825107

NINNOVA INC.

HOLE NUMBER: U1330-01 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 632.26N
EAST: 9630.00W
ELEV: 1335.21

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

COLLAR DIP: -18° 0' 0"
LENGTH OF THE HOLE: 86.90m
START DEPTH: 0.00m
FINAL DEPTH: 86.90m

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

DATE STARTED: January 12, 1991
DATE COMPLETED: January 13, 1991
DATE LOGGED: January 14, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE
CASING: N/A
CORE STORAGE: BARRIERE

PURPOSE: DETAILED UNDERGROUND DRILLING OF SAM OREBODY

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
76.20	-	-19° 0'	ACID	OK	WEAK	-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 19.90	«MAFIC	Colour - Pale to dark green and grey				
0.00 TO 1.00						
TO 19.90	TUFF»	Grain size - Aphanitic to fine Pale to dark green, aphanitic to fine grained chloritic mafic tuff. Numerous quarts-carbonate veins give greyish-white mottled appearance to core. Angle to c/a - 4.3 m - 10.7 m - 16.8 m Blocky broken core and friable gouge {15.7 - 16.8} «Flt Zone» 18.7 - 18.9 m - gouge.	 53 40 50	Intense dolomitization. Moderate yellow-green sericite as wispy bands parallel to foliation.	(1/2% fine disseminated pyrite. Occasional blebs associated with silicification.	Core generally blocky.
19.90 TO 41.70	«MFLT»	Colour - Pale yellow-green and grey Upper contact, possibly minor fault zone. Pale greenish yellow-brown chloritic, mafic lapilli tuff. Lapilli speckled with vesicular like in fillings of silica/carbonate. Blocky core and minor fault gouge {29.7 - 30.1} «Flt Zone» Average angle to c/a	 55 60	 Lapill: sericitized to greenish yellow-brown. Intense dolomitization and locally intense silicification.	 (1/2% fine disseminated pyrite. Locally grains and blebs up to 1-2%	 Core generally more competent than mafic tuff due to greater silicification.
41.70 TO 43.40	«FLT BX GOUGE»	Colour - grey to yellow Grey to yellow fault breccia and gouge zone at lapilli tuff/mixed altered sediment/tuff contact. Fault appears to parallel foliation at upper and lower contacts.	 64 50	 Locally intense yellow green banded sericite visible. Locally intense grey cherty silicification and grey white QV.	 (1/2% - 1% fine disseminated pyrite.	 Lapilli tuff becomes blocky to 41.7m at fault contact. Friable core.

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
43.40 TO 50.30	«QTZ/SER/ PY SEDS»	Colour - grey and yellow to olive green Grain Size - Aphanitic to fine Variably altered interval of mixed sediments (and minor mafic tuff?) exhibiting phyllitic foliation parallel to compositional layering. 43.4 - 45.6m, banded grey and yellow quartz, sericite and pyrite. [45.6 - 50.3] «Sert» Massive olive green sericite and pyritic silicified bands, patches parallel to fol.	60 70 55 70	Pervasive silicification through quartz flooding, possible chert component. Moderate to intense yellow to olive green sericitization. Yellow green sericite. 40% silicification by volume. Intense olive green sericite.	7-15% pyrite distributed as disseminated grains, patches, blebs and bands. Locally 30% pyrite at 43.7 and 44.6m. Pyrite patches and bands 7-10%.	Serts. Minor silicified "MUT" 45.0 - 45.6m Soft friable sericite.
50.30 TO 50.90	«QTZ/PY VEIN»	Colour - grey-white Grey white quartz carbonate vein with transitional contact to overlying sericite.		Vein incorporates patches of olive green sericite	Two bands of fine disseminated pyrite grains and course semi massive pyrite. Overall [50.3 - 50.9] «20% Py»	Blocky recovery.
50.90 TO 54.30	«SER/PY SEDS»	Colour - grey - yellow to olive green Grain size - very fine Altered sediments "Sert". Grey, yellow to olive green very fine grained to aphanitic sericite. Possible minor chert/silicified siltite. Upper and lower contacts faulted. [50.9 - 51.8] «Flt Zone» [53.6 - 54.3] «Flt Zone» Faults comprise sert breccia and gouge.	70 50 60	Intense sericitization diminishes to lower contact.	5 - 7% pyrite distributed as fine grained patches, bands and courser bleby aggregations associated with quartz veins.	Sert including two fault zones.
54.30 TO 56.60	«SER SEDS»	Colour - greenish grey and black Grain size - very fine All through upper contact faulted, lithologies appear transitional. Dark greenish grey, v. fine grained sericitic sediments with dark v. fine grained patches of relatively unaltered argillite/siltite. Phyllitic foliation parallel to compositional layering.		Continued decrease in intensity of sericitization.	Decrease in pyrite content (3%	Sert (Weak to moderate) sericitization.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
56.60 TO 59.60	«WACKE ARG»	Colour - grey and black Grain size - very fine to medium Upper contact conformable. Marked by fine to medium grained wacke. Grades into laminated black argillite and grey siltite/ wacke.	60 65	Locally weak to moderate greenish grey sericite bands. Sericite increases to lower contact.	Course pyrite blebs in silicified bands of argillite/siltite. Overall 5-10% pyrite.	Includes weak sert.
59.60 TO 62.00	«SER/PY SEDS»	Colour - Olive green and grey Grain size - very fine Olive green and grey banded sericite and quartz/pyrite. Compositional layering parallel to phyllitic foliation. White quartz-carbonate veins occupy 7% by volume. Upper contact marked by minor fault and 2-3 cm QV. Lower contact apparently conformable.	55 60	Intense sericitization.	⌈59.6 - 62.0⌉ «15% Py» present as fine grains in bands and blebs associated with quartz veins.	Sert.
62.00 TO 68.00	«SIL SEDS»	Colour - pale to dark grey Grain size - very fine to fine Pale to dark grey, v. fine to fine grained, phyllitic pyritic, silicified sediment. Appearance is almost cherty or quartzitic.	70	Moderate to intense development grey sericite. Locally intense silicification due to quartz flooding. Upper 0.5 m, 62.0-62.5 m shows green talc and minor fuchsite.	Sulphides have a variable distribution, occurring both in MUT matrix and associated with cross-cutting quartz ve ins. ⌈62.0 - 65.9⌉ «1-2% Sp (1% Ga+Te» Tetrahedrite distributed as fine disseminations often in associate with pale honey brown sphalerite. Galena occurs proximal to quartz veins. Mineralization decreases to lower part of interval.	Also logged as QTE/MUT. Altered wacke? Chert?
68.00 TO 70.80	«SIL SEDS/ QTZ VN»	Colour - Grey to White Grain Size - v. fine Pale to dark grey, very fine to fine grained, phyllitic, pyritic, siliceous sediment and white quartz-carbonate veins. ⌈70.2 - 70.8⌉ «Qtz Vn» 60 cm QV cut by 3 faults, one with angle to c/a	 59	Moderate to intense grey sericitization Locally intense silicification.	15% pyrite as fine disseminations in MUT. Quartz vein barren. ⌈70.0 - 70.1⌉ «Tr Gn, 10% py» Galena bleb in quartz.	Mislatch. Core reduced to rubble. 68.0 - 68.7 m Generally blocky core due to proximity to fault zone.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
70.80 TO 71.60	«FLT ZONE»	Colour - grey to white Fault zone in quartz-carbonate vein and mut/ wacke. Core blocky with sections of gouge up to 45% by volume.		Sericitization decreasing in intensity.	Quartz-carbonate barren of sulphide. Minor pyrite.	Blocky broken core. Fault orientation difficult to determine.
71.60 TO 79.60	«WACKE/ARG»	Colour - Pale to dark grey and black Grain size - V. fine to fine-medium Pale to dark grey and black, very fine to fine-medium grained argillite and wacke. Argillite - wacke interbeds disrupted by faulting and fracturing. 20% quartz carbonate veining.	55 60	Locally weak greenish yellow sericitization. Argillite moderately graphitic.	2-5% pyrite as fine disseminations in bands. 4 cm QV at 79.6 m with blebby pyrite.	Blocky broken fore due to proximity to faults.
79.60 TO 81.10	«FLT ZONE»	Colour - grey to black Grain size - very fine Black, very fine grained clayey graphitic gouge, includes 20% blocks quartz-carbonate veins. Lower contact at	52		1-2% blebby pyrite in quartz carbonate vein remnants.	79.2 - 80.8 33% core loss Wacke bedding 55 deg. Cleavage/sericite 85 deg.
81.10 TO 86.90	«ALT SEDS ARG TECT»	Colour - grey to dark yellow brown black Grain size - v. fine to fine Mixed interval of altered tectonized, argillite, wacke and chert. Stretching, sheaving parallel to foliation. Fragmentation of argillite and chert. Local small scale folding. Minor fault 82.1 - 82.3m E.O.H.		Weak to moderate greyish-yellow-brown sericite in bands 20% silicification by volume in cherts, quartz flooding and minor veining.	Pyrite iocreases to end of hole. Overall from ∮81.1 - 86.9∮ «15% Py» with occurrence as fine pyritic bands and disseminated blebs. Locally 20% pyrite.	Hinge Zone at 85.2 m represented by bullseye structure.

HOLE NUMBER: U1330-01 ASSAY SHEET DATE: 21-June-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29758	50.30	50.90	0.60	0.01	0.10	0.05	8.2	2.06						2.89			
BCD29759	60.70	62.00	1.30	1.30	0.01	0.01	2.3	0.09									
BCD29751	62.00	63.50	1.50	0.26	1.09	0.63	231	0.51									
BCD29752	63.50	65.00	1.50	0.28	1.15	0.67	232	0.49									
BCD29753	65.00	65.90	0.90	0.51	2.15	1.42	315	0.80									
BCD29754	65.90	66.90	1.00	0.04	0.17	0.08	35	0.48									
BCD29755	66.90	68.00	1.10	0.04	0.14	0.10	34	0.71									
BCD29756	68.00	68.90	0.90	0.01	0.03	0.05	11	0.06									
BCD29757	68.90	69.70	0.80	0.02	0.02	0.05	12	0.36									
BCD29760	69.60	70.80	1.20	0.01	0.01	0.01	5.8	.17									
AVE.	62.00	65.90	3.90	0.33	1.36	0.83	250.77										

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	MnO2 %	TiO2 %	Ba %	Zr %	Cu ppm	Zn ppm	Pb %	Total %	Au ppb	Ba ppm	Ag ppm	Pb ppm	P2O5 %	Sr %	S %	Total %	As ppm	Sb ppm
BCD29761	85.70	86.90	1.20												76	206	59		15		0.5							

MINNOVA INC.

HOLE NUMBER: U1330-02 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 632.15N
EAST: 9629.90W
ELEV: 1334.44

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

COLLAR DIP: -37° 0' 0"
LENGTH OF THE HOLE: 73.80m
START DEPTH: 0.00m
FINAL DEPTH: 73.80m

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

DATE STARTED: January 13, 1991
DATE COMPLETED: January 14, 1991
DATE LOGGED: January 15, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU
CASING: NO
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
73.10	-	-39° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 17.40	«DOL MAFICS"	Colour - whitish grey and green Grain size - aphanitic to fine White to grey and green, intensely altered, aphanitic to fine grained chloritic mafic tuffs? Original textures destroyed. Minor faults and fractures: 10.1 - 10.2m - gouge 10.7 - 10.8m - gouge 11.5 - 12.0m - gouge + blocky 12.6 - 13.0m - Minor gou + blocky 16.2 - 16.3m - broken 17.0 - 17.4m - blocky broken, minor fault at contact with lapilli tuff.	60 65	Intense quartz - carbonate (ferro-dolomitization) alteration of mafic. Moderate yellow-green sericitization parallel to foliation. Intense silicification 14.0 - 14.9m	1% disseminated and blebby pyrite. Locally 15% over 4-5cm width quartz-carbonate veins.	Intense quartz flooding/silicification and dolomitization.
17.40 TO 33.90	«MFLT»	Colour - Whitish grey, green-yellow Grain size - fine to course Intensely altered, whitish, grey, green-yellow mafic lapilli tuff. Lapilli preferentially sericitized forming greenish yellow ghost clasts in dolomitized tuffaceous matrix. Angle to c/a at 24.0m Fracture at low angle to c/a at 28.3 - 28.8m Sub parallel fracture to c/a at 33.1-33.2m	65 20	Intense sericitization, dolomitization, silicification. Increasing alteration to lower contact.	1-2% fine disseminated pyrite. Occasional blebs associated with silicification. Trace Galena in QV.	
33.90 TO 37.60	«ALT MAF»	Colour - Green to white and grey Grain size - fine Intensely altered mafic (tuff?), such that all original textures destroyed. Texture now appears as mottled to banded grey/white dolomite/quartz and yellow-green sericite. 3 Quartz carbonate veins total 15cm. Foliation at angle c/a Fractured core at 36.5 - 36.8m	 70 80	Dolomitization greater than silicification. Yellow-green to brown sericite as thin bands (1-5mm), and patches.	1-3% fine disseminated and blebby pyrite.	Intense alteration. Compositional layering has relatively high angle to c/a.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
37.60 TO 38.10	«FLT GOUGE»	Colour - grey white Faulted clayey quartz/mafic gouge/breccia. Angle to c/a possibly broken due to proximity to fault.	60		1-2% pyrite.	
38.10 TO 39.20	«QTZ V/ MSSX»	Colour - grey to white yellow Grey quartz and white quartz carbonate including two slivers of olive green soft sericite. Upper 0.5m, 38.1 - 38.6m broken due to proximity to fault.			Massive Cp and Sp associated with quartz vein. [38.9 - 39.2] «40% Cp+Sp» Main mineralization in 15cm massive band.	Orientation difficult to determine at upper contact. Lower appears parallel to foliation. Lower contact gratational with sert.
39.20 TO 45.50	«QTZ VN/ SER/PY»	Colour - Olive green and grey to white Grain size - fine Mixed interval of sericitic pyritic sediments, including 40 cm of weakly sericitized wacke, intruded by quartz carbonate veining and flooding. Some white veins show monoclinal folding. Interval is punctuated with minor faults at 40.8 - 40.9 m 42.9 - 43.0 m 43.9 - 44.0 m Angle to c/a varies from 87 at 39.9m to 55 deg. near contact with underlying fault zone.	87 55	Sericite and pyrite show banding. Intense olive green sericite alteration. Silicification and quartz-carbonate veining from irregular patches and veins of grey and white. Local fuchsite and green talc in quartz vein and fractures.	Olive green sericite intervals have siliceous bands containing fine to blebby pyrite, ranging in width 1-10mm. Greyish-white silicified zones contain grains and blebs Tet and Galena. Whitish cream qtz-carb vein contains blebs greyish brown sphalerite. [39.9 - 45.2] Overall «1/2%Tt1/2%sp+gn15%py» However Sp GnTt min'zn locally concentrated.	Sert + silicified sediment + quartz carbonate veins.
45.50 TO 46.00	«FLTGOU/BX»	Colour - Greyish green and white Intense fault zone in quartz/sericite/pyrite to produce gouge and breccia. Orientation appears parallel to foliation . . .	55		5-7% disseminated pyrite.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
46.00 TO 51.10	«QTZ/SER/ PY»	Colour - olive green and grey Grain size - fine Intermittently faulted olive green sericite with pyrite bands and veins and patches of quartz and qtz-carb. Lower contact marked by minor fault and Q.V.		Intense olive green sericitization.	10-15% pyrite in fine disseminated to blebby bands. No base metal sulphides observed.	Sert. Very weak and friable.
51.10 TO 54.50	«SIL SEDS/ QTZ VN»	Colour - grey white Grain size - fine Mottled grey black and white interval of intensely silicified sediments quartz veins and later stage cross-cutting quartz dolomite veins. Minor fault at lower contact.		Pervasive silicification of sediments. Occasional fuchsite and talc alteration.	5% pyrite hosted mainly in sediment remnants. Widely distributed grains and blebs of Tt, Gn, Sp, Cp. ╡51.1 - 54.5╞ «(1/2%Tt 1%Cp+Sp+Gn»	
54.50 TO 63.50	«ALT SEDS»	Colour - Grey to olive green-white Intermittently faulted interval of altered sediments (serts and muts). Original textures essentially destroyed. (Wacke argillite siltite?) 17% by volume Qtz-dolomite veins and patches. 54% grey sericitized seds 29% olive green ser/py seds. Phyllitic foliation at: 55.2m 68 58.0m 60 Minor intervals of gouge occur throughout. Main intervals as follows: ╡59.3 - 60.0╞ «Flt Gou/Bx» The lower contact is marked by an intense grey clayey gouge zone.		Intense olive green and grey sericitization. Patches of green talc and green fuchsite associated with quartz carbonate veins and parallel to foliation in MUT.	15% pyrite distributed as fine disseminations in MUT, and as grains and blebs within silicified bands in serts. Base metals occur as discrete disseminations and occasional disjointed bands in MUT. Occasional blebs Cp,Gn,Sp, Tt in quartz veins. ╡54/5 - 57/0╞ «(1/2%Tt 1/2%Cp+Sp+Gn»	Sert+MUT. 54.5 - 57.0m 12% core loss. Interval generally weak and friable. Some QV only partly intersected by core at 55m
63.50 TO 68.80	«SER SEDS/ QTZ VNS»	Colour - Olive green to white Intermittently faulted interval of white quartz carbonate veins and olive green sericite, including minor grey wacke. Intensely faulted seds/qv ╡63.5 - 63.6╞ «Flt gou» and 64.0-64.1m		Olive green sericite alteration locally intense.	7% pyrite distributed as fine disseminations in sediments, course grains and blebs in QV. Base Metal sulphides: ╡63.6 - 64.0╞	Core very broken and blocky.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		65.0-66.2 «Flt Gou/Bx»			«4% Py (1% Cp+Tt»	
		Quartz carbonate veins occupy 43% of interval.				
68.80 TO 69.20	«GRAPH FLT ZNE»	Colour - grey black Grain size - fine Fault zone comprising graphitic fault gouge, blocky broken argillite and quartz vein.				
69.20 TO 72.20	«CHT/ARG»	Colour - dark grey black Grain size - fine Contorted black very fine grained graphitic argillite and cryptocrystalline ribbon cherts. Foliation is marked by graphitic partings at Minor fault at lower contact.	65	Secondary silicification through 20% of cherts by quartz flooding.	5-10% disseminated grains and blebs in patches and bands.	
72.20 TO 73.70	«SIL WACKE»	Colour - grey to greenish yellow-brown Grain size - fine to fine-med. Grey, fine to fine medium grained partly silicified wacke(?) with patchy to banded greenish-yellow-brown sericite. Original textures difficult to distinguish. Minor fault at end of hole. E.O.H.		Moderate development of greenish-yellow-brown sericite.	5% irregularly disseminated blebs and grains of pyrite.	

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29762	38.10	38.50	0.40	.02	.01	.01	18.8	.06									
BCD29763	38.50	38.90	0.40	.54	.07	.02	286.2	.32						2.25			
BCD29764	38.90	39.20	0.30	12.88	1.18	.55	8157.	7.61						3.25			
BCD29765	39.20	39.90	0.70	.06	.02	.01	34.8	.19									
BCD29766	39.90	40.40	0.50	.11	.03	.01	112.2	.47						3.25			
BCD29767	40.40	40.80	0.40	.01	.01	.01	5.2	.05									
BCD29768	40.80	41.30	0.50	.42	.07	.85	456.4	1.82						2.92			
BCD29769	41.30	42.20	0.90	.01	.01	.01	5.3	.09									
BCD29770	42.20	42.70	0.50	.15	.03	.01	144.7	.28						2.71			
BCD29771	42.70	43.30	0.60	.03	2.02	.01	5.7	.22									
BCD29772	43.30	43.90	0.60	.01	.01	.01	4.1	.07									
BCD29773	43.90	44.80	0.90	.01	.02	.02	3.9	.13									
BCD29774	44.80	45.20	0.40	.39	.06	.01	432.8	1.10						2.86			
BCD29775	51.10	52.10	1.00	.14	.05	.05	50.2	.17									
BCD29776	52.10	53.10	1.00	.19	.12	.03	123.6	.24						2.78			
BCD29777	53.10	54.50	1.40	.07	.13	.03	48.4	.15									
BCD29778	54.50	55.10	0.60	.71	.98	.39	722.	1.36						2.75			
BCD29779	55.10	56.10	1.00	.32	.37	.29	251.6	.48						3.04			
BCD29780	56.10	57.30	1.20	.05	.54	.13	34.3	.18									
BCD29781	58.00	59.00	1.00	.05	.13	.13	20.4	.28									
BCD29782	59.00	60.00	1.00	.07	.29	.08	11.5	.46									
BCD29783	60.00	61.50	1.50														
BCD29784	61.80	63.50	1.70	.01	.01	.01	6.2	.22									
BCD29785	63.60	64.00	0.40	.04	.02	.01	6.1	.11									
AVE.	38.50	39.20	0.70	5.83	0.55	0.25	3659.4	3.44									
AVE.	38.50	41.30	2.80	1.57	0.16	0.22	1025.8	1.32									
AVE.	54.50	56.10	1.60	0.47	0.60	0.33	428.00	0.81									

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	MnO2 %	TiO2 %	Ba %	Zr %	Cu ppm	Zn ppm	Pb %	Total %	Au ppb	Ba ppm	Ag ppm	Pb ppm	P2O5 %	Sr %	S %	Total %	As ppm	Sb ppm
BCD29783	60.00	61.50	1.50												27	76	52		80		1.5							
BCD29786	64.50	65.30	0.80												409	72	119		240		10.7							
BCD29787	67.20	68.20	1.00												10	34	18		65		0.3							

NINNOVA INC.

HOLE NUMBER: U1330-03 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 632.35N
EAST: 9629.96W
ELEV: 1335.62

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

COLLAR DIP: -5° 0' 0"
LENGTH OF THE HOLE: 89.60m
START DEPTH: 0.00m
FINAL DEPTH: 89.60m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: January 14, 1991
DATE COMPLETED: January 15, 1991
DATE LOGGED: January 16, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: NO
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
30.50	-	-4° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-5° 0'	ACID	OK		-	-	-	-	-	
89.60	-	-5° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 26.40	«MAFIC TUFF»	Colour - greyish dark green Grain size - aphanitic to fine Greyish to dark green chloritic mafic tuffs with intense quartz dolomite veining and flooding. Veining commonly parallels foliation 5.0m 10.7m 16.5m 24.5m Faulting fracturing intervals - 13.6 - 14.0m minor blocky - 15.0 - 15/4m broken - 23.4 - 24.5m gouge + blocky intervals - 25.0 - 25.3m minor gouge + blocks	 30 45 31 32	Pervasive dolomitization of mafics. Local moderate to well developed yellowish green sericite as wisps and bands parallel to foliation.	< 1/2% pyrite, finely disseminated and occasional blebs.	
26.40 TO 45.60	«MFLT»	Minor fault marks contact including zone of pervasive silicification which crosses contact from 26.1 - 26.9m. Interval comprises yellow green altered lapilli in a fine grained tuffaceous chloritic matrix. Foliation less well developed 29.2m 36.7m Faulting and fractures: 28.1 - 28.4m - gouge + blocks 34.0 - 34.5m - gouge + blocks 36.2 - 36.3m - fracture subparallel to core axis 37.1 - 37.2m - minor fault gouge + block.	 40 30	Preferential yellow green sericitization of lapilli. Approx. 40% interval silicified.	< 1/2% pyrite as fine disseminations and blebs.	Last easily recognizable lapilli at 45.6m.
45.60 TO 55.20	«ALT MAFIC /SEDS»	Colour - greyish green and yellow Grain size - aphanitic to fine Mixed interval of altered mafic and sediments, complicated by faulting and quartz carbonate veining Greenish yellow and grey Sericite and quartz show laminations, (2-5m) Some sections appear to have a chloritic component Quartz present as grey patchy veins/silicification and in later stage white quartz dolomite veins. Phyllitic foliation at: 48.2m 51.0m 54.0m Fault and fracture zones	 65 50 50	Intense greenish yellow sericitization. Local silicification.	5-7% pyrite as fine disseminations in bands and blebs in patches of silicification.	Core moderately blocky. Well laminated sections break easily along foliation. Approx. 45% sert-like lithology.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		46.5 - 47.6m gouge + blocky 47.8 - 47.9m gouge 50.2 - 50.3m blocky 51.9 - 52.1m gouge + blocky 54.1 - 54.5m gouge + blocky				
55.20 TO 58.20	«ALT SEDS»	Colour - grey yellowish green Grain size - v. fine Upper contact marked by fault gouge ╟55.2 - 55.4╢ «flt gou» Alteration texture essentially continuous with the overlying horizon except no mafic component. Grey and yellow quartz/sericite are interlayered with dark grey, very fine grained sediment, altered to a grey sericite phyllite (MUT).	 55 66	Yellow and grey sericitic alteration is intense. Well developed soft olive green sert: ╟57.2 - 58.2╢ «Sert»	5-10% pyrite as fine disseminations in bands and coarser blebs associated with QV and patchy silicification.	Minor sert and MUT Altered siltstones/wacke?
58.20 TO 73.10	«ARG/ WACKE»	Colour - light to dark grey and black Grain Size - fine to course Upper contact marked by minor fault. Interval comprises light grey to dark grey, fine to course grained wacke, and graphitic very fine argillite. Foliation variable between lithologies: - Med gd. Wacke 60.7m - Fine gd. Wacke 62.1m - Fine gd. Wacke 68.7m Blocky core and minor fault zones at: 63.3 - 63.7m - gouge + blocky 65.5 - 65.8m - blocky 68.0 - 68.5m - blocky/broken 69.2 - 69.6m - blocky/broken Minor qtz-carbonate veins parallel to and cross cutting foliation.	 75 37 50	Weak development of greenish yellow and grey sericite. Coarser wacke silicified, appears quartzitic between 58.2 - 59.1m Moderate greenish-yellow sericite alteration from 72.3 - 72.8m.	1-3% fine grained and blebby pyrite in patches and occasional bands.	Possible load casts at 59.9m indicate way up downhole.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
73.10 TO 75.90	»FLT GOUGE«	Colour - Greenish white Grain size - fine Greenish white intensely faulted zone of sediments. Friable gouge. Some foliation evident at	35			
75.90 TO 78.50	«QTZ CARB VEIN»	Colour - cream to white Grain size - crystalline Cream to white quartz - carbonate vein with minor altered sediment caught in vein. Qtz:carbonate 60:40 Vein has been subject to some faulting resulting in blocky core between 77.5-78.0m		Minor green talc in shear along foliation in sediment and in QV.	Base metal sulphides dominate. Sp) Cp) Gn. Trace tetrahedrite? Overall 6% blebby pyrite. Minlz'n uneven distribution. Concentrated: ╟76.8 - 77.5╢ «3%Sp,1%Cp+Gn+Tt» Irregular blebs greyish to honey brown sphalerite occur up to 10x25mm. @ 75.9 - 76.8m (1%Sp+Cp+Gn @ 77.5 - 78.5 1%Cp (1/2 Sp+Gn	
78.50 TO 79.50	«ALT SEDS»	Colour - grey-yellow-green to brown Grain size - v. fine Partly faulted interval of altered sediments comprising grey fine grained pyritic to greenish yellow-brown lithologies. Single folded cross-cutting qtz.-carb vein subparallel to fold axis. Pyrite bands.....	50	Intense greenish-yellow-brown and grey sericitization.	╟78.5 - 79.5╢ «15% py» Pyrite as blebs and disseminated grains in bands and patches.	MUT + Sert.
79.50 TO 81.60	«QTZ VN/ FLT ZNE»	Colour - cream to white Grain size - crystalline Broken, crushed quartz-carbonate vein and minor sediment gouge in fault zone.		Minor sericite and fuchsite.	Sulphides present within remnant blocks of Qtz-carb. ╟79.5 - 81.6╢ «1%Sp+Cp+Gn 0.1%Tt»	Core difficult to sample due to breakage.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
					Overall 5% grains and blebs pyrite.	
81.60 TO 89.60	«ARG/ WACKE»	Colour - Pale green to grey and black Grain size - v. fine to fine-med Greyish green, partly silicified, and sericitized siltites and wackes pass into grey and black siltites and graphitic argillite to the end of hole. Foliation - Wackes @ 83.5m - Argillite @ 89.0m Faulted and broken sediments occur at 81.6 - 81.7m minor gouge/blocks 85.6 - 85.7m gouge/blocky 86.5 - 86.6m gouge/blocky [88.4 - 89.3] graphitic arg. «flt zone» Blocky core breaks easily along foliation, includes 2 minor intense fault gouge intervals of 5-10cm.	45 55 65 70	Greenish yellow sericite alteration and silicification decreases downhole. [81.6 - 86.5] «Sil + Sert»	1-2% pyrite in fine disseminations. 15-20% pyrite in 7 cm qtz-carb vein at 85.7 m	Silicified fine to med. Wacke bed up to width 0.4m @ angle c/a 40 deg. 82.7 - 83.1 m.
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29789	74.90	75.90	1.00	0.02	0.04	0.01	1.9	.07									
BCD29790	75.90	76.80	0.90	0.15	0.08	0.02	14.0	0.03									
BCD29791	76.80	77.50	0.70	0.53	3.86	0.11	115.2	0.53						2.65			
BCD29792	77.50	78.50	1.00	0.14	0.11	0.01	35.0	0.22									
BCD29793	78.50	79.50	1.00	0.04	0.05	0.02	6.5	0.17									
BCD29794	79.50	80.50	1.00	0.08	0.09	0.09	5.9	0.05									
BCD29795	80.50	81.60	1.10	0.13	0.05	0.02	7.3	0.45									
BCD29796	81.60	83.10	1.50	0.02	0.04	0.01	1.5	0.05									

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	MnO2 %	TiO2 %	Ba %	Zr %	Cu ppm	Zn ppm	Pb %	Total %	Au ppb	Ba ppm	Ag ppm	Pb ppm	P2O5 %	Sr %	S %	Total %	As ppm	Sb ppm
BCD29788	66.20	67.70	1.50												20	28	21		10		0.1							

NINNOVA INC.

HOLE NUMBER: U1330-04 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 633.02N
EAST: 9629.87W
ELEV: 1334.33

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

COLLAR DIP: -60° 0' 0"
LENGTH OF THE HOLE: 74.40m
START DEPTH: 0.00m
FINAL DEPTH: 74.40m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: January 15, 1991
DATE COMPLETED: January 16, 1991
DATE LOGGED: January 17, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
30.50	-	-60° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-59° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 16.20	«DOL MAFICS»	Colour - Pale to dark green, greys and white Grain size - Aphan. to fine				
		Mottled green, white and grey, aphanitic to fine grained dolomitized, chloritic mafic tuffs.	65 70	Intense ferro-dolomitization and quartz carb veining.	1-2% pyrite	Blocky core 4.8 - 5.8m Joint parallel to c/a 5.5 - 5.8
		Fault gouge 9.2 - 9.5m		Moderate greenish yellow sericitization.		Blocky core/broken 12.8 - 13.4m Joint subparallel to c/a 13.8 - 14.2m
16.20 TO 26.80	«MFLT»	Colour - Pale to dark green, grey to greenish yellow Grain size - Aphan. to lapilli				
		Pale to dark green aphanitic to fine grained, chloritic mafic tuff with preferentially sericitized greenish yellow lapilli size clasts. Faulting: 20.5 - 20.8m Minor gouge & blocks 21.1 - 22.6m Blocky broken core due to joints 23.7 - 24.0m Blocky core 24.6 - 24.7m Minor gouge	60 65	Intense ferro-dolomitization and qtz-carb veining. Moderate greenish yellow sericitization.	1% pyrite	
26.80 TO 29.70	«FLT GOU/ ALT MAF»	Colour - white to grey,pale green Grain size - aphan. to fine and coarse				
		Fault zone comprising wide gouge zones and more competent altered mafics. 3 gouge zones: 26.8 - 27.0m 27.4 - 27.7m 28.2 - 29.4m intense flt. bx/gouge zone with minor 5 cm gouge at 29.07m at angle.....	55 60 50	Patchy dolomitization and silicification. Moderate to intense, local, green sericite.	1-3% pyrite as disseminated grains and blebs.	Major flt gouge appears to cross-cut foliation.
29.70 TO 38.80	«ALT MAF/ SED»	Colour - grey to white, pale to dark green Interval of intensely altered mafics and sediments. Original textures destroyed. Rock appears as complex, mottled shades of grey, white and pale to dark green and brown.		Intense quartz carbonate veining and dolomitization. Moderate to intense greenish-yellow/ brown sericitization.	Pyrite shows a marked increase. [29.7 - 38.8] «10 - 15% py» Distributed as grains, bands and patches, locally 30% e.g. 37.1 - 37.2m	Interval partly faulted and fractured throughout. More significant zones as follows: 32.6 - 32.9m gouge and blocks

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Foliation 28.8m	60			34.6 - 36.8m fractures, blocks & gouge
		34.2m	60	Interval comprises 2-3% green talc		
		38.0m	70	and fuchsite.		
		Minor fault at lower contact.				
38.80 TO 43.80	«ALT SEDS FLT ZNE»	Colour - grey and olive green Grain size - crystalline to fine				
		Mixed altered sediments which have faulted to leave zones of gouge and blocks.		Locally intense silicification and grey to olive green sericitization.	Pyrite variable distribution 1-2% disseminated grains and blebs in Sil-wacke to 15% in sert.	MUT + Sert + faulted and healed breccia/gouge.
		Altered sediments comprise grey silicified, fine-med gd wache; olive green pyritic sert and grey sericitic pyritic mut.		Silicification has healed a fault gou/bx ┤39.8 - 40.9├ «healed bx» and 41.5 - 41.8m.	Base metals occur in sil-wacke and sert. ┤38.9 - 39.7├ sil wacke & Mut «1-2% py (1/2% cp» ┤43.2 - 43.8├ Qv & Silic «2% Tt,2%Sp»	Quartz veins have drusy cavities.
		Foliation at 39.7 m	70			
		43.5 m	65			Sphalerite in silicified patch in sert.
		Minor fault at lower contact.				Tetrahedrite as stringers in 2 milky white qtz-carb veins. Veins parallel foliation.
43.80 TO 56.20	«QTZ VN/ ALT SEDS»	Colour - White grey, greenish yellow				
		White qtz-carbonate vein intimately mixed with altered sediments: namely grey or greenish yellow pyritic sert and mut. Core passes repeatedly in and out of qtz-carb vein and sediment. Longest sections of qtz-carb vein 43.8 - 45.3m and 45.7 - 46.9m From 46.9 - 56.2m veins occupy 45% by volume.		Moderate to intense greenish yellow and grey sericitization within seds adjacent to qtz-carb veins. Patches of siltite/wacke are silicified to give a grey quartzitic texture.	Sulphides vary as follows: ┤43.8 - 45.3├ «1%cp+gn trTt» in white grey QV and minor seds. 45.3 - 45.7 m 2% SpGnCp in grey Mut. ┤46.7 - 46.9├ «10% Tt 5%Py» semi-massive bleb Tt in QV. From 46.9 to 53.0m the QV+Seds carry only pyrites.	Pyrite 1-2% in Qtz-Carb veins. Locally to 15% associated with sediments.
		Orientation of vein system difficult to assess. More than one phase. One section of veins in grey wacke at 50.8 - 51.2m is almost stockwork-like. However no BN's associated.			┤53.0 - 53.5├ «7%Tt,3%Cp,2%Gn» Stringer-like minlzn in quartz vein.	
		Sediments within vein system show foliation: 45.4m	65			QV appears in 2 phases: (i) silicification/flooding (ii) Qtz veining cross-cutting.
		50.0m	60			
		53.5m	55			
		Intervals are faulty fractured:- 44.3 - 44.8m Wacky/broken 46.7 - 47.7m Fracture sub-parallel to c/a. broken/shattered.				
		49.0 - 49.3m sheared mut	40			
			50			

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
56.20 TO 74.40	«ARG/ALT SEDS»	Colour - grey greenish yellow black Grain size - fine				
		Intermittently faulted interval of weak to moderately altered argillite, siltite, wacke and chert. Upper contact faulted.		Moderate to locally intense greenish yellow sericitization. Patchy grey silicification.	Disseminated and blebby pyrite varying from 2-7%, locally 10-12%. [57.3 - 59.3] «7-10% py»	Alternating sequence of grey, greenish-yellow and black sediments. 10% qtz-carbonate veins.
		Foliation at 56.6m	70			
		60.3m	70			
		64.2m	45			
		Cleavage cross-cutting folded QV or relict sed structure. 67.3m 74.0m				
		Faults: 56.2 - 56.5m gouge & blocks [60.4 - 64.0] «Flt Gou» intensely faulted zone, gouge & blocks. Includes 0.5m of graphitic argillite gouge. 64.8 - 66.9m flt gou/bx includes part broken QV from 65.2 - 65.5m. 70.9 - 71.6m flt gou. Competency increases from 72.0m to E.O.H. where rock becomes more quartz rich. However core breaks easily along greenish-yellow sericite partings.		Minor fuchsite in gouge at 69.9m.		66.8 - 68.2m grey-black siltite and argillite.
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		COMMENTS
BCD29813	38.90	39.70	0.80	0.19	2.22	0.93	922.6	1.99						2.82				
BCD29814	39.80	40.90	1.10				58.2											
BCD29815	43.20	43.80	0.60	0.28	1.58	0.01	252.2	0.91						3.10				
BCD29816	43.80	45.30	1.50	0.17	0.16	0.07	125.4	0.16						2.67				
BCD29817	45.30	45.70	0.40	1.62	5.86	0.29	1213.0	3.15						3.10				
BCD29818	45.70	46.70	1.00	0.03	0.04	0.03	21.4	0.04										
BCD29819	46.70	46.90	0.20	0.89	0.22	0.17	617.8	0.66						2.57				
BCD29820	46.90	48.40	1.50	0.01	0.01	0.01	8.4	0.13										
BCD29821	48.40	50.00	1.60	0.02	0.01	0.02	13.4	0.19										
BCD29822	50.00	51.50	1.50	0.01	0.01	0.01	1.3	0.06										
BCD29823	51.50	53.00	1.50	0.01	0.01	0.01	1.1	0.03										
BCD29824	53.00	53.50	0.50	0.97	0.12	0.21	413.4	1.76						2.64				
BCD29825	53.50	54.50	1.00	0.18	0.22	0.10	109.4	0.24						2.66				
BCD29826	54.50	56.10	1.60	0.04	0.07	0.07	25.4	0.19										
BCD29827	57.60	59.10	1.50	0.01	0.01	0.01	1.2	0.04										
AVE.	43.20	45.70	2.50	0.43	1.41	0.09	329.85	0.82										

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	MnO2 %	TiO2 %	Ba %	Zr %	Cu ppm	Zn ppm	Pb %	Total %	Au ppb	Ba ppm	Ag ppm	Pb ppm	P2O5 %	Sr %	S %	Total %	As ppm	Sb ppm
BCD29814	39.80	40.90	1.10												558	281	172		460		30.0							

MINNOVA INC.

HOLE NUMBER: U1330-05 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 633.90N
EAST: 9629.81W
ELEV: 1334.36

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

COLLAR DIP: -90° 0' 0"
LENGTH OF THE HOLE: 62.20m
START DEPTH: 0.00m
FINAL DEPTH: 62.20m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: January 16, 1991
DATE COMPLETED: January 16, 1991
DATE LOGGED: January 18, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: NO
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
30.50	-	-88° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-88° 0'	ACID	OK	WEAK ETCH	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 17.10	«DOL MAFICS»	Colour - light to dark green and white Grain size - aphan. to fine				
		Light to dark green, aphanitic to fine grained, dolomitized, chloritic, mafic tuffs. Interval is flooded with quartz carbonate veins and patches, often parallel to foliation to give a mottled green and white colour to the rock. Possible minor fault at lower contact.	60 65	< 1/2% pyrite as fine dissemination, and blebs associated with qtz-carb veins.	Fracture 13.0 - 13.4m sub-parallel c/a Sub-parallel fractures to c/a between 13.4 - 16.4m.	
17.10 TO 27.00	«MFLT»	Colour - light yellow green to dark green Grain size - aphan. to lapilli				
		Light yellow green to dark green, aphanitic to lapilli size tuff.		MFLT generally shows greater silicification than the overlying dol mafics.	1/2 - 1% pyrite. Tr galena locally in QV at 20.7m.	Lower contact difficult to pinpoint Last lapilli 27.0m.
		Foliation less well developed in MFLT	60 70	Lapilli preferentially altered to greenish yellow sericite and silicified.		
		Core locally blocky, broken, faulted.				
		⎨24.1 - 25.0⎬ «flt gou/blocky» 26.3 - 26.6m - gouge & blocky.		⎨25.6 - 26.3⎬«silic»		
27.00 TO 39.60	«ALT MAF»	Colour - Grey to light and dark green Grain size - aphan. to fine				
		Intensely altered interval of mafics (and sediments?) to greyish white silicified, dolomitized patches and chloritic? Sericitic rock.		Patchy, intense silicification, dolomitization and yellow-brown-green sericitization.	1/2 - 1% pyrite.	Core spill 27.3 - 34.4m original textures destroyed.
		Foliation well developed in sericitic intervals: 29.8m 33.8m		Drusy qtz-carb 32.3m ⎨31.5 - 32.7⎬ «silic-dol» Locally well developed patchy talc.		
		Isoclinal folding evident at 29.4m within Q.V. ⎨31.1 - 31.4⎬ «flt gou»				Faults difficult to pinpoint due to core spill.
		Minor fault 36.4 - 36.5.				
39.60 TO 41.30	«ARG TECT»	Colour - Black and grey				
		Tectonized black argillite (and chert?). Shearing has contorted, stretched and broken up argillite, contained quartz veins, and siliceous bands cherts/altered siltite?		Patchy silicification, increasing to lower contact.	< 1/2% pyrite.	
		Texture variable size grey fragments (to 15mm)				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		in black argillite matrix.				
		Foliation to c/a	45			
		lower contact gradational from argillite to silicified, altered sediments.				
41.30 TO 52.90	«ALT SEDS»	Colour - light to dark grey, greenish yellow Grain size - fine				
		Altered interval of sediments (argillite, siltite wacke and chert?). Variable sequence of grey quartz and greenish yellow sericite, mottled black, grey, white silicified sediment, QV and carbonate.		Silicification varies from pervasive to patchy downhole.	Variable distribution of sulphides as follows, but overall ⟨42.5 - 51.3⟩ «4%Sp,3%Cp6n,(0.5%Tt»	Sequence becomes more MUT-like to lower part of interval from 48.5m.
		Massive to semi-massive pyrite ⟨43.9 - 45.4⟩ «SMSX»		Sericite varies from greenish yellow to grey. ⟨41.3 - 42.6⟩ «SERT» Yellow sericite contorted folded with qtz. vein.	Interval generally enriched in Cp,Sp,6n. 42.6 - 43.9m Cp stringers in QV-carb vein.	Cp in vein varies from subparallel to perpendicular to c/a.
		Foliation at 46.2m	50		49.5 - 49.6m massive 10 cm of CpSp6nTt. Possibly a faulted sliver.	
		48.8m	40			
		50.0m	60			
		Variable foliation due to faulting rotating planar orientations.				
		Faults: 45.5 - 45.7 m gouge Orientation to c/a	50			
		47.6 - 47.9m fractured 48.5 - 52.9 - interval Suffered stress, fracturing.				
		At 50.4 - 51.2 low angle fractures to c/a....	20			
52.90 TO 59.80	«FLT ZNE/ SIL SEDS»	Colour - Pale to dark grey and white Grain size - Aphan. to fine				
		Interval of highly faulted, silicified, grey sericitized sediments (argillite, siltite chert?)		Pervasive silicification within remnant blocks between gouge zones.	Mineralization present within fault zone.	Sections resemble silicified MUTS.
		Gouge zones are interrupted by more competent silicified blocks.		Intense grey sericitization.	⟨52.9 - 59.8⟩ «2% Sp+Cp (1%6n+Tt» Locally sulphides are greater concentrated. % minlz'n decreases downhole.	Only 21% of core remains as blocks within fault zone.
		Foliation evident within faulted zones. 54.2m	60			
		55.5m	60			
		59.8m	60			
			65			

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
59.80 TO 62.20	«SIL SEDS»	Colour - dark grey Grain size - v. fine to fine Lithologically the same as the overlying interval, comprising dark grey silicified and sericitized sediments. Phyllitic foliation surfaces	55 60	Silicification may in part be primary (Chert). Intense grey sericite development.	Less than 1/2% honey brown sphalerite and grey galena associated with qtz-carbonate stringers. 59.8 - 62.2 «(1.2% Sp+Gn2%Py»	
	E.O.H.					

				ASSAYS							GEOCHEMICAL							COMMENTS
Sample	From (m)	To (m)	Length (m)	CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		
BCD29797	41.30	42.60	1.30	0.02	0.07	0.01	1.2	0.09										
BCD29798	42.60	43.90	1.30	4.42	7.30	1.16	3533	6.03						3.05				
BCD29799	43.90	45.40	1.50	1.42	1.06	0.08	1179	2.55						3.58				
BCD29800	45.40	45.90	0.50	1.16	1.14	0.11	986	1.80						3.00				
BCD29801	45.90	46.90	1.00	4.68	1.12	0.05	4177	6.90						3.11				
BCD29802	46.90	48.00	1.10	3.06	0.82	0.03	3171	5.51						3.04				
BCD29803	48.00	48.50	0.50	6.88	1.12	0.11	4265	8.70						3.11				
BCD29804	48.50	49.50	1.00	3.76	5.68	4.18	3916	6.42						3.10				
BCD29805	49.50	50.00	0.50	4.96	15.76	5.96	4207	8.67						3.43				
BCD29806	50.00	51.50	1.50	1.62	3.12	1.44	1313	3.68						2.78				
BCD29807	51.50	53.00	1.50	1.26	1.78	0.48	1392	2.56						2.92				
BCD29808	53.00	54.60	1.60	0.64	4.62	3.34	505.7	1.18						2.84				
BCD29809	54.60	56.10	1.50	0.64	7.76	4.38	513.2	1.07						2.86				
BCD29810	56.10	57.60	1.50	0.30	0.59	0.38	97.2	0.25										
BCD29811	57.60	59.10	1.50	0.42	0.55	0.33	239.6	0.14						2.77				
BCD29812	59.10	60.60	1.50	0.39	0.39	0.26	197.4	0.15						2.64				
AVE.	42.60	56.10	13.50	2.41	4.01	1.76	1809.7	3.96										
AVE.	57.60	60.60	3.00	0.40	0.47	0.29	218.50	0.14										

NINNOVA INC.

HOLE NUMBER: U1330-06 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID:
NORTH: 634.25N
EAST: 9629.74W
ELEV: 1334.40

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

COLLAR DIP: -75° 0' 0"
LENGTH OF THE HOLE: 77.40m
START DEPTH: 0.00m
FINAL DEPTH: 77.40m

COLLAR GRID AZIMUTH: 360° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: January 16, 1991
DATE COMPLETED: January 17, 1991
DATE LOGGED: January 19, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
30.50	-	-75° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-75° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 21.00	«DOL MAFICS»	Colour - pale to dark green, grey and white Grain size - aphan. to fine				
		Pale to dark green, aphanitic to fine grained chloritic tuffs invaded by quartz dolomite veins to give greyish white mottled colour to core.		Intense ferro-dolomitization. Moderate to intense development greenish yellow sericite after chlorite	< 1/2% pyrite.	Fracture along folded foliation surface at 2.0m.
		Foliation 1.2m	55	1-2 m intervals of pervasive silicification.		
		8.8m	55			
			60			
		13.4m	60			
		18.0m	55			
		21.0m	50			
		Faulting fracturing: 9.7 - 10.0 flt gouge 10.7 - 11.5m blocky broken + 20cm gouge 12.6 - 12.8m gouge +broken 14.7 - 14.9m blocky + broken 15.7 - 15.8m fracture subparallel to c/a V. minor faulted lower contact.				
21.00 TO 30.20	«MFLT»	Colour - Greenish grey to greenish yellow Grain size - aphan. to lapilli				
		Pale to dark greenish grey aphanitic to fine gd mafic tuff with preferentially sericitized greenish yellow lapilli.		Locally intense greenish yellow sericitization and silicification. Moderate dolomitization.	1 - 2% pyrite	Foliation less well developed in lapilli tuffs than in overlying interval. However core splits readily along sericitic foliation.
		Foliation: 24.0m	55			
		27.2m	60			
		Faults: 22.5 - 22.6m minor gouge 26.5 - 27.4m blocky;fracture subparallel to c/a 27.7 - 27.8m - gouge				
		Lower contact faulted 30.0 - 30.2m. Appears parallel to foliation.				30.0m last easily recognized lapilli.
30.20 TO 44.00	«ALT MAFICS»	Colour - Pale green to grey and greenish yellow Grain size - fine to coarse				
		Intensely altered mafics. Original textures destroyed.		Intense silicification, dolomitization and greenish-yellow-brown sericitization.	< 1.2% pyrite.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Interval comprises a grey-white silicified to dolomitized fine to course crystalline matrix with green chloritic and greenish-yellow sericitic laminae, streaks and patches		⌈31.5 - 44.0⌋ «Silic - Dol»		
		Foliation: 28.7m	60			
		39.3m	55			
		43.8m	55			
		Faults fractures: 31.6 - 31.8m - fracture, cross cutting c/a and foliation at	60			
44.80 TO 47.50	«ALT MAF/ SEDS»	Colour - pale to dark grey Grain size - v. fine				
		Pale to dark grey with minor greenish brown mixed silicified sediments and dolomitized mafics.		Intense dolomization and patchy silicification. Qtz - dol flooding at 44.9 - 45.2 m.	1% pyrite.	
		Fine to very fine gd texture with altered sediments/mafics showing faint compositional layering and foliation.	55	Moderate development greenish brown sericite.		
		Upper contact has silicified zone and minor fracture.				
		Lower contact conformable at angle to c/a	50			
47.50 TO 53.40	«SIL AR6/ WACKE»	Colour - black grey Grain size - aphan. to fine				
		Hard, black silicified argillite intervals up to 1.5m are interbedded with pale greenish grey fine grained wacke up to 0.60m.	60 65	Pervasive silicification of argillite. Numerous veins/microveins of white quartz and carbonate permeate the argillite.	2-5% pyrite as disseminated grains, blebs, occasional folded bands (2-3mm) Trace Cp and Gn with pyrite in quartz stringer with arg/wacke ⌈50.6 - 51.0⌋ «3%Py tr.Cp6n»	Argillite locally highly graphitic.
		Folding evident in qtz feins and within seds at 49.0 - 49.6m				
53.40 TO 56.20	«FLT ZNE»	Colour - grey black				
		Sediments essentially the same as the overlying interval except shearing/faulting and greater alteration is evident.		Grey sericitic alteration increases to lower contact.	2 - 5% pyrite.	possible relict cherts.
		Angle to c/a of upper contact	50			

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Grey to black, moderately faulted, argillite, quartz vein breccia and gouge.				
		Foliation is relict blocks	40 45			
		Interval become more MUT-like to lower contact.				
56.20 TO 77.40	«ALT SEDS»	Colour - grey Grain size - fine				
		Siltites, wacke(and chert?) altered to a dark grey sericitic phyllite.	50 60	Intense development grey sericite. Local banded silicification associated with qtz - carbonate veining.	Pyrite 7-10% overall, perhaps more. Pyrite present as very fine grained disseminations and blebs blending in with the fine grained host rock. Base metal sulphides, predominantly Sp with lesser Gn, concentrated along quartz veins (to 1 cm width) parallel to foliation. Minor, small (1-3mm)Sp. blebs also disseminated outside veins throughout interval. No zones of great concentration! ╟66.2 - 66.5╢ «5% Py, 2% Sp+Gn» ╟73.3 - 73.6╢ «5% Py2%Sp+Gn»	MUT-like Possibly relict chert. Lithology becomes distinctly heterolithic fragmental from ╟74.3 - 77.4╢ «Het frag»
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		COMMENTS
BCD29828	56.20	57.70	1.50	0.37	0.28	0.59	60.6	0.63										
BCD29829	57.70	59.20	1.50	0.18	0.28	0.31	26.6	0.22										
BCD29830	59.20	60.70	1.50	0.03	0.40	0.35	14.3	0.07										
BCD29831	60.70	62.20	1.50	0.06	0.64	0.30	18.4	0.04										
BCD29832	62.20	63.70	1.50	0.07	0.14	0.11	29.2	0.04										
BCD29833	63.70	65.20	1.50	0.08	0.35	0.24	43.6	0.06										
BCD29834	65.20	66.70	1.50	0.18	0.52	0.38	71.2	0.09										
BCD29835	66.70	68.20	1.50	0.05	0.08	0.09	21.4	0.04										
BCD29836	68.20	69.70	1.50	0.06	0.17	0.09	23.6	0.04										
BCD29837	69.70	71.20	1.50	0.01	0.05	0.07	7.1	0.03										
BCD29838	71.20	72.70	1.50	0.05	0.12	0.05	16.1	0.03										
BCD29839	72.70	74.20	1.50	0.04	0.11	0.08	15.5	0.03										
BCD29840	74.20	75.70	1.50	0.10	0.49	0.14	26.1	0.06										
BCD29841	75.70	77.20	1.50	0.01	0.03	0.02	3.7	0.03										

NINNOVA INC.

HOLE NUMBER: U1330-07 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 632.76N
EAST: 9569.91W
ELEV: 1336.17

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

COLLAR DIP: -65° 0' 0"
LENGTH OF THE HOLE: 50.00m
START DEPTH: 0.00m
FINAL DEPTH: 50.00m

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

DATE STARTED: January 18, 1991
DATE COMPLETED: January 18, 1991
DATE LOGGED: January 19, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: 0.6M
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
50.30	-	-65° 0'	ACID	ok		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 34.90	«DOL MAFICS»	Colour - pale to dark green grey, and white Grain size - aphan. to lapilli				
		Intensely altered pale to dark green, aphanitic to fine grained, and lapilli size, chloritic tuffs. Alteration resulted in texture appearing as laminated or mottled greens, greenish-yellow and greys and white.		Intense ferrodolomitization, silicification and greenish yellow sericitization. Numerous quartz and quartz-carbonate veins invade the mafic, mainly parallel to foliation.	1 - 3% disseminated grains and blebs pyrite. Isolated occurrences galena in qtz-carb veins	Lapilli tuff not extensive, possibly concealed by alteration.
		Foliation: 2.7m 8.8m 16.5m	65 70 70			
		Near fault zone 24.1m 31.0m	52 68			
		Minor faults and fractures at: 1.2 - 1.3m gouge 9.3 - 9.4m gouge + blocky 22.6 - 23.0m gouge + blocks 23.8 - 24.2m blocky + gouge 24.8 - 25.0m blocky + gouge..... 27.7 - 27.9 «flt bx/gou»	 40			
34.90 TO 37.50	«SIL WACKE»	Colour - grey Grain size - fine - med. to med.				
		Grey fine to medium grained, altered, silicified wacke? Upper contact quite sharp with mafics.		Moderate to intense silicification. Moderate dolomitization.	7% disseminated blebby pyrite.	
		Foliation weakly developed: Minor qtz-carb veins 1-3 cm width parallel to schistose foliation.	70			
37.50 TO 37.80	«FLT GOUGE»	Colour - greenish white Grain size - fine to coarse				
		Intense zone of faulting to produce greenish white fault gouge and breccia. Orientation to c/a	 50			

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
37.80 TO 44.40	«ALT SEDS/ FLT ZNE»	Intermittently faulted, greenish grey and dark grey-black altered (argillite siltite?) sediment. Interval is brecciated in part. Possibly of tectonic origin. 30% interval fault gouge. Foliation 42.6m	60	Faulting has resulted in the formation of soft pale green talc. Moderate to intense grey sericitization Blocky silicified zones. V. minor greenish yellow sericite.	Pyrite variable. Overall 10-12% with local concentration (38.2-39.3m) of 20% - 30%. Dark brown Sp, Gn,Cp and Tt are disseminated as blebs through interval [42.2 - 43.7] «5%Sp4%Cp+Gn3%Tt»	Very soft friable core. Possible mafic component. Nut Tt difficult to estimate %.
44.40 TO 50.00	«ALT SEDS»	Colour - grey Upper contact marked by fault gouge. Approx. Pale to dark grey very fine grained altered sediments. (Siltite/wacke?) Silicification may in part be primary (Chert?)	87	Intense grey sericitization. Patchy silicification.	5-7% pyrite as very fine disseminations wisps and thin bands (1-2 mm). One single large bleb Sp at 44.6m. Otherwise occasional small blebs (1.2mm) scattered through interval. [44.4 - 50.0] «7%py (0.2%Sp»	Nut-like.
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29842	36.00	37.50	1.50	0.05	0.01	0.01	2.1	0.74									
BCD29843	37.80	39.30	1.50	0.02	0.13	0.03	4.1	0.08									
BCD29844	39.30	40.80	1.50	0.65	1.24	0.13	474.	1.51						2.75			
BCD29845	40.80	42.20	1.40	1.06	0.19	0.08	999.	2.91						2.74			
BCD29846	42.20	43.70	1.50	2.98	8.92	4.32	2692.	6.34						2.94			
BCD29847	43.70	44.40	0.70	0.58	0.17	0.08	518.	0.85						2.80			
BCD29848	44.40	45.90	1.50	0.05	0.42	0.17	32.7	0.66									
BCD29849	45.90	47.40	1.50	0.01	0.18	0.10	12.9	1.04						2.52			
BCD29850	47.40	48.90	1.50	0.07	0.16	0.11	44.9	1.15						2.61			
AVE.	39.30	44.40	5.10	1.44	3.06	1.34	1276.5	3.22									

MINNOVA INC.

HOLE NUMBER: U1330-08 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 631.64N
EAST: 9569.89W
ELEV: 1336.65

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

COLLAR DIP: -30° 0' 0"
LENGTH OF THE HOLE: 60.70m
START DEPTH: 0.00m
FINAL DEPTH: 60.70m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: January 18, 1991
DATE COMPLETED: January 19, 1991
DATE LOGGED: January 21, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: NONE
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
30.50	-	-32° 0'	ACID	OK	WEAK	-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 40.70	«DOL MAFICS»	Colour - pale to dark green, grey, white greenish yellow Grain size - aphan. to lapilli Altered, dolomitized, pale to dark green, aphanitic to lapilli sized, chloritic mafic tuff. Alteration resulted in texture appearing as mottled to banded green, grey, white and greenish yellow. Abundant quartz-carbonate veining. Lapilli tuff occurs at: 15.3 - 18.6m «MFLT» 32.6 - 33.9m «MFLT» 35.3 - 38.6m «MFLT» Foliation at 2.0m 12.8m 15.5m 22.0m 34.6m Lower contact from 40.3 - 41.0 sheared, core friable.	65 60 65 60 60	Intense dolomitization. Moderate to intense, patchy silicification. Patchy to laminated greenish yellow sericite after chlorite.	1/2 - 1% Pyrite overall. Local concentrations associated QV. Occasional base metal sulphides; e.g. at 10.3m blebs of galena.	Faults, fractures: 5.4 - 5.5m gouge and blocks 6.7 - 6.9m blocky 9.4 - 9.8 blocky 10.6 - 11.1m blocky + minor gou and drusy qtz veins 30.2 - 30.4 blocky 22.5 - 33.0m blocky + gouge Minor variations in foliation 40 - 60 deg. over 1 - 2.0m do occur, related to different orientations in sericite.
40.70 TO 60.70	«ALT SEDS»	Colour - grey Grain size - v. fine to fine Quite homogenous interval of grey altered sediments. Original textures have been overprinted. Texture appears as moderately well foliated, faintly defined bands and laminae of pale to dark grey silicified sediment, sericite and pyrite. Later stage white qtz-carb veins occur parallel to and cross cut foliation. 57.6 - 58.5 «Qtz Vn/Seds» Foliation.....43.6m .....51.2m .....56.0m Minor fractures faults, shears. 42.8 - 43.6 gouge/blocky 48.9 - 49.0 qtz vn gouge 49.9 - 50.1m gouge blocky	65 70 65	Moderate to intense development grey sericite throughout. Patchy silicification due to quartz flooding.	Fine grained pyrite disseminated in very thin bands parallel to foliation. % difficult to estimate, 5 - 7% overall? Blebby sphalerite is associated with thin quartz stringers which permeate the host rock mainly parallel to foliation. No outstanding concentrations. Overall 40.7 - 60.7 «7%Py(0.3%Sp+Gn» Qtz Vn/Seds between 57.6 - 58.5m may have trace Tt in galena stringers.	MUT-like. Protolith may have been partly chert. Sections of core finely laminated.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29851	40.80	42.50	1.70	0.07	0.06	0.02	16.2	.44									
BCD29852	42.50	44.00	1.50	0.05	0.49	0.28	43.2	.56									
BCD29853	44.00	45.50	1.50	0.05	0.30	0.13	38.8	.82									
BCD29854	45.50	47.00	1.50	0.06	0.36	0.20	59.7	1.25						2.59			
BCD29855	47.00	48.50	1.50	0.07	0.37	0.19	74.3	.90						2.58			
BCD29856	48.50	50.00	1.50	0.10	0.48	0.25	75.4	1.21						2.91			
BCD29857	50.00	51.50	1.50	0.01	0.20	0.11	18.1	.52									
BCD29858	51.50	53.00	1.50	0.02	0.34	0.17	32.9	.39									
BCD29859	53.00	54.50	1.50	0.02	0.19	0.13	31.4	.38									
BCD29860	54.50	56.00	1.50	0.02	0.10	0.05	31.9	.33									
BCD29861	56.00	57.50	1.50	0.02	0.08	0.04	31.6	.31									
BCD29862	57.50	59.00	1.50	0.02	0.13	0.14	16.1	.27									
BCD29863	59.00	60.70	1.70	0.02	0.39	0.08	20.3	.29									

Sample	From (m)	To (m)	Length (m)	SiO2 %	Al2O3 %	CaO %	MgO %	Na2O %	K2O %	Fe2O3 %	MnO2 %	TiO2 %	Ba %	Zr %	Cu ppm	Zn ppm	Pb %	Total %	Au ppb	Ba ppm	Ag ppm	Pb ppm	P2O5 %	Sr %	S %	Total %	As ppm	Sb ppm
	0.00	0.00	0.00																									

From (m)	To (m)	Length (L)	Sum Of Length S)= 0.00cm	RQD S/LX100	Number Of Fractures	Fracturs Per Metres	Number Of Veins	Veins Per Metres	Angle	Comments
0.00	0.00	0.00	0.00	0	0	0	0	0	0	

MINNOVA INC.

HOLE NUMBER: U1330-09 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 633.73N
EAST: 9569.92W
ELEV: 1336.22

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

COLLAR DIP: -81° 0' 0"
LENGTH OF THE HOLE: 62.50m
START DEPTH: 0.00m
FINAL DEPTH: 62.50m

COLLAR GRID AZIMUTH: 360° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: January 19, 1991
DATE COMPLETED: January 19, 1991
DATE LOGGED: January 20, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: NONE
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
35.00	-	-81° 0'	ACID	OK		-	-	-	-	-	
64.00	-	-84° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 25.30	«DOL MAFICS»	Colour - pale to dark green grey-white green-yellow Grain size - aphan. to fine Intensely altered, pale to dark green, chloritic aphanitic to fine grained mafic tuffs. Alteration resulted in destruction of original textures. Textural appearance, mottled to laminated shades of grey, white and greenish-yellow. Abundant quartz-carbonate veining invade parallel to foliation and cross-cutting. Foliation @ 3.0m @13.7m @25.0m Gradational contact with MFLT	52 50 65	Intense ferro-dolomitization, patchy silicification, and well developed patches, flakes, laminae of greenish-yellow sericite. Most intensely altered zones comprise rough bands of qtz-carb and sericite.	1/2 - 1% disseminated and blebby pyrite. Very occasional base metal sulphides associated with QV.	Fractures and Faults: 1.7 - 1.8m fracture sub parallel c/a 4.3 - 4.4m fracture minor gouge 4.6 - 4.8m QB blocks, minor gouge 6.1 - 6.2m gou/bx. 30 deg to c/a 9.0 - 9.4m blocky + gouge 14.8 - 15.2m gouge + blocks. 30 deg to c/a 22.8 - 23.7m vuggy QV + healed breccia. Minor gouge.
25.30 TO 35.00	«MFLT»	Colour - pale to dark green grey white green yellow Grain size - aphan. to lapilli Intensely altered mafic lapilli tuff. Relict lapilli preferentially altered to green yellow sericite. Foliation @ 30.0m @ 35.0m	50	Intense ferro-dol, patchy silicification and greenish yellow sericite.	1/2% pyrite	Faults and fractures: 26.5 - 26.8m blocky + gouge 33.1 - 33.4 blocky + gouge 33.5 - 33.7 blocky + gouge
35.00 TO 49.10	«ALT MAFICS»	Colour - Pale to dark green grey Grain size - aphan. to fine Intensely altered mafic tuff. Alteration/ destruction of chloritic texture increases to lower contact. Tectural appearance mottled-laminated grey-white and greenish yellow sericite. Foliation @ 38.1m @ 39.6m @ 45.5m @ 48.8m	62 45 52	Intense ferro-dol Patchy silicification Intense development greenish yellow sericite laminae, patches and streaks.	1% pyrite. Locally 3-4% in QV over 3-4mm.	Faults and fractures: 36.1 - 37.8½ «Flt gou/heal bx» 38.6 - 38.7m gouge/bx 39.8 - 40.0m blocky + gouge 40.9 - 41.1m gouge 41.9 - 42.1m gouge

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		At 48.8m variable foliation. Dependent on relation of sericite to beads/veins of quartz-dolomite.	50			
49.10 TO 52.00	«SIL ARG/ ALT SED»	Colour - black to pale green - grey Grain size - aphan. to v. fine				
		49.1 - 50.3m black, graphitic silicified argillite blends into a mixed argillite/altered sediment at 50.3m. Interval is tectonised. Numerous micro-fractures filled with qtz-carb veins/micro veins stretched, boudined. Possible minor fault at lower contact.	 50 60	Moderate to intense silicification. Sericite and pyrite increase to lower contact.	3 - 7% pyrite. Disseminated pyrite increasing to end of interval.	No major fault apparent at contact. Knife sharp from altered mafic to silicified argillite. Minor fault at contact? Mafic clast at contact suggests way-up downhole.
52.00 TO 57.60	«HET FRAG/ ALT SEDS»	Colour - grey Grain size - v. fine to pebble				
		Moderately altered, grey to black sub-rounded granule to small pebble size argillite (and chert?) clasts are supported in a matrix of v. fine altered sediment, grey sericite. Foliation 52.0m 55.0m 57.6m Faults fractures: 52.0 - 52.7m intermittent gouge sheared. 56.2 - 56.6m gouge + blocky. Sheared sediment increases to contact. However, gradational change.	 55 40 55 60	Moderate to intense grey sericite developed. Patchy silicification due to quartz flooding.	Variable pyrite 7-15% as fine disseminated grains in patches and bands. Sphalerite and galena commonly occur with faint white QV and silicified patches. {52.0 - 57.6} «2%Sp(1%Gn10%Py»	Mut character increases to end of hole. Isolated vein shows isoclinal folding over 3 cm.
57.60 TO 62.50	«ALT SEDS»	Colour - grey Grain size - v. fine				
		Grey fine grained altered sediment. (Het frag+siltite/wacke?) Original textures destroyed. Foliation averages..... Faults: 58.2 - 58.6m gouge 59.4 - 59.6m sheared	 45 50	Intense grey sericitization. Patchy silicification and mottled grey-white quartz-carbonate flooding.	7-12% pyrite. {57.6 - 62.5} «(8.5%Sp+Gn 10%Py» Blebby Sp associated with QV and qtz-carb veining.	MUT Shearing affects rock competency.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
	0.00	0.00	0.00														
BCD29864	52.00	53.50	1.50	0.04	0.15	0.16	14.8	.29									
BCD29865	53.50	55.00	1.50	0.03	0.77	0.31	12.1	.27									
BCD29866	55.00	56.50	1.50	0.01	0.14	0.21	5.6	.23									
BCD29867	56.50	58.00	1.50	0.06	0.09	0.08	16.6	.34									
BCD29868	58.00	59.50	1.50	0.01	0.05	0.07	5.5	.35									
BCD29869	59.50	61.00	1.50	0.01	0.10	0.08	3.6	.28									
BCD29870	61.00	62.50	1.50	0.01	0.18	0.12	5.1	.22									

NINNOVA INC.

HOLE NUMBER: U1330-10 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 633.00N
EAST: 9560.00W
ELEV: 1336.36

ALTERNATE COORDS GRID: UTM
NORTH: 0+ 00
EAST: 0+ 00
ELEV: 0.00

COLLAR DIP: -67° 0' 0"
LENGTH OF THE HOLE: 50.00m
START DEPTH: 0.00m
FINAL DEPTH: 50.00m

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

DATE STARTED: January 20, 1991
DATE COMPLETED: January 20, 1991
DATE LOGGED: January 27, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
48.80	-	-67° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
Ø.ØØ TO Ø.6Ø	«CSG»					
Ø.6Ø TO 13.4Ø	«DOL MAFICS»	Colour - pale to dark green, grey-white, green-yellow Grain size - aphan. to fine Pale to dark green, intensely altered, aphanitic to fine grained mafic tuffs. Alteration resulted in texture appearing as mottled to banded and laminated green, green-yellow, grey and white. Abundant quartz and quartz-carbonate veining. Foliation at 2.7m 1Ø.5m 13.4m	 6Ø 78 75	Intense ferr-dol patchy silicification associated qtz-carb flooding. Moderate to intense greenish-yellow laminated, banded and patchy sericitization.	1% pyrite	Faults and Fractures 1.6 - 1.8m fracture sub parallel c/a
13.4Ø TO 17.ØØ	«MFLT»	Colour - pale to dark green, green-yellow Grain size - aphan. to lapilli Pale to dark green, altered, aphanitic to lapilli size chloritic mafic tuff. Foliation..... Upper and lower contacts gradational.	 75 8Ø 	Lapalli altered to greenish yellow sericite. Speckled texture lapilli infilled vesicles, silica and pyrite. Intense ferro-dol.	1-2% pyrite.	Faults and fractures 15.Ø - 15.2m minor fracture/gou. Foliation less well developed in MFLT Qtz-carb veining less abundant.
17.ØØ TO 35.8Ø	«ALT MAFICS»	Colour - pale to dark green, grey, white green-yellow Grain size - aphan to fine Altered, pale green to dark green, aphanitic to fine grained, chloritic mafic tuffs. (Includes minor MLFT) Alteration destroyed almost all protolith texture. Foliation at 21.Ømm 23.9m 26.5m 3Ø.2m No major structure seen at lower contact. Minor fault gouge.	 6Ø 7Ø 75 7Ø 65 7Ø 	Intense ferro-dol Patchy silicification and greenish-yellow sericitization. Intense development Yellow sericite and rough bands qtz.-dolomite between [31.2 - 32.6] «grey qtz - ser» Alteration intensity increases to lower contact. Texture appears almost chaotic due to alteration and tectonism.	1 - 10% pyrite	Faults and fractures: 23.5 - 23.7m - gouge 24.1 - 24.5 blocky core 27.9 - 28.Øm minor gouge+blocks 29.7 - 29.8m fracture x-cuts c/a at 2Ø deg. 31.7m minor gouge 33.6 - 33.7m fracture subparallel c/a.

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
35.80 TO 36.90	«SIL WACKE»	Colour - grey Grain size - fine - medium Grey, siliceous, fine-medium grained wacke. Quite homogenous texture.		Moderate development grey sericite.	⌈35.8 - 36.9⌉ «10 - 15%Py» Fine to coarse grained disseminated blebs. Coarser blebs in Qtz-carb veins.	Similar to contact at hole 1330-7.
36.90 TO 37.30	«FLT GOUGE»	Colour - grey - white Grain size - fine Intense zone of fault gouge.		Friable talc within fault gouge.		
37.30 TO 50.00	«ALT SEDS»	Colour - grey to grey-green Grain size - fine Grey to greyish green altered, fine grained sediments. (siltite, wacke and chert?) Foliation - 37.5m 40.0m 48.8m Fault fractures: ⌈42.4 - 43.2⌉ «flt gou/bx» 44.1 - 44.3m gouge + blocky 44.8 - 45.3m gouge+blocky 45.5 - 46.0 gouge + blocky ⌈47.1 - 47.6⌉ «flt gou/bx»	62 70 65	Well developed grey sericite. Talc locally intense between 37.3 - 39.3m Silicification (cherty?) increases through quartz flooding from 41.3 - 50.0m.	Pyrite decreases downhole. 15% pyrite to 41.3m decreasing to 3-5% at end of hole. Semi-massive pyrite ⌈37.7 - 37.8⌉ «SMSX 35%Py» Occasional base metal sulphides occur: ⌈40.0 - 40.2⌉ «1%CpGm,0.5%Tt» (0.2%Sp distributed as blebs associated with veins and patches QV. From approx 42.7-50.0m. ⌈46.9 - 47.1⌉ «3%Sp,5%Py»	Core breaks easily from 37.3 - 42.7m due to effects of shearing from fault zone. MUT-like lithologies/alteration. Isoclinal fold in qtz vn at 45.5m.
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29871	35.80	36.90	1.10	0.02	0.03	0.02	5.6	.78									
BCD29872	37.30	37.80	0.50	0.01	0.04	0.06	6.7	.19									
BCD29873	37.80	39.30	1.50	0.01	0.03	0.05	4.1	.24									
BCD29874	39.30	40.80	1.50	1.12	0.48	0.25	859	1.65						3.23			
BCD29875	40.80	42.30	1.50	0.02	0.07	0.05	16.4	.34									
BCD29876	42.30	43.80	1.50	0.01	0.04	0.05	7.8	.33									
BCD29877	43.80	45.30	1.50	0.17	0.10	0.07	105.4	.81						2.80			
BCD29878	45.30	46.80	1.50	0.18	0.48	0.29	80.4	.72									
BCD29879	46.80	48.30	1.50	0.05	0.67	0.48	28.8	.84									
BCD29880	48.30	49.80	1.50	0.01	0.04	0.02	9.4	.24									

NINNOVA INC.

HOLE NUMBER: U1330-11 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 636.00N
EAST: 9580.00W
ELEV: 1335.85

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

COLLAR DIP: -60° 0' 0"
LENGTH OF THE HOLE: 53.00m
START DEPTH: 0.00m
FINAL DEPTH: 53.00m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: January 20, 1991
DATE COMPLETED: January 21, 1991
DATE LOGGED: January 28, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
35.00	-	-60° 0'	ACID	OK		-	-	-	-	-	
53.00	-	-60° 0'	ACID	OK	WEAK	-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 37.40	«DOL MAFICS»	Colour - Pale to dark green, grey-white greenish-yellow Grain size - aphan. to lapilli Altered sequence of aphanitic to lapilli sized chloritic pale to dark green mafic tuffs. Alteration resulted in texture appearing as mottled to laminated shades of grey and green to greenish yellow. Alteration destroyed original textures, except, ghost lapilli. visible - 20.7 - 21.3m 26.1 - 33.2m Foliation: 4.4m 13.5m 21.0m 27.3m 34.1m Lower contact with seds, knife sharp. However may be faulted silver in structural hanging wall. Fuchsite at contact.	

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
45.70 TO 53.00	«SIL/ALT SEDS»	Colour - pale to dark grey Grain size - fine				
		Pale to dark grey altered fine grained sediments which are 60% silicified. Possibly, in part, a chert protolith.		Moderate to intense grey sericite developed as patches, bands and laminae between irregular silicified patches and bands.	5-7% very fine grained pyrite as wisps, patches and laminae. [45.7 - 53.0] «0.2%Sp 5-7%Py» Occasional blebby Sp. Possible hinge zone at 46.9m?	Folded qtz-carb veins occur as faint outlines against the grey silicified matrix. Silicified sediments show some boudinage.
		Foliation at 46.9m	85			
		49.5m	72			
		54.5m	75			
		Interval more competent than the overlying seds. Minor faults and fractures at: 46.5m fractur 50 deg. to c/a cross-cuts foliation. 48.7 - 48.9m sheared/minor gouge 50.1 - 50.3m gouge + blocky.				
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		COMMENTS
BCD29881	37.40	38.40	1.00	0.01	0.03	0.05	7.0	0.26										
BCD29882	38.40	39.90	1.50	2.18	8.92	4.22	2144	4.13										
BCD29883	39.90	41.20	1.30	5.06	14.12	7.64	5710	10.94										
BCD29884	41.20	42.70	1.50	0.00	0.18	0.06	82.7	0.41										
BCD29885	42.70	44.20	1.50	0.02	0.04	0.04	18.4	0.46										
BCD29886	44.20	45.70	1.50	0.01	0.23	0.10	17.4	0.63										
BCD29887	45.70	47.20	1.50	0.01	0.43	0.21	18.2	0.66										
BCD29888	47.20	48.70	1.50	0.01	0.25	0.15	11.9	0.67										
BCD29889	48.70	50.20	1.50	0.02	0.14	0.08	12.0	0.46										
BCD29890	50.20	51.70	1.50	0.04	0.13	0.11	22.6	0.42										
BCD29891	51.70	53.00	1.30	0.02	0.16	0.04	15.8	0.35										
AVE.	38.40	41.20	2.80	3.52	11.33	5.81	3799.6	7.29										

NIMNOVA INC.

HOLE NUMBER: U1330-12 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 637.00N
EAST: 9580.00W
ELEV: 1335.85

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

COLLAR DIP: -90° 0' 0"
LENGTH OF THE HOLE: 61.00m
START DEPTH: 0.00m
FINAL DEPTH: 61.00m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: January 21, 1991
DATE COMPLETED: January 21, 1991
DATE LOGGED: January 29, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
30.50	-	-90° 0'	ACID	OK	
61.00	-	-90° 0'	ACID	OK	

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

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CGS»					
0.60 TO 29.20	«DOL MAFICS»	Colour - pale to dark green, grey to greenish-yellow Grain size - aphan. to lapilli Altered pale to dark green aphanitic to fine grained chloritic mafic tuffs with minor visible lapilli. Alteration resulted in texture appearing as laminated to banded and mottled shades of grey, green and green-yellow. Abundant qtz carb veining. [9.2 - 9.7] «Qtz-carb vn» Foliation - 3.0m 12.2m 21.3m 29.2m Lapilli tuff occurs between 24.8 - 29.2m.	 50 55 65 67	Intense ferro-dol. Moderate to intense alteration chlorite to green-yellow sericite which forms laminae, bands and wisps parallel to foliation.	2-3% pyrite, locally 10% over 5-10mm, associated with qtz-carb veins.	Faults and fractures: 1.1 - 1.4m fault/fracture at 50 deg. to c/a 4.9 - 5.1m fracture (10 deg c/a Core becomes increasingly blocky to end of interval. Lower contact based on fact that core becomes increasingly broken and blocky. Lithologies are the same.
29.20 TO 37.10	«FLT ZONE/ DOL MAFICS»	Colour - pale to dark green, grey to green-yellow Grain size - aphan. to lapilli Intermittently faulted interval of dolomitized mafics. From 32.0 - 35.1m weakly healed fault breccia. Foliation @ 31.4m 37.1m	 51 70 65	Intense ferro-dol. Moderate to intense pale green to green-yellow sericitization.	1-2% pyrite	Core broken and blocky. Lower contact faulted but no major lithological change occurs.
37.10 TO 45.10	«ALT MAFICS»	Colour - pale to dark green, grey, green-yellow Grain size - aphan. to fine Altered pale to dark green aphanitic to fine grained chloritic mafics. Original textures destroyed. Sericite texture appears stretched around	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		boudins of quartz-carbonate.				43.3 - 43.4m fracture @ 15 deg. c/a
		Foliation at 39.7m	60			cross-cutting foliation
		42.7m	65			43.9 - 44.5m blocky + gouge.
		Lower contact sharp.	58			
45.10 TO 45.70	«SIL ARG»	Colour - grey to black Grain size - V. fine Grey to black partly silicified graphitic argillite invaded by qtz carb veining/flooding Argillite is tectonized with veining moderately deformed, stretched and boudined. Minor fault at lower contact, parallel to foliation.	70	Silicification creates very fine mottled black and grey texture.	1% pyrite as occasional blebs and fine grains in thin bands (2-3mm).	
45.70 TO 47.50	«ALT SEDS»	Colour - grey, green-yellow Grain size - v. fine Strained interval of finely laminated quartz, sericite and pyrite from 45.7 - 47.0m. Grey sericite and v. fine pyrite (MUT) from 47.0 - 47.5.		Intense greenish yellow and grey sericitization. Minor increase in silicification to lower contact.	7-10% pyrite as very fine disseminations, and grains + blebs banded paralled to foliation. Trace Sphalerite.	Sert + mut Friable core. Minor fault at lower contact.
47.50 TO 53.40	«SIL SEDS»	Colour - grey white Grain size - v. fine Silicified grey very fine sediments. Original textures destroyed. 90-95% silicified Foliation within interval Lower contact faulted at approx. 70 deg. to c/a	50 65 70	Silicification due to intense white quartz flooding, creating a patchy white on grey texture. Minor grey sericite partings developed within silicified host rock.	Pyrite <1% Sphalerite scattered throughout interval as dark brown to honey brown blebs and patches. Tetrahedrite intimately associated with larger patches of sp. 48.9 - 53.4 <2% Sp+Gn (1% Tt»	
53.40 TO 55.40	«FLT ZNE/ ALT SEDS»	Colour - grey Grain size - v. fine Grey v. fine grained altered sediment. (Siltite, Argillite). Interval sheared; soft clayey gouge over 5cm at upper contact.		Intense grey sericitization.	5-7% pyrite as fine disseminations. Occasional blebs Sp. <1/2%	Friable core, splits easily along foliation. MUT

HOLE NUMBER: U1330-12

NINNOVA INC.
DRILL HOLE RECORD

DATE: 21-June-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Core splits easily along foliation at	35 50			
55.40 TO 61.00	«SIL SEDS»	Colour - dark grey white Grain size - v. fine				
		Silicified, grey very fine sediments with minor intervals of non silicified grey sericitic/pyritic seds (MUT) Foliation	35 50	Silicification due to intense quartz flooding. 80 - 90% silicified. Pyrite and grey sericite from partings between silicified patches.	5-7% pyrite as disseminated grains and thin bands (2-3mm). Blebby sphalerite. Overall less than 1.2%. Minor 10cm zone [55.8 - 55.9] «5%Sp5%Py» in sheared MUT.	Minor fault gouge/bx at 57.4 - 57.8m.
	E.O.H.					

HOLE NUMBER: U1330-12 ASSAY SHEET DATE: 21-June-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29892	46.50	47.50	1.00	0.14	0.16	0.05	34.7	.21									
BCD29893	47.50	48.90	1.40	0.25	1.02	0.61	116.6	.72									
BCD29894	48.90	50.40	1.50	0.22	0.39	0.22	89.9	.47									
BCD29895	50.40	51.90	1.50	0.50	1.07	0.45	241.6	.26									
BCD29896	51.90	53.40	1.50	0.20	0.51	0.37	86.7	.16									
BCD29897	53.40	54.40	1.00	0.25	1.16	0.91	58.8	.93									
BCD29898	54.40	55.40	1.00	0.15	0.93	0.47	42.7	.73									
BCD29899	55.40	55.90	0.50	0.10	1.18	0.99	38.9	.36									
BCD29900	55.90	57.40	1.50	0.23	0.59	0.66	54.6	1.10									
BCD29901	57.40	58.90	1.50	0.01	0.25	0.25	11.1	.27									
BCD29902	58.90	60.40	1.50	0.01	0.19	0.13	10.9	.37									

MINNOVA INC.

HOLE NUMBER: U1330-13 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 635.00N
EAST: 9580.00W
ELEV: 1336.19

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

COLLAR DIP: -32° 0' 0"
LENGTH OF THE HOLE: 59.70m
START DEPTH: 0.00m
FINAL DEPTH: 59.70m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 2° 0' 0"

DATE STARTED: January 21, 1991
DATE COMPLETED: January 21, 1991
DATE LOGGED: January 29, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: NONE
CORE STORAGE: BARRIERE

PURPOSE: COLLAR ACID TEST 32 DEG.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
35.00	-	-32° 0'	ACID	OK	
56.70	-	-31° 0'	ACID	OK	V. WEAK ETCH.

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

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 34.70	«DOL MAFICS»	Colour - pale to dark green, grey, greenish-yellow Grain size - aphan. to lapilli Altered pale to dark green, aphanitic to lapilli size chloritic tuffs. Alteration and deformation resulted in textural appearance of mottled to banded and laminated greenish sericite/chlorite and grey-white silicification. Abundant Qv and qtz-carb veins parallel to and cross-cutting foliation. Foliation: 4.9 m 11.0m 17.1m 24.1 30.5m	50 60 55 45 52 60 55	Intense ferro-dol. Moderate to intense patchy grey white silicification. Moderate to intense greenish-yellow sericitization.	1-3% pyrite.	Foliation less well developed from 26.2 - 34.7m. Minor faults and fractures: 16.3 - 16.4m minor gouge 30.9 - 30.95m v. minor gouge.
34.70 TO 39.50	«MFLT»	Colour - pale to dark green, dark grey, green-yellow Grain size - aphan. to lapilli More recognisable interval of lapilli tuffs. Pale green to green-yellow lapilli in a grey to green dolomitized matrix.	 57 60	Moderate to intense ferro-dol/silicification. Moderate to intense pale green-yellow sericite.	1-2% pyrite.	Lower contact passes into altered mafics with no recognisable lapilli.
39.50 TO 42.50	«ALT MAFICS»	Colour - pale green grey, green-yellow Grain size - aphan. Intensely altered mafic tuffs/lapilli? Original textures destroyed. Now appears as patchy, banded and mottled quartz, sericite/chlorite, dolomite. Lower metre 41.5-42.5m comprises sheared greenish yellow sericite, grey Qv and white qtz-carb veins. 41.5 - 42.5 «Flt zone» 15% by volume Qtz-carb veins.	 65 70	Intense pale green to yellow sericitization. Intense ferro-dol. Patchy silicification associated with QV.	3-4% disseminated to laminated pyrite.	Core at mafic/sed contact friable.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
42.50 TO 59.70	«ALT SEDS»	Colour - pale to dark grey Grain size - v. fine Altered, pale to dark grey, very fine grained sediments (siltite, wacke and chert?). Lithology varies from sericitic/pyritic (MUT) to a more silicified (almost cherty) grey sediment.		Moderate to intense grey sericitization Minor olive green-yellow sericite [43.9 - 44.5] «Sert» with 2-10mm banded pyrite. Silicification moderate to intense in zones, related to quartz flooding. (Possible remnant primary chert?).	Variable pyrite: 3-10% in grey sericitic to silicified seds (MUT). 10.15% pyrite in Sert. Low concentration base metal sulphides. Blebby Sp associated with silicification parallel to foliation. [45.9 - 48.4] «5-7% Py(1/2%Sp+Gn» [50.0 - 50.6] «1-2%Sp 5%Py»	MUT to silicified MUT and minor Sert. Fold hinge zone in Sert at 44.3m. Similarly fold in mut at 45.0m.
		Foliation: 40.9m 47.0m 55.5m 59.0m	65 70 67 70			
		Faults and fractures: 45.2 - 45.6 gouge + blocks [49.0 - 49.5] «flt gou/blocky»	20 25			
		Core has partly shattered appearance between 52.1 - 53.3m, including fault gouge at 52.8 - 53.0m. [53.3 - 54.4] «flt gou/bx»				
		Core shows certain amount of strain to end of hole. [59.4 - 59.6] «flt bx»				
	E.O.H.					

