MAP No. 105 D 2, 3

ASSESSMENT REPORT [X]
PROSPECTUS [ ]
CONFIDENTIAL [X]
OPEN FILE [ ]

DOCUMENT NO.: 091910
MINING DISTRICT: WHITEHORSE
TYPE OF WORK: DIAMOND DRILLING

REPORT FILED UNDER: Island Mining and Exploration Co. Ltd; Canadian Nickel Co. Ltd.

DATE PERFORMED: Sept. 25 - Oct. 4, 1986 DATE FILED: October 27, 1986

LOCATION: LAT 60° 18'N LONG 135° 56'W AREA: WHEATON RIVER

CLAIM NAME & NO.

TON	1-16	YA78181-196
JL	1-24	YA59033-056
	25-80	YA85597-652

VALUE $

WORK DONE BY: AURUM GEOLOGICAL CONSULTANTS INC. T. Garagan

WORK DONE FOR: ISLAND MINING AND EXPLORATION CO. LTD.

DATE TO GOOD STANDING:

REMARKS: #32 MOUNT STEVENS

The TON claims cover the headwaters of Stevens Creek. Approximately 60 percent of the claim block is underlain by massive, dark green, porphyritic volcanic rocks, and muscovite and chlorite schist of the Upper Triassic Lewes River Group. A 300 m wide dyke of late Cretaceous-early Tertiary quartz diorite trends northwest across the property. Cutting the quartz diorite is a swarm of younger, Eocene rhyolite dykes which also trend northwest. Both the dykes and the surrounding wall rocks are typically shattered and sheared. Some rhyolite dykes are flow banded and show chilled margins 5 to 7 cm wide; others have brecciated and silicified margins and contain zones of anastamosing gold-bearing quartz stringers with associated sericite, pyrite, pyrrhotite, galena and minor sphalerite. Fluid inclusion studies indicate the dykes were emplaced in a mesothermal environment.

The JL claims cover the west side of the Wheaton River valley, on the east side of Mt. Stevens. Geology is similar to the TON and ISLAND claims with Triassic basalt flows, lapilli tuff and fine to coarse clastics intruded by Cretaceous/Tertiary quartz diorite an Eocene dyke swarm. Individual dykes are 0.3 to 7 m wide and occur within a zone 500 m wide which trends northwest onto the TON claims.

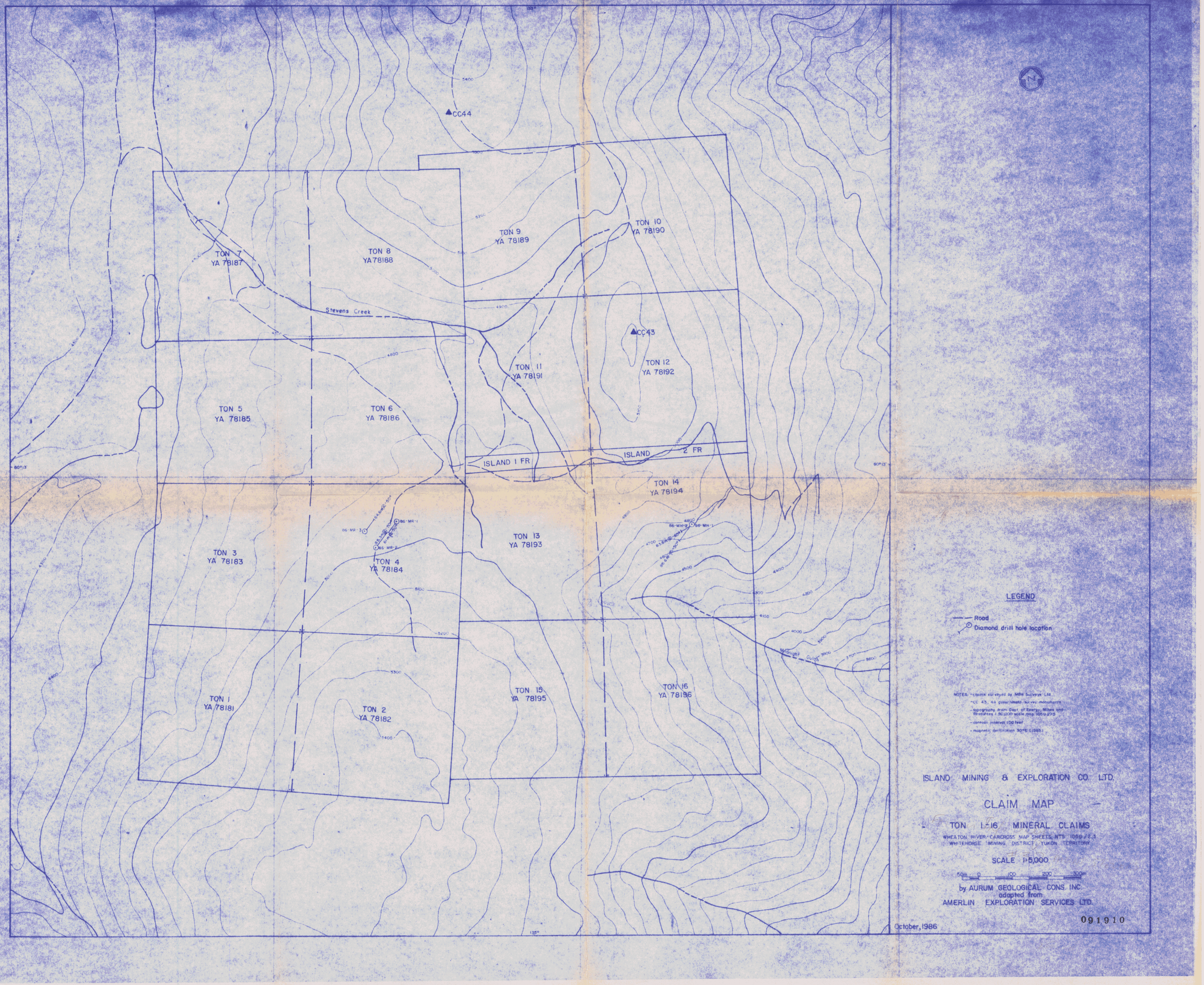
Three types of mineralization are recognized on the JL claims block:

1. gold-silver bearing quartz veins in rhyolite dykes similar to those on the adjoining TON claims.
2. galena-bearing quartz veins in quartz diorite with high silver and gold values.
3. galena-sphalerite-pyrite fracture fillings in quartz diorite.

Extensive geochemical sampling was done on the TON claims in 1985. A total of 1024 soil samples were taken at 50 x 50 m and 50 x 100 m spacings on a grid measuring 1800 x 1800 m and analysed for gold, silver, zinc, copper, arsenic and antimony. A few anomalous gold values up to 1450 ppb were scattered across the property. Sixty-one 1-2 kg rock chip samples were taken across surface. Rhyolite dykes had the highest gold content with two samples containing 920 and 1350 ppb. Somewhat anomalous lead, silver and arsenic values were also obtained from rhyolite dykes, but their distribution was erratic and did not correspond to the distribution of gold. The highest gold assays (89 g/t) came from grab samples of galena-bearing quartz vein material from a stockpile beside an old trench on the TON 14 claim. A continuous chip sample across 1.1 m of quartz-veined rhyolite in the same trench assayed 0.82 g/t Au.

Five holes totalling 266 m were drilled on the TON claims in 1986. Two of the drill holes were located at the site of the TON 14 trench showing where gold concentrations of up to 210 ppb were found over a 2-3 m interval within quartz-veined sericite-altered rhyolite. The other three tested a gossan exposed in a roadcut on the TON 4, where the drill holes penetrated a sequence of meta-andesite and breccia which contained negligible gold despite zones of intense quartz-carbonate veining and epidote alteration.

