



32D12SW0301 63.4992 HOLLOWAY

010

**WORVEST PROPERTY  
HARKER & HOLLOWAY TOWNSHIPS, ONTARIO  
1986  
SUMMARY EXPLORATION REPORT**

Gilles Tousignant  
American Barrick Resources  
Corporation  
April, 1987

DM 86-6-C-78



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## INTRODUCTION

This report is a summary of the work carried out by American Barrick Resources during 1986 on the Worvest Property under a joint venture agreement with Lenora Explorations Ltd. For more details about the property and the geology, the reader should refer to previous reports on this property.

## DIAMOND DRILLING

During 1986, the exploration work on the Worvest ground consisted mainly of surface diamond drilling. A total of 26 holes were drilled for 29,230 feet (8909 m). The holes were drilled roughly on sections 25 meters apart, to try to show the continuity of the ore intersections detected in the previous drilling. The objective was to extend the "zone" both at depth and along strike to the West.

The 1986 diamond drilling succeeded in outlining a zone of probable and possible ore on the property. This zone is in a geological setting similar to the main zone of the Holt-McDermott mine. It is located at or near the McKenna fault plane in a pervasively silicified, carbonatized and mineralized horizon. The silicification varies between 100% and 10% and the gold values are generally associated with higher silicification and pyrite content. The degree of alteration is often related to the brecciation.

In one hole, Mc.86-271, an ore grade zone was intersected above the McKenna fault plane but in most cases the ore is on the footwall of the fault. Deeper drilling will be necessary to check the presence of more ore above the McKenna.

Like the main zone, the Worvest zone has a westerly plunge. It seems to be weakening to the southwest but additional drilling is still needed to confirm this theory.

## ORE RESERVES

Some preliminary ore reserve calculations were made using the same criteria that were used for the main ore zone, which are:

- a) The "polygonal method" was used to determine the area of influence of each hole
- b) A minimum true thickness of 2.0 meters is necessary to classify an intersection as ore.
- c) The grade for a given intersection has to be supported by more than one assay.
- d) The lower cut-off grades are 3.3 g/t and 2.7 g/t (0.10 oz/t and 0.08 oz/t).
- e) The criteria used to distinguish between the probable and possible ore are based on the geostatistical studies made on the main deposit. The density of the diamond drill holes is the main factor in classifying the ore; a pattern tighter than 25 m by 50 m is necessary to classify ore as probable. The other intersections are classified as possible, and no "potential ore" category has been used.

As the ore reserves calculation was completed after the end of the year, some of the 1987 holes have been included, in particular Mc.87-304 and Mc.87-306.

The total ore reserves for the Worvest property, as calculated after the 1986 drilling program, are as follows:

### **Cut-off Grade - 2.7 g/t. (0.08 oz/t):**

#### PROBABLE ORE:

311,245 M.t at 5.2 g/t (342,370 s.t. at 0.152 oz/t)

#### POSSIBLE ORE:

188,160 M.t at 4.4 g/t (206,980 s.t. at 0.128 oz/t)

TOTAL PROBABLE + POSSIBLE:

499,405 M.t at 4.9 g/t (549,350 s.t. at 0.143 oz/t)

Cut-off Grade - 3.3 g/t (0.10 oz/t) :

PROBABLE ORE:

274,804 M.t at 5.5 g/t (302,284 s.t. at 0.160 oz/t)

POSSIBLE ORE:

153,648 M.t at 4.8 g/t (169,013 s.t. at 0.140 oz/t)

TOTAL PROBABLE + POSSIBLE:

428,452 M.t at 5.2 g/t (471,297 s.t. at 0.152 oz/t)

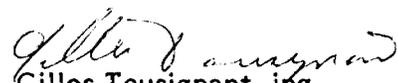
The detailed calculations, hole by hole, are included in Appendix "A"

**CONCLUSIONS & RECOMMENDATIONS**

There were no ore reserves determined as a result of the five reconnaissance holes drilled during 1985, which did, however, indicate potential ore plunging to the southwest near the east boundary of the property.

During 1986, nineteen and sixteen drill holes of the total twenty six holes drilled were used in the 0.08 oz/ton and 0.10 oz/ton cut-off grades respectively, in calculating the above probable and possible calculations.

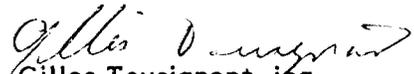
The 1987 diamond drill program is designed to test the westward and possible down-dip extension of the ore zone, in addition to further drilling in the central and western parts of the property.

  
Gilles Tousignant, ing  
Regional Exploration Manager

## CERTIFICATE OF QUALIFICATIONS

I, Gilles Tousignant, of the City of Val D'Or, Province of Quebec, do hereby certify that:

- I graduated from l'Ecole Polytechnique de Montreal, in 1973, with a B.A.Sc. in Geology.
- I am a member of the Quebec Order of Engineers.
- Since 1973, I have been involved in mineral exploration, development and production with various companies.
- I am employed by American Barrick Resources Corporation as Regional Exploration Manager.
- I supervised and I had personal knowledge of the exploration work conducted since 1981 on the "McDermott Project" in Harker and Holloway Townships, Ontario, northeastern Ontario.

  
Gilles Tousignant, ing.  
Regional Exploration Manager  
April 1987

**APPENDIX A**

**WORVEST PROPERTY**  
**Probable Ore**  
**Reserves, April 1987**  
**0.08 cut-off**

Hole #	Area m2	Width m	Volume m3	Grade g/t	Tonnage m.t.	Grams Au
250	2150	4.3	9245	3.3	24684	81458
251	1400	9.7	13580	8.0	36259	290069
	1400	1.8	2520	3.2	6728	21531
258	1950	4.7	9165	10.7	24471	261835
269	2220	3.5	7770	6.0	20746	124475
273	880	5.5	4840	4.6	12923	59445
278	2175	4.3	9353	3.3	24971	82405
	1935	4.0	7740	4.7	20666	97129
283	1935	4.3	8321	4.0	22216	88863
	1860	2.3	4278	3.3	11422	37693
284	1860	3.7	6882	6.4	18375	117600
	1570	2.4	3768	2.7	10061	27164
285	1570	2.4	3768	2.7	10061	27164
286	1840	4.0	7360	2.9	19651	56988
290	2300	2.4	5520	3.8	14738	56006
291	450	11.0	4950	3.7	13217	48901
295	800	3.6	2880	4.6	7690	35372
306	2400	3.5	8400	5.5	22428	123354
total = (probable)				5.2	311245	1610288



**WORVEST PROPERTY**  
**Probable Ore**  
**Reserves, April 1987**  
**0.10 cut-off**

Hole #	Area m2	Width m	Volume m3	Grade g/t	Tonnage m.t.	Grams Au
250	2150	4.3	9245	3.3	24684	81458
251	1400	9.7	13580	8.0	36259	290069
258	1950	4.7	9165	10.7	24471	261835
269	2220	3.5	7770	6.0	20746	124475
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	1860	3.7	6882	6.4	18375	117600
290	2300	2.4	5520	3.8	14738	56006
291	450	11.0	4950	3.7	13217	48901
295	800	3.6	2880	4.6	7690	35372
306	2400	3.5	8400	5.5	22428	123354
total = (probable)				5.5	274804	1504605



**APPENDIX B**

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords: 9699.6 9100.3

DIAMOND DRILL RECORD

HOLE NO.: MC.B6-267

Azimuth: 344.0

Section: 100E

Property: Worvest Option

Dip: -70.0

Core Size: BQ

Location: 1+00E 3+00S

Elevation: 5001.6

Date Started: 2 April, 1986

Length: 458.0

Date Completed: 18 April, 1986

Logged by: A.W. Workman

Measurement: Metric

Comments: Casing left in Ground

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-70.5	201.78	350.5	-69.0	365.76		-63.0
91.44		-71.5	228.60		-68.5	411.48		-54.0
137.16		-69.0	273.32		-67.5	457.20		-51.5
153.01	345.0	-70.0	308.46	345.3	-66.0			
182.88		-68.0	320.04		-64.0			

-----Log Summary-----

.00 47.55 OVERBURDEN.

47.55 167.60 BASALT.

167.60 250.04 DIORITE.

250.04 333.20 BASALT.

333.20 344.00 DIORITE.

344.00 374.60 BASALT.

374.60 377.87 GREENSCHIST.

377.87 378.41 CHLORITE-CARBONATE SCHIST.

378.41 412.60 MAIN MINERALIZED ZONE.

378.41 380.09 TRANSITIONALLY SILICIFIED ZONE.

380.09 396.59 MAIN SILICIFIED ZONE.

396.59 412.60 TRANSITIONALLY SILICIFIED ZONE.

412.60 430.90 CHLORITE-CARBONATE SCHIST.

430.90 431.90 GREENSCHIST.

From To -----Description----- Sample From To Length % Sul GW Au

431.90 457.96 BASALT.

457.96 Meters END OF HOLE.

.00 47.55 OVERBURDEN

47.55 167.60 BASALT

Pale green to medium grey-green with few dark green phases and usually fine to very fine grained. Finer grained pillowed flows and relatively coarser grained massive flows are found in the section. The rock in this section is composed of massive flow only. Flows are well structured with vesicular, often angularly brecciated tops and less broken interiors. Massive flows are occasionally flow brecciated with rounded, reaction rimmed fragments. These fragments reveal a variety of alteration styles (chiefly silicification) and textures. Flow top breccia is characterized by highly angular clasts and relative uniformity of alteration. Rocks are non-magnetic. A few porphyritic sections are noted locally.

47.55 55.30 Deeply weathered and fractured bedrock surface possibly close to a major fault zone. Section is grey-green very fine grained massive flow.

55.30 59.80 Highly fractured upper bedrock section of very fine grained massive flow.

59.80 83.50 Grey-green fine to very fine grained massive flow.

83.50 102.99 Fine grained massive flow. Pinkish-green, very fine grained porphyritic intrusive at 92.53 to 92.63 meters at approximately 75 degrees to the core axis. Weakly developed chill noted at lower contact.

102.99 103.06 Hyaloclastite probable flow top zone.

103.06 109.00 Mixed section of flow top breccia and flow breccia with reaction rimmed often vesicular fragments up to 5 cm.

109.00 110.00 Very fine grained, highly auto-brecciated.

110.00 110.65 Sheared section with abundant carbonatization along foliation planes at 50 to 55 degrees to the core axis.

110.65 112.30 Several minor sections of flow breccia with mafic intrusive at 111.23 to 112.17 meters. Intrusive is dark green and very

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
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fine grained and moderately magnetic with feldspar phenocrysts up to 1 mm in size. Contacts at approximately 70 degrees to the core axis.

- |        |        |   |  |  |  |  |  |  |  |
|--------|--------|---|--|--|--|--|--|--|--|
| 112.30 | 121.30 | Very fine grained massive flow.   |  |  |  |  |  |  |  |
| 121.30 | 124.95 | Section becomes highly fractured, finer grained than above and glomeroporphyritic with pale green, saussuritized feldspar phenocrysts up to 4 mm. These phenocrysts are clumped into aggregates up to 2 cm in size. |  |  |  |  |  |  |  |
| 124.95 | 125.20 | Flow rapidly fines down section to a chilled flow contact zone.   |  |  |  |  |  |  |  |
| 125.20 | 125.47 | Flow contact zone.  |  |  |  |  |  |  |  |
| 125.47 | 125.67 | Highly brecciated, weakly vesicular and chilled flow top.   |  |  |  |  |  |  |  |
| 125.67 | 126.05 | Narrow section of bread-crust type flow top breccia with hyaloclastite, becoming more rounded flow breccia down section.  |  |  |  |  |  |  |  |
| 126.05 | 129.00 | Weakly auto-brecciated very fine grained flow with narrow 10 cm sections of breccia similar to flow top material. These sections repeat down section similar to pillow selvages.                                    |  |  |  |  |  |  |  |
| 129.00 | 129.63 | Pale to medium grey-green, fine grained intermediate intrusive non-magnetic.  |  |  |  |  |  |  |  |
| 129.63 | 163.78 | Medium green, fine to very fine grained massive flow moderately auto-brecciated locally.  |  |  |  |  |  |  |  |
| 163.78 | 167.60 | Fine to medium grained massive flow non-magnetic.   |  |  |  |  |  |  |  |

NOTE contact with underlying intrusive is not well exhibited placement is highly subjective.

#### 167.60 250.04 DIORITE

Pale to medium green, often grey-green, usually fine to medium grained and massive. Section is relatively unaltered and weakly fractured. Local shearing has promoted chlorite alteration. The zone is non-magnetic throughout and carries low pyrite contents, generally less than 1%.

- |        |        |  |  |  |  |  |  |  |  |
|--------|--------|--|--|--|--|--|--|--|--|
| 167.60 | 195.00 | Fine to very fine grained massive flow. White quartz veining at 185.63 to 185.91 meters associated with localized shearing. The section becomes increasingly irregularly textured down section, almost medium grained locally, with increasing chlorite alteration. Abundant epidotized seams locally. |  |  |  |  |  |  |  |
|--------|--------|--|--|--|--|--|--|--|--|

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
195.00	231.70	Fine grained massive flow less altered than above with up to 1% quartz - carbonate stringers up to 1 cm in width with pale alteration halos of epidotization. Rare quartz veins up to 3 cm have broader halos and increased associated brecciation in margins.							
231.70	241.00	Fine to medium grained massive flow gradational to underlying section.							
241.00	249.58	Medium grained massive section altered felsic minerals form a fish-net pattern around euhedral mafics. Reference sample taken.							
249.58	250.04	Fine grained massive section with increasing epidotization down section. Lower contact exhibits a chill across 1 cm. The intrusive contact is at 45 degrees to the core axis. Minor irregular foliation is noted locally often crenulated or drag-folded.							
250.04	333.20	BASALT							
		Medium green, generally very fine grained massive and pillowed sections are noted in this unit. Flow top structures are well developed. Rocks are non-magnetic throughout and relatively unaltered.	21170	326.42	327.00	.58	0-1	.000	tr
			21171	327.00	327.65	.65	1-2	.000	tr
			21172	327.65	328.35	.70	0-1	.000	tr
250.04	254.43	Very fine grained, often foliated basal flow. Foliation is result of flowage with highly irregular angles to core axis but averaging approximately 65 degrees.							
254.43	256.55	Very fine grained to aphanitic, weakly brecciated and vesicular flow top.							
256.55	258.45	Fine to very fine grained massive flow, non-magnetic.							
258.45	258.50	Silicified and epidotized flow contact zone							
258.50	319.90	Pillowed flow selvages are up to 1.5 meters apart and pillow rims are vesicular with minor variolites. Minor hyaloclastite is noted along selvages locally. Pillows locally indicate tops up. Major fractures are parallel to core axis between 266.50 and 270.60 meters poorly cemented. Section is gradational into underlying massive flow.							
319.90	323.50	Very fine grained massive flow no flow contact with overlying section.							
323.50	327.00	Very fine grained massive flow with abundant weakly developed foliation or shear planes locally at 55 degrees to the							

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		core axis highlighted by wispy chlorite.							
327.00	327.65	Strongly foliated section, almost chlorite schist or greenschist. Foliation at 60 degrees to the core axis. Minor silicification along foliation planes with associated pyrite contents of up to 2% locally.							
327.65	333.20	Fine to very fine grained massive flow.							
333.20	344.00	<b>DIORITE</b>							
		Well chilled and silicified upper contact at approximately 40 to 45 degrees to the core axis. Rock is fine grained and massive becoming medium grained below 333.90 meters. Intrusive fines below 341.10 meters to a well developed chilled basal contact at approximately 40 degrees to the core axis. Non-magnetic. Non-carbonatized.							
344.00	374.60	<b>BASALT</b>							
		The section is dominantly composed of medium green, very fine grained massive flow. Abundant auto-brecciation is noted in these flows. Associated with brecciation is moderate to strong epidotization and silicification. Rare section of feldspar phenocrysts are noted. Phenocrysts are highly fractured and epidotized. Non-magnetic throughout.	21173	372.40	373.40	1.00	1-2	.000	tr
			21174	373.40	374.20	.80	1	.000	tr
			21175	374.20	374.60	.40	1	.000	tr
344.00	356.37	Rarely vesicular massive flow with 1 to 2% pink feldspar phenocrysts up to 2 cm in size. Phenocrysts are epidotized to a green colour. Strong auto - fracturing is noted throughout.							
356.37	357.00	Flow contact zone.							
357.00	357.45	Brecciated flow top section with angular fragments.							
357.45	363.00	Flow breccia subangular to subrounded, vesicular fragments up to 10 cm in size with patchy epidotization throughout.							
363.00	372.40	Strongly epidotized auto-brecciated flow with intense localized silicification associated with epidotization. Few reaction rims are noted on fragments up to 5 cm in size. Zone has increasing pervasive carbonatization down section.							
372.40	374.60	Rare 1 to 2 cm sections of purple-grey, aphanitic moderate silicification associated with localized brecciation. This alteration is similar to main							

From To -----Description----- Sample From To Length % Sul GW Au

silicified zone type rock. Minor weak tectonic fabric developed at 50 to 60 degrees to the core axis. Strong localized pervasive carbonatization in silicified breccia.

374.60 377.87 GREENSCHIST

21176 374.60 375.69 1.09 1 .000 tr  
 21177 375.69 376.78 1.09 1 2.616 2.40  
 21178 376.78 377.87 1.09 1 .371 .34

• Medium green, fine grained well foliated rock with minor carbonate alteration as carbonatization along the foliation. Minor amounts of purple-grey silicified breccia clasts are noted within this section tectonically rafted into present location. Minor pink to orange calcite stringers up to 3 cm in width locally. Non-magnetic throughout. Section carries up to 1% pyrite locally as a fine grained dissemination.

377.87 378.41 CHLORITE-CARBONATE SCHIST

21179 377.87 378.41 .54 1 .184 .34

Foliation development sharply increases from overlying unit with an increase in amount and degree of carbonatization. Rock is dark green with calcite highlighting foliation as pale grey laminations up to 1 cm in width. Foliation is at 45 to 50 degrees to the core axis. Minor weak silicification is locally noted along carbonatized laminations. Rock is non-magnetic throughout.

MAIN MINERALIZED ZONE 378.41 412.60.

The zone is based upon amount and degree of silicification and is composed of three members. The zone is of normal width with a section of Main Silicified Zone type alteration slightly broader than normal. However, the main silicified zone is cut by abundant late stage chloritic shears parallel to a well developed foliation in silicified rock. The development of this foliation is considered to be a detriment to the zone. The foliation reflects a tendency towards ductile deformation. Strong brittle deformation or brecciation is not common within this main silicified zone and the degree of silicification is seldom intense. Very little silica dumping is noted. The lower transitional section is somewhat thinner than normal because of the width of the silicified core. Pyrite content are average but no contents above 10% are noted. The McKenna Fault is

From To -----Description----- Sample From To Length % Sul GW Au

noted within a chloritized shear zone from 379.72 to 379.88 meters at probably 48 degrees to the core axis.  
379.85 MCKENNA FAULT PLANE.

378.41 380.09 TRANSITIONALLY SILICIFIED ZONE

This section is a continuation of overlying zone with moderate to strong purple-grey silicification along 1 to 5 mm laminations parallel to foliation. The foliation is more finely developed than in the overlying unit and pyrite contents increase up to 3% finely disseminated locally. Below 379.27 meters, rock is very well foliated with 1 to 2 cm brecciated quartz - carbonate veins parallel to the foliation at 40 to 45 degrees to the core axis. The foliation becomes less tightly cemented and altered down section as the McKenna Fault is approached. The fault zone is a sheared, gritty clay and breccia section from 379.72 to 379.88 meters. The fault plane is probably along a shear at 48 degrees to the core axis at 379.85 meters. Weakly developed crenulations are noted within the foliation locally at irregular angles to the core axis. Rock is pervasively carbonatized throughout along the foliation. Minor hematite streak is noted from silicified rock.

21180	378.41	379.27	.86	2-3	1.772	2.06
21181	379.27	380.09	.82	1-3	.566	.69

380.09 396.59 MAIN SILICIFIED ZONE

Buff and pale grey to purple-grey bands alternate in a strongly to intensely silicified rock, generally across a well developed foliation. Varying colour of alteration reflects differing contents of pyrite, hematite, and dolomite. Generally, darker hues are due to the presence of hematite. The alteration styles are well foliated at 45 to 55 degrees to the core axis. A relatively large amount (10-15%) of relic green chloritized rock is noted in this unit. These seams have a non-brecciated appearance. In the strictest sense the width of the main silicified zone could be decreased based upon the large amount of chloritic seams within the zone. However, these chloritized section were derived through late stage shearing parallel to the foliation and not through incomplete silicification. The degree of intense brecciation is not high in this zone as indicated by the well developed foliation. Narrow section of fine brecciation are noted usually buff in colour and most highly silicified. The zone averages 3 to 5% pyrite with highly localized amounts of up to 10% in the most highly silicified sections. Pyrite is

21182	380.09	380.68	.59	3-5	2.425	4.11
21183	380.68	381.37	.69	2-4	2.132	3.09
21184	381.37	382.30	.93	2-4	2.874	3.09
21185	382.30	383.20	.90	3-5	2.160	2.40
21186	383.20	383.95	.75	3-5	1.800	2.40
21187	383.95	385.00	1.05	2-4	.724	.69
21188	385.00	385.90	.90	4-6	3.393	3.77
21189	385.90	386.29	.39	2-3	.936	2.40
21190	386.29	387.18	.89	6-8	2.439	2.74
21191	387.18	387.60	.42	2-3	.290	.69
21192	387.60	388.47	.87	5-7	.600	.69
21193	388.47	388.97	.50	3-5	.345	.69
21194	388.97	389.58	.61	2-4	.207	.34
21195	389.58	390.40	.82	4-6	1.689	2.06
21196	390.40	391.22	.82	5-7	.566	.69
21197	391.22	392.05	.83	5-7	1.992	2.40
21198	392.05	392.82	.77	2-4	.793	1.03
21199	392.82	393.59	.77	2-4	.262	.34
21200	393.59	394.54	.95	0-1	.323	.34
21201	394.54	395.58	1.04	2-4	.354	.34
21202	395.58	396.59	1.01	2-4	.343	.34

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		concentrated along the foliation in silicified rock and in chloritic shears parallel to the foliation. Most of the pyrite is found as very finely disseminated blebs up to 1 mm in size.							
380.09	381.18	Banded and well foliated alteration generally intensely silicified with less than 5% chloritic shears.							
381.18	381.37	Well developed chloritized shears parallel to the foliation at 50 degrees to the core axis.							
381.37	383.20	As described above at 380.09 to 381.18 with well developed foliation at 45 to 55 degrees to the core axis. Locally, a crenulation cleavage is noted at 75 degrees to foliation and dipping shallowly east. Minor fracturing parallel to core axis.							
383.20	383.95	Approximately 10% chloritic shears parallel to foliation. Lowermost 22 cm is very highly silicified 6 to 8% pyrite.							
383.95	384.50	Approximately 30% chloritic shears as described above at about 40 degrees to the core axis.							
384.50	385.00	Moderate but not well developed silicification with 5 to 10% chloritic shears. Foliation at 20 degrees to the core axis locally.							
385.00	385.90	Intensely silicified section generally well foliated with minor strongly brecciated, non-foliated section. Amount of pyrite and degree of alteration increases down section.							
385.90	386.29	Intensely silicified section with several gritty chloritic late stage shears parallel to foliation at 55 degrees to the core axis.							
386.29	387.18	Pink hued section with intense silicification and minor silica dumping locally. Pyrite noted as a very fine grained dissemination and as localized clots up to 2 cm elongated along the foliation. Pyrite contents average 6 to 8% with up to 10% locally. A white and pink, 10 cm carbonate vein is localized at 386.60 meters possibly injected into a late stage shear. Lower contact of vein is against a late stage shear parallel to the foliation.							
387.18	387.60	Continuation of overlying section with 20 to 30% late stage chloritized shearing parallel to foliation.							
387.60	388.97	Intensely silicified, buff colour breccia							

From To -----Description----- Sample From To Length % Sul GW Au

- with 8 to 10% pyrite locally. Breccia is locally well foliated at 45 to 50 degrees to the core axis. A subordinate healed fracture set in breccia follows a crenulation cleavage at approximately 80 degrees to foliation. The amount of relic chloritized material increases down section below 388.47 meters.
- 388.97 389.30 Same as described above at 387.18 to 387.60 meters with approximately 40% chloritic seams at 40 degrees to the core axis.
- 389.30 389.58 As described above with less chloritized material approximately 5 to 10%.
- 389.58 392.05 Intensely silicified breccia with buff and purple-grey hues. A well developed foliation is noted locally at 50 to 60 degrees to the core axis. Section carries rare chloritized seams parallel to the foliation.
- 392.05 393.59 Intensely silicified breccia with 10 to 15% chloritized shears parallel to foliation at 50 degrees to the core axis. Shearing and chloritization increase in lower 10 cm of section.
- 393.59 394.54 Mafic intrusive pale grey-green to greenish-grey, fine grained and massive with abundant late stage shears throughout, parallel to the foliation in the surrounding rock. Xenoliths of silicified rock up to 1 cm in size are common. Matrix carries chloritized micas, possibly biotites. Rock is moderately magnetic throughout and weakly to moderately pervasively carbonatized. Pyrite contents range from trace to nil. Contacts have assimilated relatively large volumes of silicified wall rock. Contacts parallel foliation.
- 394.54 396.59 Buff to brown colour, intensely silicified breccia seams up to 35 cm in width alternate with sections of abundant chloritic shearing parallel to a well developed foliation at 40 degrees to the core axis. Lower contact is highly subjective within 1.5 meters. Alteration and brecciation generally decreases down section.

Across this section.

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
396.59	412.60	TRANSITIONALLY SILICIFIED ZONE	21203	396.59	397.29	.70	1-2	.238	.34
		Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 1 cm wide. Greenish rock is chloritized and locally hematized but is generally not silicified. The amount of silicified breccia irregularly decreases down section from approximately 20% near the top of the zone. The site of silicification is almost entirely controlled by prior brecciation. Silicified breccia is occasionally honey coloured. Cream to honey coloured, pyrite rich alteration is noted as halos bordering fractures. Silicified rock carries 2-3% pyrite with up to 5% in paler varieties. Chloritized rock carries 0-1% pyrite. Overall pyrite content for this section averages 1-2%. Seams/patches of silicification are oriented parallel to foliation but cross cut locally. Cross-cutting relationships usually produce larger more highly silicified sections of breccia. The amount and general degree of silicification in breccia decreases downhole. Hematization as fine interstitial blebs is noted in chloritized rock upon scratching. Zone is non-magnetic throughout. All but the most highly silicified rock is moderately reactive to HCl.	21204	397.29	398.02	.73	1-2	.248	.34
			21205	398.02	398.68	.66	1	.224	.34
			21206	398.68	399.33	.65	1	.221	.34
			21207	399.33	399.65	.32	0-1	.109	.34
			21208	399.65	400.80	1.15	1	.391	.34
			21209	400.80	401.95	1.15	1	.391	.34
			21210	401.95	403.10	1.15	1	.000	tr
			21211	403.10	404.12	1.02	1	.000	tr
			21212	404.12	405.15	1.03	1	.000	tr
			21213	405.15	406.18	1.03	1-2	.000	tr
			21214	406.18	406.98	.80	0-1	.000	tr
			21215	406.98	407.79	.81	0-1	.000	tr
			21216	407.79	408.57	.78	1	.000	tr
			21217	408.57	409.68	1.11	0-1	.000	tr
			21218	409.68	410.63	.95	0-1	.000	tr
			21219	410.63	411.61	.98	0-1	.000	tr
			21220	411.61	412.60	.99	1-2	.000	tr
396.59	398.02	Approximately 20% silicified breccia in seams up to 10 cm in width.							
398.02	399.33	8 to 10% silicified breccia in narrow seams foliated at 45 to 55 degrees to the core axis.							
399.33	399.65	Mafic intrusive fine grained and well foliated at 55 degrees to the core axis possibly contains relic biotites. Moderately magnetic. Section is same as described above at 394 meters.							
399.65	403.10	20% well foliated silicified breccia.							
403.10	406.18	40% silicified breccia in seams up to 15 cm in width. Foliation is well developed at 40 to 50 degrees to the core axis. Crenulation cleavage noted locally at 45 degrees to the core axis and 80 degrees to foliation.							
406.18	408.57	10 to 15% silicified breccia moderately well foliated throughout.							
408.57	409.68	50 to 55% silicification in breccia seams up to 32 cm in width.							
409.68	411.61	Section carries minor silicification in mm to cm scale laminations parallel to a well developed foliation at 50 to 55 degrees to the core axis. Foliation is crenulated locally as described above.							
411.61	412.60	Approximately 50% silicified breccia in seams up to 15 cm in width with up to 5%							

From To -----Description----- Sample From To Length % Sul GW Au

pyrite in the narrowest, most highly silicified seams. Foliation well developed.

412.60 430.90 CHLORITE-CARBONATE SCHIST

Dark green, fine to very fine grained and generally well laminated/foliated. The rock is weakly chloritized pervasively - perhaps due to regional metamorphism. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 25% of the rock volume. The rock is weakly to moderately well parted throughout. Foliation is often strongly crenulated along planes at 80 to 85 degrees to the core axis and approximately 50 degrees to the foliation. Quartz rich augen up to 2 mm in size are often clearly visible within foliation which decreases markedly in lower 50 cm of the zone with a resulting decrease in the degree of carbonatization along the foliation. Zone is non-magnetic throughout. Pyrite contents average 0 to 1% as blebs up to 1 mm in size.

FOLIATION 40 degrees to the core axis at 416.65 meters, 60 degrees to the core axis at 422.50 meters, 70 degrees to the core axis at 428.40 meters, and 75 degrees to the core axis at 429.85 meters.

412.60 413.75 Rare weak pervasive silicification along seams which have been sheared along foliation. Highly localized pyrite contents of up to 3% are noted.

21221	412.60	413.60	1.00	1	.000	tr
21222	413.60	414.62	1.02	0-1	.000	tr
21223	414.62	415.60	.98	0-1	.000	tr
21224	415.60	416.58	.98	0-1	.000	tr
21225	416.58	417.58	1.00	0-1	.000	tr
21226	417.58	418.59	1.01	0-1	.000	tr
21227	419.60	420.60	1.00	0-1	.000	tr
21228	421.60	422.60	1.00	0-1	.000	tr
21229	424.60	425.60	1.00	0-1	.000	tr
21230	427.60	428.62	1.02	0-1	.000	tr

430.90 431.90 GREENSCHIST

Medium to dark green, very fine grained weakly to moderately foliated rock with rare relic volcanic textures throughout. Foliation is parallel to structure in the overlying zone. Non-magnetic and relatively unaltered.

431.90 457.96 BASALT

Pale hues of green, very fine grained to aphanitic, generally pillowed flows make up this section. Rocks are non-carbonatized and non-magnetic. Volcanic structures



AMERICAN BARRICK RESOURCES CORPORATION

Co-ords: 9760.0 9000.1

DIAMOND DRILL RECORD

HOLE NO.: MC.86-268

Azimuth: 347.4

Section: 000E

Property: Worvest Option

Dip: -70.0

Core Size: 80

Location: 0+00E 2+40S

Elevation: 5005.5

Length: 383.3

Date Started: 21 April, 1986

Date Completed: 29 April, 1986

Logged by: A.W. Workman

Measurement: Metric

Comments: Casing left in ground

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-64.5	182.88		-65.0	320.04		-63.0
91.44		-66.5	228.60		-65.5	363.32	353.0	-63.0
137.16		-65.5	274.32		-64.0	383.13		-59.5
156.06	355.0	-65.0	281.03	356.5	-64.0			

-----Log Summary-----

.00 42.67 OVERBURDEN.  
 42.67 82.09 BASALT.  
 82.09 149.05 DIORITE.  
 149.05 184.50 BASALT.  
 184.50 208.31 DIORITE.  
 208.31 247.92 BASALT.  
 247.92 275.00 DIORITE.  
 275.00 276.39 CHLORITE-CARBONATE SCHIST.  
 276.39 289.74 BASALT.  
 289.74 293.79 CHLORITE-CARBONATE SCHIST.  
 293.79 350.07 MAIN MINERALIZED ZONE.  
 293.79 294.16 TRANSITIONALLY SILICIFIED ZONE.  
 294.16 297.51 MAIN SILICIFIED ZONE.  
 297.51 302.17 TRANSITIONALLY SILICIFIED ZONE.  
 302.17 304.58 LOWER SILICIFIED ZONE.  
 304.58 350.07 TRANSITIONALLY SILICIFIED ZONE.  
 350.07 356.09 CHLORITE-CARBONATE SCHIST.  
 356.09 365.82 LOWER MINERALIZED ZONE.  
 356.09 362.61 TRANSITIONALLY SILICIFIED ZONE.  
 362.61 364.74 LOWER SILICIFIED ZONE.  
 364.74 365.82 TRANSITIONALLY SILICIFIED ZONE.  
 365.82 372.55 CHLORITE-CARBONATE SCHIST.  
 372.55 377.80 TRANSITIONALLY SILICIFIED ZONE.  
 377.80 383.28 CHLORITE-CARBONATE SCHIST.  
 383.28 Meters END OF HOLE.

From	Description	Sample From	To	Length	% Sul	GW	Au
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0.00	42.67	OVERBURDEN					
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42.67	82.09	BASALT					
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Pale to medium green, fine to very fine grained massive flow and relatively unaltered. Rare sections up to 30 cm of strongly epidotized and silicified auto-breccia are noted throughout. No distinct volcanic structures or textures are exhibited. Generally, the style of alteration and brecciation resembles basalt rather than intrusive. Zone is non-carbonatized and non-magnetic.

82.09	147.05	DIORITE					
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Medium to dark green and fine grained becoming medium grained locally near lower contact. Rock is massive and weakly fractured throughout. Zone is equigranular and non-porphyrific. Magnetism are very weakly developed locally.

82.09 82.22 Section is weakly foliated at 60 degrees to the core axis - contact zone. Moderately carbonatized and epidotized, and strongly brecciated.

82.22 89.68 Fine grained and massive with increasing grain size down section.

89.68 90.37 Late stage intrusive section with 1 to 2 mm pink feldspar phenocrysts - related to diorite. Contacts are well chilled at 58 degrees to the core axis.

90.37 128.00 Fine grained and massive with occasional pink calcite veinlets up to 2 cm in width with pyrite crystals up to 2 cm in size. Approximately 25 cm of lost core between 108.72 and 111.86 meters according to depth markers. No shearing or fault zone is noted in core. Minor broken rock noted at 111.47. Minor highly sheared breccia seams are noted locally eq. At 15 to 20 degrees to the core axis at 109.95 - 110.10 meters. Slight trace of magnetism locally.

128.00 147.50 Gradational change to fine to medium

From	Description	Sample From	To	Length	Sul	GW	Au
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grained - lower section of zone carries fish-net type epidotization around mafics.

147.50 148.93 Fine grained, massive.

148.93 149.05 Well foliated and chilled contact at approximately 40 degrees to the core axis.

149.05 184.50 BASALT

Section is composed of massive and pillowed flows. Rocks are dominantly medium to dark green. Abundant auto-breccia is noted throughout. Flow tops are generally vesicular but volcanic structures are not often well exhibited. Rocks are generally non-magnetic.

149.05 150.55 Fine to very fine grained massive flow - dark to medium grey-green, moderately to strongly developed vesicles - probable flow top section. Size grading of vesicles in flow tops indicates that tops are up.

150.55 160.60 Fine grained massive section with few epidotized seams of auto-breccia.

160.60 160.65 Possible flow contact section.

160.65 165.80 Pillowed flow.

165.80 174.63 Fine to very fine grained massive flow.

174.63 184.50 Highly irregularly auto-brecciated - possibly due to late stage flow movement.

184.50 208.31 DIORITE

Medium to dark green, initially very fine grained to aphanitic but rapidly becoming fine grained below 184.80 meters. Section between 204.20 and 205.80 is relatively coarser grained. Rock gradationally fines down section to a well exhibited and weakly chilled intrusive contact at 50 degrees to the core axis.

208.31 247.92 BASALT

Section is composed of massive and pillowed flows, generally dark green to grey-green in colour. Volcanic structures and textures are usually well developed. Rocks are non-magnetic with moderately developed magnetics locally. Basalt is relatively unaltered.

208.31 208.72 Irregularly brecciated flow top material. Section is weakly to strongly magnetic.

208.72 209.10 Shattered very fine grained to aphanitic flow top.

FROM -----Description----- Sample From To Length % Sui GW Au

209.10 211.10 Strongly vesicular section with vesicles up to 1 cm. Minor thin seams of hyaloclastite locally.

211.10 216.75 Fine to very fine grained massive flow - weakly to moderately magnetic becoming strongly magnetic locally.

216.75 216.92 Basal flow with well developed foliation at approximately 50 degrees to the core axis - moderately developed magnetics.

216.92 216.94 Flow contact.

216.94 217.20 Very weakly vesicular, brecciated flow top.

217.20 219.50 Fine to very fine grained massive flow - minor moderate magnetics locally near top of zone, decreasing down section to non-magnetic.

219.50 232.50 Filled flow - section becomes more greenish-grey in colour. Vesicles are well developed throughout. Non-magnetic. Highly fractured locally.

232.50 247.92 Dark greenish-grey, fine grained massive flow - minor auto-breccia locally. Abundant quartz and white calcite filled fractures at 30 to 40 degrees to the core axis between 246.15 and 248.00 meters.

247.92 275.00 DIGRITE

Upper contact is not well exhibited but degree of epidotized and silicified shearing with amount of calcite veining suggests intrusive contact in the approximate area of 247.92 meters. Rock is dark grey-green, fine grained and massive. Grain size increases gradationally down section from upper contact. Zone becomes fine to medium grained between 256.05 and 260.65 meters and fines down section below this point.

247.92 256.05 Fine to very fine grained, non-magnetic.

256.05 260.65 Fine to medium grained, non-magnetic.

260.65 275.00 Fine grained with weak purple hue throughout - rock is moderately to strongly magnetic. Colour is due to magnetite. Section is cut off at lower contact by a quartz stringer at 65 degrees to the core axis.

275.00 276.39 CHLORITE-CARBONATE SCHIST

Dark green, fine to very fine grained and generally well laminated/foliated. The foliation is highlighted by

21231	275.00	275.72	.72	1-3	.245	.34
21232	275.72	276.39	.67	1-3	.690	1.03

From -----Description----- Sample From To Length % Sui GW Au

selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Rock is well parted throughout and weakly to moderately magnetic. Foliation angles are highly variable in direction of dip. The foliation is at 70 to 75 degrees to the core axis. Pyrite contents average 1 to 3% but up to 5% pyrite as a fine grained dissemination is noted locally along carbonatized laminations. Section carries few clasts of dioritic rock up to 2 cm in size - tectonically rafted fragments.

276.39 289.74 BASALT

Medium to dark green, very fine grained massive flow with well developed volcanic structures and textures. Rocks are non-magnetic with slight trace locally associated with margins of epidotized and carbonatized seams up to 1 cm in width. Flow breccia is relatively unaltered.

276.39 287.40 Flow breccia - abundant rounded fragments up to 8 cm in size with well developed reaction rims. Section also carries more angularly developed breccia with strong epidotization. Non-magnetic. Rare 1 to 2 cm section of late stage tectonic breccia are subjected to strong silicification similar to main silicified zone type material. Breccia generally becomes more angular down section into shrinkage-type auto breccia.

287.40 289.74 Weakly fractured massive flow with increasing pervasive carbonatization down section.

289.74 293.79 CHLORITE-CARBONATE SCHIST

Rock is dark green and fine grained with white selective carbonatization along laminations up to 1 cm in width. However, carbonatization in laminations and bands is not as well exhibited as usually indicated in this section. Abundant deformed basalt may be included in this zone. Pervasive carbonatization is moderate between laminations. Foliation is noted at 40 to 45 degrees to the core axis. Pyrite contents average trace amounts. A few more highly carbonatized, brecciated seams up to 10 cm in width carry up to 3% finely disseminated pyrite

21233	289.74	290.67	.93	0-1	.316	.34
21234	290.67	291.67	1.00	0-1	.690	.69
21235	291.67	292.74	1.07	1	.738	.69
21236	292.74	293.79	1.05	1	.357	.34

From -----Description----- Sample From To Length % Sul GW Au

locally. These sections are often weakly magnetic whereas rock is typically non-magnetic. No interstitial hematite is apparent from scratch testing.

MAIN MINERALIZED ZONE : 293.79 to 350.07 meters.

The zone is of average width but the main silicified zone is thinner than normal. However, although the zone is relatively broad it is not well developed.

A highly silicified zone within the lower transitional member partially compensates for the lack of silicification in this zone. Hence, the main mineralized zone is composed of 5 members. The most continuous pyritized section is localized in the main silicified zone. However, the highest pyrite contents are noted in the lower transition. Pyrite contents are lower than average throughout.

294.05 MCKENNA FAULT PLANE.

293.79 294.16 TRANSITIONALLY SILICIFIED ZONE

21237 293.79 294.16 .37 1-2 .255 .69

Dark green and very fine grained with well developed foliation at 40 degrees to the core axis, and pale grey moderately to strongly silicified and carbonatized seams up to 1.5 cm in width parallel to the foliation. These seams carry up to 3% finely disseminated pyrite and 1 to 2 mm blebs. The McKenna Fault is noted at 294.05 meters as a 1 cm clay-grit seam at 50 degrees to the core axis. Slickensides on the fault plane might pitch in a westerly direction at approximately 30 degrees across this plane.

294.16 297.51 MAIN SILICIFIED ZONE

21238 294.16 294.87 .71 1-2 1.214 1.71  
21239 294.87 295.58 .71 2-4 .241 .34  
21240 295.58 296.02 .44 1-3 3.168 7.20  
21241 296.02 296.45 .43 3-5 .297 .69  
21242 296.45 296.98 .53 1-2 3.270 6.17  
21243 296.98 297.51 .53 1-2 .180 .34

Generally, the zone is composed of dark purple-grey, very fine grained to aphanitic moderately to intensely silicified breccia. However, the strong degree of hematization makes estimation of the original strength of silicification problematic. Most silicified rock exhibits a strong hematite streak. All silicified breccia is moderately to strongly reactive to HCl due to pervasive carbonatization. Pyrite contents up to 5% are noted associated with buff coloured alteration but zones average 1 to 3% as a fine dissemination, 1 to 2 mm blebs and as fractured euhedral crystals up to 2 mm in size. A weakly developed foliation in breccia is noted locally at 35 to 40 degrees to the core axis. A few

From Description Sample From To Length % Sul Gw Au

late stage chloritic shears are noted at approximately 40 degrees to the core axis and parallel to the foliation. These are located at 294.40 and 295.97 meters. Relict chloritized patches are noted locally - up to 3 cm in width. These patches are non-brecciated but may be penetrated at margins by fractures with silicified halos. Minor specular hematite is noted below 296.85 meters. The lower contact with transitional silicification is more gradational than usual.

294.16 294.87 Moderately to strongly silicified purple-grey breccia with 1 to 2% pyrite.

294.87 295.58 As described above with 2 to 4% pyrite.

295.58 296.02 As described above with 1 to 3% pyrite and weakly developed and localized late stage shearing.

296.02 296.45 Intensely silicified breccia - dominantly buff with slight pink hue, and abundant purple-grey silicification at top of section. Buff colour is penetrative into late stage brecciation event. Pale hue is cut off along a microfault fracture at 296.44 meters. Pyrite contents average 3 to 5% with up to 8% locally. A few clots up to 1 cm noted. Pyrite contents highest in buff alteration. A crenulation cleavage noted locally at 45 to 55 degrees to the core axis and approximately normal to foliation. Foliation is not well exhibited in this section.

296.45 297.51 Purple-grey and buff coloured strongly silicified breccia with abundant sections of weak to moderate silicification. Abundant fractures with white silicified halos. Section averages 1 to 2% pyrite and trace of specular hematite.

297.51 302.17 TRANSITIONALLY SILICIFIED ZONE

Purple-grey to buff coloured, aphanitic, moderately to intensely silicified breccia in seams up to 20 cm in width cut dark green very fine grained chloritic rock. All brecciated rock is silicified whereas chloritized rock is non-brecciated. Several sections up to 1 meters in width are 85 to 90% silicified. Overall average content of silicification is 40% with 60% at upper margin and 20% at lower contact. Degree of silicification in this unit is higher than is generally the case within the transitional silicified zone and is more typical of main silicified zone type rock. The narrow breccia seams probably focus silicification.

21244	297.51	298.41	.90	1	.306	.34
21245	298.41	299.28	.87	1	.296	.34
21246	299.28	300.25	.97	1	.330	.34
21247	300.25	301.21	.96	1	.163	.17
21248	301.21	302.17	.96	1	.163	.17

From -----Description----- Sample From To Length % Sul GW Au

Silicified rock is initially non-reactive to HCl but reactivity increases to moderate below 300.0 meters. White silica dumping is locally noted in the matrix between breccia fragments. Silicified sections often have 1 to 2 mm central fractures which parallel the foliation and control the orientation of breccia seams. Silicification increases where crenulation cleavage controlled fractures radiate outwards from the central fracture. These central fractures are often the site of silica dumping. The rock is non-magnetic throughout and chloritic sections exhibit well developed hematization. Pyrite contents average 1 to 2% in silicified rock and trace amounts in chloritized sections. Seams/patches of silicification appear to have no preferred orientation with respect to foliation. Weakly developed foliation is at approximately 40 degrees to the core axis.

302.17 304.58 LOWER SILICIFIED ZONE

Purple-grey intensely silicified breccia with patchy buff coloured alteration throughout. Zone carries approximately 5% relict chloritized seams - possibly related to late stage shearing parallel to a poorly developed foliation at 35 degrees to the core axis. Buff coloured alteration is often close to these chloritic seams which may have acted as conduits to carbonatizing fluids. Pyrite contents up to 3% noted locally with zone averaging 1 to 2%.

21249	302.17	302.97	.80	1-2	.136	.17
21250	302.97	303.77	.80	1-2	1.648	2.06
21251	303.77	304.58	.81	1-2	.275	.34

304.58 350.07 TRANSITIONALLY SILICIFIED ZONE

Upper 30 cm is a greenish-grey coloured extension of the overlying unit with abundant pervasive chloritization and increased pervasive carbonatization. Below this, the rock is dark green, very fine grained and highly foliated with pale grey silicified and pervasively carbonatized laminations up to 1 cm in width. These laminations are internally brecciated and granulated. Localized microfaults have deformed the foliation. These fault planes are subparallel to the foliation at 38 degrees to the core axis and displacement is reversal - north side down - eg. 305.35 m.

304.58 306.03 Well foliated section at 40 to 45 degrees to the core axis with 10 to 20% silicified laminations.

306.03 306.70 Fault zone - identical to the McKenna Fault zone with abundant silicified debris in chloritized, highly foliated and

21252	304.58	305.27	.69	1	.711	1.03
21253	305.27	306.03	.76	1	1.041	1.37
21254	306.03	306.70	.67	0-1	1.608	2.40
21255	306.70	307.45	.75	1	.127	.17
21256	307.45	308.19	.74	1	.126	.17
21257	308.19	308.46	.27	10-15	.092	.34
21258	308.46	309.37	.91	1-2	.309	.34
21259	309.37	310.28	.91	1-2	.309	.34
21260	310.28	311.21	.93	1-2	.158	.17
21261	311.21	312.13	.92	1-2	.156	.17
21262	312.13	313.08	.95	1-2	1.301	1.37
21263	313.08	314.00	.92	1-2	.313	.34
21264	314.00	314.94	.94	1-2	.160	.17
21265	314.94	315.77	.83	1-2	.141	.17
21266	315.77	316.53	.76	1-2	.129	.17
21267	316.53	317.36	.83	1-2	.141	.17
21268	317.36	318.19	.83	1	.141	.17
21269	318.19	318.86	.67	1	.114	.17

From	Description	Sample	From	To	Length	% Sul	GW	AU
	sheared matrix. Shearing is at 38 degrees to the core axis - same as microfaults in overlying section. A clay-grit seam is noted at 306.58 to 306.65 meters.	21270	318.86	319.55	.69	1	.117	.17
		21271	319.55	320.40	.85	1	.145	.17
		21272	320.40	321.15	.75	1	.127	.17
		21273	321.15	322.10	.95	1	.162	.17
306.70	308.19	21274	322.10	322.95	.85	1	.145	.17
	Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 12cm wide. Silicified sections are randomly oriented to parallel to a weakly developed foliation at approximately 40 degrees to the core axis. Section carries 40 to 45% silicified breccia.	21275	322.95	323.80	.85	1	.144	.17
		21276	323.80	324.65	.85	1	.587	.69
		21277	324.65	325.50	.85	1	.289	.34
		21278	325.50	326.35	.85	1	.145	.17
		21279	326.35	327.08	.73	1-2	.124	.17
		21280	327.08	327.96	.88	1	.150	.17
		21281	327.96	328.84	.88	1	.150	.17
308.19	308.46	21282	328.84	329.70	.86	1	.146	.17
	Pinkish-red, aphanitic and intensely silicified section with well developed foliation at 45 to 50 degrees to the core axis. Pyrite content, often as heavy concentrations along laminations in the foliation ranges from 10 to 15%.	21283	329.70	330.58	.88	1	.299	.34
		21284	330.58	331.46	.88	1	.299	.34
		21285	331.46	332.25	.79	1	.269	.34
		21286	332.25	332.80	.55	1	.379	.69
		21287	332.80	333.51	.71	1-2	.241	.34
308.46	314.00	21288	333.51	334.23	.72	1-3	.497	.69
	Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 16cm wide. The core of most breccia seams is buff to white, pale grey and orange in colour. These seams are generally parallel to the foliation at 40 to 50 degrees to the core axis but localized cross-cutting relationships are common. Abundant fractures associated with brecciation carry pink to orange silicified halos. Silicified and chloritized sections are both non-magnetic. Silicified rock is weakly reactive to HCl. Chloritic zones carry 1 to 2% pyrite very finely disseminated throughout while silicified rock carries similar contents and up to 3% locally. Pyrite tends to be irregularly distributed. Zone carries 40 to 45% silicified breccia - generally decreasing in amount and in width down section.	21289	334.23	335.00	.77	1-3	.793	1.03
		21290	335.00	335.85	.85	1	.289	.34
		21291	335.85	336.71	.86	1	.292	.34
		21292	336.71	337.50	.79	1	.269	.34
		21293	337.50	337.78	.28	1-2	.193	.69
		21294	337.78	338.13	.35	0-1	.060	.17
		21295	338.13	338.93	.80	1-2	1.368	1.71
		21296	338.93	339.70	.77	1	.262	.34
		21297	339.70	340.50	.80	1	.824	1.03
		21298	340.50	341.39	.89	1	.614	.69
		21299	341.39	342.14	.75	1	.517	.69
		21300	342.14	342.88	.74	1	.126	.17
		21301	342.88	343.90	1.02	0-1	.173	.17
		21302	343.90	344.92	1.02	0-1	.173	.17
		21303	344.92	345.94	1.02	0-1	.173	.17
		21304	345.94	346.96	1.02	0-1	.347	.34
		21305	346.96	347.98	1.02	0-1	.347	.34
		21306	347.98	349.00	1.02	1	.173	.17
		21307	349.00	350.07	1.07	0-1	.182	.17
314.00	318.19							
	As described above at 308.46 to 314.00 meters but with less silicification at 10 to 15% of section. Degree of silicification is generally low to moderate. A few intensely silicified sections up to 10 cm in width are noted. A well developed foliation is locally noted at 40 to 45 degrees to the core axis.							
318.19	319.55							
	Similar to section as described above but with 45 to 50% intensely silicified breccia seams up to 25 cm in width. This silicification is usually pinkish-red in colour.							

From	To	Description	Sample From	To	Length	% Sul	GW	Au
319.55	326.35	Same as described above at 314.00 to 318.19 meters - well foliated at 45 degrees to the core axis.						
326.35	327.08	Approximately 55% purple-grey, buff and pinkish-red coloured intensely silicified breccia.						
327.08	332.80	Same as described above at 314.00 to 318.19 meters with 15 to 20% silicification in breccia - most of alteration is concentrated below 328.50 meters.						
332.80	335.00	55 to 65% silicified breccia in seams up to 50 cm in width - generally intensely silicified and non-reactive to weakly reactive to HCl. Silicification noted as grey, purple-grey and buff coloured sections with up to 3% pyrite locally - 1 to 2% average. A moderate foliation is noted within silicified breccia at 50 degrees to the core axis.						
335.00	336.71	Generally chloritic section with 1 to 2% silicification along fractures and fracture margins. Abundant carbonatized laminations along a well developed foliation at 40 degrees to the core axis. Section is non-magnetic throughout. Possible mafic intrusive at 335.70 to 335.85 meters - well foliated at 40 degrees to the core axis due to shearing.						
336.71	337.50	As described above with 10 to 15% silicification.						
337.50	337.78	Increased amounts of silicified breccia to 35% - generally increasing towards underlying mafic intrusive.						
337.78	338.13	Mafic intrusive - medium green, fine grained and highly foliated parallel to foliation in surrounding rock. Moderately magnetic throughout. Weakly reactive to HCl due to pervasive carbonatization.						
338.13	342.88	35 to 40% silicified breccia in seams up to 35 cm in width with moderately developed foliation at 30 to 40 degrees to the core axis. Foliation angles of 55 to 60 degrees are rare. Amount of silicification gradationally decreases from approximately 55% at upper contact against overlying intrusive. A similar intrusive is noted at 340.74 to 340.86 meters with irregular contacts.						
342.88	350.07	Section carries 10 to 15% silicified breccia as described above - generally in seams up to 10 cm in width parallel to						

From -----Description----- Sample From To Length % Sui Gw Au

foliation at 35 to 50 degrees to the core axis. Steeper angles are favoured. Foliation exhibits a well developed crenulation locally axis at approximately 65 degrees to the core axis and 75 to 80 degrees to foliation laminations.

350.07 356.09 CHLORITE-CARBONATE SCHIST

Dark green, fine to very fine grained and generally well laminated/foliated. The rock is weakly chloritized pervasively - perhaps due to regional metamorphism. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 15% of the rock volume. Rare silicification is noted as a purple-grey hue within carbonatized seams. Rock is well parted throughout along foliation at 45 degrees to the core axis at 351.15 meters, 55 degrees to the core axis at 354.30 meters and 60 degrees to the core axis at 355.85 meters. Laminations are often rippled or crenulated along axes which cut the core axis at 70 to 80 degrees - approximately normal to foliation. Rock is non-magnetic throughout. Silicified breccia in amounts up to 1% is noted locally in seams 2 to 3 cm in width. A broader section of approximately 30% silicification is noted at 352.12 to 353.66 meters.

21308	350.07	351.07	1.00	0-1	.340	.34
21309	351.07	352.07	1.00	0-1	.340	.34
21310	352.07	353.12	1.05	0-1	.178	.17
21311	353.12	353.66	.54	1	.184	.34
21312	353.66	354.56	.90	0-1	.153	.17
21313	354.56	355.56	1.00	0-1	.170	.17
21314	355.56	356.09	.53	0-1	.090	.17

LOWER MINERALIZED ZONE : 356.09 to 362.61 meters.

This zone is composed of three members. An intensely silicified core is central to the zone. Pyrite contents increase dramatically in this core above the overlying and underlying transitional sections. The controls on alteration and pyrite are the same as described above in the main mineralized zone. Comparatively however, the degree of pyrite formation is not as high. In addition there is no late stage fault plane reactivation in the same sense as the McKenna Fault.

356.09 362.61 TRANSITIONALLY SILICIFIED ZONE

A gradational increase in the amount of silicified breccia is noted down section. Initial contents of 10 to

21315	356.09	357.03	.94	1	.160	.17
21316	357.03	357.95	.92	1	.156	.17
21317	357.95	358.93	.98	1	.333	.34

From	Description	Sample	From	To	Length	% Sul	GW	Au
	15% increase to approximately 80% at the base. The degree of silicification is very high - main silicified zone type, and the silicified rock is non-reactive to HCl. Narrow altered breccia seams are parallel to the foliation at approximately 45 degrees to the core axis. Rock is non-magnetic throughout. Pyrite content increases in silicified rock with up to 2% locally but 1% average. Minor orange carbonate veining locally.	21318	358.93	359.85	.92	1	.313	.34
		21319	359.85	360.80	.95	1	.161	.17
		21320	360.80	361.73	.93	1	.316	.34
		21321	361.73	362.61	.88	1	.299	.34
362.61	364.74 LOWER SILICIFIED ZONE							
	Purple-grey, white, buff and pale grey intensely silicified breccia with less than 1% relict chloritized seams and shears. Very little foliation is noted but is well developed locally in 5 to 10 cm sections at 50 to 60 degrees to the core axis. White colour is due to localized silica dumping associated with silicification between breccia fragments. Silicified rock is reactive to HCl. Pyrite is dominantly noted as a very finely disseminated throughout the rock and as trails of blebs along healed fractures. Pyrite contents average approximately 3% with up to 5% locally - higher contents associated with 5 mm aggregates of grains. Rock is non-magnetic throughout. Breccia fragments up to 5 mm are often enclosed in a matrix of ultra-fine grained breccia - ultra-mylonite?	21322	362.61	363.32	.71	1-3	.852	1.20
		21323	363.32	364.03	.71	2-4	1.945	2.74
		21324	364.03	364.74	.71	2-3	.973	1.37
364.74	365.82 TRANSITIONALLY SILICIFIED ZONE							
	Dark green fine grained and chloritized with 20% purple-grey, pale grey and pink coloured silicified breccia seams up to 6 cm in width. Silicified rock carries up to 3% fine grained pyrite as blebs and euhedral crystals up to 1 mm in width. Silicified breccia seams and carbonatized laminations and bands are well foliated locally at approximately 40 degrees to the core axis. Silicified rock becomes strongly reactive to HCl down section. Section is non-magnetic throughout.	21325	364.74	365.27	.53	1-2	.090	.17
		21326	365.27	365.82	.55	1-2	.187	.34
365.82	372.55 CHLORITE-CARBONATE SCHIST							
	Same as described above at 350.07 to 356.09 meters. Section carries a total of 5 cm of silicified breccia from 3 seams - less than 1% of zone. Foliation is at approximately 40 degrees to the core axis at upper contact, steepening to 60 degrees near base. Rock is	21327	365.82	366.78	.96	0-1	.163	.17
		21328	366.78	367.78	1.00	0-1	.170	.17
		21329	369.00	370.00	1.00	0-1	.170	.17
		21330	371.00	371.77	.77	0-1	.131	.17
		21331	371.77	372.55	.78	1	.265	.34

From o -----Description----- Sample From To Length & Sui GW Au

non-magnetic throughout. Pyrite contents average trace amounts with 1 to 2% localized in silicified rock.

372.55 377.80 TRANSITIONALLY SILICIFIED ZONE

Similar to the section described above but with abrupt change in the amount of silicified breccia. Style of the alteration is the same as above but strong localized silica dumping is noted locally - eg. At 374.18 to 374.31 meters and 375.45 to 375.70 meters. This alteration carries up to 7% pyrite whereas most silicified breccia carries 1 to 3%. Zone carries 40% silicified breccia, mostly concentrated between 375.00 and 376.50 meters. Generally, silicified rock is moderately to strongly reactive to HCl. Some silicified breccia was rebrecciated but little subsequent cementing silicification - mostly carbonatization. Weakly silicified and strongly carbonatized breccia near base of section carries abundant pyrite as a very finely disseminated and 1 mm crystals. Pink calcite flooding is locally associated with intense carbonatization in breccia and the highest pyrite contents. Pyrite contents up to 5% are possible locally.

21332	372.55	373.23	.68	1-3	.116	.17
21333	373.23	373.94	.71	1-3	.611	.86
21334	373.94	374.35	.41	4-6	.422	1.03
21335	374.35	375.30	.95	1-3	.161	.17
21336	375.30	376.24	.94	4-6	1.936	2.06
21337	376.24	377.11	.87	2-3	1.488	1.71
21338	377.11	377.80	.69	2-3	.945	1.37

377.80 383.28 CHLORITE-CARBONATE SCHIST

Rock is dark green, very fine grained and moderately chloritized with a moderately well developed foliation throughout. Pale grey carbonatized laminations up to 1 cm in width highlight the foliation. Abundant breccia is noted throughout which might have been weakly to moderately silicified but which is now intensely carbonatized. Thinner breccia seams parallel the foliation but cross-cutting relationships are noted in broader sections. Some of these sections carry silicification. The most prominent example exhibited at 381.54 to 381.76 meters carries up to 30% silicified breccia fragments. A few other 3 to 5 cm sections of silicified breccia are noted. In general, zone carries much less than 5% silicified breccia throughout. Zone is non-magnetic throughout. The foliation is noted at 50 degrees to the core axis at 378.75 and 382.60 meters.

21339	377.80	378.80	1.00	1	.340	.34
21340	380.41	381.41	1.00	1	.170	.17
21341	381.41	382.11	.70	2-1	.238	.34
21342	382.11	382.79	.68	1	.469	.69
21343	382.79	383.28	.49	1	.167	.34

383.28 Meters : END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

UQ-0005: 9824.6 9101.1

DIAMOND DRILL RECORD

HOLE NO.: MC.86-269

Azimuth: 344.3

Section: 100E

Property: Worvest Option

Dip: -70.0

Core Size: BQ

Location: 1+00E 1+75S

Elevation: 4999.6

Date Started: 30 April, 1986

Length: 337.4

Date Completed: 7 May, 1986

Logged by: A.W. Workman

Measurement: Metric

Comments: Casing left in hole

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-65.0	182.88		-63.0	320.04	345.0	-58.0
91.44		-65.0	204.83	354.0	-63.0	330.71	345.5	-58.0
137.16		-65.0	228.60		-61.0	337.41		-57.0
141.73	348.5	-65.0	274.32		-60.0			

-----Log Summary-----

.00 31.10 OVERBURDEN.  
 31.10 35.60 DIORITE.  
 35.60 95.88 BASALT.  
 95.88 98.80 DIORITE.  
 98.80 186.51 BASALT.  
 186.51 206.92 DIORITE.  
 206.92 210.51 FOLIATED BASALT.  
 210.51 211.36 GREENSCHIST.  
 211.36 213.57 CHLORITE-CARBONATE SCHIST.  
 213.57 280.44 MAIN MINERALIZED ZONE.  
 213.57 213.86 TRANSITIONALLY SILICIFIED ZONE.  
 213.86 234.48 MAIN SILICIFIED ZONE.  
 234.48 248.43 TRANSITIONALLY SILICIFIED ZONE.  
 248.43 254.89 LOWER SILICIFIED ZONE.  
 254.89 266.49 TRANSITIONALLY SILICIFIED ZONE.  
 266.49 270.46 CHLORITE-CARBONATE SCHIST.  
 270.46 273.60 TRANSITIONALLY SILICIFIED ZONE.  
 273.60 275.38 LOWER SILICIFIED ZONE.  
 275.38 280.44 TRANSITIONALLY SILICIFIED ZONE.  
 280.44 302.72 CHLORITE-CARBONATE SCHIST.  
 302.72 305.20 GREENSCHIST.  
 305.20 337.41 BASALT.  
 337.41 Meters END OF HOLE.

From -----Description----- Sample From To Length % Sul GW Au

.00 31.10 OVERBURDEN

31.10 35.60 DIORITE

Coarse grained, dark green rock, fining at lower contact. The rocks have an alligator skin appearance due to dark green amphibole crystals in a pale green fine grained matrix. Amphiboles up to 4 mm are noted. Non-magnetic. Minor shear noted at 34.21 meters at 41 degrees to the core axis - chloritic with minor clay developed.

35.60 95.26 BASALT

The section is composed of massive flows. These are very fine grained to locally medium grained with very fine grained margins and relatively coarser centres. The tops are often brecciated and vesicular. Generally, the rocks are non-magnetic, but localized strongly magnetic sections occur.

21344	64.51	65.11	.60	1	.102	.17
21345	65.11	65.77	.66	1	.455	.69

35.60 37.61 Flow top breccia : green, aphanitic, non-magnetic and locally vesicular. Vuggy near upper contact. Pyrite contents of up to 12 are noted in fracture fillings, traces chalcopyrite.

37.61 64.51 Massive flow : very fine to fine grained, green with vesicular top. Grain size increases down section to medium grained at 48 meters. Non-magnetic. The medium grained section appears grungy due to the white coloured leucoxene overgrowths. Green amphiboles minor chlorite laths and the lighter green minerals with no preferred orientation.

64.51 65.77 Foliated zone : fine grained green - brown with blue - green chlorites along foliation planes. Strongly magnetic. 12 pyrite throughout. 4 cm quartz - carbonate stringer at upper contact with abundant epidote. Foliation noted at 55 degrees to the core axis at 65.60 meters.

65.77 69.76 Massive flow : dark to medium green, very

From -----Description----- Sample From To Length % Sul GW Au

fine to fine grained. Vesicular top with minor brecciation. Moderately to strongly magnetic.

69.76 70.31 Mafic intrusive : green, fine grained, pervasively carbonatized. Weakly to moderately magnetic. Trace to 1% pyrite. Upper contact at 65 degrees to the core axis, and lower at 62 degrees to the core axis.

70.31 76.36 Massive flow : dark to medium green, very fine to fine grained, non-magnetic. Vesicles rare. Quartz stringers up to 4 cm in width noted from 74.26 to 74.66 meters with trace pyrite and chalcopyrite. Stringers at 61 to 67 degrees to the core axis.

76.36 76.94 Mafic intrusive : as described above at 69.76 to 70.31 meters, but weakly magnetic.

76.94 90.15 Massive flow : fine grained green. Non-magnetic. Becomes very fine grained at base.

90.15 92.37 Vesicular flow : aphanitic to very fine grained, green flow top section. Non-magnetic

92.37 92.67 Mafic intrusive : as described above at 69.76 to 70.31 meters. Non-magnetic and non-carbonatized. Upper contact at 54 degrees to the core axis, and lower at 62 degrees to the core axis.

92.67 95.88 Massive flow : green, very fine grained, locally vesicular. Non-magnetic. Non-carbonatized. Numerous epidote fracture fillings and stringers occur at 50 degrees to the core axis between 94.58 and 94.95 meters.

95.88 98.80 DIORITE

medium grained, green massive section with diffuse lower contact. Upper contact at 60 degrees to the core axis. Non-magnetic. Becomes very fine grained at lower contact.

98.80 186.51 BASALT

21346 162.75 163.20 .45 1-2 .153 .34

The section is composed of green, fine grained massive flows and green, aphanitic pillowed flows with the pillowed flows often grading down section into massive flows. The pillowed flows have well developed selvages with hyaloclastite and vesicles near chloritic and epidotic selvages. A minor silicified zone is noted

From	Description	Sample From	To	Length	% Sul	Gw	Au
	from 162.75 to 163.20 meters.						
98.80	124.75 Pillowed flow : aphanitic and green with well developed chloritic and epidotic selvages, vesicles common. Selvages locally magnetic. Traces of pyrite, pyrrhotite and chalcopyrite are noted locally, usually in selvages.						
124.75	137.27 Pillowed flow : siliceous. Green and aphanitic. The flow appears to have been finely brecciated the fragments being subrounded to subangular and have remained in place with no reaction rims.						
137.27	149.98 Pillowed flow : as described above at 98.80 to 124.75 meters. Auto-breccia noted from 142.34 to 142.61 meters with angular pale green fragments within a siliceous matrix. 1% pyrite, traces of chalcopyrite.						
149.98	159.79 Massive flow : green and fine grained becoming medium grained from 155 to 159.75 meters. Leucoxene overgrowths noted. Non-magnetic.						
159.79	160.09 Fault zone : highly chloritic green sheared rock with carbonate veining along shear planes. Clay seam at 159.90 meters at 23 degrees to the core axis. Traces of pyrite noted.						
160.09	162.75 Massive flow : as described above at 149.98 to 159.75 meters. Fine grained.						
162.75	163.20 Siliceous zone : well foliated zone with numerous quartz stringers and carbonate stringers. Faint purple hue noted due to hematite alteration. 1 to 2% pyrite overall, locally up to 5%. The foliation is at 40 to 50 degrees to the core axis.						
163.20	182.89 Pillowed flow : the pillows are aphanitic, pale green and separated by zones of hyaloclastite and brecciated rock. The fragments often exhibit breadcrust fractures and reaction rims. Vesicles also common. The upper 1 meters is foliated at 50 degrees to the core axis.						
182.89	182.91 Hematite - carbonate stringer with clay. The stringer is brecciated with hematite between carbonate fragments. Possible shear. This stringer is oriented at 21 degrees to the core axis.						
182.91	186.51 Massive flow : fine grained, green with rare vesicles. Non-magnetic. Zone might locally include irregular fragments or sills of diorite.						

From	To	Description	Sample	From	To	Length	Wt	Gr	Sp
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188.81 200.92 DIORITE

Green, initially fine grained massive rock becoming medium grained by 189.85 meters. Sub-ophitic texture noted. Upper contact is diffuse, lower is indistinct, fine grained to medium grained and poorly foliated at 41 degrees to the core axis. Non-magnetic. Traces of pyrite throughout. Carbonate stringers increasing frequency down section.

208.92 210.51 BASALT

Green, fine grained, locally foliated basalt. Strained hyaloclastite noted at 209.00 to 209.10 meters and at 209.41 meters. Epidote and carbonate fracture fillings common. Non-magnetic. Foliation at 44 degrees to the core axis at 209.00 meters and 40 degrees to the core axis at 209.65 meters. The amount of pervasive carbonatization increases down section.

210.51 211.36 GREENSCHIST

Dark green, fine grained rock with wispy selective carbonatization along foliation. Non-magnetic. Crenulation cleavage noted locally - poorly developed. Foliation is generally well developed at 50 to 55 degrees to the core axis. Minor increased carbonatization and calcite filling of fractures and brecciation is noted down section in seams up to 5 cm in width. Minor moderately developed magnetics locally. With increased alteration, pyrite increases to 1 to 3% as blebs up to 1 mm.

21347 210.51 211.36 .85 1 .145 .17

211.36 213.57 CHLORITE-CARBONATE SCHIST

Dark green, fine to very fine grained and generally well laminated/foliated. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 20% of the rock volume. The amount of carbonatization increases down section. The rock is weakly to moderately well parted throughout. Hematite

21348	211.36	212.09	.73	1	.124	.17
21349	212.09	212.83	.74	1	.126	.17
21350	212.83	213.57	.74	1	.126	.17

From -----Description----- Sample From To Length % Sul GW Au

is found as a very fine interstitial dissemination within the chloritized groundmass. The zone is essentially non-magnetic with a trace of magnetism locally. foliation is noted at 60 degrees to the core axis at 212.20 meters and approximately 65 degrees to the core axis at base of zone.

MAIN MINERALIZED ZONE : 213.57 to 280.44 meters.

This zone is much more complex than normal due to the presence of a lower silicified zone in addition to the main silicified zone. Furthermore below a thin section of schist, a lower mineralized zone is noted which is in turn composed of a central highly silicified core and flanking transitional sections. It is the upper two intensely silicified sections which are of most importance. The main silicified zone is better developed than normal with higher pyrite contents - particularly in the lower half. Very little foliation is noted in silicified rock indicating dominantly brittle deformation.

213.84 MCKENNA FAULT PLANE.

213.57 213.86 TRANSITIONALLY SILICIFIED ZONE

21351 213.57 213.86 .29 1 .200 .69

Dark green, very fine grained with selective silicification in carbonatized laminations and clasts. These clasts were derived through brecciation of the underlying zone and tectonic rafting into the fault zone. Carbonatization is indicated by a cream colouration whereas silicification has a greyer hue. Pyrite content averages 1% with up to 2% locally in silicified sections. The McKenna Fault is represented by a clay seam at 60 degrees to the core axis at 213.84 meters. This seam is 3 cm in width. The rock is non-magnetic with a slight trace locally. Silicified rock is reactive to HCl.

213.86 234.48 MAIN SILICIFIED ZONE

21352 213.86 214.68 .82 1-3 .566 .69  
 21353 214.68 215.49 .81 2-3 .275 .34  
 21354 215.49 216.31 .82 2-3 1.689 2.06  
 21355 216.31 217.09 .78 1-2 .265 .34  
 21356 217.09 217.91 .82 1-3 .845 1.03  
 21357 217.91 218.77 .86 1-3 .886 1.03  
 21358 218.77 219.65 .88 1-2 .607 .65  
 21359 219.65 220.42 .77 1-2 1.317 1.71

Fale grey to dark purple-grey, buff and more rarely pink coloured intensely silicified breccia make up this zone.

As a result of silicification, the rock is generally aphanitic and breaks with a semi-conchoidal fracture. A strong hematite streak is associated with moderate to strong magnetics near the top of the unit. Both of these characteristics decrease down section.

From	Description	Sample	From	To	Length	% Sul	GW	Au
	Reactivity to HCl increases on the margins of the zone. The highest pyrite concentrations are noted in pale grey to buff coloured rock. A few late stage, fine grained, variably magnetic biotite bearing mafic intrusives are noted locally. These are generally parallel to subparallel to the foliation. Rare late stage shears are also noted along the foliation	21360	220.42	221.01	.59	2-3	8.456	14.40
		21361	221.01	221.64	.63	2-3	1.077	1.71
		21362	221.64	222.48	.84	2-3	2.016	2.40
		21363	222.48	223.49	1.01	4-6	8.656	8.57
		21364	223.49	223.73	.24	2-4	.576	2.40
		21365	223.73	224.36	.63	4-6	2.589	4.11
		21366	224.36	224.76	.40	10-12	2.468	6.17
	215.49 purple-grey, strongly silicified and moderately brecciated with hematite streak throughout and moderate to strong magnetics. Weakly developed foliation locally at approximately 60 degrees to the core axis. Brecciation often intensifies along 2 to 3 cm seams resembling the rock adjacent to the McKenna Fault in McDermott trench on 9+00E.	21367	224.76	225.26	.50	7-9	.855	1.71
		21368	225.26	225.57	.31	10-12	.849	2.74
		21369	225.57	226.34	.77	8-10	1.848	2.40
		21370	226.34	226.68	.34	2-3	.116	.34
		21371	226.68	227.38	.70	10	4.319	6.17
		21372	227.38	227.78	.40	5-7	.824	2.06
		21373	227.78	228.70	.92	6-8	4.416	4.80
215.49	221.64 Same as described above with intense silicification and minor silica dumping locally. A few relict textures noted locally - slight resemblance to volcanic textures eg. 216.30 meters. Section carries abnormally high amounts of chalcopyrite - up to 2% locally associated with late stage fracture fillings and voids with quartz-carbonate. Minor pink calcite filling latest fractures. Section is moderately magnetic throughout. A few thin mafic intrusive cut this section as described below.	21374	228.70	229.46	.76	6-8	1.041	1.37
		21375	229.46	230.04	.58	6-8	3.184	5.49
		21376	230.04	230.64	.60	6-8	10.698	17.83
		21377	230.64	231.07	.43	2-4	1.329	3.05
		21378	231.07	231.90	.83	2-4	3.984	4.80
		21379	231.90	232.42	.52	2-4	2.137	4.11
		21380	232.42	233.18	.76	2-4	2.082	2.74
		21381	233.18	233.88	.70	6-8	3.598	5.14
		21382	233.88	234.48	.60	3-6	1.854	3.05
219.05	219.18 Mafic intrusive - dark green fine grained and magnetic late stage intrusive with deformed and altered biotites and irregular contacts at 45 to 60 degrees to the core axis.							
219.45	219.65 Mafic intrusive - same as above.							
221.64	223.49 Purple-grey intensely silicified breccia as described above with buff coloured carbonatization penetrating into late stage brecciation along fractures. Amount of this dolomitization and late stage brecciation increases below 222.48 meters. Buff hued rock carries increased pyrite contents. Up to 10% pyrite is noted locally - mostly as coarse aggregates of 1 to 2 mm grains. The amount of quartz stringers and silica dumping within buff alteration is higher than in purple-grey rock. Generally, section is moderately magnetic throughout. However, pale coloured rock is the more weakly magnetic variety of alteration due to sulphidation of magnetite to pyrite.							
223.49	223.73 Pale purple-grey intensely silicified section with abundant late stage chloritic							

From	Description	Sample	From	To	Length	% Sul	GW	Au
	Reactivity to HCl increases on the margins of the zone. The highest pyrite concentrations are noted in pale grey to buff coloured rock. A few late stage, fine grained, variably magnetic biotite bearing mafic intrusives are noted locally. These are generally parallel to subparallel to the foliation. Rare late stage shears are also noted along the foliation	21360	220.42	221.01	.59	2-3	8.456	14.40
		21361	221.01	221.64	.63	2-3	1.077	1.71
		21362	221.64	222.48	.84	2-3	2.016	2.40
		21363	222.48	223.49	1.01	4-6	8.656	8.57
		21364	223.49	223.73	.24	2-4	.576	2.40
		21365	223.73	224.36	.63	4-6	2.589	4.11
		21366	224.36	224.76	.40	10-12	2.468	6.17
		21367	224.76	225.26	.50	7-9	.855	1.71
		21368	225.26	225.57	.31	10-12	.849	2.74
		21369	225.57	226.34	.77	8-10	1.848	2.40
		21370	226.34	226.68	.34	2-3	.116	.34
		21371	226.68	227.38	.70	10	4.319	6.17
		21372	227.38	227.78	.40	5-7	.824	2.06
		21373	227.78	228.70	.92	6-8	4.416	4.80
215.49	221.64 Same as described above with intense silicification and minor silica dumping locally. A few relict textures noted locally - slight resemblance to volcanic textures eg. 216.30 meters. Section carries abnormally high amounts of chalcopyrite - up to 2% locally associated with late stage fracture fillings and voids with quartz-carbonate. Minor pink calcite filling latest fractures. Section is moderately magnetic throughout. A few thin mafic intrusive cut this section as described below.	21374	228.70	229.46	.76	6-8	1.041	1.37
		21375	229.46	230.04	.58	6-8	3.184	5.49
		21376	230.04	230.64	.60	6-8	10.698	17.83
		21377	230.64	231.07	.43	2-4	1.329	3.05
		21378	231.07	231.90	.83	2-4	3.984	4.80
		21379	231.90	232.42	.52	2-4	2.137	4.11
		21380	232.42	233.18	.76	2-4	2.082	2.74
		21381	233.18	233.88	.70	6-8	3.598	5.14
		21382	233.88	234.48	.60	3-6	1.854	3.05
215.05	219.18 Mafic intrusive - dark green fine grained and magnetic late stage intrusive with deformed and altered biotites and irregular contacts at 45 to 60 degrees to the core axis.							
215.45	219.65 Mafic intrusive - same as above.							
221.64	223.49 Purple-grey intensely silicified breccia as described above with buff coloured carbonatization penetrating into late stage brecciation along fractures. Amount of this dolomitization and late stage brecciation increases below 222.48 meters. Buff hued rock carries increased pyrite contents. Up to 10% pyrite is noted locally - mostly as coarse aggregates of 1 to 2 mm grains. The amount of quartz stringers and silica dumping within buff alteration is higher than in purple-grey rock. Generally, section is moderately magnetic throughout. However, pale coloured rock is the more weakly magnetic variety of alteration due to sulphidation of magnetite to pyrite.							
223.45	223.73 Pale purple-grey intensely silicified section with abundant late stage chloritic							

From	Description	Sample	From	To	Length	% Sul	GW	Au
	65 degrees to the core axis. Intrusive carries nil pyrite.							
230.71	231.07 Purple-grey intensely silicified breccia.							
231.07	232.42 Section carries 20% relict chloritized seams and a few late stage shears - degree of silicification remains very strong to intense. Silicified breccia contains up to 10% pyrite in buff coloured sections. Several elongated cm scale clots of pyrite noted along foliation and offset across microfaults. Foliation is at approximately 45 degrees to the core axis and these faults are normal to the foliation. Zone averages 2 to 4% pyrite.							
232.42	234.48 Purple-grey and buff coloured intensely silicified breccia averages 4 to 5% pyrite with up to 10% locally. Well developed foliation between 233.35 and 233.71 meters with 8 to 10% pyrite as laminations up to 1 mm in width along the foliation. Section carries up to 2% relict chloritized seams.							
234.48	248.43 TRANSITIONALLY SILICIFIED ZONE							
	Dark green very fine grained chloritic rock contains sections up to 20 cm in width of purple-grey, pale grey, buff, cream and orange coloured silicification. These sections are variably brecciated and generally, the degree of alteration increases with fineness of brecciation. Silicified rock carries up to 10% pyrite locally whereas chloritized rock seldom exceeds 1%. Silicified breccia within thinner 1 to 3 cm seams is often parallel to a well developed foliation averages 35 to 40 degrees to the core axis in this unit, generally steepening down section to approximately 55 degrees. Magnetics are highly variable in this zone - highest in chloritized rock near silicified sections. Silicified breccia is usually reactive to HCl.	21383	234.48	235.62	1.14	2-4	1.493	1.31
		21384	235.62	236.18	.56	6-8	3.455	6.17
		21385	236.18	237.00	.82	2-3	.279	.34
		21386	237.00	238.00	1.00	1-2	.340	.34
		21387	238.00	239.00	1.00	1-2	.000	n/a
		21388	239.00	240.00	1.00	1-2	.000	n/a
		21389	240.00	241.00	1.00	1-2	.340	.34
		21390	241.00	242.00	1.00	1-2	.000	n/a
		21391	242.00	243.00	1.00	1-2	.000	n/a
		21392	243.00	244.00	1.00	1-2	.340	.34
		21393	244.00	244.65	.65	1	.000	n/a
		21394	244.65	245.28	.63	1	.000	n/a
		21395	245.28	245.89	.61	1-2	.421	.65
		21396	245.89	246.52	.63	1-2	.214	.34
		21397	246.52	247.68	1.16	2-3	.800	.69
234.48	235.62 Zone contains 30% purple-grey to buff coloured, intensely silicified breccia in seams up to 20 cm in width. These sections carry up to 8% pyrite whereas chloritized sections carry 1 to 3%.	21398	247.68	248.43	.75	1-2	.255	.34
235.62	236.18 Intensely silicified breccia with pyrite in clots up to 3 cm in size. Weakly to moderately magnetic. A strongly foliated section in lower 10 cm is very highly magnetic - foliation at 30 degrees to the core axis.							

From To -----Description----- Sample From To Length % Sul GW Au

236.18 245.28 Contains 5 to 10% silicified breccia in cream to buff coloured, often pink hued sections up to 5 cm in width. These seams are generally parallel to well developed foliation at 45 to 50 degrees to the core axis. Foliation is frequently deformed locally - probably due to shearing along planes at approximately 30 degrees to the core axis and sub-parallel to foliation. Ladder-type fracturing at about 70 degrees to foliation probably represents the crenulation cleavage. Zone is non-magnetic.

242.00 242.28 Fault zone - probably same age as the McKenna Fault with similar style of associated brecciation. Silicification is very weak - dominantly carbonatization with this fault plane. Shearing is at 45 degrees to the core axis but no clay-grit seam is exhibited. Hence there was no late stage tectonic reactivation after hydrothermal activity. Drag-folding may indicate south side down.

245.28 246.52 Zone contains 35 to 40% silicified breccia in sections up to 20 cm in width.

246.52 247.68 Buff, purple-grey and orange coloured silicified breccia - non-reactive to HCl becoming weakly reactive locally.

247.68 248.43 Continuation of overlying section with 50% late stage shears parallel to a well developed foliation ranging from 45 to 55 degrees to the core axis. At the base, the section carries abundant silicified clasts supported in a chloritic matrix very similar to the zone above the McKenna Fault. Lower contact is a sharp fault plane at 45 degrees to the core axis.

248.43 254.89 LOWER SILICIFIED ZONE

Fale grey, dark purple-grey, buff and pinkish-red coloured intensely silicified breccia with up to 10% relict chloritized patches and late stage chloritic shears parallel to a weakly to moderately developed foliation at approximately 45 degrees to the core axis. General colouration is dominantly in the brownish to orange tones. Alteration colours are often banded along the original ductile deformation and offset by late stage brittle deformation. Silicified breccia is often moderately magnetic at top of zone becoming non-magnetic below 250.0 meters. Abundant hematite noted throughout

21399	248.43	249.05	.62	2-4	.211	.34
21400	249.05	249.78	.73	2-4	.248	.34
21401	249.78	250.58	.80	2-4	.272	.34
21402	250.58	251.35	.77	1-3	.262	.34
21403	251.35	252.28	.93	1-3	.958	1.03
21404	252.28	253.09	.81	1-2	.559	.69
21405	253.09	253.95	.86	2-3	.593	.69
21406	253.95	254.89	.94	2-3	.320	.34

From -----Description----- Sample From To Length % Sul GW Au

in matrix to breccia fragments. This hematite may be present due to a lack of sulphur introduction. Pyrite appears at the expense of hematite. Abundant white silica flooding of matrix and voids between breccia fragments is noted throughout. Silicified breccia is generally non-reactive to HCl.

254.89 266.45 TRANSITIONALLY SILICIFIED ZONE

Pink, buff and pale grey coloured, strongly to intensely silicified breccia seams up to 2 cm in width often coalesce into continuous sections of silicification up to 25 cm in width. Silicified rock makes up approximately 20% of the zone. The remaining rock is dark green, very fine grained and strongly chloritized. Silicified seams are highly deformed, probably the result of drag-folding along abundant hairline fault planes at approximately 50 degrees to the core axis. In the upper 1.5 meters of the zone, silicified seams are sub-parallel to the core axis. Above 257.0 meters this orientation might explain the relative lack of silicification over broad sections between zones of concentrated silicification. Within sections dominantly composed of silicified breccia, strong magnetics are exhibited from magnetite within chloritic laminations.

21407	254.89	255.80	.91	1-2	.000	n/a
21408	255.80	256.35	.55	1-2	.187	.34
21409	256.35	257.00	.65	1-2	.221	.34
21410	257.00	257.88	.88	1	.000	n/a
21411	257.88	258.82	.94	1	.000	n/a
21412	258.82	259.82	1.00	1	.000	n/a
21413	259.82	260.85	1.03	1	.000	n/a
21414	260.85	261.85	1.00	1	.000	n/a
21415	261.85	262.82	.97	1	.030	n/a
21416	262.82	263.80	.98	1	.676	.69
21417	263.80	264.55	.75	0-1	.517	.69
21418	264.55	265.52	.97	0-1	.000	n/a
21419	265.52	266.49	.97	0-1	.000	n/a

254.89 257.00 Section contains 40% silicified breccia in seams sub-parallel to the core axis.

257.00 259.82 Chloritic section - well foliated with white carbonatization along laminations and up to 1% silicification along selectively altered bands up to 2 cm in width. Rock is non-magnetic throughout.

259.82 263.80 Silicified breccia content is 20 to 25% - generally buff, red-brown and purple-grey in colour. Chloritized rock is locally reddish hued due to generally higher degrees of hematization than in overlying rock. Rock is also moderately magnetic where red hue is noted. Zone is approximately 50% grey to cream coloured laminations due to very strongly developed carbonatization. Foliation is at 35 degrees to the core axis.

263.80 266.45 Zone carries 10 to 15% silicified breccia in irregularly brecciated sections within the foliation at 35 to 40 degrees to the core axis.

From	Description	Sample	From	To	Length	% Sul	GM	Au
266.49	270.46 CHLORITE-CARBONATE SCHIST	21420	266.49	267.48	.99	0-1	.000	n/a

Dark green, fine to very fine grained and generally well laminated/foliated. The foliation is highlighted by selective carbonatization of individual laminations. Edges of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 10% of the rock volume. The rock is weakly to moderately well parted throughout. Zone is non-magnetic throughout. Foliation noted at 45 degrees to the core axis at 267.50 meters and 60 degrees to the core axis at 270.40 meters.

NOTE: this section of schist is included in the Main Mineralized Zone because it is apparent on section that this zone is a minor non-silicified island within a broader area of breccia controlled silicification. It is also included because of the generally high degrees of alteration in the underlying Lower Mineralized Zone equivalent.

LOWER MINERALIZED ZONE : 270.46 to 280.44 meters.

This zone is composed of three members centred on a very highly silicified core zone. This core, the lower silicified zone, is relatively thin and although pyrite contents increase, the amount of increase may not be highly significant. No faulting as late stage tectonism is exhibited.

270.46	273.60 TRANSITIONALLY SILICIFIED ZONE	21424	270.46	271.31	.85	1	.876	1.03
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Fale grey to dark purple-grey, buff and orange coloured silicified breccia in seams up to 20 cm in width - often well foliated internally with chloritic seams up to 1 cm in width. Foliation is generally well developed at 55 to 60 degrees to the core axis. Cross-cutting relationships are noted in many of the broader silicified seams. Most relatively thin seams parallel the foliation. Silicified rock is generally non-reactive to HCl. Zone is non-magnetic throughout. Silicified breccia content averages 50% overall.

273.60	275.38 LOWER SILICIFIED ZONE	21428	273.60	274.45	.85	1-2	.289	.34
	Dark purple-grey, aphanitic intensely silicified breccia	21429	274.45	275.38	.93	1-2	.000	n/a

From -----Description----- Sample From To Length % Sul Gk Au

with abundant orange to buff coloured alteration patches. Pale coloured alteration is generally related to later stages of brecciation. Upper half of the zone is often weakly magnetic - rock becomes less magnetic down section. Very little reactivity to HCl is noted in this zone - generally restricted to buff coloured alteration. Pyrite contents average 1 to 2% with minor localized increases associated with rare clots up to 1 cm in size.

275.36 280.44 TRANSITIONALLY SILICIFIED ZONE

Dark green and very fine grained chloritized rock with average 40% pale grey to purple-grey, orange to brown and cream coloured silicified breccia in sections up to 44 cm in width - widest at 277.87 to 278.31 meters. Chloritized rock is weakly to moderately magnetic throughout - magnetics decrease as the amount of silicification increases in section. Silicified rock is non-magnetic and is generally weakly to moderately reactive to HCl. Chloritized sections are well foliated throughout at 40 to 60 degrees to the core axis - foliation is often plastically deformed into randomly oriented open and closed folds. Laminations within foliation often wrap around quartz rich augen. Foliation is highlighted by a combination of cream coloured silicification and carbonatization in selectively replaced laminations. Chloritic rock carries a trace of pyrite with up to 5% locally in silicified sections. Pyrite is noted as very finely disseminated blebs, 1 to 2 mm grains and euhedral crystals, and as clots of grains up to 1 cm in size.

21430	275.36	276.22	.64	1	.000	n/a
21431	276.22	277.07	.85	1	.000	n/a
21432	277.07	277.90	.83	1	.573	.69
21433	277.90	278.87	.97	1-2	.999	1.03
21434	278.87	279.53	.66	1	.568	.86
21435	279.53	280.44	.91	1	.628	.69

280.44 302.72 CHLORITE-CARBONATE SCHIST

Dark green, fine to very fine grained and generally well laminated/foliated. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 5-10% of the rock volume. Increases up to 20% are noted over 20 to 40 cm locally. Near the upper contact with the more highly deformed transitional rocks, localized micro-faulting is noted. The foliation near these structures exhibits drag-folding - eg. 280.54 meters. The fault plane is at approximately 40 degrees

21436	280.44	281.42	.98	0-1	.333	.34
21437	281.42	282.42	1.00	0-1	.690	.69
21438	282.42	283.40	.98	0-1	.676	.69
21439	283.40	284.40	1.00	0-1	.340	.34
21440	285.65	286.65	1.00	0-1	.690	.69
21441	287.20	288.20	1.00	0-1	.340	.34
21442	289.20	290.20	1.00	0-1	.000	nil
21443	291.20	292.20	1.00	0-1	.340	.34
21444	294.00	295.00	1.00	0-1	1.030	1.03
21445	295.00	295.50	.50	1	.345	.69
21446	295.50	296.50	1.00	0-1	.340	.34
21447	296.50	297.50	1.00	0-1	.690	.69
21448	297.50	298.50	1.00	0-1	.690	.69

From -----Description----- Sample From To Length % Sul GW Au

to the core axis and 70 degrees to the foliation - has a flat north-westerly dip. Indicated displacement is southeast side thrust down or under the north side. This suggests that the fault underwent reverse movement. Rare sections of highly carbonatized breccia are noted locally in this unit. The average width of these sections is 3 to 5 cm. Rare subrounded clasts and pods of silicified breccia up to 5 cm are noted locally enclosed within the foliation. These are of unknown origin although they were probably derived from a mineralized zone and were tectonically rafted into their present location. Foliation noted at 55 degrees to the core axis at 288.50 meters, 295.50 meters and 299.20 meters, and at 65 to 70 degrees to the core axis at 302.00 meters.

