO 45.80	«GREY WCKE»	Pale grey, poorly sorted volcanoclastic, grey wcke Minor very thin partings of graphitic argillite. Becoming softer, almost mushy. LOWER CONTACT	70	Mod.-strong clay gouge.	Upto 10% fine grained diss. py.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
45.80 TO 47.90	«ARG»	Black to dark grey silty weakly graphitic argillite. Mod.-finely banded, phyllitic.		Occasional crosscutting qtz. stringer.	5-7% fine grained diss. pyrite also along foliation.	45.8-46.3 40% recovery.
47.90 TO 48.90	«GREY WCKE»	Pale grey, soft, fine grained siltstone; reworked tuff like above grey wacke. 48.7-48.9 mush.		Weak clay altn. Strong clay.	Upto 10% fine grained diss. py.	
48.90 TO 100.00	«ARG»	<p>Black, fine grained, highly fractured, minor silty interbeds. Mod. graphitic.</p> <p>49.1 CLEAVAGE 50.5-50.6 irregular, crosscutting vuggy qtz. veinlets. 50.6 clay seam 5cm wide. 51.4 becomes strongly fractured, mod. graphitic. 53.5-54.9 54.9-56.1 55.2-55.7 fractured up white qtz. vein. 56.1 56.3-56.5 white qtz. veining. 62.9-63.7 crushed, str. graphitic. 64.6-65.3 crushed, stringer. 65.9-66.1 qtz. stringers near conformable,</p> <p>FOLIATION 67.7-74.8 finely crushed strongly graphitic, minor qtz. stringers. 77.6-79.6 crushed, mod. graphitic. 79.6-81.5 finely crushed very muddy. 81.5-88.5 more competent, weakly graphitic</p> <p>FOLIATION 88.5-99.5 highly fractured, locally crushed. 96.0 3cm band of massive pyrite. 99.5-100. dark grey silty argillite cut by thin qtz. stringers. Very competent, almost massive looking.</p> <p>END OF HOLE.</p>	65 80 80		<p>5-10% pyrite.</p> <p>Bands of pyrite.</p> <p>15+% pyrite.</p>	<p>10% core recovery. 40% core recovery.</p> <p>Bit change, recovery >80%. Continues strongly graphitic. 63.1-66.1 litho sampled.</p> <p>40% core recovery.</p> <p>92.0-94.8 litho'd.</p>
100.00 TO 151.10						

HOLE NUMBER: BAR 31

ASSAY SHEET

DATE: 9-February-1990

Sample	From (m)	To (m)	Length (m)	COMMENTS

HOLE NUMBER: BAR 31

ASSAY SHEET

PAGE: 4

HOLE NUMBER: BAR 31

GEOCHEM. SHEET

DATE: 9-February-1990

Sample	From (m)	To (m)	Length (m)	AL2O3 %	BAT %	CAO %	FE2O3 %	K2O %	MGO %	MNO2 %	NAO2 %	P2O5 %	SI02 %	TIO2 %	S %	TOT %	AG PPM	AS PPM	BA PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB	
BCD24885	11.30	14.30	3.00																						
BCD24886	32.60	35.60	3.00																						
BCD24887	63.10	66.10	3.00																						
BCD24888	92.00	94.80	2.80																						

HOLE NUMBER: BAR 32

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: ZONE TYLOX 1989
PROJECT NUMBER: 243
CLAIM NUMBER: DIXIE 2
LOCATION: UPPER WIKIUP ROAD

PLOTTING COORDS GRID: LITTLE DIXON
NORTH: 125.60N
EAST: 22.37E
ELEV: 1270.00

ALTERNATE COORDS GRID: 125+60N
NORTH: 125+60N
EAST: 22+37E
ELEV: 1270.00

COLLAR DIP: ° ' "
LENGTH OF THE HOLE: 100.00m
START DEPTH: 0.00m
FINAL DEPTH: 100.00m

COLLAR GRID AZIMUTH: ° ' "

COLLAR ASTRONOMIC AZIMUTH: ° ' "

DATE STARTED: October 13, 1989
DATE COMPLETED: October 14, 1989
DATE LOGGED: October 15, 1989

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

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

CONTRACTOR: FRONTIER
CASING: LEFT IN HOLE
CORE STORAGE: BARRIERE

PURPOSE: TO DETERMINE STRATIGRAPHY ACROSS A CONTACT BETWEEN FELSIC TUFFS AND ARGILLITE.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
39.60	-	0° 0'	ACID	OK		-	-	-	-	-	
91.40	-	0° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	