Also in 1985, soil samples were taken at 50 x 100 m intervals on a grid running the length of the JL property. Sample spacing was decreased to 50 x 50 m in the Midnite Gulch area. Gold with associated silver soil anomalies were clustered at the south end of the property with values up to 810 ppb Au, and up to 4.1 ppm Ag. Strong silver-lead-zinc anomalies were also observed in three locations with values up to 8.3 ppm Ag, 3010 ppm Pb and 672 ppm Zn. The adits and trenches in Midnite Gulch were remapped, prospected and sampled in 1985. The best chip sample of rhyolite dyke material ran 125 ppb Au. Galena-sphalerite-pyrite fracture fillings in diorite assayed 7.5 g/t Ag, 1.4 g/t Au, 0.48% Pb and 0.63% Zn. Galena-bearing quartz veins in quartz diorite were found at the north end of the claim block. A grab sample of galena-bearing float assayed 486 g/t Ag, [illegible] g/t Au and 0.99% Pb.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TON 15
YA 78195
TON 16
YA 78196
Stevens Creek
ISLAND 1 FR
ISLAND 2 FR
Midnight Gulch
86-MR-1
86-MR-2
86-MR-3
86-MH-1
86-MH-2
LEGEND
Road
Diamond drill hole location
NOTES: - claims surveyed by MBW Surveys Ltd.
- CC 43, 44 government survey monuments
- topography from Dept. of Energy, Mines and Resources 1:50,000 scale map 105D/2,3
- contour interval 100 feet
- magnetic declination 30°E (1985)
ISLAND MINING & EXPLORATION CO. LTD.
CLAIM MAP
TON 1-16 MINERAL CLAIMS
WHEATON RIVER-CARCROSS MAP SHEETS, NTS 105D/2,3
WHITEHORSE MINING DISTRICT, YUKON TERRITORY
SCALE 1:5,000
50m 0 100 200 300m
by AURUM GEOLOGICAL CONS. INC.
adapted from
AMERLIN EXPLORATION SERVICES LTD.
091910
October, 1986

ACME GEOLOGICAL CONSULTANTS INC. DIAMOND DRILL LOG 091910 HOLE No. 86-MR-1 Page 1 of 4

Property TON Claims: Midnite Gulch	NTS 105-D-3	Claim TON 4	Elevation	Azimuth 215°	Length 38 m	Dip -50°
Coordinates 8+91N/7+62E	Dip Tests -48° (61 m)	Advance	Depth 61 m	Date Collared Sept. 29	Date Completed Sept. 3	
Purposes ?? To test underneath road gossan	Drilled by G & D Drilling	Assays by Acme	Logged by T. Garagan			

Interval (m) From	To	Rec'y %	RQD	DESCRIPTION (# fragments > 10 cm)	Sample No.	Interval From	To	Core Width	Au	Ag
0	4.6			Casing				(m)		
4.6	9.2			Quartz diorite: light grey-green, medium to coarse grained, equigranular with 20% mafics consisting of 15% hornblende and						
4.6	5.9	95%	0	5% biotite, both of which are partially altered to chlorite;						
5.9	7.9	75%	0	contains 15% interstitial quartz. Cut by 2-3% chlorite-Mn						
7.9	9.2	95%	.23	fractures.						
				The feldspars are only slightly sericitized throughout except						
				from 8.9-9.2 (moderate).						
				5.8: Hematite stained.						
				5.9-6.0, 6.2-6.3: Ground core.						
				Lower contact is intrusive.						
9.2	10.8	90%	.47	Meta basaltic andesite lithic lapilli to ash tuff, medium-dark						
				green. Unit is moderately magnetic which persists in areas of						
				veining. Cut by 2-3% narrow calcite veinlets and is 5% calcite						
				altered throughout.						
				9.2, 9.45, 10.3-10.8: Moderate ankerite alteration.						
				9.7: 5 mm ank-cal-qtz vein. C/A: 75°.						
				10.35 and 10.5: Cut by a .5 cm to 1 cm wide quartz (cockscomb)	3T3064	10.35	10.8	0.45	26	.5
				-limonite vein at shallow angles to core (5-10°). May be part of						
				same vein. Associated with strong ankerite alteration and minor						
				pyrite.						
				10.6: Ground core.						
10.8	11.2	95%	.58	Breccia: orange-brown fragments in a grey-green matrix. Frag-	3T3065	10.8	11.2	0.4	2	
				ments occupy 80% of the rock and are comprised of angular clast						
				supported fragments of ankerite-calcite-quartz altered meta						
				basalt in a matrix of calcite (60%), quartz-pyrite (5%), trace						
				chalcopyrite vein material with 10% chlorite and 10% ankerite.						
				11.15-11.2: Ground core.						

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width
11.2	17.5			Meta basaltic-andesite, medium to dark green, fine grained with local development of medium to coarse grained euhedral				
11.2	12.8	80%	0	Augite phenocrysts. The phenocrysts, where developed, occupy				
12.8	16.8	75%	.08	10-20% of the rock.				
16.8	17.5	100%	.81	The phenocrysts may be developed in the centre of the flow.				
			(3)	The volcanic is strongly magnetic, except within the last 1 m near the intrusive contact.				
				Contains 1-2% calcite veining throughout and trace to 1% epidote coated fractures, 2-5% calcite alteration. The veins are <3 mm wide.				
				11.5: Trace quartz veinlets.				
				16.4: 3 cm green qtz-cal-ank (banded with 60% quartz, 35% calcite and 5% ankerite) vein. C/A: 5°.				
				Ground core: 12.3-12.4, 13.2-13.3.				
17.5	24.4	90%	.12	Quartz diorite to quartz monzonite as above. Grey white to pink white. Hornblende-biotite (20%) with 2-5% sericitization of feldspars.				
				Contains 1-2% xenoliths of mafic volcanics which average 1-3 cm across. One zone from 20.1-20.3 consists of mafic volcanic cut by aplitic veins up to 3 cm across (minor brecciation); may represent a larger xenolith. Contains trace calcite veinlets. Upper and lower contacts are intrusive.				
24.4	24.9	95%	.28	Meta basaltic andesite: medium green, fine grained with 10% medium grained Augite phenocrysts at 24.65. Moderately magnetic with 5% calcite alteration and veinlets. Lower contact C/A: 60° - intrusive.				
24.9	25.8	100%	.53	Quartz monzonite: pink to pink white; medium grained with 10% chlorite altered biotite and hornblende and 10% quartz. The plagioclase is slightly sericitized.				
				25.5, 25.7: 5 cm x 2 cm and greater, mafic xenoliths.				

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width
25.8	61.0			Meta basaltic andesite as before, with several zones of grey-green meta basalt with medium to coarse grained Augite phenocrysts as before. Interbedded with lithic lapilli tuff. Weakly foliated C/A: 45°. 1-2% epidote-calcite veinlets throughout with 1-2% disseminated calcite and 1-5% (variable) epidote. Minor hematite on				
25.8	29.0	80%	.17	fractures.				
29.0	32.0	95%	.49	26.7: 2 cm calcite (quartz) vein. C/A: 30°.				
			(8)	27.0: 3 cm quartz-magnetite vein parallel to foliation.				
32.0	33.4	80%	.14	C/A: 45°. Contains x-cutting epidote-calcite tension gashes				
33.4	35.4	100%	.33	perpendicular to the zone.				
35.4	36.3	100%	.18	25.8-29.0: 0.8 cm of lost core.				
36.3	37.8	90%	.43	29.8-30.0, 30.2-30.3: broken core.				
			(4)	32.1-32.2: Quartz vein breccia zone with 40% vein material. The				
37.8	39.2	95%	.34	veins are 0.2 to 1 cm wide and contain 80% quartz and 20%				
			(4)	calcite.				
39.2	40.7	100%	.5	32.6: 1 cm quartz vein. C/A: 10°.				
			(5)	34.2: Epidote microfracturing (10% EP) for 5 cm.				
40.7	42.1	100%	.39	36.3: K-spar-quartz-epidote 1 cm vein. C/A: 65°. Cut by				
			(3)	malachite coated fracture (20% Cu).				
				36.4: 0.5 cm quartz-epidote vein.				
				36.5-36.6: Brecciated zone with epidote filled fractures and 25%				
				epidote.				
				36.6-37.2: 5% epidote fracturing.				
42.1	43.9	100%	.29	39.2: 10% malachite in .5 cm chlorite-quartz vein.				
			(3)	39.55-39.7: Two zones of 30% quartz flooding along foliation.				
43.9	45.9	100%	.53	C/A: 40°.				
			(4)	41.1-41.3: 20% epidote alteration of matrix.				
45.9	47.5	95%	.53	41.7-42.1: Hematite stained shear with slickensides, subparallel				
			(5)	to the core, i.e. C/A ~10° plunge of slickensides: C/A: 60°.				
47.5	49.5	100%	.43	The calcite alteration is decreasing down the hole.				
			(4)	46.4: Shear zone with calcite-hematite, C/A: 30°.				
				47.2: 0.5 cm epidote vein, C/A: 40°.				
				48.25-48.35: Epidote-quartz alteration, parallel to foliation.				
				C/A: 50°.				