- 295.00 295.50 Highly brecciated and carbonate flooded section with up to 2% pyrite locally.
- 295.50 297.50 Abundant narrow sections of carbonatized breccia.
- 298.25 298.35 Section carries 80% silicified breccia.
- 299.85 301.40 Massive section - weakly foliated locally - possibly weakly deformed intrusive.

302.72 305.20 GREENSCHIST

Medium to dark green, very fine grained weakly to moderately foliated rock with minor carbonatization as replacements along laminations within foliation. The foliation interflow irregularly developed - deformation partially ductile - partially brittle. Minor black seams up to 5 cm in width carry material which resembles hyaloclastite. Non-magnetic throughout. Foliation at approximately 45 degrees to the core axis.

305.20 327.41 BASALT

The upper part of this zone is composed of massive flow. However, the dominant lithology below 328.0 meters is pillowed flow. Generally, rocks are medium to pale green in colour and fine grained. All rocks are non-magnetic. Minor pervasive carbonatization is noted near the upper contact with the overlying schist.

- 305.20 306.20 Brecciated section - probably flow top.
- 306.20 310.75 Vesicular very fine grained to aphanitic massive flow.
- 310.75 320.00 Fine to very fine grained massive flow - pale to medium grey-green.
- 320.00 325.60 Fine to medium grained massive flow -

21449	325.92	326.92	1.00	0-1	.340	.34
21450	326.92	327.50	.58	1	.795	1.37
21451	327.50	328.15	.65	1	.667	1.03
21452	328.15	328.80	.65	0-1	.221	.34

From ● -----Description----- Sample From To Length % Sul GW Au

darker in colour than overlying section.  
 326.60 326.92 Increasing carbonatization in fine grained massive flow.  
 326.92 328.15 Brecciated section with moderate to strong carbonatization and highly localized strong silicification.  
 328.15 328.17 Fine grained massive flow.  
 328.17 Shear plane at approximately 55 degrees to the core axis.  
 326.17 326.60 Fine to very fine grained massive flow - pale to medium grey-green gradational down section into underlying section.  
 326.60 337.41 Pale green, very fine grained to aphanitic pillowed flow.

337.41 Meters END OF HOLE.

NOTE: G. Baschuk logged the hanging wall sequence of basalt and intrusive rocks.

AMERICAN BARRICA RESOURCES CORPORATION

Co-ords: 5760.2 9149.7

DIAMOND DRILL RECORD

HOLE NO.: MC.60-170

Azimuth: 336.3

Section: 150E

Property: Norvest Option

Dip: -70.0

Core Size: 80

Location: 1+50E 2+405

Elevation: 4996.8

Length: 376.9

Date Started: 7 May, 1966

Date Completed: 15 May, 1966

Logged by: A.W. Workman

Measurement: Metric

Comments: Casing left in ground

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-68.5	174.35	345.5	-66.0	274.32		-61.5
91.44		-68.0	182.88		-63.5	320.04		-58.5
137.16		-66.0	228.60		-63.0	332.84	342.0	-58.0

-----Log Summary-----

.00 48.16 OVERBURDEN.

48.16 94.20 BASALT.

94.20 110.51 DIORITE.

110.51 242.05 BASALT.

242.05 266.37 DIORITE.

266.37 275.79 BASALT.

275.79 286.68 CHLORITE-CARBONATE SCHIST.

286.68 311.24 MAIN MINERALIZED ZONE.

286.68 289.30 TRANSITIONALLY SILICIFIED ZONE.

289.30 296.15 MAIN SILICIFIED ZONE.

296.15 311.24 TRANSITIONALLY SILICIFIED ZONE.

311.24 323.75 CHLORITE-CARBONATE SCHIST.

323.75 332.20 GREENSCHIST.

332.20 349.63 CHLORITE-CARBONATE SCHIST.

349.63 354.40 GREENSCHIST.

354.40 376.89 BASALT.

376.89 Meters END OF HOLE.

From ----- Description ----- Sample From To Length % Sui GW Au

.00 48.16 OVERBURDEN

48.16 94.20 BASALT

The section is fine grained massive flow with a medium grained flow centre. Numerous clay seams are noted within a zone of rubble and broken core. The flow rocks are non-magnetic. These rocks are relatively unaltered.

48.16 80.20 Massive flow : green and fine grained. Highly rubble and broken core from 53.95 to 60.25 meters, numerous vugs from ground waters. Clay seams noted at : 56.78 meters at 56 degrees to the core axis, 57.82 meters at approximately 44 degrees to the core axis, and 58.29 meters at 58 degrees to the core axis. Other more irregular seams are noted at 58.16 and 60.20 meters. 56.95 to 60.25 meters, red-brown intrusive, highly weathered.

80.20 86.98 Massive flow : green fine to medium grained continuation of above flow.

86.98 87.62 Mafic intrusive : green very fine grained, and non-magnetic. Minor pervasive carbonatization. M<sub>2</sub> size feldspar phenocrysts noted. Upper contact at 90 degrees to the core axis and lower at 20 degrees to the core axis. Intenses carry traces of pyrite.

87.62 94.10 Massive flow : as described above from 80.20 to 86.98 meters.

94.10 94.20 Chill margin : very fine grained, green - brown with quartz vein and trace to 1% pyrite

94.20 110.51 DIORITE

Green medium to coarse grained, massive zone with fine grained chilled lower contact. Upper contact is more indistinct.

94.20 102.15 Medium to coarse grained. Non-magnetic. An alligator skin texture is noted throughout due to large, dark green amphibole grains within a finer grained, lighter green groundmass.

From -----Description----- Sample From To Length & Sul GW Au

102.15 105.62 Fine to medium grained.  
 105.62 106.37 Mafic intrusive : pale green, very fine grained with 1% disseminated pyrite. Barren pinkish-white carbonate vein from 105.82 to 105.94 meters.  
 106.37 107.19 Sheared or foliated zone. Very fine grained with pale green (chlorite or epidote ?) foliation - shear planes. 2% pyrite at lower contact. Foliation at 30 degrees to the core axis at 106.45 meters and 59 degrees to the core axis at 107.14 meters. Carbonate - quartz vein noted at 106.90 to 107.20 meters with traces of chalcopryrite.  
 107.19 110.51 As described above from 94.20 to 102.15 meters. Fine grained lower 20 cm. Lower contact at 46 degrees to the core axis.

110.51 242.05 BASALT

Both fine grained massive flows and relatively finer pillowed flows are noted within this zone. Pillows are often developed a part of a massive flow. Generally, the rocks are relatively unaltered and volcanic structures and textures are well exhibited. The flows are non-magnetic although highly localized weak magnetics may be present on a cm scale.

110.51 128.45 Pillowed flow : pale to medium green, aphanitic, vesicular, non-magnetic. Traces pyrite and chalcopryrite within chloritic and epidotic selvages. Down section the selvages become more brecciated - resembling flow top breccia. Lower contact is defined by last recognizable selvage.  
 128.45 150.75 Massive flow : green, fine grained, and non-magnetic. Upper 5 meters is vesicular. Leucoxene overgrowths noted locally.  
 150.75 155.35 Vesicular flow top : flow to very fine grained, green, non-magnetic. Sharp upper contact at 53 degrees to the core axis defined by a 5 cm pale green, aphanitic section.  
 155.35 181.13 Massive flow : green fine to medium grained and non-magnetic. Leucoxene overgrowths common decreasing down section. A sub-ophitic texture is noted locally.  
 181.13 199.48 Siliceous pillowed flow : aphanitic, green, vesicular. Traces pyrite and

From -----Description----- Sample From To Length % Sul Gw Au

chalcopyrite in selvages often associated with quartz stringers. Non-magnetic.

199.48 200.48 Shear zone : carbonatized foliation planes with minor epidote and hematite. Clay seam noted at 200.37 meters at 68 degrees to the core axis. Vesicles noted locally within shear zone. Foliation or shearing noted at 57 degrees to the core axis at 199.72 meters.

200.48 236.21 Pillowed flow : as described above at 181.13 to 199.48 meters. Vesicles are less abundant and decrease in number down section. Pillowed flow becomes less siliceous down section and lower contact with massive flow is gradational.

236.21 242.05 Massive flow : green fine grained and non-magnetic with section containing chlorite filled vesicles at top. Leucoxene overgrowths are common locally. Carbonate stringers noted in lower 35 cm.

242.05 Minor clay in sheared contact at 29 degrees to the core axis. No carbonate stringers as described above below the shear plane.

242.05 266.37 DIORITE

The upper contact is not well chilled. The rock is fine to medium grained, massive, non-magnetic and non-carbonatized. Alligator - skin texture noted in mafic minerals. Section fines in lower 50 cm.

266.37 275.79 BASALT

The section is dominantly composed of fine grained variably carbonatized and magnetic massive flow. Volcanic structures and textures are well exhibited.

15965	266.37	267.31	.94	1	.645	.65
15966	267.31	268.08	.77	0-1	.793	1.03
15967	268.08	268.91	.83	0-1	.573	.69

266.37 268.91 Flow top breccia - pervasively carbonatized with minor localized silicification. Texture resembles hyaloclastite at 267.00 meters. Foliation as result of shearing is noted at 63 degrees to the core axis at 266.74 meters and 58 degrees to the core axis at 268.65 meters. Breccia fragments within this section are sub-angular and locally vesicular. Magnetics are strongly developed locally.

268.91 275.79 Massive flow : green fine grained massive

From ----- Description ----- Sample From To Length % Sul GW Au

flow becoming fine to medium grained locally and locally magnetic. Carbonate filled fractures and carbonate stringers increase down section with generally higher levels of pervasive carbonatization.

275.79 286.68 CHLORITE-CARBONATE SCHIST

Dark green fine grained chloritic rock with wispy carbonate along a well developed foliation due to selective carbonatization within mm scale laminations. Magnetics are variably developed throughout. A few silicified fragments are noted locally - probably derived from the underlying main mineralized zone. The foliation generally wraps around these clasts. In general the degree of pervasive carbonatization increases down section through this unit. Abundant clay seams are noted throughout - significantly more than usual for this zone. These seams are probably the same age as the McKenna Fault. No associated silicification is noted.

15968	275.79	276.79	1.00	0-1	.690	.69
15969	276.79	277.79	1.00	0-1	.340	.34
15970	277.79	278.79	1.00	0-1	1.370	1.37
15971	278.79	279.79	1.00	0-1	.340	.34
15972	279.79	280.79	1.00	0-1	.000	tr
15973	280.79	282.10	1.31	0-1	.445	.34
15974	282.10	282.55	.45	TR.	.310	.69
15975	282.55	283.25	.70	0-1	.000	tr
15976	283.25	284.29	1.04	TR.	.354	.34
15977	284.29	285.60	1.31	TR.	.223	.17
15978	285.60	286.68	1.08	TR.	.745	.69

275.79 282.10 Zone of abundant late stage shearing - clay seams at 30 to 40 degrees to the core axis at 276.96, 278.76, 278.75 and 280.17 meters. Foliation generally flattening down section from 60 degrees to the core axis at 275.89 meters to 54 degrees at 277.94 meters and to 41 degrees to the core axis at 281.30 meters. Magnetics are weakly developed locally.

282.10 283.25 Section carries reddish pervasively carbonatized and weakly silicified rounded and elongated clasts in chloritized matrix. Hematitic streak noted locally. Localized weak magnetics exhibited. Pyrite in trace amounts. Flattening of foliation continuous at 35 degrees to the core axis at 283.05 meters.

283.25 286.68 Pervasively carbonatized with weakly developed magnetics locally but no altered clasts noted. A crenulation cleavage is noted locally. Foliation is noted at 45 degrees to the core axis at 283.40 meters. A section of broken and ground core is noted below 284.75 meters. This might represent a minor fault zone similar to the McKenna Fault ?.

From To -----Description----- Sample From To Length % Sul GW Au

MAIN MINERALIZED ZONE : 286.68 to 311.24 meters.

The main silicified zone is not as well developed as expected within this area. The zone is relatively thin although the degree of alteration is high. The highest pyrite contents are restricted to a narrow section near the top of the zone. The lower transitional member is also thinner than normal. Several narrow sections of elevated pyrite are noted within the lower transition. These contents are much higher than normal.

289.30 MCKENNA FAULT PLANE.

286.68 289.30 TRANSITIONALLY SILICIFIED ZONE

Dark green, very fine grained and chloritized with selective silicification along a well developed foliation in seams and laminations up to 10 cm in width.

Broader zones of silicification are within brecciated sections. All silicified rock is moderately to strongly pervasively carbonatized and reactive to HCl. Generally, the amount and degree of silicification increases down section. Minor interstitial hematite is associated with silicified and carbonatized laminations. The lower 10 to 20 cm is composed of silicified clasts up to 3 cm in size supported in a chloritic matrix. These clasts are ripped up fragments of main silicified zone tectonically dragged into the fault zone. The McKenna Fault is represented by a clay seam at 46 degrees to the core axis at 289.30 meters. Foliation in overlying rock is at approximately 45 degrees to the core axis. Silicified rock in this zone averages 1 to 2% pyrite as very finely disseminated grains whereas chloritized sections average trace amounts up to 1%. A minor increase in pyrite is noted within 20 cm of the McKenna Fault. This zone is non-magnetic throughout. The largest concentration of silicification is noted at 288.18 to 288.68 meters.

15979	286.68	287.60	.92	1	.948	1.03
15980	287.60	288.48	.88	1	.299	.34
15981	288.48	289.30	.82	1	.566	.69

289.30 296.15 MAIN SILICIFIED ZONE

Purple-grey to honey or cream coloured, aphanitic, intensely silicified breccia. A minor amount (less than 5%) of green, relic chloritized seams are noted within this section. These sections are concentrated near the base of the unit. These seams have a non-brecciated appearance. They are dominantly the result of late stage shearing. Grey silicified rock has a purple hue due to a variable degree of hematization. This hematite is reduced to pyrite in the buff to honey coloured

15982	289.30	289.84	.54	2-4	.556	1.03
15983	289.84	290.47	.63	8-10	1.298	2.06
15984	290.47	291.03	.56	10	2.878	5.14
15985	291.03	291.75	.72	2-4	1.483	2.06
15986	291.75	292.47	.72	2-4	1.483	2.06
15987	292.47	293.21	.74	2-4	.762	1.03
15988	293.21	293.61	.40	1-2	.136	.34
15989	293.61	294.43	.82	1-2	.279	.34
15990	294.43	295.30	.87	1-3	.296	.34
15991	295.30	296.15	.85	1-3	.289	.34

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		alteration patches and zones. A degree of hematization is found, and is more readily identified by streak, in chloritized rock. Darker coloured rock exhibits weak to trace magnetics. Generally, pale coloured silicified breccia is weakly reactive to HCl. The zone averages 3-4% pyrite as fine disseminations and as 1-3mm blebs. Larger amounts, including clots up to 1 cm in size, are noted in buff coloured alteration. Foliation throughout ranges from 35 to 45 degrees to the core axis.							
289.30	289.84	Buff to honey coloured with slight pink to purple hue, intensely silicified with moderately developed foliation at 45 degrees to the core axis highlighted by mm-scale pyritic seams. Weakly magnetic throughout and moderately to strongly reactive to HCl.							
289.84	291.03	Buff coloured intensely silicified breccia with foliation as described above - non-magnetic and becoming less reactive to HCl down section. Pyrite contents increase sharply in this section to 8 to 10% as very finely disseminated blebs and clots up to 1 cm in size. Lower 20 cm carries 15 to 20% purple-grey patches with less pyrite.							
291.03	292.47	Dark purple-grey, aphanitic intensely silicified breccia - non-reactive to HCl with trace magnetics to weakly magnetic. Minor weakly reactive buff coloured alteration throughout along late stage fracturing and brecciation. Zone carries 2 to 4% pyrite. Minor foliation noted locally at 35 to 40 degrees to the core axis as evidence of early ductile deformation. Purple-grey rock is softer due to strong hematization indicated by hematitic streak.							
292.47	293.21	Buff coloured alteration increases as 1 to 5 mm breccia seams along a weak foliation at approximately 30 to 35 degrees to the core axis.							
293.21	294.43	As described above with 1 to 2% dark green chloritic seams or shears up to 5 mm in width parallel to foliation at 35 degrees to the core axis. Amount and width of chloritized shears increases below 293.61 meters. Amount of buff coloured breccia also increases and carries higher pyrite contents locally.							
294.43	296.15	Mixed purple-grey and buff to white coloured silicified breccia with up to 5% chloritic shears throughout. The amount							

From	Description	Sample	From	To	Length	% Sul	GW	Au
	of this late stage shearing increases down section and patchy relict chloritization likewise increases. Associated with localized chloritic material, the section becomes weakly to moderately magnetic.							
296.15	311.24	TRANSITIONALLY SILICIFIED ZONE						
	Dark green, very fine grained and variably carbonatized with 45 to 50% silicified breccia. This alteration is characterized by pale grey to purple-grey, pink and buff colours, often with a weak brownish to orange hue. The silicified rock is noted in sections up to one meters in width. Thinner silicified sections up to 5 cm are often oriented parallel to a moderately developed foliation at 40 to 50 degrees to the core axis. Pyrite contents up to 10% are localized in silicified rock. Most silicified sections are reactive to HCl. However, the highest silicification is nearly non-reactive. This rock is also generally non-magnetic. Chloritized rock in relict patches and late stage shears is generally weakly to moderately magnetic.	15992	296.15	296.69	.54	1-2	.373	.69
		15993	296.69	297.28	.59	2-3	1.215	2.08
		15994	297.28	298.11	.83	3-5	1.710	2.08
		15995	298.11	299.11	1.00	1	.690	.69
		15996	299.11	300.04	.93	4-6	2.232	2.40
		15997	300.04	300.85	.81	1-2	.275	.34
		15998	300.85	301.63	.78	2-4	1.872	2.40
		15999	301.63	302.33	.70	3-5	3.241	4.63
		16000	302.33	303.18	.85	1-2	.587	.69
		16967	303.18	303.99	.81	1	1.110	1.37
		16968	303.99	304.80	.81	1	1.110	1.37
		16969	304.80	305.61	.81	1	.559	.69
		16970	305.61	306.42	.81	1	.559	.69
		16971	306.42	307.05	.63	8-10	2.375	3.77
		16972	307.05	307.69	.64	5-7	2.854	4.48
296.15	297.28	16973	307.69	308.40	.71	0-1	.490	.69
	Dark green chloritized section with approximately 35% pale grey to purple-grey silicified seams of breccia up to 10 cm in width. Chloritic rock is cut by a mm to cm - scale mesh of fractures which exhibit narrow silicified halos. Up to 10% pyrite is noted with silicification as blebs up to 2 mm and clots up to 1 cm. Chloritic rock is weakly magnetic.	16974	308.40	309.08	.68	1-2	.469	.69
		16975	309.08	310.08	1.00	0-1	.690	.69
		16976	310.08	310.77	.69	2-3	.476	.67
		16977	310.77	311.24	.47	0-1	.160	.34
297.28	298.11	Pinkish-grey with very fine grained silicified and carbonatized breccia carrying concentrations of quartz breccia fragments up to 3 mm. These quartz augen (?) are noted along laminations within a well developed foliation at 40 degrees to the core axis. Rock is moderately to strongly reactive to HCl. Zone is weakly to moderately magnetic and carries heavy concentrations of 1 to 3 mm pyrite crystals along foliation. The basal 10 cm weakly resembles strongly magnetic iron formation.						
298.11	299.11	Dominantly dark green and chloritized with approximately 10% silicified breccia in narrow seams along foliation at 40 degrees to the core axis.						
299.11	300.04	Massive sections of silicified breccia up to 30 cm in width are partial of this zone						

From	To	Description	Sample From	To	Length & Sui	Gm	Ku
		averages 70 to 75% silicification. Alteration is dominantly pale grey to buff coloured and carries up to 10% pyrite. This section averages 4 to 6% pyrite.					
300.04	300.85	As described above at 298.11 to 299.11 meters with 35% silicified breccia.					
300.85	303.18	Section is mostly purple-grey, buff and yellow-brown coloured strongly to intensely silicified breccia 10% relict chloritized patches and chloritic late stage shears. Pyrite contents up to 20% are noted locally in association with pyrite clots up to 3 cm by 1 cm in size - eg. 301.87 meters.					
303.18	306.42	Dark green and chloritized with 25 to 30% silicified breccia in sections up to 25 cm in width. Chloritic rock is strongly hematized adjacent to major silicified seams. All silicification is reactive to HCl. Silicified breccia is generally developed along seams parallel to a strong foliation at approximately 45 degrees to the core axis. Fractures which cut across the foliation have 1 to 3 mm silicified halos. These fractures are often filled with pink carbonate.					
306.42	307.69	Buff to dark purple-grey silicified breccia - pale colour is imposed upon darker hues. Foliation at 40 degrees to the core axis within silicification is highlighted by pyritic laminations up to 2 mm in thickness along healed fractures parallel to foliation. Pyrite also noted as very finely disseminated grains and euhedral crystals up to 3 mm.					
307.69	311.24	Section carries 35 to 40% silicified breccia in seams up to 20 cm in width but averages 5 to 10 cm. Generally, amount and degree of silicification decrease down section. Similarly, amount of pyrite associated with silicification decreases. However, up to 10% pyrite is noted in the broader silicified sections, often as clots up to 1 cm in size. Chloritic rock and silicified seams are well foliated at 45 to 50 degrees to the core axis. Chloritized rock is often strongly hematized interstitially - green rock develops a reddish and weak magnetic where most highly hematized.					

From	Description	Sample	From	To	Length	% Sul	GW	Au
311.24	323.75	CHLORITE-CARBONATE SCHIST						
	Dark green, fine to very fine grained and generally well laminated/foliated. The rock is weakly chloritized pervasively - perhaps due to regional metamorphism. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey coloration in an otherwise green rock. Carbonatized laminations make up an average of 5% of the rock volume. Rare silicification is noted as a purple-grey hue within carbonatized seams. The rock is weakly to moderately well parted throughout. Minor interstitial hematization is noted locally. Localized sections of brecciation carry increased carbonatization and highly localized strong silicification. These sections are up to 10 cm in width but make up less than 3% of the unit. This silicification often carries 2 to 3% very finely disseminated pyrite. The zone is strongly reactive to HCl throughout. Abundant cross - fracturing of rock between laminations within foliation. These fractures are also strongly carbonatized. The lower contact of the chlorite - carbonate schist is transitional into underlying greenschist. A porphyritic red-brown intrusive is noted below 314.60 meters. The foliation is noted at 60 degrees to the core axis at 314.55 and flattens to 35 degrees to the core axis at 316.20 and 321.00 meters.	16978	311.24	312.24	1.00	0-1	.340	.34
		16979	312.24	313.24	1.00	0-1	.340	.34
		16980	313.24	314.00	.76	0-1	.129	.17
		16981	314.00	314.60	.60	0-1	.102	.17
		16982	314.60	315.15	.55	TR.	.093	.17
		16983	315.15	316.00	.85	0-1	.145	.17
		16984	316.00	317.00	1.00	0-1	.340	.34
		16985	317.00	318.00	1.00	0-1	.170	.17
		16986	318.00	319.00	1.00	0-1	.690	.69
		16987	319.00	320.02	1.02	1	.347	.34
		16988	320.02	321.00	.98	0-1	.676	.69
		16989	321.00	322.00	1.00	0-1	.170	.17
314.60	315.15	Syenitic or monzonitic intrusive - red-brown and aphanitic with euhedral pink feldspar phenocrysts up to 2 mm in size. The upper contact is parallel to the foliation at approximately 60 degrees to the core axis. The lower contact is irregularly developed.						
323.75	322.20	GREENSCHIST						
	Dark green, fine to very fine grained and variably foliated. The foliation is occasionally highlighted by thin (mm scale), parallel carbonatized seams. The rock is weakly to moderately well parted throughout. Relict hyaloclastite is noted in 5 to 10 cm seams throughout the unit. Rare 5 to 15 cm sections of strongly carbonatized breccia are noted locally which carry up to 5% pyrite. Sections between hyaloclastite - bearing seams often exhibit stretched vesicles. This zone may have been derived from pillowed flow. The foliation is	16990	325.02	325.90	.88	1	.299	.34
		16991	328.78	329.78	1.00	0-1	.170	.17

From To -----Description----- Sample From To Length % Sul GW Au

at 50 degrees to the core axis at 328.50 meters.

NOTE: this zone is a relatively rare example of deformed basalt incorporated into a section dominantly composed of chlorite - carbonate schist - originally intrusive rocks.

332.20 345.63 CHLORITE-CARBONATE SCHIST

Same as described above at 311.24 to 323.75 meters with no silicified breccia seams. The foliation is well developed throughout and steepens slightly down section from 65 degrees to the core axis at 333.70 meters, and 70 degrees at 340.00 to 75 degrees to the core axis at 344.00 meters. The basal section is foliated at 70 to 75 degrees to the core axis at 349.00 meters.

16992	334.30	335.30	1.00	0-1	.340	.34
16993	337.35	338.35	1.00	0-1	.170	.17
16994	341.00	342.00	1.00	0-1	.000	nil
16995	347.00	348.00	1.00	0-1	.170	.17

349.63 354.40 GREENSCHIST

Same as described above at 323.75 to 332.20 meters although volcanic structures and textures are not as well exhibited.

354.40 376.89 BASALT

The rock is generally pale to medium green magnesium-rich type tholeiites. Upper pillowed flow grades down section to massive flow. The rocks are relatively unaltered and non-magnetic.

354.40 357.10 Pale to medium green, fine grained pillowed flow - carries convolutedly folded and well laminated section at 358.25 to 358.60 meters - possibly interflow sediment incorporated into pillows. Selvages are well developed and often carry hyaloclastite.

357.10 376.89 Zone grades to fine grained massive flow with moderately developed auto-brecciation decreasing in strength down section. Rock is non-magnetic and non-carbonatized.

376.89 Meters END OF HOLE.

NOTE: G. Baschuk logged the hanging wall succession of



Co-ords: 9729.8 9049.7

DIAMOND DRILL RECORD

HOLE NO.: NC.B6-271

Azimuth: 348.3

Section: 050E

Property: Worvest Option

Dip: -70.0

Core Size: 80

Location: 0+50E 2+715

Elevation: 5000.2

Date Started: 15 May, 1986

Length: 428.9

Date Completed: 28 May, 1986

Logged by: A.W. Workman

Measurement: Metric

Comments: Casing left in ground

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-71.0	182.88		-70.0	365.76		-63.0
91.44		-71.0	228.60		-67.0	405.08	347.3	-63.0
110.03	1.5	-70.0	273.41	336.0	-66.5	428.20		-56.5
137.16		-69.5	320.04		-65.5			

-----Log Summary-----

.00 40.84 OVERBURDEN.  
 40.84 91.70 BASALT.  
 91.70 217.27 DIORITE.  
 217.27 302.27 BASALT.  
 302.27 307.42 DIORITE.  
 307.42 308.25 GREENSCHIST.  
 308.25 323.58 DIORITE.  
 323.58 335.05 BASALT.  
 335.05 339.00 GREENSCHIST.  
 339.00 340.77 TRANSITIONALLY SILICIFIED ZONE.  
 340.77 343.55 GREENSCHIST.  
  
 343.55 374.63 MAIN MINERALIZED ZONE.  
  
 343.55 349.30 UPPER SILICIFIED ZONE.  
 349.30 351.98 TRANSITIONALLY SILICIFIED ZONE.  
 351.98 361.00 MAIN SILICIFIED ZONE.  
 361.00 374.63 TRANSITIONALLY SILICIFIED ZONE.  
  
 374.63 378.68 CHLORITE-CARBONATE SCHIST.  
 378.68 380.73 LOWER SILICIFIED ZONE.  
 380.73 381.62 TRANSITIONALLY SILICIFIED ZONE.  
 381.62 418.45 CHLORITE-CARBONATE SCHIST.  
 418.45 423.29 GREENSCHIST.  
 423.29 428.85 BASALT.  
 428.85 Meters : END OF HOLE.

From	Description	Sample From	To	Length	% Sui	GW	Au
.00	40.84 OVERBURDEN						
40.84	91.70 BASALT						
	Section is composed of fine to very fine grained massive flow, often porphyritic and relatively unaltered. Volcanic structures are generally well exhibited throughout. Rock is often moderately to strongly silicified where flow brecciated or near flow contacts. basalt is non-magnetic. A few late stage mafic intrusives are noted locally with relic biotites - often weakly magnetic.						
40.84	50.95						
	Grey-green, fine grained - minor surface weathering, highly fractured locally. fractures are open with hematite and epidote - probably due to shearing. Drillers required cement in this section.						
50.95	51.00						
	Epidotized and silicified contact zone at 47 degrees to the core axis - strong auto-brecciation.						
51.00	55.40						
	Flow breccia - often strongly epidotized and silicified, non-magnetic.						
55.40	57.60						
	Auto-breccia and fracturing due to shrinkage with no reaction rims.						
57.60	61.00						
	Continuation of overlying with intense brecciation and minor sections of flow type brecciation. Variolitic fragments up to 5 cm in size. some of this brecciation is due to quenching - resembles hyaloclastite locally. Rock becoming paler green in colour.						
61.00	66.55						
	Very fine grained to aphanitic vesicular flow						
66.55	70.53						
	Fine to very fine grained massive flow - porphyritic with pale yellow-green, often skeletal feldspars up to 5 mm in size. Short intervals up to 1 meters within this section carry flow breccia and hyaloclastite.						
70.53	71.65						
	Mafic intrusive - dark green, fine grained with pink hue, upper contact at 55 degrees to the core axis and weakly foliated. lower contact at 50 degrees to the core axis. Carries abundant dark green chloritized grains - possibly relic biotites, and abundant vague epidotized patches up to 1						

From	Description	Sample	From	To	Length	% Sul	GM	Au
	cm in size.							
71.65	72.86	Strongly developed, locally vesicular, flow top breccia.						
72.88	77.60	Fine grained massive flow.						
77.60	82.21	Porphyritic fine grained flow - often glomeroporphyritic with aggregates of phenocrysts up to 1.5 cm in size.						
82.21	82.26	Contact zone - silicified and well foliated at approximately 75 degrees to the core axis.						
82.26	83.50	Weakly brecciated and weakly vesicular flow top section.						
83.50	91.33	Fine to very fine grained massive flow with moderately developed fracturing throughout.						
91.33	91.70	Epidotized and silicified, moderately to strongly brecciated flow margin with locally developed highly carbonatized material at approximately 50 degrees to the core axis - probably due to shearing.						

## 91.70 217.27 DIORITE

The upper contact is in a rock which vaguely resembles basalt but grades down section into dioritic texture and composition. fracturing is generally weakly developed but localized shearing is noted with an increase in local fracture content. rock is relatively unaltered, equigranular, non-brecciated and non-magnetic. No volcanic structures are exhibited.

91.70	92.90	Strongly brecciated and silicified contact zone.						
92.90	95.90	Very fine grained with several 5 to 10 cm epidotized and silicified breccia seams vaguely similar to pillow selvages.						
95.90	134.50	Fine grained with near dioritic texture, weakly fractured with irregular epidotization, becoming less fractured and more equigranular down section. Section from 119.0 to 126.2 meters is closest to diorite and carries a pink feldspathic section at 122.78 to 123.38 meters - possibly a late stage intrusive. zone carries 5 to 10% quartz - carbonate veining throughout at a dominant angle of 10 to 15 degrees to the core axis - possibly along shear planes.						
134.50	139.40	Dark grey-green, fining to medium grained massive dioritic textured and equigranular.						
139.40	158.30	Same as described above but finer grained.						
158.30	159.97	As described above with increasing fracturing as hematized breaks and open						

From	To	Description	Sample From	To	Length	X Sul	Gk	Au
		fractures at 5 to 30 degrees to the core axis.						
159.97	161.00	Epidotized fractures and epidotization of feldspar increases - appears more fine to medium grained in this section.						
161.00	164.45	Fine to medium grained with fish-net type texture locally. Magnetics are very weakly developed in localized patches.						
164.45	164.62	Pale green strongly silicified and epidotized seam - abundant quartz flooding along well developed foliation at approximately 65 degrees to the core axis possibly due to shearing during intrusion.						
164.62	183.00	Fine to medium grained section with fish-net texture locally. A zone of quartz veining at 165.65 to 165.85 meters at approximately 30 degrees to the core axis with 10 cm epidotized and silicified shear zone at 166.00 meters at same orientation.						
183.00	186.50	Medium grained massive section with generally few fractures.						
186.50	194.40	Fine grained with few carbonate filled fractures at 30 to 40 degrees to the core axis and rare epidotized and silicified patches. Gradationally fining down section.						
194.40	195.15	Very fine grained section.						
195.15	200.70	Mafic minerals are highly elongated along a well developed foliation at 30 degrees to the core axis. Section also carries abundant carbonate filled fractures at irregular angles to core axis - alteration is also higher in this section - dominantly carbonatization and chloritization.						
200.70	207.20	Sharp change to fine to medium grained and lower alteration levels across a fractured 10 cm section at 35 degrees to the core axis - minor micro-faulting. Zone gradationally coarsens down section.						
207.20	214.80	Medium grained with fish-net texture around 2 to 4 mm chloritic patches.						
214.80	217.10	Finer grained section with same texture as described above, becoming very fine grained with weak brecciation below 216.45 meters.						
217.10	217.20	Highly fractured along micro-breccia developed at 30 to 35 degrees to the core axis.						
217.20	217.27	Contact zone with abundant quartz - carbonate veining.						

From	Description	Sample From	To	Length	% Sul	6W	Au
217.27	302.27						
	Zone is dominantly pale grey-green, very fine grained to aphanitic and composed of pillowed flow and flow brecciated pillowed flow equivalent. Volcanic structures and textures are well developed. A few minor fault planes are noted in this section at 30 to 40 degrees to the core axis. rock is relatively unaltered apart from deuteric processes.						
217.27	255.31						
	Pillowed flow - non-magnetic with exception of rare magnetite concentrations along selvages in bands up to 2 cm in thickness. Pyrite contents of up to 10% are also localized in pillow selvages. pillows are irregularly developed below 247.60 meters. A quartz to carbonate filled shear zone is noted at approximately 35 degrees to the core axis at 247.68 to 248.00 meters with minor associated grit - probably formed after extrusion, but possibly while flow still hot.						
255.31	255.90						
	Brecciated, quartz and carbonate filled flow with well developed foliation at approximately 70 degrees to the core axis.						
255.90	255.98						
	Epidotized and silicified flow top crust.						
255.98	258.10						
	Very fine grained, weakly vesicular flow top.						
258.10	261.87						
	Very fine grained, strongly auto-brecciated massive flow.						
261.87	265.35						
	Fine to very fine grained massive flow, gradual coarsening trend down-hole.						
265.35	265.52						
	Very fine grained to aphanitic, gradual fining trend down-hole.						
265.52	265.57						
	Aphanitic chilled basal flow.						
265.57	265.59						
	Chilled flow top.						
265.59	265.90						
	Weakly vesicular upper flow section.						
265.90	302.27						
	Weakly pillowed flow with quartz and carbonate filled shears throughout at 35 to 40 degrees to the core axis. the most prominent shear at 270.65 meters and 271.05 meters with hematized fault planes. A 10 cm section of carbonated late stage breccia at 30 degrees to the core axis at 269.25 meters. A hematized, carbonated and quartz veined fault plane noted at 10 to 25 degrees to the core axis at 298.75 meters - slickensides are not well developed but pitch approximately 30 degrees across fault plane in a north-easterly direction interflow fault						

From	Description	Sample From	To	Length	% Sui	GW	Au
------	-------------	-------------	----	--------	-------	----	----

plane is steep, or north-westerly if fault plane is relatively shallower.

## 2.27 307.42 DIBRITE

Dark greenish-grey, fine grained massive rock becoming dominantly medium grained in lower half of zone. Rock is relatively unaltered and non-magnetic.

302.27 304.18 Section is very fine grained below a sharp intrusive contact at approximately 75 to 80 degrees to the core axis.

304.18 307.42 Fine to medium grained, massive, fining sharply in lower 5 cm to an aphanitic chilled contact.

## 307.42 308.25 GREENSCHIST

Rock was originally very fine grained basalt, probably pillowed and has become highly deformed due to shearing. A well developed foliation is noted in most of the zone at 50 to 60 degrees to the core axis. Section is highly epidotized and silicified locally. No original textures are clearly visible. Lower contact is in highly silicified and epidotized breccia section. This section might represent a xenolith of basalt.

## 308.25 323.58 DIORITE

Zone is generally composed of fine grained massive rock becoming medium to coarse grained locally. Minor shearing is noted at a different angle from the overlying foliation.

308.25 315.15 Continuation of section above xenolith coarsening down section to medium grained at 310.40 meters.

315.15 315.20 Section of hematized shearing at 15 degrees to the core axis.

315.20 317.65 Medium to coarse grained.

317.65 321.20 Medium grained with gradational fining down section.

321.20 323.53 Fine grained becoming very fine grained.

323.53 323.58 Silicified and epidotized, aphanitic chilled contact zone at 60 to 65 degrees to the core axis.

row -----Description----- Sample From To Length % Sul GW Au

323.58 335.05 BASALT

Medium to dark green, very fine grained flow with volcanic textures well exhibited. Abundant auto-breccia throughout possibly due to quenching. Degree of pervasive carbonatization increases at lower contact.

323.58 329.65 Very fine grained to aphanitic, auto-brecciated, probably pillowed flow. Porphyritic throughout altered feldspar phenocryst up to 1 cm.

329.65 331.55 Flow breccia - possibly developed through the rupturing of pillows - section carries selvage material throughout.

331.55 331.80 Strongly epidotized and intensely silicified section - possibly a flow contact section.

331.80 335.05 Strongly auto-brecciated ? very fine grained massive flow. Increasing pervasive carbonatization down section. a preferred fracture orientation develops at 40 degrees to the core axis.

335.05 339.00 GREENSCHIST

Dark green, very fine grained rock with weakly to moderately developed foliation as highlighted by well developed parting and 1 to 2 mm carbonate filled fractures along foliation at 30 to 40 degrees to the core axis - generally steeper angles down section. pervasive carbonatization is very strong and is indicated by cream coloured seams up to 2 cm in width often with lensitic outlines. these seams exhibit fine internal brecciation and rarely carry a purple hue due to strong hematization and weak to moderate silicification. generally, the amount of this alteration increases down section. Pyrite contents average 0 to 1% as fine grained disseminated blebs. increases in content are noted in strongly carbonatized section with up to 3% locally where silicification is noted. zone carries up to 1 to 2% silicification. Rock is non-magnetic throughout. Chloritized rock very rarely exhibits interstitial hematization.

21453	335.05	336.03	.98	0-1	.676	.69
21454	336.03	337.00	.97	0-1	.669	.69
21455	337.00	338.00	1.00	0-1	.690	.69
21456	338.00	339.00	1.00	0-1	.690	.69

339.00 340.77 TRANSITIONALLY SILICIFIED ZONE

Zone is essentially same as described above in schists with approximately 5% silicification in narrow breccia

21457	339.00	339.86	.86	1-2	.886	1.03
21458	339.86	340.77	.91	1-2	.937	1.03

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
<p>seams up to 3 cm in width. these seams also carry up to 3% pyrite associated with silicification, as compared to up to 1% in chloritized rock. rock is non-magnetic throughout. Pervasive carbonatization is moderate to strong in breccia and weak in chloritized sections. Foliation developed at 30 degrees to the core axis throughout.</p>									
340.77	343.55	GREENSCHIST	21459	340.77	341.69	.92	0-1	.313	.34
<p>Zone is same as described above at 335.05 to 339.00 meters with minor silicification totalling 2 to 3% of section. Level of pervasive carbonatization increases towards lower contact, especially below 343.00 meters. abundant very fine grained interstitial hematization is noted throughout. The lower contact is marked by a late stage shear plane at 35 degrees to the core axis - parallel to overlying foliation. Minor quartz veining up to 1 cm in width noted within shear plane. a trace of magnetics is noted throughout becoming weak to moderate locally in chloritic rock.</p>									
			21460	341.69	342.61	.92	0-1	tr	tr
			21461	342.61	343.55	.94	0-1	tr	tr
<p>MAIN MINERALIZED ZONE 343.55 to 374.63 meters.</p> <p>The zone is of slightly less than average width and the main silicified zone is somewhat thinner than average, exhibiting abundant late stage shearing. However, of importance is an upper zone of strong silicification, and although it is foliated and thin, the section carries well developed alteration. No transitional section is noted above this unit. Pyrite contents are lower throughout, including the main and the upper silicified zones.</p> <p>351.97 MCKENNA FAULT PLANE.</p>									
343.55	349.30	UPPER SILICIFIED ZONE	21462	343.55	344.31	.76	1-2	1.041	1.37
<p>Zone is dark purple-grey and buff coloured, moderately to intensely silicified and brecciated rock with up to 5% relic chloritized patches. abundant late stage chloritized chills also cut this zone parallel to a locally moderate foliation at approximately 35 degrees to the core axis. foliation is better developed near the sheared upper contact. A strong degree of hematization gives the rock a softer scratch than normal for main silicified zone type rock. All but the most intensely silicified rock is reactive to HCl.</p>									
			21463	344.31	344.64	.33	3-5	4.980	15.09
			21464	344.64	345.49	.85	1-3	1.164	1.37
			21465	345.49	346.30	.81	1-3	3.054	3.77
			21466	346.30	347.10	.80	1-3	3.704	4.63
			21467	347.10	347.56	.46	2-4	4.968	10.80
			21468	347.56	348.10	.54	1-3	1.296	2.40
			21469	348.10	348.52	.42	1-3	3.889	9.26
			21470	348.52	349.30	.78	1-3	7.488	9.60

From ----- Description ----- Sample From To Length % Sul 6W Au

Magnetics are variably developed throughout from trace to weak becoming moderately developed locally. generally, buff coloured alteration is less magnetic.

343.55 344.31 Dominantly purple-grey and moderately sheared near overlying shear plane. Degree of silicification is moderate. near base, buff coloured intensely silicified breccia fragments up to 1 cm in size are set in a purple-grey, very fine grained, hematitic matrix.

344.31 344.64 Dark purple grey and moderately silicified as described above with 35% buff coloured intense silicification along late stage brecciation carrying up to 5% pyrite.

344.64 347.10 Dark purple-grey moderately silicified breccia with abundant late stage chloritic fracturing throughout.

347.10 347.56 Same as described above at 344.31 to 344.64 meters.

347.56 348.52 Same as described above at 344.64 to 347.10 meters - abundant foliation planes at 40 to 45 degrees to the core axis along chloritic partings below 348.10 meters with increasing magnetics. Lower contact is along a sharply developed plane parallel to the foliation.

348.52 349.30 Same as described above at 344.64 to 347.10 meters, lower 20 cm becoming increasingly soft.

349.30 351.98 TRANSITIONALLY SILICIFIED ZONE

Dark green, very fine grained with selective silicification in carbonatized laminations and clasts. Clasts have been derived through the brecciation of altered bands and breccia seams up to 1 cm in thickness. Carbonatization is indicated by a cream colouration whereas silicification has a greyer hue. Hematization accompanies silicification as a purple tint in more highly altered rock. Altered, angular to subangular fragments up to 2cm are noted in a chloritic matrix. these fragments are indistinct due to subsequent brecciation and alteration. Green, chloritized, non-silicified rock is weakly hematized as a fine interstitial dissemination. Pyrite content averages 1% with up to 5% locally in silicified sections. The McKenna Fault is represented by a clay seam at 65 degrees to the core axis at 351.97 meters. abundant shearing is noted in surrounding rock parallel to the foliation. within 1 meters of the fault plane,

21471	349.30	350.16	.86	2-3	4.721	5.49
21472	350.16	351.06	.90	2-3	6.174	6.86
21473	351.06	351.98	.92	2-3	3.781	4.11

From -----Description----- Sample From To Length % Sul GW Au

foliation flattens to approximately 45 to 50 degrees to the core axis - particularly below the fault plane. the clay-grit seam is in ground. core - possibly 2 cm in width. Chevron-type folding of laminations within the foliation indicates south side down displacement which is considered normal movement (eg. 350.20 and 350.65 m. The rock is much more thinly laminated below 351.56 meters as the McKenna Fault is approached. Silicified rock is reactive to HCl. The rock is weakly fractured with both quartz and carbonate filling fractures.

351.98 361.00 MAIN SILICIFIED ZONE

Pale to dark purple-grey, and locally buff coloured, strongly to intensely silicified breccia with approximately 5% dark green chloritic shears up to 5 mm in width parallel to a well developed foliation at 50 to 60 degrees to the core axis. Foliation is often convolutedly deformed into open folds near McKenna Fault. Late stage fracturing is noted across foliation at approximately 70 degrees and 50 degrees to the core axis. this probably parallels crenulation cleavage. These fractures both pre- and post-date development of late stage shears. quartz and pink carbonate is often noted along these shear planes. All silicified rock is reactive to HCl but reactivity decreases down section. No dominant trends are noted in alteration colours within zone. rock adjacent to McKenna Fault is generally slightly paler in hue and carries up to 5% pyrite. Pyrite is common as a very fine grained dissemination, 1 to 3 mm euhedral crystals and clots up to 1 cm in thickness - often elongated to 3 to 4 cm along the foliation planes. Localized pyrite contents are highly variable throughout. average content is approximately 3 to 4% with highest pyrite concentrations associated with localized silica dumping and 3 to 5 mm quartz veining along foliation.

21474	351.98	352.68	.70	2-3	6.958	9.94
21475	352.68	353.34	.66	2-3	1.584	2.40
21476	353.34	354.06	.72	2-3	1.483	2.06
21477	354.06	354.79	.73	2-4	1.504	2.06
21478	354.79	355.57	.78	2-4	.538	.69
21479	355.57	356.35	.78	2-4	tr	tr
21480	356.35	357.13	.78	1-3	.538	.69
21481	357.13	357.87	.74	2-3	1.014	1.37
21482	357.87	358.50	.63	2-3	.649	1.03
21483	358.50	359.06	.56	2-4	.767	1.37
21484	359.06	359.54	.48	1-2	.494	1.03
21485	359.54	360.42	.88	3-4	.607	.69
21486	360.42	361.00	.58	2-4	.992	1.71

351.98 354.06 Section carries 5 to 10% late stage chloritic shearing along the foliation at 50 degrees to the core axis. silicified breccia also exhibits a well developed foliation.

354.06 359.06 Section is more massively composed of silicified breccia with little foliation development. Late stage shearing makes up 3 to 5% of section at 45 to 60 degrees to the core axis.

359.06 359.54 Abundant late stage chloritic shearing at 55 to 70 degrees to the core axis. A biotite carrying late stage mafic

From	Description	Sample	From	To	Length	% Sul	6W	Au
	intrusive is noted at 359.33 to 359.47 meters. intrusive is dark green, weakly to moderately magnetic and possibly lamprophyre in composition.							
359.54	360.42 Pale to medium grey with few late stage shears. Silicified breccia carries several percent indistinct red-brown silicified fragments up to 5 mm in size.							
360.42	361.00 Section of increasing chloritization along more abundant late stage shears with pale grey to reddish-pink silicified breccia.							
<b>361.00 374.63 TRANSITIONALLY SILICIFIED ZONE</b>								
		21487	361.00	361.78	.78	2-3	.538	.69
	Dark green chloritized fine grained rock with abundant breccia - controlled silicification along seams up to 25 cm in width. foliation in chloritic rock is highlighted by grey strongly carbonatized laminations up to 5 mm in thickness.	21488	361.78	362.63	.85	1-2	.587	.69
		21489	362.63	363.48	.85	1-2	.587	.69
		21490	363.48	364.32	.84	1-2	tr	tr
		21491	364.32	365.02	.70	1-3	.238	.34
		21492	365.02	365.70	.68	1-3	1.632	2.40
361.00	361.78 50 to 55% silicified breccia in sections up to 25 cm in width carrying 2 to 4% pyrite.	21493	365.70	366.50	.80	1	.824	1.03
		21494	366.50	367.50	1.00	1	tr	tr
		21495	367.50	368.50	1.00	1	.340	.34
361.78	364.32 20 to 25% silicified breccia in sections up to 10 cm in width carrying lower pyrite contents than above. Foliation at 50 to 55 degrees to the core axis.	21496	368.50	369.50	1.00	1	tr	tr
		21497	369.50	370.50	1.00	1	.690	.69
		21498	370.50	371.50	1.00	1	.690	.69
		21499	371.50	372.50	1.00	1	.340	.34
364.32	365.70 50 to 55% silicified breccia as described above at 361.00 to 361.78 meters.	21500	372.50	373.50	1.00	0-1	tr	tr
		21501	373.50	374.63	1.13	0-1	.780	.69
365.70	374.63 5 to 10% silicified breccia in sections up to 5 cm in width. Chloritized rock carries a well developed foliation at 40 to 50 degrees to the core axis. rock carries trace to very weakly developed magnetics. 5 to 10% of rock volume is carbonatized laminations up to 3 mm in width. a late stage weakly magnetic mafic intrusive parallel to foliation at 373.69 to 373.81 meters carries highly deformed mafics - possibly biotites. intrusive is same as described above at 359.40 meters. Foliation at 45 degrees to the core axis at 370.40 meters, 40 to 45 degrees to the core axis at 375.00 meters.							
<b>374.63 378.68 CHLORITE-CARBONATE SCHIST</b>								
		21502	374.63	375.65	1.02	0-1	.347	.34
	Dark green, fine to very fine grained and variably foliated at 50 to 55 degrees to the core axis. The	21503	375.65	376.65	1.00	0-1	.690	.69
		21504	376.65	377.66	1.01	0-1	.869	.86

From	Description	Sample	From	To	Length	% Sul	GW	Au
	foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 30% of the rock volume. Rare silicification is noted as a purple-grey hue within carbonatized seams. The rock is weakly to moderately well parted throughout. hematite as fine grained dissemination in carbonatized seams. Rare brecciated sections up to 10 cm in width are more highly carbonatized.	21505	377.66	378.68	1.02	0-1	.704	.69
78.68	380.73 LOWER SILICIFIED ZONE	21506	378.68	379.36	.68	2-4	.932	1.37
	Dark purple-grey, red-brown and pale grey coloured intensely to strongly silicified breccia and silicified bands along the foliation. Much silicification has occurred within the foliation but increases markedly in brecciated rock. pyrite contents increase with increasing levels of silicification. Zone is cut by abundant late stage chloritic shears parallel to the foliation at 35 to 40 degrees to the core axis. Most silicified rock is weakly reactive to HCl. Localized strong hematization noted in 1 to 3 cm patches. zone has a 1.5 cm quartz vein at lower contact probably intruded along a basal shear plane. Rock is non-magnetic becoming very weakly magnetic locally.	21507	379.36	380.00	.64	2-4	.659	1.03
		21508	380.00	380.73	.73	2-4	1.000	1.37
380.73		381.62 TRANSITIONALLY SILICIFIED ZONE	21509	380.73	381.62	.89	0-1	.614
	Dark green, very fine grained chloritic rock, well foliated at 40 degrees to the core axis with seams of moderately silicified breccia up to 7 cm in width. Total content of silicification is 5 to 10%. Rock is non-magnetic throughout. Silicified rock is weakly reactive to HCl. chloritic rock is well parted throughout along foliation highlighted by 1 to 3 mm strongly carbonatized laminations. No hematization noted in chloritic matrix.	21510	381.62	382.58	.96	0-1	.662	.69
381.62	418.45 CHLORITE-CARBONATE SCHIST	21511	382.58	383.60	1.02	0-1	1.051	1.03
	Dark green, fine to very fine grained and generally well laminated/foliated. The foliation is highlighted by selective carbonatization of individual laminations.	21512	386.98	387.80	.82	0-1	.845	1.03
		21513	387.80	388.80	1.00	1	1.370	1.37

From	Description	Sample	From	To	Length	% Sul	GW	Au
	sections of strongly carbonatized breccia with minor weakly developed silicification are noted locally in seams up to 10 cm in width. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Rare silicification is noted as a purple-grey hue within carbonatized seams. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. The rock is weakly to moderately well parted throughout.	21514	388.80	389.80	1.00	1	.340	.34
		21515	389.80	390.92	1.12	1	.190	.17
		21516	390.92	392.19	1.27	0-1	nil	nil
		21517	392.19	393.00	.81	0-1	.138	.17
		21518	393.00	394.00	1.00	0-1	.340	.34
		21519	398.00	399.00	1.00	0-1	.170	.17
		21520	402.78	403.32	.54	1	.092	.17
		21521	403.32	404.35	1.03	2-3	.711	.69
		21522	404.35	405.09	.74	1-2	.511	.69
381.62	387.80 Carbonatized laminations make up an average of 10-15% of the rock volume. Siliceous augen or silicified clasts up to 2 cm in size are noted within foliation, average size is 3 to 5 mm.	21523	405.09	405.86	.77	2-3	.262	.34
		21524	405.86	406.85	.99	1-2	3.059	3.09
		21525	406.85	407.85	1.00	1-2	1.370	1.37
		21526	407.85	408.32	.47	1-2	.160	.34
		21527	408.32	409.29	.97	1-2	.999	1.03
387.80	390.92 Increasing amount of carbonatization along foliation now comprising 20 to 25% of rock volume. abundant silicified debris (augen?) along foliation - appears to be rafted material after silicification. down section, below 390.50 meters, rock becomes harder with a baked appearance locally and 1 meters section above intrusive has weak foliation and strong randomly oriented carbonatized and healed fractures. Rock within 20 cm of intrusive contains quartz veining up to 2 cm in width	21528	409.29	410.25	.96	1	tr	tr
		21529	410.25	411.05	.80	1-2	.136	.17
		21530	411.05	411.67	.62	1-2	.428	.69
		21531	411.67	412.28	.61	1-2	.207	.34
		21532	412.28	413.30	1.02	0-1	.347	.34
		21533	416.20	417.20	1.00	0-1	1.030	1.03
390.92	392.19 Syenite - dark red-brown, aphanitic and very hard, silicified ? rock with 10% pale pink euhedral feldspar phenocrysts up to 5 mm in size. Rock is weakly fractured and fractures are well healed with siliceous material. zone carries a trace of pyrite. Upper contact is at 50 degrees to the core axis, lower contact is at 45 degrees to the core axis - parallel to foliation in surrounding rock.							
392.19	402.78 Same as described above at 381.62 to 387.80 meters with 5% carbonatized laminations.							
402.78	403.04 Carries several 5 cm silicified breccia seams. carbonatized rock carries up to 3% disseminated pyrite locally with up to 5% in silicified sections.							
403.04	405.09 Strongly carbonatized in locally developed brecciation. Localized crenulation cleavage noted at 45 degrees to the core axis and approximately normal to foliation.							
405.09	405.86 80% silicified breccia - purple-grey and buff coloured, intensely silicified breccia with up to 3% pyrite.							
405.86	408.32 Section of strongly carbonatized breccia with localized strong silicification and							

From	Description	Sample From	To	Length	% Sul	GW	Au
	up to 3% pyrite locally.						
408.32	Generally decreasing amounts of alteration from overlying section with breccia controlled carbonatization throughout in seams up to 10 cm.	410.80					
410.80	50 to 60% silicified breccia.	412.28					
412.28	Amount of pervasive carbonatization, and breccia controlled carbonatization decreases down section. Foliation at 45 degrees to the core axis at 412.70 meters.	417.80					

## 418.45 423.29 GREENSCHIST

Dark green very fine grained and well foliated rock with much lower pervasive carbonatization than overlying section and very dark green seams up to 1 cm in width randomly oriented with respect to core axis - appear to contain relic volcanic textures. rock is non-magnetic throughout.

## 423.29 428.85 BASALT

Dark green very fine grained massive flow with weakly to moderately developed pervasive carbonatization and very weak foliation, decreasing down section. weakly to moderately fractured with carbonate filling. Non-magnetic. Carbonatization decreases down section with minor increase at base of hole.

428.85 Meters : END OF HOLE.

AMERICAN GRAPHIC RESOURCES CORPORATION

Core-ID: 9800.9 8880.4 DIAMOND DRILL RECORD HOLE NO.: 80.86-272  
 Azimuth: 346.0 Section: 150w Property: Harvest Option  
 Dip: -70.0 Core Size: 80 Location: 1+50w 2+105  
 Elevation: 4999.0 Date Started: 29 May, 1986  
 Length: 364.2 Date Completed: 5 June, 1986  
 Measurement: Metric Logged by: R.W. Workman  
 Comments: Casing left in ground

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-68.0	182.88		-61.5	320.04		-57.0
51.44		-63.0	207.87	351.5	-64.0	332.84	344.5	-56.0
110.39	353.3	-63.0	228.30		-62.0			
187.16		-63.0	274.32		-60.0			

-----Log Summary-----

00 24.38 OVERBURDEN.  
 24.38 28.65 BASALT.  
 28.65 54.41 DIORITE.  
 54.41 74.47 BASALT.  
 74.47 91.38 DIORITE.  
 91.38 102.38 BASALT.  
 102.38 120.63 DIORITE.  
 120.63 204.30 BASALT.  
 204.30 237.85 DIORITE.  
 237.85 240.75 CHLORITE-CARBONATE SCHIST.  
  
 240.75 306.00 MAIN MINERALIZED ZONE.  
 240.75 250.26 TRANSITIONALLY SILICIFIED ZONE.  
 250.26 252.21 UPPER SILICIFIED ZONE.  
 252.21 257.06 TRANSITIONALLY SILICIFIED ZONE.  
 257.06 267.76 MAIN SILICIFIED ZONE.  
 267.76 271.41 TRANSITIONALLY SILICIFIED ZONE.  
 271.41 273.84 LOWER SILICIFIED ZONE.  
 273.84 306.00 TRANSITIONALLY SILICIFIED ZONE.  
  
 306.00 322.94 CHLORITE-CARBONATE SCHIST.  
 322.94 336.20 DEFORMED INTRUSIVE.  
 336.20 339.90 GREENSCHIST.  
 339.90 364.18 BASALT.  
 364.18 Meters : END OF HOLE.

From To -----Description----- Sample From to Length % Sui GW Au

.00 24.38 OVERBURDEN

24.38 26.85 BASALT

The zone is composed of medium grey-green, fine to very fine grained massive flow with moderately developed auto brecciation throughout. Fractures within breccia are epidotized. Upper 3 to 4 meters of the zone are highly fractured due to late stage tectonism. Fractures are open, hematite and grit filled and range from sub-parallel to 45 degrees to the core axis. No slickensides are noted. Fracturing and alteration, silicification and epidotization increase towards the lower contact.

26.85 34.41 DIORITE

Medium to dark grey-green, fine to medium grained rock with equigranular texture of at least 60% feldspar chloritic matrix of relic mafics. Rock is relatively unaltered and very weakly fractured. A few epidotized and silicified fracture systems are locally noted over widths of up to 10 cm. Rock is non-magnetic. Diorite carries a xenolith of silicified and pyritized basalt at 39.42 to 39.86 meters.

26.85 44.50 Fine to medium grained, massive with rare basalt xenoliths.

44.50 44.69 Quartz veined section.

44.69 48.87 Fine grained massive.

48.87 49.80 Mafic intrusive - carries euhedral pink feldspar phenocrysts up to 2 mm. Rock is weakly to moderately magnetic. Contacts are sheared and subsequently healed.

49.80 53.41 Fine grained massive - lower 20 to 30 cm is altered from underlying intrusive.

53.41 54.15 Intermediate intrusive - grey-green fine grained rock with euhedral pink feldspar phenocrysts up to 8 mm. Rock is moderately pervasively carbonatized throughout with trace magnetics.

54.15 54.41 Fine grained section becomes very fine grained to aphanitic down section and a strongly epidotized and foliated basal

From	To	Description	Sample	From	To	Length	% Sui	Gw	Au
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contact develops at approximately 60 degrees to the core axis. This contact is indistinct due to alteration.

54.41 74.47 BASALT

Medium to dark green, very fine grained massive flow with abundant epidotized fractures. Rapid changes in texture suggest that this zone is basalt. Several 10 to 20 cm mafic intrusives are noted in the upper 7 meters of the zone. These are weakly foliated at 75 degrees to the core axis. Rock is non-magnetic with weakly developed magnetics in intrusives. A narrow chloritized shear plane is noted at 40 degrees to the core axis at 55.77 meters - no shearing is noted in bordering rock. The lower 3 to 5 cm is strongly hematized interstitially as indicated by streak.

67.75 68.00 Chlorite - carbonate schist with well developed laminations at 45 degrees to the core axis on a 0.5 to 3.0 mm scale.

74.47 91.38 DIDRITE

Dark green fine grained massive rock with relatively unaltered textures and very weakly developed fracturing. Occasional epidotized and silicified fracture systems locally - healed through alteration. Non-magnetic throughout. Well developed chilled contacts are noted at margins.

74.47 76.05 Irregularly textured and fine grained.

76.05 78.40 Fine to medium grained with fish-net texture developed locally.

78.40 91.15 Fine grained section gradationally fining down section.

91.15 91.38 Rapid fining to a well developed chilled contact at 45 degrees to the core axis.

91.38 102.38 BASALT

Rock is probably a combination of massive and pillowed flow - the lower section is porphyritic with abundant feldspar phenocrysts. Pillows are not well formed and probably ruptured after initial formation. The rock is relatively unaltered and non-magnetic.

91.38 93.22 Very fine grained to aphanitic, dark green weakly vesicular flow.

From To -----Description----- Sample From To Length % Sul Gw Au

90.22 99.00 Flow carries selvage - like structures which are highly pyritized and resemble brecciated and ruptured pillows - vesicles are strongly developed throughout up to 5 mm in size. These vesicles are regularly distributed in localized concentrations throughout the rock - possibly associated with weak pillow rims.

99.00 102.38 Vesicles are less apparent and size decreases. Flow is porphyritic below 99.15 meters, probably containing up to 1% phenocrysts. White to pale green, subhedral feldspar phenocrysts up to 5 mm in size are rarely skeletal.

102.38 120.68 DIORITE

Medium to dark green, fine grained massive rock. Upper 40 cm is a brecciated section with carbonate filled open voids. A narrow secondary intrusive is noted above 102.46 meters with a 5 mm quartz vein marking the contact at 60 degrees to the core axis. Fracturing in diorite decreases from initial moderate degrees to lower amounts down section. Speckled epidotization is noted as 1 to 2 mm blebs or as possible overgrowths. Zone gradually becomes relatively coarser grained down section to 118.30 meters. This zone is more mafic than most diorite. Below this point, zone fines to a very indistinct basal contact - possible welding with underlying flow.

120.68 204.30 BASALT

The zone is composed of massive and pillowed flow, generally relatively unaltered with well preserved volcanic textures throughout. Massive flows are often vesicular and flow brecciated, feldspar phenocrysts are noted locally. Pillows are well exhibited. Basalt is non-magnetic throughout.

120.68 124.50 Weakly vesicular massive flow top.

124.50 132.10 Pillowed flow - moderately to strongly brecciated, most fractures are healed. Minor quartz veining and pyrite filled fractures are associated with pillow selvages. Rock is locally foliated in arcuate patterns within the interiors of pillows. Some pillows may extend 1.0 to 1.5 meters along the core axis.

21534	187.85	188.85	1.00	8-10	.690	.67
21535	189.80	190.95	1.15	8-10	.391	.34

From	To	Description	Sample	From	To	Length	% Sul	Gk	Hu
133.10	137.31	Weakly porphyritic with 1 to 5 mm pale green, euhedral feldspars and round silica filled voids up to 3 mm in size - do not resemble vesicles. Rock is possibly intrusive.							
137.31	141.59	Pillowed flow - often strongly brecciated with occasional massive pyrite along selvages. possible mafic intrusive at 138.22 to 138.75 meters with pinkish-green colour, and fine grained texture not resembling basalt.							
141.59	145.87	Section grades to fine grained massive flow							
145.87	146.00	Strongly epidotized, silicified and foliated basal flow section.							
146.00	147.30	Flow top breccia - possibly composed of ruptured pillows.							
147.30	154.93	Pillowed and silicified flow - interiors of pillows are strongly epidotized and brecciated.							
154.93	155.46	Mafic intrusive - fine grained, pinkish-green zone of intense carbonatization with weak to moderate foliation at contacts at 65 degrees to the core axis. abundant grains of altered mica noted throughout, possibly relic biotites - Lamprophyre; fine grained, mafic rock?. Non-magnetic.							
155.46	170.00	Pillowed flow - trace magnetics.							
170.00	178.00	Continuation of overlying, very fine grained to aphanitic, weakly brecciated flow with no selvages. abundant epidotization and silicification is noted in sections up to 25 cm in width.							
178.00	187.85	Weakly pillowed flow - selvages are thin and not well exhibited. Trace magnetics noted.							
187.85	191.50	Continuation of overlying section with blocky auto-brecciation characterized by rounded reaction rimmed fragments up to 4 cm in size, and intensely pyritized matrix with up to 20% pyrite locally. rock resembles flow breccia.							
191.50	199.00	Very fine grained to aphanitic, angularly auto-brecciated flow - no pillow selvages.							
199.00	199.30	Foliated, epidotized and silicified flow contact zone - foliation at approximately 60 degrees to the core axis.							
199.30	202.00	Very fine grained to aphanitic, weakly vesicular locally, moderately brecciated and fractured section with hematized shear planes at 5 degrees, 45 degrees and 30 degrees to the core axis. The angles of 30							

From	To	Description	Sample	From	To	Length	% Sui	GW	Au
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to 45 degrees to the core axis are dominant at 201.95 meters.

## 204.30 207.85 DIORITE

The rock is fine grained, equigranular and is dominantly composed of plagioclase. The zone is less fractured than the overlying basalt. However, a few hematized shear planes are noted which represent late stage tectonic activity. The rock is generally non-magnetic with trace magnetics locally.

204.30 204.35 Epidotized and silicified contact zone with well developed foliation at 80 to 85 degrees to the core axis.

204.35 205.90 Fine grained massive section - feldspar rich with 60 to 70% plagioclase.

205.90 206.05 Well foliated, epidotized and silicified, aphanitic section - possible contact between two phases of same intrusive. textures are gradational becoming relatively coarser grained locally.

206.05 220.00 Fine grained equigranular with irregularly distributed composition from feldspar rich sections 50 to 60% plagioclase, to mafic rich areas with 20 to 25% feldspar. mafic sections are weakly to moderately magnetic and almost diabasic textured. zone carries 5% strongly silicified and epidotized fracture systems and breccia seams up to 5 cm in width.

220.00 237.30 Fine grained continuation of overlying section with more uniform composition - plagioclase laths are dominant at greater than 50% of the rock and euhedral crystals up to 1.5 mm in length. Hematized shear planes are noted at 20 degrees to the core axis at 235.23 meters with slickensides 5 degrees from direction of core axis. the number of silicified and epidotized foliated sections and minor breccia seams increases down section below 229.00 meters. a trace of magnetics is noted locally.

237.30 237.85 Rock is slightly more mafic and fines down section to a chilled contact which exhibits well developed foliation at approximately 65 degrees to the core axis. Minor increase in carbonate content within fractures is noted in lower 20 cm.

From To -----Description----- Sample From To Length % Sul SW AU

237.85 240.75 CHLORITE-CARBONATE SCHIST

21536	238.00	239.00	1.00	1-2	.340	.34
21537	239.00	240.00	1.00	1-2	.340	.34
21538	240.00	240.75	.75	1-2	.517	.89

Dark green, fine to very fine grained and generally well laminated/ foliated. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatized laminations make up an average of 10% of the rock volume. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. The rock fractures generally along foliation at 65 to 70 degrees to the core axis throughout. section contains 1 to 3 cm patches where deformation and alteration are lower - appearance is similar to diorite. Hematite is found as a very fine interstitial dissemination within the chloritized groundmass. The amount of hematization increases down section, particularly below carbonate vein. pyrite contents averages 1 to 2% with up to 3% locally as a fine grained dissemination in the most highly altered sections.

238.34 238.61 Pink carbonate vein with abundant dark green debris - contacts parallel foliation. Minor orange carbonate veining in underlying rock.

240.00 240.50 Laminations along foliation decrease and deformation becomes more brittle with angular fragments still in place - no rotation or pull-apart. Fragments have weakly altered rims. alteration within fragments is dominantly hematization as indicated by a purple-grey colour and medium green chloritic rims up to 1 mm in width. fractures are often surrounded by pale green 1 to 4 mm alteration halos. pervasive carbonatization in chloritic rock sharply increases down section within fragments.

MAIN MINERALIZED ZONE - 240.75 to 306.00.

The zone is composed of 7 members instead of the more typical 3 members due to the presence of an Upper and a Lower silicified zone as well as a moderately developed Main Silicified Zone. the upper zone exhibits minor foliation locally, mostly erased by later brecciation. The lower silicified zone is well brecciated and silicified although a chloritic colour is noted throughout. The main silicified zone also carries minor

From To -----Description----- Sample From To Length % Sul GW Au

chloritic material but generally, the degree of silicification is very strong. Pyrite contents are average in the main zone and low in the upper and lower zones. The McKenna Fault is normally located at the top of the main silicified zone.  
257.06 MCKENNA FAULT PLANE.

240.75 250.26 TRANSITIONALLY SILICIFIED ZONE

Dark green, fine to very fine grained chloritized rock with pale grey and rarely purple-grey to buff coloured intensely silicified breccia seams up to 15 cm in width and angular silicified brecciated fragments up to 2 cm. Silicified breccia is often normal appearing transitional rock. chloritized rock exhibits strong hematization locally as a fine grained interstitial growth. silicified fragments seem to have been derived through the re-brecciation of formerly massively silicified section. These fragments are supported in a variably foliated schist matrix. laminations within foliation wrap around clasts. Rare angular silicified fragments up to 3 cm in size are noted in a granulated chloritic matrix at 241.58 meters. Chloritized, non-silicified breccia is noted locally - no pull-apart or fragment rotation - similar to rock in lower section of overlying unit. All rock is pervasively carbonatized and reactive to HCl. Rare red silicified and intensely hematized breccia sections or clasts are noted locally up to 5 cm in size, the amount and perhaps degree of silicification increases down section. Silicified rock averages 10 to 15% of section and this averages 2 to 3% pyrite. trace amounts pyrite are noted in chloritized rock. A localized foliation is noted at 55 degrees to the core axis. A trace of magnetics is noted throughout.

21539	240.75	241.71	.96	1-2	.662	.69
21540	241.71	242.66	.95	1-2	.978	1.03
21541	242.66	243.63	.97	1-2	.869	.69
21542	243.63	244.59	.96	1-3	.989	1.03
21543	244.59	245.57	.98	1-3	.676	.69
21544	245.57	246.54	.97	1-3	1.329	1.37
21545	246.54	247.51	.97	1-2	.669	.69
21546	247.51	248.42	.91	1-2	.309	.34
21547	248.42	249.34	.92	1-2	.313	.34
21548	249.34	250.26	.92	2-3	.313	.34

250.26 252.21 UPPER SILICIFIED ZONE

Pale grey to dark purple-grey, orange and buff coloured aphanitic intensely silicified breccia exhibits localized foliation due to early ductile deformation - almost erased by later brittle deformation. silicified rock is moderately fractured with chloritic partings and fracture fillings. Silicified sections are weakly reactive to HCl and carry up to 5% pyrite with an average 2 to 4%. Zone is cut by abundant (10%) late stage chloritic shears at approximately 40 degrees to the core axis. these shear planes parallel the foliation. Trace magnetics locally.

21549	250.26	251.24	.98	2-4	1.343	1.37
21550	251.24	252.21	.97	2-4	.330	.34

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
252.21	257.06	TRANSITIONALLY SILICIFIED ZONE							
		Same as described above in transitional zone above	21551	252.21	253.18	.97	2-3	.669	.69
		250.26 meters with silicification decreasing towards a	21552	253.18	254.15	.97	2-3	.330	.34
		central section carrying trace silicification from	21553	254.15	255.10	.95	2-3	.656	.69
		253.39 to 253.60 meters. Brecciation is dominant above	21554	255.10	255.74	.64	1-2	.218	.34
		255.45 meters becoming foliated below this point.	21555	255.74	256.37	.63	1-2	.863	1.37
		Ductile deformation is characterized by strong	21556	256.37	257.06	.69	1	1.180	1.71
		carbonatization along laminations within foliation.							
		content of silicification increases below 253.60 meters							
		with minor silicified clasts within foliation near the							
		McKenna Fault. Overall the transitional zone carries 40							
		to 45% silicification, dominantly in breccia. Pyrite							
		contents up to 5% are noted locally, average is 2 to 3%.							
		All silicified rock is weakly to moderately reactive to							
		HCl. Minor hematization noted in chloritic rock becoming							
		strong near carbonatized sections. The McKenna Fault is							
		represented by a clay seam at 50 degrees to the core							
		axis at 257.06 meters.							
		256.37 256.64 Abundant deformation and crenulation							
		within the foliation indicates south side							
		down displacement. foliation averages 55							
		to 65 degrees to the core axis near the							
		McKenna Fault and 45 degrees to the core							
		axis well above the fault plane.							
257.06	267.76	MAIN SILICIFIED ZONE							
		The zone is characterized by pale grey to dark	21557	257.06	257.63	.57	1-2	.587	1.03
		purple-grey, and buff coloured intensely silicified	21558	257.63	258.30	.67	1-2	.228	.34
		breccia with relatively minor green chloritized	21559	258.30	258.64	.34	2-3	.116	.34
		material along late stage shears. Foliation in	21560	258.64	258.95	.31	6-8	2.018	6.51
		silicified breccia generally parallels these shears.	21561	258.95	259.85	.90	5-7	7.407	8.23
		Minor amounts of late stage intrusive rock is noted	21562	259.85	260.51	.66	5-7	2.713	4.11
		within the zone as brick red aphanitic, highly	21563	260.51	261.28	.77	2-3	.793	1.03
		silicified rock. this rock differs from silicified	21564	261.28	262.06	.78	2-3	2.675	3.43
		breccia in that it rarely carries above trace amounts	21565	262.06	262.60	.54	1-3	.923	1.71
		pyrite. silicified rock averages about 3 to 4% pyrite.	21566	262.60	263.65	1.05	5-7	3.601	3.43
		Higher contents up to 10% are noted locally typically as	21567	263.65	264.67	1.02	0-1	.347	.34
		very fine grained disseminations and as clots up to 2	21568	264.67	265.30	.63	2-4	1.298	2.06
		cm in size. Euhedral crystals up to 1 mm and pyritic	21569	265.30	265.98	.68	4-6	2.795	4.11
		fractures fillings are also noted. rock is generally	21570	265.98	266.87	.89	1-3	1.522	1.71
		non-magnetic with trace magnetics noted locally. the	21571	266.87	267.76	.89	1-3	1.219	1.37
		upper contact of the main silicified zone is marked by							
		the McKenna Fault and grooving on this fault plane							
		indicates that late stage displacement is at 45 degrees							
		across the plane in a westerly direction.							

From	To	Description	Sample	From	To	Length	% Sul	Gw	Au
257.06	257.62	Dark purple-grey with maximum breccia fragment size of 5 to 8 mm, average is 2 mm. Breccia clasts are of varying composition and generally exhibit a moderate foliation at approximately 50 degrees to the core axis. Dark colours are due to high degrees of hematization. Section carries 1 to 2% pyrite throughout, is non-magnetic with weak magnetics locally							
257.62	257.63	late stage chloritic seam parallel to foliation - probable shear carrying 20 to 50% silicified debris.							
257.63	258.30	Silicified fragments as described above up to 3 cm in size are set in a weakly chloritic and foliated matrix. Clasts are generally tabular and parallel the foliation at 45 degrees to the core axis. Rare fragments exhibit well developed internal foliations due to early ductile deformation. Fragments carry 2 to 3% pyrite with trace pyrite in chloritic matrix. This is a late stage tectonic zone para-contemporaneous with McKenna Fault.							
258.30	258.64	Generally same texture as described above without the chloritic matrix - 100% silicified breccia.							
258.64	258.95	Pale grey to buff, aphanitic, angular to rounded breccia fragments up to 2 cm exhibit finer internal brecciation. These fragments are supported in dark purple-grey to greenish-grey silicified matrix. Many breccia clast exhibit relic purple-grey hematized cores with pale coloured, dolomitized rims. 6 to 8% pyrite in fragments and matrix.							
258.95	260.51	Dark purple-grey with abundant buff coloured alteration patches with minor associated silica dumping and up to 10% pyrite locally. Zone is cut by carbonate filled fracture system sub-parallel to core axis. Pyrite noted as very finely disseminated, euhedral crystals up to 1 mm and clots up to 2 cm. Voids within fracture are often healed with solid masses of pyrite up to 1 cm in width.							
260.51	262.06	Dark purple-grey, intensely silicified and very finely brecciated with minor buff to pale grey alteration in matrix to breccia fragments and as halos around fractures. Section carries less pyrite than above although concentrations up to 5 mm are							

From	To	Description	Sample	From	To	Length	% Sol	GW	Au
		noted along late stage breccia seams within locally developed foliation planes.							
262.06	262.40	Section composed of 1 to 3 cm alternating bands of dark green chloritic material, purple-grey angularly brecciated rock, and buff coloured very finely comminuted rock. These alteration types give the rock a banded appearance well foliated at 40 to 45 degrees to the core axis. chloritized material exhibit weak magnetics. Zone carries 1 to 2% pyrite with higher amounts in buff coloured alteration.							
262.40	262.60	Same as described above at 260.51 to 262.06 meters.							
262.60	262.87	Purple-grey intensely silicified breccia with 25 to 30% buff to pale grey alteration patches carrying 10 to 15% pyrite. minor silica dumping is noted locally.							
262.87	263.06	Late stage chloritized shear zone with shear planes at 35 degrees to the core axis at 262.96 meters. carries abundant silicified debris from overlying and underlying silicified sections.							
263.06	263.13	Same as described above at 262.60 to 262.87 meters.							
263.13	263.33	Syenite - dark brick red, aphanitic, highly silicified, weakly to moderately brecciated and strongly reactive to HCl due to pervasive carbonatization. Zone carries 0.25 mm rounded quartz bodies - altered phenocryst ? contacts are highly irregular due to subsequent brecciation. Non-magnetic. Trace pyrite.							
263.33	263.65	Purple-grey as described above at 262.60 to 262.87 meters but with lower pyrite contents - average 4 to 6%. Up to 8% pyrite noted locally.							
263.65	264.67	Intrusive zone - medium grey-green, very fine grained, moderately chloritized and strongly pervasively carbonatized with localized 5 to 15 cm patches of buff coloured alteration which are probably strongly dolomitized. These patches exhibit moderate brecciation and generally this rock exhibits higher degrees of deformation than normal for these mafic intrusives - possibly Lamprophyre; fine grained, mafic rock. carries 1 mm chlorite grains - possibly highly altered biotites. This rock seems to be the equivalent of magnetic mafic intrusives							

From	To	Description	Sample	From	To	Length	% Sul	GW	AG
		noted in other holes. Minor stoping of silicified breccia noted at lower contact.							
		Intrusive is foliated locally at 40 to 45 degrees to the core axis. Some fracture patterns are sub-parallel to core axis.							
264.67	265.13	Same as above at 261.60 to 262.67 meters with 4 to 6% pyrite and up to 10% locally.							
265.13	265.39	Chloritic late stage shear at approximately 30 to 45 degrees to the core axis with abundant silicified clasts and debris.							
265.39	267.76	Same as described above at 260.51 to 262.06 meters - dominantly purple-grey intensely silicified breccia. abundant late stage calcite filled fractures within breccia. Pyrite contents of 10% noted locally above 265.98 meters - lower below this point.							
267.76	271.41	TRANSITIONALLY SILICIFIED ZONE							
			21572	267.76	268.51	.75	1	.517	.69
		Dark green very fine grained chloritized material carries average 50 to 60% pale grey to purple-grey and buff coloured silicified breccia. pyrite contents average 1 to 2% generally increasing within more highly silicified sections. Foliation is not well exhibited.	21573	268.51	269.26	.75	1-3	2.572	3.43
			21574	269.26	269.84	.58	2-4	1.989	3.40
			21575	269.84	270.62	.78	1-3	.538	.69
			21576	270.62	271.41	.79	1-3	.545	.69
267.76	269.26	Carries 45 to 50% silicified breccia with up to 5% pyrite noted locally in silicified rock and trace amounts in chloritic alteration.							
269.26	269.84	Silicified breccia - white, pale grey and buff coloured, intensely silicified rock.							
269.84	271.41	55 to 60% silicified breccia as described above.							
271.41	273.84	LOWER SILICIFIED ZONE							
			21577	271.41	272.22	.81	1-2	.834	1.03
		This section represents a peak in silicification and brecciation within the lower transitional zone. Upper contact is marked by a late stage chlorite and calcite filled shear plane at approximately 20 degrees to the core axis. pale grey to dark purple-grey, reddish-pink and white coloured rock contains less than 5% relic chloritized patches. the zone locally retains a weak chlorite green hue. Silicified breccia becomes increasingly foliated down section. No very high pyrite concentrations are noted in this section. Pyrite as a very fine grained dissemination averages 1 to 2% with	21578	272.22	273.03	.81	1-2	2.778	3.43
			21579	273.03	273.84	.81	1-2	2.219	2.74

From	To	Description	Sample	From	To	Length	% Sul	6W	Au
		localized silica dumping and orange coloured silicified breccia.							
273.84	306.00	TRANSITIONALLY SILICIFIED ZONE							
		Zone is essentially the same as the transitional unit above the lower silicified zone. Chloritized rock carries 25 to 30% silicified breccia. Rock becomes increasingly foliated down section but silicified breccia seams do not generally exhibit a well developed internal foliation. Several late stage clay-grit seams mark fault planes generally parallel to the foliation.	21580	273.84	274.72	.88	1	.299	.34
			21581	274.72	275.60	.88	1	.299	.34
			21582	275.60	276.48	.88	1	.299	.34
			21583	276.48	277.30	.82	0-1	.845	1.03
			21584	277.30	278.08	.78	0-1	.265	.34
			21585	278.08	278.95	.87	0-1	.000	n/a
			21586	278.95	279.90	.95	0-1	.323	.34
			21587	279.90	280.90	1.00	0-1	.000	tr
273.84	276.48	55 to 60% silicified breccia same as described above with sections of buff and pale brown silicification up to 40 cm in width. Breccia seams generally parallel foliation at 40 to 45 degrees to the core axis and rare 1 cm breccia clasts are preferentially oriented along foliation. Silicified rock is weakly reactive to HCl.	21588	280.90	281.88	.98	0-1	.000	tr
			21589	281.88	282.80	.92	0-1	.000	tr
			21590	282.80	283.82	1.02	0-1	.000	tr
			21591	283.82	284.75	.93	0-1	.000	tr
			21592	284.75	285.72	.97	0-1	.999	1.03
			21593	285.72	286.68	.96	0-1	.000	tr
			21594	286.68	287.51	.83	0-1	.000	tr
			21595	287.51	288.02	.51	0-1	1.051	2.06
276.48	278.95	10 to 15% silicified breccia in seams generally less than 5 cm in width.	21596	288.02	288.67	.65	2-3	2.009	3.09
			21597	288.67	289.21	.54	1-2	.373	.69
278.95	281.88	50 to 55% silicified breccia in seams up to 35 cm in width.	21598	289.21	289.78	.57	1	1.368	2.40
			21599	289.78	290.34	.56	0-1	.190	.34
281.88	284.75	Same as described above at 276.48 to 278.95 meters with well developed foliation at 30 to 35 degrees to the core axis. A 90 degree change in the orientation of silicified breccia seams is noted at 282.85 meters a silicified breccia seam cuts across core axis normal to foliation.	21600	290.34	291.31	.97	0-1	.330	.34
			21601	291.31	292.27	.96	0-1	.326	.34
			21602	292.27	293.25	.98	0-1	.000	tr
			21603	293.25	294.24	.99	0-1	.000	tr
			21604	294.24	294.84	.60	1	.000	tr
			21605	294.84	295.56	.72	1	.986	1.37
			21606	295.56	296.36	.80	0-1	1.096	1.37
			21607	296.36	297.31	.95	1	.979	1.03
284.75	286.68	60 to 65% silicified breccia seams up to 30 cm in width well foliated at 30 to 35 degrees to the core axis.	21608	297.31	298.00	.69	0-1	.235	.34
			21609	298.29	299.18	.89	0-1	.000	tr
			21610	299.18	300.16	.98	0-1	.000	tr
286.68	289.21	10 to 15% silicified breccia dominantly chloritic section is foliated at 45 to 55 degrees to the core axis as highlighted by grey carbonatized granulated quartz rich or silicified breccia seams up to 1 cm in width. A 3 mm clay-grit seam is noted at 45 to 50 degrees to the core axis at 288.02 meters with increase in very finely disseminated pyrite below this structure. A possible second shear is noted at 288.67 meters pyrite content decreases below this point.	21611	300.16	300.93	.77	0-1	.793	1.03
			21612	300.93	301.69	.76	0-1	1.566	2.06
			21613	301.69	302.58	.89	0-1	.000	tr
			21614	302.58	303.46	.88	0-1	.000	tr
			21615	303.46	304.34	.88	0-1	.000	tr
			21616	304.34	305.20	.86	0-1	.000	tr
			21617	305.20	306.00	.80	0-1	.000	tr
289.21	290.34	45 to 50% silicified breccia, often as 1 to 5 cm seams along foliation and intersection points of major fracture							

From	To	Description	Sample	From	To	Length	% Sui	@W	Hu
		intersection points of major fracture systems. The degree of brecciation begins to decrease down section with increasing halo-type silicification.							
290.34	294.24	Approximately 3% silicified breccia seams up to 4 cm parallel to a well developed foliation at 35 to 50 degrees to the core axis. foliation generally flattens down section.							
294.24	295.56	35 to 40% silicified breccia in sections up to 15 cm in width - generally reddish-pink, buff and pale grey coloured as in overlying silicified material. Pyrite is noted in trace amounts within chloritized rock and up to 2% in silicified sections.							
295.56	300.16	Zone becomes more finely foliated on a 1 to 3 mm scale with 10 to 15% silicified breccia. a fine grained section at 295.00 to 298.29 meters seems to have igneous texture becoming more deformed down section into moderately developed foliation. NOTE: Sample removed for study.							
300.16	301.67	Zone carries 50 to 55% silicified breccia in section up to 10 cm in width becoming pinker in colour down section. this change is possibly due to increased calcite content. Foliation well developed at 60 degrees to the core axis.							
301.67	306.00	Section contains 10 to 15% silicified breccia in sections averaging 3 to 5 cm in width. a well developed foliation is noted at 65 degrees to the core axis as mm scale laminations. The lower 80 cm carries deformed laminations. these laminations are convolutely folded indicating south side down type movement probably related to minor localized shearing.							
306.00	322.94	CHLORITE-CARBONATE SCHIST							
		Dark green, fine to very fine grained and generally well laminated/foliated. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and reather out along the foliation. carbonatized lamination are also openly folded locally. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 15% of the rock	21618	306.00	306.97	.97	0-1	tr	tr
			21619	306.97	308.00	1.03	0-1	tr	tr
			21620	308.00	309.00	1.00	0-1	tr	tr
			21621	312.00	313.00	1.00	0-1	tr	tr
			21622	315.00	316.00	1.00	0-1	tr	tr
			21623	319.00	319.97	.97	0-1	1.998	2.06
			21624	322.00	322.94	.94	0-1	tr	tr

From To Description Sample From To Length % Sol SW AU

volume. Rare silicification is noted as a purple-grey hue within carbonatized seams. These sections become more rare down section. Silicification initially makes up approximately 1% of section. The rock is weakly to moderately well parted throughout. Occasional fine grained, massive sections are noted. Foliation is noted at 70 degrees to the core axis at 307.65 meters.

322.94 328.20 DEFORMED INTRUSIVE

Dark green, fine grained massive rock with variably developed foliation locally - green becomes almost equigranular in texture. This indicates that parent rock is probably intrusive. Zone is cut by several pinkish-red to cream coloured intrusives of syenitic material. These are strongly silicified and non-reactive to HCl. Green rock is weakly to moderately pervasively carbonatized. Strong carbonatization is noted along seams within the foliation. Lower contact of unit is highly quartz-carbonate veined and is marked by a narrow 5 mm clay-grit seam and fault plane at 55 degrees to the core axis.

21620	323.92	324.36	.44	0-1	.140	.17
21626	324.36	325.11	.75	1	.285	.34
21627	325.11	325.81	.70	1	.219	.17
21628	325.81	326.27	.46	0-1	.156	.34
21629	326.27	327.00	.73	0-1	.124	.17
21630	329.00	330.00	1.00	0-1	.170	.17

324.36 325.11 Cream to brick-red coloured, aphanitic silicified intrusive with irregular contacts but parallel to foliation. Carries 1 to 2% very finely disseminated pyrite.

325.32 325.51 Quartz - carbonate vein - possibly related to intrusives.

325.81 326.27 Reddish intrusive as described above - probably was porphyritic with 1 to 2 mm phenocrysts - too highly altered to be certain.

336.20 337.90 GREENSCHIST

Dark green, very fine grained weakly to moderately foliated rock with few carbonate replacements along mm bands within foliation. Dominantly, the foliation is highlighted by carbonate filled fractures and carbonate stringers along foliation at 45 degrees to the core axis at 336.85 meters. Non-magnetic. Trace pyrite.

339.90 364.18 BASALT

Medium green massive and pillowed flows are noted within

From	To	Description	Sample	From	To	Length	% Sui	GW	Au
		this zone. basalt is generally very fine grained and relatively unaltered - original volcanic structures and textures are well exhibited. 357.90 359.06 pillowed flow.							
359.00	361.00	Chlorite - carbonate schist with well developed foliation at 55 degrees to the core axis.							
361.00	362.40	Pillowed flow - gradational into underlying section.							
363.90	365.95	Very fine grained massive flow.							
367.95	368.42	Flow breccia.							
368.40	369.00	Weakly developed angular auto - brecciation							
369.00	369.07	Irregularly brecciated with locally developed reaction rims. Trace magnetite locally.							
369.37	369.70	Silicified and epidotized flow contact zone							
369.70	364.18	Irregularly fractured massive flow.							
364.18		Meters : END OF HOLE.							

