



MINNOVA Inc.

**UNDERGROUND DIAMOND DRILL
LOGS**

U1290-01 TO U1290-20

DRILLED OCTOBER, 1991

822907

Samatosum Division

**UNDERGROUND DIAMOND DRILL
LOGS**

U1290-01 TO U1290-20

DRILLED OCTOBER, 1991

822907

*B. Jensen
26/11/91*

MINNOVA INC.
SAMATOSUM PROJECT

MEMORANDUM

DATE: 29 November, 1991

TO: Alex Davidson

JEC 2 1991

FROM: Bob Friesen

SUBJECT: Underground Drill Logs/Sections

Alex,

Enclosed is a set of diamond drill logs and 1:250 scale sections covering the recent underground program from the 1290 Drift.

Fred Sveinson picked up their set yesterday while visiting the site.

Best regards,



Bob Friesen

HOLE NUMBER: U1290-01

NIMROVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: 1290 ACCESS DRIFT

PLOTTING COORDS GRID: NINE
NORTH: 684.71N
EAST: 9700.86W
ELEV: 1297.70

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

COLLAR DIP: -45° 0' 0"
LENGTH OF THE HOLE: 71.00m
START DEPTH: 0.00m
FINAL DEPTH: 71.00m

COLLAR GRID AZIMUTH: 182° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 227° 0' 0"

DATE STARTED: October 6, 1991
DATE COMPLETED: October 7, 1991
DATE LOGGED: 0, 0

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

PULSE EN SURVEY: NO
PLUGGED: YES
HOLE SIZE: BW

CONTRACTOR: TONTO
CASING: NONE
CORE STORAGE: EXPLORATION CAMP

PURPOSE: TEST Au ZONE IN VACINITY OF HOLE U1330-43.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
4.60	-	-47° 0'	ACID	-	-	-	-	-	-	-	-
70.10	-	-47° 0'	ACID	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
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HOLE NUMBER: U1290-01

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-01

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 20.05	Delomitized Mafic Tuff, Lapilli Tuff «DL NT»	Medium green, tan grey. Fine to medium grained. Weak to moderately foliated weakly fragmental, (1-5cm light green, cream green mafic fragments. 15.6-20.05m: Colour change from medium green to tan grey, patchy granular texture.		0-15.6m: Moderately delomitized, moderate- ly abundant 2mm-2cm wormy quartz- carbonate veining. Strongly delomitized.	Trace pyrite. Trace sp, gm associated with quartz veins.	
20.05 TO 21.15	Fault Zone Interlayer- ed Argil- lite, Seri- cite «FLT, ARG»	Tan brown, black. Fine grained. Black brecciated gougy silicified argillite mixed with strongly sericitized mafic or soda. Faulted lower contact @..... Foliation terminated by fault contact.	67	Strong sericite.	Patchy 1-2% pyrite.	
21.15 TO 32.30	Undiscript Pyritic Sediments «NT»	Dark grey. Fine grained. FOLIATION @ 23.0m 27.5m Occasional 1-2cm wide gouge zones. «29.65-29.8» «Flt» Brecciated seds and quartz veins, minor gouge.	70 60 70	Strong gray sericite along foliation planes. 1-10cm wide quartz-sulphide veins com- mon.	7-15% very fine pyrite disseminated and wispy parallel to foliation. Coarse brassy pyrite, honey sphalerite and galena associated with quartz vein- ing. Significant zones of mineraliza- tion as follows. «20-20.37» «25% py, 3% sp, 1% gm» «32.1-32.25» «5% sp»	
32.30 TO 47.65	Silicified Pyritic Sediments «NT»	Dark grey. Fine grained. Granular to weakly fragmented texture. Below 38.9m wispy 1-2mm-1cm black argillite layers. «35.15-35.7» «Flt» Sharp upper contact @..... «38.6-39.6» «Flt Zn» Fault zone. Numerous 1-3cm gouge zones. Faulted lower contact at.....	55 65	37.15-38.75m: Numerous 3-5cm quartz veins. 43.4-44.15m and 45.5-46.75m: Abundant quartz veining and quartz flooding.	7-15% pyrite, locally 40-50% very fine grained pyrite. 35.85m: 10cm 7% sp, 15% py, (1% gm). 37.15-38.75m: Quartz veins with 3-10% sp, 2-3% gm. (5% coarse brassy py. «43.4-43.7» «2% sp, gm» «46.15-46.4» «7% sp, 1% gm» Possible tetrahedrite?	

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DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-01

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
47.65 TO 49.04	*SXS*	Disseminated to narrow massive layers to massive clots of py, cp, gn in a siliceous sericitic gangue. 48.77m: 3cm fault gouge..... Gougy slip plane at lower contact @.....	95 70		20-40% coarse brassy pyrite, (1% cp, 1% sp, (1% gn. 47.92m: 4cm massive gn.	Pyrite coarser grained and more brassy than pyrite in nut.
49.04 TO 49.60	*NUT*	Medium grained. Fine grained. 4cm fault gouge at lower contact.			15-20% very fine grained pyrite, minor coarser grained pyrite flooding similar to previous unit.	
49.60 TO 61.65	*SXS*	Massive core, no foliation. Medium grained disseminated sulphides merging into larger clots in a siliceous sericitic gangue. 52.3-61.65m: Weak fault zone. Interval contains numerous 1-2mm irregular gougy slips. Strongest faulting from 57.3-57.7m. {52.95-53.55} *Nut* Raft of lesser silicified and mineralized nut within smax.		61.05-61.4m: Quartz vein.	30-50% sulphides mainly coarse brassy pyrite with 1-3% honey sphalerite, trace cp. Elevated base metals as follows: {49.6-52.45} *7-10% sp, 1-2% gn, 1% cp* {53.55-54.6} *5-7% sp* Includes 1.5cm massive sp. {60.8-61.65} *5% sp, 3% cp* Cp as (1-2cm clots within quartz veins.	Intense pervasive silicification and mineralization of nut.
61.65 TO 64.10	*NUT*	Medium to dark grey. Fine grained. Nondiscript pyritic seds. Quartz veining along lower contact.		Minor quartz veining.	7-10% very fine disseminated wispy pyrite. (1% sp, tr cp. {62.1-62.35} *3% sp* 3% honey sp, (1% cp & gn associated with quartz veining.	
64.10 TO 71.00	Sericitized Sediments *SER SEDS*	Brown, beige. Fine to medium grained. 64.1-67.5m: Medium grained granular sediments with patchy strong sericite rich layers. 67.5-71m: Finer grained seds, strong pervasive sericite.		Weak sericite. 67.5-71m: Strong sericite abundant quartz veining.	(1% pyrite. Patchy 7-10% pyrite over 5cm widths. 69.25-69.45m: 3-5% red brown sp within quartz vein.	
		END OF HOLE.				

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DRILL HOLE RECORD

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HOLE NUMBER: U1290-01

BIMBOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
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HOLE NUMBER: U1290-01

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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SOLE NUMBER: U1290-01

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						EPI D-CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SO ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SO oz/T	AG oz/T		
34151	27.60	28.00	0.40	0.029	0.25	0.42	9.4	0.11									
34152	28.00	28.40	0.40	0.093	3.3	2.36	32.1	0.17				3.20					
34153	32.00	32.30	0.30	0.051	2.45	1.02	9.7	0.05									
34154	37.15	38.75	1.60	0.188	0.83	0.73	57.7	0.14									
34155	41.25	42.50	1.25	0.017	0.29	0.28	6.6	0.15									
34156	42.50	43.00	0.50	0.012	0.05	0.19	6.0	0.22									
34157	43.40	44.50	1.10	0.051	0.37	0.90	26.5	0.10									
34158	44.50	45.50	1.00	0.047	0.40	0.47	17.3	0.43									
34159	45.50	46.75	1.25	0.060	1.50	0.83	33.6	0.57									
34160	46.75	47.05	0.30	0.32	0.19	0.10	7.6	0.30									
34161	47.65	49.04	1.39	0.572	3.63	4.14	103.2	11.50				3.90					
34162	49.04	49.60	0.56	0.095	1.55	0.71	21.5	0.54									
34163	49.60	51.00	1.40	1.150	0.44	6.02	224.1	30.92				4.19					
34164	51.00	52.45	1.45	1.040	10.12	3.76	912.0	5.56				4.01					
34165	52.45	52.95	0.50	0.172	3.15	0.90	129.6	0.54				3.67					
34166	52.95	53.55	0.60	0.135	0.96	0.53	125.0	0.97				3.27					
34167	53.55	54.60	1.05	1.02	6.20	3.47	803.0	2.56				3.92					
34168	54.60	56.10	1.50	0.002	3.26	0.42	31.7	0.58									
34169	56.10	57.60	1.50	0.272	3.95	0.94	30.1	1.10				3.56					
34170	57.60	59.20	1.60	0.310	2.46	0.80	30.0	2.04				3.40					
34171	59.20	60.80	1.60	0.205	3.67	1.31	39.3	5.10				3.79					
34172	60.80	61.65	0.85	1.960	2.22	0.96	60.4	0.60				3.20					
34173	61.65	62.10	0.45	0.115	0.22	0.13	10.1	0.60									
34174	62.10	62.35	0.25	0.245	5.61	2.65	66.3	12.22				3.41					
34175	62.35	63.35	1.00	0.006	0.32	0.09	9.6	1.04									
34200	67.20	68.70	1.50	0.005	0.01	0.02	3.1	0.23									
34201	68.70	70.15	1.45	0.006	1.93	0.29	6.7	0.19									

SOLE NUMBER: U1290-01

ASSAY SHEET

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 10.95	Dolomitized Mafic Tuff «DOL NT»	Medium green. Fine grained. Weakly foliated, patchy fine granular texture, rare lighter green mafic lapilli. 18-18.95m: Brecciated texture. Sharp lower contact.		8-14.25m: Weak pervasive dolomite, fairly abundant fine wormy quartz-calcite, quartz dolomite veining. Weakly chloritic. 14.25-18m: Stronger pervasive dolomitization, sharp decrease in quartz-carbonate veining, weak sericite. 18-18.95m: Moderate sericite as 1-2mm wide veinlets.	(1-1% pyrite.	
18.95 TO 22.30	Argillite, Sericite, Fault Zone «ARG, FLT»	Dark grey, light beige. Fine grained. Mix of black brecciated, graphitic silicified argillite & brecciated sheared sericite rich sediments or mafics with brecciated quartz veins. 28.35-28.6m: Screens of silicified pyritic sediments (NUT). Faulted, gougy lower contact.		Patchy strong sericite alteration of seds/mafics.	Patchy 2-3% pyrite, locally 7% over 5cm.	
22.30 TO 46.55	Undifferentiated Silicified Pyritic Sediments «NUT»	Medium to dark grey. Fine grained. Weakly foliated, weak brecciated texture from anastomosing pyrite veinlets, may also be primary sedimentary feature. 36.3-41.5m: Traces of remnant argillite, argillite and sediment fragments at 41.4m. Minor 2-4cm wide grey fault gouge zones. Wider fault zones as follows: 22.3-22.75m, 39.1-33.3m, and 36.1-36.3m. FOLIATIONS: @ 26m 77 @ 31m 75 @ 39.3m 70		Pervasive silicification. Strong grey sericite along foliation planes. Minor quartz veining as massive bull quartz and finer wormy quartz sulphide veining.	7-12% and locally 20-30% very fine grained pyrite disseminated and as very fine anastomosing veinlets partially defining foliation. Occasional 1-5cm wide quartz veins with up to 10% sphalerite-galena. Zones of wider quartz-sulphide mineralization as follows: 26.95-27.25m: 10% coarse brassy pyrite, 3% honey brown sp. (1% gn). 36.5-36.86m: 20-25% very fine pyrite, 10% coarser brassy pyrite, 1-2% sp. 39.5-41.1m: 20-25% pyrite associated with wormy quartz veining. 1-2% sp from 40.5-41.1m. 44.35-46.55m: 20% very fine pyrite.	
46.55 TO 56.45	«SRSZ»	Brassy bronze. Fine to medium grained. Disseminated sulphides to 1-2cm wide massive layers which form a patchy layered appearance. Sulphides hosted by grey fine siliceous gangue, (1% dolomite.			25-50% granular fine to medium grained brassy pyrite, local very fine grained 1-2cm massive pyrite layers. (1-2% honey sp disseminated with pyrite. Zones of base metal enrichment asso-	

HOLE NUMBER: U1290-02

NIXNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		{47.35-48.25} «Nut» Silicified pyritic sediments. Layering in sulphides @ 48.5m: @ 53.2m: Core angles decreasing, folding? @ 55.1m:	65 58 50	46.65-47.35m: Sulphides associated with white quartz veining.	clated with quartz veining. {46.55-47.35} «7x sp, 5x gn» 5-7x sp, 5x gn, possible tetrahedrite. 47.35-48.25m: 7-8x very fine grained dark wispy pyrite. Below 52.4m begin to see occasional disseminated grains of cp. {55.8-56.45} «7x sp, + gn» associated with quartz veining.	Locally unit looks very similar to foliated NUT, but with a silicification and coarse grained pyrite overprint. 49-49.5m: Fragments of NUT in coarser grained siliceous smax.
56.45 TO 60.60	Quartz Veined, Silica Flooded Distorted Pyritic Sediments «QTZ VND NU» To	Medium grey. Fine grained. Grey silicified pyritic seds, highly contorted and veined. 58.4-58.8m: Fault zone. 58.8-60.05m: less distorted appearance, strong silica flooding as 5mm mineralized veinlets.		Strong silica flooding. Abundant grey/white wormy quartz veining.	20-30x pyrite mainly as very fine grained dark pyrite more characteristic of NUT occurring as 2-5cm wide massive distorted layers from 56.45-58.4m and as narrow wispy veinlets below 58.4m. 56.45-58.65m: 1-2x sp associated with quartz veins, (1x cp). 58.65-60.05m: 5-7x sp, (1-1x cp) {60.05-60.6} «Smax» Smax-ns mainly pyrite with up to 10x sp, 2x cp over 5cm width.	
60.60 TO 72.40	Silicified Pyritic Sediment «NUT»	Medium grey. Fine grained. {66.55-67.7} «Flt» 66.55-67.4m: Sheared gougy seds. 67.4-67.7m: Fault gouge. Shearing before fault gouge B..... {70.9-71.65} «Flt» Brecciated, fault gouge. 72.2r-72.4m: Faulted lower contact, possibly at	35 73	62.25-66.55m: Abundant white bull quartz veins.	7-10x very fine grained pyrite. Patchy sp-gn within quartz veins. 63.9m: 3cm grey siliceous zone with felted tetrahedrite.	