BCD29903	41.50	42.50	1.00	0.01	0.01	0.01	07.3	0.09				
BCD29904	42.50	43.90	1.40	0.01	0.02	0.03	10.7	0.17				
BCD29905	43.90	44.40	0.50	0.03	0.03	0.02	14.1	0.13				
BCD29906	44.40	45.90	1.50	0.01	0.01	0.02	7.8	0.47				
BCD29907	45.90	47.40	1.50	0.03	0.07	0.04	32.4	1.15		2.61		
BCD29908	47.40	48.90	1.50	0.10	0.17	0.05	80.3	0.89				
BCD29909	49.10	50.60	1.50	0.07	0.73	0.35	67.8	0.71				
BCD29910	50.60	52.10	1.50	0.02	0.27	0.16	30.6	0.39				
BCD29911	52.10	53.60	1.50	0.03	0.13	0.06	48.7	0.29				
BCD29912	53.60	55.10	1.50	0.06	0.28	0.11	74.1	0.18				
BCD29913	55.10	56.60	1.50	0.01	0.06	0.03	15.8	0.14				

MINNOVA INC.

HOLE NUMBER: U1330-14 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER:
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 635.00N
EAST: 9580.00W
ELEV: 1337.06

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

COLLAR DIP: -10° 0' 0"
LENGTH OF THE HOLE: 79.90m
START DEPTH: 0.00m
FINAL DEPTH: 79.90m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: January 23, 1991
DATE COMPLETED: January 23, 1991
DATE LOGGED: January 30, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: NONE
CORE STORAGE: BARRIERE

PURPOSE: COLLAR ACID TEST -10 DEG.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
30.50	-	-10° 0'	ACID	OK		-	-	-	-	-	
70.10	-	0° 0'	ACID	--	BAD ETCH	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 25.20	«DOL MAFICS»	Colour - pale to dark green, grey, green-yellow Grain size - aphan. to fine Intensely altered, pale to dark green, aphanitic to fine grained mafic tuffs. Alteration resulted in texture: mottled, laminated banded grey, white quartz-carb, greenish-yellow chlorite/sericite. Abundant qtz-carb veining. Foliation: 3.0m 12.5m 19.0m 25.2m	 50 70 47 42 42	Intense ferro-dol. Patchy grey white silicification. Moderate to intense sericitization, sericite after chlorite.	1-3% pyrite.	Upper 8.0m, core blocky and broken. 0 - 0.8m Faults and fractures: 14.2 - 14.6 fracture 17 deg. c/a crosscuts foliation.
25.20 TO 30.40	«MFLT»	Colour - Pale to dark green, green-yellow Grain size - aphan. to lapilli Pale greenish yellow sericitized, speckled lapilli matrix supported in dark green aphanitic to fine grained, chloritic mafic tuff. Foliation less well developed in MFLT. Overall variation Lower contact - 30.4m Local qtz-carb veining.	 40 50 42	Patchy silicification and ferro-dol. Weak to moderate, greenish yellow sericitization.	1% pyrite.	
30.40 TO 46.60	«DOL MAFICS»	Colour - pale to dark green, grey, green-yellow Grain size - aphan. to fine. Intensely altered pale to dark green, aphanitic to fine grained chloritic mafics. Original textures destroyed. Texture - patchy grey to mottled grey white silicification, and dolomitization. Banded green yellow sericite/chlorite and quartz-dol veins. Foliation: 34.1m 40.2m 46.3m	 50 45 53	Intense ferro-dol. Patchy silicification associated qtz-carb flooding. Weak to moderate green-yellow sericitization.	1-2% pyrite.	Faults fractures: 35.3 - 35.5m fracture 15 deg. to c/a. 45.2 - 45.7m blocky core, minor gouge.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		⟦46.2 - 46.6⟧ «flt gou/block»				
46.60 TO 48.90	«ALT MAF/ SEDS»	Colour - grey to green-yellow Grain size - fine Transitional interval comprising grey altered sediments and intensely altered relict mafic tuff. From 46.6 - 48.3m, banded laminated, patchy yellow sericite, pyrite and qtz. 48.3 - 48.9m grey, partly silicified, sericitic seds. (MUT). Foliation	 67	Moderate to intense yellow sericitization. Patchy silicification. QV show some boudinage. Patchy talc and fuchsite suggest mafic component.	7-10% pyrite as patches, bands and disseminations. Locally 20-25% over 2-3cm.	46.6 - 47.2m sheared, strained sericite/pyrite breaks easily along foliation. Contact mafic to seds? conformable at 48.3m.
48.90 TO 55.50	«SERT»	Colour - dark yellow Grain size - v. fine Yellow very fine grained sericite. Quite homogenous, massive. Where QV invade the sericite course blebs pyrite occur. Foliation: 49.4m 53.9m Upper contact marked by 2cm qtz-carb vein parallel to foliation. Lower contact is gradational.	 64 75	Intense yellow sericitization of very fine sediments. Intensity of yellow sericite decreases to lower contact where weak grey sericite become prevalent.	Overall 10-12% pyrite Locally 30% over 2-3cm ⟦51.9 - 52.3⟧ «30% py»	Faint compositional banding in sericite is folded; possible hinge zones outlined at 51.5 - 51.9m and 52.6 - 52.9m. Faults: ⟦49.9 - 50.9⟧ «flt gou/blocky» friable. ⟦53.8 - 54.0⟧ «flt gouge» intense faulting.
55.50 TO 63.40	«ALT SEDS/ SILTITE»	Colour - grey Grain size - v. fine Weak to moderately altered grey, very fine grained sediments (siltites). Foliation 58.5m 63.1m Faulting ⟦60.5 - 61.5⟧ «flt. gou/blocky» Lower contact faulted from 63.3 - 63.4m. Intense gouge zone.	 70 58 30	Weak to moderate grey sericitization. Weak to moderate yellow sericite ⟦61.6 - 62.6⟧ «Sert»	Pyrite variable distribution. Sediments not pyritized throughout. Pyrite associated with faint patches silicification, minor QV and within fault zones. Overall 3-10% pyrite. Locally 15% over 2-3cms Possible Arsenopyrite at 60.0m Trace Cp at 56.8m.	Interval moderately friable due to faulting and ease with which core splits along phyllitic foliation.

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
63.40 TO 70.00	«QV/SEDS FLT ZNE»	Colour - grey, grey-white Grain size - fine to med. Silicified, grey, fine to medium grained sediments. White qtz-carb veins occur parallel to and cross cut foliation. Foliation - 65.0m 68.7m Lower contact faulted.	 50 60 50	Moderately well developed grey sericite as partings to silicified sediment.	Low % pyrite, 1-2% locally 5-10% over 5-10mm. Sphalerite occurs as fine to course grained blebs distributed in bands 3-20 mm. Most concentrated zones ╟64.4 - 65.4╢ «3%Sp+6n(1%Tt»	Possibly relict chert primary silicification?
70.00 TO 73.80	«QV/SEDS FLT ZNE»	Colour - grey white Grain size - v. fine Sheared strained interval of altered, grey sediments invaded by numerous qtz-carb veins mostly parallel to foliation. 30% by volume. Foliation	 50 60	Moderate grey sericite. Talc formation in sheared seds.	2-5% v. fine pyrite, occasional blebs.	
73.80 TO 76.50	«ALT SEDS»	Colour - grey, yellow Faulted upper contact. Interval comprises grey (MUT) and yellow (Sert) fine grained altered sediments, partly faulted, folded and intruded by Qtz-carb veins. Gradational contact.	 50	Intense grey and yellow sericitization. Alteration intersity decreased rapidly to lower contact.	7% - 10% pyrite.	Possible hinge zone in sert at 75.5m.
76.50 TO 79.90	«ARG/SILT WACKE»	Colour - grey black Grain size - fine to fine-med. Dark grey, black very fine to fine-medium grained argillite/siltite/wacke bedded at angle to c/a Qtz-carb veins intrude both parallel and cross-cutting to bedding. E.O.H.	 70			Argillite weakly graphitic, increasingly so in fault zone ╟78.9 - 79.9╢ «flt gou/blocky»

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29914	47.70	48.90	1.20	0.04	0.08	0.05	20.6	0.31									
BCD29915	48.90	50.40	1.50	0.05	0.01	0.01	17.9	0.29									
BCD29916	50.90	51.40	0.50	0.01	0.01	0.01	3.0	0.19									
BCD29917	51.90	52.30	0.40	0.01	0.02	0.01	2.1	0.12									
BCD29918	55.50	57.00	1.50	0.02	0.02	0.01	1.3	0.07									
BCD29919	57.00	58.50	1.50	0.01	0.02	0.01	.7	0.05									
BCD29920	63.40	64.40	1.00	0.08	0.34	0.03	62.4	0.58									
BCD29921	64.40	65.40	1.00	1.02	4.70	2.68	784	1.97						3.03			
BCD29922	65.40	66.90	1.50	0.10	0.60	0.34	72.3	0.41									
BCD29923	66.90	68.50	1.60	0.05	0.25	0.15	45.3	0.22									
BCD29924	68.50	70.00	1.50	0.01	0.03	0.02	2.9	0.03									
BCD29925	70.50	71.50	1.00	0.01	0.02	0.01	5.1	0.13									

MINNOVA INC.

HOLE NUMBER: U1330-15 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 633.00N
EAST: 9600.00W
ELEV: 1336.44

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

COLLAR DIP: -17° 0' 0"
LENGTH OF THE HOLE: 63.40m
START DEPTH: 0.00m
FINAL DEPTH: 63.40m

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

DATE STARTED: January 23, 1991
DATE COMPLETED: January 24, 1991
DATE LOGGED: January 31, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: NONE
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-17° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-17° 0'	ACID	OK		-	-	-	-	-	
63.40	-	-17° 0'	ACID	--	WEAK	-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 18.40	«DOL MAFICS»	Colour - pale to dark green, grey-white, green-yellow Grain size - aphan. to fine Pale to dark green, aphanitic to fine grained, chloritic mafic tuffs altered to mottled, banded and laminated shades of green-yellow chlorite/sericite, grey-white quartz and dolomite. Numerous qtz-carbonate veins. Foliation: 3.7m 13.0m Minor fault at lower contact.	 45 55	 Intense ferro-dol. Moderate greenish-yellow sericitization after chlorite. Patchy silicification.	 <1% Pyrite	 Original texture destroyed.
18.40 TO 41.70	«DOL MAFICS /MFLT»	Colour - pale to dark green, grey, greenish-yellow Interval dominated by lapilli tuffs with minor intervals of altered mafic tuffs. Lapilli form speckled yellow patches in dol-sil tuff matrix. Foliation: 21.9 31.8	 55 60 60	 Moderate to intense ferro-dol. Moderate to intense sericitization. Silicification moderate, though greater % silicified than dol-mafics.	 1% pyrite	 Greater % qtz-carb veins in mafic tuff. Veins cross-cut and parallel foliation. Fault fractures: 36.0 - 36.3m sheared with minor gouge along foliation. 37.5 - 37.7m vein filled fracture sub-parallel c/a. Core becomes blocky to lower contact.
41.70 TO 43.90	«FLT ZONE»	Colour - grey to green Fault zone in mafics and possible sediments. Core is blocky and broken with clayey gouge over 10cm from 43.8-43.9m	 	 Weak to moderate greenish-yellow sericitization. Intense ferro-dol.	 <1% pyrite.	 Orientation difficult to determine. Blocky in flt. zone show regional foliation. 55-60 deg.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
43.90 TO 46.10	«QV/SIL SEDS»	Colour - Grey Grey quartz flooded sediment. Fine mottled grey-white texture with white patches. Patches of yellow sert as within the silicified interval including a friable section 44.6 - 44.9m Sericitic breaks at	50	Patches of intensely sericitized sediment. Silicification appears cherty in sections of core.	Uneven distribution pyrite. Occasional fine disseminations with local concentrations in bands and blebby patches. Large blebs of galena occur associated with possible later stage white quartz-carbonate veins. {45.4 - 46.1} «10%Py2%Gn»	Silicified zone breaks along occasional grey sericite laminae. Friable sert at lower contact.
46.10 TO 50.00	«SERT»	Colour - yellow to yellow grey Grain size - v. fine Fairly massive v. fine grained yellow sert. Faint compositional layering/foliation at	55 75	Intense yellow sericitization which decreases in intensity from 48.9 to 50.0, to a greyish yellow.	Pyrite occurs as blebs in silicified bands and patches 5-20mm width. Semi-massive pyrite between 48.1-48.3m minor intersection semi-massive Cp at {47.5-47.6} «25%Cp»in QV.	Minor faults in sert at 46.4m. gouge 47.0 - 47.1m gouge 47.5 - 47.8m blocky+gouge Core friable to lower contact which is marked by gouge.
50.00 TO 54.40	«ALT SEDS/ SILTITE»	Colour - greyish green-yellow Grain size - v. fine to fine Weak to moderately altered grey-green-yellow sediments (siltites). Core splits easily along foliation at 52.6m 54.4m Minor gouge intervals. Lower contact approaches major fault zone.	70 75	Weak to moderately grey and yellow sericitization.	3-5% pyrite, locally 7-10% as blebs associated with silicification.	Possible hinge zone at 52.7m Faint traces cross-cutting foliation may be relict bedding?
54.40 TO 59.40	«FLT ZNE»	Colour - white, yellow, grey Major fault zone with broken blocky and gouge sections of grey weakly altered siltite, yellow sert and quartz vein. QV + silicified seds occupy 20% by volume. Lower contact at	60	Intense yellow sericitization between {57.0 - 57.6} «sert gouge»	Pyrite overall 2-4%. Most concentrated in Sert, as blebs associated with QV patches. Trace base metals occur at {58.6 - 58.7} «Tr. Sp,Cp»	
59.40 TO 63.40	«SIL SEDS»	Colour - grey Grain size - fine Grey silicified sediments, almost cherty in appearance, with faint traces of white quartz		Moderate to intense silicification with well developed grey sericite as part-	Minor pyrite1-2% sphalerite occurs as disseminated	

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		vein parallel to foliation.		ings between silicified patches.	blebs (1-2mm) throughout, although	
		larger 2-10cm Qtz-carb veins occur roughly			concentration <1%.	
		parallel to, and cross-cut foliation, occupying			Greater % sulphides associate with	
		10% by volume.			qtz-carb veins.	
		Foliation at: 60.3m	65		61.2-61.8	
			70		«2%Py2%Sp+Gn» in 2 veins 15 and 7cm.	
		61.8m	45			
		63.3m	55			
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29926	43.90	45.40	1.50	0.01	0.03	0.02	11.5	0.18									
BCD29927	45.40	46.10	0.70	0.07	0.02	3.66	151.1	0.69									
BCD29928	46.10	47.50	1.40	0.01	0.01	0.02	2.2	0.12									
BCD29929	47.50	47.70	0.20	4.26	0.03	0.01	82.6	0.28									
BCD29930	47.70	48.90	1.20	0.01	0.01	0.01	1.6	0.08									
BCD29931	55.80	57.50	1.70	0.02	0.01	0.01	2.6	0.06									
BCD29932	57.60	59.40	1.80	0.18	1.32	0.52	172.5	0.58									
BCD29933	59.40	61.20	1.80	0.04	0.20	0.14	39.3	0.13						2.77			
BCD29934	61.20	61.80	0.60	0.06	0.48	0.23	58.6	0.14									
BCD29935	61.80	63.40	1.60	0.07	0.48	0.23	66.4	0.27									

NIMNOVA INC.

HOLE NUMBER: U1330-16 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 632.00N
EAST: 9600.00W
ELEV: 1335.65

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

COLLAR DIP: -35° 0' 0"
LENGTH OF THE HOLE: 55.50m
START DEPTH: 0.00m
FINAL DEPTH: 55.50m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: January 24, 1991
DATE COMPLETED: January 25, 1991
DATE LOGGED: January 31, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: NONE
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-35° 0'	ACID	OK	
45.70	-	-35° 0'	ACID	OK	
-	-	-	-	-	
-	-	-	-	-	
-	-	-	-	-

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 17.00	«DOL MAFICS»	Pale to dark green aphanitic to fine grained altered, chloritic mafic tuffs. Alteration and abundant qtz-carbonate veins have resulted a mottled to banded grey-green-yellow texture. Foliation at: 1.0m 11.0m	 62 57	Weak to moderate greenish yellow sericite after chlorite. Intense ferro-dol and patchy silicification.	<1% pyrite	Conformable lower contact.
17.00 TO 27.00	«MFLT»	Greenish yellow, speckled, sericitized, lapilli supported in a pale to dark greenish grey, chloritic tuff matrix. Foliation: 18.4m 20.1m 24.9 Faults and Fractures: flt gou.bx «21.8 - 21.9» 25.7 - 25.9m Fracture, blocky core.	 45 50 64 30	Moderate yellow sericitization of lapilli. Patchy silicification.	1% pyrite	Few qtz-carb veins.
27.00 TO 39.20	«DOL MAFICS/ MFLT»	Pale to dark green and grey altered chloritic mafic tuffs and lapilli tuffs. Some brecciation and boudinge of clasts parallel to foliation creating mottled, patchy, banded texture. Foliation variable due to change sericite orientation around silicified bands.	 60	Intense ferro-dol. Patchy silicification. Weak to moderate greenish-yellow sericitization.	<1% pyrite.	Fracture 35.7 - 36.1m parallel to c/a Minor fault at lower contact 45 - 50 deg. to c/a Qtz-carb vein cross cuts foliation 36.4 - 36.9m.
39.20 TO 40.80	«ALT SEDS/ QV»	Mixed interval of very pale yellow-green sericite and quartz flooded sediment. A fine grey white mottled mix of qtz vein and silicified grey sediment. Minor dark yellow sert in silicified section.	 	Moderate sericitization, almost a sert lithology. 39.2 - 39.9m Intense silicification 39.2 - 40.8m.	Pyrite is concentrated in a zone of QV and silicified seds at 39.1 - 40.2 «20% PyS%SpGnCp»	Gouge filled minor faults cut the interval at 39.7 - 39.8m 40.2 - 40.3m
40.80 TO 46.00	«FLT ZNE»	Fault gouge and breccia zone within sert and quartz vein. Quartz vein and QV flooded seds remain as competent blocks within flt zone. Approx. 15% total, mainly between 43.5 - 44.5m. Foliation within sert block at 41.4m	 70	Intense yellow-olive green sericitization.	Variable pyrite distribution 5-7% locally up to 15% in remnant sert blocks.	V. intense white clay gouge approx 45.0 - 45.7m.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
46.00 TO 47.90	«SERT»	Dark yellow fine grained sert with pyrite bands up to 15cm associated with QV flooding. Faulted lower contact 15cm gouge and friable sert.	57 70	Intense sericitization.	Overall 15% pyrite locally 30 - 35% associated with QV.	Well developed bullseye structure in sericite/pyrite bands at 47.6m.
47.90 TO 55.50	«SIL SEDS»	Colour - grey Grey silicified sediments. Interval is intermittently faulted at: ⎧48.5 - 50.0⎫ «gou/blocky» 50.5 - 50.7m gouge/blocky 52.6 - 52.7m Foliation 50.9m 51.9m 1-2% qtz-carb veins	70 62	Silicified seds (cherts?) with grey sericitic partings parallel to foliation.	Variable sulphide distribution. Pyrite decreasing downhole as silicification increases. ⎧50.9 - 52.4⎫ «5%Py,1%Sp»	Minor zones are mut like grey sericite + pyrite.
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29936	39.90	40.20	0.30	0.18	1.62	0.73	54.1	0.25									
BCD29937	40.20	40.80	0.60	0.01	0.03	0.01	9.7	0.23									
BCD29938	42.50	44.50	2.00	0.02	0.01	0.01	19.4	0.06									
BCD29939	47.90	49.40	1.50	0.20	0.32	0.11	181.8	0.66						2.71			
BCD29940	49.40	50.90	1.50	0.35	0.74	0.54	193.2	0.84						2.88			
BCD29941	50.90	52.40	1.50	0.15	0.88	0.54	44.3	0.77									
AVE.	47.90	50.90	3.00	0.27	0.53	0.32	187.50	0.75									

HOLE NUMBER: U1330-17 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG	PLOTTING COORDS GRID: MINE	ALTERNATE COORDS GRID: UTM	COLLAR DIP: -85° 0' 0"
PROJECT NUMBER: SAM	NORTH: 634.00N	NORTH: 0+ 0	LENGTH OF THE HOLE: 68.60m
CLAIM NUMBER:	EAST: 9599.00W	EAST: 0+ 0	START DEPTH: 0.00m
LOCATION: DRIFT	ELEV: 1335.48	ELEV: 0.00	FINAL DEPTH: 68.60m
	COLLAR GRID AZIMUTH: 45° 0' 0"	COLLAR ASTRONOMIC AZIMUTH: 360° 0' 0"	
DATE STARTED: January 25, 1991	COLLAR SURVEY: YES	PULSE EM SURVEY: NO	CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: January 25, 1991	MULTISHOT SURVEY: YES	PLUGGED: YES	CASING: PULLED
DATE LOGGED: February 1, 1991	RQD LOG: YES	HOLE SIZE: BTW	CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-85° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-85° 0'	ACID	OK		-	-	-	-	-	
56.40	-	-85° 0'	ACID	OK		-	-	-	-	-	

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 18.30	«DOL MAFICS»	Pale to dark green aphanitic to fine grained, altered chloritic mafic tuffs. Alteration texture: laminated, banded and mottled, chlorite/sericite, qtz-carbonate and dolomite. Numerous qtz-carb veins parallel to foliation. Folitation 4.6m 12.4m 18.3m	 57 50 65	Intense ferro-dol Moderate ser'n, chlorite to greenish yellow sericite, patchy sil'n.	1% pyrite Conformable lower contact.	Faulting fracturing: 13.0 - 13.3 fracture parallel to c/a 15.5 - 15.7 minor fault/fracture 12 deg. to c/a.
18.30 TO 51.70	«DOL MAFICS/ MFLT»	Altered interval of chloritic mafic tuffs and lapilli tuffs. Texture appears as mottled to banded and patchy grey-white quartz dolomite and greenish-yellow sericite. Ghost lapilli visible between 18.3 - 22.3m and 29.2 - 32.1m. Foliation: 22.8m 29.4m 35.1m 39.4m 43.1m 50.0m No major fault immediately at contact. Lithologies appear transitional over 20cm.	 64 65 48 63 70 40	Intense ferro-dol. Patchy sil'n. Moderate greenish-yellow to dark yellow ser'n. Alteration increases to lower contact.	1-2% pyrite. locally 15-20% at 39.9 - 40.1m.	Faults and fractures: 22.3 - 24.9 «Fract/QV» fracture + QV subparallel to c/a. 29.0 - 29.2 «flt bx/gou» 43.4 - 44.0 «flt bx/gou» 44.3 - 44.4 m gouge 47.3 - 47.6m fault/fracture sub parallel to c/a.
51.70 TO 53.90	«SIL ARG»	Tectonized, silicified, black graphitic argillite. Grey silicified sediment is stretched, boudined in the black argillite matrix creating a chaotic texture. Qtz carbonate filled microveins and fractures. Foliation:	 46 60	Moderate to intense silicification.	5-7% pyrite as occasional bands (2-4mm) parallel to foliation, disseminated grains and blebs. Locally 10% pyrite as course blebs associated silicified patches and QV.	Sheared argillite, product of thrust at mafic-seds contact?

53.9ø TO 59.8ø	«FLT ZONE»	Generally faulted interval of silicified sediments to breccia and gouge. Approx. 3% blocky which have a shattered texture. Intense gouge 53.9 - 54.4		Minor grey sericite. Moderate to intense sil'n due to white QV flooding.	5% very fine disseminated pyrite. Occasional blebs of brown sphalerite throughout. Locally ╟56.9 - 57.9╢ «5%Py1%SpGnTrTt»	Possibly original cherty protolith.
59.8ø TO 62.1ø	«SIL SEDS»	Grey silicified fine grained sediments. Foliation	5ø 55	Grey sericite as partings to silicified patches. Moderate to intense silicification associated white qtz flooding.	5% disseminated pyrite. Patchy zones of SpGnTt. ╟59.8 - 62.1╢ «2%SpGn(1%Tt» includes 5cm zone 2ø-3ø% SpGnTt sulphides.	Possible remnant cherty protolith. Patchy mottled grey and white.
62.1ø TO 64.1ø	«FLT ZONE»	Fault zone in grey silicified sediment and grey sericitic/pyritic sediment (MUT). Blocky remnants show foliation at	47	Moderate to intense grey ser'n.	Increased pyrite 7-1ø%. Occasional patches, blebs Sp+Gn. Overall % difficult to estimate 1-2%Sp+Gn? TrTt?	Gouge and breccia relatively compact.
64.1ø TO 68.6ø	«ALT SEDS»	Grey, partly silicified, sericitic, pyritic sediments.(MUT-like) Foliation: 64.6m 67.2m Lower 0.5m 68.1 - 68.6m strained, partly faulted to gouge.	65 6ø	Moderate to intense grey ser'n. Patchy sil'n due to white QV flooding.	7-1ø% fine disseminated to patchy pyrite. Disseminated blebs of brown sphalerite. Sp+Gn where white QV occur, (2-4mm). ╟64.1 - 65.6╢ «7-1ø%Py2%SpGn»	Alt seds lithologically transitional SIL SEDS.
	E.O.H.					

HOLE NUMBER: U1330-17 ASSAY SHEET DATE: 21-June-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29942	54.40	55.90	1.50	0.01	0.08	0.03	04.5	0.09									
BCD29943	55.90	56.90	1.00	0.08	0.55	0.18	35.1	0.17									
BCD29944	56.90	57.90	1.00	0.13	0.41	0.24	49.5	0.18									
BCD29945	57.90	59.80	1.90	0.23	0.48	0.28	89.3	0.13									
BCD29946	59.80	61.00	1.20	0.11	0.32	0.19	43.0	0.08									
BCD29947	61.00	62.10	1.10	1.86	1.38	1.22	653.	0.27						2.67			
BCD29948	62.10	63.10	1.00	0.03	0.07	0.03	09.2	0.17									
BCD29949	63.10	64.10	1.00	0.05	0.25	0.14	18.3	0.11									
BCD29950	64.10	65.60	1.50	0.09	0.18	0.15	51.0	0.15									
BCD29951	65.60	67.10	1.50	0.08	0.11	0.11	31.2	0.16									
BCD29952	67.10	68.60	1.50	0.17	0.41	0.10	79.5	0.13									

MINNOVA INC.

HOLE NUMBER: U1330-18 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 633.00N
EAST: 9600.00W
ELEV: 1335.48

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

COLLAR DIP: -68° 0' 0"
LENGTH OF THE HOLE: 54.90m
START DEPTH: 0.00m
FINAL DEPTH: 54.90m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: January 25, 1991
DATE COMPLETED: January 25, 1991
DATE LOGGED: February 1, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
0.30	-	-68° 0'	ACID	OK		-	-	-	-	-	
54.90	-	-68° 0'	ACID	OK		-	-	-	-	-	
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HOLE NUMBER: U1330-18 — KINNOVA INC. DRILL HOLE RECORD — DATE: 21-June-1991

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 15.60	«DOL MAFICS»	Altered pale to dark green, aphanitic to fine grained chloritic mafic tuffs. Altered texture, mottled to laminated and banded, greenish yellow chlorite/sericite, grey-white qtz-dolomite. Numerous qtz-carb veins. Foliation 1.1m 9.1m 15.0m	 70 70 85	Intense ferro dol. Patchy sil'n. Moderate green yellow ser'n.	1% pyrite.	Faults fractures: 12.8 - 13.4m fracture subparallel to c/a. 14.8 - 15.3 fracture parallel to c/a. Conformable lower contact.
15.60 TO 35.00	«MFLT»	Greenish yellow sericitized lapilli supported in a greenish grey dolomitized matrix of aphanitic to fine grained tuff. Foliation: 19.8m 25.9m 32.4m	 77 78 78	Intense ferro-dol. Moderate greenish yellow ser'n. Patchy sil'n. Alteration increases to lower contact with intense ser'n.	1-2% pyrite.	Faults and fractures: 24.4 - 24.6 «flt gou/bx» 32.4 - 33.4 «flt gou/blocky» including 10cm intense clay gouge. Core splits easily along foliation within fault zone blocks. Contact with underlying seds appears gradational although minor fault break.
35.00 TO 37.90	«SIL ARG»	Silicified black, very fine grained, graphitic, tectonized argillite. Brecciation, boudinage of grey silicified patches, bands. Numerous quartz filled microveins and fractures.	 60 70	Moderate to intense sil'n.	Blebby pyrite. 3-4% occasional large patches (20x10mm) associated with tectonised clasts quartz.	 Minor fault at lower contact.
37.90 TO 41.50	«ARG/MAF»	Mixed interval, comprising silicified argillite, grey-black silicified sediment (siltite?) and greenish grey, weakly sericitic and moderately dolomitic mafic. Argillite moderately graphitic.		Patchy sil'n associated qtz veining/flooding. Moderately ferro-dol mafic component. Weak to moderate greenish yellow ser'n of mafic.	1-2% pyrite.	Interval is in part faulted: 38.5 - 38.7m gouge + blocky + minor fuchsite. 39.3 - 39.6m broken, blocky 39.9 - 40.3 «flt gou/bx» at 70 deg to c/a.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
41.50 TO 47.30	«ALT SED/ FLT ZNE»	Fault zone enclosing gouge, breccia and blocky sections of silicified sediment, MUT, sert and quartz-carbonate vein. At least 2 phases veins: (i) grey white quartz invading seds to produce fine grained mottled texture. (ii) Pinkish qtz carbonate veins cross-cutting. Sert 45.7 - 46.8m. Not well developed; patchy within silicified qtz vein + seds.		Patchy intense sil'n. Moderate to intense locally developed, patchy yellow sericite. Moderate grey sericite. local talc.	Variable sulphides. Mineralized section. [43.4 - 44.2] «30% SpCpGnTt» Almost semi massive sulphide within sheared mut-like grey sediment, moderately silicified. Zone quite friable due to faulting and bounded by gouge. Pyrite very variable. (1% in silicified seds/QV to 20% over 5-10cm in Sert. 44.7 - 45.2m Tt blebs in late stage pinkish qtz carb cross-cutting silicified grey white mottled sed.	35% fault gouge. Blocky core strained and sheared. Upper faulted contact possibly at 47 deg. to c/a. Hinge zone within altered seds at 42.6 - 42.8m.
47.30 TO 49.80	«QV/SIL SED»	Dark grey white, mottled fine grained silicified, qtz flooded sediment.		Pervasive silicification. Pinkish qtz carb veins cross-cut silicified sediment.	3-4% disseminated to blebby pyrite. No visible base metal sulphides.	Fault gouge at lower contact.
49.80 TO 54.90	«ALT SEDS»	Grey very fine grained pyritic/sericitic sediments (MUTS) gradually, pass (downhole) into grey silicified sediment with white quartz patches. Foliation within sheared MUT at 50.7m 53.7	 38 52	Moderate to intense grey ser'n. Sericite forms foliated partings within more silicified seds.	7-12% fine disseminated pyrite, decreasing in concentration downhole. Base metal sulphides occur as blebs and wispy streaks. Sp blebby to banded with associated Gn+Tt. Occurs parallel to foliation associated with thin quartz veins. [51.3 - 52.8] «10% Py3%Sp6nTt» in Sil Seds. Tt maybe more concentrated in interval 49.8 - 51.3m, within MUT.	Faults and fractures: [49.8 - 50.2] «flt gouge» From 50.2 - 50.9m the interval is friable due to shearing. 51.3 - 51.8m blocky, minor gouge + 10cm Qv. 52.9 - 53.3m blocky + minor gouge.
	E.O.H.					

HOLE NUMBER: U1330-18 ASSAY SHEET DATE: 21-June-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29953	39.60	41.10	1.50	0.01	0.07	0.04	1.2	0.08									
BCD29954	41.10	42.10	1.00	0.01	0.02	0.02	2.4	0.17									
BCD29955	42.10	43.40	1.30	0.06	0.64	0.25	5.9	0.17									
BCD29956	43.40	44.20	0.80	2.38	17.72	11.33	2032	3.50						3.30			
BCD29957	44.20	44.70	0.50	0.95	5.55	2.44	834	1.53						2.80			
BCD29958	44.70	45.20	0.50	2.30	0.42	0.06	2302	4.90						2.68			
BCD29959	45.20	46.70	1.50	0.11	0.20	0.10	105.3	0.56						2.84			
BCD29960	46.70	47.30	0.60	0.02	0.03	0.04	21.3	0.31									
BCD29961	47.30	48.80	1.50	0.23	0.16	0.08	236.9	0.64						2.72			
BCD29962	48.80	49.80	1.00	0.28	0.37	0.10	278.4	0.69						2.78			
BCD29963	49.80	51.30	1.50	0.56	1.22	0.64	354.7	1.17						3.08			
BCD29964	51.30	52.80	1.50	0.01	2.12	1.56	64.8	0.47									
BCD29965	52.80	54.30	1.50	0.04	0.47	0.25	53.8	0.41									
AVE.	43.40	45.20	1.80	1.96	9.53	5.73	1774.2	3.34									
AVE.	47.30	51.30	4.00	0.37	0.61	0.29	291.45	0.85									
AVE.	48.80	51.30	2.50	0.45	0.88	0.42	324.18	0.98									

NINNOVA INC.

HOLE NUMBER: U1330-19 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 632.79N
EAST: 9619.67W
ELEV: 1334.85

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

COLLAR DIP: -53° 0' 0"
LENGTH OF THE HOLE: 64.60m
START DEPTH: 0.00m
FINAL DEPTH: 64.60m

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

DATE STARTED: January 26, 1991
DATE COMPLETED: January 27, 1991
DATE LOGGED: February 1, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-53° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-53° 0'	ACID	OK		-	-	-	-	-	
58.50	-	-53° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 15.60	«DOL MAFICS»	Pale to dark green, aphanitic to fine grained chloritic mafic tuffs altered to mottled, laminated and banded, quartz dolomite, and greenish yellow sericite. Numerous qtz-carbonate veins parallel to foliation. Foliation: 3.2m 11.5m 15.6m	 75 70 60	Intense ferro dol. Patchy sil'n. Moderate to intense greenish yellow sericite after chlorite.	1-2% pyrite	Faults, fractures: 5.9 - 6.2 «flt gouge» 11.9 - 12.1m fracture sub parallel to c/a 12.8 - 13.2m fracture sub parallel to c/a
15.60 TO 34.40	«MFLT»	Pale green to greenish yellow lapilli tuff supported in a matrix of pale to dark green, aphanitic to fine grained chloritic tuff. Foliation: 20.5 m 27.6 m	 60 65	Intense ferro dol. Weak to moderate greenish yellow ser'n of lapilli. Patchy sil'n.	1% pyrite.	Alteration increases downhole. Lapilli size decreases downhole. Faulting and fractures: very minor faults and fractures. Foliation less well developed in course lapilli tuffs.
34.40 TO 38.40	«ALT MAFICS»	Intensely altered mafics. Original textures destroyed. Appearance, mottled, patchy mixture grey silicified zones, green chlorite, talc fuchsite, grey dolomite, patchy pyrite and 10% white quartz veins. Foliation: developed in sericitic intervals: 35.3m 38.4m	 60 70	Intense ferr dol. Intense patchy sil'n over intervals of 20-30cm. Locally intense brown sericite. Patchy, occasionally laminated fuchsite + talc.	Pyrite increases within interval. Overall 10-15% distributed as blebs, bands and patches. Locally 20% over 10cm.	Faults and fractures. 35.4 - 35.5m gouge. 37.2 - 37.5m fractures 10-15 deg. to c/a. Lower contact faulted. 20 cm broken core minor gouge. Hinge zone 36.3 - 36.4m?
38.40 TO 39.50	«ALT SED»	Partly sheared grey-black fine grained, altered sediment (MUTish) Foliation varies	 50 70	Intense grey ser'n. Minor grey-white quartz flooding. Minor patchy talc.	Blebby, patchy, disseminated sulphides often strung out parallel to foliation. 38.4 - 39.5 «20% SPCpGnTt» 10% Py	Friable, includes gouge at 38.5 - 38.55m 39.0 - 39.1m

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
39.5@ TO 56.7@	«ALT SEDS/ QV»	Mixed interval comprising grey and yellow, altered fine grained sediments, white quartz (+cream carbonate) veins and quartz flooded, finely mottled grey-white sediments. Faulting has reduced some sections to gouge and breccia. Qtz veining and silicified seds occupy 67% of the interval. Foliation in Sert 41.8m Sert 45.3m Pyritic black mut 50.2m Sert/wacke 52.0m Sheared contact at 56.7m between QV and MUT	60 70 40 50 30	Yellow sericitized sediments are locally well developed: 44.9 - 45.8m Sert + Pyrite ⟦51.7 - 52.4⟧ «Sert» laminated in a siltite wacke (Not massive soft sert).	Variable distribution of sulphides. Hardly any base metals. Pyrite concentrate in sections of sert. ⟦47.9 - 48.4⟧ «TrCpTt3%Py» ⟦51.1 - 52.6⟧ «15%Py1%Cp+Tt» Massive blebs pyrite, v. local in white QV. Fine wisps Cp rimming Pyrite and sediment patches. Blebby Tt (1/2%.	Faults and fractures. 41.8 - 44.3 blocky core+broken QV. ⟦44.3 - 44.9⟧ «flt gouge» intensely faulted. 45.6 - 45.7m minor gouge.
56.7@ TO 64.6@	«ALT SEDS»	Grey fine grained altered sediment. (Mut to Sil Mut). Foliation: 57.0m 58.7 63.1	75 80 55 50 55	Moderate to intense grey ser'n. Patchy zones of silicification due to white quartz flooding. Faint traces of veins parallel foliation.	7-15% pyrite. Traces of Sp throughout as small blebs 1-3mm. ⟦60.2 - 60.7⟧ «2%Cp+Sp1@%Py» CpSp in stringer associated with QV.	Interval shows strain. Minor in sections of gouge. Zone overall quite friable. 56.8 - 56.9m intense gouge. Qtz-Cp stringer oriented 4@-5@ deg. to c/a roughly parallel to sub parallel to foliation.

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29966	37.20	38.40	1.20	0.06	0.05	0.03	16.4	0.21									
BCD29967	38.40	39.50	1.10	2.92	7.28	2.44	2625	4.91						2.96			
BCD29968	39.50	41.00	1.50	0.06	0.51	0.30	66.4	0.31									
BCD29969	41.00	42.50	1.50	0.24	0.04	0.01	232.8	0.46						2.74			
BCD29970	42.50	44.30	1.80	0.01	0.02	0.01	11.9	0.12									
BCD29971	44.80	45.80	1.00	0.03	0.03	0.01	5.2	0.18									
BCD29972	45.80	47.30	1.50	0.01	0.02	0.01	5.8	0.11									
BCD29973	47.30	47.90	0.60	0.01	0.02	0.01	9.3	0.17									
BCD29974	47.90	48.40	0.50	0.01	0.03	0.04	11.4	0.26									
BCD29975	48.40	49.90	1.50	0.01	0.04	0.05	8.6	0.13									
BCD29976	49.90	51.10	1.20	0.02	0.03	0.02	21.1	0.14									
BCD29977	51.10	52.60	1.50	0.01	0.01	0.01	1.4	0.10									
BCD29978	52.60	54.10	1.50	0.01	0.07	0.01	9.4	0.08									
BCD29979	54.10	55.20	1.10	0.41	0.59	0.06	168.6	0.34						2.86			
BCD29980	55.20	56.70	1.50	0.01	0.01	0.01	7.6	0.11									
BCD29981	56.70	58.20	1.50	0.60	1.85	1.05	418	1.02						2.92			
BCD29982	58.20	59.70	1.50	0.09	0.74	0.40	45.3	0.41									
BCD29983	59.70	60.20	0.50	0.02	0.10	0.03	11.7	0.51									
BCD29984	60.20	60.70	0.50	0.42	1.06	0.19	28.1	0.81									
BCD29985	60.70	62.20	1.50	0.05	0.15	0.13	33.2	0.47									
BCD29986	62.20	63.70	1.50	0.03	0.16	0.13	18.1	0.44									
BCD29987	63.70	64.60	0.90	0.16	0.14	0.41	75.4	0.83									

MINNOVA INC.

HOLE NUMBER: U1330-20 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 633.84N
EAST: 9619.66W
ELEV: 1334.86

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

COLLAR DIP: -90° 0' 0"
LENGTH OF THE HOLE: 64.00m
START DEPTH: 0.00m
FINAL DEPTH: 64.00m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: January 27, 1991
DATE COMPLETED: January 27, 1991
DATE LOGGED: February 2, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-90° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-90° 0'	ACID	OK		-	-	-	-	-	
64.00	-	-90° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 0.00 TO 0.60	«CS6»					
0.60 TO 17.50	«DOL MAFICS»	Pale to dark green aphanitic to fine grained chloritic mafic tuffs altered to mottled, laminated and banded, quartz-dolomite and greenish yellow sericite. Numerous qtz carb veins Foliation 5.2m 11.0m 16.4m	 65 60 75 66	Intense ferro-dol Intense sil'n due to quartz flooding of local intervals. Moderate to intense greenish yellow ser'n.	1-2% pyrite	Faults fractures: 16.3 - 6.5 «flt gou/bx» Vuggy quartz carbonate at 17.0-17.5m Lower contact quite sharp.
17.50 TO 31.70	«MFLT»	Greenish yellow sericitized lapilli supported in a matrix of dolomitized aphanitic to fine grained chloritic tuff. Foliation: 20.3m 23.5m	 70 72	Intense ferro-dol. Patchy intense sil'n. Moderate to intense greenish yellow ser'n.	1-2% pyrite increasing to 5-7% to lower contact.	Faults and fractures: 25.8 - 26.5m qtz vein and fracture sub parallel to c/a 26.9 - 27.0m minor intense zone of flt gouge Lower contact (31.2 - 31.5m) partly broken minor gouge, due to proximity to underlying fault zone.
31.70 TO 39.70	«ALT MAF»	Partly faulted interval of intensely altered mafics, possibly with minor mixed sediments. Alteration textures: fine mottled grey-white quartz carbonate and dark, brownish green, almost massive chlorite. (talc). Foliation variable due to faulting: 33.2m Foliation within tectonized lithologies at lower contact	 55 70	Intense ferro-dol. Alteration complex due to qtz carbonate flooding the lithologies, creating vein-like alteration zones. later qtz-carb veins cross-cut pervasive alteration. Intense patchy chloritization. Fuchsite in gouge zones. Dark yellow sericite in minor interval 32.5 - 33.5m as wispy foliations between patchy qtz-carb.	7-10% disseminated to blebby pyrite, locally 15%	Faults and fractures 29.8 - 32.3 «flt-gou» intense zone faulting. Remainder of interval shows strain, blocky core, minor gouge. Lithologies appear transitional to underlying silicified tectonized argillite.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
39.70 TO 42.40	«SIL ARG»	Grey to black silicified, tectonized argillite. (Minor mafic?) Quartz veins and silicified bands have been stretched parallel to foliation and brecciated/boudined/folded. Foliation approx.	 70 80	Pervasive sil'n. Mottled grey-white quartz-carbonate near upper contact.	5-7% pyrite as disseminations and blebs.	Lower contact gradational to less silicified, more sericitic sediment.
42.40 TO 64.00	«ALT SEDS»	Predominantly grey, fine grained sediments sericitized and locally silicified. Foliation is variable due to the effects of silicification and faulting. Foliation at 44.0m Faulting shear 48.8m 51.8m Shearing 55.1 62.0 The interval is intermittently faulted from 45.6 - 64.0m, but locally intense fault zones occur at: [47.2 - 47.4] «flt gouge» intense 48.2 - 48.5 intense flt gouge. [57.0 - 57.1] «flt gouge» intense [57.9 - 61.5] «flt gou/bx»	 60 47 84 22 45 59	Moderate to intense grey ser'n throughout. Yellow sericite weakly to intensely developed between [43.5 - 45.0] «Sert» Quartz carbonate locally invades the sediments creating fine grey-white mottled texture. (QV-Seds). Silicified sediments (Sil Seds) are altered by faint white qtz veins. Grey sericite forms partings to the silicified patches.	Variable distribution: pyrite, CpSp6n and Tt. Sp+6n show disseminated grains and blebs from 45.0 - 59.5m. 45.0 - 47.7m fine grained sulphides patchy/deformed within (argillic) mut. 3%Cp1%Sp6n20%Py [45.7 - 46.1] «35% CpTtSp6n» [47.2 - 48.7] «3%Cp2%Sp6n TrTt» 48.7 - 53.2m blebby Sp+6n in occasional bands parallel to foliation. 2%Sp+6n1%Cp. [53.2 - 54.7] «5%Sp6nTtCp» 54.7 - 55.2m semi massive Sp+6n? in partly faulted mut. [59.0 - 59.1] «MSSX Sp+6n» Block within fault zone, bounded by soft gouge.	Mut to siliceous Mut. Sert to mut contact irregular but conformable. Includes 5-7cm massive homogeneous Cp. 3cm massive Tt occurs where Qv+Carb vein floods sediment. Orientation difficult to determine 50 deg. to c/a? Interval includes 2 intense gouge zones, mut, qtz carb vein and flooded seds. Cp as patchy stringer parallel to foliation. Tt difficult to see!
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD29988	43.50	45.00	1.50	0.01	0.01	0.01	0.6	0.04									
BCD29989	45.00	45.70	0.70	0.30	2.24	1.44	54.1	1.28						2.88			
BCD29990	45.70	46.10	0.40	6.64	1.91	1.89	2110	2.55						3.13			
BCD29991	46.10	46.60	0.50	0.45	0.16	0.09	316.6	0.73						2.97			
BCD29992	46.60	47.20	0.60	0.92	0.87	0.24	561	1.06						2.88			
BCD29993	47.20	48.70	1.50	2.22	4.52	2.09	1827	3.36						2.86			
BCD29994	48.70	50.20	1.50	1.68	5.69	2.05	859	1.69						3.02			
BCD29995	50.20	51.70	1.50	0.21	0.32	0.16	66.4	0.35									
BCD29996	51.70	53.20	1.50	0.06	1.38	1.12	49.7	0.32									
BCD29997	53.20	54.70	1.50	0.43	3.22	2.04	248.1	0.64						2.87			
BCD29998	54.70	55.20	0.50	0.41	16.16	11.84	653	0.92						3.15			
BCD29999	55.20	56.70	1.50	0.10	8.38	5.24	217.2	0.52						2.72			
BCD30000	56.70	57.90	1.20	0.36	9.88	6.88	359.4	0.74						2.91			
BCD30101	57.90	59.00	1.10	0.15	17.44	10.88	302.4	0.71						3.05			
BCD30102	59.00	59.10	0.10	0.94	34.14	22.66	2325	1.72						4.09			
BCD30103	59.10	60.10	1.00	0.03	6.52	4.24	125.8	0.37						2.62			
AVE.	45.70	50.20	4.50	2.06	3.71	1.59	1192.9	2.13									
AVE.	53.20	60.10	6.90	0.25	9.63	6.31	311.11	0.64									

MINNOVA INC.

HOLE NUMBER: U1330-21 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: U6 — PLOTTING COORDS GRID: MINE — ALTERNATE COORDS GRID: UTM — COLLAR DIP: -28° 0' 0"
PROJECT NUMBER: SAM — NORTH: 631.88N — NORTH: 0+ 0 — LENGTH OF THE HOLE: 73.10m
CLAIM NUMBER: — EAST: 9619.68W — EAST: 0+ 0 — START DEPTH: 0.00m
LOCATION: DRIFT — ELEV: 1335.21 — ELEV: 0.00 — FINAL DEPTH: 73.10m

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

DATE STARTED: January 27, 1991 — COLLAR SURVEY: YES — PULSE EM SURVEY: NO — CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: January 28, 1991 — MULTISHOT SURVEY: YES — PLUGGED: YES — CASING: NONE
DATE LOGGED: February 4, 1991 — ROD LOG: YES — HOLE SIZE: BTW — CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-28° 0'	ACID	OK		-	-	-	-	-	
45.70	-	-28° 0'	ACID	--	WEAK	-	-	-	-	-	
73.10	-	-28° 0'	ACID	--	WEAK	-	-	-	-	-	
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HOLE NUMBER: U1330-21 | NINNOVA INC. DRILL HOLE RECORD | DATE: 21-June-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 17.80	«DOL MAFICS»	Pale to dark green aphanitic to fine grained chloritic mafic tuffs altered to mottled, banded, laminated grey-green-white quartz, dolomite and greenish yellow chlorite/sericite. Numerous white qtz-carb veins parallel to foliation. Foliation: 4.0m 8.8m 10.2m 14.5m 17.0m	 74 40 50 53 42	Intense ferro-dol. Patchy/banded sil'n. Moderate greenish yellow ser'n.	1% pyrite	Faults and fractures ╫9.2 - 9.4╫ «flt gouge» 13.2 - 13.4m broken core 16.2 - 17.1 blocky broken core.
17.80 TO 36.60	«MFLT»	Pale greenish yellow altered lapilli supported in a dolomitized matrix of aphanitic to fine grained chloritic tuff. Foliation less well developed in MFLT Foliation 19.6m 24.3m 27.0 35.3m Lower contact of recognisable MFLT placed at a fault zone.	 55 46 55 60 65	Intense preferential Ser'n of lapilli Moderate to intense ferro-dol. Patchy sil'n.	1-3% pyrite	Fauls and fractures: 18.2 - 18.3m vuggy QV+gouge 25.4 - 25.5m fracture sub parallel to c/a with QV 33.5 - 35.1m fracture parallel to c/a. 5mm displacement of veins. Minor gouge at 36.3m.
36.60 TO 40.50	«ALT MAF/ SEDS»	Possibly a mixed interval of mafics and minor sediments intensely altered to mottled greyish green dolomite/chlorite and banded, laminated qtz-dolomite and greenish yellow sericite. Foliation 38.3m 40.2m	 70 70	Patchy sil'n and ferro-dol. Weak to moderate greenish yellow ser'n throughout, with locally intense yellow ser'n.	Pyrite increases to lower contact, overall 10% distributed as fine disseminations, blebs, bands and patches. Single bleb Gn in Qtz-carb vein.	Interval is partly faulted. ╫36.6 - 36.8╫ «flt gouge» 37.2 - 37.4m blocky broken ╫39.1 - 39.6╫ «flt gou+blocks» 40.5 - 40.7m flt gouge at lower contact.
40.50 TO 43.00	«QV SED/ SERT»	Interval of fine mottled grey-white quartz flooded sediment and laminated to banded yellow sericite and pyrite (sert). 40.6 - 41.1 QV/Sed 41.1 - 41.8 Sert 41.8 - 42.05m Qv/Sed 42.05 - 42.45m Sert 42.45 - 42.95m Qv/Sed Foliation 41.1m 41.7m	 68 80	Intense yellow to olive green ser'n and quartz carbonate flooding within defined intervals.	10-20% pyrite in Sert. QV/Seds 2-7% pyrite as blebs and patches. Base metal sulphides are as follows: ╫42.7 - 43.0╫ «8%Tt2%Py1%Sp» Large (5x3cm)patch Tt in Qtz vn with sed inclusions.	 Faults-fractures: 40.9 - 41.1m broken 42.4 - 42.7m gouge + blocks.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
43.00 TO 56.20	«SERT»	Yellow to olive green sericite and pyrite with bands of grey quartz and pyrite blebs. White quartz and cream carbonate veins locally cross-cut and flood sericite. ⟦49.9 - 50.3⟧ «QV/Carb Vn» Foliation: 44.2m 48.8m 52.1m	71 77 68 75	Intense yellow ser'n decreasing to moderate alteration to lower contact.	Pyrite 15-20% near upper contact, decreasing to 10-15% at lower contact. Pyrite mainly occurs as blebs within grey qtz veins and as fine banded disseminations.	Faults and fractures: 43.0 - 43.5m friable core minor gouge 45.0 - 45.1 gouge ⟦55.4 - 56.4⟧ «flt gou/bx» Flt zone crossing lower contact.
56.20 TO 69.80	«QV/ALT SED FLT ZNE»	Faulted interval dominated by broken and blocky white qtz vein. Silicified grey seds occur from ⟦57.9 - 59.3⟧ «sil seds» and form a competent sub-interval. 59.6 - 59.9m intense gouge 65.8 - 66.3m intense gouge 66.6 - 67.7m Nut + Sil Sed 67.7 - 69.2m Sert + QV 69.2 - 69.8m Minor seds + cream-white qtz-carb vein.	71 61	Pervasive sil'n of seds 57.9-59.3 Local intense grey and yellow ser'n ⟦67.7 - 69.2⟧ «QV+Sert» Minor very occasional green talc.	Sulphides difficult to estimate due to broken core. White qtz vein mostly barren except for local coarse blebby pyrite. ⟦56.7 - 57.9⟧ «5% Py Tr Cp» ⟦60.0 - 60.5⟧ «1/2% Cp 7%Py» ⟦67.9 - 68.0⟧ «30%Py» coarse blebs in white qtz vein.	Poor quality of recovery within QV owing to faulting or bad drilling?
69.80 TO 73.10 E.O.H.	«ARG/SILT»	Grey and black interbedded, laminated siltite and wacke. Argillite weakly graphitic. 2-3% Qtz carb veining	63		1-2% pyrite	Partly faulted and folded

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30104	39.60	40.60	1.00	0.06	0.17	0.08	36.4	0.19									
BCD30105	40.70	41.70	1.00	0.01	0.02	0.02	12.6	0.20									
BCD30106	41.70	42.70	1.00	0.07	0.02	0.02	98.4	0.41									
BCD30107	42.70	43.00	0.30	3.38	0.45	0.05	3615	13.85						2.97			
BCD30108	43.00	44.50	1.50	0.03	0.01	0.01	20.9	0.21									
BCD30110	48.40	49.90	1.50	0.01	0.01	0.01	1.7	0.14									
BCD30109	49.90	50.40	0.50	0.01	0.01	0.01	7.8	0.23									
BCD30111	54.70	56.20	1.50	0.01	0.01	0.01	2.2	0.16									
BCD30112	56.20	56.70	0.50	0.02	0.03	0.05	6.4	0.22									
BCD30113	56.70	57.90	1.20	0.20	0.86	0.35	52.3	0.24									
BCD30114	57.90	59.30	1.40	0.18	0.69	0.34	182.8	0.69						2.98			
BCD30115	59.30	60.00	0.70	0.52	1.48	0.71	484	1.38									
BCD30116	60.00	60.50	0.50	0.46	1.92	1.06	390	1.07						2.82			
BCD30117	60.50	62.00	1.50	0.02	0.03	0.02	6.2	0.11									
BCD30118	62.00	63.50	1.50	0.01	0.01	0.01	4.1	0.05									
BCD30119	63.50	64.50	1.00	0.18	0.02	0.02	9.6	0.18									
BCD30120	64.50	65.80	1.30	0.01	0.02	0.01	2.9	0.12									
BCD30121	66.60	67.60	1.00	0.01	0.02	0.02	12.1	0.49									
BCD30122	67.90	69.80	1.90	0.01	0.01	0.01	1.3	0.40									
AVE.	57.90	60.50	2.60	0.33	1.14	0.58	303.74	0.95									
AVE.	59.30	60.50	1.20	0.49	1.66	0.86	444.83	1.25									

NINNOVA INC.

HOLE NUMBER: U1330-22 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6 — PLOTTING COORDS GRID: MINE — ALTERNATE COORDS GRID: UTM — COLLAR DIP: -80° 0' 0"
PROJECT NUMBER: SAM — NORTH: 634.00N — NORTH: 0+ 0 — LENGTH OF THE HOLE: 65.50m
CLAIM NUMBER: — EAST: 9619.65W — EAST: 0+ 0 — START DEPTH: 0.00m
LOCATION: DRIFT — ELEV: 1334.85 — ELEV: 0.00 — FINAL DEPTH: 65.50m

COLLAR GRID AZIMUTH: 360° 0' 0" — COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: January 28, 1991 — COLLAR SURVEY: YES — PULSE EM SURVEY: NO — CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: January 28, 1991 — MULTISHOT SURVEY: YES — PLUGGED: YES — CASING: PULLED
DATE LOGGED: February 5, 1991 — RQD LOG: YES — HOLE SIZE: BTW — CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-80° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-84° 0'	ACID	OK		-	-	-	-	-	
64.00	-	-82° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 19.20	«DOL MAFICS»	Pale to dark green, aphanitic to fine grained chloritic tuffs altered to mottled grey-white dolomite/quartz patches and bands, and greenish yellow sericite. Numerous qtz-carb veins parallel to foliation and occasionally cross-cutting. Foliation: 4.3m 8.0m 12.5m 17.5m Faults and fractures: ╞6.9 - 7.2╡ «flt gouge»	 60 61 60 66	Intense grey-white ferro-dol. Patchy sil'n. Moderate greenish yellow ser'n after chlorite.	1-3% pyrite Trace base metals	Lower contact marked by minor gouge and intensely dolomitized mafic.
19.20 TO 32.00	«MFLT»	Greenish yellow sericitized lapilli supported in a grey-white dolomitized, partly silicified aphanitic to fine grained tuff matrix. Foliation: 20.5m 23.6m 31.5m Faults and fractures: ╞27.1 - 27.7╡ «flt gou/heal bx» Minor gouge 30.7m	 53 50 56	Intense ferro-dol. Intense greenish yellow ser'n of lapilli Patchy sil'n.	1-3% pyrite	Lapilli tuffs have conformable contact with underlying dol-mafics.
32.00 TO 45.30	«DOL MAFICS»	Intensely altered chloritic tuffs. Texture appears as mottled to laminated and banded mixture grey-white qtz and dolomite, and greenish yellow sericite. Foliation 33.0m 38.0m 42.1m	 45 50 48 52	Moderate to intense greenish yellow sericitization. Sericite forms wisps, laminae and bands to a greater % than the upper dol mafics.	1% pyrite. Local concentrations ╞43.9 - 44.2╡ «20%Py5%Gn+Sp» within intensely dol mafics, partly qtz-dol vein.	Original textures destroyed. Lower contact appears conformable at 47 deg to c/a. Minor tectonized altered mafic at 48.7 - 43.8m.
45.30 TO 51.80	«ALT MAF/ SIL ARG»	Dominantly textonised block, graphitic, silicified argillite, with greyish green sericitised mafics. Argillite and greyish silicified sediment exhibit brecciation, boudinage and microveining. Foliation: 47.2m	 50	3-5% pyrite distributed as grains and blebs. Pyrite increasing to lower contact.	White quartz-carbonate vein cross-cutting foliation and 25 deg to c/a. 48.4 - 49.9m Conformable lower contact.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		50.5m	60			
51.80 TO 53.10	«SERT/SIL SED»	Banded to laminated quartz, yellow sericite and pyrite grades into a grey silicified sediment Sert 51.8 - 52.4m Sil Sed 52.4 - 53.1m Faint white qtz veins characterise the texture. Foliation affected by faulting Lower contact faulted.	 25 40	Sert is not massive. Tends to be pale yellow and laminated to banded.	7-10% pyrite as grains, blebs, bands and patches.	
53.10 TO 63.50	«FLT ZNE/ ALT SEDS»	Faulted interval of grey sericitic/pyritic very fine grained sediments, and grey silicified sediments, party het frag. Recovery is 100%. Gouge and breccia display a shattered texture in core. Competent blocks occupy 10% by volume. Qtz carbonate veins greater than 2 cm width occupy (1% volume. Foliation: 55.9m Sheared 57.5m 62.3m Lower contact	 50 30 67 68	Patchy silicification. Moderate to intense grey ser'n.	5-10% fin grained pyrite as wisps, bands and patches. Base metals have uneven distribution being mainly confined to the interval 53.1 - 56.4m ╟54.3 - 54.8╢ «3%Sp1%Tt1%Gn» ╟55.7 - 56.0╢ «3%-4%Sp+Gn1/2%Tt» brown blebs Sp in folded vein cross-cutting foliation. Veining comprises faint grey-white silicification through the silicified sed matrix.	Upper contact marked by intense fault gouge over 10cm. Gouge is compact enough to retain foliation of 62 deg to c/a. Possibly more than one phase of faulting. Fault at 56.1 - 56.4m cross-cuts foliation. Angle to c/a 20 deg. Similarly at 58.6m - 28 deg to c/a.
63.50 TO 65.50	«SIL SEDS»	Grey fine to medium grained silicified sediment with grey sericite partings. Includes minor het frag/tectonite? at 64.8 - 65.0m. Minor flt bx at end of hole. Foliation 64.1 65.2	 57 59	Moderate to intense grey ser'n Patchy sil'n.	3-5% fine grained disseminated to banded pyrite.	
	E.O.H.					

HOLE NUMBER: U1330-22 ASSAY SHEET DATE: 21-June-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30123	43.90	44.20	0.30	0.07	1.64	3.92	58.7	0.29									
BCD30124	45.30	46.80	1.50	0.01	0.01	0.02	00.3	0.04									
BCD30125	48.00	48.90	0.90	0.01	0.01	0.01	00.2	0.03									
BCD30126	52.30	53.10	0.80	0.02	0.07	0.09	07.8	0.10									
BCD30127	53.30	54.30	1.00	0.34	1.02	0.62	147.8	0.61						2.57			
BCD30128	54.30	54.80	0.50	0.73	1.72	1.12	206.3	0.47						2.65			
BCD30129	54.80	55.70	0.90	0.21	0.64	0.67	79.8	0.29									
BCD30134	55.70	56.00	0.30	1.42	2.56	2.82	489.7	2.33						2.66			
BCD30130	56.00	57.80	1.80	0.06	0.09	0.12	19.7	0.36									
BCD30131	57.80	59.30	1.50	0.02	0.19	0.16	9.3	0.41									
BCD30132	59.30	60.80	1.50	0.34	0.93	0.57	57.3	0.65									
BCD30133	60.80	62.30	1.50	0.09	0.36	0.32	29.4	0.68									

NINNOVA INC.

HOLE NUMBER: U1330-23 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 633.48N
EAST: 9639.72W
ELEV: 1333.99

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

COLLAR DIP: -81° 0' 0"
LENGTH OF THE HOLE: 61.00m
START DEPTH: 0.00m
FINAL DEPTH: 61.00m

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

DATE STARTED: January 29, 1991
DATE COMPLETED: January 29, 1991
DATE LOGGED: February 7, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-81° 0'	ACID	OK	
30.50	-	-81° 0'	ACID	--	WEAK ETCH
61.00	-	-79° 0'	ACID	OK	

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

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 8.60	«CSG»					
8.60 TO 18.00	«DOL MAFICS»	Pale to dark green aphanitic to fine grained chloritic mafic tuffs altered to mottled, laminated and banded grey-white qtz-dolomite and greenish yellow sericite. Numerous qtz-carb veins. Foliation: 4.6m 9.1m 16.1m Faults and fractures ╟5.2 - 5.6╢ «flt gouge» 6.2 - 6.3m gouge and blocky ╟10.8 - 11.5╢ «flt zone» Fracture sub paralled to c/a ╟17.2 - 18.0╢ «fracture»	 70 68 75	Intense ferro-dol. Moderate greenish yellow ser'n Patchy sil'n.	1% pyrite	Minor fault at lower contact with MFLT. Dol shows increase in intensity near contact.
18.00 TO 24.00	«MFLT»	Intense alteration of mafic lapilli tuff. Yellow sericitized lapilli supported in a dolomitic, sericitic matrix. Patches of grey-white dol. Foliation: 20.0m 23.3m Faults and fractures: Minor intervals gouge within blocky, broken sections. ╟23.4 - 24.0╢ «flt bx+blocky»	 64 62	Intense ferro-dol. Moderate to intense ser'n. Patchy sil'n. Intense sil-dol, between 21.3 - 22.8m due to qtz-carb flooding.	1 - 3% pyrite.	Interval quite blocky and broken.
24.00 TO 42.40	«DOL MAFICS»	Intensely altered mafics. Original textures destroyed as alteration increases in intensity to lower contact. Texture appears as chaotic mixture grey dol-mafics and greenish-yellow chlorite/ sericite. Pinkish leucoxene within mafic at 28.5 - 29.8m. Foliation: 24.6m 31.5m 37.5m 40.2m Faults and fractures ╟26.5 - 26.9╢ «flt gou+qv»	 48 70 70 50	Intense ferro-dol and patchy sil'n. Moderate to intense greenish yellow ser'n. ╟40.0 - 41.1╢ «sil/qtz-carb» Locally intense fuchsite.	Variable pyrite distribution increasing to lower contact. Overall 3-12%. Semi massive pyrite blebs occur in a cross-cutting white qtz vein at ╟27.4 - 27.7╢ «15% Cp+Py» Massive bleb Cp occurs in white qtz vein between ╟41.1 - 41.2╢ «20% Cp»	 Py,Cp qtz vn crosscuts foliation at angle to c/a 15 deg. Unusual occurrence within mafics. Upper contact of Cp Minor gouge.

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		30.2 - 30.5m minor gouge+blocky broken core. 32.2 - 32.8m gouge+blocky, partly healed. 35.4 - 36.6m fracture sub parallel to c/a 36.9 - 37.6m minor gouge + strained mafics. 39.6 - 40.0 minor gouge + strained mafics. 41.5 - 42.5m gouge + strained mafics.				
42.40 TO 42.70	«FLT GOUGE»	Intensely faulted zone of mafics/sediments? to gouge and breccia. Plane of faulting approx.	80		1-2% pyrite.	
42.70 TO 50.50	«QV/ALT SEDS»	Mixed interval of white qtz vein, white qtz vein with grey and yellow sericite inclusions, and mottled grey white quartz flooded sediments. Foliation at 43.2m within sert. Sert at 50.3 Lower contact faulted.	30 42	Patches, bands and minor intervals of yellow sericite (sert) [50.1 - 50.5] «Sert» Intense silicification due to qtz veining and flooding.	Variable distribution of sulphides. Pyrite low in concentration. Overall 3% with local patches (3cm) up to 15%. Base metal sulphides are concentrated in a zone [44.9 - 45.6] «15% CpSpTtGn» within qtz flooded grey sediments.	Foliation poorly developed in qtz flooded sediments. Minor breaks within interval along sericitic foliation.
50.50 TO 55.00	«ALT SEDS»	Grey sericitic fine grained seds with minor patchy sil'n. 7 - 10% qtz-carb veins, grey-white flooding seds. Foliation: 50.6m 51.7m 52.9 54.8 Faults and fractures 50.5 - 51.5m intermittent fault gouge and sheared seds. [51.5 - 51.9] «flt gou/blocky» 52.3 - 52.8m flt gouge + sheared seds. [53.9 - 54.5] «flt gou/blocky» +sheared seds.	70 50 60 70	Moderate to intense grey ser'n. Patchy sil'n. 10 cm block yellow sert in fault zone at 51.7m.	10 - 15% fine grained disseminated pyrite. Occasional blebs Sp throughout. [50.5 - 51.5] «7%CpSp6nTt»	Interval is partly faulted with intervals of friable gouge and strained sericitic seds.
55.00 TO 61.00	«FLT ZNE/ SIL SEDS»	Silicified and grey sericitized sediments faulted to gouge and breccia. Intense zone of gouge 55.0 - 56.4m Foliation: 57.5m	30	Grey silicified patches elongate parallel to foliation and separated by grey sericitic partings.	5-10% pyrite as fine grained disseminations and wispy laminae. Occasional blebby Sp.	Possible chert component increasing to end of hole.
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30135	40.00	41.10	1.10	0.01	0.01	0.02	2.6	0.03									
BCD30136	41.10	41.20	0.10	4.10	0.02	0.01	63.4	0.19									
BCD30137	41.20	42.40	1.20	0.01	0.01	0.01	1.3	0.03									
BCD30138	42.80	43.90	1.10	0.01	0.01	0.01	12.6	0.12									
BCD30139	43.90	44.90	1.00	0.23	0.03	0.01	246.1	0.47						2.57			
BCD30140	44.90	45.60	0.70	3.02	2.46	0.04	2882	4.34						2.87			
BCD30141	45.60	47.10	1.50	0.08	0.02	0.02	43.7	0.22									
BCD30142	47.10	48.60	1.50	0.01	0.01	0.01	9.2	0.05									
BCD30143	48.60	49.60	1.00	0.01	0.01	0.01	10.6	0.16									
BCD30144	49.60	50.50	0.90	0.01	0.11	0.02	9.3	0.34									
BCD30145	50.50	51.50	1.00	1.82	6.24	3.18	2130	3.28						2.89			
BCD30146	51.50	52.50	1.00	0.64	0.88	0.22	740	1.18						2.75			
BCD30147	52.50	53.50	1.00	0.89	1.82	0.85	907	1.78						2.88			
BCD30148	53.50	55.00	1.50	0.34	1.08	0.46	279.8	0.82						3.03			
BCD30149	56.50	58.00	1.50	0.05	0.15	0.13	12.6	0.51									
BCD30150	59.50	61.00	1.50	0.04	0.17	0.05	22.6	0.23									

NINNOVA INC.

HOLE NUMBER: U1330-24 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 632.96N
EAST: 9639.65W
ELEV: 1334.09

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

COLLAR DIP: -62° 0' 0"
LENGTH OF THE HOLE: 72.80m
START DEPTH: 0.00m
FINAL DEPTH: 72.80m

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

DATE STARTED: January 29, 1991
DATE COMPLETED: January 30, 1991
DATE LOGGED: February 8, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-62° 0'	ACID	OK		-	-	-	-	-	
31.70	-	-61° 0'	ACID	OK		-	-	-	-	-	
60.00	-	-62° 0'	ACID	OK		-	-	-	-	-	
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MINNOVA INC.

HOLE NUMBER: U1330-24 — DRILL HOLE RECORD — DATE: 21-June-1991

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 17.10	«DOL MAFICS»	Pale to dark green aphanitic to fine grained chloritic mafic tuffs altered to mottled, laminated and banded grey-white dolomitized mafics and greenish-yellow sericite. Numerous white qtz-carb veins. Foliation at 2.7m 7.3m 15.3m Faulting and fractures: 6.0 - 6.2 «flt gou/block» 11.2 - 11.6 «flt gou/block» 12.4 - 12.7 «flt gou/block» Minor gouge at 13.8m Minor gouge at lower contact + 10cm qtz-carb vein.	80 75 80	Intense ferro dol. Patchy sil'n. Moderate greenish yellow ser'n.	1-2% pyrite.	
17.10 TO 23.20	«MFLT»	Pale greenish yellow sericitized lapilli in a grey-white to pale and dark green, dolomitized, chloritic matrix. Foliation average approx. Faults and fractures: 18.9 - 19.2 «flt gou/bx» 21.6 - 22.6 partly healed fault gouge and bx.	60	Moderate to intense ferro-dol. Patchy sil'n. Moderate to intense greenish-hellow ser'n.	1-2% Pyrite.	Interval is quite blocky and broken. Minor fault at lower contact.
23.20 TO 37.80	«ALT MAFICS»	Pale to dark green, aphanitic to fine grained chloritic tuffs altered to patches of grey white dolomitzed and silicified tuff, and greenish yellow brown sericite. Foliation: 24.1m 27.7m 29.1m within dol-maf+flt zne 33.9m Sheared fuchsite + Ser. 35.9 Faults and fractures 23.3 - 23.4 «flt gou/bx» 25.2 - 25.4 «flt gou/bx» 34.2 - 34.6m shear, gouge + blocky. 34.5 - 34.7m fracture sub parallel c/a. Core blocky at lower contact with intense flt gouge 37.4 - 37.6 «flt gouge»	75 78 68 48 70	Moderate to intense ferro-dol and sil'n increasing to lower contact. Locally intense greenish yellow-brown sericite. Patchy fuchsite is intense from 35.2 - 36.6m «patch fuchsite». Intense sil & dol and qtz veining within zone - 36-5 - 37.8m.	1-3% pyrite, locally up to 10% in patches and bands near the mafic/sed contact. 1-3%	Foliation less well developed in the interval due to the more "massive" alteration. Interval not characterized by the abundant white qtz-carb veins seen in the Dol-Mafics. However greyish white qtz-carb veins do occur both parallel to and cross-cutting foliation Orientation on faults difficult to determine.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
37.80 TO 64.50	«QV/ALT SEDS»	Mixed interval of intermittently faulted white qtz-carbonate veins, mottled grey-white qtz flooded seds, grey and yellow sericitized sediments.		Locally intense grey and yellow sericite. (Mut+Sert).	Variable pyrite and base metal sulphides throughout.	
		37.8 - 45.3m, qv/sed, Sert, Mut.		Locally intense flooding seds with qtz to give mottled grey-white fine texture + sed inclusions.		37.8 - 45.3m generally blocky and faulted with intense zones of gouge.
		Foliation in remnant blocks of sediments 39.7m	65		⌊41.1 - 41.9⌋ «2%Tt2%Py» in block within flt zne.	
		Sheared 42.7m	32	43.9 - 45.3 mostly sert and mut.	41.9 - 42.0 10cm block SM Py	
		⌊40.6 - 43.9⌋ «flt gou/blocky»			⌊43.6 - 43.9⌋«15% Sp+Tt» in Qv-Sed block in flt zone.	
		⌊45.3 - 50.7⌋ «Qtz-carb Vn» Dominantly vein+minor seds. Qv partly brecciated with local gouge through sed inclusions.			Includes intense gouge. 45.3 - 50.7m minor pyrite within Qv, locally 5-10% within seds inclusions	Contact Qv-carb with seds at 45.3m, 60% to c/a.
		50.7 - 52.0m - QV+gouge and bx. ⌊51.3 - 51.9⌋ «flt gouge»			⌊49.7 - 49.9⌋«15% Sp+Tt» within QV shattered bx. 3-5% pyrite locally concentrated in sed inclusions.	
		52.0 - 56.1m mut+sert quite friable due to effects of shearing.			⌊52.0 - 53.0⌋ «15 - 20%SpCpTtGn» in dark grey-black mut.	Fine grained disseminated SpCpTt(Gn?) sheared, stretched parallel to foliation.
		Foliation at: 52.0m	75			
		52.6m	60			
		53.6m	60			
		56.1 - 56.6m massive pyrite Sp,Cp in white QV. Flt bounded. Foliation prevails	60		⌊56.1 - 56.6⌋ «Mssx40%Py10%SpCpTt»	Massive pyrite blebs with dark brown black Sp and lesser Cp + Tt.
		56.6 - 58.0m White Qv + patches of Mssx. Minor shearing in sed inclusions.			56.7 - 57.0 mssx in Qv ⌊57.6 - 58.0⌋ «50%Py» as fine to coarse blebs.	Lower contact of QV + Py faulted.
		58.0 - 63.4m Blocky to intensely faulted sediments. 10% Qv+carb. ⌊58.1 - 63.4⌋ «flt gou+blocky»		Sert + mut, but intensity of alteration is diminishing downhole.	7-15% pyrite as grains blebs and bands.	Local intense zones of fault gouge. Qtz veins form blocky intervals. 10 - 20 cm.
		63.4 - 64.5m white qtz carb vein with blebby to semi massive sulphide.			⌊63.4 - 64.5⌋ «30% Py7% Gn» Blebby to stringer-like Gn.	Lower contact marked by intense gouge over 5 cm.
64.50 TO 69.70	«ALT SEDS/ ARG/SILT»	Partly faulted mixture of weakly altered sediments (sert+mut), black graphitic argillite, and possible grey siltite/wacke.	60	Patchy weak grey and yellow sericitization.	3-7% Pyrite.	Interval separated from the over-lying zone due to decrease in intensity of sed alteration.
		7 - 10% white qtz-carb veins and patches. ⌊65.5 - 66.1⌋ «flt gou»				

NIMNOVA INC.

HOLE NUMBER: U1330-24 — DRILL HOLE RECORD — DATE: 21-June-1991

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
69.70 TO 71.30	«FLT GOUGE»	Intense zone of faulting. Seds ground up to pale greenish white gouge.				
71.30 TO 72.80	«QTZ/SER»	Tectonized interval of quartz and pale yellow sericite. Hinge zone at 72.6m. Fault crossing c/a at low angle. Gouge at 72.6 - 72.8m.	70 80 10 20	Intense qtz sericite alteration.	7-10% pyrite	Original textures destroyed (Chert-argillite protolth?)
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30151	37.60	38.10	0.50	0.13	0.03	0.02	98.4	0.19									
BCD30152	38.10	39.60	1.50	0.02	0.01	0.02	19.8	0.18									
BCD30153	39.60	41.10	1.50	0.02	0.03	0.01	19.6	0.37									
BCD30154	41.10	41.90	0.80	0.02	0.02	0.02	17.9	0.26									
BCD30155	41.90	42.40	0.50	0.23	0.04	0.06	209.8	2.60						2.82			
BCD30156	42.40	43.60	1.20	0.01	0.01	0.01	5.7	0.07									
BCD30157	43.60	43.90	0.30	5.18	6.52	0.04	5584	12.28						2.88			
BCD30158	43.90	44.40	0.50	0.03	0.02	0.04	32.4	0.13									
BCD30159	44.40	44.90	0.50	0.37	0.15	0.18	334.6	0.84						2.85			
BCD30160	44.90	45.30	0.40	0.05	0.01	0.01	7.8	0.05									
BCD30161	45.30	46.80	1.50	0.02	0.01	0.02	8.2	0.09									
BCD30162	46.80	48.30	1.50	0.01	0.01	0.01	1.5	0.03									
BCD30163	48.30	49.70	1.40	0.01	0.01	0.01	3.4	0.03									
BCD30164	49.70	49.90	0.20	0.11	5.38	0.01	49.8	0.06									
BCD30165	49.90	50.70	0.80	0.01	0.01	0.01	1.4	0.03									
BCD30166	50.70	52.00	1.30	0.25	0.79	0.45	228.7	0.40						2.69			
BCD30167	52.00	53.00	1.00	0.81	9.44	6.34	582	1.72						3.21			
BCD30168	53.00	53.70	0.70	0.02	0.10	0.07	9.3	0.18									
BCD30169	53.70	54.70	1.00	0.01	0.03	0.02	2.6	0.03									
BCD30170	54.70	56.10	1.40	0.01	0.01	0.01	1.3	0.07									
BCD30171	56.10	56.60	0.50	1.08	2.78	0.17	202.7	0.45						4.01			
BCD30172	56.60	57.60	1.00	0.46	0.08	0.12	47.8	0.29									
BCD30173	57.60	58.00	0.40	0.03	0.10	0.05	15.9	1.20						3.12			
BCD30174	58.00	60.00	2.00	0.01	0.01	0.03	3.3	0.23									
BCD30175	60.00	61.50	1.50	0.01	0.11	0.07	2.9	0.10									
BCD30176	61.50	63.40	1.90	0.01	0.01	0.01	.9	0.24									
BCD30177	63.40	64.50	1.10	0.02	2.12	2.90	79.4	0.41									
BCD30178	64.50	64.70	0.20	0.01	0.54	0.03	23.4	0.29									
BCD30179	64.70	65.50	0.80	0.01	0.01	0.02	.6	0.04									

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 634.13N
EAST: 9639.66W
ELEV: 1334.01

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

COLLAR DIP: -82° 0' 0"
LENGTH OF THE HOLE: 83.80m
START DEPTH: 0.00m
FINAL DEPTH: 83.80m

COLLAR GRID AZIMUTH: 360° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: January 30, 1991
DATE COMPLETED: January 30, 1991
DATE LOGGED: March 28, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE: 60.6 - 83.8 EXTENSION TO TEST FOR GOLD ZONE

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-80° 0'	ACID	OK	
30.50	-	-82° 0'	ACID	OK	
60.60	-	-82° 0'	ACID	OK	
82.00	-	-79° 0'	ACID	OK	

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

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 19.90	«DOL MAFICS»	Pale to dark green aphanitic to fine grained chloritic tuffs altered to mottled, laminated and banded grey-white qtz-dol, and greenish yellow sericite. Numerous white qtz-carb veins parallel to foliation. Foliation: 2.5m 7.0m 9.5 13.4m 18.7m Faults and fractures: Minor faults - 10.7 - 10.8m 12.7 - 12.8m 13.6 - 13.65m [14.1 - 14.8] «flt gou/bx»	56 64 66 58 54	Intense ferro dol. Patchy sil'n. Moderate to intense greenish yellow ser'n. Local minor fuchsite on fault surfaces.	1-3% pyrite. Isolated patches and blebs base metal sulphides.	Minor fault, partly healed at contact with lapilli tuff. 19.9 - 20.0m.
19.90 TO 27.00	«MFLT»	Greenish yellow sericitized lapilli in an aphanitic to fine grained dolomitic, chloritic tuff matrix. Foliation 21.7m 25.9m	56 52	Moderate to intense ferro-dol. Patchy sil'n. Intense greenish+yellow ser'n of lapilli.	1-2% pyrite.	Lapilli size decreases downhole. Alteration shows some increase in intensity to lower contact which is conformable.
27.00 TO 37.20	«ALT MAF»	Intensely altered mafic tuffs? Original textures destroyed. Interval dominated by grey dolomite and grey to white qtz-dol veining. Greenish chlorite and greenish yellow to yellow sericite from a matrix to the patches of qtz-dol. Foliation 28.6m 33.7m 36.7m Faults [28.2 - 28.6] «flt gou/bx» 29.0 - 30.0m fracture subparallel to c/a + minor gouge. 30.2 - 30.3m minor gouge +blocky.	55 58 55	Intense ferro-dol. Patchy sil'n due to veining and flooding. Locally intense greenish yellow sericite. Local green fuchsite along foliation surfaces.	1-5% pyrite as disseminations, blebs and patches.	Lower contact from mafic to argillite is gradational.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
37.20 TO 49.60	«MAF/SIL ARG»	Black silicified, tectonised, graphitic argillite with patches and occasional interbeds of mafics. ╡45.3 - 47.9m╞ mainly «mafics» Silicified bands within argillite show stretching and boudinage parallel to foliation. Foliation: 40.0m 45.2m 47.9m Faulted zone @ 49.6m Faults and fractures: ╡48.3 - 48.5╞ «flt bx» minor.	53 47 72 55	Patchy to pervasive sil'n of argillite. Moderate development freenish yellow sericite, and moderate to intense ferro-dol of mafic component.	2 - 5% pyrite.	Lower contact with altered grey seds, faulted.
49.60 TO 83.80	«ALT SEDS»	Intermittently faulted grey sericitic/pyritic seds with zones showing greater silicification (sil seds). Sil Seds: faint to patchy white qtz veins, invade grey v. fine grained seds. Foliation: 50.5m fractures in QV at 52.3m 55.1 56.7m 60.3m Faults and fractures: ╡49.6 - 50.0╞ «flt gou/bx» ╡50.6 - 51.2╞ «flt gou/bx» 51.5 - 53.3m gouge + bx sub-intervals (to 20 cm width) and blocky to broken core. 54.0 - 54.3m healed flt bx. ╡54.8 - 53.3╞ «flt gou/bx» ╡57.5 - 58.4╞ «flt zone» Continuing from original log - Deepening to	55 15 74 50 56	Patchy to locally intense sil'n due to qtz flooding. Intense grey ser'n.	Variable 3 - 10% pyrite Blebs Sp scattered throughout, but over all (1%. Local concentrations: ╡52.0 - 52.4╞ «8 - 10% Sp6n» in QV with sed inclusions. 52.4 - 53.0m 7% Sp6nTrTt within broken, part flt bx zone. ╡59.1 - 60.7m╞ «2%Sp15%Py» Very fine grained pyrite. Blebs of Sp, often dotted along white QV, or silicified bands.	

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30180	37.20	38.70	1.50	0.01	0.02	0.01	0.04	0.03									
BCD30181	43.80	45.30	1.50	0.01	0.03	0.01	2.2	0.03									
BCD30182	48.10	49.60	1.50	0.01	0.01	0.01	0.8	0.03									
BCD30183	49.60	51.10	1.50	0.18	0.26	0.21	57.1	0.39									
BCD30184	51.10	52.00	0.90	0.26	0.76	0.63	77.4	0.22									
BCD30185	52.00	52.40	0.40	0.02	3.58	2.02	34.7	0.12						2.61			
BCD30186	52.40	53.00	0.60	1.00	2.22	1.64	233.6	0.77						2.71			
BCD30187	53.00	54.50	1.50	0.32	0.63	0.63	91.8	0.39									
BCD30188	54.50	55.30	0.80	0.07	0.38	0.27	29.8	0.18									
BCD30189	55.30	56.80	1.50	0.05	0.12	0.08	26.4	0.09									
BCD30190	56.80	57.60	0.80	0.02	0.09	0.06	7.2	0.08									
BCD30191	57.60	59.10	1.50	0.09	0.38	0.24	41.4	0.13									
BCD30192	59.10	60.60	1.50	0.06	0.69	0.30	29.7	0.07									
BCD30959	61.00	61.50	0.50	0.11	0.68	0.43	38.9	0.07									
BCD30960	66.50	66.80	0.30	0.36	1.64	0.74	69.1	0.11									
BCD30961	68.30	68.50	0.20	0.01	0.04	0.02	3.7	0.03									
BCD30962	70.00	71.00	1.00	0.17	0.65	0.20	46.4	0.08									
BCD30963	73.40	74.10	0.70	0.68	1.18	0.33	215.6	0.09						2.88			
BCD30964	77.70	78.30	0.60	1.22	1.96	1.72	485.0	0.21						2.70			
BCD30965	78.30	79.40	1.10	0.12	0.27	0.16	44.2	0.04									
BCD30966	79.40	81.00	1.60	0.08	0.15	0.07	30.4	0.05									

MINNOVA INC.