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Co-ords:	9785.6 9051.4	DIAMOND DRILL RECORD	HOLE NO.:	MC.86-273
Azimuth:	342.5	Section: 050E	Property:	Worvest Option
Dip:	-70.0	Core Size: 80	Location:	0+50E 1+75S
Elevation:	5000.1			
Length:	367.8		Date Started:	6 June, 1986
Measurement:	Metric		Date Completed:	13 June, 1986
Comments:	Casing in; rods sheared, 273A used		Logged by:	A.W. Workman

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-65.5	182.88		-63.5	274.32		-62.0
91.44		-66.0	220.07	356.5	-66.0	305.41	352.5	-63.0
137.16		-63.0	228.60		-66.0	320.04		-61.0
149.96	351.5	-63.0	238.35	349.0	-67.0	367.81		-55.0

-----Log Summary-----

.00 36.88 OVERBURDEN.  
 36.88 91.18 DIORITE.  
 91.18 101.11 BASALT.  
 101.11 161.58 DIORITE.  
 161.58 192.34 BASALT.  
 192.34 236.07 DIORITE.  
 236.07 239.26 VARIABLY SILICIFIED ZONE (undetermined).  
 239.26 240.46 DIORITE.  
 240.46 245.36 GREENSCHIST.  
  
 245.36 251.47 UPPER MINERALIZED ZONE.  
  
 245.36 246.50 TRANSITIONALLY SILICIFIED ZONE.  
 246.50 247.44 UPPER SILICIFIED ZONE.  
 247.44 251.47 TRANSITIONALLY SILICIFIED ZONE.  
  
 251.47 255.91 GREENSCHIST.  
  
 255.91 323.75 MAIN MINERALIZED ZONE.  
  
 255.91 260.90 TRANSITIONALLY SILICIFIED ZONE.  
 260.90 274.77 MAIN SILICIFIED ZONE.  
 274.77 323.75 TRANSITIONALLY SILICIFIED ZONE.  
  
 323.75 344.67 CHLORITE-CARBONATE SCHIST.  
 344.67 355.00 GREENSCHIST.  
 355.00 367.81 BASALT.  
 367.81 Meters : END OF HOLE.

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Hole No.: MC.86-273

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From To -----Description----- Sample From To Length % Sul GW Au

.00 36.88 OVERBURDEN

36.88 91.18 DIORITE

Section is dominantly dark green to grey-green and fine grained with medium to coarse grained phases near the base of the zone. rock is characterized by massive, equigranular texture. Fractures are weakly developed throughout. a few shear planes are noted locally at shallow angles to the core axis - possibly parallel to contacts. the intrusive is generally non-magnetic although more mafic phases often contain weakly developed magnetics. alteration is weak throughout with minor localized increases near epidotized shears which developed during intrusion.

36.88 56.20 Fine to very fine grained with moderate to strong fracturing between 40.0 and 42.5 meters - possibly near a fault zone. abundant quartz filled vuggy fractures are noted at 10 to 20 degrees to the core axis. A strongly weathered mafic intrusive noted at approximately 41.66 to 42.37 meters - possibly Lamprophyre; fine grained, mafic rock, with altered micas, possibly biotites. intrusive is non-magnetic with minor quartz veining near margins.

56.20 64.15 Becoming less fractured and relatively coarser grained although still fine below a 5 cm epidotized foliated section at 85 degrees to the core axis.

64.15 65.00 Abundant quartz veining sub-parallel to core axis.

65.00 68.90 Fine grained, massive.

68.90 69.62 Pinkish-green, fine to very fine grained porphyritic intrusive with pink subhedral, epidotized feldspar phenocrysts up to 8 mm. contacts are at 65 to 80 degrees to the core axis.

69.62 74.00 Fine grained.

74.00 83.00 Fine to medium grained, becoming fish-net textured locally. Rare shears at approximately 30 degrees to the core axis are probably syn-intrusion as exhibited by plastically deformed grains within 10 cm of

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
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shear. these planes are carbonate filled with strong localized epidotization in bordering rock.

83.00 89.30 Medium to coarse grained with minor leucoxene overgrowths.

89.30 90.50 Fine to medium grained.

90.50 91.18 Fine grained, gradual fining trend down-hole to a well developed intrusive contact at 35 degrees to the core axis.

91.18 101.11 BASALT

The zone is composed of relatively unaltered, very fine grained massive flow with well developed vesicles throughout with grading indicating tops up. basalt is non-magnetic and carries trace amounts of pyrite.

91.18 91.80 Dark green, very fine grained to aphanitic, locally weakly foliated basal flow.

91.80 93.05 Flow top breccia with vesicular fragments up to 2 cm. Minor hyaloclastite localized in voids within breccia.

93.05 97.20 Weakly to moderately vesicular flow - becoming less vesicular with smaller vesicles down section.

97.20 98.10 Very fine grained massive flow.

98.10 98.29 felsic intrusive - pinkish-green, fine grained and epidotized.

98.29 101.11 Very dark green fine grained section with trace magnetics and strongly developed foliation below 101.07 at 55 degrees to the core axis.

101.11 161.58 DIORITE

Same as described above at top of drill hole but generally fine grained throughout. Patches of more mafic composition exhibit weak throughout moderate magnetics. A localized but dominant fracture system is noted at 10 to 30 degrees to the core axis as described above which probably reflects late stage tectonic activity along intrusive margins. Minor shearing is noted at higher angles to the core axis.

101.11 101.46 Very fine grained.

101.46 101.82 Intermediate intrusive - pale green, very fine grained.

101.82 105.10 Very fine grained non-magnetic section gradationally coarsening texture down section.

From	To	Description	Sample From	To	Length	% Sul	GW	Au
105.10	149.55	Fine grained, generally equigranular with very fine grained, more mafic patches. Rare hematite filled fracturing at 10 to 30 degrees to the core axis. Gradual coarsening trend down-hole and zone becomes more uniform in composition.						
149.55	149.63	Quartz veined shear zone at 60 to 65 degrees to the core axis.						
149.63	160.60	Same as described above quartz vein, fine grained throughout with well developed 1 cm scale fish-net texture becoming very pronounced below 158.35 meters. Texture may be result of crystal settling.						
160.60	161.58	Fining down section to a very fine grained contact at 30 degrees to the core axis.						

61.58 192.34 BASALT

Rocks are generally dark green to medium grey-green in colour becoming pale green with localized silicification and epidotization. Both fine grained massive flows and very fine grained pillowed flows are noted within this section. Massive flow is characterized by vesicular flow tops and localized flow breccia. Selvages are generally not well developed in pillowed flow. The rocks are relatively unaltered and generally exhibit well preserved volcanic textures. Basalt is non-magnetic. Auto-breccia is common within flows. In addition, shearing has locally increased the amount of fracturing within basalt, although fracturing is generally weak.

21631	190.86	191.60	.74	1	.126	.17
21632	191.60	192.34	.74	1-3	.252	.34

161.58 166.20 Pillowed flow - epidotized, irregularly developed selvages and vesicles up to 2 cm in size. These voids are quartz filled with radially growing epidote crystals. Basalt is weakly to moderately auto-fractured.

166.20 173.10 Fine grained massive, with abundant 10 cm epidotized and silicified (healed) shears generated by flowage.

173.10 173.60 Increasingly epidotized and foliated section - probably basal flow.

173.60 176.90 Fine grained massive flow, equigranular - possible lava tube.

176.90 177.46 Becomes very fine grained, then aphanitic down section to a well chilled contact at approximately 65 degrees to the core axis.

177.46 178.15 Aphanitic, vesicular and hyaloclastite-bearing flow top.

178.15 178.95 Flow breccia - possibly derived through brecciation and rupturing of pillows in

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From	To	Description	Sample From	To	Length	% Sul	GW	Au
		flow top. section seems to carry fragments of pillow selvages.						
178.95	180.43	Very fine grained massive flow, localized brecciation and 1 to 5 mm fragments. Weakly vesicular throughout. Non-magnetic.						
180.43	180.63	Increasingly brecciated with epidotized and silicified matrix filling. Lower 5 cm is strongly foliated at 40 degrees to the core axis and intensely altered.						
180.63	181.13	Fine grained massive weakly fractured section - probably a lava tube.						
181.13	183.30	Same as described above at 179.0 meters with vesicles throughout in a generally very fine grained rock.						
183.30	185.05	Fine grained massive flow - no contact with overlying section but a foliated epidotized section marks contact with underlying zone.						
185.05	188.58	Very fine grained, weakly to moderately vesicular massive flow.						
188.58	188.70	Strongly epidotized flow boundary between overlying flow top and underlying pillowed section.						
188.70	190.84	Pillowed flow - selvages are not well exhibited.						
190.84	190.86	Possible fault plane at approximately 90 degrees to the core axis ?. Abundant ground core in this section.						
190.86	190.98	Approximately 80% randomly oriented white quartz veining.						
190.98	192.34	Dark green weakly foliated at 50 to 70 degrees to the core axis with localized chlorite to carbonate schist - abundant quartz veining and silicification locally. Silicified rock carries up to 3% pyrite. Lower contact is sharp and parallels foliation at 70 degrees to the core axis.						

192.34 236.07 DIORITE

The rock is generally medium green, fine grained and equigranular with several shear planes noted throughout.

rock is initially relatively unaltered but pervasive carbonatization develops down section and a weak foliation is noted at base of unit. intrusive is non-magnetic and same as above in other dioritic zones in the overlying, hanging wall section.

192.34 220.00 Fine grained section with possible fault contact at upper margin. Abundant calcite

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From	To	Description	Sample	From	To	Length	I	Sul	GM	Au
		filled fractures locally.								
220.00	234.23	Upper contact is gradational and section becomes weakly pervasively carbonatized with degree of alteration increasing down section. below 224.50, carbonatization is moderate and rock becomes strongly pervasively carbonatized below 231.00 meters. A few epidotized and silicified shears ? are noted in this zone. These are not fault contacts - rock is same each side. amount of randomly oriented calcite filled fractures gradationally increases down section. A fault and shear zone with associated clay-grit seams is noted at 25 to 30 degrees to the core axis at 229.75 meters.								
234.23	236.07	Continuation of overlying section with very strong pervasive carbonatization and weak to moderate hematization as indicated by reddish streak and generally by colour of rock. Near base of section, minor weak silicification is noted along fractures as thin halos up to 3 mm in width. A very weakly developed foliation is noted locally								
236.07	239.26	VARIABLELY SILICIFIED ZONE (UNDETERMINED)								
		Zone is a continuation of the overlying unit with approximately 10 to 15% purple-grey, weak to moderate silicification as halos around fractures and as silicified patches up to 10 cm in width where brecciation is developed. Silicified rock carries up to 5% pyrite - generally as 1 mm euhedral crystals and grains. All silicified sections are more highly reactive to HCl than dark green chloritic rock. a weakly developed foliation is noted throughout averaging 45 degrees to the core axis. Rock is non-magnetic throughout	21633	236.07	236.94	.87	1-3	1.644	1.89	
			21634	236.94	237.82	.88	1-3	1.206	1.37	
			21635	237.82	238.70	.88	1-3	.299	.34	
			21636	238.70	239.26	.56	1	.190	.34	
239.26	240.46	DIORITE								
		Dark green, fine to very fine grained and massive with weakly developed foliation at 45 degrees to the core axis. Rock is moderately chloritized - chlorite highlights the foliation, and pervasive carbonatization is strongly developed throughout, increasing down section. A well dioritic texture is exhibited across 10 cm at 240.35 meters. The lower contact at 50 degrees to the core axis is indistinct but recognizeable.	21637	239.26	240.46	1.20	1	.204	.17	

From	To	Description	Sample	From	To	Length	g Sul	GM	Au
240.46	245.36	GREENSCHIST							
			21638	240.46	241.44	.98	1	.333	.34
		Medium to dark green, very fine grained basalt flow top section characterized by pale green to grey-green, angular to subangular aphanitic fragments up to 3 cm in size with a strongly chloritized and devitrified hyaloclastite carrying groundmass. a well developed foliation is noted throughout at 40 to 50 degrees to the core axis and fragments exhibit stretching along the foliation. rock is very highly pervasively carbonatized throughout. Foliation generally steepens down section and becomes better developed. a trace of weakly developed magnetics is noted locally. Fragments are occasionally vesicular and are often more highly carbonatized than the hyaloclastite matrix material. trace to 1% pyrite is noted as blebs up to 1 mm in size.	21639	241.44	242.42	.98	1	.333	.34
			21640	242.42	243.40	.98	1	.333	.34
			21641	243.40	244.38	.98	1	.333	.34
			21642	244.38	245.36	.98	1	.333	.34
245.36	251.47	UPPER MINERALIZED ZONE.							
		This zone is composed of three members with a central section of highly silicified breccia. all silicification is breccia controlled and pyrite contents increase within silicified rock to approximately 1% above trace amounts in chloritic sections. highest pyrite contents of approximately 3% are noted with minor silica dumping. All but the most highly silicified breccia is reactive to HCl.							
245.36	246.50	TRANSITIONALLY SILICIFIED ZONE							
			21643	245.36	245.93	.57	2-3	1.761	3.09
		Continuation of overlying schist with development of 1 to 8 cm (average 2 cm) purple-grey to buff coloured silicified breccia seams and silicified halos around fractures. Total content of silicified breccia is 30 to 35% of section. pyrite contents increase with silicification, particularly where minor white silica flooding is noted. average pyrite content is 1% with up to 3% locally as blebs up to 2 mm often coale Small amounts of basaltic debris are noted throughout - parent rock was probably basalt. rock is non-magnetic throughout and pervasive carbonatization is weakly developed as indicated by HCl reaction, although dolomitization may be dominant. silicified rock is more weakly reactive to acid. Chloritic rock exhibits weak to moderate heatization. foliation is moderately well developed throughout in silicified breccia seams at 40	21644	245.93	246.50	.57	2-3	1.465	2.57

From To -----Description----- Sample From To Length % Sul GW Au

degrees to the core axis.

246.50 247.44 UPPER SILICIFIED ZONE

21645 246.50 247.44 .94 1-3 3.224 3.43

Dark purple-grey, pale grey, buff to orange coloured intensely silicified breccia with angular to subangular breccia fragments up to 2 cm in size. Larger fragments exhibit fine internal brecciation with clasts less than 1 mm in size. These larger fragments often exhibit earlier ductile deformation as indicated by well developed internal foliations. rock is generally non-reactive to HCl except in rare relic chloritized, non-silicified sections up to 1 cm in width near the margins of the zone. Contacts of this zone and the loss of silicification are very sharp and possibly controlled by margins of original parent (intrusive) lithology. silicified breccia carries up to 3% pyrite as very fine grained disseminations, and as larger blebs up to 1 mm. Pyrite is noted dominantly in the siliceous matrix between silicified breccia fragments. Average pyrite content is 1 to 3%.

247.44 251.47 TRANSITIONALLY SILICIFIED ZONE

21646 247.44 248.44 1.00 1 .340 .34  
 21647 248.44 249.47 1.03 1 .711 .69  
 21648 249.47 250.47 1.00 1 .340 .34  
 21649 250.47 251.47 1.00 1 tr tr

Dark green very fine grained chloritized rock with well developed foliation throughout at 40 degrees to the core axis as highlighted by cream to pale grey coloured carbonatized breccia seams, laminations and bands up to 1 cm in width. Zone carries 5 to 7% silicified breccia in seams up to 4 cm but averaging approximately 1 cm in width. Degree of silicification is moderate, decreasing down section as does pervasive carbonatization. carbonatization is often noted as lensitic bodies up to 3 mm in width along the foliation. Chloritic rock exhibits moderate hematization as indicated by reddish streak. Chloritic rock resembles basalt. Pyrite content averages 1% as a fine grained dissemination and blebs up to 1 mm within carbonatized and silicified laminations. A late stage shear zone is noted at 30 degrees to the core axis at 250.73 to 250.79 meters. white calcite filling is noted around 1 to 2 cm angular fragments with minor clay-grit seams at each margin of the zone. Movement was dilatant. Shearing is sub-parallel to foliation.

251.47 255.91 GREENSCHIST

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
			21650	251.47	252.38	.91	0-1	tr	tr
			21651	252.38	253.38	1.00	0-1	tr	tr
			21652	253.38	254.36	.98	0-1	tr	tr
			21653	254.36	255.24	.88	0-1	tr	tr
			21654	255.24	255.91	.67	0-1	tr	tr

Medium to dark green, very fine grained, moderately well foliated rock with pale grey carbonate stringers and carbonatized seams up to 2 cm in width highlighting a foliation at 45 degrees to the core axis. Carbonate content is relatively minor in the rock. carbonatized section often have a pale purple hue due to weak to moderate hematization. Green chloritic rock exhibits irregularly developed weak hematization. chloritized rock is locally pervasively carbonatized and becomes pale green in colour. Rock vaguely resembles basalt throughout. the degree of pervasive carbonatization is generally uniform throughout the section and the rock is non-magnetic. pyrite content averages trace amounts with up to 2% localized in silicified material within very rare and narrow breccia seams.

255.91 323.75 MAIN MINERALIZED ZONE.

The main zone is well developed and composed of three members. Both the upper and lower zones of transitional silicification are broader than normal. The upper section carries higher amounts of silicified breccia than usual although pyrite contents are low. The main silicified zone is well developed, intensely silicified and exhibit little ductile deformation. Pyrite contents are normal in this central member. the lower transitional zone is characterized by several sections of highly increased breccia controlled silicification although pyrite contents are generally low as is typical for this unit.

260.89 MCKENNA FAULT PLANE.

35.91 260.90 TRANSITIONALLY SILICIFIED ZONE

This zone is a continuation of the overlying zone with dark green very fine grained moderately foliated rock containing 5 to 10% purple-grey silicified breccia in randomly oriented seams up to 5 cm in width but averaging 1 to 2 cm. All silicified rock is moderately to strongly reactive to HCl and carries higher pyrite contents at 2 to 3% versus no pervasive carbonatization and trace amounts of pyrite in chloritized rock. The foliation sharply increases and becomes more finely developed below 258.07 meters. brecciation also decreases below this point. Foliation is often deformed into chevron-type folds which indicate south-side down type displacement across hairline microfaults which are 65 degrees to the core axis and are sub-parallel to the

21655	255.91	256.55	.64	1	1.210	1.89
21656	256.55	257.36	.81	1	tr	tr
21657	257.36	258.07	.71	1	.121	.17
21658	258.07	259.00	.93	1	.642	.69
21659	259.00	259.93	.93	1	.642	.69
21660	259.93	260.90	.97	1	1.329	1.37

To	Description	Sample	From	To	Length	% Sul	GM	Au
	foliation. Rock is non-magnetic throughout. The McKenna Fault is represented by a clay seam at 50 degrees to the core axis at 260.89 meters.							
255.91	258.07 Weakly to moderately foliated rock with silicified breccia seams - generally resembles overlying zone.							
258.07	260.73 Becomes very strongly foliated at 40 degrees to the core axis steepening down section to 50 degrees. pervasive carbonatization increases slightly down section and chloritized rock becomes more purple hued. hematization increases below 260.45 meters.							
260.73	260.90 McKenna Fault zone - abundant narrow clay-grit seam with major 2 cm clay seam at 260.89 meters. shearing is noted at 50 degrees to the core axis. Minor grooving of the fault plane indicates direction of late stage displacement to be westerly at 50 to 60 degrees across the plane.							
.90	274.77 MAIN SILICIFIED ZONE							
	The zone is composed of purple-grey, pale grey and buff coloured intensely silicified breccia. Brecciation is variably developed from shatter-type with minor fragment rotation to extreme comminution with fragments less than 0.05 mm in size. Pyrite content is normal for main silicified zone type rock with average 4% pyrite as a very fine grained dissemination, as relatively late stage fracture fillings, as euhedral crystals and grains up to 1 mm, and as aggregated grains in clots up to 2 cm in size. Maximum content is approximately 10%. several dark red-brown to purple hued silicified intrusives are noted within the zone - possibly carrying paler coloured phenocrysts up to 0.5 mm and minor pyrite contents. Moderate magnetics are generally noted in silicified breccia whereas these intrusives are non-magnetic. Very little early foliation has developed.	21661	260.90	261.51	.61	1-3	3.135	5.14
		21662	261.51	262.06	.55	1-3	.093	.17
		21663	262.06	262.63	.57	TR	.393	.69
		21664	262.63	262.97	.34	2-4	.993	2.92
		21665	262.97	263.28	.31	TR	.053	.17
		21666	263.28	263.91	.63	5-7	2.917	4.63
		21667	263.91	264.67	.76	6-8	3.390	4.46
		21668	264.67	265.41	.74	3-5	2.790	3.77
		21669	265.41	266.38	.97	10	4.656	4.80
		21670	266.38	266.85	.47	4-6	2.416	5.14
		21671	266.85	267.53	.68	0-1	.700	1.03
		21672	267.53	267.81	.28	0-1	.288	1.03
		21673	267.81	268.56	.75	1-3	1.545	2.06
		21674	268.56	269.18	.62	8-10	7.335	11.83
		21675	269.18	269.79	.61	5-7	4.185	6.86
		21676	269.79	270.18	.39	2-4	.803	2.06
		21677	270.18	271.09	.91	5-7	1.247	1.37
260.90	262.06 Dark purple-grey silicification carrying 1 to 2% pyrite, with patchy buff to pink coloured alteration averaging 2 to 3% pyrite. Aggregates noted of 0.5 mm pyrite grains into 2 to 4 mm clots within voids in breccia and along fractures. colours of alteration are irregular possibly due to overprinting from several stages of brecciation. minor 1 cm late stage chloritized shear plane noted at 55 degrees to the core axis at 261.33 meters	21678	271.09	272.15	1.06	4-6	1.452	1.37
		21679	272.15	272.84	.69	2-4	.945	1.37
		21680	272.84	273.53	.69	2-3	.235	.34
		21681	273.53	273.81	.28	0-1	.048	.17
		21682	273.81	274.77	.96	3-5	.662	.69

From	To	Description	Sample From	To	Length	% Sul	GM	Au
		is bordered by buff coloured alteration. abundant very fine chloritic fractures noted throughout - no shearing. All silicified rock is reactive to HCl and irregular moderately magnetic are noted throughout.						
262.06	262.63	Dark purple-grey intensely silicified rock with very fine shatter-type brecciation developed on mm scale. Non-reactive to HCl, and non-magnetic with trace pyrite - probably a syenitic or monzonitic intrusive. Lower contact is irregular but sharply developed at approximately 65 degrees to the core axis.						
262.63	262.97	Buff coloured with slight mauve tint, aphanitic intensely silicified breccia with angular and subangular fragments up to 3 mm in size - generally less than 1 mm. Pyrite content averages 2 to 4% as fine grained dissemination. Section is moderately magnetic.						
262.97	263.28	Same as described above at 262.06 to 262.63 meters - late stage fractures and brecciation have orange alteration halos.						
263.28	264.67	Buff to pale grey, intensely silicified with breccia fragments up to 1 cm, averaging 1 mm. Larger fragments are composed of smaller fragments developed through earlier brecciation. the upper 30 cm of section is slightly mauve coloured, carries 3 to 5% pyrite, and is moderately magnetic - magnetism decrease down section, becoming non-magnetic below 264.55 meters and carrying 6 to 8% pyrite where rock is dominantly dark grey coloured in areas of ultra-mylonitization of breccia to an average clast size of less than 0.05 mm with largest breccia fragments at 0.25 mm. This is best exhibited in lower 10 cm. pyrite noted in clots up to 1 cm in size, as disseminations, as trails along healed fractures, and as minor euhedral crystals.						
264.67	265.41	Continuation of above with weakly developed late stage fracturing and shearing foliated at 30 to 40 degrees to the core axis. Many of these fractures are chloritized - often with associated pyrite trails. Chlorite gives rock a pale green hue to the dominantly buff alteration. Minor kink brecciated, silica-flooded bands up to 1 cm in width						

From	To	Description	Sample	From	To	Length	% Sul	BW	Au
		are noted along foliation. Pyrite content averages 3 to 5% and the rock is generally non-magnetic. minor black magnetite is locally noted in chloritized fractures.							
265.41	266.38	Buff coloured, extremely finely comminuted groundmass with reddish-grey angular breccia clasts up to 3 mm in size. Matrix carries approximately 10% pyrite as very fine grained disseminations, 1 mm grains, rare euhedral crystals, and as cm scale aggregates of grains. Pyrite content increases down section with highs of 15% associated larger pyrite clots. Rock is non-magnetic throughout.							
266.38	266.57	Intrusive ? - medium grey, fine grained, highly brecciated and moderately to strongly silicified with moderately developed magnetics locally. Carries trace pyrite whereas surrounding rock contains up to 10% and is non-magnetic.							
266.57	266.85	Same as described above at 265.41 to 266.38 meters. The lower contact is highly irregularly developed due to microfaulting across the intrusive contact.							
266.85	267.53	Dark purple-grey to red-brown, silicified intrusive as described above at 262.02 to 262.63 meters.							
267.53	267.81	Greenish-grey strongly brecciated section with abundant siliceous debris from flanking syenitic intrusive. rock is strongly chloritized and moderately magnetic throughout. Pervasive carbonatization is weakly developed. Lower contact is well developed at 55 degrees to the core axis and cuts obliquely across foliation in underlying rock. This section is probably a late stage mafic intrusive.							
267.81	269.79	Dark purple-grey, intensely silicified and strongly brecciated. Below 268.56 meters, rock is characterized by abundant white silicification - often ductily deformed. This section also carries abundant silica dumping and coarse pyrite clots up to 2 cm in size. rock is dominantly greenish-grey to pale grey in lower 20 cm and brittle deformation is dominant.							
269.79	270.18	Section carries 30 to 40% dark green late stage chloritized shears at approximately 30 degrees to the core axis - zone may contain minor relic chloritized material. Abundant pyrite along shear planes as fracture fillings. Trace magnetics are							

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		irregularly developed throughout.							
270.18	271.09	Dark purple-grey breccia fragments in buff coloured more finely brecciated matrix - all silicified breccia. pyrite contents up to 20% are noted in buff coloured groundmass breccia. average pyrite content is 5 to 7% due to relatively lower amounts of pyrite in purple-grey rock.							
271.09	272.15	Continuation of overlying section becoming paler coloured with increasing buff and pale grey hues. pyrite contents also increases with clots up to 2 cm often elongated within late stage healed fractures. Many clots are displaced across hairline microfaults.							
272.15	273.53	Dark grey intensely silicified breccia with approximately 10% sections of brecciation with lower levels of silicification, generally weak to moderate. minor relic chloritized material is noted locally. The amount of pyrite clots decreases down section as does pyrite content from approximately 5% at top of section.							
273.53	273.61	Abundant late stage chloritized shear planes at approximately 35 degrees to the core axis. This sheared material carries abundant silicified breccia debris.							
273.61	273.81	Fine grained and weakly foliated at 40 degrees to the core axis, pervasively silicified increasing upwards towards the overlying shear planes. Rock is non-magnetic and non-reactive to HCl - resembles intrusive, possibly diorite. upper and lower contacts are relatively sharp parallel to foliation.							
273.81	274.77	Pale grey to buff coloured, intensely silicified breccia with abundant late stage white silica dumping around breccia fragments. pyrite content averages 3 to 5% dominantly as a filling in late stage healed fractures and as overgrowths on earlier pyrite to form 2 to 5 mm clots.							
274.77	323.75	TRANSITIONALLY SILICIFIED ZONE							
			21683	274.77	275.39	.62	1	tr	tr
		The zone is composed of dark green, very fine grained chloritized rock with variable amounts of pale grey to purple-grey and buff coloured, moderately to intensely developed silicification. Brecciation is the dominant	21684	275.39	276.39	1.00	1-2	.340	.34
			21685	276.39	277.19	.80	1-3	.272	.34
			21686	277.19	278.00	.81	2-3	1.806	2.23
			21687	278.00	278.27	.27	NIL	.046	.17

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From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		control on silicification and generally, the degree of alteration increases within wider and more finely brecciated seams. The zone carries an average content of 25% with several sections of greater than 80% silicified breccia. Minor silicification is also noted as 1 to 5 mm halos bordering fractures related to brecciation. pyrite contents up to 5% are noted locally in same forms as in main silicified zone - rare coarse clots. magnetics are rare throughout zone and are generally very weak if present. Most chloritized section exhibit a well developed foliation ranging from 30 to 60 degrees to the core axis - generally steepening down section. silicified breccia seams tend to parallel foliation.	21688	278.27	279.10	.83	1	.282	.34
			21689	279.10	279.90	.80	1	.136	.17
			21690	279.90	280.77	.87	1	.148	.17
			21691	280.77	281.55	.78	1	tr	tr
			21692	281.55	282.33	.78	1	.133	.17
			21693	282.33	283.11	.78	1	.133	.17
			21694	283.11	283.60	.49	1-2	.338	.69
			21695	283.60	284.45	.85	0-1	tr	tr
			21696	284.45	285.30	.85	0-1	.144	.17
			21697	285.30	286.15	.85	0-1	.145	.17
			21698	286.15	287.02	.87	0-1	.600	.69
			21699	287.02	287.89	.87	0-1	tr	tr
			21700	287.89	288.73	.84	2-3	1.151	1.37
			21701	288.73	289.67	.94	0-1	.160	.17
274.77	275.18	Greater than 50% silicified breccia developed along 1 to 5 cm seams often with central controlling fractures. seams are weakly foliated at approximately 30 degrees to the core axis. A narrow off-shoot of the underlying mafic intrusive is noted at 275.05 to 275.07 meters at 25 degrees to the core axis, feathering into silicified breccia and terminating.	21702	289.67	290.67	1.00	0-1	.170	.17
			21703	290.67	291.68	1.01	0-1	.172	.17
			21704	291.68	292.59	.91	0-1	.309	.34
			21705	292.59	293.25	.66	0-1	.112	.17
			21706	293.25	294.05	.80	0-1	1.232	1.54
			21707	294.05	294.93	.88	0-1	1.206	1.37
			21708	294.93	295.83	.90	0-1	.153	.17
			21709	295.83	296.78	.95	0-1	.162	.17
			21710	296.78	297.61	.83	0-1	tr	tr
			21711	297.61	298.65	1.04	0-1	.177	.17
275.18	275.29	Mafic intrusive - olive green, very fine grained, weakly to moderately magnetic, well foliated at 25 to 30 degrees to the core axis, with irregular contacts due to microfaulting. Contacts are generally parallel to foliation. Resembles mafic intrusives in other holes.	21712	298.65	299.60	.95	1	.162	.17
			21713	299.60	300.39	.79	1-2	.545	.69
			21714	300.39	301.24	.85	1	.289	.34
			21715	301.24	301.77	.53	1-2	.726	1.37
			21716	301.77	302.72	.95	1	.323	.34
			21717	302.72	303.72	1.00	1	tr	tr
			21718	303.72	304.40	.68	1	.116	.17
275.29	276.39	Same as described above at 274.77 to 275.18 meters with 45 to 50% pale grey silicified breccia in section up to 23 cm in width.	21719	304.40	304.91	.51	1	.087	.17
			21720	304.91	305.88	.97	0-1	tr	tr
			21721	305.88	306.83	.95	0-1	tr	tr
			21722	306.83	307.87	1.04	0-1	.177	.17
276.39	278.00	Silicified breccia with less than 5% chloritized late stage shears generally parallel to foliation at 50 to 55 degrees to the core axis. Abundant white silica filled fractures within silicified breccia. Pyrite content generally increases down section towards underlying intrusive and buff colouration develops. Lower 5 to 6 cm is strongly foliated and chloritized sheared material.	21723	307.87	308.48	.61	1-2	1.671	2.74
			21724	308.48	309.15	.67	1-2	2.988	4.46
			21725	309.15	309.87	.72	1	1.728	2.40
			21726	309.87	310.49	.62	2-3	.849	1.37
			21727	310.49	311.45	.96	0-1	.499	.52
			21728	311.45	312.35	.90	0-1	.306	.34
			21729	312.35	313.28	.93	0-1	.642	.69
			21730	313.28	314.26	.98	0-1	.167	.17
			21731	314.26	315.28	1.02	0-1	.347	.34
			21732	315.28	315.97	.69	0-1	.235	.34
278.00	278.27	Mafic intrusive - pale grey, generally same as described above at 275.18 to 275.29 meters. Carries silicified breccia xenoliths up to 1 mm.	21733	315.97	316.84	.87	0-1	tr	tr
			21734	316.84	317.84	1.00	1	tr	tr
			21735	317.84	318.84	1.00	0-1	.340	.34
			21736	318.84	320.04	1.20	1-2	.408	.34
278.27	283.11	Dark green very fine grained chloritized rock with 10 to 15% silicified breccia in seams up to 6 cm, averaging 2 to 3 cm in	21737	320.04	321.00	.96	0-1	.326	.34
			21738	321.00	321.97	.97	0-1	.330	.34
			21739	321.97	322.83	.86	1-2	1.471	1.71

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From	To	Description	Sample	From	To	Length	% Sul	BW	Au
		width and well developed foliation at 45 to 50 degrees to the core axis. Silicified rock is often weakly reactive to HCl.	21740	322.83	323.75	.92	0-1	tr	tr
283.11	283.60	As described above with 65% silicified breccia. Foliation is highly irregular due to intensified deformation.							
283.60	287.89	Continuation of overlying section with 5 to 10% silicification often bordering central silicified fractures outwardly radiating silicification along other fractures. Chloritized sections are irregularly hematized and well foliated at 40 degrees to the core axis. Abundant grey carbonatized seams are noted along foliation. Some foliation planes exhibit grooving due to shear-type movement along core axis to approximately 70 degrees plunge westerly.							
287.89	288.73	As described above with 45% silicified breccia in sections up to 20 cm in width. Pyrite contents up to 5% are noted locally as very fine grained disseminations and stringers within healed fractures. Silicification is weakly reactive to HCl. White silica flooding is noted locally. Irregular hematization throughout in chloritized sections.							
288.73	293.25	5 to 10% silicified breccia as described above at 283.60 to 287.89 meters. Silicification is often intense with localized concentrations of up to 5% pyrite. Some pervasive carbonatization is noted in non-silicified breccia. Carbonatized 1 to 5 mm laminations also noted along foliation at 50 degrees to the core axis. foliation is often deformed into open folds indicating south side down - type movement.							
293.25	294.93	Continuation of overlying zone with approximately 25% silicified breccia.							
294.93	297.61	Well foliated section with 5 to 10% silicified breccia seams up to 3 cm in width. Chloritized rock contains abundant carbonatized breccia seams and laminations at 40 to 50 degrees to the core axis - generally parallel to foliation.							
		Zone of highest transitional type silicification below the main silicified zone with 35 to 40% silicification overall in sections up to 35 cm in width, averaging approximately 4 cm. Minor silica dumping noted locally. Chloritized rock is often sheared along							

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		foliation at 45 degrees to the core axis. pyrite content is highest in broader breccia section and not associated with most intense brecciation. 304.91 307.87 continuation of overlying zone with 20% silicified breccia in sections up to 10 cm in width.							
307.87	309.15	80% silicified breccia with sections of chloritized rock up to 5 cm in width. Maximum pyrite content of 3 to 4% is noted associated with localized silica dumping. Pyrite also noted in 1 mm seams along foliation at 55 degrees to the core axis.							
309.15	309.86	Approximately 45% silicified breccia as described above.							
309.86	310.49	85 to 90% silicified breccia with foliated, chloritic sections up to 3 cm in width. Two planes of intense silica flooding are noted above sections of intensely silicified breccia. The upper margin of one of these zones is marked by a fault plane at 60 degrees to the core axis - parallel to foliation. Rock carrying silica dumping contains up to 10% pyrite.							
310.49	315.28	Amount of silicification decreases sharply to 10 to 12% often as seams centred on silica filled fractures. Silicified breccia locally increases where foliation is highly deformed. A 1 cm quartz vein at 312.27 parallel to foliation marks a minor fault plane, also parallel to foliation at 58 degrees to the core axis. Section at 312.28 to 312.35 meters resembles weakly magnetic mafic intrusives as described above.							
315.28	316.84	Chlorite - carbonate schist with nil silicification and carbonatized laminations comprising 10 to 20% of section. highly foliated throughout at 50 to 60 degrees to the core axis.							
316.84	321.97	Amount of silicified breccia increases sharply to 50% in sections up to 35 cm in width. chloritized rock between silicified sections is schist and carries abundant silicified and carbonatized laminations. a section of 90% silicified breccia is noted at 318.98 to 320.02 meters. Clots of pyrite up to 1.5 cm are noted throughout associated with largest continuous sections of silicification.							

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From	To	Description	Sample	From	To	Length	% Sul	GM	Au
321.97	322.83	Intensely silicified breccia with more intense brecciation allowing complete silicification.							
322.83	323.75	Sharp decrease in amount of silicified breccia to 5% - rock becomes well laminated at 45 to 50 degrees to the core axis. highly carbonatized seams highlight foliation.							
323.75 344.67 CHLORITE-CARBONATE SCHIST									
		Dark green, fine to very fine grained and generally well laminated/foliated. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 10-20% of the rock volume. The rock is weakly to moderately well parted throughout. Hematite is found as a very fine interstitial dissemination within the chloritized groundmass. Rocks are non-magnetic with a trace locally. several 2 to 3 cm silicified seams are noted between 329.30 and 329.80 meters and carry up to 2% very finely disseminated pyrite. these sections are weakly to moderately brecciated. Intensified carbonatization is often noted within section of increased brecciation. foliation is noted at 50 degrees to the core axis at 324.50 and 327.00 meters, 60 degrees to the core axis at 331.00 meters, 60 to 65 degrees to the core axis at 333.30 meters 55 degrees to the core axis at 340.00 meters and 65 degrees to the core axis at 342.70 meters.	21741	323.75	324.78	1.03	0-1	tr	tr
			21742	324.78	325.79	1.01	0-1	tr	tr
			21743	325.79	326.79	1.00	0-1	tr	tr
			21744	326.79	327.79	1.00	0-1	tr	tr
			21745	327.79	328.79	1.00	0-1	tr	tr
			21746	328.79	329.79	1.00	0-1	tr	tr
			21747	329.79	330.80	1.01	0-1	tr	tr
			21748	330.80	331.80	1.00	0-1	tr	tr
			21749	331.80	332.80	1.00	0-1	tr	tr
			21750	332.80	333.80	1.00	0-1	tr	tr
			21751	337.00	338.00	1.00	0-1	tr	tr
		21752	339.00	340.00	1.00	1	tr	tr	
		21753	343.66	344.67	1.01	0-1	tr	tr	
344.67 355.00 GREENSCHIST									
		Medium to dark green, very fine grained and weakly foliated throughout at approximately 50 degrees to the core axis as highlighted by orientation of chlorite and occasional carbonatized 1 to 2 mm seams. Irregularly developed bands up to 3 cm in width may be relic pillow selvages. Recognizable pillow rims are noted at 352.39 meters and possibly at 349.0 and 352.4 meters. well developed randomly oriented fracturing is noted throughout as compared to parallel parting in overlying zone. the foliation is noted at 55 degrees at 348.30 meters and 60 degrees to the core axis at 352.50 meters. Lower contact is gradational into pillowed flow.	21754	344.67	345.75	1.08	1	tr	tr
			21755	345.75	346.75	1.00	0-1	tr	tr

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From To -----Description----- Sample From To Length % Sul GN Au

55.00 367.81 BASALT

Medium green fine to very fine grained massive and pillowed flows, generally non-magnetic and weakly altered with combined moderate chloritization and weak to moderate pervasive carbonatization. Rock becomes increasingly foliated down section below pillowed flow.

355.00 360.48 Pillowed flow - irregularly fractured, locally foliated and deformed pillowed flow. Localized brecciation is moderately pervasive carbonatization.

360.48 360.70 Irregularly brecciated section - probably a flow contact zone.

360.70 367.81 Massive flow - very fine grained, weakly pervasively carbonatized with very weakly developed foliation locally at 45 to 50 degrees to the core axis. rock resembles greenschist near base of hole with increasing foliation down section.

367.81 Meters : END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Coordinates: 9738.8 8750.0

DIAMOND DRILL RECORD

HOLE NO.: MC.86-274

Azimuth: 344.6

Section: 250W

Property: Barrick East Dis.

Dip: -70.0

Core Size: 80

Location: 2+50W 2+61.5S

Elevation: 5002.3

Date Started: 16 June, 1986

Length: 434.6

Date Completed: 27 June, 1986

Logged by: A.W. Workman

Measurement:

Comments: DDH drilled onto Worst Option

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-68.0	182.88		-65.0	365.76		-62.0
78.33	347.0	-68.0	229.21	344.0	-64.5	402.34	343.0	-59.0
91.44		-66.0	274.32		-65.0	411.48		-54.0
137.16		-67.5	320.04		-65.5	432.62		-54.0
159.11	345.5	-67.0	335.89	343.0	-65.0			

-----Log Summary-----

.00 22.25 OVERBURDEN.  
 22.25 139.52 BASALT.  
 139.52 207.07 DIORITE.  
 207.07 226.15 BASALT.  
 226.15 263.58 DIORITE.  
 263.58 271.35 BASALT.  
 271.35 273.36 GRANDDIORITE.  
 273.36 279.08 BASALT.  
 279.08 293.28 DIORITE.  
 293.28 302.86 BASALT.  
 302.86 334.87 DIORITE.  
 334.87 358.66 BASALT.  
 358.66 361.27 GREENSCHIST.  
  
 361.27 368.03 CHLORITE-CARBONATE SCHIST.  
  
 368.03 375.07 MAIN MINERALIZED ZONE.  
  
 368.03 375.07 TRANSITIONALLY SILICIFIED ZONE.  
  
 375.07 415.95 CHLORITE-CARBONATE SCHIST.  
  
 415.95 425.40 GREENSCHIST.  
 425.40 428.74 BASALT.  
 428.74 434.15 GREENSCHIST.  
 434.15 434.63 BASALT.  
  
 434.63 Meters : END OF HOLE.

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From To -----Description----- Sample From To Length % Sul 6W Au

.00 22.25 OVERBURDEN

22.25 139.52 BASALT

Medium grey-green to dark green, generally very fine grained pillowed and massive flows are found in this zone. Paler colours are noted where minor silicification has occurred. Basalt is relatively unaltered and is generally non-magnetic. relic volcanic structures are well exhibited throughout. Several late stage mafic intrusives are noted within the volcanic sequence.

22.25 26.65 Grey-green, fine grained massive flow - upper 50 cm is highly silicified. Increasing fracturing down section.

26.65 34.10 Intensely fractured with abundant ground core and approximately 50% core recovery - probable fault zone. hematite and limonite noted on most fractures - one set is sub-parallel to core axis.

34.10 37.92 Pale green, very fine grained weakly fractured pillowed flow.

37.92 38.85 Intermediate intrusive - pinkish-green, fine grained and weakly magnetic locally. Upper contact at 35 degrees and lower at 55 degrees to the core axis.

38.85 46.35 Medium to dark green, very fine grained pillowed flow.

46.35 46.97 Mafic intrusive - dark grey, fine grained and moderately magnetic, possible biotites ?.

46.97 50.15 Dark green pillowed flow.

50.15 50.69 Variably brecciated basal flow.

50.69 50.75 Chilled flow bottom - well foliated at 80 degrees to the core axis.

50.75 51.00 Silicified, epidotized shrinkage fractured flow top.

51.00 54.50 Variably brecciated, locally vesicular flow top.

54.50 61.43 Very fine grained massive flow.

61.43 61.53 Silicified and epidotized, moderately brecciated contact zone with well developed foliation at 60 degrees to the core axis.

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
61.53	69.00	Very fine grained massive flow with very fine chlorite filled vesicles throughout up to 0.5 mm.							
69.00	79.95	Continuation of overlying section becoming fine grained locally and carrying pale yellow-green euhedral feldspar phenocrysts up to 1 cm. phenocrysts are often glomeroporphyritic below 78.00 meters.							
79.95	80.20	Epidotized and silicified flow contact zone.							
80.20	98.95	Mixed flow top and more rounded reaction rimmed type breccia with fragments up to 3 cm. pale coloured 1 to 5 mm feldspar phenocrysts are noted throughout with glomeroporphyritic texture below 87.1 meters.							
98.95	100.22	Mafic intrusive - fine grained equigranular matrix with euhedral pink feldspar phenocryst up to 5 mm. Well chilled contacts at 60 to 65 degrees to the core axis. very weakly pervasively carbonatized and non-magnetic.							
100.22	104.83	Fine to very fine grained massive flow.							
104.83	105.70	Fault zone - highly fractured and sheared with red hematite filling in fault planes at 104.85 and 105.50 meters. Angle of fault plane is unknown due to ground core - minor secondary fracturing sub-parallel to core axis.							
105.70	116.15	Pale green pillowed flow.							
116.15	117.35	Epidotized and silicified, irregularly brecciated basal flow.							
117.35	117.65	Brecciated and epidotized flow top.							
117.65	124.50	Dark green, highly auto fractured very fine grained massive flow.							
124.50	126.30	Continuation of overlying section with abundant quartz - carbonate filled fractures and brecciated seams sub-parallel to core axis.							
126.30	139.52	Same as described above at 117.65-124.50. foliation is well developed at 35 degrees to the core axis in section noted at 131.05 to 131.30 meters - possibly due to flowage. Abundant late stage shearing noted at 35 degrees to the core axis between 132.55 and 134.75 meters.							
138.73	139.06	Intermediate intrusive - contacts at 40 degrees to the core axis.							

139.52 207.07 DIORITE

Fine grained massive rock with equigranular texture and

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		more weakly developed fracturing than bordering basalt. Rock is non-magnetic and relatively unaltered.							
139.52	139.67	Carbonatized intrusive margin with contact at 45 degrees to the core axis sub-parallel to overlying intrusive at 138.8 meters.							
139.67	141.45	Very fine grained weakly fractured massive.							
141.45	145.10	Fine grained with localized weakly magnetic mafic phases.							
145.10	160.50	Dominantly fine grained, weakly fractured.							
160.50	185.50	Fine grained with local very fine grained phases.							
185.50	193.20	Same as described above at 141.45 to 145.10 meters - carries epidotized healed fractures and hematized fractures sub-parallel to core axis.							
193.20	197.10	Fine to medium grained, weakly fractured.							
197.10	203.60	Fish-net textured medium grained and very weakly fractured.							
203.60	206.70	Gradual fining trend down-hole.							
206.70	207.07	Very fine grained to aphanitic, chilled margin becoming foliated below 206.98 meters at 50 degrees to the core axis parallel to intrusive contact.							
207.07	226.15	BASALT							
		Dark green fine to very fine grained massive and pillowed flow noted in this section of relatively unaltered but moderately fractured rocks. pillow selvages are indistinct structures. Minor porphyritic flow is noted locally. Basalt is non-magnetic throughout.							
207.07	207.97	Fine to very fine grained massive flow. Gradual fining trend down-hole to a well chilled contact at 50 to 55 degrees to the core axis.							
207.97	209.50	Very dark green, vesicular, weakly brecciated massive flow top.							
209.50	213.13	Continuation of above with no vesicles.							
213.13	219.03	Irregularly vesicular with abundant silicified, epidotized and quartz flooded seams - probably pillowed.							
219.03	219.12	Well foliated basal flow with contacts at approximately 20 degrees to the core axis.							
219.12	219.28	Highly epidotized and silicified flow top crust with minor hyaloclastite.							
219.28	223.20	Vesicular flow top section grading to largest, 5 mm vesicles at 221.20 meters decreasing in size below.							
223.20	226.10	porphyritic section with euhedral feldspar							

From	To	Description	Sample From	To	Length	% Sul	BW	Au
		phenocrysts up to 4 mm.						
226.10	226.15	Very fine grained massive flow with highly silicified and quartz veined seam at base.						
226.15	263.58	DIORITE						
		Medium green, fine to very fine grained massive equigranular rock becoming generally coarser grained down section. rock is non-magnetic with patches of weakly to moderately developed magnetics. Alteration is very weak throughout.						
226.15	227.13	Very fine grained margin.						
227.13	227.36	Felsic intrusive - pink fine grained groundmass with euhedral zoned feldspar phenocrysts up to 1 cm. Contacts at approximately 50 degrees to the core axis. Note: sample taken for reference.						
227.36	235.10	Very fine grained and non-magnetic becoming weakly to moderately magnetic locally, generally increasing below 231.80 meters. gradual coarsening trend down-hole						
235.10	236.00	Fine to medium grained and moderately magnetic.						
236.00	239.00	Fine grained, gradual fining trend down-hole, becoming weaker magnetically.						
239.00	243.50	Gradual coarsening trend down-hole to fine to medium grained at 239.50 to 240.10 meters and fining below. magnetics decrease from very weakly magnetic at top to non-magnetic at base.						
243.50	245.50	Very fine grained and fining down section. Non-magnetic.						
245.50	249.00	Texture becomes relatively coarser grained and weakly porphyritic with occasional pale green euhedral feldspar phenocrysts up to 3 mm. Irregular texture becoming fine grained locally.						
249.00	249.30	Fines down section to very fine grained and becomes very weakly magnetic.						
249.30	249.56	Quartz - carbonate vein zone with irregular contacts.						
249.56	263.58	Fine grained, equigranular and weakly porphyritic with feldspar phenocrysts as described above. Very weakly developed fracturing. a few 1 to 3 cm vesicular basalt xenoliths are noted at lower contact at 30 degrees to the core axis.						

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
263.58	271.35	BASALT	21756	264.43	265.19	.76	5	.258	.34
<p>Medium grey-green, very fine grained, often vesicular and brecciated massive flow. Fracturing is moderately developed throughout. rock is vuggy locally and voids are often filled with massive pyrrhotite, minor chalcopyrite and abundant euhedral 1 to 5 mm pyrite crystals.</p>									
271.35	273.36	BRANDIDORITE	21757	271.73	272.64	.91	2-3	.309	.34
<p>Medium green and very fine grained near contacts at 45 to 50 degrees to the core axis becoming pink to pinkish-green and more felsic in centre and fine to medium grained. Average composition is approximately 50% feldspar, 10% quartz and 40 % amphibole. rock is massive, non-magnetic, relatively unaltered and carries 2 to 3% pyrite as a very fine grained dissemination throughout. Fracturing is weakly developed.</p>									
273.36	279.08	BASALT							
<p>Dark green, very fine grained massive flow with moderately developed fracturing throughout. a localized foliation at 60 to 70 degrees to the core axis associated with minor pervasively carbonatized dioritic intrusive up to 30 cm in width (eg. 276.68-276.98 m). zone becomes moderately magnetic within 1 meters of lower contact with intrusive.</p>									
279.08	293.28	DIORITE	21758	279.48	280.51	1.03	1	tr	tr
<p>The upper half of the zone is characterized by moderate to strong deformation, strong pervasive carbonatization and weak to moderate magnetics. these features become less strong down section and the intrusive is fine grained, equigranular, massive and relatively unaltered. 279.08 280.50 very strongly fractured, often brecciated, becoming well foliated locally at 30 degrees to the core axis. section is moderately pervasively carbonatized. Possible basalt xenoliths locally.</p>									
280.50	282.59	Fine grained massive, highly carbonatized and possibly silicified locally. rock has	21759	280.51	281.50	.99	1	tr	tr
			21760	281.50	282.60	1.10	1	tr	tr
			21761	282.60	283.33	.73	1	tr	tr
			21762	283.33	284.37	1.04	1	tr	tr

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		a generally granulated appearance and carries 10 to 20% 1 to 2 mm pink clasts throughout.							
282.59	283.33	Quartz vein with abundant dark green chloritic material in 80% of rock - central section is relatively free quartz.							
283.33	284.53	Massive and fine grained, becoming irregularly foliated locally.							
284.53	292.60	Massive, fine grained equigranular dioritic textured. Non-carbonatized and non-magnetic.							
292.60	293.28	Gradationally fines down section to a well chilled and locally brecciated contact at 55 degrees to the core axis.							

293.28 302.86 BASALT

Section is composed of fine grained massive flow with well exhibited volcanic textures and structures - relatively unaltered. Rocks are non-magnetic.

293.28	293.70	Fine to very fine grained, weakly to moderately brecciated, possibly chilled massive flow.							
293.70	296.00	Flow top breccia with angular to subangular fragments up to 3 cm with hyaloclastite - bearing matrix material. Largest fragments are rounded with reaction rims.							
296.00	297.45	Auto-breccia with epidotized fractures and void fillings.							
297.45	302.24	Dominantly massive flow with well developed flow breccia locally.							
302.24	302.86	Greenschist - strongly deformed basalt with abundant white calcite filling fractures and voids along foliation at 50 degrees to the core axis.							

302.86 334.87 DIORITE

Generally a medium green, fine grained, massive, equigranular relatively unaltered and generally non-magnetic rock. Fracturing is very weakly developed.

302.86	310.80	Fine to very fine grained.							
310.80	317.50	Fine grained section gradationally increasing grain size down section. Trace magnetics locally.							
317.50	321.90	Continuation of above becoming finer grained down section with trace magnetics.							

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
321.90	322.30	Shear zone - chloritized with quartz - carbonate veining parallel to shearing at 25 degrees to the core axis.							
322.30	323.00	Minor continuation of shearing along narrow planes.							
323.00	331.00	Fine grained with localized medium grained phases.							
331.00	334.75	Fine grained gradationally fining down section.							
334.75	334.87	Very fine grained, highly foliated contact zone - probable contact at 55 to 70 degrees to the core axis.							
34.87	358.66	BASALT	21763	354.03	355.00	.97	TR	tr	tr
		Zone is generally very fine grained massive flow with well developed structures and textures due to relatively low degree of alteration. fracturing is more strong than in overlying intrusive section. Basalt is non-magnetic throughout. an increase in pervasive carbonatization is noted down section, particularly below 356.80 meters.							
334.87	339.20	Very fine grained to aphanitic with highly epidotized and silicified sections of auto-breccia up to 40 cm in width.							
339.20	345.25	Continuation of above with less brecciation and fracturing. flow becomes weakly porphyritic with euhedral pale green epidotized feldspar phenocrysts up to 1.5 cm in size.							
345.25	348.75	Flow breccia.							
348.75	349.17	Intermediate intrusive - dioritic and very fine grained.							
349.17	354.05	Flow breccia.							
354.05	356.80	Very fine grained and porphyritic with phenocryst as described above up to 1 cm.							
356.80	358.66	Very fine grained massive flow with increasing pervasive carbonatization down section becoming moderately developed at 358.00 meters and strong at base. a very weakly developed foliation begins near the base of the zone.							
358.66	361.27	GREENSCHIST	21764	358.66	359.68	1.02	0-1	tr	tr
		Medium grey-green, very fine grained continuation of overlying section with increasing pervasive carbonatization and foliation down section. foliation	21765	359.68	360.63	.95	0-1	tr	tr
			21766	360.63	361.27	.64	0-1	1.094	1.71

From To -----Description----- Sample From To Length % Sul GW Au

is highlighted by mm scale carbonate filled fractures at 50 to 55 degrees to the core axis. pervasive carbonatization in green chloritic rock and amount of finely granulated mm seams increases down section. trace magnetics noted locally. Minor hematization in chloritized rock exhibited near carbonatized material.

361.27 368.03 CHLORITE-CARBONATE SCHIST

Dark green, fine to very fine grained and generally well laminated/foliated. The rock is weakly chloritized pervasively - perhaps due to regional metamorphism. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 20% of the rock volume. Rare silicification is noted as a purple-grey hue within carbonatized seams. The rock is weakly to moderately well parted throughout. Hematite is found as a very fine interstitial dissemination within the chloritized groundmass. This hematization is noted associated with carbonatized seams. the foliation is noted at 35 degrees to the core axis at 361.60, 40 degrees at 362.20, 45 degrees at 364.90 and 55 to 60 degrees to the core axis at 367.80 meters. a 2 mm clay filled fault plane is noted parallel to foliation at 361.80 meters. localized drag-folding and chevron folds within foliation. indicates south side down movement. a minor increase in brecciation noted down section as fracturing normal to foliation or parallel to crenulation at approximately 75 degrees to foliation.

21767	361.27	362.26	.99	0-1	1.020	1.03
21768	362.26	363.21	.95	0-1	.978	1.03
21769	363.21	364.14	.93	0-1	.316	.34
21770	364.14	365.09	.95	0-1	tr	tr
21771	365.09	366.07	.98	0-1	tr	tr
21772	366.07	367.07	1.00	0-1	tr	tr
21773	367.07	368.03	.96	0-1	.326	.34

MAIN MINERALIZED ZONE : 368.03 375.07.

Zone is composed of transitional type alteration only although a relic main silicified zone is apparent immediately below the McKenna Fault. Silicification is not well developed and pyrite contents are much lower than normal. the section is dominated by the widespread development of foliation by ductile deformation.

368.87 MCKENNA FAULT PLANE.

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
368.03	375.07	TRANSITIONALLY SILICIFIED ZONE							
			21774	368.03	368.87	.84	1	2.596	3.09
		Dark green very fine grained strongly chloritized rock with well developed foliation and 5 to 10% silicification along laminations up to 5 mm in width parallel to foliation and in localized breccia seams up to 2 cm in width. silicification is of moderate strength and is characterized by a purple-grey colouration. laminations within the foliation are generally highlighted by 1 to 5 mm cream to pale grey coloured carbonatization. silicified rock carries increased pyrite contents although amount is highly variable from minor disseminations to massive 3 to 5 mm pyritic bands along foliation. Silicified breccia averages 2 to 3% pyrite. Chloritized and carbonatized rock contains 0 to 1%. The McKenna Fault is represented by a clay seam at 40 degrees to the core axis at 368.87 meters. the fault plane is coated with 2 to 3 mm of green clay. Grooving or slickensides on fault plane is not well developed. possible westerly plunges at -60 degrees may be indicated. a distinct although minor increase in silicification and pyrite content is noted below the McKenna Fault. the section between the fault plane and 369.41 meters was probably massively silicified and subsequently was rebrecciated through mm scale shearing. this section is now characterized by silicified clasts in an intensely sheared chloritic schist cut by numerous late stage carbonate filled fractures.	21775	368.87	369.41	.54	1-2	tr	tr
			21776	369.41	370.21	.80	1	tr	tr
			21777	370.21	371.06	.85	1	tr	tr
			21778	371.06	371.95	.89	1	tr	tr
			21779	371.95	372.87	.92	1	tr	tr
			21780	372.87	373.83	.96	2-3	.662	.69
			21781	373.83	374.67	.84	1-2	.580	.69
			21782	374.67	375.07	.40	TR	.136	.34
368.03	368.87	5% silicified lamination and seams up to 2 cm in width. Foliation at 40 degrees to the core axis.							
368.87	369.41	50% silicified fragments in sheared chloritic material - probable relic main silicified zone. base of section is marked by a clay-coated highly irregular fault plane.							
369.41	374.67	Same as described above at 368.03 to 368.87 meters. foliation is at 50 degrees to the core axis and a crenulation cleavage is developed locally at 70 degree to foliation with a distinct easterly plunge. Amount of silicified breccia down section with local increase below 372.87 meters carrying 3 to 5% pyrite locally in massive pyrite laminations.							
374.67	375.07	Red-brown, aphanitic, highly brecciated and siliceous zone with possible pale pink 1 mm feldspar phenocrysts. trace pyrite noted as is normal in intrusives of this type.							

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
375.07	415.95	CHLORITE-CARBONATE SCHIST							
		Dark green, fine to very fine grained and generally well laminated/foliated. The foliation becomes distinctly better developed down section from a 4 meters upper section containing abundant carbonatized brecciation and up to 15% silicification locally. The rock is weakly to moderately well parted throughout. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Grey carbonatization is rarely coloured by purple-grey silicification. Hematite is found as a very fine interstitial dissemination within the chloritized groundmass locally.	21783	375.07	376.00	.93	1	.316	.34
			21784	376.00	377.00	1.00	1	.340	.34
			21785	377.00	378.03	1.03	1	.350	.34
			21786	378.03	379.00	.97	1	.330	.34
			21787	379.00	379.94	.94	1-2	.320	.34
			21788	379.94	380.94	1.00	1	.340	.34
			21789	380.94	381.95	1.01	1-2	.343	.34
			21790	381.95	382.95	1.00	1	tr	tr
			21791	382.95	383.97	1.02	1	tr	tr
			21792	383.97	384.97	1.00	0-1	tr	tr
			21793	384.97	385.97	1.00	0-1	tr	tr
			21794	385.97	386.97	1.00	0-1	tr	tr
			21795	386.97	387.97	1.00	0-1	tr	tr
			21796	387.97	388.97	1.00	0-1	tr	tr
375.07	379.15	Minor locally brecciated and silicified sections with well developed chloritic foliation throughout carrying minor reddish-pink clasts of material similar to overlying intrusive.	21797	388.97	389.97	1.00	0-1	tr	tr
			21798	389.97	390.97	1.00	0-1	tr	tr
			21799	390.97	391.97	1.00	0-1	tr	tr
			21800	391.97	393.00	1.03	0-1	.350	.34
			21801	393.00	394.00	1.00	0-1	3.090	3.09
379.15	379.50	10 to 15% silicified breccia.	21802	394.00	395.00	1.00	0-1	tr	tr
379.50	383.97	Same as described above at 375.07 to 379.15 meters carrying 2 to 3% silicified material. Minor strongly hematized reddish-green sections are moderately magnetic. Up to 10% pyrite is noted in carbonatized and silicified breccia seams up to 10 cm in width.	21803	395.00	396.00	1.00	0-1	tr	tr
			21804	398.00	399.00	1.00	0-1	tr	tr
			21805	401.00	402.00	1.00	0-1	tr	tr
			21806	405.00	406.00	1.00	0-1	tr	tr
			21807	411.00	412.00	1.00	0-1	tr	tr
			21808	415.04	415.95	.91	TR	.309	.34
383.97	415.95	Sharp change to typical chlorite - carbonate schist. Non-magnetic. A minor amount of the sequence has a distinct granular appearance with grains up to .mm. Rare sections up to 4 cm are brecciated and quartz flooded with no pyrite. a 5 mm sheared fault zone at 398.54 meters at 55 degrees to the core axis and parallel to foliation. zone carries rare 1 cm seams of purple-grey silicified breccia. foliation at 55 degrees to the core axis at 386.25 meters and 415.00 meters, 50 degrees at 391.80 and 405.50 meters, and 55 to 60 degrees to the core axis at 397.20 meters.							
415.95	425.40	GREENSCHIST							
		Medium green, very fine grained well parted and moderately foliated rock with relic volcanic structures,	21809	415.95	416.85	.90	TR	.306	.34

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From To -----Description----- Sample From To Length % Sul GW Au

possibly pillows. rock is not pervasively carbonatized and is non-magnetic. carbonate is restricted to fracture fillings and carbonatized laminations - not as abundant as in overlying schist. Some relic pillow rims exhibit moderate to strong epidotization below 419.50 meters. Foliation decreases in strength down section. foliation at 50 degrees to the core axis at 419.75 meters and at 423.00 meters. Point to point, foliation is highly irregular.

25.40 428.74 BASALT

Continuation of overlying section with very weakly developed foliation and abundant epidotized pillow rims. Rock is very fine grained and non-magnetic.

428.74 434.15 GREENSCHIST

21810 431.71 432.68 .97 3-5 1.998 2.06

Same as described above at 415.95 to 425.40 meters with volcanic textures and structures not easily recognizable due to very well developed foliation at 45 to 50 degrees to the core axis. sections of highly silicified and carbonatized breccia up to 10 cm in width carry pyrite contents up to 5 to 7% locally. most of these sections are concentrated between 431.71 and 432.68 meters.

434.15 434.63 BASALT

Weakly pillowed flow with good volcanic structures. Minor carbonate filled fractures but no foliation. Non-magnetic.

434.63 Meters : END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords: 9815.1 9000.1

DIAMOND DRILL RECORD

HOLE NO.: MC.86-275

Azimuth: 346.5

Section: 000E

Property: Worvest Option

Dip: -69.0

Core Size: RQ

Location: 0+00E 1+85S

Elevation: 5003.5

Date Started: 28 June, 1986

Length: 370.9

Date Completed: 9 July, 1986

Logged by: A.W. Workman

Measurement: Metric

Comments: Casing left in ground

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-66.0	152.10	338.0	-66.0	274.32		-61.0
60.96	338.3	-68.0	182.88		-64.5	320.04		-58.5
91.44		-68.0	228.60		-64.5			
137.16		-66.0	263.96	337.8	-64.5			

-----Log Summary-----

.00 41.15 OVERBURDEN.  
 41.15 57.14 DIORITE.  
 57.14 60.98 BASALT.  
 60.98 119.25 DIORITE.  
 119.25 166.79 BASALT.  
 166.79 218.35 DIORITE.  
 218.35 230.00 BASALT.  
  
 230.00 233.91 GREENSCHIST.  
  
 233.91 239.48 CHLORITE-CARBONATE SCHIST.  
  
 239.48 292.63 MAIN MINERALIZED ZONE.  
 239.48 240.09 TRANSITIONALLY SILICIFIED ZONE.  
  
 240.09 262.44 MAIN SILICIFIED ZONE.  
  
 262.44 292.63 TRANSITIONALLY SILICIFIED ZONE.  
  
 292.63 313.27 CHLORITE-CARBONATE SCHIST.  
  
 313.27 340.60 GREENSCHIST.  
  
 340.60 370.85 BASALT.  
  
 370.85 Meters : END OF HOLE.

From -----Description----- Sample From To Length % Sul GW Au

.00 41.15 OVERBURDEN

41.15 57.14 DIORITE

Medium grey-green, generally fine grained, massive and equigranular rock with well developed dioritic texture and very weakly developed fracturing. zone is cut by several mafic to intermediate intrusives at approximately 45 degrees to the core axis. Basal contact is well developed.

41.15 44.00 Fine grained with late stage mafic intrusive at 43.06 to 43.74 meters.

44.00 47.02 Fine to medium grained with epidotized intermediate intrusive at 47.22 to 48.13 meters - weak pink hue.

47.02 53.82 Medium grained section with good fish-net texture.

53.82 57.41 Gradual fining trend down-hole becoming very fine grained below 57.00 and aphanitic in lower 10 cm. Basal contact is along an epidotized and possibly sheared plane at approximately 70 degrees to the core axis.

57.14 60.98 BASALT

Medium green, very fine grained to aphanitic flow with weakly vesicular flow top section with localized granulated and sheared sections at 45 degrees to the core axis. a narrow section at 58.80 to 59.05 meters contains minor hyaloclastite along pillow - like structures. lower contact is a highly quartz veined, hematized and sheared section across 7 cm at approximately 70 degrees to the core axis. shearing is partially healed by heat from underlying intrusive.

60.98 119.25 DIORITE

Chilled and chloritized upper 10 cm of section becomes fine grained down section with minor quartz veining

21811 119.06 119.25 .19 4-5 .196 1.03

From	Description	Sample From	To	Length	% Sul	GW	Au
	locally in upper 50 cm. rock is generally non-magnetic and relatively unaltered but exhibits moderate magnetics between 64.32 and 74.00 meters. the zone is more mafic than normal for diorite and texture is locally sub-ophitic. Rock is more dioritic below 100.0 meters.						
60.98	61.60						
	Very fine grained with chilled upper contact and minor shearing at 70 degrees to the core axis.						
61.60	64.32						
	Fine grained and non-magnetic with porphyritic weakly magnetic intermediate intrusive at 63.74 to 64.32 meters carrying euhedral fractured and epidotized feldspar phenocrysts up to 4 mm.						
64.32	82.20						
	As described above fining down section with weak to moderate magnetics throughout - carries 1 mm purple-grey hematitic patches - probably magnetite aggregates. Magnetics generally become stronger down section in finer grained more mafic sections then less magnetic below 74.00 meters as rock becomes paler green in colour.						
82.20	88.95						
	Fine to very fine grained section with irregularly developed textures and moderately epidotized fractures throughout. Trace magnetics.						
88.95	89.50						
	Very fine grained intermediate intrusive - contacts highly irregular.						
89.50	89.83						
	Blocky and highly quartz veined.						
89.83	100.00						
	Fine to very fine grained, massive and weakly fractured. Non-magnetic. minor healed shear planes at 99.28 to 99.32 meters at 75 degrees to the core axis.						
100.00	112.00						
	Fine grained becoming increasingly dioritic in composition.						
112.00	114.82						
	Gradual fining trend down-hole to a highly silicified and epidotized seam at approximately 60 degrees to the core axis - possible contact between two intrusive phases.						
114.82	115.50						
	Very fine grained gradationally coarsening down section.						
115.50	116.80						
	Fine grained with very finely developed fish-net texture.						
116.80	119.00						
	Very fine grained, fining down section becoming very weakly foliated or sheared with parallel fracturing at approximately 20 degrees to the core axis below 118.75 meters.						
119.00	119.25						
	Contact possibly along epidotized shear at 20 degrees to the core axis at 119.00 meters or at margin of quartz - carbonate bearing breccia seam below 119.06 meters						

From	Description	Sample From	To	Length	% Sul	GW	Au
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at approximately 25 degrees to the core axis. fragments within breccia are purple-grey often carrying buff coloured rims similar to main silicified zone type alteration. silicification is probably early with subsequent white calcite flooding.

## 119.25 166.79 BASALT

Fine to very fine grained massive flows with dark green colouration and well exhibited volcanic structures and textures. zone is cut by localized shears. Basalt is relatively unaltered and is generally non-magnetic.

119.25 125.00 Very fine grained to aphanitic, weakly vesicular with finely developed auto-brecciation throughout often resembles flow top breccia. A well developed shear plane is noted at 50 to 60 degrees to the core axis at 122.69 meters with 25 cm of associated sheared breccia.

125.00 130.68 Fine grained massive zone with moderately developed fracturing throughout.

130.68 132.85 Very fine grained section.

132.85 133.16 Sheared section with planes at 20 degrees to the core axis.

133.16 137.00 Flow top and flow breccia.

137.00 145.35 Fine to very fine grained irregularly textured and sheared, moderately fractured massive flow.

145.35 150.47 Very fine grained and highly fractured with fractures at 20 degrees to sub-parallel to core axis - hematized planes throughout.

150.47 166.79 Less fractured than above - very fine grained massive flow. Non-magnetic - trace locally. a few hematized fractures noted locally as described above.

## 166.79 218.35 DIORITE

Medium to dark green and generally fine grained becoming medium grained locally. Rock is relatively unaltered and non-magnetic with moderate magnetism developed locally. patchy epidotization is exhibited with associated silicification along healed fracture systems.

166.79 167.13 Highly sheared and carbonatized contact section with foliation locally at 65 to 75

From To -----Description----- Sample From To Length % Sul GW Au

degrees to the core axis.  
 167.13 168.00 Very fine grained massive section with strong carbonatization above 167.35 meters and patches of epidotization up to 5 cm in width not related to structure.  
 168.00 191.71 Fine grained equigranular and massive, very weakly fractured. Non-magnetic with moderate magnetics highly localized in more mafic sections. Minor increased healed fracturing below 190.30 meters.  
 191.71 191.95 Highly epidotized, silicified and brecciated section.  
 191.95 192.30 Highly chloritized, locally foliated very fine grained section with minor alteration at lower contact similar to upper margin - possibly non-magnetic intrusive.  
 192.30 205.50 Same as described above at 168.00 to 191.71 meters - equigranular with rare epidotized and silicified patches.  
 205.50 209.00 Fine to medium grained continuation of overlying section with several 1 to 11 cm dark green mafic intrusives.  
 209.00 217.35 Fine grained massive section with irregularly developed textures and grain size.  
 217.35 218.35 Fine grained - gradual fining trend down-hole to a chilled, weakly sheared and chloritic lower contact at approximately 80 degrees to the core axis.

218.35 230.00 BASALT

Basalt is flow brecciated throughout with 5 to 20 mm subangular reaction rimmed fragments well foliated throughout at approximately 45 degrees to the core axis. down section, breccia becomes more rounded with larger, generally vesicular fragments more typical of flow breccia. Open hematized fractures at 10 to 15 degrees to the core axis between 224.90 and 229.05 meters with a major fractured section at 228.90 to 229.05 meters - minor fault. Rock is moderately to strongly pervasively carbonatized throughout. a penetrative foliation is noted increasing in fragments down section.

230.00 233.91 GREENSCHIST

Medium green very fine grained basalt with generally a lack of distinct volcanic structures but relatively weak

21812 232.96 233.91 .95 0-1 .323 .34

From -----Description----- Sample From To Length % Sul GW Au

alteration, rock is moderately foliated at 60 degrees to the core axis and increasing foliation down section. Pervasive carbonatization is moderate at top of section but sharply decreases below a granulated seams 231.30 meters. Rock below this point is fine grained - may be intrusive. carbonatization increase below 232.62 meters as foliation becomes stronger at approximately 45 to 50 degrees to the core axis. minor 1 to 25 cm sections of strongly granulated and highly carbonatized rock are noted locally and increase in number down section. this rock exhibits moderate hematization and silicification locally and carries increased pyrite contents of up to 2% with trace to 1% in chloritized sections. rare 1 mm clay coatings are noted along fractures and partings parallel to foliation. slickensides are irregularly developed and indistinct.

233.91 239.48 CHLORITE-CARBONATE SCHIST

Dark green very fine grained chloritic rock with well developed foliation at approximately 45 degrees to the core axis highlighted by parallel 1 to 20 mm grey strongly carbonatized bands. these seams often swell to cross-cut the foliation locally and feather into the chloritized rock. minor open s-folds indicate south-side down type shearing along the foliation. carbonatization increases down section and hematization is noted as a purple hue in carbonate, also irregularly increasing. rock is weakly fractured and well parted parallel to foliation. Few clay filled fractures are noted along the foliation as minor micro-faults. Chloritic rock carries 0 to 1% pyrite as a very finely disseminated with up to 2% associated highly carbonatized seams often exhibiting minor brecciation.

21813	233.91	234.98	1.07	0-1	1.830	1.71
21814	234.98	236.00	1.02	0-1	tr	tr
21815	236.00	236.98	.98	0-1	tr	tr
21816	236.98	237.79	.81	0-1	tr	tr
21817	237.79	238.59	.80	1	.824	1.03
21818	238.59	239.48	.89	1	.303	.34

239.48 292.63 MAIN MINERALIZED ZONE.

The main zone is broader than was expected for this area, particularly as the main silicified zone is developed. Pyrite contents are higher than normal within the main silicified zone although this pyrite is localized in the lower half of the zone and noted proximal to the McKenna Fault. the lower transitional zone is normal in all respects and is cut by several mafic intrusive parallel to foliation.

240.09 MCKENNA FAULT PLANE.

From	Description	Sample	From	To	Length	% Sul	GW	Au
239.48	240.09	TRANSITIONALLY SILICIFIED ZONE						
	Continuation of overlying section with increasing purple-grey silicification and hematization along carbonatized bands. carbonatization is exhibited as a pale coloured alteration penetrating darker hued silicification. all silicified rock is strongly reactive to HCl. Foliation is well developed at 60 degrees to the core axis with abundant mm scale clay-grit seams along parting planes. The McKenna Fault is represented by a clay seam at 55 degrees to the core axis at 240.09 meters. Abundant ground core marks fault plane. slickensides are not well exhibited - possibly plunging west at -10 degrees.	21819	239.48	240.09	.61	1	1.043	1.71
240.09	262.44	MAIN SILICIFIED ZONE						
	Dark purple-grey, pale grey and buff coloured intensely silicified breccia exhibits a well developed foliation locally and carries pyrite contents of up to 20%. Initially, rock is strongly magnetic and reactive to HCl but both decrease down section. several mafic intrusive are noted within the zone, probably parallel to foliation and possibly containing relic biotites.	21820	240.09	240.63	.54	1-2	.556	1.03
		21821	240.63	241.17	.54	1-2	1.112	2.06
		21822	241.17	242.02	.85	1-2	1.751	2.06
		21823	242.02	242.85	.83	1-2	.282	.34
		21824	242.85	243.70	.85	1-2	2.915	3.43
		21825	243.70	243.96	.26	1-2	1.336	5.14
		21826	243.96	244.93	.97	2-3	1.998	2.06
		21827	244.93	245.95	1.02	2-3	.704	.69
240.09	241.17	21828	245.95	246.38	.43	2-4	.886	2.06
	Dark purple-grey, strongly hematized and silicified, strongly reactive to HCl with rare 1 to 2 cm relic chloritized patches and abundant late stage chloritic shears locally. Weakly magnetic throughout becoming moderately magnetic locally. section is highly fractured locally along chloritic breaks.	21829	246.38	247.16	.78	TR	.265	.34
		21830	247.16	247.95	.79	TR	1.082	1.37
		21831	247.95	248.72	.77	0-1	.262	.34
		21832	248.72	249.18	.46	2-4	.630	1.37
		21833	249.18	249.75	.57	2-3	.194	.34
		21834	249.75	250.23	.48	1-3	.494	1.03
		21835	250.23	250.89	.66	3-5	1.129	1.71
241.17	243.70	21836	250.89	251.58	.69	2-4	1.891	2.74
	As described above with increasing pale grey and buff coloured patches up to 10 cm carrying up to 3% pyrite often as euhedral crystals up to 1 mm. well developed foliation locally at 45 to 50 degrees to the core axis. a white to pink carbonate vein noted along a shear plane at base of section at 10 to 15 degrees to the core axis. Abundant red breccia clasts noted locally. weakly to moderately magnetic throughout.	21837	251.58	252.12	.54	10-15	.923	1.71
		21838	252.12	252.66	.54	15-20	.740	1.37
		21839	252.66	253.30	.64	3-5	.659	1.03
		21840	253.30	254.02	.72	7-9	.742	1.03
		21841	254.02	254.83	.81	6-8	1.110	1.37
		21842	254.83	255.76	.93	5-7	1.274	1.37
		21843	255.76	256.39	.63	3-5	1.077	1.71
		21844	256.39	257.14	.75	3-4	.255	.34
		21845	257.14	257.90	.76	3-4	2.082	2.74
		21846	257.90	258.61	.71	2-3	1.463	2.06
243.70	243.96	21847	258.61	259.61	1.00	2-3	1.370	1.37
	Dark purple-grey and banded with red mm scale laminations - highly brecciated throughout and moderately magnetic.	21848	259.61	260.61	1.00	2-3	1.370	1.37
		21849	260.61	261.50	.89	1-3	1.522	1.71
243.96	246.38	21850	261.50	262.44	.94	1-3	2.256	2.40
	Mixed breccia with pale to dark purple-grey, buff and pink hued silicified fragments with rare early ductile deformation overprinted by later brittle							

From	Description	Sample From	To	Length	% Sul	GW	Au
	fracturing. Paler hues increase down section with generally increasing pyrite contents. a 3 cm brick red intrusive same as underlying intrusive is noted at 245.93 meters. Reaction to HCl decreases down section. magnetics are highly irregular throughout from non-magnetic to moderately magnetic. Weakly developed foliation throughout at 50 to 55 degrees to the core axis. lower intrusive contact is sub-parallel to foliation at approximately 70 to 75 degrees.						
246.38	250.23	Brick red, aphanitic siliceous intrusive, possibly a silicified syenitic or monzonitic rock. non-magnetic and non-reactive to HCl with trace pyrite locally. Well developed fracturing is sub-parallel to core axis were originally silicified then were reopened to be carbonate filled below 247.95 meters. Lower 15 cm carries 50% debris from underlying zone. abundant late stage chloritic shears are noted throughout generally parallel to a foliation at approximately 45 degrees to the core axis and increasing below 249.18 meters. lower contact is irregular at approximately 70 degrees to the core axis.					
250.23	255.76	Dominantly pale grey with few buff cream and pink coloured patches. degree of silicification is extremely high with coarse clots of pyrite up to 4 cm within voids in breccia and healing late stage fracturing parallel to foliation at approximately 50 degrees to the core axis. Minor white silica dumping is noted locally in breccia. a few sections of late stage chloritic shearing are noted carrying 2 to 5% pyrite, eg. 250.89 to 251.58 and 252.66 to 252.87 meters. these chloritized sections carry approximately 70% silicified debris from surrounding rock. Minor pale grey to white coloured silicification in very cherty in appearance and exhibits early ductile deformation.					
255.76	257.90	Medium to pale grey intensely silicified breccia with generally decreasing pyrite content down section with dominantly fine grained disseminateds below 256.39 meters. buff colouration is noted as a alteration penetrating late stage brecciation					

From	Description	Sample	From	To	Length	% Sul	GW	Au
	carrying up to 10% pyrite localized within 2 to 3 cm patches. rock becomes weakly reactive to HCl in buff alteration.							
257.90	258.61 Intrusive zone - 3 mafic intrusives with fine grained textures possibly carrying relic biotite and weakly developed magnetics. a section of silicified breccia is noted at 60 to 80 degrees to the core axis, parallel to late stage shearing. Section includes approximately 30% fragments of purple-grey silicified breccia carrying up to 10% pyrite. Intrusive rock carries nil pyrite. Pink carbonate veinlets noted throughout.							
258.61	262.44 Brecciation is dominantly pale grey and shatter-type with no fragment rotation and no matrix. fractures are white carbonate and quartz filled - generally barren of sulphide. section carries up to 10% pyrite localized in buff coloured alteration and averages 2 to 3%. minor late stage chloritized shears noted locally up to 5 cm in width. rare 1 mm white carbonate foliated voids locally similar to 3 and 4 zone alteration.							
262.44	292.63 TRANSITIONALLY SILICIFIED ZONE							
	Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 30cm wide. Greenish rock is chloritized and locally hematized but is generally not silicified. The zone is moderately to strongly carbonatized and alteration decreases with depth. Carbonatization is reflected in a pale grey to cream colouration. silicified rock is non-reactive to HCl. The site of silicification is almost entirely controlled by prior brecciation. silicification is indicated by white, buff and purple-grey colourations. Cream to honey coloured, pyrite rich alteration is noted as halos bordering fractures. Seams/patches of silicification are oriented parallel to foliation but cross cut locally. The amount and general degree of silicification in breccia decreases downhole. Overall pyrite content for this section averages 1%. Silicified breccia carries up to 3% very finely disseminated pyrite. chloritized rock contains trace amounts. Zone is generally non-magnetic with minor localized traces.	21851	262.44	263.29	.85	2-3	.876	1.03
		21852	263.29	264.20	.91	1	1.247	1.37
		21853	264.20	265.08	.88	1	.607	.69
		21854	265.08	265.77	.69	1	.476	.69
		21855	265.77	266.60	.83	1	2.274	2.74
		21856	266.60	267.60	1.00	1	.340	.34
		21857	267.60	268.60	1.00	1	1.710	1.71
		21858	268.60	269.60	1.00	1	.690	.69
		21859	269.60	270.60	1.00	1	.340	.34
		21860	270.60	271.60	1.00	1	.340	.34
		21861	271.60	272.60	1.00	1	.340	.34
		21862	272.60	273.60	1.00	1	.690	.69
		21863	273.60	274.60	1.00	1	tr	tr
		21864	274.60	275.60	1.00	1	tr	tr
		21865	275.60	276.60	1.00	1	tr	tr
		21866	276.60	277.60	1.00	1	tr	tr
		21867	277.60	278.60	1.00	1	tr	tr
		21868	278.60	279.60	1.00	1	tr	tr
		21869	279.60	280.78	1.18	1-2	2.018	1.71
		21870	280.78	281.78	1.00	0-1	tr	tr
262.44	263.29 Section carries 80 to 85% dark purple-grey silicified breccia with abundant white to pale grey coloured quartz - possibly a	21871	281.78	282.78	1.00	0-1	tr	tr
		21872	282.78	283.78	1.00	0-1	tr	tr
		21873	283.78	284.78	1.00	0-1	tr	tr

From	Description	Sample	From	To	Length	% Sul	GW	Au	
	re-crystallized quartz vein or late stage hydrothermal precipitate with much lower brecciation. Chloritized rock carries strong hematization and often moderate magnetics in relic relatively unaltered patches and shears up to 5 cm in width.	21874	284.78	285.78	1.00	0-1	.690	.69	
		21875	285.78	286.78	1.00	0-1	.340	.34	
		21876	286.78	287.78	1.00	1	.340	.34	
		21877	287.78	288.78	1.00	1	.340	.34	
		21878	288.78	289.78	1.00	1	.340	.34	
		21879	289.78	290.86	1.08	1	.367	.34	
263.29	265.08	25 to 30% silicified breccia generally parallel to a well developed foliation at 50 degrees to the core axis in seams up to 10 cm in width.	21880	290.86	291.71	.85	0-1	tr	tr
			21881	291.71	292.63	.92	1	tr	tr
265.08	266.60	Section carries 90 to 95% silicified breccia containing very finely disseminated pyrite and clots up to 5 mm in voids within breccia.							
266.60	279.60	Approximately 30 to 35% silicified breccia in seams and bands up to 12 cm in width, generally well foliated at 30 to 40 degrees to the core axis. A 2 mm clay-grit seam representing a minor fault plane at 65 degrees to foliation noted at 277.65 meters. plane dips south-easterly.							
279.60	280.78	Section carries 65 to 70% silicified breccia in seams up to 15 cm in width.							
280.78	292.63	Averages 10% silicified breccia in somewhat isolated sections up to 23 cm in width surrounded by normal chlorite-carbonate schist. Amount of silicification generally decreases down section. Foliation ranges from 40 to 45 degrees to the core axis between 281.25 and 287.20 meters, to approximately 45 to 50 degrees below 288.00 meters.							
292.63	313.27	CHLORITE-CARBONATE SCHIST							
		Dark green, fine to very fine grained and generally well laminated/foliated. A minor amount of the sequence has a distinct granular appearance with grains up to .5 mm. The rock is weakly chloritized pervasively - perhaps due to regional metamorphism. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 10-15% of the rock volume. Rare silicification is noted as a purple-grey hue within carbonatized seams. The amount of this alteration decreases down section. minor localized increases in silicification are noted at 295.80 to 296.15 meters.	21882	292.63	293.63	1.00	0-1	tr	tr
			21883	293.63	294.63	1.00	0-1	tr	tr
			21884	294.63	295.63	1.00	0-1	tr	tr
			21885	295.63	296.63	1.00	0-1	tr	tr
			21886	296.63	297.67	1.04	0-1	tr	tr
			21887	300.63	301.60	.97	0-1	tr	tr
			21888	305.02	306.02	1.00	0-1	tr	tr

From To Description Sample From To Length % Sul GW Au

Hematite is found as a very fine interstitial dissemination within the chloritized groundmass locally. The zone is essentially non-magnetic with a trace of magnetism locally.

313.27 340.60 GREENSCHIST

Dark green very fine grained weakly foliated rock with localized structures which resemble volcanic features. Rock is relatively unaltered and more weakly deformed than overlying zone. fracturing is often randomly oriented as compared to parallel parting within overlying chlorite - carbonate schist. Zone is cut by abundant fine grained massive, equigranular sections which are possibly intrusive. this rock is granulated and moderately pervasively carbonatized as contrasted against very weak pervasive carbonatization in typical greenschist. Equigranular rock is particularly apparent below 330.75 meters foliation at 40 degrees to the core axis. Rock often nearly resembles chlorite - carbonate schist. Lower contact is gradational - possible masking of intrusive contact by deformation.

340.60 370.85 BASALT

21889 356.45 357.51 1.06 0-1 tr tr

Basalt in the base of the drill hole exhibits well developed pillow selvages and relatively unaltered volcanic textures. - these rocks are medium green to grey-green and are very fine grained to aphanitic. Fracturing is moderately developed throughout. several intermediate intrusives are noted within the volcanic succession, proximal to the McDermott Deformation Zone and these intrusives appear to decrease down section. Basalt is non-carbonatized and non-magnetic, carrying trace amounts of pyrite.

340.60 354.21 Pillowed flow with carbonate foliated fractures.

354.21 354.96 Intermediate intrusive - fine grained, pinkish-green, non-magnetic and moderately pervasively carbonatized. Contacts are at 60 to 70 degrees to the core axis.

354.96 356.50 Weakly pillowed flow.

356.50 356.90 Brick red, aphanitic felsic intrusive sub-parallel to core axis with 5% pale pink feldspar phenocrysts up to 2 mm.

356.90 357.65 Intermediate intrusive - possible phase of overlying intrusive. Textures are granulated and rock is strongly

From	Description	Sample From	To	Length	% Sul	GW	Au
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pervasively carbonatized - probably dioritic.

357.65 370.85 Medium to pale grey-green pillowed flow.

370.85 Meters : END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords:	9857.0 9050.1	DIAMOND DRILL RECORD	HOLE NO.:	MC.86-277
Azimuth:	344.4	Section: 050E	Property:	Norvest Option
Dip:	-70.0	Core Size: 80	Location:	0+50E 1+43S
Elevation:	4999.5		Date Started:	22 July, 1986
Length:	276.1		Date Completed:	31 July, 1986
Measurement:	Metric		Logged by:	A.W. Workman
Comments:	Casing left in ground			

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-69.0	137.16		-65.5	244.45	358.0	-65.0
91.44		-68.5	182.88		-67.0	274.32		-60.0
121.06	1.0	-68.0	228.60		-64.5			

-----Log Summary-----

.00 24.38 OVERBURDEN.  
 24.38 38.70 DIORITE.  
 38.70 93.15 BASALT.  
 93.15 173.73 DIORITE.  
 173.73 181.85 BASALT.  
 181.85 183.83 GREENSCHIST.  
 183.83 186.22 CHLORITE-CARBONATE SCHIST.  
 186.22 251.97 MAIN MINERALIZED ZONE.  
 186.22 186.66 TRANSITIONALLY SILICIFIED ZONE.  
 186.66 203.47 MAIN SILICIFIED ZONE.  
 203.47 251.97 TRANSITIONALLY SILICIFIED ZONE.  
 251.97 271.25 CHLORITE-CARBONATE SCHIST.  
 271.25 276.14 GREENSCHIST.  
 276.14 Meters : END OF HOLE.

From To Description Sample From To Length % Sul GW Au

.00 24.38 OVERBURDEN

24.38 38.70 DIORITE

This fine grained, dark green equigranular intrusive section is in fault contact with the underlying basalt. The contact is in highly ground core with minor quartz veining estimated up to 5 cm in width. Generally, the diorite fines down section. Fault may have formed during intrusion along intrusive margin with late stage continued displacement. Rock is non-magnetic and non-carbonatized.

24.38 38.00 Fine grained with well developed dioritic texture and strongly hematized fracturing in upper half.

38.00 38.70 Intensely developed fracturing with minor quartz veining core is highly ground and recovery is estimated at 50%. Dioritic texture fines down section to a probable fault plane at approximately 38.70 meters.

38.70 93.15 BASALT

Pale to medium grey-green becoming dark green below approximately 72 meters, and generally fine to very fine grained throughout. Both massive and pillowed flows are noted within this section and volcanic structures and textures are well preserved. Alteration is generally weak, flows are non-magnetic and non-carbonatized with minor epidotized auto breccia locally.

38.70 41.80 Pillowed flow.

41.80 48.95 Fine to very fine grained massive flow.

48.95 49.73 Ground core possibly a dioritic intrusive.

49.73 52.75 Very fine grained massive flow.

52.75 54.85 Increasing auto brecciation with white quartz carbonate flooded shear at approximately 20 degrees to the core axis between 54.61 and 54.95 meters.

54.85 72.40 Pillowed flow selvage are not well developed below 65.0 meters.

72.40 72.50 Flow contact zone.

From	To	Description	Sample	From	To	Length	% Sul	BW	Au
72.50	72.70	Zone carries bread-crust shrinkage type fracturing in flow top crust.							
72.70	73.20	Weakly vesicular flow top material.							
73.20	75.90	Very fine grained flow with no selvages.							
75.90	83.05	Pillowed flow well developed pillow rims.							
83.05	87.30	Flow breccia some fragments resemble pillow rim material.							
87.30	92.78	Very fine grained massive flow, brecciated locally.							
92.78	93.15	Clay-grit seams at 20 to 25 degrees to the core axis are carbonate flooded and indicate a major fault along an intrusive margin.							

## 93.15 173.73 DIORITE

Section is generally dark green, fine grained and unstructured equigranular rock with relatively weak alteration except for minor epidotization of fractures. Rock is non-magnetic and non-carbonatized. A few relatively late felsic intrusives are noted locally.