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width
25.8	61.0	cont'd		51.5: Hematite and slickenside coated fractures. C/A: 5°.				
				52.2: Broken core and gouge with hematite, chlorite and				
				slickenside on fracture surfaces. C/A: 55°.				
49.5	52.3	90%	.5	Slickenside plunge is parallel to C/A.				
			(6)	52.45: Hematite coated shear with slickensides, C/A: 55°.				
52.3	55.9	100%	.51	53.4: aa. C/A: 5°.				
			(10)	54.4: Chlorite shear with slickensides, C/A 5°.				
55.9	57.6	100%	.61	55.5: 1 cm quartz-feldspar-epidote vein, C/A: 50°.				
			(5)	57.4: Foliation C/A 60°.				
57.6	59.1	90%	.3	57.5: Hematite-chlorite gouge with slickensides.				
			(3)	C/A: 50°.				
59.1	61.0	100%	.88	57.9: 3 cm with 15% epidote alteration.				
			(8)	58.4-58.8: Broken core with 15% epidote and 5% calcite				
				alteration.				
				E.O.H.				

AJRUM GEOLOGICAL CONSULTANTS INC. DIAMOND DRILL LOG 001910 HOLE No. 86-MR-2 Page 1 of 4

Property TON Claims: Midnite Gulch	NTS 105-D-3	Claim TON 4	Elevation	Azimuth 035°	Length 57 m	Dip 50°
Coordinates ~8+25N/6+95E	Dip Tests None: drillers forgot!!	Advance	Depth 85.3	Date Collared Oct. 1	Date Completed Oct. 3	
Purposes To test ROAD gossan from other side	Drilled by G & D Drilling	Assays by Acme	Logged by T. Garagan			

Interval (m) From	To	Rec'y %	RQD (# of fragments >10 cm)	DESCRIPTION	Sample No.	Interval From	To	Core Width (m)
0	3.7			Casing				
3.7	53.9			Meta basaltic andesite ash and lapilli tuff and flows as in MR-1.				
				Medium dark green. Very fine grained to fine grained with ash to				
3.7	11.3	70%	0	lapilli sized lithic fragments and up to 15% Augite phenocrysts				
11.3	14.3	75%	0	(flows). A fine grained non-descript unit dominates. The rock is				
14.3	16.8	70%	0	locally magnetic. Contains 1-5% calcite alteration and 1-2%				
16.8	22.2	70%	.03	calcite veinlets. Hematite coated fractures, which cut all other				
22.2	23.8	85%	0	zones and usually contain slickensides, are common from 0 to				
				16.4 m. The rock is locally foliated.				
				There are several zones of epidote alteration and vein, vein				
				brecciation which are listed with other variations below:				
				0-11.1: Broken and ground core.				
				11.3-14.8: Highly fractured core.				
				4.2 m: Ankerite altered volcanic cut by a 3 cm wide ankerite-				
				calcite-quartz vein with trace pyrite. C/A: 40°.				
				13.75-13.9: Epidote vein and breccia zone with 40% epidote.				
				C/A: 80°.				
				14.35: 2 cm epidote vein and breccia with hematite altered				
				volcanic fragments in vein. 80% epidote. C/A: 85°.				
				14.7, 16.6, 21.22: Ground core.				
				14.4-16.4: 5% epidote veining and alteration.				
				16.4-16.5: Intensely epidotized meta-volcanic with 25% epidote.				
				16.7-16.8: 20% epidote veining up to 2 cm wide. C/A: 50-90°.				
				17.5: Anastamosing quartz-calcite vein and breccia up to 2 cm				
				wide. C/A: 40°.				
				17.9-22.2, 21.0, 22.0: Broken core. 21.0 - ground core and gravel				
				with 40% fragments of ankerite altered and veined volcanic.				
				22.0-23.0: 10% epidote altered and veined with a zone from 22.5				
				to 23.0 containing 30% epidote.				
				25.5-27.5: Broken core; 26.5 ground core; 0.5 m lost.				
				27.9: 0.5 cm ankerite-epidote vein. C/A: 80°.				

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width
3.7	53.9	cont	/d					
23.8	24.4	65%	0	30.7-30.8: 50% epidote alteration.				
24.4	25.0	70%	0	31.0: 2 cm wide epidote altered zone.				
25.0	25.9	80%	.14	31.7-31.8: 30% epidote veining and alteration.				
25.9	26.5	50%	0	32.8: 2 cm epidote-calcite-hematite vein.				
26.5	27.1	60%	0	34.3: 0.6 m lost core.				
27.1	28.2	80%	.33	35.1-36.3: Broken core.				
28.2	30.2	95%	.43	36.1: Hematite fracture and 2 cm wide epidote vein. C/A: 55°.				
30.2	32.3	80%	.26	37.3: Hematite-clay gouge, 0.3 m lost core.				
32.3	35.1	79%	.56	39.9: 2 cm wide epidote (20%)-quartz (10%) alteration zone.				
			(6)	C/A: 40°.				
35.1	35.7	85%	0	40.5: 0.1 m lost core.				
35.7	37.3	100%	.6	42.2-42.35: Broken core.				
			(5)	42.3-42.4: Partly silicified with 15% magnetite, 25% SiO_2,				
37.3	39.0	85%	.35	minor calcite, 15% epidote.				
39.0	40.5	95%	.61	43.0-43.1: Broken core with 2 cm aplite "vein".				
			(4)	43.1: 60% epidote altered (1 cm wide) along a limonite-Mn				
40.5	42.5	90%	.66	coated fracture. C/A: 10°.				
			(7)	44.2-46.6: 5% epidote alteration.				
42.5	43.6	95%	.8	45.4-46.3: Broken core, 0.5 m lost.				
			(5)	46.6: Broken core.				
44.2	46.6	80%	.08	46.7: 3 cm aplite "vein". C/A: 30°.				
46.6	49.7	85%	.11	46.75: 1cm aplite "vein". C/A: 30°.				
			(1)	47.1-47.2, 47.45-47.5, 47.7-47.8: Epidote altered volcanic with				
49.7	53.9	90%	0	minor hematite; 15-30% epidote.				
				47.8-49.7: 3% calcite-hematite (tr.) veinlets.				
				47.8-48.5: Broken core - 0.4 m lost.				
				49.7-53.9: 5% calcite veining and alteration.				
				52.1: 1 cm aplite "vein". C/A: 80°.				
53.9	54.1	100%	-	Granite, pink, fine grained with medium grained felspar pheno-				
				crysts. Fragments of basalt (not rotated) at lower contact, i.e.				
				anastamosing dyke. 5% chlorite after mafics. C/A: 20°.				
54.1	56.8	95%	.48	Meta basaltic andesite as before with 10% medium grained				
			(3)	broken and euhedral augite phenocrysts.				
				54.6-54.7: Broken core.				