HOLE NUMBER: BAR 32

DRILL HOLE RECORD

LOGGED BY: CHRIS WILD

PAGE: 1

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 6.10	«CASING»					
6.10 TO 11.80	«ARG»	Black to dark grey, fine grained, weakly graphitic with pale grey silty interbeds.	70		20% banded, diss. py.	8.1-11.1 litho sampled.
11.80 TO 43.20	«QFP TUFF» ‡40.2-43.2‡	Pale grey, faintly greenish highly competent. coarse quartz eye-feldspar porphyry. Upto 10% qtz eyes to 4mm dia. Lots of grain size variation probably a blocky tuff-breccia. Strongly brecciated with blocks to 5cm in black argillaceous matrix, clast supported. 41.8-42.0 black, pyritic argillite, 10% clasts of felsic volcanic. 43.1-43.3 sheared, soft transition to sediments.		Weakly sericitic. «hydro brxx»	2% finely diss. plus minor pyrite stringers. 20% diss. py.	33.6-36.6 litho sampled.
43.20 TO 43.90	«ARG»	Black fine grained, silty interbeds 1-5cm thick. Moderate thin qtz. stringers. FOLIATION	70		2-5% diss. py.	
43.90 TO 45.00	«GREY WCKE»	Pale grey medium grained, occasional thin (<1cm) interbeds of argillite. Finely bedded, variable grain size.		Moderately calcareous.		
45.00 TO 47.10	«ARG»	Mainly black argillite; ~20% pale grey silt or wacke beds. 45.0-45.1 2 fining up sequences BEDDING 45.5 crossbedded. 46.5 good fining up sequence	70 70		Argillite contains 15% fine grained diss. py.	Tops uphole; rock face northeast, upright sequence.
47.10 TO 47.90	«GREY WCKE»	Medium grained. Clasts >90% felsics in black matrix Poorly sorted clastic looking.				Hydrobrecciated felsics?
47.90 TO 62.70	«ARG»	Black, many included hydrobrecciated felsic clastic sections. 48.0-48.2 intermixed medium-coarse grained felsic clasts. 48.6-50.0 10% intermixed layers of felsic clasts. 50.5-50.6 felsic clastics. 50.7-50.9 51.6-51.7 felsic clastics-tuffs reworked tuff			Argillite 15% fine grained diss. py. 20% pyrite in bands and 'blebs'.	«bands of felsic tuff clasts»

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		(g wcke). 52.0-52.3 hydrobrecciated felsic tuff. 52.6-52.8 felsic tuff probably hydrofractured, clasts in argillite matrix. 54.5-55.5 coarse round clasts of felsic tuff in argillite matrix. 59.2-59.4 very poorly sorted clasts of felsic tuff ~60-70% of rock. 59.5-59.6 band of felsic tuff clasts. 59.7-60.8 mainly coarse felsic tuff clasts in arg. ~75% felsics. 61.3-61.4 one large felsic tuff block or layer. 61.8-62.1 mainly coarse felsic tuff blocks in arg. Round, upto 5cm dia. Scattered finer clasts.				«felsic tuff-brxx» 55.8-58.8 litho'd.
62.70 TO 79.40	«INT TUFF»	Pale greenish grey, feldspar phyric, strongly hydrobrecciated. Clasts of felsic/interm tuff in black chloritic matrix. Clast supported, ~5% arg. 78.1-79.4 No argillite in matrix pale grey; faint clasts.		Very weakly sericitic, weakly calcareous, minor qtz.-calcite stringer veinlets.		74.1-77.1 litho'd.
79.40 TO 100.00	«ARG»	Black, fine grained, finely foliated, weakly graphitic, fairly competent. 94.3-94.5 1-2cm thick pale grey silty interbeds. END OF HOLE.			10% fine grained diss. py. Occasional bands of pyrite, upto 1cm thick.	97.0-100.0 litho'd.

HOLE NUMBER: BAR 32

ASSAY SHEET

DATE: 9-February-1990

Sample	From (m)	To (m)	Length (m)	COMMENTS
	0.00	0.00	0.00	

HOLE NUMBER: BAR 32

ASSAY SHEET

PAGE: 4

HOLE NUMBER: BAR 32

GEOCHEM. SHEET

DATE: 9-February-1990

Sample	From (m)	To (m)	Length (m)	AL2O3 %	BAT %	CAO %	FE2O3 %	K2O %	MGO %	MNO2 %	NAO2 %	P2O5 %	SI02 %	TI02 %	S %	TOT %	AG PPM	AS PPM	BA PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB
BCD24889	8.10	11.10	3.00																					
BCD24890	33.60	36.60	3.00																					
BCD24891	55.80	58.80	3.00																					
BCD24892	74.10	77.10	3.00																					
BCD24893	97.00	100.00	3.00																					