93.15	138.70	Fine grained rock with localized epidotization in 1 to 10 cm weakly brecciated patches.							
138.70	140.05	Felsic intrusive pinkish-green, very fine grained to aphanitic with abundant dioritic debris. Contacts at approximately 20 degrees to the core axis.							
140.05	141.24	Same as described above overlying intrusive							
141.24	141.43	Felsic intrusive as described above with contacts at approximately 40 to 45 degrees to the core axis.							
141.43	144.75	Fine grained dioritic texture gradual coarsening trend down-hole.							
144.75	152.85	Fine to medium grained, equigranular with fish-net texture. Carbonate - quartz veins up to 10 cm in width are noted at 30 degrees to the core axis at 144.95 meters possibly marking a minor shear.							
152.85	153.89	Fine grained becoming very fine grained down section.							
153.89	154.44	Heavily quartz veined section.							
154.44	157.30	Fine grained, highly fractured rock with red hematized planes dominantly sub-parallel to core axis.							
157.30	171.45	Fine grained and massive but not equigranular.							
171.45	171.60	Felsic intrusive as described above at 138.70 to 140.05 meters. Epidotization is strongly developed.							
171.60	173.73	Fining down section to a chilled,							

From To -----Description----- Sample From To Length % Sul GW Au

brecciated contact lower 30 cm resembles basalt. Fracturing sharply increases near lower contact.

173.73 181.85 BASALT

Medium green very fine grained and probably massive flow although fracturing masks much of the original structures. Possible pillow selvage are noted locally. Carbonatization is absent at top but increases to moderate down section. Minor foliation is noted locally at 35 to 40 degrees to the core axis.

173.73 179.83 Medium green, very fine grained highly fractured massive flow with abundant quartz filled hematized shears at approximately 30 to 40 degrees to the core axis. A few intensely epidotized patches up to 2 cm are noted locally may be feldspar phenocrysts glomeroporphyritic. White calcite filled fractures increase down section.

179.83 180.20 Ground core hematized and chloritized fault zone at approximately 30 degrees to the core axis.

180.20 181.85 Same as described above at 173.73 to 179.83 meters.

181.85 183.83 GREENSCHIST

Medium to dark green, very fine grained strongly chloritized and moderately to strongly pervasively carbonatized throughout with weakly to moderately developed foliation. Textures are a continuation from overlying section and suggest that the parent rock was basalt. Rock is non-silicified and non-magnetic. Foliation is highlighted by parallel 1 to 5 mm quartz carbonate stringers.

183.83 186.22 CHLORITE-CARBONATE SCHIST

Dark green, fine to very fine grained and generally well laminated/foliated. The foliation becomes better developed down section. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is

21920	183.83	184.78	.95	0-1	.323	.34
21921	184.78	185.78	1.00	0-1	.000	tr
21922	185.78	186.22	.44	0-1	.150	.34

From To -----Description----- Sample From To Length % Sul GW Au

revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 10% of the rock volume. Rare silicification is noted as a purple-grey hue within carbonatized seams. This purple hue is due to weak to moderate degrees of hematization along carbonate replacements. The rock is weakly to moderately well parted throughout. Rock is non-magnetic throughout. Foliation averages 45 degrees to the core axis.

186.22 251.97 MAIN MINERALIZED ZONE.

The zone is of average thickness and is composed of three members. The upper transitional section is slightly thinner than normal. The McKenna Fault separates this zone from the underlying main silicified zone which is of greater thickness than average. Silicification is well developed but little buff coloured alteration is noted. Rock exhibits stronger magnetics throughout than normal and pyrite contents are much lower than normal in main silicified zone type rock.  
186.63 MCKENNA FAULT PLANE.

186.22 186.66 TRANSITIONALLY SILICIFIED ZONE

21923 186.22 186.66 .44 0-1 .304 .69

Dark green very fine grained chloritic rock with pale grey to purple-grey, 1 to 3 mm carbonatized and silicified laminations highlighting a very well developed foliation at 45 to 65 degrees to the core axis with abundant chevron-type folding indicating normal movement on the McKenna Fault. Rock is non-magnetic throughout and strongly pervasively carbonatized. Purple hue is due to moderately to strongly developed hematization. No hematite is exhibited in chloritized rock. A trace of pyrite is noted within the most highly altered rock near the McKenna Fault. The McKenna Fault is represented by a clay seam at 55 degrees to the core axis at 186.63 meters. The seam is 6 cm in width.

186.66 203.47 MAIN SILICIFIED ZONE

The zone is dominantly composed of purple hued intensely silicified breccia. Minor amounts of buff to pale grey coloured alteration are irregularly developed throughout. The upper sections of the zone are weakly

21924 186.66 187.25 .59 1-3 .201 .34  
21925 187.25 188.12 .87 1-2 .600 .69  
21926 188.12 189.00 .88 1-2 9.354 10.63  
21927 189.00 190.00 1.00 1-2 .340 .34  
21928 190.00 190.85 .85 1-2 .289 .34



From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		sharp borders resembling intrusives.							
198.77	199.24	Intrusive brick red 1 cm intrusive margin with pink hued silicified and brecciated interior. Pyrite is noted within healed fractures and voids in breccia. Contacts are irregularly developed at approximately 50 degrees to the core axis.							
199.24	203.47	Medium grey to dark purple-grey, intensely silicified breccia with abundant buff to white coloured silicification within late stage brecciation and as halos around fractures. Several green chloritized fine grained, moderately magnetic mafic intrusives are noted at 199.84 to 199.91 and 200.38 to 200.51 meters. 5 intrusive contacts are parallel to the foliation at 45 to 50 degrees to the core axis. Increased chloritic fracturing is noted in lower 50 cm of section.							
203.47	251.97	TRANSITIONALLY SILICIFIED ZONE							
			21945	203.47	204.40	.93	1-2	.642	.69
			21946	204.40	205.26	.86	1	.292	.34
203.47	206.16	Dark green, very fine grained chloritized rock with abundant (35-40%) white, buff and purple-grey silicified breccia seams up to 13 cm in width and silicified halos around fractures. Pyrite contents increase to 10% within silicification, and increased contents are noted within shear planes along margins of some breccia seams.	21947	205.26	206.16	.90	1	.306	.34
			21948	206.16	207.36	1.20	1-2	1.236	1.03
			21949	207.36	208.26	.90	1	.306	.34
			21950	208.26	209.16	.90	1	.927	1.03
			21951	209.16	210.06	.90	1	1.233	1.37
			21952	210.06	210.98	.92	1	.313	.34
			21953	210.98	211.90	.92	1	.313	.34
			21954	211.90	212.72	.82	1	.000	tr
206.16	207.36	Increased silicified breccia to 80% of section with continuous sections up to 50 cm in width.	21955	212.72	213.73	1.01	0-1	.000	tr
			21956	213.73	214.74	1.01	0-1	.000	tr
			21957	214.74	215.76	1.02	0-1	.000	tr
207.36	212.72	25 to 30% silicified breccia in section up to 12 cm in width generally developed along a moderately developed foliation at 40 degrees to the core axis.	21958	215.76	216.76	1.00	0-1	.340	.34
			21959	216.76	217.76	1.00	0-1	.340	.34
			21960	217.76	218.76	1.00	0-1	.340	.34
			21961	218.76	219.76	1.00	0-1	.340	.34
212.72	215.76	Section carries 5% silicified breccia and minor pyrite as a fine grained dissemination.	21962	219.76	220.76	1.00	0-1	.690	.69
			21963	220.76	221.76	1.00	0-1	.000	tr
			21964	221.76	222.56	.80	0-1	.000	tr
215.76	222.56	5 to 10% silicified breccia with silicification almost absent below 220.10 meters. Seams are well foliated at 35 to 45 degrees to the core axis.	21965	222.56	223.40	.84	1	2.302	2.74
			21966	223.40	224.40	1.00	0-1	.000	tr
			21967	224.40	225.40	1.00	0-1	.000	tr
			21968	225.40	226.30	.90	0-1	.000	tr
222.56	223.40	Approximately 40% silicified breccia.	21969	226.30	227.10	.80	1	.272	.34
223.40	226.30	1 to 2% silicified breccia essentially chlorite carbonate schist.	21970	227.10	227.91	.81	1	.000	tr
			21971	227.91	228.88	.97	0-1	.000	tr
226.30	227.91	Section carries 40% silicified breccia in section up to 13 cm in width, mostly	21972	228.88	229.91	1.03	0-1	.000	tr
			21973	229.91	230.92	1.01	0-1	.343	.34

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		concentrated above 227.6 meters.	21974	230.92	231.93	1.01	0-1	.343	.34
227.91	232.97	Approximately 5% silicified breccia most of which is localized near margins of section. Centre of zone between 228.50 and 232.00 meters is dominantly chlorite carbonate schist with well developed foliation at 30 degrees to the core axis.	21975	231.93	232.97	1.04	0-1	2.496	2.40
			21976	232.97	233.90	.93	1	1.590	1.71
			21977	233.90	234.80	.90	1	.621	.69
			21978	234.80	235.67	.87	1	.600	.69
			21979	235.67	236.52	.85	1	.731	.86
			21980	236.52	237.46	.94	1	1.288	1.37
232.97	237.46	Pale grey to purple-grey, intensely silicified breccia with orange to pink altered patches and white silicified halos around fractures. Generally, a moderately developed foliation is noted throughout in chloritized rock and locally within silicified breccia at 40 degrees to the core axis near top of section and irregularly between 30 and 50 degrees lower in section. Pyrite contents in silicified rock average 1 to 3% with trace amounts in chloritic rock. Silicification is of main silicified zone intensity. A section between 234.13 and 235.42 meters contains 90% silicification resembles a lower silicified zone continuous section up to 75 cm in width.	21981	237.46	238.30	.84	1	.286	.34
			21982	238.30	239.20	.90	1-2	.927	1.03
			21983	239.20	240.10	.90	1-2	1.233	1.37
			21984	240.10	241.00	.90	1-2	1.233	1.37
			21985	241.00	241.89	.89	0-1	.614	.69
			21986	241.89	242.89	1.00	0-1	.340	.34
			21987	242.89	243.79	.90	0-1	.153	.17
			21988	243.79	244.69	.90	0-1	.153	.17
			21989	244.69	245.59	.90	0-1	.000	tr
			21990	245.59	246.49	.90	0-1	.153	.17
			21991	246.49	247.50	1.01	0-1	.343	.34
			21992	247.50	248.46	.96	0-1	.326	.34
			21993	248.46	249.12	.66	0-1	.000	tr
			21994	249.12	249.61	.49	0-1	.167	.34
			21995	249.61	250.52	.91	0-1	.473	.52
			21996	250.52	251.43	.91	0-1	.309	.34
			21997	251.43	251.97	.54	0-1	.184	.34
237.46	241.00	Section contains 25 to 30% silicified breccia as described above with sections up to 20 cm in width. Foliation at 35 to 45 degrees to core axis. Pyrite contents are higher in this section than above possibly a combination of narrow breccia seams and chloritic rock (?). Generally, euhedral pyrite is noted in amounts up to 5% within some silicified sections.							
241.00	247.50	10 to 15% silicified breccia in seams up to 17 cm in width carrying up to 5% pyrite locally as very fine disseminations, euhedral crystals and 1 to 2 mm seams along healed fractures parallel to the foliation at 40 degrees to the core axis. Mafic Intrusive noted at 244.95 to 245.02 meters pale green, very fine grained and weakly to moderately magnetic with distinct chloritized micas highlighting a well developed foliation at 40 degrees to the core axis. Contacts are parallel to foliation.							
247.50	249.61	Zone averages 1 to 2% silicified breccia in 1 to 2 cm seams as described above. Minor crenulation cleavage noted at 30 degrees to the core axis, approximately normal to foliation. A Mafic Intrusive same as described above at 245 meters is							

From To -----Description----- Sample From To Length % Sul GW Au

noted at 248.35 to 248.45 meters.  
 249.61 251.43 Section contains 35% silicified breccia in 1 to 5 cm sections with a generally well developed foliation at 30 to 35 degrees to the core axis. Localized pyrite contents up to 1% are noted. A well developed crenulation cleavage is noted at 75 degrees to the core axis and essentially normal to foliation. A chloritized gritty late stage shear is noted at 45 degrees to the core axis with planar margins which are at 20 degrees to each other. The upper contact is parallel to the foliation, the lower is sub-parallel but not dipping in same direction as foliation.  
 251.43 251.97 Silicification decreases to 5 to 10% of section.

251.97 271.25 CHLORITE-CARBONATE SCHIST

Dark green, fine to very fine grained and generally well laminated/foliated. A minor amount of the sequence has a distinct granular appearance with grains up to .mm. These sections are highly carbonatized throughout. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 10-15% of the rock volume. Rare silicification is noted as a purple-grey hue within carbonatized seams. The rock is weakly to moderately well parted throughout. Hematite is found as a very fine interstitial dissemination within the chloritized groundmass locally. Non-magnetic throughout. Foliation: 50 to 55 degrees at 256.00, 55 to 60 degrees at 264.00 and 45 to 50 degrees to the core axis at 270.50 meters.

21998	251.97	253.02	1.05	0-1	.179	.17
21999	255.00	256.00	1.00	0-1	.170	.17
22000	260.00	261.00	1.00	0-1	.000	nil
20552	264.00	265.00	1.00	0-1	.000	nil
20553	269.00	270.00	1.00	0-1	.000	tr

271.25 276.14 GREENSCHIST

Dark green, very fine grained, weakly to moderately foliated rock with basaltic textures and possible relic structures locally. The zone was possibly derived from pillowed flow. The degree of pervasive carbonatization is lower and generally decreases down section. Minor increases in carbonatization are noted locally. Rock is

From To -----Description----- Sample From To Length % Sul GW Au

non-magnetic throughout.

276.14 Meters : END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords: 9908.0 9150.0

DIAMOND DRILL RECORD

HOLE NO.: MC.86-278

Azimuth: 344.5

Section: 150E

Property: Norvest Option

Dip: -60.0

Core Size: BQ

Location: 1+50E 0+92S

Elevation: 4996.3

Length: 209.1

Date Started: 31 July, 1986

Date Completed: 5 August, 1986

Logged by: A.W. Workman

Measurement: Metric

Comments: Casing left in ground

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-57.5	137.16		-54.0	207.26		-49.0
91.44		-56.0	148.74	344.5	-55.0			

-----Log Summary-----

.00 29.26 OVERBURDEN.  
 29.26 30.23 BASALT.  
 30.23 66.21 DIORITE.  
 66.21 92.20 BASALT.  
 92.20 93.45 GREENSCHIST.  
 93.45 95.31 CHLORITE-CARBONATE SCHIST.  
 95.31 150.94 MAIN MINERALIZED ZONE.  
 95.31 96.39 TRANSITIONALLY SILICIFIED ZONE.  
 96.39 104.79 MAIN SILICIFIED ZONE.  
 104.79 150.94 TRANSITIONALLY SILICIFIED ZONE.  
 150.94 175.00 CHLORITE-CARBONATE SCHIST.  
 175.00 177.75 GREENSCHIST.  
 177.75 209.12 BASALT.  
 209.12 Meters : END OF HOLE.

From To -----Description----- Sample From To Length % Sul GW Au

.00 29.26 OVERBURDEN

29.26 30.23 BASALT

Medium green, very fine grained to aphanitic, intensely fractured and broken basalt with abundant limonitic voids probably heavily faulted. Non-magnetic and non-carbonatized. Basalt carries a trace of pyrite and is highly auto brecciated.

30.23 66.21 DIORITE

Section is generally fine grained and massive and, where visible, exhibits a well developed equigranular dioritic texture. The rock spans a major fault zone at an uncertain angle to the core axis possibly at 20 to 30 degrees. Several distinct fault planes are recognized. The largest fragments of core in this unit measure approximately 10 cm in length. Rock is non-magnetic generally, with trace magnetics noted locally.

30.23 37.80 Very fine grained, medium green, massive with much less auto brecciation than overlying basalt. Rock remains highly sheared and broken. Dominant fracture set is at 20 to 30 degrees to the core axis and sub-parallel to core axis.

37.80 41.07 Fine grained, equigranular continuation of overlying section with minor clay-grit seams locally.

41.07 41.70 Major fault zone no core recovered 100% lost core.

41.70 41.90 Continuation of rock overlying fault.

41.90 42.40 Fault zone as described above with no recovery.

42.40 64.31 Fine grained, nearly medium grained locally, equigranular and extremely fractured and broken throughout. Possible fault planes at 53.3 and 63.5 meters very finely ground core. Fracturing is less extreme between 54 and 61 meters but remains high with planes

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		at 20 to 25 degrees to the core axis open and unhealed.							
64.31	66.21	Fine grained gradual fining trend down-hole to an epidotized, silicified and chilled contact at approximately 75 degrees to the core axis. Rock is moderately to strongly fractured throughout.							
66.21	92.20	BASALT							
		The rock is medium to dark green, generally very fine grained and is relatively unaltered with well exhibited volcanic structures and textures. Abundant flow breccia is present possibly developed from pillowed flow. Minor porphyritic flow is noted with euhedral feldspar phenocrysts up to 1.5 cm. Rock is strongly auto brecciated locally with subsequent healing by deuteric fluids. Basalt is non-magnetic and weakly fractured throughout.							
66.21	69.03	Medium green very fine grained to aphanitic, locally flow brecciated porphyritic flow with pale green phenocrysts up to 1 cm.							
69.03	69.40	Aphanitic flow top with angular brecciation and minor hyaloclastite locally.							
69.40	72.00	Resembles ruptured pillowed flow with few feldspar phenocrysts as described above.							
72.00	79.92	Pale to medium grey-green massive flow with abundant phenocrysts up to 1.5 cm. A greenish-pink felsic intrusive is noted at 73.89 to 74.18 meters with contacts at 30 degrees to the core axis. Rare pillow selvages noted locally (eg. 76.80 m).							
79.92	79.98	Epidotized and foliated flow contact zone at approximately 30 degrees to the core axis.							
79.98	91.31	Flow breccia maximum fragment size is approximately 10 cm. The lower 1 to 2 meters is highly carbonated with abundant white calcite filling all voids. The fragments become strongly pervasively carbonatized down section below 88.5 meters. Initial alteration penetrates only fragment rims with more complete alteration below.							
91.31	92.20	Strongly auto brecciated. Parallel parting at 65 to 75 degrees to the core axis develop in the lower 30 cm of zone.							

92.20 93.45 GREENSCHIST

From To -----Description----- Sample From To Length % Sul GW Au

Medium to dark green, very fine grained to aphanitic rock with few relic volcanic textures and structures locally rock exhibits more of an impression of basalt than overt evidence. A weakly developed foliation at 50 to 60 degrees to the core axis is noted throughout as highlighted by white calcite filled fractures along parallel partings. Pervasive carbonatization is strongly developed throughout and non-magnetic.

93.45 95.31 CHLORITE-CARBONATE SCHIST

20554 94.33 95.31 .98 0-1 1.676 1.71

Upper contact is marked by a sharp increase in the amount in carbonate in rock as wispy replacements along a very well developed foliation. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. A minor amount of the sequence has a distinct granular appearance with grains up to 0.1mm. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 10% of the rock volume. The rock is weakly to moderately well parted throughout. Hematite is found as a very fine interstitial dissemination within the chloritized groundmass. This increases down section. Rock is non-magnetic throughout. Pyrite content averages trace amounts increasing to 1 to 2% in lower 10 cm.

MAIN MINERALIZED ZONE 95.31 150.94 meters.

The zone is based upon amount and degree of silicification and is composed of three members. The upper transition zone is typical thin and generally well foliated. The main silicified zone is slightly thinner and carries lower pyrite contents than average. Maximum pyrite contents of 10% are localized in the most highly altered rock, often pale grey to buff coloured and probably strongly dolomitized. However, these sections seldom are greater than 15 cm in width. The lower transition is normal with respect to the distribution of silicification and is probably of greater thickness than average.

95.31 96.39 TRANSITIONALLY SILICIFIED ZONE

20555 95.31 96.39 1.08 1 .745 .69

Dark green and very fine grained with abundant cream to pale grey and purple-grey coloured silicified bands up to 1.5 cm in width parallel to a well developed

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		foliation at 55 to 60 degrees to the core axis. Abundant pink hued silicified fragments up to 1.5 cm are also noted within foliation probably tectonically rafted from the main silicified zone. Abundant pink to white carbonate noted within late stage fracturing. The McKenna Fault is represented by a clay seam at 35 degrees to the core axis at 96.39 meters. Approximately 14 cm of ground core marks the fault plane.							
96.39	104.79	MAIN SILICIFIED ZONE							
		The rock is dominantly dark purple-grey with relatively minor amounts of the paler grey and buff alteration which characterized the better sections of alteration within other drill holes. Correspondingly, the amount of pyrite within this zone is lower than normal and averages approximately 2%. Several brick red to pinkish-red, aphanitic siliceous syenitic or monzonitic intrusives are noted locally associated with local increases in degree of alteration. The main silicified zone initially exhibits weak to moderate magnetics but magnetics generally decrease down section. Similarly, reactivity to HCl decreases down section.	20556	96.39	97.04	.65	1-3	2.230	3.43
			20557	97.04	97.69	.65	1-3	4.011	6.17
			20558	97.69	98.30	.61	1-3	1.257	2.06
			20559	98.30	98.85	.55	4-6	.753	1.37
			20560	98.85	99.50	.65	1	.000	tr
			20561	99.50	99.92	.42	0-1	.000	tr
			20562	99.92	100.84	.92	1-3	.948	1.03
			20563	100.84	101.76	.92	1-2	1.573	1.71
			20564	101.76	102.66	.90	1-2	1.539	1.71
			20565	102.66	103.33	.67	1-2	2.298	3.43
			20566	103.33	104.08	.75	1-2	2.572	3.43
			20567	104.08	104.79	.71	1-2	1.704	2.40
96.39	97.58	Dark purple-grey with minor buff alteration along late stage breccia sections up to 2 cm in width. Dark rock carries 2 to 3% pyrite whereas buff alteration contains 6 to 10% generally very finely disseminated throughout. Rock is moderately reactive to HCl, sharply decreasing down section. Weakly magnetic throughout.							
97.58	97.67	Brittle late stage chloritized shear at 30 to 45 degrees to the core axis non-parallel contacts. Weakly magnetic.							
97.67	98.30	Mixed dark grey and buff coloured alteration with moderately developed foliation at 50 to 65 degrees to the core axis. Generally non-magnetic trace locally. Weakly reactive to HCl.							
98.30	98.85	Dominantly buff coloured with up to 10% pyrite, averaging approximately 4 to 6% and with well developed foliation as described above. Pyrite is found as very fine disseminations, 1 cm clots within voids in breccia, and mm thick elongated laminations along the foliation possibly marking healed fractures. Non-magnetic and weakly reactive to HCl.							
98.85	98.95	Brick red aphanitic, strongly brecciated syenitic intrusive carrying abundant highly							

From	To	Description	Sample	From	To	Length	% Sul	EW	Au
		pyritized silicified breccia debris. Contacts are at 65 and 75 degrees to the core axis.							
98.95	99.50	Greenish hued, buff coloured silicified breccia with abundant late stage shearing along a shear foliation at 60 to 65 degrees to the core axis. Material within 5 cm of upper and lower contacts is highly silicified. Weakly to moderately magnetic throughout.							
99.50	99.92	Same as described above at 98.85 to 98.95 meters. Contacts at 45 and 55 degrees to the core axis sub-parallel to foliation.							
99.92	100.84	Purple-grey silicified breccia with minor buff alteration and rare 1 by 4 cm pyrite bands along a weak foliation. Non-magnetic throughout with weak to moderate pervasive carbonatization indicated by reaction to HCl							
100.84	100.95	Late stage chloritic shearing in this section parallel to foliation.							
100.95	104.79	Purple-grey silicified rock with 5% late stage chloritized shears throughout foliated at 40 to 45 degrees to the core axis, particularly between 103.33 and 103.75 meters. Fracturing strongly developed sub-parallel to core axis between 100.0 and 103.0 meters. Section contains up to 10% pyrite highly localized in most strongly altered 5 to 10 cm sections.							
104.79	150.94	TRANSITIONALLY SILICIFIED ZONE							
			20568	104.79	105.77	.98	1	.676	.69
		Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 30cm wide. Greenish rock is chloritized and locally hematized but is generally not silicified. Silicification is indicated by a dark greyish colouration but is strongest where purple hued. Healed fractures which often form the centre of silicified breccia seams are generally white silica filled. Other fractures radiating from these central breaks often exhibit white silicified halos. The site of silicification is almost entirely controlled by prior brecciation. Silicified rock carries 1% pyrite with up to 10% in paler varieties. Chloritized rock carries 0-1% pyrite. Seams/patches of silicification are oriented parallel to foliation but cross cut locally. Zones of localized brecciation have provided sites for intensified silicification and pyritization. These sections may have a local cross-cutting relationship to	20569	105.77	106.75	.98	1	5.713	5.83
			20570	106.75	107.42	.67	1	.228	.34
			20571	107.42	108.24	.82	1	5.059	6.17
			20572	108.24	109.12	.88	1	.299	.34
			20573	109.12	109.94	.82	1	.279	.34
			20574	109.94	110.86	.92	1	.000	tr
			20575	110.86	111.81	.95	1	.000	tr
			20576	111.81	112.64	.83	1	.282	.34
			20577	112.64	113.44	.80	1	.000	tr
			20578	113.44	114.29	.85	1	.289	.34
			20579	114.29	114.96	.67	1-2	.690	1.03
			20580	114.96	115.64	.68	1-2	.700	1.03
			20581	115.64	116.60	.96	1	.326	.34
			20582	116.60	117.56	.96	1	.000	tr
			20583	117.56	118.52	.96	1	.000	tr
			20584	118.52	119.48	.96	0-1	.000	tr
			20585	119.48	120.43	.95	0-1	.323	.34

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		the foliation. The amount of silicified breccia generally decreases down section. Hematization as fine interstitial blebs is noted in chloritized rock locally.	20586	120.43	121.48	1.05	1	.725	.69
			20587	121.48	122.50	1.02	0-1	.000	tr
			20588	122.50	123.50	1.00	1	.340	.34
104.79	111.81	Dominantly dark green very fine grained and chloritized with strong hematization throughout and 25 to 30% dark purple-grey, pale grey, buff and white coloured intensely silicified breccia in section up to 17 cm in width. A green carbonatized mafic intrusive noted at 106.83 to 106.89 meters with contacts at 40 degrees to the core axis generally parallel to the foliation. A similar intrusive is noted at 107.08 to 107.25 meters with abundant silicified debris. These intrusives are highly sheared and associated with a localized high in the amount of and degree of silicification. Silicified fragments are purple-grey with buff coloured reaction rims.	20589	123.50	124.55	1.05	0-1	.357	.34
			20590	124.55	125.55	1.00	0-1	.340	.34
			20591	125.55	126.60	1.05	0-1	.000	tr
			20592	126.60	127.62	1.02	0-1	.347	.34
			20593	127.62	128.29	.67	0-1	.000	tr
			20594	128.29	129.06	.77	1	.262	.34
			20595	129.06	130.00	.94	1	.320	.34
			20596	130.00	130.90	.90	1	.306	.34
			20597	130.90	131.75	.85	1	.289	.34
			20598	131.75	132.62	.87	1-3	.896	1.03
			20599	132.62	133.26	.64	0-1	.218	.34
			20600	133.26	134.28	1.02	1	.704	.69
			20601	134.28	135.36	1.08	1	1.112	1.03
			20602	135.36	136.31	.95	1	.000	tr
			20603	136.31	137.21	.90	1	.306	.34
			20604	137.21	138.10	.89	1	.917	1.03
			20605	138.10	138.65	.55	0-1	.187	.34
111.81	114.29	Section carries approximately 50% silicified breccia with well developed foliation locally at 55 degrees to the core axis.	20606	138.65	139.61	.96	1-3	1.642	1.71
			20607	139.61	140.60	.99	0-1	.337	.34
			20608	140.60	141.58	.98	0-1	.333	.34
			20609	141.58	142.48	.90	2-3	2.160	2.40
114.29	115.64	Amount of silicified breccia increases to approximately 65 to 70% in continuous sections up to 30 cm in width carrying 1 to 2% pyrite. Foliation at 55 degrees to the core axis with minor parallel shearing at upper contact.	20610	142.48	143.18	.70	0-1	.000	tr
			20611	143.18	143.92	.74	0-1	.000	tr
			20612	143.92	144.70	.78	0-1	.000	tr
			20613	144.70	145.50	.80	2-3	.552	.69
			20614	145.50	146.30	.80	1	.552	.69
			20615	146.30	147.41	1.11	0-1	.000	tr
115.64	118.52	45 to 50% silicified breccia as described above.	20616	147.41	148.14	.73	0-1	.000	tr
			20617	148.14	149.14	1.00	TR	.000	tr
118.52	119.48	Approximately 10% silicification in breccia seams up to 3 cm in width developed on central fractures and along radiating fractures.	20618	149.14	150.13	.99	TR	.000	tr
			20619	150.13	150.94	.81	0-1	.000	tr
119.48	120.43	Intrusive zone two mafic intrusives noted with 20 cm of highly sheared silicified breccia between. Intrusives are grey-green, very fine grained and well foliated at approximately 40 degrees to the core axis. Intrusives are weakly magnetic and weakly to moderately pervasively carbonatized and non-silicified. A trace of pyrite is noted locally, possibly extracted from the abundant localized silicified debris. The upper contact is noted at 35 degrees to the core axis and the lower sheared contact is at 60 degrees to the core axis.							
120.43	121.48	Carries 50% silicified breccia in sections up to 11 cm. Sharp increase noted at upper							

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		contact.							
121.48	127.62	Contains 15 to 20% silicification in narrow breccia seams along a localized but well developed foliation at 40 degrees to the core axis. Rare pink silicified and brecciated section resembles quartz vein material.							
127.62	129.06	Section is essentially chlorite carbonate schist with weakly developed foliation at 40 degrees to the core axis carrying up to 5% silicified breccia.							
129.06	136.31	25 to 30% silicified breccia with up to 10% pyrite locally but dominantly euhedral crystals up to 1 mm (eg.132.22 - 132.31 m). A slight increase in the amount of silicified breccia is noted below 133.24 meters.							
136.31	139.61	55 to 60% silicified breccia in seams up to 26 cm in width with up to 10%, dominantly euhedral, pyrite. A localized foliation noted at 35 to 45 degrees to the core axis.							
139.61	141.58	Silicification increases to approximately 10% of section in seams averaging 2 to 3 cm in width.							
141.58	142.48	60% silicified breccia with amount of silicification increasing down section towards underlying monzonitic intrusive. Lower 6 cm at contact is heavily pyritized with 5 to 10% pyrite.							
142.48	143.92	Brick red to pinkish-red, aphanitic monzonitic intrusive with pale pink indistinct feldspar phenocrysts up to 1 mm. Rock is weakly brecciated and highly siliceous silicified ?. Contains trace pyrite locally and 1 to 2% white barren quartz stringers up to 5 mm in width. Intrusive contacts are parallel to foliation, upper at 40 degrees and lower at 45 degrees to the core axis.							
143.92	146.30	30 to 35% silicified breccia with foliation locally at 35 to 40 degrees to the core axis.							
146.30	147.41	Monzonitic intrusive same as described above at 142.48 to 143.92 meters. Contacts parallel foliation at approximately 40 to 45 degrees to the core axis.							
147.41	148.14	Section of chlorite carbonate schist with approximately 5% silicification associated with intrusive contacts at upper and lower margins.							
148.14	150.13	Intrusive same as described above 143.92							

From To -----Description----- Sample From To Length % Sul GW Au

meters. Upper contact parallels foliation at 50 degrees to the core axis, lower sub-parallel to core axis at 70 degrees.  
 150.13 150.94 Same as described above at 147.41 to 148.14 meters well developed foliation at 50 degrees to the core axis.

150.94 175.00 CHLORITE-CARBONATE SCHIST

Dark green, fine to very fine grained and generally well laminated/foliated. A minor amount of the sequence has a distinct granular appearance with grains up to 0.5mm. The rock is weakly chloritized pervasively - perhaps due to regional metamorphism. The foliation is highlighted by selective carbonatization of individual laminations. Carbonate is abundant within fractures parallel to foliation. Carbonatization is generally restricted to the laminations and little pervasive carbonatization is noted in chloritized material. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Several 10 to 15 cm sections of breccia are strongly pervasively carbonatized and may have been originally silicified. These carry a purple-grey hue. Carbonatized laminations make up an average of 10-15% of the rock volume. Rare silicification is noted as a purple-grey hue within carbonatized seams. This purple colouration is due to abundant finely disseminated hematite. The rock is weakly to moderately well parted throughout. Zone carries approximately 5% weakly silicified and highly carbonatized breccia between 163.60 and 165.70 meters. Minor shearing is noted locally as 1 mm clay-grit seam along the foliation. Rock is non-magnetic throughout. Foliation at 55 degrees to the core axis at 157.00 meters and at 70 degrees to the core axis at 167.90 meters.

20620	150.94	152.00	1.06	0-1	.000	tr
20621	152.00	153.00	1.00	0-1	.000	tr
20622	155.00	156.00	1.00	0-1	.000	tr
20623	159.00	160.00	1.00	0-1	.000	tr
20624	163.80	164.80	1.00	0-1	.340	.34
20625	171.00	172.00	1.00	0-1	.340	.34

175.00 177.75 GREENSCHIST

Medium grey-green, very fine grained to aphanitic moderately foliated rock with relic pillow selvages throughout. Rock is not pervasively carbonatized and is non-magnetic. The upper contact is marked a sharp drop in the amount of carbonatization and foliation.

From To -----Description----- Sample From To Length % Sul GW Au

177.75 209.12 BASALT

The rock is generally pale green to grey-green, and very fine grained to aphanitic. In the upper section, pillow selvages are well formed. Below, the rock becomes more massive and possibly exhibits a fine grained spinifex texture - ultrabasic composition ?. The rocks are non-magnetic throughout.

177.75 199.75 Medium green pillowed flow with minor greenschist in sections up to 1 meters in width.

199.75 203.00 Pillow selvages are not well exhibited and rock is slightly coarser grained.

203.00 209.12 Pale grey-green, very fine grained massive flow. A possible fine grained spinifex texture is noted locally below 206.00 meters. If so, these rocks are gradational into the Stoughton-Roquemaure Group.

209.12 Meters : END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords:	9942.7 9149.0	DIAMOND DRILL RECORD	HOLE NO.:	MC.86-279
Azimuth:	342.0	Section: 150E	Property:	Warvest Option
Dip:	-55.0	Core Size: 80	Location:	1+50E 0+575
Elevation:	4995.2		Date Started:	5 August, 1986
Length:	169.6		Date Completed:	8 August, 1986
Measurement:	Metric		Logged by:	A.W. Workman
Comments:	Casing left in ground			

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-53.5	91.44		-50.5	168.25	342.5	-46.0
46.33	343.5	-54.0	137.16		-46.5			

-----Log Summary-----

.00 31.09 OVERBURDEN.  
 31.09 41.74 BASALT.  
 41.74 42.85 GREENSCHIST.  
 42.85 46.43 CHLORITE-CARBONATE SCHIST.  
 46.43 104.69 MAIN MINERALIZED ZONE.  
 46.43 46.94 TRANSITIONALLY SILICIFIED ZONE.  
 46.94 58.99 MAIN SILICIFIED ZONE.  
 58.99 104.69 TRANSITIONALLY SILICIFIED ZONE.  
 104.69 126.30 CHLORITE-CARBONATE SCHIST.  
 126.30 133.13 GREENSCHIST.  
 133.13 142.65 BASALT.  
 142.65 145.50 GREENSCHIST.  
 145.50 155.01 BASALT.  
 155.01 169.55 DEFORMED INTRUSIVE.  
 169.55 Meters : END OF HOLE.

From To -----Description----- Sample From To Length % Sul GW Au

.00 31.09 OVERBURDEN

31.09 41.74 BASALT

Medium green very fine grained basalt with strong auto-brecciation locally. The upper section is highly fractured, probably due to a major fault nearby. The base of the section is characterized by an initiation of pervasive carbonatization and an increase in parallel, white carbonate filled fracturing probably along a weak foliation. Zone is non-magnetic throughout.

31.09 36.10 Very fine grained, moderately auto-brecciated, possibly pillowed flow with patchy epidotization. Abundant red hematite in fractures locally due to faulting. Non-carbonatized.

36.10 37.25 Abundant white carbonate filled randomly oriented fractures and weak pervasive carbonatization increasing down section. The number of carbonate filled fractures also increases down section. A dominant fracture filling direction becomes apparent below 35.8 meters at 35 to 40 degrees to the core axis.

37.25 41.64 Continuation of overlying section with white carbonate filled parallel fracturing at 30 degrees to the core axis, steepening down section to 45 degrees to the core axis. Pervasive carbonatization becomes moderate.

41.64 41.74 Quartz carbonate vein at 45 to 50 degrees to the core axis parallel to foliation.

41.74 42.85 GREENSCHIST

Dark green very fine grained rock with moderately to strongly developed foliation as highlighted by parallel white carbonate filled fracturing at 55 to 60 degrees to the core axis. Rock is moderately pervasively carbonatized throughout.

From To -----Description----- Sample From To Length % Sul GW Au

42.85 46.43 CHLORITE-CARBONATE SCHIST

20626 45.43 46.43 1.00 0-1 .000 tr

No sharp contact is noted with overlying section. The amount of wispy carbonatization is lower than normal making up approximately 1 to 3% of section. Foliation is well developed at 50 to 55 degrees to the core axis. Pervasive carbonatization is generally strongly developed particularly in localized breccia seams up to 10 cm in width. Minor silicified clasts noted throughout. Carries 1% very finely disseminated pyrite locally. White quartz veining up to 5 cm in width noted parallel to the foliation increasing amount down section.

MAIN MINERALIZED ZONE : 46.43 104.69 meters.

The zone is based upon amount of silicification and is composed of three members. The upper transitional zone is of normal thickness. The main silicified zone is of moderate thickness but carries lower pyrite contents than normal. The zone also contains less buff coloured alteration than normal dominantly composed of purple-grey alteration. The lower transition zone is much broader than normal but the amount of localized silicification seldom approaches main silicified zone type rock.

46.43 46.94 TRANSITIONALLY SILICIFIED ZONE

20627 46.43 46.94 .51 1 .173 .34

Dark green and very fine grained chloritized rock with minor interstitial hematization locally and moderate pervasive carbonatization, with 10 to 15% purple-grey, hematized and silicified breccia seams up to 1 cm in width and silicified laminations along a well developed foliation at 55 degrees to the core axis. This foliation becomes increasingly deformed down section towards McKenna Fault, and amount of silicification increases. The McKenna Fault is represented by a clay seam at 60 degrees to the core axis at 46.88 meters. This fault plane is in ground core. Approximately 5 cm of lost core is noted at fault.

46.94 58.99 MAIN SILICIFIED ZONE

20628 46.94 47.63 .69 1-2 .000 tr  
 20629 47.63 48.32 .69 1-2 .000 tr  
 20630 48.32 49.15 .83 2-3 .282 .34

Purple-grey to honey or cream coloured, aphanitic, intensely silicified breccia. The amount of pale

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		coloured alteration makes up probably less than 10% of section. A minor amount (less than 5%) of green, relic chloritized seams are noted within this section. These are due to late stage shearing. These seams have a non-brecciated appearance. They are generally at 50 degrees to the core axis parallel to a localized weakly developed foliation within breccia clasts. Grey silicified rock has a purple hue due to a variable degree of hematization. This hematite is reduced to pyrite in the buff to honey coloured alteration patches and zones. Zone is strongly reactive to HCl throughout. The zone averages 2-3% pyrite as very fine disseminations and as clots filling voids in breccia. In honey coloured rock, pyrite content may locally reach 8-10%, mostly as coarser clots. Pyritic seams up to 3 mm in width are noted within healed fractures. Non-magnetic throughout.	20631	49.15	49.99	.84	2-3	.000	tr
			20632	49.99	50.83	.84	1-2	.000	tr
			20633	50.83	51.65	.82	2-3	.566	.69
			20634	51.65	52.46	.81	2-3	.275	.34
			20635	52.46	53.01	.55	TR	.000	tr
			20636	53.01	53.69	.68	2-4	.000	tr
			20637	53.69	54.59	.90	1-2	.000	tr
			20638	54.59	55.49	.90	2-4	.306	.34
			20639	55.49	56.40	.91	2-4	.309	.34
			20640	56.40	56.65	.25	TR	.000	tr
			20641	56.65	57.43	.78	1-3	.000	tr
			20642	57.43	58.21	.78	2-4	.538	.69
			20643	58.21	58.99	.78	2-4	.000	tr
46.94	48.32	Dominantly purple-grey and averages 1 to 2% pyrite minor chloritization within 5 cm of McKenna Fault. Abundant late stage white carbonate filled randomly oriented fractures throughout.							
48.32	52.46	Continuation of above with 5 to 10% buff coloured patches carrying up to 8% pyrite. These patches exhibit minor early ductile deformation. The section at 50.36 to 50.83 meters is probably a brecciated and silicified syenitic or monzonitic intrusive carrying trace pyrite, and strong pervasive carbonatization. Increased pyrite contents (8-10%) noted at upper contact.							
52.46	53.01	Felsic intrusive very dark brick red, aphanitic, siliceous, strongly brecciated and probably highly silicified contacts are indistinct. Sharply increased pyrite at upper contact.							
53.01	53.69	Dark purple-grey with abundant clots and seams of pyrite up to 5 mm in width and 3 cm in length along a weak foliation and within healed fractures.							
53.69	56.40	Medium to dark purple-grey with minor pale grey to buff coloured intensely silicified breccia. Paler hues carry up to 10% pyrite locally. Some of these sections are also the sites of strong silica dumping in 1 cm seams along a moderate foliation at 45 to 50 degrees to the core axis resembles quartz veins. These seams remain weakly to moderately reactive to HCl.							
56.40	56.65	Dark grey-green, fine grained mafic intrusive with moderate foliation at 60 degrees to the core axis very nearly							

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		parallel to bordering foliation. Strongly carbonatized, non-magnetic and strongly chloritized. Rock has a granulated texture.							
56.65	58.99	Generally well foliated section with pale grey, pink, purple-grey and buff 3 to 7 cm bands at approximately 55 degrees to the core axis. Parallel late stage chloritic shearing is noted locally, generally increasing at base of zone. Pyrite noted in 0.5 cm bands up to 3 cm in length along foliation. Minor crenulation cleavage noted at 60 degrees to the core axis, at 65 to 70 degrees to foliation and plunging easterly with respect to the foliation at a relatively low angle.							
58.99 104.65 TRANSITIONALLY SILICIFIED ZONE									
		Dark green, very fine grained chloritized rock is cut by abundant silicified seams up to 30 cm in width. Silicification is localized within brecciated sections and is characterized by purple-grey, pale grey to white, and buff colourations. Generally the degree and amount of silicification decreases down section. Rock is generally non-magnetic throughout. Pyrite contents increase in silicified rock with up to 5% locally. Chloritized rock carries trace amounts. All but the most highly silicified rock is moderately reactive to HCl	20644	58.99	59.83	.84	1	.000	tr
		58.99 60.62 Section contains 70 to 75% silicified breccia dominantly pale to dark purple-grey, in sections up to 30 cm in width cut by late stage shearing at 45 to 50 degrees to the core axis and parallel to foliation within breccia.	20645	59.83	60.62	.79	1	.000	tr
		60.62 65.94 40 to 45% silicified breccia mostly purple-grey with up to 4% very finely disseminated pyrite locally in more finely brecciated rock. Foliation at 40 to 45 degrees to the core axis.	20646	60.62	61.51	.89	1	.917	1.03
		65.94 67.26 Silicification decreases to approximately 25% of section.	20647	61.51	62.40	.89	1	.614	.69
		67.26 68.38 Approximately 85% silicified breccia averaging about 2% pyrite as a very fine dissemination.	20648	62.40	63.29	.89	1	.303	.34
		68.38 68.93 50% silicified breccia with a strongly developed foliation at 50 degrees to the core axis in seams up to 5 cm in width.	20649	63.29	64.18	.89	1	.000	tr
		68.93 70.36 Approximately 90% silicified breccia nearly main silicified zone type rock with 2 to 4% pyrite locally.	20650	64.18	65.08	.90	1	.000	tr
			20651	65.08	65.94	.86	1	.000	tr
			20652	65.94	66.60	.66	0-1	.224	.34
			20653	66.60	67.26	.66	0-1	.680	1.03
			20654	67.26	67.82	.56	1-2	.386	.69
			20655	67.82	68.36	.54	1-2	.000	tr
			20656	68.36	68.93	.57	1	.194	.34
			20657	68.93	69.65	.72	1-2	1.483	2.06
			20658	69.65	70.36	.71	1-2	.490	.69
			20659	70.36	71.03	.67	1	3.444	5.14
			20660	71.03	71.84	.81	1	.559	.69
			20661	71.84	72.67	.83	1	.573	.69
			20662	72.67	73.53	.86	1	.292	.34
			20663	73.53	74.72	1.19	1	.405	.34
			20664	74.72	75.50	.78	0-1	.265	.34
			20665	75.50	76.26	.76	0-1	.000	tr
			20666	76.26	77.02	.76	0-1	.000	tr
			20667	77.02	77.71	.69	1	.000	tr
			20668	77.71	78.40	.69	1	.000	tr
			20669	78.40	79.09	.69	1-2	.000	tr
			20670	79.09	80.08	.99	0-1	.000	tr
			20671	80.08	81.06	.98	0-1	.000	tr
			20672	81.06	82.06	1.00	0-1	.000	tr
			20673	82.06	83.06	1.00	0-1	.000	tr
			20674	83.06	84.06	1.00	0-1	.000	tr
			20675	84.06	84.99	.93	1-2	.000	tr
			20676	84.99	86.04	1.05	0-1	.000	tr

From	To	Description	Sample	From	To	Length	% Sul	SW	Au
70.36	71.03	70% silicified breccia with foliated seams at 35 to 45 degrees to the core axis.	20677	86.04	87.07	1.03	0-1	.000	tr
			20678	87.07	88.16	1.09	0-1	.000	tr
71.03	73.53	Dominantly chloritized section with abundant late stage shears parallel to silicified seams up to 5 cm in width at 30 to 35 degrees to the core axis. Silicification of breccia makes up approximately 30% of section. Slickensides are well developed on some shear planes plunging steeply westerly sub-parallel to core axis.	20679	88.16	89.60	1.44	0-1	.000	tr
			20680	89.60	90.63	1.03	0-1	.350	.34
			20681	90.63	91.33	.70	TR	.238	.34
			20682	91.33	92.63	1.30	0-1	.442	.34
			20683	92.63	93.49	.86	0-1	.292	.34
			20684	93.49	94.39	.90	0-1	.306	.34
			20685	94.39	95.24	.85	0-1	.289	.34
			20686	95.24	96.25	1.01	0-1	.000	tr
73.53	74.72	Section carries 85% silicified breccia often in very finely comminuted seams with 0.25 mm fragments intensely silicified and almost non-reactive to HCl.	20687	96.25	97.26	1.01	0-1	.000	tr
			20688	97.26	98.28	1.02	0-1	.347	.34
			20689	98.28	99.26	.98	0-1	.333	.34
			20690	99.26	100.30	1.04	0-1	.000	tr
74.72	77.02	Zone is composed of approximately 35% silicified breccia in continuous sections up to 39 cm in width. Foliation is developed in chloritized seams and shears at 35 degrees to the core axis. A section of less than 5% silicification is noted below 76.27 meters. Foliation locally exhibits open folds around silicified breccia pods.	20691	100.30	101.31	1.01	0-1	.000	tr
			20692	101.31	102.40	1.09	0-1	.000	tr
			20693	102.40	103.55	1.15	0-1	.000	tr
			20694	103.55	104.69	1.14	0-1	.000	tr
77.02	79.09	Carries approximately 65 to 70% silicified breccia, often resembles main silicified zone material. Breccia is purple-grey, pink, buff and pale grey in colour with bands foliated at 40 to 60 degrees to the core axis							
79.09	84.06	10 to 15% silicified breccia.							
84.06	84.99	40% silicified breccia with abundant main silicified zone type alteration weakly reactive to HCl.							
84.99	88.16	Section carries approximately 20% silicified breccia in seams up to 5 cm in width with moderate foliation at 50 to 60 degrees to the core axis.							
88.16	89.60	Essentially chlorite carbonate schist with up to 1% silicified breccia. Minor carbonatized breccia noted locally.							
89.60	90.87	5% silicified breccia in narrow seams foliated at 40 to 55 degrees to the core axis							
90.87	91.13	Brick red syenitic or monzonitic intrusive aphanitic, silicified or siliceous, with irregularly developed contacts generally parallel to foliation. Abundant 1 to 5 mm white quartz stringers within intrusive.							
91.13	92.63	Carries 10 to 15% silicification along breccia seams up to 4 cm in width. Foliation at 50 to 55 degrees to the core axis.							
92.63	95.24	Chlorite carbonate schist with 3 to 5% silicification along seams and fractures up to 5 mm in width halo type.							
95.24	101.31	Section is generally very fine grained and							

From To -----Description----- Sample From To Length % Sul GW Au

chloritized with 30% silicified breccia in seams up to 24 cm in width.

101.31 104.69 5 to 10% silicified breccia generally decreasing in amount and width on seams down section. Chloritized rock in this section is weakly to moderately carbonatized and has a distinct granulated texture. All silicified rock becomes increasingly reactive to HCl.

104.69 126.30 CHLORITE-CARBONATE SCHIST

Dark green, fine to very fine grained and generally well laminated/foliated. A minor amount of the sequence has a distinct granular appearance with grains up to 0.5mm. Some of this rock closely resembles deformed dioritic rock from near Casa-Berardi Break in Montgolfier Twp.. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 10% of the rock volume. Rare silicification is noted as a purple-grey hue within carbonatized seams. This is generally restricted to a section in upper 2 meters of zone. The rock is weakly to moderately well parted throughout. Rock is generally non-magnetic.

20695	104.69	105.69	1.00	0-1	.000	tr
20696	109.01	110.01	1.00	0-1	.000	tr
20697	112.96	113.96	1.00	0-1	.000	tr
20698	123.00	124.00	1.00	0-1	.000	tr

Foliation at 65 degrees to the core axis at 106.40 meters, and 60 degrees to the core axis at 112.50 meters.

116.40 121.02 DEFORMED INTRUSIVE medium green, foliated equigranular rock with intense pervasive carbonatization throughout. Relic textures are well exhibited as well as a general fining trend down section. Rock was probably diorite.

126.30 133.13 GREENSCHIST

Medium grey-green, very fine grained moderately to strongly foliated rock with abundant relic pillow selvages and epidotized auto-breccia. Pervasive carbonatization is weakly developed. Rock is weakly parted along foliation at 45 to 50 degrees to the core axis. Non-magnetic throughout.

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
133.13	142.65	BASALT							

Pale to medium grey-green, generally very fine grained and relatively unaltered pillowed flow with minor localized foliation development as described above. Abundant epidotized shrinkage breccia noted throughout. Selvages locally carry hyaloclastite and are strongly chloritized. Minor localized brecciation and possible pyroclastic or sediment debris is noted between pillows strongly silicified fragments and generally strong pervasive carbonatization (eg. 140.55-140.68 m).

142.65	145.50	GREENSCHIST							
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Dark green, very fine grained well foliated basalt, 45 to 50 degrees to the core axis, with higher carbonate content than normal. Relic vesicles are noted below 143.35 meters.

145.50	155.01	BASALT							
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Medium to dark green, very fine grained massive flow with few relic volcanic structure despite low general degree of alteration. Rock is non-magnetic throughout.

145.50 153.85 Abundant carbonate along shrinkage fracturing. Non-magnetic and relatively unaltered with strong carbonatization limited to 10 cm seams of auto-breccia developed through late stage flow.

153.85 155.01 Becoming increasingly foliated as a result of shearing with probable sheared lower intrusive contact at 43 degrees to the core axis.

155.01	169.55	DEFORMED INTRUSIVE							
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Rock is medium green, and fine to very fine grained with a moderately developed foliation throughout as highlighted by 1 to 5 mm wispy chloritized patches at 50 to 55 degrees to the core axis and carbonatized laminations up to 2 mm in width. Zone generally resembles chlorite carbonate schist with much lower number of carbonatized laminations. Pervasive carbonatization is weak to moderate becoming strong locally. Rock has a strong granulated texture. Some areas seem to have been equigranular. Very weakly

From	To	Description	Sample From	To	Length	% Sul	GW	Au
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developed magnetics noted irregularly throughout.  
 Chloritized mafics noted at base of hole with lath-like  
 crystal habit up to 5 mm in length.

169.55 Meters : END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords: 9889.5 9175.2 DIAMOND DRILL RECORD HOLE NO.: MC.86-280  
 Azimuth: 338.3 Section: 175E Property: Worvest Option  
 Dip: -61.0 Core Size: 80 Location: 1+75E 1+11S  
 Elevation: 4995.8  
 Length: 193.3 Date Started: 9 August, 1986  
 Date Completed: 13 August, 1986  
 Measurement: Metric Logged by: A.W. Workman  
 Comments: DDH crossed onto Worvest at 90 m.

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-56.0	93.57	346.5	-52.0	182.88		-47.0
91.44		-52.5	137.16		-51.5			

-----Log Summary-----

.00 31.30 OVERBURDEN.  
 31.30 37.30 DIORITE.  
 37.30 45.60 FAULT ZONE.  
 45.60 107.50 BASALT.  
 107.50 109.01 GREENSCHIST.  
 109.01 110.99 CHLORITE-CARBONATE SCHIST.  
 110.99 152.25 MAIN MINERALIZED ZONE.  
 110.99 112.10 TRANSITIONALLY SILICIFIED ZONE.  
 112.10 139.20 MAIN SILICIFIED ZONE.  
 139.20 152.25 TRANSITIONALLY SILICIFIED ZONE.  
 152.25 178.41 CHLORITE-CARBONATE SCHIST.  
 178.41 183.60 GREENSCHIST.  
 183.60 193.28 BASALT.  
 193.28 Meters : END OF HOLE.

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
.00	31.30	OVERBURDEN							
31.30	37.30	DIORITE							
		Medium to dark green, fine to very fine grained massive equigranular rock with relatively unaltered textures and generally weakly developed shrinkage fracturing. The amount of tectonic fracturing increases down section. Zone is non-carbonatized and non-magnetic.							
31.30	35.25	Fine to medium grained, weakly fractured.							
35.25	37.30	Fining down section to very fine grained below 36.8 meters. Dominant fracture set at 35 degrees to the core axis with parallel shearing increasing down section.							
37.30	45.60	FAULT ZONE							
		Fault marks contact between overlying diorite and underlying basalt most of section is probably in basalt. Fragments of drill core seldom exceed 10 cm. Possible altered non-magnetic intrusive noted at 44.9 to 45.5 meters. Dominant fracture direction throughout is sub-parallel to core axis to 30 degrees to the core axis.							
45.60	107.50	BASALT							
		Dark green, fine to very fine grained rock becoming medium grained locally and exhibiting well preserved, relatively unaltered volcanic textures and structures. Zone is dominantly massive flow with possible pillowed flow locally. An increase in pervasive carbonatization is noted at lower contact.							
45.60	53.70	Flow breccia minor open shears locally, often partially filled with carbonate crystals.							
53.70	54.35	Very fine grained massive flow generally fining down section to a flow foliated basal contact at approximately 55 degrees to the							

From To -----Description----- Sample From To Length % Sul GW Au

core axis.  
 54.35 54.62 Epidotized very fine grained to aphanitic, generally massive flow top section.  
 54.62 57.70 Very fine grained becoming strongly vesicular  
 57.70 64.75 Fine grained massive with sub-ophitic texture  
 64.75 : sharp contact at 40 degrees to the core axis.  
 64.75 69.15 Vesicular upper massive flow weakly brecciated locally.  
 69.15 70.84 Very fine grained massive flow becoming very fresh textured at base resembles intrusive but not diorite.  
 70.84 75.20 Continuation of overlying section, fine to medium grained, equigranular basalt with pyroxene crystals up to 3 mm in length. Texture is possibly the result of higher than average feldspar content.  
 75.20 82.95 Texture becomes more fine grained and composition is more mafic. Relatively unaltered and trace magnetics locally.  
 82.95 86.65 Very fine grained and weakly sheared at 45 degrees to the core axis with minor hematite filled fractures sub-parallel to core axis.  
 86.65 93.00 As described above with abundant hematized fractures sub-parallel to 10 degrees to the core axis. A flow contact noted at 89.64 meters underlying flow is vesicular and porphyritic. A few fragments of vesicular flow top material are noted in lower 3 meters of overlying section.  
 93.00 104.10 Possibly pillowed flow with few poorly developed selvages, grades down section into flow breccia. Rock is porphyritic throughout with saussuritized feldspar phenocrysts up to 1.5 cm and becomes glomeroporphyritic locally. Phenocrysts are relatively rare below 96.0 meters in best developed flow breccia.  
 104.10 107.50 Continuation of overlying flow breccia becoming increasingly pervasively carbonatized down section, becoming moderately to strongly altered below 106.0 meters.

107.50 109.01 GREENSCHIST

Medium to dark green very fine grained rock with relic flow breccia locally and strongly developed tectonic foliation increasing down section at 50 degrees to the core axis. Foliation is not penetrative into fragments of basalt. Non-magnetic and strongly pervasively

From To -----Description----- Sample From To Length % Sul GW Au

carbonatized.

109.01 110.99 CHLORITE-CARBONATE SCHIST

20699 109.01 109.95 .94 0-1 .000 tr  
 20700 109.95 110.99 1.04 0-1 .000 tr

A sharp increase in foliation and penetrative fabric masks this unit. No relic volcanic textures or structures are visible and rock has a more granulated texture. Dark green, fine to very fine grained and generally well laminated/foliated. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Carbonatized laminations make up an average of 10-20% of the rock volume. The rock is weakly to moderately well parted throughout. Rock is non-magnetic throughout. Deformation within foliation indicates south side down type movement or shearing. Foliation at 50 degrees to the core axis.

MAIN MINERALIZED ZONE : 110.99 to 152.25 meters.

The zone is slightly narrow in width and is composed of 3 members. The upper transitional section is of normal width. However, the lower transition zone is thinner than average, particularly considering that the main silicified zone is slightly wider than average. Despite this, the highly silicified section contains lower pyrite contents. The best alteration is associated with localized silica dumping at 127.07 to 132.09 meters.

110.99 112.10 TRANSITIONALLY SILICIFIED ZONE

20701 110.99 111.54 .55 1 .000 tr  
 20702 111.54 112.10 .56 1 .000 tr

Dark green, very fine grained with selective silicification in carbonatized laminations and clasts. These clasts are moderately silicified and were derived through tectonic rafting from the main silicified zone. Carbonatization is indicated by a cream colouration whereas silicification has a greyer hue. Hematization accompanies silicification as a purple tint in more highly altered rock. Green, chloritized, non-silicified rock is weakly hematized as a fine interstitial dissemination. Pyrite content averages 1% with up to 2% locally in silicified sections. The McKenna Fault is represented by a clay seam at 50 degrees to the core axis at 111.78 meters. The chloritic and clay-bearing

From To -----Description----- Sample From To Length % Sul GW Au

section is approximately 5 cm in width. Silicified rock is reactive to HCl. The rock is weakly fractured with both quartz and carbonate filling fractures.

112.10 139.20 MAIN SILICIFIED ZONE

Purple-grey to honey or cream coloured, aphanitic, intensely silicified breccia. A minor amount (less than 5%) of green, relic chloritized seams are noted within this section. These seams have a non-brecciated appearance. Chloritic material is result of late stage shearing parallel to a locally developed foliation within silicified breccia. Grey silicified rock has a purple hue due to a variable degree of hematization. This hematite is reduced to pyrite in the buff to honey coloured alteration patches and zones. The upper margin of zone is strongly reactive to HCl due to pervasive carbonatization but reaction decreases rapidly down section. Honey colouration of alteration is tightly controlled by a late stage brecciation event and this alteration is penetrative into purple-grey alteration. The zone averages 2-3% pyrite as very fine disseminations and as clots filling voids in breccia. In honey coloured rock, pyrite content may locally reach 10%, mostly as coarser clots. Associated with coarse clots of pyrite in the paler rock, is an increased amount of silica dumping. Some noted as 1 to 4 mm clear to white quartz stringers. Magnetics are variably developed throughout becoming moderate locally near chloritized seams and in some purple-grey rock. The highest degrees of alteration are noted near base of zone between 120.32 and 132.09 meters, becoming best at base.

112.10 112.64 Dominantly purple-grey and strongly silicified with few buff coloured patches minor 1 cm clots of pyrite noted. No comminution of breccia, zone is coarser than average.

112.64 114.28 Rock becomes paler coloured with increase in buff alteration. Minor ductile deformation noted throughout. Degree of silicification and brecciation are lower than average. Foliation at 55 degrees to the core axis and crenulation cleavage noted at 35 to 40 degrees to the core axis and 70 degrees to foliation.

114.28 115.60 Degree of alteration and brecciation increases with minor silica dumping and clear quartz stringers locally up to 5 mm in width. Minor localized foliation at 40

20703	112.10	112.64	.54	1-2	.000	tr
20704	112.64	113.46	.82	2-3	.000	tr
20705	113.46	114.28	.82	2-3	1.689	2.06
20706	114.28	114.94	.66	2-3	1.360	2.06
20707	114.94	115.60	.66	2-3	1.129	1.71
20708	115.60	116.16	.56	1-2	.386	.69
20709	116.16	116.81	.65	2-4	1.339	2.06
20710	116.81	117.51	.70	2-4	.238	.34
20711	117.51	118.06	.55	1-2	.187	.34
20712	118.06	118.86	.80	2-4	.000	tr
20713	118.86	119.66	.80	2-3	.000	tr
20714	119.66	120.32	.66	3-4	.000	tr
20715	120.32	121.30	.98	2-4	.000	tr
20716	121.30	122.10	.80	2-4	.000	tr
20717	122.10	122.69	.59	2-4	.000	tr
20718	122.69	123.35	.66	3-5	.000	tr
20719	123.35	124.12	.77	2-4	.000	tr
20720	124.12	124.93	.81	2-4	.000	tr
20721	124.93	125.72	.79	3-5	2.710	3.43
20722	125.72	126.35	.63	2-4	.214	.34
20723	126.35	127.07	.72	2-4	1.231	1.71
20724	127.07	128.00	.93	2-4	1.274	1.37
20725	128.00	128.87	.87	2-4	.296	.34
20726	128.87	129.65	.78	2-4	.265	.34
20727	129.65	130.45	.80	2-3	.272	.34
20728	130.45	131.39	.94	3-5	10.960	11.66
20729	131.39	132.09	.70	2-4	1.918	2.74
20730	132.09	132.88	.79	2-4	1.082	1.37
20731	132.88	133.90	1.02	1-3	.704	.69
20732	133.90	134.70	.80	2-3	.272	.34
20733	134.70	135.50	.80	2-3	.272	.34
20734	135.50	136.10	.60	TR	.204	.34
20735	136.10	136.61	.51	1-2	.173	.34
20736	136.61	137.47	.86	1-2	.292	.34
20737	137.47	138.25	.78	1-2	.265	.34
20738	138.25	139.20	.95	1-3	.978	1.03

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		degrees to the core axis.							
115.60	116.16	Dominantly buff alteration with minor relic purple-grey coloured material. Degree of alteration is not strong and rock is cut by abundant late stage chloritized fracturing.							
116.16	117.51	Mixed buff and purple-grey coloured silicified breccia with generally stronger alteration than above. Pyrite contents up to 15% in 1 to 5 mm seams localized along foliation at 45 degrees to the core axis. Minor 1 cm chloritized seams or shears parallel to foliation.							
117.51	118.06	Rock is moderately silicified with abundant chloritized fractures and seams section is possibly intrusive material, but bulk of section contains silicified breccia.							
118.06	120.32	Dark purple-grey and pale grey intensely silicified breccia with minor 1 cm pyrite clots. This section carries highest degrees of alteration to this point in ddh. Section carries minor 1 to 4 cm chloritized seams probably late stage shears. Minor pale grey silica flooding near lower contact with up to 10% pyrite locally. Most prominent late stage shear at 60 to 65 degrees to the core axis at 119.55 meters.							
120.32	122.69	Section contains intensely silicified breccia, generally pale to medium grey in colour with 5 to 10% relic chloritized patches and late stage chloritic shears parallel to foliation at 50 degrees to the core axis. Pyrite content increases with abundant 1 to 2 cm clots along margins of chloritic material and in voids in breccia. Minor localized silica dumping noted throughout associated with coarser pyrite clots. Abundant deformed ductile deformation throughout overprinted by brittle deformation.							
122.69	123.35	Intensely silicified breccia with minor late stage chloritized shearing and up to 10% pyrite locally as described above. Abundant buff alteration locally associated with highest pyrite content.							
123.35	124.12	Increased late stage chloritized shears at approximately 40 degrees to the core axis making up 5 to 10% of section.							
124.12	124.93	As described above at 120.32 to 122.69 meters.							

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
124.93	125.72	Abundant buff coloured alteration with up to 7% pyrite associated with sections of very finely comminuted breccia in seams up to 20 cm in width.							
125.72	127.07	Dominantly medium grey to purple-grey, intensely silicified breccia with up to 5% pyrite.							
127.07	132.09	As described above with abundant pale grey to buff coloured altered patches carrying up to 10% pyrite often associated with silica dumping. Pyrite is very finely disseminated, 1 to 3 mm grains and 3 cm by 5 mm laminations within foliation. Section carries minor (1%) late stage chloritized shears and 1 to 2 cm chloritized patches concentrated between 129.65 and 130.45 meters.							
132.09	133.90	Section contains 5% relic chloritized sections.							
133.90	135.50	Dark purple-grey to medium grey intensely silicified breccia with few relic chloritized patches up to 1 cm.							
135.50	136.10	Syenitic intrusive dark brick red, aphanitic, highly siliceous or silicified, possibly porphyritic with vague relic ? feldspar up to 1 mm. Brecciation is moderate but pyrite contents are trace amounts only. Contacts parallel foliation at 55 degrees to the core axis.							
136.10	136.61	Pale grey, white and buff coloured silicification of breccia carries up to 3% pyrite locally.							
136.61	139.20	Section contains 5% relic chloritized patches up to 5 cm in width. Foliation noted at 40 to 45 degrees to the core axis. Chloritization increases down section							

139.20 152.25 TRANSITIONALLY SILICIFIED ZONE

			20739	139.20	139.95	.75	1-2	.255	.34
Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 40cm wide. Greenish rock is chloritized and locally hematized but is generally not silicified. Silicification is indicated by pale to dark purple-grey, orange-brown, red-brown, white and buff colourations. The site of silicification is almost entirely controlled by prior brecciation. Silicification, generally as pale grey to white coloured areas is also noted in 1 cm halos around fractures within silicified breccia. Silicified rock carries 2-3% pyrite with up to 10% in paler varieties. Chloritized			20740	139.95	140.81	.86	1	.292	.34
			20741	140.81	141.82	1.01	0-1	.343	.34
			20742	141.82	142.80	.98	0-1	.000	tr
			20743	142.80	143.68	.88	0-1	.000	tr
			20744	143.68	144.58	.90	2-3	.306	.34
			20745	144.58	145.48	.90	1-3	.306	.34
			20746	145.48	145.71	.23	0	.000	tr
			20747	145.71	147.01	1.30	1-2	.000	tr
			20748	147.01	148.12	1.11	0-1	.000	tr
			20749	148.12	148.63	.51	1-2	.173	.34
			20750	148.63	149.31	.68	0-1	.000	tr

From	Description	Sample	From	To	Length	% Sul	GW	Au
	rock carries 1% pyrite. This pyrite is generally concentrated in chloritized shears. Seams/patches of silicification are oriented parallel to foliation but cross cut locally. The amount and general degree of silicification in breccia decreases downhole. Most types of silicified breccia are moderately reactive to HCl exception is paler coloured alteration, especially non-reactive halos to fractures. Most highly chloritized sections exhibit strong hematization and are often moderately magnetic. Magnetics decrease down section.	20751	149.31	149.99	.68	0-1	.000	tr
		20752	149.99	151.03	1.04	1	.000	tr
		20753	151.03	151.97	.94	0-1	.649	.69
		20754	151.97	152.25	.28	0-1	.193	.69
139.20	145.48	Approximately 60% silicified breccia in continuous sections up to 40 cm in width.						
145.48	145.71	Mafic intrusive pale grey-green, fine grained irregularly foliated with well defined chloritized relic phyllosilicates. Possible lamprophyre. Rock is non-magnetic with contacts sub-parallel to foliation at approximately 70 degrees to the core axis.						
145.71	147.01	Approximately 50% silicified breccia with decreasing amounts down section.						
147.01	148.12	Dominantly chloritic schist with minor carbonate and 5 to 10% silicification.						
148.12	148.63	Approximately 80% intensely silicified breccia often resembles brecciated chert.						
148.63	149.99	Chloritic section carries approximately 5% silicified breccia with moderately developed foliation at 45 to 50 degrees to the core axis.						
149.99	151.03	Carries 25% silicified breccia in sections up to 10 cm in width.						
151.03	151.97	Minor reduction in silicification to approximately 20% of section in narrow seams up to 5 cm in width foliation well developed at 40 degrees to the core axis.						
151.97	152.08	Mafic intrusive same as described above at 145.48 to 145.71 meters contacts at approximately 65 degrees to the core axis, sub-parallel to local foliation.						
152.08	152.25	Approximately 5% silicified breccia.						
152.25	178.41	<b>CHLORITE-CARBONATE SCHIST</b>						
		20755	152.25	153.10	.85	0-1	.000	tr
		20756	153.10	154.12	1.02	0-1	.000	tr
		20757	156.10	157.08	.98	0-1	.000	tr
		20758	159.88	161.07	1.19	0-1	.821	.69
		20759	161.07	162.03	.96	TR	.000	tr
		20760	162.03	163.17	1.14	0-1	.000	tr
		20761	165.00	166.00	1.00	0-1	.000	tr
		20762	167.95	168.98	1.03	0-1	.000	tr

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		feather out along the foliation. Chevron-type fractures are also carbonate filled most are parallel to foliation. Some are possibly parallel to a localized crenulation cleavage at approximately 50 to 70 degrees to foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. The rock is weakly to moderately well parted throughout. Rock carries minor interstitial hematite locally as indicated by streak. Several intrusives noted ranging in composition from highly carbonatized and fine grained mafic, possible Lamprophyre; fine grained, mafic rocks, to brick red, aphanitic, highly siliceous and porphyritic, probably syenitic or monzonitic intrusives. Felsic varieties are much wider and are sub-parallel to cross-cutting foliation. Mafic intrusive are parallel to the foliation. Minor chloritic shearing is noted locally along foliation planes. FOLIATION: 40 degrees at 155.0, 65 degrees at 164.5, 55 degrees at 170.7 and 60 degrees to the core axis at 178.0 meters.	20763	177.39	178.41	1.02	0-1	.000	tr
158.33	158.55	Mafic intrusive possible Lamprophyre; fine grained, mafic rock, relic biotites are not clear as described above for other intrusives in overlying zones.							
161.07	162.03	Syenitic intrusive brick red with 10% pale pink feldspar phenocrysts up to 2 mm generally euhedral.							
178.41	183.60	GREENSCHIST	20764	178.41	179.35	.94	0-1	.000	tr
		Sharp decrease in amount of carbonate and development of foliation. Highly foliated relic volcanic structures are noted throughout vesicles, hyaloclastite, and auto-breccia. Pervasive carbonatization is very weakly developed. Rock is generally pale green to grey-green and very fine grained. Non-magnetic. Foliation at 55 degrees to the core axis at 182.40 meters.							
183.60	193.28	BASALT							
		Pale green, very fine grained massive flow becoming fine grained locally with accicular rutile crystals up to 2 mm in length. Rock is non-carbonatized and non-magnetic. Lower 30 cm of DDH is probably greenschist with well developed foliation at 45 to 60 degrees to the core axis.							

From  To -----Description----- Sample From To Length % Sul GW Au

193.28 Meters : END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords: 9737.3 9074.9

DIAMOND DRILL RECORD

HOLE NO.: MC.86-282

Azimuth: 345.5

Section: 075E

Property: Norvest Option

Dip: -72.0

Core Size: 80

Location: 0+75E 2+63S

Elevation: 4999.8

Date Started: 19 August, 1986

Length: 427.3

Date Completed: 28 August, 1986

Logged by: A.W. Workman

Measurement: Metric

Comments: Casing left in ground

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-69.0	182.88		-67.5	320.04		-63.5
91.44		-68.0	213.36	354.5	-67.0	352.65	354.5	-62.0
137.16		-67.5	228.60		-65.5	365.76		-60.0
149.96	352.5	-67.5	274.32		-68.0	411.48		-57.0

-----Log Summary-----

.00 41.15 OVERBURDEN.  
 41.15 116.20 BASALT.  
 116.20 196.08 DIDRITE.  
 196.08 296.00 BASALT.  
 296.00 297.50 CHLORITE-CARBONATE SCHIST.  
 297.50 306.80 BASALT.  
 306.80 309.12 GREENSCHIST.  
  
 309.12 325.53 UPPER MINERALIZED ZONE.  
  
 309.12 313.14 TRANSITIONALLY SILICIFIED ZONE.  
 313.14 317.07 UPPER SILICIFIED ZONE.  
 317.07 325.53 TRANSITIONALLY SILICIFIED ZONE.  
  
 325.53 355.61 MAIN MINERALIZED ZONE.  
  
 325.53 326.47 TRANSITIONALLY SILICIFIED ZONE.  
 326.47 333.71 MAIN SILICIFIED ZONE.  
 333.71 355.61 TRANSITIONALLY SILICIFIED ZONE.  
  
 355.61 362.65 CHLORITE-CARBONATE SCHIST.  
 362.65 366.86 TRANSITIONALLY SILICIFIED ZONE.  
 366.86 420.05 CHLORITE-CARBONATE SCHIST.  
 420.05 421.00 GREENSCHIST.  
 421.00 427.28 BASALT.  
 427.28 Meters : END OF HOLE.

From ----- Description ----- Sample From To Length % Sul GW Au

.00 41.15 OVERBURDEN

41.15 116.20 BASALT

Medium to dark green, generally very fine grained massive flow with abundant epidotized patches and seams throughout. Volcanic structures and textures are well preserved due to relatively light alteration apart from weak chloritization. Rocks are generally non-magnetic and undeformed.

41.15 47.00 Mixed flow top and flow breccia, highly fractured with many open voids - probably near a major fault zone.

47.00 60.75 Highly fractured very fine grained massive flow - increased red hematization in fractures. Trace magnetics locally.

60.75 61.87 Mafic intrusive - possibly dioritic, fine grained with abundant pink felsic 1 to 5 mm patches throughout - do not resemble phenocrysts. Pervasive carbonatization is very weak throughout. Non-magnetic.

61.87 63.60 Very fine grained massive flow with patchy epidotization, possibly altered phenocrysts between 62.00 and 63.25 meters.

63.60 64.45 Weakly developed flow breccia.

64.45 67.25 Flow becomes pillowed - moderately fractured sub-parallel to core axis.

67.25 71.68 Very fine grained massive flow with open hematized fractures sub-parallel to core axis with minor orange carbonate filling.

71.68 72.02 Mafic intrusive - as described above at 60.75 to 61.87 meters.

72.02 116.20 Dark green, very fine grained massive flow with narrow sections of quartz veined chlorite - carbonate schist at 74.15 to 74.30, 84.20 to 84.38 and 91.55 to 91.80 meters. These sections often carry up to 10% pyrite locally, generally as euhedral crystals. Foliations average 50 degrees to the core axis with minor 85 degree angles.

116.20 196.08 DIORITE

From -----Description----- Sample From To Length % Sul GW Au

Zone is medium to dark green and fine grained with very fine grained and locally, medium grained phases. Rock is generally equigranular and is relatively unaltered and non-magnetic. The upper contact is chilled and carries basalt xenoliths. The lower contact is locally sheared.

116.20 116.30 Upper contact at approximately 70 degrees to the core axis. Contact is well chilled with abundant 1 to 5 mm angular xenoliths of basalt. Carbonate filled voids noted throughout - these are not vesicles.

116.30 130.20 Gradual coarsening trend down-hole, very fine grained becoming fine grained locally, massive, weakly fractured.

130.20 193.00 Fine to medium grained, massive, equigranular rock with fish-net texture locally. Zone carries abundant epidotized basaltic debris between 152.40 and 153.15 meters. A late stage very fine grained mafic intrusive phase cuts this section at 165.11 to 165.16 meters. Equigranular textures are better exhibited below 160.0 meters most of medium grained rock below 191.0 meters.

193.00 196.08 Gradual fining trend down-hole - well developed chilled lower contact becoming locally sheared at 40 degrees to the core axis.

196.08 224.68 BASALT

20808 224.68 225.03 .35 1-2 .000 tr

Rock is medium grey-green and very fine grained, dominantly pillowed flow. Volcanic structures and textures are undeformed and relatively unaltered. Basalt is generally non-magnetic although trace magnetics are exhibited locally. Pyrite content averages trace amounts localized highs in pillow selvage. An open and unhealed fault zone is noted at approximately 277 meters.

196.08 234.00 Pillowed flow - selvages are well developed with hyaloclastite bearing inter-pillow debris. Voids within selvages between 224.75 and 232.50 meters are filled with massive magnetite - often slightly reddish hued due to hematite. Pillow material adjacent to selvages is non-magnetic.

234.00 237.03 Very fine grained non-magnetic basal flow.

237.03 274.80 Pillowed flow below a possible flow contact at top of section at 40 to 50

From -----Description----- Sample From To Length % Sul GW Au

degrees to the core axis. Pillows are highly vesicular with chlorite filled vesicles up to 1 cm in size. Non-magnetic throughout. Trend from dark green to pale grey-green down section.

274.50 280.80 Abundant red hematite filled fractures sub-parallel to core axis - several clay-grit seams at 25 degrees to the core axis indicate probable fault movement. Pillows are lost in this section.

280.80 286.00 Weakly pillowed flow.

286.00 293.20 Fine grained massive flow.

293.20 293.50 Foliated basal flow with laminations at 55 degrees to the core axis.

293.50 295.00 Brecciated flow top.

295.00 296.00 Very fine grained massive flow.

296.00 297.50 CHLORITE-CARBONATE SCHIST

Dark green with abundant white to pale grey, strongly carbonatized bands, seams and laminations along a well developed foliation at 50 to 65 degrees to the core axis. The foliation is highlighted by this carbonate in an otherwise green, chloritized rock. The underlying flow top suggests that this unit developed along a flow contact or within interflow sediments or within an intrusive along the flow contact.

297.50 306.80 BASALT

The upper margin of this zone seems to be along a flow top with well developed flow brecciation below. Volcanic structure are relatively unaltered. Pervasive carbonatization, while weak initially, generally increases down section.

297.50 298.70 Flow top breccia - often strongly epidotized and silicified.

298.70 306.80 Flow breccia with abundant angular auto-breccia and minor foliation developed locally. Rock becomes weakly pervasively carbonatized becoming strongly pervasively carbonatized down section.

306.80 309.12 BREENSCHIST

Mixed flow breccia of overlying section becomes

20809	307.98	308.52	.54	1	.373	.69
20810	308.52	309.12	.60	1	.204	.34

From -----Description----- Sample From To Length % Sul GW Au

increasingly foliated and carbonatized along narrow seams within foliation. The foliation becomes much finer scaled down section. Relict volcanic structures become partially masked by the increasing foliation. The foliation is developed at 40 to 45 degrees to the core axis.

NOTE: This greenschist is more highly altered than the same lithology as represented in other drill holes.

309.12 325.53 UPPER MINERALIZED ZONE.

The zone is composed of three members centred upon an upper silicified zone characterized by strong brecciation and intense silicification. Flanking zones of transitional silicified rock exhibit tectonic fabrics typical of the lower transition below the McKenna Fault - ie. Breccia controlled silicification. Pyrite contents are not high in this zone, seldom exceeding 2% as a very finely disseminated. However, alteration carries white carbonate in ovoid growths typical of McDermott Zones 3 and 4 which carry lower pyrite and higher gold contents.

309.12 313.14 TRANSITIONALLY SILICIFIED ZONE

Dark green very fine grained chloritized rock occasionally exhibiting relict volcanic textures, is cut by seams of purple-grey, buff, orange, and white coloured silicification. This silicification is restricted to sections of localized intense brittle deformation which overprints earlier ductile deformation. Silicified rock carries elevated pyrite contents of 2 to 3% locally, whereas chloritized rock carries trace amounts. Silicified material is well foliated locally along late stage shears. Zone is non-magnetic throughout.

309.12 310.45 Section contains 10 to 15% silicified breccia in seams up to 4 cm in width with well developed foliation at 45 to 50 degrees to the core axis. Minor silicification is also noted within gritty carbonatized laminations along foliation. Rock does not exactly resemble normal transitional alteration possibly due to a basalt protolith.

310.45 313.14 Carries 75 to 80% silicified breccia in sections averaging 7 to 10 cm in width but up to 50 cm locally. Degree and amount of silicification increases down section as

20811	309.12	309.84	.72	1	.497	.69
20812	309.84	310.45	.61	1	.207	.34
20813	310.45	311.32	.87	1-2	.856	1.03
20814	311.32	312.22	.90	1-2	.927	1.03
20815	312.22	313.14	.92	1-2	.000	tr

From -----Description----- Sample From To Length % Sul Gw Au

reactiveness to HCl decreases. Although general style of alteration is typical, the distribution of alteration is suggestive of a different, perhaps basaltic parent rock. Chloritized patches may carry basaltic textures.

313.14 317.07 UPPER SILICIFIED ZONE

Pale to dark purple-grey, buff and white coloured strongly to intensely silicified rock with strong brittle deformation overprinting earlier ductile deformation. Strong brecciation prevents reading the angle of early foliation. Late stage chloritized shearing locally highlights a foliation at 50 to 55 degrees to the core axis. Silicified material is speckled with ovoid calcite growths up to 1 mm in size - these make up 10% of rock. This texture is also noted within McDermott Zones 3 and 4. The paler buff to white coloured silicification is later and noted as halos around fractures within silicified breccia. Purple-grey rock is weakly magnetic locally whereas paler hues are non-magnetic. Silicified rock is weakly reactive to HCl locally. Pyrite is generally very finely disseminated throughout, averaging 1 to 2%.

20816	313.14	314.10	.96	1-2	.662	.69
20817	314.10	315.09	.99	1-2	.337	.34
20818	315.09	316.06	.97	1-2	.330	.34
20819	316.06	317.07	1.01	1-2	.343	.34

317.07 325.53 TRANSITIONALLY SILICIFIED ZONE

Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 55cm wide. Silicification is indicated by a dark greyish colouration but is strongest where purple hued. The site of silicification is almost entirely controlled by prior brecciation. Silicified breccia is occasionally honey coloured. Less common white and orange silicification is noted locally. Cream to honey coloured, pyrite rich alteration is noted as halos bordering fractures. Silicified rock carries 1% pyrite with up to 2% in paler varieties. Chloritized rock carries 0-1% pyrite. Seams/patches of silicification are oriented parallel to foliation but cross cut locally. Shear foliation is at 35 to 45 degrees to the core axis.

20820	317.07	318.10	1.03	1-2	.000	tr
20821	318.10	318.85	.75	1-2	.255	.34
20822	318.85	319.65	.80	1-2	.000	tr
20823	319.65	320.65	1.00	1-2	.000	tr
20824	320.65	321.65	1.00	1-2	.000	tr
20825	321.65	322.65	1.00	1-2	.000	tr
20826	322.65	323.65	1.00	1-2	.000	tr
20827	323.65	324.65	1.00	1-2	.000	tr
20828	324.65	325.53	.88	1-2	.000	tr

317.07 318.10 Approximately 40% silicified breccia in pale grey to dark purple-grey seams up to 7 cm in width. Degree of silicification is not high and silicified material exhibits moderate hematization. Rock is non-magnetic throughout.

From To Description Sample From To Length % Sul GW Au

318.10 319.65 Carries approximately 90% silicified breccia - degree of alteration is moderate to strong and some of chloritized material is along late stage shearing at 40 to 50 degrees to the core axis. Section resembles main silicified zone type alteration.

319.65 325.53 Section contains 55 to 60% silicified breccia in seams up to 30 cm in width. Late stage tectonism has produced a shear induced foliation of breccia fragments at 30 to 40 degrees to the core axis often highlighted by chloritized shear planes up to 1 cm in width. Degree of silicification is often intense.

325.53 355.61 MAIN MINERALIZED ZONE.

The zone is based upon amount and degree of silicification and is composed of three members. The upper and lower transitional zones are of normal thickness but the main silicified zone is slightly thinner than average. The upper transition extends into the overlying section of transitionally altered rock, the difference being the habit and texture of the silicification. Pyrite content is normal for the main silicified zone. Pyrite content averages 3-5% in the Main Silicified Zone with up to 10% locally. Reactiveness to HCl and magnetics are irregularly developed throughout.

326.47 MCKENNA FAULT PLANE.

325.53 326.47 TRANSITIONALLY SILICIFIED ZONE

20829 325.53 326.47 .94 1 .000 tr

Silicification is initially indicated by selective along pale grey to purple-grey laminations and narrow breccia bands along a well developed foliation at 50 to 60 degrees to the core axis. The zone grades into a section of broken silicified fragments enclosed in a chloritized mylonitic matrix. This material is adjacent to the McKenna Fault and has been developed through fracturing of the main silicified zone and tectonic rafting of these clasts within the fault zone. The McKenna Fault is represented by a clay seam at 55 degrees to the core axis at 326.47 meters.

325.53 326.32 Strongly foliated section with silicification dominantly along 1 to 10 mm bands and laminations parallel to foliation at 50 to 60 degrees to the core

From -----Description----- Sample From To Length % Sul GW Au

axis as highlighted by chloritized shear planes of similar thickness. This rock is typical upper transition zone type material  
326.32 326.47 McKenna Fault - zone of mylonitized chloritized and sheared rock with fragments up to 1 cm of silicified material ripped from underlying main silicified zone. The fault plane is characterized by a 1 cm clay seam at 55 degrees to the core axis at base of zone.

326.47 333.71 MAIN SILICIFIED ZONE

Purple-grey to honey or cream coloured, aphanitic, intensely silicified breccia. A minor amount (less than 5%) of green, relic chloritized seams are noted within this section. This material is generally due to late stage shearing. These seams have a non-brecciated appearance. Grey silicified rock has a purple hue due to a variable degree of hematization. This hematite is reduced to pyrite in the buff to honey coloured alteration patches and zones. A degree of hematization is found, and is more readily identified by streak, in chloritized rock. The zone averages 3-5% pyrite as very fine disseminations and as clots filling voids in breccia. In honey coloured rock, pyrite content may locally reach 10%, mostly as coarser clots. Magnetics are irregularly developed throughout from generally non-magnetic, to moderate locally.

326.47 331.42 Pale to dark purple-grey intensely silicified breccia with buff colourations becoming more common near top of zone and McKenna Fault. Well developed foliation noted throughout : 40 degrees to the core axis at 326.80 meters and 50 degrees to the core axis below 328.50 meters. Foliation is partially due to late stage shearing with shear planes noted as 1 to 5 mm chloritized and hematized sections. A major chloritized section is noted at 327.93 to 328.07 meters. Very finely disseminated pyrite along with 1 to 2 mm grains and euhedral crystals, and clots up to 2 cm are noted in amounts up to 10% locally. Coarse pyrite is generally localized in healed fractures with massive pyrite in patches up to 2 cm in length and 5 mm in thickness. These clots are generally oriented parallel to foliation. More highly elongated 1 to 5 mm thick

20830	326.47	327.44	.97	3-5	4.656	4.80
20831	327.44	328.07	.63	2-4	.435	.69
20832	328.07	328.87	.80	2-3	.824	1.03
20833	328.87	329.67	.80	2-4	.824	1.03
20834	329.67	330.45	.78	3-5	2.410	3.09
20835	330.45	331.42	.97	4-6	1.329	1.37
20836	331.42	331.97	.55	10	2.260	4.11
20837	331.97	332.92	.95	TR	.323	.34
20838	332.92	333.71	.79	1-2	.814	1.03

From	Description	Sample	From	To	Length	% Sul	GW	Au
	pyritic laminations are noted below 329.80 meters as rock becomes more strongly foliated. Section is weakly reactive to HCl and weakly magnetic locally.							
331.42	331.97 Very finely foliated and resembles a cherty sediment. Individual laminations are strongly brecciated. Dark charcoal grey material contains abundant magnetite. Pyrite noted in amounts up to 20% as laminations along the foliation and as very fine grained disseminations and euhedral crystals. The lower 5 cm is marked by strong shearing and chloritization at 40 degrees to the core axis - generally sub-parallel to foliation.							
331.97	332.92 Mafic intrusive - very fine grained, medium grey-green, with abundant 1 to 5 mm silicified xenoliths and highly elongated chloritic patches. Pervasive carbonatization is weak to moderate, magnetics are weak, becoming moderate locally.							
332.92	333.71 Section carries 5 to 10% chloritized material, dominantly as late stage chloritized shears along foliation at 30 to 40 degrees to the core axis. A few relict chloritized patches are also noted. Zone represents change to underlying transition zone.							
333.71	335.61 TRANSITIONALLY SILICIFIED ZONE							
	Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 12cm wide. Greenish rock is chloritized and locally hematized but is generally not silicified. Silicification is indicated by a dark greyish colouration but is strongest where purple hued. The site of silicification is almost entirely controlled by prior brecciation. Seams/patches of silicification are oriented parallel to foliation but cross cut locally. The amount and general degree of silicification in breccia decreases downhole. Cream to honey coloured, pyrite rich alteration is noted as halos bordering fractures. Silicified material carries up to 2 to 3% pyrite. Chloritized rock carries 0-1% pyrite. Trace magnetics are noted locally throughout becoming slightly stronger near margins of mafic intrusives.	20839	333.71	334.45	.74	1	1.014	1.37
		20840	334.45	335.20	.75	1	.772	1.03
		20841	335.20	335.92	.72	0-1	.742	1.03
		20842	335.92	336.71	.79	0-1	.265	.34
		20843	336.71	337.50	.79	0-1	.545	.65
		20844	337.50	338.27	.77	0-1	.000	tr
		20845	338.27	339.10	.83	0-1	.000	tr
		20846	339.10	339.90	.80	0-1	.272	.34
		20847	339.90	340.70	.80	0-1	.272	.34
		20848	340.70	341.52	.82	0-1	.000	tr
		20849	341.52	342.58	1.06	TR	.000	tr
		20850	342.58	343.38	.80	0-1	.272	.34
		20851	343.38	344.18	.80	0-1	.000	tr
		20852	344.18	344.98	.80	0-1	.000	tr
		20853	344.98	345.79	.81	0-1	.275	.34
		20854	345.79	346.56	.77	0-1	1.848	2.40
333.71	335.20 Section contains approximately 60% silicified breccia with chloritized patches throughout. Most of chloritization	20855	346.56	347.34	.78	0-1	.265	.34
		20856	347.34	348.15	.81	TR	1.110	1.37
		20857	348.15	349.12	.97	0-1	1.329	1.37

From	Description	Sample	From	To	Length	% Sul	GW	Au
	is a relict feature and pre-dates brecciation and silicification. However, abundant late stage chloritized shears are noted throughout along a foliation at 35 to 50 degrees to the core axis. Silicified rock carries up to 2 to 3% pyrite with trace amounts in chloritic material. Silicification often radiates pervasively from the intersections of major fractures healed with white silica.	20858	345.12	350.09	.97	0-1	.330	.34
		20859	350.09	350.93	.84	0-1	.580	.69
		20860	350.93	351.50	.57	1	.781	1.37
		20861	351.50	352.25	.75	0-1	1.800	2.40
		20862	352.25	353.00	.75	0-1	2.572	3.43
		20863	353.00	353.89	.89	1	.000	tr
		20864	353.89	354.70	.81	1	.000	tr
		20865	354.70	355.61	.91	1	.000	tr
335.20	341.52	Section carries 25% silicified breccia as described above with seams up to 12 cm in width. These seams become narrower on average below 336.71 meters but generally, the concentration of silicification remains the same. A crenulation cleavage is noted locally at 50 degrees to the core axis and approximately 70 degrees to foliation. Crenulation cleavage dips 30 to 40 degrees in a westerly direction. A few narrow ductily deformed mafic intrusives with possible relict biotites are noted parallel to the foliation at 337.99 to 338.06, 339.72 to 339.92 (?), and 342.22 to 342.21 (?) meters.						
341.52	342.58	Essentially chlorite - carbonate schist with abundant sections of carbonatized laminations and breccia seams with well developed foliation at 45 to 50 degrees to the core axis.						
342.58	345.79	Zone contains approximately 5% silicified breccia in 1 to 2 cm seams.						
345.79	347.34	Approximately 25 to 30% silicified breccia in sections up to 6 cm in width along a well developed foliation within intervening chlorite schist. Foliation is openly folded due to secondary ductile deformation. Chlorite - carbonate schist also carries tectonically rafted fragments of underlying syenitic intrusive.						
347.34	348.15	Felsic intrusive - pinkish-red to brick red, aphanitic, highly silicified and probably of monzonitic or syenitic composition. Abundant white quartz filled late stage parallel fracturing noted throughout which may parallel crenulation cleavage in surrounding rock. Intrusive contacts parallel foliation in schist at 30 to 35 degrees to the core axis. Rock is non-magnetic and non-carbonatized.						
348.15	350.93	Zone carries approximately 20 to 25% silicified breccia, generally in sections						

From -----Description----- Sample From To Length % Sul Gw Au

of less than 7 cm. Foliation noted at 25 to 30 degrees to the core axis becoming sub-parallel locally.