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
56.8	57.6	100%	.38 (1)	Quartz monzonite-granite, light green white to pink. Medium grained biotite-hornblende quartz monzonite which varies to a fine grained pink granite (56.8-57.1). The upper contact is intrusive. C/A: 35°. The granite-quartz monzonite contact is gradational over 1 cm, i.e. possibly indicates a composite dyke. The lower contact is faulted and the underlying volcanics have slickenside on the fracture surfaces.							
57.6	62.8	90%	.46 (15)	Meta basaltic andesite as above; 3-5% calcite veinlets. 57.6: Fractures with slickensides. C/A: 65°.							
				58.4-58.7: Intensely ankerite-clay altered basalt (75% replacement) with 5% quartz veinlets (1 mm wide) every 2-5 cm. Vein C/A: 50-80°. 1 cm calcite vein at top.	3T3066	58.4	58.7	0.3		2	.2
				60.3-60.35: Calcite vein and breccia zone. 30% calcite and 5% quartz. C/A: 80°.							
				60.7-60.9: Silicified and partly carbonate altered and brecciated volcanics with 10% quartz-ankerite-calcite veining up to 1 cm wide. C/A: 70°.	3T3067	60.7	60.9	0.2		17	.3
				61.6: 1 cm wide calcite filled shear. C/A: 85°.							
				62.1: Hematite-chlorite coated shear with slickensides. C/A: 30°.							
				62.6-62.75: Calcite (10%) altered.							
62.8	63.3	90%	0	Breccia, ankerite altered and partly silicified volcanic cut by a quartz stockwork which has caused brecciation. The stockwork grades to a massive quartz vein breccia at 62.95-63.15. C/A: 70°. The vein breccia is vuggy in places with the vugs filled with limonite. The upper part of the zone contains a 2 cm wide banded quartz-hematite chlorite-calcite vein and shear. The zone contains 10% ankerite veining. No sulphides were seen and the volcanics on either side of the zone are unaltered.	3T3068	62.8	63.3	0.5		6	.3
63.3	66.9	80%	.34 (7)	Meta basalt-andesite aa: 5% calcite veining. 63.7: 3 cm quartz-ankerite vein breccia. C/A: 85°. 63.8: 3 cm quartz vein zone. 65.4-65.5: 50% quartz-ankerite veining, 1-5 mm wide every 1 mm to 1 cm.							

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
66.9	68.3	-	-	Lost core.							
68.3	68.65	100%	.66	Meta basalt-andesite aa.							
			(1)								
68.65	69.7	60%	0	Meta basalt-andesite aa. 20% carbonate altered with 5%	3T3069	68.65	69.7	1.05		5	.2
				calcite-quartz veining (20%: 68.65-68.7) and a 10 cm quartz-							
				ankerite-clay vein at the bottom. The quartz is limonite stained							
				and occurs as narrow 1 mm to 1 cm veins. C/A: 75°.							
				The vein is also partly silicified throughout and contains frac-							
				tures with well developed slickensides near the top. C/A: 35°.							
69.7	85.3			Meta basalt-andesite aa. 5% calcite veining with 5-10% quartz-							
				hematite. Slightly magnetic with minor epidote and quartz vein-							
69.7	71.0	80%	0	ing, as listed below:							
71.0	72.4	90%	.13	73.6: 3 cm quartz vein, C/A: 75°.							
			(1)	73.6-74.6: Hematite-slickensides on fracture.							
72.4	73.3	90%	.41	74.6-75.6: Lost core.							
			(2)	74.6: 2 cm epidote vein and 30% epidote alteration.							
73.3	75.6	57%	0	80.6: Broken core.							
75.6	77.1	80%	.15	81.7: 5 cm ankerite stockwork.							
			(2)	84.4-85.3: Ground core.							
77.1	80.2	95%	.08								
80.2	81.4	90%	.14								
			(3)								
				E.O.H.							

AURUM GEOLOGICAL CONSULTANTS INC. DIAMOND DRILL LOG HOLE No. 86-MR-3 Page 1 of 2

Property TON Claims: Midnite Gulch	NTS 105-D-3	Claim TON 4	Elevation	Azimuth 035°	Length 41 m	Dip -50°
Coordinates 8+71N/6+75E	Dip Tests -48° (64.6 m)	Advance	Depth 64.6 m	Date Collared Oct. 4	Date Completed Oct. 6	
Purposes Another test on ROAD gossan	Drilled by G & D Drilling	Assays by Acme	Logged by T. Garagan			

Interval (m) From	To	Rec'y %	RQD (# of frags. >10 cm)	DESCRIPTION	Sample No.	Interval From	To	Core Width	Au	Ag
0	18			Casing - in caved meta basalt and sand.				(m)		
18	19.8	-	-	Sand: green, fine grained from meta-basalt-andesite.						
19.8	22.1	-	-	Cave.						
22.1	23.6	60%	0	Meta basaltic-andesite, medium green, same as in MR-1,2; slightly magnetic, 2-4% calcite veinlets, C/A: 25°. 1-2% hematite microfractures with slickensides. C/A: 5-15°. 10% calcite alteration and 2-3% ank. veining. 22.6: Ground core.						
23.6	24.4	-	-	Sand.						
24.4	29.4	-	-	Ground core, cave with pieces of above.						
29.4	31.6	75%	.15	Meta basalt-andesite with coarse grained Augite phenocrysts and lithic lapilli, 2-3% calcite veinlets and 2-3% epidote alteration. 30.2-30.3: Epidote vein stockwork with 15% epidote veining. All veins are randomly orientated and 1-2 mm wide.						
31.6	32.9	50%	.27 (2)	Meta basalt-andesite aa orange brown; strongly ankeritized and sheared with thin (1-5 mm) ankerite and calcite veinlets parallel to the shear direction. C/A: 30°. Trace 1-2% quartz, 5% disseminated pyrite.	3T3070	31.6	32.9	1.3	3	0.2
32.9	33.7	70%	.3 (2)	Meta basalt-andesite aa 5% calcite veinlets, variable C/A, 1-5 mm wide. 33.3-33.5: Moderately sericitized alteration with 10% ankerite.						
33.7	39.6	-	-	Cave and broken core of above.						
39.6	64.6	-	-	Meta basalt-andesite medium grey-green, fine grained with 5-10% medium grained Augite phenocrysts, slightly to strongly						

interval From	interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
39.6	64.6	cont'd		magnetic locally. 1-2% calcite alteration. Epidote altered and other zones are listed below:							
				39.7-41.4: Cave.							
39.6	41.1	40%	0	46.7: 1 mm chlorite-pyrite fracture with 4 mm Kspar alteration							
41.1	42.4	38%	.15	rim. C/A: 25°.							
42.4	44.2	100%	.48	47.6-47.7: Epidote stockwork zone with 30% epidote veining.							
44.2	46.6	81%	.47	47.8-50.5: Broken core with 3-5% epidote veining 1mm to 2 cm							
46.6	48.2	100%	.56	wide.							
48.2	50.0	90%	.1	48.7: Limonite stained chips.							
50.5	53.0	90%	.37	50.8-50.9: 60% epidote veining 1 mm to 4 cm wide, minor hema-							
53.0	55.8	100%	.37	tite. C/A: 35°.							
55.8	58.2	31%	.12	51.3: Hematite coated fractures with slickensides, C/A: 35°.							
58.2	64.6	?	-	51.9: 3 cm zone of 30% epidote veining and alteration, C/A 45°.							
				53.1: 1 cm zone of epidote veining with an adjacent 3 cm zone of							
				10% epidote alteration.							
				53.4: 1 cm epidote vein which forks, C/A 40°.							
				53.4-53.6: 10% epidote alteration.							
				53.8: 2 cm calcite filled shears with 10% quartz, 15% chlorite,							
				C/A: 50°.							
				56.2-57.9: Ground and broken core, 1.5 m lost. Fragments con-							
				sist of epidote altered volcanic with chlorite-hematite shears							
				with well developed slickensides.							
				57.9-58.2: Epidote-sericite altered volcanics cut by 20% chlorite-	3T3071	57.9	58.2	0.3		10	0.2
				calcite tension fractures with associated slickensides.							
				Calcite C/A 35° Chlorite C/A: 60°.							
				58.2-58.4: 5% recovery broken and ground core consisting of	3T3072	58.2	~58.4	? 0.2		30	~~21~~
				ankerite volcanic with 40% quartz veining. Veins appear to be							
				1-2 cm wide - similar to zone in MR-2.							
				58.4-59.4: As in 57.9-58.2 with 15% recovery.	3T3073	58.4	59.4	? 1.0		23	0.3
				59.4-59.7: 5% calcite veining with 1-2% hematite coated shears							
				with slickensides, C/A 70°.							
				59.7-64.6: Cave and lost core.							
				E.O.H.							