HOLE NUMBER: U1290-02

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-02

KINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
72.40 TO 77.10	Sericitized Sediments +SERT SEOS	Light beige, yellow brown. Fine grained sericite sediments moderately foliated accented by (cm grey siliceous pyritic veining parallel to foliation. 72.4-72.85) cflc Fault zone, gassy brecciated sands & quartz veins. FOLIATION @ 74.9m 76.45-77.1m: Grey pyritic sediments similar to previous NWT with abundant quartz veining. END OF HOLE.	60	Strong sericite abundant massive white quartz-carbonate veins.	1-2% pyrite.	

HOLE NUMBER: U1290-02

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-02

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS								GEOCHEMICAL						EPI D-CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG oz/T	AG oz/T	AU oz/T			
34176	26.95	27.25	0.30	0.189	1.40	1.20	30.1	0.16											
34177	36.50	36.85	0.35	0.012	0.41	0.42	10.1	0.14											
34178	39.50	40.50	1.00	0.000	0.04	0.10	5.1	0.40											
34179	40.50	41.10	0.60	0.014	0.05	0.34	0.0	0.15											
34180	44.35	45.45	1.10	0.000	0.02	0.03	0.0	0.74											
34181	45.45	46.55	1.10	0.015	0.10	0.12	0.2	0.30											
34182	46.55	47.35	0.80	0.143	1.09	4.99	102.5	0.33						3.42					
34183	47.35	48.25	0.90	0.009	0.02	0.10	6.3	0.40											
34184	48.25	49.00	1.55	0.020	1.11	0.77	20.3	0.16											
34185	49.00	51.20	1.40	0.064	1.6	0.66	19.6	0.39											
34186	51.20	52.00	1.60	0.165	1.15	1.20	46.7	0.40											
34187	52.00	54.30	1.50	0.086	0.66	0.70	16.9	0.21											
34188	54.30	55.00	1.50	0.054	1.99	0.91	19.0	1.22											
34189	55.00	56.45	0.65	0.126	3.03	2.41	42.8	2.90						3.36					
34190	56.45	57.55	1.10	0.124	0.36	0.21	13.2	1.40						3.14					
34191	57.55	58.65	1.10	0.049	0.52	0.22	7.1	0.55											
34192	58.65	60.05	1.40	0.237	1.99	0.65	22.2	0.95											
34193	60.05	60.60	0.55	0.362	1.60	22.32	02.6	0.47						3.61					
34194	60.60	62.10	1.50	0.067	0.09	0.12	0.0	0.32											
34195	62.10	63.60	1.50	0.030	0.11	0.11	0.3	0.20											
34196	63.60	65.10	1.50	0.013	0.03	0.03	4.7	0.19											
34197	65.10	66.55	1.45	0.009	0.01	0.10	4.3	0.14											
34198	74.95	75.05	0.90	0.003	0.01	0.01	3.2	0.07											
34199	76.25	77.10	0.85	0.012	0.01	0.01	2.3	0.14											

HOLE NUMBER: U1290-02

ASSAY SHEET

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE (TO CA)	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 18.50	Dolomitized mafic Tuff, Lapilli «DOL HT»	Medium green, light gray. Fine grained. Weakly foliated. Weakly fragmental, minor mafic lapilli. 14.3-18.5m: 20% mafic lapilli. Sharp lower contact, possibly faulted @.....	62	0-13.3m: Minor quartz carbonate veining. 14.3-18.5m: Strongly bleached, dolomitized, wispy sericite & fuchsite.	Trace pyrite. 14.4m and 16.4m: 10cm wide quartz-carb veins with 2-5% pyrite. (1% gn, cp.)	
18.50 TO 19.45	Brecciated Argillite, Sericite, Fault «ARG, SERT, FLT»	Black, yellow gray. Fine grained. Interlayered tectonized silicified argillite and sericite mafics or seds. Minor fault gouge.			(1% pyrite.)	
19.45 TO 26.50	Graphitic Silicified Argillite «SIL ARG»	Black. Weakly foliated, no relief bedding excluding very fine grained (5mm wide pyrite layers which are often distorted, folded, locally isoclinal). 20.4-21.15m: Medium gray pyritic sediments (NWT) with interlayers of black argillite. Sharp lower contact at 21.15m..... Graphitic along foliation planes. FOLIATION @ 22.9m 25.3m Sharp lower contact @.....	70 60 55 62	1-2mm wide white quartz veinlets common.	(3% pyrite as occasional very fine grained beds. Trace sp associated with quartz veining. 7% pyrite. 21.15-21.45m: 15% pyrite, (1% sp.)	
26.50 TO 52.65	Silicified Pyritic Sediments «SIL PY SED»	Medium to dark gray. Fine grained. Undifferentiated sediments. Moderately foliated. Occasional fault zones as follows. {31.95-32.45} «Flt»..... {39.5-40.1} «Flt»	60 50 50 47 52	Sericitic and clay coated foliation surfaces. 1-2cm to 10-40cm wide quartz sulphide veins common.	7-15% very fine grained wispy and disseminated pyrite generally parallel to foliation. Coarse grained pyrite sphalerite galena +/- tetrahedrite veins common. Zones of abundant quartz-sulphide veining as follows: 30.7-31.8m: 10-15% coarse brassy py, 2-3% honey sp, 1-2% tot. 36.35-38.75m: 7-10% coarse brassy py and sp within 10-30cm quartz veins, trace gn, tot. 42.95-44.05m: 15-20% fine & coarse brassy pyrite, 2-3% sp.	

HOLE NUMBER: U1298-03

NINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		Sharp lower contact @..... Minor clay gouge along contact plane.	52		{49.25-51} «Smsx» foliated 40-50% py in 3 generations of pyrite: 1) very fine grained pyrite characteristic of NUT. 2) Medium grained disseminated pyrite flooding characteristic of next interval. 3) Coarse brassy pyrite associated with quartz veins. 1-2% sp, (1% gn.	NUT precursor still quite prominent.
52.65 TO 64.20	Semi-massive Sulphides, Pyritic Sediments «SNSX, NUT»	Medium grained pyrite flooding of fine grained pyritic sediments (NUT). Remnant fine grained foliated nut textures. Siliceous matrix to sulphides, trace dolomite. Weak layering/foliation @... 61.3-63.65m: Pyritic silicified cherty sediments.	53	59.85-59.75m: Massive white barren quartz vein. Abundant waxy quartz veining.	35-60% fine to medium grained pyrite. 1-3%, locally 5% honey sp, traces of gn, cp, tet. Elevated base metals associated with white quartz veining. 63.65-64.2m: Semi-massive to massive pyrite, quartz veining with 3-5% sp, 2% tet, trace gn.	NUT precursor still evident. Patchy more massive zones. Equivalent to base of zone in hole U1298-2. Equivalent to NS interval at base of zone in hole U1298-2.
64.20 TO 86.00	Silicified Pyritic Sediments «NUT»	Medium gray. Fine grained. Undifferentiated pyritic sediments well foliated at..... {70.4-71} «Flts» {75.1-76.6} «Flts» END OF HOLE.	45	{82.25-83.8} «Qtz Vns» White barren quartz veining.	10-15% very fine grained wispy pyrite layers defining foliation. 64.2-70.2m: Occasional (1-3cm wide quartz veins with coarse brassy pyrite, sp, tet, gn. 70.8-82.25m: (1% cp, sp within gray siliceous veining approximately parallel to foliation.	

HOLE NUMBER: U1298-03

DRILL HOLE RECORD

LOGGED BY: P.BAXTER

PAGE: 3

HOLE NUMBER: U1290-03

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS								GEOCHEMICAL						EPI D/CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG oz/T	AG oz/T	AU oz/T			
34202	30.70	31.00	1.10	0.592	4.56	1.91	121.0	0.11								3.25			
34203	36.35	37.50	1.15	0.072	1.15	0.52	13.7	0.10											
34204	37.50	38.75	1.25	0.330	1.26	1.79	60.0	0.37											
34205	38.75	39.90	1.15	0.006	2.24	0.06	26.1	0.34											
34206	42.95	44.05	1.10	0.097	1.51	0.55	16.3	0.20											
34207	47.00	49.25	1.45	0.014	0.02	0.11	5.1	0.14											
34208	49.25	51.00	1.75	0.076	1.00	1.01	10.4	0.25											
34209	51.00	52.65	1.65	0.020	0.07	0.70	22.7	0.26											
34210	52.65	53.90	1.25	0.057	2.63	1.14	25.3	0.24											
34211	53.90	55.15	1.25	0.433	4.69	1.92	103.7	3.74							3.93				
34212	55.15	56.45	1.30	0.120	2.90	1.21	39.2	1.17							3.54				
34213	56.45	57.75	1.30	0.003	0.71	0.46	20.0	0.46											
34214	57.75	59.05	1.30	1.092	0.13	0.21	24.0	0.50											
34215	59.05	59.75	0.70	0.004	0.01	0.00	1.5	0.07											
34216	59.75	61.30	1.55	0.036	1.10	1.00	15.11	0.07											
34217	61.30	62.45	1.15	0.206	0.33	0.73	50.7	1.02							3.03				
34218	62.45	63.65	1.20	0.027	0.92	0.69	12.4	5.10							2.99				
34219	63.65	64.20	0.55	0.762	6.92	2.67	214.0	1.73							3.61				
34220	64.20	65.50	1.30	0.020	0.02	0.09	0.0	0.42											
34221	65.50	66.00	1.30	0.121	0.99	0.26	39.6	0.57											
34222	66.00	68.10	1.30	0.039	0.09	0.12	15.0	0.54											
34223	68.10	69.50	1.40	0.006	0.01	0.05	4.4	0.23											
34224	69.50	70.20	0.70	0.246	1.01	3.40	06.0	0.61						2.94					
34225	70.00	79.95	1.15	0.155	0.16	0.21	11.0	0.52											
34226	79.95	81.10	1.15	0.466	0.30	0.32	26.1	0.50											
34227	81.10	82.25	1.15	0.140	0.44	0.27	21.3	0.55											
34228	82.25	83.00	1.55	0.035	0.20	0.11	9.5	0.19											

HOLE NUMBER: U1290-03

ASSAY SHEET

PAGE: 4

HOLE NUMBER: U1290-03

RQD ASSAY

DATE: 17-November-1991

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

HOLE NUMBER: U1290-03

RQD ASSAY

PAGE: 5

HOLE NUMBER: U1290-04

NINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: 00
PROJECT NUMBER: SAR
CLAIM NUMBER:
LOCATION: 1250 ACCESS DRIFT

PLOTTING COORDS GRID: NINE
NORTH: 687.60M
EAST: 9728.40M
ELEV: 1297.60

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

COLLAR DIP: -59° 0' 0"
LENGTH OF THE HOLE: 81.70m
START DEPTH: 0.00m
FINAL DEPTH: 81.70m

COLLAR GRID AZIMUTH: 100° 0' 0"

COLLAR ASTRONOMIC AZIMUTH: 225° 0' 0"

DATE STARTED: October 9, 1991
DATE COMPLETED: October 11, 1991
DATE LOGGED: October 11, 1991