350.93 351.50 100% dark purple-grey silicified breccia with 1 to 2% pyrite and weakly developed magnetics locally. No foliation.

351.50 353.00 55 to 60% silicified breccia along an irregularly developed foliation at 35 to 55 degrees to the core axis.

353.00 353.89 Silicification of breccia decreases to 25% of rock volume as seams up to 3 cm in width along a well developed foliation at 40 degrees to the core axis. Pyrite content increases locally in silicification with abundant euhedral 1 mm crystals.

353.89 355.61 5 to 10% silicified breccia.

355.61 362.65 CHLORITE-CARBONATE SCHIST

Dark green, fine to very fine grained and generally well laminated/foliated. The rock is weakly chloritized pervasively - perhaps due to regional metamorphism. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Rare silicification is noted as a purple-grey hue within carbonatized seams. The rock is weakly to moderately well parted throughout. Zone is essentially non-magnetic. Pyrite content in carbonatized seams and laminations is slightly higher than in chloritized rock. Pyrite is noted in amounts up to 1% locally in chloritized rock. Silicified material makes up a minor component (1-2%) of the zone within seams generally less than 2 cm in width. Foliation noted at 40 degrees to the core axis throughout.

20866	355.61	356.60	.99	0-1	.000	tr
20867	359.00	360.00	1.00	0-1	.000	tr
20868	361.65	362.65	1.00	0-1	.000	tr

362.65 366.86 TRANSITIONALLY SILICIFIED ZONE

Zone is generally the same as the middle to lower sections of the transitional unit in the base of the Main Mineralized Zone. However, all silicified material is strongly reactive to HCl due to pervasive carbonatization along these seams. The zone is composed of dark green, very fine grained chlorite schist cut by aphanitic, purple-grey, buff and white coloured

20869	362.65	363.65	1.00	0-1	.000	tr
20870	363.65	364.65	1.00	0-1	.000	tr
20871	364.65	365.67	1.02	0-1	.000	tr
20872	365.67	366.37	.70	0-1	.000	tr
20873	366.37	366.86	.49	0-1	.000	tr

From -----Description----- Sample From To Length % Sul Gw Au

silicification localized within breccia seams up to 20 cm in width. The amount and general degree of silicification in breccia decreases downhole. Seams/patches of silicification are oriented parallel to foliation but cross cut locally. The foliation is measured at 30 to 35 degrees to the core axis at 364.0 meters and 45 degrees to the core axis at 366.3 meters.

362.65 365.67 30 to 35% silicified breccia in sections up to 20 cm in width generally decreasing in width down section.

365.67 366.86 Silicification decreases down section with minor interval of abundant silicified 1 cm fragments concentrated between 366.50 and 366.86 meters. Matrix to these fragments is chloritized and pervasively carbonatized

366.86 420.05 CHLORITE-CARBONATE SCHIST

Zone is same as described above at 355.61 to 362.65 meters. Rock becomes more granulated in appearance below 393.0 meters as the foliation becomes weaker. In a similar sense, carbonatization decreases.

FOLIATION : measured with respect to core axis - 367.8 (40) : 368.6 (45) : 372.0 (50) : 374.4 (55) : 376.1 (35) : 377.9 (60) : 380.0 (55) : 387.5 (60) : 393.5 (50) : 398.0 (65) : 405.5 (60) and, 414.0 (40).

20874	366.86	367.87	1.01	0-1	.000	tr
20875	371.00	372.00	1.00	0-1	.000	tr
20876	375.96	376.92	.96	0-1	.000	tr
20877	381.00	382.00	1.00	0-1	1.370	1.37
20878	386.00	386.98	.98	0-1	.000	tr
20879	392.00	392.96	.96	0-1	.000	tr

420.05 421.00 GREENSCHIST

Medium very fine grained massive rock with radiating shrinkage-type fracturing and weakly developed foliation at approximately 35 degrees to the core axis. Section is thinner than normal. No well developed volcanic structure or texture are noted.

421.00 427.28 BASALT

Medium grey-green, very fine grained to aphanitic pillowed flow. Abundant epidotization of selvages and carbonate filling of voids noted locally. Rock is relatively unaltered and undeformed with well preserved and exhibited volcanic textures and structures such as vesicle, variolites and pillow rims. Basalt is non-magnetic and non-carbonatized.

From ● -----Description----- Sample From To Length % Sui Gw Au

427.28 Meters : END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords:	9795.5 9126.5	DIAMOND DRILL RECORD	HOLE NO.:	MC.86-283	
Azimuth:	346.8	Section:	125E	Property:	Worvest Option
Dip:	-71.0	Core Size:	BQ	Location:	1+25E 2+05E
Elevation:	4997.7			Date Started:	28 August, 1986
Length:	372.3			Date Completed:	6 Sept., 1986
Measurement:	Metric			Logged by:	A.W. Workman
Comments:	Casing left in ground				

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-66.0	156.97	347.0	-66.0	320.04		-57.5
89.00	346.5	-66.0	182.88		-63.0	365.76		-54.5
91.44		-66.0	228.60		-62.0	372.47	342.0	-54.0
137.16		-64.0	274.32		-64.0			

-----Log Summary-----

.00 37.19 OVERBURDEN.  
 37.19 87.00 DIORITE.  
 87.00 90.79 BASALT.  
 90.79 120.00 DIORITE.  
 120.00 175.00 BASALT.  
 175.00 177.30 FAULT ZONE.  
 177.30 217.89 DIORITE.  
 217.89 238.00 BASALT.  
 238.00 239.37 GREENSCHIST.  
 239.37 241.85 CHLORITE-CARBONATE SCHIST.  
 241.85 285.39 MAIN MINERALIZED ZONE.  
 241.85 247.96 TRANSITIONALLY SILICIFIED ZONE.  
 247.96 257.32 MAIN SILICIFIED ZONE.  
 257.32 272.50 TRANSITIONALLY SILICIFIED ZONE.  
 272.50 276.91 LOWER SILICIFIED ZONE.  
 276.91 285.39 TRANSITIONALLY SILICIFIED ZONE.  
 285.39 319.28 CHLORITE-CARBONATE SCHIST.  
 319.28 325.70 GREENSCHIST.  
 325.70 372.26 BASALT.  
 372.26 Meters : END OF HOLE.

From -----Description----- Sample From To Length % Sul GW Au

.00 37.19 OVERBURDEN

37.19 87.00 DIORITE

Medium to dark green, fine to very fine grained with few medium grained, equigranular phases and relatively unaltered with localized patchy silicification and epidotization. A few late stage mafic intrusives are noted which exhibit pervasive carbonatization. Rock is generally non-magnetic.

37.19 47.08 Fine to very fine grained, highly fractured with carbonate filled to vuggy and open breaks.

47.08 48.00 Fault zone - core is very highly fractured and broken with several 3 to 5 cm clay-grit seams and abundant hematite and limonite throughout. Lost core is estimated at 60% of section.

48.00 57.77 Very fine grained, massive, non-magnetic and highly fractured throughout with open vuggy breaks as described above 47.08 meters. A pale grey-green, late stage intrusive noted at 48.26 to 48.54 meters with contacts at 30 degrees to the core axis.

57.77 65.50 Fine grained massive rock with sections of more felsic material locally - feldspars are highly saussuritized to a pale green colouration. Section is non-magnetic with trace magnetics locally.

65.50 66.14 Ground core - possible minor fault with 45 cm of lost core.

66.14 70.30 Fine grained massive section as described above fault.

70.30 83.55 Fine to medium grained, massive equigranular with well developed fish-net texture throughout. Relatively coarsest grain size between 82.0 and 83.5 meters.

83.55 84.15 Mafic intrusive - dark green, very fine grained and non-magnetic with contacts at 80 to 85 degrees to the core axis. Pervasive carbonatization is weakly developed.

84.15 87.00 Dioritic texture - gradual fining trend down-hole to a weakly chilled contact at 90

From -----Description----- Sample From To Length % Sul GW Au

degrees to the core axis. Minor epidotized auto - shearing at 85.79 to 85.89 at 35 degrees to the core axis.

87.00 90.79 BASALT

20880 90.55 90.79 .24 8-10 .329 1.37

Dark green very fine grained pillowed flow with associated flow breccia. Relict volcanic structures and textures are well exhibited throughout such as selvages, vesicles, and locally, hyaloclastite. Rocks are non-magnetic and relatively unaltered. Lower contact of this section is marked by strongly developed shearing and quartz veining at 50 to 65 degrees to the core axis.

90.58 90.79 70 to 80% white quartz veining with up to 15% pyrite locally.

90.79 120.00 DIORITE

Same as described above at 37.19 to 87.00 meters.

90.79 101.70 Fine to very fine grained, massive rock with minor shear planes at 99.69 meters at 50 degrees to the core axis.

101.70 102.16 Mafic intrusive - very fine grained to aphanitic, generally same as described above at 48.26 to 48.54 meters.

102.16 116.90 Rock becomes fine grained down section with fish-net texture developed below 115.0 meters.

116.90 118.81 Continuation of overlying section with white carbonate vein parallel to core axis along a possible shear.

118.81 120.00 Fines down section to a localized shear plane at 119.53 meters, then fines again to a sheared, chilled, epidotized and brecciated contact at 20 degrees to the core axis.

120.00 175.00 BASALT

The upper part of the section is composed of very fine grained, auto-fractured massive flow overlying a zone of very fine grained pillowed flow. Basalt is generally non-magnetic and relatively unaltered with well. Developed volcanic structures throughout.

120.00 124.50 Dark greenish-grey, very fine grained to

From	Description	Sample From	To	Length	% Sul	GW	AU
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aphanitic, weakly to moderately auto-brecciated and carrying few vesicles throughout.

124.50 129.40 Continuation of overlying section, very fine grained and massive.

129.40 130.00 Highly fractured section - local shearing ?

130.00 136.78 Very fine grained massive section fining down section to a chilled contact at 25 degrees to the core axis.

136.78 175.00 Fine to very fine grained pillowed flow - a few short finer grained sections do not exhibit well developed pillow selvages.

#### 175.00 177.30 FAULT ZONE

Heavily broken section with approximately 30% white carbonate filled voids up to 20 cm in length carrying abundant volcanic debris. A shear foliation is noted locally at 50 to 60 degrees to the core axis.

#### 177.30 217.89 DIORITE

Dark, fine grained rock with inter-locking texture of pyroxenes. A few hematized fractures sub-parallel to core axis near the upper margin with less prominent hematized randomly oriented fractures throughout above 203.0 meters. Rock becomes equigranular below this point and relatively coarser grained, becoming coarsest below 213.0 meters. A gradual fining trend is noted down section below 216.0 meters. The section from 217.56 to 217.89 meters is irregularly foliated and carbonatized with mixed intrusive and basaltic debris. A 2 mm clay seam marks a FAULT at 55 degrees to the core axis at lower intrusive contact.

#### 217.89 238.00 BASALT

Dark green, very fine grained massive flow with well developed shrinkage-type fracturing and auto-brecciation throughout. A section of flow top breccia sharply grades down section into flow breccia. Rock is non-magnetic and relatively unaltered with minor pervasive carbonatization developing near base of zone.

217.89 224.00 Highly altered, chloritized and epidotized flow top breccia with sharp gradation to flow breccia. Rounded fragments up to 3

From -----Description----- Sample From To Length % Sul GW Au

cm noted with well developed reaction rims.  
224.00 230.50 Irregularly developed and epidotized auto  
- fracturing and brecciation with strongly  
developed vesicles throughout exhibiting  
flattening along a plane at 25 degrees to  
the core axis.  
230.50 238.00 Non-vesicular continuation of overlying  
section with minor pervasive  
carbonatization at base.

238.00 239.37 GREENSCHIST

Dark green with abundant carbonate veinlets along a  
weakly developed foliation at 40 to 50 degrees to the  
core axis. Chloritic rock is not pervasively  
carbonatized and is non-reactive to HCl. Rock is  
non-magnetic throughout and carries trace amounts of  
pyrite. Lower contact is marked by a shear plane at  
approximately 25 degrees to the core axis.

239.37 241.85 CHLORITE-CARBONATE SCHIST

20881 240.88 241.85 .97 0-1 .165 .17

Dark green, very fine grained chloritized rock with  
carbonate veinlets and carbonatized laminations parallel  
to a well developed foliation at approximately 55 to 60  
degrees to the core axis. Bodies of carbonate  
alteration swell to cross-cut and feather out along the  
foliation. Carbonatization is revealed by a cream to  
pale grey colouration in an otherwise green rock.  
Carbonatized laminations make up an average of 3-5% of  
the rock volume. Carbonatized bands increase down  
section and chloritic material becomes weakly  
pervasively carbonatized. Lower contact is marked by a  
clay-coated fault plane at 55 degrees to the core axis  
with slickensides plunging approximately 45 degrees in  
an easterly direction. Fault plane parallels foliation.

MAIN MINERALIZED ZONE - 241.85 to 285.39 meters.

The zone is based upon amount and degree of  
silicification and is composed of 5 members. Generally,  
the level of alteration is proportional to the degree  
of brecciation. The upper transition zone is much  
thicker than normal and locally carries more pyrite  
than expected. The main silicified zone is well  
developed, although slightly thinner than average, and  
carries higher pyrite contents than normal. Within the

From -----Description----- Sample From To Length % Sul GW Au

lower transition zone, a section of intense silicification carries highly elevated pyrite contents.

241.85 247.96 TRANSITIONALLY SILICIFIED ZONE

Dark green, very fine grained with selective silicification in carbonatized laminations and clasts. Altered, angular to subangular fragments up to cm are noted in a chloritic matrix. These clasts were derived by brecciation of silicified laminations and tectonic rafting. Most silicified rock is at least weakly reactive to HCl becoming strongly reactive locally. Carbonatized laminations extend from the overlying zone of schist into this unit. A foliation at 45 to 55 degrees to the core axis is well exhibited throughout. Carbonatization is indicated by a cream colouration whereas silicification has a greyer hue. Hematization accompanies silicification as a purple tint in more highly altered rock. Elevated pyrite contents, up to 5% locally, is noted within silicified rock. Pyrite is found as very fine grained disseminations, 1 to 2 mm grains and euhedral 1 mm crystals. Minor 1 to 15 cm sections of localized quartz rich, silicified breccia carry up to 5% pyrite locally. A clay filled fault plane noted at upper contact and also parallel to foliation at 243.25 meters. No increased alteration associated with lower fault plane. Localized chevron-type deformation of the foliation indicates south-side down type movement. Increased alteration below 245.79 meters with intense silicification in purple-grey, finely comminuted bands up to 1 cm in width. The McKenna Fault is localized at 247.86 meters as a clay-grit seam at approximately 60 degrees to the core axis in ground core. The fault plane is of unknown width. No interstitial hematite is noted within chloritized material.

20882	241.85	242.36	.51	1-2	.525	1.03
20883	242.36	242.72	.36	3-5	4.259	11.83
20884	242.72	243.71	.99	1	1.693	1.71
20885	243.71	244.70	.99	1	1.693	1.71
20886	244.70	245.79	1.09	1	.752	.69
20887	245.79	246.58	.79	1-2	.545	.69
20888	246.58	247.39	.81	1	.559	.69
20889	247.39	247.96	.57	1	.781	1.37

247.96 257.32 MAIN SILICIFIED ZONE

The zone is composed is purple-grey to pale grey and buff coloured intensely silicified breccia. A minor amount of dark green chloritized material is noted locally - generally in late stage shears. Pyrite content averages 7% pyrite with lower contents in dark hued rock and up to 20% locally in pale grey to buff coloured alteration. Minor medium to late stage intrusive activity is noted a reddish syenitic intrusive and a dark green mafic intrusive.

247.96 248.59 Section of intensely silicified breccia

20890	247.96	248.59	.63	1-2	.649	1.03
20891	248.59	249.07	.48	2-3	2.467	5.14
20892	249.07	250.06	.99	1	4.069	4.11
20893	250.06	250.62	.56	8-10	13.826	24.65
20894	250.62	251.17	.55	8-10	4.147	7.54
20895	251.17	251.56	.39	5	2.941	7.54
20896	251.56	252.30	.74	8-10	1.902	2.57
20897	252.30	253.06	.76	15-20	5.472	7.20
20898	253.06	253.84	.78	10	2.137	2.74
20899	253.84	254.56	.72	8-10	.742	1.03
20900	254.56	254.92	.36	0-1	.061	.17

From	Description	Sample	From	To	Length	% Sul	GW	Au
	with abundant late stage chloritized tectonic activity to produce abundant silicified debris supported in a chloritic matrix. Silicified fragments up to 1 cm are noted. The altered fragments were ripped from the Main Silicified Zone during late stage tectonism below 248.59 meters. This rock is generally more common within upper transition zone adjacent to the McKenna Fault. Purple-grey colouration acquires a slight penetrative pale green hue locally near chloritized shears.	20901	254.92	255.56	.64	10	1.094	1.71
		20902	255.56	256.46	.90	5	1.854	2.06
		20903	256.46	257.32	.86	5-7	8.402	9.77
248.59	249.07	Purple-grey intensely silicified breccia carrying 1 to 2% very finely disseminated pyrite with abundant buff patches carrying up to 5% pyrite.						
249.07	250.06	Brick red aphanitic syenitic intrusive with contacts generally parallel to the foliation at 50 degrees to the core axis. Intrusive is brecciated with patchy pink alteration and 1 to 3% pyrite in breccia. Fragments of intrusive are also noted within underlying silicified breccia - tectonic rafting.						
250.06	253.84	Pale grey to buff coloured intensely silicified breccia with abundant clasts of silicified syenitic intrusive from above. A narrow syenitic intrusive as described above is noted at 256.54 to 256.62 meters. Pyrite content is highly elevated with up to 30% noted in some 10 to 20 cm sections. Pyrite noted as very fine grained disseminations, 1 mm grains, euhedral crystals up to 1 mm, 0.1 to 1.0 mm trails within healed fractures and clots of poikiloblastic pyrite up to 2 cm X 4 cm in size - generally elongated along the local foliation. Pyrite is also noted as fillings around silicified breccia clasts within the most highly altered sections. Larger pyrite clots often exhibit brecciation and later cementation with late stage pyrite. Abundant localized silica dumping throughout.						
253.84	254.56	Continuation of overlying section with darker colours of grey and buff coloured alterations, however, no typical purple-grey alteration. Pyrite contents decrease slightly from above with few clots greater than 1 cm in size. In lower 15 cm of section, pyrite content						

From	Description	Sample	From	To	Length	% Sul	GM	Au
	increases from 6 to 7% to 8 to 10%. Minor silica dumping noted locally.							
254.56	254.92 Mafic intrusive - dark grey-green, very fine grained and weakly to moderately magnetic with contacts at 70 degrees to the core axis. Intrusive carries nil pyrite and is non-reactive to HCl. A xenolith of silicified breccia is located at 254.80 to 254.86 meters. Lower contact of intrusive is sheared and carbonatized.							
254.92	255.56 Same as described above at 250.06 to 253.84 meters with 10% pyrite throughout.							
255.56	256.46 Mixed purple-grey silicified breccia with 5% pyrite, and buff alteration carrying 7 to 9% pyrite, often associated with localized silica dumping. Pyrite contents generally decrease down section.							
256.46	257.32 Dominantly pale grey to buff coloured alteration with 20% dark grey rock. A well developed foliation is exhibited locally at 60 degrees to the core axis within intensely silicified rock due to early ductile deformation. Pyrite laminations up to 2 mm in width are along foliation planes. Pyrite contents increase slightly from section above due to increasing amount of buff alteration.							

257.32 272.50 TRANSITIONALLY SILICIFIED ZONE

		20904	257.32	258.13	.81	2-3	2.219	2.74
		20905	258.13	259.00	.87	2-3	2.384	2.74
		20906	259.00	259.35	.35	2-4	.242	.69
		20907	259.35	260.20	.85	7-9	.587	.69
		20908	260.20	260.63	.43	2-4	.589	1.37
		20909	260.63	261.56	.93	6-7	6.054	6.51
		20910	261.56	262.09	.53	7-9	2.544	4.80
		20911	262.09	262.63	.54	1-3	1.480	2.74
		20912	262.63	263.29	.66	1-2	.224	.34
		20913	263.29	264.10	.81	2-4	.834	1.03
		20914	264.10	264.85	.75	1-3	.255	.34
		20915	264.85	265.61	.76	1-2	.524	.69
		20916	265.61	266.37	.76	1	.524	.69
		20917	266.37	267.13	.76	1	1.300	1.71
		20918	267.13	267.90	.77	1-2	2.641	3.43
		20919	267.90	268.44	.54	1-2	.373	.69
		20920	268.44	269.37	.93	2-3	.642	.69
		20921	269.37	270.44	1.07	1	.738	.69
		20922	270.44	271.02	.58	2-4	.795	1.37
		20923	271.02	271.77	.75	2-3	2.572	3.43
		20924	271.77	272.50	.73	2-3	.248	.34

Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 53cm wide. Greenish rock is chloritized and locally hematized but is generally not silicified. Silicification is indicated by a dark greyish colouration but is strongest where purple hued. Silicification is also represented by white, pale pink and red-brown colours..

The site of silicification is almost entirely controlled by prior brecciation. Silicified breccia is occasionally honey coloured. Cream to honey coloured, pyrite rich alteration is noted as halos bordering fractures. Silicified rock carries 2-3% pyrite with up to 10% in paler varieties. Chloritized rock carries 0-1% pyrite. Seams/patches of silicification appear to have no preferred orientation with respect to foliation. The amount and general degree of silicification in breccia decreases downhole. Hematization as fine interstitial blebs is noted in chloritized rock. Minor dark green very fine grained magnetic sections reflect localized injection of lampropyrite in sections as thin as 6 cm in

From	Description	Sample From	To	Length	% Sul	GW	Au
	width.						
257.32	259.35	60 to 65% silicified breccia seams with well developed foliation locally and pyrite laminations up to 5 mm in width along foliation at approximately 50 degrees to the core axis. Probable lamprophyre intrusive at 258.39 to 258.43 meters. Strong alteration also noted within highly foliated sections up to 6 cm in width. Non-magnetic throughout.					
259.35	260.20	Main silicified zone type silicified breccia as described above at 250.06 to 253.84 meters with up to 10% pyrite locally, often in 5 mm laminations along a well developed foliation at 50 degrees to the core axis.					
260.20	260.63	Section contains approximately 50% silicified breccia often bordering central white silica filled fractures with silicified halos.					
260.63	262.09	Similar to zone described above at 259.35 to 260.20 and 250.06 to 253.84 meters with up to 10% pyrite locally. Pyrite is dominantly euhedral 1 to 3 mm crystals and very fine grained disseminateds with increased amount of clots near margins. A few 1 to 2 cm chloritic patches or possible shears are noted. Section is dominantly reddish-pink silicification with white halos around fracturing within breccia. Increased silica dumping is noted in lower 30 to 40 cm.					
262.09	264.85	Section carries approximately 65% silicified breccia, irregularly distributed in seams up to 46 cm but averaging 10 to 15 cm in width. Foliation at 50 to 60 degrees to the core axis within silicified material. Pyrite contents up to 10% locally.					
264.85	267.13	Approximately 30% silicification within breccia sections up to 15 cm in width. Silicified material carries 2 to 3% breccia					
267.13	269.37	Silicification increases to 80% of section, often in massive altered zones up to 53 cm in width carrying 6 to 8% pyrite, generally as euhedral crystals and 1 mm grains.					
269.37	270.44	Contains 30 to 35% silicified breccia as described above. Foliation well developed at 55 degrees to the core axis.					
270.44	271.02	Section carries approximately 80% silicification, often in massive					

From To Description Sample From To Length % Sul GW Au

brecciated siliceous sections which resemble chert. Laminations are the result of alteration halos parallel to fracturing or shear foliation at 45 degrees to the core axis.

271.02 272.50 60% silicified breccia in sections up to 15 cm in width, and averaging 6 to 7 cm. Clots of pyrite up to 1 cm in size noted between breccia fragments in highly silicified rock.

272.50 276.91 LOWER SILICIFIED ZONE

Zone is generally massively and intensely silicified with 2% relict chloritized patches up to 5 cm in width irregularly oriented with respect to foliation. Possibly as much as an additional 5% chloritized material is concentrated in late stage shearing between 274.95 and 275.65 meters. Silicification is reflected in purple-grey and buff colourations with minor white and red-brown colours. Silicified rock is non-reactive to HCl. Pyrite contents up to 10% locally are concentrated in buff coloured, probably dolomitized and silicified breccia. Purple-grey alteration carries lower values. Highest pyrite concentrations are found as 5 mm thick laminations along the foliation, and 1 to 3 cm clots within silicified matrix to breccia, particularly at 273.99 to 274.95 meters. Foliation noted at 50 degrees to the core axis at 274.4 meters.

20925	272.50	273.21	.71	2-4	1.945	2.74
20926	273.21	273.99	.78	2-4	.538	.69
20927	273.99	274.95	.96	5-7	1.315	1.37
20928	274.95	275.65	.70	1-3	.238	.34
20929	275.65	276.26	.61	6-8	5.435	8.91
20930	276.26	276.91	.65	6-8	.890	1.37

276.91 285.39 TRANSITIONALLY SILICIFIED ZONE

Same as described above at 257.32 to 272.50 meters.  
 276.91 278.87 Section carries 55 to 60% silicified breccia in sections up to 25 cm in width carrying 2 to 4% pyrite locally.  
 278.87 281.53 Silicification decreases to approximately 25% in breccia seams up to 15 cm in width averaging 5 to 6 cm and carrying up to 1 to 2% pyrite.  
 281.53 285.39 Continuation of decrease in silicification to 5% of section as irregular seams up to 5 cm in width along a well developed foliation at 45 to 50 degrees to the core axis.

20931	276.91	277.89	.98	1-3	1.009	1.03
20932	277.89	278.87	.98	1-3	.333	.34
20933	278.87	279.73	.86	1-2	.292	.34
20934	279.73	280.65	.92	1-2	.313	.34
20935	280.65	281.53	.88	1	.299	.34
20936	281.53	282.48	.95	0-1	.656	.69
20937	282.48	283.40	.92	0-1	.313	.34
20938	283.40	284.37	.97	0-1	.330	.34
20939	284.37	285.39	1.02	0-1	.347	.34

From	Description	Sample	From	To	Length	% Sul	GW	Au
285.39	319.28 CHLORITE-CARBONATE SCHIST							
		20940	285.39	286.40	1.01	0-1	.343	.34
	Dark green, fine to very fine grained and generally well laminated/foliated. A minor amount of the sequence has a distinct granular appearance with grains up to 1mm. The rock is weakly chloritized pervasively - perhaps due to regional metamorphism. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Rare silicification is noted as a purple-grey hue within carbonatized seams. The rock is weakly to moderately well parted throughout. Hematite is found as a very fine interstitial dissemination within the chloritized groundmass locally.	20941	286.40	287.40	1.00	0-1	.340	.34
		20942	287.40	288.40	1.00	0-1	.340	.34
		20943	288.40	289.40	1.00	0-1	.340	.34
		20944	296.00	297.00	1.00	0-1	.170	.17
		20945	301.00	302.00	1.00	0-1	.170	.17

Foliation noted at 50 to 55 degrees to the core axis at 286.0 and 294.0, 45 to 50 degrees to the core axis at 300.0 and 306.0, 60 degrees to the core axis at 312.0, and 65 degrees to the core axis at 317.0 meters.

283.39 291.40 Minor section of weakly silicified, highly carbonatized purple-grey rock.

319.28 325.70 GREENSCHIST

Pale to medium green, very fine grained and moderately but irregularly foliated throughout at 60 to 70 degrees to the core axis. Relict volcanic structures and textures are visible locally such as hyaloclastite, variolites and vesicles. Rock is non-magnetic and exhibits minor carbonatization.

325.70 372.26 BASALT

Pale to medium green, very fine grained massive and pillowed flow with well exhibited volcanic structures and textures. Rock is non-magnetic throughout and relatively unaltered. A major fault zone is noted near the base of the hole.

325.70 330.50 Vesicular fine grained massive flow.

330.50 346.40 Pillowed flow - well developed 1 to 3 cm highly carbonatized and epidotized selvages. Pillow rims are not well exhibited below 342.0 meters.

346.40 347.85 Minor section of moderately foliated rock with carbonatized laminations and carbonate filled fractures at 70 degrees to the core axis.

From  -----Description----- Sample From To Length % Sul GW Au

347.85 353.75 Very fine grained, moderately brecciated flow - possibly ruptured pillows.

353.75 354.21 Fine grained, dioritic intrusive with contacts at 45 degrees to the core axis.

354.21 356.50 Pillowed flow becomes increasingly fractured sub-parallel to core axis down section. Fractures are open and red hematite coated.

356.50 359.05 Fault zone - possible major fault plane at 358.75 meters. Minor clay-grit seams with abundant fractures sub-parallel to core axis.

359.05 372.26 Pale green very fine grained pillowed flow, possibly grading to massive flow at base.

372.26 Meters : END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords: 9862.0 9124.9 DIAMOND DRILL RECORD HOLE NO.: MC.86-284  
 Azimuth: 348.2 Section: 125E Property: Worvest Option  
 Dip: -70.0 Core Size: 80 Location: 1+25E 1+38S  
 Elevation: 4997.1  
 Length: 258.8 Date Started: Sept.8, 1986  
 Date Completed: Sept.13, 1986  
 Logged by: A.W. Workman  
 Measurement: Metric  
 Comments: Casing left in ground

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-67.5	121.92		-67.0	202.69	344.0	-62.0
91.44		-66.0	137.16		-65.0	228.60		-62.0
113.08	345.5	-67.0	182.88		-62.0	258.81		-59.5

-----Log Summary-----

.00 29.15 OVERBURDEN.  
 29.15 30.20 DIORITE.  
 30.20 170.54 BASALT.  
 170.54 172.15 GREENSCHIST.  
 172.15 174.30 CHLORITE-CARBONATE SCHIST.  
 174.30 230.13 MAIN MINERALIZED ZONE.  
 174.30 175.30 TRANSITIONALLY SILICIFIED ZONE.  
 175.30 196.13 MAIN SILICIFIED ZONE.  
 196.13 222.97 TRANSITIONALLY SILICIFIED ZONE.  
 222.97 225.75 LOWER SILICIFIED ZONE.  
 225.75 230.13 TRANSITIONALLY SILICIFIED ZONE.  
 230.13 258.81 CHLORITE-CARBONATE SCHIST.  
 258.81 END OF HOLE.

From 10 -----Description----- Sample From To Length % Sul GW Au

.00 29.15 OVERBURDEN

29.15 30.20 DIORITE

Dark green, medium grained becoming very fine grained down section, massive equigranular rock exhibiting a well developed fish-net texture at top of hole. Lower contact is highly broken due to shearing or fault at contact. No indicated fault plane noted in ground core. Rock is relatively unaltered and non-magnetic.

30.20 170.54 BASALT

The section is composed of very fine grained to fine grained green massive flows and aphanitic pillowed flows. Local sections of glomeroporphyritic flows are also noted. Epidote and carbonatization is increasing at the lower contact of this zone.

30.20 39.15 Dark green very fine grained massive flow with minor vesicles throughout and minor shrinkage type fracturing. Abundant epidotized patches. Fractures noted locally sub-parallel to core axis with red hematite filling due to late tectonics probably cross-faulting.

39.15 40.91 Strongly foliated rock with epidotization along foliation and 10 to 20 cm patches probably basal flow with flow foliation at 30 to 40 degrees to the core axis.

40.91 41.32 Strongly epidotized and silicified, aphanitic flow top.

41.32 46.00 Irregularly brecciated, epidotized and silicified very fine grained to aphanitic massive flow.

46.00 55.68 Very fine grained massive flow no pervasive carbonatization.

55.68 56.43 Intermediate intrusive very fine grained weakly foliated pink green coloured. Moderate pervasive carbonatization throughout and contacts at approximately 80 degrees to the core axis.

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
56.43	60.20	Very fine grained massive flow.							
60.20	61.40	Fine grained massive flow.							
61.40	63.85	Gradual fining trend down-hole to very fine grained aphanitic.							
63.85	80.15	Very fine grained to aphanitic pillowed flow.							
80.15	80.77	Intermediate intrusive very fine grained, pale green with dark green chloritized mafics, possibly biotites and euhedral pale green laths, probably feldspar. Randomly oriented acicular needles of rutile are noted. Contacts at 70 to 85 degrees to the core axis lower margin marked by minor quartz veining. Non-magnetic weakly to moderately pervasively carbonatized.							
80.77	92.73	Dark green pillowed flow becoming pale green down section.							
92.73	93.20	White quartz veining highly broken during drilling.							
93.20	94.50	Pale green pillowed flow.							
94.50	117.40	Flow grades to flow breccia with rounded very fine grained reaction rimmed fragments up to 10 cm, averaging 2 to 3 cm. Fragments generally becomes less abundant and less distinct down section as amount of matrix decreases, generally a slight texture coarsening also noted down section. Chloritic matrix to fragments carries chalcopyrite and pyrrhotite in trace amounts (eg. 106.80m) with localized silicification.							
117.40	122.25	Continuation of overlying flow with no reaction rims but strong auto breccia throughout. Several strongly epidotized and silicified, often laminated sections resembles flow contact material.							
122.25	122.85	Fine grained zone.							
122.85	124.02	Bread-crust type flow top breccia grades into variolitic hyaloclastite carrying section below 123.35.							
124.02	144.65	Pale green very fine grained basalt with strongly hematized fractures sub-parallel to core axis between 124.50 and 127.30 meters. 130.60 meters minor clay-grit seam but possible major fault zone. This section grades down section into possible flow breccia or ruptured pillows. Rock contains rounded reaction rimmed fragments up to 5 cm in a hyaloclastite carrying and variolitic matrix. Flow breccia becomes better developed down section, particularly below 136.70 meters with unusually high amount of hyaloclastite in							

From -----Description----- Sample From To Length % Sul GW Au

matrix.  
144.65 145.30 Sheared, quartz carbonate veined section. Possible minor fault with foliation at approximately 45 degrees to the core axis.  
145.30 152.60 Fine grained massive rock grades down section into equigranular medium grained zone between 147.20 and 148.60 meters, then fines down section.  
152.60 161.49 Below an epidotized fracture, rock is medium grey-green very fine grained and glomeroporphyritic with clumped feldspar phenocrysts up to 3 cm in size. Feldspar crystals are euhedral, moderately saussuritized and strongly fractured. Aggregates of phenocrysts are up to 5 cm in size. Phenocrysts become smaller and less abundant below 158.3 meters.  
161.49 161.55 Epidotized and silicified contact section.  
161.55 161.81 Weakly sheared rock with localized foliation at 40 degrees to the core axis.  
161.81 170.54 Flow breccia with rounded reaction rimmed fragments up to 7 cm. These fragments become less distinct down section. Minor pervasive carbonatization is noted weakly developed, increasing down section.

170.54 172.15 GREENSCHIST

Continuation of overlying zone with few volcanic structures such as flow breccia fragments locally. A foliation at 55 to 65 degrees to the core axis is variably developed throughout and generally highlighted by carbonate filled fractures and restricted carbonatization along bands parallel to foliation and up to 5 mm in width. Pervasive carbonatization in dark green very fine grained chloritic rock is not exhibited. Rock is non-magnetic throughout.

172.15 174.30 CHLORITE-CARBONATE SCHIST

A sharp increase in amount of carbonatized laminations, degree of deformation and fineness of laminations are noted at upper contact. Rock is dark green very fine grained and well foliated throughout. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. The rock is weakly to moderately well parted throughout. The rock

20947 173.10 174.30 1.20 0-1 .408 .34

From To Description Sample From To Length % Sul GW Au

is non-magnetic with a slight trace locally.

MAIN MINERALIZED ZONE : 174.30 to 230.13 meters.

The zone is based upon amount and degree of silicification and is composed of three members with a lower silicified zone. The zone is of normal thickness but features an extremely well developed Main Silicified Zone. Pyrite contents are higher than normal, particularly in the Main Silicified Zone.

175.25 MCKENNA FAULT PLANE.

174.30 175.30 TRANSITIONALLY SILICIFIED ZONE

20948 174.30 175.30 1.00 1-2 .690 .69

Continuation of overlying chlorite carbonate schist with minor purple-grey to pale grey silicification along selectively altered laminations. Carbonatization is moderately to strongly developed throughout in silicified laminations. Hematization accompanies silicification as a purple tint in more highly altered rock. Green, chloritized, non-silicified rock is weakly hematized as a fine interstitial dissemination. Minor increased pyrite as fine disseminations is noted within silicified laminations. Foliation is generally at 65 to 70 degrees to the core axis although many open folds and chevron-folds indicates south side down type displacement or shearing. The McKenna Fault is located within a chloritized sheared zone from 175.19 to 175.30 meters. The section is highly ground core.

175.30 196.13 MAIN SILICIFIED ZONE

Purple-grey to honey or cream coloured, aphanitic, intensely silicified breccia. A minor amount (less than 5%) of green, relic chloritized seams are noted within this section. Grey silicified rock has a purple hue due to a variable degree of hematization. This hematite is reduced to pyrite in the buff to honey coloured alteration patches and zones. The zone is moderately reactive to HCl due to carbonatization throughout. The zone averages 5% pyrite as very fine disseminations and as clots filling voids in breccia. In honey coloured rock, pyrite content may locally reach 10%, mostly as coarser clots. The rock is weakly to moderately magnetic locally.

175.30 178.86 Purple-grey intensely silicified breccia

20949	175.30	176.28	.98	1-3	.676	.69
20950	176.28	177.14	.86	1-3	.292	.34
20951	177.14	177.98	.84	1-3	1.445	1.72
20952	177.98	178.86	.88	2-3	1.813	2.06
20953	178.86	179.45	.59	6-8	2.631	4.46
20954	179.45	180.48	1.03	1-3	.350	.34
20955	180.48	181.49	1.01	2-4	2.424	2.40
20956	181.49	182.12	.63	10-15	3.673	5.83
20957	182.12	182.74	.62	5	2.127	3.43
20958	182.74	183.36	.62	5	1.277	2.06
20959	183.36	184.01	.65	8-10	2.008	3.09
20960	184.01	184.66	.65	10	1.118	1.72
20961	184.66	185.32	.66	10	.904	1.37
20962	185.32	185.99	.67	8-10	.690	1.03
20963	185.99	186.66	.67	8-10	.918	1.37

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		with 1 to 3% finely disseminated pyrite and minor buff alteration within late stage brecciation events. This dolomitization is generally in seams up to 1 cm in width along central fracture sets. Section is heavily ground by drillers above 175.57 meters. Higher pyrite content noted locally with healed fractures as grain trails and associated with localized silica dumping. A few late stage chloritized shear planes are bordered by buff dolomitized halos up to several cm in width. Weakly to moderately magnetic. Weakly reactive to HCl.	20964	186.66	187.30	.64	10	2.413	3.77
			20965	187.30	188.19	.89	8-10	3.667	4.12
			20966	188.19	188.76	.57	2-3	2.542	4.46
			20967	188.76	189.50	.74	8-10	5.328	7.20
			20968	189.50	190.22	.72	6-8	10.375	14.41
			20969	190.22	190.95	.73	6-8	6.512	8.92
			20970	190.95	191.60	.65	5-7	2.451	3.77
			20971	191.60	192.25	.65	7-9	2.229	3.43
			20972	192.25	192.84	.59	3-5	.307	.52
			20973	192.84	193.41	.57	3-5	1.664	2.92
			20974	193.41	194.35	.94	1-2	1.288	1.37
			20975	194.35	194.98	.63	7-9	4.322	6.88
			20976	194.98	195.57	.59	1-2	2.024	3.43
			20977	195.57	196.13	.56	1-2	.190	.34
178.86	179.45	Over 10 cm the section grades to buff coloured intensely silicified and finely comminuted breccia up to 10% pyrite locally. A sheared section between 178.96 and 179.07 meters carries abundant red pink siliceous breccia fragments similar to syenitic intrusive material and a irregularly developed 8 cm section of mafic intrusive carrying relic biotites. Intrusive is cut off along late stage shearing. Below shear, alteration and pyrite content increases strongly. Pyrite dominantly as very fine disseminations and 1 to 2 mm grains and very few 2 to 5 mm clots.							
179.45	179.47	Chloritized late stage shear with abundant silicified debris throughout and foliation at approximately 45 degrees to the core axis.							
179.47	179.78	Purple-grey intensely silicified breccia, weakly magnetic becoming moderately magnetic locally. Non-reactive to HCl.							
179.78	179.79	Chloritic shear plane at 60 to 65 degrees to the core axis.							
179.79	179.91	A 3 cm silicified section above a chloritized carbonatized mafic intrusive with relic randomly oriented biotites throughout. Contacts at 65 degrees to the core axis. Nil pyrite in intrusive. Trace magnetics.							
179.91	180.48	Dark purple-grey intensely silicified breccia with minor alteration. Late stage chloritic fracturing. Minor late developed tectonic foliation at 30 to 35 degrees to the core axis. Variably magnetic, weak to moderate. Non-reactive to HCl.							
180.48	181.49	Rock becomes pale grey and strongly foliated to purple-grey. 2 to 4% pyrite							

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		throughout, dominantly as trails along foliation at 30 to 45 degrees to the core axis. Weakly to moderately magnetic throughout. Non-reactive to HCl.							
181.49	188.19	Sharp transition over 10 cm to buff, intensely silicified breccia with a moderate to strongly developed late stage foliation highlighted by pyrite bands up to 1 cm in width, averaging 1 to 2 mm at 40 to 45 degrees across core axis. Earlier deformation is brittle with few relic purple grey breccia clasts locally, generally concentrated in fairly granulated breccia seams along foliation. These seams are often moderately magnetic whereas buff coloured alteration is non-magnetic. Pyrite contents up to 40% are noted locally in some 5 to 10 cm sections. Average content throughout is 5 to 10%. Dominant form of pyrite is as laminations along foliation with healed fractures. Also noted as a very fine grained dissemination, 1 mm euhedral crystals and irregular grains as clots within matrix to breccia fragments and as net-like filaments and stringers developed between tightly packed breccia fragments. Section from 182.12 to 183.36 carries abundant relic purple-grey 1 to 2 mm breccia clasts and this is reflected in generally lower pyrite contents. Minor localized silica dumping noted throughout.							
188.19	190.95	Section is composed of 25 to 60 cm zones which are dominantly purple-grey with minor buff alteration along late stage breccia, or are dominantly buff coloured. Pyrite content averages 1 to 3% in dark purple-grey rock and 8 to 10% in buff alteration. Upper 60 cm is dark purple-grey and weakly to moderately magnetic. Underlying sections are generally non-magnetic, traces locally. This section carries more silica dumping than in overlying section above 188.19 meters.							
190.95	191.60	Section carries increased chloritic shears with associated mafic intrusive material in 5 to 10 cm. Pockets along shears and also carries late stage chloritized brecciation very tight with little matrix to silicified fragments. Lower pyrite contents. Shearing possibly parallels a							

From	Description	Sample	From	To	Length	% Sul	GW	Au
	weak foliation at 65 degrees to the core axis. Chlorite is strongly hematized.							
191.60	192.25 Buff to pale grey coloured intensely silicified and very finely comminuted breccia with silica dumping throughout and up to 10% pyrite as described above at 181.49 to 188.19 meters.							
192.25	193.41 Section is composed of mixed purple and buff colour breccia where purple-grey colouration is overprinted by later buff dolomitization and reduction of hematite to pyrite. However, later brecciation has often thoroughly mixed differing colours of breccia into a heterogeneous assemblage carrying 3 to 5% pyrite.							
193.41	194.35 Dark purple-grey intensely silicified breccia with lower pyrite contents and noted late stage dolomitization breccia clasts are indistinct. Non-magnetic throughout.							
194.35	194.98 Continuation of overlying section with late stage brecciation and strongly developed dolomitization and buff alteration throughout with associated silica dumping and up to 10% pyrite locally often in clots up to 2 cm in size. Microfaults within silicified breccia offset distinct textures up to 5 cm.							
194.98	196.13 Same as described above at 193.41 to 194.35 meters with minor buff alteration along late stage breccia seams up to 3 cm in width. Zone includes several narrow carbonatized mafic intrusives carrying relic micas at 195.09 to 195.20 and 195.47 to 195.53 meters. Intrusives are non-magnetic. Contacts generally parallel foliation at 35 to 45 degrees to the core axis. Increased chloritized late stage shearing increases in lower 50 cm of zone with minor relic chloritized, non-silicified patches.							
196.13	222.97 TRANSITIONALLY SILICIFIED ZONE							
		20978	196.13	197.15	1.02	1	.347	.34
	Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 50cm wide. Greenish rock is chloritized and locally hematized but is generally not silicified. Silicification is indicated by dark purple-grey, pale grey, white and buff colourations with increased pyrite contents, particularly associated with	20979	197.15	198.15	1.00	1	.340	.34
		20980	198.15	199.20	1.05	1	2.163	2.06
		20981	199.20	200.19	.99	1	.337	.34
		20982	200.19	201.24	1.05	1	.357	.34
		20983	201.24	202.23	.99	1	.337	.34
		20984	202.23	203.22	.99	1	.337	.34

From	Description	Sample	From	To	Length	% Sul	GW	Au
	buff alteration. The site of silicification is almost entirely controlled by prior brecciation. Silicified buff to white halos are also noted parallel to fractures within silicified breccia and cutting chloritic rock. Seams/patches of silicification are oriented parallel to foliation but cross cut locally. The amount and general degree of silicification in breccia decreases downhole. Hematization as fine interstitial blebs is noted in chloritized rock locally. Non-magnetic with rare weak magnetics exhibited locally in chloritized rock.	20985	203.22	204.29	1.07	1-3	.738	.69
		20986	204.29	205.29	1.00	0-1	.690	.69
		20987	205.29	206.30	1.01	0-1	.343	.34
		20988	206.30	207.30	1.00	0-1	.340	.34
		20989	207.30	208.30	1.00	0-1	.690	.69
		20990	208.30	209.31	1.01	0-1	.343	.34
		20991	209.31	210.37	1.06	0-1	1.092	1.03
		20992	210.37	210.94	.57	1-2	.194	.34
		20993	210.94	211.54	.60	NIL	.204	.34
		20994	211.54	212.70	1.16	1-2	.394	.34
196.13	203.22 Section is chloritized, weakly to moderately foliated locally at 40 to 55 degrees to the core axis and carries 30% silicified breccia in seams up to 15 cm in width. Chloritic rock contains trace pyrite with 7 to 9% localized in silicified material. A late stage shear plane noted at 60 degrees to the core axis at 201.24 meters. Silicified breccia laminations above indicate fault movement after latest silicification and dolomitization.	20995	212.70	213.74	1.04	0-1	.354	.34
		20996	213.74	214.80	1.06	0-1	.731	.69
		20997	214.80	215.86	1.06	0-1	.360	.34
		20998	215.86	216.95	1.09	0-1	.371	.34
		20999	216.95	217.49	.54	1	.184	.34
		21000	217.49	218.40	.91	0-1	.309	.34
		16996	218.40	219.31	.91	0-1	.309	.34
		16997	219.31	220.20	.89	0-1	.614	.69
		16998	220.20	221.09	.89	0-1	.303	.34
		16999	221.09	222.02	.93	0-1	.316	.34
		17000	222.02	222.97	.95	0-1	.323	.34
203.22	204.29 Zone contains 75 to 80% silicified breccia in seams up to 35 cm in width and averaging 12 cm in width and carrying up to 8% pyrite locally as grains and clots between breccia clasts.							
204.29	210.37 Silicification decreases to 20% of section in brecciated seams rarely up to 16 cm in width and averaging 3.5 cm in width. Pyrite contents are generally lower at 0 to 1% with up to 2% locally concentrated in silicified breccia.							
210.37	210.94 Section carries increasing silicification down section to total 73% of section.							
210.94	211.54 Mafic intrusive grey-green fine grained massive and weakly foliated rock with pink grains up to 0.5 mm in a chloritized matrix. Granulated texture throughout. Foliation at 35 to 40 degrees to the core axis. Intrusive is moderately to strongly pervasively carbonatized in central portion and is non-magnetic. Zone is generally parallel to foliation in surrounding rock. Nil pyrite with traces locally.							
211.54	212.70 Section contains 80 to 85% silicified breccia in sections up to 50 cm in width and up to 5% pyrite locally.							
212.70	216.95 40 to 45% silicified breccia as seams averaging 5 to 6 cm in width and up to 15 cm maximum width. Foliation well							

From o -----Description----- Sample From To Length % Sul GW Au

developed locally at 40 degrees.  
216.95 217.49 Section contains approximately 80% silicified breccia.

217.49 222.97 25 to 30% silicified breccia in continuous sections up to 15 cm but averaging 4 cm regularly distributed throughout. Localized foliation noted averages 45 degrees to the core axis with localized deformation producing a flattening to sub-parallel to core axis.

222.97 225.75 LOWER SILICIFIED ZONE

Silicification strongly increases from overlying zone with only minor relic chloritized patches up to 2 cm in width and few late stage chloritic shears. Degree of silicification is moderate to intense, directly reflecting fineness of brecciation. Some silicification is noted as 1 to 5 mm halos around fractures and near relic chloritization. Pyrite contents increase notably from surrounding rock. Pyrite contents of up to 10% are localized in one 10 to 20 cm section. However, average content is probably 2 to 3% throughout. Silicification is generally purple-grey to pale grey with minor buff alteration carrying the highest amounts of pyrite.

22001	222.97	223.91	.94	1-3	.320	.34
22002	223.91	224.72	.81	2-3	.000	tr
22003	224.72	225.75	1.03	3-5	.000	tr

225.75 230.13 TRANSITIONALLY SILICIFIED ZONE

Same as described above from 196.13 to 222.97 meters with generally decreasing amounts and degree of silicification down section. Pyrite content generally averages less than 1% with up to 10% locally associated with highest levels of silicification. Foliation noted locally developed throughout at 40 to 45 degrees to the core axis.

225.75 227.03 Section contains approximately 65% silicified breccia in continuous sections up to 30 cm in width and carrying up to 10% pyrite generally in the narrower seams of alteration.

227.03 229.32 Zone carries 40 to 45% silicified breccia as described above but with less than 3% pyrite generally associated with silicification.

229.32 230.13 Silicification decreases down section averaging 20 to 25% over this interval.

22004	225.75	226.34	.59	1	.000	tr
22005	226.34	227.03	.69	2-3	.235	.34
22006	227.03	227.79	.76	1	.000	tr
22007	227.79	228.52	.73	1	.000	tr
22008	228.52	229.32	.80	1	.552	.69
22009	229.32	230.13	.81	0-1	.275	.34

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
230.13	258.81	CHLORITE-CARBONATE SCHIST							
			22010	230.13	231.10	.97	0-1	.000	tr
		Dark green, fine to very fine grained and generally well laminated/foliated. A minor amount of the sequence has a distinct granular appearance with grains up to 1mm. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Carbonatization is revealed by a cream to pale grey colouration in an otherwise green rock. Rare silicification noted as pale grey to pink colourations within narrow breccia seams, occasionally up to 15 cm in width. These seams are concentrated between 237.95 and 238.65 meters. The rock is weakly to moderately well parted throughout. Hematite is found as a very fine interstitial dissemination within the chloritized groundmass locally. The zone is essentially non-magnetic with a trace of magnetism locally associated with granulated sections eg. 249.75 to 250.30 m. Minor localized silicification of breccia at 253.45 to 254.10 meters with approximately 25% silicified material.	22011	231.10	232.00	.90	0-1	.000	tr
			22012	232.00	233.00	1.00	0-1	.000	tr
			22013	233.00	234.00	1.00	0-1	.000	tr
			22014	234.00	235.00	1.00	0-1	.000	tr
			22015	235.00	236.00	1.00	0-1	.000	tr
			22016	236.00	237.00	1.00	0-1	.000	tr
			22017	237.00	237.95	.95	0-1	.000	tr
			22018	237.95	238.80	.85	1	2.040	2.40
			22019	238.80	239.80	1.00	0-1	.340	.34
			22020	243.98	245.00	1.02	0-1	.347	.34
			22021	253.39	254.29	.90	1	.306	.34
		Foliations :.							
		40 Degrees to the core axis at 241.00 meters.							
		65 Degrees to the core axis at 245.00 meters.							
		40 to 45 degrees to the core axis at 249.00 meters.							
		50 Degrees to the core axis at 258.00 meters.							

258.81 : END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords 9791.5 9024.8

DIAMOND DRILL RECORD

HOLE NO.: MC.86-285

Azimuth: 345.4

Section: 025E

Property: WORVEST OPTION

Dip: -70.0

Core Size: BQ

Location: 0+25E 2+085

Elevation: 5001.2

Date Started: SEPT. 15, 1985

Length: 351.1

Date Completed: SEPT. 22, 1985

Measurement: METRIC

Logged by: B. BASCHUK

Comments: CASING LEFT IN HOLE

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-70.0	188.98	352.5	-66.0	320.04		-60.0
91.44		-69.0	228.60		-65.5	349.61	347.5	-56.0
137.16		-67.5	274.32		-61.0			
182.88		-66.5	284.07	352.5	-61.0			

-----Log Summary-----

.00 37.80 OVERBURDEN.  
 37.80 53.81 BASALT.  
 53.81 94.68 DIORITE.  
 94.68 100.25 BASALT.  
 100.25 162.22 DIORITE.  
 162.22 189.07 BASALT.  
 189.07 239.92 DIORITE.  
 239.92 242.55 VARIABLY SILICIFIED ZONE (undetermined).  
 242.55 251.03 GREENSCHIST.  
 251.03 260.17 CHLORITE-CARBONATE SCHIST.  
 260.17 289.85 MAIN MINERALIZED ZONE.  
 260.17 260.78 TRANSITIONALLY SILICIFIED ZONE.  
 260.78 268.06 MAIN SILICIFIED ZONE.  
 268.06 289.85 TRANSITIONALLY SILICIFIED ZONE.  
 289.85 291.46 CHLORITE-CARBONATE SCHIST.  
 291.46 318.87 TRANSITIONALLY SILICIFIED ZONE.  
 318.87 322.32 CHLORITE-CARBONATE SCHIST.  
 322.32 335.85 TRANSITIONALLY SILICIFIED ZONE.  
 335.85 337.18 LOWER SILICIFIED ZONE.  
 337.18 341.98 TRANSITIONALLY SILICIFIED ZONE.  
 341.98 351.13 CHLORITE-CARBONATE SCHIST.  
 351.13 END OF HOLE.

From To -----Description----- Sample From To Length % Sul GW Au

.00 37.80 OVERBURDEN

37.80 53.81 BASALT

Fine grained dark green non-magnetic massive flow with no distinct flow features noted. Numerous narrow mafic intrusives are noted often with sheared contacts.

37.80 42.54 Massive flow : fine grained, dark green with no distinct flow features noted. Non-magnetic

42.54 42.80 Mafic intrusive : green, fine grained with 10% white fibrous phenocrysts up to 2 mm across. Pale green phenocrysts 1.5 mm also noted. Contacts sub-parallel to core axis to approximately 10 degrees to the core axis. Non-magnetic.

42.80 45.10 Massive flow : as described above from 37.80 to 42.54 meters.

45.10 45.75 Mafic intrusive : dark green and fine grained with pale green phenocrysts up to 1 mm and biotites up to 1 mm. Possibly LAMPROPHYRE. Non-magnetic. Contacts at 50 to 55 degrees to the core axis.

45.75 53.80 Massive flow : continuation of above flow. Narrow fine grained, green non-magnetic mafic intrusives noted at 49.05 to 49.10 ( with contacts at 55 degrees to the core axis ), 50.85 to 51.00 ( irregular contacts, often sheared ) and 51.63 to 51.70 ( very fine grained with 15% pale green epidote blebs 1 mm across often with biotite cores. Contacts at 72 degrees to the core axis ).

53.80 Fault gouge : 1 cm hematite stained clay-grit seam at 70 degrees to the core axis with carbonate and quartz stringers with epidote in adjacent host rocks.

53.81 94.68 DIDRITE

Medium grained grey-green intrusive with fish-net texture noted. Non-magnetic. Minor epidote fracture fillings. Local sections with equigranular interlocking feldspar and mafic minerals. From 67 to 90 meters the

From To -----Description----- Sample From To Length % Sul GW Au

grain size gradually increases to medium to coarse grained, then below 90 meters the grain size decreases to very fine grained at the lower contact. Lower contact at 40 degrees to the core axis with minor chill and associated quartz - carbonate stringers with trace to 1% pyrite + chalcopyrite. Mafic intrusive noted at 55.43 to 55.50 meters as described above from 51.63 to 51.70 meters. Lower contact at 75 degrees to the core axis with minor shearing.

94.68 100.25 BASALT

Aphanitic to very fine grained locally vesicular and breccia section of flow top. Monzonitic intrusive noted from 99.13 to 99.69 meters.

94.68 96.30 Flow top breccia : aphanitic section with subrounded to subangular fragments often with chilled margins in a matrix with hyaloclastite.

96.30 99.13 Vesicular section : aphanitic to very fine grained vesicular section with epidote filling vesicles. Non-magnetic. Vesicles up to 4 mm across averaging 2 mm comprising 10% of the rock.

99.13 99.69 Intermediate intrusive : monzonite ?. Fine grained greenish-grey with faint reddish tinge. Carbonate blebs up to 1 mm noted. Sharp contacts at 80 to 85 degrees to the core axis. Non-magnetic. Trace to 1% disseminated pyrite.

99.69 100.25 Vesicular section : as described above from 96.30 to 99.13 meters, but with 5% vesicles.

100.25 162.22 DIORITE

Dark green intrusive with the grain size increasing from very fine grained at the upper contact to medium to coarse grained at the center. The magnetics are increasing towards the center and are found predominantly in finer grained rock. Fish-net texture is noted locally.

100.25 105.00 Very fine grained green non-magnetic intrusive. Upper contact is defined by narrow epidote stringer and the end of vesicles. Pyrite noted locally up to 1% as a fine dissemination and associated with chlorite along fractures.

105.00 111.50 Fine to medium grained continuation of

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		above. Weakly magnetic at base. Well developed interlocking equigranular texture noted.							
111.60	113.57	Gradational fining trend down section with magnetics increasing down section.							
113.57	118.50	Fine grained dark green strongly magnetic section with 5 to 8% fine grained magnetite blebs up to 1 mm across. Contacts are gradational.							
118.50	162.22	Fine to medium grained green to locally grey-green intrusive. Magnetics decreasing down section and become sporadic. Local sections noted with equigranular interlocking crystals and locally with fish-net texture. Lower contact at 30 degrees to the core axis. Leucoxene noted from 119.60 to 123.70 up to 1 mm comprising 3 to 5% of the rock and from 143.68 to 144.55 meters.							
128.65	128.75	Intermediate intrusive : green with faint pale green tinge. Weakly carbonatized. Rare pink phenocrysts up to 1 mm noted. Trace pyrite. Contacts at 52 degrees to the core axis.							
160.70	162.22	Well developed medium grained fish-net texture. Grain size decreasing to fine grained at base.							
162.22	189.07	BASALT	22022	188.69	189.07	.38	TR-1	.129	.34
		Green aphanitic and very fine grained pillowed flows and massive flows. Fault gouge noted at 170.64 meters at 55 degrees to the core axis. Dioritic intrusive noted from 176.70 to 177.99 meters.							
162.22	164.09	Vesicular flow : aphanitic, green non-magnetic section with vesicles filled by quartz. Minor breccia at upper contact for 1 cm. Fragments are angular and exhibit no chills.							
164.09	169.20	Massive flow : very fine grained green non-magnetic. Non-reactive to HCl. Weakly foliated sub-parallel to core axis.							
169.20	170.62	Massive flow : continuation of above flow, but sharp increase in epidote fracture fillings, carbonate fracture fillings and stringers and the rock is grassy green coloured. Fractures are 22, 30 and 40 to 45 degrees to the core axis. Late stage carbonate stringers are at 80 degrees to the core axis.							

From	To	Description	Sample From	To	Length	% Sul	GW	Au
170.62	170.85	Fault gouge : highly chloritized and sheared. Clay-grit seam at 170.64 meters at 55 degrees to the core axis.						
170.85	172.65	Massive flow : continuation of flow from 169.20 to 170.62. Felsic intrusive noted from 171.25 to 171.37 meters. Intrusive is fine grained, green, highly carbonatized with pink grains in groundmass. Strongly foliated at 72 degrees to the core axis.						
172.65	172.95	Flow breccia : subrounded to subangular, pale green fragments with hyaloclastite in matrix.						
172.95	174.90	Vesicular flow : green aphanitic to very fine grained section with dark green vesicles filled with biotite or quartz. Non-magnetic.						
174.90	176.55	Fine grained flow : possibly pillowed, no distinct selvages but epidote fracture fillings concentrated near vesicles often associated with brecciation.						
176.55	176.70	Foliated section : possibly chill margin to underlying diorite. Strong foliation at 55 degrees to the core axis with minor brecciation.						
176.70	177.99	Diorite : possibly pillow interior, no distinct contacts. Fine grained, green massive with minor brecciation at lower contact. Non-magnetic and non-reactive to HCl.						
177.99	188.69	Pillowed flow : green, aphanitic and vesicular. Non-magnetic. Selvages become better developed down section with epidote rich chilled selvages.						
188.69	189.07	Quartz vein : white bull quartz vein with traces of pyrite within, 2 to 3% at contacts.						

189.07 239.92 DIORITE

Dark green intrusive with the grain size rapidly increasing to medium to coarse grained after a fine grained upper contact. The rocks are magnetic from 193.50 to 205.00 meters. The base of the intrusive is weakly foliated.

189.07 204.20 Diorite : green, fine grained at upper contact, rapidly increasing grain size to medium to coarse grained after 0.5 meters. Non-magnetic to 193.50, then gradual increase to strongly magnetic.

From To Description Sample From To Length % Sul GW Au

Magnetic zones are dominantly fine to medium grained. Well developed igneous interlocking equigranular texture noted locally. Below 200.24 meters, the grain size decreases to fine grained, but still strongly magnetic.

204.20 204.40 Foliated section : fine grained, strongly magnetic with epidote stringers at contacts. Foliation at 65 to 70 degrees to the core axis. Minor interstitial hematite

204.40 230.70 Diorite : fine grained, green section with epidote fracture fillings common. Moderately magnetic at upper contact. Foliated section noted from 227.56 to 227.70 meters with epidote and carbonate at 61 degrees to the core axis.

230.70 237.15 Medium grained green diorite : continuation of above. Fish-net texture noted locally. Non-magnetic.

237.15 238.25 Fine grained green section : continuation of above. Minor leucoxene noted.

238.25 239.92 Fine grained continuation of above. Weakly foliated highlighted by selective carbonatization and weak alignment of chlorite. No hematitic streak. Minor leucoxene locally. Foliation at 50 to 60 degrees to the core axis.

239.92 242.55 VARIABLY SILICIFIED ZONE (UNDETERMINED)

Well developed foliated section with fine grained green bands and carbonate rich bands. Minor silicification, less than 5% occurring in 0.5 to 2 cm bands. Hematitic streak noted throughout. Traces pyrite with silicification. Minor leucoxene noted locally. Locally moderately magnetic. Foliation at 55 to 60 degrees to the core axis.

242.55 251.03 GREENSCHIST

The rocks are foliated flow breccias. Pale green aphanitic fragments cut by late stage hematite rich fluids. The rocks exhibit a hematitic streak.

242.55 246.98 Strongly foliated flow breccia : angular and subrounded fragments cut by late stage fractures. Interiors of fragments are pale green, grey-green with hematitic streak where the fluids have penetrated.

From To -----Description----- Sample From To Length % Sul GW Au

Very locally moderately magnetic. Fragments noted locally with vesicles. The fragments have brecciated and aligned parallel to the foliation at 45 to 60 degrees to the core axis.

246.98 251.03 Fine grained green more massive appearing section with rare fragments, elongated vesicles are common. Foliation at 45 to 55 degrees to the core axis defined by wispy carbonatization and vesicles. Non-magnetic with hematitic streak.

251.03 260.17 CHLORITE-CARBONATE SCHIST

22023 259.18 260.17 .99 TR .337 .34

Dark green, fine to very fine grained and generally well laminated/foliated. The foliation is highlighted by selective carbonatization of individual laminations. Bodies of carbonate alteration swell to cross-cut and feather out along the foliation. Rare silicification is noted as a purple-grey hue within carbonatized seams. Hematite is found as a very fine interstitial dissemination within the chloritized groundmass. The zone is essentially non-magnetic with a trace of magnetism locally. Pyrite content in carbonatized seams and laminations is slightly higher than in chloritized rock.

251.03 258.79 In chloritized rock traces pyrite, 1 to 2% in silicified sections. Red fine grained siliceous syenitic fragment noted at 255.46 to 255.46 meters, sharp contacts and carbonatized. Foliations noted at : 52 degrees at 251.20, 40 degrees at 253.05, 36 degrees at 255.22, 50 degrees at 256.71, 38 degrees at 258.20 and 55 degrees to the core axis at 259.55 meters.

258.79 260.17 Crenulation cleavage is noted. Foliation at 28 degrees to the core axis, crenulation cleavage at 70 degrees to foliation at 259.08.

260.17 to 289.85 MAIN MINERALIZED ZONE.

The zone is based upon amount and degree of silicification and is composed of three members. The upper section is of normal thickness, but the MAIN SILICIFIED ZONE is slightly thinner than normal. The lower TRANSITIONALLY SILICIFIED ZONE is thinner than normal. If the CHLORITE-CARBONATE SCHIST sections were included within the MAIN MINERALIZED ZONE, then the

From To -----Description----- Sample From To Length % Sul SW Au

lower TRANSITIONALLY SILICIFIED ZONE would be larger than average. The style of silicification is not particularly well developed and occurs dominantly in narrow seams, not the pervasive type generally noted. Pyrite contents are lower than average.  
260.78 MCKENNA FAULT PLANE.

260.17 260.78 TRANSITIONALLY SILICIFIED ZONE

22024 260.17 260.78 .61 TR .628 1.03

10% Silicification. Dark green, very fine grained with selective silicification in carbonatized laminations and clasts. Hematization accompanies silicification as a purple tint in more highly altered rock. Green, chloritized, non-silicified rock is weakly hematized as a fine interstitial dissemination. Traces pyrite. The McKenna Fault is located within a chloritized sheared zone from 260.74 to 260.78 meters. The McKenna Fault is represented by a clay seam at 56 degrees to the core axis at 260.78 meters. The rock is non-magnetic with a slight trace locally. Crenulation cleavage developed locally, continuation of above CHLORITE-CARBONATE SCHIST, but silicification occurs. Crenulation cleavage at 260.62 meters, 20 degrees to foliation, foliation at 44 degrees to the core axis. Foliation also noted at 55 degrees at 260.55 and 46 degrees at 260.17 meters.

260.78 268.06 MAIN SILICIFIED ZONE

Silicified breccia cut by syenitic, mafic and intermediate intrusives. The silicification is not as intense as usual and the pyrite contents are low. A minor amount (less than 5%) of green, relic chloritized seams are noted within this section. The silicification is purple grey, green, buff or cream coloured. The zone is moderately reactive to HCl due to carbonatization throughout. The zone averages 1-2% pyrite as fine disseminations and as 1-3mm blebs. In honey coloured rock, pyrite content may locally reach 10%, mostly as coarser clots. The rock is weakly to moderately magnetic.

22025 260.78 261.16 .38 2-3 1.566 4.12  
22026 261.16 261.85 .69 1-2 .235 .34  
22027 261.85 262.89 1.04 TR .354 .34  
22028 262.89 263.49 .60 1-2 1.644 2.74  
22029 263.49 264.25 .76 2-3 2.082 2.74  
22030 264.25 264.47 .22 TR .152 .69  
22031 264.47 265.14 .67 2-3 2.988 4.46  
22032 265.14 266.40 1.26 TR .428 .34  
22033 266.40 267.02 .62 1-2 1.916 3.09  
22034 267.02 267.60 .58 5-7 2.993 5.16  
22035 267.60 268.06 .46 1-2 1.578 3.43

260.78 261.16 Silicified breccia : cream to buff coloured fragments in a silicified green matrix. 2 to 3% pyrite overall, locally up to 3 to 5% in buff sections. Minor purple fragments noted. Pervasively carbonatized. Non-magnetic. Pyrite occurs as fine disseminations. Fragments parallel to foliation at 52 degrees to the core axis.

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
261.16	261.85	Purple silicified breccia : 1 to 2% pyrite. Moderately magnetic throughout. Pervasively carbonatized. Less than 5% relic chloritized patches. Cut by late stage carbonate fracture fillings.							
261.85	262.89	Syenitic intrusive : dark red-brown, highly siliceous with buff coloured fragments at contacts. Rare red phenocrysts noted up to 2 mm across. Upper contact at 72 degrees to the core axis. Non-magnetic and non-carbonatized.							
262.89	264.25	Highly brecciated with buff, purple and green silicified fragments in a green silicified matrix. 1 to 2% pyrite, locally up to 5 to 10% associated with buff coloured fragments. Pyrite occurs as fine disseminations and fracture fillings. Non-magnetic. Pervasively carbonatized, strongest associated with buff sections.							
264.25	264.47	Mafic intrusive : dark green, fine grained with sharp contacts at 40 degrees to the core axis. Strongly pervasively carbonatized with pale pink grains noted locally. Non-magnetic.							
264.47	265.14	Dark purple grey section : 2 to 3% finely disseminated pyrite and as fracture fillings and blebs. Minor buff coloured alteration adjacent to fractures. Locally strongly magnetic associated with zones of high pyrite. Pervasively carbonatized.							
265.14	266.40	Intermediate intrusive : fine grained, green intrusive with local brecciated sections. The breccia sections are relic quartz stringers up to 1 cm in width. Trace pyrite. Sharp contacts : upper at 55 degrees and lower at 52 degrees to the core axis.							
266.40	268.06	Dark grey to purple section : less than 5% relic chloritized seams. Down section the colour becomes dark green. Locally the pyrite has a distinct orange brass colour eg. 267.50 meters. Pyrite content is 1 to 2%, locally up to 10% as fine disseminations in bands up to 1 cm wide. Non-magnetic. Pervasively carbonatized.							
268.06	289.85	TRANSITIONALLY SILICIFIED ZONE							
		Dark green, fine grained with aphanitic purple grey silicified breccia bands. The greenish rock exhibits a	22036	268.06	269.06	1.00	TR-1	1.340	1.34
			22037	269.06	270.06	1.00	TR-1	2.400	2.40
			22038	270.06	271.06	1.00	1-2	1.720	1.72

AMERICAN BARRICK RESOURCES CORPORATION

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		hematitic streak and is generally not silicified. The foliation is well developed and defined by the bands of silicified breccia. The pyrite content averages 1 to 2%, locally up to 10% associated with buff coloured silicification.	22039	271.06	272.06	1.00	2-3	3.090	3.09
			22040	272.06	272.65	.59	1-2	2.431	4.12
			22041	272.65	273.28	.63	TR-1	.435	.69
			22042	273.28	274.28	1.00	1	1.030	1.03
			22043	274.28	275.28	1.00	TR-1	.340	.34
268.06	273.28	85% silicified breccia : dark green to green purple with pink, purple and buff coloured brecciated seams 5 to 15 cm wide. These are oriented at 35 to 45 degrees to the core axis. Trace to 2% pyrite, locally up to 8 to 10% associated with white and pink brecciated seams. Matrix is non-reactive to HCl, silicified breccia is reactive. Non-magnetic. Cut by late stage quartz and carbonate fracture fillings.	22044	275.28	276.26	.98	1-2	.333	.34
			22045	276.26	277.26	1.00	TR-1	.340	.34
			22046	277.26	278.26	1.00	1-2	.690	.69
			22047	278.26	279.30	1.04	TR-1	.354	.34
			22048	279.30	280.38	1.08	TR-1	.367	.34
			22049	280.38	281.38	1.00	1-2	2.740	2.74
			22050	281.38	282.33	.95	2-3	1.301	1.37
			22051	282.33	283.33	1.00	2-3	2.060	2.06
			22052	283.33	284.31	.98	1-2	.333	.34
			22053	284.31	285.31	1.00	3-5	.340	.34
			22054	285.31	286.31	1.00	1-2	.340	.34
273.28	280.38	40% silicified breccia : as described above but with an increase in late stage fracture fillings oriented at 30 and 60 degrees to the core axis. Trace to 1% pyrite. Magnetic locally associated with coarse blebs of pyrite in late stage chlorite patches.	22055	286.31	287.31	1.00	3-5	1.030	1.03
			22056	287.31	288.14	.83	1-2	.282	.34
			22057	288.14	289.14	1.00	1	.340	.34
			22058	289.14	289.85	.71	1	.241	.34
280.38	288.14	90% silicified breccia : the non-silicified sections are late stage chloritic fractures and thus this section may be considered a LOWER SILICIFIED ZONE. The silicification is controlled by prior brecciation and located in grey, purple, pink, cream or buff coloured seams. Pyrite content is variable and averages 1 to 2%, locally up to 8 to 10% associated with silicification. The pyrite occurs as fracture fillings, fine disseminations and as blebs filling voids. Foliation at 40 to 55 degrees to the core axis defined by the silicified bands. From 285.05 to 288.21 the section is massive magnetic with 5 to 10% magnetite and silicified. Generally the rocks are non-magnetic.							
288.14	289.85	50% silicified breccia : dark green to green purple with silicified seams up to 15 cm wide. The pyrite content averages 1 to 2%, locally up to 8 to 10% associated with silicification. The pyrite occurs as fracture fillings, fine disseminations and as blebs filling voids. Foliation at 40 to 55 degrees to the core axis defined by the silicified bands. From 289.14 to 289.85 the section is massive magnetic with 5 to 10% magnetite and silicified. Generally the rocks are non-magnetic.							
			22059	289.85	290.85	.78	TR	.285	.34

Description	Sample	From	To	Length	% Sul	GM	Au
291.46 318.87 The rocks are green with dominantly cream coloured silicified bands up to 45 cm wide. Minor sections of purple silicification occur. Trace to 1% pyrite. Foliation at 42 degrees to the core axis.	22060	290.63	291.46	.83	TR	.282	.34
<b>291.46 318.87 TRANSITIONALLY SILICIFIED ZONE</b>							
The rocks are green with dominantly cream coloured silicified bands up to 45 cm wide. Minor sections of purple silicification occur. Trace to 1% pyrite. 291.46 301.20 40% silicified breccia : fine grained green rock with cream coloured silicified bands up to 45 cm wide. Minor purple coloured bands noted. Trace to 1% pyrite. Well foliated at 40 to 45 degrees to the core axis. Non-magnetic, except magnetite rich band at 292.85 to 292.88 meters. 295.00 to 295.21 : fine grained, green red intermediate intrusive. Non-magnetic and non-carbonatized. Contacts at 51 degrees to the core axis. 297.74 to 298.13 : intermediate intrusive, as described above from 295.00 to 295.21 meters.	22061	291.46	292.46	1.00	1-2	2.060	2.06
	22062	292.46	293.46	1.00	1-2	.340	.34
	22063	293.46	294.46	1.00	1-2	.340	.34
	22064	294.46	295.46	1.00	TR-1	.340	.34
	22065	295.46	296.46	1.00	TR-1	.340	.34
	22066	296.46	297.74	1.28	TR-1	.435	.34
	22067	297.74	298.13	.39	NIL	.133	.34
	22068	298.13	299.13	1.00	1-2	1.720	1.72
	22069	299.13	300.13	1.00	TR	.690	.69
	22070	300.13	301.20	1.07	1	1.102	1.03
	22071	301.20	302.20	1.00	TR-1	.340	.34
	22072	302.20	303.20	1.00	TR-1	.000	n/a
	22073	303.20	304.20	1.00	TR	.340	.34
	22074	304.20	305.20	1.00	TR	.340	.34
	22075	305.20	306.20	1.00	TR	.690	.69
	22076	306.20	307.20	1.00	TR-1	.340	.34
	22077	307.20	308.20	1.00	TR-1	.690	.69
301.20 314.20 15 to 20% silicified breccia : resembles CHLORITE-CARBONATE SCHIST but with minor silicification. The rocks are green, fine grained and silicification is cream to white coloured, rarely pink purple. Traces pyrite, locally up to 1% in silicified sections. Non-magnetic. Foliation is at 45 degrees at 302.40 and 57 degrees to the core axis at 308.00 meters.	22078	308.20	309.20	1.00	TR	.340	.34
	22079	309.20	310.20	1.00	TR	.340	.34
	22080	310.20	311.20	1.00	TR	.340	.34
	22081	311.20	312.20	1.00	TR	.340	.34
	22082	312.20	313.20	1.00	TR	.340	.34
	22083	313.20	314.20	1.00	TR-1	3.770	3.77
	22084	314.20	315.20	1.00	1	.340	.34
	22085	315.20	315.84	.64	TR-1	.659	1.03
	22086	315.84	316.64	.80	1	.272	.34
	22087	316.64	317.45	.81	TR	.275	.34
314.20 316.64 40% silicified breccia : breccia seams up to 28 cm wide. Trace to 1% pyrite as a fine dissemination in silicified rocks. Non-magnetic.	22088	317.45	318.06	.61	TR	.207	.34
	22089	318.06	318.87	.81	TR	.559	.69
316.64 318.06 5% silicified breccia : silicification is in narrow, less than 2 cm bands, usually cream coloured. Non-magnetic. Traces pyrite							
318.06 318.87 50% silicified breccia : silicification in bands up to 23 cm wide. Traces pyrite. Foliation at 54 degrees to the core axis.							
<b>318.87 322.32 CHLORITE-CARBONATE SCHIST</b>							
Fine grained, green well foliated rock with wispy carbonatization and exhibiting a hematitic streak. Non-magnetic. Minor silicification at base. Foliation at	22090	318.87	319.87	1.00	TR	.340	.34
	22091	319.87	320.87	1.00	TR	.340	.34
	22092	320.87	321.58	.71	TR	.241	.34
	22093	321.58	322.32	.74	TR	.252	.34

From To Description Sample From To Length % Sul GW Au

69 degrees to the core axis at 320.00 and 321.00 meters.

322.32 335.85 TRANSITIONALLY SILICIFIED ZONE

Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 85cm wide. The site of silicification is almost entirely controlled by prior brecciation. Greenish rock is chloritized and locally hematized but is generally not silicified. A minor amount of honey coloured alteration carrying elevated pyrite is found in silicified rock. Seams/patches of silicification are oriented parallel to foliation but cross cut locally. The rock is non-magnetic becoming weakly to moderately magnetic locally. Overall pyrite content for this section averages TR-1%.

322.32 322.91 30% silicified breccia.

322.91 323.85 90% silicified breccia.

323.85 324.44 30% silicified breccia.

324.44 325.33 90% silicified breccia.

325.33 327.72 20 to 25% silicified breccia : traces pyrite. Silicification pink in colour. Foliation at 65 degrees to the core axis at 326.00 meters and at 60 degrees at 327.00 meters.

327.72 330.63 2% silicified : this section is not a true transitionally silicified zone. The nature of silicification is as the above zones and thus was included within the transitional silicified zone. The rocks are fine grained, dark green and well foliated with carbonate wisps defining the foliation at 60 degrees to the core axis. Traces pyrite.

330.63 332.01 60% silicified breccia : Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 35cm wide. Averaging 5 to 8 cm in width. Seams/patches of silicification are oriented parallel to foliation but cross cut locally. Greenish rock is chloritized and locally hematized but is generally not silicified. Trace to 1% pyrite, locally up to 3% associated with chlorite in fracture fillings. Silicified rock is weakly carbonatized. Non-magnetic.

332.01 335.85 65 to 70% silicified breccia : Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 70cm wide. Averaging 10 to 15 cm in width. Trace to 1% pyrite, locally up to 3%.

Sample	From	To	Length	% Sul	GW	Au
22094	322.32	322.91	.59	TR-1	.201	.34
22095	322.91	323.85	.94	TR-1	.649	.69
22096	323.85	324.44	.59	TR	.201	.34
22097	324.44	325.33	.89	TR-1	.303	.34
22098	325.33	326.39	1.06	TR-1	.731	.69
22099	326.39	327.72	1.33	TR	.452	.34
22100	327.72	328.72	1.00	TR-1	.340	.34
22101	328.72	329.72	1.00	TR	.340	.34
22102	329.72	330.63	.91	TR-1	.309	.34
22103	330.63	331.31	.68	1	.231	.34
22104	331.31	332.01	.70	TR-1	.238	.34
22105	332.01	333.01	1.00	TR-1	.340	.34
22106	333.01	334.01	1.00	1-2	.340	.34
22107	334.01	335.01	1.00	1-2	.340	.34
22108	335.01	335.85	.84	TR-1	.580	.69

From To -----Description----- Sample From To Length % Sul GW Au

Minor buff coloured silicification. Non-magnetic. Silicification along foliation planes at 45 to 60 degrees to the core axis.

335.85 337.18 LOWER SILICIFIED ZONE

Dark purple to green locally buff coloured silicified breccia. A minor amount (less than 5%) of green, relic chloritized seams are noted within this section. The zone averages 1-2% pyrite as very fine disseminations and as clots filling voids in breccia. Non-magnetic. Pervasively carbonatized at base.

22109 335.85 336.53 .68 1-2 .231 .34  
22110 336.53 337.18 .65 1 .221 .34

337.18 341.98 TRANSITIONALLY SILICIFIED ZONE

10% Silicified breccia : this section resembles a CHLORITE-CARBONATE SCHIST but contains minor silicification in brecciated seams and patches parallel to foliation up to 30 cm in width. Silicification is generally cream coloured, locally with a faint purple hue. Traces pyrite, trace to 1% associated with silicification. Silicified sections are pervasively carbonatized. Green chloritic rock is not pervasively carbonatized. Foliation defined by carbonate wisps at 45 to 65 degrees to the core axis.

22111 337.18 338.22 1.04 TR-1 .718 .69  
22112 338.22 339.22 1.00 TR .340 .34  
22113 339.22 339.90 .68 TR .469 .69  
22114 339.90 340.90 1.00 1 .340 .34  
22115 340.90 341.98 1.08 TR-1 .367 .34

341.98 351.13 CHLORITE-CARBONATE SCHIST

Green fine grained foliated rock with minor, less than 5% silicification in seams and patches parallel to foliation. Foliation also defined by wispy carbonate. Non-magnetic. Trace to 1% pyrite in silicified sections, nil in chloritic rock. Foliation noted at : 342.55 meters at 60 degrees, 343.83 meters at 52 degrees and at 347.75 meters at 52 degrees to the core axis.

22116 341.98 342.98 1.00 TR .340 .34  
22117 342.98 343.88 .90 TR-1 .306 .34

351.13 END OF HOLE.

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Co-ords 9754.1 9050.0

DIAMOND DRILL RECORD

HOLE NO.: MC.86-286

Azimuth: 345.0

Section: 050E

Property: WORVEST OPTION

Dip: -70.0

Core Size: BQ

Location: 0+50E 2+45S

Elevation: 5000.5

Date Started: SEPTEMBER 22, 1985

Length: 366.4

Date Completed: SEPTEMBER 29, 1985

Logged by: G. BASCHUK

Measurement: METRIC

Comments: CASING LEFT IN HOLE

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-68.0	182.88		-63.5	320.04		-58.0
91.44		-68.0	228.60		-63.0	365.76		-53.5
111.86	347.5	-68.0	274.32		-61.0			
137.16		-68.0	282.55	345.5	-61.5			

-----Log Summary-----

.00 39.32 OVERBURDEN.

39.32 113.70 BASALT.

113.70 167.15 DIORITE.

167.15 212.08 BASALT.

212.08 213.68 DIORITE.

213.68 277.20 BASALT.

277.20 280.00 GREENSCHIST.

280.00 350.94 MAIN MINERALIZED ZONE.

280.00 298.14 TRANSITIONALLY SILICIFIED ZONE.

298.14 308.59 MAIN SILICIFIED ZONE.

308.59 350.94 TRANSITIONALLY SILICIFIED ZONE.

350.94 364.03 CHLORITE-CARBONATE SCHIST.

364.03 366.40 BASALT.

366.40 END OF HOLE.

From To -----Description----- Sample From To Length % Sul GW Au

.00 39.32 OVERBURDEN

39.32 113.70 BASALT

The section consists of very fine grained to fine grained massive flows with minor shears. Few intermediate intrusives are noted.

39.32 70.85 Massive flow : very fine grained, green possibly pillowed for upper 1 meters, minor brecciation noted in fragments of core. Minor hyaloclastite. 39.32 to 45.00 meters : section of highly broken core. 39.76 to 41.00 meters intermediate intrusive : fine grained green with red tinge, non-magnetic.

70.85 71.25 Weakly chloritized section with strong foliation at 65 degrees to the core axis. Open carbonate filled fractures noted, possibly flow contact zone.

71.25 97.65 Massive flow : very fine grained medium green. Intermediate intrusive at 72.34 to 72.51 meters at 60 degrees to the core axis. Fractured and weakly silicified aphanitic section noted from 82.95 to 83.08 meters, possibly marks a contact. Rock below becomes relatively coarser grained. Trace magnetics throughout.

97.65 97.79 Carbonatized and foliated section with increase in grain size in underlying section. Foliation irregular at approximately 80 degrees to the core axis.

97.79 109.90 Gradual coarsening trend down-hole to fine grained and less fractured than overlying sections.

109.90 115.00 Rock becomes finer grained with increasing fracturing controlled by dominant shear planes at 15 to 20 degrees to the core axis. Shears are open and red hematite filled. Minor pervasive carbonatization in section. Minor intermediate intrusives exhibit aphanitic matrix with euhedral hornblende phenocrysts up to 4 mm in length. Contacts are partially controlled by late stage fractures eg. 111.62 to

From To -----Description----- Sample From To Length % Sul GW Au

112.08 meters. Shearing is dominantly between 112.60 and 113.70 meters.

113.70 167.15 DIORITE

Sheared upper contact with a chilled distinct lower contact. Minor sections of shearing noted.

115.00 141.16 Rock texture becomes fine grained and slightly equigranular below overlying fault zone as compared to grains in rock at 97.79 to 109.90 meters. Fracturing is weakly developed except for increased shears at approximately 20 to 30 degrees to the core axis. Shears are generally open, hematized and carbonate filled.

141.16 152.00 Epidotized fractured section in upper 5 cm with moderately to strongly foliated section below with foliation sub-parallel to core axis and strongly developed carbonate veined fracturing. A zone, possibly a contact zone at 142.75 to 143.25 meters is strongly but irregularly foliated and highly quartz veined and carbonatized. Zone nonetheless is of tectonic origin.

152.00 166.00 Rock becomes relatively coarser grained down section and more equigranular in texture. Rock becomes almost medium grained and exhibits a well developed fish-net texture below 160.0 meters.

166.00 167.15 Fining down section to a well chilled contact at 20 degrees to the core axis with minor equigranular texture, relatively coarser injected overlying intrusive contact.

167.15 212.08 BASALT

The section consists of pillowed flows grading into massive flows down section. The section is cut by a diorite at the base.

167.15 171.90 Dark to medium green very fine grained pillowed flow with epidotized selvages containing traces of chalcopyrite and pyrrhotite.

171.90 174.20 Strongly vesicular massive flow with vesicles up to 1 cm in size becoming smaller down section tops up.



From To -----Description----- Sample From To Length % Sul GW Au

a well developed foliation at 50 degrees to the core axis. Rock may originally have been a flow breccia. Rock below 277.20 is essentially greenschist.

277.20 280.00 GREENSCHIST

Rock is composed of pale green elongated and rounded fragments up to 4 cm in length, probably derived from flow breccia and stretched along foliation at 50 degrees to the core axis. Surrounding rock is generally dark green and granulated with moderate to strong pervasive carbonatization. The amount of stretching increases down section with initial axial ratios of 1:3 becoming greater than 1:6. In some 50 to 75 cm patches, deformation is weak and flow breccia is clearly exhibited. Minor hyaloclastite also noted. Rare silicification is noted of stretched and subsequently brecciated fragments below 279.20 meters. Generally the number of quartz carbonate filled fractures parallel to foliation increases down section as foliation becomes better and more finely developed. Minor hematization of chloritic seams noted locally increasing down section. Trace magnetics locally.

NOTE : Five reference samples taken showing destruction of flow breccia fabric to greenschist at 275.50 to 278.60 meters.

MAIN MINERALIZED ZONE 280.00 to 350.94 meters.

The zone is based upon amount and degree of silicification and is composed of three members. The upper member of the zone is thicker than normal, as is the MAIN SILICIFIED ZONE but the lower TRANSITIONALLY SILICIFIED ZONE is of normal thickness. Pyrite content is normal, finely disseminated throughout and as coarser clots in silicified rock. Pyrite content averages 3-5% in the Main Silicified Zone with up to 10% locally.

MCKENNA FAULT PLANE 297.58.