AURUM GEOLOGICAL CONSULTANTS INC. DIAMOND DRILL LOG 091910 HOLE No. 86-MH-1 Page 1 of 8

Property TON Claims:Midnite Gulch	NTS 105-D-2	Claim TON 14	Elevation	Azimuth 218	Length 57 m	Dip -51°
Coordinates 7+85N/16+40E	Dip Tests	Advance	Depth 282'(86.6m)	Date Collared Sept. 10	Date Completed Sept. 1
Purposes To test underneath 0.5 and 2.6 oz Au in trench	Drilled by G & D Drilling (NQ)	Assays by Acme	Logged by T. Garagan		

Interval (m) From	To	Rec'y %	RQD (35)	DESCRIPTION — # of pieces	Sample No.	Interval From	To	Core Width		Au	Ag
0	12.2			Overburden and casing.				(m)			
12.2	16.8			Felsite (? rhyolite?) orange brown, fine grained with 15-20% fine to medium grained feldspar phenocrysts in a fine grained							
12.2	13.4	75%	0	feldspar-quartz (~ 20%) matrix. The feldspars are slightly to							
13.4	15.5	75%	.16	moderately sericitized throughout the section with alteration							
15.5	16.8	75%	.28	increasing in intensity near the bottom. Minor thin quartz							
				veinlets in lower 1 m of section. 2-3% pyrite, partly altered to							
				Mn.							
				16.3-16.8: Partly silicified quartz flooding with 5% quartz filled	3T3001	16.3	16.6	0.3		.001 opt	.01 opt
				fractures (< 1 mm thick) and increased sericite.	3T3002	16.6	16.8	0.2		.001 opt	.1 opt
				16.6-16.8: Quartz veining and brecciation up to 1-2 cm thick with 5% galena.							
				Broken core: 13.6-13.7, 15.2-15.3, 15.5-15.7, 16.5-16.8.							
16.8	22.9			Foliated meta-andesite; very fine grained, medium grey-green							
				to orange brown in zones of ankerite alteration. Foliation is more							
16.8	17.7	75%	0	intense in altered zones. C/A: 85°.							
17.7	19.8	45%	.21	16.7-17.2: Strongly foliated ankerite-fuschite altered andesite							
19.8	22.9	90%	0.6	with 5-10% fuschite and 5% Mn.							
			(35)	17.2-19.5: Alteration as above, but less intense with less Mn and							
				poorly developed fabric.							
				17.8-18.8: Broken core with 0.8 m lost. Rubble consists of	3T3003	~17.8	18.8	~ 1 m	20% recovery	.001	.11
				strongly foliated meta volcanic with 15% quartz vein rubble with							
				1-2% galena.							
				Zones of moderate to weakly ankerite-fuschite (2-3%) altered as							
				follows: 20-20.1 m, 20.5-21.00 m, 21.2-21.8 m, 22.7-22.9 m.							
				The carbonate zones are locally bleached, indicating the possible							
				development of sericite: 16.7-17.2, 20.8, 21.2, 21.5.							
				Two types of veins are present in this section. An earlier grey							
				quartz occurs parallel to the schistosity and locally contains trace							
				chalcopyrite and galena with minor associated hematite alteration.							

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
16.8	22.9	cont'd		The veins do not exceed 2 cm in width and those >1 cm occur at:							
				19.4, 20 (tr. galena), 20.5, 22.2 (3-5% chalcopyrite, fuschite),							
				22.4, 22.6 (cp, py-ank).							
				The grey quartz veins are cut by later ank. veinlets and locally							
				banded fine grained (sugary) yellow-white quartz veins up to 4 cm							
				wide. These veins (when containing quartz) have ankerite							
				margins and the veins x-cut the fabric. Those >1 cm: 19.3, 19.9,	3T3004	20.6	21.1	0.5		.001	.02
				20.8, 20.86-20.9.							
				Zone: 20.93-21.06, 21.5, 22.05-22.09, 22.35.	3T3005	21.95	22.25	0.3		.001	.02
				The zones at 21.5 and 22.05 are associated with bleached							
				volcanics. The veins carry trace pyrite.							
				C/A: 22.09: 60°							
				20.93: 35°							
				21.06: 45°							
22.9	23.4	70%	0	Rhyolite (felsite): light yellow brown, very fine grained with							
				10% fine grained feldspar phenocrysts and 5% very fine grained							
				pyrite (Mn altered).							
				The matrix is partly quartz flooded (5-10% silica) and partly							
				sericitized. The upper 10 cm contains thin (1-5%) quartz veins							
				every 1-2 cm which x-cut the core at a variety of angles.							
				22.9-23.0: Badly broken core.							
23.4	29.4			Foliated meta andesite tuff: medium green, fine grained with							
				medium grained fragments elongated along foliation.							
23.4	25.9	50%	0	Appears to be 25% clasts (lithic) which are stretched at a 1 to 5							
25.9	29.4	70%	.26	ratio.							
				Chlorite is developed parallel to the foliation and is also present							
				as an alteration of the rock fragments.							
				Ankerite-fuschite alteration is developed in several zones but is							
				concentrated along the dyke-volcanic contact.							
				Foliation C/A: 80°, weakly magnetic where fresh.							
				23.4-23.7: Strongly ankerite altered and sheared with 1-2%							
				fuschite. The zone is strongly bleached (? ser.)							
				Contains 1 thin quartz vein.							
				Shearing C/A: 045°.							

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
23.4	29.4	cont'd		23.8-25.9: Ankerite-fuschite altered volcanic with several (2-5%) thin (2 mm) white quartz-ankerite veins varying between 90° and 20° C/A, 1-10 cm apart.							
				23.8-24.8: Lost core. Rubble consists of above and minor rhyolite with quartz veins.							
				25.9-26.1: Broken core.							
				26.2-26.6: More strongly foliated volcanic with 15% fine grained quartz in veins and quartz flooding with 5% fuschite and minor ankerite. Quartz veins are thin (i.e. < 1 cm).	3T3006	26.2	26.6	0.4		.001	.01
				27.0: ~ 0.9 m lost core.							
				28.8-29.4: Ankerite-fuschite (<5%) altered with a 5 cm wide quartz vein at 29.1 surrounded by a bleached zone with 10% fuschite.							
29.4	38.2			Rhyolite: light red brown to sandy brown, very fine grained with 5-10% (increases lower down) fine to medium grained euhedral							
29.4	31.4	90%	0.3	feldspar phenocrysts which are storngly sericitized (grass green)							
31.4	32.0	60%	0	near the top and only slightly sericitized lower in the section							
32.0	32.5	60%	0	(grey green). The top 5 cm is silicified and contains 5-7% very							
32.5	33.8	75%	0.23	fine grained Mn after pyrite.							
33.8	35.4	95%	0.44	Broken and/or ground core: 31.2-32, 32.25-32.5, 33-33.8 (0.2 m							
			(30)	lost), 35.12.						(ppb)	(ppm)
35.4	36.6	50%	0.1	The dyke is quartz flooded locally with minor thin quartz filled	3T3007	32.8	33.0	0.2		7	0.6
36.6	37.5	60%	0	fractures: 32-32.2, 32.8-33, 35.25-36.05.							
37.5	38.2	70%	0	The broken core from 35.12-37.5 is moderately sericite-carbonate altered with calcite coated fractures every 1-3 cm.	3T3008	35.2	36.6	1.4		11	0.4
				37.5-38.1: Rhyolite is cut by several thin (< 1 cm) quartz veins (average one every 4-5 cm) with minor ankerite. The rhyolite is moderately to very strongly (quartz flooded) silicified and contains 5-7% fine to medium grained pyrite cubes.	3T3009	37.5	38.2	0.7		127	0.5
				37.6-38.1: Broken core.							
38.2	39.5	7%	0	Ground core: includes 1.2 m lost core.							
				-0.1 m sheared fuschite/ankerite altered meta andesite.							