HOLE NUMBER: U1330-26 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 632.23N
EAST: 9639.74W
ELEV: 1334.15

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

COLLAR DIP: -45° 0' 0"
LENGTH OF THE HOLE: 69.20m
START DEPTH: 0.00m
FINAL DEPTH: 69.20m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: January 30, 1991
DATE COMPLETED: January 30, 1991
DATE LOGGED: February 12, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-45° 0'	ACID	OK		-	-	-	-	-	
29.60	-	-45° 0'	ACID	OK		-	-	-	-	-	
69.20	-	-45° 0'	ACID	OK		-	-	-	-	-	

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.06	«CS6»					
0.06 TO 17.70	«DOL MFT» DOLOMITIC MAFIC TUFF	Colour - Green Grain size - V. fine to aphanitic Chloritic mafic tuff altered to mottled, well laminated with bands of whitish grey qtz & dol veinlets. Foliation consistent dip 12.3 - 12.4 «Minor Flt» 15.5 - 16.2 «Minor Flt»	60	Moderate yellow sert Intense ferro-dol chlorite	<1% fine diss'd py throughout	Foliation well developed and core breaks along foliation.
17.70 TO 21.00	«MFLT» MAFIC LAPILLI TUFF	Colour - Pale green Grain size - V. fine to aphanitic Altered and deformed (stretched & sericitized) lapilli Foliation ave	62	Moderate to intense yellow sert & ferro dol (increases downhole) Patchy sil'n and a min of two stages of qtz veining. Occ. rare 3 - 5mm patches fuchsite.	< 3% fine diss'd py	Foliation not as well developed.
21.00 TO 35.80	«ALT MAFICS»	Colour - Pale to greyish green Grain size - aphanitic Chloritic tuffs altered to a massive greyish dolomitic & sil'd tuff. @ 27.9m - 3cm shearing dip = 45 deg. 35.5 - 35.55 gouge dip = 71 deg. Foliation @ 29.6m Lower contact flted.	77	Mod. ferro-dol & sil'd mod yellow sert, locally intense fuchsite occ. at E.O.I.	3% patchy py in qtz veinlets ((1% overall) 2%py&trSp&Cp towards E.O.I.	Altered and v. sil'd interval last 2 m stock work bx intervals with tr. Sp & Cp & 2% Py @ Top of intervals.
35.80 TO 41.20	«QV/SERT & FLT»	Colour - white qv - grey to yellow sert seds Grain size - fine to v. fine Mixed intervals of Qtz Veining Flting and yellow sericitic seds. Foliation 41m	65	Yellow sericite on seds	Sericitic seds 1-3% v. fine diss'd py. Qtz veining variable from bull qtz with tr.sulphides(?) to stockworking of fine grained wall rock? (some old logs called qtzite) with 3 - 5% comb. tet,sp,ga & cp.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		35.8 - 36.6 Flt			Rare sp veins 1 cm wide	
		37.9 - 38.4 Flt			@ 36.8 - 36.9m	
		38.9 - 39.8 Flt Zne partially healed				
		39.8 - 40.3 Flt			Tet blebs up to 1 cm,	
					40.4 to 41.2 m.	
41.20 TO 48.80	«SERT» YELLOW SERICITIC ALT SEDS	Colour - brownish yellow & grey bands Grain size - v. fine to aphanitic Sericitic alt. well banded seds. - occ. cut by qtz veins - 41.8 - 41.9 & 47.4 - 47.45 & 48.0 - 48.25 & Flts. 41.9 - 42.1 «Minor Flt» 43.6 - 43.65 «Minor Flt» 43.85 - 43.9 44.4 - 44.9 «Minor Flt» 46.9 - 47.1 «Minor Flt» 48.0 - 48.1 Minor Flt 47.5 - 47.9 Tectonic deformation.		Yellow & grey sericite alt. bands.		
		Foliation @ 43m	77			
		@ 46.6	67			
48.80 TO 63.40	«QV & SERT» QTZ VEINING & SERICITIC ALT SEDS	Colour - Q.V. white Grey & yellow sert alt seds Grain size - fine to v. fine Mixed intervals of qtz veining and altered seds (yellow & grey sert) Qtz veining with inclusions of sert seds, fine gr. wall rock? (old log qtzite) which holds approx 1-3% tet,sp,ga & 5% py.		Yellow & grey sericitic alt on seds.	1 - 3% tet,sp,ga & 5% py. @ 49.4m 2-3cm bleb sp. cut by qtz veining.	
		Foliation @ 49m	35			
		@ 50.5m	62	48.8m - 57.0m = 70% qtz 57.0 - 61.0 = 85% alt seds		
		56.9 - 57.6 «flt zne» 58.1 - 58.2 Minor Flt 58.9 - 59.1 Minor Flt				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		ǂ61.8 - 62.2ǂ «Flt» 62.2 - 62.6 healed stockwork bx ǂ62.6 - 63.0ǂ «flt gouge» Contact flted with flt dip @ 63.4	47			
63.40 TO 68.40	«GR ARG/ FLT» GRAPHITIC ARGGFLTING	Colour - black Grain size - aphanitic Black graphitic arg with qtz & qtz/dol veining. ǂ63.2 - 66.0ǂ «flt zne» 66.0 - 67.0 well laminated arg & wacke ave. bedding = 67.0 - E.O.I. Tectonic def. & rock becoming MUT ǂ68.0 - 68.1ǂ «gouge» Contact gradational	62	Grey sericite (MUT) @ E.O.I. graphite	Tr py throughout (dis'd)	
68.40 TO 69.20	«SERT & ARG» SERICITIC ALT SEDS & ARG WISPS	Colour - yellow and black Grain size - v. fine to aphanitic Mixed sediments altered and minor tectonic deformation. Foliation ave =	66	Yellow sericite & graphite	1-3% dis'd py.	
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30193	34.10	34.60	0.50	0.03	0.11	0.01	0006.7	0.07									
BCD30194	34.70	35.10	0.40	0.01	0.23	0.01	0001.8	0.08									
BCD30195	35.10	35.80	0.70	0.01	0.01	0.01	0000.3	0.15									
BCD30196	35.80	36.60	0.80	0.01	0.02	0.01	0001.6	0.03									
BCD30197	36.60	37.20	0.60	0.32	4.34	0.03	0307.6	0.46						2.83			
BCD30198	37.20	37.40	0.20	1.64	0.36	0.02	1653	2.53						2.63			
BCD30199	37.40	37.70	0.30	0.04	0.05	0.03	0020.4	0.09									
BCD30200	37.70	38.40	0.70	0.38	0.38	0.03	0398.9	0.67						2.59			
BCD30201	38.40	39.80	1.40	0.08	0.02	0.01	0077.4	0.24									
BCD30202	39.80	41.20	1.40	0.11	0.04	0.03	0097.6	0.44									
BCD30203	41.20	41.70	0.50	0.01	0.01	0.01	0002.5	0.03									
BCD30204	47.30	48.80	1.50	0.01	0.02	0.01	0003.6	0.05									
BCD30205	48.80	50.30	1.50	0.05	0.52	0.03	0026.1	0.23									
BCD30206	50.30	51.80	1.50	0.01	0.07	0.01	0002.7	0.06									
BCD30207	51.80	53.30	1.50	0.01	0.01	0.01	0000.4	0.03									
BCD30208	53.30	55.30	2.00	0.01	0.01	0.01	0000.9	0.03									
BCD30209	55.30	57.80	2.50	0.01	0.01	0.01	0001.5	0.12									
BCD30210	61.80	62.20	0.40	0.01	0.01	0.01	0000.4	0.11									
BCD30211	62.20	62.60	0.40	0.01	0.01	0.01	0000.1	0.03									
BCD30212	62.60	63.40	0.80	0.01	0.01	0.01	0000.7	0.11									

MINNOVA INC.

HOLE NUMBER: U1330-27 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 632.15N
EAST: 9639.72W
ELEV: 1335.07

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

COLLAR DIP: -22° 0' 0"
LENGTH OF THE HOLE: 80.20m
START DEPTH: 0.00m
FINAL DEPTH: 80.20m

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

DATE STARTED: January 31, 1991
DATE COMPLETED: February 1, 1991
DATE LOGGED: February 12, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG
3.00	-	-22° 0'	ACID	OK		-	-	-	-	-
30.50	-	-22° 0'	ACID	OK		-	-	-	-	-
71.00	-	-22° 0'	ACID	--	WEAK ETCH	-	-	-	-	-

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 20.10	«DOL MFT» DOLOMITIC MAFIC TUFF	Colour - Dk green to green Grain size - v. fine				
		Chloritic mafic tuff altered to mottled, well laminated with bands of whitish grey qtz & dol veinlets.		Intense ferro-dol Weak - yellow sert from 13.0m to E.O.I. (increasing downhole) sil'd moderate throughout	1% fine diss'd py throughout	Foliation well developed.
		Foliation varies from 35 deg to 50 deg ave =	45			
		┤10.7 - 10.8├ «minor flt» gouge ┤12.4 - 12.6├ «minor flt» gouge 18.0 - 18.1 flt gouge ┤19.8 - 20.2├ «flt gouge» contact flted.				
20.10 TO 34.50	«MFLT» MAFIC LAPILLI TUFF	Colour - pale green Grain size - v. fine				
		Stretched lapilli & dolomitic throughout Foliation @ 20.9= 26m=	41 55	Mod. yellow sert alt lapilli Mod. ferro-dol & sil'd	3% diss'd py.	Foliation less developed than DOL MFT above.
		┤26.4 - 26.6├ «flt gouge» 33m=	46			
		┤27.9 - 28.1├ «flt gouge»				
34.50 TO 44.50	«ALT MAFICS»	Colour - pale to yellowish green Grain size - v. fine to aphanitic				
		Chloritic tuff & occ. lapilli tuffs altered to grey white dolomitized and mod. sil'd.		Yellow sert increase down hole. Developing sericitic mafics @ 40.0m Below 40.0m tr. leucoxin		
		Foliation 36m =	52			
		┤37.4 - 37.5├ «flt» 42m =	64			
		51m =	63			
		Bottom contact flted.				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
44.50 TO 45.10	«MUT/FLT»	Colour - grey Grain size - aphanitic ╟44.5 - 44.9╢ «flt zne» flted (sheared) sil'd MUT 44.9 - 45.1 qtz vein	 80	 Silver grey sert	 3-5% Fine diss'd py. 44.9 - 45.1 - 1-2% tet,ga,sp	 Contact of mafics to seds sheared with MUT alteration & 15cm QV at EOI
45.10 TO 74.30	«SERT&QV» YELLOW SERT ALT SEDS & QTZ VEINS	Colour - brownish yellow & grey bands Grain size - v. fine to aphanitic Sericitic alt seds with occ qtz veins. Veining increases down hole. Foliation @ 45.4m 51.3m 57.3 45.4 - 45.6 flted 45.7 - 45.9 flted ╟53.1 - 53.4╢ «minor flt» ╟54.4 - 54.7╢ «flt zne» 55.9 - 56.6╢ «flt zne» 58.8 - 59.0 flted Foliation @ 61m = 61.9 - 62.1 sheared ╟61.9 - 63.1╢ «mut & flts» with 5% py Foliation @ 64m 70m 72m ╟68.9 - 71.0╢ «qtz tr fuchsite» 72.5 - 73.9 Carb Veining Bx by qtz veining & sert	 79 63 66 82 70 66 61 	 Yellow sericite on seds.	 3 - 5% fine diss'd py throughout sert seds. 50.5 - 50.6 10% py in qtz veinlets ╟52.3 - 52.4╢ «3%tet&sp7%py» ╟60.3 - 61.9╢ «QV3-5%tet,ga,sp,cp» 72.5 - 73.9 - 5% py as blebs in veinlets.	

NIMNOVA INC.

HOLE NUMBER: U1330-27 — DRILL HOLE RECORD — DATE: 21-June-1991

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		78.7 - 79.1 Het Frag				
		Foliation @ 77.7	65			
		79	55			
		80	64			
	E.O.H.					

HOLE NUMBER: U1330-27 ASSAY SHEET DATE: 21-June-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		COMMENTS
BCD30213	44.50	44.90	0.40	0.04	0.09	0.11	23.2	0.44										
BCD30214	44.90	45.10	0.20	0.32	0.92	0.48	307.6	1.25						2.56				
BCD30215	51.30	52.30	1.00	0.01	0.01	0.01	1.4	0.14										
BCD30216	52.30	52.45	0.15	0.22	0.04	0.01	57.2	0.41										
BCD30217	52.45	53.50	1.05	0.01	0.01	0.01	0.9	0.19										
BCD30218	58.80	60.30	1.50	0.01	0.02	0.02	2.7	0.07										
BCD30219	60.30	61.90	1.60	0.23	0.38	0.11	168.4	0.34						2.56				
BCD30220	61.90	63.10	1.20	0.21	0.66	0.21	169.7	1.11						3.20				
BCD30221	63.10	64.60	1.50	0.01	0.01	0.02	4.4	0.16										
BCD30222	72.00	72.50	0.50	0.02	0.01	0.01	1.1	1.08										
BCD30223	72.50	74.30	1.80	0.01	0.01	0.01	0.3	0.24										
BCD30224	74.30	74.80	0.50	0.01	0.01	0.01	0.6	0.08										
BCD30225	74.80	75.10	0.30	0.01	0.01	0.01	0.3	0.3										

HOLE NUMBER: U1330-28

NINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: MINE
NORTH: 633.94N
EAST: 9660.14W
ELEV: 1333.39

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

COLLAR DIP: -90° 0' 0"
LENGTH OF THE HOLE: 67.00m
START DEPTH: 0.00m
FINAL DEPTH: 67.00m

COLLAR GRID AZIMUTH: ° ' "

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 1, 1991
DATE COMPLETED: February 1, 1991
DATE LOGGED: February 13, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
ROD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-90° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-90° 0'	ACID	OK		-	-	-	-	-	
67.00	-	-90° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 16.00	MAFIC PYROCLASTIC (TUFF) «MPYRO»	Colour - Green Grain size - Fine to Medium grain Strongly foliated, intensely veined by interfolial qtz veins, lenses ⌈7.5 - 7.9⌋ «healed breccia zone» @ 1.5m 5.8m 6.5m 10.8m 13.7m 15.0m	 48 58 50 64 56 68	 Chloritic to 7.9m then increasing sericite to 16.0m Intense q. v'ing to 6.5m (25-30% of core). Minor dolo.	 Tr. minor py.	
16.00 TO 19.80	MAFIC PYROCLASTIC (LAPILLI) «MPYRO»	Colour - Green-grey Light yellow lapilli Grain size - medium to course grain Lapilli tuff Lapilli becoming less common to E.O.I. Competent, moderately foliated, lapilli relatively undeformed. @ 19.3	 63	 Lapilli Sericitic Minor dolo Minor qtz veining	 Tr pyrite	 ⌈16.3 - 17.7⌋ «FLT» Gouge + bx.
19.80 TO 24.20	ALTERED MAFIC PYROCLASTIC (TUFF) «MPYRO»	Colour - Green-Grey Grain size - fine to medium grain Green-grey altered mafic tuff. Locally moderately foliated @ 24.2	 68	 Moderately to strongly dolomitic Locally sericitic towards EOI Qtz veining subparallel c.a. @20.4 - 21.0m	 Tr. py.	
24.20 TO 27.20	«SILICIFIED ARGILLITE»	Colour - Black-grey Grain size - fine grain Silicified argillite with local interbedded sericitic Mafic Tuffs. Isoclinal folding and resultant foliation generally well developed; disrupture to original bedding. 20cm Qtz vein @ upper contact @ 265.2	 48	 Silicification of unit by qtz veining	 	 ⌈23.0 - 23.6⌋ «FLT»

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
27.20 TO 33.80	SERICITIC MAFIC TUFF & CHERT «SERT+CHT»	Colour - grey - locally lite yellow Grain size - fine to medium grain Foliated - massive interbedded unit. Foliation results in disrupted beds. @ 28.5 @ 33.8	 61 50	 Well dev. sericitic intervals; Silicification. Local qtz veining subparallel c.a. (x-cutting) and parallel foliation.	 Tr minor py 5 cm mass py assoc with lapilli frag @ 29.0m.	
33.80 TO 47.50	FAULT ZONE «FAULT»	Colour - grey Major cross-fault zone. Strongly gouged - bx'd Faulted Sert + cht to 36.8m. Qtz + sil wallrock (MUT?) 36.8 - 41.6 and sil'd or cherty MUT to 47.5 Orig bedding disrupted.	 	 Talc in fault gouge	 Local patches of sph. (41.6m) and cpy (42.2) in bx'd wallrock (MUT + sil'd MUT)	
47.50 TO 67.10	SILICIFIED MUT «SILMUT»	Colour - medium grey; locally green-brown Grain size - fine to medium grain Qv flooded and veined MUT prod. Mod to well dev silicified MUT throughout (same as "cherty" MUT) @ 51.6 @ 52.9 @ 56.3 @ 62.7	 50 60 70 55	 Silica flooding, qtz veining Slightly sericitic towards EOH	 1-3% visible diss pyrite, locally SMS (pyrite) @ 51.9 - 52.0 and 52.8 - 60.1m [52.0 - 52.8] «25% cpy; 1-3% tet» Also 5 cm SMS sp,ga,tet @ 49.0 + 58.3 - 58.4 SMS sp, tet 1-2% diss lite yellow sphalarite blebs throughout interval.	55.9 - 56.0: Fault gouge 64.0 - 64.4: Fault gouge
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30226	51.30	51.90	0.60	0.06	0.08	0.11	24.6	0.37									
BCD30227	51.90	52.80	0.90	8.24	0.12	0.15	94.7	0.36						3.26			
BCD30228	52.80	53.20	0.40	0.13	0.02	0.09	14.9	0.21									
BCD30229	53.20	54.70	1.50	0.09	0.30	0.19	13.4	0.14									
BCD30230	54.70	55.80	1.10	0.11	0.25	0.20	35.6	1.31						2.64			
BCD30231	55.80	57.30	1.50	0.23	1.08	0.93	47.4	11.06						2.81			
BCD30232	57.30	58.30	1.00	0.10	0.68	0.24	31.6	0.36									
BCD30233	58.30	58.40	0.10	4.84	5.14	3.64	1870	0.81						2.88			
BCD30234	58.40	59.40	1.00	0.34	0.76	0.35	168.6	0.24						2.64			
BCD30235	59.40	61.00	1.60	0.09	0.40	0.22	68.4	0.28									
BCD30236	64.40	65.90	1.50	0.11	0.98	0.36	39.8	0.23									
BCD30237	65.90	67.10	1.20	0.05	0.67	0.30	16.2	0.17									

MINNOVA INC.

HOLE NUMBER: U1330-29 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 634.29N
EAST: 9660.21W
ELEV: 1333.39

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

COLLAR DIP: -82° 0' 0"
LENGTH OF THE HOLE: 82.70m
START DEPTH: 0.00m
FINAL DEPTH: 82.70m

COLLAR GRID AZIMUTH: 360° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: February 2, 1991
DATE COMPLETED: February 2, 1991
DATE LOGGED: February 14, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-82° 0'	ACID	OK	
30.50	-	-84° 0'	ACID	OK	
71.60	-	-82° 0'	ACID	OK	

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

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 18.10	«DOL MAFICS»	Mottled to banded, grey white to greenish yellow sericitized, dol mafic tuffs. Foliation: 1.8m 8.1m 13.6m Faults and fractures: 11.9 - 12.1m blocky + gouge 12.3 - 12.4m gou/bx/blocky 13.5 - 14.9 «fltgou+heal bx»	 59 35 62	Ferro-dol greenish yellow ser'n	1% pyrite	Overall interval appears strained.
18.10 TO 23.80	«MFLT»	Yellow sericitized lapilli in greyish green dol tuff matrix. Foliation: 18.5m Faults and fractures: 18.6 - 18.9 «flt gou/bx» 19.2 - 19.8m blocky 23.1 - 23.3m flt gou/bx	 52 60	Ferro-dol Greenish yellow ser'n	1% pyrite	Interval quite blocy. Alteration increases to lower contact.
23.80 TO 24.10	«FLT GOU/BX»	Altered mafics faulted to gouge + breccia				
24.10 TO 27.40	«ALT MAFICS»	Intensely altered mafics. Patchy grey sil'n and dol. Greenish yellow ser'n Foliation: 26.7m	 55	Locally intense sil'n Intense ferro-dol Local fuchsite	5% pyrite	Although gouge present at lower contact transition to Arg/Maf appears gradational.
27.40 TO 36.60	«ARG/MAF»	Laminated and banded greenish sericitized mafic and black argillite. Foliation: 29.3m 33.0m Block of Mafic 35.9m Faults fractures: 27.5 - 28.0 «flt gou/bx» fault has rotated foliation almost sub-paralled to c/a 28.8 - 29.0 in fracture x-cuts foliation 30.6 - 30.7m flt gou. 31.9 - 32.0m flt gou.	 50 50 65 70 25	Greenish ser/n of mafic component	Variable 3-10% pyrite grains, blebs, bands	Tectonised. Minor flt zones, slip parallel to foliation. Core increasingly blocky to lower contact.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		33.5 - 33.7m blocky				
36.60 TO 48.40	«FLT ZONE»	Intense flt gouge ╢37.2 - 38.8╟ «flt gouge» soft clayey. 39.1 - 40.0m intense gouge. Flt Zone comprises grey altered seds from 39.9m to 48.4m. Silicified grey seds tend to be faulted to breccia. Foliation in remant blocks at: 43.1m 44.2m	 30 35 40	Yellow sericite evident in gouge 37.2 - 37.8m. Grey sericite partings in altered to silicified seds.	5-7% pyrite. Blebs of brown Sp scattered throughout remnant blocks and within breccia fragments. Local blebby Sp concentrations associate with QV. ╢37.6 - 38.1╟ «1%Tt» in Qtz-carb in gouge ╢41.5 - 43.0╟ «1% Sp»	Should sampled intervals record ore gra des. Further samples may be required.
48.40 TO 82.70	«ALT SEDS»	Locally faulted, grey pyritic, sericitic sediments (MUT) and grey silicified sediments with sericitic partings. Minor het frag/wacke 48.8 - 49.4m Foliation: 48.9m 59.4m 58.4m 66.0m 71.2m 73.7m 80.8m Faults, fractures: 49.4 - 49.5m minor gouge 51.1 - 51.3m goug + blocky 51.6 - 51.8m gouge + blocky	 75 60 68 35 50 45 35 45	Locally intense grey ser'n and sil'n.	Variable distribution of sulphides. PySp6nCpTt. Blebby Sp (1% throughout, with local concentrations associated with white QV. 49.8 - 50.8m 2%Sp1%Gn in white QV flooding seds. ╢50.8 - 51.1╟ «8%Tt5%Sp+6n» QV ╢52.2 - 52.9╟ «4%Sp10%Py» Sp+Py blebs associated QV	Mut to sil-Mut. Hinge Zone. 50.6 - 50.7m Pyritic Mut, friable. At 53.0m cleavage 30 deg. to c/a Hinge Zone 81.1 - 81.2m Long Limb-Short limb with cleavage at 80 deg to c/a

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		╡53.5 - 53.8m╞ «flt gouge»			╡54.4 - 55.4╞	
		54.9 - 57.9m blocky with			«3-4% Sp+Gn»	
		╡56.7 - 57.3╞ «flt gouge»			55.4 - 56.6m 1-2% Sp+Gn	
		╡59.4 - 60.4╞ «flt gouge»			╡56.6 - 57.1╞	
		60.5 - 60.8m gou + blocky			«25%Py1%Cp» Py rich	
		╡62.3 - 62.8╞ «flt gou/bx»			Sed with blebs Cp	Very friable, faulted and includes
		64.0 - 64.2m QV + gou/bx				intense gouge.
		67.9 - 68.0m heal bx			╡60.4 - 60.8╞	
		72.3 - 72.5m part heal bx			«2%Cp2%Sp» in partly faulted Seds	
		╡74.2 - 74.8╞ «flt gou/bx»			& QV60.8 - 62.3m 1%Sp1%Tt	Blebs Tt in 20cm Zone QV + silicified
		╡76.4 - 76.8╞ «flt gou/bx»				sed.
		╡79.2 - 79.7╞ «flt gou + block»			62.3 - 67.2 1-2%Sp	
					╡67.2 - 67.9╞	
					«3-4%Sp6nTt»	
					67.9 - 71.6m (1%SpTt	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30238	35.90	36.90	1.00	0.01	0.02	0.01	0.3	0.03									
BCD30239	36.90	37.60	0.70	0.01	0.01	0.01	0.6	0.03									
BCD30240	37.60	38.10	0.50	0.14	0.10	0.08	157.6	0.26						2.71			
BCD30241	38.10	40.00	1.90	0.01	0.03	0.03	16.6	0.38									
BCD30242	40.00	41.50	1.50	0.17	1.44	1.30	45.4	0.34									
BCD30243	41.50	43.00	1.50	0.01	0.94	0.59	13.6	0.43									
BCD30244	43.00	44.50	1.50	0.01	0.44	0.38	6.2	0.60									
BCD30245	46.90	48.40	1.50	0.03	0.14	0.11	22.4	0.07									
BCD30246	48.40	49.80	1.40	0.07	0.21	0.26	33.1	0.12									
BCD30247	49.80	50.80	1.00	0.52	1.52	0.65	289.7	0.14						2.76			
BCD30248	50.80	51.10	0.30	2.94	2.02	1.78	1142	0.72						3.11			
BCD30249	51.10	52.20	1.10	0.02	0.42	0.31	13.5	0.05									
BCD30250	52.20	52.90	0.70	0.12	3.82	2.08	68.3	0.11						2.92			
BCD30251	52.90	54.40	1.50	0.07	0.51	0.63	25.4	0.15									
BCD30252	54.40	55.40	1.00	0.11	0.53	0.37	36.8	0.25									
BCD30253	55.40	56.60	1.20	0.20	0.96	0.49	39.4	0.44									
BCD30254	56.60	57.10	0.50	0.46	0.44	0.17	8.5	7.48						3.18			
BCD30255	57.10	58.60	1.50	0.11	0.08	0.05	8.2	0.59									
BCD30256	58.60	59.90	1.30	0.18	0.28	0.25	55.6	0.44									
BCD30257	60.40	60.80	0.40	0.41	1.18	1.04	32.2	3.74						2.62			
BCD30258	60.80	62.30	1.50	0.67	0.61	0.33	258.4	0.23						2.81			
BCD30259	62.30	62.70	0.40	0.04	0.12	0.06	15.9	0.07									
BCD30260	62.70	64.10	1.40	0.08	0.25	0.08	23.4	0.14									
BCD30261	64.10	65.60	1.50	0.04	0.18	0.05	15.6	0.08									
BCD30262	65.60	67.20	1.60	0.04	0.11	0.07	18.4	0.04									
BCD30263	67.20	67.90	0.70	2.84	3.58	1.92	890	0.17						2.83			
BCD30264	67.90	69.90	2.00	0.21	0.28	0.23	82.7	0.03									
BCD30265	69.90	71.60	1.70	0.20	0.22	0.19	84.6	0.03									
BCD30266	71.60	73.60	2.00	0.17	0.32	0.16	60.3	0.04									
BCD30267	73.60	75.60	2.00	0.03	0.13	0.05	13.8	0.03									

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.51N
EAST: 9660.12W
ELEV: 1333.38

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

COLLAR DIP: -73° 0' 0"
LENGTH OF THE HOLE: 68.60m
START DEPTH: 0.00m
FINAL DEPTH: 68.60m

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

DATE STARTED: February 2, 1991
DATE COMPLETED: March 2, 1991
DATE LOGGED: February 15, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-73° 0'	ACID	OK		-	-	-	-	-	
39.60	-	-71° 0'	ACID	OK		-	-	-	-	-	
64.00	-	-71° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 15.50	«DOL MAFICS»	Pale to dark green chloritic tuffs altered to mottled and banded green-yellow sericite and grey-white dolomitized mafics. Numerous white qtz-carb veins Foliation: 1.1 4.6 9.8 13.7 Faults and fractures: 5.8 - 6.4m blocky ⎨8.0 - 8.2⎬ «flt gouge» 10.7 - 10.8m blocky + gouge 12.0 - 12.2m gou + blocky ⎨12.4 - 12.6⎬ «flt gou/bx»	69 58 70 80	Patchy sil'n. Intense ferro-dol Moderate to intense greenish yellow ser'n, increases in abundance to end of interval	1% pyrite	Contact with easily recognisable lapilli marked by QV _ dol mafics and minor gouge.
15.50 TO 21.10	«MFLT»	Greenish yellow sericitized lapilli in pale to dark green chloritic, dolomitic tuff matrix. Foliation: 16.8 Faults & fractures: ⎨19.4 - 19.8⎬ «blocky» + minor healed gouge 20.4 - 20.6m blocky + flt bx ⎨20.8 - 21.0⎬ «flt bx»	70	Intense patches of greenish yellow ser'n. Mod-intense ferro dol Patchy sil'n.	1% pyrite	Sharp lower contact of mafic and sil Arg. Mafic and argillite form a partly healed flt breccia.
21.10 TO 31.50	«MAF/SIL AR6»	Intermittently faulted silicified, graphitic argillite with minor greenish, greyish dolomitized mafic. Foliation: 23.2m 26.2m 31.4m Faults and fractures: ⎨22.1 - 22.6⎬ «flt bx + blocky» 23.1 - 23.2m flt gou ⎨23.9 - 24.3⎬ «flt bx/gou» 24.5 - 25.4m flt-bx, blocky and healed bx. ⎨26.9 - 27.4⎬ «flt bx» 27.6 - 28.0m flt bx gou 28.1 - 31.5m fault breccia; very strained contorted mixed argillite/mafic and QV within lower metre (30.5 - 31.5m)	64 68 65 20	Ferro-dol'n of mafic component. Patchy sil'n.	Variable pyrite, 1-7% Trace base metals. 23.1 - 23.2m Cp in QB block within mino r flt. ⎨30.2 - 30.3⎬ «1%Cp6%Py» within QV in brecciated Sil Arg.	Interval generally blocky and broken.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
31.50 TO 33.80	«FLT GOU/ BX»	Intense zone of fault breccia and gouge. Includes partly healed, (silicified) qtz bx. Sert bx 33.2 - 33.5m	60			
33.80 TO 34.70	«QV/SEDS/ TALC»	Mixed interval of white qtz carb vein, grey-white mottled qtz flooded seds and soft green patches talc.		Talc formation due to faulting. Single patch yellow sericite 10 cm section sil'n.	3 - 4% pyrite	Lower contact based on talc content decreasing.
34.70 TO 42.70	«QV/SEDS»	Sections of white QV + minor carbonate, grey-white fine mottled, flooded silicified sediments. QV dominant sections 36.6 - 37.6m, 38.1 - 38.5m Foliation in sert @ 37.8m 43.3 - 43.4m Sert	54 80	Patches of yellow sericite within QV. Intense sil'n.	Variable pyrite, 1-7% as disseminations blebs and patches. Cp as dissem. grains and blebby patches within mottled, flooded QV/ seds. Tt as small blebs/grains disseminated in mottled QV/seds and as larger blebs patches in white QV. ╡34.7 - 36.3╞ «4%Cp+Sp5%Tt» ╡38.5 - 40.2╞ «7%Sp+Cp4%Tt»	
42.70 TO 61.30	«ALT SEDS/ FLT ZNE»	Faulted zone of grey silicified, to sericitic pyritic seds with sections of white Qtz-carb veins. Intensely silicified seds and QV form blocky intervals to gouge and breccia. 47.8 - 49.2m intense fault gouge/breccia. 56.3 - 57.9 gouge + white QV blocks Foliation: 42.9m 45.0m 54.9m 58.9m	62 50 54 50	Patchy sil'n Moderate to intense grey ser'n.	Variable sulphides distributed as follows: ╡42.7 - 44.2╞ «2%SpTt» in sheared blocky and grey sil seds. ╡46.2 - 47.8╞ «1-2%Sp6n» blebs in blocky section sil seds. ╡51.5 - 52.1╞ «flt MSSX py» coarse massive pyrite in QV, intensely faulted to bx/gou. 52.1 - 53.6m pyritic seds v. friable (20 - 30cm blocky) 25% py + 3% cp. ╡53.6 - 54.6╞ «3%CpTrSp2%Py» includes 7cm Qtz-carb vein with Cp bleb 3x2cm. 57.9 - 58.2m 4% Sp+Tt in QV flooded sil sed. Intense gouge on upper contact of sample. No significant minlz'n downhole.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
61.30 TO 68.60	«AR6 WACKEY ALT SEDS»	Black very fine argillite with grey wacke interbeds grades downhole into qtz veining and weakly to locally intensely, sericitic seds.		ǂ67.1 - 67.5ǂ «Sert»	1-2% pyrite, minor zone concentration 10% Py in sert 67.1 - 67.5m	Qtz vein has low angle of intersection with c/a, varying from 30 deg to sub parallel.
		Foliation in argillite varies from...	53			
		over section 61.3 - 64.5m	74			
		67.1m	75			
		Seds are faulted				
		ǂ65.5 - 66.6ǂ «flt bx/gou»				
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30268	31.50	33.20	1.70	0.07	0.03	0.02	84.6	0.21									
BCD30269	33.50	33.80	0.30	2.22	0.32	0.03	2447	3.51						2.58			
BCD30270	33.80	34.70	0.90	0.31	0.07	0.09	388.5	0.83						2.74			
BCD30271	34.70	35.70	1.00	1.38	0.19	0.05	1229	1.74						2.61			
BCD30272	35.70	36.30	0.60	3.94	1.76	0.03	3601	4.95						2.75			
BCD30273	36.30	37.80	1.50	0.04	0.04	0.03	57.4	0.21									
BCD30274	37.80	38.50	0.70	0.01	0.02	0.02	10.7	0.03									
BCD30275	38.50	39.50	1.00	2.52	2.46	0.03	2157	3.39						2.80			
BCD30276	39.50	40.20	0.70	2.14	0.52	0.03	2274	3.62						2.92			
BCD30277	40.20	41.70	1.50	0.07	0.15	0.03	85.3	0.27									
BCD30278	41.70	42.70	1.00	0.10	0.05	0.06	139.6	0.37						2.87			
BCD30279	42.70	44.20	1.50	1.22	2.02	0.88	1262	2.12						2.86			
BCD30280	44.20	46.20	2.00	0.08	0.45	0.23	82.4	0.24									
BCD30281	46.20	47.80	1.60	0.19	1.26	0.77	166.7	0.38						2.62			
BCD30282	49.20	50.70	1.50	0.04	0.24	0.18	36.6	0.36									
BCD30283	50.70	51.50	0.80	0.01	0.01	0.11	6.3	0.34									
BCD30284	51.50	52.10	0.60	0.07	0.03	0.16	11.9	0.56									
BCD30285	52.10	53.60	1.50	0.45	0.02	0.07	60.1	0.60									
BCD30286	53.60	54.60	1.00	0.56	0.48	0.22	59.3	0.58									
BCD30287	54.60	56.30	1.70	0.11	0.75	0.50	46.4	0.44									
BCD30288	56.30	57.90	1.60	0.01	0.02	0.04	6.3	0.12									
BCD30289	57.90	58.20	0.30	0.50	2.10	0.80	118.7	0.43						2.63			
BCD30290	58.20	58.50	0.30											2.74			

From (m)	To (m)	Length (L)	Sum Of Length S)= 0.00cm	RQD S/LX100	Number Of Fracturs	Fracturs Per Metres	Number Of Veins	Veins Per Metres	Angle	Comments
0.00	0.00	0.00	0.00	0	0	0	0	0	0	

MINNOVA INC.

HOLE NUMBER: U1330-31 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 632.70N
EAST: 9668.25W
ELEV: 1333.37

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

COLLAR DIP: -51° 0' 0"
LENGTH OF THE HOLE: 61.90m
START DEPTH: 0.00m
FINAL DEPTH: 61.90m

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

DATE STARTED: February 3, 1991
DATE COMPLETED: February 4, 1991
DATE LOGGED: February 16, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-51° 0'	ACID	OK	
30.50	-	-51° 0'	ACID	OK	
61.00	-	-51° 0'	ACID	OK	

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

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 16.70	«DOL MAFICS»	Mottled, banded, grey-white and yellow green, altered chloritic mafic tuffs. Numerous white qtz. carb veins. Foliation: 1.0m 4.3m 9.6m 16.7m Faults and fractures: 7.7 - 8.3m flt & fracture 9.6 - 9.9m «flt bx» 11.2 - 11.4m «flt bx» 12.6 - 13.1m minor gouge, core breaks easily along foliation. 15.0 - 15.2 blocky + gouge 15.4 - 16.2 minor gou/blocky.	65 77 60 62	Intense ferro-dol Patchy sil'n. Mod. to intense ser'n.	1% pyrite.	
16.70 TO 18.30	«FLT ZONE»	Mafics faulted to blocky, gouge and breccia. Minor healed breccia.				
18.30 TO 20.90	«MFLT»	Greenish-yellow sericitized lapilli in chloritic dolomitic tuff matrix Foliation: 19.5m Interval blocky.	65	Mod to intense ferro-dol and greenish yellow ser'n.	1% pyrite.	Minor gouge at lower contact.
20.90 TO 33.60	«MAF/SIL ARG»	Mixed interval of tectonized, black, graphitic silicified argillite and pale greyish green very fine grained mafic tuff. Qtz and Qtz-carb veins and veinlets occupy 15%. 21.8 - 25.8m mafic dominant with QV-carb 25.0 - 25.3m. 28.3 - 28.6m Qtz carb 29.9 - 31.8m mafic dominant Faults and fractures: 21.4m blocky 22.0m gouge 25.9 - 26.0m minor gouge & blocky 29.2 - 29.3m blocky 32.2 - 33.6m «flt gou/blocky» intense gouge at contact.	77 64	Mod to intense ferro-dol Patchy to pervasive sil'n.	1-2% pyrite overall, local bands to 10mm at 31.9m	QV and highly graphitic sil arg mark upper contact.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
33.60 TO 36.50	«QTZ VEIN»	Grey-white quartz vein.		V. minor altered sed inclusions. Minor talc, fuchsite or hairline fractures	Overall <1/2% scattered blebs SpCpTt	
36.50 TO 53.90	«QV/ALT SEDS»	Alternating intervals grey-white to white quartz-carbonate veins, yellow sert and lesser grey sericitic seds (mut). 35% Q.V. Foliation: 38.7m 40.2m 41.6m 49.0m 50.8m Faults and fractures: ╡36.9 - 37.0╞ «flt gou/bx» 38.9 - 39.0m flt gou + blocky ╡41.7 - 41.9╞ «flt gou + blocky» ╡42.8 - 43.0╞ «flt gou + blocky» 45.7 - 45.9m flt gou/bx ╡46.1 - 47.3╞ «flt gou + blocky» 47.3 - 48.8m blocky ╡49.4 - 50.3╞ «flt gou/bx» ╡51.5 - 51.8╞ «flt gou/shear» highly strained grey black mut. 52.4 - 52.4m gouge + strained qtz. vein	 76 65 71 76 60	Sections of intense Yellow ser'n lessor grey sericite. Seds locally flooded by sil' to grey-white mottled QV/sed.	Pyrite concentrated in seds as bands, patches and blebs 10 - 15%. Variable distribution base metal sulphides: 38.6 - 39.5m 10-15% Py1%Tt ╡39.5 - 40.3╞ «6%Cp 1/2%Tt» 40.3 - 49.4m Trace Cp but mainly Py insert sections. 50.3 - 51.0m fine dissem. CpTtSp in partly faulted grey sil sed. 51.0 - 51.5m SpCp blebs in white QV +QV+Sed inclusions. 51.5 - 51.8m fine dissem. SpCpTt in strained grey sed (mut) ╡51.8 - 52.3╞ «8%Sp2%Cp6n1%Tt» Massive blebs dark brown Sp rimmed with Tt, in white Qtz-carb vein.	Sert generally friable.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30290	33.60	34.60	1.00	0.12	0.03	0.01	131.4	0.17						2.74			
BCD30291	34.60	35.60	1.00	0.18	0.05	0.02	76.4	0.13									
BCD30292	35.60	36.50	0.90	0.01	0.01	0.01	10.2	0.03									
BCD30293	36.50	37.20	0.70	0.05	0.02	0.01	53.1	0.17									
BCD30294	37.20	38.60	1.40	0.01	0.01	0.01	4.2	0.03									
BCD30295	38.60	39.50	0.90	0.13	0.10	0.01	154.8	0.37						2.71			
BCD30296	39.50	40.30	0.80	1.38	0.04	0.01	72.3	0.17									
BCD30297	40.30	41.80	1.50	0.01	0.01	0.01	2.1	0.06									
BCD30298	41.80	43.80	2.00	0.01	0.01	0.01	3.7	0.04									
BCD30299	43.80	45.80	2.00	0.01	0.01	0.01	2.9	0.09									
BCD30300	45.80	47.80	2.00	0.06	0.07	0.02	3.7	0.06									
BCD30301	47.80	49.40	1.60	0.01	0.01	0.03	1.6	0.03									
BCD30302	49.40	50.30	0.90	0.09	0.92	0.54	76.7	0.19									
BCD30303	50.30	51.00	0.70	0.96	6.08	3.82	1062	1.86						2.82			
BCD30304	51.00	51.50	0.50	0.81	1.08	0.40	347.6	0.28						2.63			
BCD30305	51.50	51.80	0.30	1.60	4.22	0.86	1068	1.97						2.49			
BCD30306	51.80	52.30	0.50	0.77	8.72	1.08	398.7	1.01						2.95			
BCD30307	52.30	53.90	1.60	0.05	0.05	0.05	33.3	0.06									
BCD30308	56.30	56.80	0.50	0.80	0.61	2.96	375.6	1.41						2.92			
BCD30309	56.80	57.30	0.50														

MINNOVA INC.

HOLE NUMBER: U1330-32 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 631.67N
EAST: 9660.15W
ELEV: 1333.50

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

COLLAR DIP: -30° 0' 0"
LENGTH OF THE HOLE: 53.30m
START DEPTH: 0.00m
FINAL DEPTH: 53.30m

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

DATE STARTED: February 4, 1991
DATE COMPLETED: February 4, 1991
DATE LOGGED: February 17, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BPOSVENIE DRO;;ONG
CASING: NONE
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-30° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-30° 0'	ACID	OK		-	-	-	-	-	
53.30	-	-30° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
Ø.ØØ TO 21.8Ø	«DOL MAFICS»	Mottled banded and laminated grey-white dolomitised and greenish yellow sericitized mafic tuffs. Abundant Qtz-carb veins Foliation: Ø.3m 1Ø.7m 19.8m 21.6, Faults and fractures: 1.8 - 2.Øm Minor gouge 7.3 - 7.4m gou + blocky ⎨18.8 - 19.4⎬ «blocky + minor gou»	 54 54 4Ø 56	Intense ferro-dol Moderate greenish yellow ser'n Patchy sil'n Alteration increases in intensity to lower contact.	1% pyrite	Minor gouge at lower contact.
21.8Ø TO 26.9Ø	«MFLT»	Greenish-yellow sericitized lapilli in dolmitized, chloritic tuff matrix. Lapilli texture destroyed due to alteration 21.8m - 3cm gouge ⎨22.3 - 22.4⎬ «flt gou» ⎨23.4 - 23.6⎬ «flt gou/bx» 23.6 - 23.9 broken core fracture at angle cuts across foliation 25.4 - 25.7m fracture	 15 2Ø 2Ø	Intense ser'n lapilli Patchy sil'n Intense ferro-dol of matrix.	1-2% pyrite	Lower contact quite sharp.
26.9Ø TO 35.3Ø	«MAF/SIL ARG»	Intervals of greyish green dolomitized mafic and black, graphitic silicified argillite. 26.9 - 27.7 mainly sil arg. ⎨27.7 - 27.8⎬ «flt gou/bx» 27.7 - 31.Øm mafic ⎨31.Ø - 32.Ø⎬ «flt gou/bx/blocky» 32.Ø - 35.3 sil arg 33.9m minor gouge ⎨34.4 - 34.5⎬ «flt gou» Foliation 27.8 31.Ø 35.Ø	 6Ø 6Ø 57 53	Patchy to intense sil'n of argillite. Intense ferro-dol of mafic	Variable pyrite 1-5% Local patches up to 2Ø% at 32.3 2% Sp blebs associated with QV in mafic at 29.6 - 29.7m Tr Tt?	Interval is tectonised. Lower contact quite sharp.
35.3Ø TO 42.3Ø	«SER/QTZ MAFIC»	Intensely altered mixture of mafics (and possible sediments?). Abundant laminated, banded, pale yellow to dark yellow sericite and grey quartz. Intense deformation/tectonism. Foliation variable due to folding, cleavage 36.2m 36.2m 39.1m 41.6m	 52 6Ø 64 8Ø	Intense pale greenish yellow to yellow ser'n.	5 - 1Ø% pyrite.	Old terminology Sert - Chert Relict greenish, chloritic colour suggests mafic protolith. Mafic content decreases to lower contact.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Minor gouge intervals at: 38.3m 39.0m 41.1m 42.0m				
42.30 TO 48.10	«QV/SERT FLT ZNE»	Faulted zone of grey to white qtz and qtz carbonate veins, and yellow to olive green sert. Intense faulting 42.8 - 44.0m Foliation 44.2 46.6	49 70	Intense "massive" yellow-olive green ser'n.	15% pyrite concentrated as blebs within quartz veins. Locally 20% pyrite over 5-20 cm. Base metals associated with white QV and grey silicified sed/QV. [47.0 - 47.2] «15%SpTt» in faulted folded white QV	White Qtz-Carb veins, Sert and Mut. Sert very friable.
48.10 TO 53.30	«QV/SERT»	Less faulted interval White and grey QV, Qtz-carb, and yellow-olive green sert. Foliation: 49.6m 52.4 Faults: 50.0 - 50.1m gouge [50.3 - 50.9] «flt gou/bx» 52.7 - 52.8m QV brecciated.	69 72	Intense massive yellow-olive green ser'n.	15% pyrite [48.2 - 48.7] «15% Py2%Cp2%Gn» Base metals concentrated in 7 cm width QV.	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		COMMENTS
BCD30309	29.50	29.90	0.40	0.02	0.67	0.35	6.6	0.03										
BCD30310	35.50	37.50	2.00	0.01	0.02	0.01	0.6	0.03										
BCD30311	44.00	44.50	0.50	0.01	0.09	0.01	1.5	0.10										
BCD30312	44.50	47.00	2.50	0.01	0.03	0.01	1.1	0.07										
BCD30313	47.00	47.20	0.20	0.29	4.65	0.57	22.3	0.30						2.75				
BCD30314	47.20	48.20	1.00	0.01	0.03	0.04	2.0	0.06										
BCD30315	48.20	48.70	0.50	0.31	0.02	1.10	24.6	0.14										
BCD30316	48.70	50.30	1.60	0.01	0.01	0.02	1.9	0.08										
BCD30317	50.30	51.10	0.80	0.03	0.02	0.01	2.2	0.20										
BCD30318	51.10	51.60	0.50	0.11	0.01	0.02	2.8	0.11										

NINNOVA INC.

HOLE NUMBER: U1330-33 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 631.86N
EAST: 9660.17W
ELEV: 1334.23

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

COLLAR DIP: -15° 0' 0"
LENGTH OF THE HOLE: 89.00m
START DEPTH: 0.00m
FINAL DEPTH: 89.00m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 4, 1991
DATE COMPLETED: February 5, 1991
DATE LOGGED: February 18, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: NONE
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-15° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-15° 0'	ACID	OK		-	-	-	-	-	
89.00	-	-15° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 25.10	«DOL MAFICS»	Pale to dark green chloritic mafic tuffs altered to laminated, banded and mottled grey-white dol-mafic and greenish yellow sericite. Foliation: 4.0m 11.2m 17.7m 24.7m Faults and fractures: 13.2 - 13.4m fracture subparallel to c/a 13.4 - 13.7m «flt gou/bx» 18.8 - 18.9m minor gouge 21.7 - 22.1m blocky 23.2 - 23.5m blocky	 56 50 42 40	Intense ferro-dol. Patchy sil'n. Moderate greenish-yellow ser'n.	1-2% pyrite	Numerous white qtz-carb veins in upper 15.0m. Lower contact conformable.
25.10 TO 35.90	«MFLT»	Greenish-yellow sericitized lapilli in a dolomitized, to sericitized tuff matrix. Foliation: 28.8m 33.5m 35.1m Faults and fractures: 30.5 - 31.0m «flt gou/bx» 31.0 - 32.0 blocky. Flt gouge at lower contact between mafic and sil arg.	 55 58 60 35	Alteration increases to lower contact. Faint "ghost" lapilli.	1-2% pyrite.	Lower contact marked by 10cm gouge.
35.90 TO 41.80	«MAF/SIL ARG»	Tectonised black, graphitic, silicified argillite, inter-mixed with greenish dolomitic mafic. 24% grey-white QV/flooding Foliation: 37.2 40.7 Faults and fractures: 35.6 - 35.7m minor gouge 38.6 - 38.7m «flt gou»	 50 43	Mod to intense ferro-dol of mafic Patchy to intense sil'n of argillite. Moderate development green to brown sericite within mafics.	Variable pyrite 1-15% Base metals within white QV flooding argillite. 41.3 - 41.8m «3%Cp+Sp»	
41.80 TO 43.20	«FLT ZONE»	Blocky interval punctuated with gouge. The zone is not intensely faulted. Blocky sections, strained white qtz.carb and grey quartz. Minor mafic component.		Minor green talc and fuchsite.	1-5% pyrite. (1/2% blebs Cp in white Qtz-carb vein blocks. 42.5 - 42.9m «3%Py Tr Cp»	
43.20 TO 48.10	«MAF/QTZ SER»	Laminated to banded interval of grey qtz. yellow sericite and greenish (chloritic?) mafic. Foliation: 45.1 47.5	 77 62	Intense laminated yellow ser'n. Patchy sil'n associated with QV.	3-7% disseminated pyrite in sert.	Splits easily along foliation. Qtz veins folded, stretched, boudined.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Minor intervals gouge parallel to foliation at 44.0m, 44.7m, 46.6m, 47.4m.				
48.10 TO 50.20	«QV/SER FLT ZNE»	Blocky to broken white Qtz-Carb vein, yellow sericite and grey quartz. Local intense gouge at 48.8m, 49.4-49.7m, and 49.9-50.1. Lower contact at	50	Mod to intense yellow ser'n within gouge.	1-7% pyrite. Occasional coarse blebs in QV.	
50.20 TO 51.20	«SIL SED/ MSSX»	50.2 - 50.4 greyish brown sericitic/pyritic partly silicified sed. 50.4 - 51.2m massive to semi massive sulphides	50	Later stage silicification by QV?	╟50.4 - 51.2╢ «40%Py6%Cp6nSp» Blebs Cp)6n)Sp within massive to semi massive pyrite and white patches of QV.	Lower contact of sulphide marked by minor core loss in gouge.
51.20 TO 82.00	«QV/ALT SEDS/ WACKE»	Mixed interval of intensely to weakly altered sediments, (sert/mut), wacke, white qtz-carbonate veins, grey quartz veins with sed inclusions.		Yellow ser'n varies from weak to intense. Yellow sericite)grey sericite. Local intense sil'n.	Variable distribution of sulphides.	
		Sub intervals as follows: 51.2 - 53.0 Sert	62	Massive sert	Pyrite in bands parallel to foliation. 15%.	
		╟53.0 - 53.6╢ «flt gou + blocky» in QV + grey wacke. 53.6 - 56.1m weakly altered silty argillite grading into wacke.	42 55	Weak to mod grey sericite	2-3% dissem. blebs Py.	
		56.1 - 57.0m, 50:50 QV+wacke ╟57.0 - 57.5╢ «flt zone» in QV+seds. 57.5 - 60.4m, blocky partly faulted interval QV/alt seds. ╟60.4 - 60.9╢ «flt gou/bx» in QV/alt seds. 60.9 - 61.8m QV/alt seds.			56.1 - 61.8m Pyrite concentrated in seds and sil, grey seds/QV. White QV minor blebby pyrite.	Interval 56.1 - 61.8m dominated by white qtz-carb.
		61.8 - 63.4m sert)mut ╟63.4 - 67.0╢ «QV» white to grey qtz and qtz carb veins + silicified, mottled grey white, flooded seds.	55	Massive sert lesser grey py/ser/mut Minor Sert and ut patchesm	15% pyrite in bands. Scattered blebs SpCp ╟63.4 - 63.9╢ «1-2% Sp» Trace to 1/2% Sp 64.6 - 66.1m Trace to 1/2% Sp near pyritic Sert 66.4 - 66.5 Tr Tt?	friable, flt zone 63.1 - 63.4m Sert 66.4 - 66.5m folded, may be a hinge zone.
		67.0 - 74.1m mixed grey and yellow sericitized sediments with grey silicified bands and patches.	50	Variable weak to intense yellow and grey (sert)mut) ser'n of fine silty argillite and wacke.	Py 3-15% within seds, increasing to near Qtz carb veins.	69.9 - 70.1m double hinge zone.S-Z fold with long axis parallel to c/a.
		Qtz carb veins, 68.9 - 69.3m	58 20			

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
			30			
		and at 70.3 - 70.6m	50			
		⌈74.1 - 74.7⌉ «flt gou + QV»				
		74.7 - 75.4m Qtz-carb vein with 10cm fault at 75.1 - 75.2m.			3-5% blebby pyrite in sed inclusions.	If QV record good assays further sampling required.
		75.4 - 82.0m yellow and grey sericitized siltite/argillite and wacke.	44 53	Intensity of alteration decreases downhole to end of interval.	Pyrite content decreases downhole 7 - 1%.	Hinge zone 78.7m.
		Qtz-carb vein 77.1 - 78.1m, 80.0 - 80.5m, 80.7 - 81.3m.				
		Faults at ⌈79.8 - 80.0⌉ «flt gou/bx» 80.6 - 80.7m flt gouge.				Conformable lower contact. Marked as transition to black unaltered argillite.
		Lower contact at angle	40			
82.00 TO 85.70	«ARG/ WACKE»	Deformed black graphitic argillite and lesser siltite wacke Fault gouge at lower contact.	40	Minor grey brown pyritic sericitic sed. 83.7 - 83.9m	2-5% pyrite	Hinge zone 85.5m.
85.70 TO 89.00	«ALT SED?»	Weakly to moderately altered wacke? (Mafic component?)	51	Mottled grey-white texture with brown sericite wisps and patches. Speckled white carbonate grains clasts?	1-2% pyrite.	
	E.O.H.					
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30319	39.80	41.30	1.50	0.01	0.01	0.01	0.09	0.06									
BCD30320	41.30	41.80	0.50	0.07	0.43	0.19	15.3	0.08									
BCD30321	42.50	42.90	0.40	0.09	0.01	0.02	10.9	0.06									
BCD30322	50.40	51.20	0.80	0.54	8.74	4.32	156.1	10.34						4.07			
BCD30323	54.60	56.10	1.50	0.01	0.01	0.01	0.6	0.12									
BCD30324	56.10	58.60	2.50	0.01	0.03	0.02	2.0	0.18									
BCD30325	58.60	60.10	1.50	0.01	0.01	0.02	2.9	0.13									
BCD30326	61.80	63.40	1.60	0.01	0.03	0.01	3.2	0.14									
BCD30327	63.40	63.90	0.50	0.01	0.45	0.01	9.4	0.05									
BCD30328	63.90	64.60	0.70	0.09	0.15	0.01	3.2	0.04									
BCD30329	64.60	66.10	1.50	0.08	0.14	0.01	72.8	0.05									
BCD30330	66.10	67.00	0.90	0.07	0.16	0.05	48.4	0.07									
BCD30331	68.90	69.30	0.40	0.01	0.01	0.01	1.5	0.06									
BCD30332	70.30	70.90	0.60	0.01	0.01	0.01	2.9	0.37									
BCD30333	74.70	75.40	0.70	0.01	0.01	0.01	1.1	0.25									

KINNOVA INC.

HOLE NUMBER: U1330-34 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.98N
EAST: 9679.81W
ELEV: 1332.80

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

COLLAR DIP: -75° 0' 0"
LENGTH OF THE HOLE: 80.80m
START DEPTH: 0.00m
FINAL DEPTH: 80.80m

COLLAR GRID AZIMUTH: 360° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: February 6, 1991
DATE COMPLETED: February 7, 1991
DATE LOGGED: February 21, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-74° 0'	ACID		V. WEAK
30.50	-	-74° 0'	ACID	OK	
79.20	-	-75° 0'	ACID	OK	

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

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 14.50	«DOL MAFICS»	Pale green to dark green mottled grey-white, banded yellow green, dol mafic tuffs Numerous white QV Foliation: 1.2m 4.6m 10.4m Faults fractures: 0.6 - 1.1m flt gou + blocks ⟦5.4 - 5.7⟧ «flt gou/bx»	 44 54 52	Intense ferro-dol Greenish yellow ser'n.	1-2% pyrite.	
14.50 TO 24.40	«MFLT/ALT MAF»	Sericitized yellow lapilli in dolomitized matrix grading into intensely altered mafic, with no recognisable textures near lower contact. Foliation: 21.0m Faults: ⟦17.9 - 18.3⟧ «blocky» 23.8 - 24.4m blocky	 46	Greenish-yellow ser'n Patchy sil'n and ferro-dol.	1-2% pyrite.	
24.40 TO 31.20	«SIL ARG/ MAF»	Mixed tectonised, black silicified, graphitic argillite and greenish mafic. 30.5 - 31.0m intense gouge/bx. Foliation:	 49	Patchy to banded sil'n. Ferro-dol of mafic.	1-2% pyrite	Blocky interval with intermittent friable gouge core. Faulting rotated banding/bedding parallel to c/a at 28.5m
31.20 TO 38.20	«FLT ZONE»	Fault zone through contact of arg/maf, yellow sert and grey alt seds. (mut) Intense gouge/bx, 31.2 - 34.1m Sert gouge 32.4 - 33.5m 33.5 - 34.1 grey gouge 34.1 - 35.1m grey silicified, mottled grey-white QV/sed. 35.1 - 36.1m 80% gouge 36.1 - 38.2m 60% strained blocs grey alt seds.	 30 40	Grey and yellow ser'n Patchy sil'n locally silicified QV/sed.	⟦34.1 - 35.1⟧ «3-4% Tt» blebs to fine grained Tt in grey-white, fine mottled qtz vn and sed inclusions. 35.1 - 36.1m mainly gouge includes Tt in 20cm block.	24% remnant blocks
38.20 TO 80.80	«ALT SEDS»	Grey sericitic sediments, with silicified and pyritic intervals (mut). Protolith textures locally visible. e.g., fragmental/wacke and black argillite. Foliation: 40.4m 46.3m 54.5m 60.0m	 56 49 40 40	Patchy to banded sil'n. Patchy to veined white quartz-carbonate.	Variable pyrite and base metal sulphides. Local concentrations of blebby Sp associated with QV-carb and silicified patches. Distribution: ⟦41.9 - 42.9⟧ «2-3% Sp5%Py»	MUT Lower interval deformed hinge zones faintly visible through alteration within interval 67-80.8m.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Shearing 65.7m	36		╡44.2 - 44.8╞	
		77.5m	57		«7%Py3%Sp1%Gn»	
		80.0m	48		47.60-47.67m, a 7cm vein with	
		Faults and fractures:			blebby Sp & Tt, 3-4% combined.	
		39.6 - 40.2m blocky				
		╡42.9 - 43.5╞ «flt bx/blocky»			51.8 - 52.3m sheared, bands of	
		Minor gouge/straining at			blebby Sp in argillic mut. 5% Sp	
		46.0 - 46.3m, 48.0 - 48.2m			5-7% Py	
		╡51.8 - 52.3m╞ «flt/frac»			╡55.8 - 56.4╞	
		52.9 - 53.3m blocky			«1%Sp(1%Tt»	
		╡54.3 - 54.6╞ «flt bx»				
		65.5 - 66.0m friable/strained			56.4 - 57.4m white Qtz-carb invade	
		╡67.7 - 68.2╞ «flt gou/bx»			Alt Seds	
		╡72.2 - 72.4╞ «flt gou»			1%GnSp(1/2%Tt.	
		╡76.7 - 77.0╞ «flt gou/bx»				
					59.9 - 60.4m 4-5mm blebs Sp in	
					white Qtz-carb.	
					╡64.4 - 64.8╞	Pyrite interval of greatest
					«30% Py» fine semi-massive pyrite bed.	concentration. However 64.8 - 67.7m
						is relatively pyritic, 10-20% gouge
					66.3 - 67.7m pyritic sed/mut, quite	zones cut SMSK at 64.4 and 64.6m.
					sheared, gouge at 66.7 and 67.4m.	
					67.7 - 68.2, 3%CpSp in blocks	
					silsed/mut within flt zone.	
					68.2 - 69.7m includes 30cm Qtz-carb	Contains banded blebs CpGnSp.
					vein subparallel to c/a.	
					76.2 - 77.7m includes white qtz-carb	Vein folded in Mut, forms a 1/2 moon
					with blebby SpTt at 76.3-76.5m	shape parallel to c/a.
					Overall 2-4% SpGntrTt.	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30334	33.50	34.10	0.60	0.22	0.44	0.13	215.6	0.71						2.82			
BCD30335	34.10	35.10	1.00	2.14	1.18	0.08	2044	3.30						2.80			
BCD30336	35.10	36.10	1.00	0.81	1.86	0.68	581.0	1.42						2.61			
BCD30337	36.10	37.60	1.50	0.10	0.51	0.28	43.4	0.32									
BCD30338	37.60	38.20	0.60	0.03	0.17	0.16	21.1	0.25									
BCD30339	38.20	40.20	2.00	0.06	0.24	0.18	13.8	0.06									
BCD30340	40.20	41.90	1.70	0.15	0.77	0.46	38.6	0.22									
BCD30341	41.90	42.90	1.00	0.08	1.82	0.69	35.3	0.18									
BCD30342	44.20	44.80	0.60	1.32	4.46	2.24	267.4	0.29						3.17			
BCD30343	46.50	48.50	2.00	0.11	0.31	0.20	26.7	0.10									
BCD30344	48.50	50.50	2.00	0.31	0.42	0.34	80.3	0.11									
BCD30345	50.50	51.80	1.30	0.02	0.35	0.20	9.9	0.09									
BCD30346	51.80	52.30	0.50	0.04	2.10	0.70	18.9	0.12									
BCD30347	52.30	53.80	1.50	0.02	0.33	0.19	8.8	0.13									
BCD30348	55.80	56.40	0.60	0.13	0.25	0.16	41.4	0.09									
BCD30349	56.40	57.40	1.00	0.44	0.61	0.92	110.6	0.19						2.81			
BCD30350	57.40	59.40	2.00	0.06	0.35	0.23	19.4	0.29									
BCD30351	59.40	59.90	0.50	0.05	0.16	0.22	14.3	0.41									
BCD30352	59.90	60.40	0.50	0.38	3.42	0.71	87.9	0.37						3.02			
BCD30353	60.40	61.40	1.00	0.01	0.60	0.18	9.8	0.35									
BCD30354	61.40	63.40	2.00	0.03	0.59	0.33	13.4	0.48									
BCD30355	63.40	64.40	1.00	0.01	0.16	0.05	2.2	0.50									
BCD30356	64.40	64.80	0.40	0.02	0.23	0.05	4.9	1.98						3.45			
BCD30357	64.80	66.30	1.50	0.01	0.01	0.03	4.8	0.94									
BCD30358	66.30	67.70	1.40	0.01	0.14	0.11	4.2	1.48						3.74			
BCD30359	67.70	68.20	0.50	0.79	2.42	0.23	26.1	16.79						3.24			
BCD30360	68.20	69.70	1.50	0.18	0.60	0.54	13.9	2.06						2.79			
BCD30361	69.70	71.70	2.00	0.01	0.04	0.05	4.2	0.31									
BCD30362	74.70	76.20	1.50	0.05	0.17	0.08	16.4	0.19									
BCD30363	76.20	77.70	1.50	0.12	1.54	0.30	41.7	0.31									

MINNOVA INC.

HOLE NUMBER: U1330-35 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAK
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 632.88N
EAST: 9679.84W
ELEV: 1332.79

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

COLLAR DIP: -65° 0' 0"
LENGTH OF THE HOLE: 62.20m
START DEPTH: 0.00m
FINAL DEPTH: 62.20m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 7, 1991
DATE COMPLETED: February 7, 1991
DATE LOGGED: February 22, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
ROD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-65° 0'	ACID	OK		-	-	-	-	-	
27.40	-	-65° 0'	ACID	OK		-	-	-	-	-	
53.00	-	-62° 0'	ACID		V.WEAK ETCH	-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 10.20	«DOL MAFICS»	Pale to dark green, mottled grey-white, and banded greenish yellow, dol-mafics Numerous qtz-carb veins parallel foliation. Foliation: 3.8m 5.2m 8.8m Faults & fractures: ╟1.1 - 1.3╢ «flt bx» Minor blocky intervals. 8.3 - 8.8m blocky ╟8.8 - 10.1╢ «flt gou & blocky» includes qtz-dol vein 9.3 - 9.7m	74 60 84	Intense ferro-dol. Patchy sil'n. Moderate greenish-yellow ser'n Alteration increases to lower contact.	1-2% pyrite.	
10.20 TO 16.20	«MFLT»	Greenish-yellow sericitized lapilli in dolomitized tuff matrix. Fault 15.0 - 15.1m gouge 15.6 - 16.1m blocky	75	Intense ferro-dol of matrix. Patchy sil'n Mod-intense ser'n.	1-2% pyrite.	Lower contact conformable.
16.20 TO 25.50	«MAF/SIL ARG»	Tectonised black, silicified, graphitic argillite intermixed with greyish green mafic. Foliation 16.5m 20.7m Faults and fractures: ╟17.7 - 17.8╢ «flt bx» ╟25.3 - 25.5╢ «flt bx» Contact at	74 60 80	Patchy-pervasive sil'n Ferro-dol of mafic.	1-5% pyrite, locally 15% over 10cm associated with minor base metal sulphides. ╟21.1 - 22.0╢ «10%Py4%Sp+Gn» in arg/maf flooded by qtz-carb.	
25.50 TO 26.90	«QTZ/SER»	Patchy to banded and veined grey to white QV and pale yellow sericite. ╟26.6-26.9╢ «flt gou+blocks»	65	Intense pale yellow ser'n. Patchy sil'n	Patches of fine grained pyrite.	
26.90 TO 32.10	«QV/SEDS»	Finely mottled grey-white quartz veins with sed inclusions. Parts of vein are white qtz-carb. ╟27.8 - 28.3╢ «sert» Minor blocky sections.	50	Intense qtz flooding of seds. Intense yellow sert with bands of blebby pyrite associated with grey-white qtz vein. Minor green talc and fuchsite inclusions.	Variable Base Metal Sulphides. ╟26.9 - 27.1╢ «20%Tt+BnCp» ╟28.3-29.6╢ «8%GnTt» 29.6 - 32.1m possibly discrete Tt in grey-white sed inclusions.	Almost semi massive band of Tetrahedrite + Gn Massive blebs Gn at 2 spots within sample. Blebs 3-5cm of very strained galena. Intense gouge at lower contact.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
32.10 TO 36.30	«QV/SED FLT ZNE»	Blocky to gouge intervals of white qtz carb veins, grey white mottled QV/sed and minor sert/mut. Intensely faulted intervals 32.1 - 32.3m 33.0 - 33.8m and at 35.5m.	 80 85	Patchy inclusions sert/mut.	Variable sulphides 32.3 - 32.5m 20-25% pyrite in bands within QV. [33.8 - 35.2] «5% Tt1%GnSp» 35.2 - 36.3m includes large blebs Cp and dark brown Sp in white Qtz/carb and disseminated Tt in grey QV/sed.	50% small blocks broken QV+gouge. Disseminated Tt in grey-white mottled QV/sed.
36.30 TO 37.80	«ALT SED»	Grey to dark grey, sericitic altered sediment. Possible remnant black argillite protolith.		Intense grey ser'n. Patches of grey sil'n.	[36.3 - 37.8] «10-15%Sp6nCpTt» Fine grained disseminated base metal sulphides, occasional blebs associated sil patches.	Interval quite strained, locally v. friable. Resembles intersection 95+70W.
37.80 TO 38.10	«FLT BX»	Zone of intense faulting. QV/sed/mut breccia and gouge	 55 60	Fuchsite and talc.		
38.10 TO 43.90	«QV/ALT SEDS»	Variable interval of white qtz carb veins, qtz flooded grey seds (QV/seds), sert and mut. Local blocky broken core, minor gouge. 39.1 - 39.5m blocky 41.2 - 41.3 blocky [43.2 - 43.4] «flt gou+blocky» Faulted lower contact. Foliation: 44.0m 42.4m	 66 66	Minor sert inclusions in QV. [40.4 - 41.0] «Sert-Mut» + 8 cm QV+sed. Minor talc + fuchsite	Variable sulphides: 38.1 - 39.1m 10% Cp6n5%5%Tt. 39.1 - 42.0m variable Py, base metals and Tt. 42.0 - 43.2m increased mottled grey sed in QV, with 40cm dark grey mut/arg. Overall 5%Tt7%Sp6n 43.2 - 43.9m white QV+grey sed patches. Includes 43.8 - 43.9m, massive 5cm section Sp and 2x1cm Tt.	 Large blebs 6nCp, in white-grey QV. Lower contact marked by intense fault gouge.
43.90 TO 48.10	«MUT/SIL SED/FLT ZN»	Intermittently faulted grey silicified, sericitized seds, lesser Py/ser seds(mut) and QV. Foliation: 44.8 46.2 45.4 - 46.5m relatively competent sub-interval of grey sil sed. 46.5 - 48.1m gou+bx+blocks	 60 53 56	Grey sericite partings to silicified seds.	Variable sulphide. 43.9 - 45.4m includes 2, 5cm sections Cp,fine Sp6n and Tt disseminations. 45.4 - 48.1m mainly wisps, bands pyrite in sil seds.	 Gouge + strained blocks of silsed, white QV-carb.

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
48.10 TO 49.50	«SIL SEDS»	Grey, silicified, sericitized sediments. Minor gouge and strained blocks.	70	Grey sericite.	3-7% pyrite.	Wacke protolith?
49.50 TO 51.20	«FLT GOU/ BX»	Seds intensely faulted to gouge + bx.		Grey ser'n.	3% pyrite + possible trace base metal sulphides.	
51.20 TO 52.40	«SMSX/MUT»	Semi massive to massive sulphide and grey-dark brown pyritic/sericitic seds. Upper contact	60	Grey ser'n.	╪51.2 - 52.4╪ «30%Py5%Cp5%Sp6n» Sulphides decrease to lower 40cm of interval.	Semi massive to massive sulphide. Fine grained CpSp6n and Py, with patches of coarser blebs. Matrix pyritic, sericitic, sediment.
52.40 TO 53.40	«FLT GOU/ BX»	Grey fault gouge + breccia. Includes 10cm block Qtz-carb.				
53.40 TO 54.70	«ALT SED»	Grey partly silicified, sericitized seds. (Mut). Moderately strained, minor gouge parallel to foliation.	55	Grey ser'n Patchy sil'n	5-7% pyrite.	
54.70 TO 56.90	«FLT GOU/ BX»	Grey gouge bx to 56.5m Weak ser'n to 56.9m			╪55.7 - 56.1╪ «2%SpTt» in 10 cm fault block of QV.	
56.90 TO 62.20	«SERT/ WACKE»	Weakly altered wacke. ╪58.1 - 60.1╪ «flt zone + Qtz-carb» Foliation: 56.9m 60.9m 62.2m	55 80 80	Weak to moderate yellow ser'n.	Blebby Gn+Sp at 58.9m in Qtz-carb. Sample 58.1 - 60.1m through pink/white qtz-carb veining in weakly altered seds and gouge.	Hinge Zone 58.0m.
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30364	21.10	22.00	0.90	0.20	1.78	2.10	13.4	0.17									
BCD30365	26.90	27.10	0.20	5.56	13.60	7.41	4538	6.42						3.26			
BCD30366	27.10	27.80	0.70	0.04	0.07	0.05	30.5	0.14									
BCD30367	27.80	28.30	0.50	0.02	0.02	0.02	8.9	0.04									
BCD30368	28.30	29.60	1.30	0.03	0.02	9.37	377.0	0.84						2.65			
BCD30369	29.60	31.10	1.50	0.04	0.02	0.07	43.5	0.23									
BCD30370	31.10	32.10	1.00	0.42	0.21	0.09	508.0	1.29						2.61			
BCD30371	32.30	33.00	0.70	0.04	0.03	0.05	29.8	1.38						2.80			
BCD30372	33.00	33.80	0.80	0.04	0.03	0.02	39.6	0.08									
BCD30373	33.80	35.20	1.40	2.34	3.26	0.05	2579	3.24						2.63			
BCD30374	35.20	36.30	1.10	0.83	3.68	0.25	610.0	0.68						2.70			
BCD30375	36.30	37.80	1.50	1.58	14.20	7.94	1344	2.34						3.17			
BCD30376	37.80	38.10	0.30	1.14	5.72	0.26	1013	1.77						2.77			
BCD30377	38.10	39.10	1.00	1.20	0.98	5.24	506.0	1.09						2.69			
BCD30378	39.10	40.40	1.30	0.76	0.34	0.10	808.0	1.19						2.75			
BCD30379	40.40	41.00	0.60	0.02	0.02	0.02	15.8	0.06									
BCD30380	41.00	42.00	1.00	0.02	0.03	0.02	13.8	0.03									
BCD30381	42.00	43.20	1.20	1.18	8.32	4.90	1075	1.86						2.87			
BCD30382	43.20	43.90	0.70	1.36	6.18	0.12	1507	3.35						2.70			
BCD30383	43.90	45.40	1.50	1.08	1.38	0.51	209.0	0.39						2.84			
BCD30384	45.40	46.50	1.10	0.15	0.24	0.05	113.0	0.23						2.90			
BCD30385	46.50	48.10	1.60	0.20	0.23	0.18	97.8	0.37									
BCD30386	48.10	49.50	1.40	0.04	0.11	0.07	25.6	0.27									
BCD30387	49.50	51.20	1.70	0.21	0.51	0.29	83.2	0.34									
BCD30388	51.20	52.40	1.20	1.66	3.74	2.48	318.0	4.28						3.55			
BCD30389	52.40	53.40	1.00	0.08	0.22	0.20	13.8	0.18									
BCD30390	53.40	54.70	1.30	0.02	0.01	0.03	5.6	0.22									
BCD30391	54.70	55.70	1.00	0.07	0.07	0.11	27.9	0.43									
BCD30392	55.70	56.10	0.40	0.04	0.42	0.11	10.9	0.23									
BCD30393	56.10	56.90	0.80	0.01	0.01	0.01	1.0	0.03									
BCD30394	58.10	60.10	2.00	0.01	0.28	0.66	16.0	0.03									

HOLE NUMBER: U1330-36

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.36N
EAST: 9679.83W
ELEV: 1332.79

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

COLLAR DIP: -82° 0' 0"
LENGTH OF THE HOLE: 72.80m
START DEPTH: 0.00m
FINAL DEPTH: 72.80m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 8, 1991
DATE COMPLETED: February 9, 1991
DATE LOGGED: February 23, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-82° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-83° 0'	ACID	OK		-	-	-	-	-	
65.20	-	-84° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 10.00	«DOL MAFICS»	Pale to dark green chloritic mafics altered to banded and mottled, greenish yellow sericite and greyish-white dolomite. Numerous white Qtz-carb boudined parallel foliation 0.6 - 5.7m Foliation: 2.1 5.3 Faults and fractures: 1.0 - 1.5 «flt gou/bx» 6.4 - 6.6 «flt gou/bx» 7.5 - 7.6m minor gouge 8.1 - 8.2m flt gou. Minor fault at lower contact.	70 55	Greenish yellow ser'n. Intense ferro-dol. Patchy sil'n. Alteration increases from 5.8m - 10.0m.	1-2% pyrite.	
10.00 TO 16.90	«MFLT»	Inensely altered mafic lapilli: tuff. Lapilli: faintly visible. Foliation 12.4m 15.5m	60 60	Intense ferro-dol Moderate greenish-yellow ser'n of lapilli	1-2% pyrite.	Lower contact with SilArg marked by minor fault. Sharp contact.
16.90 TO 27.20	«MAF/SIL ARG»	Tectonized, black, silicified, graphitic argillite and pale greenish grey dolomitized mafic. Mafic dominates 23.8 - 25.5m Foliation: 17.1 19.5 21.0 25.6 Faults fractures. Intervals locally blocky and strained. 20.6 - 20.8m blocky 31.0m blocky broken. 22.1 - 22.3m blocky broken. 26.8 - 27.2 blocky + 10cm intense gouge.	53 55 53 65 80	Patchy to pervasive sil'n. Intense ferro-dol of mafic component. 5% qtz and qtz-carb veins.	3-5% blebs, patches and bands of pyrite. Local base metal sulphides associated with qtz-carb. e.g., 21.8 - 21.9m. 3% blebby Sp6n.	Faulted lower contact.
27.20 TO 28.60	«MAF/SER FLT ZNE»	Highly strained, locally healed to friable fault zone in sericitized mafic. Numerous bands grey qtz parallel to foliation.	80	Moderate pale yellow ser'n. Patchy remnants of sil'n.	3-7% pyrite.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
28.60 TO 32.80	«QV/SEDS»	Grey-white fine mottled QV and sed inclusions. Local blocky sections, 29.7 - 30.2m 30.4 - 30.5m gouge Healed flt bx 30.7 - 31.2 31.2 - 32.8m intermittent gouge + blocks + healed bx.	20	Intense qtz flooding of seds. Minor sert. 29.4 - 29.6m at 33 deg to c/a.	╡28.6 - 29.6╞ «5% - 7% TtSp6n» fine disseminated Tt, Sp6n in fine mottled grey-white QV. 29.6 - 32.8m discrete Tt in grey-white QV/seds. 10% Py over 1-2cm 31.2 - 31.6m.	
32.80 TO 51.00	«SILSED/MUT FLT ZNE»	Blocky to intensely faulted interval of mainly grey silicified, sericitized sediments. Sub Intervals as follows: 33.1 - 35.2m gouge + bx 35.2 - 35.6m blocky QV + sil sed 35.6 - 36.3m gouge + blocky 36.3 - 37.7m strained sil sed + gou+bx. 37.7 - 40.4m intense gouge + bx zone ╡40.4 - 41.9╞ «Sil Seds» competent interval 41.9 - 46.2m intense gouge + bx. 46.2 - 46.5m Sil Sed/QV 47.3 - 49.8m, at least 30 cm SMSX? Difficult to assess 49.8 - 51.0m sil seds, influence of fault decreasing; strained + 30% gou/bx	58 44 65	Patchy sil'n Moderate grey ser'n Sert in gouge 33.7 - 35.2m Qtz flooding Angle to c/a, banding of Py in QV.	1-2% Tt, finely disseminated in QV/sed. Blebby Sp associated with white Qtz carb in Sil Sed Blebby Sp,6n associated with Qtz/carb Flooding 39.9 - 40.4m, minor Sp in blocks Qtz/carb and QV/sed Tt? ╡41.9 - 43.9╞ «TrCp» ╡46.2 - 47.3╞ «7%Py1%Sp» ╡47.3 - 48.3╞ «10-15%PySp»	Overall 7% Py 1-2% Sp6n. 47.3 - 49.8 core loss, grinding/carb
51.00 TO 64.50	«SIL SEDS»	Grey silicified seds (sil Mut) with grey sericite partings. Patches, faint white - qtz carb veins. Foliation: 51.3m 54.6m 57.6 62.1 64.2	46 60 54 50 54	Patchy to pervasive sil'n. Moderate development grey sericite.	5-7% wispy brown pyrite. Blebby Sp6nTt associated with intensely sil patches and white qtz-carb. Concentration as follows: ╡54.6 - 57.6╞ «3%Sp2%6n1%Tt» 57.6 - 64.5m 1-2% Sp6nTrTt.	
64.50 TO 64.90	«FLT ZONE»	At upper contact 10cm gouge			5-7% pyrite.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
64.9@ TO 67.8@	«QV/SERT WACKE»	White qtz-carb veins and weakly altered sericitic wacke	52	Weak to moderate yellow sericitization	2-3% pyrite.	QV 64.9 - 65.5m 67.2 - 67.6
67.8@ TO 72.8@	«ALT SEDS/ WACKE»	Weakly to moderately altered grey and yellowish green sediments. Minor white qtz veining.		Banded yellow sericitization.	5-7% pyrite	Minor gouge at E.O.H.
		Foliation: 65.1m	52			
		71.3m	75			
		Shearing 72.5m	40			
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30395	27.20	28.60	1.40	0.01	0.03	0.01	6.3	0.05									
BCD30396	28.60	29.60	1.00	0.56	0.35	0.17	505.0	0.83						2.90			
BCD30397	29.60	30.60	1.00	0.03	0.02	0.02	23.1	0.06									
BCD30398	30.60	31.80	1.20	0.18	0.06	0.04	181.4	0.55									
BCD30399	31.80	32.80	1.00	0.67	0.29	0.03	612.0	0.95						2.58			
BCD30400	32.80	35.20	2.40	0.83	1.38	0.48	748.0	1.25						2.82			
BCD10801	35.20	35.60	0.40	1.32	0.23	0.06	1390	3.01						2.99			
BCD10802	35.60	36.30	0.70	0.43	3.48	2.02	447.4	0.89						2.90			
BCD10803	36.30	37.70	1.40	0.30	1.88	2.18	359.7	0.62						2.51			
BCD10804	37.70	39.30	1.60	2.02	6.28	2.64	989.0	2.77						2.93			
BCD10805	39.30	40.40	1.10	0.18	4.66	2.62	206.4	0.56						2.76			
BCD10806	40.40	41.90	1.50	0.05	0.32	0.19	34.2	0.17									
BCD10807	41.90	43.90	2.00	0.55	1.14	0.88	226.1	0.82						2.51			
BCD10808	46.70	47.30	0.60	0.07	2.46	1.74	104.7	0.39						2.94			
BCD10809	47.30	48.50	1.20	0.09	5.62	3.28	131.8	0.65						2.48			
BCD10810	49.80	51.00	1.20	0.42	3.74	2.22	197.6	0.71						2.69			
BCD10811	51.00	53.00	2.00	0.18	0.51	0.27	109.4	0.59						2.77			
BCD10812	53.00	54.50	1.50	0.06	0.93	0.41	35.1	0.31									
BCD10813	54.50	56.00	1.50	0.56	0.74	0.56	182.4	0.33						3.06			
BCD10814	56.00	57.50	1.50	2.02	2.92	1.68	573.0	0.48						2.84			
BCD10815	57.50	59.00	1.50	1.32	0.80	0.69	423.6	0.44						2.82			
BCD10816	59.00	60.50	1.50	0.35	0.88	0.53	159.7	0.30						2.74			
BCD10817	60.50	62.00	1.50	0.46	2.04	1.26	194.3	0.34						2.71			
BCD10818	62.00	63.50	1.50	0.82	2.66	2.08	378.6	0.45						2.76			
BCD10819	63.50	64.50	1.00	0.78	2.82	1.82	384.9	1.09						2.71			
BCD10820	64.50	64.90	0.40	0.10	0.10	0.14	14.3	0.17									
BCD10821	64.90	66.80	1.90	0.01	0.03	0.12	3.4	0.11									
BCD10822	67.20	67.60	0.40	0.01	0.01	0.01	1.2	1.98						2.86			

MINNOVA INC.

HOLE NUMBER: U1330-37 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 632.09N
EAST: 9679.84W
ELEV: 1332.81

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

COLLAR DIP: -45° 0' 0"
LENGTH OF THE HOLE: 58.50m
START DEPTH: 0.00m
FINAL DEPTH: 58.50m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 9, 1991
DATE COMPLETED: February 9, 1991
DATE LOGGED: February 25, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
30.50	-	-46° 0'	ACID	OK		-	-	-	-	-	
56.40	-	-45° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 10.00	«DOL MAFICS»	Pale to dark green chloritic, mafic tuffs. Numerous white qtz-carb veins occur parallel to foliation Faults & fractures: 1.1 - 1.2m flt bx 7.7m gouge 8.8 - 9.0m flt bx	68	Intense dolomitization Local greenish yellow sericite laminae	<1% pyrite	Veins exhibit folding
10.00 TO 12.60	«HEALED MAF FLT»	Partly healed mafic fault breccia, transitional from dol-mafics to MFLT Foliation prevails in blocks	70	Dolomitization	1/2% pyrite.	
12.60 TO 17.20	«MFLT/ FLT ZONE»	Sericitized lapilli tuff, faulted from 13.5 - 17.2m. Locally healed, overall quite compact breccia and gouge.		Ferro-dol Patchy sil'n and ser'n.	<1% pyrite	Sharp contact with underlying black argillite.
17.20 TO 30.10	«MAF SIL ARG»	Partly faulted interval of black silicified, graphitic argillite and pale green grey mafic. Faulted sections, compact gouge and breccia. {18.1 - 18.9} «flt bx» 18.9 - 19.7m blocky {19.7 - 20.2} «flt/heal bx» 20.2 - 20.7 - gou/bx 20.7 - 23.2 - blocky & healed bx {23.2 - 23.7} «flt bx» 24.2 - 24.6 flt bx {24.8 - 25.6} «flt/heal bx» 25.6 - 29.3m blocky/broken 29.3 - 29.8 flt gou/bx 29.8 - 30.1 - sil bx	40 66	Patchy to pervasive sil'n arg/arg bx. Mod. dol'n mafic.	2-3% pyrite, local patches 3-5% over 2-3cm.	
30.10 TO 31.20	«FLT GOU/	Intensely faulted zone of mixed arg/maf and				
TO 30.20	BX»	qtz/ser. Very soft to compact gouge.				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
30.30 TO 30.40						
31.20 TO 32.60	«QTZ/SER MAF»	Partly faulted, highly strained, sheared, laminated, banded, qtz Sericite and green mafic component	55	Patchy veined and banded sil'n. Bands, laminae of pale yellow sericite.	5% pyrite	
32.60 TO 35.20	«MAF/SED FLT ZNE»	Intensely faulted zone transitional from mafic to sed dominant lithologies.				
35.20 TO 44.70	«QV/ALT SED FLT ZNE»	Intermittently faulted zone of qtz vein, qtz vein with grey-white mottled inclusions and sert. Locally intense zones faulting to produce soft gouge.		Fragments of intensely sericitized seds. (sert). Fragments of qtz flooded grey seds.	Remnant fragments of potential ore within brecciated intervals. [35.2 - 36.2] «5% Py 5%Sp» [40.2 - 40.6] «10%Cp» in single large bleb, 5cm width, in qtz-carb and breccia. [42.3 - 42.7] «1%-2%Cp»	Single large bleb Sp 5cm width on edge of Qtz-carb and gouge
44.70 TO 50.90	«SIL SEDS»	Partly faulted grey, silicified, sediments with grey sericitic partings. Minor pyritic, sericitic seds (MUT) Faults and fractures: [46.5 - 46.3] «flt bx» [47.2 - 48.8] «flt bx/blocky» 49.2 - 49.4m flt bx 50.2 - 50.9m flt gou/bx	52 55	Patchy sil'n. Mod - intense grey sil'n.	Zones of honey brown, blebby sphalerite. Overall 3-5% Py (1%Sp	46.3 - 46.6m white Qtz-carb.
50.90 TO 58.50	«ALT SEDS/ WACKE»	Weakly to locally intensely altered fine seds and grey wacke. Foliation: 51.0 54.2 58.0 Faults, 52.4 - 52.6m gouge 55.1 - 55.4m flt bx 55.8 - 56.0m flt bx	62 62 57	Weak grey and yellow ser'n. Minor mut/sert 50.9 - 51.1m Alteration decreases in intensity downhole.	2-3% pyrite overall. Locally 5-7% blebby pyrite in white qtz-carb.	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD10851	33.60	33.90	0.30	0.09	0.16	0.08	67.3	0.12									
BCD10852	33.90	35.20	1.30	0.01	0.02	0.02	5.1	0.09									
BCD10853	35.20	36.20	1.00	0.10	1.88	0.03	91.5	0.30									
BCD10854	36.20	37.10	0.90	0.01	0.03	0.01	3.7	0.03									
BCD10855	37.10	38.70	1.60	1.16	0.35	0.14	169.0	0.38						2.68			
BCD10856	38.70	40.20	1.50	0.02	0.03	0.01	4.9	0.04									
BCD10857	40.20	40.60	0.40	2.42	0.08	0.02	82.3	0.29									
BCD10858	40.60	42.30	1.70	0.03	0.02	0.01	3.6	0.03									
BCD10859	42.30	42.70	0.40	0.82	2.44	0.06	232.0	0.29						2.81			
BCD10865	42.70	44.70	2.00	0.10	0.28	0.19	62.7	0.11									
BCD10864	44.70	46.20	1.50	0.04	0.07	0.06	30.2	0.18									
BCD10860	46.20	47.20	1.00	0.03	1.20	0.32	14.2	0.06									
BCD10861	47.20	48.70	1.50	0.26	1.26	0.76	261.0	0.94						2.79			
BCD10862	48.70	50.20	1.50	0.07	1.78	0.92	80.1	0.31									
BCD10866	52.50	53.90	1.40	0.02	0.03	0.02	15.1	0.09									
BCD10863	56.00	56.40	0.40	0.03	0.03	0.03	3.7	0.46									

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.98N
EAST: 9679.87W
ELEV: 1332.80

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

COLLAR DIP: -85° 0' 0"
LENGTH OF THE HOLE: 73.80m
START DEPTH: 0.00m
FINAL DEPTH: 73.80m

COLLAR GRID AZIMUTH: 360° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: February 9, 1991
DATE COMPLETED: February 10, 1991
DATE LOGGED: February 24, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-86° 0'	ACID	OK	
30.50	-	-87° 0'	ACID	OK	
75.00	-	-85° 0'	ACID	OK	
-	-	-	-	-	
-	-	-	-	-	
-	-	-	-	-

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CS6»					
0.60 TO 5.20	«DOL MAFICS»	Banded pale to dark green chloritic mafics with numerous white qtz-carb veins parallel foliation. Faults: ⎧0.6 - 1.2m⎫ «flt bx» ⎩5.0 - 5.2⎭ «flt bx»	40	Intense ferro-dol. Patchy sil'n by white QV	<1% pyrite.	
5.20 TO 18.90	«ALT MAF/ MFLT»	Mottled, banded altered mafics grading into yellow sericitized lapilli tuff. 5% white qtz-carb veins. Foliation: 7.1m 11.0m 13.6m 17.3m Faults: ⎧5.8 - 6.1⎫ «flt bx+blocks» 6.1 - 6.8m healed flt bx. ⎧8.7 - 8.9⎫ «flt bx» 12 - 12.2m wacky 16.4 - 16.8 flt bx + blocky	55 44 50 51	Intense ferro-dol. Patchy sil'n.	1-2% pyrite. Local, v. minor base metals associated QV.	2 cm gouge at lower contact. Angle to c/a 45 - 55 deg.
18.90 TO 21.40	«SIL ARG»	Black silicified, highly graphitic argillite. Tectonised.		Patchy to pervasive sil'n.	Minor base metals associated with veins in sil arg.	Blocky to broken recovery.
21.40 TO 27.50	«MAF/ SIL ARG»	Black silicified graphitic argillite intermixed with grey green mafic Tectonised. Foliation at 24.6 27.3 Faults, 23.1 - 23.4m flt bx.	56 60	Patchy sil'n. Moderate ferro-dol'n Mafic.	2-4% pyrite, locally 5-7% over 2-5cm associated with QV	Blocky to broken core.
27.50 TO 29.20	«MAF/ARG FLT ZNE»	Fault zone through mafic/sil argillite. 10% white qtz-carb veins.	64			Blocky + gouge + bx.
29.20 TO 32.00	«MAF/QTZ/ SER FLT ZN»	Banded to laminated, tectonised, mafic, sericite and quartz within flt zone.	55	Intense pale yellow ser'n.		Hinge zone 28 deg and 21 deg to c/a at 31.0m

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
32.ØØ TO 34.2Ø	«QTZ/SER FLT ZNE»	Mainly faulted qtz and yellow sericite	45 65	Intense pale yellow ser'n.		Blocky and minor gouge intervals.
34.2Ø TO 35.7Ø	«ALT SED FLT ZONE»	34.2 - 34.7m block of partly silicified, grey to black sericite and argillite. 34.7 - 35.7m intense fault gouge, very soft and clayey.		Patchy sil'n due to qtz-carb flooding	╡34.2 - 34.7╞ «3%Cp3%Sp6n2%Tt» fine to blebby dissemination minl'zn.	34.2 - 34.7m deformed.
35.7Ø TO 38.2Ø	«SMSX/QV/ SED»	Qtz carb flooded, and patchy silicified, altered sed with local semi-massive sulphides.	45 5Ø	Patchy qtz-carbonate flooded, patchy sil'n.	35.7 - 36.2m 1Ø%Cp3%Sp(6nTt?) in qtz carb flooded sed. Large patches to stringer-like veins Cp. ╡36.2 - 37.2╞ increased Py «2Ø%Py8%Cp2%SpTt» veins, patches Cp vary in orientation from parallel to c/a, to 45 - 5Ø deg. 37.2 - 38.2m decreased Py and base metals.	Patchy to mottled mixture black-grey-white. fine to coarse grains and blebs Py. Patches to veins of Cp. Blebs SpTt difficult to see. in patchy sed with white v. fine qtz-carb matrix
38.2Ø TO 38.5Ø	«FLT GOUGE»	Intensely faulted grey seds to gouge.				
38.5Ø TO 38.7Ø	«SIL SED/ MUT»	Grey partly silicified, sericitized, pyritic seds. (Mut)	66	Patchy to faintly banded, sil'n by faint white QB	7% fine grained brown pyrite as patches wisps and bands.	
38.7Ø TO 42.8Ø	«SIL SED/ MUT FLT ZNE»	Compact fault breccia and gouge comprising sil seds and mut. Patchy white QV and veins	56	Patchy sil'n with sericite partings.	Blebby sp associated with white QV veins/patches 3-5% Py (1/2% Sp overall.	
42.8Ø TO 54.8Ø	«ALT SED»	Locally, blocky + gouged, grey to dark brown and black, sericitic, pyritic seds. Qtz carb vein 48.5 - 48.7m Foliation: 45.3m 48.2m 53.3m Faults and fractures: ╡43.3 - 43.7╞ «flt gou/bx» 44.2 - 44.4m flt bx/blocky 46.3 - 49.7m sheared quite friable, local gouge. 53.Ø - 53.3m flt gou/blocky ╡54.1 - 54.8╞ «flt gou/blocks»	35 47 5Ø 55	Intense grey ser'n Patches and 1Ø-2Øcm zones flooded with qtz-carbonate.	Fine grained, wispy, patchy and banded brown/yellow pyrite. Occasional zones of honey brown blebby Sp associated with sil'n. Pyrite increases to lower contact. Overall 7-15% py. ╡51.8 - 53.3╞ «7%Py1%Cp»	MUT.