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

PULSE EN SURVEY: NO
PLUGGED: YES
HOLE SIZE: BW

CONTRACTOR: TORONTO DRILLING LTD.
CASING: NONE
CORE STORAGE: EXPLORATION CAMP

PURPOSE: TEST AN ZONE AT AN ELEVATION OF 1250M.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
4.60	-	-51° 0'	ACID	-		-	-	-	-	-	
81.70	-	0° 0'	ACID	-	WATER IN TUBE.	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-
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HOLE NUMBER: U1290-04

DRILL HOLE RECORD

LOGGED BY: P.BAXTER

PAGE: 1

HOLE NUMBER: U1290-04

 HIRKOVA INC.
 DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 17.60	Dolomitized Sericitized mafic Tuff «DOL SER M TUFF»	Medium green, beige-gray-green. Fine to coarse grained. Massive to weakly foliated granular coarser grained below 6.5m. FOLIATION @ 16.5m Faulted lower contact	75 83	Moderate pervasive streaky pervasive dolomite-ankerite. Weak quartz-carbonate veining. 9.8-17.6m: Moderately sericitic. Sericite occurring as inn wisps to 4cm wide veins.	Trace pyrite.	
17.60 TO 19.15	Tectonized Sericitized mafic and Argillite «FLT, SERT, ARG»	Beige-gray. Fine grained. Sheared sericitized mafic tuffs with zones of brecciated silicified argillite and minor brecciated quartz veins. Minor fault gouge. Sharp lower contact @.....	85	Intense sericite.	1-2% pyrite, trace ep.	
19.15 TO 52.00	Silicified Pyritic Sediments «NUT»	Medium gray. Fine grained. Siliceous sediments weakly foliated defined by wispy pyrite and weak-moderate pervasive fine brecciated (milled) sheared texture. {25-25.2} «Flt» Sharp lower fault at..... {30.2-30.4} «Flt» 32m: 5cm fault. {36.4-36.7} «Flt» 10-20cm wide gouge zones. FOLIATION @ 20.7m 26.6m 30.2m 49.3-52.0m: Wispy traces of black silicified	70 75 75 75	Silicified, grey sericite along foliation. 30.8-36.3m: Quartz-sulphide veins common. 40.2-43m: 10-20cm quartz sulphide veins common. Quartz veins comprise 25% of interval.	7-8% very fine wispy pyrite. Narrow quartz veins contain up to 5% honey brown sphalerite. 30.8-36.3m: 25-50% pyrite as very fine grained pyrite within NUT, patchy medium grained pyrite flooding and coarse brassy pyrite associated mainly with quartz veins. 3-5% & up to 15% sp within quartz veins, (1% gn, tet associated with quartz veins. 40.2-43m: Coarse brassy pyrite, coarse honey & grey sphalerite, galena & tetrahedrite associated with quartz veins. Individual veins contain up to 30% py & 10% sp. {46.2-46.8} «Smxz» 46.2-46.35m: No 80% pyrite. 46.35-46.8m: Pyritic sediments with 25-30% medium grained pyrite flooding. {48.3-49.25} «Smxz» 30% fine to medium grained disseminated pyrite flooding in a wormy veining pat-	Unit retains a foliated appearance, NUT precursor still evident. Similar style of mineralization as in previous hole.

HOLE NUMBER: U1290-04

DRILL HOLE RECORD

LOGGED BY: P.BAXTER

PAGE: 2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		argillite. 52.3-52.7: #Flts			tern. 7-8% sphalerite, 1-2% gn, 2-3% tet associated with irregular quartz veining.	
52.00 TO 60.10	<SNS>	Medium gray. Fine grained foliated pyritic sediments with medium grained pyrite flooding, silicified with irregular grey siliceous veining and cut by white quartz sulphide rich veins. 54.6-54.7m: Fault. 56.05-56.3m: Brecciated core, minor gouge.		20-25% quartz veining.	40-70% very fine to medium grained pyrite layered/foliated. Coarse brassy pyrite, honey sphalerite, galena & tetrahedrite associated with coarse veining. 3-5% sp, (1% gn & tet.	Unit retains foliated texture, NUT precursor still evident.
60.10 TO 69.60	Silicified Pyritic Sediments <NUT>	Medium gray. Fine grained. Weak to moderately foliated patchy sheared milled texture. FOLIATION @ 67.7m 10cm fault gouge at lower contact.	75	Minor 1-2cm white quartz veining.	7-15% very fine dark pyrite disseminated, but mainly as wispy anastomosing-braided veinlets parallel to foliation. Trace sphalerite. Locally 30% very fine pyrite.	
69.60 TO 76.30	Quartz Veins, Sericitic Sediments <QTZ VNS, SER SEDS>	White, yellow, tan. Fine grained. Predominantly massive white barren quartz veins with inclusion of strongly sericitized sediments and 15-40cm wide intervein zones of fine grained sericitized sediments and coarser siltstones.		Intense sericite.	First 50cm of veining irregular veinlets/clots of galena with minor py, cp, sp. Trace 1% pyrite in sedi.	
76.30 TO 78.60	Pyritic Sericitic Sediments <PY SEDS>	Medium to dark grey. Fine, nondescript foliated sericitic sediments. FOLIATION @ 76.3-77.2: #Flts Gougy brecciated core, sharp lower contact @	60 65	Strong gray sericite.	5-10% fine wispy pyrite parallel to foliation.	
78.60 TO 81.70	Sericitized Sediments <SER SEDS>	Medium gray, yellow, beige. Fine grained. 78.6-79.6m: Medium gray, fine grained foliated sericitic argillaceous sediments, minor lighter grey siltstone BEDDING/FOLIATION @ 79.6-81.7m: Yellow, beige, fine sericitized sediments, with distorted, brecciated 5mm quartz veins, FOLIATION @..... END OF HOLE.	65 65	Strong sericite. Approximately 30% brecciated, bounded quartz veins.	Patchy 3-5% disseminated pyrite within sericite.	

HOLE NUMBER: U1290-04

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						EPI D-CAR	COMMENTS	
				CU %	ZN %	PB %	AG g/t	AU g/t	SO ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SO oz/T	AG oz/T			AU oz/T
34229	29.55	30.00	1.25	0.400	2.41	1.51	102.0	0.32										
34230	30.00	32.00	1.20	0.070	2.49	1.45	20.4	0.02										
34231	32.00	33.40	1.40	0.349	2.94	1.94	56.0	0.21										
34232	33.40	34.00	1.40	0.071	1.72	1.14	22.0	0.05										
34233	34.00	36.30	1.50	0.239	3.28	1.79	37.1	0.09										
34234	40.20	41.60	1.40	0.072	2.40	1.35	26.9	0.01										
34235	41.60	43.00	1.40	0.177	1.10	0.72	50.9	0.05										
34236	43.00	44.60	1.60	0.014	0.20	0.17	9.6	0.02										
34237	44.60	00.20	1.60	0.006	0.01	0.05	7.5	0.19										
34238	46.20	46.00	0.60	0.000	0.25	0.04	13.5	0.40										
34239	46.00	48.30	1.50	0.005	0.01	0.04	9.6	0.21										
34240	48.30	49.30	1.00	0.029	1.19	1.05	47.7	0.10										
34241	49.30	51.00	1.70	0.022	0.07	0.04	11.5	0.10										
34242	51.00	52.00	1.00	0.003	0.01	0.00	5.4	0.03										
34243	52.00	54.50	1.50	0.067	0.05	1.74	33.6	0.02										
34244	54.30	55.00	1.50	0.030	1.23	0.66	30.0	0.04										
34245	55.00	57.30	1.50	0.234	4.06	2.00	00.2	0.16										
34246	57.30	58.00	1.50	0.040	0.90	0.60	20.0	0.05										
34247	58.00	60.10	1.30	0.060	0.57	0.44	27.1	0.21										
34248	60.10	61.60	1.50	0.120	0.27	0.10	53.9	0.24										
34249	69.60	71.30	1.70	0.026	0.17	1.13	16.0	0.19										
34250	71.30	73.00	1.70	0.002	0.01	0.01	2.4	0.02										
34251	73.00	74.70	1.70	0.002	0.01	0.02	2.5	0.04										
34252	74.70	76.30	1.60	0.003	0.01	0.02	4.1	0.15										

HOLE NUMBER: U1290-04

ASSAY SHEET

PAGE: 4

HOLE NUMBER: U1290-05

NIXHOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: UG
PROJECT NUMBER: SAN
CLAIM NUMBER:
LOCATION: 1290 ACCESS DRIFT

PLOTTING COORDS GRID: NINE
NORTH: 688.18M
EAST: 9720.40M
ELEV: 1297.60

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

COLLAR DIP: -79° 0' 0"
LENGTH OF THE HOLE: 122.80m
START DEPTH: 0.00m
FINAL DEPTH: 122.80m

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

DATE STARTED: October 11, 1991
DATE COMPLETED: October 12, 1991
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQB LOG: NO

PULSE EN SURVEY: NO
PLUGGED: YES
HOLE SIZE: 8M

CONTRACTOR: TONTO DRILLING LTD
CASING:
CORE STORAGE: EXPLORATION CAMP

PURPOSE: TEST AU ZONE 20M NORTH OF KNOWN MINERALIZATION.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
4.61	-	-79° 0'	ACID	-		-	-	-	-	-	
87.80	-	0° 0'	ACID		IRREGULAR ETCN.	-	-	-	-	-	
91.40	-	-76° 0'	ACID	OK		-	-	-	-	-	
121.90	-	-76° 0'	ACID	OK	FAINT ETCN.	-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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HOLE NUMBER: U1290-05

DRILL HOLE RECORD

LOGGED BY: P.BAXTER

PAGE: 1

HOLE NUMBER: U1290-05

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	(ANGLE) TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 17.90	Dolomitized Mafic Tuff Lapilli Tuff •DOL NT•	Medium grey-green, yellow-brown. Fine to coarse grained. Fine grained mafic tuff become coarser grained below 7.9m. 7.9-14.1m: (1cm sericitized dolomitized lapilli in a green dolomitized matrix. 14.1-17.9m: Stronger sheared appearance strong dolomitized lapilli in a strongly sericitized matrix. FOLIATION @ 17.5m	72	Strong pervasive dolomitization. 14.1-17.9m: Strong sericite, Dolomite, Trace fuchsite.	Trace pyrite.	
17.90 TO 18.00	Fault Zone, Sericitized Mafics and Minor Argillite •FLT, SER M AF•	Grey-beige. Fine grained. Sheared gouge sericitized mafic tuff with narrow screens and fragments of argillite and zones of brecciated quartz veining.			(lt pyrite.	
18.00 TO 96.00	Silicified	Medium grey. Fine grained. Pervasive sheared, milled texture. 18.0-20m: Traces of argillite fragments. Occasional 1-2cm wide fault gouge zones wider fault zones as follows: {21.0-22.3} •Flt• 52-52.1m: Fault gouge. {81.7-82} •Flt• {92.2-92.8} •Flt• 49-60.1m: Wispy dark grey remnant argillite layers and rare fragments. FOLIATIONS @ 26.6m 37.5m 47.5m 57.7m 76.5m	60 50 55 60 53		7-10% very fine disseminated pyrite and wispy anastomosing pyrite veinlets/layers. Locally 20-30% pyrite. Occasionally 2-4cm wide quartz veins with coarse grained brassy pyrite, sphalerite, tetrahedrite and galena. {41.7-43.3} •20% py, 3% sp, tot• Coarse brassy pyrite locally massive, with 3-4% honey sphalerite and tetrahedrite associated with quartz veining. {60.1-62.61} •40% py, 2% sp, 1% tot• 40% medium grained pyrite, 2% light brown sphalerite, and 1% tetrahedrite associated with quartz veining. 60.8-62.6m: 30% fine to medium grained pyrite flooding. 1-2% sp & gn associated with minor quartz veining. {62.6-62.9} •7% sp, 5% gn• White quartz vein with coarse brassy	
93.90 TO	Pyritic Sediments •MUT•					MUT precursor very strong.

HOLE NUMBER: U1290-05

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

PAGE: 2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	(ANGLE) TO CA	ALTERATION	MINERALIZATION	REMARKS
				{87.5-90.1} «Qtz-Dol Vns» Quartz-Dolomite Veining. 90.1-93.1m: Quartz-dolomite veining less abundant.	pyrite, coarse sphalerite and galena. 2-5% brassy pyrite and traces of goethite associated with veining. {92.9-93.1} «Ss Gm» 10% brassy pyrite, 5% galena within veins.	
96.00 TO 98.40	Sericitized Tectonized Sediments «SERT»	Yellow. Fine grained. Layered appearance of yellow sericitized sands & creamy gray silica layers. Strongly tectonized, silica layers brecciated & discontinuous.		Strong sericite.	3-5% disseminated pyrite.	
98.40 TO 104.05	Tectonized Argillite «ARG, FLT»	Dark gray, black. Fine grained. Strongly brecciated sheared, patchy remnant bedding within fragments, very little fault gouge. Sharp lower contact @.....	75		Locally 2-3% pyrite.	
104.05 TO 122.00	Sericitized Cherty/ Silicified Sediments «SER CHERT/ SIL SED»	Yellow. Fine grained. Thinly intercalated yellow sericitized fine grained sediments layers and creamy gray brecciated siliceous (chert?) layers. Some siliceous layers do appear to be veins. {105.3-106.3} «Arg» Argillite, strongly brecciated and sheared, local isoclinal folding of remnant bedding. 116.7-117.1m: Fragmental texture, possibly primary? FOLIATION @ 106.5m 60 @ 110.0m 63 @ 121.0m 60		Strong sericite.	5% disseminated pyrite within sericite layers.	
		END OF HOLE.				