280.00 298.14 TRANSITIONALLY SILICIFIED ZONE

The rock trends from a dark green, very fine grained finely foliated upper section with minor purple-grey and buff silicification along network-type breccia seams up to 5 cm in width, to a lower section dominantly composed

22118	280.00	281.00	1.00	1	1.370	1.37
22119	281.00	281.69	.69	1-2	2.367	3.43
22120	281.69	282.29	.60	1-2	3.096	5.16
22121	282.29	282.95	.66	1-2	5.663	8.58
22122	282.95	283.68	.73	1	2.504	3.43

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From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		of silicified breccia with relatively minor chloritic schist. Continuously silicified brecciated sections up to 1.25 meters in width are noted. Generally, the degree of alteration is highest in broader sections. The degree of reaction to HCl in silicified rock is lower. A tectonic foliation is noted between silicified breccia seams throughout.	22123	283.68	284.41	.73	1	.504	.69
			22124	284.41	285.24	.83	1	.573	.69
			22125	285.24	286.05	.81	1	.275	.34
			22126	286.05	286.91	.86	1	.292	.34
			22127	286.91	287.84	.93	1	1.916	2.06
			22128	287.84	288.78	.94	1	.968	1.03
			22129	288.78	289.57	.79	1	.269	.34
280.00	281.00	Approximately 30% silicified breccia in seams averaging 2 to 3 cm in width. Foliation at 60 degrees to the core axis.	22130	289.57	290.59	1.02	2-3	.704	.69
			22131	290.59	291.59	1.00	2-3	2.060	2.06
			22132	291.59	292.59	1.00	1-2	.340	.34
281.00	281.69	80 to 85% silicified breccia in sections averaging 10 cm in width.	22133	292.59	293.59	1.00	1-2	.340	.34
			22134	293.59	294.55	.96	TR-1	.662	.69
281.69	282.95	Section is strongly to intensely silicified and brecciated throughout. Foliation at 45 to 50 degrees to the core axis.	22135	294.55	295.55	1.00	TR-1	.690	.69
			22136	295.55	296.25	.70	TR-1	.483	.69
			22137	296.25	297.02	.77	1-2	.262	.34
			22138	297.02	298.14	1.12	TR	1.926	1.72
282.95	284.41	Silicification decreases to approximately 45% of section in seams averaging 3 to 4 cm in width.							
284.41	286.91	Section averages approximately 50% buff silicified breccia but degree of silicification is low to moderate and only locally becomes strong to intense. Chloritized, granulated sections up to 30 cm are common.							
286.91	289.57	Silicification increases to approximately 75% of section, generally is buff coloured and contains massively silicified breccia seams up to 45 cm in width and averaging 6 to 8 cm. Chloritic seams cutting silicification are partly relic patches and partially late stage shears.							
289.57	298.14	75 to 80% silicified breccia: dark green silicified section with local grey purple coloured sections. Hematitic streak common. Foliation increases down section near the McKenna Fault from 297.02 to 298.14 meters. No clay-grit seam is noted: the core has been dropped with some pieces missing. Foliation is 40 to 60 degrees to the core axis. 1 to 2% pyrite throughout, locally up to 5 to 7% as fine disseminations and as fracture fillings. Non-magnetic.							
298.14	308.59	MAIN SILICIFIED ZONE							
		Predominantly dark purple coloured silicified breccia with narrow sections of cream coloured silicification.	22139	298.14	299.14	1.00	2-3	2.740	2.74
		Entire section is pervasively carbonatized, decreasing	22140	299.14	300.14	1.00	1-2	1.370	1.37
			22141	300.14	301.14	1.00	5-7	.690	.69
			22142	301.14	302.14	1.00	5-7	2.740	2.74

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From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		down section. Locally strongly magnetic. 3 to 5% pyrite, locally up to 5 to 10% as fine disseminations, fracture fillings and clots. Mafic intrusive noted at 305.20 to 305.42 meters. This is fine grained green with dark green mafic laths aligned at 52 degrees to the core axis. Contacts at 20 degrees to the core axis. Mafic intrusive also at 307.38 to 307.49 meters. This is silicified with a faint green pink colouration. Contacts at 70 degrees to the core axis.	22143	302.14	303.14	1.00	3-5	.340	.34
			22144	303.14	304.17	1.03	5-7	2.822	2.74
			22145	304.17	305.17	1.00	3-5	4.120	4.12
			22146	305.17	306.17	1.00	3-5	2.060	2.06
			22147	306.17	307.17	1.00	3-5	2.740	2.74
			22148	307.17	307.91	.74	2-3	2.028	2.74
			22149	307.91	308.59	.68	2-3	.231	.34
308.59	350.94	TRANSITIONALLY SILICIFIED ZONE							
		The section is composed of purple grey, cream and white coloured silicified breccia seams separated by chlorite rich foliated rock. Pyrite contents are low and average 1%.	22150	308.59	309.60	1.01	1	.343	.34
			22151	309.60	310.60	1.00	1-2	.690	.69
			22152	310.60	311.25	.65	1	.221	.34
			22153	311.25	312.25	1.00	1	.340	.34
			22154	312.25	313.25	1.00	TR-1	.340	.34
308.59	311.25	75% silicified breccia : fine grained dark green silicified rock with chloritic patches and seams and grey to buff silicified seams, locally pink coloured.	22155	313.25	314.25	1.00	TR-1	.340	.34
			22156	314.25	315.25	1.00	TR	.340	.34
			22157	315.25	316.25	1.00	TR	.340	.34
			22158	316.25	317.25	1.00	TR	.340	.34
			22159	317.25	318.25	1.00	TR	.340	.34
			22160	318.25	319.22	.97	TR	.330	.34
			22161	319.22	320.22	1.00	TR	.340	.34
			22162	320.22	321.22	1.00	TR	.340	.34
			22163	321.22	322.22	1.00	TR	.000	tr
311.25	326.89	25 to 30% silicified breccia : dark green chloritic rock with silicified breccia seams up to 20 cm in width. Silicification is dominantly purple grey coloured with minor cream coloured sections and white 'cherty' sections. Quartz filled tension fractures are common. Silicified rock is pervasively carbonatized. Local sections are white coloured and may represent relic chert bands.	22164	322.22	323.22	1.00	TR	.000	tr
			22165	323.22	324.22	1.00	TR	.000	tr
			22166	324.22	325.22	1.00	TR	.000	tr
			22167	325.22	326.22	1.00	TR	.000	tr
			22168	326.22	326.89	.67	TR-1	.000	tr
			22169	326.89	327.89	1.00	TR	.000	tr
			22170	327.89	328.89	1.00	TR	.000	tr
			22171	328.89	329.89	1.00	TR	.000	tr
			22172	329.89	330.89	1.00	TR	.000	tr
			22173	330.89	331.89	1.00	TR	.340	.34
			22174	331.89	332.89	1.00	TR	.340	.34
			22175	332.89	333.81	.92	TR	.313	.34
			22176	333.81	334.61	.80	TR	.272	.34
			22177	334.61	335.61	1.00	TR	.340	.34
			22178	335.61	336.61	1.00	TR	.340	.34
			22179	336.61	337.61	1.00	TR	.690	.69.
326.89	342.68	5% silicified breccia : resembles chlorite carbonate schist but with minor narrow silicified breccia seams up to 6 cm in width. Seams are parallel to foliation at 45 degrees to the core axis at 331.80 meters and at 58 degrees to the core axis at 337.75 meters. The rocks are fine grained, dark green with pink white silicification, locally grey purple	22180	337.61	338.61	1.00	TR	.340	.34
			22181	338.61	339.61	1.00	TR	.340	.34
			22182	339.61	340.61	1.00	TR	.340	.34
			22183	340.61	341.61	1.00	TR	.340	.34
			22184	341.61	342.68	1.07	TR	.738	.69
			22185	342.68	343.68	1.00	1	1.370	1.37
			22186	343.68	344.68	1.00	TR-1	.340	.34
			22187	344.68	345.64	.96	1	2.630	2.74
			22188	345.64	346.64	1.00	TR-1	.340	.34

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		coloured. Entire section exhibits a hematitic streak. Non-magnetic. Numerous carbonate filled tension fractures at 25 to 40 degrees to the core axis. Traces pyrite.	22189	346.64	347.64	1.00	TR	.340	.34
			22190	347.64	348.64	1.00	TR-1	.340	.34
			22191	348.64	349.64	1.00	TR	.000	tr
			22192	349.64	350.34	.70	TR	.000	tr
			22193	350.34	350.94	.60	TR-1	.000	tr
342.68	345.64	55% silicified breccia : fine grained dark green chloritic rock exhibiting a hematitic streak with silicified breccia zones parallel to foliation up to 30 cm in width at 60 degrees to the core axis. Silicification takes on a cream colour, rarely purple with 1 to 2% pyrite in purple sections. Overall trace to 1% pyrite. Non-magnetic. Within the purple sections minor buff alteration is noted with halos into the purple colour. Silicified breccia is pervasively carbonatized.							
345.64	350.94	15 to 20% silicified breccia : dark green highly chloritic rock with brecciated silicified seams up to 18 cm in width. Silicification is cream or purple coloured, locally pink. Silicified sections are pervasively carbonatized, chloritic sections are not. Carbonate feathering out along the foliation resembles chlorite carbonate schist. Non-magnetic. Trace to 1% pyrite, locally up to 2% in silicified sections as fine disseminations and clots locally. Foliation well developed at 60 degrees to the core axis at 341.05 meters.							
350.94	364.03	CHLORITE-CARBONATE SCHIST							
		Fine grained green well foliated section cut by a syenitic intrusive. Non-magnetic.	22194	355.81	356.14	.33	TR-1	.000	tr
350.94	355.81	Fine grained green well foliated rock with wispy carbonate along foliation planes. Non-magnetic. Minor sericite noted along foliation associated with crenulation cleavage, no angle possible to measure, but at a low angle, less than 40 degrees to the core axis. Foliation noted at 42 degrees to the core axis at 351.20 meters and 35 to 61 degrees to the core axis from 355.4 to 355.6 meters.							
355.81	356.14	Syenitic intrusive : dark red and siliceous with trace to 1% finely disseminated pyrite. Late stage carbonate							

From To -----Description----- Sample From To Length % Sul GW Au

fracture fillings cut the intrusive but stop abruptly at the contacts. Contacts at 66 degrees to the core axis.

356.14 364.03 As described above from 350.94 to 355.81 meters.

364.03 366.40 BASALT

Continuation of the above chlorite carbonate schist with the foliation decreasing rapidly down section into a massive section. Grain size is fine to medium grained. Non-magnetic and weakly pervasively carbonatized throughout. The wispy carbonatization is not present.

366.40 END OF HOLE.

Note : The section from 70.85 to 289.57 m was logged by A. Workman.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords: 9714.8 8974.8

DIAMOND DRILL RECORD

HOLE NO.: MC.86-287

Azimuth: 347.8

Section: 025W

Property: WORVEST OPTION

Dip: -70.0

Core Size: BQ

Location: 0+25W 2+85S

Elevation: 5002.4

Date Started: September 30, 1985

Length: 403.0

Date Completed: October 10, 1985

Logged by: G. BASCHUK

Measurement: METRIC

Comments: CASING LEFT IN HOLE

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-70.0	182.88		-66.5	320.04		-61.5
91.44		-70.0	228.60		-65.5	365.76		-61.0
137.16		-69.0	233.48	355.5	-66.0	400.81		-58.0
175.87	351.5	-67.0	274.32		-63.5			

-----Log Summary-----

.00 41.15 OVERBURDEN.  
 41.15 53.97 BASALT.  
 53.97 77.75 DIORITE.  
 77.75 166.45 BASALT.  
 166.45 223.06 DIORITE.  
 223.06 295.70 BASALT.  
 295.70 303.72 DIORITE.  
 303.72 330.96 BASALT.  
 330.96 336.86 DIORITE.  
 336.86 349.25 BASALT.  
 349.25 354.69 GREENSCHIST.  
 354.69 355.87 CHLORITE-CARBONATE SCHIST.  
 355.87 366.57 MAIN MINERALIZED ZONE.  
 355.87 359.67 TRANSITIONALLY SILICIFIED ZONE.  
 359.67 362.22 MAIN SILICIFIED ZONE.  
 362.22 366.57 TRANSITIONALLY SILICIFIED ZONE.  
 366.57 393.29 CHLORITE-CARBONATE SCHIST.  
 393.29 394.96 TRANSITIONALLY SILICIFIED ZONE.  
 394.96 402.95 CHLORITE-CARBONATE SCHIST.  
 402.95 END OF HOLE.

From To -----Description----- Sample From To Length % Sul GW Au

.00 41.15 OVERBURDEN

41.15 53.97 BASALT

The section is a massive flow cut by a mafic intrusive and a lamprophyre. Non-magnetic.

41.15 43.89 Massive flow : very fine grained, green, non-magnetic with minor quartz filled tension fractures up to 1 mm wide with traces of pyrite. Non-carbonatized.

43.89 44.27 Mafic intrusive : fine grained green with white carbonate specks less than 1 mm comprising 5 to 10% of the rock. Lower contact at 75 degrees to the core axis. Non-magnetic.

44.27 52.10 Massive flow : fine grained green continuation of above flow.

52.10 52.21 Lamprophyre : brown green, fine grained, non-carbonatized and non-magnetic. Biotites have weathered to brown colour.

52.21 53.97 Massive flow : continuation of above flow. Down section the grain size decreases to very fine grained. Lower contact is weathered. Non-magnetic.

53.97 77.75 DIORITE

Fine grained, green with the grain size increasing down section to medium grained exhibiting a equigranular interlocking texture. Non-magnetic. Traces of chalcopyrite and pyrite noted locally. Fracture fillings are common and chlorite filled. The lower contact is aphanitic and rich in epidote. From 67.42 to 67.45 is a carbonate - quartz vein with minor ankerite at 25 degrees to the core axis. The adjacent rock is bleached grey coloured.

77.75 166.45 BASALT

From	To	Description	Sample	From	To	Length	% Sul	SW	Au
		Flow breccia with sections of glomeroporphyritic flows. The phenocrysts are white and occur in clumps up to 5 cm across within a fine grained groundmass.							
77.75	84.82	Flow top breccia : aphanitic green fragments within a very fine grained, epidotized matrix. Fragments are often epidotized near upper contact exhibiting breadcrust fracturing. Down section the epidote is more common in matrix. Traces pyrite noted locally in matrix. Minor carbonate associated with epidote. Minor hyaloclastite noted near upper contact.							
84.82	85.63	Monzonitic intrusive : fine grained green with faint red tinge. Carbonatized. Sharp contacts at 45 to 50 degrees to the core axis. Non-magnetic.							
85.63	89.71	Flow top breccia : continuation of above with the epidote decreasing down section as basaltic material dominates the matrix.							
89.71	90.01	Glomeroporphyritic flow : green, fine grained with very little breccia fragments and 1 to 2% phenocrysts up to 1 cm across. The phenocrysts generally occur in masses of crystals.							
90.01	94.81	Flow breccia : continuation of above with epidote and basaltic material in matrix. Rare variolites noted up to 1 mm across.							
94.81	100.84	Glomeroporphyritic flow : 15% feldspar phenocrysts up to 1.5 cm occurring in clumps up to 5 cm across. Locally these are aligned parallel to foliation at 40 to 45 degrees to the core axis eg. 96.8 meters.							
100.84	109.11	Flow breccia : breadcrust fractures noted on fragments.							
109.11	115.02	Glomeroporphyritic flow : as described above from 94.81 to 100.84 meters with minor sections of flow breccia.							
115.02	115.24	Intermediate intrusive : fine grained grey-green with 5% disseminated pyrite. Siliceous and weakly carbonatized.							
115.24	120.90	Flow breccia : very fine grained with aphanitic fragments as described above from 100.84 to 109.11 meters.							
120.90	124.07	Vesicular flow : very fine grained green non-magnetic with mm sized vesicles. Vesicles decrease down section.							
124.07	126.67	Mafic intrusive : fine grained green with trace to 1% pyrite as fine disseminations. Non-magnetic. Non-carbonatized. Mafic clots up to 1 mm give core a speckled appearance. Contacts at 66 degrees to the core axis.							

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From To -----Description----- Sample From To Length % Sul GW Au

126.67 166.45 Massive flow : fine grained green and non-magnetic. Mafic intrusive noted from 144.15 to 144.39 meters. Medium grained green with pale green and blue phenocrysts up to 3 mm. Bluish crystals are striated and may represent altered pyroxenes. Chloritized lower contact.

166.45 223.06 DIORITE

Fine grained green intrusive with sharp lower contact at quartz vein. Locally equigranular texture noted. Non-magnetic.

166.45 171.30 Fine grained green non-magnetic intrusive. Minor epidote and quartz fracture fillings. Fracture fillings decrease down section.

171.30 220.77 Continuation of above with local sections of interlocking-equigranular grains and exhibiting a fish-net texture. Non-magnetic. Mafic intrusive noted at 209.34 to 209.38 meters at 71 degrees to the core axis. Fine grained green and weakly carbonatized.

220.77 233.06 Fine grained continuation of above section. Green with white carbonate blebs throughout, increasing down section. Sharp lower contact at quartz stringer.

223.06 295.70 BASALT

Massive flows and pillowed flows, dominantly very fine grained to fine grained green.

233.06 236.29 Vesicular flow : very fine grained green non-magnetic and non-carbonatized.

236.29 239.65 Massive flow : fine grained green non-magnetic and non-carbonatized with rare white feldspar phenocrysts up to 2 mm across.

239.65 253.77 Pillowed flow : very fine grained to aphanitic, green. Upper contact at first distinguishable selvage. Non-magnetic. Vesicles common. Down section the selvages become questionable and filled with epidote and locally magnetite. Local foliated sections at 55 degrees to the core axis eg. 250.00 meters.

253.77 270.37 Massive flow : very fine grained to fine

22195	290.55	291.55	1.00	TR-1	.000	tr
22196	291.55	292.55	1.00	TR-1	.000	tr
22197	292.55	293.55	1.00	TR	.000	tr
22198	293.55	294.53	.98	TR	.000	tr
22199	294.53	295.26	.73	TR	.000	tr
22200	295.26	295.70	.44	TR	.000	tr

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From To -----Description----- Sample From To Length % Sul GW Au

grained down section. Non-magnetic with traces of pyrite. Cut by late stage quartz - carbonate stringers at 40 to 60 degrees to the core axis. Narrow foliated flow bottom.

270.37 290.55 Pillowed flow : aphanitic green and non-magnetic. Locally vesicular and locally variolitic. Selvages poorly developed.

290.55 295.26 Brecciated section : dark green very fine grained with epidote and magnetite interstitial to subangular and subrounded fragments. Trace pyrite, locally up to 5 to 7%. Strongly magnetic throughout. Non-carbonatized. Vesicles noted locally.

295.26 295.70 Quartz vein : white bull quartz with trace to 1% pyrite at irregular contacts. Cut by late stage carbonate stringers.

295.70 303.72 DIORITE

Fine to medium grained dark green intrusive locally with fish-net texture. Foliated base at 36 degrees to the core axis. Strongly magnetic at top, sporatically magnetic down section. Minor chill at lower contact associated with carbonate stringers.

303.72 330.96 BASALT

Pillowed flow with a flow top breccia. Selvages are poorly developed at the top and become better developed down section.

303.72 308.80 Flow top breccia : angular aphanitic pale green fragments within a dark green matrix. Foliated at 30 degrees to the core axis.

308.80 330.96 Pillowed flow : aphanitic to fine grained green, locally vesicular. Selvages become better developed down section. Selvages at top appear as breccia zones 10 to 60 cm in width. Lower contact is 10 cm chilled margin with carbonate and epidote stringers with minor quartz and 1% disseminated pyrite.

330.96 336.86 DIORITE

From To -----Description----- Sample From To Length % Sul GW Au

Fine grained to medium grained dark green diorite with chilled lower contact represented by 10 cm carbonate epidote quartz rich zone. Traces pyrite at lower contact. Central section has well developed inter-locking equigranular texture. Non-magnetic.

336.86 349.25 BASALT

Glomeroporphyritic and pillowed flows. Fine grained, locally brecciated at upper section. White pink feldspar phenocrysts noted up to 1 cm across. The selvages are epidote rich up to 10 cm in width associated with brecciation. First phenocryst noted at 339.60 meters, last at 345.15 meters. Carbonate fracture fillings increase down section at 30 and 60 degrees to the core axis.

349.25 354.69 GREENSCHIST

Dark green and fine grained with the foliation increasing to moderate down section. Local flow brecciation noted. Carbonate fracture fillings common. Foliation at 45 to 55 degrees to the core axis. Local mafic grains noted resembling vesicles parallel to foliation. Diorite noted from 351.46 to 352.52 meters. Grain size is fine to medium grained and equigranular with relic fish-net texture noted. Contacts at 38 and 52 degrees to the core axis.

354.69 355.87 CHLORITE-CARBONATE SCHIST

Fine grained green non-magnetic chloritic rock with carbonate wisps parallel to foliation at 60 degrees to the core axis. Trace very fine grained disseminated pyrite. No hematitic streak.

22201 354.69 355.87 1.18 TR .000 tr

355.87 to 366.57 meters : MAIN MINERALIZED ZONE.

The zone is based upon amount and degree of silicification and is composed of three members. Each member of the zone is relatively thin and the degree of alteration is not particularly strong.

359.62 MCKENNA FAULT PLANE.

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
<b>355.87 359.67 TRANSITIONALLY SILICIFIED ZONE</b>									
		Dark green dominantly very fine grained chloritic rock resembling the chlorite carbonate schist with approximately 5% silicification. Hematitic streak is common. Wispy carbonate common at 40 to 45 degrees to the core axis. The silicification is pervasive and not in brecciated seams. Somewhat coarser grained section with a granular texture noted from 356.45 to 358.55 meters possibly a diorite intrusive. Trace to 1% pyrite throughout, locally up to 2 to 3%.	22202	355.87	356.87	1.00	TR-1	.000	tr
			22203	356.87	357.87	1.00	TR-1	.690	.69
			22204	357.87	358.55	.68	1	.231	.34
			22205	358.55	359.18	.63	1-2	.214	.34
			22206	359.18	359.67	.49	1	.671	1.37
359.18	359.67	McKenna Fault zone : chloritic, highly sheared rock with 2 clay seams. Seams at 60 degrees to the core axis. Minor sericite also noted.							
<b>359.67 362.22 MAIN SILICIFIED ZONE</b>									
		Highly silicified and brecciated section with silica dumping noted at top. Silicification is purple, buff and dark grey coloured with up to 12% pyrite. The intensity of brecciation is not as strong, and high pyrite contents are sporadic.	22207	359.67	360.04	.37	8-10	1.014	2.74
			22208	360.04	360.69	.65	1-2	.221	.34
			22209	360.69	361.21	.52	2-3	.359	.69
			22210	361.21	362.22	1.01	10-12	4.848	4.80
359.67	360.04	60% silica dumping and 8 to 10% pyrite as fine disseminations, fracture fillings and clots filling voids in breccia.							
360.04	361.21	Dark green and purple silicified rock with silicification more pervasive than associated with brecciation. Section is similar to the granular section from 356.45 to 358.55 meters but with more silicification and pyrite. 1 to 2% pyrite as fine disseminations and fracture fillings.							
361.21	362.22	Buff coloured highly altered silicified breccia section with 10 to 12% pyrite throughout as fine disseminations, fracture fillings and clots filling voids in breccia. Pronounced foliation at 38 degrees to the core axis. Strongly pervasively carbonatized. Non-magnetic. Minor silica dumping.							
<b>362.22 366.57 TRANSITIONALLY SILICIFIED ZONE</b>									
		25 to 30% silicified breccia : brecciation is rare with cream coloured angular fragments in 5 cm bands.	22211	362.22	363.22	1.00	2-3	.690	.69
			22212	363.22	364.22	1.00	2-3	.690	.69
			22213	364.22	365.22	1.00	1-2	.340	.34

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From To -----Description----- Sample From To Length % Sul GW Au

Silicification is generally purple coloured and parallel to foliation with 1 to 2% pyrite. Host rock is dark green and chloritic. Silicification decreases down section. Foliation at 40 to 45 degrees to the core axis. Upper section is pervasively carbonatized, decreasing down section where the silicified seams are only carbonatized. Non-magnetic.

22214 365.22 365.92 .70 1-2 .238 .34  
22215 365.92 366.57 .65 TR-1 .221 .34

366.57 393.29 CHLORITE-CARBONATE SCHIST

Fine grained green chloritic rock with wispy carbonate decreasing down section. Well developed foliation at 40 to 50 degrees to the core axis. Weak hematitic streak for upper 3 meters. Non-magnetic. Trace to 1% pyrite, locally up to 3% decreasing down section. Foliation: 40 degrees at 370.80 meters, 50 degrees at 376.10 meters, 44 degrees at 381.80 meters and 50 degrees to the core axis at 388.00 meters.

22216 366.57 367.57 1.00 TR .340 .34  
22217 367.57 368.57 1.00 TR .690 .69  
22218 368.57 369.48 .91 TR-1 .937 1.03  
22221 369.48 370.48 1.00 TR .340 .34

393.29 394.96 TRANSITIONALLY SILICIFIED ZONE

30% Silicified breccia: fine grained foliated section with cream coloured rounded fragments up to 1 cm within a purple green matrix. Non-magnetic. Trace to 1% pyrite. Fragments pervasively carbonatized. Matrix weakly carbonatized. Foliation at 51 degrees to the core axis at 394.10 and 50 degrees to the core axis at 394.40 meters.

22219 393.29 394.09 .80 TR-1 .824 1.03  
22220 394.09 394.96 .87 TR-1 .296 .34

394.96 402.95 CHLORITE-CARBONATE SCHIST

Fine grained green foliated rock with wispy carbonate up to 1 cm in width parallel to foliation. Trace pyrite locally. Hematitic streak noted locally. Foliation at 50 degrees to the core axis at 399.8 meters.

402.95 END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords: 9760.3 8925.0

DIAMOND DRILL RECORD

HOLE NO.: MC.86-288

Azimuth: 345.0

Section: 075W

Property: WORVEST OPTION

Dip: -70.0

Core Size: 80

Location: 0+75W 2+40S

Elevation: 5001.8

Date Started: OCTOBER 10, 1985

Length: 411.8

Date Completed: OCTOBER 21, 1985

Logged by: G. BASCHUK

Measurement: METRIC

Comments: CASING LEFT IN HOLE

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-69.0	208.79	356.5	-65.0	365.76		-56.0
63.09	351.5	-69.0	228.60		-65.0	396.24	351.5	-55.0
91.44		-67.0	274.32		-60.5	411.48		-51.5
137.16		-65.0	320.04		-60.0			
182.88		-66.0	321.56		-60.0			

-----Log Summary-----

.00 22.56 OVERBURDEN.  
 22.56 84.43 BASALT.  
 84.43 155.85 DIORITE.  
 155.85 291.39 BASALT.  
 291.39 293.30 GREENSCHIST.  
 293.30 334.74 MAIN MINERALIZED ZONE.  
 293.30 304.40 TRANSITIONALLY SILICIFIED ZONE.  
 304.40 306.70 MAIN SILICIFIED ZONE.  
 306.70 324.46 TRANSITIONALLY SILICIFIED ZONE.  
 324.46 325.56 LOWER SILICIFIED ZONE.  
 325.56 334.74 TRANSITIONALLY SILICIFIED ZONE.  
 334.74 341.42 CHLORITE-CARBONATE SCHIST.  
 341.42 365.76 TRANSITIONALLY SILICIFIED ZONE.  
 365.76 382.50 GREENSCHIST.  
 382.50 391.49 CHLORITE-CARBONATE SCHIST.  
 391.49 411.78 BASALT.  
 411.78 END OF HOLE.

From To -----Description----- Sample From To Length % Sul GW Au

.00 22.56 OVERBURDEN

22.56 84.43 BASALT

The hole collared in a massive flow. A second massive flow occurs down section with a well developed flow top breccia. The rocks are fine grained green and non-magnetic cut by minor intrusives.

22.56 30.48 Massive flow : fine grained green. Non-magnetic. Non-carbonatized. Minor shear from 29.28 to 29.36 meters at 40 degrees to the core axis. No volcanic textures noted, possibly diorite.

30.48 36.33 Flow breccia : aphanitic pale green fragments within a fine grained dark green chloritic matrix. Locally vesicular. Breadcrust fractures noted locally.

36.33 37.94 Intermediate intrusive : monzonitic : fine grained green with faint red tinge. Non-magnetic. Non-carbonatized. Contacts at 35 and 27 degrees to the core axis, respectively.

37.94 44.29 Flow breccia : as described above from 30.48 to 36.33 meters. Possibly pillowed down section.

44.29 45.72 Lost core section. Due to carbonate leaching.

45.72 46.00 Basalt : continuation of above from 37.94 to 44.29 meters.

46.00 46.99 Lamprophyre; fine grained, mafic rock : brown green highly weathered intrusive. Brown colouration due to biotites alteration. Chilled contacts. Non-carbonatized. Moderately magnetic throughout.

46.99 84.43 Massive flow : aphanitic to very fine grained green. Locally fragments of pale green aphanitic basalt noted with reaction rims. Vesicles noted locally. Down section vesicles and fragments absent. Narrow mafic intrusives noted at 5 to 10 degrees to the core axis.

From To -----Description----- Sample From To Length % Sul GW Au

84.43 155.85 DIORITE

Fine grained diorite with medium grained center cut by minor intrusives. Non-magnetic.

84.43 96.52 Fine grained green intrusive : upper contact in carbonate rich section with 5 to 7% pyrite

96.52 97.11 Intermediate intrusive : fine grained grey-green with minor red tinge due to K-feldspars. Pervasively carbonatized. Non-magnetic. Sharp contacts at 70 to 75 degrees to the core axis.

97.11 127.12 Diorite : fine grained green becoming fine to medium grained down section with equigranular interlocking texture.

127.12 127.88 Mafic intrusive : fine grained green non-carbonatized and non-magnetic. White pink feldspar and green epidote phenocrysts noted comprising 5% of the rock. Sharp contacts at 55 and 54 degrees to the core axis, respectively. No chills.

127.88 154.20 Diorite : medium grained green with good interlocking equigranular texture. Non-magnetic.

154.20 155.85 Diorite : fine to medium grained. Continuation of above with grain size rapidly decreasing to lower contact.

155.85 291.39 BASALT

Pillowed flows and massive flows comprise this section with minor gloeoporphyritic section noted. Shear zone noted at 264.12 to 265.78 meters.

155.85 170.89 Pillowed flow : aphanitic dark green. Well developed selvages. Minor silicification noted in selvages with faint purple colouration. Trace to 1% pyrite. This section noted from 158.80 to 159.61 meters.

170.89 171.54 Carbonate rich intrusive : fine grained grey, highly carbonatized with traces of pyrite. Sharp contacts at 55 to 60 degrees to the core axis.

171.54 180.70 Pillowed flow : aphanitic, green. Non-magnetic. Vesicles common from 175.45 to 180.70 meters.

180.70 185.70 Massive flow : very fine grained, green non-magnetic.

185.70 187.60 Altered section : highly carbonatized breccia with traces of pyrite. Olive green coloured. Possibly flow top, variolites

2222	158.80	159.61	.81	TR-1	.275	.34
2223	264.12	264.92	.80	1	.552	.69
2224	264.92	265.78	.86	TR-1	.292	.34

AMERICAN BARRICK RESOURCES CORPORATION

Hole No.: MC.86-288

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From To -----Description----- Sample From To Length % Sul GW Au

noted up to 2 mm.  
 187.60 201.36 Pillowed flow : very fine grained to aphanitic with chloritic selvages. Vesicles common.  
 201.36 205.65 Massive flow : fine grained grey-green. Vesicular top. Non-magnetic.  
 205.65 245.81 Pillowed flow : aphanitic green with silicified selvages with traces of pyrite. Vesicles common. Below 241.5 meters selvages less distinct but flow brecciation common. Lower contact last visible brecciation.  
 245.81 251.00 Massive flow : fine grained green non-magnetic vesicular flow.  
 251.00 264.12 Massive flow : fine grained increasing to medium grained by 258.0 meters. Non-magnetic. Interlocking- equigranular texture noted. Possibly diorite.  
 264.12 265.78 VARIABLY SILICIFIED ZONE (undetermined) : shear zone : fine grained green well foliated section with carbonate and quartz parallel to foliation. Trace to 1% pyrite. Minor leucoxene overgrowths. Foliation at 50 to 70 degrees to the core axis. Foliation decreasing down section as is pyrite content.  
 265.78 271.63 Massive flow : medium grained green, possibly diorite. Grain size decreases to fine grained at lower contact. Lower contact rich in epidote for 10 cm, possibly a chill. Non-magnetic.  
 271.63 280.79 Glomeroporphyritic flow : brecciation common with epidote fragments and numerous epidote rich fracture fillings. White phenocrysts up to 1 cm across comprising 1% of the section.  
 280.79 291.39 Flow top breccia : pale green siliceous fragments with fine grained matrix. Breadcrust fracturing and reaction rims noted. Carbonate fracture fillings increase down section.

291.39 293.30 GREENSCHIST

Continuation of above flow breccia with increased carbonate fracture fillings and strong foliation. Fractures at 38 degrees to the core axis. Foliation increasing intensity down section with wispy carbonate at 40 to 45 degrees to the core axis.

22225 292.18 293.30 1.12 TR-1 .381 .34

From To -----Description----- Sample From To Length % Sul GW Au

293.30 to 334.74 meters MAIN MINERALIZED ZONE.

The zone is based upon amount and degree of silicification and is composed of three members with a lower silicified zone in the lower transitional silicified zone. The zones are of normal thickness except for a wide upper transitional silicified zone. Pyrite content is normal, finely disseminated throughout and as coarser clots in silicified rock. Pyrite content averages 5-7% in the Main Silicified Zone with up to 10% locally.

304.38 MCKENNA FAULT PLANE.

293.30 304.40 TRANSITIONALLY SILICIFIED ZONE

Dark green, very fine grained with selective silicification in carbonatized laminations and clasts. Green, chloritized, non-silicified rock is weakly hematized as a fine interstitial dissemination and exhibits a hematitic streak. Pyrite content averages TR-1% with up to 5% locally in silicified sections. The McKenna Fault is located within a chloritized sheared zone from 303.73 to 304.39 meters. The McKenna Fault is represented by a clay seam at 58 degrees to the core axis at 304.38 meters.

293.30 298.66 30 to 35% silicified breccia : dark grey purple silicified breccia bands up to 30 cm in width aligned parallel to foliation separated by fine grained dark green chloritic rock. Carbonate fracture fillings common along foliation planes. Hematitic streak throughout. Non-magnetic. 1% pyrite, locally up to 5% in clots, fracture fillings and fine disseminations. Relic siliceous syenitic fragments noted. Foliation at 42 degrees at 295.00, 50 degrees at 297.00 and 38 degrees to the core axis at 298.00 meters.

298.66 304.40 5% silicified breccia : fine to medium grained locally granular well foliated section with wispy carbonate along foliation planes. Silicification extremely weak and in isolated seams up to 4 cm in width. Hematitic streak throughout. Weakly magnetic within chloritic sections. Trace to 1% pyrite, locally up to 2% associated with medium grained rock. The medium grained section is granular and from 302.31 to 303.31

22226	293.30	294.30	1.00	1	1.370	1.37
22227	294.30	295.30	1.00	1	.340	.34
22228	295.30	296.30	1.00	1-2	1.030	1.03
22229	296.30	297.30	1.00	1-2	.690	.69
22230	297.30	297.90	.60	1-2	.000	tr
22231	297.90	298.66	.76	TR-1	.000	tr
22232	298.66	299.66	1.00	1	.000	tr
22233	299.66	300.65	.99	TR-1	.000	tr
22234	300.65	301.64	.99	1	.000	tr
22235	301.64	302.31	.67	TR-1	.000	tr
22236	302.31	302.99	.68	TR-1	.000	tr
22237	302.99	303.58	.59	1-2	.000	tr
22238	303.58	304.40	.82	TR-1	.566	.69

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From To -----Description----- Sample From To Length % Sul GW Au

meters. McKenna Fault zone from 303.73 to 304.39 meters. Highly broken and rubbled core with 2 clay-grit seams at 303.83 meters at 45 degrees to the core axis and at 304.38 meters at 58 degrees to the core axis. Note : 0.34 meters lost core from 304.01 to 304.35 meters. Foliation at 44 degrees to the core axis at 301.00 and 50 degrees to the core axis at 303.00 meters. Fractures at 60 to 65 degrees to the core axis.

304.40 306.70 MAIN SILICIFIED ZONE

Purple-grey to honey or cream coloured, aphanitic, intensely silicified breccia. A minor amount (less than 5%) of green, relic chloritized seams are noted within this section oriented at 40 to 45 degrees to the core axis. Grey silicified rock has a purple hue due to a variable degree of hematization. This hematite is reduced to pyrite in the buff to honey coloured alteration patches and zones. Non-magnetic. Entire section is pervasively carbonatized except late stage chloritic seams. The zone averages 5-7% pyrite as very fine disseminations and as clots filling voids in breccia. In honey coloured rock, pyrite content may locally reach 10%, mostly as coarser clots. The honey coloured alteration section is 10 cm in width at the upper contact adjacent to the McKenna Fault. The section is locally well foliated at 40 to 45 degrees to the core axis, often with pyrite along foliation planes.

22239	304.40	305.20	.80	10	4.936	6.17
22240	305.20	306.10	.90	5-7	4.320	4.80
22241	306.10	306.70	.60	5-7	2.472	4.12

306.70 324.46 TRANSITIONALLY SILICIFIED ZONE

The rocks are dark green and chloritic with varying amounts of silicified breccia, usually in seams parallel to foliation. The silicified seams are purple grey and buff coloured, pervasively carbonatized and carry up to 10% pyrite.

306.70 312.33 85% silicified breccia : silicification decreases down section. Foliation at 40 to 45 degrees to the core axis. 3 to 5% pyrite throughout, locally up to 10%. Pyrite occurs as fine disseminations, fracture fillings and clots within breccia. Pervasively carbonatized throughout except for chloritic sections. Late stage carbonate fracture fillings are

22242	306.70	307.70	1.00	5-7	1.720	1.72
22243	307.70	308.65	.95	5-7	1.957	2.06
22244	308.65	309.65	1.00	5-7	2.060	2.06
22245	309.65	310.65	1.00	3-5	.340	.34
22246	310.65	311.60	.95	3-5	1.634	1.72
22247	311.60	312.33	.73	5-7	1.256	1.72
22248	312.33	313.33	1.00	1	1.030	1.03
22249	313.33	314.33	1.00	1-2	1.030	1.03
22250	314.33	315.33	1.00	TR-1	.690	.69
22251	315.33	316.15	.82	1	.279	.34
22252	316.15	316.87	.72	3-5	1.728	2.40
22253	316.87	317.45	.58	TR-1	.197	.34
22254	317.45	318.52	1.07	1	.364	.34
22255	318.52	319.48	.96	TR-1	.989	1.03
22256	319.48	320.48	1.00	TR-1	.000	tr

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From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		at 69 and 43 degrees to the core axis.	22257	320.48	321.48	1.00	TR	.000	tr
		Pyrite noted locally in bands up to 2 cm in width within white 'cherty' rocks.	22258	321.48	322.48	1.00	TR-1	.000	tr
			22259	322.48	323.48	1.00	TR-1	.690	.69
312.33	317.45	40% silicified breccia : silicified breccia seams up to 30 cm in width with 2 to 3% pyrite. 1% pyrite overall. Pervasively carbonatized. Late stage carbonate fracture fillings at 55 to 60 degrees to the core axis. Hematitic streak throughout. Foliation in chloritic sections less than in brecciated sections.	22260	323.48	324.46	.98	TR-1	.333	.34
		Foliation : 45 degrees to the core axis at 313.0 meters : breccia.							
		38 Degrees to the core axis at 313.0 meters : chloritic.							
		58 Degrees to the core axis at 315.0 meters : breccia.							
		30 Degrees to the core axis at 315.0 meters : chloritic.							
317.45	324.46	5 to 10% silicified breccia : chloritic rich with wispy carbonate. Breccia seams up to 25 cm in width. 1 to 2% pyrite within silicified breccia, trace to 1% in chloritic rock. Hematitic streak noted locally. Non-magnetic. Breccia is pervasively carbonatized. Foliation 55 degrees to the core axis. Late stage carbonate fracture fillings are at 55 degrees to the core axis to parallel to core axis.							
324.46	325.56	LOWER SILICIFIED ZONE							
		Greater than 95% silicified breccia. Dark green grey with honey coloured and cream coloured fragments with trace to 1% pyrite. Foliation 40 to 45 degrees to the core axis. Late stage chloritic seams 30 to 35 degrees to the core axis. 15 mm wide dark purple to black section is magnetite rich, rest of section is non-magnetic.	22261	324.46	324.96	.50	TR-1	.170	.34
			22262	324.96	325.56	.60	1	.618	1.03
325.56	334.74	TRANSITIONALLY SILICIFIED ZONE							
		Dominantly dark green chloritic rock with silicified breccia seams parallel to foliation and parallel to wispy carbonate. Pyrite contents low averaging trace to 1%. The silicified breccia are cream, grey and pink coloured. Locally carbonatized.	22263	325.56	326.56	1.00	TR-1	.340	.34
			22264	326.56	327.56	1.00	TR-1	.340	.34
			22265	327.56	328.56	1.00	TR	.000	tr
			22266	328.56	329.56	1.00	TR	.000	tr
			22267	329.56	330.56	1.00	TR	.000	tr
			22268	330.56	331.51	.95	TR	.000	tr
325.56	331.51	20% silicified breccia : dominantly chlorite-carbonate schist with breccia seams up to 15 cm in width parallel to	22269	331.51	332.03	.52	TR-1	.000	tr
			22270	332.03	332.79	.76	1-2	.524	.69
			22271	332.79	333.79	1.00	TR	.340	.34

AMERICAN BARRICK RESOURCES CORPORATION

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From	To	Description	Sample	From	To	Length	% Sul	SW	Au
		foliation at 45 to 50 degrees to the core axis. Hematitic streak noted near silicified breccia seams. Rare white 'cherty' sections noted with 1 to 2% pyrite. Minor shear at 329.62 meters at 49 degrees to the core axis, now filled by a carbonate stringer with associated sericite.	22272	333.79	334.74	.95	TR	.323	.34
331.51	332.79	40% silicified breccia : foliation at 55 to 65 degrees to the core axis. Lower 1.5 cm is very fine grained silicified sheared section with 3 to 5% pyrite. Lower contact is shear at 58 degrees to the core axis. Overall 1% pyrite as fine disseminations and rarely clots filling voids in breccia.							
332.79	334.74	10% silicified breccia : seams up to 10 cm in width. Hematitic streak noted locally. Non-magnetic. Dominantly chlorite carbonate schist with wispy carbonate along foliations at 50 degrees to the core axis. Minor sericite associated with crenulation cleavage at upper contact. Crenulation cleavage flat-lying to core axis. Traces pyrite.							
334.74	341.42	CHLORITE-CARBONATE SCHIST							
		Fine grained green chloritic rock with wispy carbonate along foliation planes at 45 to 50 degrees to the core axis. Minor silicification noted, but less than 5%. Non-magnetic.	22273	334.74	335.74	1.00	NIL	.340	.34
			22274	335.74	336.74	1.00	TR	.340	.34
			22275	336.74	337.74	1.00	NIL	.340	.34
			22276	337.74	338.74	1.00	TR	.340	.34
			22277	338.74	339.74	1.00	TR	.340	.34
			22278	339.74	340.74	1.00	TR	.340	.34
			22279	340.74	341.42	.68	TR	.231	.34
341.42	365.76	TRANSITIONALLY SILICIFIED ZONE							
		Dark green chloritic rock with silicified breccia seams. Silicification is grey to purple and rarely buff coloured. Trace to 1% pyrite. Carbonate wisps decreasing down section.	22280	341.42	342.50	1.08	1	1.112	1.03
			22281	342.50	343.50	1.00	TR	.340	.34
			22282	343.50	344.50	1.00	1	.340	.34
			22283	344.50	345.40	.90	TR-1	.306	.34
			22284	345.40	346.40	1.00	1	.340	.34
			22285	346.40	347.55	1.15	TR	1.978	1.72
			22286	347.55	348.43	.88	TR-1	1.206	1.37
			22287	348.43	349.43	1.00	1	.000	tr
			22288	349.43	350.23	.80	TR-1	.000	tr
			22289	350.23	351.01	.78	TR-1	.000	tr
			22290	351.01	352.00	.99	TR	.000	tr
			22291	352.00	353.00	1.00	TR	.000	tr
			22292	353.00	354.00	1.00	TR-1	.000	tr

AMERICAN BARRICK RESOURCES CORPORATION

Hole No.: MC.86-288

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From	To	Description	Sample	From	To	Length	% Sul	GM	Au
347.55	351.01	50% silicified breccia : dark purple silicified section with minor brecciation. Trace to 1% pyrite. Non-magnetic. Minor buff alteration. Foliation at 45 to 50 degrees to the core axis.	22293	354.00	355.00	1.00	TR	.340	.34
			22294	355.00	356.00	1.00	TR	.340	.34
			22295	356.00	357.00	1.00	TR-1	.340	.34
			22296	357.00	358.00	1.00	TR	.340	.34
			22297	358.00	359.00	1.00	TR	.000	tr
351.01	365.76	5% silicified breccia : dominantly chlorite carbonate schist with minor silicified breccia seams. Trace pyrite. Non-magnetic. Flat-lying crenulation cleavage noted commonly eg. Foliation 47 degrees to the core axis at 355.74 meters, crenulation cleavage 40 degrees to foliation. Crenulation cleavage 80 to 90 degrees to the core axis. 354.37 to 354.88 meters : intermediate intrusive, fine grained pink green intrusive with small sized mafic grains aligned parallel to foliation. Sheared contacts at 48 degrees to the core axis. At 359.70 meters high sericite content at 90 degrees to the core axis. Carbonate wisps are distorted. Amount of carbonate wisps decrease down section.	22298	359.00	360.00	1.00	TR-1	.000	tr
			22299	360.00	361.00	1.00	TR-1	.000	tr
			22300	361.00	362.00	1.00	TR	.000	tr
			22301	362.00	363.00	1.00	1	1.370	1.37
			22302	363.00	364.00	1.00	TR-1	.340	.34
			22303	364.00	365.00	1.00	1	.340	.34
			22304	365.00	365.76	.76	TR	.000	tr
365.76	382.50	GREENSCHIST							
		Fine to medium grained green foliated rock with mafic laths less than 5 mm long elongated parallel to foliation at 40 to 45 degrees to the core axis. Abundant carbonate stringers and fracture fillings throughout decreasing down section. No distinct volcanic features noted. Carbonate fracture fillings at 60 and 90 degrees to the core axis. Section from 365.76 to 368.25 meters, the foliation is strong. Weakly magnetic locally. Minor shear noted at 379.74 meters at 49 degrees to the core axis. Below 379.74 meters, ground waters have leached out carbonate from stringers. Trace to 1% pyrite noted throughout. Minor purple grey silicification with minor brecciation and trace to 1% pyrite. Locally pale green fragments are noted elongated parallel to foliation resembling flow breccia fragments.	22305	379.68	380.68	1.00	TR-1	.000	tr
			22306	380.68	381.68	1.00	TR-1	.000	tr
			22307	381.68	382.50	.82	TR	1.968	2.40
382.50	391.49	CHLORITE-CARBONATE SCHIST							
		Fine grained green chloritic rock with wispy carbonate along foliation planes at 50 to 60 degrees to the core axis. Non-magnetic. Wispy carbonate decreases down section and only fracture fillings and stringers noted	22308	383.85	384.85	1.00	TR	.340	.34
			22309	384.85	385.17	.32	1	.659	2.06
			22310	385.17	386.17	1.00	1	.340	.34
			22311	386.17	386.77	.60	TR	1.644	2.74
			22312	386.77	387.77	1.00	TR	.340	.34

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Hole No.: MC.86-288

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
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		near lower contact. 384.85 to 385.17 meters quartz vein with minor carbonate at lower contact. Contacts at 44 degrees to the core axis. Trace to 1% pyrite as crystals. Silicified breccia sections noted at 386.17 to 386.35 meters with traces of pyrite and at 388.40 to 388.80 meters with 2% pyrite. Mafic intrusive noted at 391.35 to 391.49 meters : fine grained green with mafic laths parallel to foliation. Irregular contacts. Pervasively carbonatized.	22313	387.77	388.80	1.03	1-2	.711	.69
			22314	388.80	389.80	1.00	TR	.340	.34

391.49 411.78 BASALT

Pillowed flow : fine grained green cut by carbonate fracture fillings and stringers. Non-magnetic. Selvages poorly developed becoming well developed down section. Fracture fillings and stringers decreasing abundance down section. Tension fractures at 30 degrees to the core axis.

411.78 END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords 9629.9 8924.9

DIAMOND DRILL RECORD

HOLE NO.: MC.86-285

Azimuth: 350.0

Section: 075W

Property: MORVEST OPTION

Dip: -70.0

Core Size: 86

Location: 0+75W 1+70E

Elevation: 5001.8

Date Started: OCTOBER 22, 1986

Length: 336.1

Date Completed: OCTOBER 29, 1986

Logged by: N.DOWNEY

Measurement: METRIC

Comments: CASING LEFT IN HOLE

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.77		-68.0	182.88		-63.0	320.04		-59.0
91.40		-67.0	228.60		-63.0	325.22	352.0	-59.0
137.16		-67.5	274.32		-59.0			

-----Log Summary-----

.00 35.05 OVERBURDEN.  
 35.05 37.27 DIORITE.  
 37.27 46.75 BASALT.  
 46.75 85.77 DIORITE.  
 85.77 95.42 BASALT.  
 95.42 99.03 DIORITE.  
 99.03 156.98 BASALT.  
 156.98 193.08 DIORITE.  
 193.08 204.76 BASALT.  
 204.76 211.23 GREENSCHIST.  
 211.23 222.50 CHLORITE-CARBONATE SCHIST.  
 222.50 259.20 MAIN MINERALIZED ZONE.  
 222.50 225.50 MAIN SILICIFIED ZONE.  
 225.50 228.95 TRANSITIONALLY SILICIFIED ZONE.  
 228.95 230.63 LOWER SILICIFIED ZONE.  
 230.63 232.38 FAULT ZONE.  
 232.38 234.34 LOWER SILICIFIED ZONE.  
 234.34 259.20 TRANSITIONALLY SILICIFIED ZONE.  
 259.20 272.29 CHLORITE-CARBONATE SCHIST.  
 272.29 279.25 MONZONITE.  
 279.25 287.02 CHLORITE-CARBONATE SCHIST.  
 287.02 300.20 BASALT.  
 300.20 305.80 TRANSITIONALLY SILICIFIED ZONE.  
 305.80 311.10 CHLORITE-CARBONATE SCHIST.  
 311.10 336.07 BASALT.  
 336.07 END OF HOLE.

From To -----Description----- Sample From To Length % Sul Gw Au

.00 35.05 OVERBURDEN

35.05 37.27 DIORITE

Medium grained becoming fine grained at lower sheared contact. Fish net texture noted in medium grained sections. Lower contact is at 31 degrees to the core axis and is a 3 mm sericite rich shear with hematite staining. Non-magnetic.

37.27 46.75 BASALT

Pillowed flow. Aphanitic to locally fine grained with well developed chloritic selvages. Vesicles are common. Non-magnetic. Lower contact is 13 mm section of carbonate - quartz veining with 1 to 2% disseminated pyrite and abundant epidote.

46.75 85.77 DIORITE

Fine to medium grained green massive intrusive. Strongly magnetic becoming weakly magnetic at base. Chloritic mafics up to 3 mm. Leucoxene noted locally. Trace disseminated pyrite. Chalcopyrite noted with carbonate - quartz veinlets. Fines at base. 66.70 to 66.97 mafic intrusive; brown to pink very fine grained felsic intrusive. 10 to 15% green chloritic blebs up to 2 mm.

85.77 95.42 BASALT

Dark green very fine grained to aphanitic massive flow. Non-magnetic. Minor vesicular sections. Rare possible selvages noted. Stringers of diorite noted near base.

From To -----Description----- Sample From To Length % Sul SW Au

95.42 99.03 DIDRITE

Fine grained dark green massive intrusive rock. Sharp contacts. Locally weakly magnetic. Same as overlying diorite.

99.03 156.98 BASALT

Very fine grained to aphanitic green pillowed flow. Non-magnetic. Selvages poorly developed. Many carry epidote and pyrite. Locally vesicular. Selvages becoming well developed down section. The base is a 0.15 meters foliated zone.

118.50 120.23 Selvages contain up to 20% pyrite.

134.03 143.55 Flow contact zone. Poorly developed flow breccia zone. Rounded basalt fragments with indistinct margins. Matrix is very fine grained basalt.

134.03 134.07 Foliated zone with pyrrhotite pyrite banding.

134.07 135.40 Flow breccia. Rounded fragments with indistinct contacts.

135.40 136.70 Well developed flow breccia. Rounded fragments with indistinct contacts. Matrix is basalt. Pyrrhotite pyrite blebs common in matrix.

136.70 137.40 Brown green fine grained monzonite intrusive. Sharp chilled contacts. 2 to 3% disseminated pyrite. Non-magnetic. Non-reactive to HCl. Top contact 25 degrees to the core axis, base 30 degrees to the core axis.

137.40 143.55 Continuation of flow breccia. Base grades to massive flow. Narrow quartz-carbonate breccia bands developed 15 degrees to the core axis.

143.55 148.81 Green fine grained to very fine grained massive flow. Vesicular sections dominant.

148.81 149.15 Monzonite. Brown green fine grained intrusive. Contacts are carbonate - quartz veinlets. 1 to 2% disseminated pyrite. Pervasively carbonatized.

150.45 151.18 Fractures with hematite and limonite.

From To -----Description----- Sample From To Length % Sul GW Au

156.98 193.08 DIORITE

Fine to medium grained green massive intrusive. Grain size increases down section. Non-magnetic becoming strongly magnetic at 180.20. Indistinct top contact with a quartz stringer. Carbonate - quartz filled fracture often with epidote.

156.98 167.21 Fine grained massive diorite. Grain size increases down section. Contains inclusions of basalt at top.

167.21 180.02 Medium grained massive diorite. Locally coarse grained. Non-magnetic.

180.02 188.36 Medium grained locally coarse grained magnetic diorite. Up to 2% disseminated magnetite. 180.90 181.00 foliated zone. Narrow shear zone. Foliation 65 degrees to the core axis. Leucoxene noted adjacent zone. 187.22 clay seam with limonite. Foliation developed 35 degrees to the core axis. 187.45 clay seam 75 degrees to the core axis with limonite. 188.06 188.36 foliated zone with clay seam 35 degrees to the core axis. 188.36 193.08 medium grained non-magnetic massive diorite. Fish net texture. Abundant carbonate - quartz filled fracture with epidote. 192.49 193.08 brecciated zone with carbonate - quartz veining. Annealed fault zone. Top is diorite base is basalt.

193.08 204.76 BASALT

Non-magnetic flow breccia becoming massive down section. Base is gradational to GREENSCHIST. Abundant carbonate - quartz stringers increasing down section.

193.08 202.48 Flow breccia. Angular fragments up to 10 mm with chloritized contacts. Matrix is fragmental with hyaloclastite common. 201.65 201.86 carbonate alteration breccia. Clay seam 35 degrees to the core axis. Brown dolomitized fragments noted. 1 to 2% pyrite.

202.48 204.76 Massive fine grained green basalt. Indistinct fragments noted locally. Abundant carbonate - quartz stringers increasing down section. 202.48 202.65

From To -----Description----- Sample From To Length & Sul Gw Al

carbonate alteration breccia. Brown  
dolomitized fragments.

204.76 211.23 GREENSCHIST

Green fine grained moderately to strongly foliated rock.  
Top is mafic intrusive, base is fine grained green  
foliated rock with no primary textures.

204.76 206.35 Mafic intrusive. Green fine grained  
foliated rock. Pervasive carbonate  
alteration. Abundant carbonate fracture  
filling increasing down section. 5 to 10%  
green chloritic blebs parallel foliation.  
Trace pyrite.

206.35 211.23 Fine grained green poorly foliated rock.  
Carbonate alteration brecciation  
increasing down section. 1 to 2% pyrite  
with most intense brecciation. Brown  
dolomitized fragments noted. Sharp base  
contact may be a fault plane at 65 degrees  
to the core axis.

211.23 222.50 CHLORITE-CARBONATE SCHIST

Green fine grained strongly foliated rock. Carbonate  
replaces foliation. Narrow bands of carbonate alteration  
breccia. Abundant leucoxene.  
Often with hematite stain. Brown dolomitized fragments  
noted. Rare sericite noted.

213.92 1.00 No clay-grit seam 48 degrees to the core axis  
214.69 214.84 Fine grained pink syenitic intrusive.  
Pervasively carbonatized. Brecciated.  
Sharp contacts.

217.0 foliation 50 degrees to the core axis.  
219.5 foliation 55 degrees to the core axis.  
219.55 222.50 Intensely foliated with up to 50%  
quartz-carbonate laminations intensely  
contorted increasing down section.  
Abundant sericite noted overlying MCKENNA  
FAULT PLANE.

222.50 259.20 MAIN MINERALIZED ZONE.

The MAIN MINERALIZED ZONE has a true thickness of 29  
meters. The zone is poorly developed with low pyrite

22315	211.48	212.48	1.00	TR	.340	.34
22316	212.48	213.48	1.00	TR	.000	tr
22317	213.48	214.50	1.02	TR	.000	tr
22318	214.50	215.52	1.02	TR	.000	tr
22319	215.52	216.48	.96	TR	.000	tr
22320	216.48	217.48	1.00	TR	.000	tr
22321	217.48	218.47	.99	TR	.000	tr
22322	218.47	219.55	1.08	TR	.000	tr
22323	219.55	220.65	1.10	TR	.000	tr
22324	220.65	221.65	1.00	TR	.000	tr
22325	221.65	222.50	.85	TR	1.462	1.72

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From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		values. The zone is high in specular hematite and magnetite. The zone contains minor late stage intrusives. The MAIN SILICIFIED ZONE is poorly developed with low pyrite. It is strongly magnetic and contains abundant specular hematite.							
		222.47 MCKENNA FAULT PLANE.							
		Dark grey clay-grit seam 51 degrees to the core axis.							
222.50	225.50	MAIN SILICIFIED ZONE	22326	222.50	223.45	.95	1	.978	1.03
		Purple silicified breccia zone. Abundant specular hematite and magnetite. Reactive to HCl. Angular breccia fragments are silicified down section. White carbonate fracture filling. Foliation of breccia developed 45 degrees to the core axis adjacent MCKENNA FAULT PLANE. Only 1% pyrite.	22327	223.45	224.45	1.00	1	2.060	2.06
			22328	224.45	225.50	1.05	1	1.439	1.37
225.50	228.95	TRANSITIONALLY SILICIFIED ZONE	22329	225.50	226.48	.98	1	1.686	1.72
		80% Purple silicified breccia. Abundant specular hematite and magnetite. 20% dark green chloritic patches often strongly foliated CHLORITE-CARBONATE SCHIST. Non-reactive to HCl at base. Low pyrite. White carbonate filled fracture. 227.5 227.60 quartz veinlet with inclusions of TRANSITIONALLY SILICIFIED ZONE.	22330	226.48	227.50	1.02	1	1.754	1.72
			22331	227.50	228.12	.62	1-2	.211	.34
			22332	228.12	228.95	.83	1-2	.282	.34
228.95	230.63	LOWER SILICIFIED ZONE	22333	228.95	230.05	1.10	1-2	.374	.34
		Purple to grey silicified zone. Abundant specular hematite, strongly magnetic. Non-reactive to HCl. Low pyrite. Grey to honey yellow zone occur at base with increase in pyrite. White carbonate fracture filling.	22334	230.05	230.63	.58	2-3	1.792	3.09
230.63	232.38	FAULT ZONE	22335	230.63	231.65	1.02	1-2	.347	.34
		Fault zone 5 degrees to the core axis. Grey silicified breccia fragments with chloritic matrix. Is a portion of	22336	231.65	232.38	.73	1-2	1.000	1.37

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From	To	Description	Sample	From	To	Length	% Sul	GM	Au
<p>LOWER SILICIFIED ZONE brecciated by faulting. Top is fault plane at 20 degrees to the core axis. Weakly magnetic locally. Blocky, highly fractured core.</p>									
232.38	234.34	LOWER SILICIFIED ZONE	22337	232.38	233.37	.99	5-10	1.703	1.72
		Grey to purple-grey silicified breccia. Continuation of overlying silicified zone. Abundant brown dolomitization. Up to 10% pyrite. Non-magnetic, non-reactive to HCl.	22338	233.37	234.34	.97	2-3	.669	.69
233.47	233.53	Fine grained grey-green mafic intrusive. 10 to 15% chloritic mafics up to 2 mm. No silicification.							
233.98	234.05	Grey-green mafic intrusive. Sharp contacts at 50 degrees to the core axis. 10 to 15% chloritic mafics up to 2 mm. No silicification.							
<p>234.34 259.20 TRANSITIONALLY SILICIFIED ZONE</p>									
		75% Grey to purple-grey silicified breccia zones in fine grained green chloritic rock. Locally strongly foliated. Low pyrite. Zone contains mafic intrusives.	22339	234.34	235.35	1.01	1-2	5.545	5.49
			22340	235.35	236.36	1.01	1	.343	.34
			22341	236.36	237.13	.77	TR-1	.262	.34
			22342	237.13	238.15	1.02	TR-1	.347	.34
			22343	238.15	239.35	1.20	TR-1	.408	.34
234.34	237.13	75% purple-grey to grey silicified breccia in green chloritic rock. Non-reactive to HCl, non-magnetic. Foliation often developed 40 degrees to the core axis often with minor sericite. 236.95 chloritic fault plane 25 degrees to the core axis.	22344	239.35	239.95	.60	TR	.204	.34
			22345	239.95	240.95	1.00	TR-1	.340	.34
			22346	240.95	241.97	1.02	TR-1	.347	.34
			22347	241.97	243.05	1.08	TR-1	.367	.34
			22348	243.05	244.10	1.05	TR-1	.357	.34
			22349	244.10	244.94	.84	TR-1	.286	.34
			22350	244.94	246.00	1.06	TR-1	.360	.34
			22351	246.00	247.02	1.02	1	1.397	1.37
237.13	239.35	50% grey to brown silicified breccia in fine grained green massive to foliated green chloritic rock. Brown dolomitized fragments common. Weakly reactive to HCl. Non-magnetic. 238.74 238.82 Unsilicified zone of CHLORITE-CARBONATE SCHIST. Foliation 45 degrees to the core axis.	22352	247.02	248.15	1.13	TR-1	.384	.34
			22353	248.15	249.15	1.00	1	1.370	1.37
			22354	249.15	250.28	1.13	1	.384	.34
			22355	250.28	251.28	1.00	TR	.340	.34
			22356	251.28	252.28	1.00	TR	.340	.34
			22357	252.28	253.29	1.01	TR	.343	.34
			22358	253.29	254.27	.98	TR	.333	.34
			22359	254.27	255.33	1.06	TR	.360	.34
239.35	239.95	Felsic intrusive. Fine grained brown to pink strongly magnetic intrusive. Sharp contacts. Non-reactive to HCl. Trace pyrite. Top contact is 45 degrees to the core axis with well developed foliation. Base is 65 degrees to the core axis.	22360	255.33	256.33	1.00	TR-1	.000	tr
			22361	256.33	257.34	1.01	TR-1	.000	tr
			22362	257.34	258.39	1.05	TR	.357	.34
			22363	258.39	259.20	.81	TR	.000	tr

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
239.95	244.94	36% grey to brown silicified breccia. Non-magnetic. Locally weakly reactive to HCl.	240.37	240.68					
		mafic intrusive. Grey-green fine grained strongly magnetic intrusive. Weakly reactive to HCl. Sharp contacts 45 degrees to the core axis.							
244.94	250.28	50% brown to grey silicified breccia in fine grained green chloritic rock. Brown dolomitized fragments are abundant. Minor purple silicification noted. Non-magnetic, non-reactive to HCl.							
250.28	259.20	18% brown to grey silicified breccia in foliated green chloritic rock. Purple-grey silicification noted. Abundant brown dolomitized fragments. Low pyrite. 251.5 foliation 55 degrees to the core axis. 255.0 foliation 35 degrees to the core axis. 258.0 foliation 40 degrees to the core axis. Carbonate alteration increasing down section to pervasive at base.							
259.20	272.29	CHLORITE-CARBONATE SCHIST							
		Green fine grained strongly foliated rock. Narrow zones of carbonate alteration breccia rarely with purple silicification. Non-magnetic. Carbonate alteration often pervasive. Carbonate - quartz filled fracture common. Flat crenulation cleavage locally well developed. Minor sericite noted locally with most intense foliation. 262.0 foliation 58 degrees to the core axis. 265.20 carbonate - quartz veinlet. Strongly foliated with a clay seam at base. Sericite developed along foliation at 35 degrees to the core axis.	22364	259.20	260.20	1.00	TR	.000	tr
			22365	260.20	261.20	1.00	TR	.000	tr
			22366	261.20	262.20	1.00	TR	.000	tr
			22367	262.20	263.19	.99	TR	.000	tr
			22368	263.19	264.22	1.03	TR	.000	tr
			22369	264.22	265.35	1.13	TR	.000	tr
			22370	265.35	266.40	1.05	TR	.000	tr
			22371	266.40	267.43	1.03	TR	.000	tr
			22372	267.43	268.40	.97	TR	.000	tr
			22373	268.40	269.47	1.07	TR	.000	tr
			22374	269.47	270.50	1.03	TR	.000	tr
		270.00 270.90 Purple silicification and white carbonate - quartz veining parallel core axis. Intense foliation at base with fault plane 45 degrees to the core axis. 271.5 foliation 43 degrees to the core axis.	22375	270.50	271.60	1.10	TR-1	.759	.69
			22376	271.60	272.29	.69	TR	.235	.34
272.29	279.25	MONZONITE							
		Brown green fine grained foliated intrusive rock. Strongly magnetic. Chloritic blebs up to 1.5 mm.	22376	272.29	272.63	.34	TR	.116	.34
			22377	272.63	273.63	1.00	TR	.340	.34
			22378	273.68	274.63	.95	TR	.323	.34

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From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		Non-reactive to HCl. Foliation 40 degrees to the core axis.	22379	274.63	275.63	1.00	TR	.340	.34
		278.15 278.80 inclusion of CHLORITE-CARBONATE SCHIST.	22380	275.63	276.65	1.02	TR	.347	.34
			22381	276.65	277.29	.64	TR	.218	.34
			22382	277.29	278.15	.86	TR	.593	.69
			22383	278.15	278.80	.65	TR	.000	tr
			22384	278.80	279.25	.45	TR	.000	tr

279.25 287.02 CHLORITE-CARBONATE SCHIST

22385 279.25 280.25 1.00 1 .000 tr

Fine grained green well foliated section with wispy carbonate along foliation planes at 55 degrees to the core axis. Minor silicified sections exhibiting purple hue with elevated pyrite up to 5%. Locally magnetic. 2% quartz - carbonate stringers. Crenulation cleavage noted locally with sericite - flat-lying to core axis.

287.02 300.20 BASALT

Pillowed flow : very fine grained green weakly foliated section with selvages. Hematitic streak noted locally within foliated sections.

300.20 305.80 TRANSITIONALLY SILICIFIED ZONE

40% Silicified breccia : trace to 1% pyrite as fine disseminations, locally up to 3 to 5% associated with silicification. Dominantly fine grained green rock with silicified breccia seams and silicification along fractures with halos extending into the host rock. Silicified breccia is cream to purple coloured. Locally magnetic. Silicified sections are reactive to HCl.

22386 300.20 301.20 1.00 1 .000 tr  
 22387 301.20 302.20 1.00 TR-1 .690 .69  
 22388 302.20 303.20 1.00 1 .340 .34  
 22389 303.20 304.20 1.00 TR-1 .340 .34  
 22390 304.20 305.00 .80 TR-1 .272 .34  
 22391 305.00 305.80 .80 TR-1 .272 .34

305.80 311.10 CHLORITE-CARBONATE SCHIST

Very fine grained green foliated rock with 10 to 15% white carbonate wisps along the foliation at 35 to 60 degrees to the core axis. 50 to 55 degrees to the core axis is the dominant foliation. Foliation decreasing down section. Narrow mafic intrusives at lower contact.

311.10 336.07 BASALT

Pillowed flow : aphanitic to very fine grained green

From 10 -----Description----- Sample From To Length % Sul GW Au

flow, locally vesicular. Selvages are epidote rich. Hyaloclastite noted locally at selvages. Foliation is increasing down section below 332 meters with minor silicification and brecciation noted at base of hole.  
 325.05 Meters : clay-grit seam at 25 degrees to the core axis - no shearing noted in adjacent rocks.

336.07 END OF HOLE.

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Coordinates: 9849.3 9025.1

DIAMOND DRILL RECORD

HOLE NO.: MC.86-290

Azimuth: 350.5

Section: 0+25E

Property: WORVEST OPTION

Dip: -71.0

Core Size: 80

Location: 025E 150E

Elevation: 5001.5

Date Started: OCTOBER 29, 1960

Length: 335.9

Date Completed: NOVEMBER 5, 1980

Logged by: G. BASCHUK

Measurement: METRIC

Comments: CASING LEFT IN GROUND

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-68.0	141.73		-67.0	274.32		-56.0
91.44		-67.5	182.88		-64.0	294.75	350.3	-56.0
137.16		-66.5	228.60		-59.5	297.79	350.3	-56.0

-----Log Summary-----

.00 23.95 OVERBURDEN.  
 23.95 42.10 DIORITE.  
 42.10 95.45 BASALT.  
 95.45 160.41 DIORITE.  
 160.41 162.00 BASALT.  
 162.00 181.30 DIORITE.  
 181.30 182.12 BASALT.  
 182.12 188.64 GREENSCHIST.  
 188.64 191.58 CHLORITE-CARBONATE SCHIST.  
 191.58 238.15 MAIN MINERALIZED ZONE.  
 191.58 205.72 MAIN SILICIFIED ZONE.  
 205.72 238.15 TRANSITIONALLY SILICIFIED ZONE.  
 238.15 244.58 VARIABLY SILICIFIED ZONE (undetermined).  
 244.58 249.39 TRANSITIONALLY SILICIFIED ZONE.  
 249.39 267.30 CHLORITE-CARBONATE SCHIST.  
 267.30 335.89 BASALT.  
 335.89 END OF HOLE.

From To -----Description----- Sample From To Length % Sul GW Au

.00 23.95 DVERBURDEN

23.95 42.10 DIORITE

Dark green medium grained intrusive, fining down section to fine grained. Lower contact in section of rubbled core

23.95 39.90 Dark green medium grained intrusive with equigranular grains. Non-magnetic.

39.90 41.60 Fine grained continuation of above.

41.60 42.10 Section of highly rubbled and broken core. Highly weathered section with red hematite alteration on fragments possibly weathered shear.

42.10 95.45 BASALT

Massive and pillowed flows cut by minor diorites are noted in this section. Non-magnetic.

42.10 46.72 Massive flow : fine grained green, non-magnetic.

46.72 47.79 Diorite : fine to medium grained green. Equigranular interlocking texture noted. Sheared upper contact. Fining down section to indistinct lower contact.

47.79 48.68 Flow top : aphanitic green rock with hyaloclastite noted. Fragments are rare and rounded.

48.68 52.68 Vesicular flow : very fine grained green non-magnetic.

52.68 60.24 Massive flow : very fine grained, non-magnetic. Traces pyrite locally associated with epidote and chlorite in irregular stringers.

60.24 63.21 Diorite : fine grained with equigranular texture noted. Non-magnetic. Chilled upper contact, sheared lower contact at 48 degrees to the core axis.

63.21 64.92 Massive flow : very fine grained, continuation of above from 52.68 to 60.24 meters.

64.92 69.32 Pillowed flow : aphanitic, green. Slightly siliceous.

69.32 69.93 Intermediate intrusive : fine grained light green, highly carbonatized with 5% mafic

From To -----Description----- Sample From To Length % Sul GW Au

blebs.

69.93 82.60 Pillowed flow : continuation from 64.92 to 69.32 meters. Dark green and aphanitic. Vesicles common. Minor brecciation and hyaloclastite noted in selvages.

82.60 91.25 Vesicular flow : very fine grained green with chloritic and carbonate filled vesicles comprising 5% of the rock. Carbonate filled at top, chloritic towards base.

91.25 95.45 Massive flow : fine grained green with 5% epidote and carbonate fracture fillings. Non-magnetic.

95.45 160.41 DIORITE

Fine to medium grained, dark green equigranular intrusive. Locally strongly magnetic. Chloritized upper contact at 35 degrees to the core axis. Leucoxene overgrowths common. Down section the colour changes to grey-green and non-magnetic. From 147 to 159.8 meters, fish-net texture noted in green rocks. Below 159.8 meters, the grain size rapidly decreases to very fine grained at sharp lower contact at 40 degrees to the core axis.

124.05 124.36 Shear zone : silicified and epidotized with 1% pyrite. Minor hematite alteration. Shearing at 30 degrees to the core axis.

160.41 162.00 BASALT

Flow breccia : highly foliated pale green with rounded elongated fragments in a dark green chloritic matrix. Hyaloclastite noted at upper contact. Foliation at 38 degrees to the core axis.

162.00 181.30 DIORITE

Green, equigranular, magnetic intrusive. Fine grained and non-magnetic at upper contact rapidly increasing grain size to medium grained down section. Lower 1.65 meters is fine grained and lower contact at 2 cm epidote vein at 15 degrees to the core axis.

181.30 182.12 BASALT

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		Aphanitic to very fine grained green flow top breccia with abundant epidote stringers. Non-magnetic.							
182.12	188.64	BREENSCHIST							
		Continuation of the above flow, but weakly foliated increasing down section. The rocks are fine grained, green locally auto-brecciated with abundant epidote. Carbonate fracture fillings increasing down section. Hematitic streak noted locally associated with carbonate stringers. Foliation at 30 to 40 degrees to the core axis							
188.64	191.58	CHLORITE-CARBONATE SCHIST							
		Very fine grained, green foliated section with hematitic streak. McKenna Fault noted at lower contact at 48 degrees to the core axis.	22439	189.60	190.58	.98	TR-1	1.343	1.37
			22440	190.58	191.58	1.00	TR	.000	tr
188.64	189.32	Strongly foliated dark green continuation of above flow, but without fragments. 20% carbonate stringers. Trace pyrite.							
189.32	191.52	Very fine grained strongly foliated with hematitic streak throughout. Flat-lying crenulation cleavage noted. Few laminations are hematite rich and purple in colour. Traces pyrite. Non-magnetic.							
191.52	191.58	McKenna Fault : 6 cm green clay-grit seam at 48 degrees to the core axis.							
191.58	238.15	meters - MAIN MINERALIZED ZONE.							
		The section is based upon amount and degree of silicification and is composed of two members, a MAIN SILICIFIED ZONE and a lower transitional silicified zone. The rocks are strongly magnetic in the MAIN SILICIFIED ZONE and purple in colour with rare buff sections. The magnetite has not been reduced to pyrite. Overall pyrite contents are low. The silicification within the lower transitional silicified zone is not well developed and consists of quartz filled tension fractures with silicified halos.							
191.58	205.72	MAIN SILICIFIED ZONE							
		Dark purple, strongly magnetic silicified breccia with	22441	191.58	192.58	1.00	TR	2.060	2.06
			22442	192.58	193.60	1.02	1	1.051	1.03

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		minor buff coloured sections carrying up to 10% pyrite.	22443	193.60	194.61	1.01	1-2	2.081	2.06
		Buff sections up to 30 cm in width. Within purple	22444	194.61	195.60	.99	1	1.703	1.72
		sections 1% finely disseminated pyrite. Buff sections	22445	195.60	196.60	1.00	1-2	2.060	2.06
		are non-magnetic - magnetite has been reduced to pyrite.	22446	196.60	197.60	1.00	1	2.740	2.74
		Carbonatization occurs rarely.	22447	197.60	198.59	.99	1	1.356	1.37
204.05	204.57	Syenite : very fine grained, dark red,	22448	198.59	199.60	1.01	1-2	7.272	7.20
		very siliceous and non-magnetic.	22449	199.60	200.60	1.00	5	1.370	1.37
205.04	205.72	Syenite : as described above.	22450	200.60	201.60	1.00	1	1.030	1.03
		Foliations noted at 40 degrees to the core axis at	22451	201.60	202.39	.79	TR	.269	.34
		192.9, 48 degrees to the core axis at 197.4 and 45	22452	202.39	203.16	.77	2-3	.262	.34
		degrees to the core axis at 204.0 meters.	22453	203.16	204.05	.89	5-8	1.833	2.06
			22454	204.05	204.86	.81	TR-1	.275	.34
			22455	204.86	205.72	.86	TR-1	.292	.34
205.72 238.15 TRANSITIONALLY SILICIFIED ZONE									
		The rocks are green grey with local silicified	22456	205.72	206.72	1.00	TR	.340	.34
		brecciated seams up to 40 cm in width. Silicification	22457	206.72	207.72	1.00	TR-1	.340	.34
		decreases down section. Much of the silicification is	22458	207.72	208.72	1.00	TR-1	.340	.34
		in the form of halos from tension fractures and thus not	22459	208.72	209.42	.70	TR	.000	tr
		the usual silicified breccia form. Pyrite contents are	22460	209.42	210.05	.63	TR-1	.000	tr
		traces to locally 1%.	22461	210.05	211.05	1.00	TR	.340	.34
			22462	211.05	212.05	1.00	TR	1.720	1.72
205.72	210.05	85% silicified breccia : dark green grey	22463	212.05	213.05	1.00	TR	.340	.34
		rock with 50% silicified tension fractures	22464	213.05	214.05	1.00	TR	.340	.34
		with halos extending into the green host	22465	214.05	215.00	.95	TR	.323	.34
		rock. Trace to 1% pyrite. Weakly	22466	215.00	215.83	.83	TR	2.274	2.74
		carbonatized locally. Non-magnetic.	22467	215.83	216.83	1.00	1	1.030	1.03
210.05	215.83	50% silicified breccia : dominantly dark	22468	216.83	217.83	1.00	TR	.340	.34
		green chloritic rock with brecciated	22469	217.83	218.83	1.00	TR	.340	.34
		silicified seams, purple grey to red in	22470	218.83	219.83	1.00	TR	.340	.34
		colour, with traces of pyrite. Seams up	22471	219.83	220.83	1.00	TR	.340	.34
		to 40 cm in width. Foliation at 50 degrees	22472	220.83	221.83	1.00	TR	1.030	1.03
		to the core axis.	22473	221.83	222.83	1.00	TR	.340	.34
215.83	238.15	5 to 10% silicified breccia : dominantly	22474	222.83	223.83	1.00	TR	.340	.34
		dark green chloritic rock with narrow	22475	223.83	224.83	1.00	TR	.340	.34
		silicified brecciated seams purple grey to	22476	224.83	225.83	1.00	TR	.000	tr
		red in colour often accompanied by quartz	22477	225.83	226.83	1.00	TR	.000	tr
		stringers within the reddish sections.	22478	226.83	227.83	1.00	NIL	.000	tr
		Silicification and brecciation decrease	22479	227.83	228.83	1.00	TR	.000	tr
		down section. Trace to nil pyrite.	22480	228.83	229.83	1.00	TR	.000	tr
		Foliation at 45 to 50 degrees to the core	22481	229.83	230.83	1.00	TR-1	.000	tr
		axis. Highly strained hyaloclastite noted	22482	230.83	231.83	1.00	TR	.000	tr
		at 224.85 meters. 228.77 to 229.22 meters	22483	231.83	232.83	1.00	TR	.000	tr
		: intermediate intrusive - weakly	22484	232.83	233.85	1.02	NIL	.000	tr
		carbonatized fine grained, green to pink	22485	233.85	234.85	1.00	TR	.340	.34
		with mafic clots. Contacts at 40 degrees	22486	234.85	235.85	1.00	NIL	.340	.34
		to the core axis.	22487	235.85	236.85	1.00	TR	.340	.34
			22488	236.85	238.15	1.30	TR-1	.442	.34

238.15 244.58 VARIABLY SILICIFIED ZONE (UNDETERMINED)

From To -----Description----- Sample From To Length % Sul GW Au

Dark green foliated rock with narrow brecciated silicified seams. Silicification is usually red coloured, rarely purple with trace to 1% pyrite in seams.

244.58 249.39 TRANSITIONALLY SILICIFIED ZONE

25 to 30% silicified breccia : as described above from 215.83 to 238.15 meters with trace to 1% pyrite.

22489	244.58	245.58	1.00	TR	.000	tr
22490	245.58	246.58	1.00	1	.000	tr
22491	246.58	247.41	.83	TR	.000	tr
22492	247.41	248.41	1.00	1	1.720	1.72
22493	248.41	249.39	.98	TR	.333	.34

249.39 267.30 CHLORITE-CARBONATE SCHIST

Fine grained, green well foliated rock with wispy carbonate along foliation planes. Non-magnetic. Rare silicification noted. Foliation at 40 to 50 degrees to the core axis.

267.30 335.89 BASALT

Fine grained to medium grained green massive flow. Minor altered section noted with quartz - carbonate veining and 1 to 2% pyrite within veins.

267.30 279.86 Massive flow : fine grained green, non-magnetic. Weakly foliated, decreasing down section.

279.86 282.51 Altered section with 60% quartz - carbonate veins and stringers at 50 degrees to the core axis with 1 to 2% pyrite. Minor chloritic inclusions.

282.51 335.89 Massive flow : continuation of above with the grain size increasing to medium grained down section. Minor leucoxene overgrowths. Non-magnetic. Fine grained towards lower contact.

22494	279.86	280.86	1.00	TR-1	.340	.34
22495	280.86	281.86	1.00	1-2	.340	.34
22496	281.86	282.51	.65	1-2	.221	.34

335.89 END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords 9840.0 8374.8

DIAMOND DRILL RECORD

HOLE NO.: MC86-301A

Azimuth: 350.0

Section: 0+25W

Property: #ORVEST OPTION

Dip: -73.0

Core Size: 8G

Location: 025W 140S

Elevation: 5004.5

Date Started: NOVEMBER 6, 1986

Length: 134.7

Date Completed: NOVEMBER 11, 1986

Logged by: G. BASCHUK

Measurement: METRIC

Comments: HOLE ABANDONED DUE TO DIP

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-74.0	91.44		-75.0			
82.30		-75.5	133.20	350.5	-76.0			

-----Log Summary-----

.00 28.96 OVERBURDEN.

28.96 47.33 DIORITE.

47.33 134.72 BASALT.

134.72 END OF HOLE.

From To -----Description----- Sample From To Length % Sul GW Au

.00 28.96 OVERBURDEN

28.96 47.33 DIORITE

Medium grained green intrusive with fish-net texture noted with interlocking equigranular grains. Non-magnetic 45.74 to 47.33 meters ; intermediate intrusive : fine grained grey-green with 5% pink feldspar phenocrysts up to 4 mm diameter. Non-carbonatized and non-magnetic. Contacts in rubble.

47.33 134.72 BASALT

The section is composed of massive and vesicular flows, often with the vesicles near the top of the massive sections. The flows are aphanitic to very fine grained and green in colour. Magnetics noted locally near the top of the section.

47.33 53.97 Massive flow : aphanitic to very fine grained dark green. Abundant epidote stringers near upper contact.

53.97 54.79 Intermediate intrusive : as described above from 45.74 to 47.33 meters. Phenocrysts concentrated near upper contact. Moderately pervasively carbonatized. Contacts at 75 to 80 degrees to the core axis.

54.79 68.10 Massive flow : very fine grained dark green, continuation of above. Locally magnetic.

68.10 68.30 Shear zone : red to green brecciated section with traces of pyrite. Epidote matrix to angular fragments. Shearing at 18 to 20 degrees to the core axis.

68.30 72.49 Massive flow : dark green fine grained continuation of above.

72.49 74.71 Flow contact zone : flow breccia : dark green with epidote noted in matrix between rounded fragments. Non-magnetic.

74.71 81.80 Vesicular flow : fine grained green. Non-magnetic.

81.80 90.27 Flow top breccia : dark green with hyaloclastite noted near upper contact.

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
------	----	-------------	--------	------	----	--------	-------	----	----

Fragments are subangular to subrounded with chloritic matrix. Breadcrust fractures noted on fragments. Fragment size increases down section with reaction rims.

90.27 102.75 Vesicular flow : fine grained grey-green for upper 2 meters, then dark green down section. Chloritic filled vesicles near top, carbonate filled down section.

102.75 121.90 Massive flow : very fine grained to fine grained green with abundant carbonate - quartz stringers and epidote fracture fillings. Local auto-breccia and injection breccia noted with carbonate. Non-magnetic. Brecciation decreases down section. Carbonate - quartz stringers are sub-parallel to core axis.

121.90 125.50 Massive flow : fine grained green and non-magnetic. Grain size increasing down section.

125.50 134.72 Massive flow : medium grained continuation of above with well developed equigranular interlocking texture. Non-magnetic. Leucoxene overgrowths noted as minor component.

134.72 END OF HOLE.

Note: The hole was abandoned due to the steep increase in dips. Drillers reported encountering numerous boulders in the overburden.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords 9861.2 8574.8

DIAMOND DRILL RECORD

HOLE NO.: MC66-301E

Azimuth: 346.0

Section: 025W

Property: NORVEST OPTION

Dip: -68.0

Core Size: 60

Location: 0+25W 1+38S

Elevation: 5004.9

Date Started: NOVEMBER 11, 1986

Length: 274.9

Date Completed: NOVEMBER 18, 1986

Logged by: G. BASCHUK

Measurement: METRIC

Comments: CASING LEFT IN HOLE

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-69.0	137.16		-67.5	228.60		-63.5
73.76	352.5	-68.0	156.06		-66.0	270.24	350.8	-62.0
91.44		-68.0	216.71	352.0	-65.0	274.32		-61.0

-----Log Summary-----

.00 30.88 OVERBURDEN.

30.88 44.50 DIORITE.

44.50 187.16 BASALT.

187.16 190.89 GREENSCHIST.

190.89 193.24 CHLORITE-CARBONATE SCHIST.

193.24 243.25 MAIN MINERALIZED ZONE.

193.24 204.80 MAIN SILICIFIED ZONE.

204.80 243.25 TRANSITIONALLY SILICIFIED ZONE.

243.25 261.85 CHLORITE-CARBONATE SCHIST.

261.85 273.46 TRANSITIONALLY SILICIFIED ZONE.

273.46 274.93 CHLORITE-CARBONATE SCHIST.

274.93 END OF HOLE.

From To -----Description----- Sample From To Length % Sul GW Au

.00 30.88 OVERBURDEN

30.88 44.50 DIORITE

Medium grained, green, equigranular rock. Non-magnetic with traces disseminated pyrite. Fish-net texture common. Lower contact in rubble. Minor shear at 36.27 meters at 23 degrees to the core axis with limonite on shear plane.

Note : whole rock # 29461 taken.

44.50 187.16 BASALT

22555 70.96 71.51 .55 3-5 .187 .34

Medium to dark green and fine grained with aphanitic flow margins and medium grained flow centres. Finer grained pillowed flows and relatively coarser grained massive flows are found in the section. Minor shears noted at 71.30 meters and at 166.45 meters. Rocks dominantly non-magnetic.

44.50 50.90 Massive flow : fine grained to very fine grained green. Non-magnetic.

50.90 53.90 Weathered section : brown green coloured, highly rubbled with hematite staining on fractures.

53.90 59.70 Massive flow : fine grained to very fine grained. Continuation of above. Abundant epidote stringers and fracture fillings near upper contact.

59.70 64.15 Brecciated section : very fine grained green section with localized brecciation and massive magnetite associated with epidote in narrow bands up to 10 cm in width. Possibly poorly developed selvages.

64.15 85.50 Vesicular flow : fine grained, green and non-magnetic. From 70.96 to 71.51 meters : shear, weakly silicified and brecciated with 3 to 5% pyrite as crystals and fine disseminations. Shearing at 15 degrees to the core axis with minor clay at 71.30 meters

85.50 98.62 Massive flow : fine grained, green to grey-green down section. Down section

From 10 -----Description----- Sample From To Length & Sul GW Au

interlocking equigranular texture noted. Non-magnetic. 98.54 to 98.62 meters : mafic intrusive, very fine grained green weakly carbonatized with sheared lower contact at 70 degrees to the core axis. Contacts at 15 degrees to the core axis.

98.62 115.00 Massive flow : medium grained continuation of above. Non-magnetic, except strongly magnetic from 108.5 to 112.0 meters. The magnetic section is fine grained and dark green. Note : whole rock sample #29462 at 103 to 104 m and #29463 at 108.5 to 109.0 meters.

115.00 150.20 Massive flow : fine grained green continuation of above. Non-magnetic.

150.20 153.00 Mafic intrusive : fine grained, olive green coloured and non-magnetic. Core is heavy. 1 to 2% finely disseminated pyrite throughout. Weakly carbonatized. Contacts at 20 degrees to the core axis.

153.00 162.30 Massive flow : fine to medium grained, green. Non-magnetic. Equigranular interlocking crystals throughout.

162.30 166.00 Massive flow : medium grained with well developed fish-net texture.

166.00 166.90 Shear zone : highly foliated and locally brecciated with carbonate - quartz stringers and traces pyrite. Brecciation resembles flow breccia but, fragments are elongated and altered. Shearing at 55 degrees to the core axis.

166.90 182.75 Massive flow : fine rapidly increasing grain size to medium grained with equigranular interlocking crystals noted. Non-magnetic. Lower contact in hematite stained shear at 57 degrees to the core axis.

182.75 187.18 Flow breccia : pale to medium green very fine grained flow with minor hyaloclastite and associated subangular to subrounded breccia fragments. Non-magnetic. Epidote fracture fillings and stringers associated with brecciation.

187.18 190.89 GREENSCHIST

22556 189.89 190.89 1.00 TR .340 .34

Continuation of above flow breccia with foliation increasing down section at 50 degrees to the core axis. Minor hematite alteration noted. Wispy carbonate increasing down section. Minor shear at 190.57 meters

From 190.89 To 193.24 Description ----- Sample From To Length & Sul GW Au  
at 52 degrees to the core axis, 1 mm clay on plane.

190.89 193.24 CHLORITE-CARBONATE SCHIST

Very fine grained green well foliated section with minor strongly magnetic purple coloured laminations. Foliation at 60 to 65 degrees to the core axis. Trace to 1% pyrite often in carbonate laminations. Section from 192.35 to 193.24 meters is highly fissile and rubbled. Flat-lying crenulation cleavage noted.

22557	190.89	191.90	1.01	TR-1	.343	.34
22558	191.90	193.24	1.34	TR-1	1.386	1.03

193.24 to 243.25 meters - MAIN MINERALIZED ZONE.

The zone is based upon amount and degree of silicification and is composed of two members. The upper of the zones, the MAIN SILICIFIED ZONE, is strongly magnetic and dark purple. The magnetite has not been reduced to pyrite. Pyrite contents are low at 1%. The lower of the zones, the lower transitional silicified zone, is of normal thickness and poorly developed with trace to 1% pyrite.

193.24 MCKENNA FAULT PLANE.

193.24 204.80 MAIN SILICIFIED ZONE

Aphanitic, dark purple, highly silicified section with fine brecciation and well developed foliation. McKenna Fault at upper contact in rubble. Section is strongly magnetic throughout. 1% pyrite, 2 to 3% near lower contact. Pervasively carbonatized from 193.24 to 195.0 meters. Micro-faulting sub-parallel to core axis is common. Foliations 45 degrees at 194.0, 50 degrees at 197.0 and 30 to 40 degrees to the core axis from 204.0 to 204.5 meters.