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
39.5	40.4	80%	0	Breccia: rhyolite, grey green; silicified and clay altered breccia formed in part by an intense clay-ankerite quartz stockwork. The fragments are intensely silicified near the bottom and are strongly sericitized at top with zone in between being a mixture of both. The fragments are subrounded, up to 1 cm across and are both clast and matrix supported. They are locally hematized and ankeritized. The matrix consists of fine grained orange brown clay and carbonate with minor quartz. The fragments consist of rhyolite with 5% grey quartz and contain minor disseminated pyrite and galena. The top part of the zone is less brecciated and is cut by a 2 cm quartz-ankerite-barite vein at 39.6. C/A: 20°.	3T3010	39.5	40.4	0.9		6	0.3
40.4	41.9	80%	.25 (>20)	Rhyolite, light brown, very fine grained with 15% fine grained feldspar phenocrysts and 2-3% fine to medium grained quartz-eyes. The feldspars are partly clay altered. 40.4-40.5: Partly sericitized. 40.7-41.0: Clay calcite veinlets in 3 zones 10 cm apart. 41.2-41.4, 41.6-41.8: Brown clay seams.							
41.9	43.2	70%	0	Rhyolite, light brown, rubbly core in places; fine grained with medium to coarse grained euhedral feldspar phenocrysts (15%) and quartzeyes (10%). The matrix has a pinkish tinge to it (clay alteration) and the feldspars are altered to a pinkish white clay (possibly ankerite) and hematite (trace). The matrix also contains approximataely 5 to 10% calcite alteration. This unit is probably a coarser grained version of the above. 42.0-42.4, 42.8-43.2: Broken and rubbly.							
43.2	44.2	90%		Rhyolite, fine grained as in 40.4-41.9. Trace to 5% calcite alteration.							
44.2	44.4	100%	1	Breccia: medium brown, matrix supported, fragments angular to subrounded, varying between 0.2 to 2 cm across in a sandy-clay-ankerite matrix. The fragments consist of 50% foliated fuschite altered meta-volcanic, 10% grey quartz and 30% fine	3T3011	44.2	44.4	0.2		17	0.2

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
44.2	44.4	cont'd		The matrix is locally sericitized with minor quartz-carbonate flooding. A few of the fragments have thin reaction rims (? composition).							
44.4	44.6	100%	1	Meta-andesite tuff. Strongly foliated with highly contorted and tightly folded fabric. Ankerite-fuschite altered with very fine grained pyrite along foliation.							
44.6	44.8	30%	0	Broken and ground meta volcanic and rhyolite core.							
44.8	45.5	100%	.33	Rhyolite, light brown to green brown, very fine to fine grained with 15% fine to medium grained grey euhedral and broken feldspar phenocrysts and 5% elongate? quartz. Contains 5-7% fine disseminated pyrite. Top 5 cm is sericitized with minor thin (1-2 mm) quartz veins. Also contains several 1-5 mm qtz-ank-py veins throughout (~ 3-5%) with variable core angles.	3T3012	44.8	45.5	0.7		4	0.5
45.5	46.3			Lost core.							
46.3	47.2	75%	0	Foliated meta andesite lithic lapilli to ash tuff; medium green-brown with 25% chlorite altered andesite fragments. The unit is orange brown near the upper contact due to ankerite alteration. The fabric is also stronger at this point. C/A: 80°. Contains 1% thin x-cutting (<2 mm variable C/A) ankerite-quartz veinlets throughout.							
47.2	50.6			Rhyolite: light-medium brown, fine grained with 15% elongate quartz-sericite-(chlorite) clots (? replaced feldspars) and 5% euhedral feldspar phenocrysts. Contains 5% disseminated pyrite cubes which occur within the quartz sericite zones. The unit is quartz flooded locally and contains thin (3-5 mm) grey quartz-ankerite-pyrite (limonite) veins at C/A 0-40° at: 47.6, 47.75, 48, 48.4, 48.5, 49.1, 49.2. 49.3-49.8: Quartz flooded with clay clots and 10% sericite cut by a moderately developed stockwork (10% veining) of 0.5 to 2	3T3013	47.2	48.2	1.0		128	0.5
					3T3014	48.2	49.3	1.1		74	0.6
47.2	49.3	90%	0.4		3T3015	49.3	49.8	0.5		164	0.4
			(37)		3T3016	49.8	50.6	0.8		39	0.6
49.3	49.8	100%	.24								
			(≈15)								
49.8	50.6	75%	0								

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
47.2	50.6	cont'd		Veining is 40% of the rock for 10 cm at 49.7. Contains 8-10% pyrite with 2-3% occurring in veins. The grey quartz veins contain 5% ankerite and are brecciated by a later milky white quartz phase (5% of veins).							
50.6	51.5			Lost core.							
51.5	55.8	80%	.58 (35)	Meta-andesite tuff/andesite: medium green, foliated, fine grained with lapilli size fragments which are flattened near the contacts. Unit is slightly magnetic. Fol: C/A: 70°. Contains 2-5% calcite veinlets. Upper 20 cm: ank-altered; rest 1-2% epidote.							
55.8	57.2	80%	.38 (2> 10cm)	Sheared and strongly ankerite altered above. Orange brown. Cut by quartz-calcite (10%) stockwork (25% veining) from 55.9-57.0. The rock contains ∿5-10% calcite. The veins do not exceed 1 cm thick. The ankerite decreases dramatically in the lower 20 cm.	3T3017	55.8	57.2	1.4		6	0.1
57.2	58.9	80%	.12	Meta-andesite lithic lapilli tuff as before; foliation C/A: 80°, with trace carbonate veining. 58.5: 10 cm clay gouge and broken core.							
58.9	64.3			Rhyolite: light brown to green brown; very fine grained with fine to medium grained euhedral grey feldspar (15%) phenocrysts and 5-7% very fine to fine grained yellow clay altered to sericitized feldspar phenocrysts (probably Kspar). The coarser phenocrysts are partly sericite and silica altered, as in 47.2-50.6. The matrix is locally sericitized and quartz flooded which is accompanied by thin (<.5 cm) quartz filled fractures: 59.4, 60.9, 61.2, 62.0, 62.9, 64.0. 58.9-59.3: Strongly silicified with 10% pyrite and 15% quartz-ankerite (5% of vein)-pyrite (tr.) thin veining. The unit contains 3-5% disseminated pyrite.	3T3018	58.9	59.3	0.4		6	1.0
					3T3019	59.3	60.3	1.0		8	0.5
58.9	59.3	90%	.25		3T3020	60.3	61.3	1.0		3	0.9
59.3	59.7	90%	0		3T3021	61.3	62.3	1.0		10	0.8
59.7	60.5	95%	.16		3T3022	62.3	63.3	1.0		13	0.5
60.5	62.6	90%	.17		3T3023	63.3	64.3	1.0		6	0.3
62.6	63.1	100%	.74 (3> 10cm)								
63.1	64.3	90%	.17								

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
64.3	67.26	100%	.79	Meta andesite lithic ash to lapilli tuff, as before, strongly							
			(13 >	foliated adjacent to dyke contacts with moderate ank. alt.							
			10cm)	Foliation C/A 65°, lower contact C/A 85°.							
				64.45-64.55: Strongly ankeritized with 2 cm clay gouge.							
				66.3: 4 cm clay gouge.							
				Minor calcite veining and alteration throughout.							
67.26	70.1	95%	.35	Rhyolite: light green to brown, very fine grained with fine	3T3024	67.3	67.8	0.5		5	0.1
			(11 >	grained partly clay altered feldspar phenocrysts (5%).	3T3025	67.8	68.8	1.0		9	0.2
			10cm)	The upper and lower contacts are sericitized and quartz flooded	3T3026	68.8	69.8	1.0		2	0.3
				from 67.26-67.8, 69.3-70.1.	3T3027	69.8	70.1	0.3		5	0.3
				69.8-70.1 is strongly silicified (40% silica) with abundant quartz							
				microfractures.							
70.1	75.1	90%	.49	Meta andesite tuff as above. 1-2% calcite veining.							
			(15 >	71.1: Amygdules (5%), therefore minor interbedded flows.							
			10cm)	70.1-70.4: Ankerite and sericite altered with minor quartz veining	3T3028	70.1	70.45	0.35		3	0.2
				with a 2 cm wide quartz vein. C/A 10° at 70.35.							
				72.2: Quartz veinlet, C/A 10°.							
				73.2: 2 mm wide quartz vein and gouge, C/A 5°.							
				73.5: 20 cm broken core.							
				74.1: 2 cm wide zone with quartz filled tension gashes. C/A 45°.							
75.1	75.45	95%	0	Meta andesite-chlorite schist: medium green, strongly foliated,							
				C/A 90°. 15% calcite veining parallel to schistosity.							
				75.2: Clay seam.							
75.45	76.35	90%	0	Meta andesite tuff, medium to dark green, weakly foliated, C/A							
				90°. Slightly carbonate altered.							
				75.8: 3 cm clay gouge and calcite vein.							
				76.25: 1-2 mm qtz-hem-cal. vein. C/A 20°.							
76.35	76.4	?	0	Green clay gouge.							