HOLE NUMBER: U1290-05

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL					EPI O CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CO ppm	ZN ppm	PB ppm	SG oz/T		
34253	38.75	40.20	1.45	0.330	1.03	1.29	68.0	0.12								
34254	40.20	41.70	1.50	0.039	0.11	0.12	0.5	0.04								
34255	41.70	43.30	1.60	0.994	2.78	44.36	174.5	0.18			3.35					
34256	43.30	45.10	1.80	0.065	1.25	0.58	15.3	0.05								
34257	45.10	46.20	1.10	0.037	0.50	0.52	19.7	0.03								
34305	51.00	53.00	1.60	0.010	0.29	0.16	0.3	0.20								
34306	53.00	55.00	1.60	0.006	0.03	0.05	4.2	0.06								
34307	55.00	56.60	1.60	0.026	0.22	0.25	0.6	0.04								
34308	56.60	58.20	1.60	0.008	0.47	0.29	5.1	0.02								
34258	60.10	61.30	1.20	0.115	2.04	1.32	31.7	0.04								
34259	61.30	62.60	1.30	0.024	1.17	0.93	14.5	0.02								
34260	62.60	62.90	0.30	0.069	7.00	2.52	39.8	0.01			3.29					
34261	62.90	64.00	1.50	0.030	0.12	0.14	11.6	0.04								
34262	64.00	65.90	1.50	0.032	0.67	0.45	16.0	0.16								
34263	66.00	67.50	1.50	0.019	0.03	0.05	5.0	0.00								
34264	67.50	68.00	1.30	0.002	0.01	0.03	3.2	0.10								
34265	68.00	68.10	1.30	0.001	0.01	0.02	3.0	0.02								
34266	68.10	69.20	0.70	0.003	0.01	0.03	2.9	0.02								
34309	92.20	92.90	0.70	0.007	0.01	0.04	1.1	0.38								
34267	92.90	93.10	0.20	0.016	0.11	3.75	64.3	3.52			0.47					
34310	93.10	93.80	0.70	0.006	0.01	0.03	1.5	0.39								
34332	93.80	95.40	1.60	0.007	0.01	0.01	5.6	0.20								
34333	95.40	96.00	1.40	0.016	0.01	0.02	2.3	0.10								

HOLE NUMBER: U1290-05

ASSAY SHEET

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 23.40	Dolomitic mafic lapilli tuff «DDL MLT»	Medium green. Fine grained. Yellowish sericitized mafic lapilli in a fine grained mafic matrix. Below 15.1m (5m dolomitized patches = possible lapilli producing granular speckled appearance. Sharp lower contact @.....	67	Strong pervasive dolomitization, minor quartz-dolomite veining. Weakly sericitic in last 50cm.	Trace pyrite.	
23.40 TO 25.00	Argillite, Sericitized mafic, Fault Zone «ARG, SER, FLT»	Black, grey, yellow. Fine grained. Sheared brecciated grey + black argillite mixed with sheared strongly sericitized mafic tuff. Minor fault gouge with 30cm fault gouge at lower contact @...	60	Strong sericite alteration of mafic.	Patchy 5-7% disseminated pyrite mainly within sericitized mafic. Trace sp, tet, cp.	
25.00 TO 60.70	Silicified Sheared Pyritic Sediments «MUT»	Medium grey. Fine grained. Weakly foliated, sheared milled texture. Locally white speckling over 5cm, black argillaceous wisps common. 41.2-41.9m: Strong siliceous cherty appearance. «43-43.85» «FLT» «52.7-53.6» «FLT» Brecciated gougy core. 53.6-56.5m: Soft, weakly brecciated, minor gouge.		Strong grey sericite. 36.55-37.55m: Elevated quartz sulphide veining.	7-15% very fine dark pyrite disseminated and as wispy anastomosing layers with foliation. Occasional (5cm quartz veins with coarse py+sp with tetrahedrite often closely associated with sphalerite. 36.55-37.55m: Pyrite, sphalerite, tetrahedrite within quartz veins. «37.55-38.1» «SMX» 50% coarse brassy pyrite, 7-10% honey and dark grey sphalerite, tetrahedrite often intergrown with sphalerite. «38.1-40.45» «QTZ Py, Sp Vns» 10-20cm quartz veins with coarse brassy pyrite, sphalerite and tetrahedrite from 38.6-38.8m, 39-39.1m, 39.9-40.1m, and 40.3-40.45m. 42.75-43m: 25-30% very fine pyrite, 3-5% sp, 1% tet. 43-43.85m: Medium grained pyrite and disseminated pyrite within fault zone. «45.95-46.65» «SIL, 3% Sp, 1% Tet» Light grey silica flooding with 25% fine to medium grained disseminated pyrite, 3% sphalerite, 1% tet.	

HOLE NUMBER: U1290-06

NINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	[ANGLE] TO CA	ALTERATION	MINERALIZATION	REMARKS
		{56.5-57.4} =Flt Gougy brecciated core.				
		{63.9-65.3} =Flt Gougy brecciated core. Sharp lower contact at...	70	67.8m: 10cm sericitized sediments similar to next unit.		
		FOLIATIONS @ 29.7m 36.8m 49.8m 66.3m	80 80 70 60			
		55cm white quartz carbonate veining at lower contact.				
68.70 TO 73.20	Sericitized Turbidites =SER TURB	Yellow, brown. Fine grained. Well foliated, fine grained sediments with minor light gray slightly coarser grained sediments.		Strong yellow sericite.	Patchy 3-7% fine disseminated pyrite.	
		69m: Fine bedding at..... cut by foliation at.....	25 65			
		71.2m: 20cm of folded and distorted fine bedding crosscut by foliation.		70.4-72.5m: Abundant white quartz-carbonate veining.		
		72.5-73.2m: Fault zone? rubble core, abundant rock cuttings (rock grounded away).				
		END OF HOLE				

HOLE NUMBER: U1290-06

DRILL HOLE RECORD

LOGGED BY: P.BAXTER

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HOLE NUMBER: U1290-06

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS								GEOCHEMICAL						EPI D/CAR	COMMENTS
				CU %	ZN %	PR %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PR ppm	SG oz/T	AG oz/T	AU oz/T			
34260	35.00	36.55	1.55	0.096	0.17	0.26	20.0	0.12											
34269	36.55	37.55	1.00	0.153	1.14	0.67	43.7	0.10											
34270	37.55	38.10	0.55	1.033	5.36	5.03	463.0	0.55				3.03							
34271	38.10	38.60	0.50	0.111	0.17	0.40	29.8	0.16											
34272	38.60	39.10	0.50	0.169	3.37	2.19	44.5	0.26				3.17							
34273	39.10	39.90	0.80	0.016	0.12	0.17	7.0	0.22											
34274	39.90	40.45	0.55	0.067	0.79	1.26	26.0	0.23											
34275	40.45	41.20	0.75	0.013	0.24	0.19	4.9	0.20											
34276	41.20	41.90	0.70	0.354	0.32	0.44	91.8	0.33											
34277	41.90	43.00	1.10	0.146	0.60	0.34	39.2	0.18											
34278	43.00	43.85	0.85	0.059	0.55	0.25	31.1	0.42											
34279	43.85	45.00	1.15	0.018	0.41	0.95	6.9	0.14											
34280	45.00	45.90	0.90	0.012	0.12	0.12	6.0	0.02											
34281	45.90	46.65	0.75	0.247	1.75	0.70	72.6	0.19											
34282	46.65	47.70	1.05	0.012	0.11	0.10	4.5	0.02											
34283	47.70	49.20	1.50	0.007	0.01	0.05	2.9	0.02											
34284	49.20	50.70	1.50	0.028	0.10	0.09	0.2	0.12											
34285	53.35	54.00	0.65	0.062	1.00	0.64	35.7	0.22											
34286	50.50	59.20	0.70	0.100	0.75	0.32	36.8	0.18											

HOLE NUMBER: U1290-06

ASSAY SHEET

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
8.00 TO 22.00	Dolomitized mafic lapilli tuff «DOT MLT»	Medium green. Fine to coarse grained. Yellowish green sericitized mafic lapilli and blocks in a fine grained mafic matrix. Strong speckled and fragmented appearance from (5mm white dolomite patches and 3-4cm high Fe-calcite patches (brecciated veins).		Pervasive dolomitization, (ankerite), very minor calcite veinlets. 20.5-21.65m: Wispy yellow sericite. 21.65-22m: Pervasive yellow sericite.	Trace pyrite, sphalerite.	
22.00 TO 23.40	Sericitized mafics, argillite «SER MT, AR G, FLT»	Yellow black, light grey. Fine grained. Sheared yellow sericitized mafics mixed with brecciated silicified argillite brecciated quartz veins and minor fault gouge.		Strong sericite.	1-3% pyrite.	
23.40 TO 34.40	Graphitic silicified argillite «SIL ARG»	Black. Aphanitic to fine grained. Massive argillite patchy distorted bedding defined by (5mm wide often discontinuous fine pyrite laminations. 23.3-24.4m: light grey fine grained silicified (cherty?) sediments. Brecciated, minor fault gouge. 27.05-28.25m: Debris flow. Fragmented argillite and fine grained gray sediments in a pyritic matrix. {28.3-30.8} «Py Sed» Weakly pyritic sediments, light grey, fine grained silicified/cherty? Sharp lower contact @..... possibly faulted.	50	Patchy 2-3cm wide white quartz veining and 2-3mm wide white grey wormy quartz veining.	(5mm very fine grained pyrite laminations common. Fine grained pyrite often associated with wormy quartz veining. 25.3-25.5m: 25-30% very fine pyrite and 1-2% sphalerite associated with quartz veining. 3-5% wispy fine grained pyrite. Traces of sp and tet associated with quartz veins. 30.8-33.6m: Pyrite all associated with wormy quartz veining.	
34.40 TO 76.70	Silicified Pyritic Sediments «MUT»	Light to medium grey. Fine grained. Brecciated sheared silicified sediments producing (1cm milled fragments with anastomosing to foliated sericitic pyritic wispy layering between frags. Pyrite layers also broken into 1-2mm pellets. Upper contact probably faulted, tight folding of pyrite layers adjacent to contact. 3-4cm fault gouge zones at 35m, 38.35m, 38.9m, 39.45m, 42.4m, 42.4-42.6m, 45.2-48.4m, and 75.3-76.1m.		Strong silica, grey sericite.	10-20% very fine grained pyrite. Base metal enrichment associated with zones of silica flooding and quartz veins with medium to coarse brassy pyrite. {37-37.3} «30% py, 5% sp» 30% coarse brassy pyrite, 5% sp, trace tet in quartz vein. 39.9m: 15cm 25% py, 2% sp, tet in	Foliation/shearing: 35.5m - 70 degrees. 44.5m - 70 degrees. 55.5m - 60 degrees.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
					quartz vein. {39.9-40.45} «250 py, 30 sp, tot» Medium to coarse brassy pyrite, sphalerite and minor tetrahedrite within a fine grey siliceous matrix. Patchy mat precursor still evident.	Medium grained pyrite flooding similar to smex Au zones in holes 1290-1,2.
		{47.65-48.7} «S11 Arg» Black silicified argillite. Sharp upper contact with embayments of out into argillite. Sharp lower contact at.....	53	{42.2-45.0} «Dol» Dolomite flooding of sediments producing whitish grey rock with 15-20% fine pyrite wispy layers and patches.	Patchy honey brown sphalerite with traces of shiny grey metallic mineral.	
		48.7-50.7m: Excellent examples of weak layering/foliation in pyritic seds crosscut by pyrite shears. See diagram in remarks.				
		50.7m: Trace of (1cm remnant silicified argillite fragments and layers. Patchy strong fragmental texture, tectonic?				
		FOLIATION @ 35.5m	70			
			44.5m			
			55.5m			
			63.0m			
			67.0m			
			69.2m			
		Folding from 70.7-72.3m foliations swing from 60 to zero to 60.				
76.70 TO 80.80	Graphitic Argillite, Siltstone «ARG, SLTST»	Medium to dark grey to black. Fine to aphanitic grained. Intercalated soft black graphitic argillite and medium to dark grey coarser grained mudstones, siltstone. Sharp bedding contacts but some appear transposed. BEDDING 50-60 degrees.	55		1-2cm wide fine pyrite layers.	Not silicified.
80.80 TO 85.60	Cherty Pyritic Sedi-ments «MVT»	Medium brassy grey. Fine grained. 80.8-82.7m: Bruciated fragmented siliceous/cherty fragments in a semi-massive to massive very fine grained pyrite matrix. 81.1-81.3m: Fault gouge. 82.7-85.3m: Patchy silicified cherty fragments in		Intense pyrite flooding.	80.8-81.65m: 20-40% very fine pyrite matrix. 81.65-81.95m: 60% very fine grained massive pyrite matrix. Traces sp-tet-cp within cherty patches/veins? 81.95-85.3m: 30-40% very fine pyrite,	Grey silicified/cherty patches may be remnant veining containing py-sp-tet.