22559	193.24	194.24	1.00	1	.340	.34
22560	194.24	195.24	1.00	1	1.720	1.72
22561	195.24	196.24	1.00	1	.340	.34
22562	196.24	197.24	1.00	1	.340	.34
22563	197.24	198.24	1.00	1	.340	.34
22564	198.24	199.24	1.00	1	.340	.34
22565	199.24	200.24	1.00	1	.340	.34
22566	200.24	201.24	1.00	1-2	.340	.34
22567	201.24	202.24	1.00	1	.000	tr
22568	202.24	203.24	1.00	1	.000	tr
22569	203.24	204.00	.76	1	.000	tr
22570	204.00	204.80	.80	2-3	1.376	1.72

204.80 243.25 TRANSITIONALLY SILICIFIED ZONE

Dark green and fine grained with aphanitic, purple-grey silicified breccia zones up to 50cm wide. Greenish rock is chloritized and locally hematized but is generally not silicified. Minor sections of white to cream coloured silicified sections resembling 'chert' are noted. Pyrite contents are trace to 1%, locally up to 2 to 3%. Magnetite noted in purple coloured silicified

22571	204.80	205.79	.99	TR	.337	.34
22572	205.79	206.41	.62	2-3	.639	1.03
22573	206.41	207.04	.63	1-2	.214	.34
22574	207.04	208.04	1.00	1	1.030	1.03
22575	208.04	209.04	1.00	1	.690	.69
22576	209.04	210.04	1.00	TR	.340	.34
22577	210.04	211.04	1.00	TR-1	.690	.69
22578	211.04	212.14	1.10	TR-1	.374	.34

From	Description	Sample	From	To	Length	% Sul	GW	Au
	sections.	22579	212.14	212.69	.55	1	.754	1.37
204.80	205.79 Syenitic intrusive : dark red, aphanitic siliceous intrusive with 3% white mm sized phenocrysts. 5 to 10% at contacts. Minor inclusion of main silicified zone rock near base. Contacts at 65 and 45 degrees to the core axis, respectively.	22580	212.69	213.42	.73	1-2	2.000	2.74
		22581	213.42	214.42	1.00	TR-1	.340	.34
		22582	214.42	215.42	1.00	1	.340	.34
		22583	215.42	216.42	1.00	TR-1	.340	.34
		22584	216.42	217.42	1.00	1	.340	.34
		22585	217.42	218.13	.71	TR-1	.241	.34
205.79	207.04 80% silicified breccia : 1 to 3% pyrite, silicification decreases down section. Pyrite as fine disseminations and filling voids in breccia. Non-magnetic. Silicified sections weakly reactive to HCl.	22586	218.13	218.58	.45	NIL	.153	.34
		22587	218.58	219.58	1.00	TR-1	.340	.34
		22588	219.58	220.58	1.00	TR-1	.340	.34
		22589	220.58	221.58	1.00	TR	.340	.34
		22590	221.58	222.58	1.00	TR-1	.340	.34
207.04	212.14 30 to 35% silicified breccia : trace to 1% pyrite, locally up to 2% associated with silicified breccia. Dominantly dark green rock with mafic clots parallel to foliation, 1 to 2 mm long. Breccia seams average 5 cm in width parallel to foliation at 40 to 45 degrees to the core axis locally to 25 degrees to the core axis. Minor chloritic shear at 212.45 meters at 25 degrees to the core axis. 5% quartz stringers and quartz filled tension fractures with silicified halos. Silicification locally reactive to HCl. Non-magnetic.	22591	222.58	223.58	1.00	TR	.340	.34
		22592	223.58	224.58	1.00	1-2	.690	.69
		22593	224.58	225.44	.86	TR	.292	.34
		22594	225.44	226.18	.74	5-7	.511	.69
		22595	226.18	226.61	.43	10	.589	1.37
		22596	226.61	227.61	1.00	5-7	3.090	3.09
		22597	227.61	228.61	1.00	3-5	1.720	1.72
		22598	228.61	229.61	1.00	1	.340	.34
		22599	229.61	230.61	1.00	1-2	.340	.34
		22600	230.61	231.61	1.00	1-2	.690	.69
		22601	231.61	232.15	.54	1-2	.184	.34
		22602	232.15	233.15	1.00	TR-1	.340	.34
		22603	233.15	234.15	1.00	TR-1	.340	.34
		22604	234.15	235.15	1.00	1	1.030	1.03
212.14	213.42 85% silicified breccia, 1% pyrite.	22605	235.15	236.15	1.00	TR	.340	.34
213.42	225.44 25 to 30% silicified breccia : trace to 1% pyrite, locally up to 3 to 5%. Dominantly dark green fine to medium grained mafic rock with silicified breccia seams averaging 5 cm, locally up to 15 cm in width. Locally magnetic associated with purple silicified seams. Silicification commonly grey to white coloured. Foliation at 40 to 50 degrees to the core axis. Graphitic shears noted at 217.47 meters at 40 degrees to the core axis and at 219.43 meters at 58 degrees to the core axis. Intermediate intrusive noted from 218.13 to 218.58 meters : medium grained, green with 40% felsics and 10 to 15% red blebs up to 2 mm. Contacts at 45 degrees to the core axis.	22606	236.15	237.15	1.00	TR	1.030	1.03
		22607	237.15	238.15	1.00	TR	.000	tr
		22608	238.15	239.15	1.00	TR	.000	tr
		22609	239.15	240.15	1.00	TR	.000	tr
		22610	240.15	241.15	1.00	TR	.690	.69
		22611	241.15	242.15	1.00	TR	.340	.34
		22612	242.15	243.25	1.10	TR	.000	tr
225.44	226.61 85% silicified breccia : resembles a 'cherty' section with 5 to 7% pyrite, generally as laminations parallel to foliation. The silicification is cream to white or dark grey coloured resembling silica dumping zones. Non-carbonatized and non-magnetic. Foliation at 45 degrees to the core axis. Abundant sericite noted at							

From To Description Sample From To Length % Sul GW Au

lower contact.

226.61 232.15 25% silicified breccia : 1 to 2% pyrite, locally up to 10% as fine replacements of carbonate bands. Ovoid carbonate alteration, resembling vesicles are common, often replaced by pyrite. These are commonly noted near brecciated silicified bands, possibly pillows. Possible hyaloclastite, highly strained, noted at upper contact. Moderately magnetic throughout. Hematitic streak throughout. Foliation at 50 degrees to the core axis. Minor shears at 231.87 meters at 18 degrees to the core axis and at 232.15 meters at 20 degrees to the core axis, clay coated.

232.15 243.25 5 to 10% silicified breccia : trace to 1% pyrite. Dominantly CHLORITE-CARBONATE SCHIST with brecciated silicified seams averaging 5 to 10 cm in width, locally up to 15 cm. Bands parallel foliation at 45 to 50 degrees to the core axis. Non-magnetic. Hematitic streak noted rarely. 3 mm clay seam at 232.90 meters at 31 degrees to the core axis.

243.25 261.85 CHLORITE-CARBONATE SCHIST

Fine grained green well foliated rock with wispy carbonate along foliation planes at 45 degrees to the core axis. Non-magnetic. No hematitic streak. Traces pyrite noted in carbonate wisps as a replacement. Pink quartz veining from 253.00 to 253.32 meters. Traces pyrite. Irregular contacts. Mm sized clay seam at 255.17 meters at 35 degrees to the core axis. Shear zone noted from 260.65 to 260.80 meters with sericite perpendicular to the core axis defining a crenulation cleavage.

22613	243.25	244.25	1.00	TR	.000	tr
22614	252.97	253.57	.60	TR	.000	tr
22615	260.65	261.85	1.20	TR	.000	tr

261.85 272.48 TRANSITIONALLY SILICIFIED ZONE

Fine to very fine grained, green chloritic rock with silicification taking on a grey colouration with a faint purple hue. Silicification often accompanied by salmon, cream, grey or purple coloured brecciation. Trace to 1% pyrite, locally up to 3 to 5% associated with salmon coloured silicification. Silicification is reactive to HCl where most intense. Non-magnetic. No hematitic streak

22616	261.85	262.88	1.03	1-2	.000	tr
22617	262.88	263.85	.97	TR-1	.000	tr
22618	263.85	264.90	1.05	TR-1	.724	.69
22619	264.90	265.91	1.01	1-2	2.767	2.74
22620	265.91	266.91	1.00	1	1.030	1.03
22621	266.91	267.80	.89	TR	.303	.34
22622	267.80	268.77	.97	TR	.330	.34
22623	268.77	269.50	.73	TR-1	1.000	1.37

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
261.85	264.90	40% silicified breccia : trace to 1% pyrite, up to 3% near upper contact. Foliation at 60 to 65 degrees to the core axis.	22624	269.50	270.04	.54	TR-1	.184	.34
			22625	270.04	271.00	.96	TR-1	.326	.34
			22626	271.00	272.01	1.01	TR-1	.343	.34
			22627	272.01	272.63	.62	1-2	.849	1.37
264.90	266.91	65 to 70% silicified breccia : 1% pyrite. Silicification often in contorted bands. Down section silicification occurs as halos to fracture fillings and stringers.	22628	272.63	273.48	.85	TR	.289	.34
266.91	268.77	10% silicified breccia : dominantly CHLORITE-CARBONATE SCHIST with minor silicification as halos to fracture fillings and stringers. Trace pyrite.							
268.77	270.04	95% silicified breccia : trace to 1% pyrite. Cream coloured silicified breccia at top, as halos down section.							
270.04	273.48	50% silicified breccia : dominantly purple coloured halos to stringers and fracture fillings. Trace to 1% pyrite. Some fragments contain vesicular appearing blebs within, eg. 272.75 meters. Possibly vesicular basalt.							
273.48	274.93	CHLORITE-CARBONATE SCHIST	22629	273.48	274.00	.52	TR	.177	.34
		Fine grained, green moderately foliated rock with less than 5% silicification as halos to fracture fillings and stringers. Ground waters have leached out some carbonate filled vesicles.							
274.00	274.31	Mafic intrusive : fine grained, green. Pervasively carbonatized. Less than 5% reddish blebs 1 mm across. Contacts at 20 and 40 degrees to the core axis respectively.							
274.93		END OF HOLE.							

AMERICAN BARRICK RESOURCES CORPORATION

Co-or 9784.2 8975.0 DIAMOND DRILL RECORD HOLE NO.: MC.86-302  
 Azimuth: 339.0 Section: 025W Property: WORVEST  
 Dip: -68.0 Core Size: 80 Location: 0+25W 2+15S  
 Elevation: 5004.0  
 Length: 366.4 Date Started: NOV. 18, 1986  
 Date Completed: NOV. 26, 1986  
 Measurement: METRIC Logged by: N. DOWNEY  
 Comments: CASING LEFT IN HOLE

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-65.0	152.40	346.5	-64.0	274.93	350.0	-60.0
75.90	344.5	-65.0	182.88		-62.5	320.04		-56.0
91.44		-65.0	209.40	349.0	-63.0	351.13	350.0	-56.0
137.16		-64.5	228.60		-61.0			

-----Log Summary-----

.00 37.19 OVERBURDEN.  
 37.19 109.54 DIORITE.  
 109.54 113.23 BASALT.  
 113.23 117.79 DIORITE.  
 117.79 122.25 BASALT.  
 122.25 161.02 DIORITE.  
 161.02 211.96 BASALT.  
 211.96 212.76 QUARTZ VEIN ZONE.  
 212.76 247.65 DIORITE.  
 247.65 249.14 GREENSCHIST.  
 249.14 250.80 TRANSITIONALLY SILICIFIED ZONE.  
 250.80 262.45 CHLORITE-CARBONATE SCHIST.  
 262.45 302.18 MAIN MINERALIZED ZONE.  
 262.45 262.52 MCKENNA FAULT PLANE.  
 262.52 268.07 TRANSITIONALLY SILICIFIED ZONE.  
 268.07 269.84 MAIN SILICIFIED ZONE.  
 269.84 302.18 TRANSITIONALLY SILICIFIED ZONE.  
 302.18 334.85 CHLORITE-CARBONATE SCHIST.  
 334.85 350.13 GREENSCHIST.  
 350.13 366.37 DIORITE.  
 366.37 END OF HOLE.

From To -----Description----- Sample From To Length % Sul GW Au

.00 37.19 OVERBURDEN

37.19 109.54 DIORITE

Fine grained grey-green massive rock. Unit is very consistant. Non-magnetic. Minor carbonate - quartz stringers. Grain size increases down section.

37.19 50.45 Blocky, highly fractured core. Fine grained green massive rock. Carbonate leached.

50.45 77.00 Grey-green fine grained massive rock. Grain size increasing down section. 61.25 61.75 mafic intrusive. Green fine grained strongly magnetic. Pervasive carbonate alteration. Chloritized contacts, top 55 degrees to the core axis, base 60 degrees to the core axis.

77.00 90.15 Medium grained, non-magnetic massive rock.

90.15 90.96 Fine grained green glomeroporphyritic intrusive. Phenocrysts up to 8 mm. Non-magnetic. Non-reactive to HCl. Weakly epidotized. Chloritized contacts, top 52, base 57 degrees to the core axis.

90.96 101.86 Grey-green medium to coarse grained massive intrusive. Continuation of overlying unit. Mafics up to 3 mm. Fish net texture developed.

101.86 102.41 Brown green monzonite. Green chloritic blebs up to 1.5 mm. Non-magnetic. Traces to 1% pyrite. Chloritized contacts 75 degrees to the core axis.

102.41 109.54 Grey-green medium grained diorite. Sharp foliated base at 50 degrees to the core axis. Fish net texture.

109.54 113.23 BASALT

Dark green very fine grained massive rock. Sharp top and base contacts. Base 80 degrees to the core axis.

113.23 117.79 DIORITE

Fine grained grey-green massive intrusive rock.

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
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Continuation of overlying diorite. Fines at base. Base is quartz stringer 40 degrees to the core axis.

117.79 122.25 BASALT

Dark green very fine grained to aphanitic pillowed flow. Non-magnetic. Pervasively silicified at base with epidotization. Base is blocky, highly fractured core with abundant bit on core.

122.25 161.02 DIORITE

Dark green fine to medium grained massive intrusive. Fines at top and base. Abundant leucoxene, locally up to 10%.

122.25 125.17 Non-magnetic.

125.17 134.50 Medium grained strongly magnetic.

134.50 143.00 Medium to coarse grained non-magnetic. Chloritic mafics up to 4 mm. Locally up to 10% leucoxene.

143.00 161.02 Grey-green fine to medium grained massive non-magnetic diorite. Up to 60% felsics. Base 50 degrees to the core axis.

161.02 211.96 BASALT

Dark green non-magnetic massive flow. Flow breccia at top

161.02 161.70 Flow breccia. Rounded fragments in hyaloclastite matrix.

161.70 165.70 Very fine grained to aphanitic massive flow. Minor vesicles noted. Grades to fine grained massive flow.

165.70 178.11 Green fine grained massive flow. Rare carbonate - quartz stringers.

178.11 178.74 Mafic intrusive. Grey-green foliated intrusive. Pervasive carbonate alteration. Chloritic blebs up to 2 mm. Top contact is 70 degrees to the core axis. Base is fault plane 20 degrees to the core axis.

178.74 179.55 Very fine grained dark green massive flow.

179.55 180.10 Fault plane with epidote carbonate -

AMERICAN BARRICK RESOURCES CORPORATION

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
180.10	185.95	quartz stringer 5 degrees to the core axis. Epidote carbonate quartz injection breccia. Gradational base.							
185.95	191.22	Flow breccia. Well rounded fragments in basalt matrix. Locally magnetic.							
191.22	194.55	Fine grained green massive flow. Indistinct contacts. Non-magnetic. May be intrusive.							
194.55	196.55	Flow breccia. Continuation of overlying flow breccia. Locally magnetic.							
196.55	211.96	Fine grained green massive flow. Numerous vesicular sections. Locally magnetic. Minor epidotization with vesicle.							
211.96	212.76	QUARTZ VEIN ZONE	22707	211.96	212.76	.80	1-2	.000	tr
		Abundant wall rock fragments. Massive blobs of pyrite at base.							
212.76	247.65	DIORITE							
		Fine to medium grained grey-green massive intrusive. Non-magnetic. Abundant leucoxene. Poorly developed carbonate alteration at base. Minor quartz veinlets often with epidote. Base gradational to GREENSCHIST.							
247.65	249.14	GREENSCHIST							
		Dark green foliated non-magnetic rock. Continuation of overlying diorite. Foliation and carbonate alteration increasing down section. Abundant leucoxene. Foliation 43 degrees to the core axis at 249 meters.							
249.14	250.80	TRANSITIONALLY SILICIFIED ZONE	22708	249.14	250.14	1.00	2	1.200	1.20
		20% Grey silicified breccia in well developed CHLORITE-CARBONATE SCHIST. Carbonate replacement of foliation. Locally up to 2% pyrite. Non-magnetic. Intense pervasive carbonate alteration. Minor sericite noted. 249.3 clay seam 35 degrees to the core axis.	22709	250.14	250.80	.66	1-2	3.056	4.63

AMERICAN FARRICK RESOURCES CORPORATION

Hole No.: MC.86-302

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From To -----Description----- Sample From To Length % Sul GW Au

250.2 foliation 50 degrees to the core axis. 250.68 clay-grit seam 20 degrees to the core axis.

250.80 262.45 CHLORITE-CARBONATE SCHIST

Strongly foliated green rock. Carbonate replacement of foliation gives banded appearance. Non-magnetic. Narrow bands of carbonate alteration breccia have minor silicification. Less intensely foliated section at 252.8 has same texture as overlying diorite. 252.8 foliation 60 degrees to the core axis. 255.87 clay seam 20 degrees to the core axis. 258.38 clay seam 60 degrees to the core axis. 258.7 foliation 70 degrees to the core axis. 260 foliation 60 degrees to the core axis. 261.95 clay seam 50 degrees to the core axis. 261.97 clay seam 65 degrees to the core axis.

22710	250.80	251.86	1.06	TR-1	.360	.34
22711	251.86	252.86	1.00	TR-1	.340	.34
22712	252.86	253.86	1.00	TR-1	.690	.69
22713	253.86	254.95	1.09	TR-1	.371	.34
22714	254.95	256.06	1.11	1	.766	.69
22715	256.06	257.16	1.10	TR-1	.374	.34
22716	257.16	258.16	1.00	TR-1	.340	.34
22717	258.16	259.23	1.07	TR-1	.364	.34
22718	259.23	260.27	1.04	TR-1	.354	.34
22719	260.27	261.30	1.03	TR	1.772	1.72
22720	261.30	262.45	1.15	TR	.794	.69

262.45 302.18 MAIN MINERALIZED ZONE.

The zone is based upon amount and degree of silicification and is composed of three members. Each member of the zone is relatively thin and the degree of alteration is not particularly strong. However the LOWER SILICIFIED ZONE is well developed. Pyrite contents are lower than normal, most noticeably in the Main Silicified Zone.

262.45 262.52 MCKENNA FAULT PLANE

Clay fault gouge 60 degrees to the core axis.

262.52 268.07 TRANSITIONALLY SILICIFIED ZONE

80 to 90% dark red to grey strongly foliated silicified breccia. Hematitic streak throughout section. Silicification poorly developed. Locally magnetic. Intense pervasive carbonate alteration leaves zone soft. 1 to 3% pyrite increasing at base. 262.8 foliation 50 degrees to the core axis. 267.10 267.37 red-brown syenitic intrusive. Silicified and brecciated.

22721	262.52	263.55	1.03	2-3	3.183	3.09
22722	263.55	264.60	1.05	1	.357	.34
22723	264.60	265.60	1.00	1-2	.340	.34
22724	265.60	266.48	.88	1-2	2.411	2.74
22725	266.48	267.40	.92	1-2	1.895	2.06
22726	267.40	268.07	.67	5-7	4.710	7.03

AMERICAN BARRICK RESOURCES CORPORATION

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
268.07	269.84	MAIN SILICIFIED ZONE							
		Grey to purple-grey silicified breccia. Non-magnetic. Non-reactive to HCl. Low pyrite. Zone is composed of 2 sections. 268.07 268.90 brecciated silicified purple syenite. Contains silicified carbonate filled fractures. 2 to 3% pyrite. 268.90 269.84 grey to purple-grey silicified breccia. Silicified carbonate stringers are common. Low pyrite.	22727	268.07	268.90	.83	2-3	1.137	1.37
			22728	268.90	269.84	.94	1	.320	.34
269.84	302.18	TRANSITIONALLY SILICIFIED ZONE							
		Purple grey to grey silicified breccia in fine grained green CHLORITE-CARBONATE SCHIST. Low pyrite.	22729	269.84	270.84	1.00	1	.340	.34
			22730	270.84	271.84	1.00	2-3	3.090	3.09
			22731	271.84	272.93	1.09	1	.371	.34
			22732	272.93	273.93	1.00	TR-1	1.030	1.03
269.84	276.05	80% purple-grey silicified breccia. Unaltered zones are chloritic. Minor silica dumping noted with most intense silicification. Non-reactive to HCl. 273.0 foliation 70 degrees to the core axis. 275.42 275.74 brown green to pink green foliated mafic intrusive. Chloritic blebs up to 2 mm. Non-reactive to HCl. Weakly magnetic. Strongly foliated 55 degrees to the core axis. Pink feldspar overgrowths up to 3 mm are brecciated by foliation.	22733	273.93	274.93	1.00	1	1.030	1.03
			22734	274.93	276.05	1.12	1	.381	.34
			22735	276.05	277.13	1.08	TR-1	.367	.34
			22736	277.13	278.16	1.03	TR-1	.350	.34
			22737	278.16	279.20	1.04	TR-1	1.425	1.37
			22738	279.20	280.20	1.00	TR-1	.340	.34
			22739	280.20	281.20	1.00	TR-1	.340	.34
			22740	281.20	281.86	.66	1	.680	1.03
			22741	281.86	282.90	1.04	1	1.425	1.37
			22742	282.90	283.94	1.04	TR-1	.354	.34
			22743	283.94	284.96	1.02	TR-1	.347	.34
			22744	284.96	285.96	1.00	TR-1	.340	.34
276.05	281.86	50% grey to grey brown silicified breccia zones in CHLORITE-CARBONATE SCHIST. Non-magnetic. Reactive to HCl except for zones of most intense silicification. Brown dolomitized fragments noted. 276.40 276.54 red foliated intrusive. Intense carbonate alteration. Non-magnetic. Brecciated and silicified. 278.60 foliation 40 degrees to the core axis. 279.70 280.0 poorly deformed section with foliated diorite texture. 280.80 foliation 45 degrees to the core axis.	22745	285.96	287.00	1.04	1	.354	.34
			22746	287.00	288.00	1.00	1	.340	.34
			22747	288.00	289.00	1.00	TR-1	.340	.34
			22748	289.00	290.00	1.00	TR-1	.340	.34
			22749	290.00	291.00	1.00	TR-1	.340	.34
			22750	291.00	292.04	1.04	TR	.354	.34
			22751	292.04	293.04	1.00	1-2	.340	.34
			22752	293.04	294.06	1.02	1	1.051	1.03
			22753	294.06	295.08	1.02	TR-1	.347	.34
			22754	295.08	296.20	1.12	TR-1	.381	.34
			22755	296.20	297.07	.87	TR-1	.296	.34
			22756	297.07	297.77	.70	1	.238	.34
281.86	292.04	25% grey silicified breccia in CHLORITE-CARBONATE SCHIST. Brown dolomitized fragments common. Minor purple-grey silicification. 281.93 clay seam 40 degrees to the core axis. 284.20 foliation 47 degrees to the core axis. 291.0 foliation 50 degrees to the core axis.	22757	297.77	298.34	.57	1	.194	.34
			22758	298.34	299.40	1.06	TR-1	.360	.34
			22759	299.40	300.37	.97	TR-1	.330	.34
			22760	300.37	301.25	.88	TR	.000	tr
			22761	301.25	302.18	.93	TR	.000	tr
292.04	297.07	30% grey to purple-grey silicified							

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Hole No.: MC.86-302

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From To -----Description----- Sample From To Length % Sul GW Au

breccia. Non-magnetic. Reactive to HCl.  
 293.0 foliation 50 degrees to the core axis  
 297.07 298.34 75% grey to brown grey silicified breccia.  
 Abundant silicified carbonate stringers.  
 298.34 302.18 30% grey silicified zones. Intense  
 carbonate alteration. Silicification  
 decreases down section. 301 foliation 55  
 degrees to the core axis.

302.18 334.85 CHLDRITE-CARBONATE SCHIST

Green strongly foliated rock. Pervasive carbonate  
 alteration. Narrow bands of carbonate alteration breccia  
 rarely with purple-grey silicification. Low pyrite.  
 Subhorizontal S2 foliation locally well developed. 308  
 clay seam 40 degrees to the core axis. 309 foliation 60  
 degrees to the core axis, S2 80 degrees to the core axis  
 dipping to the south. 318.80 clay seam 55 degrees to  
 the core axis. 321.0 321.29 carbonate alteration breccia  
 with minor silicification. 1 to 2% pyrite. 321.29 clay  
 seam 50 degrees to the core axis. 319.0 foliation 50  
 degrees to the core axis. 322.5 foliation 50 degrees to  
 the core axis. 323.75 234.18 carbonate alteration  
 breccia with minor silicification. Brown dolomitized  
 fragments noted. Minor pyrite. 330.9 331.13 carbonate  
 alteration breccia. Minor silicification. Trace pyrite.  
 Foliation 55 degrees to the core axis 333.5 foliation  
 50 degrees to the core axis.

22762	302.18	303.00	.82	TR	.000	tr
22763	303.00	304.00	1.00	TR	.340	.34
22764	304.00	305.00	1.00	TR	.340	.34
22765	305.00	306.00	1.00	TR	.000	tr
22766	306.00	307.00	1.00	TR	.000	tr
22767	307.00	308.00	1.00	TR	.000	tr
22768	308.00	309.03	1.03	TR	.000	tr
22769	309.03	310.00	.97	TR	.000	tr
22770	310.00	311.00	1.00	TR	.000	tr
22771	311.00	312.00	1.00	TR	.000	tr
22772	312.00	313.00	1.00	TR	.000	tr
22773	313.00	314.00	1.00	TR	.340	.34
22774	314.00	315.00	1.00	TR	.340	.34
22775	315.00	316.00	1.00	TR	.340	.34
22776	316.00	317.04	1.04	TR	.354	.34
22777	317.04	318.04	1.00	TR	.340	.34
22778	318.04	319.04	1.00	TR	.340	.34
22779	319.04	320.00	.96	TR	.326	.34
22780	320.00	321.00	1.00	TR	.690	.69
22781	321.00	322.00	1.00	1-2	2.400	2.40
22782	322.00	323.00	1.00	TR-1	.340	.34
22783	323.00	324.18	1.18	TR-1	1.617	1.37
22784	324.18	325.24	1.06	TR-1	.360	.34
22785	325.24	326.28	1.04	TR	.354	.34
22786	326.28	327.30	1.02	TR	.347	.34
22787	327.30	328.40	1.10	TR	.374	.34
22788	328.40	329.40	1.00	TR	.340	.34
22789	329.40	330.42	1.02	TR	.347	.34
22790	330.42	331.53	1.11	TR	.766	.69

334.85 350.13 GREENSCHIST

Fine grained green foliated rock. Carbonate alteration  
 locally weak. Carbonate tension fracture filling common.  
 Rock was fine grained diorite. Base gradational to  
 basalt. 340.0 foliation 50 degrees to the core axis.  
 348.2 foliation 45 degrees to the core axis.

AMERICAN BARRICK RESOURCES CORPORATION

Hole No.: MC.86-302

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From To -----Description----- Sample From To Length % Sul GW Au

350.13 366.37 BASALT

Medium grained massive flow grades down section to pillowed flow.

350.13 355.63 Fine grained green massive flow. Only local carbonate alteration. Carbonate - quartz stringers common.

355.63 366.37 Green to pale green pillowed flow. Selvages poorly developed. Non-magnetic.

366.37 END OF HOLE.

Depth: 000.7 892.7  
 Azimuth: 345.5  
 Dip: -70.5  
 Elevation: 5001.0  
 Location: 421.8

DIAMOND DRILL RECORD  
 Section: 075A  
 Core Size: B6

HOLE NO.: MC-87-303  
 Property: WORVEST OPTION  
 Location: 0+75W 1+85E

Date Started: JANUARY 5, 1967  
 Date Completed: JANUARY 14, 1967  
 Logged by: G. BASCHU

Measurement: METRIC

Comments: CASING LEFT IN HOLE

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.70		-69.0	192.64	359.5	-66.0	332.85		-61.0
76.81	355.5	-65.0	228.60		-65.0	365.76		-58.0
91.44		-67.0	250.55	358.0	-65.0	412.09	358.3	-57.0
137.16		-67.0	274.32		-62.5	415.14	358.3	-57.0
182.88		-66.0	320.04		-61.0	417.58		-56.0

-----Log Summary-----

00 28.35 OVERBURDEN.  
 28.35 65.01 BASALT.  
 65.01 92.35 DIORITE.  
 92.35 164.85 BASALT.  
 164.85 225.75 DIORITE.  
 225.75 310.12 BASALT.  
 310.12 334.82 DIORITE.  
 334.82 344.12 BASALT.  
 344.12 352.91 GREENSCHIST.  
 352.91 356.45 CHLORITE-CARBONATE SCHIST.  
 356.45 368.40 MAIN MINERALIZED ZONE.  
 356.45 368.40 TRANSITIONALLY SILICIFIED ZONE.  
 368.40 421.84 CHLORITE-CARBONATE SCHIST.  
 421.84 END OF HOLE.

To	Description	Sample	From	To	Length	A. Sul	GW	AL
00	28.35 OVERBURDEN							
35	65.01 BASALT							
	Flow breccia grading down section to pillowed flow. Non-magnetic.							
28.35	29.75 Flow breccia. Rounded fragments with chloritized contacts. Abundant epidote matrix							
29.75	57.75 Fine grained to very fine grained grey-green to green massive flow. Minor carbonate - quartz stringers. 32.11 to 32.60 meters : fine grained grey-green MONZONITE. Non-magnetic. Weak carbonate alteration. Sharp contacts ; top 70 degrees to the core axis, base 50 degrees to the core axis.							
57.75	58.25 Fine grained grey-green MONZONITE. Weakly magnetic. Pervasive carbonate alteration. Abundant white feldspar phenocrysts up to 2 mm. Top contact is a carbonate - quartz stringer. Sharp base contact 72 degrees to the core axis.							
58.25	59.54 Continuation of fine grained massive flow.							
59.54	61.04 Fine grained grey-green MONZONITE. Weakly magnetic. Pervasive carbonate alteration. Abundant white feldspar phenocrysts up to 2 mm. Top is carbonate - quartz stringer. Basalt inclusions at base.							
61.04	65.01 Continuation of fine grained massive flow.							
65.01	92.35 DIORITE							
	Fine to coarse grained massive intrusive. Non-magnetic. Base is carbonate - quartz veinlet 20 degrees to the core axis.							
65.01	69.15 Coarse grained zone with feldspar laths up to 4 mm. Chloritic mafic laths up to 10 mm. Non-magnetic. Non-reactive to HCl. 68.70 to 68.97 meters : quartz - carbonate veining with fault plane 50 degrees to the core axis. Abundant epidote.							
69.15	92.35 Fine grained grey-green massive intrusive.							

To	Description	Sample	From	To	Length & Sul	Gr	Ac
	Non-magnetic. Non-reactive to HCl. 84.30 to 85.10 meters : carbonate stringer with epidote parallel to core axis. 90.37 to 91.31 meters : grey-green fine grained MONZONITE. Weakly magnetic. White to pink feldspar phenocrysts up to 2 mm. Sharp contacts 60 degrees to the core axis.						
92.05	164.85	BASALT					
	Massive to pillowed flow with zones of flow breccia. Non-magnetic. Base is gradational to diorite.						
92.05	106.52	Flow breccia. Rounded to angular fragments. Hyaloclastite noted locally in matrix. Reaction rims on fragments are rare. Massive sections up to 1.5 meters are glomeroporphyritic. Glomeroporphyritic fragments noted. 96.10 to 96.30 meters : strongly foliated zone. Foliation 55 degrees to the core axis. Possible fault zone.					
106.50	110.27	Massive fine grained glomeroporphyritic flow. White feldspar phenocrysts up to 20 mm. 106.10 to 106.82 meters : grey-green fine grained MONZONITE. Non-magnetic. Pervasive carbonate alteration. Contacts 90 degrees to the core axis. Up to 1% disseminated pyrite.					
110.27	119.80	Fine grained green pillowed flow. Selvages often flow breccia. Glomeroporphyritic pillows are rare becoming absent down section.					
119.80	122.30	Zone of intense carbonate alteration. Fault zone. Top is carbonate - quartz veining with clay-grit seen 37 degrees to the core axis. Chloritic fractures are common.					
122.30	164.85	Green fine grained to very fine grained massive basalt, very similar to diorite. Rare carbonate - quartz stringers. 142.93 to 143.18 meters : mafic intrusive. Green fine grained with dark green biotite up to 6 mm. Non-magnetic. Non-reactive to HCl. 126.34 to 164.85 meters : grey zone of pervasive carbonate alteration. Carbonate - quartz veining 15 degrees to the core axis.					

To -----Description----- Sample From To Length % Sol Gr H

164.65 225.75 DIORITE

Green fine to medium grained massive rock. Grain size increases down section. Non-magnetic.

164.65 184.80 Fine to medium grained massive rock. Grain size increasing down section. 171.40 to 173.05 meters : grey zone of pervasive carbonate alteration. 172.15 to 172.25 meters : carbonate - quartz veining with foliation 50 degrees to the core axis. 184.48 to 184.60 meters : carbonate - quartz veining 15 degrees to the core axis.

164.80 210.00 Green medium grained massive rock with rare carbonate - quartz stringers. Abundant leucokene noted locally. Grain size increasing down section. 206.64 206.70 quartz - carbonate veinlet with clay fault gouge at top contact. 40 degrees to the core axis.

210.00 225.75 Medium grained rock with fish-net texture well developed. Fines at base. Base is quartz - carbonate stringer 50 degrees to the core axis. Clay-grit seam at base.

255.75 310.12 BRECCIA

very fine grained to aphanitic, locally fine grained green to pale green pillowed flow. Selvages well developed. Pillow margins locally vesicular.

25160	259.70	260.39	.69	5-10	.000	tr
25181	260.39	261.23	.84	1-5	.000	tr
25182	267.22	267.99	.77	1-2	.000	tr

225.75 256.45 Non-magnetic pillowed flow. Selvages well developed.

256.45 265.25 Strongly magnetic pillowed flow. Continuation of overlying flow. Abundant magnetite in selvages and along fractures in pillows. 259.70 to 260.39 meters : carbonate - quartz vein. 5 to 10% pyrite. Euhedral pyrite crystals up to 3 mm.

265.25 292.70 Continuation of non-magnetic pillowed flow.

292.70 297.22 Selvages becoming rare. Rock is darker green with an increase in epidote.

297.22 297.99 Foliated zone. Fine grained green strongly foliated zone with grey carbonate along foliation. Gradational to CHLORITE-CARBONATE SCHIST. Foliation is contorted. 179.60 meters : foliation is 65 degrees to the core axis. 1 to 2% pyrite.

297.99 304.85 Fine grained green vesicular basalt. 1 to 2 mm white to black vesicles with carbonate. Non-magnetic.

304.85 310.12 Fine grained green massive basalt.

From To Description Sample From To Length W. Bul G- R-

Continuation of overlying unit.  
Gradational to underlying diorite.

01 12 334.82 DIORITE

Fine to medium grained green massive rock. Grain size increasing down section. Top gradational to overlying unit. Minor leucoxene noted. Non-magnetic. Rare quartz - carbonate stringers. Fines at base. Gradational to underlying unit.

02 92 336.12 BASALT

Very fine grained, dark green, locally glaucophanitic flow. Epidote common. Non-magnetic. Phenocrysts decreasing down section.

336.55 338.94 Carbonate rich intrusive : fine grained, white to pale green with pink blebs up to 1 cm across. 1 to 2% pyrite.

25222 336.55 338.94 .35 1-2 .000 tr

044.12 352.91 GREENSCHIST

Fine grained, green continuation of above with no phenocrysts. Minor brecciation noted. Carbonate fracture fillings increase intensity down section, as does foliation. Foliation at 45 to 50 degrees to the core axis. Non-magnetic. Traces pyrite noted as replacements of carbonate. No hematitic streak.

25223 351.91 352.91 1.00 TR .000 tr

050 91 356.45 CHLORITE-CARBONATE SCHIST

Fine grained, green locally purple grey well foliated section. Purple colouration due to hematite. Hematitic streak noted from 353.55 to 356.45 meters, increasing intensity down section. Non-magnetic. Traces pyrite. Minor silicification noted in narrow bands along foliation at 55 to 60 degrees to the core axis. No clay seen noted, but McKenna Fault at 356.00 to 356.38 meters in section of missing core. Minor fragments with clay and sericite on fractures.

25224 352.91 353.55 .64 TR .000 tr  
25225 353.55 354.55 1.00 TR .000 tr  
25226 354.55 355.55 1.00 TR-1 .340 .34  
25227 355.55 356.45 .90 TR 1.235 1.37

356.45 to 368.40 meters - MAIN MINERALIZED ZONE.

To -----Description----- Sample From To Length % Sul S4 S6

The zone, based on development of silicification, is composed of only transitional-type alteration. Silicification is restricted to narrow purple grey breccia bands and brecciated quartz stringers. A hematitic streak is noted throughout the section. Pyrite contents are trace to 1%. The rocks are non-magnetic. Silicified sections are pervasively carbonatized.

366.45 368.40 TRANSITIONALLY SILICIFIED ZONE

366.45 368.40 weakly silicified with silicification decreasing down section. Hematitic streak throughout. Traces to 1% pyrite. Dominant foliation of 50 degrees to the core axis. Non-magnetic. Much of the silicification consists of brecciated quartz stringers and not the typical silicified breccia.

25228	356.45	357.45	1.00	1	2.060	2.06
25229	357.45	358.45	1.00	1	.340	.34
25230	358.45	359.40	.95	1	2.803	2.74
25231	359.40	360.09	.69	TR-1	1.180	1.71
25232	360.09	360.90	.81	TR-1	1.385	1.71
25233	360.90	361.62	.72	TR-1	.986	1.37
25234	361.62	362.62	1.00	TR	.340	.34
25235	362.62	363.62	1.00	TR-1	.340	.34
25236	363.62	364.62	1.00	TR-1	.340	.34
25237	364.62	365.66	1.00	TR	.360	.34
25238	365.66	366.66	.76	TR	.335	.34
25239	366.66	367.56	.91	TR	.310	.34
25240	367.56	368.40	.62	TR	.566	.69

366.45 361.62 40% silicified breccia : dominantly dark grey purple with chloritic sections exhibiting a hematitic streak in matrix. Trace to 1% pyrite. Non-magnetic. Carbonate fracture fillings common, no preferred orientation. Foliation well developed at 35 to 55 degrees to the core axis. 50 to 55 dominant. Highly carbonatized throughout. No buff alteration. Approximately 30% brecciated quartz stringers.

361.62 365.40 5 to 10% silicified breccia : brecciation is very minor, as most silicification is brecciated quartz stringers and narrow dark purple grey bands. Traces pyrite. Non-magnetic. Well foliated at 35 to 55 degrees to the core axis. 45 to 50 dominant. Hematitic streak disappearing down-hole.

368.40 421.64 CHLORITE-CARBONATE SCHIST

368.40 421.64 Fine grained, green well foliated. Carbonate stringers common and often cross-cut foliation. Foliation noted at : 40 degrees at 370.0, 58 degrees at 379.2, 50 degrees at 382.0, 35 degrees at 386.9, 40 degrees at 390.0, 52 degrees at 401.9 and 45 to 50 degrees to the core axis at 415.2 meters.

25241	368.41	369.41	1.00	0-1	.000	tr
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421.76 421.64 SYENITE : dark red, aphanitic, siliceous. Upper contact at 41 degrees to the core

Fr To Description Sample From To Length & Bul Gw H.

axis. No associated alteration.

NOTE : N.E. DOWNEY LOGGED DOWNHOLE TO 304.82 M.

421.84 END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Coordinates: 774.1 8874.8

DIAMOND DRILL RECORD

HOLE NO.: MC.87-304

Azimuth: 346.7

Section: 1+25W

Property: WORVEST OPTION

Dip: -71.0

Core Size: BQ

Location: 125W 225S

Elevation: 5000.5

Date Started: JANUARY 15, 1987

Length: 352.4

Date Completed: JANUARY 21, 1987

Logged by: G. BASCHUK

Measurement: METRIC

Comments: CASING LEFT IN HOLE

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-70.0	168.86	359.5	-67.0	320.04		-62.5
91.44		-69.0	182.88		-66.0	341.99	2.5	-62.0
104.24	353.0	-69.0	228.60		-65.0	345.04	2.5	-62.0
137.16		-67.0	289.56		-63.5			

-----Log Summary-----

.00 15.85 OVERBURDEN.  
 15.85 248.30 BASALT.  
 248.30 255.58 DIORITE.  
 255.58 257.58 CHLORITE-CARBONATE SCHIST.  
 257.58 288.05 BASALT.  
 288.05 289.80 GREENSCHIST.  
 289.80 316.57 MAIN MINERALIZED ZONE.  
 289.80 296.58 TRANSITIONALLY SILICIFIED ZONE.  
 296.58 297.56 TRANSITIONALLY SILICIFIED ZONE.  
 297.56 297.58 MCKENNA FAULT PLANE.  
 297.58 300.33 TRANSITIONALLY SILICIFIED ZONE.  
 300.33 303.58 MAIN SILICIFIED ZONE.  
 303.58 316.57 TRANSITIONALLY SILICIFIED ZONE.  
 316.57 320.86 CHLORITE-CARBONATE SCHIST.  
 320.86 328.94 TRANSITIONALLY SILICIFIED ZONE.  
 328.94 352.35 CHLORITE-CARBONATE SCHIST.  
 352.35 END OF HOLE.

From To -----Description----- Sample From To Length % Sul GW Au

15.85 15.85 OVERBURDEN

18.85 248.30 BASALT

Finer grained pillowed flows and relatively coarser grained massive flows are found in the section. Flows are well structured with vesicular, often angularly brecciated tops and less broken interiors. Pillowed flows exhibit well developed glassy selvages and interiors with well developed vesicles. Lavas are non-magnetic, locally weakly to moderately magnetic (flow margins, selvages, etc.).

Minor shear zones are noted, often at selvages associated with up to 2% pyrite, pyrrhotite and chalcopyrite.

15.85 18.08 Massive flow : fine grained, grey-green non-magnetic.

18.08 22.30 Flow top breccia : pale green fragments in dark green chloritic matrix. Locally siliceous. Non-magnetic. Brecciation decreasing down section.

22.30 34.32 Massive flow : fine grained, green, non-magnetic. 30.62 to 33.71 meters : glomeroporphyritic flow : no distinct contacts, weak phenocrysts as clumps up to 2 cm across comprising 5% of the rock.

34.32 44.50 Flow top breccia : dark green, siliceous. Brecciation decreasing down section. Pillowed at base.

44.50 45.54 Mafic intrusive : fine grained, green grey, magnetic and carbonatized.

45.54 65.60 Massive flow : fine grained, green. Non-magnetic. Variolitic from 52.18 to 52.50 meters.

65.60 66.27 Mafic intrusive : very fine grained, green. Non-magnetic, non-carbonatized. Mm sized dark green mafic laths, traces pyrite.

66.27 81.50 Massive flow : as described above from 45.54 to 65.60 meters. Fine to medium grained. Shear zone noted from 71.89 to 72.34 meters. Highly foliated with hematite alteration and epidotization. Foliation at 30 degrees to the core axis, 1% pyrite.

25242	71.89	72.34	.45	1	.000	tr
25243	173.52	174.52	1.00	TR-1	.000	tr
25244	174.52	175.53	1.01	TR	.000	tr
25245	175.53	176.48	.95	TR	.000	tr
25246	182.00	183.00	1.00	TR-1	.000	tr
25247	183.00	184.00	1.00	TR-1	.000	tr
25248	184.00	184.78	.78	TR-1	.000	tr
25249	197.79	198.75	.96	TR-1	.000	tr
25250	216.17	217.01	.84	1	.000	tr

From	To	Description	Sample From	To	Length	% Sul	GM	Au
		Shear noted from 79.95 to 80.05 meters. Shear at 33 degrees to the core axis, hematite rich with carbonate stringers.						
81.50	81.93	Mafic intrusive : as described above from 65.60 to 66.27 meters.						
81.93	107.65	Massive flow : continuation of above from 66.27 to 81.50 meters. 104.70 to 105.45 meters : mafic intrusive, fine grained, green with 5% mm sized white felsic laths randomly oriented. Irregular contacts. 107.00 to 107.15 meters : mafic intrusive, fine grained, green, non-carbonatized with no felsic laths. Contacts at 35 degrees to the core axis. 107.35 to 107.65 meters : mafic intrusive, as described above from 104.70 to 105.45 meters.						
107.65	130.70	Massive flow : continuation of above with grain increasing to medium grained. Locally fish-net texture developed. Possible diorite. Fine grained, pervasively carbonatized, non-magnetic mafic intrusive noted from 126.00 to 126.40 meters.						
130.70	149.70	Continuation of above. The grain size often changes gradationally from fine to medium grained. Weak foliation at lower contact sub-parallel to core axis. Sharp lower contact with carbonate veining.						
149.70	160.55	Pillowed flow : dark green, siliceous. Well developed selvages. Locally vesicular. Minor hyaloclastite noted at selvages near top. Locally variolitic.						
160.55	161.42	Mafic intrusive : dark grey-green, weakly carbonatized. Non-magnetic. Gradational contacts. White phenocrysts up to 3 mm noted.						
161.42	202.38	Pillowed flow : as described above from 149.70 to 160.55 meters. Quartz - carbonate stringers common at selvages with trace to 2% pyrite, pyrrhotite and chalcopyrite. Magnetic with pyrrhotite. 175.74 to 176.20 meters : quartz - carbonate stringer sub-parallel to core axis with 1 to 2% pyrite. Foliation parallel to stringer. 182.00 to 184.78 meters : quartz - carbonate stringers sub-parallel to core axis, possible shear. Trace to 1% pyrite, pyrrhotite and chalcopyrite. Minor brecciation and hyaloclastite noted with stringer. 197.79 to 198.75 meters : quartz - carbonate stringer sub-parallel to core axis with 1%						

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		pyrite.							
202.38	208.65	Massive flow : fine grained, dark grey-green. Non-magnetic.							
208.65	233.70	Pillowed flow : very fine grained to aphanitic, dark green. Poorly developed selvages at top. Vesicular locally. Often 1 to 2% pyrite at selvages. 208.65 to 208.97 meters : quartz - carbonate veining with hyaloclastite and trace to 1% pyrite. 216.17 to 217.01 meters : purple grey carbonatized and silicified selvage with 1% finely disseminated pyrite and chalcopyrite.							
233.70	248.30	Massive flow : fine grained, green. Vesicular top. Non-magnetic. Gradational lower contact with diorite (?).							
248.30	255.58	DIORITE							
		Dark green, medium grained diorite or possibly flow center. Upper contact is gradational to overlying flow. Well developed equigranular inter-locking texture. Becomes magnetic down section. Leucoxene noted sporadically. Sample 29465 taken for whole rock analysis from 249 to 252 m.							
255.58	257.58	CHLORITE-CARBONATE SCHIST							
			25251	255.58	256.18	.60	TR-1	.000	tr
			25252	256.18	256.83	.65	1	.000	tr
			25253	256.83	257.58	.75	TR-1	.000	tr
		Shear zone : very fine grained, green well foliated section at 55 to 60 degrees to the core axis. Minor leucoxene at upper and lower contacts. Strongly to moderately magnetic throughout. 2 to 3% quartz veining. Trace to 1% finely disseminated pyrite. Hematitic streak noted locally. This is a sheared section of the overlying diorite or flow.							
257.58	288.05	BASALT							
			25254	257.58	258.39	.81	TR	.000	tr
			25255	267.75	268.68	.93	TR-1	.000	tr
			25256	286.05	287.05	1.00	TR	.000	tr
			25257	287.05	288.05	1.00	TR	.000	tr
		Flow breccia and glomeroporphyritic flows are in the section. Glomeroporphyritic section noted with fish-net texture from 270.60 to 272.30 meters. The flows are fine grained, green and non-magnetic.							
257.58	268.68	Flow breccia grading to a glomeroporphyritic flow. Weakly foliated at upper contact. The breccia is of aphanitic, green fragments within a fine							

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		grained chloritic matrix. 1% white phenocrysts occurring in clumps up to 2 cm. Non-magnetic. 267.75 to 268.68 meters : weakly foliated, strongly brecciated section with trace to 1% pyrite. Weak hematitic streak. Foliation at 40 degrees to the core axis. Highly carbonatized and non-magnetic. Phenocrysts noted in breccia.							
268.68	270.60	Glomeroporphyritic flow : fine grained, green. Non-magnetic. White phenocrysts in clumps up to 1 cm across.							
270.60	272.30	Glomeroporphyritic flow : fine grained, green continuation of above but with a fish-net texture. 2% white feldspar phenocrysts in clumps up to 2 cm.							
272.30	275.70	Breccia section : combination of flow breccia and injection breccia. Injection breccia with red carbonate - hematite alteration. Abundant epidote. Felsic phenocrysts still present in breccia.							
275.70	277.21	Glomeroporphyritic flow : massive, fine grained, green. Non-magnetic. 1% white phenocrysts up to 5 mm across.							
277.21	278.05	Flow top breccia : pale green fragments with hematite in matrix. Rare phenocrysts noted.							
278.05	288.05	Massive flow : fine grained, green. Non-magnetic. Weakly, finely brecciated at lower meter.							

288.05 289.80 GREENSCHIST

Moderately to strongly foliated flow. Flow breccia fragments are noted locally stretched parallel to foliation at 40 to 45 degrees to the core axis. Trace to 1% pyrite, locally up to 3%. Non-magnetic. Highly carbonatized. Hematitic streak throughout. The rocks are granular in appearance, possibly due to the brecciation.

25258	288.05	289.00	.95	1	.000	tr
25259	289.00	289.80	.80	TR-1	.000	tr

289.80 to - MAIN MINERALIZED ZONE.

The MAIN MINERALIZED ZONE contains the typical three units based upon silicification. The upper transitional silicified section has been sub-divided into two units. The uppermost closely resembles CHLORITE-CARBONATE SCHIST, and is weakly silicified. Pyrite contents throughout the MAIN MINERALIZED ZONE are less than normal and the silicification is not particularly strongly developed. The McKenna Fault contains minor

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From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		graphite.							
		MCKENNA FAULT PLANE at 297.57 meters.							
289.80	296.58	TRANSITIONALLY SILICIFIED ZONE							
		Fine to medium grained, green grey well foliated granular section resembling a CHLORITE-CARBONATE SCHIST. Silicification occurs along foliation planes and as a fine brecciation. Carbonate occurs as an overprinting. Hematitic streak noted throughout. Breccia fragments up to 5 mm. Fragments are generally cream to purple grey in colour. Trace to 1% pyrite. Locally weakly to strongly magnetic.	25260	289.80	290.75	.95	TR-1	2.280	2.40
			25261	290.75	291.60	.85	1	3.502	4.12
			25262	291.60	292.30	.70	TR-1	.238	.34
			25263	292.30	293.00	.70	TR-1	2.401	3.43
			25264	293.00	294.00	1.00	TR-1	1.030	1.03
			25265	294.00	295.00	1.00	TR-1	1.030	1.03
			25266	295.00	295.85	.85	TR	2.329	2.74
			25267	295.85	296.58	.73	TR	1.256	1.72
289.80	293.00	15% silicified breccia : trace to 1% pyrite. Foliation at 40 to 45 degrees to the core axis.							
293.00	296.58	5% silicified breccia : trace to 1% pyrite. Foliation at 45 to 60 degrees to the core axis. More chloritic than above section.							
296.58	297.56	TRANSITIONALLY SILICIFIED ZONE							
		Fine grained, green, chloritic rock with purple grey silicified breccia seams. Carbonatized.	25268	296.58	297.04	.46	1	1.421	3.09
			25269	297.04	297.50	.46	1-2	.630	1.37
			25270	297.50	298.19	.69	2-3	.476	.69
296.58	296.76	Quartz vein : 25 degrees to the core axis, 1% pyrite.							
296.76	297.04	30 % silicified breccia : highly chloritic with minor purple breccia fragments up to 1 cm across. Traces pyrite. Strongly magnetic. Felsic phenocryst noted, possibly altered glomeroporphyritic flow.							
297.04	297.50	95% silicified breccia : dark purple grey, finely brecciated with 1 to 2% finely disseminated pyrite. Specular hematite common - hematitic streak. Carbonate stringer noted sub-parallel to core axis.							
297.50	297.56	50% silicified breccia : dark purple grey, finely brecciated with abundant specular hematite. 2 to 3% pyrite. Hematitic streak throughout.							
297.56	297.58	MCKENNA FAULT PLANE							
		1 cm clay seam at 297.57 meters at 48 degrees to the							

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		core axis. The seam is dark grey to black, possibly with graphite.							
297.58	300.33	TRANSITIONALLY SILICIFIED ZONE							
		Very fine grained, green chloritic rock with purple grey silicified breccia seams. Well foliated. Non-magnetic. Hematitic streak noted.	25271	298.19	298.97	.78	1	1.069	1.37
			25272	298.97	299.78	.81	1	.834	1.03
			25273	299.78	300.33	.55	1-2	1.133	2.06
297.58	298.19	50% silicified breccia : as described above from 297.50 to 297.56 meters. 10 cm graphite rich section below McKenna Fault.							
298.19	298.97	10% silicified breccia : foliation at 35 degrees to the core axis. Local silicification carries elevated pyrite up to 5 to 10%. Overall 1% pyrite.							
298.97	300.33	60% silicified breccia : dark purple green silicified sections up to 30 cm in width. 1% finely disseminated pyrite. Strongly pervasively carbonatized. Foliation at 30 degrees to the core axis at 299.70 meters.							
300.33	303.58	MAIN SILICIFIED ZONE							
		95% Silicified breccia : dark purple grey to grey green with minor silica dumping. Hematite - chlorite seams common. Non-magnetic. Weakly to moderately pervasively carbonatized. 1 to 2% pyrite, locally up to 5%. Section is foliated at 50 to 55 degrees to the core axis and 30 to 35 degrees to the core axis. Buff alteration rare with up to 5% pyrite.	25274	300.33	301.25	.92	2-3	1.895	2.06
			25275	301.25	302.05	.80	3-5	2.744	3.43
			25276	302.05	302.95	.90	1-2	1.233	1.37
			25277	302.95	303.58	.63	1-2	7.346	11.66
300.33	302.05	Dominantly grey green section with 2 to 3% pyrite. Silica dumping noted from 300.92 to 301.22 meters. 3 to 5% pyrite.							
302.05	303.33	Dark purple grey. Highly hematized with 1 to 2% pyrite.							
303.58	316.57	TRANSITIONALLY SILICIFIED ZONE							
		Fine grained, silicified brecciated section with up to 3% pyrite. Silicification is grey green to purple, purple grey or cream orange coloured. Non-magnetic. Hematitic streak throughout. Carbonate stringers commonly cut core at 54 and 30 degrees to the core axis. Silicification decreasing down section.	25278	303.58	304.44	.86	1	1.479	1.72
			25279	304.44	305.44	1.00	1-2	.690	.69
			25280	305.44	306.40	.96	1-2	1.315	1.37
			25281	306.40	307.40	1.00	1	.340	.34
			25282	307.40	308.37	.97	1	.330	.34
			25283	308.37	309.37	1.00	TR-1	.340	.34
			25284	309.37	310.37	1.00	TR-1	.340	.34
303.58	308.37	50% silicified breccia : silicification in seams up to 30 cm in width. Breccia	25285	310.37	311.37	1.00	TR	.340	.34
			25286	311.37	312.37	1.00	TR-1	.340	.34

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		fragments up to 5 mm across. Strong foliation at 35 degrees to the core axis.	25287	312.37	313.35	.98	TR	.333	.34
			25288	313.35	314.35	1.00	TR	.340	.34
		1% pyrite, locally up to 3% associated with hematite alteration. Pyrite often along foliation planes.	25289	314.35	315.09	.74	TR	.252	.34
			25290	315.09	315.78	.69	TR-1	.000	tr
			25291	315.78	316.57	.79	TR	.000	tr
308.37	316.57	30% silicified breccia : fine grained, well foliated with silicified breccia seams up to 25 cm in width. Dominant foliation at 30 to 40 degrees to the core axis. Trace to 1% pyrite, locally up to 2 to 3%.							
316.57	320.86	CHLORITE-CARBONATE SCHIST							
		Fine grained, green well foliated rock with hematitic streak noted locally. Graphitic seams noted resembling beds down section. Foliation at 55 degrees to the core axis at 317.5 meters, 40 to 50 degrees to the core axis at 321.5 meters. Graphitic seams noted at 320.74 to 320.83 meters. 2 to 3% pyrite, strongly carbonatized.	25292	316.57	317.55	.98	TR	.000	tr
			25293	317.55	318.57	1.02	TR	.000	tr
			25294	318.57	319.40	.83	TR	.000	tr
			25295	319.40	320.15	.75	TR	.000	tr
			25296	320.15	320.86	.71	TR-1	.000	tr
320.86	328.94	TRANSITIONALLY SILICIFIED ZONE							
		Dominantly fine grained, green foliated rock with carbonate along foliation planes with silicified breccia seams. Silicification is dominantly dark purple grey, locally as halos to fracture fillings. Highly carbonatized. Hematitic streak throughout. Pyrite trace to 1%, locally up to 5%. Minor beds of magnetite noted with 5% pyrite.	25297	320.86	321.82	.96	TR	.000	tr
			25298	321.82	322.82	1.00	1	1.030	1.03
			25299	322.82	323.80	.98	1	1.009	1.03
			25300	323.80	324.48	.68	TR	.469	.69
			25301	324.48	325.50	1.02	TR	.347	.34
			25302	325.50	326.37	.87	1	.600	.69
			25303	326.37	327.08	.71	1	.490	.69
			25304	327.08	327.68	.60	TR	.204	.34
		320.86 321.82 10% silicified breccia : traces pyrite. Foliation at 30 degrees to the core axis.	25305	327.68	328.13	.45	1	1.854	4.12
			25306	328.13	328.94	.81	TR	.275	.34
		321.82 324.48 80% silicified breccia : trace to 1% pyrite. Foliation at 40 degrees to the core axis. Silicification commonly orange - pink coloured. Strongly magnetic dark grey to black bands with 5% pyrite. Bedding at 40 degrees to the core axis.							
		324.48 327.68 5% silicified breccia : silicification as quartz stringers and narrow silicified bands up to 10 cm in width. Numerous strongly magnetic dark grey to black bands up to 5 cm in width. Possibly iron formation. Bedding at 25 to 50 degrees to the core axis. Foliation at 30 to 35 degrees to the core axis. Traces pyrite, 5% in magnetite rich beds. Hematitic streak noted.							

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From	To	Description	Sample	From	To	Length	% Sul	GW	Au
327.68	328.94	50% silicified breccia : faint purple grey silicification along foliation planes with minor brecciation. Trace to 1% pyrite. Non-magnetic. Weakly carbonatized. Foliation at 40 degrees to the core axis.							
328.94	352.35	CHLORITE-CARBONATE SCHIST							
		Very fine grained, green well foliated with carbonate along foliation planes. Non-magnetic. Carbonate content decreasing down section.	25307	328.94	329.94	1.00	TR	.000	tr
			25308	329.94	330.94	1.00	TR	.000	tr
			25309	330.94	331.94	1.00	TR	.000	tr
			25310	345.60	346.60	1.00	TR	.340	.34
332.25	333.57	Fine grained, green granular section with sharp contacts at 60 degrees to the core axis. Possibly relic mafic intrusive or diorite.	25311	346.60	347.14	.54	1	.373	.69
			25312	347.14	347.93	.79	TR	.269	.34
338.43	341.99	Fine grained green section with weakly developed foliation. Carbonate stringers have no preferred orientation.							
345.60	347.93	Fine grained, green section with weak hematitic streak and trace to 1% pyrite locally associated with quartz - carbonate stringers sub-parallel to core axis.							
		Foliations noted at 44 degrees to the core axis at 329.05 meters, 42 degrees to the core axis at 331.75 meters and 50 degrees to the core axis at 343.50 meters.							
352.35		END OF HOLE.							

AMERICAN BARRICK RESOURCES CORPORATION

Coordinates: 21.2 9049.9  
 Azimuth: 344.3  
 Dip: -71.0  
 Elevation: 4999.8  
 Length: 307.5

DIAMOND DRILL RECORD  
 Section: 0+50E  
 Core Size: 80

HOLE NO.: MC.87-305  
 Property: WORVEST OPTION  
 Location: 050E 178S  
 Date Started: JANUARY 22, 1987  
 Date Completed: JANUARY 29, 1987  
 Logged by: G. BASCHUK

Measurement: METRIC

Comments: CASING LEFT IN HOLE

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-70.0	137.16		-69.5	234.09	351.0	-67.0
56.39	348.0	-70.0	160.63	350.5	-69.0	274.32		-63.5
91.44		-70.0	182.88		-68.0	290.17	352.0	-62.0
106.98	347.5	-70.0	228.60		-67.0			

-----Log Summary-----

.00 30.48 OVERBURDEN.  
 30.48 46.50 DIORITE.  
 46.50 54.86 BASALT.  
 54.86 92.70 DIORITE.  
 92.70 218.00 BASALT.  
 218.00 226.77 GREENSCHIST.  
 226.77 228.88 CHLORITE-CARBONATE SCHIST.  
 228.88 228.91 MCKENNA FAULT PLANE.  
 228.91 229.10 CHLORITE-CARBONATE SCHIST.  
 229.10 290.07 MAIN MINERALIZED ZONE.  
 229.10 234.83 MAIN SILICIFIED ZONE.  
 234.83 235.58 SYENITE.  
 235.58 241.70 MAIN SILICIFIED ZONE.  
 241.70 242.33 SYENITE.  
 242.33 253.42 MAIN SILICIFIED ZONE.  
 253.42 290.07 TRANSITIONALLY SILICIFIED ZONE.  
 290.07 295.14 CHLORITE-CARBONATE SCHIST.  
 295.14 299.05 TRANSITIONALLY SILICIFIED ZONE.  
 299.05 307.54 CHLORITE-CARBONATE SCHIST.  
 307.54 END OF HOLE.

From To -----Description----- Sample From To Length % Sul GW Au

30.00 30.48 DVERBURDEN

30.48 46.50 DIORITE

Medium grained, dark green diorite with well developed fish-net texture. Non-magnetic. Highly fractured at 30 and 60 degrees to the core axis. Below 45.50 to the lower contact the grain size decreases to fine grained.

46.50 54.86 BASALT

Flow top breccia grading into a massive flow with a vesicular top. Flows are very fine grained and non-magnetic.

46.50 47.91 Flow top breccia : aphanitic green fragments, often subrounded with hyaloclastite in matrix.

47.91 53.40 Vesicular flow : dark green, aphanitic to very fine grained. Carbonate vesicles at top, becoming chloritic down section.

53.40 54.86 Massive flow : very fine grained, dark green. Lower contact highly broken with epidote.

54.86 92.70 DIORITE

Dominantly fine to medium grained dark green, locally strongly magnetic diorite. Upper contact in fractured section associated with epidote. Lower contact is sharp, but no chill noted. Basaltic inclusion noted.

54.86 64.05 Fine to medium grained, dark green with faint red tinge. Red colouration decreasing down section. Minor leucoxene. Grain size increases to medium grained down section with well developed equigranular interlocking texture. Strongly magnetic throughout. Brown weathered section noted from 59.00 to 60.00 metres.

64.50 88.02 Continuation of above, but non-magnetic.

To	Description	Sample From	To	Length	% Sul	GW	Au
	Sharp change. Rocks are fine to medium grained and dark green. Vesicular inclusion from 67.50 to 68.07 metres.						
88.02	88.55 Mafic intrusive : dark olive green with biotite laths up to 3 mm, concentrated at upper contact. 1 to 2% white blebs, possibly feldspar phenocrysts averaging less than 1 mm. Non-magnetic. Weakly pervasively carbonatized.						
88.55	92.70 Fine to medium grained, dark green non-magnetic continuation of above. Grain size decreases to aphanitic at lower 1 meter. Sharp lower contact.						
92.70	218.00 BASALT						
	Finer grained pillowed flows and relatively coarser grained massive flows are found in the section. Flows are well structured with brecciated tops and massive flow centers. Minor shears are noted locally. A fault gouge represented by a 1 cm clay-grit seam noted at 187.76 metres at 18 degrees to the core axis. Rocks are non-magnetic.	25313	187.20	187.76	.56	1	.190 .34
92.70	93.27 Flow top breccia : aphanitic dark green fragments in a matrix of hyaloclastite.						
93.27	95.70 Vesicular flow : dark green aphanitic rock with pale green to olive green vesicles up to 1.5 cm across. Vesicle size decreases down section. Mm sized chloritic vesicles down section. Non-magnetic. Traces disseminated pyrite.						
95.70	109.73 Massive flow : very fine grained, dark green. Non-magnetic. Traces pyrite. Becomes fine grained down section. Shear noted at 109.72 metres at 38 degrees to the core axis with 1% pyrite, minor hematite, carbonate and epidote.						
109.73	114.34 Massive flow : fine to medium grained, green with fish-net texture. Non-magnetic. Fining trend down section to very fine grained from 112.56 metres.						
114.34	114.67 Siliceous altered section : foliated at 15 degrees to the core axis with 1 to 2% finely disseminated pyrite. Dark green ovoid blebs with purple cores noted up to 8 mm across. Minor carbonate.						
114.67	117.87 Vesicular flow : aphanitic, green. Non-magnetic. Mm sized vesicles. No flow top breccia, gradational change from massive flow to vesicular flow.						

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
117.87	133.05	Breccia : minor brecciation with massive flows and vesicular flows up to 2 to 3 metres in width. Brecciation often sub-parallel to core axis. Fragments are subrounded, green and fine grained in a chloritic matrix. Possibly pillowed unit with selvages sub-parallel to core axis. Minor fine to medium grained section from 125.10 to 126.25 metres with good equigranular interlocking texture. Non-magnetic.							
133.05	137.90	Pillowed flow : well developed selvages, no flow top breccia, gradational with overlying flow.							
137.90	141.91	Continuation of above, highly fragmented resembling a flow breccia. Possibly selvages sub-parallel to core axis.							
141.91	168.20	Massive flow : fine grained, green. Non-magnetic. Vesicular from 143.4 to 162.0 metres. Locally siliceous. 5 cm band of stretched hyaloclastite at 157.85 metres. Shear at 165.81 metres at 58 degrees to the core axis rich in epidote, hematite and carbonate.							
168.20	185.00	Massive flow : fine to medium grained, green to grey green. Grain size increasing to medium grained down section. Gradational upper contact. Well developed equigranular interlocking texture. Non-magnetic. Minor shear at 181.97 metres at 44 degrees to the core axis with epidote, carbonate - quartz stringers and trace to 1% pyrite. Local fish-net texture developed.							
185.00	186.68	Massive flow : fine to very fine grained, green. Grain size decreasing down section. Fish-net texture noted locally. No chill at lower contact.							
186.68	210.45	Flow top breccia : pale green subrounded to subangular variably sized fragments in a chloritic and hyaloclastite rich matrix. Minor massive sections up to 2.2 metres in width, generally 0.3 to 0.6 metres. Local siliceous sections noted. Altered section from 187.20 to 187.76 metres with 2 quartz veins 3 cm in width with 1% pyrite. Veins at 25 to 30 degrees to the core axis.							
210.45	218.00	Massive flow : fine grained, green, non-magnetic. Vesicular from 211.84 to 212.82 metres elongated at 20 to 30 degrees to the core axis. Carbonate							

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		stringers increasing number down section with preferred orientation of 50 degrees and 80 to 90 degrees to the core axis.							
218.00	226.77	GREENSCHIST							
		Fine to medium grained, green, non-magnetic foliated rock with carbonate wisps and stringers along foliation at 55 to 60 degrees to the core axis. Leucoxene overgrowths common. Gradational upper contact, no leucoxene in above flow. Carbonate alteration increasing down section. Non-magnetic.							
226.77	228.88	CHLORITE-CARBONATE SCHIST							
			25314	226.77	227.77	1.00		TR .340	.34
		Very fine grained, green, well foliated, highly chloritic with pinkish carbonate and carbonate - quartz stringers and wisps. Foliation at 45 to 50 degrees to the core axis. Traces pyrite. Minor brecciation of chloritic rock. Foliation highly contorted at McKenna Fault. Weak hematitic streak down section. Non-magnetic.	25315	227.77	228.47	.70		TR .238	.34
			25316	228.47	229.10	.63		TR .435	.69
228.88	228.91	MCKENNA FAULT PLANE							
		Green, 3 cm clay-grit seam at 57 degrees to the core axis							
229.91	229.10	CHLORITE-CARBONATE SCHIST							
		Continuation of above chlorite - carbonate schist. Highly contorted foliation. Strong hematitic streak. Sharp contact with main silicified zone at 60 degrees to the core axis. This section of chlorite - carbonate schist contains more fragments than above McKenna Fault. Non-magnetic.							
229.10	290.07	MAIN MINERALIZED ZONE (60.97 m).							
		The section is based upon amount and degree of silicification and is composed of 2 members - the MAIN SILICIFIED ZONE, and the Lower TRANSITIONALLY SILICIFIED ZONE. The section is broad with a well developed MAIN SILICIFIED ZONE, but no upper transitional silicified zone is noted. Alteration styles							

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
<p>are highly variable within the MAIN SILICIFIED ZONE. Pyrite contents are average. Sections of the main silicified zone are strongly magnetic. Silicification and pyrite concentrations are decreasing down section. Two syenites are noted cutting the section.</p>									
229.10	234.83	MAIN SILICIFIED ZONE							
		The MAIN SILICIFIED ZONE is much thicker than normal with some high pyrite values and a large variation in the styles of brecciation. Most of the section is magnetic. The intensity of brecciation decrease down section, pyrite content decrease down section. The section is cut by two syenitic intrusives.	25317	229.10	230.10	1.00	TR-1	.340	.34
			25318	230.10	231.10	1.00	TR-1	.340	.34
			25319	231.10	232.10	1.00	TR-1	.340	.34
			25320	232.10	233.10	1.00	1	.340	.34
			25321	233.10	233.76	.66	TR-1	.224	.34
			25322	233.76	234.07	.31	1-2	.105	.34
			25323	234.07	234.83	.76	1	.258	.34
229.10	233.76	Dark purple, highly magnetic, very finely brecciated. Trace to 1% pyrite. Pervasively carbonatized. Buff alteration rare with up to 3 to 5% pyrite. Foliation becomes weakly developed down section at 60 degrees to the core axis at 232.8 metres							
233.76	234.07	Dark purple grey fine grained matrix with orange - brown subrounded fragments 1 to 2 mm across. Specular hematite in matrix. Magnetic. 1 to 2% pyrite, dull orangy-yellow coloured. Well foliated at 55 degrees to the core axis. Highly brecciated. Weakly carbonatized.							
234.07	234.83	Purple grey, 1% pyrite. Strongly magnetic. Finely brecciated. White carbonate (?) overprinting.							
234.83	235.58	SYENITE							
		Aphanitic, siliceous, reddish-brown coloured. Numerous quartz fracture fillings at 32 degrees and sub-parallel to core axis. No pyrite. Non-carbonatized. Non-magnetic. Contacts 70 to 75 degrees to the core axis.	25324	234.83	235.58	.75	NIL	.255	.34
235.58	241.70	MAIN SILICIFIED ZONE							
		Dark purple grey. Strongly magnetic. 1 to 2% pyrite. Fragments variable in size from less than 1 mm to a syenitic fragment or irregular intrusive 4 cm across. Buff alteration with 5 to 7% pyrite.	25325	235.58	236.29	.71	5	3.408	4.80
			25326	236.29	237.07	.78	3-4	1.342	1.72
			25327	237.07	237.87	.80	1	.272	.34
			25328	237.87	238.72	.85	2-3	.289	.34
			25329	238.72	239.38	.66	1-2	.224	.34
			25330	239.38	240.24	.86	2-3	.292	.34

To	Description	Sample	From	To	Length	% Sul	GW	Au
	Non-carbonatized. Foliation at 55 degrees to the core axis. Fractures at 10 to 15 degrees and 30 to 35 degrees to the core axis. 2 to 3% pyrite at lower contact.	25331	240.24	240.92	.68	5	2.101	3.09
		25332	240.92	241.70	.78	5-7	1.342	1.72
238.72	240.24 Relic intrusive : fine grained, grey with faint purple hue. Red grains noted in groundmass. Non-carbonatized. Possible relic monzonite. Magnetic. 1 to 2% finely disseminated pyrite, locally up to 5% associated with buff colouration. Sharp contacts at 25 and 35 degrees to the core axis, respectively, lower contact irregular. Chloritic shear from 239.56 to 239.60 metres at 52 degrees to the core axis.							
240.24	241.70 Dark purple with buff grey bands along foliation at 50 to 55 degrees to the core axis. 5% pyrite as fine stringers. Weakly to moderately magnetic. Pyrite is orangy-yellow coloured at 241.2 metres.							
241.70	242.33 SYENITE	25333	241.70	242.33	.63	NIL	.214	.34
	Aphanitic, siliceous dark red. Upper contact at 55 degrees to the core axis, lower at 25 degrees to the core axis with splay of underlying alteration into syenite. Sharp contacts. Non-magnetic.							
242.33	253.42 MAIN SILICIFIED ZONE							
		25334	242.33	243.29	.96	5-7	.662	.69
242.33	244.62 Pale purple grey coloured, finely, intensely brecciated. The appearance of the section resembles lapilli tuff with fragments from less than 1 mm to 5 mm across. Bands of magnetite noted parallel to foliation at 40 to 45 degrees to the core axis. Magnetic throughout. 3 to 5% pyrite. Buff alteration noted at upper contact. Foliation well developed. Weakly pervasively carbonatized when scratched.	25335	243.29	243.89	.60	3-5	1.032	1.72
		25336	243.89	244.62	.73	3-5	.248	.34
		25337	244.62	245.06	.44	5-7	1.509	3.43
		25338	245.06	246.03	.97	1-3	1.998	2.06
		25339	246.03	247.01	.98	1-3	2.019	2.06
		25340	247.01	248.04	1.03	5-7	2.822	2.74
		25341	248.04	249.04	1.00	1-2	3.090	3.09
		25342	249.04	250.01	.97	2-3	1.998	2.06
		25343	250.01	251.00	.99	1-2	.337	.34
		25344	251.00	251.92	.92	2-3	2.521	2.74
244.62	245.06 Dark purple with white to translucent quartz stringers and veins. Pyrite bands noted with magnetite. (magnetite reduced to pyrite). Bands at 45 to 50 degrees to the core axis. Lower contact with white quartz, possibly chert. 5 to 7% pyrite.	25345	251.92	252.56	.64	1-2	1.101	1.72
		25346	252.56	253.10	.54	2-3	.184	.34
		25347	253.10	253.42	.32	5-7	1.651	5.16
245.06	253.42 Dominantly dark green grey to purple network style silicification. I.e. Quartz							

To	Description	Sample	From	To	Length	% Sul	BW	Au
	stringers and fracture fillings at variable degrees to the core axis with the silicification extending into the host rock. Narrow sections are noted of different silicification styles. The upper 2 metres contains rare carbonate blebs 1 to 2 mm across resembling vesicles. Pyrite contents are variable from 1% to 5 to 7%. Barren quartz - carbonate vein at 252.45 to 252.55 metres at 25 to 30 degrees to the core axis.							
253.42	290.07	TRANSITIONALLY SILICIFIED ZONE						
	Fine grained, green well foliated rock with silicified breccia seams of variable styles and intensities. Pyrite contents are generally low and average trace to 1%. Local magnetite rich bands are noted with up to 5% pyrite. These are parallel to sub-parallel to foliation and highly carbonatized. Local sections with strained pale green fragments resembling flow breccia fragments were noted. Sections with dark green bands resembling selvages also noted - possibly a relic pillowed flow in part.	25348	253.42	254.17	.75	2-3	2.055	2.74
		25349	254.17	254.84	.67	2-3	.462	.69
		25350	254.84	255.84	1.00	TR	.340	.34
		25351	255.84	256.84	1.00	TR	.340	.34
		25352	256.84	257.72	.88	TR-1	3.018	3.43
		25353	257.72	258.72	1.00	TR-1	.340	.34
		25354	258.72	259.62	.90	1	1.854	2.06
		25355	259.62	260.24	.62	1-2	2.127	3.43
		25356	260.24	260.84	.60	1	1.854	3.09
		25357	260.84	261.84	1.00	TR-1	.340	.34
		25358	261.84	262.84	1.00	TR	.340	.34
253.42	260.84	10 to 15%	silicified breccia : very fine grained, green with pink - cream - buff coloured silicified breccia seams up to 35 cm in width, averaging 5 to 8 cm. Pyrite contents are trace to 1%, locally up to 5 to 7%. Fragments noted resembling flow breccia at 254.2 metres, highly strained. Dark green chloritic bands noted resembling relic selvages. Possible vesicles at 255.70 metres. Foliation at 45 to 55 degrees to the core axis. 2 cm magnetite rich band at 254.73 metres at 15 to 20 degrees to the core axis, 15 to 20% pyrite, highly carbonatized.					
		25359	262.84	263.84	1.00	TR	.340	.34
		25360	263.84	264.84	1.00	TR	.340	.34
		25361	264.84	265.84	1.00	TR	.340	.34
		25362	265.84	266.84	1.00	TR	.000	tr
		25363	266.84	267.84	1.00	TR	.000	tr
		25364	267.84	268.84	1.00	TR	.000	tr
		25365	268.84	269.84	1.00	NIL	.000	tr
		25366	269.84	270.84	1.00	NIL	.000	tr
		25367	270.84	271.80	.96	TR-1	.000	tr
		25368	271.80	272.36	.56	TR	1.344	2.40
		25369	272.36	273.18	.82	TR-1	.845	1.03
		25370	273.18	273.85	.67	TR-1	.228	.34
		25371	273.85	274.75	.90	TR-1	.306	.34
		25372	274.75	275.65	.90	TR-1	.621	.69
260.84	272.36	5%	silicified breccia : dominantly CHLORITE-CARBONATE SCHIST with narrow seams averaging 1 to 2 cm and quartz stringers. Traces pyrite. Foliation at 45 to 50 degrees to the core axis. Hematitic streak rare. 263.55 to 264.80 metres : fine to medium grained granular section.					
		25373	275.65	276.47	.82	1	.279	.34
		25374	276.47	277.17	.70	TR-1	.238	.34
		25375	277.17	278.00	.83	TR-1	.282	.34
		25376	278.00	279.03	1.03	TR-1	.350	.34
		25377	279.03	280.00	.97	TR-1	.669	.69
		25378	280.00	280.94	.94	TR-1	1.617	1.72
		25379	280.94	281.94	1.00	TR-1	.340	.34
272.36	275.65	45 to 50%	silicified : minor brecciation, dominantly silicification along foliation planes at 50 to 55 degrees to the core axis. Silicification is purple coloured, rare brecciation is pink - orange and					
		25380	281.94	282.76	.82	2-3	1.123	1.37
		25381	282.76	283.76	1.00	TR	.340	.34
		25382	283.76	284.76	1.00	TR	.340	.34
		25383	284.76	285.81	1.05	TR-1	1.081	1.03
		25384	285.81	286.74	.93	TR	.316	.34

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		honey coloured. Trace to 1% pyrite. Non-magnetic. Clay on break at 272.93 metres at 40 degrees to the core axis associated with carbonate stringers. Minor sericite associated with clay.	25385	286.74	287.74	1.00	TR-1	.340	.34
			25386	287.74	288.61	.87	TR-1	1.496	1.72
			25387	288.61	289.40	.79	TR	.269	.34
			25388	289.40	290.07	.67	TR-1	.228	.34
275.65	277.17	90% silicified breccia : aphanitic, dark purple grey with intensity of brecciation decreasing down section. 1% finely disseminated pyrite. Non-magnetic. Very weakly carbonatized. Cream and orange - honey fragments common in silicified breccia. Network style silicification at base of section. 2 cm chloritic shear at 296.97 metres at 54 degrees to the core axis. 276.54 to 276.65 metres : syenite : aphanitic dark red with quartz - carbonate stringers cutting into syenite from host rock. Irregular contacts.							
277.17	282.76	40% silicified breccia : white and dark grey silicified breccia seams up to 15 cm in width, averaging 5 cm. Cream coloured seams and pinkish quartz stringers common. Trace to 1% pyrite, up to 5% at base in brecciated quartz stringer. Minor fragments noted resembling flow breccia. 277.50 metres : magnetite rich band at 45 degrees to the core axis. 5% pyrite, highly carbonatized.							
282.76	290.07	10% silicified breccia : dominantly chlorite - carbonate schist with narrow silicified breccia seams averaging 5 cm. Trace to 1% pyrite, seams 1%. Non-magnetic. Silicification is cream, pink and rarely purple and buff coloured. Well foliated at 45 to 50 degrees to the core axis. Local sections resemble flow breccia and vesicles, possibly relic pillowed flow. Magnetite rich band at 285.77 metres at 40 degrees to the core axis, 5% pyrite. 1 cm thick.							
290.07	295.14	CHLORITE-CARBONATE SCHIST							
		Fine grained, green well foliated at 55 to 60 degrees to the core axis. Flow breccia fragments noted locally. Dark green chloritic bands resembling selvages noted locally - no chill. Traces pyrite.	25389	290.07	291.07	1.00	TR	.340	.34
			25390	291.07	292.07	1.00	TR	.000	tr
			25391	292.07	293.07	1.00	TR	.000	tr
			25392	293.07	294.07	1.00	TR	.000	tr
			25393	294.07	295.14	1.07	TR	.000	tr

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
295.14 299.05 TRANSITIONALLY SILICIFIED ZONE									
		The section has variable intensities of silicification and low pyrite concentrations averaging trace to 1%. Non-magnetic.	25394	295.14	295.70	.56	TR	.000	tr
			25395	295.70	296.59	.89	1	2.136	2.40
			25396	296.59	297.27	.68	TR-1	2.101	3.09
			25397	297.27	298.26	.99	1	1.356	1.37
295.14	295.70	60% silicified breccia : fine grained, dark green matrix with cream, pink - buff silicified seams averaging 3 to 4 cm. Trace pyrite. Non-magnetic. Weakly carbonatized.	25398	298.26	299.05	.79	TR-1	.814	1.03
295.70	297.27	90 % silicified breccia : minor brecciation, dominantly purple silicification along foliation planes. Hematitic streak in matrix. Trace to 1% pyrite. Non-magnetic. Silicification often reactive to HCl. Foliation at 45 degrees to the core axis. Minor brecciation is honey and white coloured.							
297.27	299.05	20% silicified breccia : dark green purple finely silicified breccia. Trace to 1% pyrite. Carbonatized. Well foliated at 40 to 50 degrees to the core axis. Two magnetite rich bands noted near lower contact with 5% pyrite and highly carbonatized.							
299.05 307.54 CHLORITE-CARBONATE SCHIST									
		Fine grained, green well foliated at 45 to 50 degrees to the core axis. Non-magnetic. No hematitic streak. Minor fine brecciation from 304.50 to 305.13 metres with minor silicification. 1% pyrite, overall traces.	25399	299.05	300.05	1.00	TR	.340	.34
			25400	304.50	305.13	.63	1	.649	1.03
307.54 END OF HOLE.									

AMERICAN BARRICK RESOURCES CORPORATION

Co-ord:	9899.6 9049.8	DIAMOND DRILL RECORD	HOLE NO.:	MC.87-306
Azimuth:	343.1	Section: 0+50E	Property:	NORVEST OPTION
Dip:	-71.0	Core Size: BQ	Location:	050E 100S
Elevation:	4999.0		Date Started:	JANUARY 29, 1987
Length:	235.6		Date Completed:	FEBRUARY 4, 1987
Measurement:	METRIC		Logged by:	G. BASCHUK
Comments:	CASING LEFT IN HOLE			

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-68.0	137.16		-66.0	199.64	351.0	-64.0
71.02	348.5	-68.0	140.51	349.5	-66.0	202.69	351.0	-64.0
91.44		-67.0	182.88		-65.0			

-----Log Summary-----

.00 24.38 OVERBURDEN.  
 24.38 102.40 BASALT.  
 102.40 117.35 DIORITE.  
 117.35 128.09 BASALT.  
 128.09 131.52 CHLORITE-CARBONATE SCHIST.  
 131.52 207.39 MAIN MINERALIZED ZONE.  
 131.52 132.73 TRANSITIONALLY SILICIFIED ZONE.  
 132.73 132.93 MCKENNA FAULT PLANE.  
 132.93 137.33 MAIN SILICIFIED ZONE.  
 137.33 149.00 TRANSITIONALLY SILICIFIED ZONE.  
 149.00 153.31 LOWER SILICIFIED ZONE.  
 153.31 184.13 TRANSITIONALLY SILICIFIED ZONE.  
 184.13 184.28 SYENITE.  
 184.28 186.65 TRANSITIONALLY SILICIFIED ZONE.  
 186.65 187.05 SYENITE.  
 187.05 207.39 TRANSITIONALLY SILICIFIED ZONE.  
 207.39 219.50 CHLORITE-CARBONATE SCHIST.  
 219.50 233.38 GREENSCHIST.  
 233.38 235.61 BASALT.  
 235.61 END OF HOLE.

To -----Description----- Sample From To Length % Sul GW Au

.00 24.38 DVERBURDEN

24.38 102.40 BASALT

Massive flows and flow top breccia is noted in the section. The flows are generally medium grained to coarse grained with finer grained contacts. The medium grained massive flows are equivalent to diorites in earlier holes, but often have gradational contacts with flow top breccia. The flows are non-magnetic.

24.38 50.00 Massive flow : fine to medium grained, dark green. Fish-net texture noted locally. Slight changes in grain size and colour to grey green noted. Equivalent unit of diorite in previous holes. Fine grained, green vesicular inclusion at 28.90 to 29.00 meters. Highly fractured from 36.58 to 40.23 meters at 15 to 20 degrees and 80 to 90 degrees to the core axis.

50.00 60.50 Massive flow : gradational increase in grain size to medium grained with well developed fish-net texture.

60.50 61.20 Massive flow : fine grained, green continuation of above, gradational contact. Fish-net texture still evident.

61.20 75.65 Flow top breccia : aphanitic pale green fragments in darker green fine grained matrix. Chilled rims noted locally. Down section fragments are subrounded and larger than above. Local vesicular sections noted.

75.65 102.40 Massive flow : fine grained, green, becomes fine to medium grained down section. Phenocryst noted at 96.10 meters similar to those noted in glomeroporphyritic flows. 76.69 to 77.76 meters : mafic intrusive, fine grained green brown with biotite blebs in center. Sharp contacts at 50 degrees to the core axis.

102.40 117.35 DIORITE

To -----Description----- Sample From To Length % Sul GW Au

Coarse grained, dark green, possible flow center. Sharp upper sheared contact at 53 degrees to the core axis 3 cm in width with epidote. Non-magnetic. 5% leucoxene overgrowths. Down section the grain size fines to medium grained.

109.65 109.80 Mafic intrusive : fine grained, green with faint brown hue. 1% pyrite, non-magnetic. Pervasively carbonatized. Contacts at 30 to 35 degrees to the core axis.

110.32 115.80 Red hematite rich blebs noted up to 4 mm comprising up to 10% of the rock. Commonly near hematite rich carbonate stringers.

117.35 128.09 BASALT

A medium grained massive flow grading down section to a very fine grained foliated flow bottom. A magnetic flow breccia occurs at base.

117.35 125.10 Massive flow : medium grained, equigranular interlocking texture. Green, non-magnetic. 1 to 2% leucoxene.

125.10 126.00 Massive flow : rapidly fines to very fine grained at foliated lower contact. Foliation at 58 degrees to the core axis.

126.00 128.09 Flow breccia : aphanitic pale green fragments in a dark green fine grained matrix. No chills or reaction rims on fragments. Abundant carbonate stringers with hematitic streak. Local sections strongly magnetic.

128.09 131.52 CHLORITE-CARBONATE SCHIST

Fine grained, green well foliated schist with minor silicification and local brecciation. Pyrite contents are averaging 1% as fine disseminations. The silicification - brecciation is dark grey purple and strongly carbonatized. Foliation at 43 degrees to the core axis parallel to silicification and brecciation seams. Locally magnetic. Hematitic streak throughout. Lower 0.5 meters is green, with 1% pyrite along foliation planes. Minor sericite.

25401	128.09	129.05	.96	TR-1	1.978	2.06
25402	129.05	130.05	1.00	1-2	.690	.69
25403	130.05	131.03	.98	1	.333	.34
25404	131.03	131.52	.49	1	.167	.34

131.52 to 207.39 MAIN MINERALIZED ZONE.

The section is based upon amount and degree of

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		silicification and is composed of 5 members and 2 narrow syenitic intrusives. Pyrite contents are variable and are highest associated with buff altered rock and red siliceous bands, possibly relic cherts. Silicification and brecciation styles are variable.							
131.52	132.73	TRANSITIONALLY SILICIFIED ZONE	25405	131.52	132.49	.97	1	.330	.34
		10% Silicified breccia: purple green silicification in bands along foliation. Highly chloritic green matrix. Silicification is reactive to HCl. Foliation at 50 to 55 degrees to the core axis. Trace to 1% pyrite. Non-magnetic.	25406	132.49	132.93	.44	TR	.150	.34
132.73	132.93	MCKENNA FAULT PLANE							
		Highly chloritic, strongly foliated with 1 cm clay-grit seam at 40 degrees to the core axis. Trace pyrite. Chlorite wraps around breccia fragments.							
132.93	137.33	MAIN SILICIFIED ZONE	25407	132.93	133.91	.98	1-2	.333	.34
		Silicification is greater than 95%. Non-magnetic. Pyrite contents variable from traces to 10%. Higher pyrite contents associated with buff alteration. Intensity of brecciation decreases down section and becomes network style. Silicified sections commonly pervasively carbonatized.	25408	133.91	134.55	.64	10	1.318	2.06
			25409	134.55	135.33	.78	1-2	1.607	2.06
			25410	135.33	136.33	1.00	TR-1	1.720	1.72
			25411	136.33	137.33	1.00	TR-1	2.400	2.40
132.93	133.91	Dark purple, fine grained pervasively carbonatized silicified breccia. 1 to 2% pyrite often as stringers along foliation planes. Weakly developed foliation. Minor buff sections with 3 to 5% pyrite. Non-magnetic. Foliation at 50 degrees to the core axis.							
133.91	134.55	Dark grey to buff with 10% finely disseminated pyrite. Pervasively carbonatized. Non-magnetic. No brecciation evident. Intensely silicified.							
134.55	135.33	Dark grey-green silicified matrix with 75% white to cream silicified fragments. Fragments 2 to 3 to 10 mm across. 1 to 2% very finely disseminated pyrite. Foliation at 40 to 45 degrees to the core axis. Non-magnetic. Fragments pervasively carbonatized, matrix non-carbonatized.							