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Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
76.4	76.75	80%	0	Meta andesite tuff. 40% silica flooding and quartz veining with	3T3029	76.4	76.75	0.35		5	0.4
				tr. ankerite and 3-5% fuschite.							
				76.45: 2 cm wide quartz vein.) C/A 75°							
				76.7: 4 cm wide quartz vein.) Parallel to foliation							
76.75	77.7	80%	0	"Poker chip" meta andesite-chlorite feldspar schist: strongly							
				foliated, C/A 65°. May actually be more felsic.							
77.7	78.4	85%	0	Meta-andesite tuff, medium/dark green, aa: 75.45-76.35.							
78.4	79.1	100%	0	"Poker chip" meta andesite a.a.							
79.1	86.6	95%	.28	Meta andesite tuff and flows, medium/dark green, fine to							
			(17 >	medium grained. Weakly foliated, C/A 70° with local areas of							
			10cm)	strong foliation (schistose).							
				5% calcite alteration and 1-2% x-cutting calcite veinlets.							
				Quartz veins >1 cm at 82.9 and 83.2.							
				Clay gouge: 79.2, 79.75, 81.1, 82.3, 83.2, 84, 85.3.							
				E.O.H.							

AURUM GEOLOGICAL CONSULTANTS INC. DIAMOND DRILL LOG 891910 HOLE No. 86-MH-2 Page 1 of 7

Property TON Claims, Midnite Gulch	NTS 105-D-2	Claim TON 14	Elevation	Azimuth 233°	Length 35 m	Dip -65°
Coordinates 7+85N/16+40E	Dip Tests 65° at 83.8 m	Advance	Depth 83.8 m	Date Collared Sept. 17	Date Completed Sept. 20	
Purposes As in MH-1, test possible northwest plunge	Drilled by G & D Drilling		Assays by Acme	Logged by T. Garagan		

Interval (m) From	To	Rec'y %	RQD (# frags > 10 cm)	DESCRIPTION	Sample No.	Interval From	To	Core Width		Au	Ag
0	12.2			Casing				(m)			
12.2	19.02			Rhyolite-felsite, medium green brown, very fine grained	3T3030	17.0	17.5	0.5		210	1.1
				with fine to medium grained sericitized feldspar pheno-	3031	17.5	18.0	0.5		184	1.8
				crysts (20%)	3032	18.0	18.7	0.7		99	1.2
12.2	15.2	40%	0	Contains 2-4% disseminated pyrite and 5% accicular fine	3033	18.7	19.02	0.32		179	1.5
15.2	15.8	58%	.2(1)	grained clay altered feldspars							
15.8	16.5	25%	0	12.2 - 15.2: broken and ground core							
16.5	17.1	33%	0	16.25 - 16.9: lost core							
17.1	18.92	85%	.23 (4)	17.5 - 18.92: partly silicified with 5% quartz veining and 5-7% disseminated pyrite. Veins have various C/A and are 1-5 mm wide							
				17.9 ground core							
				18.8: 3 cm wide quartz-fuschite vein with trace galena and pyrite. Core is ground here.							
19.02	19.25	90%	0	Quartz vein, white, with 5-7% fuschite, 2-3% galena,	3T3034	19.02	19.25	0.23		74	7.4
				~ 1% sphalerite and trace -1% pyrite. Contains a 3 cm							
				zone of ankerite-fuschite altered metavolcanic, strongly							
				sheared C/A: 75°. Bottom 2-3 cm is ground core.							
19.25	22.9	~10%	0	Rhyolite: silicified and brecciated, ground and broken	3T3035	19.25	22.9	3.65	10% recovery	89	0.6
				core with 3 m lost.							
22.9	27.4			Meta-andesite, medium green to orange brown, fine grained,							
				moderately foliated C/A: 60°							
22.9	25.9	60%	.19	22.9: 1 m lost core.							
			(3)	Ankerite altered from: 22.9-24.2, 24.4-24.6, 25.8-27.4.							
25.9	27.4	66%	.41	1-2% calcite altered and several thin (< .5 cm) quartz							
			(4)	veins parallel to foliation.							
				Fine grained white quartz veins occur at 24.7, 24.8, 25.3							
				(3 cm), 25.35 (1 cm), 25.4 (4 cm), trace fuschite, C/A:	3T3036	25.0	25.5	0.5		61	0.2
				30-90°.							
				25-25.2: silicified and brecciated.							

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
22.9	27.4	cont'd		The ankerite alteration increases in intensity towards the lower contact with 5% fuschite occurring in the lower 20 cm.							
				25.9: 40 cm lost core. Minor ground core with yellow-white fine grained quartz fragments.							
27.4	27.85	80%	0	Rhyolite, grey-green, very fine grained, quartz flooded with 5-7% disseminated pyrite cubes. Cut by a very fine quartz vein stockwork (veins: 1-2 mm wide). The veins occupy 5% of the rock.	3T3037	27.4	27.85	0.45		1	0.4
				27.5 - 27.7: broken core.							
27.85	28.3	100%	.3(1)	Meta-andesite tuff, strongly bleached and foliated with 3-5% fuschite. Fol. C/A: 75°.	3T3038	27.85	28.3	0.45		1	0.2
				Strong bleaching may be caused by very fine grained silica and clay.							
28.3	30.9	90%	.35 (7)	Meta-andesite lithic lapilli to ash tuff, foliated, orange brown to light green, ankerite-fuschite altered (2-3%).	3T3039	30.2	30.6	0.4		1	0.2
				29.6-30.0: less altered. Foliation C/A: 60°.							
				30.2-30.9: strongly ankerite altered with several quartz veins (usually < 1 cm).							
				5 cm quartz vein with 10% fuschite at 30.2 and 30.6.							
				Veins are parallel to foliation.							
30.9	32.2	30%	0	Rhyolite: ground core throughout. Fine grained with 15% medium grained sericite altered feldspar phenocrysts.	3T3040	30.9	32.2	1.3		1	0.3
				Minor quartz flooding. 10% of the fragments consist of bull quartz with 5% sphalerite and galena with trace pyrite.							
32.2	34.4	95%	.91 (7)	Meta-andesite lapilli tuff as before, medium green, fine to medium grained. Foliation C/A: 55°. Cut by 5% quartz veinlets (1-3 mm) and 1-2% quartz filled tension gashes.							
				Minor hemetite associated.							
				32.2 - 32.4: ankerite altered.							
				34.3 - 34.4: ankerite altered. With 10% sericite.							

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
34.4	~42.5			Rhyolite, light red brown to light green, in sericitized zones. Very fine grained. With 5-10% fine grained feldspar phenocrysts and 2-3% Mn altered disseminated pyrite. Contains several narrow zones of sericitization with quartz veining and flooding as follows:							
34.4	36.6	90%	.34 (6)	34.4-34.86: Moderately developed quartz vein stockwork with 1-10 mm wide sericite alteration haloes. Veins do	3T3041	34.4	34.86	0.46		1	0.1
36.6	38.4	90%	.12 (2)	not exceed 5 mm. Contain 5-10% limonite. Upper contact is sericitized for 3 cm.							
38.4	41.5	70%	.29 (5)	36.5-36.8: Quartz flooding with intense quartz veining stockwork with 10% ankerite and 50% quartz vein material	3T3042	36.5	36.8	0.3		14	0.7
41.5	42.5	80%	0	from 36.7-36.8. The remaining section has 2-3% quartz-ankerite veinlets.							
				39.5-43.5: Rhyolite is fine to medium grained.	3T3043	39.0	39.5	0.5		23	0.6
				39-40.5: 2-5% quartz flooding with 5-7% disseminated	3044	39.5	40.0	0.5		20	0.4
				pyrite and 10% sericite. A 1 cm wide quartz (ank-py)	3045	40.0	40.5	0.5		10	0.6
				vein is subparallel to the core from 39.8 to 40.1.	3046	40.5	41.0	0.5		1	0.8
				40.5-42.2: Quartz flooded with 10-30% quartz. Minor thin	3047	41.0	41.5	0.5		3	0.9
				quartz veinlets throughout and 10% disseminated pyrite in	3048	41.5	42.2	0.5	0.2 m lost core	10	1.3
				the most intensely silicified zones. Feldspars are	3049	42.2	42.5	0.3		4	0.7
				sericitized. 41.9-42.2: 2-5% quartz veinlets.							
				41.6-41.8: 0.2 m lost core.							
42.5	45.5	85%	.4 (7)	Foliated meta-andesite lithic lapilli tuff; medium green to light orange brown. Foliation C/A: 65°. Contains	3T3050	42.5	43.5	1		1	0.2
				several zones of more intense ankerite-fuschite altera-							
				tion with quartz veining.							
				42.5-43.5: Ankerite-fuschite (10%) altered volcanic cut							
				by several quartz veins between 1 mm and 1 cm wide which							
				coalesce into an intense stockwork and brecciated zone							
				between 42.7 and 42.8 and 43-43.2.							
				The veins consist of fine grained, white quartz and clear							
				grey quartz with minor ankerite (5% pyrite and 5% lim.)							
				The veins are locally banded. The foliation is contorted							
				in this zone.							
				43.5-43.7: Lost core.							