HOLE NUMBER: U1290-47

KINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE (TO CA)	ALTERATION	MINERALIZATION	REMARKS
		a sericitic pyritic matrix.				
		85.3-85.6m: 2-3mm grey siliceous granular texture with green intergranular sericite.				(1-3% sp. Traces tet and cp associated with quartz veins, minor disseminated cp within pyrite.
		END OF HOLE.				

HOLE NUMBER: U1290-47

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-07

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						EPI D-CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG oz/T	AG oz/T		
34287	25.20	25.50	0.30	0.060	1.29	0.20	21.0	0.10									
34288	27.70	28.20	0.50	0.081	0.01	0.06	15.5	0.10									
34289	30.00	32.40	1.60	0.072	0.51	0.15	18.5	0.05									
34290	35.50	37.00	1.50	0.155	0.45	0.19	29.7	0.06									
34291	37.00	37.35	0.35	0.719	4.07	3.33	96.5	0.23			3.64						
34292	37.35	38.00	1.45	0.221	2.27	1.05	60.7	0.20									
34293	38.00	39.30	1.10	0.045	0.13	0.10	9.9	0.06									
34294	39.30	40.45	0.55	0.197	4.22	2.00	59.5	0.20			3.41						
34295	40.45	41.40	0.95	0.151	0.08	0.31	40.6	0.31									
34296	41.40	42.60	1.20	0.030	0.65	0.30	14.3	0.23									
34297	42.60	43.00	1.20	0.035	1.01	0.34	11.7	0.14									
34298	43.00	45.00	1.20	0.037	0.30	0.53	17.9	0.02									
34299	45.00	46.50	1.50	0.036	0.01	0.03	10.9	0.02									
34300	00.00	01.65	0.05	0.011	0.02	0.04	5.6	0.24									
34301	01.65	01.95	0.30	0.902	2.04	1.14	459.0	1.60			3.32						
34302	01.95	02.70	0.75	0.104	0.44	0.20	51.0	0.30									
34303	02.70	04.00	1.30	0.100	1.72	0.92	20.1	0.42									
34304	04.00	05.30	1.30	0.039	0.69	0.26	0.6	0.22									

HOLE NUMBER: U1290-07

ASSAY SHEET

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HOLE NUMBER: U1290-00

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	[ANGLE] TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 24.10	Dolomitized mafic Lapilli Tuff «DOL MLT»	Medium green, yellow green. 1-5cm, occasionally to 10cm yellow green sericitized mafic lapilli in a fine grained mafic matrix. {23.7-24} «Flt» Sheared brecciated strongly sericitized mafic tuff with minor argillite fragments and brecciated quartz vein.		Pervasive dolomitization. Weak sericite becoming stronger and more pervasive below 16m.	Patchy 1-3% pyrite.	
24.10 TO 63.00	Silicified Pyritic Sediments «SIL»	Medium to dark grey. Fine grained. Sheared milled texture. Rare remnant (1cm argillite ulcers). 24.1-24.8m: Stronger sheared brecciated texture, cherty appearance. {24.8-25.8} «Arg» Black silicified graphitic argillite. 50.15-52.7m: Strong fragmental texture, pyrite, argillite, and gray siliceous frags, (tectonic). {54.8-58.35} «Flt Zn» Fault zone. Strong brecciated texture, numerous gougy zones.			10-25% pyrite as sheared wispy pyrite layers, pellets & dissemination. {33.15-34.4} «Ssex» 40-50% coarse brassy pyrite, 5-7% sphalerite, 3% tetrahedrite associated with grey white quartz veining/flooding, (1% galena). 34.85-35.85m: 60-70% coarse brassy pyrite, 3-4% sphalerite, 1% tetrahedrite. {35.7-36.8} «Qtz-Py-Sp Vns» Quartz-pyrite-sphalerite veining, some Nut textures remain. 30% coarse brassy pyrite, 4-6% sp, 1-3% tet, (1% gn). {58.3-59.4} «Qtz-Sp-Gn Vns» Strongly pyritic Nut with wormy white quartz veining mineralized with sphalerite and galena.	
63.00 TO 66.60	Sericitized Sediments «SER SEDS»	Yellow, brown. Fine grained. Sericitized fine grained sediments with minor light grey siliceous siltstones. Weak relict bedding possibly transposed by foliation @ (50-70 deg).....	60	Intense sericite, white quartz veining common. 61.6-63m: Minor 2-3cm white quartz veining.	Patchy coarse grained pyrite. 63.3-63.6m: 10% pyrite.	60% recovery.

HOLE NUMBER: U1290-00

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-08

KENNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
66.60 TO 82.00	Graphitic Argillite cGRAPH ARG	Dark gray-black. Aphanitic to fine grained. Intercalated black graphitic argillite and coarser grained medium to dark gray siltstone and sandstone some with 1-mm wispy argillite fragments. Bedding contacts after appear transposed. Some siltstone/sandstone layers show fining uphole grading. BEDDING/FOLIATION @ 70.5m 70 @ 72.0m 70 @ 78.0m 70 {70.5-79.15} cflt. Shearing and gouge @..... 40 Faulted lower contact 15cm fault gouge.		Non silicified.	Trace pyrite.	Topo uphole.
82.00 TO 106.40	Cherty Sericitized Sediments cCHT SER SE DS	Yellow. Fine grained. Thinly layered creamy white, greenish gray chert/silicified layers and soft fine grained sericitized sediments. Chert layers often brecciated/fragmented. LAYERING @ 85.8m 65 @ 97.5m 65 @ 102.7m 65 END OF HOLE.		Intense sericite.	Patchy fine disseminated pyrite within sericitized layers, locally to 7% py.	

HOLE NUMBER: U1290-08

DRILL HOLE RECORD

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HOLE NUMBER: U1290-00

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						EPI CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG oz/T	AG oz/T		
34311	30.20	31.70	1.50	0.036	0.16	0.12	2.1	0.02									
34312	31.70	33.15	1.45	0.009	0.01	0.05	0.3	0.01									
34313	33.15	34.40	1.25	0.700	3.90	2.06	93.0	0.19									
34314	34.40	34.85	0.45	0.011	0.06	0.11	2.3	0.02									
34315	34.85	35.05	0.20	0.050	4.20	4.35	146.0	0.26									
34316	35.05	35.70	0.65	0.017	0.02	0.09	3.0	0.03									
34317	35.70	36.00	1.10	0.050	3.60	3.50	109.0	0.17									
34318	36.00	38.30	1.50	0.095	0.20	0.31	32.1	0.14									
34319	38.30	40.00	1.70	0.008	0.30	0.66	19.3	0.06									
34320	50.35	59.40	1.05	0.142	3.45	1.56	70.5	0.22									

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ASSAY SHEET

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HOLE NUMBER: U1298-09

KINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 23.50	Dolomitized mafic Lapilli Tuff «DOL NLT»	Grey green, yellow green. Fine grained. Sericitized yellow mafic lapilli. {23.2-23.35} «Flt» Faulted lower contact.	80	Pervasive dolomitization. Patchy qtz-dol veins. Weak sericite. 16.5-23.5m: Moderate to strong pervasive sericite.	Trace pyrite. Local quartz-dol veins mineralized as follows: 11.65-13.0m: 3-5% pyrite, trace sp. 14-15.5m: 1-15cm wide quartz-dol veins with sp-gn.	
23.50 TO 28.00	Silicified Pyritic Sediments, Argillite «SIL NUT, A RG»	Light grey, black. Fine grained. Patchy argillaceous component to sediments with black argillite zones from 25.3-25.4m, and 26.2-26.75m. Faulted lower contact.....	45		5-7% disseminated & wispy fine pyrite. Trace sp within quartz veins.	Not as grey or pyritic as usual NUT.
28.00 TO 49.00	Silicified Graphitic Argillite «SIL ARG»	Black. Aphanitic. Massive to weakly foliated, no bedding. Graphitic partings. (1cm irregular and folded quartz veins. 46.9-49.8m: Intercalated black argillite and grey weakly pyritic silicified fine grained sediments. {48.1-48.6} «Flt» Strongly brecciated minor gouge. 15cm gougy core at lower contact.			Irrregular wormy quartz veins mineralized with pyrite and minor sphalerite, galena. Veining and mineralization strongest from 28.7-32.9m. {31.8-32.15} «10% py, 3% sp» 10% brassy pyrite, 3% sphalerite, (1% gn & cat.	
49.00 TO 71.00	Silicified Pyritic Sediments «NUT»	Light to medium grey. Fine grained. 49.8-56.2m: Patchy argillite. 56.2-59.8m: Fragmental texture, fragments of black argillite and grey sediment.			5-10% pyrite disseminated in wispy anastomosing layers. 60.35-60.75m: Two zones of quartz veining 4cm & 7cm wide with pyrite, sphalerite and tetrahedrite. 60.9m: 7cm quartz veining zone with sphalerite and tetrahedrite. 65.6-67.9m: Minor quartz veining with weak pyrite-sphalerite-tetrahedrite.	

HOLE NUMBER: U1298-09

DRILL HOLE RECORD

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HOLE NUMBER: 01290-09

KINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		END OF HOLE.				

HOLE NUMBER: 01290-09

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-09

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						EPI D-CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG oz/T	AG oz/T		
34321	11.65	13.00	1.35	0.13	0.07	0.07	2.00	0.01									
34322	14.00	15.50	1.50	0.02	0.05	0.54	6.50	0.01									
34323	20.00	29.40	1.40	0.09	0.03	0.46	29.30	0.04									
34324	29.40	30.70	1.30	0.02	0.11	0.37	9.20	0.03									
34325	30.70	31.00	1.10	0.05	0.72	0.49	20.50	0.10									
34326	31.00	32.15	0.35	1.15	5.10	4.79	370.0	0.40				3.27					
34327	32.15	32.30	0.75	0.31	1.00	1.31	05.60	0.17									
34328	60.30	60.00	0.50	0.11	0.74	0.76	41.2	0.30									
34329	65.60	66.00	1.20	0.17	0.39	0.64	79.3	0.07									
34330	66.00	07.90	1.10	0.12	0.22	0.19	61.7	0.14									

HOLE NUMBER: U1290-09

ASSAY SHEET

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 11.00	Sericitized Dolomitized Mafic Tuff «SER DOL HT »	Yellow, green. Fine grained. 0-4.0m: Occasional yellow sericitized mafic lapilli. 7.5-9.3m: Strong fragmental texture. 9.6-11.0 «Flt» Brecciated sheared sericitized mafics, screens of silicified argillite, patchy fault gouge.		0-4.0m: Strong sericite. 4-11.0m: Weak to moderate sericite. Pervasive dolomite, trace quartz-dolo- mite veining.	2-3.4m: 3-5% pyrite, trace sphalerite.	
11.00 TO 46.50	Silicified Pyritic Sediments «MUT»	Medium grey. Fine grained. Weak to moderately foliated/layered appearance of gray silicified seds and pyritic rich layers. Local strong milled/sheared texture. Traces of remnant wispy argillite fragments. 31.5m: 10cm screen of unaltered sedimentary frag- mentals, (1cm argillite fragments in a dirty silt/ sand matrix. 33.2-33.5m: Minor folding of quartz veins and foliation. 40.25-40.65 «Flt» 43.65-43.8 «Flt» FOLIATIONS @ 14.5m 03 @ 26.0m 00 @ 35.7m 70 @ 43.0m 70 Lower contact..... 75		Pervasive silicification and gray seri- cite.	7-15% pyrite. Disseminated and wispy mm wide anastomosing layers. Pyrite also tectonized into mm pellets. Trace disseminated sphalerite, locally concentrated in rare grey quartz/silica veins/patches. 18.7-19.4m: Minor wormy white quartz veining with 2-3% sp, (1% gn.	Occurrence of quartz-sulphide veins much lower than previous.
46.50 TO 52.00	Graphitic Argillite «GRAPH ARG»	Black. Aphanitic to fine grained. Faintly lami- nated and bedded, probably transposed, minor lig- hter grey siltstone laminations. 51.2-52m: Well bedded, does not appear as trans- posed, bedding at..... Quartz veining at lower contact.		Minor wormy white quartz veining.	(1% pyrite.	Not silicified.