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
54.80 TO 56.90	«SMSX»	Semi massive pyrite and base metal sulphides in a matrix of qtz-carb and grey seds? Banding	30 55	Patchy matrix sil'n	Fine to blebby disseminations of Cp. 20%Py10%CpSp6n	Faulted lower contact
56.90 TO 62.50	«SIL SEDS»	Grey silicified seds (wacke protolith?) with sericitic partings. Lower contact with flt	54 45	Moderate to intense development grey sericite. Patchy sil'n.	5-7% pyrite as wispy brown fine grains. Blebby Sp and Tt occur where white qtz-carb veins cross sil-seds {58.4 - 59.4} «5%Py1%Sp1/2%Tt»	Intensely faulted sed to grey gouge. 56.9 - 57.0 Overall trace Sp and Tt.
62.50 TO 66.60	«FLT GOU/ BX»	Compact grey gouge and breccia. Coarse clasts sil sed.			4% Pyrite. Traces of Sp.	
66.60 TO 73.80	«SIL SED»	Partly faulted, grey, patchy silicified seds with sericitic partings. Patches and veins of white qtz-carb (7-10%) Foliation: 67.1m 69.8m 73.6m Faults and fractures: {68.5 - 68.8} «flt gou/blocks» 69.3 - 69.4 flt bx {70.7 - 73.2} «flt bx/blocky» Strained/shattered texture.	45 45 50	Patchy to banded sil'n Moderate to intense development grey sericite.	2-5% pyrite. Occasional Sp blebs associated with white QV-carb + silicified patches.	(Sil-Nut) Cherty Protolith?
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD10823	33.20	34.20	1.00	0.01	0.02	0.03	2.8	0.03									
BCD10824	34.20	34.70	0.50	3.48	9.36	5.96	3571	6.84						3.18			
BCD10825	34.70	35.70	1.00	0.53	0.41	0.12	473.0	1.38						2.70			
BCD10826	35.70	36.20	0.50	5.44	2.26	0.23	263.0	1.21						3.17			
BCD10827	36.20	37.20	1.00	2.08	1.38	0.21	1136	3.87						3.65			
BCD10828	37.20	38.20	1.00	2.04	1.40	0.15	2030	3.79						3.24			
BCD10829	38.20	38.50	0.30	0.33	1.44	0.79	189.0	0.90						2.76			
BCD10830	38.50	39.70	1.20	0.31	0.42	0.31	89.6	0.74									
BCD10831	39.70	41.20	1.50	0.12	0.23	0.18	33.4	0.63									
BCD10832	41.20	42.80	1.60	0.13	0.44	0.22	32.6	0.35									
BCD10833	42.80	44.80	2.00	0.31	2.64	0.74	184.0	0.49						2.82			
BCD10834	44.80	46.80	2.00	0.02	0.03	0.05	5.6	0.56									
BCD10835	46.80	48.80	2.00	0.02	0.08	0.03	2.8	0.59									
BCD10836	48.80	50.30	1.50	0.01	0.01	0.02	4.5	0.61									
BCD10837	50.30	51.80	1.50	0.01	0.01	0.02	3.3	0.57									
BCD10838	51.80	53.30	1.50	0.03	0.01	0.03	3.6	0.17									
BCD10839	53.30	54.10	0.80	0.01	0.15	0.05	1.2	0.73									
BCD10840	54.10	54.80	0.70	0.03	0.56	0.06	1.3	1.72						2.83			
BCD10841	54.80	55.80	1.00	0.70	6.32	3.82	116.0	23.27	0.75	5.68	3.38	125.1	21.03	3.54			
BCD10842	55.80	56.90	1.10	0.92	2.72	0.84	61.0	49.64						4.00			
BCD10843	56.90	58.40	1.50	0.26	0.73	0.43	59.0	2.28						2.82			
BCD10844	58.40	59.40	1.00	1.02	1.32	0.69	457.0	0.78									
BCD10845	59.40	61.10	1.70	0.04	0.11	0.03	13.5	0.18									
BCD10846	61.10	62.50	1.40	0.04	0.24	0.06	14.6	0.08									
BCD10847	62.50	66.10	3.60	0.04	0.82	0.36	16.8	0.42									
BCD10848	66.60	68.60	2.00	0.02	0.44	0.15	1.4	0.52									
BCD10849	68.60	70.10	1.50	0.01	0.27	0.10	0.6	0.42									
BCD10850	71.70	73.20	1.50	0.02	0.37	0.50	1.7	0.25									

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 631.95N
EAST: 9679.87W
ELEV: 1333.72

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

COLLAR DIP: -18° 0' 0"
LENGTH OF THE HOLE: 72.90m
START DEPTH: 0.00m
FINAL DEPTH: 72.90m

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

DATE STARTED: February 10, 1991
DATE COMPLETED: February 11, 1991
DATE LOGGED: February 23, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-18° 0'	ACID		WEAK	-	-	-	-	-	
30.50	-	-18° 0'	ACID	OK		-	-	-	-	-	
70.10	-	-19° 0'	ACID	OK		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 / TO / 8.60	«CSG»					
8.60 / TO / 19.00	MAFIC TUFF «MT»	Colour - Med. green grey Grain size - fine to med. grain Mafic tuff very intensely impregnated by qtz. veins & blebs. (25 - 30% qtz) @ 2.3 5.0 8.6 14.4	 43 50 52 54	Q. v.ing causes local silicification 10.4 - 2cm Crosscutting q.v. @ 20 deg to core axis. Sericite alteration starts @17.5m	Tr. diss py.	3.3 - 3.8 fault gouge 6.3 - 7.3 fault gouge
19.00 / TO / 33.90	MAFIC LAPILLI TUFF «MFLT»	Colour - lite yellow-green Grain size - medium to coarse grain Typical lapilli tuff 22 24 27.5 Becomes more fragmented and locally sl. argillaceous towards end of interval.	 51 48 47	Lapilli sericitized Occ. minor qtz vein	Tr py	
33.90 / TO / 37.50	MIXED MAFIC TUFF AND SILICIFIED ARGILLITE «MT+SILARG»	Colour - light green-black Grain size - fine to medium grain Approx 20% sil arg as separate zone to 20cm thick. Rest is M.T. @ 35.2	 63	Moderate sericitization Silicification	Tr py	
37.50 / TO / 47.50	SERICITIC MAFIC TUFF QTZ «SERT»	Colour - light yellow Grain size - fine to medium Sericitic and locally silicified MT Moderately foliated @ 43.0 @ 45.0 37.5 - 39.1 Q.V. w/ minor py blebs 45.6 - 46.2 QV 46.9 - 47.5 QV w/py blebs sheared @ 47.4 - 47.5	 57 64			

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		(sub parallel to core axis)				
47.50 TO 72.90	YELLOW SERICITE ALTERED SEDIMENTS «ALT'D SEDS» (old Sert)	Colour - yellow - grey Grain size - fine to medium grain Sericite altered sediments (arg & wacke & mudstones) local minor q.v.'s QV 51.4 - 51.6 54.1 - 54.3 59.0 - 59.2 (bx'd) 59.8 - 61.5 (bx'd) 64.9 - 65.8 - Highly sil'd (cherty) zone 72.3 - 72.8 - alteration weakens and unit is sl. argillaceous		Sericite, local silicification	Remnant py beds (now w/ qtz) widely scattered to about 64.0m Best tet mineralization is 2 cm band at 48.5m 64.9 - 65.8: 1-3% diss. sp & minor tet.	
		@ 48.5m	48			
		@ 52.6	56			
		@ 55	61			
		@ 62	53			
		@ 63	57			
		@ 72.5	56			
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	S6	AG oz/T	AU oz/T	COMMENTS
BCD28281	46.90	48.00	1.10	0.11	0.10	0.09	21.2	0.09									
BCD28282	48.00	48.40	0.40	0.23	1.02	0.41	135.0	0.28						2.66			
BCD28283	48.40	48.70	0.30	3.86	5.80	2.86	2300	7.20						3.34			
BCD28284	48.70	49.10	0.40	0.04	0.06	0.04	25.6	0.10									
BCD28285	51.50	52.00	0.50	0.02	0.02	0.01	6.0	0.54									
BCD28286	59.00	59.20	0.20	0.02	0.01	0.01	20.9	1.11						2.75			
BCD28287	59.20	59.80	0.60	0.01	0.01	0.01	3.2	0.03									
BCD28288	59.80	61.50	1.70	0.01	0.01	0.01	.9	0.19									
BCD28289	64.90	65.80	0.90	0.36	0.86	0.14	432.0	0.56						2.59			

NINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.07N
EAST: 9699.65W
ELEV: 1332.12

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

COLLAR DIP: -60° 0' 0"
LENGTH OF THE HOLE: 55.80m
START DEPTH: 0.00m
FINAL DEPTH: 55.80m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 11, 1991
DATE COMPLETED: February 12, 1991
DATE LOGGED: February 23, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-60° 0'	ACID	OK		-	-	-	-	-	
45.10	-	-60° 0'	ACID	OK		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CS6»					
0.60 TO 15.40	MAFIC TUFF MINOR LOCAL LAPILLI «MT»	Colour - green Grain size - fine to medium Very intensely qv'd @ 0.6 - 3.0 Lapilli @ 10.0 - 11.5 @ 2.5 — 76 @ 7.0 — 61 @ 11.7 — 68 Heavily sheared towards lower contact		Silicification; lapilli sericitized	Tr diss. py.	
15.40 TO 23.00	SILICIFIED ARGILLITE W/MINOR INTERBEDDED MT «SIL ARG»	Colour - black Grain size - fine to medium grain Intensely silicified, bx'd; locally graphitic @ 17.5 Heavily sheared towards lower contact.	46	18.0 - 20.2 completely silicified w/bx texture.		
23.00 TO 26.80	SERICITIC MAFIC TUFFS «ALT'D M. TUFF»	Colour - light yellow-greenish Grain size - fine to medium Well foliated sericitic locally bx'd mafic tuff (old sert) @ 25.5 — 53		Increasing sericite towards lower contact (sheared) Local Minor q.v.'s	Tr minor diss py.	
26.80 TO 43.70	QV&ALTERED WALLROCK «QV-ORE ZONE»	Colour - white-grey Grain size - fine to medium Approx. 50:50 qtz vein and silicified wallrock (="inclusion ore" in pit) Mottled texture		Silicification of W/R by Q.V. Yellow sericite altered seds common @ 34.4 - 37.5	Hard to see but 3-5% diss tet, sp and ga. throughout but most common in grey "altered wallrock" patches.	⌈39.5 - 40.7⌉ «FLT»
43.70 TO 45.10	SILICIFIED MUT «SILMUT»	Colour - dark grey Grain size - medium Above min'l'z'd zone grades into this MUT @ 44.5 — 71		Silica flooding	1-2% diss sp tet in qtz zones	
45.10 TO 48.90	«FLT»	Colour - grey-yellow Grain size - fine to coarse Strong fault gouge and bx zone. ⌈45.1 - 47.4⌉ «flt'd»		Grey and yellow sericite.	Local narrow py. bands @ 45.1 - 47.4	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		147.4 - 48.9 «flt'd sert»				
48.90 TO 51.70	GREY SERICITE ALTERED SED+Q.V. «ALT'D SED»	Colour - Grey-white Grain size - fine to medium Grey ser alt'd sed (MUT) + interbands of q.v. to 20 cm (approx. 20%)		Grey sericite; qtz veining	Minor thin f.g. py bands.	
51.70 TO 55.80	GREY AND YELLOW ALT'D SEDS + qv «ALT'D SED»	Colour - grey, dirty yellow Grain size - fine to medium Grey - yellow alt'd sed (SERT) - mostly orig. wacke texture Unit is gradational from above. @ 53.0 @ 54.5	 48 65	Yellow and grey sericite Local q.v. and assoc'd sil'n of wallrock.	Minor diss py in q.v. reminant SMS py beds in alt'd seds.	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD28290	26.80	28.30	1.50	1.66	1.04	0.30	1540	1.80						2.65			
BCD28291	28.30	29.80	1.50	0.54	0.46	0.03	465.0	0.93						2.59			
BCD28292	29.80	31.30	1.50	0.90	1.34	0.19	825.0	1.44						2.80			
BCD28293	31.30	32.80	1.50	1.16	1.06	0.15	1060	1.97						2.66			
BCD28294	32.80	33.40	0.60	0.23	0.10	0.02	233.0	0.42						2.70			
BCD28295	33.40	33.90	0.50	2.30	3.48	0.64	2200	4.12						2.79			
BCD28296	33.90	35.40	1.50	0.03	0.02	0.02	21.6	0.08									
BCD28297	35.40	36.90	1.50	0.23	0.26	0.15	217.0	0.29						2.56			
BCD28298	36.90	38.40	1.50	0.18	0.10	0.04	170.0	0.34						2.74			
BCD28299	38.40	39.90	1.50	0.84	2.02	0.96	708.0	1.53						2.77			
BCD28300	39.90	41.20	1.30	0.78	0.96	0.16	728.0	1.29						2.96			
BCD28301	41.20	42.30	1.10	1.08	5.22	2.54	870.0	1.74						2.87			
BCD28302	42.30	43.60	1.30	0.23	0.26	0.05	195.0	0.57						2.55			
BCD28303	43.60	45.10	1.50	0.72	2.68	1.34	615.0	1.31						2.75			
BCD28304	45.10	46.00	0.90	0.31	0.54	0.39	234.0	0.49									

MINNOVA INC.

HOLE NUMBER: U1330-41 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.95N
EAST: 9699.64W
ELEV: 1332.12

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

COLLAR DIP: -85° 0' 0"
LENGTH OF THE HOLE: 79.20m
START DEPTH: 0.00m
FINAL DEPTH: 79.20m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 12, 1991
DATE COMPLETED: February 12, 1989
DATE LOGGED: February 23, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE: HOLE EXTENDED FROM 61.0M TO 79.2M ON 15/02/91

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-85° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-85° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-85° 0'	ACID	OK		-	-	-	-	-	
76.20	-	-85° 0'	ACID		? V. WEAK ETCH	-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 11.60	MAFIC TUFFS «MT»	Colour - green Grain size - fine to medium Mafic tuff, heavily impregnated with thin interbands of qtz. and occ. crosscutting qtz vein. @ 1.0m @ 6.5m @ 9.2m	 60 68 65	Local sericitization up to 1.0 m. thick Dolomitic	1-2% diss. py. 4.3 - 4.6: qtz vein w/1-3% galena and minor cpy. 11.4 - 11.6: qtz vein w/ minor diss. ga, sp, cpy.	
11.60 TO 18.70	MAFIC LAPILLI TUFF «MFLT»	Colour - green-grey Grain size - fine to medium Dominately ser'c lapilli tuff moderately intersected by qtz veining and occ. tuffaceous zones. @ 16.8 18.2 - 18.4: qtz vein.	 48	Sericite dolomite	Tr. minor diss. py.	
18.70 TO 22.90	SIL'D ARG INTERBEDDED WITH MAFIC TUFF «SIL.ARG + M.T.»	Colour - black, green Grain size - fine to medium Faulted, brecciated, folded, and qtz veined @ 21.0	 20	Local sericitization Local intense qtz veining Silicification	Occ py bed in arg component; otherwise tr diss. py.	Fault gouge & breccia @ ⎨19.1 - 20.9⎬ «FLT» ⎨21.3 - 21.7⎬ «FLT» ⎨22 - 22.6⎬ «FLT»
22.90 TO 27.20	PROGRESS'LY SERICITIC MAFIC TUFFS W/QTZ INTERBANDS «SERT»	Colour - green to light yellow Grain size - fine to medium Banded, flattened frags; abund deformed qtz vein interbands progressively more sericitic, sheared and deformed to lower contact. @ 23.7 25.8 - 26.1: Qtz vein (barren)	 65	Sericite more intense towards lower contact.	Diss py. Tr minor in higher tuffs increasing to approximately 5-8% diss and banded py in lower sheared sericitic rocks.	
27.20 TO 37.40	«QTZ VEIN & SMS»	Colour - grey Grain size - medium Fairly intense SMS to MASS pyrite min'l'z'n as individual zones up to 0.5m thick often sheared ⎨27.2 - 31.5⎬ «qv+sil'd wallrock»	 	Silicification of sed? wallrock	1-2% locally 5-8% Cp,Sp,Tet. 31.5 - 32.8: SMS, locally Mass py	33.5 - 37.4: heavily sheared check for poss Au in py??

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
					w/3-5% coarse blebs cpy.	
					35.1 - 37.4: same as above.	
37.40 TO 48.60	SILICA FLOODED «MUT»	Colour - grey Grain size - fine to medium				
		Silicified grey - bronze coloured MUT		Qtz flooding, producting veins and	3-5% locally	Caving at 48.6
		@41.0	56	silicified MUT	8-10% Sp,tet,cp,ga	
		@47.0	55			
48.60 TO 62.00	«MUT» ALTERED SEDS	Colour - brown-grey Grain size - fine				
		MUT is brown colour (more f.g.py?) and not as		Grey sericite more common	Minor - 1% locally	
		silicified also finer grained.		Local silicification	3-5%? sp, tet in small veinlets	
		Occasional silica flooding				
		@ 49	70			
		@ 56	45			
		@ 61.6	59			
62.00 TO 79.20	QTZ VEIN +DARK YELLOW ALT SEDS «QV+SER'C SEDS»	Colour - dark yellow wallrock and white qtz vein Grain size - fine to medium				
		Mixed deformed sericitic seds and deformed		Zone is 50% qtz vein up to 0.5m thick.	1 cm thick H/G sp,ga stringers	
		qtz veins. Typical of upper mineralized zone		Intense yellow sericite in sed	assoc. w/qtz. veining.	
		in ore body.		wallrock		78.7 - 79.2 «FLT» gouge.
		@ 63.9	53	Major qtz veins @:		
		@ 70.5	40	66.3 - 66.8		
		@ 73.5	0	68.0 - 68.5		
		@ 75.0	59	74.2 - 74.5		
		Local x-cutting q.v's		75.7 - 76.2		
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD28251	27.20	27.50	0.30	0.19	0.21	0.09	156.0	0.33						2.92			
BCD28252	27.50	29.00	1.50	0.36	0.40	0.33	359.0	0.44						2.71			
BCD28253	29.00	29.80	0.80	0.43	3.04	1.56	388.0	0.49						2.94			
BCD28254	29.80	30.10	0.30	3.06	3.74	2.06	2110	6.37						2.78			
BCD28255	30.10	31.50	1.40	0.45	2.56	1.58	147.0	0.62						3.14			
BCD28256	31.50	33.00	1.50	2.76	1.46	0.72	216.0	1.10						3.21			
BCD28257	33.00	34.50	1.50	0.50	0.27	0.15	249.0	0.56						2.80			
BCD28258	34.50	36.00	1.50	0.33	0.05	0.07	42.8	0.53									
BCD28259	36.00	37.20	1.20	0.37	0.06	0.07	61.5	0.46									
BCD28260	37.20	37.40	0.20	11.20	0.22	0.06	1590	1.84						2.99			
BCD28261	37.40	38.90	1.50	0.21	8.04	6.04	189.0	0.55						3.40			
BCD28262	38.90	40.40	1.50	0.10	0.45	0.78	51.6	0.45									
BCD28263	40.40	41.90	1.50	0.40	0.64	0.29	286.0	0.66						2.66			
BCD28264	41.90	43.40	1.50	0.12	0.82	0.29	62.5	0.22									
BCD28265	43.40	44.20	0.80	0.33	0.53	0.27	119.0	0.21						2.71			
BCD28266	44.20	45.60	1.40	1.84	2.76	2.42	844.0	0.56						2.70			
BCD28267	45.60	47.10	1.50	0.07	3.20	0.98	48.5	0.12									
BCD28268	47.10	48.00	0.90	0.33	0.48	0.22	127.0	0.21						2.87			
BCD28269	48.00	48.60	0.60	0.08	0.16	0.06	48.3	0.17									
BCD28270	48.60	50.10	1.50	0.05	0.57	0.19	27.1	0.31									
BCD28271	50.10	51.60	1.50	0.02	0.29	0.05	10.4	0.33									
BCD28272	51.60	52.80	1.20	0.06	0.67	0.36	31.6	0.46									
BCD28273	52.80	53.70	0.90	0.03	0.38	0.11	13.5	0.49									
BCD28274	53.70	54.40	0.70	0.01	0.01	0.04	7.5	0.87									
BCD28275	61.00	62.00	1.00	0.02	0.06	0.09	6.3	0.76									
BCD28276	62.00	62.50	0.50	0.01	0.01	0.02	1.7	0.18									
BCD28277	64.20	65.40	1.20	0.06	0.08	0.11	5.2	0.64									
BCD28278	68.00	68.40	0.40	0.01	0.01	0.01	0.7	0.05									
BCD28279	68.40	68.50	0.10	0.02	0.27	0.05	5.8	0.24									
BCD28280	69.50	69.80	0.30	0.06	3.58	2.70	47.8	1.30						3.08			

MINNOVA INC.

HOLE NUMBER: U1330-42 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 632.16N
EAST: 9699.67W
ELEV: 1332.27

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

COLLAR DIP: -35° 0' 0"
LENGTH OF THE HOLE: 53.60m
START DEPTH: 0.00m
FINAL DEPTH: 53.60m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 12, 1991
DATE COMPLETED: February 13, 1991
DATE LOGGED: February 24, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: NONE
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)		Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-35° 0'	ACID		OK	
52.10	-	-35° 0'	ACID		OK	
-	-	-	-	-		
-	-	-	-	-		
-	-	-	-	-

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 8.70	MAFIC TUFF «MT»	Colour - green-brown Grain size - fine to medium Typical mafic tuff riddled with thin qtz veins and lenses. @ 2.0m @ 4.5	 75 61	 Silicification, sericitization From 4.6 - 8.7 M.T. is brownish color (sericitization) Dolomite	 Tr diss. py.	
8.70 TO 13.00	MAFIC LAPILLI TUFF «MFLT»	Colour - yellowish-green Grain size - fine to medium Typical lapilli tuff @ 10.0	 68	 Lapilli sericitized minor silicificat'n from occ. thin q.v.	 Tr minor diss py	12.5 - 13.6 «FLT» minor gouge; heavily bx'd.
13.00 TO 16.10	SERICITIC MAFIC TUFF «M.T.»	Colour - yellowish-green Grain size - fine to medium Moderate to well sericitized mafic tuff. @ 15.0 @ 15.8	 71 45	 Dolomite Sericite, dolomite	 Tr minor py.	
16.10 TO 28.30	SILICIFIED ARGILLITE «SIL ARG»	Colour - black Grain size - fine to medium Chaotic sil'd argillite w/poss. interbedded mafic tuff @ 20.0 - 23.7 (sl. greenish color) Rest is good black sil arg. quite graphitic Folded, qtz veined, and bx'd. @ 17.0 @ 22.5 23.8	 51 74 58	 Silicification Graphitic	 Tr diss py.	18.2 - 19.0 «FLT» 24.5 - 26.2 «FLT» bx frags. V. minor gouge.
28.30 TO 40.50	ALTERED MAFIC TUFF «ALT'D MT»	Colour - White-grey-green Grain size - fine to medium Heavily qtz veined silicified, and fuchsitic mafic tuff. Unit is approx 30% q veined by irregular qtz up to 40cm thick @ 32 @ 35	 51 58	 local yellow sericite altered interbedded seds (Sert) @ 28.8 - 29.0 @ 32.0 - 32.4 @ 32.9 - 33.1 @ 36.3 - 37.5	 Several py beds and nodules in yellow ser alt'd seds to 3cm thick Minor diss py in q.v's near contacts.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		@ 40	67			
40.50 TO 53.60	MIXED YELLOW ALT'D SEDS & Q.V. «ALT'D SED + qv»	Colour - white, yellowish brown Grain size - fine to medium Heavily qtz veined. Yellow sericite alt'd sed (sert) Ore horizon (poorly mineralized) Major q.v's @ 40.5 - 40.9 42.3 - 44.0 44.5 - 45.0 45.9 - 48.5 49.6 - 50.0 50.5 - 51.2 52.1 - 53.1		Yellow sericite in seds (sert) Local wallrock silicification Local grey sericite alteration (MUT) @ 44.5 - 45.1 45.6 - 46.0 51.0 - 51.8	Remnant pyrite beds & nodules in ser'c seds Local medium to coars grain dissem py in q.v.'s. 45.9 - 46.0: 3 cm on q.v. contact with 8-10% tet, sp. @ 47.0: 1-2cm 10% ga.	[46.5 - 51.0] «Sh'd Q.V.»
		@ 44.4 @ 46.3	76 71		48.3 - 48.4: 25% c.g. Sp,ga cp tet?	
					50.6 - 51.0 1-3% diss tet in q.v. + MUT alt'd sed.	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD28305	30.80	32.00	1.20	0.03	0.06	0.04	24.5	0.05									
BCD28306	32.00	32.80	0.80	0.05	0.04	0.07	54.3	0.39									
BCD28307	38.40	40.20	1.80	0.01	0.02	0.01	.7	0.03									
BCD28308	42.30	43.40	1.10	0.02	0.01	0.01	17.1	0.03									
BCD28309	43.40	44.50	1.10	0.01	0.01	0.01	1.8	0.03									
BCD28310	44.50	45.90	1.40	0.01	0.01	0.06	5.5	0.08									
BCD28311	45.90	46.00	0.10	3.00	3.04	2.06	2750	7.22						2.92			
BCD28312	46.00	46.80	0.80	0.03	0.14	0.14	25.9	0.06									
BCD28313	46.80	47.20	0.40	0.37	0.03	2.80	75.8	0.21									
BCD28314	47.20	48.30	1.10	0.02	0.01	0.01	10.6	0.03									
BCD28315	48.30	48.50	0.20	0.39	14.00	3.48	103.2	0.37						2.84			
BCD28316	48.50	49.60	1.10	0.02	0.05	0.02	16.3	0.07									
BCD28317	49.60	50.60	1.00	0.05	0.04	0.02	14.9	0.07									
BCD28318	50.60	51.20	0.60	0.30	2.24	1.10	56.4	0.25									
BCD28319	51.20	51.50	0.30	0.08	0.57	0.26	29.1	0.17									

NINNOVA INC.

HOLE NUMBER: U1330-43 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 634.38N
EAST: 9699.65W
ELEV: 1332.12

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

COLLAR DIP: -80° 0' 0"
LENGTH OF THE HOLE: 105.20m
START DEPTH: 0.00m
FINAL DEPTH: 105.20m

COLLAR GRID AZIMUTH: 45° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 360° 0' 0"

DATE STARTED: February 13, 1991
DATE COMPLETED: February 14, 1991
DATE LOGGED: February 20, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-80° 0'	ACID	OK	
30.50	-	-80° 0'	ACID	OK	
61.00	-	-80° 0'	ACID	OK	V. WEAK ETCH
105.20	-	-80° 0'	ACID	OK	
-	-	-	-	-	
-	-	-	-	-	
-	-	-	-	-

MINNOVA INC.

HOLE NUMBER: U1330-43 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 634.38N
EAST: 9699.65W
ELEV: 1332.12

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

COLLAR DIP: -80° 0' 0"
LENGTH OF THE HOLE: 105.20m
START DEPTH: 0.00m
FINAL DEPTH: 105.20m

COLLAR GRID AZIMUTH: 45° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 360° 0' 0"

DATE STARTED: February 13, 1991
DATE COMPLETED: February 14, 1991
DATE LOGGED: February 20, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-80° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-80° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-80° 0'	ACID	OK	V. WEAK ETCH	-	-	-	-	-	
105.20	-	-80° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 14.70	«DOL MAFICS»	Pale to dark green chloritic mafic tuffs altered to patchy, mottled and banded grey white qtz and dolomite, and greenish-yellow sericite. Foliation: 4.3 8.8m 14.7m Faults and fractures: Minor gouge, blocky zones at 1.6m, 4.5m, 5.0m, 5.8m, 7.7 - 7.8m flt zone 9.8 - 10.5m «flt gou/blocks» 13.4 - 13.8m «flt gou/blocks»	 53 51 57	Intense ferro-dol. Moderate greenish yellow ser'n. Patchy to locally pervasive sil'n at 11.1 - 12.3m Alteration increases to lower contact.	1-2% Pyrite	Gradational lower contact.
14.70 TO 20.90	«MFLT»	Ghost, sericitized lapilli in grey dolomitic tuff matrix. Foliation variable, 16.2m 17.6m 20.0m	52 40 60	Intense ferro-dol. Moderate - intense patchy to laminated ser'n. Patchy sil'n.	1-2% pyrite	Original lapilli difficult to see due to alteration Core locally blocky Lower contact faulted from 20.7m.
20.90 TO 25.90	«SIL ARG FLT ZNE»	Faulted zone of black silicified, graphitic argillite (+ minor mafic). 88% gouge, breccia and broken blocks. Intense gouge at upper and lower contacts. Foliation in remnant blocks	 45 57	Patchy sil'n associated with QV in blocky remnants. Mod-intense ferro-dol of mafics	1% pyrite.	Minor chert component. Blocky chert/sil arg sections show tectonized texture.
25.90 TO 29.00	«QTZ/SER MAF»	Highly strained, partly faulted interval of tectonized, mixed, laminated to banded qtz. sericite and mafic. Foliation	 22 64	Intense pale yellow ser'n.	1-5% pyrite.	Friable
29.00 TO 33.10	«QTZ/SER QV FLT ZNE»	Faulted zone of pale yellow qtz/ser (+mafic?) and grey QV with mottled grey-white sed inclusions Foliation in blocks	 50 65	Intense pale yellow sericite in gouge.	Patchy 2-7% pyrite.	Intense gouge near upper and lower contacts. Lower contact 50 deg. to c/a.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
33.10 TO 67.60	«SIL SEDS/ MUT»	Pale to dark grey, silicified seds with grey sericitic partings and white patches, veinlets and veins of quartz-carb. Locally sil seds pass into more pyritic/ sericitic seds, a grey-brown mut. Remnant fragmental and black sil arg present within altered seds. Foliation: 34.0m 36.6m 44.8m 50.0m 56.5m 63.8m Lower contact 67.6m Low angle due to minor fault. Faults and fractures: ╢38.0 - 38.3╟ «flt gou/bx» 39.9 - 40.0 m flt bx ╢45.1 - 45.7╟ «flt bx/blocky» ╢47.3 - 48.1╟ «flt gou/bx+blocky» 48.6 - 48.8m flt gou + blocky 49.2 - 49.3m minor gouge ╢51.7 - 51.9╟ «flt gou/bx» ╢52.8 - 53.3╟ «flt gou + blocks» 53.4 - 53.5m flt gou 56.5 - 56.7m flt gou+block 57.7 - 59.4 minor gou+blocky ╢60.0 - 61.3╟ «flt gou+blocks» including 60.7 - 61.3m, sheared at 61.5 - 61.6m flt gou/bx 67.5 - 67.6m gouge parallel to foliation at contact Sil seds and semi-massive sulphides.	 47 57 48 46 46 47 32 30	Patchy to pervasive quartz flooding. Moderate to intense development grey sericite as partings (foliation) between banded sil'n and white QV.	Variable pyrite in range 5-25% distributed as dissem. grains, blebs patches, laminae and bands parallel to foliation. Blebby honey to dark brown sugary Sp scattered throughout associated with sil patches/veins. Local concentrations as follows: ╢36.6 - 37.6╟ «1-2%Sp5%Py» ╢43.1 - 44.1╟ «1%Sp6n7%Py» ╢51.0 - 51.7╟ «10%Sp)6n10%Py» ╢53.5 - 55.5╟ «5%Sp6n15%Py» ╢61.5 - 63.0╟ «2%Sp6n15%Py» Pyrite increasing to lower contact. 63.0 - 67.6m very fine wisps, bands of brown pyrite in sil seds 10 - 20%	 Blebs Sp6n assoc white Qtz-carb flooding Abundant white QV patches. 67.3 - 67.4m QV with banded Py+Sp parallel to foliation; low angle to c/a, 20 deg.
67.60 TO 69.90	«SMSX/ MSSX»	Semi massive to massive base metal sulphides in a silicified matrix. 68.6 - 68.7m flt gouge Faint banding of sulphides visible. Bands vary in angle to c/a between 69.7 - 69.9m Pyrite band undulates parallel to c/a.	 37 25 30 		Fine to coarse grain size blebs Cp,Gn, Sp Cp also forms patches 1-2cm width. 67.6 - 68.6m SMSX 20% Py, 15 - 20% Cp6nSp 68.6 - 69.9m Cp increases to end of sample 20-30% Py, 15-25%Cp6nSp	Faulted lower contact at 35 deg to c/a.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
69.90 TO 70.40	«FLT ZONE»	Gouge + blocky, pyritic sil seds and SMSX			15%Py(5% Sp6nCp	
70.40 TO 77.90	«SIL SEDS»	Grey silicified sediments with sericitic partings. Foliation 70.8m Partly sheared 73.4m Partly sheared 76.4m Faulted lower contact. 77.8 - 77.9m 5cm intense gouge.	45 20 34		Moderately pyritic, 7-15%, locally 20% over 4-5cm of patchy sil'n. Blebby Sp - associated with QV and silicified bands. [71.9 - 73.4] «10%Py2%Sp»	
77.90 TO 88.90	«SMSX/MSSX»	Upper faulted contact. Semi massive to massive pyrite and base metal sulphides in a silicified matrix. White patches and veins of qtz-carbonate visible. Interval locally sheared. Foliation/Banding 78.0m 78.9m 81.3m 84.3m 87.6m 88.7m Faulting and fractures: [78.1 - 78.8] «flt/fracture» +gouge at 78.1m and 78.7m. [85.0 - 85.5] «flt gou/blocky» Minor gouge at 86.3, 86.6. Lower contact faulted.	60 60 60 32 47 55 50	Interval of semi-massive sulphides may illustrate the collision of syngenetic mineralization and later stage (mesothermal) qtz-carbonate veins.	Variable distribution pyrite and base metal sulphides as follows: [78.9 - 80.4] «35%Py15%Sp6nCp» 80.4 - 81.4m SMSX 35 - 40% 25% Py 10-15% SpCp6n. 82.4 - 83.4m 30% Py, 15% SpCp6n includes white qtz carb vn and trace Tt. 83.4 - 84.4m increased white QV in matrix. SMSX 85.5 - 86.5m includes partly sheared blocks. 86.5 - 87.5m more massive. Fine grained wispy pyrite with Cp blebs. 88.0 - 88.9m Coarser pyrite associated with white Qtz-carb 30%Py 10% SpCp6nTt	Mainly fine grained pyrite, fine-coarse Sp. Tet associated with patches/veins white QV/carb.
88.90 TO 89.30	«SIL SEDS FLT ZNE»	Blocky interval of minor gouge and blocks of grey silicified, pyritic sediments. Gouge filled fractrures at	50	Moderate development sericitic partings Patchy to pervasive sil'n. Numerous faint white QV.	5-7% Py, 1-2% Sp.	
89.30 TO 93.40	«SIL SEDS»	Grey silicified, sericitic pyritic seds. Numberous faint white qtz-carb veins. Rare veins to 10cm. Interval appears moderately chaotic, tectonized. Hinge zone 91.4m.	38	Patchy to pervasive sil'n. Grey sericite moderately developed as partings to sil-sed.	5-7% Py locally 10% Traces of Sp6nCp. [93.0 - 93.4] «3%Sp6nTt» associated with white/cream qtz-carb vein.	Possible altered wacke?

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
93.40 TO 95.20	«FLT ZONE»	Friable grey gouge and friable sil seds.				
95.20 TO 102.80	«SIL SEDS/ MUT»	Grey-brown mut 95.2 to 97.0m. Passes into intensely deformed sil seds. Numerous hinge zones. White qtz-carb veins 101.4 - 101.9m in partly sheared sil seds. {102.1 - 102.4} «flt blocky + gouge»	26 62	Silicification and sericite are banded.	3-5% pyrite.	Cherty protolith?
102.80 TO 105.20	«SERT/QV»	Yellow sericitized sediments, partly faulted with blocky QV. {103.4 - 103.8} «flt gou/blocky» E.O.H.	10 40	Weak to intense yellow ser'n. Wacke protolith?	5-7% pyrite.	

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD24976	31.00	32.70	1.70	0.10	0.13	0.15	74.7	0.36									
BCD24977	33.50	35.50	2.00	0.03	0.09	0.36	16.7	0.19									
BCD24978	36.60	37.60	1.00	0.01	0.36	0.19	7.8	0.22									
BCD24979	39.60	41.60	2.00	0.01	0.09	0.10	6.9	0.23									
BCD24980	43.10	44.10	1.00	0.14	0.30	0.25	31.8	0.05									
BCD24981	44.10	45.10	1.00	0.07	0.27	0.09	19.3	0.08									
BCD24982	45.70	47.30	1.60	0.14	0.75	0.31	36.4	0.14									
BCD24983	50.00	51.00	1.00	0.09	0.11	0.16	38.2	0.11									
BCD24984	51.00	51.70	0.70	0.63	7.68	3.98	249.7	0.19						3.44			
BCD24985	51.70	53.50	1.80	0.05	1.38	0.52	26.6	0.17									
BCD24986	53.50	54.50	1.00	0.01	1.32	0.98	23.7	0.11									
BCD24987	54.50	55.50	1.00	0.04	2.94	0.51	14.1	0.10									
BCD24988	55.50	56.50	1.00	0.02	0.20	0.10	7.6	0.04									
BCD24989	59.00	60.00	1.00	0.02	0.82	0.31	13.6	0.07									
BCD24990	61.50	63.00	1.50	0.07	0.19	0.34	32.3	0.42									
BCD24991	63.00	64.50	1.50	0.01	0.02	0.04	8.9	0.48									
BCD24992	64.50	66.00	1.50	0.01	0.20	0.20	15.7	0.41									
BCD24993	66.00	67.60	1.60	0.05	0.65	0.30	51.8	0.71									
BCD24994	67.60	68.60	1.00	0.70	11.04	4.36	211.2	5.82						3.47			
BCD24995	68.60	69.90	1.30	0.86	6.14	3.76	129.2	15.26						3.62			
BCD24996	69.90	70.40	0.50	0.19	3.02	0.97	110.4	1.05						3.29			
BCD24997	70.40	71.90	1.50	0.07	1.18	0.47	63.6	0.48									
BCD24998	71.90	73.40	1.50	0.02	0.56	0.24	26.4	0.32									
BCD24999	73.40	74.90	1.50	0.01	0.17	0.05	5.3	0.16									
BCD25000	74.90	76.40	1.50	0.02	0.36	0.16	24.2	0.28									
BCD28226	76.40	77.90	1.50	0.07	0.49	0.17	42.1	0.58									
BCD28227	77.90	78.90	1.00	0.32	5.64	1.16	58.6	0.85						3.77			
BCD28228	78.90	80.40	1.50	0.39	3.54	1.80	57.1	1.61						3.86			
BCD28229	80.40	81.40	1.00	0.38	3.96	2.20	109.8	1.34						3.57			
BCD28230	81.40	82.40	1.00	0.27	3.96	1.66	43.2	5.66						3.32			
BCD28231	82.40	83.40	1.00	0.48	4.28	2.64	64.6	8.63						3.80			
BCD28232	83.40	84.40	1.00	0.48	4.14	4.04	109.3	7.24						3.39			
BCD28233	84.40	85.00	0.60	0.49	2.92	1.74	64.9	14.58						3.29			
BCD28234	85.00	85.50	0.50	0.22	1.96	1.16	32.1	1.65									
BCD28235	85.50	86.50	1.00	0.14	1.78	0.32	23.6	0.76									
BCD28236	86.50	87.50	1.00	0.41	2.46	2.80	65.3	5.69						4.22			
BCD28237	87.50	88.00	0.50	0.72	1.76	3.92	60.8	8.54						3.82			
BCD28238	88.00	88.90	0.90	1.06	0.39	0.99	101.3	37.6						3.77			
BCD28239	89.30	90.30	1.00	0.03	0.03	0.05	8.8	0.91									
BCD28240	93.00	93.40	0.40	0.03	0.29	0.32	12.2	0.27									

MINNOVA INC.

HOLE NUMBER: U1330-44 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 632.10N
EAST: 9699.69W
ELEV: 1333.11

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

COLLAR DIP: -15° 0' 0"
LENGTH OF THE HOLE: 68.00m
START DEPTH: 0.00m
FINAL DEPTH: 68.00m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 14, 1991
DATE COMPLETED: February 14, 1991
DATE LOGGED: February 25, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
ROD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: NONE
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-15° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-15° 0'	ACID	OK		-	-	-	-	-	
66.40	-	-16° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 7.20	«DOL MAFICS»	Pale to dark green chloritic mafic tuffs. Numerous white qtz-carb veins Foliation: 2.4m 4.0 Faults fractures: 0.0 - 0.5 flt subparallel to c/a 2.1 - 2.4m healed flt bx.	 48 52	Dol'n Patchy sil'n Local mod. greenish yellow ser'n.	(1% pyrite	Minor block core, gouge at lower contact.
7.20 TO 21.90	«MFLT»	Yellow sericized lapilli in a green chloritic tuff matrix. Texture masked by alteration 7.2 - 11.6 and 17.4 - 21.9m Foliation 9.1 14.6m 18.7m 20.8m Faults and fractures: 16.1 - 16.4m «flt bx» 18.5 - 18.6m flt/fracture 18.7 - 18.9m flt gou+blocks	 45 42 36 32	Selectively intense Yellow ser'n Patchy sil'n Mod-intense ferro-dol.	1-2% pyrite	Distinct lapilli at 11.6m to 17.4m. Blocky core to lower contact.
21.90 TO 30.80	«MAFIC FLT ZNE»	Intermittently faulted pale green mafic. (Possibly remnants of lapilli protolith) Breccia generally compact and locally healed. Blocky sections, 123.3 to 23.7m, healed bx, 26.2 - 26.6m, and 28.3 - 28.7m Foliation 23.3m 28.7m	 35 22	Ferro-dol. Patchy sil in remnant blocks. Local greenish yellow ser'n.	(1% pyrite.	Gouge becomes friable from 29.9 - 30.8m.
30.80 TO 32.10	«SIL ARG/ MAF FLT BX»	Blocky to intensely faulted mixture of silicified, graphitic argillite and pale green mafic. Remnant foliation in gouge	 40	Dol of mafic component.	1-3% pyrite	
32.10 TO 39.00	«MAF/SIL ARG»	Mixed interval of sil arg and pale green mafic. Foliation 32.4 37.8 Faults & fractures: 34.8 - 36.0 «flt bx» 36.9 - 37.1 «flt gou/bx» 37.6 - 37.8m highly sheared 37.9 - 38.4m white qtz-carb blocky broken upper contact	 56 40 43 40 30	Patchy sil'n Dol of mafic component	3-4% pyrite, locally 5% over 2-3cm in patches	Fault brecciated in part.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		38.4 - 39.0 gouge + blocky				
39.00 TO 47.30	«MAF/QTZ/ SER»	Pale yellow finely laminated sericite with 1-2mm bands of quartz sheared, flattened, parallel to foliation. Foliation: 39.6m 43.9 {45.8 - 46.6} «flt gouge» Intense gouge. Very soft.	 55 55	Intense pale yellow sericite	5% disseminated grains pyrite.	Tectonised. Altered mafic component. Friable parallel to foliation.
47.30 TO 49.10	«CHERT/ SIL SED»	Dark bluish grey intensely silicified sed/mafic?? Original textures destroyed	48	Intense pervasive, homogenous, silicification. Chertification?? Faint green fuchsite.	<1/2% pyrite	Protolith chert? mafic? Sheared lower contact parallel to foliation.
49.10 TO 68.00	«ALT SEDS/ WACKE»	Seds exhibiting variable intensity of alteration. Pale greyish green to dark grey wacke and minor sert. Foliation: 49.4m 54.3 56.1 61.5 66.9 Faults and fractures: 49.1 - 50.0 strained {50.0 - 50.2} «flt gouge» {51.9 - 52.3} «flt gou/bx» 52.5 - 53.5m fault at low angle to c/a 55.8 - 56.0m, contorted white qtz-carb vein 57.0 - 57.1m flt gouge 59.0 - 59.1m flt bx {59.8 - 60.6} «flt bx» blocky QV and seds gouge {61.1 - 61.5} «flt bx/gou»	 53 74 41 52 53 20	Weak to locally intense yellow ser'n. Well developed sert near upper and lower sections of interval.	Variable distribution pyrite. Mostly confined to occasional bands associated with sil'n or coarse blebs in white qtz-carb veins. {62.7 - 63.1} «10% Py» in white qtz carb and pyritic sil-sed. QV sub parallel to c/a.	Blocky core from 53.5 to 68.0m. White qtz carb at 50.2 - 50.7m 60.7 - 61.1m 62.7 - 63.1m 65.1 - 65.3m
	E.O.H.					

				ASSAYS							GEOCHEMICAL							COMMENTS
Sample	From (m)	To (m)	Length (m)	CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		
BCD28241	36.00	37.50	1.50	0.01	0.02	0.01	0.8	0.03										
BCD28242	47.30	49.10	1.80	0.01	0.02	0.01	2.4	0.11										
BCD28243	50.20	50.70	0.50	0.01	0.02	0.01	8.6	0.03										
BCD28244	50.70	51.80	1.10	0.01	0.01	0.01	0.9	0.03										
BCD28245	60.70	61.10	0.40	0.01	0.01	0.01	0.4	0.05										
BCD28246	62.70	63.10	0.40	0.01	0.02	0.02	2.5	0.58										
BCD28247	63.40	64.90	1.50	0.01	0.01	0.01	1.0	0.14										

KINNOVA INC.

HOLE NUMBER: U1330-45 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 632.41N
EAST: 9719.99W
ELEV: 1331.51

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

COLLAR DIP: -45° 0' 0"
LENGTH OF THE HOLE: 57.00m
START DEPTH: 0.00m
FINAL DEPTH: 57.00m

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

DATE STARTED: February 15, 1991
DATE COMPLETED: February 16, 1991
DATE LOGGED: February 26, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-45° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-45° 0'	ACID	OK		-	-	-	-	-	
57.00	-	-45° 0'	ACID	OK		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 18.30	«MFLT»	Yellow sericitized lapilli in a pale to dark green chloritic to sericitic and dolomitic tuff matrix. Foliation: 2.4m 6.7m 13.6m Faults and fractures: 5.3 - 5.5m blocky 7.0 - 7.1m qv + flt + bx 8.3 - 8.6m flt blocky/broken ╟18.2 - 18.3╢ «flt gouge» at lower contact	 67 67 68	Intense ferro-fol Selective intense yellow ser'n Patchy sil'n	1-2% Pyrite	
18.30 TO 21.90	«MAF/ SIL AR6»	Tectonised black, silicified, graphitic argillite with minor pale grey green, dol-mafic ╟19.2 - 19.9╢ «flt bx» compact ╟20.3 - 20.4╢ «flt bx» 20.9 - 21.0m flt bx	77	Patchy sil'n Ferro dol of mafic	3-4% blebby pyrite.	Minor fault at contact.
21.90 TO 22.90	«MAF/QTZ/ SER»	Pale yellow sericite and laminae of mafic. Stretched laminae of qtz and deformed folded grey qtz veins. Minor gouge parallel to foliation.	56	Intense pale yellow sericitization	7% disseminated pyrite mainly in yellow sericite.	Tectonized, sheared parallel to foliation.
22.90 TO 25.20	«ALT MAFIC»	Altered, pale to dark green dolomitized mafic. 22.9 - 23.1m - QV + flt-bx ╟25.1 - 25.2╢ «flt-bx»	55	Ferro-dol. Minor patches of sil'n.	1-2% pyrite.	
25.20 TO 25.90	«QTZ-CARB VN»	White qtz-carb vein, with minor healed QV breccia.			1/2% pyrite.	
25.90 TO 30.10	«MAF/QTZ/ SER.FLT»	Interval comprising sections of intensely faulted qtz/ser/maf; healed qtz-carb vein bx, and minor blocky qtz/ser/maf. Blocky section foliation	73	Intense pale yellow ser'n.	5-6% pyrite.	Tectonised and later stage faulting to gou/bx.

HOLE NUMBER: U1330-45

MINNOVA INC.
DRILL HOLE RECORD

DATE: 19-March-1991

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
30.10 TO 32.40	«QV/SED»	Partly faulted, blocky interval of white qtz-carb, with 30% grey-white sed inclusions. Minor sert. ╡30.4 - 30.5╞ «flt gou/bx»	59	Yellow sert at upper contact and within flt 30.4 - 30.5m. Minor fuchsite with qtz-carb.	Minor Tt in mottled grey-white qv/sed and occasional bleb in white qtz-carb. 30.1 - 31.1m (1%Tt. ╡31.1-32.4╞ «3%Tt blebs» in white qtz carb and grey-white mottled sed/qtz inclusions.	
32.40 TO 35.40	«FUCHSITE ALT MAF»	Pale greenish grey altered mafic with fuchsite associated with fault bx, 35.0 - 35.4m 5% qtz-carb veining.		Intense ferro-dol. Minor sil'n.	1-2% blebby pyrite.	
35.40 TO 43.70	«QV/SERT»	Mixed interval of white to grey qtz-carb veins, sert and minor weakly altered wacke. Foliation 37.0m / 39.4m / 42.9m. Faults 35.5 - 35.6m, ╡40.9 - 41.3╞ «flt gou/bx» ╡42.3 - 42.7╞ «flt bx»	74 / 60 / 75	Intense yellow to olive green ser'n. (sert). ╡35.9 - 37.6╞ «Sert flt zne» friable.	Blebby pyrite in silicified bands within sert. 35.4 - 35.9m 1/2% Tt in mottled QV/sed. 35.9 - 37.6m TrTt 10% Py. ╡37.6 - 38.6╞ «7%Py(1%Tt»	
43.70 TO 45.50	«ALT SED FLT ZNE»	Fault zone transitional from weakly altered seds/wacke to grey, sericitic seds.			3-4% Pyrite.	
45.50 TO 48.40	«ALT SEDS»	Grey sericitic seds with minor sil seds and pyritic/ser seds (mut). Foliation 45.7m / 48.3m	78 / 61	Intense grey ser'n.	5-7% pyrite. Blebby Sp locally associated with sil patches and QV. Overall (1/2% Sp	Faults, 45.8 - 45.9m bx 46.8 - 47.1 gou/bx 48.3 - 48.4m faulted lower contact.
48.40 TO 52.80	«QV/ALT SEDS/WKE»	Seds showing variable degrees of alteration. Weakly altered pale grey wacke varies to moderately yellow sericitic sed. White qtz-carb from 49.0 - 49.8 and 49.9 - 50.2m Minor gouge intervals. Foliation: 48.4m / 51.6m	70 / 65	Weakly to locally intersely sericitic seds. (Minor mut and sert)	5-7% Pyrite. ╡49.0 - 50.2╞ «3%Py1%Cp» Blebby stringers in white qtz. carb.	Faulted lower contact.
52.80 TO 57.00	«ARG/WACKE»	Grey silicified wacke passes downhole into black graphitic argillite and grey wacke. 53.7m. Foliation 55.2m	76 / 80	Minor dark yellow sericite 56.7 - 57.0m as patches and laminae.	1-3% pyrite. However from 55.8 to 56.7m bands and wisps brown pyrite occur up to 10%.	White qtz-carb veins invade interval 55.8 - 56.7.
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD10867	30.10	31.10	1.00	0.28	0.11	0.07	319.0	0.61						2.80			
BCD10868	31.10	32.40	1.30	0.52	0.86	0.44	552.0	0.69						2.63			
BCD10869	35.40	35.90	0.50	0.25	0.12	0.06	273.0	0.43						2.67			
BCD10870	35.90	37.60	1.70	0.03	0.03	0.02	32.3	0.12									
BCD10871	37.60	38.60	1.00	0.03	0.01	0.01	37.6	0.07									
BCD10872	38.60	40.10	1.50	0.09	0.02	0.03	104.0	0.19						2.61			
BCD10873	40.10	40.90	0.80	0.01	0.01	0.02	7.3	0.13									
BCD10874	40.90	41.30	0.40	0.01	0.01	0.01	2.3	0.03									
BCD10875	41.30	42.30	1.00	0.01	0.01	0.01	1.1	0.03									
BCD28320	42.30	42.70	0.40	0.23	1.16	0.72	239.0	0.44						2.95			
BCD28321	42.70	43.70	1.00	0.01	0.01	0.01	2.4	0.05									
BCD28322	43.70	45.50	1.80	0.19	0.92	0.52	157.0	0.28						2.76			
BCD28223	45.50	46.50	1.00	0.54	1.78	0.84	448.0	1.06						2.66			
BCD28324	46.50	48.40	1.90	0.03	0.16	0.12	31.6	0.33									
BCD28325	49.00	50.20	1.20	0.08	0.01	0.01	16.7	0.30									

HOLE NUMBER: U1330-46

NIMNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 634.37N
EAST: 9719.94W
ELEV: 1332.48

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

COLLAR DIP: -79° 0' 0"
LENGTH OF THE HOLE: 94.50m
START DEPTH: 0.00m
FINAL DEPTH: 94.50m

COLLAR GRID AZIMUTH: 360° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: February 16, 1991
DATE COMPLETED: February 17, 1991
DATE LOGGED: February 27, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE: DEEP HOLE TO TEST STRIKE EXTENSION OF MASSIVE SULPHIDES INTERSECTED IN HOLE U1330-43. NOT

DIRECTIONAL DATA: SUCCESSFUL.

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-79° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-79° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-80° 0'	ACID	OK		-	-	-	-	-	
94.50	-	-83° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CS6»					
0.60 TO 14.40	«MSLP»	Greenish yellow sericitized lapilli in a pale greyish green chloritic/sericitic/dolomitic matrix. Foliation: 1.2m 5.5m 10.7m 14.4m Faults: 12.1 - 13.3 «compact flt-bx» 13.9 - 14.1m - compact flt bx.	44 47 54 53 55	Intense ferro-dol, patchy sil'n. Selective yellow ser'n.	1-2% pyrite.	
14.40 TO 15.40	«FLT ZONE»	Fault zone transitional through MFLT to black graphitic sil arg. Compact mafic bx to soft graphitic gouge.				Possibly 2 faults; one in mafic at 15 deg to c/a and second at contact mafic argillite.
15.40 TO 23.70	«SIL ARG/ MAF»	Mafic dominated interval. Minor sil, graphitic argillite. Foliation: 17.6m 20.0m Faults: 15.4 - 16.4m blocky 20.2 - 21.7m blocky and part healed breccia. 22.9 - 23.0m flt bx. 23.3 - 23.4 flt bx.	41 45	Intense ferro-dol of mafic	2-5% blebby pyrite.	Fault at upper contact result in blocky core.
23.70 TO 24.90	«GRAPH ARG FLT»	Graphitic argillite faulted to compact and soft, breccia and gouge. Orientation of gouge, 23.7m	45			
24.90 TO 30.60	«SIL ARG»	Blocky, partly faulted highly graphitic, silicified argillite. Numerous qtz carb microveinlets. Very blocky, broken core from 26.2 - 28.3m			Base metal sulphides in white qtz carb patch 25.9 - 26.1 «7%CpGnSp»	Faulted lower contact. 30.5 - 30.6 flt gou bx. Remnant of folded vein?
30.60 TO 32.20	«MAF/ARG QTZ/SER»	Sheared, laminated mixture mafic, argillite and qtz and sericite. Intense fault gouge at 32.1 - 32.2m	50 56 65	Pale yellow ser'n.	5% blebby pyrite Trace Cp.	Tectonized.

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 14.40	«MSLP»	Greenish yellow sericitized lapilli in a pale greyish green chloritic/sericitic/dolomitic matrix. Foliation: 1.2m 5.5m 10.7m 14.4m Faults: [12.1 - 13.3] «compact flt-bx» 13.9 - 14.1m - compact flt bx.	 44 47 54 53 55	Intense ferro-dol, patchy sil'n. Selective yellow ser'n.	1-2% pyrite.	
14.40 TO 15.40	«FLT ZONE»	Fault zone transitional through MFLT to black graphitic sil arg. Compact mafic bx to soft graphitic gouge.				Possibly 2 faults; one in mafic at 15 deg to c/a and second at contact mafic argillite.
15.40 TO 23.70	«SIL ARG/ MAF»	Mafic dominated interval. Minor sil, graphitic argillite. Foliation: 17.6m 20.0m Faults: 15.4 - 16.4m blocky 20.2 - 21.7m blocky and part healed breccia. 22.9 - 23.0m flt bx. 23.3 - 23.4 flt bx.	 41 45	Intense ferro-dol of mafic	2-5% blebby pyrite.	Fault at upper contact result in blocky core.
23.70 TO 24.90	«GRAPH ARG FLT»	Graphitic argillite faulted to compact and soft, breccia and gouge. Orientation of gouge, 23.7m	 45			
24.90 TO 30.60	«SIL ARG»	Blocky, partly faulted highly graphitic, silicified argillite. Numerous qtz carb microveinlets. Very blocky, broken core from 26.2 - 28.3m			Base metal sulphides in white qtz carb patch [25.9 - 26.1] «7%CpGnSp»	Faulted lower contact. 30.5 - 30.6 flt gou bx. Remnant of folded vein?
30.60 TO 32.20	«MAF/ARG QTZ/SER»	Sheared, laminated mixture mafic, argillite and qtz and sericite. Intense fault gouge at 32.1 - 32.2m	 50 56 65	Pale yellow ser'n.	5% blebby pyrite Trace Cp.	Tectonized.

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
32.2m TO 94.5m	«ALT SEDS»	Relatively homogenous interval of grey, sericitic seds. Protolith varies from heterolithic fragmental to wacke and argillite.		Alteration varies from grey ser'n to sil'n and combinations of both with Pyritic zones; i.e. MUT.	Variable. Base metals generally associated with patches/veins of sil'n and Qtz. Pyrite varies from very fine grained, banded to patchy, in form, to blebby.	
		Noteable features as follows:				
		32.2 - 36.1m Het frag	54		Fine wisps and bands Py	35.2 - 36.2m 7%Py1%Sp6nTt
			56		TrSpTt	
		36.1 - 36.2 minor shear parallel foliation.	45			
		Foliation 39.6m	52			
		43.2 - 45.1 black argillite remnants in alt seds.	47			
		49.2 - 54.5m sil seds/het frag. 40% qts-carb veining and flooding. Includes 50.7 - 51.2m flt bx	52		10% Pyrite. 2%Sp6n.	
		and 53.5 - 53.7m minor bx.	51	Sil'n	╟49.2 - 54.5╢ «2%Sp2%Gn(1/2%Tt»	
		Blocky and minor gouge 54.8m and 55.1m.				
		╟56.7 - 58.2╢ «flt gou/strained»	54		Fine disseminated Py 15%	MUT
		Foliation - 62.5m	45			
		68.6m	44		╟69.1 - 70.1╢ «7%Py4%Sp6n»	Blebby Sp and stringer-like 6n in qtz-carb flooding seds.
		72.5m	42			
		77.4m	43		70.1 - 71.6m - 6%Sp6nTrTt	in flooded seds.
					╟73.1 - 74.6╢ «8%Sp3%Gn10%Py»	Qtz carb flooded seds
		76.1 - 77.3m faint, deformed qtz carb veins			76.1 - 77.3 - 5%Sp 10%Py	Fine disseminated to blebby Sp and Py.
		╟77.4 - 77.5╢ «flt bx/strained»				
		╟78.8 - 79.5╢ «flt bx + blocks»				
		Foliation 80.8m	41			
		88.4m	40			
		93.0m	44			
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD28326	22.90	23.20	0.30	0.01	0.05	0.04	0.8	0.03									
BCD28327	25.90	26.10	0.20	1.90	2.22	1.58	51.7	0.27						2.79			
BCD28328	32.20	34.20	2.00	0.09	0.20	0.10	26.7	0.30									
BCD28329	34.20	35.20	1.00	0.07	0.43	0.27	23.6	0.23									
BCD28330	35.20	36.20	1.00	0.19	0.50	0.17	61.5	0.32									
BCD28331	36.20	38.20	2.00	0.02	0.24	0.18	9.6	0.31									
BCD28332	41.70	43.20	1.50	0.29	0.36	0.25	44.3	0.21									
BCD28333	43.20	45.20	2.00	0.05	0.39	0.20	17.9	0.08									
BCD28334	46.70	47.70	1.00	0.11	0.55	0.19	33.2	0.14									
BCD28335	49.20	50.20	1.00	0.02	0.82	0.24	9.7	0.13									
BCD28336	50.20	50.70	0.50	0.04	2.58	0.39	18.7	0.09									
BCD28337	50.70	51.20	0.50	0.01	0.05	0.08	7.7	0.23									
BCD28338	51.20	52.70	1.50	0.11	0.74	0.78	66.5	0.32									
BCD28339	52.70	53.60	0.90	0.05	3.38	1.78	60.3	0.20						2.66			
BCD28340	53.60	54.60	1.00	0.04	0.08	0.05	25.0	0.28									
BCD28341	54.60	55.60	1.00	0.01	0.02	0.03	4.5	0.26									
BCD28342	55.60	56.70	1.10	0.01	0.01	0.02	3.9	0.40									
BCD28343	56.70	58.20	1.50	0.01	0.01	0.03	5.7	0.38									
BCD28344	58.20	59.70	1.50	0.01	0.42	0.10	9.9	0.47									
BCD28345	62.70	64.70	2.00	0.02	0.14	0.06	16.6	0.29									
BCD28346	69.10	70.10	1.00	0.04	0.82	0.92	37.5	0.18									
BCD28347	70.10	71.60	1.50	0.01	1.02	0.94	23.4	0.19									
BCD28348	71.60	73.10	1.50	0.01	0.01	0.17	9.9	0.30									
BCD28349	73.10	74.60	1.50	0.01	1.10	0.57	16.3	0.09									
BCD28350	74.60	76.10	1.50	0.01	0.03	0.07	6.0	0.12									
BCD28351	76.10	77.30	1.20	0.01	0.05	0.06	5.3	0.31									
BCD28352	77.30	78.80	1.50	0.13	0.25	0.17	45.3	0.29									
BCD28353	79.50	81.50	2.00	0.03	0.55	0.24	16.6	0.23									
BCD28354	81.50	82.00	0.50	0.01	0.21	0.08	7.9	0.03									
BCD28355	85.30	86.80	1.50	0.16	0.34	0.12	54.3	0.39									
BCD28356	89.90	91.40	1.50	0.03	0.03	0.03	16.3	0.39									

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.53N
EAST: 9719.98W
ELEV: 1331.44

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

COLLAR DIP: -70° 0' 0"
LENGTH OF THE HOLE: 61.00m
START DEPTH: 0.00m
FINAL DEPTH: 61.00m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 17, 1991
DATE COMPLETED: February 17, 1991
DATE LOGGED: February 28, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-70° 0'	ACID		OK	-	-	-	-	-	
61.00	-	-73° 0'	ACID		OK	-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 12.60	«MFLT»	Yellow sericitized lapilli in a chloritic, sericitic, dolomitic matrix. Foliation at: 1.2m 6.0m 10.7m Faults and fractures: 2.4 - 2.5m flt bx 7.1 - 7.3m flt bx	 79 70 57	Intense ferro-dol Patchy sil'n Selective ser'n.	1-2% Pyrite.	
12.60 TO 15.20	«MAF FLT BX»	Compact mafic lapilli fault breccia - Minor graphitic argillite.		Ferro-dol		
15.20 TO 17.80	«MAF ARG»	Dominantly dolomitized mafic with intermixed minor argillite	71			Faulted lower contact.
17.80 TO 20.90	«MAF SIL ARG»	Partly fault brecciated, mixed, black, silicified graphitic argillite and minor mafic. Faults: 17.8 - 17.9m flt bx [18.2 - 19.2] «flt bx»	79		1% Pyrite	Tectonized mafic/arg pre fault brecciation.
20.90 TO 24.10	«MAF/SED FLT ZNE»	Fault zone transitional through graphitic arg, maf/qtz/ser and grey alt sed. 20.9 - 22.3m graph arg bx. 22.3 - 23.1m maf/ser/qtz bx 23.1 - 23.4m block maf/ser/qtz 23.4 - 23.8m qtz/ser bx 23.8 - 24.1 grey qv/sed bx	70	Intense pale yellow ser'n.	7-10% Py in maf/ser/qtz Possible Tt in grey QV/sed breccia.	
24.10 TO 25.90	«QV/ALT SED»	Mixed interval qtz carb veins and grey and yellow alt sed inclusions. Part fault brecciated.		Yellow and grey sericitized sed inclusions.	[24.1 - 24.5] «2-3% Tt» 24.5 - 25.9m 1-2% Tt in grey sed inclusions.	Disseminated Tt in fine moddled grey-white qtz-carb sed matrix.
25.90 TO 27.40	«ALT SED FLT BX»	Faulted zone of yellow and grey sericitized seds, qtz-carb veins with mottled texture and white qtz-carb.		Grey and yellow ser'n.	2-3%Tt 1% Sp contained within blocky zones and fragments of Qtz-carb/mottled grey sed.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
27.40 TO 48.80	«QV/MUT/ SIL SEDS»	Interval varying from brownish-grey sericitic, pyritic (argillic) seds to intensely flooded grey silicified seds with grey sericitic partings and patches of white qtz-carb veins. Variations as follows: 27.4 - 29.2m partly faulted strained, locally silicified, brownish grey pyritic mut. ┤29.2 - 29.8├ «flt bx/gou» Foliation 30.3 ┤31.3 - 32.3├ «flt zone» gouge + blocky intervals of sil sed + white qv. 32.3 - 32.8m banded, pyritic sericitic partly silicified sed. 32.8 - 34.9m Seds intensely flooded by white qtz carb. Virtually no sed texture visible. Banding Py. Essentially a qtz-carb vein. 34.9 - 43.4m Sil Seds Foliation 36.1m 40.0 43.4 43.4 - 48.8m. locally faulted interval of sil seds, with 1-5cm sections of gouge at 43-4, 43.7, 44.5 45.5 - 46.1m flt gou + blocks. 47.2m 5cm gouge 47.2 - 48.8m minor gouge every 10cm.	64 55 35 64 60 53 51 53 55	Patchy, banded to pervasive sil'n. Moderate to intense grey ser'n, developed as partings parallel to foliation.	Variable distribution of sulphides as follows: 27.4 - 28.9m 5%Sp2%Gn(Tt?) honey brown blebs and disseminations elongate, parallel to foliation. ┤29.8 - 30.8├ «10%Tt7%Cp5%Sp3%Gn» 3% CpSp6n blebs scattered within sil seds. Patchy Cp parallel to foliation 5% Cp. Banded to blebby CpSp6n. Large Gn patch 2 x 3cm at ┤33.8 - 34.9├ «8%Sp7%Cp5%Gn1%Tt» 34.9 - 43.4m 10%Py2-3%Sp6n Tr.CpTt 5-7% pyrite and occasional blebby Sp.	Zone includes 20 cm zone semi massive fine grained Tt. Blebby CpSp Locally more concentrated zones. 41.1 - 41.4m 15% Sp6nTt
48.80 TO 49.40	«FLT BX»	Compact faulted sil seds.				
49.40 TO 54.90	«SIL SEDS»	Grey silicified seds, with grey sericite partings. Foliation 50.1m 52.9m ┤54.4 - 54.7├ «flt gou+blocks» Minor gouge at lower contact.	48 54	Moderate to intense sil'n and grey ser'n.	Decrease in pyrite content from overlying intervals. Overall 3-5%.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
54.90 TO 61.00	«ALT SED/ WACKE»	Banded yellow and grey weakly altered seds with recognisable wacke sub intervals.		Weak yellow and grey sericitization. Minor local sert.	3-5% banded pyrite. Locally 20% pyrite associated with QV.	
		Foliation 56.6m	53			
		59.4m	55		[58.4 - 58.5]	
		5% white qtz-carb veining.			«20-30% Py»	
		Minor gouge 59.0 - 59.1m.				
		Gouge at 60.8 - 61.0m				
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD28357	22.80	23.80	1.00	0.01	0.01	0.01	1.4	0.03									
BCD28358	23.80	24.10	0.30	3.92	6.64	3.48	2975	3.38						3.29			
BCD28359	24.10	24.50	0.40	1.52	0.67	0.07	1575	1.42						2.72			
BCD28360	24.50	25.90	1.40	0.54	0.29	0.07	477.0	0.75						2.81			
BCD28361	25.90	27.40	1.50	0.58	0.96	0.32	504.0	1.12						2.57			
BCD28362	27.40	28.90	1.50	0.45	4.94	2.72	404.0	1.10						3.04			
BCD28363	28.90	29.80	0.90	0.81	3.58	1.52	564.0	1.42						2.69			
BCD28364	29.80	30.80	1.00	4.76	10.60	5.74	3620	5.84						3.07			
BCD28365	30.80	31.30	0.50	0.14	1.26	0.49	115.3	0.29						2.70			
BCD28366	31.30	32.30	1.00	0.03	0.29	0.26	22.1	0.09									
BCD28367	32.30	32.80	0.50	0.36	0.20	0.75	84.7	0.27									
BCD28368	32.80	33.80	1.00	3.52	9.68	7.06	2274	4.46						3.59			
BCD28369	33.80	34.90	1.10	3.06	9.92	5.46	2016	3.41						3.19			
BCD28370	34.90	36.40	1.50	0.30	0.97	0.65	175.3	0.30						2.76			
BCD28371	36.40	37.90	1.50	0.39	0.62	0.32	207.3	0.46						2.67			
BCD28372	37.90	39.40	1.50	0.51	0.95	0.50	174.8	0.44						2.79			
BCD28373	39.40	40.90	1.50	0.08	0.52	0.17	36.4	0.19									
BCD28374	40.90	42.40	1.50	1.26	3.28	2.74	386.0	1.21						2.87			
BCD28375	42.40	43.40	1.00	0.11	1.10	0.52	43.2	0.30									
BCD28376	43.40	44.90	1.50	0.07	0.37	0.29	24.3	0.22									
BCD28377	44.90	46.40	1.50	0.24	1.28	0.61	94.1	0.49									
BCD28378	46.40	47.90	1.50	0.08	0.39	0.50	47.8	0.33									
BCD28379	57.50	58.40	0.90	0.01	0.29	0.65	17.4	0.03									
BCD28380	58.40	58.60	0.20	0.01	0.02	0.05	5.6	0.14									

NINNOVA INC.

HOLE NUMBER: U1330-48 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: U6 — PLOTTING COORDS GRID: FIELD — ALTERNATE COORDS GRID: — COLLAR DIP: -21° 0' 0"
PROJECT NUMBER: SAM — NORTH: 632.32N — NORTH: 0+ 0 — LENGTH OF THE HOLE: 72.50m
CLAIM NUMBER: — EAST: 9720.01W — EAST: 0+ 0 — START DEPTH: 0.00m
LOCATION: GRID — ELEV: 1332.41 — ELEV: 0.00 — FINAL DEPTH: 72.50m

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

DATE STARTED: February 17, 1991 — COLLAR SURVEY: YES — PULSE EM SURVEY: NO — CONTRACTOR: BOISVENUE DRILLING
DATE COMPLETED: February 18, 1991 — MULTISHOT SURVEY: YES — PLUGGED: YES — CASING: NONE
DATE LOGGED: March 1, 1991 — RQD LOG: YES — HOLE SIZE: BTW — CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-23° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-22° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-23° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 21.60	«MFLT»	Yellow sericitized lapilli in a chloritic, dolomitic tuffaceous matrix. Foliation 0.9m 6.0m 12.0m 15.0m 20.4m Faults: 3.4 - 3.9m ╡8.3 - 8.5╞ «blocky» 9.4 - 9.6m flt gouge 12.3 - 12.4m ╡17.0 - 17.2╞ «flt gou+blocks» 17.7 - 19.2 blocky broken core. ╡21.3 - 21.6╞ «flt bx+blocky»	51 53 40 50 58	Intense ferro-dol. Patchy sil'n. Selective yellow ser'n.	1-2% Pyrite.	
21.60 TO 24.00	«MAF/SIL ARG»	Black silicified, graphitic argillite and interbedded dolomitized mafic. 21.6 - 21.9m blocky ╡22.1 - 22.4╞ «flt bx»	62	Dol mafics.	1-2% Pyrite	
24.00 TO 25.00	«FLT BX»	Fault transitional through maf/qtz/ser. Contact at 24.5m. Foliation in block	60	Dol of mafic component. Mod to intense pale yellow ser'n.	3-4% Pyrite.	
25.00 TO 41.20	«MAF/QTZ/SER»	Tectonized, laminated, greenish mafic, pale yellow sericite and patches and bands of quartz. Foliation 28.0m 35.0m 41.0m Faults: ╡25.6 - 26.0╞ «flt gou+blocks» 26.8 - 27.0m flt bx ╡29.1 - 29.9╞ «flt zone» 30.2 - 30.4m flt gou+blocks 32.4 - 32.6m flt bx ╡33.7 - 34.4╞ «flt zone» 35.5 - 35.6m flt gouge ╡38.2 - 40.2╞ «flt gou/bx» Major zone of faulting.	56 62 58 32	Intense pale yellow ser'n.	2-7% pyrite mainly as disseminations.	
41.20 TO 41.70	«FLT BX»	Faulted contact zone between maf/qtz/ser and mineralized qtz vein and sil seds. Upper contact	50	Pale yellow ser'n	Remnant sulphides in gouge; trace Sp in block white qtz-carb.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
41.70 TO 42.90	«SMSX/ SIL SEDS»	Partly faulted interval of Sp,Tt rich sil seds with faint white qtz-carb and semi-massive 30cm pyrite zone.	50 40		41.7 - 42.3m blocky partly faulted grey sil seds + base metal sulphides 20% SpTt. 42.3 - 42.6m 3-4% Spt in sil seds. 42.6 - 42.9m 40% yellowish brown pyrite. (Semi to massive sulphide).	Appears syngenetic. Minor gouge shear parallel foliation at contact.
42.90 TO 72.50	«QV/SERT ALT SEDS»	Moderate to locally intensely yellow sericitized sediments with lesser bands of grey sericitized seds. Local qtz carb veining and faulting. Details as follows: 42.9 - 43.8m Well developed sert ╟43.8 - 45.9╢ major «flt gou/bx» 45.9 - 48.1m friable greyish to yellow sericitized seds. 15cm total QV. 48.1 - 48.3m flt gouge. 48.3 - 60.0m sub-interval characterised by intermittent faulting, and Tt bearing qtz-carb veins. (Pinkish carbonate). 69.6 - 72.5m Strained, partly faulted moderately yellow sericitized seds pass into grey sil-seds. 70.6 - 70.8m compact graphitic flt bx/gou.	60 50 60	Moderate to intense yellow ser'n.	Pyrite bands within sert. Blebby, coarse grained pyrite associated with qtz-carb. Local massive blebs/bands/patches Tt associated with qtz-carb. Variations as follows: Blebby Py in qtz bands. 52.9 - 53.3m. 15% Py 1/2%Tt coarse blebby Py in qtz-carb. ╟54.7 - 54.9╢ «15%Tt» in white qtz-carb. ╟57.7 - 57.9╢ «20% Tt» ╟59.2 - 59.4╢ «6% Tt»	50.0 - 50.3m flt gouge 50.9 - 51.0m flt gouge 52.3 - 52.5m flt gouge 54.9 - 55.0m flt gouge cutting off Tt in qtz-carb vein. 62.5 - 66.0m Breccia/conglomerate of debateable origin.
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD28381	41.20	41.70	0.50	0.22	0.48	0.26	49.8	0.84									
BCD28382	41.70	42.30	0.60	8.24	13.60	7.10	1780.0	0.76						2.65			
BCD28383	42.30	42.60	0.30	3.78	4.86	2.32	1240.0	1.49						2.66			
BCD28384	42.60	42.90	0.30	2.60	3.42	1.84	1820.0	3.39						4.14			
BCD28385	47.90	48.30	0.40	0.07	0.04	0.03	62.5	0.36									
BCD28386	48.30	49.80	1.50	0.09	0.03	0.02	92.3	0.22									
BCD28387	49.80	51.30	1.50	0.04	0.06	0.02	30.1	0.30									
BCD28388	51.30	52.90	1.60	0.02	0.02	0.01	22.2	0.18									
BCD28389	52.90	53.30	0.40	0.80	0.80	0.96	721.0	4.08						2.75			
BCD28390	54.70	54.90	0.20	7.78	1.58	0.32	639.0	13.67						2.97			
BCD28391	55.60	57.70	2.10	0.08	0.02	0.02	78.5	0.20									
BCD28392	57.70	57.90	0.20	13.60	2.46	0.13	10500	12.45						2.92			
BCD28393	57.90	59.20	1.30	0.07	0.02	0.01	71.3	0.15									
BCD28394	59.20	59.40	0.20	4.34	0.76	0.09	3740.0	4.46						2.69			
BCD28395	59.40	60.40	1.00	0.04	0.01	0.01	34.3	0.25									
BCD28396	62.50	62.90	0.40	0.01	0.01	0.02	9.9	0.12									
BCD28397	62.90	64.90	2.00	0.01	0.01	0.01	3.8	0.08									
BCD28398	68.60	69.60	1.00	0.01	0.01	0.01	1.9	0.13									

HOLE NUMBER: U1330-49

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 634.09N
EAST: 9719.96W
ELEV: 1331.44

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

COLLAR DIP: -89° 0' 0"
LENGTH OF THE HOLE: 62.80m
START DEPTH: 0.00m
FINAL DEPTH: 62.80m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 18, 1991
DATE COMPLETED: February 19, 1991
DATE LOGGED: March 2, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-89° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-89° 0'	ACID	OK		-	-	-	-	-	
54.90	-	-89° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CS6»					
0.60 TO 12.70	«MFLT»	Yellow sericitized lapilli in a dark green chloritic tuff matrix. Foliation 4.3 — 64 10.9 — 50 Faults 6.1 - 6.3 flt bx 7.3 - 7.5 blocky + minor bx 11.7 - 12.7 «flt bx» compact.		Intense ferro-dol. Selective ser'n of lapilli.	1-2% pyrite.	Fault at lower contact persists into sil-arg.
12.70 TO 24.00	«MAF/SIL ARG»	Mafic dominated interval of mixed mafic and graphitic argillite between 12.7 - 20.1m. Sil arg dominates from 20.1m - 24.0m. Foliation 16.0m — 62 19.4m — 61 23.2m — 65 Faults fractures: 17.1 - 17.4m flt bx+blocks 19.5 - 19.6m flt bx. 20.2 - 20.8m blocky/strained 22.4 - 23.1 «flt bx» 23.2 - 23.7m flt bx Fault zone through lower contact with underlying maf/qtz/ser.		Ferro-dol of mafic. Local pervasive sil'n argillite.	1-3% Pyrite	Upper 0.5m 12.7 - 13.2m faulted 17.4 - 18.0m intense dol + QV.
24.00 TO 26.20	«MAF/QTZ/ SER»	Laminated to tectonized, partly fault brecciated, qtz, pale yellow sericite and mafic. Foliation 24.4m — 65 26.0 — 50 24.7 - 24.9m strained/shattered 25.3 - 25.6m flt bx.		Intense pale yellow ser'n.	2-4% pyrite.	Fault zone 23.9 - 24.4m
26.20 TO 27.70	«FLT ZONE»	Fault zone transitional through qtz/ser/maf into grey sericitized altered seds. Breccia and gouge. Upper contact — 65 70				Contact maf/sed at approx 26.7m

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
27.7@ TO 62.8@	«MUT/SIL SEDS»	Grey sericitic altered sediments with variable degrees of sil'n and pyritization (MUT).		Moderate to intense grey ser'n. Locally pervasive sil'n associated with white qtz-carb flooding.	Variable pyrite 5-15% Blebby Sp often strung out parallel to foliation.	Foliation/banding of pyrite locally at v. low angles to c/a.
		Foliation 29.5m	4@			43.5m, 8 deg to c/a
		36.3m	4@			Rotation due to shearing.
		41.8m	39		╡33.4 - 34.7╞ «1@%Py3%Sp»	
		47.@m	26		╡36.2 - 37.2╞ «1@%Py4%SpCp»	Fine honey brown Sp in dark pyritic
		51.@m	49		SpCp associated with seds flooded	MUT.
		56.8m	47		by white qtz-carb.	
		61.@	55			
		Faults and fractures:			4@.2 - 42.1m 1@-15% Py with traces	Banding/foliation of dark pyritic MUT.
		28.@ - 28.1m flt gou+blocky			of Sp.	
		31.@ - 31.1m flt bx			47.4 - 49.5m - 1@-12%Py 1%Sp	47.4 - 5@.4 Abundant white qtz-carb
		╡31.7 - 32.2╞ «flt gou/bx»				patches/flooding.
		33.2 - 33.4m flt bx			╡59.4 - 59.9╞	
		34.6 - 34.7m flt bx			«4%Sp6n» Blebs and stringers in	
		42.5 - 46.9m local gouge + intermittent sheared mut.			white qtz-carb.	
		╡47.4 - 47.5╞ «flt gou»				
		╡49.5 - 5@.@╞ «flt gou+blocks»				
		5@.@ - 51.1m minor gouge parallel to foliation.				
		51.1 - 51.5m blocky QV				
		52.3 - 52.5m flt gou				
		54.5m - 5cm gouge				
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD28399	26.70	27.70	1.00	0.20	2.38	0.98	116.0	0.44						2.64			
BCD28400	27.70	28.20	0.50	0.23	1.24	0.60	135.0	0.65						2.74			
BCD28401	28.20	29.70	1.50	0.07	0.92	0.36	36.5	0.17									
BCD28402	29.70	32.20	2.50	0.01	0.26	0.15	8.2	0.21									
BCD28403	32.20	33.40	1.20	0.09	0.28	0.15	17.3	0.27									
BCD28404	33.40	34.70	1.30	0.33	3.04	0.94	166.0	0.46						2.80			
BCD28405	34.70	36.20	1.50	0.06	1.70	0.45	23.7	0.13									
BCD28406	36.20	37.20	1.00	0.18	0.39	0.11	33.3	0.48									
BCD28407	37.20	38.70	1.50	0.01	0.01	0.02	7.0	0.34									
BCD28408	38.70	40.20	1.50	0.02	0.04	0.04	11.2	0.17									
BCD28409	40.20	42.10	1.90	0.01	0.08	0.17	7.6	0.23									
BCD28410	42.10	44.10	2.00	0.02	0.19	0.05	8.5	0.24									
BCD28411	44.10	46.10	2.00	0.01	0.01	0.04	5.3	0.30									
BCD28412	46.10	47.40	1.30	0.01	0.01	0.02	4.7	0.27									
BCD28413	47.40	48.90	1.50	0.03	0.17	0.24	28.5	0.21									
BCD28414	48.90	50.40	1.50	0.01	0.18	0.30	15.2	0.13									
BCD28415	50.40	51.90	1.50	0.01	0.20	0.11	8.2	0.14									
BCD28416	51.90	53.40	1.50	0.01	0.17	0.09	12.8	0.32									
BCD28417	54.90	56.40	1.50	0.14	0.94	0.47	99.3	0.42									
BCD28418	56.40	58.40	2.00	0.22	0.94	0.56	136.0	0.57						2.72			
BCD28419	58.40	59.40	1.00	0.03	0.47	0.34	31.5	0.41									
BCD28420	59.40	59.90	0.50	0.64	1.12	1.48	211.0	0.84						2.62			
BCD28421	59.90	61.40	1.50	0.02	0.16	0.14	17.3	0.17									

MINNOVA INC.