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
42.5	45.5	cont'd		43.7-43.75: Intense quartz-ankerite-fuschite (also sericite) altered meta-volcanic which is cut and brecciated by an intense quartz vein stockwork with 30% quartz (5% ank.) Similar zones also occur at 44.15-44.21, 44.28-44.21, 44.37-44.4, 44.9-44.94, with ankeerite altered meta-volcanic between the upper 2 zones and for 5 cm above the zones. The remainder of the core contains 2-5% quartz veins (<1 cm wide) throughout. The lower contact is gradational.	3T3051	44.1	44.4	0.3		1	.2
45.5	47.8	50%	0	Meta-andesite tuff; intensely ankerite-fuschite altered with the lithic-lapilli (15%) fragments totally altered to fuschite-sericite, and the matrix altered to ankerite. 45.8-46.0: Minor quartz flooding and sericitization of matrix. 46.0-47.7: Broken core with 1 m lost. Core fragments in this zone consist almost entirely of the above with 2 fragments of white quartz vein material.							
47.8	47.9	95%	0	Quartz-ankerite vein; fine grained white to yellow white with 30% ankerite, 10% fuschite, 3-5% pyrite and 1-2% limonite.							
					3T3052	47.8	50.0	-	Grab of splits of vein material	2	0.2
47.9	50.0	-	-	Caving and lost core. Core fragments consist of 45% veining, 45% rhyolite and 10% sericitized volcanics.							
50.0	55.9	95%	.75 (22)	Rhyolite: medium green to light red brown. Grain size is highly variable from a very fine grained dyke with fine grained euhedral feldspar phenocrysts (15%) and rare quartz-eyes to a fine to medium grained rock with medium to coarse grained K-feldspar (5%), quartzeyes (15%) and 10% fine to medium grained plagioclase phenocrysts. The K-spars are slightly alunitized and the plagioclases are partly carbonate-sericite altered throughout. The matrix is slightly calcite altered (1-3%). The contacts between the 2 types is gradational. The coarser grained unit occurs at: 50-5-50.7, 51.4-53.4. 51.3-51.4: Cave. A 4-5 cm wide bleached zone occurs around fractures at 54.8 and 55.0. The fracture at 54.8 contains a 1-2 mm wide calcite limonite vein. The fracture at 55.0 is dry. C/A: 45°. 53.8-55.9: 1% calcite filled fractures.							

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
55.9	56.85	90%	.32	Rhyolite: light orange-brown. Fine grained with medium grained quartz-sericite "fiamme" shaped blebs. May be altered glass within banded rhyolite. Blebs aligned C/A 45°. This unit is slightly to moderately quartz flooded throughout with a moderately developed quartz-limonite-calcite micro-fracture stockwork. 56.1-56.4: broken core.	3T3053	55.9	56.85	0.95		200	0.3
56.85	57.0	90%	0	Meta andesite tuff: ankerite-sericite altered.							
57.0	57.35	-	-	Caved.							
57.35	65.9	95%	.78 (34)	Meta-andesite lithic lapilli to ash tuff with interbedded flows? Medium-dark green. foliation C/A: 50-60°.							
				65.4-65.9: Strongly ankerite-sericite altered with a 1 cm banded yellow-green quartz vein subparallel to the core from 65.5-65.8. The unit is weakly carbonate (calcite) altered throughout with 1-2% quartz-calcite veins throughout (1 mm to 1 cm wide), but in no concentration. The rock contains 2-5% epidote with 2 areas (63.8 and 64.25) containing 15%.	3T3054	65.4	65.9	0.5		1	0.4
65.9	69.15			Rhyolite, light grey green to grey brown. Very fine grained with 10% fine grained euhedral feldspars which can only be seen in the less altered parts of the dyke. The rhyolite is partly quartz flooded throughout (moderate to intense) with 5-10% sericite, minor fuschite near the lower contact. Also contains 5% disseminated pyrite.							
65.9	66.8	80%	0	The dyke is cut by a moderately developed quartz vein stockwork	3T3055	65.9	66.5	0.6		3	0.6
66.8	67.5	60%	0	(5-10% veining). The veins vary between 1 mm and 2 cm (rare)	3056	66.5	67.0	0.5		4	0.7
67.5	68.0	100%	.52	wide. Have variable C/A and contain 10% ankerite and 2-3%	3057	67.0	67.5	0.5		23	0.5
			(2)	pyrite. A 2 cm vein at 67.75 is vuggy in places, an ankerite core	3058	67.5	68.0	0.5		1	0.7
68.0	68.6	90%	0	and trace galena.	3059	68.0	68.5	0.5		22	1.2
68.6	69.15	95%	.38		3060	68.5	69.15	0.65		7	0.7
			(1)								

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
				Broken core: .5 m at 66.8 (10 cm lost)							
				.2 m at 67.1							
				.3 m at 68.6							
69.15	70.2	95%	.40 (4)	Meta-andesite lapilli tuff, altered, light green to medium red brown. Fine grained with 20% lithic (andesite) lapilli fragments which are partly elongated parallel to the foliation. C/A: 50°. Strongly ankerite-sericite altered with the sericite content increasing towards the upper contact. 69.5: cut by a 2 cm fine grained yellow-white quartz vein with poorly defined banding. Contains 5% ankerite. C/A: 70°. 70.0: cut by a similar 1 cm wide vein. C/A: 55°. The remainder of the unit is cut by 1% thin quartz veins with associated sericite and/or fuschite alteration.	3T3061	69.15	70.2	1.05		2	0.4
70.2	75.7	90%	.33 (6)	Meta-andesite lithic lapilli to ash tuff (as before) to chlorite schist. Foliation C/A: 45°. Trace to 3% calcite and contains 2-3% calcite veining with minor quartz veining. 72.8: 2 cm quartz vein. C/A parallel to foliation. 70.5: two 5 mm quartz veins with 10 cm wide ankerite altered zone. Cuts foliation at an acute angle. Unit is ankerite altered: 73.9 to 74.1 and 75.4 to 75.7. Clay gouge: 70.9.							
75.7	78.0	30%	0	Rhyolite, light green brown, very fine grained. Moderately quartz flooded and sericitized. Cut by a very fine and weak to moderately developed (10% veining) quartz-clay-ankerite stockwork. Unit contains 5% disseminated pyrite. The rhyolite is usually bleached adjacent to the fractures and some of the fractures contain a fine grained pink alteration halo (possibly Kspar). Very poor recovery throughout the zone and the core is broken up. 40 cm lost between 77.4 and 78.0.	3T3062	75.7	78.0	~ 2.3	30% recovery	2	0.3
78.0	83.8			Foliated meta-andesite and andesite tuff. Medium green to dark green, very fine to medium grained; possibly interbedded flows and tuffs.							

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval From	Interval To	Core Width		Au	Ag
78.0	83.8	cont'd									
78.0	81.1	95%	.62	5% calcite throughout (except near upper contact) with 5%							
			(10)	calcite veining. Also contains 1-5% epidote (variable).							
81.1	83.8	95%	.45	78.0-78.2: Strongly ankerite altered with 20% thin (up to 3 cm	3T3063	78.0	78.3	0.3		1	.05
			(6)	wide) and fine grained quartz ankerite veins from 78-78.3.							
				82.0-82.6: Light green chlorite-sericite schist with 15% calcite.							
				Foliation C/A: 45°.							
				EOH							