HOLE NUMBER: U1290-10

BIMNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
52.00 TO 57.75	Sericitized Sediments +SERT+	Yellow, grey. Fine to medium grained. Laminated to thinly bedded fine grained sericitized sediments, minor argillite and siltstone to medium grained sandstone. Bedding parallel to foliation. BEDDING/FOLIATION @ 52.4m @ 54.5m Rough faulted lower contact @.....	70 75 70	Strong sericitized fine grained sediments. Coarser beds less altered.	Trace pyrite.	
57.75 TO 60.40	Pyritic Sediments +PT+	Medium grey, brown, grey. Fine grained. Moderately foliated very fine nondescript. Not as sheared or milled as previous NUT. FOLIATION @ 57.9m @ 58.7m @ 59.0m END OF HOLE.	65 75 40	Strong grey sericite, trace yellow sericite.	7-20% very fine disseminated and fine grained pellets of pyrite.	Not Silicified.

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DRILL HOLE RECORD

LOGGED BY: P. DAXTER

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ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS								GEOCHEMICAL						EPI CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG oz/T	AG oz/T	AU oz/T			
34331	18.70	19.40	0.70	0.15	1.23	0.59	35.9	0.04											

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HOLE NUMBER: U1290-11

NIMNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
				{66.2-67.6} «Qtz Vns»	66.2-66.6m: 7% brassy py within quartz veins.	
68.20 TO 76.30	Sericitized Turbidites «SER TURB»	Yellow. Fine grained sericitized sediments, well foliated patchy remnant bedding. FOLIATION 74.7-75.1m: Coarser grained silt and sand grading down hole to gray silts any argillite. {75.1-75.7} «Arg Siltst» {75.7-76.3} «Flt» Strongly milled and sheared, remnant argillaceous component. SHEARING 8	70 70	Strong sericite. 68.2-71.3m: 10-40cm quartz veins common.	68.2-71.3m: Patchy 3-5% py within sericite sediments, (1% py, sp within Qtz veining except from 68.4-68.6m 30% brassy py, minor fuchsite. 74.85m: 15cm quartz vein with 10% galena.	
76.30 TO 82.00	Siliceous Sericitized Sediments	Yellow-gray. Fine grained. Layered fine grained sericitized seds and gray silica layers. Strong sheared texture, brecciated of siliceous layers. {79.1-80.1} «Arg» Gray argillaceous component, brecciated and boudined siliceous layers still present. Strongly tectonized. Gradational contacts. Foliations 70-80 degrees. END OF HOLE.		Strong sericite.	(1% py.	Glover Sam Seds?

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DRILL HOLE RECORD

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ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						EPI OIL-CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	AG oz/T	AU oz/T		
34334	28.40	29.45	1.05	0.101	0.19	0.16	25.0	0.03									
34335	29.45	30.50	1.05	0.162	2.01	0.93	35.5	0.06									
34336	30.50	32.30	1.80	0.174	1.52	0.92	29.0	0.10									
34337	32.30	33.30	1.00	0.169	0.79	0.70	25.1	0.22									
34338	33.30	34.30	1.00	0.096	0.10	0.13	21.6	0.16									
34339	34.30	30.30	1.00	0.070	0.35	0.31	10.3	0.10									
34340	35.30	36.30	1.00	0.122	0.02	0.70	29.2	0.22			3.29						
34341	36.30	36.80	0.50	0.207	1.92	2.01	73.1	0.24									
34342	36.80	38.30	1.50	0.251	0.71	0.50	61.4	0.20									
34343	38.30	39.00	0.70	0.26	0.05	0.04	7.6	0.16									
34344	39.00	41.30	2.30	0.017	0.17	0.09	0.0	0.16									
34345	41.30	42.50	1.20	0.049	0.29	0.30	32.0	0.26									
34346	42.50	44.00	1.50	0.120	2.10	0.49	101.0	0.60			3.96						
34347	44.00	46.50	2.50	0.071	0.00	0.02	14.5	0.20									
34348	46.50	47.00	0.50	0.020	0.15	0.27	16.1	0.24									
34349	47.00	48.50	1.50	0.019	0.00	0.11	3.5	0.24									
34350	48.50	50.00	1.50	0.023	0.04	0.01	0.7	0.19									
34351	50.00	51.50	1.50	0.047	0.04	0.02	15.6	0.20									
34352	51.50	52.65	1.15	0.012	0.01	0.02	0.4	0.16									
34353	52.65	50.25	0.60	0.190	0.07	0.46	60.4	0.10									
34354	53.25	53.95	0.70	0.017	0.01	0.03	9.7	0.25									
34355	53.95	55.30	1.35	0.042	0.73	0.66	25.3	0.30									
34356	55.30	56.00	0.70	0.010	0.57	0.50	50.6	0.20									
34357	56.00	57.90	1.90	0.004	0.06	0.07	13.4	0.20									
34358	57.90	59.20	1.30	0.010	0.31	0.19	50.6	0.16									
34359	59.20	60.50	1.30	1.007	0.00	0.40	90.1	0.22									
34360	60.50	61.75	1.25	0.012	0.35	0.13	56.6	0.22									
34361	61.75	62.20	0.45	0.000	1.09	0.61	42.0	0.39									
34362	62.20	63.40	1.20	0.005	0.23	0.15	21.0	0.31									
34363	63.40	64.25	0.85	0.014	0.43	0.04	10.0	0.22									
34364	64.25	66.20	1.95	0.004	0.05	0.02	7.6	0.56									
34365	66.20	67.60	1.40	0.002	0.01	0.03	3.0	0.40									
34366	67.60	68.20	0.60	0.002	0.01	0.01	4.5	1.12			3.04						
34367	68.20	69.10	0.90	0.003	0.01	0.02	4.3	0.30									
34368	69.10	70.30	1.20	0.002	0.05	0.01	2.9	0.12									
34369	70.30	71.30	1.00	0.002	0.56	0.02	2.0	0.32									
34370	71.30	74.00	2.70	0.003	1.47	0.50	213.0	0.40			3.21						

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ASSAY SHEET

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HOLE NUMBER: U1290-12

NIRNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CR	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 14.50	Dolomitized mafic Tuff «DOL MAF TO FF»	Medium grey. Fine grained. Massive, strong grey fine irregular dolomite veinlet network.		Pervasive dolomitization.	(1% py.	
14.50 TO 16.00	Argillite, mafic Tuff, Fault «ARG, MT, F LT»	Green-grey, black. Fine grained. Mix of mafic tuff & argillite, strong sheared appearance in argillite with fault gouge at 15.5m.....	70			
16.00 TO 19.70	Sheared Sericitized mafics/Seds Fault Zone «SERT, FLT»	Yellow-grey. Fine grained. Strongly sheared and milled texture rounded siliceous 1-2cm fragments. Minor black argillites patchy fault gouge. Shearing at 55-65 degrees. Lower contact @	72	Strong sericite.	Fine milled pyrite.	
19.70 TO 40.20	Silicified Pyritic Sediments «MUT»	Medium to dark grey. Fine grained. Moderate foliation. Traces of remnant wispy argillite. {19.7-23.5} «FLT Zn» Fault zone: patchy brecciation and gouge, stronger development from 22-23.5m. FOLIATION @ 26.6m 65 35.7m 60 {30.9-39.05} «FLT»		Gray sericite, silicified.	14-30% very fine semi-massive wispy py & fine pyrite layers. 19.7-27.55m: Occasional 1-3cm quartz-sphalerite-galena-tetrahedrite veining. {27.55-31.4} «Qtz Py Sp Gm Tet Vns» {33.55-30.2} «Qtz Py Sp Gm Tet Vns»	Wut cut by milky white quartz veins with 2-3% sp, up to 7% gn, 1% tet. Wut also flooded by medium grained pyrite similar to Au zone.
END OF HOLE.						

HOLE NUMBER: U1290-12

DRILL HOLE RECORD

LOGGED BY: P. DAXTER

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HOLE NUMBER: U1290-12

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS								GEOCHEMICAL						EPI CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SO ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SO oz/T	AG oz/T	AU oz/T			
344371	25.00	26.50	1.50	0.018	1.10	0.92	40.3	0.21											
344372	26.50	27.55	1.05	0.017	1.51	0.94	22.6	0.16											
344373	27.55	27.80	0.25	0.153	6.17	3.53	310.0	0.59				3.10							
344374	27.80	28.65	0.85	0.018	1.55	1.86	53.6	0.28											
344375	28.65	29.20	0.55	0.006	4.00	2.40	60.5	0.24				3.31							
344376	29.20	30.00	0.80	0.006	0.60	0.35	16.7	0.10											
344377	30.00	31.40	1.40	0.010	0.90	0.44	43.0	0.10											
344378	31.40	32.50	1.10	0.006	0.44	1.10	37.0	0.12											
344379	32.50	33.55	1.05	0.118	0.41	0.23	31.4	0.09											
344380	33.55	30.90	0.95	0.426	2.50	1.23	110.7	0.00				2.92							
344381	34.50	35.60	1.10	0.062	1.30	0.39	22.2	0.01											
344382	35.60	36.50	0.90	0.715	2.07	1.01	103.7	0.10				3.06							
344383	36.50	37.40	0.90	0.430	0.52	0.62	120.6	0.00				2.83							
344384	37.40	38.20	0.80	0.200	3.09	2.62	64.9	0.04				3.03							
344385	38.20	39.20	1.00	0.025	0.10	0.19	0.0	0.07											

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ASSAY SHEET

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HOLE NUMBER: 01290-13

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 14.40	Deolomitized Nafic Tuff «DOL NT»	Medium grey. Fine grained. Patchy weak foliation. Fine lighter grey pervasive veining network.		Pervasive dolomite, minor yellow sericite.	14.2m: 10cm 10% py, 1% sp, tr tet.	
14.40 TO 15.10	Fault Zone «FLT»	Grey. Fine grained. Grey fault gouge mixed with sheared, brecciated silicified argillite.			1-3% py, trace sp, cp.	
15.10 TO 70.20	Silicified Pyritic Sediments «SUT»	Medium to dark grey. Fine grained. Well foliated. Remnant wispy & irregular grey and black siliceous argillite. FOLIATIONS @ 15.5m 24.0m 42.3m 52.5m	65 75 65 66	Silicified. Grey sericite. Minor waxy grey white quartz veining.	5-15% very fine dark pyrite in fine wispy layers parallel to foliation and as stretched pellets (bounded layers). 21.1-21.7m: 40% fine to medium grained pyrite flooding, 1-2% sp, trace tet. 30.2-30.8m: 20% py, 5% sp, 1% gn, (1% tet associated with irregular grey silica flooding/veining). 32.85-33.4m «Qtz-Py-Sp-Gn-Tet» Grey white quartz veining with 15-20% py, 5% sp, 3-5% gn, 1-2% tet. 33.4-35.2m: 15-20% fine to medium grained py flooding, 2-3% sp, (1% gn, trace tet with grey white quartz flooding/veining). 39.3-45.9m: 10-30cm wide zones of semi-massive to massive pyrite with minor sphalerite and galena associated with silica flooding/veining. Wider zones of mineralization as follows: 39.3m: 20cm, 60% py, (1% sp, gn, tet. 43.7m: 25cm, 25-30% py, 7-10% sp, (1% gn, tet.	
		44.35-44.8m «FLT» Brecciated, sheared, gougy. 46.1m: 10cm fault gouge. Not more massive less foliated appearance. 64.3-65.3m «FLT» 69.9-70.2m «FLT»		59.9-70.2m: (10cm barren white quartz veins common.		

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DRILL HOLE RECORD

LOGGED BY: P. DAXTER

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NIRNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	(ANGLE) TO CA	ALTERATION	MINERALIZATION	REMARKS
70.20 TO 73.80	Sericitized Turbidite, Argillite «SER TURB, ARG»	Yellow, grey, black. Fine grained. 70.2-71.2m: Thinly bedded yellow fine grained sericitized sands and grey chert and siltstone. 71.2-71.5} «flt» 71.5-73.5} «Arg» Laminated to thinly bedded grey & black argillite. 73.5-73.8m: Yellow sericitized laminated sands. Bedding often folded and distorted. END OF HOLE.		Strong yellow sericite. Strong yellow sericite.	(1% pyrite. Brassy pyrite associated with minor quartz veining. (1% pyrite.	