HOLE NUMBER: U1330-50 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: U6 | PLOTTING COORDS GRID: FIELD | ALTERNATE COORDS GRID: | COLLAR DIP: ° ' "
PROJECT NUMBER: SAM | NORTH: 632.32N | NORTH: 0+ 0 | LENGTH OF THE HOLE: 85.00m
CLAIM NUMBER: | EAST: 9720.02W | EAST: 0+ 0 | START DEPTH: 0.00m
LOCATION: DRIFT | ELEV: 1333.00 | ELEV: 0.00 | FINAL DEPTH: 85.00m

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

DATE STARTED: February 19, 1991 | COLLAR SURVEY: YES | PULSE EM SURVEY: NO | CONTRACTOR: BOISVENUE DRILLING
DATE COMPLETED: February 20, 1991 | MULTISHOT SURVEY: YES | PLUGGED: YES | CASING:
DATE LOGGED: March 2, 1991 | RQD LOG: YES | HOLE SIZE: BTW | CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)		Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)		Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	0° 0'		ACID	OK		-	-	-	-	-		
30.50	-	0° 0'		ACID	OK		-	-	-	-	-		
61.00	-	0° 0'		ACID	OK		-	-	-	-	-		
85.00	-	-5° 0'		ACID	OK		-	-	-	-	-		

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 47.20	MAFIC LAPILLI TUFF «MFLT»	Colour - yellow - grey - green Grain size - fine to medium Typical lapilli tuff. Lapilli 5-10cm and up to 25cm Locally Qtz veined (0-5.8m) Dolomitic		Lapilli sericitized Dolomitic Local silicification near QV's.	Tr. minor py.	╡15.5 - 20.4╞ «FLT» gouge + bx. ╡39.5 - 39.8╞ «FLT»
		@ 0.5	43			
		@ 11.0	39			
		@ 15.0	32			
		26.0 - 27.0: 5 cm Q.V. subparallel c/a - sheared contact				
		@ 30.5	43			
		@ 32.8	47			
		@ 36.5	36			
		Decreasing lapilli content from 39.0m - becomes more tuffaceous.				
47.20 TO 51.40	SILICIFIED INT & ARG	Colour - grey Grain size - fine to medium Intensely QV'd, silicified mafic tuff w/v. minor argillite; fractured, texture almost cherty.		Silicification	Tr Py.	
		@ 47.7	50			
51.40 TO 64.00	SERICITIC MAFIC TUFFS «SER M.T.»	Colour - light yellow-green Grain size - fine to medium Typical old SERT unit Locally qtz v'd & silicified Qtz veining @: 51.4 - 51.9 (barren) 53.7 - 54.0 56.5 - 56.7 57.3 - 57.6		Sericite	Minor 1% diss py.	╡57.6 - 62.5╞ «FLT» gouge & bx w/ numerous QTZ vein frags. ╡63.1 - 63.5╞ «FLT»
		@ 55	48			
64.00 TO 67.50	SILICIFIED MAFIC TUFF «SILMT»	Colour - grey-yellow Grain size - fine to medium Silicified Tuff - by intense qtz veining @65.6	51	Silicification by Qtz veining	1-3% diss py clots + blebs in q.v.'s	╡67.0 - 67.4╞ «FLT»

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
67.50 TO 85.00	SERICITIC ALTERED SEDS + Q.V'S «ALT'D SED + QV»	Colour - yellowish brown-grey Grain size - fine Yellow sericite altered seds with occasional discordant Qtz vein. Orig bedding intact Qtz veins @: 77.7 - 78.0 82.3 - 82.6 83.7 - 84.1 @ 70.2 / 57 74.0 / 55 76.0 / 53 80.6 / 33		Sericite (moderate) Q.V.'s	Tr minor diss py. Occasional py veinlet Occasional 1-2cm original py beds still present (with qtz).	78.0 - 79.4 «FLT»
	E.O.H.					

				ASSAYS							GEOCHEMICAL							
Sample	From (m)	To (m)	Length (m)	CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		COMMENTS
BCD28248	64.00	65.00	1.00	0.01	0.01	0.01	1.4	0.03										
BCD28249	65.00	66.40	1.40	0.02	0.01	0.01	3.5	0.07										
BCD28250	66.40	67.50	1.10	0.01	0.01	0.01	2.7	0.05										

KINNOVA INC.

HOLE NUMBER: U1330-51 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6 — PLOTTING COORDS GRID: FIELD — ALTERNATE COORDS GRID: — COLLAR DIP: -65° 0' 0"
PROJECT NUMBER: SAM — NORTH: 637.52N — NORTH: 0+ 0 — LENGTH OF THE HOLE: 60.70m
CLAIM NUMBER: — EAST: 9739.95W — EAST: 0+ 0 — START DEPTH: 0.00m
LOCATION: DRIFT — ELEV: 1330.80 — ELEV: 0.00 — FINAL DEPTH: 60.70m

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

DATE STARTED: February 20, 1991 — COLLAR SURVEY: YES — PULSE EM SURVEY: NO — CONTRACTOR: BOISVENUE DRILLING
DATE COMPLETED: February 21, 1991 — MULTISHOT SURVEY: YES — PLUGGED: YES — CASING: PULLED
DATE LOGGED: March 2, 1991 — RQD LOG: YES — HOLE SIZE: BTW — CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)		Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)		Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-65° 0'		ACID	OK		-	-	-	-	-		
30.50	-	-64° 0'		ACID	OK		-	-	-	-	-		
60.70	-	-65° 0'		ACID	OK		-	-	-	-	-		
-	-	-		-	-		-	-	-	-	-		
-	-	-		-	-		-	-	-	-	-		
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 3.00	«FLT»	Colour - light green-yellow Grain size - fine to coarse Fault gouge + bx. Frags are MFLT, QTZ.		Gouge is mod. sericitic	Tr diss py.	0.0 - 0.6 «CSG»
3.00 TO 5.40	DOLOMITIC MAFIC TUFF «MT»	Colour - dark grey-green Grain size - fine Fine g'd mafic tuff. Sl sericitized @3.4	70	Sericite	Tr diss py.	
5.40 TO 20.00	SILICIFIED ARGILLITE + MAFIC TUFF «SIL ARG + MT»	Colour - black-grey Grain size - fine Interbedded graphitic argillite & interbedded mafic tuff which has been silicified by intense qtz veins & veinlets. Unit is folded & fractured. Upper contact is healed fragmental @ 11.4	56	Silicification	Occasional pyrite band ((1.0cm) @ 11.8 - 12.1 - q.v. is 5% c.g. diss blebs of Sph,py,&Tr ga. Sph is light brown	
20.00 TO 23.00	SERICITIC MAFIC TUFF «SERT MT»	Colour - Yellowish green Grain size - fine to medium Moderately foliated sericitic mafic tuff w/qtz interbands folded and bx'd texture also. Upper meter contains minor sil.arg. bands to 10 cm @ 21.0 22.6	70 77	Well developed Sericite	3-5% Py as dissemination and bands to 1 cm in qtz.	22.8 - 23.0 shear.
23.00 TO 24.00	SILICIFIED SEDIMENT «SIL SED ORE»	Colour - grey Grain size - medium to coarse Intensely silicified sediment, mottled texture, non-foliated		Silicification	15-20% Sph, tet as c.g. diss blebs.	
24.00 TO 26.80	SILICIFIED SEDIMENT «SIL SED»	Colour - light grey Grain size - fine Almost completely silicified host rock (sed?) - by qtz veining. Much of qtz is		Silicification Sericite in fault zone.	Tr py.	[24.3 - 26.4] «FLT» gouge.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		amorphous (chty).				
26.80 TO 45.50	ALT'D SEDS «ALT SED + SILN»	Colour - grey Grain size - medium Grey sericite (MUT) alt'd seds with zones of silicification and irregular qtz veining plus sulfides. @ 27.0 30.2 32.0 39.2	 55 55 60 55	Grey sericite, silicification	Up to 20% Sph,ga,tet i.e in zones of q.v'ing and silicification Best @ 27.8 - 28.5 33.0 - 33.7 36.0 - 36.5 37.4 - 37.8 40.3 - 40.7 45.3 - 45.5 Overall up to 25% v.f.g. py.	
45.50 TO 54.90	ALT'D SEDS «ALT SED»	Colour - grey Grain size - medium Grey sericite (MUT) alt'd seds as above but without the qtz + sil'n + sp/tet min'l'zn 47.5 50.5 54	 65 54 48	Grey sericite	10-20% f.g. py as diss. & bands to 2-3 cm thick.	╪48.5 - 53.0╪ «FLT» gouge, v. ser'c faulted MUT @ 49.3 - 10cm frag. of SMS py. Also several q.v. frags.
54.90 TO 60.70	SERICITE ALTERED SEDIMENT «ALT'D SED»	Colour - yellow-grey Grain size - fine to medium Mod - well foliated yellow sericite altered sediment. Upper contact w/MUT is sh'd w/ narrow Q.V. 60.5 E.O.H.	 46	Yellow sericite - moderately developed.	SMS py beds to 5 cm thick (remnant py beds in seds)	╪57.6 - 59.2╪ «FLT» gouge + qtz frags.

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD28426	11.80	12.10	0.30	0.01	4.52	1.54	18.3	0.03						3.04			
BCD28427	22.70	23.00	0.30	0.09	0.30	0.14	19.5	0.19									
BCD28428	23.00	24.00	1.00	2.80	6.12	2.92	2876	5.06						2.85			
BCD28429	24.00	24.30	0.30	0.09	0.07	0.03	86.4	0.03									
BCD28430	26.80	27.80	1.00	0.03	1.12	0.59	39.8	0.24									
BCD28431	27.80	28.60	0.80	0.26	1.32	1.90	186.7	0.51						2.76			
BCD28432	28.60	30.10	1.50	0.24	0.25	0.19	138.1	0.47						2.63			
BCD28433	30.10	31.60	1.50	0.10	0.52	0.27	63.4	0.43									
BCD28434	31.60	33.00	1.40	0.20	0.97	0.51	106.8	0.48						2.70			
BCD28435	33.00	33.70	0.70	0.05	0.51	0.18	25.8	0.34									
BCD28436	33.70	35.20	1.50	0.33	0.44	0.30	105.3	0.39						2.70			
BCD28437	35.20	36.00	0.80	0.02	0.11	0.12	10.5	0.08									
BCD28438	36.00	36.50	0.50	0.11	1.68	0.47	35.3	0.10									
BCD28439	36.50	37.40	0.90	0.02	0.72	0.47	21.3	0.08									
BCD28440	37.40	37.80	0.40	0.21	3.88	1.22	125.4	0.28						3.08			
BCD28441	37.80	39.30	1.50	0.01	0.03	0.03	5.9	0.13									
BCD28442	39.30	40.30	1.00	0.03	1.10	0.25	25.5	0.29									
BCD28443	40.30	40.70	0.40	0.02	3.52	0.98	36.4	0.24									
BCD28444	40.70	42.20	1.50	0.14	0.20	0.22	92.8	0.41									
BCD28445	42.20	43.70	1.50	0.07	0.45	0.13	41.4	0.19									
BCD28446	43.70	45.30	1.60	0.08	0.32	0.23	42.1	0.30									
BCD28447	45.30	45.50	0.20	1.44	7.04	3.64	886	1.81						2.78			
BCD28448	45.50	48.20	2.70	0.04	0.51	0.31	22.8	0.28									

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: GRID

PLOTTING COORDS GRID: FIELD
NORTH: 638.66N
EAST: 9739.94W
ELEV: 1330.75

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

COLLAR DIP: -90° 0' 0"
LENGTH OF THE HOLE: 80.50m
START DEPTH: 0.00m
FINAL DEPTH: 80.50m

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

DATE STARTED: February 21, 1991
DATE COMPLETED: February 21, 1991
DATE LOGGED: March 2, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-90° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-90° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-90° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CS6»					
0.60 TO 2.90	«FLT»	Colour - light yellow green Grain size - fine - coarse Strong fault - gouge & bx. Frags of MT + QTZ				
2.90 TO 7.60	«SIL'D MT» SILICIFIED MAFIC TUFF	Colour - dark grey-green Grain size - fine - medium V. Weakly foliated mafic tuff - upper 2 meters are qtz veined and silicified. @3.0 7.0	 58 50	 Silicification Sericitization (weak)	 Tr py.	
7.60 TO 25.60	«SIL ARG + MT»	Colour - black - grey Grain size - fine to medium Interbedded sil'd arg & sil'd MT. Local zones of poor silicification. Intensely q.v'd & disrupted QV @ 9.3 - 9.7 @ 8.6 16.5 20.2	 64 55 50	 Silicification & by q. v'ing.	 Tr - minor diss py with occ. clast of mass py to 2 cm dia.	┤14.4 - 15.8├ «FLT» gouge + bx.
25.60 TO 75.80	«ALT'D SEDS + SIL» GREY SERICITE ALT'D SEDS (MUT)	Colour - grey - brown Grain size - fine to medium Moderately laminated grey sericite alt'd sed (MUT) variably intersected by qtz veins and silicification. @ 29.5 32.0 37.0 39.0 42.0 45.0 47.3 53.6	 52 50 54 37 42 58 50 46	 Grey sericite Qtz veining, Silicification. Silicific'n decreases from 61.0m to 75.3	 Pyritic 1-3% locally 5-8% sph,ga,tet assoc'd w/q.v's Best @ 32.5 - 32.8 33.5 - 34.3 39.7 - 40.9 41.1 - 43.0 45.9 - 46.5 47.9 - 48.1 48.7 - 49.0 56.8 - 57.6 60.8 - 61.1 (solid q.v.)	Fault @ 59.4 - 59.6 68.5 - 69.0 core sheared 69.5 - 70.0 core sheared ┤74.5 - 74.9├ «FLT»

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		60.5	63			
		63.2	43			
		73.8	63			
		Q.V. @ 74.9 - 75.8				
75.80 TO 80.50	SERICITIC ARGILLITE «ALT'D ARG»	Colour - black - yellowish Grain size - fine				
		Slight to moderately sericitized argillite/ wacke.		Sericite QV @ 79.2 - 79.4	Tr py	75.8 - 77.0 - shear zone @ contact with Q.V.
		78	39			
		79.5	49			
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD28449	25.60	27.10	1.50	0.34	1.12	0.60	99.3	0.63									
BCD28450	27.10	28.60	1.50	0.05	0.84	0.37	21.2	0.64									
BCD28451	28.60	29.00	0.40	0.72	3.76	1.60	111.0	0.85						2.70			
BCD28452	29.00	30.00	1.00	1.98	0.92	1.26	1200	3.76						3.32			
BCD28453	30.00	31.50	1.50	0.28	2.56	1.52	56.3	0.73									
BCD28454	31.50	32.50	1.00	0.11	2.62	1.14	42.2	0.46									
BCD28455	32.50	32.80	0.30	1.52	6.66	1.96	228.0	1.27						3.12			
BCD28456	32.80	33.50	0.70	0.51	0.76	0.45	128.0	0.34						2.67			
BCD28457	33.50	34.30	0.80	0.66	1.28	1.08	171.0	0.76						2.64			
BCD28458	34.30	35.80	1.50	0.05	1.16	0.51	29.7	0.41									
BCD28459	35.80	37.30	1.50	0.07	0.58	0.40	43.4	0.43									
BCD28460	37.30	37.80	0.50	0.09	0.15	0.09	36.5	0.44									
BCD28461	37.80	38.00	0.20	0.14	0.72	1.44	115.0	0.41						2.73			
BCD28462	38.00	39.70	1.70	0.23	0.31	0.24	59.3	0.49									
BCD28463	39.70	41.10	1.40	0.24	0.50	0.60	69.2	0.28									
BCD28464	41.10	42.00	0.90	0.13	4.02	1.30	66.5	0.11						2.74			
BCD28465	42.00	43.00	1.00	0.38	1.82	0.56	128.0	0.19						2.95			
BCD28466	43.00	44.20	1.20	0.21	0.30	0.23	44.3	0.28									
BCD28467	44.20	45.10	0.90	0.05	0.27	0.31	41.5	0.39									
BCD28468	45.10	45.90	0.80	0.06	0.92	0.44	56.7	0.38									
BCD28469	45.90	46.50	0.60	0.14	0.78	0.27	92.4	0.35									
BCD28470	46.50	47.30	0.80	0.07	0.16	0.25	45.8	0.36									
BCD28471	47.30	47.90	0.60	0.10	0.10	0.11	76.5	0.43									
BCD28472	47.90	48.10	0.20	0.60	2.34	1.06	356.0	0.90						2.80			
BCD28473	48.10	49.00	0.90	0.22	2.38	0.54	151.0	0.37						2.58			
BCD28474	49.00	50.50	1.50	0.02	0.58	0.30	28.2	0.50									
BCD28475	50.50	52.00	1.50	0.03	0.03	0.06	20.8	0.22									
BCD28476	52.00	53.50	1.50	0.01	0.05	0.05	6.7	0.19									
BCD28477	53.50	55.00	1.50	0.01	0.05	0.03	7.9	0.18									
BCD28478	55.00	56.80	1.80	0.10	0.56	0.29	39.2	0.27									
BCD28479	56.80	57.60	0.80	0.13	7.30	7.26	175.0	0.13						2.99			
BCD28480	57.60	59.10	1.50	0.01	0.05	0.09	7.6	0.34									
BCD28481	59.10	60.80	1.70	0.04	0.05	0.06	32.3	0.37									
BCD28482	60.80	61.10	0.30	0.29	8.54	5.04	87.6	0.49						2.51			
BCD28483	61.10	62.50	1.40	0.01	0.50	0.13	19.8	0.34									
BCD28484	62.50	64.00	1.50	0.07	1.06	0.51	63.4	0.48									
BCD28485	64.00	65.50	1.50	0.09	0.92	0.26	58.9	0.51									
BCD28486	65.50	67.00	1.50	0.10	0.08	0.17	63.2	0.46									
BCD28487	67.00	67.90	0.90	0.01	0.04	0.16	10.1	0.43									
BCD28488	71.20	71.50	0.30	0.01	0.01	0.05	8.0	0.72									

MINNOVA INC.

HOLE NUMBER: U1330-53 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 637.10N
EAST: 9739.98W
ELEV: 1330.91

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

COLLAR DIP: -40° 0' 0"
LENGTH OF THE HOLE: 64.90m
START DEPTH: 0.00m
FINAL DEPTH: 64.90m

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

DATE STARTED: February 21, 1991
DATE COMPLETED: February 22, 1991
DATE LOGGED: March 3, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-41° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-43° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-42° 0'	ACID	OK		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 21.60	«MFLT/ ALT MAF»	Yellow sericitized lapilli rest in a chloritic dolomitic matrix. Alteration intensity increases to lower contact such that original textures lost. Foliation: 4.0m 12.6m 16.2m 18.9m 21.2m [5.5 - 7.3] «flt gou/bx» [16.5 - 17.3] «flt gou/bx» [21.4 - 21.6] «soft flt gou»	58 50 53 66 46	Intense ferro-dol Selective yellow ser'n	1% pyrite	Interval generally blocky and broken. 1.6 - 2.0m compact gouge 4.6 - 51.1m flt gou/bx 7.3 - 11.6m blocky broken core. Grinding in flt zone? 12.6 - 13.0m blocky + minor bx 19.6 - 19.9m flt gou bx 20.2 - 20.4m flt gou/bx
21.60 TO 24.80	«SIL ARG»	Tectonized, black silicified argillite. 23.8 - 24.0 flt bx/gou	53	Patchy sil'n	2-3% pyrite	Hinge at 24.7m. Minor fault at lower contact.
24.80 TO 29.70	«MAF/QTZ/ SER»	Tectonized, laminated to banded altered mafic, quartz and pale yellow sericite.		Pale yellow ser'n.	3-4%	
29.70 TO 30.20	«FLT ZONE»	Blocky qtz-carb vein and 10cm gouge from 30.1 - 30.2.			2% Py Trace Sp.	Fault transitional to mafic/sed.
30.20 TO 35.50	«QV/SED SERT»	Mixed interval of grey sericitic seds flooded with sericitic seds flooded with qtz-carb mottled grey-white qtz veins, and yellow sert. Sections are faulted to bx and gouge: 30.7 - 30.9m flt gou/sheared 31.2 - 31.4m flt gou/bx 31.8 - 31.9m [32.7 - 33.4] «sert gou/bx»		Sert 31. - 32.1	Variable sulphides: 30.2 - 30.7m 3-4% blebby, disseminated Tt 1% Sp. 32.1 - 32.5m 3% Tt, blebs and grains in grey white mottled QV/sed. 33.4 - 35.5m, 2-3%Tt in grey white mottled QV/sed.	Sections of qtz-carb bx locally healed from 34.4 - 35.0m Interval includes 20-30cm of gouge zones.
35.50 TO 36.00	«FLT GOUGE»	Very soft grey gouge with 10cm of dark grey sulphide in sed bx.			5% Tt in 10cm block.	
36.00 TO 44.90	«MUT/ SIL SEDS»	Grey sericitic seds silicified by qtz-carb flooding. Faint white patches/veins qtz carb. Zones locally pyritic, (MUT). Foliation 36.4m	70	Patchy to banded sil'n with grey sericite partings.	Blebby sphalerite often occurring in bands parallel to foliation. Lesser fine grained Gn. Overall 1-2% Sp6n. [37.0 - 38.5] «4%Sp2%Gn»	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		40.0m	64		╪40.0 - 41.5╪ «10%Py 1-2% Sp6n»	
		44.8m	70			
		Pyritic seds 40.2 - 40.9m includes friable section, 40.7 - 40.9m 42.7 - 43.6m blocky + minor gouge.				
44.90 TO 45.10	«FLT GOU»	Seds intensely faulted to soft gouge.				
45.10 TO 46.50	«QV/SED HEAL BX»	Qtz carbonate healed breccia with minor 16cm block of QV/sed. Gouge 46.4 - 46.5m			Trace Tt?	
46.50 TO 54.40	«SIL SEDS»	Grey silicified, sericitic seds with local breccia zones. Faint patches traces of white qtz-carb.		Patchy sil'n.	╪46.5 - 47.7m╪ «10%Sp6nTt» Fine grained grey 6n and Tt with fine blebby Sp.	Includes 10cm zone almost semi massive.
		Foliation 47.7m	70			
		51.6m	60		48.7 - 50.2m includes 20cm zone of	
		54.2m	60		coarser pyrite assoc QV. 2-3% Sp6n.	
		Faults and fractures: 47.2 - 47.3m flt bx 48.6 - 49.3 blocky, minor bx. ╪51.6 - 51.9╪ «flt gou/bx» 52.7 - 52.8m blocky ╪53.2 - 53.8╪ «compact bx»				Faulted lower contact.
54.40 TO 57.00	«ALT SEDS»	Grey sericitic sediments. 54.4 - 54.6m flt gou/bx 56.9 - 57.0m flt gou	58	Grey ser'n. Minor yellow sericite 54.6 - 55.2m, included in partly sheared zone associated with qtz-carbonate veins.	5% pyrite	
57.00 TO 61.60	«ARG»	Deformed black graphitic argillite. ╪59.1 - 59.8╪ «flt bx» ╪61.0 - 61.6╪ «flt gou/bx»	86		2-5% pyrite Pyritic seds with faulted contacts 60.6 - 60.8m.	Hinge zone 59.0 - 59.1m.
61.60 TO 64.90	«ALT SEDS»	Grey to greenish grey sericitic sed. An altered heterolithic fragmental. ╪64.2 - 64.7╪ «flt zone» friable.	75	Grey ser'n.	5-7% pyrite.	Het frag clasts Stretched parallel to foliation.
	E.O.H.					

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD28422	29.70	30.20	0.50	1.18	0.54	0.07	1185	1.41						2.64			
BCD28423	30.20	30.90	0.70	4.34	0.98	0.05	3979	5.04						2.97			
BCD28424	30.90	31.90	1.00	0.51	0.08	0.02	443.0	0.84						2.63			
BCD28425	32.10	32.50	0.40	0.69	0.13	0.03	586.0	1.36						2.57			
BCD28489	32.50	33.40	0.90	0.26	0.47	0.28	264.3	0.41						2.71			
BCD28490	33.40	34.40	1.00	0.58	0.61	0.06	502.0	0.78						2.48			
BCD28491	34.40	35.50	1.10	0.38	0.37	0.09	341.8	0.61						2.64			
BCD28492	35.50	36.00	0.50	2.26	10.18	7.16	1282	2.22						3.03			
BCD28493	36.00	37.00	1.00	0.09	3.06	2.02	107.7	0.42						2.83			
BCD28494	37.00	38.50	1.50	0.27	4.24	2.54	159.6	0.47						2.81			
BCD28495	38.50	40.00	1.50	0.05	2.62	1.36	52.4	0.28									
BCD28496	40.00	41.50	1.50	0.05	1.66	0.98	64.3	0.32									
BCD28497	41.50	43.00	1.50	0.09	1.60	0.77	69.1	0.35									
BCD28498	43.00	44.00	1.00	0.28	1.46	0.74	85.6	0.41									
BCD28499	44.00	44.90	0.90	0.33	3.58	2.36	217.3	0.67						2.40			
BCD28500	45.10	46.50	1.40	0.32	1.28	0.66	284.6	0.75						2.50			
BCD13826	46.50	47.20	0.70	1.02	6.08	4.32	175.4	0.68						2.76			
BCD13827	47.20	48.70	1.50	0.16	1.08	0.71	69.3	0.22									
BCD13828	48.70	50.20	1.50	0.30	1.38	1.38	131.8	0.23						2.71			
BCD13829	50.20	51.60	1.40	0.44	0.35	0.40	170.6	0.58						2.61			
BCD13830	51.60	53.00	1.40	0.02	0.44	0.14	16.4	0.44									
BCD13831	53.00	54.40	1.40	0.04	0.05	0.09	25.9	0.36									
BCD13832	54.40	55.20	0.80	0.01	0.01	0.01	1.2	0.06									
BCD13833	60.60	60.80	0.20	0.01	0.01	0.01	1.6	0.11									
BCD13834	62.20	64.20	2.00	0.10	0.03	0.01	96.4	0.08									

NINNOVA INC.

HOLE NUMBER: U1330-54 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COOROS GRID: FIELD
NORTH: 637.21N
EAST: 9740.00W
ELEV: 1331.61

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

COLLAR DIP: -20° 0' 0"
LENGTH OF THE HOLE: 74.70m
START DEPTH: 0.00m
FINAL DEPTH: 74.70m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 22, 1991
DATE COMPLETED: 0, 0
DATE LOGGED: March 3, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENUE DRILLING
CASING: NONE
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-22° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-23° 0'	ACID	OK		-	-	-	-	-	
57.90	-	-25° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00	MAFIC	Colour - green				
TO	LAPILLI	Grain size - fine to medium				
4.90	TUFF			Chloritic	Tr diss py.	6.3 - 7.3: Fault gouge + bx.
	«MFLT»	Lapilli Tuff Frags to 10cm				
		@3.6	46			
4.90	SERICITIC	Colour - light green yellow				
TO	LAPILLI	Grain size - fine to medium				
21.00	TUFF					
	«SER MFLT»	Faulted & fractured		Lapilli sericitized.		7.8 - 10.1: Several faults in one zone
		ser'c Lapilli tuff				15.4 - 16.2 well dev.
		@7.5	49			«fault bx + gouge»
		11.8	40			
		16.8	50			
		19.5	44			
		Local qtz veins to 15 cm				
21.00	SERICITIC	Colour light green-yellow				
TO	MAFIC	Grain size - fine to medium				
29.90	TUFF					
	«SER MT»	Intensely faulted zone of sericitic		Moderately dev. sericite.	Tr diss py.	21.1 - 26.9 «FLT»
		mafic tuff				well dev. fault with frags of MT
		@ 27	54			+ qtz + gouge.
		29.7	48			
		Q.V. @ 28.3 - 28.5				
29.90	INTENSELY	Colour - grey				
TO	SILICIFIED	Grain size - fine				
32.00	MT					
	«SILMT»	Zone of intense silicification + bx by qtz		Silicification	Tr diss py	Core fractured
		veining @ 30.7 - 31.7				
32.00	SERICITIC	Colour - light yellow green				
TO	MAFIC	Grain size - fine to medium				
44.80	TUFF					
	«SER MT»	Well laminated sericitic mafic tuff w/local		Sericite, qtz veining causing local	Tr diss py.	33.2 - 35.0 «FLT»
		interbands of qtz and local silicification.		silicification		35.5 - 36.0 «FLT»
				36.0 - 36.5: silicified zone.		40.1 - 42.0 «FLT»
		@32.5	51			
		33	64			
		38	47			
		Upper contact sheared.				
		Fold hinges present @ 36.7 & 40.8				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
44.80 TO 67.60	SERICITIC ALTERED SEDS «ALT'D SEDS»	Colour - yellow-brown Grain size - fine to medium Yellow sericite altered seds hosting narrow intervals of q.v. w/tet min'lz'n (= ore horizon) Seds have numerous interbeds of orig SMS mass py to 10 cm thick (now silicified).		Yellow sericite - moderate to well developed.	Numerous individual SMS - Mass pyrite beds dispersed throughout interval. Tetrahedrite bearing q.v's @: 44.8 - 45.3 (sheared) 47.2 - 47.3 (L/G) 50.5 - 50.8 (L/G) 51.8 (5 cm M-H/G) 55.1 - 55.2 (M-H/G) (56.2 - 5cm M-H/G) & 59.2 - 59.3 M-H/G) 59.4 - 59.6 (L/G) 63.2 - 63.4 (L/G) 64.7 - 65.2 (L/G) 65.7 - 66.1 (L/G Veins are generally conformable to foliation.	Upper contact @ 44.8 is marked by a highly sheared 0.5m (0.2 m recovered) SMS - Mass Zone of py,sp,tet + QV - same as in Xcut ramp underground.
		@ 47.8	51			
		52.0	68			
		60	58			
		65.2	55			
67.60 TO 72.00	CHERT «CHT» OR CHERTY SED INTRUDED BY QTZ/ CARB VEINS	Colour - grey Grain size - fine Chert or cherty sed; disrupted and veined by qtz carb, healed bx texture; no visible bedding.		Qtz veining	Occasional c.g. bleb of brown sph in q.v's.	
72.00 TO 74.70	SILICIFIED ARG & MAFIC TUFF «SIL MT + ARG»	Colour - grey-brown black Grain size - fine to medium Silicified Mafic Tuff with sil arg interval @ 72.9 - 73.3		Silicification Sl. dolomitic	Tr py.	Looks same as generally found @ contact of MT's and Ser'c MT (Sert)
		@ 72.5	44			
		74.5	20			
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD13874	29.90	30.70	0.80	0.01	0.12	0.09	6.3	0.03									
BCD13875	30.70	32.00	1.30	0.01	0.32	0.20	8.9	0.03									
BCD13801	44.70	44.80	0.10	0.12	0.11	0.05	107.6	0.21						2.77			
BCD13802	44.80	45.30	0.50	6.28	7.56	4.06	2179	2.40						3.20			
BCD13803	45.30	45.70	0.40	1.44	1.80	1.16	977.0	1.79						2.83			
BCD13804	47.00	47.20	0.20	0.03	0.06	0.04	17.0	0.07									
BCD13805	47.20	47.30	0.10	0.19	1.28	0.46	155.3	0.38						2.69			
BCD13806	47.30	47.40	0.10	0.07	0.06	0.30	73.2	0.23									
BCD13807	50.50	50.80	0.30	0.81	0.19	0.04	689.0	0.98						2.56			
BCD13808	55.10	55.20	0.10	0.34	0.06	0.02	297.3	0.36						2.69			
BCD13809	59.20	59.60	0.40	1.96	0.36	0.02	1916	3.67						2.66			
BCD13810	64.70	65.20	0.50	0.04	0.02	0.02	34.2	0.12									
BCD13811	65.70	66.10	0.40	0.03	0.01	0.01	31.3	0.07									

MINNOVA INC.

HOLE NUMBER: U1330-55 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 642.89N
EAST: 9749.95W
ELEV: 1331.13

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

COLLAR DIP: -35° 0' 0"
LENGTH OF THE HOLE: 66.50m
START DEPTH: 0.00m
FINAL DEPTH: 66.50m

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

DATE STARTED: February 24, 1991
DATE COMPLETED: February 24, 1991
DATE LOGGED: March 3, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
ROD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)		Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)		Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-		-35° 0'	ACID	OK		-	-	-	-	-		
30.50	-		-36° 0'	ACID	OK		-	-	-	-	-		
64.90	-		-37° 0'	ACID	OK		-	-	-	-	-		
-	-	-	-	-			-	-	-	-	-		
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 9.50	MAFIC LAPILLI TUFF + MAFIC TUFF «MT»	Colour - grey - green Grain size - fine to medium 0 - 2.0 Dolomitic and silicified - Veined w/qtz and v. sl. min'lz'd w/sp,ga. Zone is mainly M.T. with a layer of lapilli tuff @ 2.9 - 5.7 @ 3.8 5.4 7.7	 60 60 58	Sericite, local silicification.	Minor sp, ga in q.v.'s @ 0.7 - 0.8m	
9.50 TO 26.60	SILICIFIED ARGILLITE W/MINOR INTERBEDDED MAFIC TUFF «SIL ARG»	Colour - black Grain size - fine Very qtz veined, silicified, and disrupted argillite. Some interbedded tuff @ 16.7 - 18.3m. 18.2 18.0 22.6	 48 80 58	Silicification	Tr py.	┤23.8 - 26.9├ «FLT» Fault zone with gouge + sil arg + qtz frags.
26.60 TO 30.60	SERICITIC M.T. «SER M.T.»	Colour - light green yellow Grain size - fine to medium Bx'd, sheared, ser'c, mafic tuff 29.6 - 29.9: fault 28	 80	Sericite, local silicification	Tr minor py	
30.60 TO 32.10	SILICEOUS M.T. (OR SED?) «SIL MUT»	Colour - grey Grain size - fine Completely silicified host rock. No primary textures.	 	Intense silicification	32.0 - 32.1: remnant of same zone as in U1330-51 (23.0 - 24.0) with 15 - 29% sp,tet as c.g. diss blebs. Min'lz'd zone is sheared out at 32.1 but may persist in fault to 33.1.	
32.10 TO 38.60	«FLT» MAJOR FAULT ZONE	Colour - grey - yellowish Grain size - fine to coarse Well developed fault zone with extensive gouge and wallrock bx.	 	Grey sericite with local yellow sericite @ 32.1 - 35.2	34.4 - 34.5: M/G tet in bx frag. Numerous other v. py'c frags in fault.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE		ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
38.60	GREY	Colour - grey					
TO	SERICITE	Grain size - fine to medium					
66.40	ALTERED						
	SED. VERY	Very silicified grey sericite alt'd sed			Intense silicification and assoc'd	3-5% sp,tet as conc. zones assoc.	FLT zones @: 48.5 - 49.1
	SILICIFIED	(sil MUT)			q.v'ing and flooding to	w/g.v'ing and flooding. Best @:	49.4 - 49.7
	«SIL ALT'D	to 52.0m			52.0m.	39.2 - 39.6: SMS sp,py,ga,tet	49.9 - 50.3
	SED»	Less sil'n 52.0 - 66.4			Well dev. yellow ser @ 60.7 - 61.4	39.6 - 42.0: Approx 5% sp,py,ga,tet	51.9 - 52.9
			43.0	80	Barren q.v. @ 63.9 - 65.0	43.6 - 43.7	57.3 - 58.8
			46.0	75		45.0 - 45.1	61.7 - 64.0
			48.0	80		52.1 - 52.2: Grag of Mass c.g. sp,tet	65.1 - 65.6
		From 48.5 - 66.4 numerous faulting				in shear	
	E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD13851	30.60	32.00	1.40	0.52	0.13	0.11	498.4	0.79						2.53			
BCD13852	32.00	32.10	0.10	3.08	5.46	5.50	3283	5.72						2.79			
BCD13853	32.10	33.10	1.00	1.20	0.94	0.44	1089	1.52						2.67			
BCD13854	33.10	34.40	1.30	0.07	0.23	0.07	65.8	0.11									
BCD13855	34.40	34.50	0.10	7.14	1.02	9.68	6861	11.05						3.15			
BCD13856	34.50	36.00	1.50	0.66	9.00	5.62	755.0	0.87						2.88			
BCD13857	36.00	37.50	1.50	1.96	7.24	3.64	2357	3.07						3.31			
BCD13858	37.50	38.60	1.10	1.02	4.02	1.40	1017	1.62						2.80			
BCD13859	38.60	39.20	0.60	0.06	2.58	1.06	62.2	0.10									
BCD13860	39.20	39.60	0.40	0.60	21.60	11.20	478.0	0.39						3.36			
BCD13861	39.60	41.10	1.50	0.31	3.04	2.02	192.7	0.29						2.66			
BCD13862	41.10	42.00	0.90	0.06	1.18	0.80	42.8	0.09									
BCD13863	42.00	43.60	1.60	0.07	0.39	0.29	54.7	0.20									
BCD13864	43.60	43.70	0.10	0.03	2.02	0.72	34.3	0.31									
BCD13865	43.70	45.00	1.30	0.02	0.90	0.76	29.2	0.24									
BCD13866	45.00	45.50	0.50	0.18	2.74	0.94	128.3	0.42						2.71			
BCD13867	45.50	47.00	1.50	0.13	0.47	0.23	100.6	0.39						2.60			
BCD13868	47.00	48.50	1.50	0.33	1.18	0.55	131.9	0.61						2.91			
BCD13869	48.50	50.00	1.50	0.05	0.74	0.82	41.3	0.34									
BCD13870	50.00	51.50	1.50	0.04	2.26	0.55	31.4	0.29									
BCD13871	51.50	52.10	0.60	0.13	4.24	2.76	113.6	0.27						2.76			
BCD13872	52.10	52.20	0.10	0.59	24.20	3.52	366.0	0.53						3.05			
BCD13873	52.20	52.40	0.20	0.84	4.76	2.66	540.0	0.97						2.70			

NINNOVA INC.

HOLE NUMBER: U1330-56 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG	PLOTTING COORDS GRID: FIELD	ALTERNATE COORDS GRID:	COLLAR DIP: -8° 0' 0"
PROJECT NUMBER: SAN	NORTH: 642.72N	NORTH: 0+ 0	LENGTH OF THE HOLE: 91.10m
CLAIM NUMBER:	EAST: 9749.89W	EAST: 0+ 0	START DEPTH: 0.00m
LOCATION: DRIFT	ELEV: 1331.91	ELEV: 0.00	FINAL DEPTH: 91.10m

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

DATE STARTED: February 24, 1991	COLLAR SURVEY: YES	PULSE EM SURVEY: NO	CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: February 25, 1991	MULTISHOT SURVEY: YES	PLUGGED: YES	CASING: NONE
DATE LOGGED: March 4, 1991	RQD LOG: YES	HOLE SIZE: BTW	CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-8° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-10° 0'	ACID	OK		-	-	-	-	-	
91.10	-	-14° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 38.30	«MFLT/ ALT MAF»	Mafic pyroclastics altered to patchy pale to dark green and yellow chlorite/sericite; and mottled patchy grey-white dolomite. Remnant lapilli textures locally visible.		Intense ferro dol Selective pale yellow ser'n lapilli	1-2% Pyrite.	Overall blocky and broken. Numerous fault zones. 7.7 - 13.4m MFLT
		Foliation 0.5m	55			
		4.7m	40			
		5.8m	39			
		11.0m	35			
		13.1m	29			
		19.5m	22			
		24.6m	20			
		Faults fractures:				
		0.0 - 7.7m blocky/broken				
		⎨14.4 - 19.9⎬ «flt zone»				
		gouge, breccia and blocky sections.				
		19.9 - 22.2 blocky broken				
		⎨22.2 - 23.6⎬ «flt bx»				
		24.1 - 25.4m flt bx + blocky				
		⎨27.5 - 28.0⎬ «flt bx»				
		29.5 - 30.5m flt bx + blocky				
		31.1 - 31.3m flt bx				
		32.8 - 33.2m flt bx				
		⎨34.0 - 34.9⎬ «flt bx»				
		34.9 - 36.6m blocky				
		37.0 - 37.5 flt bx + blocky.				
38.30 TO 62.70	«ALT MAF/ QTZ/SER»	Intermittently faulted zone of altered mafics and pale yellow to greenish yellow sericite and grey to white qtz.		Intense pale yellow ser'n.	2-4% pyrite	Tectonized. Local intense shearing parallel to foliation.
		Foliation: 38.3m	25			Faults and fractures (unflagged)
		39.9m	50			39.5 - 42.4 blocky core.
		42.9m	48			42.4 - 43.3 blocks + flt bx.
		45.2m	52			43.3 - 46.5m blocky
		48.3m	46			47.2 - 48.1m blocky + broken core
		51.5m	42			
		55.5m	55			48.1m - 52.0m friable maf/qtz/ser.
		59.4m	55			57.6m - CAVE/MISLATCH
		61.6m	40			57.6 - 62.7m intermittent sheared
		Faults:				qtz/maf ser, gouge + bx
		⎨38.3 - 39.5⎬ «flt bx»				v. friable.
		⎨46.5 - 47.2⎬ «flt bx»				Sharp lower contact.
		⎨52.0 - 57.6⎬ «sheared/flt bx»				
62.70 TO 91.10	«ALT SEDS/ SILTITES»	Grey to greyish yellow, weakly to locally intensely sericitized, sediments (wacke siltite).		Moderate to intense local yellow sericite. (Sert).	Overall 2-10% pyrite. Local coarse blebby zones in sil/qtz	Faults and fractures: (unflagged). Interval blocky
		Foliation: 63.2m	70	Weak grey ser'n associated with	bands in sert.	63.0 - 64.0m friable, sheared
		66.0m	55	foliation planes in siltite.	Local massive to blebby Tt (minor Cp)	64.0 - 65.3m blocky
		68.0m	30		associated with white qtz-carb veins.	65.3 - 65.4m minor healed bx.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		77.8m	68		Distribution as follows:	73.0 - 74.4m flt zone.
		80.7m	50		╡72.5 - 73.0╞ «4%Tt 1%Cp»	74.4 - 75.9 minor gouge separating
		84.1m	50			10-20cm blocks.
		88.6m	50		73.0 - 74.4m Tr Tt in QV + Alt Sed	76.8 - 77.3m gouge + blocks.
		Faults & fractures:			flt zone.	77.3 - 79.7m blocky
		╡66.8 - 67.2╞ «flt bx»				85.4 - 86.6m flt gou/bx + blocks.
		╡68.4 - 72.5╞ «flt zone»			╡75.0 - 76.3╞ «10%Tt»	
		breccia gouge and blocky sections.			blebby to massive 5-6cm zone, Tt in Qtz -carb.	
		╡79.7 - 79.9╞ «flt gou»				
		╡82.0 - 82.8╞ «flt gou+blocks»			76.3 - 76.8m 1%Tt in QV.	
					Sample 50:50 sed: QV	
					╡77.3 - 77.5╞ «6% Tt»	
					88.7 - 89.3 Cp stringer isolated	
					in qtz. vein.	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD88801	62.70	63.00	0.30	1.82	3.14	1.48	825.0	2.28						3.12			
BCD88802	63.00	64.00	1.00	0.01	0.01	0.01	3.3	0.03									
BCD88803	71.50	72.50	1.00	0.51	0.07	0.01	439.0	1.17						2.60			
BCD88804	72.50	73.00	0.50	0.90	0.12	0.01	389.6	0.42						2.80			
BCD88805	73.00	74.40	1.40	1.24	0.23	0.06	1173	2.23						2.59			
BCD88806	74.40	75.00	0.60	0.03	0.01	0.02	14.4	0.06									
BCD88807	75.00	75.90	0.90	0.80	0.09	0.01	730.0	1.31						2.81			
BCD88808	75.90	76.30	0.40	7.34	1.06	0.01	6102	10.51						2.93			
BCD88809	76.30	76.80	0.50	0.17	0.02	0.01	121.4	0.19						2.74			
BCD88810	76.80	77.30	0.50	0.25	0.06	0.01	55.7	1.65						2.81			
BCD88811	77.30	77.50	0.20	0.45	0.06	0.01	357.2	0.67						2.52			
BCD88812	78.40	78.90	0.50	0.08	0.22	0.01	81.2	0.26									
BCD88813	78.90	80.70	1.80	0.04	0.01	0.01	8.0	0.07									
BCD88814	80.70	82.10	1.40	0.16	0.03	0.01	6.7	0.05									
BCD88815	88.70	89.30	0.60	0.06	0.01	0.01	6.5	0.03									

MINNOVA INC.

HOLE NUMBER: U1330-57 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 643.81N
EAST: 9749.97W
ELEV: 1330.90

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

COLLAR DIP: -60° 0' 0"
LENGTH OF THE HOLE: 51.80m
START DEPTH: 0.00m
FINAL DEPTH: 51.80m

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

DATE STARTED: February 25, 1991
DATE COMPLETED: February 26, 1991
DATE LOGGED: March 4, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-60° 0'	ACID	OK		-	-	-	-	-	
51.80	-	-60° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 9.00	MAFIC TUFF «MT»	Colour - grey Grain size - fine to medium Gen f.g. mafic tuff w/ a mafic lapilli tuff zone @ 3.0 - 6.1m @ 4.0	75	Lapilli sericitized Local qtz/carb veining most intense 0 - 3.0m.	Tr. diss py.	
9.00 TO 22.30	SILICIFIED ARGILLITE W/ LOCAL INTERB'D MT «SILARG + MT»	Colour - black, grey-green Grain size - fine to medium Zone of highly sil'd argillite with interbedded mafic tuff @ approx. 14.5 - 18.5. Sil arg is graphitic, intensely qtz veined bx'd and deformed. @ 14.2 16.7 18.2 QV @ 11.9 - 12.2 18.6 - 18.9 21.0 - 21.5	70 80 65	Silicification by qtz veining	Tr diss py	┤15.8 - 16.0├ «FLT» fault zone is interbedded MT, Bx + gouge. Numerous other narrow "crushed" zones throughout interval.
22.30 TO 25.00	SERICITIC ALTERED MAFIC TUFFS «SER MT»	Colour - yellow-green Grain size - fine to medium Well laminated MT interbedded with Qtz lenses, veins. Lower contact is 10cm fault gouge.	70 75	Locally silicified Sericitic	Tr diss py.	Several small shears throughout interval.
25.00 TO 47.60	SILICIFIED GREY SERICITE ALTERED SEDIMENT «ALT SED»	Colour - grey Grain size - fine to medium Highly silicified grey sericite altered sed (MUT) Ore mineralization assoc'd w/qtz veinlets and silicification @ 33.5 35.1 47.0	60 60 65 80	Silicification by qtz veining and silica flooding. Grey sericite	Best min'l'zn @: 25.3 - 26.0 (8-10%Sp,ga,tet) 26.7 - 30.9 (3-5% tet,sp,cpy blebs) last 20cm SMS py, sph. 33.9 - 34.3 (3-5% ga,sp,minor tet) 35.2 - 35.8 (3-5% sp,ga, minor tet) 36.5 - 37.1 (2-3% sp) 42.9 - 43.5 (10-15% py,ga,sp,minor tet) 44.1 - 44.7 (10-15% ga,sp, minor tet?)	26.9 - 27.4 Shear Zone 27.7 - 29.0 Shear Zone 30.0 - 30.4 Shear Zone Core is bx'd w grey & yellow sericite matrix.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
					45.4 - 45.7 - 2-3% tet in q.v.	
47.60 TO 70.20	GREY SERICITE ALT'D SED	Colour - grey Grain size - fine to medium				
	«ALT SED»	Grey sericite alt'd sed (MUT) as above but not as well silicified & poorly min'lz'd.	70	Grey sericite. Portions of silicification.	V. minor B.M.'s Py beds in MUT	47.6 - 48.2 core bx'd.
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD13835	24.50	25.00	0.50	0.01	0.01	0.02	1.2	0.03									
BCD13836	25.00	25.30	0.30	0.08	0.29	0.16	32.8	0.07									
BCD13837	25.30	26.00	0.70	2.48	5.54	2.64	766.0	0.81						2.71			
BCD13838	26.00	26.70	0.70	0.06	0.56	0.36	30.3	0.16									
BCD13839	26.70	28.20	1.50	0.59	1.54	0.67	562.0	1.29						2.56			
BCD13840	28.20	29.70	1.50	0.91	0.22	0.05	998.0	1.80						2.54			
BCD13841	29.70	30.70	1.00	1.14	0.73	0.24	891.0	2.07						2.64			
BCD13842	30.70	30.90	0.20	0.49	6.52	3.24	519.0	1.11						3.04			
BCD13843	30.90	32.40	1.50	0.04	0.59	0.33	37.4	0.18									
BCD13844	32.40	33.90	1.50	0.08	0.23	0.16	38.3	0.21									
BCD13845	33.90	34.30	0.40	0.05	2.20	5.74	139.6	0.14						2.72			
BCD13846	34.30	35.20	0.90	0.08	0.72	0.94	34.3	0.11									
BCD13847	35.20	35.80	0.60	0.71	3.42	1.52	177.8	0.77						2.85			
BCD13848	35.80	36.50	0.70	0.07	0.57	0.33	16.8	0.28									
BCD13849	36.50	37.10	0.60	0.13	1.56	0.90	43.2	0.32									
BCD13850	37.10	38.60	1.50	0.05	0.59	0.41	18.7	0.24									
BCD13812	38.60	40.10	1.50	0.13	0.13	0.18	52.4	0.23									
BCD13813	40.10	41.60	1.50	0.06	0.10	0.11	24.7	0.10									
BCD13814	41.60	42.90	1.30	0.12	0.43	0.24	39.8	0.22									
BCD13815	42.90	43.50	0.60	0.10	2.26	4.02	122.4	0.13						2.89			
BCD13816	43.50	44.10	0.60	0.06	0.08	0.15	18.3	0.09									
BCD13817	44.10	44.70	0.60	0.02	3.30	1.38	38.1	0.04									
BCD13818	44.70	45.40	0.70	0.03	0.32	0.22	13.3	0.08									
BCD13819	45.40	45.70	0.30	0.66	2.16	0.53	241.3	0.41						2.67			
BCD13820	45.70	47.60	1.90	0.06	0.16	0.13	21.0	0.19									

MINNOVA INC.

HOLE NUMBER: U1330-58 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: U6 | PLOTTING COORDS GRID: FIELD | ALTERNATE COORDS GRID: | COLLAR DIP: -90° 0' 0"
PROJECT NUMBER: SAM | NORTH: 644.55N | NORTH: 0+ 0 | LENGTH OF THE HOLE: 60.70m
CLAIM NUMBER: | EAST: 9750.00W | EAST: 0+ 0 | START DEPTH: 0.00m
LOCATION: DRIFT | ELEV: 1330.82 | ELEV: 0.00 | FINAL DEPTH: 60.70m

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

DATE STARTED: February 26, 1991 | COLLAR SURVEY: YES | PULSE EM SURVEY: NO | CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: February 26, 1991 | MULTISHOT SURVEY: YES | PLUGGED: YES | CASING: PULLED
DATE LOGGED: March 5, 1991 | RQD LOG: YES | HOLE SIZE: BTW | CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-90° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-88° 0'	ACID	OK		-	-	-	-	-	
60.60	-	-87° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 6.90	«MFLT»	Yellow sericitized lapilli in a chloritic, dolomitic tuff matrix Foliation 3.0m 6.8 Faults fractures: 3.2 - 3.7m compact flt-bx 3.9m - minor gouge	 65 52	Intense ferro-dol. Selective yellow ser'n of lapilli	<1% pyrite.	
6.90 TO 11.90	«ALT MAFIC»	Probably lapilli tuffs in which texture destroyed. Pale to dark green chloritic, dolomitic tuffs. Foliation 10.2m Faults: 10.9 - 11.9m flt gou/bx +blocks	 66	Intense ferro-dol	1-2% Pyrite	Conformable contact with the above. Intensely faulted maf/arg at lower contact.
11.90 TO 28.00	«MAF/ SIL ARG»	Mixed silicified, black graphitic argillite and greyish green dolomitic mafic. Foliation 12.3 14.7 15.5 18.2 22.3 26.0 Faults and fractures: 13.8 - 14.3m compact flt-bx 15.0 - 15.9m intensely deformed/sheared mafic and argillite. Interbeds stretched to form laminae. 15.9 - 16.0m flt bx ⎨17.2 - 17.5⎬ «flt bx» 17.6 - 18.2m flt bx + blocks 18.2 - 18.8m blocky 18.8 - 19.9⎬ «flt-bx» 20.2 - 20.9m flt gou/bx + intensely sheared arg/maf. 21.3 - 21.4m flt bx ⎨23.3 - 23.8⎬ «flt bx» 26.7 - 26.9m flt bx ⎨27.2 - 27.5⎬ «flt bx»	 60 55 52 60 50 65

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
28.00 / TO / 60.70	«MUT / SIL SEDS»	Grey sericitized sediments with locally intense pyritization (mut) and silicification.		Grey sericite as partings between silicified patches and bands.	Overall 5-7% pyrite as fine wispy laminae and patches or coarser blebs associated with intensely silicified zones and white qtz-carb veins. Bleeby base metal sulphides associated with sil patches and veins. Distribution as follows:	
		Foliation: 30.2	55			
		33.3	46			
		38.3	38			
		40.8	60			
		48.0	50			
		55.8	52			
		59.3	55			
		Faults & fractures:			30.0 - 32.0m 1% Sp6n	
		╞38.0 - 38.3╡ «compact flt bx»			33.5 - 34.5m 1% Sp6nTt	
		╞50.0 - 50.2╡ «flt gou + blocks»			╞38.3 - 38.9╡ «10% Sp6nTrTt»	Blebby sphalerite, pyrite minor 6nTt in seds flooded by qtz carb.
					╞41.9 - 42.9╡ «10%Py7%Sp3%6nTt»	Blebby Py Sp. Lesser 6n (and Tt?). Banding of Py & Sp at 40 deg. to c/a.
					43.4 - 44.4 8% Py 7% Sp6n	
					╞44.4 - 45.6╡ «7%Sp6n7%PyTrTt?»	Fine traces of Tt? in dominantly qtz/carb.
					45.6 - 46.6m 6%Py6%Sp6n	
					╞50.1 - 52.1╡ «7%Py4%Sp6n»	
					52.1 - 53.6m 10%Py in blebs, wisps and bands. Light brown to dark brown blebs Sp, 5% 1-2%6nTt?	Relict black argillite visible. Altered Het Frag.
					╞55.1 - 56.6╡ «15%Py7%Sp2%6n» Tt?	Numerous qtz-carb veins flooding pyritic seds.
					58.6 - 59.6m 8-10%Py2-3%Sp6n(Tt?)	
	E.O.E.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD08816	28.00	30.00	2.00	0.02	0.13	0.07	6.9	0.23									
BCD08817	30.00	32.00	2.00	0.01	0.19	0.16	7.3	0.48									
BCD08818	32.00	33.50	1.50	0.01	0.66	0.24	12.5	2.07						2.81			
BCD08819	33.50	34.50	1.00	0.04	1.52	1.44	46.3	1.30						2.71			
BCD08820	34.50	36.00	1.50	0.01	0.20	0.24	9.1	0.81									
BCD08821	36.00	37.50	1.50	0.05	1.30	0.90	26.2	0.86									
BCD08822	37.50	38.30	0.80	0.09	3.86	1.76	42.8	0.42						2.55			
BCD08823	38.30	38.90	0.60	1.08	6.84	3.58	479.3	0.61						3.17			
BCD08824	38.90	40.90	2.00	0.14	2.08	1.28	64.4	0.44									
BCD08825	40.90	41.90	1.00	0.03	0.49	0.31	16.4	0.22									
BCD08826	41.90	42.90	1.00	2.54	7.00	3.84	698.7	0.80						3.12			
BCD08827	42.90	43.40	0.50	0.08	0.18	0.21	32.1	0.19									
BCD08828	43.40	44.40	1.00	0.08	2.28	1.34	72.3	0.20									
BCD08829	44.40	45.60	1.20	0.21	2.32	0.88	97.8	0.29									
BCD08830	45.60	46.60	1.00	0.27	2.34	2.22	134.6	0.24						3.02			
BCD08831	46.60	48.10	1.50	0.09	0.50	0.42	29.4	0.18									
BCD08832	48.10	50.10	2.00	0.15	0.17	0.15	41.3	0.11									
BCD08833	50.10	51.10	1.00	0.84	2.10	1.32	227.4	0.32						2.84			
BCD08834	51.10	52.10	1.00	0.29	1.40	0.60	88.4	0.19									
BCD08835	52.10	53.60	1.50	0.46	2.46	0.39	106.7	0.26						3.25			
BCD08836	53.60	55.10	1.50	0.04	0.67	0.36	16.1	0.04									
BCD08837	55.10	56.60	1.50	0.14	3.36	2.78	64.3	0.06						2.98			
BCD08838	56.60	57.60	1.00	0.01	0.04	0.04	4.3	0.15									
BCD08839	57.60	58.60	1.00	0.03	0.04	0.04	9.4	0.08									
BCD08840	58.60	59.60	1.00	0.07	0.90	0.64	35.3	0.11									

MINNOVA INC.

HOLE NUMBER: U1330-59 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 632.55N
EAST: 9560.23W
ELEV: 1336.37

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

COLLAR DIP: -45° 0' 0"
LENGTH OF THE HOLE: 51.20m
START DEPTH: 0.00m
FINAL DEPTH: 51.20m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: February 27, 1991
DATE COMPLETED: February 28, 1991
DATE LOGGED: March 6, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-46° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-47° 0'	ACID	OK		-	-	-	-	-	
48.80	-	-47° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 12.30	«DOL MAFICS»	Pale to dark green chloritic mafic tuffs. Numerous patches/bands qtz-carb parallel foliation. Foliation: 2.7m 12.6m	 65 58	Moderate pale green/yellow ser'n. Patchy sil'n. Dol.	<1% pyrite	20cm zone of qtz carb veining at lower contact.
12.30 TO 17.70	«MFLT»	Yellow sericitized lapilli in a dolomitized, chloritic tuff matrix. Foliation: 15.9m	 68	Selective pale yellow ser'n. Intense dol Patchy sil'n.	1% pyrite.	
17.70 TO 36.80	«MFLT/ ALT MAF»	Banded, patchy and mottled pale to dark grey-green, chloritic, dolomitic tuffs. Original textures overprinted by alteration. Local intervals MFLT at 24.1m - 26.5m 28.3 - 33.2m Foliation: 24.5m 34.0	 70 57	Intense ferro-dol. Moderate ser'n. Patchy sil'n.	1-2% pyrite.	Fault at upper contact 17.7 - 18.0m. Lower contact taken at contact with 20cm width semi-massive pyrite.
36.80 TO 38.80	«TALC/ALT SED»	Locally friable interval of dark greyish brown fine altered seds. Shearing parallel to foliation, with moderate development talc. [37.1 - 37.6] «shear/flt gou» 37.9 - 38.1m flt gou+blocks.	 65	10-15% soft light green talc. Grey ser'n.	7-10% pyrite. Interval includes 20cm width section of semi massive pyrite. Minor qtz-carb veins locally invade 37.8 - 38.8m [37.8 - 38.8] «Tr CpSpTt»	Possibly minor mafic component.
38.80 TO 51.20	«MUT/ SIL SEDS»	Grey sericitized, locally pyritic, silicified seds. Foliation 40.7m 46.7m 51.2 Faults: 39.3 - 39.4m - flt gou 43.2 - 43.6m flt gou+blocky 44.8 - 45.1m blocky	 66 65 67	Grey sericite partings to patches and bands of grey silicified seds.	3-5% pyrite. Traces of Sp overall. Locally 1-2% Sp with trace to 1/2% Tt associated with patches white qtz-carb. [46.0 - 46.5] «1%Sp 1/2%Tt»	Silicified bands locally show S-Z folding. 4.7m cherty protolith?
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30401	35.80	36.80	1.00	0.01	0.01	0.02	0.03	0.06									
BCD30402	36.80	37.80	1.00	0.01	0.01	0.03	3.1	0.14									
BCD30403	37.80	38.80	1.00	0.16	0.78	0.14	13.6	0.42									
BCD30404	38.80	40.30	1.50	0.05	0.15	0.14	41.3	0.56									
BCD30405	40.30	41.80	1.50	0.02	0.20	0.11	21.8	0.48									
BCD30406	41.80	43.20	1.40	0.02	0.13	0.08	27.2	0.51									
BCD30407	43.20	44.70	1.50	0.02	0.18	0.08	29.1	0.33									
BCD30408	44.70	46.00	1.30	0.01	0.13	0.05	13.1	0.32									
BCD30409	46.00	46.50	0.50	0.02	1.58	0.78	53.7	0.46									
BCD30410	46.50	48.00	1.50	0.03	0.14	0.10	45.6	0.24									

MINNOVA INC.

HOLE NUMBER: U1330-60 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: U6 | PLOTTING COORDS GRID: FIELD | ALTERNATE COORDS GRID: | COLLAR DIP: -86° 0' 0"
PROJECT NUMBER: SAM | NORTH: 633.81N | NORTH: 0+ 0 | LENGTH OF THE HOLE: 57.90m
CLAIM NUMBER: | EAST: 9560.26W | EAST: 0+ 0 | START DEPTH: 0.00m
LOCATION: DRIFT | ELEV: 1336.39 | ELEV: 0.00 | FINAL DEPTH: 57.90m

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

DATE STARTED: February 28, 1991 | COLLAR SURVEY: YES | PULSE EM SURVEY: NO | CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: February 28, 1991 | MULTISHOT SURVEY: YES | PLUGGED: YES | CASING: PULLED
DATE LOGGED: March 6, 1991 | RQD LOG: YES | HOLE SIZE: BTW | CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-86° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-86° 0'	ACID	OK		-	-	-	-	-	
57.90	-	-86° 0'	ACID	OK		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CS6»					
0.60 TO 15.20	«DOL MAFICS»	Pale to dark green chloritic tuffs invaded by abundant qtz-carb veins parallel to foliation. Creates banded, mottled, patchy grey-white green tecture. Foliation: 3.0m 12.5m Minor gouge at lower contact.	 65 58	Ferro-dol. Moderate development greenish yellow sericite after chlorite.	1% pyrite.	
15.20 TO 32.00	«ALT MAF/ MFLT»	Lapilli tuff with zones where textures completely disguised by alteration. Foliation: 20.0m 26.4 32.0 Faults: ┤22.9 - 23.5├ «flt bx+blocks» includes vuggy qtz-carb. 25.3 - 25.4m flt bx	 67 56 53	Intense ferro-dol. Patchy sil'n. Qtz-carb veins, 5% by volume. Less than the above interval. Yellow ser'n of lapilli.	2-3% Py. Trace galena associated with qtz-carb veins at 23.0m.	
32.00 TO 41.70	«ALT MAFICS»	Dolomitized and sericitized mafics. Original textures destroyed. Appears as patchy, mottled banded grey-white dolomite, greenish yellow sericite. Foliation: 35.1m Minor shearing 40.0m Faulting: 32.5 - 32.6m compact bx. ┤37.2 - 37.5├ «flt bx» compact.	 56 52	Intense ferro-dol. Banded to wispy greenish yellow ser'n. Patchy sil'n.	1-2% pyrite.	Gradational upper contact. Quartz-carb flooded mafic at lower contact. Minor fault 41.7m.
41.70 TO 45.20	«ARG/MAF»	Mixed pale green mafic and minor black graphitic argillite. Foliation: 44.0m Faulting: ┤44.5 - 45.2├ «flt gou/bx+blocks»	 59	Greenish yellow ser'n. Minor silicified bands.	1-2% pyrite.	Blocky interval.
45.20 TO 57.90	«MUT/ SIL SEDS»	Grey sericitized seds, locally pyritic (mut) and silicified. Minor black argillite, 45.2 - 45.4m. Foliation 45.4m 49.0m 56.4	 70 55 65 65	Grey sericite forms partings to silicified patches, veins and bands.	3-7% pyrite. Blebby Sp and minor Tt locally associated with silicified bands/ patches. ┤47.7 - 48.7├ «1%Sp1/2%Tt» 48.7 - 49.7m 1/2%Sp,Tr Tt?	Cherty protolith? Deformed.

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Faults:				
		45.4 - 45.6m «flt bx/gou»				
		51.8 - 51.9m flt gouge (soft)				
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30411	45.20	46.20	1.00	0.01	0.02	0.01	2.1	0.09									
BCD30412	46.20	47.70	1.50	0.02	0.34	0.24	14.4	0.23									
BCD30413	47.70	48.70	1.00	0.01	1.52	1.32	43.4	0.32									
BCD30414	48.70	49.70	1.00	0.04	0.96	0.69	17.2	0.59									
BCD30415	49.70	51.20	1.50	0.01	0.97	0.71	18.9	0.37									
BCD30416	51.20	52.70	1.50	0.01	0.46	0.80	27.6	0.61									
BCD30417	52.70	54.20	1.50	0.01	0.18	0.06	12.2	0.55									
BCD30418	54.20	56.20	2.00	0.07	0.31	0.17	37.8	0.34									
BCD30419	56.20	57.90	1.70	0.06	0.14	0.30	24.2	0.16									

MINNOVA INC.

HOLE NUMBER: U1330-61 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.84N
EAST: 9559.92W
ELEV: 1336.39

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

COLLAR DIP: -61° 0' 0"
LENGTH OF THE HOLE: 56.40m
START DEPTH: 0.00m
FINAL DEPTH: 56.40m

COLLAR GRID AZIMUTH: 151° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 196° 0' 0"

DATE STARTED: February 28, 1991
DATE COMPLETED: March 1, 1991
DATE LOGGED: March 7, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-61° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-62° 0'	ACID	OK		-	-	-	-	-	
54.60	-	-62° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 12.70	«DOL-MAFICS»	Dol mafic tuffs. Numerous qtz-carb veins. Veins and patches parallel to foliation. Foliation: 7.0m Faulted lower contact with lapilli tuffs. ┤12.5 - 12.7├ «flt-gou+blocks»	66 78	Dol. Patchy sil'n. Moderate greenish yellow Ser'n as laminae/WISPS parallel to foliation.	1% pyrite.	
12.70 TO 16.70	«MFLT»	Yellow sericitized lapilli in a chloritic, dolomitic tuffaceous matrix.	80	Intense ferro-dol. Patchy sil'n Selective yellow ser'n.	1% pyrite.	Lower contact marked by qtz-carb vein.
16.70 TO 34.70	«ALT MAFICS»	Dolomitized, sericitized chloritic tuffs. Occasional ghost lapilli texture. Foliation: 17.9m 24.0m 34.0m Faults: ┤23.2 - 23.4├«flt bx»	80 60 70	Intense ferro-dol. Wisps and laminae of greenish yellow sericite. Patchy sil'n.	1-2% pyrite.	Patches and mottling of qtz-carb.
34.70 TO 37.70	«QTZ/SER»	Pale yellow sericite bands, patches and laminae with patches and veins of qtz-carb. Foliation: 35.6m 37.7m Faults: 34.7m - 3cm gouge 35.1 - 35.2m flt bx+block 35.7 - 35.8m flt gouge.	70 80	Intense pale yellow ser'n. Talc at 37.4m.	7-10% pyrite 36.2 - 36.3m blebby Sp+Gn associated with coarse pyrite blebs in grey silicified patch/vein. 37.1 - 37.3m, pyrite, 20-25% within 8cm block + 5-7% disseminated in qv.	Highly sheared, stretched parallel to foliation. Mafic or sed? Breaks easily along foliation.
37.70 TO 41.20	«ALT SEDS»	Grey sericitic seds. Locally pyritic (mut). Foliation 39.7m Local gouge and sheared seds. 37.7 - 39.9m ┤37.7 - 38.2├ «flt gou+blocks»	67	Grey ser'n. Local talc & fuchsite.	5-7% pyrite. Locally 10%. 38.1 - 38.2m 15-20% Py in sil matrix. Block. 39.7 - 39.8m 10-15% Py in block of qtz-carb flooded seds.	Upper 2m quite friable parallel to foliation. Minor
41.20 TO 56.40	«SIL SEDS»	Grey. Silicified, sericitic seds. Foliation: 44.3m 48.6m 55.5m Faults: ┤49.2 - 49.8├ «flt gou bx» 50.2 - 51.0m strained, partly brecciated sil sed. 54.7 - 54.8m flt gou/bx.	80 70 70	Grey sericite forms partings to silicified bands and patches of seds.	Blebby sphalerite associated with silicified patches and white qtz-carb veins. Overall trace to 1/2% Sp. Minor local Gn,Tt. ┤42.7 - 44.2├ «1/2%Sp1/2%Tt»	Cherty protolith.

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
	E.O.H.	N.B. Extra 50cm recorded in logged core compared to Boisvenu Drill Sheets.				

				ASSAYS							GEOCHEMICAL							COMMENTS
Sample	From (m)	To (m)	Length (m)	CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		
BCD30420	34.70	35.70	1.00	0.01	0.01	0.01	0.06	0.03										
BCD30421	35.70	37.10	1.40	0.01	0.28	0.04	10.7	0.17										
BCD30422	37.10	37.70	0.60	0.01	0.01	0.02	6.2	0.08										
BCD30423	37.70	38.20	0.50	0.01	0.01	0.03	4.8	0.14										
BCD30424	38.20	39.70	1.50	0.01	0.08	0.02	5.2	0.28										
BCD30425	39.70	41.20	1.50	0.01	0.06	0.02	6.9	0.42										
BCD30427	41.20	42.70	1.50	0.01	0.09	0.05	15.9	0.29										
BCD30428	42.70	44.20	1.50	0.12	0.37	0.24	99.7	0.19										
BCD30429	44.20	45.70	1.50	0.13	0.21	0.22	87.8	0.17										
BCD30430	45.70	47.20	1.50	0.02	0.16	0.07	15.4	0.19										
BCD30431	47.20	48.70	1.50	0.05	0.26	0.16	44.3	0.32										
BCD30432	48.70	50.20	1.50	0.02	0.12	0.05	19.3	0.33										
BCD30433	50.20	51.70	1.50	0.02	0.07	0.04	10.1	0.11										
BCD30434	51.70	53.20	1.50	0.04	0.05	0.04	17.2	0.21										
BCD30435	53.20	54.70	1.50	0.06	0.10	0.05	26.7	0.44										
BCD30436	54.70	56.20	1.50	0.03	0.06	0.02	12.7	0.29										

MINNOVA INC.

HOLE NUMBER: U1330-62 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 634.09N
EAST: 9560.01W
ELEV: 1336.37

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

COLLAR DIP: -54° 0' 0"
LENGTH OF THE HOLE: 61.00m
START DEPTH: 0.00m
FINAL DEPTH: 61.00m

COLLAR GRID AZIMUTH: 132° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 177° 0' 0"

DATE STARTED: March 2, 1991
DATE COMPLETED: March 2, 1991
DATE LOGGED: March 7, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-54° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-56° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-56° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 14.10	«MAFIC TUFF «MT»	Colour - Pale to dark green Grain size - aphanitic				
		Well banded and mottled with qtz & qtz carb veins 6m	72	Weak to mod dol. Chlorite & sericite alt on jts.	1.3% v. fine diss'd py.	Hardness: R2
		9m	66	Mod. sil.		
		10.0 - 10.2 & 10.55 - 10.6 Minor flts. 11.5 - 11.7 «flt» Breccia & gouge 13.8 - 13.85 V. minor flt zne				
14.10 TO 16.90	«MFLT» MAFIC LAPILLI TUFF	Colour - Pale Green Grain size - aphanitic				
		Yellow sericitic alt lapilli in a chloritic dolomitic matrix.		Yellow sericitic alt lapilli dol increases down hole within interval	Approx. 1% diss'd v. fine py.	R2
		Occ. qtz & qtz carb veinlets	75	Occ Fuchsite blebs within lapilli Mod sil.		
16.90 TO 37.20	«ALT MAFIC»	Colour - pale to dark green Grain size - aphanitic				
		Dol, locally healed (sil) Tectonic, Mafics. Occ. ghost rem. lapilli		Dolomitic, local yellow sert & chlorite alt. prominent on joints. Locally tectonitic & well healed.	26.5 - 26.65 «2%Cp6nTr.Sp» qtz veining with B. Metals	R2
		28m	64	Qtz carb veining and veinlets		
		37m	58	stockworked by qtz veinlets.		
37.20 TO 44.10	«SERT MAFIC» SERICITIC ALT.MAFICS	Colour - Pale yellow green Grain size - aphanitic				
		Finely banded pale yelow sert and green chlorite. Mod tectonic deformation. 37.2 - 37.3 minor shearing 37.9 - 38.0 «minor flt» 40.5 - 40.55 - minor gouge 40.7 - 40.8 minor flt zne	53	Yellow sericite tr. fuchsite chlorite wisps Silicification increasing down hole.	Py blebs in qtz veinlets	R1
44.10 TO 61.00	«SIL'D SEDS» SIL'D SEDIMENTS SILITES,	Colour - grey Grain size - aphanitic				
		Grey v. sil'd aphanitic seds light greyish white qtz veinlets.		Grey sericite throughout Leucoxene T.O.I. to approx. 46.0m	Rare blebs of Sp & occ. gn & tr tet. usually in qtz veinlets.	R3 T.O.I. to 53.3

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
	CHRTS	51m	52		1-3% py throughout v. fine diss'd	
		Contact of chert? Protolith to mut		╡49.0 - 52.1╞ v.sil'd «chert»	and occ. py bed in 5mm veins.	
		sheared dip = 59 deg.		╡52.1 - 53.3╞ v. py «mut»	(T.O.I. to approx. 46.0m 3-5%	
		52.5 - 52.6 - minor flt & breccia		well laminated.	py as blebs)	
		╡53.3 - 61.0╞ «flt zone»		53.3 - 61.0 v. sil'd fractured and		R1-R2 53.3 - E.O.I.
				flted, possible chert protolith.	╡59.8 - 59.9╞ «3%Sp,Gn,Tr.Tet»	
	E.O.H.					

HOLE NUMBER: U1330-62 ASSAY SHEET DATE: 20-March-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30451	26.50	26.65	0.15	0.25	0.56	0.71	5.5	0.04									
BCD30452	37.20	38.20	1.00	0.01	0.02	0.01	0.1	0.03									
BCD30453	43.10	44.10	1.00	0.01	0.01	0.01	0.7	0.03									
BCD30454	44.10	45.60	1.50	0.01	0.17	0.02	3.1	0.03									
BCD30455	52.10	53.30	1.20	0.01	0.02	0.01	10.2	0.42									
BCD30456	53.30	55.90	2.60	0.02	0.04	0.02	16.3	0.12									
BCD30457	59.80	59.90	0.10	0.05	0.24	0.09	10.5	0.22									

NINNOVA INC.

HOLE NUMBER: U1330-63 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 631.66N
EAST: 9569.90W
ELEV: 1336.66

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

COLLAR DIP: -49° 0' 0"
LENGTH OF THE HOLE: 45.10m
START DEPTH: 0.00m
FINAL DEPTH: 45.10m

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

DATE STARTED: March 2, 1991
DATE COMPLETED: March 3, 1991
DATE LOGGED: March 9, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
ROD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-49° 0'	ACID		OK	-	-	-	-	-	
32.90	-	-49° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 15.70	«ALT/DOL MAFICS»	Altered interval of mafic tuffs. Appears as mottled, banded, pale to dark green, greenish yellow and grey. Foliation: 0.6m 7.8m 14.4m Faults: 3.0 - 3.1m flt bx. 5.9 - 6.2m flt bx + blocks	 60 75 62	Intense ferro-dol. locally pervasive sil'n 1.8 - 2.7m. Moderate development greenish yellow sericite laminae.	1-2% pyrite	No significant zone of Dol-mafics with characteristic qtz-carb veins. Blocky 30cm zone and qtz-carb vein at contact.
15.70 TO 18.60	«MFLT»	Yellow sericitized lapilli in a chloritic/dolomitic matrix. Foliation: 17.0m	 75	Intense ferro-dol. Selective ser'n.	1% pyrite.	18.5 - 18.6m qtz-carb vein x-cutting foliation and sub-parallel to c/a. MFLT grades into more altered mafic with loss of original textures.
18.60 TO 38.20	«MFLT/ALT MAFICS»	Mainly altered mafic. Pale to dark greyish green, chloritic, dolomitized, sericitized tuff. lapilli intervals. 25.5 - 28.2m and 29.8 - 31.4m Foliation: 20.8m 24.0m 32.1m 38.0m Faults and fractures: ╪28.4 - 28.8╪ «blocky & gouge» 35.8 - 35.9m qtz fragments in compact sericite bx. 36.2 - 36.3m minor gouge/shearing. 38.1 - 38.2m minor gouge/shearing at lower contact.	 50 61 60 67	Intense ferro-dol. Patchy sil'n. Selective yellow ser'n of lapilli. Alteration increases to lower contact. V. minor green talc and fuchsite at 37.8m. Foliated pale yellow sericite, 30-40% of section 35.7 - 38.2.	1-3% pyrite, increasing to 5-7% at lower content.	
38.20 TO 40.50	«QV/SED»	Qtz-carb flooded seds. Texture appears as fine to medium grained black and white mottling. Foliation: 39.2m Faults: 38.9m - minor gouge ╪39.9 - 40.2╪ «flt gouge + blocks»	 75	Moderate development grey sericite. Minor patches yellow sericite. Moderate development of talc 39.2 - 40.5m.	Fine disseminated tet, overall 1-2% 1%SpCp, distributed as occasional blebs. ╪38.7 - 39.7╪ «2%Tt2%SpCp»	

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
40.50 TO 45.10	«ALT SEDS»	Grey sericitic seds. Foliation 42.0m - 44.4m Faults and fractures: {40.5 - 41.0} «flt gouge» Sheared mixture grey sericite dark argillic seds. 41.5 - 41.7m flt gouge	74 80	Intense grey ser'n. 40.5 - 41.0m talc developed in sheared seds. Minor silicified patches and remnants of contorted veins.	Fine grains and blebs Sp parallel to foliation. Occasional fine grains Tt 40.5 - 42.5m.	MUT. Generally friable parallel to foliation.
	E.O.H.					N.B. - Drillers recorder 147' - 45.1m

				ASSAYS							GEOCHEMICAL							COMMENTS
Sample	From (m)	To (m)	Length (m)	CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		
BCD30437	37.20	38.20	1.00	0.01	0.01	0.01	0.09	0.23										
BCD30438	38.20	38.70	0.50	0.01	0.02	0.01	1.4	0.05										
BCD30439	38.70	39.20	0.50	0.45	0.34	0.03	19.9	0.30										
BCD30440	39.20	39.70	0.50	0.16	0.03	0.02	28.9	0.65										
BCD30441	39.70	40.50	0.80	0.09	0.15	0.03	36.8	0.43										
BCD30442	40.50	41.00	0.50	0.12	0.24	0.16	43.2	0.29										
BCD30443	41.00	41.50	0.50	0.05	1.48	0.35	39.1	0.32										
BCD30444	41.50	42.50	1.00	0.08	0.17	0.03	22.1	0.39										
BCD30445	42.50	44.00	1.50	0.01	0.02	0.01	5.2	0.42										
BCD30446	44.00	45.10	1.10	0.01	0.03	0.04	9.8	0.47										

MINNOVA INC.

HOLE NUMBER: U1330-64 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.16N
EAST: 9569.96W
ELEV: 1336.20

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

COLLAR DIP: -82° 0' 0"
LENGTH OF THE HOLE: 54.90m
START DEPTH: 0.00m
FINAL DEPTH: 54.90m

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

DATE STARTED: March 3, 1991
DATE COMPLETED: March 3, 1991
DATE LOGGED: March 9, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-82° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-82° 0'	ACID	OK		-	-	-	-	-	
54.90	-	-81° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Use Piteau Codes for ROD
0.60 TO 21.80	«HT» MAFIC TUFF	Colour - Pale green to dark Grain size - aphanitic Well banded and mottled with qtz and qtz-carb veinlets. 5m 6.0 - 6.2 R1-R0 fault zne. 6.5 - 6.6 R1 FH Zne Partially healed 9.4 - 9.5 R1 Minor shearing 12m 17m 19.8 - 20.2 local minor tect. deformation bedding angles approach to core axis ave = 19.7m	 55 66 59 30 64	Weak to mod dol. Chlorite & sericite alt on jts. Mod sil	1-3% v. fine diss'd py. 6.0 - 6.2 - 1-1.5mm py cubes in gouge 10.6 - 10.85' qtz carb veining «5%py,2%spgncp»	Hardness R2
21.80 TO 28.10	«ALT MAFIC»	Colour - Pale to dark green Grain size - aphanitic Dol locally healed tectonic mafics occ. ghost rem. lapilli and rem. sericitic lapilli. Occ. brecciatal to stockworked and well healed. 24m 24.8 - 24.9 minor flt @25.2 - 25.3 sert lapilli rem. 27.7 - 27.75 flt gouge dip	 57 66	Yellow sericite on occ rem lapilli and chlorite (alt decreases down hole) sil increases downhole.	Approx. 1% v. fine diss'd py throughout	R2
28.10 TO 33.50	«MFLT» ALT MAFIC LAPILLI TUFF	Colour - pale green Grain size - aphanitic Yellow sericitic alt lapilli in dol. Matrix, minor chlorite Minor - Mod Tectonic Occ. qtz and qtz carb veinlets 29m 30m 33.0 - 33.5 healed flt breccia.	 67 63	Yellow sert alt lapilli sil and dol increase down hole. Interval altered tectonics, dol, sil, to where lapilli are slightly ghosted. Tr Fuchsite	3% py as blebs in veinlets.	R2-R3

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
33.50 TO 42.00	«Alt MAFICS»	Colour - dark green Grain size - apjanitic ╡33.5 - 33.7╞ «Flt» gouge 33.9 - 34.1 and 34.2 - 34.3 minor flts. Dol locally healed sil Tectonic Nafics Occ ghost rem lapilli qtz veining throughout and increases down hole. ╡35.2 - 35.5╞ «Flt» gouge and breccia with qtz veining 38.9m 39.5 37.4 - 37.45 competence shear? v. minor shearing ╡40.9 - 42.0╞ «Flt Zne» gouge & breccia.	60 43	Yellow sert increases down hole. Tr. fuchsite. 35.5 - 37.4 sil flooded (R3) interval. ╡37.45 - 42.0╞ «Sert» Mod. tectonic def. qtz and qtz carb veining throughout. Sericitic alt on all joints.	1%py, v. fine diss'd throughout.	R2 R1-R2
42.00 TO 54.80	«SIL'D SEDS» SIL'D SEDIMENTS SILTITE, CHERT	Colour - Grey Grain size - aphanitic Grey v. sil'd aphanitic sediments Light greyish white qtz veinlets. (old logs - sil'd MUT & CHT) 45.5 ╡47.0 - 47.6╞ «AltCht» protolith zne.	60	grey sericite	5-8% py diss'd throughout ╡42.0 - 45.8╞ SMSX «3%Tt,3%Zn,4%Pb+Cp» 45.8 - 47.0 - 5-8%py,3%Pb+Zn+Cp	R2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		48m	61		<1%tet in pyritic sed (MUT)	
		╡48.8 - 49.5╞ «Flt» Zne with 5-8%py			╡50.2 - 50.3╞ «30%py»	
		<1%spTr.Tt (R0)				
		49.5 - 50.2 Minor fractures (approx. 5-8cm spacing)				
		51m	45	grey white qtz veining increases		
		53.3	60	@ approx 53.0m to E.O.H.		
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30458	10.60	10.85	0.25	0.01	0.06	0.23	1.2	0.03									
BCD30459	40.90	42.00	1.10	0.01	0.04	0.06	3.8	0.03									
BCD30460	42.00	43.50	1.50	0.74	4.46	2.66	409.3	0.49						2.97			
BCD30461	43.50	44.50	1.00	2.60	14.80	9.62	718.0	1.65						3.41			
BCD30462	44.50	45.80	1.30	5.14	7.54	4.66	1880	3.60						3.30			
BCD30463	45.80	47.00	1.20	0.27	0.66	0.61	120.8	0.63						2.98			
BCD30464	47.00	47.60	0.60	0.17	0.75	0.49	93.3	0.49									
BCD30465	47.60	48.80	1.20	0.03	0.49	0.23	13.9	0.19									
BCD30466	48.80	49.50	0.70	0.82	3.26	1.98	637.0	1.52						2.79			
BCD30467	49.50	50.20	0.70	0.06	0.57	0.40	56.7	0.46									
BCD30468	50.20	52.20	2.00	0.02	0.20	0.16	15.1	0.60									

MINNOVA INC.

HOLE NUMBER: U1330-65 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6	PLOTTING COORDS GRID: FIELD	ALTERNATE COORDS GRID:	COLLAR DIP: -46° 0' 0"
PROJECT NUMBER: SAM	NORTH: 632.29N	NORTH: 0+ 0	LENGTH OF THE HOLE: 50.50m
CLAIM NUMBER:	EAST: 9580.12W	EAST: 0+ 0	START DEPTH: 0.00m
LOCATION: DRIFT	ELEV: 1335.82	ELEV: 0.00	FINAL DEPTH: 50.50m

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

DATE STARTED:	March 3, 1991	COLLAR SURVEY: YES	PULSE EM SURVEY: NO	CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED:	March 4, 1991	MULTISHOT SURVEY: YES	PLUGGED: YES	CASING:
DATE LOGGED:	March 10, 1991	RQD LOG: NO	HOLE SIZE: BTW	CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-46° 0'	ACID		OK	-	-	-	-	-	
43.90	-	-48° 0'	ACID		OK	-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE		ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 20.60	«MT» MAFIC TUFF	Colour - Pale green Grain size - aphanitic Well banded and mottled with Qtz & Qtz Carb Veinlets			Yellow sert & chlorite Mod Dol Dol & Silification increasing downhole.	1-2% v. fine diss'd py	Rock Mechanic Notation from Piteau Logging R2
			4m	64			
			6m	66			
			8m	64			
		11.6 - 11.65 Minor Flt	11m	66			
		@ 12.0m isoclinal fold in qtz veinlets	13.5m	57			
			16.5m	56			
			17.5m	72	15.5m - 17.1 Prominent Sert Alt		
		18.6 - 19.1 healed breccia			17.1 - 18.6 - Prominent Chlorite Alt		
20.60 TO 39.70	«ALT MAFICS»	Colour - Pale to dark green Grain size - aphanitic Dolomitic, tectonic & healed Mafics Occ. ghost rem. lapilli			Yellow sert, chlorite Mod to strong Dol - strong sil	3-5%py as blebs & in veinlets	R2-R3
		27.9 - 28.0 Minor flt	22.5	60	increases down hole		
			24	57	╪34.4 - 37.7╪ Pervasive sil'd & dol (R3-R4) qtz. & qtz carb stockworked. «Per sil'd & dol 5%py»		
39.70 TO 50.50	«SIL'D SEDS» SIL'D SEDIMENTS SILTS, CHERTS	Colour - grey Grain size - aphanitic Grey very sil'd aphanitic sediments Light greyish white qtz veinlets throughout. ╪39.2 - 40.0╪ 5cm«Flts» with gouge zones spaced every 15-20cm over interval 40.6 - 41.2 Minor shearing	40.5	59	Grey sericite & weak Dol. Dol decreases down hole.	5-7% diss'd py throughout 1-2% Sp as blebs throughout ╪39.7 - 40.6╪ SMSX, «3%Tt,3%Sp2%Pb1%Cu» @ 40.4m Red streak - possible intermediate tetrahedrite/tenantite.	R2
		╪41.6 - 42.6╪ 5-10cm «flts» with gouge spaced every approx 10cm over interval					
			43	64			
			45	75	42.6 E.O.H. v. sild (R2-R3) with dark whitish grey qtz veining	42.6 - E.O.H. 1-2%Sp as blebs 5-7% py diss'd.	
		46.3 - 46.7 Flt Zne with gouge 46.95 - 47.2 flt zne with minor gouge ╪46.3 - 47.2╪ «flt» 48.5 - 48.7 Possible hinge zone. 50.0 - E.O.H. v. minor shearing					
			50m	75			

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30469	34.40	36.40	2.00	0.01	0.01	0.01	0.6	0.04									
BCD30470	39.20	39.70	0.50	0.01	0.01	0.02	3.4	0.11									
BCD30471	39.70	40.60	0.90	2.22	1.46	0.03	2874	5.16						3.22			
BCD30472	40.60	41.60	1.00	1.14	1.14	0.08	1066	2.28						2.84			
BCD30473	41.60	42.60	1.00	0.14	0.04	0.04	96.7	0.43									
BCD30474	42.60	44.60	2.00	0.09	0.23	0.18	82.1	0.95									

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.15N
EAST: 9580.11W
ELEV: 1335.84

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

COLLAR DIP: -73° 0' 0"
LENGTH OF THE HOLE: 48.80m
START DEPTH: 0.00m
FINAL DEPTH: 48.80m

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

DATE STARTED: March 4, 1991
DATE COMPLETED: March 4, 1991
DATE LOGGED: April 10, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-73° 0'	ACID		OK	-	-	-	-	-	
48.80	-	-73° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 31.90	«DOL/ALT MAFICS»	Mottled to banded and patchy pale to dark green chloritic tuffs, grey-white dolomitized, and greenish yellow sericitized tuffs. Numerous qtz-carb veins parallel to foliation. Foliation: 3.0m 13.7m 27.5m Faults and fractures: ┤25.0 - 25.3├ «flt bx» parallel to foliation. 31.5 - 31.6m minor flt bx.	 62 75 60	Intense ferro-dol Moderate greenish yellow sericite developed as wispy foliations and bands. Patchy sil'n. Alteration increases to lower contact.	1-2% pyrite. Very occasional base metal sulphides.	
31.90 TO 41.30	«ALT MAFICS»	Banded yellow sericite and grey white completely dolomitized zones are in faulted contact with the underlying interval. Faulted lower contact	 70	Intense dol and locally pervasive qtz-carb alteration. Zones locally fuchsitic. Pale yellow sericite 41.0 - 41.3.	3-4% pyrite.	
41.30 TO 46.10	«SMSX/ ALT SEDS»	Fine to medium grained disseminations of base metal sulphides in a dark brownish grey partly silicified, sericitic altered sediment. Foliation: 42.6m 45.7m Faults: Local Shearing parallel to foliation. 42.8 - 42.9m minor gouge, friable seds. ┤43.9 - 44.2├ «flt zone» Minor fault at lower contact.	 55 69	Patchy sil'n, related to qtz carb vein flooding?? Sil'n forms v. fine matrix to seds and sulphide. Grey ser'n.	Fine to medium grained disseminations of sphalerite with lesser grains and blebs of galena and chalcopyrite. Fine Tetrahedrite? Sulphide grains and blebs parallel foliation. ┤41.4 - 46.1├ «8%Sp6%Cp5%Gn1%Tt»	Contact marked by a friable 10cm zone of pyritic seds.
46.10 TO 48.80	«ALT SEDS»	Grey to greyish brown sericitized seds. Foliation: ┤46.5 - 47.2├ «Flt zone» friable sericitic seds.	 68	Patchy sil'n increasing to E.O.H. Grey ser'n.	5-7% pyrite. 1/2% Sp grains and blebs	
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30501	40.70	41.20	0.50	0.01	0.01	0.01	4.4	0.05									
BCD30502	41.20	41.40	0.20	0.08	1.08	0.53	57.6	0.16									
BCD30503	41.40	42.40	1.00	1.72	8.06	4.36	848	1.97						2.96			
BCD30504	42.40	42.90	0.50	1.72	13.80	7.88	1312	2.76						3.12			
BCD30505	42.90	43.90	1.00	1.36	10.80	5.68	1033	1.99						3.48			
BCD30506	43.90	44.20	0.30	1.08	15.40	7.92	848	1.48						3.22			
BCD30507	44.20	45.20	1.00	0.49	9.80	6.18	351	0.94						3.10			
BCD30508	45.20	46.10	0.90	0.57	8.52	5.44	469	1.23						3.04			
BCD30509	46.10	46.50	0.40	0.20	2.20	1.10	72.3	0.69									
BCD30510	46.50	47.20	0.70	0.03	1.02	0.41	22.6	0.59									
BCD30511	47.20	48.80	1.60	0.01	0.49	0.33	22.4	0.53									

MINNOVA INC.

HOLE NUMBER: U1330-67 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 632.58N
EAST: 9590.01W
ELEV: 1335.74

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

COLLAR DIP: -60° 0' 0"
LENGTH OF THE HOLE: 55.80m
START DEPTH: 0.00m
FINAL DEPTH: 55.80m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: March 4, 1991
DATE COMPLETED: March 4, 1991
DATE LOGGED: March 10, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-60° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-60° 0'	ACID	OK		-	-	-	-	-	
55.80	-	-60° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.30	«CSG»					Rock Mechanic Notations from Piteau Logging.
0.30 TO 20.90	«MT» MAFIC TUFF	Colour - Pale to dark green Grain size - aphanitic Well banded and mottled with qtz and qtz carb veining. 2m 9m 13.5 - 13.8 Rubble zone 20m	 62 79 73	 Dol Chlorite and yellow sert (Sert increases down hole) Sil'd	 1-3% fine diss'd py throughout.	 R2-3
20.90 TO 28.20	«MFLT» MAFIC LAPILLI TUFF	Colour - pale green Grain size - aphanitic Yellow sericitic alt partially ghosted and stretched lapilli in a chloritic dolomitic matrix. Qtz veins and veinlets parallel to X-cutting foliation.	 	 Lapilli weakly ghosted and very stretched. Sil'd. Mod-strong ferro-dol.	 1-3% fine diss'd py and occ. blebs	 R2-3
28.20 TO 39.00	«ALT MAF»	Colour - Pale to dark green Grain size - aphanitic Dolomitic and sil'd, possible MFLT (occ. ghost remnant lapilli) 32m 33.5 - 34.5 «Compact Flt» partially healed. 35.0 - 35.9 «Flt Zne» 35.0 - 35.2 - flt gouge (R0) 35.5 - 35.6 - flt gouge (R0) 35.6 - 35.65 - flt gouge (R0) 35.8 - 35.85 - sheared (R1) 36.2 - 36.3 v. minor shearing 3 sert coated jts along fol. Dip jts = 50 deg. 38.3 - 38.8 - fol. subparallel to core axis and tectonitic	 76 10	 Below flt @ 34.5 v. dol. Mod tectonitic tr. fuchsite.	 2-3% fine diss'd py. 34.5 - 39.0 - 8-10% py as veinlets 5mm wide.	 R2-3

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
39.00	«SIL'D SEDS	Colour - grey				
TO	MUT«	Grain size - aphanitic				
55.80						
		Grey pyritic very sil'd aphanitic sediments,		Silver grey sericite	3-5% diss'd py throughout	R1-R2
		yellow sericitic alt mafics? pieces as clasts		Mod. Dol. T.O.I. to 43.5. Intensity	(1% sph as blebs throughout in qtz	
		to 41m. light greyish white qtz and qtz-carb		decreases downhole.	veinlet. Occ with tr. tet.	
		veining. (qtz-carb to 43.5m)		Mod sil throughout.		
		39.5m	56			
		@ 39.75 small 2cm shear.			39.6 - 40.2 -2-3%Tt,1%Cu,2%Pb,3-5Zn	
		40.0 - 40.1 minor flt zne.			mod. dolomitic	
		40.1 - 40.25 (B+degree breakage/w sert			40.2 - 40.9 v. dolomitic 1-2%Tet 3%	
		on foliation 41m	54		Base Mtls.	
		╢40.8 - 41.1╟ «flt zne»			40.9 - 42.0 1%Tet(1%Cu2%Pb2-3%Zn	
		40.8 - 40.9 R@ Gouge			╢39.6 - 42.0╟ 2%Tt1%Cu2%Pb3%Zn	
		41.05 - 41.1 R@ Gouge			«SMSX/MUT»	
		╢42.0 - 44.0╟ «flt zne»		╢43.5 - 51.0╟ old «MUT» Rock type ("R1)		
		42.0 - 43.2 gouge and shearing				
		42.3 - 42.8 fol and shearing				
		parallel to core axis				
		43.5 - 44.0 (B-degree of breakage)				
		47m	76			
		48.7 - 48.8 minor flt.				
		51.0 - 55.8 possible chert protolith				
		51.5 - 55.8 minor shearing				
		55	67			
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		COMMENTS
BCD30475	38.00	39.00	1.00	0.01	0.01	0.02	2.5	0.11										
BCD30476	39.00	39.60	0.60	0.01	0.01	0.03	4.6	0.13										
BCD30477	39.60	40.20	0.60	2.42	4.48	1.56	2514	4.04						3.40				
BCD30478	40.20	40.90	0.70	0.38	0.06	0.04	336.4	0.74						2.83				
BCD30479	40.90	42.00	1.10	2.84	9.20	5.52	2791	4.15						3.16				
BCD30480	42.00	43.20	1.20	0.07	0.06	0.09	60.1	0.33										
BCD30481	43.20	43.50	0.30	0.04	0.03	0.04	29.1	0.29										
BCD30482	43.50	44.00	0.50	0.03	0.02	0.04	15.1	0.38										
BCD30483	50.80	51.00	0.20	0.02	1.26	0.82	45.8	0.73										

MINNOVA INC.

HOLE NUMBER: U1330-68 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG	PLOTTING COORDS GRID: FIELD	ALTERNATE COORDS GRID:		COLLAR DIP: -52° 0' 0"	
PROJECT NUMBER: SAM	NORTH: 632.78N	NORTH: 0+ 0		LENGTH OF THE HOLE: 54.20m	
CLAIM NUMBER:	EAST: 9600.10W	EAST: 0+ 0		START DEPTH: 0.00m	
LOCATION: DRIFT	ELEV: 1335.51	ELEV: 0.00		FINAL DEPTH: 54.20m	
	COLLAR GRID AZIMUTH: 180° 0' 0"	COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"			
DATE STARTED: March 5, 1991	COLLAR SURVEY: YES	PULSE EM SURVEY: NO		CONTRACTOR: BOISVENU DRILLING	
DATE COMPLETED: March 5, 1991	MULTISHOT SURVEY: YES	PLUGGED: YES		CASING: PULLED	
DATE LOGGED: March 11, 1991	RQD LOG: NO	HOLE SIZE: BTW		CORE STORAGE: BARRIERE	

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-51° 0'	ACID		OK
30.50	-	-51° 0'	ACID		OK
54.20	-	-52° 0'	ACID		OK
-	-	-	-	-	
-	-	-	-	-	
-	-	-	-	-

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 13.60	«DOL MAFICS»	Pale green to dark green chloritic tuffs invaded by numerous qtz-carb veins. Foliation: 2.2m 11.5m	 74 70	Moderate development greenish yellow ser'n. Moderate dol.	1-2% pyrite	Mottled to patchy and banded green/white/grey. Transitional lower contact.
13.60 TO 34.90	«MFLT/ ALT MAFICS»	Pale to dark green chloritic tuffs, yellow sericitized lapilli locally visible at 18.6 - 19.4m and 27.5 - 34.9m. Patchy qtz-carb and grey-white dolomitized mafics. Foliation: 16.0m 24.5m 32.8m Faults: {17.0 - 17.3} «flt bx»	 70 72 69	Greenish yellow ser'n. Patchy sil'n. Intense ferro-dol.	1% pyrite	Lower contact marked by minor fault and fuchsitic qtz vein at 56 deg to c/a.
34.90 TO 38.40	«QTZ-DOL ALT MAF»	Intensely altered zone of mafics at contact of mafics and seds. Faults: 35.1 - 35.4m flt bx 37.7m - minor bx	 30	Intense ferro-dol. Locally pervasive "cherty" sil'n. 15-20cm well developed fuchsite.	4-5% pyrite in blebs and patches mainly associated with "cherty" sil'n. The latter also contains trace Tt.	
38.40 TO 40.30	«FLT ZONE»	Faulted zone of altered mafics and seds. Includes soft gouge, breccia and blocky sections. 38.4 - 38.9m gou/bx and blocky mafic. 38.9 - 39.5m blocky section of "cherty" sil'n and qtz-carb flooded sed? 39.5 - 40.3m grey gouge and breccia.		 Patchy sil'n	 1-2% blebby Sp + 5% Py. Contains faulted zone of seds + base metal sulphides. 1-2%Sp. Tt	 Possibly faulted ore zone
40.30 TO 42.20	«QV/SEDS/ ALT SEDS»	Patchy to mottled grey-white qtz carb flooded sediments. Sections of yellow sericite intermixed with grey sericitized seds and qtz carb. Minor sections of gouge. Foliation in block 42.1m	 70 80	Yellow sericitized patches 40.5 - 40.7m 41.0 - 41.3m and 42.0 - 42.1m	3-4% pyrite Tr Sp,Tr fine disseminated Tt. {41.3 - 42.2} «2%SpTrTt» Cp+Gn?	 includes 10cm zone of fine disseminated Sp in dark grey black, sericitic seds.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
42.20 TO 45.10	«ALT SEDS FLT ZNE»	Faulted, strained grey sericitic seds. Intense grey gouge at upper contact. Local qtz-carb flooded seds in 20cm section. 42.7 - 42.9m	35 50	Grey ser'n. Minor green talc.	4-5% pyrite. Trace base metal sulphides.	Generally blocky and friable. 43.6 - 45.1m 6% core loss.
45.10 TO 54.20	«SIL SEDS»	Grey silicified seds with grey sericite partings. Foliation 46.4m 47.8m 53.4m Variable foliation due to faulting. 46.6 - 46.7m minor bx. 46.8 - 47.3m strained + bx. 48.2 - 48.4= «flt gou/bx» 49.0 - 51.4= «flt zone» Sheared, friable, sil seds gouge + bx.	 62 56 70	Patchy, banded sil'n. Grey ser'n. White qtz carb veins increase in section 52.2 - 54.2m 10-15% of volume. Veins patchy and folded.	Overall 3-4% pyrite with trace Sp as blebs associated with qtz-carb. 48.4 - 49.0m mottled grey and white qtz-carb flooded seds. 2%Sp1%Tt.	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30512	37.40	38.40	1.00	0.08	0.03	0.01	141.6	0.10						2.91			
BCD30513	38.40	38.90	0.50	0.01	0.09	0.03	5.1	0.05									
BCD30514	38.90	39.50	0.60	0.01	0.21	0.02	2.7	0.03									
BCD30515	39.50	40.30	0.80	0.98	5.48	2.78	73.4	1.33						2.77			
BCD30516	40.30	41.30	1.00	0.02	0.04	0.05	13.7	0.29									
BCD30517	41.30	42.20	0.90	0.30	3.10	1.18	366.4	1.09						2.91			
BCD30518	42.20	43.20	1.00	0.05	0.05	0.07	52.8	0.32									
BCD30519	43.20	43.60	0.40	0.02	0.04	0.03	23.4	0.31									
BCD30520	43.60	45.10	1.50	0.10	0.50	0.07	49.2	0.54									
BCD30521	45.10	45.40	0.30	0.04	0.03	0.03	32.6	0.46									
BCD30522	45.40	46.60	1.20	0.18	0.46	0.15	66.6	0.68									
BCD30523	46.60	48.10	1.50	0.06	0.22	0.16	59.6	0.33									
BCD30524	48.10	48.40	0.30	0.78	1.83	0.32	683.0	1.51						2.58			
BCD30525	48.40	49.00	0.60	0.78	2.03	0.67	805.0	2.04						2.91			
BCD30526	49.00	50.00	1.00	0.23	2.28	1.28	226.4	1.00						2.72			
BCD30527	50.00	51.40	1.40	0.02	0.24	0.30	24.9	0.41									
BCD30528	51.40	52.90	1.50	0.04	0.35	0.14	44.6	0.44									
BCD30529	52.90	54.20	1.30	0.05	0.20	0.10	43.6	0.25									

MINNOVA INC.

HOLE NUMBER: U1330-69 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6	PLOTTING COORDS GRID: FIELD	ALTERNATE COORDS GRID:			COLLAR DIP: -81° 0' 0"
PROJECT NUMBER: SAM	NORTH: 633.71N	NORTH: 0+ 0			LENGTH OF THE HOLE: 61.00m
CLAIM NUMBER:	EAST: 9600.10W	EAST: 0+ 0			START DEPTH: 0.00m
LOCATION: DRIFT	ELEV: 1335.55	ELEV: 0.00			FINAL DEPTH: 61.00m
	COLLAR GRID AZIMUTH: 360° 0' 0"	COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"			
DATE STARTED: March 5, 1991	COLLAR SURVEY: YES	PULSE EM SURVEY: NO			CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: March 5, 1991	MULTISHOT SURVEY: YES	PLUGGED: YES			CASING: PULLED
DATE LOGGED: March 11, 1991	RQD LOG: NO	HOLE SIZE: BTW			CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-81° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-81° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-81° 0'	ACID	OK		-	-	-	-	-	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 16.40	«DOL MAFICS»	Pale to dark green chloritic tuffs sericitized dolomitized and invaded by qtz carb veins. Veins occur parallel to and cross-cut foliation. Foliation: 2.8m 10.0m Minor blocky sections due to fractures.	55 62	Local pervasive qtz carb flooding. Greenish yellow ser'n. Moderate ferro-dol. Intense dol at contact with lapilli.	1% pyrite. Occasional traces of base metal sulphides.	
16.40 TO 29.00	«MFLT/ALT MAFICS»	Yellow sericitized lapilli in a chloritic dolomitic matrix. Alteration masks lapilli texture in some sections. Foliation 16.7m 24.0m 28.4m Faults: 22.6 - 22.8m flt bx 23.1 - 23.2m flt bx.	55 76 58	Intense ferro-dol. Greenish yellow ser'n. 24.2 - 25.8m, greenish yellow sericite, wisps patches, foliation in a dolomitic, silicified matrix. Minor fuchsite.	1-3% pyrite. Trace base metals associated with qtz carb veins within mafics.	
29.00 TO 42.70	«ALT MAF»	Intensely altered mafics. Interval mainly pale greenish grey dolomitized mafic. No original textures visible. Foliation: 36.5m 40.4m Faults: ⎧38.0 - 38.4⎫ «flt gou/bx» 31.2 - 31.6m compact bx. ⎧39.4 - 39.6⎫ «flt bx» 40.5 - 40.8m shear, parallel to foliation. ⎧41.6 - 42.4⎫ «flt zone» blocks and friable gouge + bx. Minor fault at lower contact.	62 62 35	Intense ferro-dol. 4-5% grey white qtz carb veining and flooding. 29.0 - 29.4m qtz-carb filling fault zone. Local greenish-yellow-grey sericite and turquoise fuchsite.	1-3% pyrite, locally 7% over 5-10cm.	
42.70 TO 45.50	«MAF/QTZ SER»	Tectonized grey qtz, pale yellow sericite and minor mafic. Foliation: 43.1 Faults and fractures: 43.3 - 43.6m 5-10mm gouge filled fractures at low angle to c/a. ⎧43.6 - 43.8⎫ «flt bx» 44.7 - 44.9m flt gouge filled fractures.	61 30 20	Intense pale yellow ser'n. Selective, grey-white sil'n. Grey quartz vein/silicified zone marks lower contact with minor fault gouge and alt seds/SMSX	5-7% pyrite as wispy stringers and locally coarse blebs.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
45.50 TO 46.50	«ALT SED/ SMSX»	Dark grey-black, sericitic seds and semi massive base metal sulphides. Sulphides form a relatively homogenous texture of brownish sphalerite blebs in a grey black, galena and silicified sed matrix. 47.8m Minor gouge	 72	Silicified matrix. Possible carbonate?	15 - 20% Sp and Gn Tt?	Interval quite blocky and locally faulted. Appears brittle. Minor fault at lower contact.
46.50 TO 61.00	«MUT/ SIL SEDS»	Grey sericitized seds locally silicified or pyritized. Variations as follows: 46.5 - 48.5m grey pervasively to patchy silicified seds. {48.5 - 48.8} «flt gou» 48.8 - 51.2m, intermittently faulted sone, compact to friable and blocky, pyritic to sericitic and silicified seds. Intense gouge 51.2m 54.2 - 54.6m minor bx + blocky sil seds. 55.7 - 56.3m flt gou + blocks Sil sed foliation 59.8m	 54 74 72 58 60 55	Variable alteration, grey ser'n + pyritization (MUT) to pervasive sil'n.	Blebby Sp, patches of Tt, blebs and minor stringers Cp+Gn. {47.1 - 47.8} «5%Tt3%Sp2%Cp6n» 48.8 - 49.1 pyritic sed. 49.1 - 51.2m 1-2% Sp 52.7 - 55.7m 1-2% Sp+traces of Tt.	46.5 - 47.1m - 1-2% Sp+Tt 47.8 - 48.5m 5% Sp6nCp
	E.O.H.					

				ASSAYS							GEOCHEMICAL						
Sample	From (m)	To (m)	Length (m)	CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30530	35.10	36.10	1.00	0.01	0.02	0.01	0.50	0.03									
BCD30531	44.50	45.50	1.00	0.01	0.02	0.01	0.90	0.03									
BCD30532	45.50	46.50	1.00	1.41	11.32	8.77	481.0	1.01						3.18			
BCD30533	46.50	47.10	0.60	1.23	5.32	3.12	605.0	1.01						2.80			
BCD30534	47.10	47.80	0.70	4.48	8.13	3.29	2511.0	4.96						2.75			
BCD30535	47.80	48.50	0.70	0.32	5.08	2.68	133.2	0.29						2.67			
BCD30536	48.50	48.80	0.30	0.05	0.24	0.31	18.7	0.27									
BCD30537	48.80	49.80	1.00	0.35	3.32	2.09	81.2	0.46									
BCD30538	49.80	51.20	1.40	0.25	5.75	3.73	241.7	0.55						2.89			
BCD30539	51.20	52.70	1.50	0.25	1.56	1.09	150.6	0.59						2.82			
BCD30540	52.70	54.20	1.50	0.18	1.72	1.48	210.3	0.78						2.67			
BCD30541	54.20	55.70	1.50	0.05	0.42	0.29	56.8	1.35						2.75			
BCD30542	55.70	57.20	1.50	0.01	0.01	0.03	5.9	0.45									

MINNOVA INC.

HOLE NUMBER: U1330-70 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6 — PLOTTING COORDS GRID: FIELD — ALTERNATE COORDS GRID: — COLLAR DIP: -89° 0' 0"
PROJECT NUMBER: SAM — NORTH: — NORTH: 0+ 0 — LENGTH OF THE HOLE: 64.00m
CLAIM NUMBER: — EAST: — EAST: 0+ 0 — START DEPTH: 0.00m
LOCATION: DRIFT — ELEV: — ELEV: 0.00 — FINAL DEPTH: 64.00m

COLLAR GRID AZIMUTH: 360° 0' 0" — COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: March 6, 1991 — COLLAR SURVEY: YES — PULSE EM SURVEY: NO — CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: March 6, 1991 — MULTISHOT SURVEY: YES — PLUGGED: YES — CASING:
DATE LOGGED: March 12, 1991 — RQD LOG: NO — HOLE SIZE: BTW — CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-89° 0'	ACID		OK	-	-	-	-	-	
30.50	-	-89° 0'	ACID		OK	-	-	-	-	-	
69.00	-	-89° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 / TO / 0.60	«CSG»					Rock Mechanic notations from Piteau Logging.
0.60 / TO / 17.90	«MT» MAFIC TUFF	Colour - pale to dark green Grain size - aphanitic Well banded and mottled with qtz & qtz-carb veinlets (veinlets parallel - subparallel to X-cutting foliation) Foliation: @ 2m 5m 7.5m 9.0m 16m 2.2 - 2.6 «flt gouge»	49 59 60 53 68	Mod dol. chlorite and yellow sert.	1-3% v. fine diss'd py.	R2
17.90 / TO / 22.80	«MFLT» MAFIC LAPILLI TUFF	Colour - pale green Grain size - aphantiic Yellow sericitized alt lapilli, partially ghosted, in a chloritic dolomitic matrix. 20.3 - 20.5 v. minor shear and compact gouge & bx. Foliation: 21m	55	Lapilli weakly ghosted. Sil'd, mod strong ferro-dol. Mod - strong sil'd, increased qtz veining Weakly tectonics.	1-3% v. fine diss'd py	R2-R3
22.80 / TO / 28.10	«MT» MAFIC TUFF	Colour - pale to dark green Grain size - aphanitic Well banded and mottled with qtz & qtz carb veinlets, parallel, subparallel and X-cutting foliation. Foliation: 24 27	64 62	Mod dol, chlorite and yellow sert. Tr. fuchsite.	1-3% v. fine diss'd py.	R2
28.10 / TO / 32.90	«MFLT/ALT MAFICS»	Colour - pale green Grain size - aphanitic Yellow sericitized lapilli in a chloritic dolomitic matrix. Foliation @ 28.5m	66	Strong ferro-dol partially masking (ghosting) lapilli in sections. Dol increasing down interval)	1-3% v. fine diss'd py.	R2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
32.90 TO 45.50	«ALT MAF»	Colour - pale to dark green Grain size - aphanitic				
		Dolomitic, strongly alt, mafics. Sections ghosted lapilli, very faint. Most of interval intensely alt and no original textures visible.		Strong ferro-dol and sil'd greyish white qtz carb veining and pervasive flooding	1-3% v. fine diss'd py pyrite increase downhole	R2-R3
		34.7 - 35.8 well healed and sil'd dol bx. Foliation: 36.5m	65	36.6 - 38.1 strong yellow sert and boudin qtz veining.	36.6 - 38.1 3-5% py as blebs.	
		╪38.0 - 38.4╪ «flt zne» gouge breccia (R1) Foliation: 41m	65	38.1 - 42.5 chlorite stronger than yellow sert.		
		42.5m	46			
		44	49			
				42.5 - 45.5 Yellow sert increasing towards E.O.I. and weak to mod. tectonics affecting chloritic, yellow sert and pyritic veinlets. Qtz & qtz carb veining/ flooding increases to E.O.I.	42.5 - 45.5 - 3-5% py as veinlets.	
		Contact Foliation 45.5m	38	fuchsite. Contact @ 45.5 gradational to a very pyritic, qtz carb veined weak ferro-dol sil'd sed (MUT)		
45.50 TO 50.40	«SMSX/ALT SEDS»	Colour - grey to greyish black Grain size - fine to v. fine				
		Sil'd, well laminated in sections, qtz and carb veined and flooded. Semi massive base metal sulphides. Later stage qtz carb veining approx. 3 cm wide with "text book brown Sph, Cpy, Py and Gn. (Matrix has v. fine to aphanitic greyish brown sph, 45.8 - 46.6m)		Sil'd qtz & carb matrix.	╪45.8 - 48.2╪ «1%Cp2%Gn7%Sp1%Tt» and 10-15% Py.	R2
		Sph laminations 46.5 Foliation 49m	56 64			
		48.2 - 50.2 sil'd mut ╪49.4 - 51.0╪ «Flt Zne» gouge R@) intervals. (contact flted).			48.2 - 50.2 Tr.Cp&Gn,2-3%Sp Tr.1% tet. ╪50.2 - 50.4╪ «35-40%Py»	
50.40 TO 64.00	«SIL'D SED MUT»	Colour - grey Grain size - aphanitic				
		Sil'd seds locally strong silicification and local flting. 51.5 - 51.6 gouge (R@)		Grey sert & local pervasive sil'n	1-3% Sp as blebs throughout 3% Py diss'd and as blebs.	R1-R2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		51.8 - 51.9 flted (R1)		51.0 - 53.0 intense qtz & carb	51.0 - 53.0 - 1-3%Tt&1-2%Cp&Sp&Gn,	
		52.2 - 52.8 flted and fractured sub-parallel to		veining.	2-3% Py with qtz veins.	
		core axis.				
		⌈51.5 - 52.8⌉ «flt zne»			53 - 55.0 - Tr 1%Tet & 1-3% B.Metals	
		Foliation 54m	46			
		56.7 - 57.1 Mod strong shearing				
		57.8 - 58.1 minor shearing				
		58.5 - 58.7 flt zne with gouge				
		59.3 - 59.5 flt zne with gouge & bx				
		60.1 - 60.7 flt zne with gouge & bx				
		61.1 - 61.4 flt zne with gouge & bx				
		61.7 - E.O.H. Minor shearing throughout				
		63m	50			
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30484	44.50	45.50	1.00	0.02	0.01	0.01	1.1	0.03									
BCD30485	45.50	45.80	0.30	0.08	0.19	0.07	14.9	0.26									
BCD30486	45.80	46.60	0.80	2.72	9.30	6.72	1114.	2.12						3.86			
BCD30487	46.60	48.20	1.60	1.02	0.99	0.41	629.0	1.79						3.26			
BCD30488	48.20	49.40	1.20	0.91	3.58	1.88	727.0	1.41						3.08			
BCD30489	49.40	50.20	0.80	0.83	6.28	1.89	406.0	0.72						2.85			
BCD30490	50.20	50.40	0.20	0.08	1.03	0.74	57.4	0.98									
BCD30491	50.40	51.00	0.60	0.02	0.09	0.10	12.2	0.32									
BCD30492	51.00	53.00	2.00	0.53	2.12	1.47	308.4	0.63						2.59			
BCD30493	53.00	55.00	2.00	0.51	1.32	0.73	360.4	0.69						2.58			
BCD30494	55.00	56.70	1.70	0.45	0.73	0.26	48.6	1.24						2.56			
BCD30495	56.70	58.20	1.50	0.07	0.03	0.07	9.4	0.29									

MINNOVA INC.

HOLE NUMBER: U1330-71 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -81° 0' 0"
LENGTH OF THE HOLE: 61.00m
START DEPTH: 0.00m
FINAL DEPTH: 61.00m

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

DATE STARTED: March 6, 1991
DATE COMPLETED: March 7, 1991
DATE LOGGED: March 12, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-81° 0'	ACID	OK	
30.50	-	-81° 0'	ACID	OK	
61.00	-	-84° 0'	ACID	OK	

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

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic notations from Piteau Logging.
0.60 TO 16.50	«MT» MAFIC TUFF	Colour - Pale to dark green Grain size - aphanitic Banded and very mottled with qtz and qtz carb veins. (veins generally parallel and sub parallel foliation with occ X-cutting) Foliation @ 3m 9m 10m	 66 68 65	Mod. dol oblorito and lesser yollow sert alt on joints. sil'd.	1-2% diss'd fine py.	R2
16.50 TO 20.00	«MFLT»	Colour - pale green Grain size - aphanitic Yellow sericitic lapilli in a dol matrix. Foliation: 19m	 72	Yellow sericitic lapilli Dol. Sil'd. noteable absence of qtz/carb veinlets Prominent in MT)	1-2% diss'd fine py.	R2
20.00 TO 46.30	«ALT MAF»	Colour - pale to dark green Grain size - aphanitic Intensely alt mafics. Generally no original textures visible except 25.0 - 27.0 questionable ghosted lapilli with well healed brecciated flts. 23.6 - 23.8 v. broken,rubble,minor gouge 25.0 - 25.1 minor gouge 26.2 - 26.3 minor flt zne. Foliation: 32 28.3 - 28.6 minor flt zne 29.0 - 29.2 minor flt zne 33.2 - 33.3 rubble - gouge zne 36.6 - 36.8 Rubble - minor flt zne. 38m Contact flted and gouge (R0) [46.2 - 46.5] «flt gouge»	 56 66 54	Sil'd and intense dolo. Greyish white qtz & qtz/carb veining and pervasive flooding. Tr. fuchsite throughout 30.5 E.O)I. increase in qtz. & qtz carb veining and flooding. (25 - 30%)	3-5% diss'd fine py. increases down hole. Occ. tr. base metals within qtz veins	R2-R3
46.30 TO 52.70	«SMSX/ALT SEDS&FLTS»	Colour - grey Grain size - v. fine to aphanitic Sil'd & well laminated in intervals, qtz & qts carb veined and flooded. Semi massive sulfides to pyritic Mut. Mod to intense flting throughout interval.		Grey sert and locally moderate dol'n and sil'n.	@46.5 - Hematite? (red intermediate?	R1

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Faults as follows:			tetrahedrite/tenantite?)	
		47.0 - 47.2 minor flts (R1)			@ 46.7m Dendritic pyrolusite.	
		47.2 - 47.7 flt gouge (R0)				
		47.7 - 48.8 Flt (gouge & bx) Zne (R0)				
		49.1 - 49.6 mod shearing				
		49.6 - 50.8 mod flting				
		50.8 - 52.2 flt gouge				
		╡47.0 - 52.2╞ «flt zne»			46/3 - 46/8 2%Cp,6m7%Sp2-3%Tt	
				48.3 - 49.6 sil'd seds.	47.7 - 48.5 1-2%Cp6n3%Sp1-2%Tt	
				pervasive sil'n.	Int. flting.	
					49.6 - 50.8 2%Cp2%6n5%Sp3%Tt	
					Intense Flting.	
					52.0 - 52.2 2%Cp2-3%6n5%Sp	
		Foliation @ 52.6	45		3%Tt in flt gouge	
				52.2 - 52.7 Mut 10% py		
52.70 TO 61.00	«SILD SED/ MUT»	Colour - grey				
		Grain size - aphanitic				
		Mod sil'n and pyritization with greyish white qtz & qtz carb veining.		Silver grey sericite sil'n	1-2% Sph diss'd and as blebs with qtz veins	R1-R2
		Veining decreasing downhole.			5-7% py diss'd and in veinlets	
		Flting intervals throughout			tr gn & cp with qtz veining	
		Foliation @ 57m	54			
		59m	52			
		Flting intervals as follows:				
		╡53.7 - 56.1╞ «flt zne»				
		53.7 - 54.2 flt zne with gouge				
		54.4 - 55.6 flt zne with gouge				
		56.8 - 56.1 flt zne with gouge				
		Minor shearing to E.O.H.				
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30496	43.80	44.20	0.40	0.05	1.42	0.09	7.3	0.16									
BCD30497	44.20	46.30	2.10	0.06	0.01	0.01	2.0	0.03									
BCD30498	46.30	46.80	0.50	4.38	0.50	0.07	3299	4.62						3.28			
BCD30499	46.80	47.20	0.40	0.06	0.01	0.07	44.8	0.09									
BCD30500	47.20	47.70	0.50	0.09	0.02	0.08	80.5	0.19									
BCD30551	47.70	48.50	0.80	2.11	6.68	3.52	1925	3.28						2.77			
BCD30552	48.50	49.60	1.10	0.02	0.72	0.25	21.8	0.13									
BCD30553	49.60	50.80	1.20	0.75	9.98	7.62	572.0	1.15						3.07			
BCD30554	50.80	52.00	1.20	0.41	3.94	2.57	324.8	0.65						2.80			
BCD30555	52.00	52.20	0.20	0.63	15.30	12.40	589.0	1.54						3.44			
BCD30556	52.20	52.70	0.50	0.14	0.49	0.19	59.8	0.41									
BCD30557	52.70	54.70	2.00	0.26	0.08	0.09	79.7	0.38									
BCD30558	54.70	55.40	0.70	0.93	1.38	0.83	735.0	1.74						2.70			
BCD30559	55.40	56.90	1.50	0.02	0.03	0.07	17.5	0.19									

MINNOVA INC.

HOLE NUMBER: U1330-72 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -73° 0' 0"
LENGTH OF THE HOLE: 61.00m
START DEPTH: 0.00m
FINAL DEPTH: 61.00m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: March 7, 1991
DATE COMPLETED: March 7, 1991
DATE LOGGED: March 12, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-73° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-73° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-73° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic notations from Piteau logging
0.60 TO 16.30	«MT» MAFIC TUFF	Colour pale to dark green Grain size - aphanitic Mod to poorly laminated and well mottled with qtz and qtz carb veining (veining decreases down hole Foliation @ 5m 10m	 82 72	 Mod dol'n and sil'n chlorite and yellow sert alt on jts.	 1-2% v. fine diss'd py	 R2
16.30 TO 25.00	«MFLT»	Colour - pale green Grain size - aphanitic Yellow sericitic alt lapilli in a Dol Matrix Foliation: 17m 21m	 63 66	 Yellow sert lapilli Dol'n sil'n	 1-2% v. fine diss'd py	 R2
25.00 TO 43.00	«ALT MAF»	Colour - Pale to dark green Grain size - aphanitic Intensely alt mafics. Original textures not distinguishable However, occ ghosted & questionable lapilli to approx 30 m. Foliation: 32m 36 42	 40 57 51	 Sil'n and intense dolomitization Greyish white qtz & qtz-carb veining and flooding, alt increases down hole. Tr. fuchsite	 3-5% fine diss'd py	 R2-R3
43.00 TO 51.90	«QV/ALT SEDS»	Colour - greyish white Grain size - v. fine Mottled dolomitic, qtz & qtz carb veined interval with occ sericitic mafic? remnant and well banded SMSX in flt zones. SMSX foliation @ 43.4 T.O.I. mod to intense flting: 43.1 - 43.4 mod flting and gouge 43.8 - 44.5 gouge (R0)	 50 62	 Weakly dolomitic, mod sil'd. Prominently silver grey sert with occ yellow sert in some joints.	 43.1 - 43.8 - 1-2% Cp2%Gn5%Sp3%Tt 43.8 - 44.5 - Flt gouge & Bx	 R2-R3

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		44.5 - 45.2 flt gouge (R0)			4 pieces of SMSX within gouge	
		ǂ43.1 - 45.2ǂ «flt zne»			1%Cp&6n3%Sp1-2%Tt	
					45.2 - 49.8 1%Cp3%6n3%Sp2-3%Tt	
					49.8 - 51.9 2-4%Base Mtls 2-3%Tt	
					QV in sert inclusions.	
51.90 TO 61.00	«SIL SED/ MUT & FLTS»	Colour - grey				
		Grain size - v. fine to aphanitic				
		Mod sil'n and pyritization with greyish		Silver grey sert		
		white qtz & qtz carb veining		Sil'n increases downhole		
		Foliation: 52m	62			
		58m	62			
		ǂ52.2 - 56.0ǂ «minor flt zne»			5-7% py diss'd throughout	R1-R2
		52.2 - 52.9m - minor flts & shears (R1)			1-3% blebby sp with tr 1%6n&cpy&Tt	
		53.1 - 53.2 gouge (R0)			within qtz veining	
		53.35 - 53.5 Minor flts & shears (R1)				
		53.8 - 54.8 flt zne gouge & Bx (R0)				
		54.9 - 55.1 - flt zne (R1)				
		55.5 - 56.0 flt zne in gouge (R0)				
		56.0 - 61.0 mod sil'n and partially healed		56.0 - E.O.H. mod sil'n.		
		flt. znes. (flt znes 10-15cm wide every				
		20 - 50cm				
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30560	41.50	43.00	1.50	0.01	0.01	0.01	2.0	0.14									
BCD30561	43.00	43.10	0.10	0.01	0.01	0.02	3.2	0.34									
BCD30562	43.10	43.80	0.70	3.87	5.22	2.93	4121	5.99						2.96			
BCD30563	43.80	44.50	0.70	2.26	0.59	0.27	897.0	2.13						2.62			
BCD30564	44.50	45.20	0.70	4.92	1.55	0.39	5256	9.38						2.66			
BCD30565	45.20	46.70	1.50	1.13	1.10	0.62	1295	2.62						2.71			
BCD30566	46.70	48.20	1.50	0.19	0.06	0.08	168.5	0.29						2.93			
BCD30567	48.20	49.80	1.60	2.73	2.15	0.29	2853	4.01						2.76			
BCD30568	49.80	50.30	0.50	0.04	0.02	0.02	43.6	0.14									
BCD30569	50.30	51.90	1.60	0.09	0.17	0.07	82.6	0.25									
BCD30570	51.90	52.90	1.00	0.15	0.97	0.87	90.3	0.49									
BCD30571	52.90	54.90	2.00	0.72	3.58	2.58	289.6	0.53						2.94			
BCD30572	54.90	56.90	2.00	0.10	0.02	0.09	16.6	0.21									
BCD30573	56.90	57.90	1.00	0.44	0.11	0.11	142.6	0.29						2.62			
BCD30574	57.90	59.40	1.50	0.11	0.57	0.38	59.7	0.32									
BCD30575	59.40	61.00	1.60	0.22	0.62	0.47	155.8	0.64						2.71			

MINNOVA INC.

HOLE NUMBER: U1330-73 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -82° 0' 0"
LENGTH OF THE HOLE: 62.20m
START DEPTH: 0.00m
FINAL DEPTH: 62.20m

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

DATE STARTED: March 7, 1991
DATE COMPLETED: March 8, 1991
DATE LOGGED: March 13, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-82° 0'	ACID		OK	-	-	-	-	-	
30.50	-	-83° 0'	ACID		OK	-	-	-	-	-	
61.00	-	-82° 0'	ACID		OK	-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CS6»					Rock Mechanic notations from Piteau Logging
0.60 TO 17.00	«MT» MAFIC TUFF	Colour - pale to dark green Grain size - aphanitic Moderately banded and well mottled with qtz and qtz carb veinlets. 27.7 - 3.0 flt zne 16.3 - 6.5 (gouge) 6.5 - 6.13 healed Bx. Foliation @ 5m 9m 15m	 64 62 65	 Mod dol'n and sil'n Both increase down hole	 1-2% diss'd py - v. fine	 R2
17.00 TO 27.60	«MFLT & ALT MAF»	Colour - pale green Grain size - aphanitic Yellow sericitic alt lapilli in a dolomitic matrix. Intervals moderate to intense alt of dol'n and sil'n where original textures are over printed. 25.9 - 26.0 minor flting 26.8 - 27.0 minor flt zne Foliation: 20m	 72	 Sil'n and mod dol'n. Occ greyish white qtz & qtz/carb veining local flooding. Tr. fuchsite near E.O.I.	 1-2% diss'd py v. fine	 R2-R3
27.60 TO 30.20	«ALT MAF/ SERT» ALTERED MAFICS & SERICITIZED MAFICS	Colour - pale green Grain size - aphanitic Pervasive yellow sericitic alt mafics. Original textures alt. Weak to mod. tectonics and minor shearing throughout. Foliation: 30m 28.8 - 28.9 shear zne 30.1 - 30.3 shearing zne Bottom contact	 62	 Intense yellow sert and dolomitization tr. fuchsite	 3-5% diss'd py.	 R1-R2
30.20 TO 39.00	«ALT MAF»	Colour - greyish white Grain size - fine to v. fine Intense dolomitization and sil'n 1-2cm veinlets of py. Qtz & qtz carb veining parallel and X-cutting & pervasive flooding.	 	 Dol'n & sil'n Greenish grey sert on joints & fuchsite throughout	 3-5% py diss'd & 5-7% py in veinlets	 R2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		No original textures visible				
		Mod-weak tectonics				
		31.3 - 31.9 py veining & fol'n	20			
		Foliation @ 34m	48			
		╫35.7 - 35.9╫ minor«flt»zne				
		37.3 - 37.4 minor flt zne				
		37.5 - 37.8 two micro folds 38m	60			
		hinge zones				
39.00 TO 41.20	«ALT MAF ALT ARG»	Colour - greyish green Grain size - fine to v. fine				
		Intense dolo (decreasing down interval) Well banded, with mod tectonics. Less qtz & qtz carb veining than preceding interval. 39.9 - 40.0 minor flt zne.		Dol'n & sil'n Greyish sert on joints & increased fuchsite (compared to last interval). Fuchsite stops abruptly @ 41.2m	3% py diss'd & 3-5% py in veinlets	R2-R3
		Foliation: 40m	70			
41.20 TO 44.40	«ALT ARG/ SEDS»	Colour - Greyish white Grain size - fine to v. fine				
		Intense sil'n & mod dolomitization Mod - strong tectonics. Competent interval 8" ave core lengths numerous hinge zone of folded qtz-carb veins		Silver grey sert Dol'n & Sil'n 43.5 - E.O.I. Graphitic alt with silver grey sert on joints & fractures.	3-5% diss'd py. 7% py in veinlets.	R3
		Foliation: 44m	85			
		╫43.2 - 43.5╫ «Flt» gouge & bx 43.5 - 44.4 minor shearing				
		Foliation @ 41.2m	81			
		44.0m	75			
44.40 TO 52.70	«SIL SEDS FLTS&SMSX»	Colour - grey Grain size - v. fine to aphanitic				
		Sil'd sediments (mut). Flts with gouge and breccia and semi massive sulfides. Most sulfide intersections are well banded and v. pyritic (10-15%) with varying base metals & Tet. Mod to intense gouge zones are 20-40cm thick throughout interval - approx. 1 per metre. Flt intervals with gouge (R0) as follows: 44.9 - 45.1) 45.2 - 45.9)		Silver grey sert Weak - mod sil'n, which increases, overall, down the hole Mod Dol T.O.I. to 45.5m	10.15% py throughout 44.4 - 47.3 1%Cp&Gn2-3%Sp1-2%Tt. 48.5 - 48.8 2%Cp3-4%Gn7-8%Sp3%Tt	R1-R2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		46.2 - 47.0)			SmSX to MSX in flt zne.	
		47.15 - 47.3)			╟44.4 - 52.7╢ «1%Cp2%Gn4%Sp2%Tt»	
		48.5 - 48.9) Gouge (R0)				
		49.15 - 49.2)				
		49.6 - 49.7)				
		49.8 - 49.9)				
		50.1 - 50.2)				
		50.3 - 50.65)				
		50.8 - 50.9)				
		51.0 - 51.3)				
		51.8 - 51.85)				
		51.95 - 52.0)				
		52.2 - 52.55)				
52.70 TO 62.20	«SIL SEDS MUT»	Colour - grey Grain size - v. fine to aphanitic				
		Moderate sil'n & Pyritization with greyish white qtz & qtz carb veining Flting & Minor shearing throughout Foliation: 54m 57m	50 55	Silver grey sericite sil'n increases down hole	5-7% py v. fine & diss'd Approx 2% py as veining (veins approx 5cm thick 15-20% py)	R1-R2
		52/7 - 53.15 flt zne 53.3 - 53.6 shear zne 55.3 - 55.5 shear zne				
		56.3 - 56.5 flt zne			╟55.8 - 56.2╢ «SMSX» 1-1.5%Cp2-3%Gn2-3%Sp3-4%Tt	
		57.45 - 57.9 flt gouge & bx 58.8 - 59.0 flt zne 59.1 - 59.25 shear zne 59.5 - 60.6 shear zne - minor gouge 61.2 - 61.8 shear zne			57.2 - 57.3 SMSX-MSX in flt gouge 1%Cp2-3%Gn7-19%Sp1-2%Tt	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30576	38.00	39.00	1.00	0.01	0.01	0.01	5.6	0.11									
BCD30577	39.00	41.20	2.20	0.01	0.01	0.01	1.3	0.07									
BCD30578	41.20	42.90	1.70	0.01	0.09	0.17	6.9	0.17									
BCD30579	42.90	44.40	1.50	0.03	0.03	0.01	7.1	0.10									
BCD30580	44.40	44.90	0.50	1.38	0.49	0.22	1378	2.18						2.86			
BCD30581	45.90	47.30	1.40	1.10	8.38	4.45	1018	2.00						3.06			
BCD30582	47.30	48.50	1.20	0.97	14.30	7.28	911	1.58						3.14			
BCD30583	48.50	48.80	0.30	2.84	9.87	3.36	2899	6.31						2.95			
BCD30584	48.80	50.30	1.50	0.62	0.27	0.06	562	1.35						2.67			
BCD30585	50.30	52.00	1.70	2.05	0.33	0.05	2120	3.41						2.69			
BCD30586	52.00	52.20	0.20	3.46	0.22	0.02	1390	3.24						2.76			
BCD30587	52.20	52.70	0.50	0.77	0.10	0.02	600.0	1.36						2.73			
BCD30588	52.70	53.10	0.40	0.40	1.53	0.04	246.3	0.57						2.62			
BCD30589	53.10	54.60	1.50	0.57	1.23	0.31	387.2	0.92						2.82			
BCD30590	54.60	55.10	0.50	0.75	0.46	0.22	79.9	0.40									
BCD30591	55.10	55.80	0.70	0.54	1.47	0.23	386.8	1.02						2.77			
BCD30592	55.80	56.20	0.40	1.23	13.50	7.35	909.0	2.23						3.23			
BCD30593	56.20	57.20	1.00	0.38	1.29	0.57	175.4	0.53						2.97			
BCD30594	57.20	57.30	0.10	0.83	10.70	0.32	534.0	0.78						2.75			
BCD30595	57.30	57.90	0.60	0.68	1.66	0.49	166.4	0.71						2.67			
BCD30596	57.90	58.80	0.90	0.08	0.18	0.15	45.2	0.51									
BCD30597	58.80	59.00	0.20	0.51	1.03	0.42	257.4	1.03						2.82			
BCD30598	59.00	59.90	0.90	0.58	0.92	0.57	301.2	0.93						2.59			
BCD30599	59.90	61.00	1.10	0.13	0.74	0.22	94.6	0.58									

MINNOVA INC.

HOLE NUMBER: U1330-74 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -75° 0' 0"
LENGTH OF THE HOLE: 65.50m
START DEPTH: 0.00m
FINAL DEPTH: 65.50m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: March 8, 1991
DATE COMPLETED: March 8, 1991
DATE LOGGED: March 17, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-75° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-75° 0'	ACID	OK		-	-	-	-	-	
65.50	-	-75° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CS6»					
0.60 TO 16.60	«DOL MAFICS»	Pale to dark green chloritic tuffs with numerous white qtz-carb veins parallel to foliation. Foliation: 1.6m 7.4m 11.8m 16.5m Minor faults at 9.5m, 10.7m.	 70 60 65 70	Moderate greenish yellow sericite. Moderate ferro-dol. Patchy sil'n.	1% pyrite	White qtz carb vein 5cm width marks lower contact with recognisable lapilli.
16.60 TO 25.30	«MFLT»	Pale yellow sericitized lapilli in a chloritic, dolomitized sericitized matrix. Foliation: 16.8m 22.7m Faults: ┤24.2 - 24.9├ «compact bx» blocky, to locally healed.	 75 63	Intense ferro-dol, Patchy sil'n. Selective ser'n. Alteration intensity increases to lower contact.	1-3% pyrite	Lower contact faulted.
25.30 TO 40.30	«ALT MAFIC»	Intensely altered mafics. No original textures visible. Foliation: 32.5m overall not well developed. Faults: ┤36.7 - 38.1├ «flt zone» mainly blocky sections and compact bx. 38.6 - 38.9m flt/fracture ┤39.2 - 39.7├ «flt bx» Faulted lower contact.	 65 10 15 66	Intense sil'n and dol. Local fuchsite yellow sericite	2-3% pyrite.	Fault at upper contact 25.3 - 25.7m compact gouge.
40.30 TO 43.20	«FLT ZONE»	Fault zone comprising blocks and intermittent gouge. 40.3 - 40.8 mafic gou & bx 40.8 - 41.1 blocky mottled grey-white qv + sed 41.1 - 42.8m blocks of QV/sed + soft gouge. 42.8 - 43.2 grey sericitization alt seds with qtz carb patches/veins	 58	Grey ser'n and greenish talc in gouge and sheared seds. Pervasive sil'n in remnant fault blocks	40.3 - 42.8m 3-5%Py traces of CpTt. ┤42.8 - 43.2├ «2%Sp2%Cp»	 Bands and blebs of Cp,Sp parallel to foliation.
43.20 TO 53.30	«QV/SED»	Grey and white qtz carb veins with grey and yellow (sert) sed inclusions. Local zones show grey-white fine grained mottled texture. (70%qv-carb + sil'n) Seds increase in % from 50.8 to lower contact. Foliation within seds, 45.6m	 62	Pervasive sil'n flooding of seds. Patches and inclusions of yellow and grey sericite. Sericite and talc increase from 51.8 - 53.3.	2-4% pyrite mostly associated with patches of sericitized seds. Trace Tt, no significant concentrations, with exception of bleb at 50.9m. Dark blebby Sp at 52.9	Ideal host rock for disseminated Tt but appears to be v. low grade. Hidden Tt? Core loss 49.7 - 51.8m Mislatch + grinding, 20%.

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30644	40.30	40.80	0.50	0.01	0.02	0.02	8.1	0.16									
BCD30645	40.80	41.10	0.30	0.02	0.04	0.03	20.4	0.21									
BCD30646	41.10	42.20	1.10	0.24	0.05	0.03	265.7	0.45						2.64			
BCD30647	42.20	42.80	0.60	1.32	1.74	0.51	626.0	1.17						2.73			
BCD30648	42.80	43.20	0.40	3.66	9.12	5.72	2782	4.55						3.38			
BCD30649	43.20	44.70	1.50	0.02	0.04	0.06	29.3	0.33									
BCD30650	44.70	45.70	1.00	0.01	0.02	0.02	15.2	0.13									
BCD30651	45.70	46.10	0.40	0.02	0.02	0.04	17.2	0.23									
BCD30652	46.10	47.20	1.10	0.01	0.01	0.01	1.5	0.08									
BCD30653	47.20	48.70	1.50	0.02	0.01	0.01	32.4	0.05									
BCD30654	48.70	49.70	1.00	0.01	0.02	0.02	7.3	0.09									
BCD30655	49.70	50.80	1.10	0.01	0.02	0.02	12.5	0.07									
BCD30656	50.80	51.80	1.00	0.02	0.03	0.03	15.6	0.19									
BCD30657	51.80	52.60	0.80	0.08	0.87	0.45	88.7	0.20									
BCD30658	52.60	53.30	0.70	0.29	2.72	1.14	233.1	0.46						3.11			
BCD30659	53.30	54.80	1.50	0.32	1.84	0.94	223.4	0.57						2.76			
BCD30660	54.80	56.20	1.40	0.11	0.79	0.09	53.5	0.26									
BCD30661	56.20	56.70	0.50	0.23	3.38	1.28	157.0	0.44						2.98			
BCD30662	56.70	58.20	1.50	0.09	0.36	0.16	91.2	0.25									
BCD30663	58.20	59.20	1.00	0.05	0.26	0.07	40.9	0.18									
BCD30664	59.20	59.70	0.50	0.06	2.16	0.81	44.1	0.37									
BCD30665	59.70	60.80	1.10	0.09	0.41	0.18	77.3	0.29									
BCD30666	60.80	61.00	0.20	0.38	0.32	0.21	51.2	0.95									
BCD30667	61.00	61.50	0.50	0.58	0.02	0.08	39.1	0.42									
BCD30668	61.50	61.80	0.30	0.09	0.08	0.10	40.1	0.67									
BCD30669	61.80	62.10	0.30	0.04	0.01	0.08	21.4	0.53									

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		52.0m	60			
		Faults:				
		52.3 - 52.4 sheared seds				
		╢52.6 - 52.8╟ «flt gou & bx»				
		53.1 - 53.3m flt gouge				
53.30 TO 65.50	«SIL SEDS»	Grey sericitic seds with variable intensity of sil'n.		Grey ser'n. Patchy to pervasive sil'n.	4-5% pyrite, locally 10% over 3-5cm, occurring as blebby gands and massive pyrite associated with qtz-carb vein. Trace to locally 1-2% Sp. blebs.	Characterised by patches and veins of white qtz-carb.
		Foliation: 56.7m	66			
		with flt zone 63.8m	45			
			50			
		Faults:				
		53.5 - 53.6m strained + minor bx.				
		54.3 - 54.7m flt gouge + strained seds	67			
		55.1 - 55.3m compact bx				
		60.8 - 61.8m blocks, gouge + bx.				
		╢62.1 - 65.5╟ «compact flt bx»				
		strained, shattered texture with intermittent friable gouge/bx.			Distribution: ╢56.2 - 56.7╟ «3%Py2%Sp» ╢59.2 - 59.7╟ «1%SpTr.Cp3%Py» ╢61.0 - 61.5╟ «40% Py» massive pyrite in qtz-carb vein faulted into blocks and breccia.	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30644	40.30	40.80	0.50	0.01	0.02	0.02	8.1	0.16									
BCD30645	40.80	41.10	0.30	0.02	0.04	0.03	20.4	0.21									
BCD30646	41.10	42.20	1.10	0.24	0.05	0.03	265.7	0.45						2.64			
BCD30647	42.20	42.80	0.60	1.32	1.74	0.51	626.0	1.17						2.73			
BCD30648	42.80	43.20	0.40	3.66	9.12	5.72	2782	4.55						3.38			
BCD30649	43.20	44.70	1.50	0.02	0.04	0.06	29.3	0.33									
BCD30650	44.70	45.70	1.00	0.01	0.02	0.02	15.2	0.13									
BCD30651	45.70	46.10	0.40	0.02	0.02	0.04	17.2	0.23									
BCD30652	46.10	47.20	1.10	0.01	0.01	0.01	1.5	0.08									
BCD30653	47.20	48.70	1.50	0.02	0.01	0.01	32.4	0.05									
BCD30654	48.70	49.70	1.00	0.01	0.02	0.02	7.3	0.09									
BCD30655	49.70	50.80	1.10	0.01	0.02	0.02	12.5	0.07									
BCD30656	50.80	51.80	1.00	0.02	0.03	0.03	15.6	0.19									
BCD30657	51.80	52.60	0.80	0.08	0.87	0.45	88.7	0.20									
BCD30658	52.60	53.30	0.70	0.29	2.72	1.14	233.1	0.46						3.11			
BCD30659	53.30	54.80	1.50	0.32	1.84	0.94	223.4	0.57						2.76			
BCD30660	54.80	56.20	1.40	0.11	0.79	0.09	53.5	0.26									
BCD30661	56.20	56.70	0.50	0.23	3.38	1.28	157.8	0.44						2.98			
BCD30662	56.70	58.20	1.50	0.09	0.36	0.16	91.2	0.25									
BCD30663	58.20	59.20	1.00	0.05	0.26	0.07	48.9	0.18									
BCD30664	59.20	59.70	0.50	0.06	2.16	0.81	44.1	0.37									
BCD30665	59.70	60.80	1.10	0.09	0.41	0.18	77.3	0.29									
BCD30666	60.80	61.00	0.20	0.38	0.32	0.21	51.2	0.95									
BCD30667	61.00	61.50	0.50	0.58	0.02	0.08	39.1	0.42									
BCD30668	61.50	61.80	0.30	0.09	0.08	0.10	40.1	0.67									
BCD30669	61.80	62.10	0.30	0.04	0.01	0.08	21.4	0.53									

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -83° 0' 0"
LENGTH OF THE HOLE: 64.00m
START DEPTH: 0.00m
FINAL DEPTH: 64.00m

COLLAR GRID AZIMUTH: 360° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: March 8, 1991
DATE COMPLETED: March 9, 1991
DATE LOGGED: March 17, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-83° 0'	ACID		OK	-	-	-	-	-	
30.50	-	-84° 0'	ACID		OK	-	-	-	-	-	
61.00	-	-84° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic notations using Piteau's codes.
0.60 TO 19.30	«MT» MAFIC TUFF	Colour - pale to dark green Grain size - aphanitic Banded and mottled with qtz & qtz carb veining. Veining generally parallel to subparallel to foliation. Occ X-cutting foliation and boudinaged. Foliation: 2m 5m 16m 15 - 15.2 Broken core, minor shr. 16.45 - 16.6 Minor flt dip = 25 deg. 18.0 - 18.2 Partially Heal flt zne.	 55 64 65	Mod Ferro-Dol & Sil'n. Chlorite & occ yellow sert on joints.	1-2% diss'd v. fine py.	R2
19.30 TO 26.90	«MFLT» MAFIC LAPILLI TUFF	Colour - pale green Grain size - aphanitic Sericitic alt lapilli in a chloritic dolomitic matrix. Foliation: 23m 21.7 - 21.9 Minor Flting 22.6 - 22.7 Compact gouge 24.3 - 24.5 Flt Zne with Rubble 25.9 - 26.1 Compact Gouge & Flting	 60	Mod yellow sericite on lapilli Mod-weak yellow sert on matrix Pervasive sil'n. Dol'n increases down hole.	1-2% diss'd v. fine py.	R2-R3
26.90 TO 40.40	«ALT MAF»	Colour - pale green-grey Grain size - aphanitic Intensely alt Mafics with no original textures present, alt increases down hole. Qtz & Qtz carb veining and blebs (boudinaged) 27.6 - 27.7 & 27.9 - 28.2 Flt Zones. Foliation @ 30m 36m Basal Contact transitional and gradational with wisps of arg from 39.9 to E.O.I. Contact Dip @ 40.4	 60 55 65	Intense sil'n & dol'n Yellow sericite Occ fuchsite 26.9 - 30.5 yellow sericitic alt pervasive 29.3 - 29.6: intense yellow sert with 5-7% py as blebs greyish white qtz-carb veinlets & boudinage & as blebs greenish mica (fuchsite?)	1-2% py diss'd & approx 2% as blebs within qtz carb veins.	R2-R3

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
40.40 TO 42.50	«SIL ARG»	Colour - black Grain size - v. fine to aphanitic				
		Black graphitic silicified Arg. Qtz & Qtz-carb veining increase down hole to a stockwork-crackle 8x appearance. Basal contact transitional & gradational @ 39.8m Slick and Slides dip = 45 deg. 41.5	60	Pervasive sil'n & graphite & Ferro-Dol	5-7% py as blebs	R3
42.50 TO 48.70	«SIL SILT/ ARG&SMSX»	Colour - black & blackish green Grain size - v. fine to aphanitic				
		Pervasive sil'n & v. well laminated very fine to aphanitic silts Siltites & arg wisps, with qtz veins & rare qtz-carb veinlets. Mod tectonitic & fold hinges with axial planar cleavage: ⟊44.2 - 44.4⟋ «Hinge» with cleavage and planar dip = & 45.0 - 45.15 Tectonic, possible hinge with cleavage dip = Foliation @ 44m @ 46.5m 46.9 Shear dip =	50 75 40 45 40	Pervasive sil'n & tr. dol'n. 46.1 - E.O.I. Mod yellow sericitic alt increases downhole to ⟊46.4 - 46.9⟋ «Sert» & 48.0 - 48.7m 46.9 - 48.0 Dolomitic	3% py as blebs in qtz veining. ⟊46.9 - 48.0⟋ «SMSX» 3% Cp(1%6n3%Sp3%Tt top of interval 1-2cm shear Bottom contact, 47.75 - 47.9 shearing sub-parallel to core axis	R2 R2-R3
48.70 TO 64.00	«SIL SEDS & SMSX&FLTS»	Colour - grey Grain size - aphanitic				
		Grey sericitic silicified sediments with greyish white qtz & qtz carb veining. Occ SMSX & Flts. Foliation: 49m		Silver grey sericite Patchy zones of mod sil'n (sil'n) increase down hole)	5-7% fine & diss'd py throughout	R0-R2
	R0	⟊49.7 - 53.2⟋ «Flt zne» (49.7 - 50.3 flt gouge (50.3 - 51.5 flt bx (51.5 - 52.2 flt gouge (52.4 - 52.9 flt gouge (53.0 - 53.2 flt compact (54.8 - 54.9 flt bx compact (⟊55.3 - 59.3⟋ «flt zne» Foliation @ 60m	55 60	⟊48.7 - 49.7⟋ «SMSX» 2%Cp1-2%6n2-3%Sp3%Tt 50.3 - 51.5 SMSX 15%py3%Cp1%6n1%Sp 1-2%Tt	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		63m	60	60.3 - 60.5 Het frags	62.2 - 62.35 qtz vein	
				63.3 - 63.5 Het frags	(1%Cp3%Gn2%Sp(1%Tt	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30670	45.40	46.90	1.50	0.01	0.01	0.02	1.1	0.03									
BCD30671	46.90	47.10	0.20	2.46	6.34	1.48	2582	4.97						2.92			
BCD30672	47.10	47.70	0.60	2.18	1.96	0.49	569.0	0.99						3.02			
BCD30673	47.70	48.00	0.30	0.38	5.48	0.48	68.9	0.13									
BCD30674	48.00	48.70	0.70	0.07	0.33	0.41	57.8	0.06									
BCD30675	48.70	49.70	1.00	1.74	3.88	4.84	1217	2.77						3.36			
BCD30701	49.70	50.30	0.60	0.15	0.09	0.10	82.3	0.17									
BCD30702	50.30	51.50	1.20	1.30	0.22	0.11	929	1.42						3.34			
BCD30703	51.50	52.20	0.70	0.77	2.12	0.78	135.6	0.64						3.04			
BCD30704	52.20	52.40	0.20	0.82	5.08	1.98	191.2	0.47						3.12			
BCD30705	52.40	53.20	0.80	0.09	1.42	0.79	29.4	0.41									
BCD30706	53.20	55.30	2.10	1.10	1.58	0.91	361.3	0.32						2.67			
BCD30707	55.30	57.80	2.50	0.10	0.26	0.10	28.4	0.23									
BCD30708	57.80	58.80	1.00	0.06	0.17	0.08	14.8	0.34									
BCD30709	58.80	58.90	0.10	1.72	0.03	0.04	74.5	0.73									
BCD30710	58.90	60.90	2.00	0.12	0.36	0.19	35.6	0.25									
BCD30711	60.90	62.20	1.30	0.04	0.04	0.04	21.2	0.07									
BCD30712	62.20	62.35	0.15	0.43	0.87	0.39	115.6	0.22						2.49			

MINNOVA INC.

HOLE NUMBER: U1330-76 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -71° 0' 0"
LENGTH OF THE HOLE: 57.90m
START DEPTH: 0.00m
FINAL DEPTH: 57.90m

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

DATE STARTED: March 9, 1991
DATE COMPLETED: March 9, 1991
DATE LOGGED: March 17, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-71° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-71° 0'	ACID	OK		-	-	-	-	-	
57.90	-	-71° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 17.20	«DOL MAFICS»	Pale to dark green chloritic mafic tuffs invaded by numerous white qtz-carb veins. Foliation: 1.6m 7.6m 16.5m Faults: 11.1 - 11.5 «flt bx + blocks» 12.7 - 12.9 flt bx.	 60 68 71	Moderate ferro-dol Patchy sil'n Weak to moderate greenish yellow ser'n increasing in intensity from 10.2m down hole.	<1% pyrite	Lower contact marked by qtz-dol vein. Contact taken where lapilli tuff visible.
17.20 TO 24.30	«MFLT»	Yellow sericitized lapilli in a chloritic dolomitic, sericitic tuff matrix. Foliation: 18.4 Faults: 19.1 - 19.2m flt bx 19.4 - 19.5m flt bx 20.2 - 21.3 «blocky + bx»	 60	Intense ferro-dol Moderate to selectively intense yellow ser'n. Patchy sil'n.	1% pyrite.	Lower contact at depth where visible lapilli pass into an altered mafic with no remnant textures.
24.30 TO 40.10	«ALT MAFICS»	Pale grey and greyish green intensely altered mafics. Foliation complicated by alteration and faulting 25.4m 33.1m 39.6m Faults: 25.4 - 25.6 flt bx 26.5 - 27.0m blocky broken & bx 27.4 - 29.0 «flt zone» gouge + bx + blocks. Broken dolomite core shows vuggy textures. 30.5 - 30.8m broken core + bx. 33.8 - 34.2 «flt gou+bx» 36.7 - 36.9m flt bx 36.9 - 37.3m blocky + broken core. Shattered cherty sil'n with trace fuchsite.	 66 70 57	Intense ferro-dol, locally forming vein-like zones of grey dolomite. Later stage qtz-carb veins locally cut dolomite to give breccia/stockwork textures. Patchy sil'n, local pale yellow to greenish yellow ser'n. Minor local fuchsite.	4-5% pyrite, locally 5-7% pyrite associated with qtz-carb. 31.0 - 31.8 «7-10% Py» coarse blebs in qtz-carb vein.	Lower contact marked by 10cm pale yellow sericite and qtz.
40.10 TO 50.80	«QV/SED/ FLT ZONE»	Intermittently faulted interval of grey and white qtz-carbonate veins, mottled grey-white qtz-carb flooded seds, miner sert and grey sericitic seds. Details: 40.1 - 40.7m soft gouge + blocks qv-sed 41.4 - 42.2m gou&bx&blocks 43.4 - 44.0m block qtz		Local grey & yellow ser'n. 41.4 - 41.5 sert in gouge.	Variable distribution as follows: 40.7 - 41.4 «(1%Tt1%Py» in qtz-carb + grey sericitized sed. 42.2 - 43.4m qtz-carb flooded sed with single patch of Tt. 1/2T Tt 43.4 - 44.0m Tt	Generally blocky core. Broken core in fractured zones of qtz carb.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		carb + talc in faulted seds				
		44.0 - 45.7m fractured,				
		strained qtz -sed inclusions				
		45.7 - 47.0m competent				
		zone qv+carb & seds.				
		╪47.0 - 47.5╪ «soft gou/bx»				
		47.5 - 49.3m healed qtz/sed				
		breccia with later fault				
		cutting at 15 - 20 deg. to c/a				
		49.3 - 50.8m qtz carb +				
		seds + bx + gouge				Soft gouge at lower contact 50.8m
50.80 TO 57.90	«SIL SEDS»	Grey sericitic		Patchy to pervasive sil'n.	Distribution:	Cherty protolith.
		silicifieds seds.		Grey sericite as partings to	50.8 - 51.2m	In pyritic and dark grey sericitic seds
		Faint white patches/veins of qtz-carb.		silicified seds.	10% Py 4% SpGn(TrTt?)	
		Foliation: 51.2m	65		╪51.2 - 52.2╪	
		53.5m	70		«5%Sp3%Gn2%TtCp	Disseminated medium grain size blebs
		56.4m	60		52.2 - 56.8m trace	of Sp throughout.
		Faults:			to 1/2% Sp blebs in sil seds.	
		51.0 - 51.2m bx + soft gou.				
		53.1m minor bx				
		╪56.9 - 57.9╪				
		«compact flt-bx»				
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30676	31.00	31.80	0.80	0.01	0.01	0.02	0.4	0.31									
BCD30677	39.10	40.10	1.00	0.01	0.01	0.01	0.7	0.15									
BCD30678	40.10	40.70	0.60	1.56	0.93	0.46	1622	2.96						2.81			
BCD30679	40.70	41.40	0.70	0.40	0.10	0.28	317.9	0.66						2.67			
BCD30680	41.40	42.20	0.80	0.04	0.03	0.04	36.7	0.19									
BCD30681	42.20	43.40	1.20	0.14	0.02	0.02	129.3	0.17						2.51			
BCD30682	43.40	44.00	0.60	0.72	0.13	0.02	700.0	0.74						2.60			
BCD30683	44.00	45.70	1.70	0.05	0.01	0.01	45.3	0.13									
BCD30684	45.70	47.00	1.30	0.01	0.01	0.01	6.5	0.09									
BCD30685	47.00	47.50	0.50	0.43	0.09	0.04	201.4	0.41						2.60			
BCD30686	47.50	49.30	1.80	0.07	0.07	0.08	36.8	0.09									
BCD30687	49.30	50.80	1.50	0.17	0.69	0.56	162.4	0.26						2.97			
BCD30688	50.80	51.20	0.40	1.94	7.34	5.02	1970	2.85						3.09			
BCD30689	51.20	52.20	1.00	0.94	9.88	6.62	773.0	1.80						2.94			
BCD30690	52.20	53.70	1.50	0.07	0.91	0.53	48.9	0.29									
BCD30691	53.70	55.20	1.50	0.13	1.03	0.69	90.1	0.26									
BCD30692	55.20	56.80	1.60	0.17	1.32	0.66	106.7	0.35						2.59			

MINNOVA INC.

HOLE NUMBER: U1330-77 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -89° 0' 0"
LENGTH OF THE HOLE: 95.40m
START DEPTH: 0.00m
FINAL DEPTH: 95.40m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: March 9, 1991
DATE COMPLETED: March 28, 1991
DATE LOGGED: April 2, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE: 61.0 - 95.4 EXTENSION TO TEST FOR GOLD ZONE

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-89° 0'	ACID		OK	-	-	-	-	-	
30.50	-	-89° 0'	ACID		OK	-	-	-	-	-	
61.00	-	-89° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 18.30	«DOL MAFICS»	Pale to dark green chloritic tuffs invaded by white qtz-carb veins. Foliation: 1.6m 6.1m 10.7m 15.8m Faults: ╟11.3 - 11.7╢ «flt bx» 17.5 - 18.3m compact to healed bx.	68 61 66 73	Moderate ferro-dol Patchy sil'n Greenish yellow ser'n after chlorite. Sericite alteration increases from 10.7 to E.O.I.	1/2% pyrite.	
18.30 TO 26.40	«MFLT»	Yellow sericitized lapilli in a chloritic dolomitized, sericitized tuff matrix. Foliation: 21.6 Faults: ╟18.7 - 19.2╢ «compact flt bx»	55	Intense ferro-dol Selective pale yellow ser'n Patchy sil'n Alteration increases to lower contact	1/2 - 1% pyrite.	Faulted lower contact.
26.40 TO 42.90	«ALT MAFICS»	Intensely altered mafics. No original textures visible. Pale grey to greenish grey dolomite. Dolomites often with cross-cutting qtz-carb veins. Foliation not well developed overall 33.5m 38.2m 41.3m Faults: ╟26.4 - 27.4╢ «flt zone» 31.4 - 31.5m flt bx 33.0 - 33.3m fractured qv-carb Faulted lower contact	65 75 42	Intense ferro dol. Patchy sil'n. Local cherty sil'n at 32.2 - 32.4m. Local fuchsite, from 37.3 - 37.7m. Interval talc/sericite dominated from 37.7 to 42.9m.	1-3% pyrite Minor base metal Sulphides associated with qtz carb e.g. Gn at 33.0m	Texture appears quite chaotic.
42.90 TO 43.70	«FLT BX»	Qtz sericite fault breccia and gouge. Upper contact	55	Pale yellow ser'n.	3-4% pyrite	Fault at contact of mafic/seds.
43.70 TO 48.20	«QV/SED/ FLT ZONE»	Intermittently faulted blocks of grey and white qtz-carbonate and finely mottled grey-white qtz carb flooded seds. 55% blocks 45% gouge + bx. 44.6m Fault gou + block Lower contact 48.2m	66 50	Patchy to locally pervasive sil'n. Grey ser'n, minor yellow sericite 47.6 to 47.7m.	Trace to 2% Tt as fine disseminations and blebs (2-3mm) occurring in grey-white mottled qtz-carb/seds. Distribution: 44.6 - 45.2m trace Tt, 5%Py ╟45.8 - 46.6m╢ «1/2% Tt» ╟47.5 - 48.2╢ «2%Tt2%Sp»	

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
48.20 TO 54.40	«ALT SEDS FLT ZNE»	Grey sericitized seds faulted to blocks, gouge and breccia. ╟49.1 - 50.2╢ «soft gou/bx» Foliation 50.0m Sheared 51.6m 54.0m	 65 47 57	Grey ser'n. Local patchy sil'n. Sil'n increasing to lower contact.	3-7% fine pyrite. 48.7 - 49.1m 1-2% SpGnCp in sheared block grey seds. 51.2 - 51.7m 1/2% Cp	Overall friable interval.
54.40 TO 71.20	«SIL SEDS»	Grey sericitized seds with irregular shaped silicified bands. Foliation: 55.2m 59.4 61.0 ╟55.9 - 56.4╢ «flt zne» 60.0 - minor gou & bx 60.3 - 60.5 - flt bx Foliation @ 61.5m 63.7m 64.5 71 63.5 - 63.7 - minor flt zne 67.8 - 67.9 - flt zne ╟67.9 - 68.4╢ Bull Qtz Vein with carb. «Qtz carb vein» 68.4 - 69.0 - minor flting	67 55 58 65 62 56 50 	Grey sericite forms partings to silicified bands of seds. Patches and wisps of white qtz-carb	Blebby sp & tt associated with silicified bands occur roughly parallel to foliation. Distribution ╟57.5 - 57.9╢ «1/2% Sp Tt» ╟59.0 - 59.4╢ «1% SpTt» includes 2 x 1cm band Sp+Tt 59.8 - 60.1m trace SpTt single band of blebby sp. 8% py throughout with tr. B. Mtls & occ tet within qtz veinlets. 68.4 - 69.0 - 12% py.	Cherty protolith? Single 1 cm true width band with blebby Sp in matrix of Tt (Gn?) Rock Mechanic notations using Piteau's Codes
71.20 TO 74.50	«PY ARG»	Colour - greyish brown Grain size - fine Very pyritic well laminated tectonitic sediments with Argillite wisps which increase down hole. Upper and lower contacts sheared with shearing throughout interval. ╟71.2 - 71.25╢ «shear» @ contact 71.5 - 71.6 - flt (R0) 72.0 - 72.1 - minor shear 72.3 - 72.4 - flt zne 74.0 - 74.1 - flt gouge 74.1 - 74.45 - v. broken (5 cm ╟74.45 - 74.5╢ «shear» with green talc Fol'n highly variable @71.7m 72m 72.2m	 35 75 34	Weak - patchy sil'n intense pyritization	20% fine py throughout	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		73m	26			
		74m	34			
		Dip @ contact 74.5m	46			
74.50 TO 93.20	«GR ARG & WACKE»	Colour - greyish black Grain size - fine to v. fine				
		Well laminated graphitic argillite with wacke intervals. Tectonitic with occ. qtz carb veins.		Graphite & v. weak sil'n which increases down hole.	1-2% py as blebs & veinlets 82.0 - 82.6 - 5mm - 10mm py veinlets	
		Foliation variable @ 75.6m	40			
		76.1	52			
		76.6	58			
		78.0	68			
		78.9	64			
		78.95 - 79.25 fol'n parallel to core axis 80.5	56			
		82.0	84			
		82.5	60			
		85.5	51			
		90.0	84			
		91.5	43			
		93.0	55			
		╡79.7 - 79.8╞ «flt gouge»		╡82.6 - 86.4╞ silicified wacke «sil wacke» qtzite appearance due to qtz veining below (i.e. alt. halo)		
		85.5 - 85.6 - minor flt		minor dol.		
		╡86.4 - 88.0╞ «qtz carb vein» with tr fuchsite, yellow sericite wisps and mottled very weak dolomitic inclusions.				
				╡88.0 - 89.0╞ yellow sert» alteration of seds with qtz veining and carb inclusions		
		90.8 - 91.0 - shearing with 5 cm qtz carb vein @ base		89.0 - 93.2 - graphitic arg as at T.O.I 91.0 - 91.3 brownish altered bands with black graphitic arg inter bands approx.		
		Bottom contact flted.		20 deg to c.a. offset by fol'n of 43 deg. parallel to bedding above and below interval.		
93.20 TO 95.40	«SERT SEDS»	Yellow sericitic seds with qtz & qtz carb veining. Tectonitic with very minor shearing throughout. 93.2 - 93.3 - shearing 93.3 - 93.45 - flt gouge ╡93.2 - 93.5╞ «flt»		Yellow sericite weak sil'n, which increases down hole to moderate sil'n. 89.45 - 89.6 qtz carb vein	3% py	@ 94.3 - hinge zone - bulls eye

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Foliation @ 94m	42			
		94.7m	46			
		95.3m	62			
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30693	43.20	43.70	0.50	0.06	0.02	0.02	54.8	0.26									
BCD30694	43.70	44.60	0.90	0.02	0.02	0.01	19.9	0.27									
BCD30695	44.60	45.20	0.60	0.01	0.08	0.03	20.1	0.37									
BCD30696	45.20	45.80	0.60	0.02	0.01	0.02	20.5	0.53									
BCD30697	45.80	46.60	0.80	0.42	0.08	0.02	482.6	0.78						3.03			
BCD30698	46.60	47.00	0.40	0.02	0.01	0.01	15.4	0.12									
BCD30699	47.00	47.50	0.50	0.40	0.11	0.13	341.4	0.87						2.41			
BCD30700	47.50	48.20	0.70	1.28	0.39	0.10	1493	2.65						2.93			
BCD30713	48.20	49.10	0.90	1.93	7.38	4.31	1965	4.12						3.49			
BCD30714	49.10	50.20	1.10	1.22	3.47	1.72	1482	2.51						2.48			
BCD30715	50.20	51.20	1.00	0.70	3.33	2.18	509.8	1.31						2.93			
BCD30716	51.20	51.70	0.50	1.03	6.19	4.03	987.2	2.32						2.72			
BCD30717	51.70	53.30	1.60	0.18	0.88	0.63	91.6	0.51									
BCD30718	53.30	54.40	1.10	0.35	0.77	0.37	193.6	0.27						3.05			
BCD30719	54.40	55.00	0.60	0.30	1.18	0.54	62.8	0.28									
BCD30720	55.00	57.50	2.50	0.06	0.09	0.06	23.6	0.15									
BCD30721	57.50	57.90	0.40	1.02	1.89	0.76	430.3	0.44						2.58			
BCD30722	59.00	59.40	0.40	0.99	1.28	0.79	488.1	0.31						2.49			
BCD30723	59.80	60.10	0.30	1.75	2.32	1.38	671.6	0.39						2.72			
BCD30968	67.40	67.90	0.50	0.02	0.04	0.04	9.1	0.26									
BCD30969	67.90	68.40	0.50	0.01	0.02	0.01	2.5	0.06									
BCD30970	68.40	69.00	0.60	0.08	0.16	0.12	31.8	1.01						2.60			
BCD30971	69.00	71.20	2.20	0.01	0.05	0.02	5.9	0.23									
BCD30972	71.20	72.20	1.00	0.01	0.03	0.03	2.6	0.46									
BCD30973	72.20	73.20	1.00	0.01	0.01	0.01	2.8	0.61									
BCD30974	73.20	74.50	1.30	0.01	0.01	0.01	2.7	0.37									
BCD30975	74.50	75.10	0.60	0.01	0.02	0.01	.7	0.03									
BCD30976	75.10	75.60	0.50	0.01	0.03	0.01	.2	0.05									
BCD30977	82.00	82.40	0.40	0.01	0.03	0.01	.4	0.03									
BCD30978	85.60	86.40	0.80	0.01	0.05	0.01	.2	0.03									
BCD30979	86.40	88.00	1.60	0.01	0.03	0.01	.6	0.10									
BCD30980	88.00	89.60	1.60	0.01	0.04	0.01	.4	0.04									

MINNOVA INC.