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ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						EPT D/CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SO ppm	AS ppm	CO ppm	ZN ppm	PB ppm	SG oz/T	AG oz/T		
34412	21.10	21.70	0.60	0.099	2.64	1.55	24.1	0.22									
34413	30.20	30.80	0.60	0.236	0.35	2.65	82.4	0.05									
34414	30.80	32.05	2.05	0.061	0.08	0.10	0.0	0.02									
34415	32.05	33.40	0.55	0.959	15.60	10.65	334.0	0.12									
34416	33.40	34.30	0.90	0.060	3.77	1.20	27.0	0.03									
34417	34.30	35.20	0.90	0.077	2.01	1.00	20.6	0.02									
34418	37.00	39.30	1.50	0.206	0.70	1.13	51.3	0.16									
34419	39.30	40.00	1.50	0.139	2.97	1.76	22.8	0.14									
34420	40.00	41.09	1.00	0.114	0.52	0.32	29.3	0.10									
34421	41.00	42.70	0.95	0.071	1.17	4.11	00.4	0.04									
34422	42.75	43.60	0.05	0.164	1.50	1.29	43.4	0.02									
34423	43.60	44.35	0.75	0.120	5.50	1.67	25.0	0.04									
34424	44.35	44.80	0.45	0.010	0.69	0.23	5.6	0.06									
34425	44.80	45.90	1.10	0.322	2.30	2.39	91.6	0.20									
34426	45.90	46.90	1.00	0.016	0.10	0.00	5.2	0.22									
34427	50.20	50.80	0.60	0.053	1.31	0.39	26.2	0.20									
34428	54.40	55.50	1.10	0.106	2.39	2.72	73.1	0.20									
34429	55.50	56.60	1.10	0.052	2.09	1.11	37.0	0.22									

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HOLE NUMBER: U1290-14

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
8.00 TO 5.50	Dolomitized Mafic Tuff «DOT MT»	Green-gray. Fine grained. 2.3-5.5m: Mix of mafic tuff and gray black silicified argillite. Interval highly tectonized.		Pervasive dolomitization. 8-1.0m: Weak moderate sericite.	Trace pyrite.	
5.50 TO 17.00	Silicified Argillite. Minor Mafic Tuff «SIL ARG FL T»	Dark gray-black. Fine grained. Occasional 10-20cm dolomitized mafic tuff zones. Very rubbly core, local fault gouge, core strongly sheared tectonized. SHEARING @ 16.0m 17.0m 17.2-17.5m: Yellow sericitized weakly pyritic sheared sediments?	55 60		<1% py. 17.9m: 10cm 20-30% py, 2% sp.	
17.00 TO 44.00	Silicified Pyritic Sediment «CHTY MUT»	Medium gray. Fine grained. Less foliated & more siliceous than other Mut zones. 17.8-28.7m: Wispy remnants of gray-black argillites. 28.7m: 50cm zone of <1cm rounded - elliptical gray sedimentary fragments. Weak FOLIATION @ 19.5m 28.5m 35.9m 43.7m	60 65 70 70	Strong silicification, minor grey sericite.	17.8-34.1m: 5-10% very fine diss & wispy pyrite 10-20cm intervals of up to 50% py. 31.2-34.1m: Patchy 10cm zones of 2-3% sp, (1-2% tet. {34.1-39} «Qtz-Py-Sp-Tet» Whitish quartz veining/silica flooding with 10-30% fine to medium grained pyrite flooding, 2-4% honey sphalerite, 1-2% tet associated with sphalerite and quartz veining. 38.3-38.8m: Semi-massive to massive fine grained pyrite. 39.5-39.8m, 40.2-40.6m, and 41.4-42.6m Qtz-py-sp-tet similar to above but not as strong.	Not as pyritic and more siliceous appearance than other Mut units.
		END OF HOLE.				

HOLE NUMBER: U1290-14

DRILL HOLE RECORD

LOGGED BY: P.BAXTER

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HOLE NUMBER: U1290-14

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						EPI D-CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG oz/T	AG oz/T		
34430	31.20	32.60	1.40	0.134	0.44	0.49	28.0	0.30									
34431	32.60	34.10	1.50	0.080	0.55	0.33	12.3	0.24									
34432	34.10	34.70	0.60	0.087	2.22	1.13	285.0	0.56									
34433	34.70	35.40	0.70	0.130	0.26	0.25	42.5	0.22									
34434	35.40	36.70	1.30	0.253	1.56	0.77	100.5	0.37									
34435	36.70	32.30	0.60	0.046	0.05	0.13	7.0	0.10									
34436	37.30	38.30	1.00	0.693	2.06	1.46	291	0.30									
34437	38.30	39.10	0.80	0.421	3.12	0.04	111.0	0.50									
34438	39.10	40.20	1.10	0.147	0.44	0.23	52.4	0.24									
34439	40.20	41.40	1.20	0.369	1.52	0.62	130.0	0.70									
34440	41.40	42.60	1.20	0.170	1.77	1.16	40.6	0.16									
34441	42.60	43.50	0.90	0.213	0.45	0.42	71.0	0.20									
34442	43.50	44.00	1.30	0.154	0.11	0.25	40.4	0.35									

HOLE NUMBER: U1290-14

ASSAY SHEET

HOLE NUMBER: U1290-15

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 10.25	Argillite, Minor Mafic Tuff «ARG»	Dark gray to black. Fine grained. Sheared foliated argillite with patchy gray-green mafic tuff component. Graphitic, locally siliceous. 0.5-0.7m: Flt gouge. Gradational lower contacts into a more mafic dominant unit.			Trace pyrite.	
10.25 TO 14.90	Dolomitized Mafic Tuff «DOL MT»	Gray-green, fine grained. Weak wispy argillaceous component near upper contact. Intense grey dolomitization of brecciated layers. {14.7-14.9} «Flt» Strongly sheared tectonized, minor gouge at 14.9m.		14.7-14.9m: Intense yellow sericite.	Trace pyrite.	
14.90 TO 60.00	Silicified Pyritic Sediments «NUT»	Dark gray, fine grained. 14.9-17.3m: Cherty, less pyritic, argillite wisps. 17.3-31.3m: Remnant fragments of black argillite (locally bedded) and light to medium gray fine grained siliceous soda/chert. FOLIATIONS @ 21.0m 60 32.3m 55 42.5m 60 51.5m 75		Gray sericite, silicified. 41.8-49.3m: Moderate white quartz veining.	5-10% fine wispy pyrite parallel to foliation. Locally 20% pyrite. Rare 1-2cm sp-tet veins. {34.85-35.1} «Ns» Fine grained sp, py and tet, argillaceous matrix. {37.2-49.3} «Qtz-Py-Sp-Tet Vns» Fine to medium grained pyrite flooding, 3-7% sp, 1-2% tet associated with grey silica flooding. 41.8-49.3m: Sp-tet mineralization also associated with white quartz veining. 49.3-60m: 10-20% fine pyrite. {55.45-55.9} «Qtz-Tet-Sp Vns» Semi-massive tet over 3-5cm widths.	Strongest mineralization from 37.2-49.6m.
		{53.6-54.1} «Flt» END OF HOLE.				

HOLE NUMBER: U1290-15

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-15

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS					GEOCHEMICAL					EPT D-CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	CU ppm	ZN ppm	PB ppm	AG oz/T	AU oz/T		
34386	33.20	34.85	1.65	0.008	0.44	0.34	4.4	0.38							
34387	34.85	35.20	0.35	0.967	0.16	4.91	213.4	2.82				3.34			
34388	35.20	35.90	0.70	0.365	1.74	1.16	116.9	0.36				3.07			
34389	35.90	37.20	1.30	0.331	0.79	0.70	113.2	0.39				2.96			
34390	37.20	38.20	1.00	0.099	2.82	1.41	40.5	0.30							
34391	38.20	38.20	1.00	0.565	2.60	1.61	140.5	1.32				3.19			
34392	39.20	40.20	1.00	0.052	3.23	2.70	53.1	0.20				3.20			
34393	40.20	41.20	1.00	0.326	0.84	0.65	82.3	0.21							
34394	41.20	41.80	0.60	0.040	0.29	0.17	13.3	0.01							
34395	41.80	42.40	0.60	0.058	1.60	0.80	29.1	0.10							
34396	42.40	43.40	1.00	0.027	0.35	0.20	9.4	0.16							
34397	43.40	44.40	1.00	0.035	0.89	0.44	14.8	0.16							
34398	44.40	48.00	0.60	0.072	0.90	2.49	50.8	0.00				3.14			
34399	45.00	46.30	1.30	0.265	2.05	0.96	81.5	0.22							
34400	46.30	47.55	1.25	0.228	1.99	1.22	99.6	0.22							
34401	47.55	48.30	1.75	0.100	0.50	0.45	80.6	0.20							
34402	49.30	50.00	1.50	0.230	0.26	0.18	70.2	0.26							
34403	50.00	52.30	1.50	0.023	0.83	0.84	9.2	0.17							
34404	52.30	53.50	1.20	0.047	0.37	1.35	30.2	0.22							
34405	53.50	54.85	1.35	0.034	0.05	0.14	10.1	0.37							
34406	54.85	55.45	0.60	0.189	2.95	0.53	40.1	0.39							
34407	55.45	59.90	0.45	5.160	4.79	2.84	2200.0	2.70				3.09			
34408	55.90	58.90	1.00	0.213	0.70	0.33	110.0	0.60				3.02			
34409	56.90	57.90	1.00	0.071	0.22	0.37	51.6	0.67							
34410	57.90	58.90	1.00	0.091	0.89	0.14	65.6	0.79							
34411	58.90	60.00	1.10	0.065	0.20	0.46	50.7	0.60							

HOLE NUMBER: U1290-15

ASSAY SHEET

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 9.00	Tectonized Mafic Tuff & Argillite «NT/ARG»	Medium green, black. Fine grained. Sheared tectonized mixture of green mafic tuff with abundant black wisps/layers and black argillite with sheared on layers of green mafics. Interval highly sheared and distorted, minor fault gouge. Faulted lower contact.....	55			Trace pyrite.
9.00 TO 11.60	Dolomitized Mafic Tuff «DOL NT»	Light to medium green-grey. Fine grained. Minor lapilli massive-weakly foliated below 10m. 10.7m: Fault contact into strongly sericitized sheared mafic tuff. SHEARING @	70	Pervasive dolomite weak yellow sericite. {10.7-11.6} «Ser» Strong sericite.		Trace pyrite.
11.60 TO 12.20	Silicified Argillite, Fault «SIL ARG, FLT»	Dark grey-black. Fine grained. Intensely tectonized & fragmental.				1-3% pyrite.
12.20 TO 49.70	Silicified Pyritic Sediments «NUT»	Medium grey. Fine grained. {13.4-14.7} «SIL Arg» Silicified argillite. {14.7-15.9} «Chty Nut» Cherty Nut, more siliceous & massive in appearance. 15.9-20.5m: Remnant wispy fragments & layers of grey black argillite. {30.0-39.7} «Flt» Fault zone. {47.3-48.1} «Flt»	70 85 83	Gray sericite, silicified.	5-20% very fine pyrite mainly as thin bands defining foliation. Cherty zones sulphide poor. Locally 10-20cm zones of 40-70% very fine pyrite. 27.4-32.7m: 15-40% very fine pyrite. Fairly common 10-15cm wide zones with 2-4% honey sp and (1-2% tet. Sp-tet zones seldom developed over wider intervals except as noted below. {37.6-38.35} «3% sp, (1% tet)» 30-50% fine to medium pyrite flooding with a siliceous matrix, 2-3% sp & (1% tet as (1-3cm wide veins. {41.5-42.15} «Qtz-Py-Sp-Tet» 3-5% sp, 1% tet.	
		FOLIACTIONS @ 22.0m 36.0m 45.5m	70 85 83			
		END OF HOLE.				