HOLE NUMBER: U1330-78 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.77N
EAST: 9650.18W
ELEV: 1333.62

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

COLLAR DIP: -81° 0' 0"
LENGTH OF THE HOLE: 57.90m
START DEPTH: 0.00m
FINAL DEPTH: 57.90m

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

DATE STARTED: March 10, 1991
DATE COMPLETED: March 10, 1991
DATE LOGGED: March 19, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
RQD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
30.50	-	-81° 0'	ACID		OK	-	-	-	-	-	
57.90	-	-81° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic Codes using Piteau Notations
0.60 TO 17.10	«MT» MAFIC TUFF	Colour - Pale to dark green Grain size - aphanitic				
		Banded and mottled with qtz & qtz carb veining.		Sil'n chlorite and greenish yellow sert on joints. Mod Dol'n	1-2% v. fine diss'd py.	R2
		Foliation @ 2m	60			
		7m	62			
		⎧10.3 - 15.0⎫ «Flt Zne» ⎩17.0 - 17.1⎭ «flt» contact				
17.10 TO 24.10	«MFLT» MAFIC LAPILLI TUFF	Colour - Pale green Grain size - aphanitic				
		Yellow sericitic alt lapilli in a silicified dolomitic matrix.		Mod - intense dol. Yellow sericitic alt lapilli		R2
		Foliation: 20m	60	Pervasive sil'n.		
		⎧20.4 - 20.7⎫ «flt zne» ⎩23.3 - 23.5 Minor flt zne				
24.10 TO 36.60	«ALT MAFIC»	Colour - greyish green to white Grain size - v. fine to aphanitic				
		Intense alteration. No original textures visible qtz and qtz carb veining parallel and X-cutting fol'n.		Intense sil'n & dol'n. Alt increasing down hole	5-7% py diss'd as blebs	R2-R3
		Foliation @ 27m	55	34.7 - 35.5 Alt gives core a "chert" appearance with fuchsite wisps.		
		30m	64			
		27.1 - 27.2 Flt Zne & fracturing 27.7 - 27.8 flt gouge 28.7 - 28.95 flt gouge dip = 25 deg. 31.4 - 31.5 flt zne with fuchsite				
36.60 TO 37.40	«FLT ZNE»	Colour - greyish yellow Grain size - aphanitic				
		Fault gouge and rubble (R0&A-) Contact between overlying intense alt mafics and underlying. Qtz Veining & Seds.		Intense yellow sericitie	5% py	R0

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
37.40 TO 43.40	«QV/ALT SEDS&FLTS»	Colour - Grey to greyish white Grain size - v. fine Pervasive sil'n with qtz veining and qtz carb veining with mottled mod. dol'n sed inclusions. Over all core is massive with no distinct foliation "Sert" intervals at 38.5 - 38.7,flted 41.6 - 41.7 - contorted 42.6 - 42.7 mod. contorted Flt Zones as follows: 38.3 - 39.4 40.2 - 40.6 42.2 - 42.4 - Rubble Zone	35	Intense sil'n & weak-mod patchy dol'n. Occ yellow sericitic alt seds "Sert" and silver grey sericite on joints. 41.1 - 41.4 intense alt, sil'n to a "chert" appearance with a purple hew.	5-8% py diss'd & as blebs within veinlets. 2-3% Cp+Gn+Sp Tr 1% Tt overall Difficult to pickout of extensive flting.	R2-R3 on qtz veining R0 within Flt zones over all core lengths ave. 2"-3"(C-)
43.40 TO 51.20	«SIL SEDS & FLTS»	Colour - grey Grain size - v. fine to aphanitic Weakly silicified, pyritic, altered seds. Greyish-white qtz & qtz-carb veining parallel to X-cutting fol'n. Occ SMSX sections and Mod to Extensive Flting throughout. Foliation ave. 43.6 - 45.7 - flt gouge 46.0 - 51.2 - flt gouge to rubble	50	Silver grey sericite Weak sil'n.	8% py v. fine ╡46.5 - 46.8╞ «SMSX in Gge» 25% py 3-5% Cp & Gn & Sp 2%Tt ╡47.5 - 47.6╞ «SMSX in Gge» 10% py 2% Cp1%Gn&Sp2%Tt ╡48.1 0 48.4╞ «SMSX in Gge» 35%py2%Cp1.5%Gn2-6%Sp2-3%Tt	R1
51.20 TO 57.90	«SIL SEDS»	Colour - grey Grain size - v. fine to aphanitic Mod-weakly sil'n, mod pyritic, altered seds. Greyish white qtz & qtz carb veining. Parallel to sub parallel to fol'n, occ X-cutting Fol'n (veining occ boudinaged or isoclinally folded) 53.2 - 53.3 - v. minor flt 53.7 - 53.9 - v. minor shearing 55.9 - 56.0 flt gouge & breccia 55m Foliation @ 57m	64 60	Mod-weak sil'n	5-8% py v. fine 1-2% Sp with Tr tet in rare qtz veinlets. 1-2cm wide every 1.5 to 2 meters. ╡51.2 - 51.4╞ «1%Cp3%Gn4%Sp2%Tt»	R2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30724	33.20	33.40	0.20	0.15	2.35	0.12	52.4	0.09									
BCD30725	35.10	36.60	1.50	0.01	0.06	0.01	6.5	0.08									
BCD30726	36.60	37.40	0.80	0.03	0.07	0.01	14.7	0.07									
BCD30727	37.40	38.30	0.90	0.01	0.02	0.01	9.1	0.09									
BCD30728	38.30	39.40	1.10	0.01	0.02	0.02	14.6	0.18									
BCD30729	39.40	40.20	0.80	0.02	0.02	0.01	24.2	0.13									
BCD30730	40.20	41.10	0.90	0.05	0.06	0.03	50.7	0.21									
BCD30731	41.10	41.40	0.30	0.01	0.02	0.01	8.1	0.05									
BCD30732	41.40	42.90	1.50	0.22	0.08	0.02	198.6	0.26						2.57			
BCD30733	42.90	43.40	0.50	0.21	1.82	1.19	208.8	0.55						2.55			
BCD30734	43.40	45.00	1.60	0.86	6.51	3.48	657.9	1.65						3.32			
BCD30735	45.00	46.50	1.50	0.40	1.63	0.71	122.6	0.46						2.81			
BCD30736	46.50	46.80	0.30	5.83	0.54	0.37	191.2	0.95						3.18			
BCD30737	46.80	47.50	0.70	0.38	0.07	0.19	42.6	0.64									
BCD30738	47.50	47.60	0.10	0.63	0.10	0.48	146.7	2.32						3.58			
BCD30739	47.60	48.10	0.50	0.18	0.03	0.05	17.6	0.54									
BCD30740	48.10	48.40	0.30	11.23	0.61	0.25	2333	4.34						3.77			
BCD30741	48.40	50.20	1.80	0.43	3.72	2.51	99.8	0.91						2.73			
BCD30742	50.20	51.20	1.00	1.12	7.23	5.23	442.3	3.07						4.14			
BCD30743	51.20	51.40	0.20	1.89	7.98	4.89	583.8	2.52						3.44			
BCD30744	51.40	52.90	1.50	0.13	0.23	0.20	40.8	0.31									
BCD30745	52.90	54.90	2.00	0.17	0.27	0.26	84.7	0.30									

MINNOVA INC.

HOLE NUMBER: U1330-79 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.33N
EAST: 9650.17W
ELEV: 1333.57

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

COLLAR DIP: -61° 0' 0"
LENGTH OF THE HOLE: 64.90m
START DEPTH: 0.00m
FINAL DEPTH: 64.90m

COLLAR GRID AZIMUTH: 180° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: March 11, 1991
DATE COMPLETED: March 11, 1991
DATE LOGGED: March 19, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-61° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-61° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-62° 0'	ACID	OK		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 11.90	«DOL MAFICS»	Pale to dark green chloritic tuffs invaded by white qtz-carb veins. Foliation: 2.4m	63	Pale green-yellow sericitization increases to lower contact. Moderate dol'	1/2% pyrite	
		10.1m	68			
		11.1 - 11.3m - minor flt bx				
11.90 TO 13.10	«FLT ZONE»	Compact flt bx and blocks				
13.10 TO 22.30	«MFLT»	Yellow sericitized lapilli tuff and greenish yellow sericitized tuff in a chloritic dolomitic matrix Foliation 14.8m	70	Intense ferro-dol. Selective ser'n.	<1/2% pyrite	
		18.3 - 20.9m fractured + compact to healed breccia.				Faulted lower contact 22.1 - 22.3m flt bx.
22.30 TO 35.40	«MAF/ SIL ARG»	Mixed interval of black, partly silicified graphitic argillite and pale greenish grey mafic. Chaotic distribution, patchy white qtz-carb and dolomite.		Patchy to locally pervasive sil'n Minor zones of cherty sil'n Moderate to interse ferro-dol of mafic component. Minor pale yellow ser'n.	2-4% pyrite as occasional patches blebs and bands.	Tectonised.
		Variable foliation: 23.5m	72	Minor fuchsite in fault zone		
		28.0m	75	33.9 - 35.4m		
		Hinge zone? 30.6m	35			
		Faults: [24.9 - 25.1] «flt bx» [31.7 - 32.0] «flt bx» 32.9 - 33.0 - flt bx [33.9 - 35.4] «compact flt bx»				
35.40 TO 48.40	«QV/ALT SEDS»	White qtz-carb veins, grey-white mottled qtz-carb+sed inclusions, grey and yellow sericitized sediments. 38.4 - 43.3m qtz-carb dominant.		Local yellow and grey sericitized seds grey sericitized seds 36.3 - 36.5m Sert	Variable distribution of sulphides.	Fault zone from above interval persists to approx. 35.8m.
		Foliation: 35.4m	65	[37.8 - 38.4] «Sert»	[39.0 - 39.5] «10%Sp6nCp»	Coarse blebs & stringer-like blebs in qtz carb. Blocky partly faulted.
		37.8m	63	[47.1 - 47.7] «Sert»		
					39.5 - 40.1m 5% Sp, single 5 cm zone coarse bleb/patch.	
		40.0 m	50		40.3 - 40.8m 1/2% Cp <1/2% Tt	Blebs Cp&Tt in mixed white qtz-carb and mottled qv/sed.
		46.7m	65		41.8 - 43.3m discrete Tt in mottled grey-white qv/sed. Trace only?	
		47.2m	65			
		Faults:				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		37.2 - 37.8m blocky + gouge 39.5 - 40.0m blocky fractured qtz-carb + minor gouge 43.6 - 43.8m blocky broken 44.4 - 44.5m flt gouge 45.6 - 46.1m blocky broken qv + alt seds. 47.4 - 47.5m gouge Faulted lower contact 48.4m	58			
48.40 TO 55.50	«SIL SEDS»	Grey sericitized, locally silicified seds. Foliation: 49.5m 50.1m 53.0m Faults: ┤48.4 - 48.6├ «flt gou» 51.7 - 52.0m compact bx ┤53.7 - 54.5├ «flt gu/bx»	72 70 58	Grey ser'n. Patch/banded sil'n.	4% pyrite. 1/2- 1% Sp disseminated as medium grain size blebs. Traces Gn,Cp,Tt. Tt in qtz carb veins 52.5 - 52.6m 1% Tt 53.6 - 53.7 1/2% GnSpTr. Tt 53.7 - 54.5m includes faulted CpSp associated with qtz-carb.	
55.50 TO 64.90	«SERT/ALT SEDS»	Yellow and grey sericitized sediments with local white to cream-white and pinkish qtz-carb veins. Foliation: 55.5m 59.0m 63.0m Faults: 55.8 - 56.0m flt gouge 56.6 - 57.0m - 2 minor gouge zones 57.5 - 57.6m flt gou ┤57.6 - 60.4├ «flt zone» blocky sections + minor gouge.	62 53 63	Weak to locally intense yellow ser'n of seds. (Sert).	5-10% pyrite. Trace to 1% SpGnCp associated with qtz-carb veins.	Core breaks easily along foliation. Dark grey fine grained seds, graphitic. 58.6 - 59.3m
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30751	35.40	36.50	1.10	0.16	0.33	0.18	151.3	0.25						3.42			
BCD30752	36.50	37.20	0.70	0.02	0.05	0.03	15.6	0.13									
BCD30753	37.20	37.80	0.60	0.01	0.04	0.02	11.9	0.20									
BCD30754	38.40	39.00	0.60	2.68	1.28	0.03	3037	6.60						2.71			
BCD30755	39.00	39.50	0.50	0.89	13.30	2.98	204.8	0.72						3.36			
BCD30756	39.50	40.10	0.60	0.17	1.88	0.19	101.6	0.24						2.52			
BCD30757	40.30	41.80	1.50	0.29	0.12	0.03	279.8	0.41						2.47			
BCD30758	41.80	43.30	1.50	0.01	0.05	0.01	8.9	0.10									
BCD30759	43.30	43.80	0.50	0.02	0.05	0.01	20.2	0.07									
BCD30760	43.80	44.40	0.60	0.21	0.06	0.01	197.3	0.29						2.69			
BCD30761	44.50	45.60	1.10	0.01	0.02	0.03	14.8	0.12									
BCD30762	45.60	46.10	0.50	0.01	0.01	0.05	6.2	0.11									
BCD30763	46.10	46.60	0.50	0.02	0.01	0.01	14.3	0.03									
BCD30764	46.60	47.10	0.50	0.01	0.01	0.01	1.0	0.03									
BCD30765	47.70	48.40	0.70	0.01	0.02	0.02	7.2	0.12									
BCD30766	48.40	48.60	0.20	1.21	2.53	1.59	571.7	0.89						2.67			
BCD30767	48.60	50.10	1.50	0.19	1.93	1.09	212.4	0.56						2.84			
BCD30768	50.10	51.30	1.20	0.22	1.29	0.92	177.5	0.47						3.47			
BCD30769	51.30	52.50	1.20	0.07	0.51	0.46	59.8	0.45									
BCD30770	52.50	52.60	0.10	0.21	0.97	0.62	182.4	0.26						2.75			
BCD30771	52.60	53.60	1.00	0.42	1.89	1.23	301.6	0.91						2.77			
BCD30772	53.60	53.70	0.10	0.13	1.04	0.48	105.5	0.17						2.64			
BCD30773	53.70	54.50	0.80	0.78	1.18	0.81	58.8	0.34									
BCD30774	54.50	55.50	1.00	0.05	0.41	0.70	18.4	0.09									
BCD30775	55.50	57.50	2.00	0.01	0.26	0.44	12.6	0.17									
BCD30543	57.90	58.60	0.70	0.01	0.03	0.02	1.8	0.17									
BCD30544	59.50	60.10	0.60	0.01	0.03	0.01	1.2	0.07									
BCD30545	62.20	63.40	1.20	0.05	0.28	2.64	85.7	0.06									

MINNOVA INC.

HOLE NUMBER: U1330-80 — DRILL HOLE RECORD — IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.22N
EAST: 9659.90W
ELEV: 1333.45

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

COLLAR DIP: -63° 0' 0"
LENGTH OF THE HOLE: 62.20m
START DEPTH: 0.00m
FINAL DEPTH: 62.20m

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

DATE STARTED: March 11, 1991
DATE COMPLETED: March 11, 1991
DATE LOGGED: March 21, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-63° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-63° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-63° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic Notations from Piteau's codes
0.60 TO 15.40	«MT» MAFIC TUFF	Colour - pale to dark green Grain size - aphanitic Poorly banded and very mottled with qtz. and qtz-carb veining. Foliation @ 2m 9m 4.6 - 6.0 very compact healed gouge 8.0 - 8.9 very compact healed gouge 11.9 - 12.0 flt zne Basal contact flted	 61 74	 Sil'n mod. ferro-del'n chlorite and greenish yellow sericite on joints	 1-2% diss'd py	 R2
15.40 TO 21.00	«MFLT» MAFIC LAPILLI TUFF	Colour - pale green Grain size - aphanitic Yellow sericitic altered lapilli in a sil'd & mod to intense dolomitic matrix Foliation @ 17m 15.4 - 15.9 flt bx partially compact 19.0 - 19.1 minor shear	 70	 Mod sil'n mod-intense ferro-dol'n Alt increases down hole.	 2-3% diss'd py	 R2
21.00 TO 32.20	«ALT MAF/ SIL ARG»	Colour - dark greyish green Grain size - v. fine to aphanitic Mixed graphitic arg with patch sil'n and pale greenish grey alt mafics. Occ qtz & qtz carb & dol'n Mod Tectonitic Foliation: 26m 28.5m 29.5m 30.0 - E.O.I. mod. to intense tectonics Basal contact faulted.	 60 60 70	 Patch sil'n & Dol'n, locally pervasive Occ. "Cherty" like sil'n.	 3-4% py as blebs, diss'd & veinlets	 R2-R3
32.20 TO 46.40	«QV/SERT»	Colour - yellow and greyish white Grain size - v. fine Dark yellow sericitic intervals with pyritic bands, bands occ isoclinaly folded and boudinaged. Overall 15% qtz veining with mottled, dolomitic? inclusions. 32.2 - 32.5 «flt Gge» 39.0 - 39.1 - flt zne with gouge	 	 Prominent yellow sericite occ silver grey sericite	 10% py overall as blebs coalesce to form bands	 R1-R2 mod friable

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		41.5 - 41.7 - flt zne				
		43.3 - 43.5 - flt zne				
		44.7 - 45.9 - flt zne gouge & bx.			44.7 - 45.1 3-5% cp&Gn&Sp, 2% Tt	
		45.9 - 46.2 - flt zne Basal contact flted.				
		[45.9 - 46.8] «flt 6ge» R0			46.2 - 46.4 3%Cp1%Gn7%Sp2-3%Tt in	
		Foliation @ 33.5m	70		flt gouge.	
		36.6	50			
46.40 TO 55.20	«SIL SEDS/ FLTS»	Colour - grey Grain size - v. fine to aphanitic				
		Silver grey sericitic mod.-weakly sil'd seds with greyish white qtz veinlets sub-parallel to fol'n mod-extensive faulting throughout.		Silver grey sericite. Weak-mod sil'n	5-8% diss'd py & as blebs in veinlets	R0-R1
		45.8 - 48.7 - mod flting				
		48.7 - 50.1 - mod flting in gouge				
		50.1 - 50.8 - mod-weak flting				
		50.8 - 52.5 - mod-int. flting in gouge				
		52.5 - 53.0 v. minor localized shears & mod tectonics		Bull qtz vein @ 48.4 - 48.7m		
		Foliation @ 53m	70	52.5 - 55.2 MUT		52.5 E.O.I. R1-R2
		55m	50			
		@ 55.2 - 1cm shear/gouge				
55.20 TO 62.20	«ALT SEDS/ WACKE»	Colour - greenish grey Grain size - v. fine				
		Yellow sericitic alt silts and wacke beds occ qtz & qtz carb veins. Mod Tectonitic				
		55.3 - 55.6 - mod shearing				
		57.4 - 55.7 - sheared		55.3 - 55.6 yellow sert alt & tr	3-5% py diss'd	R1-R2
		Foliation @ 57m	50	fuchsite within shearing.		
		58.8 - 59.2 - minor flting				
		59.6 - 59.7 - flt gouge			[59.2 - 59.6] Qtz carb vein	
		61.9 - 62.1 - flt zne			(1%Cp«4%Gn3%Sp»	
					60.6 - 60.7 - 35% py	
	E.O.H.					

HOLE NUMBER: U1330-80 | ASSAY SHEET | DATE: 20-March-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30746	31.20	32.20	1.00	0.01	0.01	0.01	1.8	0.03									
BCD30747	32.20	32.50	0.30	0.01	0.01	0.02	6.5	0.03									
BCD30748	32.50	34.10	1.60	0.20	0.02	0.03	206.7	0.44						2.73			
BCD30749	34.10	36.30	2.20	0.01	0.01	0.01	4.4	0.03									
BCD30750	36.30	37.80	1.50	0.05	0.25	0.01	64.6	0.07									
BCD30826	37.80	39.60	1.80	0.32	0.06	0.01	372.8	0.39						2.61			
BCD30827	39.60	40.60	1.00	0.62	0.99	0.26	508.8	0.83						2.77			
BCD30828	40.60	42.30	1.70	0.01	0.01	0.01	8.4	0.03									
BCD30829	42.30	42.50	0.20	0.18	0.02	0.01	159.7	0.09						2.51			
BCD30830	42.50	43.00	0.50	0.01	0.01	0.01	3.2	0.13									
BCD30831	43.00	43.90	0.90	0.16	0.04	0.02	194.5	0.16						2.73			
BCD30832	43.90	44.70	0.80	0.28	0.03	0.03	288.7	0.47									
BCD30833	44.70	45.10	0.40	0.77	0.44	0.08	776.5	1.15						2.54			
BCD30834	45.10	45.90	0.80	0.01	0.01	0.01	4.8	0.03									
BCD30835	45.90	46.20	0.30	0.03	0.01	0.02	12.5	0.03									
BCD30836	46.20	46.40	0.20	7.89	7.68	4.92	382.3	0.74						3.11			
BCD30837	46.40	48.40	2.00	0.29	1.12	0.74	231.3	0.45						2.73			
BCD30838	48.40	48.70	0.30	0.06	0.05	0.19	17.1	0.03									
BCD30839	48.70	50.80	2.10	0.05	0.37	0.21	29.6	0.23									
BCD30840	50.80	52.50	1.70	0.25	4.29	0.59	79.8	0.42									
BCD30841	52.50	54.20	1.70	0.15	0.61	0.21	32.3	0.18									
BCD30842	54.20	54.60	0.40	0.03	0.52	0.11	11.2	0.03									
BCD30844	58.70	59.20	0.50	0.01	0.10	0.02	3.4	0.21									
BCD30845	59.20	59.60	0.40	0.03	2.21	1.38	21.6	0.45									
BCD30846	59.60	60.60	1.00	0.01	0.02	0.03	1.8	0.07									
BCD30847	60.60	60.70	0.10	0.01	0.01	0.13	4.7	0.30									
BCD30848	60.70	62.20	1.50	0.01	0.50	0.11	6.8	0.06									

MINNOVA INC.

HOLE NUMBER: U1330-81 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 632.99N
EAST: 9670.06W
ELEV: 1333.23

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

COLLAR DIP: -52° 0' 0"
LENGTH OF THE HOLE: 52.70m
START DEPTH: 0.00m
FINAL DEPTH: 52.70m

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

DATE STARTED: March 12, 1991
DATE COMPLETED: March 12, 1991
DATE LOGGED: March 20, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-52° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-52° 0'	ACID	OK		-	-	-	-	-	
52.70	-	-52° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 14.80	«DOL MAFICS»	Pale to dark green chloritic tuffs invaded by white qtz-carb veins. Foliation 1.6m 5.5m 11.8m 14.8m Blocky sections: 6.5 - 6.8m 7.8 - 8.1m 9.8 - 10.1m Faulted lower contact	70 65 65 67	Moderate to intense ferro-dol. Greenish yellow ser'n increases to lower contact.	1/2% pyrite	
14.80 TO 20.10	«ALT MAFIC. MLFT»	Pale greyish green dolomitized mafics and yellow sericitized lapilli. Foliation: 16.6 Faults: ╪14.8 - 16.2╪ «blocky + bx» Faulted lower contact	64	Intense ferro-dol. Selective pale yellow ser'n.	1% pyrite.	
20.10 TO 30.70	«MAF/SIL ARG»	Black, graphitic, silicified argillite and greyish green dolomitized mafic. Foliation 22.6m 24.3m 27.1m Faulting: 22.1 - 22.3m - blocky 23.0 - 23.1m - minor bx 23.6 - 23.8m - bx + blocks ╪23.8 - 25.3╪ «blocky» 28.5 - 28.6m flt bx ╪28.8 - 29.1╪ »flt bx» ╪30.4 - 30.7╪ «flt bx gou»	70 73 68	Patchy sil'n. Moderate ferro-dol of mafic component.	3% pyrite. Local trace base metals associated with qtz-carb veins.	Highly graphitic band of gouge marks upper contact. Interval is tectonized.
30.70 TO 32.20	«QV/CHERT»	Dark grey "cherty" silicified mafic? Faulted lower contact.			Patches and bands of (syngenetic?) pyrite. Trace Tt in white qtz carb vein cutting chert.	Blocky interval + minor gouge.
32.20 TO 39.50	«QV/SERT»	Dark yellow sert with patches and bands of pyrite parallel to foliation. 10% white qtz carb veins. Foliation: 32.5m 38.6m 39.5	63 37 58	Intense dark yellow ser'n (Sert)	10% pyrite occurring as blebs in a silicified matrix. Blebs coalesce to form bands parallel to foliation. ╪35.5 - 36.0╪ «8%Py in Qtz»	Overall very friable interval.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Fauling, numerous blocky intervals punctuated by gouge. 32.9m - gouge ╪34.4 - 35.2╪ «blocks + gouge» highly strained friable sert. 36.0 - 36.8m - blocks + gouge 37.0 - 37.5m - broken, friable 38.6 - 39.0m block + gouge				
39.50 TO 43.40	«QV/ALT SED FLT ZNE»	Fault brecciated white qtz carb vein and sert. 39.5 - 41.7m mainly brecciated qtz-carb. 41.7 - 43.4 - mainly sert breccia.		Dark yellow to olive green ser'n. Occasional grey sed inclusions in qtz-carb vein.	2-3% pyrite	Fault zone extends through contact with grey altered seds and grey silicified seds.
43.40 TO 46.00	«SIL SED FLT ZNE»	Compact fault brecciated grey sericitic silicified seds.		Grey ser'n.	╪43.6 - 44.1╪ «4%Py4%SpGn» fine grained pyrite sphalerite and galena in dark grey black sericitic, silicified sed breccia fragments. 44.1 - 44.4m qtz-carb with stringer-like band of Gn.	
46.00 TO 52.70	«SIL SEDS»	Grey sericitic, silicified seds, with minor zones of more pyritic, sericitic seds. Foliation 51.3m 48.0 - 48.4m - flt bx	80 25	Grey ser'n	3-4% pyrite. Trace Sp distributed as occasional blebs.	Influence of fault persists into this lower interval but intensity of brecciation decreases.
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD31000	29.20	30.70	1.50	0.01	0.03	0.02	1.8	0.03									
BCD30776	30.70	32.20	1.50	0.59	0.38	0.42	1036	2.41						2.74			
BCD31001	32.20	32.90	0.70	0.04	0.02	0.01	48.8	2.58									
BCD30777	32.90	33.30	0.40	0.01	0.01	0.02	16.3	0.12									
BCD30778	35.30	36.00	0.70	0.08	0.01	0.03	83.6	0.52									
BCD30779	36.00	37.00	1.00	0.01	0.01	0.03	3.0	0.03									
BCD30780	38.70	38.90	0.20	0.01	0.01	0.01	8.9	0.03									
BCD30781	39.00	39.30	0.30	0.01	0.01	0.01	6.2	0.03									
BCD30782	39.50	41.70	2.20	0.11	0.15	0.04	100.6	0.44						2.69			
BCD30783	43.40	43.60	0.20	0.54	4.19	1.94	556.7	0.73						2.73			
BCD30784	43.60	44.10	0.50	0.45	6.09	3.32	455.9	0.97						2.66			
BCD30785	44.10	44.40	0.30	0.88	0.15	4.38	203.6	0.43						2.55			
BCD30786	44.40	46.00	1.60	0.11	1.03	0.63	92.5	0.26									

MINNOVA INC.

HOLE NUMBER: U1330-82 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 633.71N
EAST: 9670.06W
ELEV: 1333.24

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

COLLAR DIP: -75° 0' 0"
LENGTH OF THE HOLE: 53.00m
START DEPTH: 0.00m
FINAL DEPTH: 53.00m

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

DATE STARTED: March 12, 1991
DATE COMPLETED: March 12, 1991
DATE LOGGED: March 20, 1991

COLLAR SURVEY: YES
MULTISHOT SURVEY: YES
ROD LOG: YES

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-75° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-75° 0'	ACID	OK		-	-	-	-	-	
53.00	-	-75° 0'	ACID	OK		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 10.60	«DOL MAFICS»	Pale to dark green chloritic tuffs with numerous qtz-carb veins Foliation: 4.3m 8.8m Faults: 1.3 - 1.4m - bx	55 60 56	Greenish yellow ser'n increases to lower contact. Moderate ferro-dol.	1/2% pyrite	9.7 - 10.5m folded qtz-carb vein.
10.60 TO 11.80	«FLT BX»	Compact flt breccia lower contact	50 80			
11.80 TO 17.70	«MFLT/ALT MAFICS»	Lapilli tuff grades into altered mafic with no relict textures. Foliation: 12.5m 17.3m Faults: 13.4 - 13.8m - blocky 14.4 - 14.9m - blocky 14.9 - 15.0m - flt bx 16.5 - 16.9m - flt bx + blocks	80 60	Selective yellow ser'n of lapilli Intense ferro-dol	1/2 - 1% pyrite	Sharp lower contact with sil graphitic argillite.
17.70 TO 28.10	«MAF/SIL ARG»	Black, graphitic, locally silicified argillite with minor dolomitized mafic component. Foliation: 21.4m 23.9m 27.6m Faults: 17.8 - 18.2 «flt bx» 23.5 - 23.9 «flt bx + blocks» 24.2 - 24.3m flt bx 27.2 - 27.4m flt bx + blocks	66 60 65	Patchy to pervasive sil'n with over printed qtz-carb flooding. Ferro-dol of mafic component.	3-4% pyrite	Tectonized Faulted lower contact
28.10 TO 30.50	«FLT ZONE»	Fault zone through contact of sericite (mafic?) and qv/seds + qtz carb veins.		Grey sericite in gouge sections.	29.6 - 30.5m 1/2% Tt	Qtz/carb/seds start at 29.6m
30.50 TO 42.90	«QV/SEDS ALT SEDS»	Mottled grey-white qtz-carb veins with grey sed inclusions. Fault bounded dark grey-black sericitized seds, with base metals banded parallel to foliation, occur at the following intervals: 37.9 @ 38.8m and		Minor yellow sericite (sert) at 30.5 - 30.7, 31.2 - 31.4, 30.6 - 30.7. Patchy to pervasive sil'n through qtz-carb flooding.	32.8 - 33.3 «2%Tt» Blebs and disseminations in mottled grey-white qv/sed. 35.0 - 36.3m, 1/2%Tt Tr SpCp 37.9 - 38.8 «6%SpGnCuTr.Tt»	Ideal host rock for disseminated Tt. Appear to be only minor sections of high grade.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE		ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		42.7 - 42.9m				╡39.7 - 40.0╞	
			Foliation: 30.7m	60		«3%Tt3%SpCp6n» fine to med grained	
		1cm sert band in qv/sed	33.4	46		disseminated mineralization in	
			37.6m	47		dark grey-black silicified matrix.	
			38.5m	72			
		Faults:					
		31.4 - 31.6m blocky					
		33.2 - 33.3m gouge					
		╡33.8 - 343.1╞ «flt bx»					
		╡34.6 - 35.0╞ «flt gouge»					
		36.5 - 36.7m - gouge filled fracture					
		37.2 - 37.4m - gouge fracture		30			
		37.9 - 5cm gouge		80			
		39.2 - 39.3m flt gouge					
		╡39.4 - 39.7╞ «flt gou/bx»					
		40.0 - 41.2 blocks & minor gouge.					
42.90 TO 43.90	«FLT ZONE»	Grey sericitic gouge and breccia					
43.90 TO 53.00	«SIL SEDS»	Grey sericitized, silicified seds. Characterised by faint white qtz-carb veins and patches.			Sericite partings to grey silicified seds.	Blebby Sp6n locally associated with qtz-carb patches. ╡44.7 - 46.2╞ «1%SpTrCp6nTt» Possibly up to 20% pyrite in gouge and breccia ╡INTR╞49.8 - 51.0╞ «20%Py» 52.5 - 52.8m 2%Sp1%6n(TrTt?) in qtz-carb vein + sil sed.	Cherty protolith
			Foliation: 44.2m	63			
			46.2m	57			
			52.3m	72			
		Faults:					
		44.3 - 44.7m flt gou/bx					
		45.4 - 45.5m flt bx					
		╡46.7 - 47.0╞ «flt bx»					
		47.0 - 48.5m shattered texture					
		╡48.5 - 49.4╞ «flt bx»					
		49.8 - 51.9 compact flt bx					
		52.7 - 53.0m flt bx					
	E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD31049	28.10	29.60	1.50	0.01	0.01	0.01	2.4	0.03									
BCD30787	29.60	30.50	0.90	1.39	0.98	0.48	1298	2.51						3.01			
BCD30788	30.70	31.20	0.50	0.03	0.01	0.06	27.6	0.29									
BCD30789	31.20	31.60	0.40	0.01	0.01	0.02	11.3	0.24									
BCD30790	31.60	32.80	1.20	0.03	0.01	0.01	33.5	0.22									
BCD30791	32.80	33.30	0.50	0.83	0.09	0.01	887.3	1.64						2.52			
BCD30792	33.30	34.60	1.30	0.21	0.03	0.02	225.6	0.51						2.72			
BCD30793	34.60	35.00	0.40	0.60	0.15	0.09	522.1	1.16						2.53			
BCD30794	35.00	36.30	1.30	1.37	0.76	0.06	1449	3.04						2.75			
BCD30795	36.30	37.90	1.60	0.45	1.05	0.52	445.6	0.87						2.74			
BCD30796	37.90	38.80	0.90	0.98	11.30	7.49	799.4	1.61						3.12			
BCD30797	38.80	39.40	0.60	0.15	0.42	0.14	157.8	0.37						2.62			
BCD30798	39.40	39.70	0.30	0.38	0.11	0.05	408.6	0.76						2.80			
BCD30799	39.70	40.00	0.30	3.22	4.87	1.49	4055	6.07						2.75			
BCD30800	40.00	41.20	1.20	0.37	0.49	0.06	396.8	0.68						2.68			
BCD30801	41.20	42.40	1.20	0.04	0.16	0.11	46.9	0.13									
BCD30802	42.40	42.90	0.50	0.99	2.68	0.89	888.5	2.38						2.81			
BCD30803	42.90	43.80	0.90	1.09	9.28	5.19	1079	2.16						2.91			
BCD30804	43.80	44.70	0.90	0.36	4.11	1.61	335.3	0.89						2.74			
BCD30805	44.70	46.20	1.50	0.37	2.32	1.09	309.2	0.58						2.84			
BCD30806	49.40	49.80	0.40	0.31	2.13	1.03	371.5	0.57						2.60			
BCD30807	49.80	51.00	1.20	0.12	1.07	0.45	25.1	0.56									
BCD30808	51.00	52.00	1.00	0.01	0.06	0.09	11.8	0.34									
BCD30809	52.50	52.80	0.30	0.35	3.47	2.69	126.5	0.31						2.98			

MINNOVA INC.

HOLE NUMBER: U1330-83 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH: 634.10N
EAST: 9670.06W
ELEV: 1333.19

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

COLLAR DIP: -88° 0' 0"
LENGTH OF THE HOLE: 90.00m
START DEPTH: 0.00m
FINAL DEPTH: 90.00m

COLLAR GRID AZIMUTH: 360° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: March 12, 1991
DATE COMPLETED: March 13, 1991
DATE LOGGED: March 16, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE: TO TEST PIWEK GOLD ZONE EXTENSION ALONG STRIKE.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-88° 0'	ACID	OK		-	-	-	-	-	
30.50	-	-88° 0'	ACID	OK		-	-	-	-	-	
61.00	-	-88° 0'	ACID	OK		-	-	-	-	-	
89.90	-	-90° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					
0.60 TO 10.20	«DOL MAFICS»	Pale to dark green chloritic mafic tuffs invaded with white qtz-carb veins parallel to foliation. Veins locally boudined and contorted. Foliation 1.6m 8.2 Faults: 2.5 - 3.0m compact flt6 bx. 8.6 - 10.2m blocky	62 68 47	Moderate ferro-dol. Weak to moderate greenish yellow sericite after chlorite.	1% pyrite.	
10.20 TO 13.30	«FLT ZONE»	Partly faulted interval of mafics transitional between dol-mafics and MFLT. 10.2 - 10.9m compact flt bx 10.9 - 11.3m blocky section core breaks easily along sericite folial. 11.3 - 11.6m compact flt bx 11.6 - 12.5 blocky 12.5 - 13.3m compact flt bx	68 60 60	Moderate to well developed greenish yellow sericite. Moderate ferro-dol.	<1% pyrite Local trace base metal Sulphides.	
13.30 TO 18.60	«MFLT»	Yellow sericitized lapilli in a pale greenish grey dolomitized tuff matrix. Foliation: 13.4m 17.4m Faults: Minor blocky intervals. 17.2m - minor flt bx Flt bx at lower contact.	54 60	Intense ferro-dol Moderate to intense selective pale yellow ser'n.	1% pyrite.	
18.60 TO 22.90	«SIL ARG»	Black, silicified graphitic argillite. Numerous qtz-carb microveins with variable orientation. Local blocky sections of core.		Patchy to pervasive sil'n 21.1 - 21.5 m zone flooded with qtz carb.	<1/2% pyrite 1/2% Cp in qz-carb flooded argillite, 21.1 - 21.5m.	
22.90 TO 31.90	«MAF/SIL ARG»	Mixed black graphitic argillite and pale greenish grey mafic. Foliation: 23.1m 24.4m 29.3m Faults: 23.9 - 24.1m minor gou+bx 25.1 - 25.6m «flt bx» 31.8 - 31.9m, soft grey flt gouge at lower contact	42 68 53 65	Moderate dol of mafic component. Local pervasive sil'n of graphitic argillite.	3-5% pyrite in patches and bands. Local 10% pyrite over 1-2cm, associated with qtz-carb.	Tectonized.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
31.90 TO 36.20	«QTZ/SER FLT ZNE»	Fault zone through contact of mafic/qtz/sericite yellow sert and mineralized altered seds. 31.9 - 33.0m compact, strained qtz/ sericite.	57	Pale to darker yellow sericite.	3-5% pyrite. Possible hidden Tt in gouge 35.6 - 36.2	Blocky sections show tectonised texture.
		33.0 - 33.3m soft gouge 33.3 - 34.5m compact strained + blocky; qtz,ser & qtz-carb (dol) patches.	66			
		34.5 - 34.9m flt gou/bx, very soft. 35.1 - 36.2 «soft gouge» Contact maf/sed approx 35.6m.				Fault at 35.1 cuts foliation, sub parallel - 70 deg to foliation to c/a foliation 56 deg.
36.20 TO 37.60	«QV/SED»	Partly faulted, finely mottled grey-white altered seds, flooded with greyish white qtz-carbonate. Foliation 36.2m	55	Grey ser'n	Patchy to blebby pyrite. Patches to blebs of Cp Minor blebs Sp and Gn, trace Tt. Overall: 3%Cu1%Sp6n Tr. Tt	Friable ore zone.
37.60 TO 45.50	«ALT SED FLT ZNE»	Gouge, breccia and blocky intervals within variable grey sericitic, pyritic seds to grey sericitic, silicified seds with white patches and veins of qtz-carb. 37.6 - 38.3m grey gouge	35	Grey ser'n. Local patchy sil'n associated with qtz carb veining.	Variable distribution sulphides: Gouge sections difficult to evaluate for contained sulphides.	
		38.3 - 40.3m pyritic seds and fault gouge. Fault gouge locally sub-parallel to c/a. 40.3 - 42.1m blocky sections, compact sil sed breccia and silicified grey seds.	55	Silicification increases from 40.1m to E. O. I.	10% pyrite approx. 38.3-39.3 «2%Py1%Cu» 39.3 - 40.3 Py decreases, seds become more silicified within fault lithologies. 40.3 - 42.1m 5-7%Py 1%Sp 1/2% Cp. 3-4% Py(1/2% Sp.	
		42.1 - 42.9m grey gouge 42.9 - 45.5m faulting influence decreases. Blocky sil seds & compact bx & soft gouge 44.9 - 45.1m	46			
45.50 TO 48.50	«ALT SEDS»	Grey sericitic, pyritic seds. Texture, banded sections pyrite, sericite with patchy faint qtz carb.		Grey ser'n.	7-10% fine grained dark, patches and bands of pyrite.	Upper faulted contact. Lower faulted contact.
		Foliation: 45.5m 48.4m	55 55		1/2% Sp.	
		Faults: 47.0 - 47.3m gou + bx 47.5 - 47.6m gou + bx				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
48.50 TO 49.70	«ALT SED/ QTZ CARB»	Blocky recovery within white, sulphide bearing qtz-carb vein. 48.5 - 49.0m qtz-carb 49.0 - 49.2m friable grey sericitic seds. 49.2 - 49.7 qtz carb.		20cm interval of seds intensely grey sericitized.	Locally, semi massive patches, stringers of Cp Py with peripheral blebs/patches (to 1cm) of Tt. 48.5 - 49.0m 8%Cp6%Py2%Tt 49.2 - 49.7m 10%Cp6%Py1%Tt	Faulted upper and lower contacts.
49.70 TO 73.60	«MUT/SIL SEDS»	Grey sericitic, locally pyritic and/or silicified seds. Silicified sections commonly show patches/ remnant deformed veins of white qtz-carb. Foliation/banding: Pyrite 50.4m Py, Sp bands 51.1m Py, Cp, Sp bands 51.6m Sericite foliation 54.0m 56.4m 58.6 - 59.4, Pyrite banding, 2 - 15 deg. Shows a hinge zone or rotation of banding due to faulting. 62.5m 68.4m 71.8m 73.1m Faults: 49.7 - 49.8m flt gou + blocks 51.7 - 52.2m minor bx + very blocky. 52.6 - 53.0m minor gou + blocks ⟦54.5 - 54.8⟧ «flt gou» ⟦55.1 - 56.1⟧ «soft flt gou» 57.0 - 58.4m gouge + blocks 58.7 - 59.7m flt gouge in fractures curving sub parallel to c/a. Hinge zone, (buss eye popping out of core) 15 deg. to c/a 62.9 - 63.2m minor bx + blocks ⟦65.0 - 65.3⟧ «flt bx + blocks» 65.7 - 65.8m flt bx 66.2 - 66.5m, strained + minor gou + bx. 66.6 - 67.1m flt bx 67.2 - 67.4m compact bx ⟦68.9 - 69.4⟧ «flt bx + blocks» 70.1 - 70/4m blocky + bx 72.7 - 73.6 friable zone of pyritic/	45 30 48 55 51 52 56 60 53	Grey ser'n Local patchy to pervasive sil'n.	Variable distribution of sulphides: 49.7 - 50.6m 4-7% bands and disseminations of pyrite. ⟦50.6 - 51.6⟧ 15-20% Sulphides «7%Py10%SpCp3%GnTt» 51.6 - 53.1m, 7-15%Py1%SpCu 53.1 - 54.4, 5-7% Py 54.4 - 54.5m SMSX 54.8 - 55.1m 7% Py. 56.1 - 57.0m 7%Py1%Sp1%Cu 58.4 - 58.7m, 15-20% Py ⟦58.7 - 60.8⟧ «15-30%Py» Sections of massive pyrite. 60.8 - 67.1m, 5-7%Py 1% Sp blebs. 67.1 - 72.7m, 4-5% Py 1%Sp, occasional trace Tt. 72.7 - 73.6m 7-10% Py.	49.7 - 50.6 - 20% core loss. In sil sed. Blebby patchy + stringers tend to parallel foliation. Tt forms fine grey matrix to Sp+Cp in 3cm band at 51.1m. (Gold Zone?) Pyrite bands and patches in grey sil sed. (Blocky interval). Mut/Sil Sed. Block of 20% Py 4%Sp 5%Cu faulted on upper and lower contacts. greyish brown, pyritic altered sed. Some talc. Py in fine matrix of white qtz carb flooded seds. Variable % of fine (syngenetic?) pyrite in a sericitic ltered sed. Sections faulted + hinge zones Minor patches qtz-carb. Wisps and bands of fine brown pyrite in a patchy (almost chaotic) qtz-carb flooded sericitized sed. Contorted zone of seds with folding masked by alteration. Less chaotic, more homogenous brownish grey to grey sil seds. Sil Seds grade into pyritic sericitic seds and 10 cm of argillite at lower contact.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		sericitic seds with soft gouge at 73.3m.				
73.60 TO 82.30	«ARG/ WACHE»	Black graphitic argillite and dark grey-black very weakly altered wacke. 76.9 - 77.5 qtz-carb vns parallel to foliation. Foliation: 74.4m 79.2m 81.4m	 58 62 58	V. weak grey ser'n. Weak qtz-carb alteration to form	1/2% pyrite distributed as blebs. Two isolated arsenopyrite? blebs occur between 80.8 - 81.6m	 Appear as cubic crystals/clasts in wacke? Lower contact faulted.
82.30 TO 88.60	«QTZ CARB/ SERT/WKE»	Bands of yellow weak to moderate ser'n within grey siltite and wacke. Qtz-carb veins have invaded seds between 84.1 - 88.6m, 40% volume. Foliation: 83.0m 87.4m	 53 51	Weak to moderate yellow to olive green ser'n.	3-7% locally concentrated cubic to blebby pyrite.	Faults: 85.4 - 85.5m flt gou. 86.0 - 86.1m flt gou/friable seds. Minor fault + qtz carb vein at lower contact.
88.60 TO 90.00	«SILTITE/ ARG»	Dominantly black graphitic argillite with minor grey siltite.	50		1% pyrite Minor folding.	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30601	35.60	36.20	0.60	0.02	0.89	0.83	52.3	0.6									
BCD30602	36.20	37.60	1.40	1.01	1.33	0.66	157.7	1.48						2.95			
BCD30603	37.60	38.30	0.70	1.00	0.23	0.18	127.5	0.74						3.38			
BCD30604	38.30	39.30	1.00	0.74	0.34	0.19	63.4	0.66									
BCD30605	39.30	40.30	1.00	0.22	1.02	0.43	107.8	0.47						2.91			
BCD30606	40.30	41.30	1.00	1.12	2.58	1.48	805.0	1.51						2.87			
BCD30607	41.30	42.10	0.80	0.53	0.83	0.62	438.3	0.62						2.60			
BCD30608	42.10	42.90	0.80	0.07	0.26	0.19	31.6	0.53									
BCD30609	42.90	44.40	1.50	0.19	0.42	0.23	52.6	0.23									
BCD30610	44.40	45.50	1.10	0.17	0.98	0.67	61.8	0.21									
BCD30611	45.50	47.00	1.50	0.05	0.40	0.36	20.9	0.17									
BCD30612	47.00	48.50	1.50	0.07	0.52	0.38	30.1	0.28									
BCD30613	48.50	49.00	0.50	3.02	0.08	0.03	130.5	1.17						2.67			
BCD30935	49.00	49.20	0.20	0.50	0.12	0.06	8.5	0.38									
BCD30614	49.20	49.70	0.50	4.38	0.07	0.09	26.5	1.91						2.71			
BCD30615	49.70	50.60	0.90	0.04	0.14	0.09	5.4	0.42									
BCD30616	50.60	51.60	1.00	2.21	6.89	3.02	668.0	26.69						3.47			
BCD30617	51.60	53.10	1.50	0.27	1.98	0.52	22.4	15.90						2.99			
BCD30618	53.10	54.40	1.30	0.01	0.14	0.03	4.4	3.65						2.85			
BCD30600	54.40	54.50	0.10	3.36	7.98	1.33	155.6	112.23						3.97			
BCD30619	54.50	54.80	0.30	0.26	0.88	0.28	27.2	2.58						2.88			
BCD30620	54.80	55.10	0.30	0.08	0.32	0.09	11.3	1.45						3.12			
BCD30621	55.10	56.10	1.00	0.20	1.68	0.76	26.6	3.67						2.68			
BCD30622	56.10	57.00	0.90	0.40	1.13	0.59	26.3	7.92						3.05			
BCD30623	57.00	58.40	1.40	0.06	1.28	0.18	11.5	0.57									
BCD30624	58.40	58.70	0.30	0.18	0.64	0.73	20.0	1.08						3.35			
BCD30625	58.70	59.70	1.00	0.11	0.09	0.34	11.1	0.89									
BCD30626	59.70	60.20	0.50	0.05	0.03	0.44	14.4	1.55						3.27			
BCD30627	60.20	60.80	0.60	0.01	0.05	0.06	5.8	0.87									
BCD30628	60.80	62.30	1.50	0.01	0.03	0.04	5.2	0.50									
BCD30629	62.30	63.80	1.50	0.11	0.47	0.23	48.7	0.54									
BCD30630	63.80	65.30	1.50	0.09	0.33	0.16	38.5	0.47									
BCD30631	65.30	66.80	1.50	0.35	0.43	0.32	120.6	0.46						2.88			
BCD30632	66.80	67.40	0.60	0.47	0.65	0.44	145.6	0.34						2.65			
BCD30633	67.40	68.90	1.50	0.02	0.02	0.03	7.8	0.34									
BCD30634	68.90	70.40	1.50	0.10	0.53	0.42	19.9	0.29									
BCD30635	70.40	71.90	1.50	0.15	1.04	0.66	36.9	0.15									
BCD30636	71.90	72.70	0.80	0.01	0.40	0.31	8.7	0.12									
BCD30637	72.70	73.60	0.90	0.01	0.00	0.09	5.1	0.31									
BCD30643	76.90	77.50	0.60	0.01	0.03	0.01	0.3	0.06									

HOLE NUMBER: U1330-83 ASSAY SHEET DATE: 20-March-1991

Sample	From (m)	To (m)	Length (m)	CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		
BCD30638	80.80	81.60	0.80	0.01	0.01	0.01	0.1	0.03										
BCD30639	82.50	84.00	1.50	0.01	0.01	0.01	0.4	0.40										
BCD30640	84.00	85.50	1.50	0.01	0.01	0.01	0.1	0.43										
BCD30641	85.50	87.00	1.50	0.01	0.01	0.01	0.3	0.53										
BCD30642	87.00	88.60	1.60	0.01	0.01	0.01	0.2	1.30										

MINNOVA INC.

HOLE NUMBER: U1330-84 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6 — PLOTTING COORDS GRID: FIELD — ALTERNATE COORDS GRID: — COLLAR DIP: -58° 0' 0"
PROJECT NUMBER: SAM — NORTH: — NORTH: 0+ 0 — LENGTH OF THE HOLE: 51.50m
CLAIM NUMBER: — EAST: — EAST: 0+ 0 — START DEPTH: 0.00m
LOCATION: DRIFT — ELEV: — ELEV: 0.00 — FINAL DEPTH: 51.50m

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

DATE STARTED: March 13, 1991 — COLLAR SURVEY: YES — PULSE EM SURVEY: NO — CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: March 13, 1991 — MULTISHOT SURVEY: YES — PLUGGED: YES — CASING:
DATE LOGGED: March 21, 1991 — ROD LOG: NO — HOLE SIZE: BTW — CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-58° 0'	ACID		WEAK	-	-	-	-	-	
49.70	-	-58° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 7.60	«DOL MAFICS	Pale to dark green chloritic tuffs with white qtz-carb veins.		Moderate greenish yellow ser'n. Moderate to intense ferro-dol.	1/2% pyrite	10cm intensely dolomitized mafic at lower contact.
		Foliation	70			
			76			
		Faults, minor breccia				
		2.6m, 4-8 - 4.9m				
7.60 TO 16.50	«MFLT/ALT MAF»	Lapilli tuff and dolomitized mafics.		Yellow sericitized lapilli. Intense ferro-dol	1% pyrite	
		Foliation: 9.0m	65			
		13.2m	75			
		Knife sharp lower contact. Approx.	70			
16.50 TO 24.70	«MAF/SIL ARG»	Black silicified, graphitic argillite and minor mafic		Patchy to pervasive sil'n.	1-2% pyrite.	Tectonized.
		Foliation: 17.5m	75			
		24.2	72			
		Faults:				
		17.9 - 18.0m flt bx				
		⎨22.0 - 22.3⎬ «flt bx»				
		22.6 - 23.0m blocky				
		23.4 - 23.6m flt bx				
		⎨24.3 - 24.7⎬ «flt bx» at lower contact	50			
24.70 TO 26.40	«QTZ/SER»	Tectonised pale yellow sericite and qtz.		Intense pale yellow ser'n.	3-4% pyrite.	
		Foliation: 25.4	66			
		Faulted lower contact				
26.40 TO 45.00	«QV/SED ALT SED»	White and grey qtz vein with fine mottled grey-white qtz flooded sed inclusions, patches of sert and sert/alt sed intervals.		Local intervals of intensely yellow sericitised seds.	Variable distribution sulphides:	
				⎨29.2 - 29.9⎬ «sert»	26.9 - 27.6m 3%Sp2%Tt	fine disseminated SpTt
				39.9 - 40.8m mixed sert & grey	31.4 - 32.9m 1/2-1%Tt1%Sp	in dark grey black silicified matrix
		Foliation: 27.0m	60	altered seds and qtz carb fragments.	32.9 - 35.8m 1/2-1%Tt	
		Sert 29.2m	72			
		1cm sericite band 38.4	57	41.3 - 42.1m greyish yellow and yellow	⎨35.8 - 38.9⎬ «2%Tt4%Sp1%Cp»	Tt associated with cross-cutting
		partly faulted sert 40.6	48	sericite.		white qtz carb vein and disseminated
		43.3	63	42.3 - 42.6 grey and yellow sericitised		Tt,Sp Cp in dark grey black sil matrix.
		Faults:		seds.	38.9 - 39.9m 1/2%Tt	
		26.8 - 26.9m minor bx		44.0 - 44.4 qv + sert.	40.8 - 41.3m 1/2% Tt	
		27.6 - 27.8m flt gouge			42.1 - 42.3m 1% Sp	Dark brown Sp blebs in qtz-carb
		28.6 - 28.9m blocky & minor gouge			42.6 - 42.7m 1% Sp	Dark brown Sp blebs in qtz-carb
		32.9 - 34.3m blocky qtz vn.				
		39.9 - 42.1m minor local shearing of alt seds.			⎨42.7 - 43.7⎬«3%Sp1/2%Tt»	fine disseminated Sp
						in dark grey sil sed matrix
					44.4 - 45.0m 3%SpGn (1/2Tt	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
45.00 TO 45.30	«FLT BX»	Fault brecciated alt seds and grey silicified seds				
45.30 TO 51.50	«SIL SEDS»	Grey sericitized silicified seds. Foliation: 46.3m 50.3 Faults: [48.2 - 48.9] «flt bx» 48.9 - 51.2m sil seds have shattered texture in core. 51.2 - 51.5m flt bx.	60 65	Grey ser'n. Patchy to pervasive sil'n.	45.3 - 45.8[«4%Sp6nTrTt»	fine disseminations concentrated in 10cm of sil seds.
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30850	24.70	26.40	1.70	0.01	0.01	0.01	2.0	0.03									
BCD30810	26.40	26.90	0.50	0.29	1.38	1.03	259.8	0.29						2.66			
BCD30811	26.90	27.60	0.70	5.38	9.63	5.98	3532	7.40						3.02			
BCD30812	27.60	27.80	0.20	6.48	10.40	5.09	4927	8.45						2.69			
BCD30813	27.80	29.20	1.40	0.20	0.11	0.12	164.5	0.09									
BCD30814	29.20	31.40	2.20	0.07	0.01	0.02	58.8	0.24									
BCD30815	31.40	32.90	1.50	0.39	0.22	0.01	369.2	0.46						2.60			
BCD30816	32.90	34.30	1.40	0.21	0.04	0.01	204.5	0.19						2.65			
BCD30817	34.30	35.80	1.50	1.38	0.83	0.03	1177	1.93						2.85			
BCD30818	35.80	37.40	1.60	1.57	0.79	0.07	1593	2.67						2.68			
BCD30819	37.40	38.90	1.50	3.67	5.91	0.78	3940	5.94						3.03			
BCD30820	38.90	39.90	1.00	0.83	0.27	0.07	807.4	1.75						2.68			
BCD30821	39.90	40.80	0.90	0.98	0.65	0.16	800.8	2.04						2.90			
BCD30822	40.80	41.30	0.50	1.58	1.38	0.47	1806	3.08						2.89			
BCD30823	41.30	42.10	0.80	0.14	0.04	0.04	150.6	0.28						2.78			
BCD30824	42.10	42.30	0.20	0.03	1.58	0.01	16.2	0.03									
BCD30825	42.60	42.70	0.10	0.21	2.08	0.56	250.3	0.23						3.15			
BCD30851	42.70	43.70	1.00	0.45	5.63	2.87	467.3	0.92						2.85			
BCD30852	43.70	44.40	0.70	0.03	0.27	0.13	15.2	0.06									
BCD30853	44.40	45.00	0.60	0.90	11.30	8.19	800.0	1.39						3.13			
BCD30854	45.00	45.30	0.30	1.08	2.78	1.72	942.2	2.09						2.70			
BCD30855	45.30	45.80	0.50	0.57	7.28	4.28	433.9	0.97						2.94			
BCD30856	45.80	47.30	1.50	0.24	0.75	0.58	152.8	0.55						2.70			
BCD30857	47.30	48.20	0.90	0.08	0.73	0.54	76.50	.44									

MINNOVA INC.

HOLE NUMBER: U1330-85 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG	PLOTTING COORDS GRID: FIELD	ALTERNATE COORDS GRID:		COLLAR DIP: -85° 0' 0"	
PROJECT NUMBER: SAM	NORTH:	NORTH: 0+ 0		LENGTH OF THE HOLE: 50.30m	
CLAIM NUMBER:	EAST:	EAST: 0+ 0		START DEPTH: 0.00m	
LOCATION: DRIFT	ELEV:	ELEV: 0.00		FINAL DEPTH: 50.30m	
	COLLAR GRID AZIMUTH: 180° 0' 0"	COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"			
DATE STARTED: March 14, 1991	COLLAR SURVEY: YES	PULSE EM SURVEY: NO		CONTRACTOR: BOISVENU DRILLING	
DATE COMPLETED: March 14, 1991	MULTISHOT SURVEY: YES	PLUGGED: YES		CASING:	
DATE LOGGED: March 22, 1991	RQD LOG: NO	HOLE SIZE: BTW		CORE STORAGE: BARRIERE	

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-85° 0'	ACID		OK	-	-	-	-	-	
50.30	-	-84° 0'	ACID		OK	-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic Codes using Piteau logs
0.60 TO 8.00	«MT» MAFIC TUFF	Colour - Pale green Grain size - aphanitic Moderately faulted, poorly banded and well mottled with qtz & qtz carb veining Foliation @ 4m 7.5m 1.8 - 2.4 «flt zne» 5.2 - 5.3 minor flting/shearing Basal contact sheared	 54 53 	 Chlorite Mod dolomite Pervasive sil'n	 3-5% diss'd py	 R2
8.00 TO 11.50	«ALT MAF»	Colour - dark green Grain size - v. fine to aphanitic Locally banded, pervasive sil'n & dolomite No discernable original textures weak to mod tectonitic Foliation @ 10m 9.6 - 9.7 flt zne minor gouge Basal contact shear	 60 	 Chlorite Mod-int dol'n Sil'n	 3% diss'd py	 R2-R3
11.50 TO 18.10	«MFLT»	Colour - pale green Grain size - aphanitic Yellow sericitic lapilli in a pervasive silicified & dolomitic matrix. Lapilli stretched along fol'n 2 to 3: 1 Foliation @ 13m 15m 17.8m 15.2 - 15.7 - healed flt zne 15.9 - 16.1 - flt zne 16.5 - 16.7 - flt zne 17.2 - 17.4 - flt zne with gouge Basal contact gradational	 54 40 48 	 Mod-int Dol & Sil'n Chlorite Alt increase down hole	 2-3% diss'd py	 R-2
18.10 TO 26.30	«ALT MAF/ SIL ARG & FLTS»	Colour - black & olive green Well banded & mixed silicified graphitic argillite and altered mafics. Mod-intensely tectonitic & flted. 18.7 - 19.0 - flt zne with Bx & gouge 19.8 - 19.85 - Minor flt gouge Foliation @ 19.1m	 32	 Chlorite, greenish yellow sericite graphite Sil'n & dol'n	 Tr 1% py as Xstal & blebs	 R1-R0

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		20 m	39			
		20.5m	46			
		26 m	58			
		20.7 - 24.9 - flt zne, Bx (A+&R1+R0)				
		24.9 - 25.6 - flt zne Bx & gouge (A-&R0)				
		25.6 - 25.9 - flt rubble				
		╡20.7 - 25.9╞ «flt zne»				
26.30 TO 28.90	«SERT MAF»	Colour - yellowish white Grain size - v. fine to aphanitic Pervasive yellow sericitic alt mafics. No disernable original textures other than volcanic. Qtz & qtz carb veinlets subparallel and X-cutting fol'n 27.8 - 27.9 - mod flt zne 28.2 - 28.3 - minor flt zne 28.5 - 28.6 - minor flt zne 28.7 - 28.9 - minor flt zne ╡28.2 - 28.4╞ «shearing» increasing to E.O.I. @ flt contact		Mod sil'n & dol 27.9 - E.O.I. pervasive yellow sert with qtz & qtz carb veinlets, boudinage & generally parallel to fol'n.	1-2% py as crystals & diss'd	R1
28.90 TO 36.10	«SIL SEDS/ QV/FLTS & smsx»	Colour - greyish white Grain size - v. fine Silver grey sericitic alteration. Qtz veining & mottled sed? inclusions too flted Faulted throughout with intervals as follows: 28.9 - 29.1 - flt zne 29.2 - 29.3 - flt gouge 29.3 - 29.8 - flt gouge (R00) 30.0 - 30.5 - Fubble zne 31.1 - 31.3 - Rubble & flted zne 31.4 - 31.6 - flt zne with gouge 31.8 - 31.9 - minor flt with gouge 32.0 - 32.1 - flt zne with gouge 32.2 - 32.4 - flt zne with minor gouge 32.4 - 32.8 - rubble 32.8 - 33.1 - gouge (R00) 33.2 - 33.3 - Flt zne 33.4 - 35.2 - flt gouge & Bx (R0) 35.9 - 36.0 - flt zne		V. weak dol'n & pervasive sil'n Silver grey sericite Local yellow sericite 32.2 - 32.4 - yellow sert	4-5% diss'd py throughout Tr - 2% Tt & tr - 4% Cp&Gn&Sp variable throughout due to flting	R1-R0

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
36.10 TO 50.30	«SIL SEDS/ MUT»	Colour - grey Grain size - v. fine to aphanitic				
		Silver grey sericitic, locally pervasive sil'n & greyish white qtz veinlets subparallel to fol'n. Faulting continues from previous section. 36.1 - 36.4 - flt zne 36.6 - 36.9 - minor shearing 37.8 - 39.0 - flt zne with gouge 40.0 - 40.1 - flt zne gouged 43.4 - 43.5 - minor flt zne 44.6 - 44.75 - minor flt zne		Silver grey sericite, patchy sil'n increases down hole	8% py 39.0 - 40.0 - 12% py 40.1 - 40.4 «3%Cp&Gn2%SpTr.Tt» qtz flooded 43.8 - 43.9 - 4%Gn3%Sp	R1-R2 T.O.I. to approx 45m R2 - 45 to E.O.H.
		Foliation @ 39.5m 45.5m 48m	45 57 65			
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30858	29.80	30.10	0.30	0.12	0.12	0.05	82.4	0.32									
BCD30859	30.10	31.10	1.00	0.88	0.54	0.04	852.1	1.58						2.54			
BCD30860	31.10	31.40	0.30	0.58	0.18	0.08	555.8	0.79						2.60			
BCD30861	31.40	31.80	0.40	4.52	4.38	0.08	4730	7.50						2.85			
BCD30862	31.80	33.10	1.30	0.82	5.32	3.43	720.4	0.98						2.79			
BCD30863	33.10	33.50	0.40	0.14	0.31	0.16	110.8	0.37						2.93			
BCD30864	33.50	35.10	1.60	0.05	0.13	0.10	21.3	0.52									
BCD30865	35.10	36.10	1.00	0.09	0.12	0.10	63.5	0.50									
BCD30866	36.10	36.60	0.50	0.45	0.80	0.32	32.4	0.41									
BCD30867	36.60	37.80	1.20	0.09	1.09	0.83	53.6	0.57									
BCD30868	37.80	39.00	1.20	0.57	2.68	1.77	139.8	0.58						2.86			
BCD30869	39.00	40.10	1.10	0.04	0.02	0.08	13.7	0.44									
BCD30870	40.10	40.40	0.30	1.51	0.22	0.12	199.7	0.97						2.52			
BCD30871	40.40	42.90	2.50	0.11	0.41	0.13	65.4	0.23									
BCD30872	42.90	43.80	0.90	0.02	0.02	0.03	14.4	0.19									
BCD30873	43.80	43.90	0.10	0.11	1.58	6.68	199.5	0.37						2.67			
BCD30874	43.90	45.90	2.00	0.03	0.57	0.11	18.9	0.10									

MINNOVA INC.

HOLE NUMBER: U1330-86 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -48° 0' 0"
LENGTH OF THE HOLE: 46.90m
START DEPTH: 0.00m
FINAL DEPTH: 46.90m

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

DATE STARTED: March 14, 1991
DATE COMPLETED: March 14, 1991
DATE LOGGED: March 23, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-48° 0'	ACID		OK	-	-	-	-	-	
46.90	-	-48° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 9.80	«MT» MAFIC TUFF	Colour - pale to dark green Grain size - aphanitic				Rock Mechanic notations using Piteau codes
		V. poor banding Mottled with qtz & qtz carb veining, veining decreasing down hole & occ boudinaged 3.9 - 4.2 - flt zne 4.5 - 4.6 - flt zne		Mod-Dol pervasive sil'n - Dol increases down hole. Chlorite	3% py	R2
		Foliation @ 3m 9m	72 67			
9.80 TO 15.10	«MFLT»	Colour - pale green Grain size - aphanitic				
		Mod yellow sericitic alt lapilli occ. fractured by late qtz & qtz carb veinlets, in a dolomitic, silicified matrix. 11.8 - 11.9 - fracture flt zne 14.2 - 14.9 - flt zne. Rubble to broken tr gouge		Yellow sericite mod-strong dol chlorite	3% py	R2 - local R3
		Foliation @ 11m 13.5m	62 58			
15.10 TO 17.10	«ALT MAF»	Colour - pale to dark green Grain size - aphanitic				
		Locally banded pervasive sil'n & dolomite Original textures undisernable		Chlorite, mod-strong dol pervasive sil'n	2-3% py	R2
		Foliation @ 16.5m	68			
		Bottom contact flted & extremely friable 17.0 - 17.2 «flt gouge»				
17.10 TO 24.90	«SIL ARG/ ALT MAF & FLTS»	Colour - black and dark green Grain size - v. fine to aphanitic				
		Interbanded silicified graphitic arg and altered mafics. Flted throughout interval & mod tectonitics.		Pervasive sil'n patching mod-weak dol	1-3% diss'd v. fine py	R1
		Foliation @ 17.5m	62			
		18.2 - 19.6 - from previous interval 18.2 - 19.6 - rubble to bx 20.4 - 20.7 - rubble to broken 21.3 - 21.6 - flt zne 22.5 - 24.0 - flt zne 24.2 - 25.0 - flt zne				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
24.90 TO 43.30	«QV/SEDSERT»	Colour - white and yellow Grain size - v. fine & massive				
		Yellow sericitic alt sediments within massive qtz vein with mottled greyish white qtz flooded sed inclusions Flted to 25.0 from previous interval 25.4 - 25.6 - flt zne 26.6 - 27.1 - healed bx 27.2 - 27.7 - flt zne 42.7 - 42.8 - minor flt 43.1 - 43.2 - flt zne Foliation @ 30.5m 40.0 m 42.4m	54 75 74	Locally intense yellow sericite and mixed sert mottled seds & qv with the following intervals dominent: 24.9 - 25.6 - sert 25.6 - 26.3 - QV 26.3 - 27.1 - sert 27.1 - 29.9 - 65%Qtz Carb matrix 29.9 - 31.7 - sert 31.7 - 39.4 - QV to mottled seds 39.4 - 40.4 - sert 40.4 - 42.0 - QV 42.0 - 43.3 - Sert	Sulphides variable 10% py 3%Gn&Sp2%Tt over interval 29.9 - 31.7 contorted to boudinaged py bands [29.3 - 29.9] «SMSX»	R2 - sericitized seds R3-R4 - qtz vein 29.9 - 31.7 contorted to boudinaged py bands
43.30 TO 46.90	«SIL SEDS&FLTS»	Colour - grey Grain size - v. fine				
		Silver grey sericitized silicified seds. Faulting, breccia & minor gouge throughout. Greyish white qtz veining 43.4 - 43.5 - minor flt 44.2 - 45.0 - flt zne 45.2 - E.O.H. - flting & shearing throughout Foliation: 43.5m	64	Silver grey sericite (MUT) [44.2 - 44.4] Yellow «sert» & QV flted	8% py diss' throughout	R1-R0
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30875	24.90	25.60	0.70	0.01	0.01	0.01	.7	0.03									
BCD30876	25.60	26.30	0.70	0.03	0.01	0.01.	5.3	0.12									
BCD30877	26.30	27.10	0.80	0.07	0.65	0.75	64.5	0.13									
BCD30878	27.10	28.20	1.10	3.89	6.18	4.18	2516	2.71						3.09			
BCD30879	28.20	29.30	1.10	0.07	0.03	0.03	56.5	0.25									
BCD30880	29.30	29.90	0.60	1.09	0.33	0.06	953.0	1.42						2.62			
BCD30881	29.90	31.70	1.80	0.01	0.01	0.01	4.8	0.03									
BCD30882	31.70	33.20	1.50	0.13	0.01	0.01	134.8	0.10						2.72			
BCD30883	33.20	34.70	1.50	0.16	0.17	0.01	158.7	0.11						2.61			
BCD30884	34.70	37.10	2.40	0.06	0.01	0.01	58.6	0.04									
BCD30885	37.10	39.40	2.30	1.01	0.77	0.11	956.2	1.46						2.67			
BCD30886	39.40	40.40	1.00	0.02	0.01	0.01	18.9	0.07									
BCD30887	40.40	42.00	1.60	0.18	0.09	0.01	179.8	0.30						2.58			
BCD30888	42.00	43.30	1.30	0.01	0.01	0.01	10.8	0.06									
BCD30998	43.20	44.40	1.20	0.01	0.04	0.04	6.6	0.22									
BCD30889	44.40	44.60	0.20	1.12	5.32	2.89	923.8	1.61						2.93			
BCD30890	44.60	46.00	1.40	0.57	1.68	0.96	406.0	0.72						2.68			
BCD30999	46.00	46.90	0.90	0.25	0.66	0.34	201.6	0.31						2.52			

NIMNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: U6
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -80° 0' 0"
LENGTH OF THE HOLE: 97.50m
START DEPTH: 0.00m
FINAL DEPTH: 97.50m

COLLAR GRID AZIMUTH: 360° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: March 15, 1991
DATE COMPLETED: March 25, 1991
DATE LOGGED: April 15, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE: DROPPED RODS IN HOLE MARCH 16/91 HOLE ABANDONED MARCH 25/91

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-80° 0'	ACID		OK	-	-	-	-	-	
45.70	-	-80° 0'	ACID		OK	-	-	-	-	-	
97.50	-	-80° 0'	ACID		OK	-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic notations using Piteau Codes
0.60 TO 4.10	«MFLT»	Colour - pale green Grain size - aphanitic Yellow sericitic altered lapilli in a dolomitic matrix, alteration increasing down hole to a alt mafic with ghosted lapilli by 2.0m 1.4 - 1.5 - flt gouge with 3 cm carb vein within gouge 1.8 - 2.0 - minor partially healed flt zne 3.0 - 3.1 - minor flt zne Foliation @ 1.2 3.2	 42 42	Yellow sericitic altered lapilli ferro-dolomite Alt increases down hole	3% diss'd py	R2-R3
4.10 TO 6.00	«MT»	Colour - dark green Grain size - aphanitic Mottled with qtz and qtz carb veinlets, weak - mod tectonic, and veinlets boudinaged Foliation 4.4m 5.1m	 38 46	Mod-ferro dolomitic alt & mod-strong silicification & 1-2mm blebs of leucoxene	3% diss'd py	R2-R3
6.00 TO 15.90	«ALT MAF»	Colour - pale greyish green Grain size - aphanitic Ferro-dolomitic alteration with pervasive silicification and stretched qtz carb veins with yellow sericitic wisps 11.0 - 11.1 - minor flt 12.0 - 12.1 - minor flting & fractures @13.2 - 3 cm gouge Foliation @ 7.7m 10.6 12.8 14.6	 54 44 51 52	Strong ferro-dolomite and silicification. Yellow sericitic wisps throughout but stops abruptly @ 13.0m	2-3% diss'd py	R3
15.90 TO 23.70	«SIL ARG/ ALT MAF & FLTS»	Colour - black & greyish green Grain size - v. fine to aphanitic Interbanded, faulted, silicified locally graphitic argillite and dolomitic altered mafics. Faulted throughout		Patchy silicification throughout and weak ferro dolomitic alt of mafics	2% py	R2-R2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		15.9 - 17.4 - flt zne				
		17.7 - 19.0 - flt zne				
		21.5 - 21.7 - flt gouge				
		22.7 - 22.9 - flt gouge				
		23.1 - 23.7 - intermittent faults & shears				
23.70 TO 28.20	«SERT MAF & FLTS»	Colour - pale greyish green Grain size - v. fine to aphanitic				
		Greenish yellow sericitic altered, weakly dolomitic, mafics. Faulting throughout.		Greenish yellow sericite weakly dolomitic and weak silicification	3-4% diss'd py	R0-R1
		25.8 - 27.1 - flt gouge & bx, R0				
		27.4 - 27.7 - minor flting, R1				
		27.7 - 28.7 - flt gouge & bx R0				
		Foliation @ 27.3m	38			
28.20 TO 32.30	«SERT SILTS & ARG»	Colour - pale greyish green and black Grain size - v. fine				
		Yellow & local silver grey sericite. local silicified graphitic argillite. Mod-weakly tectonitic and intermittent faults		Yellow & lesser silver grey sericite Patch silicification throughout Local sil'd graphitic arg.	2-3% diss'd py with a veinlet of 10-15% 3-5cm @30.2-30.25	R1
		30.25 - 30.8 - flt gouge R0				
		30.8 - 31.1 - minor flting				
		31.1 - 31.3 - sil'd graphitic arg				
		Foliation @ 29.7m	64			
		32.0	46			
32.30 TO 97.50	«PY SIL SEDS/MUT»	Colour - grey Grain size - fine				
		Silver grey sericitic altered mod-silicified seds. Greyish white and white qtz veinlets throughout		Silver grey sericite Mod silicification. Heterolithic, with clasts to 1.5cm from T.O.I. to 34.3m	8% diss'd py with intervals up to 15% Tr Sp with qtz veins throughout with intervals up to 2%Gn&Sp	R2-R3
		Foliation @ 34 m	37			
		40 m	32			
		39.6 - 39.8 - flt gouge & bx				
		╟44.4 - 45.3╢ graphitic silicified argillite with distorted qtz and pyrite veinlets «Gr Arg10%pTrSp»			41.6 - 43.4 - tr tet within qtz veinlets	
		45.5 - 45.7 - flted & rubble zne				
		45.7 - 45.9 - arg wisps				
		48.8 - 49.0 - flt zne with gouge				
		Foliation @ 46.4	40			
		53	83		╟50.4 - 51.0╢ «15%py2.0%gn1.5%sp»	
		57.1	51		52.3 - 54.5 10%py,1.5-2%Gn&Sp	

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		61.0	52		Tr-1%Tt, as blebs in qtz veins	
		65.4	40			
		68.2	37		57.0 - 58.4 - 12%py graphitic arg	
		72	30		wisps	
		77.4	31			
		82.0	35			
		⎧58.4 - 58.8⎫ «flt»gouge			59.6 - 60.4 - distorted bedded	
		⎩			pyrite, 12-15% py	
		73.3 - 73.4 - minor shear			60.4 - 62.9 Tr Sp&Gn with qtz veins	
		74.9 - 75.0 - minor shear zne				
		75.9 - 76.0 - flt zne with 5 cm gouge			66.2 - 67.2 - 1.5-2% Gn & Sp	
					⎧80.6 - 80.5⎫ «2%Tt»	
					⎩	
					80.6 - 81.0 carb vein stockworked	
					by a later qtz pulse carrying tet	
					Veining subparallel @ 81.0	
					One half of the core remains with the	
					carb qtz vein to 81.15	
					@ 81.15 - 81.18 - flted with gouge	
					81.37 - 81.46 carb qtz vein on	
					one half of core.	
					@ 81.46 - 81.55 shearing	
					88.4 - 92.7 qtz carb veinlets	
					with 1-2% tet within veinlets	
					Tr Tet overall	
				@94.5 - 94.6 green talc		
				⎧93.8 - 97.5⎫ v. weak sil'n		
		94.3 - 97.5 shearing zone in less silicified MUT		⎩		
				«MUT»	96.4 - 96.8 9% py as pyritohedrons	
		95.6 - 95.8 - flt gouge				
		96.4 - 96.8 - flt gouge				
		Foliation @ 93.5	32			
		94.5	23			
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD31179	36.60	38.10	1.50	0.03	0.12	0.11	8.3	0.37									
BCD31180	41.60	43.40	1.80	0.31	0.48	0.35	138.4	0.28						2.95			
BCD31181	43.40	44.40	1.00	0.07	0.71	0.24	23.1	0.21									
BCD31182	44.40	45.30	0.90	0.11	0.53	0.30	32.4	0.18									
BCD31183	45.30	45.70	0.40	0.03	0.19	0.36	11.7	0.26									
BCD31184	48.80	50.40	1.60	0.20	0.55	0.15	86.7	0.47									
BCD31185	50.40	51.00	0.60	0.36	4.14	1.38	312.4	0.81						2.98			
BCD31186	51.00	52.30	1.30	0.03	0.39	0.12	14.9	0.43									
BCD31187	52.30	54.50	2.20	0.81	2.62	2.62	374.6	0.75						2.83			
BCD31188	54.50	57.00	2.50	0.02	0.40	0.24	13.1	0.18									
BCD31189	57.00	58.40	1.40	0.01	0.02	0.04	5.3	0.47									
BCD31190	58.40	58.80	0.40	0.01	0.07	0.09	11.0	0.59									
BCD31191	58.80	59.60	0.80	0.02	0.25	0.07	22.1	0.83									
BCD31192	59.60	60.40	0.80	0.06	0.73	0.21	41.2	0.62									
BCD31193	60.40	62.90	2.50	0.02	0.77	0.36	19.7	0.28									
BCD31194	65.00	65.70	0.70	0.04	0.59	0.87	44.6	0.29									
BCD31195	65.70	66.20	0.50	0.03	0.10	0.09	10.6	0.34									
BCD31196	66.20	67.20	1.00	0.07	2.44	1.50	41.3	0.23									
BCD31197	67.20	68.70	1.50	0.02	0.17	0.15	8.4	0.27									
BCD31198	73.40	74.90	1.50	0.02	0.69	0.82	19.3	0.37									
BCD31199	74.90	77.40	2.50	0.07	1.34	1.12	39.7	0.28									
BCD31200	77.40	79.40	2.00	0.04	0.35	0.30	26.4	0.31									
BCD31201	79.40	80.60	1.20	0.08	0.12	0.17	31.3	0.34									
BCD31202	80.60	81.00	0.40	3.18	0.35	0.05	1158	1.40						2.71			
BCD31203	81.00	81.50	0.50	0.25	0.70	0.32	90.2	0.51									
BCD31204	81.50	82.50	1.00	0.30	0.66	0.35	99.8	0.39									
BCD31205	86.90	87.10	0.20	0.10	0.57	0.15	33.2	0.62									
BCD31206	87.10	88.40	1.30	0.02	0.06	0.07	8.1	0.53									
BCD31207	88.40	89.10	0.70	0.33	0.39	0.21	114.5	0.80						2.77			
BCD31208	89.10	89.90	0.80	0.11	0.10	0.09	32.4	0.47									
BCD31209	89.90	91.70	1.80	0.19	0.33	0.15	64.6	0.65									
BCD31210	91.70	92.70	1.00	0.12	0.05	0.04	35.7	0.51									
BCD31211	96.40	96.80	0.40	0.05	0.28	0.09	7.2	0.65									

MINNOVA INC.

HOLE NUMBER: U1330-88 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -55° 0' 0"
LENGTH OF THE HOLE: 567.00m
START DEPTH: 0.00m
FINAL DEPTH: 567.00m

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

DATE STARTED: March 17, 1991
DATE COMPLETED: March 17, 1991
DATE LOGGED: March 21, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-55° 0'	ACID		OK	-	-	-	-	-	
56.70	-	-55° 0'	ACID		OK	-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic notations using Piteau Codes
0.60 TO 8.40	«MT» MAFIC TUFF	Colour - pale to dark green Grain size - aphanitic Tectonitic and mottled with qtz & qtz carb veinlets. Occ boudinaged. 1.3 - 1.4 - minor flt zn 7.3 - 7.4 minor flt zne Foliation: 2m 6.8	 60 70	Mod dol & pervasive sil'n. Tr fuchsite	3% diss'd py	R2-R3
8.40 TO 15.10	«MFLT» MAFIC LAPILLI TUFF	Colour - pale green Grain size - aphanitic Yellow sericitized lapilli in a dolomitic silicified matrix Foliation @ 9m 14.5m	 67 66	Mod-strong dol pervasive sil'n. Both alt increase down hole	2-3% diss'd py	R2-R3
15.10 TO 18.00	«ALT MAF»	Colour - dark green Grain size - aphanitic Intensely alt mafics with no visible original textures Foliation @ 15.5m Contact gradational	 65 	Pervasive sil'n and mod. weak dol.	1-2% diss'd py & 1% as blebs within qtz flooded intervals.	R2-R3
18.00 TO 25.40	«SIL AR6/ ALT MAF & FLTS»	Colour - black and greyish green Grain size - aphanitic Tectonitic interbanded silicified graphitic arg and altered mafics. Intermitent flts throughout, with major flt with gouge @ 22.9 - 23.9 - intense flting & gouge Foliation @ 19m	 72	Patchy sil'n and weak dol.	1-3% diss'd & bleb py 20.0 - 20.2 - 2%CpTr-1%Gn+Sp 15%py	R1
25.40 TO 30.80	«SERT MAF & QV	Colour - pale greenish yellow Grain size - v. fine Yellow sericite, intensely altered mafics, v. friable and mod tectonitic	 	Yellow sericite tr. fuchsite & chlorite	5-6% Py	R1-R0

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		28.5 - E.O.I. qtz & qtz carb veining intermittent flting throughout, increasing in intensity down hole 26.3 - 26.5 - flt gouge 26.4 - 27.4 - flt zne 27.4 - 28.6 - minor flting & shearing 28.6 - 28.7 - flt gouge 29.1 - 29.5 - flt zne 29.9 - 30.8 flt zne with gouge Foliation @ 26.5m 3.0m	 68 54	@ top of interval		
30.80 TO 42.50	«QV/SED ALT SED»	Colour - white and grey Grain size - v. fine and massive				
		White and greyish white qtz veining with mottled fine light greyish white qtz flooded sedimentary inclusions. Localized zones of sert & mut		Locally intense yellow & grey sericite 31.5 - 31.85 sert gouge	Variable throughout from barren bull qtz to flted bxed SMSX.	Ave = R2 (R0-R3)
		Flted throughout: 31.4 - 31.45 flt gouge 31.5 - 31.85 flt gouge 32.0 - 32.4 flt zne 32.8 - 33.1 flt zne bx & gouge 33.4 - 33.5 flt zne 33.7 - 33.8 flt zne 34.0 - 35.4 flt zne bx-gouge to v. broken 36.0 - 37.2 flt zne with (R00) gouge 36.4 - 36.6 39.3 - 39.9 flt zne Fol'n variable in flting @ 36m 37.6m 40m 43m Contact gradational	 65 30 60 80	 38.7 - 39.3 - qtz & qtz carb vein with Tr Tet & Base Mtls	31.85 - 33.4 SMSX & mottled sed inclusions 39.9 - 40.2 relatively unfaulted SMSX interval sampled for host rock values	
42.50 TO 46.30	«SIL SED/ MUT»	Colour - grey Grain size - v. fine				
		Silver grey sericitized silicified v. fine grained pyritic sediments. Minor flts and shears throughout 44.9 - 45.4 flt zne 45.7 - 46.4 flt zne with gouge Foliation: 45.5m Contact flted.	 76	Silver grey sericite Patchy sil'n	8% diss'd py & tr. Sp throughout 44.2 - 44.6 Tr Cp&Gn&Sp&Tt in qtz veinlets.	R2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE		ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
46.30 TO 56.70	«QV/SERT»	Colour - white and olive green Grain size - v. fine					
		Yellow & occ silver grey sericitic alt sediments with qtz & qtz carb veining throughout. Seds mod tectonic and occ competency sheared @ contacts with qtz veining.			Yellow & occ silver grey sericite.	5-8% py overall	R2
		Flts: 46.6 - 47.0 flt zne Bx with gouge 47.6 - 47.9 flt zne Bx with gouge 48.2 - 48.6 flt zne in MUT				46.6 - 47.2 - 12%py within flts, sert & qv 47.2 - 47.6 - 15-18% py in qv	
		Variable fol'n	47m	64			
			51.5	58	Tr green talc @ 47.7m		
			53	54			
			55m	78			

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30897	0.14	33.40	33.26	1.58	2.78	1.28	2234	3.00						2.73			
BCD30891	19.50	20.00	0.50	0.03	0.05	0.06	21.5	0.07									
BCD30892	20.00	20.20	0.20	0.19	3.17	3.68	57.8	0.23									
BCD30893	20.20	20.70	0.50	0.02	0.28	0.19	5.2	0.03									
BCD30894	29.80	30.80	1.00	0.04	0.02	0.07	33.6	0.16									
BCD30895	30.80	31.50	0.70	0.26	0.05	0.02	254.3	0.46						2.66			
BCD30896	31.50	31.85	0.35	0.15	0.15	0.11	144.8	0.28						2.65			
BCD30898	33.40	34.70	1.30	0.14	0.10	0.03	86.7	0.14									
BCD30899	34.70	37.20	2.50	1.17	4.47	2.55	1285	2.15						3.04			
BCD30900	37.20	38.70	1.50	1.45	3.04	0.52	1825	2.38						2.76			
BCD30901	38.70	39.30	0.60	0.37	0.17	0.07 3	42.8	0.69						2.71			
BCD30902	39.30	39.90	0.60	0.07	7.53	4.98	341.6	1.04						2.97			
BCD30903	39.90	40.20	0.30	1.18	10.40	8.09	1895	2.76						3.18			
BCD30904	40.20	42.50	2.30	0.73	2.48	1.47	558.9	0.92						2.76			
BCD30905	42.50	44.20	1.70	0.18	0.14	0.08	131.5	0.59						2.68			
BCD30906	44.20	44.60	0.40	3.78	1.12	0.69	3070	5.66						2.82			
BCD30907	44.60	47.20	2.60	0.19	0.04	0.09	116.8	0.67						3.03			
BCD30908	47.20	47.60	0.40	0.02	0.01	0.06	22.5	0.21									
BCD30909	47.60	47.90	0.30	0.01	0.01	0.01	7.1	0.13									

MINNOVA INC.