HOLE NUMBER: U1290-16

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						COMMENTS	
				CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SE oz/T	AG oz/T		AU oz/T
34443	26.40	21.40	1.00	0.079	1.05	0.37	29.7	0.22									
34444	26.40	27.40	1.00	0.118	0.23	0.37	69.5	0.36									
34445	27.40	28.70	1.30	0.041	1.20	0.79	22.6	0.20									
34446	28.70	30.00	1.30	0.052	0.30	0.36	16.8	0.20									
34447	30.00	31.30	1.30	0.070	0.21	0.26	20.9	0.25									
34448	31.30	32.70	1.40	0.175	0.14	0.19	13.1	0.36									
34449	37.60	38.35	0.75	0.194	3.23	1.44	62.4	0.24									
34450	38.35	39.90	1.55	0.543	1.60	0.65	136.5	0.23									
34451	39.90	41.50	1.60	0.869	0.23	0.23	25.1	0.18									
34452	41.50	42.15	0.65	1.123	4.00	2.20	301.0	0.22									
34453	42.15	43.50	1.35	0.005	0.29	0.25	34.2	0.20									
34454	43.50	44.80	1.30	0.040	0.65	0.25	14.1	0.20									
34455	48.45	48.90	0.45	0.130	2.06	0	80.5	0.22									

HOLE NUMBER: U1290-16

ASSAY SHEET

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HOLE NUMBER: U1290-17

KINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 6.10	Tectonized Mafic Tuff & Argillite «TECT NT & ARG»	Green, black. Fine grained. Thinly interfingering highly sheared green mafic tuff and black argil- lite. SNEARING @ 1.2m	75		Trace py.	Very rubbly core.
6.10 TO 12.70	Dolomitized Mafic Tuff «DOL NT»	Grey-green. Fine grained. Poor recovery between 11.9m & 13.4m. Faulted lower contact meterage approximate.		Weak sericite.	(1% py.	
12.70 TO 13.30	Fault Zone Sericitized «FLT, SERT»	Yellow. Fine grained. 35% recovery, mainly yel- low sericitized core-precursor? Minor grey-black fault gouge.		Intense sericite.		35% recovery.
13.30 TO 55.00	Silicified Pyritic Sediments «MUT»	Medium grey. Fine grained. {13.3-14.9} «Chty Mut» Strong cherty appearance, (1% py. 14.9-26.4m: Black & grey remnant wispy irregular argillite & fine sediment fragments. 30.9-31.5m: Foliation in sulphides at 60-70 deg. to core axis. FOLIATIONS @ 24.0m 37.0m 48.0m 55.5m	65 70 70 55	Gray sericite silicified.	7-20% very fine dark pyrite. 13.3-25.9m: Very minor grey quartz with sphalerite & tet. {25.9-26.8} «5% sp, (1% gn» Quartz-py-sp-gn veining; gray irregular quartz veining. {30.9-31.5} «Smx» Fairly strong fine layered/foliated sulphides in a black grey argillaceous sericitic matrix. Mainly sphalerite, minor galena and tetrahedrite. 31.5-37.0m: Elevated sphalerite +/- galena and tet associated with 1-2cm quartz veins. 37.0-48.0m: 15% py, 3% sp, minor gn & tet. Py flooding, increased grey silicification. {42.3-44.7} «Qtz-Py-Sp-Tet» White quartz veining with 3-5% honey sp (1% tet.	
END OF HOLE.						

HOLE NUMBER: U1290-17

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-17

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						EPI D/CAN	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SO ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SO oz/T	AG oz/T		
34456	25.90	26.00	0.90	0.046	2.06	1.35	15.5	0.19									
34457	26.00	28.10	1.30	0.029	0.16	0.16	9.2	0.40									
34458	28.10	29.40	1.30	0.011	0.09	0.30	9.5	0.39									
34459	29.40	30.90	1.50	0.153	2.39	1.45	61.9	0.79									
34460	30.90	31.50	0.60	1.029	14.10	10.10	314.0	1.74									
34461	31.50	33.10	1.60	0.119	0.71	0.53	69.3	0.50									
34462	33.10	34.70	1.60	0.117	0.62	0.49	51.7	0.37									
34463	34.70	36.30	1.60	0.300	1.14	0.70	135.2	0.31									
34464	36.30	37.10	1.50	0.006	0.50	0.41	34.6	0.20									
34465	37.80	38.90	1.10	0.333	1.66	1.09	94.5	0.24									
34466	38.90	40.00	1.10	0.249	1.95	1.11	86.6	0.30									
34467	40.00	41.30	1.30	0.147	1.50	0.49	55.1	0.26									
34468	41.30	42.30	1.00	0.037	0.16	0.11	12.3	0.20									
34469	42.30	43.50	1.20	0.051	3.61	0.90	29.0	0.20									
34470	43.50	44.70	1.20	0.632	3.19	1.41	324.0	0.82									
34471	44.70	46.70	1.00	0.065	0.47	0.41	50.0	0.40									

HOLE NUMBER: U1290-17

ASSAY SHEET

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HOLE NUMBER: U1290-18

MINNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 6.00	Intersheared Mafic Tuff and Silicified Argillite «SHEARED NT, ARG»	Grey-green, black. Fine grained. 0-2.7m: Thinly layered due to shearing of argillite and mafic tuff. 2.7-6.0m: Mafic tuff dominant with intervals of silicified argillite.			<1% py.	Rubby core.
6.00 TO 9.10	Mafic Tuff «NT»	Grey-green. Fine grained. 4cm yellowish sericitic gougy lower contact.		Dolomitized, weak sericite.	Trace py.	Rubby core.
9.10 TO 38.00	Cherty/Silicified Weakly Pyritic Sediments «CHTY NUT»	Light grey. Fine grained. Strong pervasive cherty appearance cut by very fine py veinlets & sericite defining foliation. Minor remnants of wispy dark grey argillite. 9.7-9.9m: Argillite. FOLIATIONS @ 16.5m 27.0m	75 75	Grey sericite, silicified or more cherty precursor.	5-7% very fine dark pyrite. Locally 30-40% fine pyrite in more usual nut looking rock. Minor 1-2cm quartz-sp-tet veining. {14.7-15.7} «3% sp, tr tet» Grey silica flooding to irregular silica patches with 5-10% py, 3% sp, <1% gn, trace tet. {20.8-22.2} «2% sp, <1% gn, tet» Weak sp-gn-tet associated with light grey siliceous veining.	Pyrite much lower than usual nut.
38.00 TO 51.50	Silicified Pyritic Sediments «NUT»	Medium grey. Fine grained. Stronger foliation. Minor grey & black argillite bands. {40.5-40.7} «Flt» {42.1-43} «Flt» Rubby core, minor fault gouge. FOLIATIONS @ 46.0m 51.0m	40 80 75	Stronger grey sericite.	10-20% very fine dark pyrite as very thin bands parallel to foliation. 40.3-42.5m: 7-10cm white quartz veining with brausy py, 1-3% sp, and patchy gn & tet.	Usual foliated pyritic nut.
		END OF HOLE.				

HOLE NUMBER: U1290-18

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-10

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						EPI D-CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SO ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG oz/T	AG oz/T		
34472	13.70	14.70	1.00	0.10	0.31	0.18	0.9	0.26									
34473	14.70	15.70	1.00	0.17	2.78	2.47	38.9	0.62									
34474	15.70	16.80	1.10	0.41	0.84	0.53	73.5	0.82									
34475	16.80	17.80	1.00	0.12	1.18	1.58	35.8	0.34									
34476	17.80	18.80	1.00	0.05	0.07	0.10	6.1	0.20									
34477	18.80	19.80	1.00	0.13	0.23	0.13	18.9	0.26									
34478	19.80	20.80	1.00	0.02	0.27	0.08	3.4	0.24									
34479	20.80	22.20	1.40	0.15	4.31	2.78	51.8	0.60									
34480	40.30	41.60	1.30	0.16	0.91	0.41	30.3	0.10									
34481	41.60	42.50	0.90	0.04	2.15	3.06	27.9	0.84									

HOLE NUMBER: U1290-10

ASSAY SHEET

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HOLE NUMBER: U1290-19

MIRNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 2.40	Silicified Argillite *SIL ARG*	Black. Aphanitic. Weakly graphitic. Rubbly core.		Very minor quartz veining.	(1% py.	1.8-2.4m: rubbly gougy, very poor recovery.
2.40 TO 8.70	Dolomitized mafic Tuff *DOL NT*	Weakly foliated. Sharp faulted lower contact @.....	42	Weak yellow sericite. Pervasive dolomitization. Minor 1-2cm gray quartz veins.	2-4% disseminated pyrite. Traces of disseminated sp and gn.	
8.70 TO 10.20	Fault Zone, Sericite Seds? *FLT, SERT*	Yellow. Fine grained. Foliated sericitized rock (sediments, mafics?). Brecciated gougy upper contact, gougy lower contact.		Intense sericite.	(1% disseminated pyrite.	30% recovery rubbly core.
10.20 TO 53.00	Silicified Pyritic Sediments *SIL PYT*	Medium grey. Fine grained. Well foliated defined py and grey siliceous bands. 10.2-10.4m: Cherty (1% py. 10.4-11.9 *FLT Zn 12.5-12.7 *FLT @ 20.1m fault @ 47.2-47.9 *FLT FOLIATIONS @ 14.5m 60 30.5m 70 44.0m 70 52.5m 70		Gray sericite, silicified.	5-15% & locally to 40% very fine grained pyrite. (1% sp & tet mainly found within 1-3cm wide grey white irregular quartz veins. 20.7-21.0 *Qtz-Sp-Gn* White gray quartz veining 2% sp, 2-3% gn. 25.7-29.8m: Elevated sp content, locally 2% sp over 10cm fine sp-tet veinlets moderately common. 20.2-20.5 *4% sp* 4% sp, 40-50% fine py, zone contains 10cm interval with 7-10% sp. 41.5-42.5 *Qtz-Sp-Tet* 60cm with 6-7% tet.	
END OF HOLE.						

HOLE NUMBER: U1290-19

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-19

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						EPT CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG oz/T	AG oz/T		
34482	17.10	18.50	1.40	0.25	0.87	0.49	58.7	0.24									
34483	20.30	21.50	1.20	0.14	1.03	2.57	26.5	0.43									
34484	21.50	22.00	1.30	0.02	0.47	0.20	8.4	0.86									
34485	26.70	28.20	1.50	0.11	1.80	1.04	60.6	0.84									
34486	28.20	28.50	0.30	0.21	4.82	2.79	46.4	0.96									
34487	28.50	29.00	1.30	0.11	0.62	0.76	31.5	0.94									
34488	32.20	33.00	1.60	0.41	0.64	0.81	139.8	0.78									
34489	40.50	41.50	1.00	0.05	0.13	0.23	13.2	0.20									
34490	41.50	42.50	1.00	4.80	9.59	6.12	1220.0	0.43									
34491	42.50	43.50	1.00	0.53	0.85	0.49	146.3	0.38									
34492	43.50	44.30	1.40	0.24	0.69	0.61	74.6	0.25									

HOLE NUMBER: U1290-19

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MINNOVA INC.
DRILL HOLE RECORD

SOLE NUMBER: U1294-20

DATE: 17-November-1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 1.00	Silicified Argillite «SIL ARG»	Black. Fine grained. Rubby core.			Trace py.	(30% recovery.
1.00 TO 6.40	Dolomitized Nafic Tuff «DOL NT»	Grey-green. Fine grained. Approximately 3-3.2m argillite. Approx. 6.1-6.4m argillite. Rubby zones very poor recovery.		Weak yellow sericite. Pervasive dolomite.	Patchy 2-3% py.	Rubby core, areas of poor recovery.
6.40 TO 7.30	Fault Zone, Sericite «FLT, SERT»	Yellow. Fine grained. Foliated sericitized sediments? Only 13cm of core recovered.		Intense sericite.	(1-1% py.	15% recovery.
7.30 TO 59.00	Silicified Pyritic Sediments «NUT»	Medium to dark grey. Fine grained. {7.3-8.8} «Chty Nut» Cherty/stronger silicification. Lower pyrite content. {26.1-30.5} «Flt Zn» Rubby core, numerous 1-8cm brecciated gonyg zones. {53.2-53.8} «Flt Zn» FOLIATIONS @ 10.1m 85 21.0m 75 41.0m 80 47.0m 75 59.0m: Faulted lower contact.		Grey sericite, silicified.	7-20% very fine dark pyrite, locally 30-40% pyrite. 19.8-22.8m: Three 10-20cm zones of 40-50% fine to medium grained py and 3-5% sp. tr gn. 32.8-40m: Occasional (1-2cm Qtz-py-sp-tot veins.	
59.00 TO 62.30	Siltstone Sandstone «SLT, SS»	Light grey. Silt to fine sand. No apparent bedding except for soft argillaceous layers at 60m possibly transposed. {61-62.3} «NUT» Fault lower contact.	30	Weak sericite.		61-62.3m: 10-20% very fine dark pyrite. 61-62.2m: 25% recovery.
62.30 TO 63.70	Sericitized Sediments «SERT»	Yellow. Fine grained. Well foliated (1-2cm grey ubite siliceous bands common. FOLIATION @ Yellow-grey fault gouge at upper contact. 62.4m: 2cm black argillite. END OF HOLE.	70	Intense yellow sericite.	5-7% medium brassy pyrite cubes within siliceous bands.	

SOLE NUMBER: U1294-20

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-20

HIMNOVA INC.
DRILL HOLE RECORD

DATE: 17-November-1991

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

HOLE NUMBER: U1290-20

DRILL HOLE RECORD

LOGGED BY: P. BAXTER

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HOLE NUMBER: U1290-20

ASSAY SHEET

DATE: 17-November-1991

Sample	From (m)	To (m)	Length (m)	ASSAYS						GEOCHEMICAL						EPI D-CAR	COMMENTS
				CU %	ZN %	PB %	AG g/t	AU g/t	SB ppm	AS ppm	CU ppm	ZN ppm	PB ppm	SG oz/T	AG oz/T		
34493	34.00	36.00	2.00	0.14	0.30	0.24	40.2	0.20									
34494	36.00	38.00	2.00	0.02	0.11	0.37	7.5	0.19									
34495	38.00	40.00	2.00	0.17	0.64	0.31	44.3	0.18									

HOLE NUMBER: U1290-20

ASSAY SHEET

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