HOLE NUMBER: U1330-89 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG	PLOTTING COORDS GRID: FIELD	ALTERNATE COORDS GRID:	COLLAR DIP: -76° 0' 0"
PROJECT NUMBER: SAM	NORTH:	NORTH: 0+ 0	LENGTH OF THE HOLE: 57.90m
CLAIM NUMBER:	EAST:	EAST: 0+ 0	START DEPTH: 0.00m
LOCATION: DRIFT	ELEV:	ELEV: 0.00	FINAL DEPTH: 57.90m

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

DATE STARTED:	March 17, 1991	COLLAR SURVEY: YES	PULSE EM SURVEY: NO	CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED:	March 17, 1991	MULTISHOT SURVEY: YES	PLUGGED: YES	CASING:
DATE LOGGED:	March 24, 1991	RQD LOG: NO	HOLE SIZE: BTW	CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-76° 0'	ACID		OK	-	-	-	-	-	
57.90	-	-76° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic notations using Piteau Codes
0.60 TO 9.00	«MT»	Colour - Pale to dark green Grain size - aphanitic				
		Mod tectonitic and mottled with qtz and qtz carb veinlets, locally boudinaged		Mod Dolomitic pervasive sil'n	3% py diss'd	R2 - R3
		2.7 - 2.9 - flt zne				
		3.1 - 3.4 - minor flting dip =	63			
		Foliation @ 3 m=	48			
		7.5m	69			
		8.8 - 9.2 - minor shearing near basal contact				
9.00 TO 15.60	«MFLT»	Colour - pale green Grain size - aphanitic				
		Moderate yellow sericitized lapilli in a dolomitic and silicified matrix. 14.6 - 15.8 - v. compact partially healed flting with bx & gouge.		Mod - strong dolomite pervasive sil'n. Alteration decreasing down hole.	3-4% py diss'd	R2-R3
		Foliation @ 10.5m	64			
		13.8m	62			
15.60 TO 21.90	«SIL ARG/ ALT MAF & FLTS»	Colour - black and greyish green Grain size - v. fine to aphanitic				
		Interbanded graphitic silicified arg and altered mafics. Flted throughout, Bx and gouge, generally v. compact. Mod Tectonitic Major faulted intervals: 16.0 - 16.9 - Flt Bx partially healed 17.3 - 17.9 - flt bx 18.3 - 18.4 - flt bx 18.7 - 18.9 - flt zne mod gouge 19.1 - 19.7 - flt zne partially healed 19.9 - 20.2 - flt bx partially healed 21.0 - 21.2 - flt zne 21.5 - 21.8 - flt zne with partially healed bx.		Patch sil'n of graphitic arg & weak local dol'n	2-3% py diss'd	R1-R2
		Foliation @ 17m	70			
		19.8m	76			

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
21.90 TO 25.90	«SERT MAF & QV/FLT»	Colour - pale greenish yellow Grain size - v. fine to aphanitic Yellow sericite, intensely altered mafics friable & tectonitic and flted throughout and into next interval. 22.0 - 22.3 - flt zne 22.5 - 31.4 - flt zne gouge & bx (R0) [22.0 - 31.4] «flt zne» Foliation variable 22.5m 22.9 25	62 55 75	Yellow sericitic and weak chlorite	3% diss'd py	R1 - R0
25.90 TO 33.40	«ALT SEDS/ MUT & FLTS»	Colour - grey Grain size - v. fine Silver grey sericitic alt seds, very friable and extensively faulted (to 31.4m as indicated in previous interval) with mottled fine light greyish white qtz flooded sedimentary inclusions. 31.7 - 32.0 - flt gouge 32.8 - 33.4 - mod shearing Foliation @ 29m 32.1 Contact gradional @ contact 33.4	54 58 60	Silver grey sericite weak sil'n. [32.4 - 32.6] yellow «sert»	Variable sulphides 5-8% py diss'd throughout 32.0 - 32.9 - 10-12% py	R0-R1
33.40 TO 53.90	«SIL SEDS/ MUT»	Colour - grey Grain size - v. fine White and greyish white qtz veinlets and pervasively silicified silver grey sericitic seds. Locally weakly friable [33.9 - 35.4] « flt zne» 33.9 - 34.8 - flt zne 35.0 - 35.4 - flt zne Foliation @ 33.5	56	Silver grey sericite - mod sil'n and pyrite	10% py throughout to 35.5 5% py 35.5 to E.O.I. 33.4 - 33.9 - 12-15% py 1%Cp 1.5% Gn&Sp Tr. 1& Tt [35.1 - 35.4] «20% Cp» [37.6 - 38.5] «SMSX» 39.7 - 40.7 - 15% py	R1

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		36.9 - 37.6 - flt zne				
		Foliation @ 45m	68			
		48.0 - 52.5 «flt» zne		43.9 - 44.2 - Bull qtz vein		
				47.6 - 47.7 - green talc within		
		Foliation @ 53.0m	44	veinlets		
					53.2 - 53.4 - qtz carb veining	
		53.4 - 53.9 - shearing			2% Gn 3% Sp	
53.90 TO 55.80	«SMSX&QV»	Colour - pyritic gold and white Grain size - semi massive				
		Qtz veining with v. minor qtz carb veinlets			18% py 1.5%Gn 1% Sp (1% Cp overall 55.0 - 55.3 - 25% py , 1%Cp 3%Gn 2.5% Sp	R2
				55.3 - 55.8 yellow sert with qv veining		
55.80 TO 57.90	«ALT SED & WACKE»	Colour - grey and yellow Grain size - fine				
		Mod yellow sericitic alteration of v. fine to fine silts & siltites and greyish sil'n of wacke intervals. Occ qtz vein sub parallel to fol"n		Yellow sert Mod sil'n (increases down hole)	1-2% diss'd py	R2
		Foliation @ 56m	45			
		57.5m	57			
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30910	24.90	25.90	1.00	0.01	0.02	0.01	2.5	0.03									
BCD30911	25.90	26.20	0.30	4.82	5.46	2.78	5338	3.81						2.87			
BCD30912	26.20	26.50	0.30	0.16	0.28	0.07	170.5	0.37						2.49			
BCD30913	26.50	29.00	2.50	0.74	7.93	4.19	729.4	1.31						2.76			
BCD30914	29.00	31.40	2.40	0.10	2.83	1.48	117.8	0.54						2.71			
BCD30915	31.40	32.00	0.60	0.03	0.19	0.15	31.7	0.35									
BCD30916	32.00	32.90	0.90	0.02	0.06	0.07	21.2	0.40									
BCD30917	32.90	33.40	0.50	0.85	0.91	0.18	264.7	0.64						2.84			
BCD30918	33.40	33.90	0.50	1.93	9.27	4.55	1415	2.58						3.25			
BCD30919	33.90	35.10	1.20	0.63	0.61	0.22	90.2	0.31									
BCD30920	35.10	35.40	0.30	19.20	0.21	0.07	596.8	0.81						3.60			
BCD30921	35.40	36.90	1.50	0.20	0.28	0.13	26.2	0.15									
BCD30922	36.90	37.60	0.70	1.02	1.68	0.83	335.6	0.41						2.71			
BCD30923	37.60	38.50	0.90	10.30	8.76	10.60	3141	2.66						3.57			
BCD30924	38.50	39.70	1.20	0.34	0.63	0.31	112.6	0.34						2.77			
BCD30925	39.70	40.70	1.00	0.12	0.94	0.59	58.7	0.19									
BCD30926	40.70	42.30	1.60	0.10	0.28	0.21	38.8	0.41									
BCD30927	42.30	43.90	1.60	0.61	1.71	1.54	186.8	0.75						2.81			
BCD30928	43.90	44.20	0.30	0.08	0.13	0.16	29.2	0.09									
BCD30929	44.20	44.70	0.50	0.26	1.03	0.43	78.7	0.49									
BCD30930	53.20	53.40	0.20	0.19	3.47	2.92	132.4	0.57						2.95			
BCD30931	53.40	53.90	0.50	0.19	1.06	0.66	53.6	0.35									
BCD30932	53.90	55.00	1.10	0.33	2.11	1.41	83.2	0.28									
BCD30933	55.00	55.30	0.30	1.09	10.30	11.20	418.8	0.64						3.89			
BCD30934	55.30	55.80	0.50	0.27	0.56	0.56	37.2	0.09									

MINNOVA INC.

HOLE NUMBER: U1330-90 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6 — PLOTTING COORDS GRID: FIELD — ALTERNATE COORDS GRID: — COLLAR DIP: -57° 0' 0"
PROJECT NUMBER: SAM — NORTH: — NORTH: 0+ 0 — LENGTH OF THE HOLE: 45.10m
CLAIM NUMBER: — EAST: — EAST: 0+ 0 — START DEPTH: 0.00m
LOCATION: DRIFT — ELEV: — ELEV: 0.00 — FINAL DEPTH: 45.10m

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

DATE STARTED: March 19, 1991 — COLLAR SURVEY: YES — PULSE EM SURVEY: NO — CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: March 19, 1991 — MULTISHOT SURVEY: YES — PLUGGED: YES — CASING:
DATE LOGGED: March 28, 1991 — RQD LOG: NO — HOLE SIZE: BTW — CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-57° 0'	ACID		OK	-	-	-	-	-	
45.10	-	-57° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic notations using Piteau Codes
0.60 TO 2.50	«MFLT»	Colour - pale to dark green Grain size - aphanitic Yellow sericitic alt lapilli in a dolomitic matrix. Occ qtz veins sub-parallel to fol'n Foliation @ 1m 1.8 - 2.0 - flt zne with rubble	 82	 Mod - strong sil'n Mod - strong dol Alt increases down hole to 1.8m where lapilli become ghosted and become no longer visible by 2.5m	 3% py diss'd	 R2
2.50 TO 11.60	«ALT MAF»	Colour - dark green Grain size - aphanitic Intensely alt (mod-strongly dol pervasive sil'n) mafics with qtz ceining and pervasive flooding Tectonitic and local minor flt zones: 5.0 - 5.1 - flt gouge 6.8 - 6.9 - flt gouge 7.8 - 7.9 - flt gouge Foliation 9m Fairly consistant	 76	 Pervasive sil'n and mod-strong dol'n	 1-2% diss'd py	 R2 - R3
11.60 TO 14.60	«MFLT»	Colour - pale to dark green Grain size - aphanitic Yellow sericitic alt lapilli in a dolomitic matrix. Occ qtz veins sub-parallel to fol'n. Fairly constant fol'n @ 12m 13.2m - 14.1 v. compact Bx gouge 14.4 - 14.6 - subhealed flt zne at contact	 80	 Mod-strong sil'n and dol'n at 11.5 - 11.7. Silicified graphitic wisps within mafics @ contact with v. minor shearing	 3% py diss'd	 R2
14.60 TO 22.40	«SIL ARG/ ALT MAF»	Colour - black and greyish green Grain size - v. fine to aphanitic Interbanded silicified graphitic arg and altered mafics. Mod - intense tectonitics and intermittent flting throughout. Occ py band and qtz vein boudinaged. Slightly variable fol'n @ 17m 14.7 - 17.7 - flt zne 18.2 - 18.5 - flt zne compact 20.7 - 20.9 - healed flting	 65	 Patchy intense sil'n and weak - mod - dol'n	 1-2% py diss'd	 R1

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		21.2 - 21.4 - flt zne with bx 21.6 - 21.7 - minor flting 22.2 - 23.3 - flt zne gouge & bx Contact faulted				
22.40 TO 30.40	«QV/ALT SEDS»	Colour - light grey Grain size - v. fine Silver grey and occ yellow sericitic alt seds. Qtz veining with silicified mottled sedimentary inclusions. Foliation @ 25m 23.8 - 23.9 - flt zne 23.9 - 24.4 - flting & fractures sub-parallel to core axis 26.0 - 26.2 - fractures sub-parallel to core axis 27.0 - 27.3 - minor flt zone 27.5 - 27.7 - minor flt zone 28.0 - 28.9 - flt zne 30.0 - 30.4 - shearing throughout	84	Silver grey and occ yellow sericite. Patchy sil'n 24.4 - 25.1 - sert 25.5 - 25.6 - sert	5-8% py diss'd & veined increasing down hole. 3-4% Cp&Gn&Sp & 1% Tt throughout 28.4 - 28.9 - sph blebs up to 2 cm wide	R1 - R2
30.40 TO 40.60	«SIL SEDS/ MUT»	Colour - grey Grain size - v. fine to aphanitic White and greyish white qtz veinlets and pervasively silicified silver grey sericitic seds Intermittent flts & shears throughout (decreasing in frequency down hole) locally friable 30.5 - 31.3 - minor flts and shears 31.7 - 32.3 - flt zne 32.8 - 34.8 - minor flting and shearing 34.8 - 35.0 partially healed flt & bx 35.0 - 35.6 minor shearing 36.1 - 36.2 - flt bx partially healed 36.4 - 36.5 «flt» gouge 36.5 - 38.3 - minor shearing 40.3 - 40.6 «flt» zne Foliation: 38m	74	Silver grey sericite, moderate sil'n and pyrite	8-10% py 36.2 - 36.4 - 20% py	R1-R2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
40.60 TO 42.20	«QV & ALT SEDS»	Colour - light grey Grain size - v. fine Silver grey sericitic alt seds. Qtz veining with mottled sedimentary mineralized inclusions. Qtz and Qtz carb veining ╪41.5 - 42.1╪ «flt» gouge foliation below flt indicating the hanging wall moved up in a thrust.		Silver grey sericite	╪40.6 - 41.5╪ «1%Cp&6n3%Sp» 42.1 - 42.2 15% py.	Thrusted ore intersection
42.20 TO 45.10	«SIL SEDS MUT»	Colour - grey Grain size - v. fine to aphanitic White and greyish white qtz veinlets and pervasive silicification Silver grey sericitic seds. Intermittent minor flts and shears throughout interval (like 30.4 - 40.6 interval) 42.4 - 42.6 - flt gouge		Silver grey sericite moderate sil'n and py	8-10% py (1% Sp as blebs within qtz veinlets or sil'd bands scattered throughout	R1 - R2
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30936	20.90	22.40	1.50	0.01	0.04	0.03	1.1	0.03									
BCD30937	22.40	23.20	0.80	0.01	0.03	0.01	2.1	0.03									
BCD30938	23.20	24.70	1.50	1.72	1.04	0.23	1610	2.05						2.86			
BCD30939	24.70	25.10	0.40	0.18	0.10	0.03	179.0	0.23						2.81			
BCD30940	25.10	26.60	1.50	1.08	0.98	0.04	1017	1.32						2.64			
BCD30941	26.60	27.70	1.10	1.52	0.94	0.13	1432	2.02						2.63			
BCD30942	27.70	28.40	0.70	1.02	0.88	0.39	945.0	1.43						2.67			
BCD30943	28.40	28.90	0.50	2.70	11.60	4.44	2561	2.79						3.42			
BCD30944	28.90	30.40	1.50	0.76	8.72	5.24	447.0	0.85						2.96			
BCD30945	30.40	31.40	1.00	0.58	2.32	1.44	418.3	0.82						2.62			
BCD30946	31.40	33.40	2.00	0.28	2.30	1.10	192.3	0.46						2.73			
BCD30947	33.40	34.40	1.00	0.38	0.98	0.76	204.6	0.51						2.59			
BCD30948	34.40	36.20	1.80	0.07	2.02	1.12	61.2	0.26									
BCD30949	36.20	36.40	0.20	0.04	7.54	5.38	128.9	0.54						3.04			
BCD30950	39.50	40.30	0.80	0.09	0.27	0.17	48.7	0.43									
BCD30951	40.30	40.60	0.30	1.54	6.96	4.20	1375	2.61						2.68			
BCD30952	40.60	40.80	0.20	0.54	15.40	9.80	529.0	1.17						3.41			
BCD30953	40.80	41.50	0.70	1.18	2.18	0.52	944.0	1.54						2.78			
BCD30954	41.50	42.10	0.60	1.48	9.46	5.24	592.0	1.31						2.98			
BCD30955	42.10	42.20	0.10	0.44	7.42	4.28	149.1	0.51						2.89			
BCD30956	42.20	43.60	1.40	0.21	3.00	1.86	124.5	0.47						2.70			
BCD30957	43.60	43.70	0.10	2.36	11.10	12.30	2220	4.30						4.40			
BCD30958	43.70	43.90	0.20	0.84	1.42	1.04	625.0	1.24						2.74			

MINNOVA INC.

HOLE NUMBER: U1330-91 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG | PLOTTING COORDS GRID: FIELD | ALTERNATE COORDS GRID: | COLLAR DIP: -80° 0' 0"
PROJECT NUMBER: SAM | NORTH: | NORTH: 0+ 0 | LENGTH OF THE HOLE: 51.80m
CLAIM NUMBER: | EAST: | EAST: 0+ 0 | START DEPTH: 0.00m
LOCATION: DRIFT | ELEV: | ELEV: 0.00 | FINAL DEPTH: 51.80m

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

DATE STARTED: March 19, 1991 | COLLAR SURVEY: YES | PULSE EM SURVEY: NO | CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: March 19, 1991 | MULTISHOT SURVEY: YES | PLUGGED: YES | CASING:
DATE LOGGED: April 2, 1991 | RQD LOG: NO | HOLE SIZE: BTW | CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-80° 0'	ACID		OK	-	-	-	-	-	
51.80	-	-83° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic notation using Piteau Codes
0.60 TO 4.50	«MFLT»	Colour - pale green Grain size - aphanitic Yellow sericitic altered lapilli in a dolomitic matrix. T.O.I. - 1.4 m very altered and chloritic 1.7 - 1.8 - flt zne	70	Yellow sericitic lapilli Mod - intense dol & sil'n	2-3% diss'd py	R2
4.50 TO 10.90	«ALT MAF»	Colour - Pale to dark green Grain size - aphanitic Intensely alt mafics, protolith possible MFLT, ghosted? lapilli throughout (over printing makes it difficult confirm). 5m	63	Mod - intense dolomite & sil'n	2-3% diss'd py	R2-R3
10.90 TO 13.20	«MFLT»	Colour - pale green Grain size - aphanitic Yellow sericitic altered lapilli in a dolomitic matrix (as MFLT interval above) 11.7 - 13.6 «flt» zne with gouge and breccia. Over laps to next interval		Yellow sericitic altered lapilli Mod-intense dolomite	2-3% diss'd py	R2 - (R1 @ E.O.I.)
13.20 TO 22.90	«SIL ARG ALT MAF»	Colour - Greyish green and black Grain size - v. fine to aphanitic Inter banded silicified graphitic Arg and altered mafics. Mod - int tectonics and intermittent flting throughout. Occ py bands & qtz veins, occ boudinaged. Foliation: 16.1m 18.4 22.0 Flted throughout with more major flts as follows: 14.0 - 14.4m - flt zne partially healed	74 67 60	Patchy intense sil'n and weak to moderate dol'n	1-2% diss'd py.	R1

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		14.6 - 14.8m - flt zne partially healed				
		15.0 - 15.2m - Flt zne partially healed				
		15.9 - 16.0m - flt zne				
		16.5 - 16.7 - flt zne				
		16.9 - 17.2 - flt zne partially healed				
		17.3 - 17.4 - flt gouge				
		17.9 - 18.1 - flt zne				
		19.2 - 19.4 - flt zne				
		19.9 - 20.1 - flt zne partially healed				
		20.2 - 21.0 - flt zne with rubble				
		21.1 - E.O.I. flt zne gouge & Bx				
22.90 TO 25.50	«SERT MAF»	Colour - yellowish olive Grain size - v. fine to aphanitic				
		Yellow sericitic altered mafics, possible sedimentary component. Tectonitized and flted.		Intense yellow sericite	1-2% diss'd py	R1
		╡23.3 - 24.4╞ «flt» zone gouge and bx 25.0 - 25.3 25.5 - 25.9 flt zne - Extends into next interval ╡25.0 - 25.9╞ «flt» Foliation: 23m 23.5m 25.0m	64 77 60			
25.50 TO 27.40	«ALT SEDS & QV»	Colour - grey Grain size - v. fine				
		Silver grey sericitic seds. Qtz veining with mottled sedimentary inclusions. Flted @ T.O.I. and E.O.I. ╡25/5 - 25.9╞ «flt»zone 26.1 - 26.15 flt zne 26.25 - 26.4 flt zne ╡26.5 - 27.1╞ «flt» gouge 27.2 - 27.5 minor flts and shearing Foliation @ 26.1m	46	Silver grey sericite	25.9 - 26.3 2%Cp2-3%Gn 1.5%Sp 2% Tt SMSX 26.3 - 26.5 - mottled sed inclusions 2-3% Base Mtls & Tr 1% Tt	R0 - R1
27.40 TO 35.10	«SIL SEDS/ MUT»	Colour - grey Grain size - v. fine				
		White and greyish white qtz veinlets with weak to moderate silicification of pyritic silver grey sericitic seds.		Silver grey sericite weak - mod silicification and mod-pyrite Sil'n increases down hole	12% py throughout	R1 - R2 @ E.O.I.

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		27.6 - 26.7 - flt zne				
		29.8 - 30.0 - flt zne				
		30.9 - 40.0 - flt gouge R0				
		Foliation @ 29.0m	44			
		31.0m	50			
35.10 TO 42.70	«QTZ CARB & SIL SEDS»	Colour - white and grey Grain size - fine to v. fine				
		Qtz carb veining within silicified silver grey sericitic seds.		Qtz carb veining Mod-int sil'n	12% py - tr - 1%Cp 1-1.5% Gn 1% Sp & Tr Tet throughout	R2
		Foliation @ 35.5m	48			
		41m	48			
42.70 TO 51.80	«SIL SEDS/ MUT»	Colour - grey Grain size - v. fine				
		White and greyish white qtz veinlets with moderate sil'n of silver grey sericitic seds.		Moderate sil'n with patchy intense sil'n	8-10% py diss'd	R2 Qtz veinlets occ tight to Ptygmatic generally subparallel to fol'n.
		44.2 - 44.6 «flt» zne				
		47.5 - 47.6 - flt zne				
		50.5 - 50.6 - flt zne				
		51.0 - 51.8 flt gouge & bx				
		Foliation @ 45m	53			
		48.5	56		49.9 - 50.2 qtz carb vein 3% Gn & 2.5% Sp	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD30981	24.50	25.50	1.00	0.01	0.03	0.01	2.5	0.07									
BCD30982	25.50	25.90	0.40	1.06	2.08	1.01	760.7	2.13						2.82			
BCD30983	25.90	26.30	0.40	3.24	2.88	1.22	3189	6.07						2.83			
BCD30984	26.30	26.50	0.20	0.14	0.16	0.11	125.6	0.35						2.69			
BCD30985	26.50	27.10	0.60	0.50	1.46	0.38	434.3	1.16						2.59			
BCD30986	27.10	27.40	0.30	0.44	1.84	0.93	367.8	1.44						2.88			
BCD30987	27.40	28.40	1.00	0.02	1.92	0.92	44.3	0.34									
BCD30988	33.60	35.10	1.50	0.44	1.01	0.38	241.3	0.62						2.77			
BCD30989	35.10	36.60	1.50	0.22	2.00	0.68	116.7	0.19						2.83			
BCD30990	36.60	38.10	1.50	0.48	2.76	0.41	296.7	0.57						2.70			
BCD30991	38.10	40.10	2.00	1.08	2.24	1.14	431.4	1.18						2.72			
BCD30992	40.10	41.10	1.00	0.10	4.30	5.68	117.1	0.20						2.84			
BCD30993	41.10	42.70	1.60	0.06	1.34	1.02	44.5	0.13									
BCD30994	42.70	44.20	1.50	0.19	0.31	0.35	98.9	0.19									
BCD31074	43.90	45.10	1.20	0.02	0.02	0.08	10.6	0.12									
BCD30995	48.90	49.90	1.00	0.01	0.14	0.06	9.2	0.42									
BCD30996	49.90	50.20	0.30	1.26	4.50	6.06	818.0	2.94						3.17			
BCD30997	50.20	51.80	1.60	0.01	0.09	0.09	13.1	0.37									

MINNOVA INC.

HOLE NUMBER: U1330-92 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -70° 0' 0"
LENGTH OF THE HOLE: 50.30m
START DEPTH: 0.00m
FINAL DEPTH: 50.30m

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

DATE STARTED: March 20, 1991
DATE COMPLETED: March 20, 1991
DATE LOGGED: April 4, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-69° 0'	ACID	OK	WEAK	-	-	-	-	-	
49.00	-	-71° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic Notations using Piteau Codes
0.60 TO 6.40	«MFLT»	Colour - pale green Grain size - aphanitic Yellow sericitic altered lapilli in a dolomatic matrix 1.1 - 1.3 - flt zne 1.7 - 2.1 - partially healed flt zne 2.3 - 2.7 - flt zne Foliation @ 1m 6m	 68 62	 Yellow sericite Mod - intense Dol & Sil'n	 2-3% py diss'd	 R2 & blocky with intermittent flts.
6.40 TO 10.00	«ALT MAF & FLTS»	Colour - dark to pale green Grain size - aphanitic Intermittent flts in a strongly altered, Dolomitic & silicified Mafic 9m	 65	 Mod-intense Dol & Sil'n	 2% diss'd py.	 R2
10.00 TO 14.10	«MFLT»	Colour - pale green Grain size - aphanitic Yellow sericitic altered lapilli in a dolomitic matrix Intermittent faults: 11.2 - 12.4 - rubble 5-8 cm blocks Foliation @ 12.5 12.9 - 13.2 - flt zne - rubble gouge 13.3 - 13.5 - minor flt zne intervals ends in gouged flted	 66 	 Yellow sericite Mod - intense dol'n & sil'n alteration increases down hole	 2-3% diss'd py	 R2-R1
14.10 TO 19.90	«SIL ARG/ ALT MAF»	Colour - greyish green & black Grain size - v. fine Interbanded black graphitic silicified argillite and altered greyish green dolomitized mafics. Moderately tectonic and faultet intermittently. [14.1 - 14.4] «flt» gouge 14.4 - 16.2 - flt & rubble zone 16.5 - 16.6 - flt gouge	 	 Patchy sil'n Moderate ferro-dol of mafic component	 3% pyrite with higher grade mineralization as indicated: 15.2 - 15.8 - 5-8%py3%cp [16.2-16.5] «30%py» 17.4 - 17.9 «15% py»	 R1

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		┤18.3 - 22.5├ «flt» gouge & bx				
		continues into next rock type				
		Foliation @ 15.5m	76			
		18.0m	62			
19.90 TO 22.50	«FLT/ SERT MAF»	Colour - greyish yellow Grain size - v. fine to aphanitic Flted yellow sericitic, silicified, weak to mod. dol mafics? Intense sericitic alt and flting protolith not certain		Yellow sericite weak-mod dol Patch sil'n	3-4% py	R1-R0
		Foliation @ 20.8	72			
22.50 TO 25.20	«QV & ALT SEDS»	Colour - greyish yellow & white Grain size - v. fine Qtz veining with yellow and occ grey sericitic altered seds. (Protolith possible seds due to presents of silver grey sericite?) Flted throughout and lower contact gouged. ┤22.9 - 23.4├ «flt» gouge & bx 23.6 - 23.7 flt zne with gouge 23.9 - 25.0 - intermittent flts with occ gouge ┤25.0 - 26.2├ «flt gouge» R1-R0 lower contact flted into next rock type		Yellow sericite occ silver grey sericite weak and sil'n 23.1 - 23.3 gouge with silver grey sericite Mottled "inclusion type ore	7-8% py 22.5 - 22.9 QV 8%py 1%sp (23.9 - 24.4 1.5%Cp2-3%Gn&Sp (1-2%Tt faulted (24.4 - 25.2 1%Cp2%Gn&Sph 1%Tt faulted	R1 - R0
		Foliation @ 23m	78			
25.20 TO 28.80	«ALT SEDS»	Colour - grey Grain size - aphanitic Very well layered (foliated), mylonite like texture, very weakly silicified silver grey sericitic seds. Thick flt gouge at T.O.I. and very thin flt gouged zine near E.O.I. 26.2 - 26.8 - shearing & gouge zone ┤28.65 - 28.70├ «flt»gouge R0		Yellowish green sericite Very weakly silicified which increases down hole into next interval. Contact at point where silicification increases.	5-7% py 27.7 - 27.9 10-15%py 1%Cp 2-3%Gn&Sp 2%Tt	R1-R2
		Foliation @ 27.0m	72		27.9 - 28.8 - 5% py	
		28.0	52			
		28.6	62			
		Lower contact abrupt & conformable				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
28.80 TO 43.00	«QV/SIL SEDS»	Colour - Greyish brown & white Grain size - fine				
		Greyish white & white qtz & occ. qtz carb veins and veinlets. Parallel to sub-parallel (occ tight to isoclinally folded) to foliation in a pyritic silicified matrix.		Mod-strong silicification pyritization	12-15% py Tr-1%Cp 1-2%Gn 1-2%Sp & Tr Tet throughout with intervals of 5-8% B. Mtls & 1%Tt	R2 (NOT MUT) highly silicified by flooding & qtz veins & very pyritic.
		Foliation @ 29m	61			
		30.6m	56			
		33 m	67			
		41m	60			
43.00 TO 50.30	«SIL SEDS/ MUT»	Colour - grey Grain size - v. fine				
		Silver grey sericitic, moderately pyritic with occ qtz & qtz carb veinlet		Mod silicification	5% py diss'd	
		45.0 - 45.7 - flt gouge			45.0 - 45.7 10-12% pyriteohedrons xstals up to 3cm	R1-R2 less pyrite & qtz/qtz-carb veining than previous interval.
		47.3 - 47.6 - minor flt zne				
		47.9 - 48.9 - flt zne with gouge				
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD31002	14.10	14.40	0.30	0.01	0.03	0.09	0.9	0.03									
BCD31003	14.40	15.20	0.80	0.26	0.79	0.64	5.2	0.03									
BCD31004	15.20	15.80	0.60	0.66	2.96	1.36	10.9	0.03									
BCD31005	15.80	16.20	0.40	0.04	0.10	0.16	1.0	0.03									
BCD31006	16.20	16.50	0.30	0.44	2.14	3.96	19.6	1.06						3.32			
BCD31007	16.50	17.40	0.90	0.05	0.65	0.50	3.2	0.03									
BCD31008	17.40	17.90	0.50	0.15	2.88	1.68	11.5	0.10									
BCD31009	17.90	19.90	2.00	0.01	0.10	0.18	2.3	0.03									
BCD31010	19.90	22.50	2.60	0.01	0.02	0.02	1.7	0.03									
BCD31011	22.50	22.90	0.40	0.01	0.29	0.01	2.1	0.04									
BCD31012	22.90	23.90	1.00	0.94	1.74	0.44	724.3	0.19						2.63			
BCD31013	23.90	24.40	0.50	0.47	0.44	0.11	409.6	0.79						2.71			
BCD31014	24.40	25.20	0.80	0.63	0.96	0.12	571.2	1.27						2.68			
BCD31015	25.20	26.20	1.00	0.54	9.16	4.28	531.9	1.13						3.21			
BCD31016	26.20	26.80	0.60	0.01	0.71	0.32	16.5	0.19									
BCD31017	26.80	27.90	1.10	0.54	5.90	2.66	518.8	1.19						3.39			
BCD31018	27.90	28.80	0.90	0.55	3.12	1.12	493.9	1.20						2.74			
BCD31019	28.80	30.50	1.70	0.53	1.66	0.91	248.6	0.67						2.69			
BCD31020	30.50	32.00	1.50	0.13	0.80	0.54	42.3	0.11									
BCD31021	32.00	33.50	1.50	1.46	4.22	2.56	665.4	1.86						3.11			
BCD31022	33.50	35.10	1.60	0.08	1.06	1.32	86.2	0.26									
BCD31023	35.10	36.60	1.50	0.26	1.32	0.20	138.1	0.41						2.84			
BCD31024	36.60	38.10	1.50	0.39	0.88	0.23	115.7	0.29						2.97			
BCD31025	38.10	39.60	1.50	1.62	5.62	3.02	704.1	1.80						2.92			
BCD31026	39.60	41.10	1.50	0.04	0.92	0.19	28.7	0.17									
BCD31027	41.10	43.00	1.90	0.03	1.42	0.43	28.5	0.23									
BCD31028	43.00	45.00	2.00	0.08	0.90	0.24	37.1	0.31									
BCD31029	45.00	45.70	0.70	0.06	0.22	0.52	22.8	0.32									
BCD31030	45.70	50.00	4.30	0.04	0.30	0.28	39.4	0.36									

MINNOVA INC.

HOLE NUMBER: U1330-93 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -50° 0' 0"
LENGTH OF THE HOLE: 40.20m
START DEPTH: 0.00m
FINAL DEPTH: 40.20m

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

DATE STARTED: March 20, 1991
DATE COMPLETED: March 20, 1991
DATE LOGGED: April 4, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING: PULLED
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-51° 0'	ACID		OK	-	-	-	-	-	
39.00	-	-51° 0'	ACID		OK WEAK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic notations using Piteau Codes
0.60 TO 10.70	«FLT/MFLT»	Colour - Green Grain size - gouge Flted with gouge and bx. Yellow sericitic alt and lapilli dolomitic 1.4m - 13.1 - flt zne Foliation @ 1m	68	Yellow sericite	2-3% diss'd py	R1 faulting partially healed
10.70 TO 21.60	«SIL ARG & ALT MAF»	Colour - greyish green and black Grain size - fine to aphanitic Well banded interbedded, silicified graphitic arg and dolomitic alt mafics. Flted throughout. Foliation @ 13.5m @ 17.0m @ 20.8m 14.5 - 16.0 - flted zone 17.0 - 17.4 - flt zne 17.5 - 17.7 - flt gouge 17.7 - 18.2 - flt zne 18.4 - 18.6 - flt zne 19.0 - 20.3 - flt zne with gouge 20.8 - 20.9 - minor flt zne 21.0 - 21.5 - rubble 5 cm blocks	70 66 68			R1-R2
21.60 TO 27.40	«SERT MAF»	Colour - greyish green Grain size - v. fine to aphanitic Yellow sericitic alt mafics. Mod dolomitic and silicified. Qtz veining subparallel to fol'n and occ isoclinally folded. Foliation @ 25 21.8 - 22.4 flt zne 25.6 - 26.0 flt zne minor gouge 26.0 - 30.4 «flt» gouge & bx continues into next interval.	59	Yellow sert Mod dol & sil'n	3% diss'd py	R1-R2
27.40 TO 30.40	«FLT/QV ALT SEDS»	Colour - grey & yellow Grain size - gouge Flted yellow and occ grey sericite. Qtz & minor qtz carb veining with mottled		Yellow and occ silver grey sericite dol'n & sil'n of remnants	2-4% diss'd py.	R0-R1 (locally partially healed).

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		"inclusions" Too flted.				
30.40 TO 32.70	«ALT SEDS»	Colour - grey Grain size - v. fine to aphanitic Similar to U1330-92, 25.2 - 28.8m except moderately silicified. Well layered, foliated, almost mylonite like @ 34.0 - 34.2m 30.7 - 30.8 minor shearing 33.7 - 33.9 minor shearing Foliation @ 34.1m	70	Mod silicification	10% py Tr-1%Cp, 1-1.5%Gn, 1.5 - 2%Sp Tr - 1% Tt throughout with localized intervals of higher grades	R2-R3
32.70 TO 40.20	«SIL SEDS/ MUT»	Colour - grey Grain size - v. fine to aphanitic White and greyish white qtz veining generally folded, to fol'n Possible cherty protlith Foliation @ 34.5m 37.0m 40 m	 67 70 55	Mod - Strong sil'n	7-8% py, Tr Gn & Sp as blebs throughout 39.6 - 40.1 - 1-1.5%Gn in qtz veinlets parallel to fol'n.	R2 - R3
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD31031	24.50	26.00	1.50	0.01	0.05	0.05	0.4	0.03									
BCD31032	26.00	27.40	1.40	0.01	0.07	0.03	1.2	0.03									
BCD31033	27.40	29.20	1.80	0.89	0.84	0.32	865.0	1.35						2.50			
BCD31034	29.20	30.40	1.20	0.96	4.98	2.88	772.0	1.69						2.63			
BCD31035	30.40	31.70	1.30	0.19	9.12	6.24	109.5	0.26						3.29			
BCD31036	31.70	32.70	1.00	0.57	3.42	2.16	316.7	0.36						2.79			
BCD31037	32.70	34.50	1.80	0.34	0.93	0.51	151.4	0.22						2.80			
BCD31038	34.50	35.70	1.20	0.27	3.36	1.90	124.6	0.21						2.74			
BCD31039	35.70	37.20	1.50	0.02	0.60	0.32	17.8	0.13									
BCD31040	37.20	39.60	2.40	0.02	0.27	0.13	31.2	0.30									
BCD31041	39.60	40.20	0.60	0.01	0.16	0.56	29.8	0.15									

MINNOVA INC.

HOLE NUMBER: U1330-94 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: U6 | PLOTTING COORDS GRID: FIELD | ALTERNATE COORDS GRID: | COLLAR DIP: -78° 0' 0"
PROJECT NUMBER: SAM | NORTH: | NORTH: 0+ 0 | LENGTH OF THE HOLE: 40.80m
CLAIM NUMBER: | EAST: | EAST: 0+ 0 | START DEPTH: 0.00m
LOCATION: DRIFT | ELEV: | ELEV: 0.00 | FINAL DEPTH: 40.80m

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

DATE STARTED: March 21, 1991 | COLLAR SURVEY: YES | PULSE EM SURVEY: NO | CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: March 21, 1991 | MULTISHOT SURVEY: YES | PLUGGED: YES | CASING: PULLED
DATE LOGGED: April 5, 1991 | RQD LOG: NO | HOLE SIZE: BTW | CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-78° 0'	ACID	OK		-	-	-	-	-	
39.00	-	-79° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic notations using Piteau Codes
0.60 TO 2.60	«FLT/MAF»	Colour - pale green Grain size - gouge				
		Flted, gouge & brecciated dol' mafics lower fault contact dip =	66	Greenish yellow sericitic gouge mod dol.	3% diss'd py	R1 partially healed
2.60 TO 6.10	«ALT MAF»	Colour - dark green Grain size - aphanitic				
		Intensely altered, silicified & dol. Tectonitic Mafics lower contact very sharp with no gouge; possible healed? or conformable		Intense sil'n & dol	2-3% diss'd py	R2-R3
		Foliation @ 4.4m	70			
6.10 TO 20.80	«SIL ARG & ALT MAF»	Colour - greyish green & black Grain size - v. fine to aphanitic				
		Interbanded silicified graphitic arg and dolimitic alt mafics. Strong tectonics		Mod to int sil'n Mafics dolomitic & silicified	3% diss'd py	R3
		Foliation @ 10.5	71			
		16.5	69			
		20.0	76			
		Localized faulting: 15.4 - 15.9 - flt zne 16.5 - 16.7 - flt zne & rubble 17.0 - 18.2 - intermittent flting & rubble zne				
20.80 TO 24.00	«SERT SEDS & MAFICS»	Colour - Greyish yellow-green Grain size - v. fine to aphanitic				
		Possible sed/volcanic contact. Yellow green sericitic alteration. Graphitic whisps (@E.O.I.) possible altered stretched altered lapilli remnants (@T.O.I.) Upper & lower contacts conformable with flt zones within unit.		Greenish yellow sericite	2-3% diss'd py	R2
		Foliation @ 21.5m	74			
		22.7m	66			
		lower contact dip @24.0	59			
		22.8 - 23.0 «flt» zne minor gouge & Bx				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		∤23.6 - 23.8∤ «flt» zne gouge & bx				
24.00 TO 28.80	«ALT SEDS»	Colour - grey Grain size - v. fine to aphanitic				
		Silver grey sericitic alteration		Patchy silicification silver-grey sericite	24.0 - 25.5 - 1-3% B. Mtls, Tr-1%Tt 5%py	R2-R3
		Well foliated & mod. strong silicification		24.0 - 25.5 - strong sil'n - cherty? 25.5 - 28.8 - Mod sil'n	25.5 - 26.6 1-1.5%Cp, 1.5 - 2.5%Gn&Sp 1-2%Tt, 12-15%py	R1-R2
		25.5 - 25.6 - flt zne gouged				
		26.1 - 26.4 - flt zne gouged				
		26.7 - 26.75 - flt gouge				
		27.1 - 27.2 - flt zne minor gouge				
		Foliation @ 24.5 m	53			
		25.5m	65			
		27.2	66			
		28.5	62			
28.80 TO 40.80	«SIL SEDS MUT»	Colour - grey Grain size - v. fine				
		White & greyish white qtz veinlets & veins subparallel & parallel, occ isoclinally folded, to fol'n in a grey sericite silicified sediment		Silver grey sericite Mod-sil'n	5-8% diss'd py Tr-1% sp&gn as blebs within qtz veinlets throughout 30.6 - 32.1 - 10%py, Tr-1%Cp, 2-2.5%Gn, 2.5-3%Sp.	R3
		Foliation @ 29.0m	53			
		32	58			
		36	55			
		40	60			
		33.3 - 33.4 - minor shearing				
		40.7 - 40.75 - minor gouge				
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T		COMMENTS
BCD31042	22.00	24.00	2.00	0.01	0.01	0.01	2.2	0.03										
BCD31043	24.00	25.50	1.50	0.77	1.18	0.70	276.8	1.11						2.67				
BCD31044	25.50	27.00	1.50	2.44	7.74	5.04	2380	4.55						3.14				
BCD31045	27.00	28.80	1.80	2.72	5.04	1.56	2775	4.34						3.40				
BCD31046	28.80	30.60	1.80	0.04	0.40	0.18	52.6	0.24										
BCD31047	30.60	32.10	1.50	0.30	1.82	1.66	137.8	0.32										
BCD31048	32.10	34.10	2.00	0.03	0.13	0.19	8.9	0.19										

MINNOVA INC.

HOLE NUMBER: U1330-95 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG | PLOTTING COORDS GRID: FIELD | ALTERNATE COORDS GRID: | COLLAR DIP: -48° 0' 0"
PROJECT NUMBER: SAM | NORTH: | NORTH: 0+ 0 | LENGTH OF THE HOLE: 45.10m
CLAIM NUMBER: | EAST: | EAST: 0+ 0 | START DEPTH: 0.00m
LOCATION: DRIFT | ELEV: | ELEV: 0.00 | FINAL DEPTH: 45.10m

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

DATE STARTED: March 21, 1991 | COLLAR SURVEY: YES | PULSE EM SURVEY: NO | CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: March 21, 1991 | MULTISHOT SURVEY: YES | PLUGGED: YES | CASING: PULLED
DATE LOGGED: April 5, 1991 | RQD LOG: NO | HOLE SIZE: BTW | CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-48° 0'	ACID		OK	-	-	-	-	-	
43.00	-	-49° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 8.10	«MFLT»	Colour - pale green Grain size - aphanitic				Rock Mechanic notations using Piteau Codes
		Yellow sericitic altered lapilli in a mod. strong dolomitic matrix. Lower contact abrupt and non conformable (x-cutting)		Mod-strong sil'n, strength increases down hole Mod-strong dol	2% diss'd py	
		Foliation @ 2m	75	6.0 - 8.1± «alt maf»		R2
		4m	62	lapilli no longer visible		
		6m	70			
8.10 TO 22.80	«SIL ARG/ ALT MAF»	Colour - greyish green & black Grain size - v. fine to aphanitic				
		Tectonitic & locally well interbedded silicified graphitic arg & mod dolomitic mafics Qtz and qtz carb veining x-cutting intermittent faulting:		Patchy sil'n & localized moderate ferro-dol of mafic component	3-5% diss'd py	R2-R3
		11.2 - 11.4 - flt gouge 14.6 - 14.8 - flt zne with gouge 15.0 - 15.2 - partially healed gouge 16.4 - 16.5 - flt zne 19.1 - 19.8 - flt zne gouge & bx 20.2 - 20.7 - flt zne gouge & bx 21.5 - 21.6 - flt gouge 21.6 - 22.2 - rubble 22.6 - 22.8 - rubble & flt gouge				
		Foliation @ 9m	68			
		13m	59			
		16.2m	75			
		20m				
22.80 TO 27.10	«SERT MAF»	Colour - yellowish grey Grain size - v. fine to aphanitic				
		Strong yellow sericitic alteration of mafics? (Very stretched highly altered remnant lapilli? ghosts at E.O.I.)		Strong yellow sericite Tr. chlorite whisps	3-4% py as blebs within veinlets and diss'd	R2
		22.8 - 23.2± «flt» gouge R0 23.8 - 24.6± «flt» gouge R0 25.4 - 25.5 - minor flting 26.8 - 27.1 - rounded qtz inclusions Healed flt zne?				
		Foliation 25.2	63			
		26	55			
		26.5	66			

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
27.10 TO 45.10	«SIL SEDS»	Colour - grey Grain size - v. fine Greyish white and white qtz veining within a pyritic silver grey sericitic sed. 27.85 - 28.0 - gouge R0 28.1 - 28.5 - flt zne gouge & bx 28.9 - 29.1 - flt zne gouge & bx 29.1 - 29.5 - rubble 3-5cm angular pieces 29.5 - 29.9 - flt zne gouge - occ bx Foliation @ 31.5 36 43 Qtz Carb barren veining @ 39.1 - 39.5 - vein sub-parallel to core axis	65 61 76	Pervasive sil'n 27.1 - 29.5 «QV/SIL SED» "Inclusion" type ore interval	8% py throughout Tr -1-5%sph as blebs within qtz veins throughout. 1%Cp,1.5%Gn,1.5-2.5%So Tr-1% Tt overall 35.4 - 36.9 15% py Tr-1%Cp,2-3% Gn&Sp, Tr Tt	R3-R4
E.O.H.						

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD31051	25.60	27.10	1.50	0.01	0.01	0.01	1.4	0.03									
BCD31052	27.10	28.10	1.00	0.25	0.18	0.13	232.6	0.81						2.74			
BCD31053	28.10	29.10	1.00	1.12	1.18	0.34	1280	2.31						2.53			
BCD31054	29.10	29.50	0.40	4.82	6.58	6.82	4705	13.08						3.16			
BCD31055	29.50	29.90	0.40	0.14	1.42	0.57	82.3	0.25									
BCD31056	29.90	31.80	1.90	0.10	1.52	0.96	94.5	0.22									
BCD31057	31.80	33.60	1.80	0.65	3.18	2.58	446.2	1.12						2.80			
BCD31058	33.60	35.40	1.80	0.08	2.40	1.52	35.6	0.29									
BCD31059	35.40	36.90	1.50	0.07	10.10	6.53	102.3	0.18						3.04			
BCD31060	36.90	38.90	2.00	0.37	1.28	0.69	171.1	0.33						2.72			
BCD31061	38.90	40.90	2.00	0.26	0.53	0.39	105.6	0.31						2.73			
BCD31062	40.90	41.60	0.70	0.90	1.38	0.69	356.7	0.97						2.68			
BCD31063	41.60	43.60	2.00	0.04	0.06	0.12	24.7	0.24									

MINNOVA INC.

HOLE NUMBER: U1330-96 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6 — PLOTTING COORDS GRID: FIELD — ALTERNATE COORDS GRID: — COLLAR DIP: -73° 0' 0"
PROJECT NUMBER: SAM — NORTH: — NORTH: 0+ 0 — LENGTH OF THE HOLE: 39.30m
CLAIM NUMBER: — EAST: — EAST: 0+ 0 — START DEPTH: 0.00m
LOCATION: DRIFT — ELEV: — ELEV: 0.00 — FINAL DEPTH: 39.30m

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

DATE STARTED: March 21, 1991 — COLLAR SURVEY: YES — PULSE EM SURVEY: NO — CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: March 22, 1991 — MULTISHOT SURVEY: YES — PLUGGED: YES — CASING:
DATE LOGGED: April 5, 1991 — RQD LOG: NO — HOLE SIZE: BTW — CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-73° 0'	ACID	OK		-	-	-	-	-	
38.00	-	-74° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic notations using Piteau Codes
0.60 TO 5.70	«MFLT»	Colour - pale green Grain size - aphanitic Yellow sericitic altered lapilli in a dolomitic matrix Foliation @ 2.4m 4 5 1.5 - 1.7m - rubble & minor flting 2.4 - 2.5m - minor flt zne 4.6 - 4.7m - minor flt zne in minor gouge 5.6 - 5.7 - minor flting & rubble	 68 70 59	Yellow sericitic lapilli, mod-strong ferro-dol & sil'n	23% diss'd py	R3
5.70 TO 10.10	«ALT MAF»	Colour - pale to dark green Grain size - aphanitic Intensely silicified and dolomitic mafics. No original textures visible. Foliation @ 7.2m 9 7.4 - 7.5 - flt gouge 7.7 - 7.75 - flt gouge 8.1 - 8.3 - flt gouge	 65 56	Strong ferro-dol & sil'n 6.2 - 6.5 Bull qtz vein to carb inclusions 6.5 - 6.8 - qtz stockwork veining	3-5% diss'd py	R3
10.10 TO 23.00	«SIL ARG/ ALT MAF»	Colour - greyish green & black Interbanded silified graphitic arg & dolomitic mafics. Tectonitic in zones to well laminated (foliated). Intermittent fault zones: 11.1 - 11.2) 11.4 - 11.5) Rubble with flt & gouge 11.6 - 11.8) 12.3 - 12.4 - healed flt zne 15.8 - 16.2 - fan cleavage 16.9 - 17.3 - flt zne @ 17.55 & 17.6 hinge zones with fan cleavage. Hinge dips = 55 deg & 56 deg respectfully 18.3 - 18.4 - flt zne 18.6 - 19.1 - rubble & flt zne 19.5 - 19.8 - flt gouge Foliation @ 12.4	 77	Patchy silicification overall and ferro-dol of Mafic component	3-5% diss'd py.	R2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		15	56			
		18.1	67			
		21	64			
23.00 TO 25.30	«SERT MAF SEDS»	Colour - yellowish grey Strong yellow sericitic alteration of mafics and seds (i.e. yellow sericite of preceding unit) 23.5 - 23.6 - minor flt 24.1 - 25.1 - flt zne		Strong yellow sericite Mod patchy sil'n	3% diss'd py	R2
		Foliation @ 23.2	76			
		25.2	74			
25.30 TO 39.30	«SIL SEDS/ MUT»	Colour - grey Grain size - v. fine - aphanitic White and greyish white qtz veining, parallel to sub-parallel to fol'n within a silver grey sericitic silicified sed. 27.9 - 28.0 - flt zone 29.0 - 29.1 - flt zne with gouge 29.4 - 29.45) & 29.6 - 29.65) flt gouge 30.4 - 30.8 - flt zne & shearing		Patchy sil'n	8% py & variable metals. 27.0 - 32.5 «O.V.&SMSX» "Inclusion" Type ore with intermittent flts & shears 1.5 - 2%cp,2-3%Gn,2.5-3.5%Sp 1-2%Tt 25.3 - 27.0 & 32.5 - E.O.H. 7-8% diss'd py & Tr - 1%Gn&Sp (MUT)	R2
		Foliation @ 31.5	51			
		31.9	60			
		32.6	65			
		36.2	60			
		37.8	58			
		39.2	60			
E.O.H.						

				ASSAYS							GEOCHEMICAL						
Sample	From (m)	To (m)	Length (m)	CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD31064	23.80	25.30	1.50	0.01	0.02	0.02	1.2	0.03									
BCD31065	25.30	27.00	1.70	1.34	2.56	1.46	345.6	0.29						2.82			
BCD31066	27.00	28.00	1.00	11.20	12.60	6.82	4735	5.41						3.23			
BCD31067	28.00	29.00	1.00	1.32	10.80	5.48	1380	2.46						3.14			
BCD31068	29.00	30.90	1.90	2.64	3.14	2.36	2577	3.58						2.78			
BCD31069	30.90	31.20	0.30	3.82	8.34	2.10	3597	7.17						3.77			
BCD31070	31.20	32.50	1.30	1.44	5.12	1.48	1400	2.80						3.25			
BCD31071	32.50	34.00	1.50	0.17	0.98	0.66	136.7	0.48						2.77			
BCD31072	34.00	35.50	1.50	0.03	0.12	0.19	21.3	0.35									
BCD31073	35.50	37.50	2.00	0.08	0.29	0.29	29.9	0.37									

HOLE NUMBER: U1330-97 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: UG | PLOTTING COORDS GRID: FIELD | ALTERNATE COORDS GRID: | COLLAR DIP: -20° 0' 0"
PROJECT NUMBER: SAM | NORTH: | NORTH: 0+ 0 | LENGTH OF THE HOLE: 76.20m
CLAIM NUMBER: | EAST: | EAST: 0+ 0 | START DEPTH: 0.00m
LOCATION: DRIFT | ELEV: | ELEV: 0.00 | FINAL DEPTH: 76.20m

COLLAR GRID AZIMUTH: 150° 0' 0" | COLLAR ASTRONOMIC AZIMUTH: 195° 0' 0"

DATE STARTED: March 22, 1991 | COLLAR SURVEY: YES | PULSE EM SURVEY: NO | CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: March 22, 1991 | MULTISHOT SURVEY: YES | PLUGGED: YES | CASING:
DATE LOGGED: April 10, 1991 | RQD LOG: NO | HOLE SIZE: BTW | CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-20° 0'	ACID		OK	-	-	-	-	-	
42.00	-	-22° 0'	ACID		OK	-	-	-	-	-	
68.60	-	-22° 0'	ACID		OK	-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 5.40	«ALT MAF»	Colour - pale to dark green Grain size - aphanitic				Rock Mechanic notations using Piteau Codes
		Intensely (altered) sil and dolomitic mafics. Locally completely healed Bx zones with qtz & lesser qtz carb veining		Intense dol & mod-intense sil'n	2-3% diss'd py	R2-R3
		Foliation @ 4.5	42			
		Contact flted.				
5.40 TO 10.50	«MFLT»	Colour - pale green Grain size - aphanitic				
		Pale greenish yellow altered lapilli in a silicified and dolomitic matrix.		Alt increases down interval, from yellow sericitic alt lapilli @ T.O.I. to greenish yellow ghosted, alt lapilli @ E.O.I.	2% diss'd py	R3
		Foliation @ 8.0m	40			
		5.4 - 5.5m - rubble & minor gouge 9.2 - 9.3m - Minor flt zone				
10.50 TO 31.80	«SIL ARG/ ALT MAF»	Colour - greyish green & black Grain size - v. fine to aphanitic				
		Interbedded, silicified black graphitic argillite and altered silicified domomitic mafics. Intermittent faulting throughout and locally healed Bxed zones		Patchy mod-intense sil'n & dolomitic mafics	4-5% py	R2-R3 to R0 @ E.O.I.
		16.2 - 16.3 - Minor flt zne 23.6 - 23.7 - minor flt zne 22.9 - 23.4 - rubble with minor gouge 24.5 - 24.7 - rubble zone 25.2 - 26.1 - rubble zne, H.W. to 1cm gouge flt zne 26.4 - 37.9 «flt» R0 gouge & Bx Zne continues into next rock unit.				
		Foliation @ 17.5 m	58			
		28.0	51			
		22.4	51			

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
31.80 TO 33.70	«FLT/SERT MAF»	Colour - greenish yellow Grain size - gouge Gouge & minor bxed yellowish wericitic altered mafics, with greenish chloritic wisps Too faulted		Yellow sericite & chlorite wisps	4-5% py	R0
33.70 TO 35.90	«FLT/SERT SEDS&QTZ»	Colour - yellow Grain size - gouge Gouge & minor bxed Yellow sericitic seds? (lack of chlorite wisps and higher bxed qtz & qtz veining). Lower contact from 35.9 to 36.4 dip ave approx 4 deg. Too faulted	Yellow sericitic 4% py with 10% in qtz vein Bxed with qtz carb stockworking		R0	
35.90 TO 39.60	«FLT/QV»	Colour - greyish white Grain size - massive Massive greyish white qtz veining with minor qtz carb veins & veinlets. Gouged at T.O.I. Too faulted 38.3 - 38.6 - core fractured 8-10 cm pieces 38.6 - 38.8 Broken trace gouge 3-4 cm pieces 38.8 - 39.4 - healed bx 39.4 - 39.6 «flt» zne gouge & bx		Yellow sericite @ T.O.I. & E.O.I.	10-12% py, 1-1.5%Pb&Sp Tr Tt?	R3 on qtz R1-R0 overall
39.60 TO 68.40	«QV/SERT &ALT SEDS»	Colour - yellow, grey & white Grain size - v. fine to aphanitic Yellow sericite & silver grey sericite altered seds? Qtz and qtz carb veining with "inclusions" of mottled, weak to mod dolomitic, wall rock. Weak to mod tectonics 40.0 - 42.4 «flt» gouge R0 40.0 - 40.2 minor flt zne 41.8 - 41.9 flt gouge 42.2 - 42.4 flt zone 45.2 - 45.4 flt zone 45.7 - 46.1 - flt zone with qtz cein folded, i.e. possible hinge zone		Yellow & silver grey sericite & @ 42.4 greenish talc. Green talc similar to U/G decline talc. Hanging Wall to ore zone. 44.3 - 44.7 «fuchsite» within qtz carb veining 43.9 - 45.7 silver grey wericitic alt of seds & trace 1mm blebs of leucoxine	3-5% py overall with zones of higher grades 37.4 - 37.9 - 1-5%Gn&Sp Tr-1%Tt 41.9 - 42.5 - mottled inclusions Tr-1%Tt, 1-2% B.Mtls	R3 - qtz carb veining R0 - gouge & flting overall R1-R2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		46.5 - 46.8 - flt zne with gouge				
		47.2 - 47.5 - rubble zne with tr gouge				
		47.5 - 47.7 - flt zne with minor gouge				
		48.0 - 48.3 - partially healed flt zone			48.0 - 49.4 -flted H.G. zone.	
					Difficult to estimate in flt approx.	
		48.3 - 48.6 - minor flting			1.5 - 2% Cp,2%Gn,2-3%Sp,2%Tt	
		48.6 - 48.8 - rubble & flt zone - pieces 1.1.5cm				
		48.0 - 50.1 - flt zne - R0 gouge				
		50.3 - 50.7 - flt zne R0 gouge				
		53.0 - 53.3 - flt zne & gouge				
		54.3 - 54.6 - minor flting & shearing				
		@ 55.3 hinge zone				
		@ 57.8) hinge zones with fan cleavage				
		@ 58.15)				
		@58.3)				
		@58.6)				
		@ 58.75)				
		59.0 - 59.2 - flt zne @41.4m	67		61.9 - 62.2 - 3%Gn in bull qtz.	
		Fol'n variable due to 44	40			
		Faulting & tectonics 46.3	34		62.8 - 64.3 - 1.5%Cp,3%Gn&Sp, 2%Tt	
		48.1	70			
		51.8	22			
		Hinge zone (dip up hole 53.3	15			
		(53.5	0			
		(dip down hole 53.7	23			
		54.9	58			
		56.5	50			
		61	31			
		66	66			
		@ 62.2 - shear zne				
		62.8 - 62.9 - minor flt zne				
		63.2 - 63.4 - flt zne minor gouge				
		63.6 - 63.65 - minor flting				
		65.0 - 65.2 - flt zne				
		68.2 - 68.4 - flt zne with gouge				
68.40 TO 70.60	«SIL SEDS/ MUT»	Colour - grey Grain size - v. fine Greyish white & white qtz veins & veinlets generally sub parallel to fol'n. Occ boudinaged.		Patchy silicification intensity increases down hole. 69.7 - E.O.I. Chert protolith	7-8% py	R2-R3
		Foliation @ 68.7	63			
		69.7	60			

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
70.60 TO 76.20	«SIL ARG/ ALT MAF»	Colour - greyish yellow & black Grain size - v. fine to aphanitic				
		Interbedded silicified graphitic argillite and dolomitic mafics. Weakly to mod tectonitic lower contact gradational		Patchy silicification (mod to strong) mafic component dolomitic	3-5% py	R3
		Foliation @ 71m	59			
		Basal contact dip @ 72.6	37			
		Foliation @ 74.5	56			
				72.6 - 74.2 - altered, mod to intensely silicified, aphanitic greenish grey. Dolomitic mafics with 1-1.5mm wisps of leucoxene		
		74.2 - 75.0 - cherty protolith 75.0 - 75.3 - heterolith, weak to mod tectonitic sed 75.3 - 75.4 - flted gouge graphitic arg 75.4 - 75.6 - qtz & qtz carb vein 75.6 - 76.2 - gouged arg, graphitic & MUT				
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD31075	32.20	33.70	1.50	0.01	0.01	0.01	0.3	0.03									
BCD31076	33.70	35.90	2.20	0.01	0.01	0.01	3.1	0.08									
BCD31077	35.90	36.40	0.50	2.38	0.50	0.09	2453	3.45						2.58			
BCD31078	36.40	37.10	0.70	0.12	0.06	0.02	108.9	0.13						2.43			
BCD31079	37.10	37.40	0.30	0.71	0.46	0.22	718.9	1.18						2.44			
BCD31080	37.40	37.90	0.50	0.81	0.64	0.72	993.7	1.89						2.57			
BCD31081	37.90	39.60	1.70	1.10	0.98	0.91	1444	2.26						2.81			
BCD31082	39.60	41.20	1.60	0.02	0.02	0.02	15.3	0.12									
BCD31083	41.20	41.90	0.70	0.01	0.01	0.01	8.3	0.03									
BCD31084	41.90	42.50	0.60	0.44	0.27	0.13	389.4	0.55						2.90			
BCD31085	42.50	43.90	1.40	0.03	0.03	0.01	29.7	0.08									
BCD31086	43.90	45.70	1.80	0.01	0.01	0.01	7.0	0.07									
BCD31087	45.70	46.10	0.40	0.04	0.43	4.08	144.5	0.37						2.70			
BCD31088	46.10	46.70	0.60	0.01	0.01	0.02	2.4	0.07									
BCD31089	46.70	48.00	1.30	0.08	0.11	0.06	66.7	0.11									
BCD31090	48.00	48.60	0.60	0.41	4.76	2.82	303.4	0.51						2.74			
BCD31091	48.60	49.40	0.80	1.08	9.12	5.48	1055	2.02						2.81			
BCD31092	49.40	50.30	0.90	0.11	0.55	0.27	99.8	0.30									
BCD31093	50.30	50.70	0.40	1.98	7.26	4.18	2066	3.29						3.01			
BCD31094	50.70	52.90	2.20	0.36	0.70	0.24	345.2	0.52						2.64			
BCD31095	52.90	53.30	0.40	0.03	0.04	0.02	25.6	0.07									
BCD31096	55.40	56.60	1.20	0.01	0.01	0.01	5.7	0.06									
BCD31097	56.60	56.90	0.30	0.02	0.01	0.04	21.2	0.19									
BCD31098	56.90	58.00	1.10	0.06	0.16	0.12	52.1	0.10									
BCD31099	59.10	61.10	2.00	0.01	0.01	0.01	4.1	0.06									
BCD31100	61.10	61.90	0.80	0.01	0.01	0.01	1.3	0.03									
BCD31101	61.90	62.20	0.30	0.01	0.01	1.74	39.1	0.09									
BCD31102	62.20	62.80	0.60	0.01	0.01	0.06	4.6	0.03									
BCD31103	62.80	64.30	1.50	0.55	3.14	1.94	424.1	0.81						2.60			
BCD31104	64.30	65.80	1.50	0.01	0.16	0.06	11.4	0.14									
BCD31105	68.20	69.70	1.50	0.01	0.23	0.11	10.1	0.29									
BCD31106	69.70	70.60	0.90	0.04	0.06	0.02	5.8	0.13									

MINNOVA INC.

HOLE NUMBER: U1330-98 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -48° 0' 0"
LENGTH OF THE HOLE: 52.50m
START DEPTH: 0.00m
FINAL DEPTH: 52.50m

COLLAR GRID AZIMUTH: 181° 0' 0"
COLLAR ASTRONOMIC AZIMUTH: 226° 0' 0"

DATE STARTED: March 23, 1991
DATE COMPLETED: March 23, 1991
DATE LOGGED: April 11, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-50° 0'	ACID		OK	-	-	-	-	-	
51.00	-	-49° 0'	ACID		OK	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CS6»					Rock Mechanic notations using Piteau Codes
0.60 TO 7.00	«MFLT»	Colour - pale green Grain size - aphanitic Yellow sericitic altered lapilli in a dolomitic matrix. Intermittent faulting: 0.8 - 1.0m - minor flting 1.3 - 1.8m - rubble to minor flt zone 3.4 - 3.8 - minor flt zone @ 7.0 - 1-2cm shear Foliation @ 2.2m 6.0m	 55 42	 Yellow sericitic altered lapilli Occ ghosted. Mod - strong dolomitic	 3-4% diss'd py	 R3
7.00 TO 9.90	«ALT MAF»	Colour - dark green Grain size - aphanitic Intensely altered mafics. No original textures visible. Intermittent flts, occ partially to totally healed. 7.1 - 7.2 - flt zone, minor 8.0 - 8.1 - flt zone, minor 9.7 - 9.8 - partially healed Basal contact flted Foliation @ 8.7m	 48	 Mod-strong dol & sil'n	 3% diss'd py	 R3
9.90 TO 24.50	«SIL ARG/ ALT MAF»	Colour - greyish green * black Grain size - v. fine to aphanitic Black silicified graphitic argillite interbanded with dolomitic silicified mafic. Qtz and qtz carb veinlets generally sub parallel with fol'n, occ folded isoclinally & x-cutting Weak to mod tectonitics Foliation @ 14.5m 22.3	 51 64	 Weak to mod silicification moderate dolomitic mafics & locally in argillite	 2% diss'd py	 R3

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
24.50 TO 29.80	«SERT MAF/ SEDS»	Colour - yellowish green Grain size - aphanitic Intense yellow sericite altered interbanded mafics & seds strained and/or moderately tectonitic. Arg wisps near E.O.I. ┤26.2 - 26.6├ «flt» zne gouge & bx 26.7 - 27.1 - partially healed flt zne 29.3 - 29.4 - minor flt zne ┤29.6 - 29.8├ «flt» gouge & bx Foliation @ 25.5m 28.5m	 52 61	Intense yellow sericite. Moderate Ferro-dolomite which decreases down hole	2-3% diss'd py	R2-R3
29.80 TO 35.50	«ALT SEDS & QTZ»	Colour - light grey Grain size - v. fine to aphanitic Weak to moderately silicified pyritic altered sediments. Greyish white & white qtz & qtz carb veining, parallel to sub parallel to fol'n & occ isoclinally folded. Local yellow sericite and mottled silicified mineralized wall rock inclusions 31.0 - 31.1) minor flting 31.3 - 31.5) ┤33.4 - 33.6├ «flt» gouge & bx ┤34.5 - 34.8├ «flt» zne Foliation @ 30m 35.3m	 44 50	Weak - mod sil'n, silver grey and occ yellow sericite Greenish talc 32.6 - 34.0 34.0 - 34.4 yellow sert	8% py	R2
35.50 TO 52.50	«SIL SEDS»	Colour - grey Grain size - v. fine to aphanitic Moderate to strong silicification. Greyish to white and white qtz and qtz carb veining. 39.6 - 40.0 flt gouge & bx 45.2 - 45.8 rubble & tr gouge 46.2 - 46.5 flt zne rubble & gouge 49.4 - 49.5 - flt zne Foliation @ 36m 38.5m	 36 48	Silver grey sericite Mod to strong sil'n	7-8% py,Tr-1%sph throughout 37.1 - 37.7 - 1-1.5%Gn,1% sp 42.1 - 43.9 - Tr-1% Cp,2%Gn,2.5%Sp Tr Tt 44.8 - 46.2 - 2%Gn&Sp 50.1 - 51.1 - 10%py,1.5%Gn&Sp	R2-R3

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		44m	46			
		48	61			
		52	52			
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD31107	10.50	10.70	0.20	0.07	0.49	0.07	59.8		0.12								
BCD31108	28.30	29.80	1.50	0.01	0.02	0.02	.8	0.03									
BCD31109	29.80	31.50	1.70	0.17	0.30	0.21	55.6	0.27									
BCD31110	31.50	32.90	1.40	0.99	0.28	0.07	1115	1.98						2.88			
BCD31111	32.90	34.00	1.10	0.12	1.78	0.03	126.7	0.18						2.70			
BCD31112	34.00	34.40	0.40	0.01	0.03	0.02	6.2	0.06									
BCD31113	34.40	35.50	1.10	0.30	3.24	1.52	296.7	0.66						2.72			
BCD31114	35.50	37.10	1.60	0.08	1.32	0.63	90.1	0.42									
BCD31115	37.10	37.70	0.60	0.09	0.64	0.82	97.9	0.32									
BCD31116	37.70	40.20	2.50	0.03	0.58	0.47	32.1	0.24									
BCD31117	40.20	42.10	1.90	0.05	0.21	0.16	25.3	0.37									
BCD31118	42.10	43.90	1.80	0.50	4.34	2.26	256.4	0.70						2.83			
BCD31119	43.90	44.80	0.90	0.03	0.22	0.17	17.3	0.40									
BCD31120	44.80	46.20	1.40	0.04	2.04	1.14	47.9	0.19									
BCD31121	46.20	48.60	2.40	0.01	0.49	0.23	14.8	0.16									
BCD31122	48.60	50.10	1.50	0.01	0.12	0.12	12.3	0.19									
BCD31123	50.10	51.10	1.00	0.32	3.42	2.60	391.6	0.80						3.39			
BCD31124	51.10	52.40	1.30	0.02	0.32	0.43	34.5	0.43									

MINNOVA INC.

HOLE NUMBER: U1330-99 | DRILL HOLE RECORD | IMPERIAL UNITS: | METRIC UNITS: X

PROJECT NAME: U6 | PLOTTING COORDS GRID: FIELD | ALTERNATE COORDS GRID: | COLLAR DIP: -33° 0' 0"
PROJECT NUMBER: SAM | NORTH: | NORTH: 0+ 0 | LENGTH OF THE HOLE: 61.60m
CLAIM NUMBER: | EAST: | EAST: 0+ 0 | START DEPTH: 0.00m
LOCATION: DRIFT | ELEV: | ELEV: 0.00 | FINAL DEPTH: 61.60m

COLLAR GRID AZIMUTH: 159° 0' 0" | COLLAR ASTRONOMIC AZIMUTH: 204° 0' 0"

DATE STARTED: March 24, 1991 | COLLAR SURVEY: YES | PULSE EM SURVEY: NO | CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: March 24, 1991 | MULTISHOT SURVEY: YES | PLUGGED: YES | CASING:
DATE LOGGED: April 12, 1991 | RQD LOG: NO | HOLE SIZE: BTW | CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-34° 0'	ACID		OK	-	-	-	-	-	
60.00	-	-34° 0'	ACID		OK	-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 4.40	«ALT MAFIC»	Colour - greyish green Grain size - aphanitic Intensely altered, dolomitic and silicified, mafics. No original textures present. Intermittent faults partially to completely healed 0.8 - 1.1 - rubble zne 1.6 - 1.9 - rubble trace gouge zne 4.2 - 4.4 «flt»gouge & bx partially healed Foliation @ 2.4m	42	Mod-intense dolomite & sil'n	3-4% dill's py	R3
4.40 TO 7.10	«MFLT»	Colour - pale green Grain size - aphanitic Yellow sericitic altered lapilli in a mod to strong dolomitic matrix. Lapilli very stretched and elongated Foliation @ 4.5m 6.0m 7.0	 52 35 47	Mod-intense dolomite & sil'n, alteration increases down hole, lapilli fade with increased alteration	2-3% diss'd py	R3
7.10 TO 8.70	«ALT MAF»	Colour - greyish green Grain size - aphanitic Intensely altered mafics. No original textures discernable Top contact sharp and basal contact graded. Both appear conformable Foliation @ 7.4m 8.0	 35 41	Intense dolomite & sil'n	2% diss'd py	R3
8.70 TO 25.70	«SIL ARG/ ALT MAF»	Colour - black & greyish green Grain size - v. fine to aphanitic Interbanded black silicified graphic argillite and dolomitic altered mafics. Locally tectonitic and intermittently faulted. 16.5 - 16.9 - flt zne 17.2 - 17.3 - flt zne 18.7 - 18.8 - flt gouge 22.9 - 23.1 - flt zne 23.2 - 23.6 - flt zne 23.8 - 23.9 - partially healed gouge	 	Patchy silicification and moderate dolomitic alteration of mafic component.	4-5% py 13.7 - 14.1 «10% py» 18.7 - 18.8 «8%py3%Sp»flted 24.8 - 25.2 «8%pyTr-1%Gn&Sp»	R2-R3

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		25.7 - 25.8 - flt zne				
		Foliation @ 9m	52			
		15.0	55			
		19.1	41			
		22.0	38			
		24.0	40			
		24.1 - 24.8 micro fold hinges with fan cleavage. Highly distorted Basal contact sheared 2-3cm gouge i.e. 25.65 - 25.7m				
25.70 TO 34.70	«SERT MAF»	Colour - greyish green Grain size - aphanitic				
		Greenish yellow sericitic highly altered dolomitic mafics with chloritic wisps. Greyish white and white qtz and qtz carb veins and veinlets, boudinaged and strained throughout. Intermittent faults and shears throughout.		Greenish yellow sericite Weak to mod dolomite & silicified.	4-5% py diss'd & as veinlets	R2
		27.4 - 27.5 - shear 3cm				
		27.8 - 27.9 - shearing & flt gouge				
		28.0 - 28.1 - minor flt zne				
		28.7 - 28.8 - rubble & shear zne				
		29.1 - 29.2 - flt & shear zne				
		29.7 - 30.2 «flt»zne gouge & bx				
		30.7 - 30.8 - flt zne				
		31.2 - 31.6 - rubble 2-3cm pieces & tr. gouge zne				
		32.5 - 32.6 - flt zne				
		33.6 - 34.7 intermittent shears and flts throughout.		32.6 - 33.6 weak-mod dolomitic massive alt mafics, pieces		
		Foliation @ 27.4m	61	20-50cm.		
		30.3m	45			
		32.6m	51	Ferro-dolomitic alteration decreases down hole and stops abruptly at shear @ 34.7m.		
34.70 TO 37.50	«SERT SEDS»	Colour - greyish green Grain size - aphanitic				
		Yellow sericite and lesser silver grey sericitic alt seds. Weakly silicified and no dolomitic alteration. Intermittent faults & shears throughout.		Intense yellow & lesser silver grey sericitic alt. Weakly silicified 34.7 - 35.5 - yellow sert 35.5 - 36.4 - silver grey sert with possible cherty protolith 36.9 - 37.5 - yellow sert	4-5% py diss'd 35.5 - 36.9 1%CpTr-1%Gn&Sp&Tt 8%py	R2
		35.2 - 35.3 - minor shear 35.9 - 35.95 - flt gouge & bx				

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		36.0 - 36.15 - flt gouge & bx				
		36.3 - 36.35 - flt gouge				
		36.6 - 37.2 - flt zne, gouge & bx				
		37.3 - 37.5 - flt bx & gouge				
		Foliation @ 35.4	63			
37.50 TO 40.40	«FLTS/ALT SEDS & QV»	Colour - grey Grain size - v. fine to aphanitic Faulted silver grey sericitic altered seds and qtz veining 37.5 - 38.2 - core fractured 38.2 - 40.2 - flted, gouge & bx 40.2 - E.O.I. - massive intact core Foliation @ 39.6m @ 40.4m	48 55	Silver grey sericite 39.7 - 39.9 - cherty pieces bxed in flt.	8% py 1-1.5%Cp1.5-2%Gn&Sph Tr-1.0%Tt throughout	R0-R1
40.40 TO 61.60	«SIL SEDS/ MUT»	Colour - grey Grain size - v. fine to aphanitic Greyish white & white qtz veins & veinlets, generally parallel to sub parallel to fol'n and occ folded isoclinally to open. Foliation @ 43.6m 46.5m 49.7 54.5 60.0 50.0 - 50.2 - flt with gouge cutting core axis at 30 deg to axis. 50.3 - 50.4 - minor flt zne 50.8 - 51.2 - flt zne with gouge 53.5 - 53.8 - flt zne gouge & bx 54.0 - 54.1 - fractured tr gouge 55.4 - 55.5 - flt gouge & shearing 55.7 - 55.75 - flt gouge	52 64 55 65 68	Silver grey sericite weak 44.6 - 44.9 - 15% py 53.8 - 54.0 3-6%Sp3-5%Gn mylonite texture. 56.3 - 56.6 «QV1%Gn2%Sp» 60.2 - 60.4 «QV2%Gn2.5%Sp»	7-9% py & tr-1%sp throughout Occ qtz veinlets & veins with 3-4% Gn & Sp and trace Tt within veinlets	R3
	E.O.H.					

HOLE NUMBER: U1330-99 ASSAY SHEET DATE: 20-March-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD31125	13.70	14.10	0.40	0.12	0.89	0.52	9.2	0.11									
BCD31126	18.70	18.80	0.10	0.03	0.81	1.62	11.3	0.10									
BCD31127	24.80	25.20	0.40	0.02	0.76	0.42	3.9	0.04									
BCD31128	32.70	34.70	2.00	0.01	0.06	0.04	.5	0.03									
BCD31129	34.70	35.50	0.80	0.01	0.02	0.01	2.8	0.03									
BCD31130	35.50	36.90	1.40	0.85	0.91	0.64	701.3	1.25						2.69			
BCD31131	36.90	37.50	0.60	0.24	0.11	0.03	225.6	0.53						2.62			
BCD31132	37.50	38.20	0.70	0.96	1.01	0.34	984.5	1.11						2.67			
BCD31133	38.20	39.70	1.50	0.92	10.80	6.60	1076	1.47						2.81			
BCD31134	39.70	40.20	0.50	0.23	8.18	5.32	307.1	0.51						2.72			
BCD31135	40.20	40.40	0.20	0.12	4.96	3.24	165.7	0.23						3.39			
BCD31136	40.40	42.40	2.00	0.09	0.68	0.49	75.6	0.16									
BCD31137	42.40	44.40	2.00	0.32	2.36	1.08	156.7	0.31						2.83			
BCD31138	44.40	46.60	2.20	0.11	1.14	0.61	61.2	0.38									
BCD31139	46.60	46.90	0.30	0.13	1.56	0.44	84.6	0.37									
BCD31140	46.90	48.90	2.00	0.06	0.57	0.37	48.9	0.39									
BCD31141	52.30	53.80	1.50	0.15	1.12	0.62	83.4	0.53									
BCD31142	53.80	54.00	0.20	0.93	12.40	7.84	378.1	1.31						3.30			
BCD31143	54.00	55.40	1.40	0.15	2.84	1.78	68.1	0.47									
BCD31144	55.40	55.70	0.30	0.83	9.56	5.76	245.3	0.83						2.92			
BCD31145	55.70	56.30	0.60	0.18	2.86	1.38	101.1	0.51						2.98			
BCD31146	56.30	56.60	0.30	0.16	2.18	0.75	84.6	0.17									
BCD31147	56.60	59.10	2.50	0.03	0.38	0.26	31.2	0.19									
BCD31148	59.10	60.20	1.10	0.05	0.03	2.04	21.7	0.27									
BCD31149	60.20	60.40	0.20	0.25	2.96	0.17	185.6	0.37						2.71			
BCD31150	60.40	61.60	1.20	0.04	0.34	0.04	18.8	0.19									

MINNOVA INC.

HOLE NUMBER: U1330-100 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAM
CLAIM NUMBER:
LOCATION: DRIFT

PLOTTING COORDS GRID: FIELD
NORTH:
EAST:
ELEV:

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

COLLAR DIP: -57° 0' 0"
LENGTH OF THE HOLE: 70.70m
START DEPTH: 0.00m
FINAL DEPTH: 70.70m

COLLAR GRID AZIMUTH: 225° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 270° 0' 0"

DATE STARTED: March 24, 1991
DATE COMPLETED: March 25, 1991
DATE LOGGED: April 12, 1991

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

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

CONTRACTOR: BOISVENU DRILLING
CASING:
CORE STORAGE: BARRIERE

PURPOSE:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
3.00	-	-58° 0'	ACID	OK		-	-	-	-	-	
50.30	-	-58° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 9.50	«ALT MAF»	Colour - pale greyish green Grain size - aphanitic				Rock Mechanic notations using Piteau Codes
		Intense altered, dolomitic and silicified, mafics. No original textures visible weakly to moderalely tectonitic. 0.90 - 1.0 - minor shear 4.1 - 4.2 - minor shear zone 5.6 - 5.8 - flt zne with gouge 6.3 - 6.8 - flt zne Bx & gouge 8.5 - 8.6 - minor flt zne		Strong dolomitic & silicification	3% diss'd py	R3
		Foliation @ 2.3m	37			
		5.5	35			
9.50 TO 30.30	«SIL ARG/ ALT MAF»	Colour - black and greyish green Grain size - v. fine to aphanitic				
		Interbanded silicified graphitic argillite and altered dolomitic mafics. Moderately tectonitic		Strong silicification, patchy. Mod dolomitic alteration of mafic. compenent and occ in argillite	4-5% diss'd py Tr sp ? gn within qtz veinlets @21.6 - 21.9 and 23.9 - 24.0 and 25.2 - 25.3	R2-R3
		Variable fol'n @ 12m	41	@ 13.1 - faulted graphitic polished to vitrinite		
		14.4	46			
		17.0	32			
		22.0	46			
		24.5	50			
		27.1	38			
		Intermittent faulting throughout 10.3 - 10.4m - minor flt 13.3 - 13.4m - partially healed 14.5 - 14.6m - minor shear zne 15.5 - 15.6 - minor flt zne 15.7 - 15.9 - flt zne 16.1 - 16.5 - flt zne gouge & bx 19.2 - 20.1 - flt zne gouge & bx 20.8 - 21.1 - shear zne 25.8 - 26.0 - flt zne 27.2 - 27.4 - flt zne partially healed Intermittent 2-3cm shears 28.0 - 30.3m				
30.30 TO 33.20	«SERT MAF»	Colour - greyish yellow Grain size - v. fine to aphanitic				
		Intense yellow sericitic alteration with greyish white & white qtz and qtz carb veins Local chloritic wisps.		Strong yellow sericite Weak-mod dolomite	3-4% diss'd py	R1-R2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Moderate shearing throughout				
		T.O.I. - 30.6 - mod shearing				
		31.4 - 31.6 - mod shearing				
		32.6 - 32.7 - mod shearing with 2 cm gouge				
		@ E.O.I.				
		Top contact dip	61			
		Fault @ 38.7 dip	54			
		Fol'n @ 30.7m	35			
				32.7 - 33.2,R4, intense sil'n & mod dol.		
33.20 TO 70.70	«SIL SEDS/ MUT»	Colour - grey Grain size - v. fine				
		Intensely silicified silver grey sericitic sed.		Intense silicification silver grey	8% py Tr-1% sp&gn throughout	R4
		Greyish white, cherty protolith		sericite		
		qtz veins & veinlets throughout.				
		33.9 - 34.1 - fractured & rubble pieces 3-5cm				
		@34.7 2-3cm shear				
		35.1 - 35.2 minor flt zne				
		35.7 - 35.8 minor flt zne				
		Foliation @ 34.5m	41	53.4 - 59.9 qtz carb	48.9 - 53.4 1%cp2.5Tgn3.5%sp1%Tt	
		38.5	53	pervasive with	2.5 - 3%gn 3.0-3.5%sph	
		42.0	38			
		46.0	46			
		49.5	42			
		52.5	25			
		55.1	35			
		59.0	38			
		63	32			
		66.2	40		68.4 - 68.7 greyish white qtz vein	
		70.0	48		with 12%py2%Gn&Sp	
					69.0 - 69.2 qtz veinlets	
					15%py Tr-1%Gn&1.5%Sp	
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD31151	21.60	21.90	0.30	0.01	0.10	0.08	.6	0.03									
BCD31152	23.90	24.00	0.10	0.08	1.10	0.58	3.4	0.05									
BCD31153	25.20	25.30	0.10	0.02	0.57	0.28	1.5	0.03									
BCD31154	31.20	32.70	1.50	0.01	0.04	0.01	.6	0.03									
BCD31155	32.70	33.20	0.50	0.01	0.11	0.03	2.4	0.03									
BCD31156	33.20	34.70	1.50	0.19	0.47	0.19	47.2	0.21									
BCD31157	34.70	36.70	2.00	0.01	0.21	0.09	5.7	0.23									
BCD31158	43.50	45.00	1.50	0.08	0.19	0.21	40.1	0.75									
BCD31159	45.00	46.50	1.50	0.03	1.48	0.92	23.6	1.69									
BCD31160	46.50	48.90	2.40	0.01	1.58	1.14	34.6	0.55									
BCD31161	48.90	49.90	1.00	0.90	7.36	2.94	893.8	1.32						2.89			
BCD31162	49.90	51.40	1.50	0.86	9.88	6.48	243.4	1.06						3.53			
BCD31163	51.40	53.40	2.00	0.12	9.96	6.52	83.2	0.51						3.04			
BCD31164	53.40	55.40	2.00	0.04	2.84	1.50	25.1	0.43									
BCD31165	55.40	57.40	2.00	0.40	1.94	1.01	98.9	0.29									
BCD31166	57.40	59.90	2.50	0.09	3.16	3.02	49.2	0.08						2.92			
BCD31167	59.90	61.90	2.00	0.79	2.56	1.16	27.2	0.11									
BCD31168	61.90	63.90	2.00	0.05	0.53	0.21	10.5	0.22									
BCD31169	63.90	65.40	1.50	0.05	1.22	0.61	21.1	0.19									
BCD31170	68.40	69.40	1.00	0.13	1.60	2.04	45.6	0.26									

MINNOVA INC.

HOLE NUMBER: U1330-101 — DRILL HOLE RECORD — IMPERIAL UNITS: — METRIC UNITS: X

PROJECT NAME: U6 — PLOTTING COORDS GRID: FIELD — ALTERNATE COORDS GRID: — COLLAR DIP: -73° 0' 0"
PROJECT NUMBER: SAM — NORTH: — NORTH: 0+ 0 — LENGTH OF THE HOLE: 29.90m
CLAIM NUMBER: — EAST: — EAST: 0+ 0 — START DEPTH: 0.00m
LOCATION: DRIFT — ELEV: — ELEV: 0.00 — FINAL DEPTH: 29.90m

COLLAR GRID AZIMUTH: 225° 0' 0" — COLLAR ASTRONOMIC AZIMUTH: 270° 0' 0"

DATE STARTED: April 2, 1991 — COLLAR SURVEY: YES — PULSE EM SURVEY: NO — CONTRACTOR: BOISVENU DRILLING
DATE COMPLETED: April 2, 1991 — MULTISHOT SURVEY: YES — PLUGGED: YES — CASING:
DATE LOGGED: April 15, 1991 — RQD LOG: NO — HOLE SIZE: BTW — CORE STORAGE: BARRIERE

PURPOSE: DRILLING FROM OPEN PIT, 1330 BERM TO TEST — UNDERGROUND

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
28.00	-	-74° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 0.60	«CSG»					Rock Mechanic notations using Piteau Codes
0.60 TO 14.60	«SERT MAF»	Colour - greenish yellow Grain size - aphanitic				
		Strong yellow sericitic, mod dolomitic altered seds. Weakly tectonitic and intermittent minor shearing and faulting 0.8 - 1.0 - minor shear 1.5 - 1.6 - minor flt 2.2 - 2.3 - minor flt 2.8 - 2.85 - minor shear 4.9 - 5.4 - minor shearing & rubble @5.4m possible hinge zone @5.5m 3-4cm gouge 6.7 - 6.9 - flt gouge 7.1 - 7.3 - flt gouge 10.7 - 10.8 - minor flt zne 12.5 - 13.0 - intermittent fling 13.6 - 14.0 «flt» gouge & Bx 14.0 - 14.6 minor intermittent shears & 1-2cm gouge planes		Strong yellow sericitic Mod ferro dolomitic alt and mod silicification	4% diss'd py	R2
		Foliation @ 1.5m	42	13.6 - 14.6 ferro-dolomitic alt very weak		
		3.5	66			
		7.0	51			
		8.5	62			
		11.5	56			
		14.0	56			
14.60 TO 15.10	«SIL SEDS»	Colour - grey Grain size - v. fine				
		Silver grey sericite and weak silicification to 14.8m. 14.8m to 15.1 pervasive silicification with a significant increase in pyrite		14.6 - 14.8 silver grey sericite 14.8 - 15.1 pervasive silicification	14.6 - 14.8 5-7% py Tr B.Mtls & Tt 14.8 - 15.1 «15-17%py»	Shearing from preceding interval ends with 5cm gouge @ 14.55-14.6 14.6 - 14.8 minor shearing throughout R 2 14.8 - 15.1, R4, flted at E.O.I. into next interval.
		Foliation 14.7m	75			
15.10 TO 28.50	«SERT SEDS/ ALT SEDS»	Colour - greyish yellow Grain size - v. fine				
		Yellow sericite with occ silver grey sericitic intervals of silts, seds and		Yellow sericite Tr silver grey sericite	4-5% py	R2

FROM / TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		occ qtz carb veins.				
		Intermittent faults @ T.O.I.				
		┤15.1 - 15.6├«flt»gouge & bx				
		15.9 - 16.0 - flt zne with gouge				
		┤16.4 - 18.1├ «flt zne»gouge & bx				
		18.7 - 22.3 - intermittent shearing & flting				
		┤22.3 - 22.8├ «flt»gouge & bx				
		22.8 - E.O.I. intermittent shears & minor flts				
		23.0 - 23.3) Qtz Carb vein				
		24.1 - 24.4)				
		25.4 - 25.7)				
		26.8 - 24.4)				
		Variable Fol'n @ 15.7	62			
		@ 18.5	82			
		@23.0	74			
		@25.0	65			
		@28.2	55			
28.50 TO 29.90	«SIL SEDS»	Colour - grey Grain size - v. fine Silver grey sericitic altered seds, with greyish white and white qtz veins Moderately tectonitic with qtz veinlets contourted & ptygmatic from 28.9 - 29.5m		Silver grey sericite Weak - mod & patchy silicification	8% py	R2
		Foliation @ 28.5	58			
		@ 29.9	53			
		29.5 - 29.6 - minor fault zne				
		29.7 - 29.8 - minor shearing & flt zne				
	E.O.H.					

HOLE NUMBER: U1330-101 ASSAY SHEET DATE: 20-March-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	GEOCHEMICAL CU ppm	ZN ppm	PB ppm	SG	AG oz/T	AU oz/T	COMMENTS
BCD31171	13.60	14.00	0.40	0.01	0.05	0.03	1.2	0.03									
BCD31172	14.00	14.60	0.60	0.05	0.12	0.07	4.5	0.03									
BCD31173	14.60	14.80	0.20	2.64	5.74	2.88	1390	3.10						2.86			
BCD31174	14.80	15.10	0.30	1.10	2.84	1.16	784.0	2.78						3.39			
BCD31175	15.10	15.60	0.50	0.05	0.13	0.06	27.5	0.08									
BCD31176	23.00	23.30	0.30	0.03	0.04	0.02	27.8	0.03									
BCD31177	23.30	23.80	0.50	0.01	0.02	0.01	1.9	0.03									
BCD31178	23.80	25.70	1.90	0.01	0.02	0.01	2.9	0.03									