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		Gradational lower contact to network style silicification.							
135.33	137.33	Dark green to purple green to grey-green silicified matrix with white, cream and honey coloured fragments. Silicification is dominantly network style. 1% leucoxene. Trace to 1% pyrite, local patches up to 1 cm. Foliation at 50 degrees to the core axis.							
137.33	149.00	TRANSITIONALLY SILICIFIED ZONE							
		The silicification is variable and pyrite contents average 1 to 2%. Silicification is dominantly purple green to purple grey in colour and locally magnetic. Local sections of red banded silicified rock are noted with elevated pyrite, possibly relic chert bands.	25412	137.33	138.28	.95	TR-1	.323	.34
			25413	138.28	139.09	.81	3-5	1.110	1.37
			25414	139.09	139.93	.84	1-2	.286	.34
			25415	139.93	140.81	.88	3-5	.299	.34
			25416	140.81	141.26	.45	10	1.390	3.09
			25417	141.26	141.85	.59	2-3	1.015	1.72
137.33	138.28	80% silicified breccia : dark purple green with 5% leucoxene overgrowths. Silicification and brecciation is network style. Trace to 1% pyrite. Silicification is cream to white to pink in colour. Silicification rarely reactive to HCl. Relic chloritic shear at lower contact at 50 degrees to the core axis.	25418	141.85	142.35	.50	TR-1	.345	.69
			25419	142.35	143.35	1.00	TR-1	.340	.34
			25420	143.35	144.35	1.00	TR	.340	.34
			25421	144.35	145.35	1.00	TR-1	.340	.34
			25422	145.35	146.35	1.00	TR-1	1.030	1.03
			25423	146.35	147.35	1.00	TR-1	.340	.34
			25424	147.35	148.17	.82	TR	.279	.34
			25425	148.17	149.00	.83	TR-1	.855	1.03
138.28	139.09	75% silicified breccia : dark purple green with trace to 1% pyrite. Non-magnetic. Silicification and brecciation is not intense. From 138.37 to 138.51 meters : 100% silicified hematite rich banded section. Red, translucent and pyrite bands form laminations 0.3 to 1 cm in width. 10% pyrite as laminations. Foliation at 30 to 55 degrees to the core axis. Possibly relic cherts.							
139.09	140.81	80% silicified breccia : dark purple grey, weakly brecciated, intensely silicified. Locally magnetic. Weakly pervasively carbonatized. 1 to 2% pyrite. 140.31 to 140.54 meters : as described above from 138.37 to 138.51 meters : red hematite rich bands with 5% pyrite. Bands at 53 degrees to the core axis.							
140.81	141.26	100% silicified : no brecciation. Red hematite rich bands with pyrite and translucent bands. Pyrite bands are 1 to 3 mm wide, others 0.5 to 1 cm. Bands at 50 degrees to the core axis. 10% pyrite. Weakly carbonatized. Possibly relic cherts.							
141.26	142.35	50% silicified breccia : dominantly purple							

To	Description	Sample	From	To	Length	% Sul	GM	Au
	grey network style silicification with white to cream siliceous fracture fillings and stringers. Locally weakly magnetic. Foliation at 45 to 65 degrees to the core axis. Trace to 1% pyrite. Silicification is pervasively carbonatized.							
142.35	35 to 40% silicified breccia : purple grey rock with silicified breccia seams up to 15 cm in width, averaging 5 to 10 cm. Seams parallel to foliation at 40 to 50 degrees to the core axis. Non-magnetic. Hematitic streak throughout. Silicification increasing down section. Trace to 1% pyrite.							
149.00	153.31 LOWER SILICIFIED ZONE							
	Highly siliceous composed of two distinct sections. The upper section is dark purple grey and similar to the overlying transitional silicified zone. The lower section is red and highly banded with pyrite and translucent silica rich laminations. Pyrite contents are variable.	25426	149.00	149.81	.81	TR-1	.275	.34
		25427	149.81	150.50	.69	TR-1	.235	.34
		25428	150.50	151.50	1.00	3-5	8.910	8.91
		25429	151.50	152.50	1.00	3-5	7.540	7.54
		25430	152.50	153.31	.81	5-7	1.944	2.40
149.00	150.50 95% silicified breccia : highly brecciated dark purple grey with cream to honey coloured fragments and trace to 1% pyrite. Non-magnetic. Weak reaction to HCl.							
150.50	153.31 Red, highly siliceous section with 3 to 5% pyrite along foliation. Foliation at 30 to 40 degrees to the core axis. Non-magnetic. Weakly reactive to HCl in white sections.							
153.31	184.13 TRANSITIONALLY SILICIFIED ZONE							
	Variably silicified with trace to 1% pyrite on average. Narrow sections carry elevated silicification and brecciation. Silicification is dominantly dark purple green and host rock exhibits a hematitic streak. Down section the rocks are chlorite carbonate schist with narrow silicified seams.	25431	153.31	154.07	.76	TR	.258	.34
		25432	154.07	154.95	.88	3-5	6.635	7.54
		25433	154.95	155.94	.99	TR-1	4.752	4.80
		25434	155.94	156.70	.76	TR-1	.524	.69
		25435	156.70	157.65	.95	TR-1	.978	1.03
		25436	157.65	158.65	1.00	TR-1	.340	.34
		25437	158.65	159.65	1.00	TR	.340	.34
		25438	159.65	160.65	1.00	TR-1	.340	.34
		25439	160.65	161.62	.97	TR-1	.000	tr
		25440	161.62	162.62	1.00	TR	.000	tr
		25441	162.62	163.64	1.02	TR	.000	tr
		25442	163.64	164.36	.72	TR	.000	tr
		25443	164.36	165.08	.72	TR	.000	tr
		25444	165.08	166.08	1.00	TR	.000	tr
		25445	166.08	167.13	1.05	TR	.000	tr

To	From	Description	Sample	From	To	Length	% Sul	GW	Au
154.95	156.70	30% silicified breccia : dark green foliated rock with a weak hematitic streak. Silicified breccia seams up to 10 cm in width. Trace to 1% pyrite. Silicification is cream to white with a pink hue. Foliation 40 degrees to the core axis. Non-magnetic. Silicified sections weakly reactive to HCl.	25446	167.13	168.13	1.00	TR	.000	tr
			25447	168.13	169.13	1.00	TR	.000	tr
			25448	169.13	170.13	1.00	TR	.000	tr
			25449	170.13	171.13	1.00	TR	.000	tr
			25450	171.13	172.00	.87	TR	.000	tr
			25451	172.00	172.71	.71	TR	.490	.69
		25452	172.71	173.37	.66	TR	.224	.34	
		25453	173.37	174.37	1.00	TR	.340	.34	
156.70	157.65	85% silicified breccia : dark grey purple silicified matrix with white, honey and pale brown fragments. Trace to 1% pyrite. Non-magnetic. Weakly reactive to HCl.	25454	174.37	175.07	.70	TR	.238	.34
			25455	175.07	175.94	.87	TR	.296	.34
			25456	175.94	176.80	.86	TR	.292	.34
			25457	176.80	177.93	1.13	TR	.384	.34
157.65	165.08	35% silicified breccia : fine grained, dark green to purple green rock with white to cream silicified breccia sections up to 10 cm in width. Traces pyrite. The purple silicification occurs as overgrowths forming blotches. This silicification stains deep blue with potassium ferric cyanide. Hematitic streak is common in matrix.	25458	177.93	178.93	1.00	TR-1	.690	.69
			25459	178.93	179.77	.84	TR	.286	.34
			25460	179.77	180.37	.60	TR	.204	.34
			25461	180.37	181.17	.80	TR	.000	tr
			25462	181.17	181.65	.48	NIL	.000	tr
			25463	181.65	182.56	.91	TR	.000	tr
			25464	182.56	183.56	1.00	TR	.000	tr
		25465	183.56	184.56	1.00	TR	.000	tr	
165.08	167.13	70% silicified breccia : purple grey matrix with purple overgrowths and white to beige silicified fragments. Strong foliation at 40 degrees to the core axis. Weakly carbonatized. Non-magnetic. Hematitic streak throughout. Traces pyrite.							
167.13	173.37	10 to 15% silicified breccia : dominantly fine grained green chlorite - carbonate schist with minor silicified breccia seams up to 5 cm in width averaging 2 to 3 cm. Silicification is cream, white, brown and rarely orange or purple coloured. Silicification non-reactive to HCl. Traces pyrite. Foliation at 35 to 45 degrees to the core axis.							
173.37	175.94	5% silicified breccia : fine grained chlorite - carbonate schist with 1 to 2 cm brecciated silicified bands parallel to foliation at 40 to 45 degrees to the core axis. Traces pyrite. Hematitic streak in upper 60 cm. Fine to medium grained at lower contact with dark green mafic clots.							
175.94	181.17	25% silicified breccia : fine to medium grained chlorite - carbonate schist with white to cream coloured silicified breccia seams up to 12 cm, averaging 5 cm. Traces pyrite. Foliation 45 to 50 degrees to the core axis. Fracture fillings 30 degrees to the core axis. Local weakly magnetic sections noted. At 180.0 meters, mm sized white ovoid blebs noted, resembling							

From	To	Description	Sample	From	To	Length	% Sul	GW	Au	
		vesicles, no fizz to HCl.								
181.17	181.65	Mafic intrusive : fine grained, green with biotite flecks up to 3 mm. Non-magnetic. Weakly carbonatized. Silicified upper section.								
181.65	182.56	85% silicified breccia : dark purple green network style silicification. Trace pyrite.								
182.56	184.13	20 to 25% silicified breccia : as described above from 175.94 to 181.17 meters, purple sections more abundant. Traces pyrite. Local dark green chloritic sections resembling selvages noted, possibly relic pillowed flow. Foliation is 40 to 50 degrees to the core axis. Mafic intrusives noted from 183.60 to 183.64 meters and 183.71 to 183.80 meters. Contacts at 45 to 50 degrees to the core axis. Possible selvages become better developed down section.								
184.13	184.28	SYENITE								
		Aphanitic, red siliceous intrusive with contacts at 40 degrees to the core axis. 3 to 5% white phenocrysts 1 to 2 mm across.								
184.28	186.65	TRANSITIONALLY SILICIFIED ZONE								
		As described above from 182.56 to 184.13 meters.	25466	184.56	185.56	1.00		TR	.000	tr
			25467	185.56	186.65	1.09		TR	.000	tr
186.65	187.05	SYENITE								
		Aphanitic, red siliceous intrusive with contacts at 35 degrees to the core axis. 2% white phenocrysts 1 to 3 mm across. 20% quartz - carbonate stringers at variable angles.	25468	186.65	187.05	.40		NIL	.000	tr
187.05	207.39	TRANSITIONALLY SILICIFIED ZONE								
		As described above from 182.56 to 184.13 meters.	25469	187.05	187.63	.58		TR	.000	tr
			25470	187.63	188.65	1.02		TR	.000	tr
			25471	188.65	189.65	1.00		TR	.000	tr
			25472	189.65	190.57	.92		TR-1	.000	tr
			25473	190.57	191.57	1.00		TR	.000	tr
			25474	191.57	192.57	1.00		TR	.000	tr

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
			25475	192.57	193.57	1.00	TR	.000	tr
			25476	193.57	194.57	1.00	TR-1	.340	.34
			25477	194.57	195.57	1.00	TR	.340	.34
			25478	195.57	196.57	1.00	TR	.340	.34
			25479	196.57	197.57	1.00	TR	1.370	1.37
			25480	197.57	198.67	1.10	TR-1	.000	tr
			25481	198.67	199.67	1.00	TR-1	.000	tr
			25482	199.67	200.67	1.00	TR	.000	tr
			25483	200.67	201.20	.53	TR	.000	tr
			25484	201.20	201.76	.56	1	.000	tr
			25485	201.76	202.76	1.00	TR	.000	tr
			25486	202.76	203.66	.90	TR	.000	tr
			25487	203.66	204.26	.60	TR	.822	1.37
			25488	204.26	205.27	1.01	TR	.343	.34
			25489	205.27	206.30	1.03	TR	.350	.34
			25490	206.30	207.39	1.09	TR	1.493	1.37

207.39 219.50 CHLORITE-CARBONATE SCHIST

Fine grained, green with white carbonate wisps. Possibly GREENSCHIST, but no distinct volcanic features noted, possibly selvages noted locally. Carbonate content less than usual in chlorite carbonate schist and decreasing down section. Foliation at 40 to 50 degrees to the core axis.

25491 207.39 208.08 .69 NIL .235 .34

219.50 233.38 GREENSCHIST

Continuation of above with epidote rich selvages noted. Pillowed flow. Selvages are poorly developed and last one noted at 226.40 meters. Fine grained, pale green massive flow from 226.40 to 233.38 meters. Foliation decreasing intensity down section.

233.38 235.61 BASALT

Pale green, fine grained, massive flow. Continuation of above but not foliated. Non-magnetic. 3% carbonate stringers.

235.61 END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Records: 9876.2 8899.7

DIAMOND DRILL RECORD

HOLE NO.: MC.87-307

Azimuth: 343.3

Section: 1+00W

Property: NORVEST OPTION

Dip: -71.0

Core Size: BQ

Location: 100W 125S

Elevation: 5000.8

Date Started: FEBRUARY 4, 198

Length: 271.3

Date Completed: FEBRUARY 10, 19

Measurement: METRIC

Logged by: G. BASCHUK

Comments: CASING LEFT IN HOLE

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-69.5	137.16		-67.5	263.65	345.5	-65.0
55.47	349.5	-70.0	182.88		-67.0	266.70	345.5	-65.0
91.44		-68.5	185.93	348.5	-67.0	269.75		-65.0
97.84	347.0	-69.0	228.60		-65.0			

-----Log Summary-----

.00 25.55 OVERBURDEN.  
 25.55 77.05 BASALT.  
 77.05 131.52 DIORITE.  
 131.52 171.88 BASALT.  
 171.88 175.26 GREENSCHIST.  
 175.26 178.31 CHLORITE-CARBONATE SCHIST.  
 178.31 178.37 MCKENNA FAULT PLANE.  
 178.37 223.54 MAIN MINERALIZED ZONE.  
 178.37 192.28 TRANSITIONALLY SILICIFIED ZONE.  
 192.28 194.82 LOWER SILICIFIED ZONE.  
 194.82 223.54 TRANSITIONALLY SILICIFIED ZONE.  
 223.54 252.40 CHLORITE-CARBONATE SCHIST.  
 252.40 270.10 TRANSITIONALLY SILICIFIED ZONE.  
 270.10 271.27 CHLORITE-CARBONATE SCHIST.  
 271.27 END OF HOLE.

From	To	Description	Sample From	To	Length	% Sul	GW	Au
.00	25.55	OVERBURDEN						
25.55	77.05	BASALT						
		Green fine grained to very fine grained massive basalt. Rare carbonate - quartz stringers often with abundant pyrite and epidote. Non-magnetic. Non-reactive to HCl.						
25.55	52.91	Green fine grained massive flow. Grain size increases down section. Fines at base.						
52.91	54.22	Flow contact zone. Poorly developed flow breccia. Rounded fragments in basalt matrix.						
54.22	61.30	Grey-green very fine grained to fine grained massive basalt.						
61.30	77.05	Continuation of overlying basalt. Vesicles up to 1.5 mm of green chlorite and carbonate.						
77.05	131.52	DIORITE						
		Green fine to medium grained massive rock. Top contact is 0.14 metres foliated zone with carbonate, epidote, quartz and pyrite. Chloritic mafics up to 2 mm in felsic matrix. Feldspar laths up to 2 mm noted. Abundant leucoxene. Fines at base to very fine grained. Base is carbonate - quartz veinlet 20 degrees to the core axis.						
77.05	90.07	Non-magnetic.						
90.07	94.74	Magnetic. Disseminated magnetite.						
94.74	131.52	Non-magnetic green massive rock. 126.45 metres : clay-grit seam 40 degrees to the core axis with quartz veinlet. 127.10 to 127.70 metres : blocky, highly fractured core.						
131.52	171.88	BASALT						
		Green massive and pillowed flows. Non-magnetic. Minor flow breccia.						

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
131.52	145.11	Flow breccia. Angular fragments often with chilled contacts. Matrix fragmental. Massive sections up to 1 meter are pillows. Abundant epidote. 134.50 to 135.01 metres : mafic intrusive. Grey-green non-magnetic. Pervasive carbonate alteration. Contacts 47 degrees to the core axis.							
145.11	145.52	Grey-green lamprophyre intrusive. Biotite balls up to 8 mm. Pervasive carbonate alteration. Non-magnetic. Top contact 70 degrees to the core axis is intensely foliated. Base 50 degrees to the core axis.							
145.52	152.95	Fine grained massive basalt. Grades down section to very fine grained basalt. Resembles diorite.							
152.95	154.80	Very fine grained massive flow.							
154.80	170.02	Fine grained to very fine grained pillowed flow. Selvages are narrow flow breccia zones with hyaloclastite. Abundant carbonate - quartz filled fractures with epidote.							
170.02	171.88	Flow breccia. Angular fragments locally with chloritized contacts. Fragmental matrix.							
171.88	175.26	<b>GREENSCHIST</b>							
		Flow breccia : foliated dark green matrix with stretched pale green fragments. Brecciation becomes increasingly more deformed down section. Local highly foliated sections weakly magnetic. Foliation at 55 to 60 degrees to the core axis. Weak hematitic streak increasing intensity down section. Carbonate stringers increasing number down section.							
175.26	178.31	<b>CHLORITE-CARBONATE SCHIST</b>							
			25492	175.26	176.27	1.01	TR	1.384	1.37
			25493	176.27	177.27	1.00	TR	.340	.34
			25494	177.27	178.37	1.10	TR	.374	.34
		Fine grained, green well foliated chlorite - carbonate schist. Locally weakly magnetic with hematitic streak throughout. Traces pyrite. Pyrite commonly as a replacement in carbonate bands. Minor silicification at lower contact. Foliation 55 degrees at 176.9 metres and 38 degrees to the core axis at 178.25 metres.							
178.31	178.37	<b>MCKENNA FAULT PLANE</b>							

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		Green, highly foliated and rubbled zone. 1 cm clay seam in rubble. Foliation adjacent to zone is at 43 degrees to the core axis.							
178.37 to 223.54 - MAIN MINERALIZED ZONE.									
The zone is poorly developed with no MAIN SILICIFIED ZONE and low pyrite concentrations. A lower silicified zone is present but the style of silicification is more fragmented vs the aphanitic intensely silicified breccia associated with the main silicified zones of other holes.									
178.37 192.28 TRANSITIONALLY SILICIFIED ZONE									
		Dark purple grey variably silicified and brecciated rock with chloritic sections exhibiting a hematitic streak. Silicification is dominantly purple coloured and often with white to cream coloured breccia fragments in bands parallel to foliation. Minor chloritic shears noted locally. Silicification is dominantly network style and pyrite contents are lower than normal averaging traces, up to 3 to 5% in highly magnetic bands. Silicified rock is non-reactive to HCl. Non-silicified sections are reactive to HCl, strongly at upper contact.	25495	178.37	178.86	.49	TR-1	1.009	2.06
			25496	178.86	179.56	.70	TR	.000	tr
			25497	179.56	180.46	.90	1-2	.000	tr
			25498	180.46	181.26	.80	TR-1	.000	tr
			25499	181.26	182.03	.77	TR	.000	tr
			25500	182.03	182.78	.75	TR-1	.000	tr
			25501	182.78	183.78	1.00	TR-1	.000	tr
			25502	183.78	184.78	1.00	TR-1	.000	tr
			25503	184.78	185.78	1.00	TR-1	.000	tr
			25504	185.78	186.78	1.00	TR-1	.000	tr
			25505	186.78	187.74	.96	TR-1	.000	tr
		178.37 178.86 10% silicified breccia : very fine grained, dark purple green with hematitic streak. Non-magnetic. Moderately carbonatized. Trace to 1% pyrite.	25506	187.74	188.78	1.04	1	.000	tr
			25507	188.78	189.78	1.00	TR	.000	tr
			25508	189.78	190.74	.96	TR-1	.000	tr
			25509	190.74	191.62	.88	TR	.299	.34
		178.86 179.56 Mafic intrusive : fine grained, green. Pervasively carbonatized and non-magnetic. Contacts at 51 degrees to the core axis. Narrow silicified breccia sections noted within intrusive.	25510	191.62	192.28	.66	TR-1	.680	1.03
		179.56 192.28 75% silicified breccia : dark purple to purple green, locally strongly magnetic. Trace to 1% pyrite, locally up to 3 to 5% associated with magnetite rich bands. Chloritic shear at 181.51 metres at 67 degrees to the core axis. Magnetite rich bands at 179.79 to 179.82, 179.95 to 179.96 and 191.04 to 191.07 metres.							
192.28 194.82 LOWER SILICIFIED ZONE									
		Fine grained, purple honey coloured brecciated rock with abundant white quartz stringers and fracture fillings.	25511	192.28	192.90	.62	1-2	.849	1.37
			25512	192.90	193.90	1.00	TR	.340	.34
			25513	193.90	194.82	.92	TR	.000	tr

AMERICAN BARRICK RESOURCES CORPORATION

Hole No.: MC.87-307

Page No.: 5

From To -----Description----- Sample From To Length % Sul SW Au

Highly magnetic black bands at upper contact with 5% pyrite. Traces pyrite throughout section. Well developed foliation at 55 degrees to the core axis. Abundant hematite. Non-magnetic. Alteration is similar to the transitional silicified zone.

194.82 223.54 TRANSITIONALLY SILICIFIED ZONE

Fine grained, green foliated rock with silicified breccia seams up to 20 cm, averaging 1 to 5 cm. Silicification averages 20 to 30% and is orange - white and purple coloured, rarely red banded style. Traces pyrite. The silicification is patchy and decreases down section. Dark green chloritic bands noted resembling selvages. Near upper contact, possible flow breccia noted, fragments with hairline fracturing. Foliation 50 degrees to the core axis. Shear noted at 201.55 metres at 15 degrees to the core axis with minor clay on break.

25514	194.82	195.82	1.00	TR	.000	tr
25515	195.82	196.82	1.00	TR	.000	tr
25516	196.82	197.82	1.00	TR	.000	tr
25517	197.82	198.82	1.00	TR-1	.000	tr
25518	198.82	199.82	1.00	TR	.000	tr
25519	199.82	200.82	1.00	TR	.000	tr
25520	200.82	201.82	1.00	TR	.000	tr
25521	201.82	202.82	1.00	TR	.000	tr
25522	202.82	203.82	1.00	TR	2.060	2.06
25523	203.82	204.83	1.01	TR	.343	.34
25524	204.83	205.82	.99	TR	.683	.69
25525	205.82	206.80	.98	TR	.333	.34
25526	206.80	207.80	1.00	TR	.340	.34
25527	207.80	208.80	1.00	TR	.340	.34
25528	208.80	209.80	1.00	TR	2.060	2.06
25529	209.80	210.80	1.00	TR	2.060	2.06
25530	210.80	211.80	1.00	TR	1.370	1.37
25531	211.80	212.80	1.00	TR	.690	.69
25532	212.80	213.80	1.00	TR	.690	.69
25533	213.80	214.80	1.00	NIL	.340	.34
25534	214.80	215.80	1.00	NIL	.340	.34
25535	215.80	216.80	1.00	TR	.000	tr
25536	216.80	217.80	1.00	TR	1.030	1.03
25537	217.80	218.80	1.00	TR	.690	.69
25538	218.80	219.80	1.00	TR	.690	.69
25539	219.80	220.80	1.00	TR	.340	.34
25540	220.80	221.80	1.00	TR	.000	tr
25541	221.80	222.80	1.00	TR	.340	.34
25542	222.80	223.54	.74	TR	.126	.17

223.54 252.40 CHLORITE-CARBONATE SCHIST

Poorly foliated, green, fine grained schist with carbonate wisps and stringers parallel to foliation at 45 degrees to the core axis. Fine grained dark green chloritic seams noted resembling selvages parallel to foliation.

234.20 240.60 10 to 15% quartz - carbonate stringers : trace to 1% pyrite. Veins are pink hued at 35 to 45 degrees to the core axis.

252.27 252.40 Mafic intrusive : fine grained, green. Contacts at 34 degrees to the core axis.

25543	234.20	235.20	1.00	TR-1	.000	tr
25544	235.20	236.20	1.00	TR	.000	tr
25545	236.20	237.20	1.00	TR-1	.340	.34
25546	237.20	238.20	1.00	TR-1	.340	.34
25547	238.20	239.20	1.00	TR	.170	.17
25548	239.20	240.60	1.40	TR	.000	tr

From To -----Description----- Sample From To Length % Sul GW Au

252.40 270.10 TRANSITIONALLY SILICIFIED ZONE

			25549	252.40	253.40	1.00	TR	.170	.17
		Dominantly chlorite - carbonate schist with narrow silicified breccia seams comprising 10% of the section.	25550	253.40	254.40	1.00	TR	.340	.34
		Silicification is pervasively carbonatized and purple coloured with trace to 1% pyrite. Foliation at 45 to 50 degrees to the core axis. Hematitic streak common proximal to silicified sections. Non-magnetic. 3 to 5% carbonate fracture fillings and stringers. Dark green chloritic bands noted resembling relic selvages.	25551	254.40	255.40	1.00	TR	.000	tr
			25552	255.40	256.10	.70	TR	.000	tr
			25553	256.10	257.00	.90	TR-1	.621	.69
			25554	257.00	258.05	1.05	TR-1	1.081	1.03
			25555	258.05	259.05	1.00	TR	.170	.17
			25556	259.05	260.05	1.00	TR-1	.170	.17
			25557	260.05	261.05	1.00	TR	.340	.34
		268.00 270.10 20% silicified breccia with trace to 1% pyrite. Ground waters have leached out carbonate. Highly brecciated and central section has been ground by drillers : possibly a fault zone.	25558	261.05	262.05	1.00	TR	.170	.17
			25559	262.05	263.05	1.00	TR	.690	.69
			25560	263.05	264.05	1.00	TR	.170	.17
			25561	264.05	265.05	1.00	TR	.000	tr
			25562	265.05	266.05	1.00	TR	.340	.34
			25563	266.05	267.05	1.00	TR	.340	.34
			25564	267.05	268.00	.95	TR	.000	tr
			25565	268.00	268.80	.80	1-2	2.192	2.74
			25566	268.80	270.10	1.30	1	1.781	1.37

270.10 271.27 CHLORITE-CARBONATE SCHIST

Fine grained, green, non-magnetic with carbonate leached out to 270.55 metres. Foliation at 45 to 50 degrees to the core axis. Trace to 1% pyrite dominantly in wispy carbonate.

271.27 END OF HOLE.

			25567	270.10	271.00	.90	TR-1	.153	.17
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AMERICAN BARRICK RESOURCES CORPORATION

Co-ords: 9746.1 8974.9

DIAMOND DRILL RECORD

HOLE NO.: MC87-308A

Azimuth: 343.5

Section: 0+25W

Property: WORVEST

Dip: -70.0

Core Size: BQ

Location: 025W 253S

Elevation: 5003.2

Date Started: FEBRUARY 11, 1987

Length: 384.4

Date Completed: FEBRUARY 23, 1987

Logged by: G. BASCHUK

Measurement: METRIC

Comments: HOLE WEDGED AT 206.3 M

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
45.72		-71.0	182.88		-72.0	285.29	346.5	-73.0
91.44		-73.0	201.17	346.0	-72.0	318.52	352.0	-72.0
96.62	348.5	-73.0	222.50	344.0	-72.0	320.04		-71.5
137.16		-72.0	228.60		-71.0	365.76		-71.5
146.61	348.5	-73.0	274.32		-72.0	373.38	351.5	-71.0

-----Log Summary-----

.00 37.49 DVERBURDEN.  
 37.49 42.50 DIORITE.  
 42.50 315.94 BASALT.  
 315.94 317.70 FAULT ZONE.  
 317.70 319.99 DIORITE.  
 319.99 335.55 BASALT.  
 335.55 350.05 GREENSCHIST.  
 350.05 352.66 CHLORITE-CARBONATE SCHIST.  
 352.66 366.42 MAIN MINERALIZED ZONE.  
 352.66 353.50 TRANSITIONALLY SILICIFIED ZONE.  
 353.50 354.23 MCKENNA FAULT PLANE.  
 354.23 361.47 TRANSITIONALLY SILICIFIED ZONE.  
 361.47 362.78 LOWER SILICIFIED ZONE.  
 362.78 366.42 TRANSITIONALLY SILICIFIED ZONE.  
 366.42 384.35 CHLDRITE-CARBONATE SCHIST.  
 384.35 END OF HOLE.

From ----- Description ----- Sample From To Length % Sul BW Au

.00 37.49 DVERBURDEN

7.49 42.50 DIORITE

Fine grained, green massive diorite. Sharp contact with underlying basalt. Non-magnetic.

2.50 315.94 BASALT

The section is composed of massive flows and pillowed flows. Massive flows are very fine grained to medium grained often with vesicular tops graded from pillowed flows. Sheared section noted from 288.30 to 291.42 metres. The rocks are non-magnetic except for a section above the shear and locally in pillow selvages associated with massive magnetite.

25568	288.30	288.60	.30	1	.000	tr
25569	288.60	289.60	1.00	TR	.000	tr
25570	289.60	290.60	1.00	TR-1	.000	tr
25571	290.60	291.42	.82	TR-1	.139	.17

42.50 43.70 Pillowed flow : dark green fine grained. Blocky, highly fractured core. Weathered with carbonate leached out from fractures.

43.70 44.90 Pink green, fine grained monzonite. Blocky, highly fractured core. Carbonate weathered.

44.90 53.98 Massive flow : dark green, fine to very fine grained. Blocky, highly fractured core to 46.07 metres.

53.98 56.42 Flow breccia : dark green with angular and rounded fragments with chilled contacts. Matrix is well developed hyaloclastite. Sharp base, gradational top.

56.42 77.10 Pillowed flow : very fine grained to fine grained dark green. Selvages often wide flow breccia with hyaloclastite. White glomeroporphyritic phenocrysts noted 5 to 40 mm across. Quartz - carbonate stringers with epidote common.

57.48 to 58.67 metres : monzonitic intrusive : pink green, fine grained. Non-carbonatized. Non-magnetic. Pink feldspar phenocrysts up to 2 mm. Sharp contacts.

66.28 67.30 Abundant white glomeroporphyritic phenocrysts 20 to 40 mm across.

From	Description	Sample From	To	Length	% Sul	GW	Au
78.65	111.42 Massive flow : fine grained to very fine grained dark green. Non-magnetic. Minor quartz - carbonate stringers with epidote.						
99.31	99.54 Mafic intrusive : grey green with pale green feldspar phenocrysts up to 1.5 mm at contacts. Green mafic phenocrysts up to 2 mm. Non-magnetic. Sharp contacts.						
108.54	109.19 Monzonite : green grey - pink. Fine grained. Chloritic mafics up to 1.5 mm at contacts. Pervasive carbonate alteration. Non-magnetic.						
111.42	135.63 Massive flow : grey green fine grained. Sharp upper and lower contacts, possibly intrusive. Chloritic mafics in felsic matrix. Rare carbonate - quartz stringers. 134.50 to 135.03 metres : chloritic foliated zone with carbonate - quartz filled fractures. Possible fault plane - 30 degrees to the core axis.						
135.63	154.60 Massive flow : fine grained, green. Non-magnetic.						
154.60	193.00 Massive flow : continuation of above, but medium grained. Local sections of fish-net texture noted. Coarse grained from 184 to 193 metres. Non-magnetic. Fractures rare. 175.95 to 176.10 metres : shear at 65 degrees to the core axis. Carbonate rich.						
193.00	195.05 Massive flow : continuation of above with grain size decreasing to very fine grained. Fish-net texture noted. Weak foliation at lower contact with minor brecciation. Foliation at 40 to 45 degrees to the core axis.						
195.05	195.20 Flow top : 3 cm band of hyaloclastite at upper contact. Aphanitic, dark green with minor brecciation below.						
195.20	196.20 Vesicular flow : fine grained, dark green. Non-magnetic. Chlorite filling vesicles.						
196.20	200.90 Massive flow : dark green very fine grained with rare glomeroporphyritic phenocrysts up to 5 mm. Non-magnetic. Grain size increases to fine grained down section then rapidly to aphanitic at lower contact.						
200.90	204.60 Pillowed flow : aphanitic, dark green, siliceous. Chloritic selvages, locally silicified with trace to 1% pyrite. Vesicles and minor brecciation noted.						

NOTE : Wedge placed at 203.91 m to attempt to flatten hole - failed.

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
204.60	208.05	Vesicular flow : fine grained with carbonate and epidote rich vesicles averaging 2 mm across. Non-magnetic.							
208.05	220.15	Massive flow : fine to medium grained. Very fine grained at lower 1 meter.							
220.15	238.70	Pillowed flow : very fine grained with well developed selvages often with variolites. Non-magnetic. Variolites disappear down section.							
238.70	243.00	Massive flow : fine grained grey green with vesicular top. Continuation of above flow sequence.							
243.00	275.15	Pillowed flow : fine grained, green to dark green with well developed selvages and locally with magnetite in selvages. Vesicles and variolites noted locally and rarely. Massive sections up to 2 to 3 metres noted within. These are often foliated.							
275.15	282.05	Pillowed flow : continuation of above, but brecciation noted at selvages with rare hyaloclastite.							
282.05	288.30	Vesicular flow : fine grained, green with epidote and chloritic vesicles. Vesicles less common down section. Magnetic near lower contact.							
288.30	291.42	Foliated section : fine grained, green highly foliated, possibly interflow sediment or shear zone. Dark green mafic blebs noted near lower contact. 2 to 3% leucoxene. Strongly magnetic upper section associated with epidote and carbonate wisps. Foliation at 55 degrees to the core axis. Trace to 1% pyrite along laminations. Pink carbonate quartz veining at lower 30 cm.							
291.42	301.35	Flow breccia : upper section highly foliated. Pale green fragments in dark green chloritic matrix. 60% fragments at top, decreasing down section. Non-magnetic.							
301.35	315.94	Massive flow : fine grained, dark green, locally aphanitic. Grain size changes on a local scale from aphanitic to fine grained. Fine grained sections often with fish-net texture. Non-magnetic. Rare glomeroporphyritic phenocrysts noted down section.							

315.94 317.70 FAULT ZONE

25572 315.94 316.55 .61 TR-1 .000 tr

From	To	Description	Sample	From	To	Length	% Sul	GM	Au
		Hematite rich clay seam at 316.55 metres at 40 degrees to the core axis. Above the fault plane, the rocks are fine grained, green, highly foliated with epidote, carbonate and hematite alteration. Below, the rocks are dark green, fine to medium grained with 3% leucoxene and traces of pyrite with minor epidote and hematite.	25573	316.55	317.50	.95	TR-1	.000	tr

317.70 319.99 DIORITE

Fine to medium grained dark green massive rock with 1 to 2% leucoxene. Poorly developed fish-net texture. Weakly foliated. Chilled lower contact with hematite, epidote and carbonate alteration. Traces pyrite at lower contact. Non-magnetic.

319.99 335.55 BASALT

The section is a glomeroporphyritic flow with flow breccia at the base with glomeroporphyritic phenocrysts rarely noted within the flow breccia.

319.99 326.30 Glomeroporphyritic flow : very fine grained with pale green to white to pink phenocrysts up to 3 cm, averaging 0.5 to 1 cm. Non-magnetic.

326.30 335.55 Flow breccia : pale green fragments in dark green matrix. Amount of matrix increases down section. Rare glomeroporphyritic phenocrysts noted.

335.55 350.05 GREENSCHIST

Fine grained, green continuation of above flow breccia with foliation developed. Few massive sections noted up to 1 meter in width. Intensity of foliation and. Number of carbonate stringers increase down section.

25574 343.75 344.13 .38 1 .521 1.37

343.75 344.15 5% silicified : highly brecciated and pervasively carbonatized with breccia aligned parallel to foliation at 50 degrees to the core axis. 1% pyrite.

350.05 to 366.42 MAIN MINERALIZED ZONE.

The zone is based upon amount and degree of silicification and is composed of three sections. No MAIN SILICIFIED ZONE is present, but a LOWER SILICIFIED

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		ZONE is noted. Pyrite contents are low and average trace to 1%. Within the LOWER SILICIFIED ZONE 5 to 7% pyrite noted. The silicification and brecciation is generally poorly developed.							
350.05	353.50	TRANSITIONALLY SILICIFIED ZONE	25575	350.05	351.05	1.00	TR	.690	.69
		80% Silicified, minor brecciation. Fine grained, dark green, well foliated with 1 to 2% finely disseminated pyrite. Foliation at 45 degrees to the core axis. Strongly carbonatized. Weakly magnetic upper half.	25576	351.05	351.98	.93	TR	.642	.69
			25577	351.98	352.66	.68	TR	.231	.34
			25578	352.66	353.50	.84	1-2	1.730	2.06
353.50	354.23	MCKENNA FAULT PLANE	25579	353.50	354.23	.73	TR-1	1.248	1.71
		Strongly foliated chloritic section with quartz - carbonate stringers parallel to foliation with clay seam at 354.0 metres in rubble core. Foliation 35 to 40 degrees to the core axis. Minor sericite. Trace to 1% pyrite often as crystals in leached out carbonate quartz stringer.							
354.23	361.47	TRANSITIONALLY SILICIFIED ZONE	25580	354.23	355.23	1.00	1	.690	.69
		5 to 10% silicified breccia : fine grained, dark green strongly foliated rock with purple hued siliceous sections with 1 to 2% pyrite. Overall trace to 1% pyrite. Silicified seams up to 5 cm, generally 1 to 2 cm. Locally weakly magnetic. Foliation at 30 to 40 degrees to the core axis. Pyrite occurs as fine disseminations and in bands as a replacement to carbonate	25581	355.23	356.23	1.00	TR-1	.690	.69
			25582	356.23	357.23	1.00	1	.170	.17
			25583	357.23	358.23	1.00	1	1.370	1.37
			25584	358.23	359.23	1.00	TR-1	.690	.69
			25585	359.23	360.23	1.00	TR-1	.690	.69
			25586	360.23	360.86	.63	1	.435	.69
			25587	360.86	361.47	.61	TR-1	.104	.17
361.47	362.78	LOWER SILICIFIED ZONE	25588	361.47	362.12	.65	5-7	.890	1.37
		Buff grey intensely silicified section with 5 to 7% pyrite as fine disseminations and along foliation planes. Highly carbonatized. Non-magnetic. No distinct fragments. Minor brecciation. Foliation at 35 to 40 degrees to the core axis, defined by pyrite trails. Late stage carbonate - quartz stringers at 40 degrees to the core axis.	25589	362.12	362.78	.66	5-7	2.039	3.09
362.78	366.42	TRANSITIONALLY SILICIFIED ZONE							

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
			25590	362.78	363.78	1.00	1	.340	.34
		Fine grained green chlorite carbonate schist with 5% silicification and minor brecciation. Strongly foliated at 40 degrees to the core axis. Silicified sections carry 2 to 3% pyrite, overall traces. Silicified sections strongly carbonatized with a purple hue. Intensity of foliation decreases down section. Hematitic streak throughout. Non-magnetic. Minor sericite along foliation planes. Injection breccia with carbonate noted at 364.50 to 364.55 metres. Possible relic massive flow.	25591	363.78	364.78	1.00	TR-1	.690	.69
			25592	364.78	365.50	.72	TR-1	.497	.69
			25593	365.50	366.42	.92	TR-1	.156	.17

366.42 384.35 CHLORITE-CARBONATE SCHIST

		Fine grained, green strongly to moderately foliated section with carbonate wisps. Localized minor silicification and brecciation - less than 5%. Traces pyrite. Minor sericite along foliation at 40 degrees to the core axis throughout. Injection breccia with carbonate noted from 366.90 to 366.97 metres.	25594	366.42	367.42	1.00	TR	.690	.69
			25595	367.42	368.42	1.00	TR	.690	.69
			25596	368.42	369.42	1.00	TR	.170	.17
			25597	369.42	370.42	1.00	TR	.170	.17

NOTE : Collar to 135.63 m logged by N. Downey.

384.35 END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Co-ords: 9746.6 8975.0

DIAMOND DRILL RECORD

HOLE NO.: MC87-308B

Azimuth: 346.5

Section: 0+25W

Property: MORVEST OPTION

Dip: -67.0

Core Size: BQ

Location: 025W 253S

Elevation: 5003.2

Length: 385.9

Date Started: FEBRUARY 24, 1987

Date Completed: MARCH 3, 1987

Logged by: G. BASCHUK

Measurement: METRIC

Comments: CASING LEFT IN HOLE

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
30.48		-67.5	153.01	348.0	-68.0	304.80		-63.0
60.96		-67.0	182.88		-67.0	332.84	346.0	-64.0
85.65	348.0	-68.0	213.36		-66.0	335.28		-64.0
91.44		-67.5	240.18	347.5	-66.0	335.89	345.5	-64.0
121.92		-66.0	243.84		-65.5	381.00		-61.0
152.40		-68.0	274.32		-63.0			

-----Log Summary-----

.00 37.49 OVERBURDEN.  
 37.49 282.10 BASALT.  
 282.10 282.65 SHEAR ZONE.  
 282.65 307.58 BASALT.  
 307.58 309.05 GREENSCHIST.  
 309.05 310.29 CHLORITE-CARBONATE SCHIST.  
 310.29 329.61 MAIN MINERALIZED ZONE.  
 310.29 310.99 TRANSITIONALLY SILICIFIED ZONE.  
 310.99 312.55 UPPER SILICIFIED ZONE.  
 312.55 318.55 TRANSITIONALLY SILICIFIED ZONE.  
 318.55 319.67 CHLORITE-CARBONATE SCHIST.  
 319.67 320.02 MCKENNA FAULT PLANE.  
 320.02 320.51 MAIN SILICIFIED ZONE.  
 320.51 329.61 TRANSITIONALLY SILICIFIED ZONE.  
 329.61 375.13 CHLORITE-CARBONATE SCHIST.  
 375.13 385.88 TRANSITIONALLY SILICIFIED ZONE.  
 385.88 END OF HOLE.

From To Description Sample From To Length % Sul GN Au

.00 37.49 OVERBURDEN

37.49 282.10 BASALT

Intercalated massive and pillowed flows with local sections of glomeroporphyritic flows. Narrow lamprophyres, mafic and felsic intrusives cut the section. Flows are generally well developed with brecciated tops and foliated flow bottoms. Minor shear zones noted locally. Altered section, rich in carbonate noted from 176.30 to 179.41 metres.

25598	92.98	93.50	.52	1-2	1.607	3.09
25599	93.50	93.90	.40	TR-1	.068	.17
25600	93.90	94.37	.47	1-2	.324	.69
25601	176.30	177.30	1.00	1-2	1.030	1.03
25602	177.30	177.75	.45	TR-1	.463	1.03
25603	177.75	178.75	1.00	TR-1	.170	.17
25604	178.75	179.41	.66	TR-1	.680	1.03

37.49 39.93 Massive flow : possibly diorite. Fine grained, green with well developed equigranular interlocking texture. Weakly foliated. Non-magnetic.

39.93 43.40 Flow top breccia : foliated at top. Aphanitic pale green rounded fragments within a fine grained green matrix. Minor epidote in matrix at top.

43.40 44.62 Lamprophyre : fine grained, green brown with biotite blebs. Brownish at top with biotite weathered. White felsic grains noted throughout. Strongly magnetic. Very fine grained at lower contact.

44.62 49.00 Massive flow : very fine grained to fine grained. Green. Non-magnetic.

49.00 51.17 Felsic intrusive : red - green, fine grained. 1% finely disseminated pyrite. Non-magnetic. Non-carbonatized. Sharp contacts at 42 degrees to the core axis. Minor basaltic inclusion within.

51.17 56.35 Glomeroporphyritic flow : fine grained, green with white phenocrysts in clumps up to 2 cm across. Phenocrysts increasing number down section. Quartz - carbonate stringer at lower contact.

56.35 58.40 Flow bottom : foliated. Fine grained, green with local fish-net texture. Rare phenocrysts noted. Minor brecciation.

58.40 70.22 Flow top breccia : very fine grained, dark green foliated. Grades into pillowed flow. Poorly developed selvages, dominantly breccia with epidote and magnetite.

From	Description	Sample From	To	Length	% Sul	GM	Au
70.22	113.00	Massive flow : fine grained, green. Non-magnetic. Local epidote rich stringers with 2 to 3% pyrite and traces chalcopyrite. 73.88 to 73.92 : carbonate stringer at 40 degrees to the core axis with massive pyrite crystals up to 3 cm. 89.63 to 89.85 : mafic intrusive, fine grained, green with epidote phenocrysts and bluish coloured striated crystals, possibly magnesite. Strongly magnetic. Non-carbonatized. Contacts at 35 degrees to the core axis. 92.98 to 93.50 : highly brecciated and carbonatized section with 1 to 2% pyrite. Also at 93.90 to 94.37 metres. Massive flow between zones with epidote and trace to 1% pyrite. Foliated at 20 degrees to the core axis. 100.10 Metres : 1 cm shear rich in hematite, carbonate and chlorite. Shear at 48 degrees to the core axis. 110.82 to 111.43 : monzonite, very fine grained, green, weakly carbonatized. Trace to 1% pyrite. Contacts at 65 degrees to the core axis.					
113.00	147.12	Continuation of above but fine to medium grained. Well developed interlocking equigranular texture. Non-magnetic. Grey-green. Grain size increases down section to medium grained with poorly developed fish-net texture.					
147.12	147.30	Shear zone : highly foliated and carbonatized. No clay. Shearing at 50 degrees to the core axis.					
147.30	148.68	Massive flow : medium grained, green with fish-net texture. Continuation of above. Non-magnetic. Grain size gradually increasing down section.					
148.68	159.78	Massive flow : medium to coarse grained continuation of above with well developed fish-net texture. Previously diorite. Minor leucoxene.					
159.78	160.87	Foliated flow : continuation of above with foliation sub-parallel to core axis. Crenulation cleavage noted at 90 degrees to the core axis.					
160.87	173.16	Massive flow : medium grained, continuation of above. Non-magnetic. Well developed fish-net texture. Grain size decreasing down section to very fine grained by lower contact.					
173.16	173.45	Flow top : minor brecciation with					

From	Description	Sample From	To	Length	% Sul	GM	Au
	elongated hyaloclastite. Very fine grained to aphanitic, pale green.						
173.45	Massive flow : fine grained, dark green. Non-magnetic.		176.30				
176.30	Altered section of massive flow : carbonate rich injection breccia with basaltic and honey coloured fragments. 1% finely disseminated pyrite. Below 177.75 metres, massive flow with narrow carbonate - quartz stringers and trace to 1% pyrite.		179.41				
179.41	Massive flow : fine grained, green. Non-magnetic.		183.18				
183.18	Pillowed flow : aphanitic green, locally magnetic at selvages associated with magnetite and epidote. Selvages become better developed down section. Variolites noted locally at selvages.		217.80				
217.80	Vesicular flow : carbonate filled vesicles, chloritic down section. Very fine grained, green. Upper contact defined by last selvage.		220.90				
220.90	Massive flow : fine grained, green. Non-magnetic. Aphanitic at lower contact.		227.80				
227.80	Pillowed flow : very fine grained, dark green, strongly magnetic locally at selvages often with epidote. Locally vesicular at selvages.		244.90				
244.90	Vesicular flow : very fine grained to fine grained, green with epidote filled vesicles, chlorite down section. Local massive sections noted within.		262.60				
262.60	Massive flow : fine grained, dark green. Non-magnetic. 269.5 to 269.8 : flow breccia with green rounded fragments in fine grained dark green chloritic matrix.		275.60				
275.60	Massive flow : continuation of above with grain size increasing to medium grained. Dark green. Weakly to strongly magnetic. Equigranular interlocking texture.		282.10				
282.10	SHEAR ZONE	25605	282.10	282.65	.55	TR-1	.566 1.03
	Very fine grained, highly foliated with quartz - carbonate veining. Bluish chlorite and minor hematite alteration. Trace to 1% pyrite. Strongly magnetic. Shearing at 62 degrees to the core axis.						

From -----Description----- Sample From To Length % Sul SW Au

282.65 307.58 BASALT

Continuation of the massive flow from 275.60 to 282.10 metres. Below this a flow top breccia grades into a pillowed flow.

282.65 300.90 Massive flow : continuation of flow above shear zone. Magnetic to 285 metres, below this the colour changes to a more pale green. Below 297.6 metres the grain size decreases to very fine grained at the lower contact. 2 to 3% carbonate stringers and fracture fillings noted for lower 1 meter.

296.8 to 297.0 metres rare glomeroporphyritic phenocrysts noted. These are reddish-green and up to 1.5 cm.

300.90 301.16 Flow top : minor brecciation and minor hyaloclastite. Section grades into a pillowed flow. Hematite filled shear noted at 301.07 metres at 26 degrees to the core axis. Orange - pink glomeroporphyritic phenocrysts noted, possibly alteration product of fragments up to 2 cm across.

301.16 307.58 Pillowed flow : wide epidote rich selvages with poorly developed chills. Glomeroporphyritic phenocrysts noted. Locally vesicular and variolitic. Hematitic streak noted near gradational lower contact.

307.58 309.05 GREENSCHIST

Weakly foliated continuation of above glomeroporphyritic pillowed flow. Variolitic and locally vesicular. Trace to 1% pyrite often replacing carbonate bands. Foliation 40 to 50 degrees to the core axis. Crenulation cleavage noted locally - flat-lying. No hematitic streak. Strongly magnetic throughout, even in variolitic sections

25606 308.05 309.05 1.00 TR 1.030 1.03

309.05 310.29 CHLORITE-CARBONATE SCHIST

Strongly foliated dark purple green bands rich in carbonate with 1 to 2% finely disseminated pyrite. Strongly magnetic. Foliation at 45 degrees to the core axis. Carbonate quartz stringers at base. Possible clay seam at 310.12 metres at partially leached out carbonate stringer at 50 degrees to the core axis. Clay may be

25607 309.05 309.66 .61 1-2 4.600 7.54  
25608 309.66 310.29 .63 1-2 3.024 4.80

From -----Description----- Sample From To Length % Sul SW Au

from drillers grinding core ?.

310.29 to 329.61 metres - MAIN MINERALIZED ZONE.

The MAIN MINERALIZED ZONE is based upon amount and degree of silicification and is composed of 6 members including a narrow section of CHLORITE-CARBONATE SCHIST above the McKenna Fault. Two possible locations for the McKenna Fault were noted, 310.12 metres and 319.67 to 320.02 metres. No clay seam was noted in either case. Silicification and brecciation are not strongly developed and silicification is commonly coalescing purple clots in the matrix with orange - red - honey and white fragments. Pyrite contents are low.

310.29 310.99 TRANSITIONALLY SILICIFIED ZONE

40% Silicified breccia : dark purple green, finely brecciated with 1% pyrite. Pervasively carbonatized. Non-magnetic. Rare honey coloured fragments. Hematitic streak throughout. Foliation variable from 35 to 45 degrees to the core axis. No reaction to potassium ferricyanide.

25609 310.29 310.99 .70 1 .959 1.37

310.99 312.55 UPPER SILICIFIED ZONE

95% Silicified breccia : dark purple green with honey and dark purple coloured angular fragments. Non-magnetic. 1% disseminated pyrite. 1 to 2% quartz - carbonate stringers and fracture fillings. Weakly foliated defined by alignment of fragments at 40 and 65 degrees to the core axis - two distinct angles. Dominant silicification of matrix is coalescing purple blebs to form a massive aggregate of silicification. Pervasive carbonate alteration is decreasing down section and only in fragments at base - ie. Matrix is non-carbonatized at base.

25610 310.99 311.63 .64 1-2 1.536 2.40  
25611 311.63 312.55 .92 1 4.416 4.80

312.55 318.55 TRANSITIONALLY SILICIFIED ZONE

Dark purple green with coalescing style of purple silicification and honey coloured angular fragments in matrix. Honey fragments associated with white silicification in bands parallel to foliation. 1% pyrite in silicified breccia. Weakly magnetic to moderately

25612 312.55 313.30 .75 TR-1 1.028 1.37  
25613 313.30 314.30 1.00 1 2.740 2.74  
25614 314.30 315.30 1.00 TR-1 .340 .34  
25615 315.30 316.31 1.01 TR-1 .172 .17  
25616 316.31 317.31 1.00 TR-1 .340 .34  
25617 317.31 317.96 .65 TR .221 .34

From	To	Description	Sample	From	To	Length	% Sul	GW	Au
		magnetic. Silicified sections are weakly carbonatized. Hematitic streak throughout. Chloritic filled vesicles noted at top in relatively unaltered basalt. The white silicification associated with honey breccia fragments is rich in Fe - stains deep blue with potassium ferricyanide.	25618	317.96	318.55	.59	TR-1	1.617	2.74
312.55	313.30	40% silicified breccia : trace to 1% pyrite							
313.30	316.31	75% silicified breccia : trace to 1% pyrite associated with white silicified breccia. Silicification in matrix is purple and not brecciated.							
316.31	318.55	15% silicified breccia : trace to 1% pyrite. Purple coalescing style of silicification dominant, white silicification rare. Weakly foliated at 35 degrees to the core axis at base.							
318.55	319.67	CHLORITE-CARBONATE SCHIST							
		Intensely foliated fine grained green purple rock with 40% carbonate bands. Hematitic streak throughout. Traces pyrite. Non-magnetic. Minor sericite at base. Foliation at 47 degrees to the core axis.	25619	318.55	319.30	.75	TR	.382	.51
			25620	319.30	320.02	.72	TR	.497	.69
319.67	320.02	MCKENNA FAULT PLANE							
		Highly ground and fractured, no clay seam - presumed location.							
320.02	320.51	MAIN SILICIFIED ZONE							
		Very fine grained, finely banded buff to pink coloured silicified rock with no distinct brecciation. 10% pyrite. Foliation or laminations at 40 degrees to the core axis. Non-magnetic. Strongly carbonatized. Low Fe content - faint blue staining from potassium ferricyanide. Section resembles lower silicified zone of hole Mc.87-306, except the banding is finer.	25621	320.02	320.51	.49	10	.505	1.03
320.51	329.61	TRANSITIONALLY SILICIFIED ZONE							
		Silicification and brecciation is strongest near contacts and weak in the central section. Silicification consists of purple green coalescing style with red,	25622	320.51	321.51	1.00	TR-1	.170	.17
			25623	321.51	322.40	.89	TR-1	.303	.34
			25624	322.40	322.86	.46	TR-1	.317	.69
			25625	322.86	323.79	.93	TR-1	.642	.69

From	Description	Sample	From	To	Length	% Sul	GN	Au
	orange and rarely honey coloured fragments. Trace to 1% pyrite. Non-magnetic.	25626	323.79	324.65	.86	TR	.146	.17
		25627	324.65	325.50	.85	TR	.587	.69
320.51	323.79 65% silicified breccia : dark purple green with red - orange silicified breccia fragments and bands. Well developed foliation. Trace to 1% pyrite, 1% in silicified breccia. Silicification is reactive to HCl with blue stain from potassium ferricyanide. Foliation 48 degrees to the core axis at 323.70 metres. Becomes more chloritic down section. Hematitic streak throughout.	25628	325.50	326.20	.70	TR	.119	.17
		25629	326.20	327.20	1.00	1	.000	tr
		25630	327.20	328.20	1.00	NIL	.000	tr
		25631	328.20	329.00	.80	TR	.136	.17
		25632	329.00	329.61	.61	TR-1	.628	1.03
323.79	329.00 5 to 10% silicified breccia : fine grained, green foliated rock with narrow silicified breccia seams parallel to foliation. Silicification is red, white to pink and rarely honey coloured. Traces pyrite, locally up to 1% as a replacement in carbonate bands. Silicification is reactive to HCl. Foliation at 40 degrees to the core axis at 323.90 metres and 36 degrees to the core axis at 328.0 metres.							
	325.50 326.20 : green, granular section with dark green mafic clots up to 2 mm. Trace pyrite. Possibly relict medium grained massive flow or mafic intrusive.							
329.00	329.61 65% silicified breccia : purple green coalescing style silicification and orange - red, locally white fragments. Trace to 1% pyrite. Silicification is pervasively carbonatized. Non-magnetic. Foliated.							
329.61	375.13 CHLORITE-CARBONATE SCHIST							
	Fine grained to very fine grained, green, finely foliated rock. Non-magnetic. Rare narrow silicified breccia seams noted. Rare quartz stringers, less than 5% of the rock.	25633	329.61	330.61	1.00	TR	.340	.34
	Foliation : 40 degrees to the core axis at 338.55 metres.							
	60 Degrees to the core axis at 345.70 metres.							
	45 Degrees to the core axis at 351.65 metres and.							
	55 Degrees to the core axis at 370.0 metres							
	361.15 to 361.59 metres : medium grained, green section with mm sized mafic clots. Non-magnetic. Weakly foliated. Possibly relict mafic intrusive or massive flow.							

From	Description	Sample	From	To	Length	X Sul	GW	Au	
375.13	385.88	TRANSITIONALLY SILICIFIED ZONE							
	CHLDRITE-CARBONATE SCHIST with purple silicified bands, no brecciation, exhibiting a hematitic streak adjacent to silicification. Minor white and honey coloured silicified breccia. Traces pyrite. Strongly foliated throughout. Silicification is reactive to HCl. Non-magnetic.	25634	375.13	375.74	.61	TR	.000	tr	
		25635	375.74	376.43	.69	TR-1	.945	1.37	
		25636	376.43	377.14	.71	TR-1	.241	.34	
		25637	377.14	378.14	1.00	TR-1	.340	.34	
		25638	378.14	379.14	1.00	TR-1	.170	.17	
		25639	379.14	380.04	.90	TR	.000	tr	
		25640	380.04	380.62	.58	TR	.099	.17	
375.13	375.74	10% silicified : trace pyrite. Foliation 54 degrees to the core axis.	25641	380.62	381.17	.55	TR	.000	tr
			25642	381.17	382.17	1.00	TR	.000	tr
375.74	377.14	75% silicified, minor brecciation : trace to 1% pyrite. Foliation 42 degrees to the core axis.	25643	382.17	383.06	.89	TR-1	.303	.34
			25644	383.06	383.83	.77	TR	.000	tr
			25645	383.83	384.40	.57	TR	.097	.17
377.14	380.04	CHLDRITE-CARBONATE SCHIST : 5% silicification. Trace pyrite. Foliation 48 degrees to the core axis.	25646	384.40	384.92	.52	TR	.088	.17
			25647	384.92	385.88	.96	TR	.163	.17
380.04	381.17	60% silicified breccia : honey coloured fragments with purple silicified bands. Trace pyrite. Foliation 40 degrees to the core axis.							
381.17	383.06	2 to 3% silicified : foliation 45 degrees to the core axis.							
383.06	383.83	25% silicified breccia : white and honey coloured fragments in fine grained green matrix with 5% leucoxene overgrowths. Trace pyrite. Foliation 45 to 50 degrees to the core axis.							
383.83	384.40	80% silicified breccia : white and honey coloured fragments in fine grained, green matrix. Traces pyrite. 1 to 2% leucoxene overgrowths. Mafic grains noted in matrix - possible relict fine to medium grained basalt. Non-magnetic. Minor sericite along fragment boundaries.							
384.40	385.88	25% silicified breccia : as described above from 383.06 to 383.83 metres. Foliation 45 degrees to the core axis.							
385.88 END OF HOLE.									



32D125W0301 63.4992 HOLLOWAY

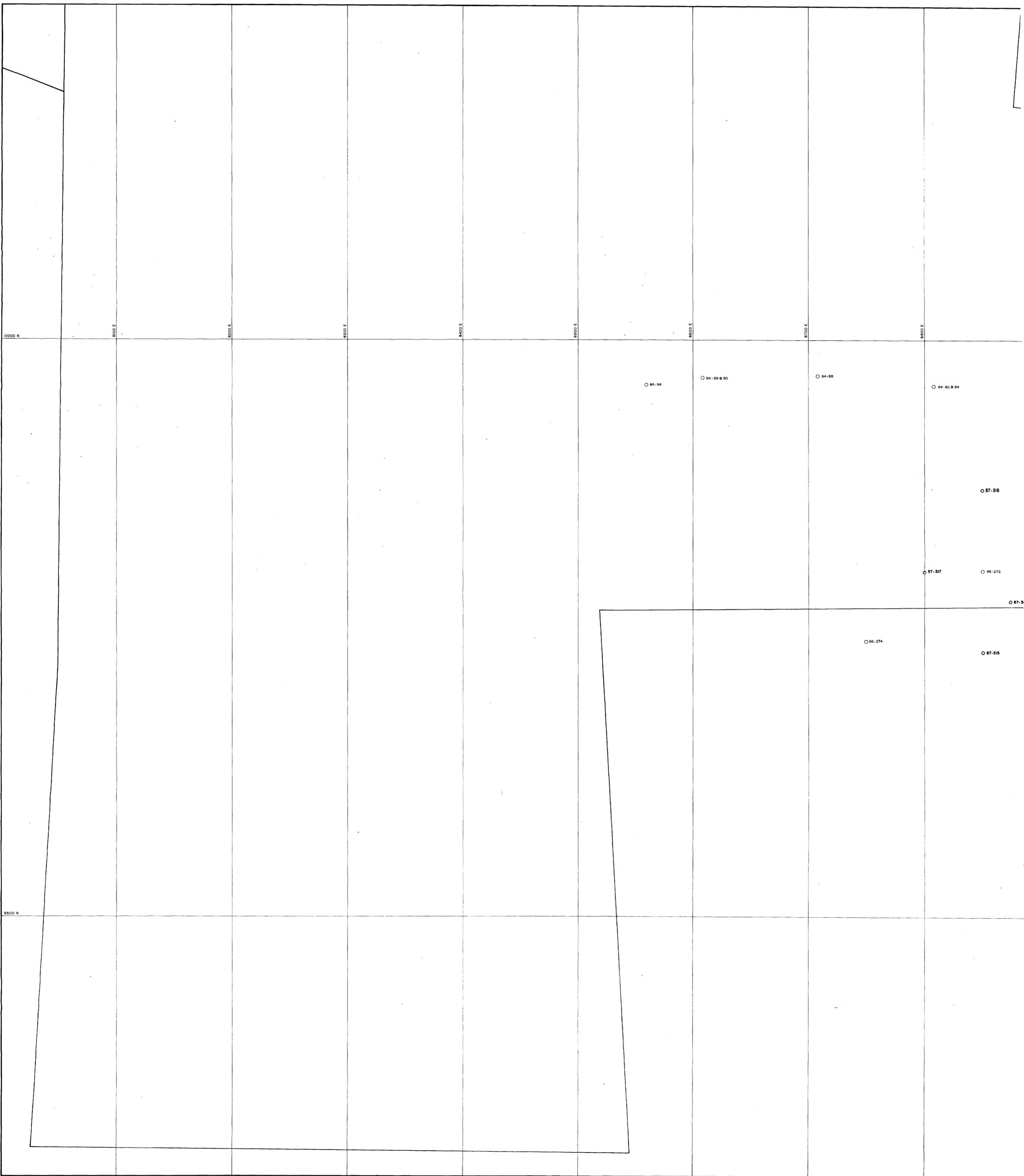
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OM 86-6-C-78

THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

Diamond drill log	→	see Toronto file
* MC86-276		diamond drilling # 30
American Barrick Res.		Holloway Tp.
Gilles Tousignant, Apr./87		R.O.W # 456 for 1986



10000 N

8500 E

8600 E

8700 E

8800 E

8900 E

9000 E

9100 E

9200 E

9500 N

○ 84-94

○ 84-89 & 90

○ 84-88

○ 84-82 & 84

○ 87-316

○ 87-317

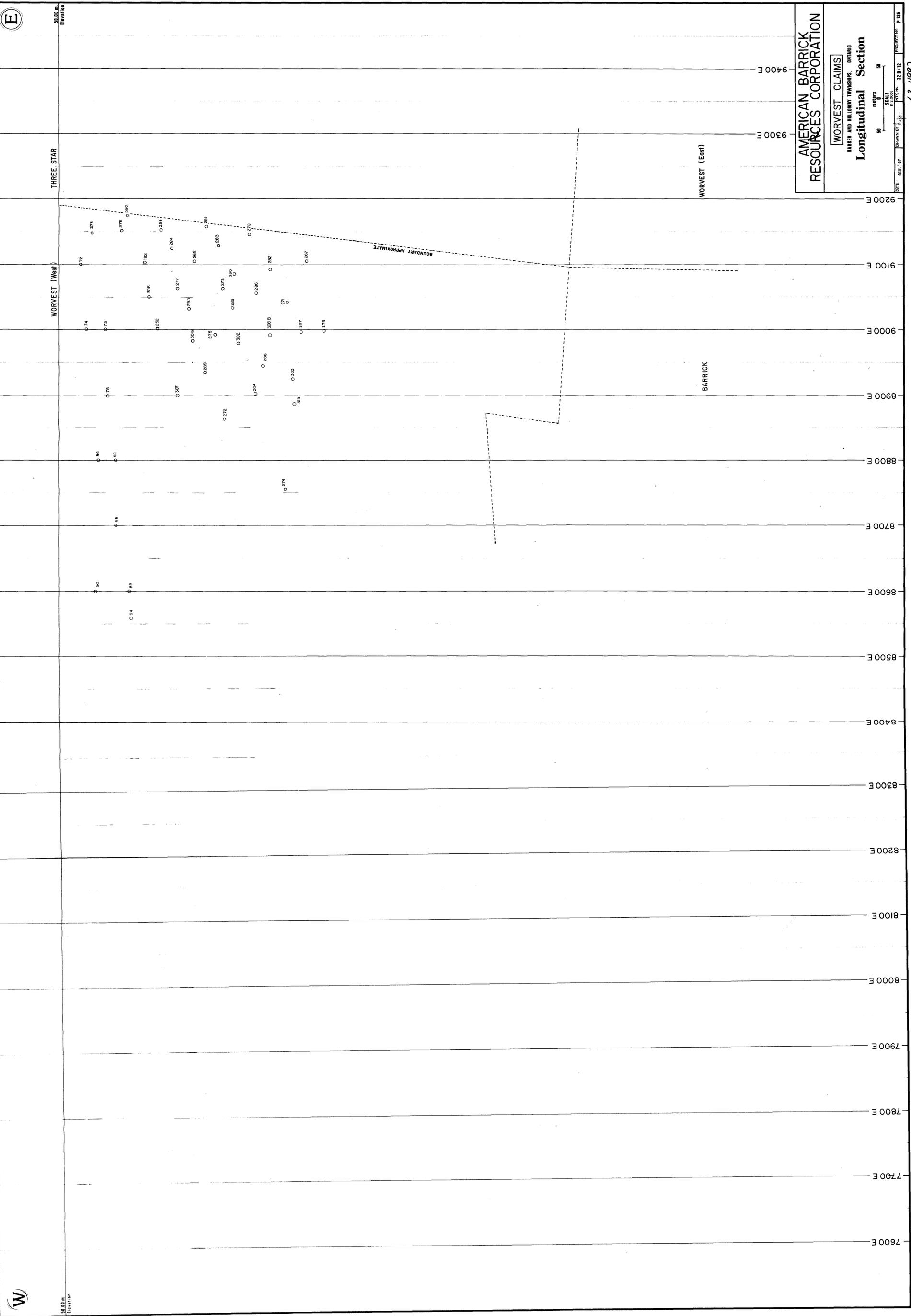
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○ 87-3

○ 86-274

○ 87-315





(E)

(W)

58.00 m  
Elevation

THREE STAR

WORVEST (West)

WORVEST (East)

BARRICK

BOUNDARY APPROXIMATE

**AMERICAN BARRICK  
RESOURCES CORPORATION**

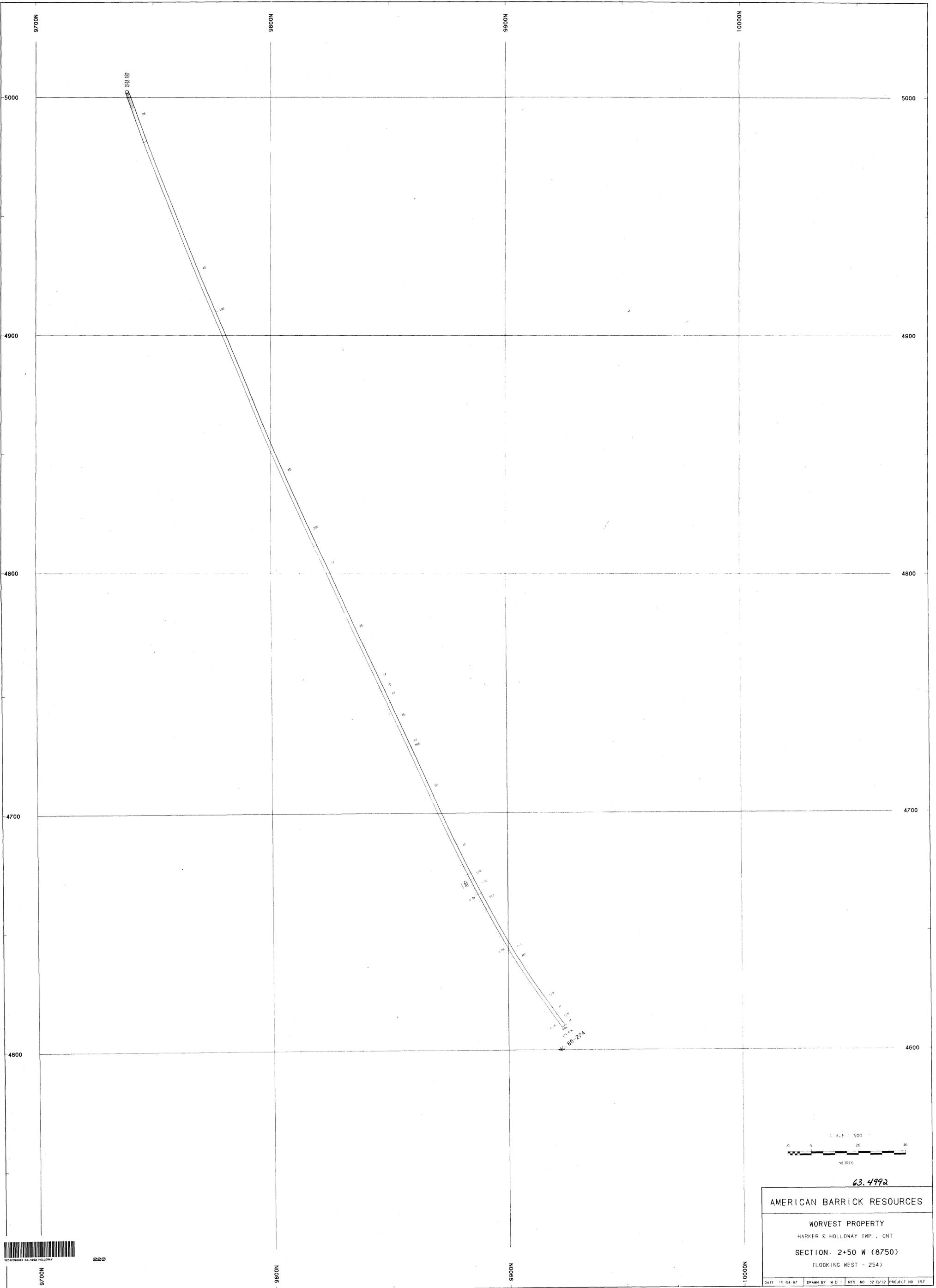
**WORVEST CLAIMS**  
HARKER AND HOLLOWAY TOWNSHIPS, ONTARIO  
**Longitudinal Section**

DATE: 2001-08-27 DRAWN BY: J. J. J. PROJECT NO.: P 133

Scale: 1:10000  
1" = 10000'

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014-86-6-C-79





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AMERICAN BARRICK RESOURCES

WORVEST PROPERTY  
 HARKER & HOLLOWAY TWP., ONT

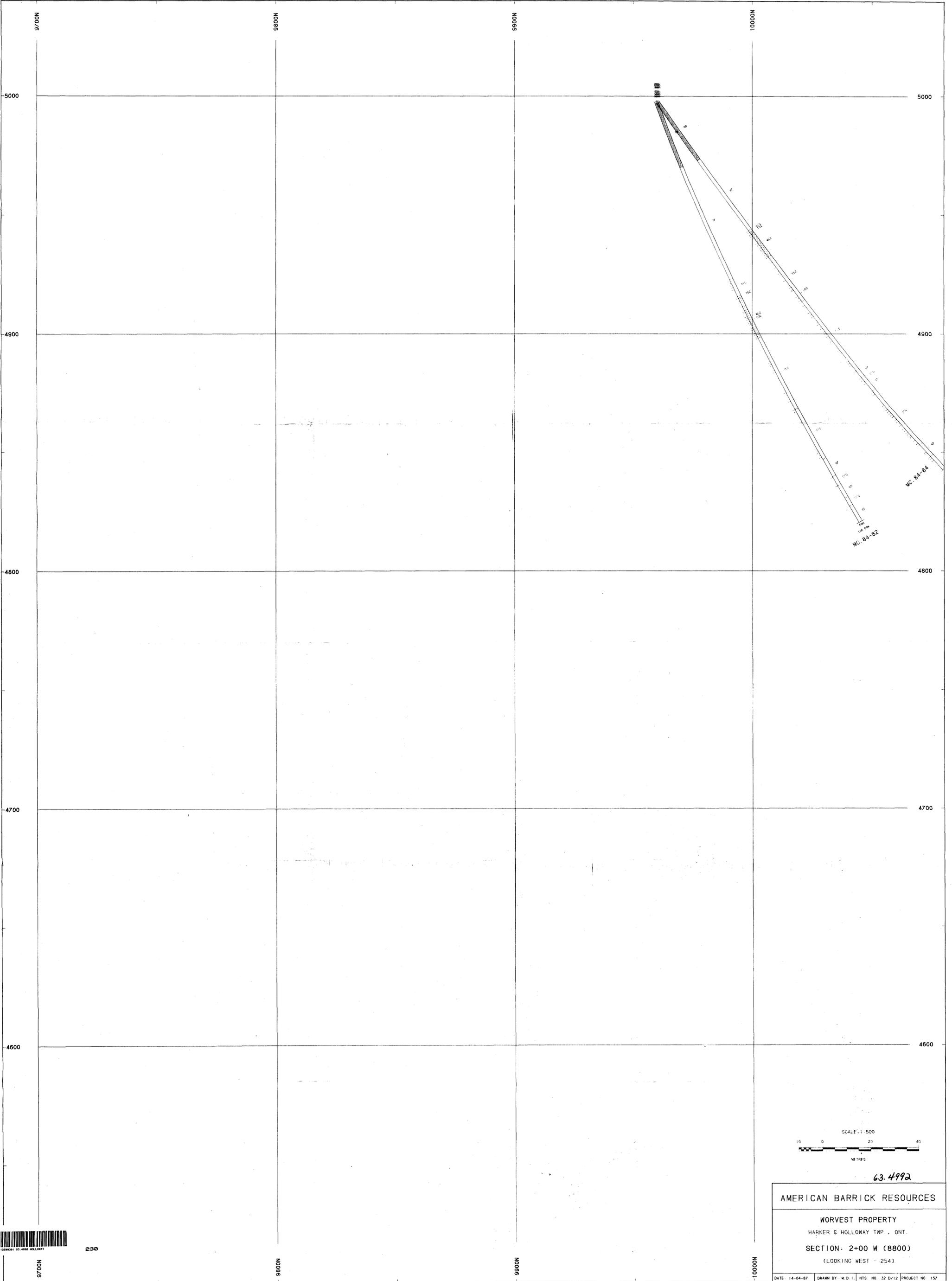
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DATE: 15.04.87 DRAWN BY: M.D.1 NTS. NO. 32 D/12 PROJECT NO. 157



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AMERICAN BARRICK RESOURCES  
 WORVEST PROPERTY  
 HARKER & HOLLOWAY TWP., ONT.  
 SECTION: 2+00 W (8800)  
 (LOOKING WEST - 254)

DATE: 14-04-87 DRAWN BY: M.D.11 NTS. NO. 32 D/12 PROJECT NO. 157

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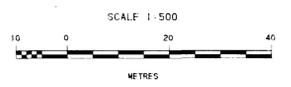
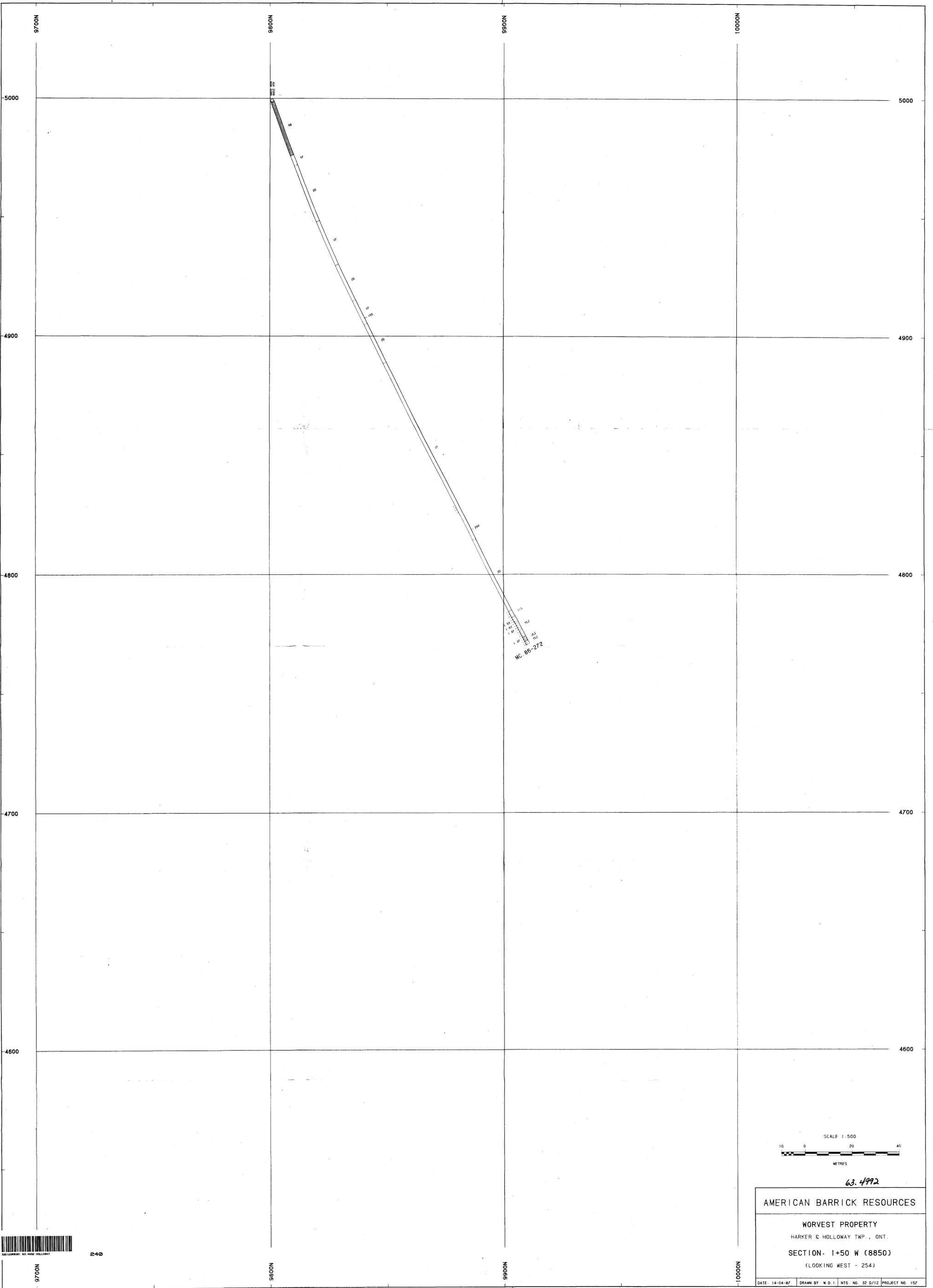
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AMERICAN BARRICK RESOURCES

WORVEST PROPERTY  
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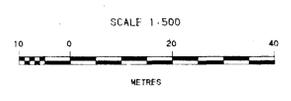
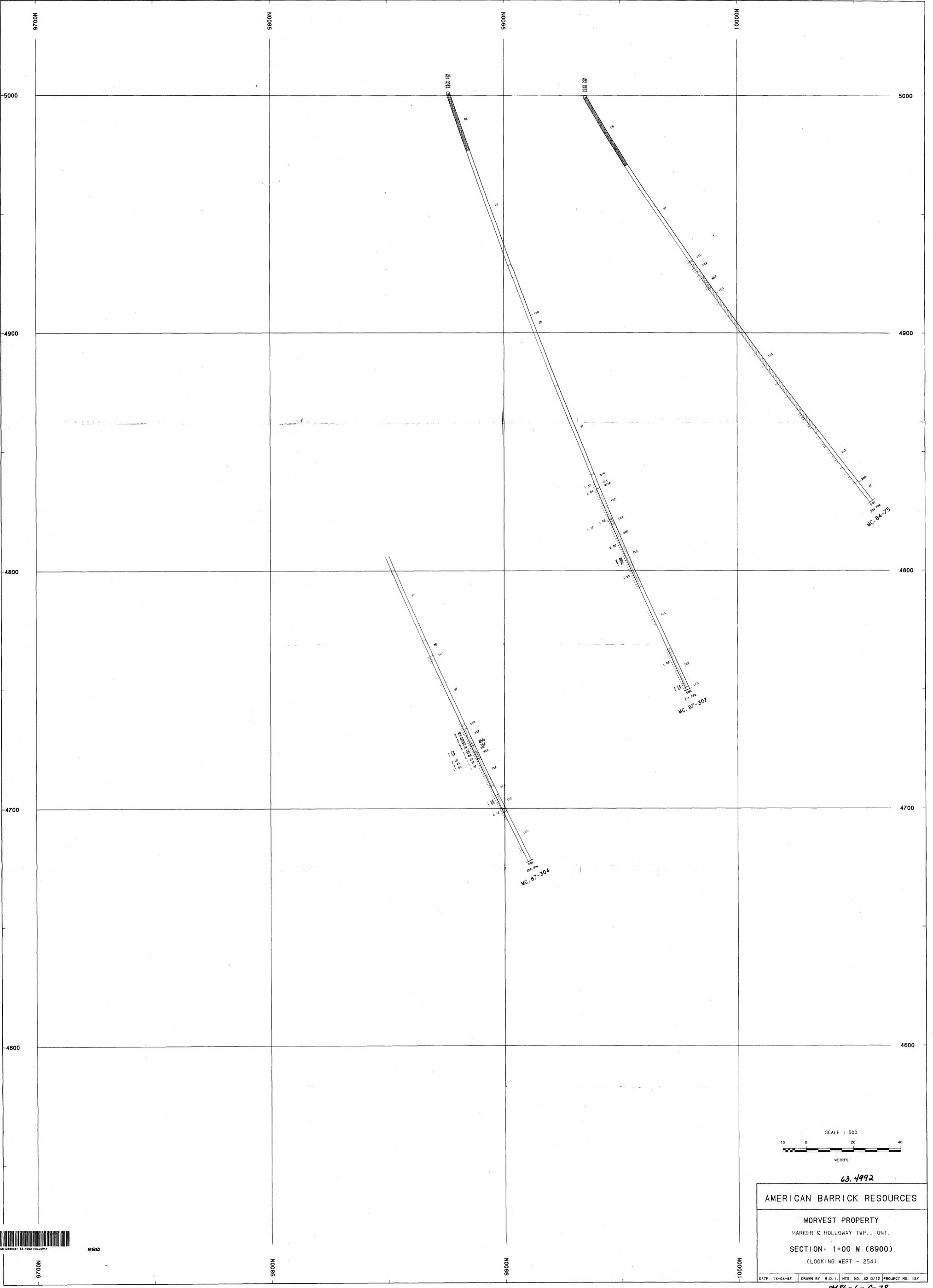
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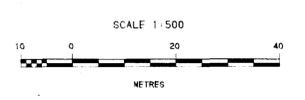
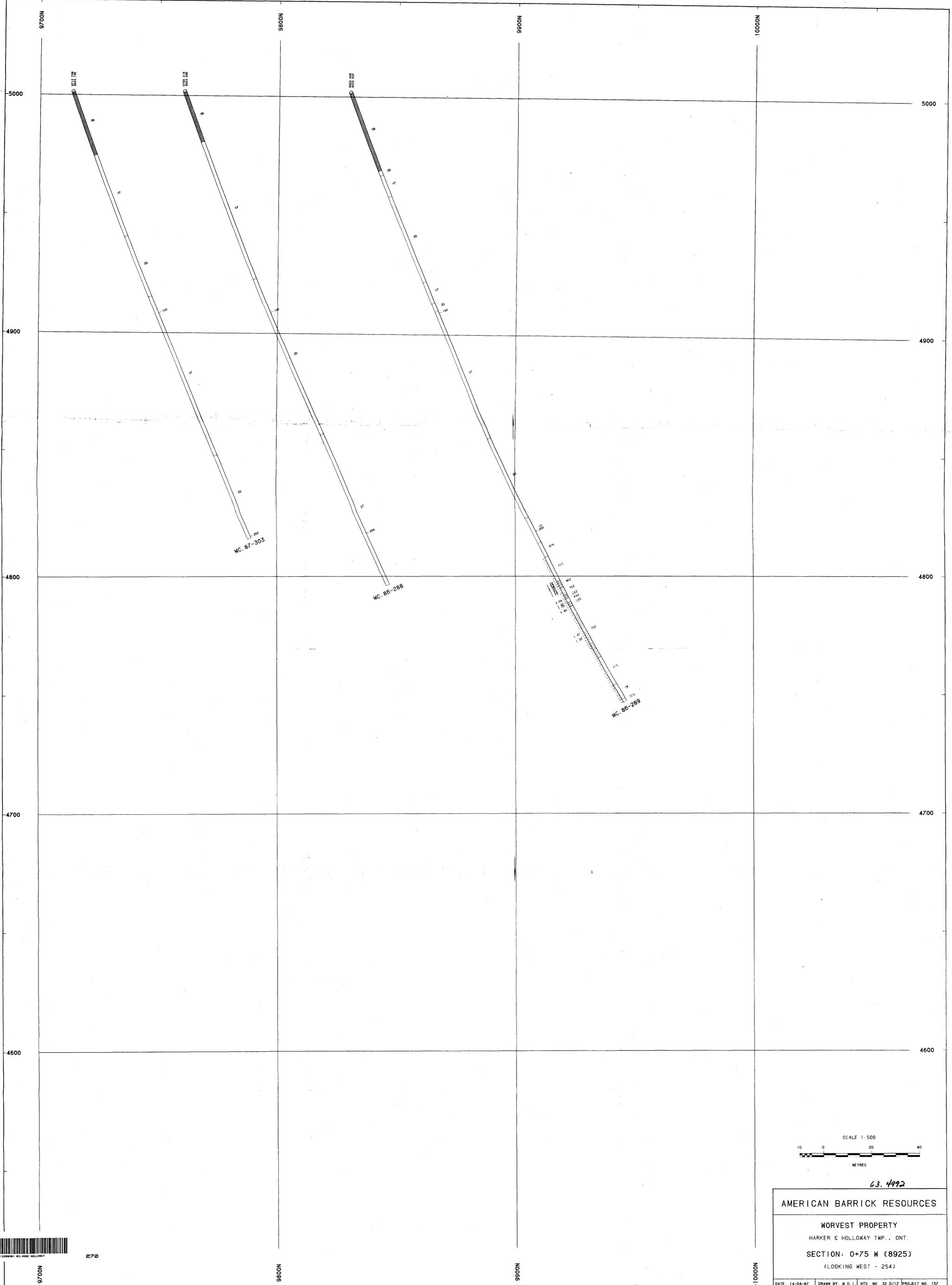




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**AMERICAN BARRICK RESOURCES**  
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 (LOOKING WEST - 254)



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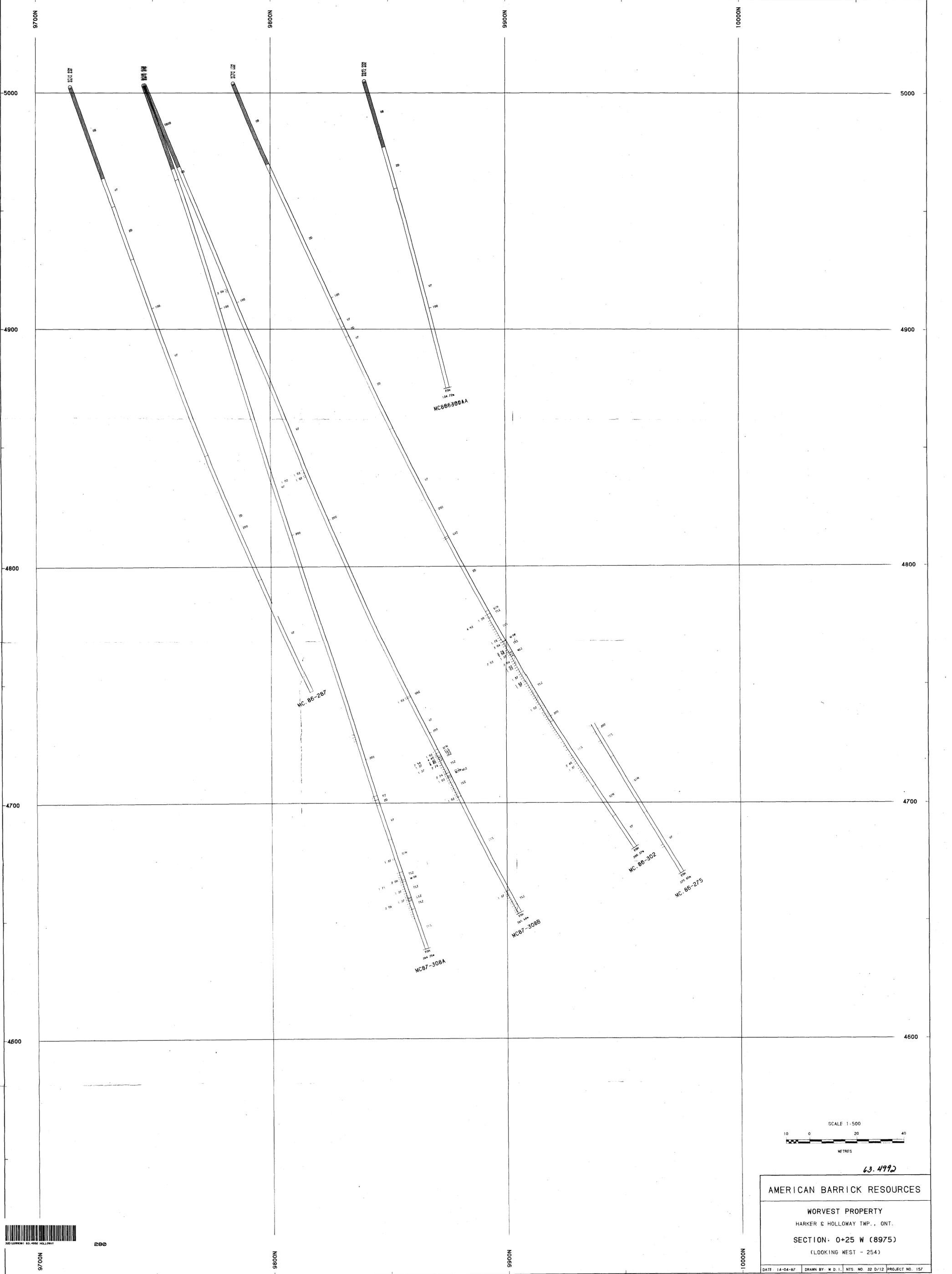
AMERICAN BARRICK RESOURCES

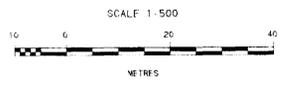
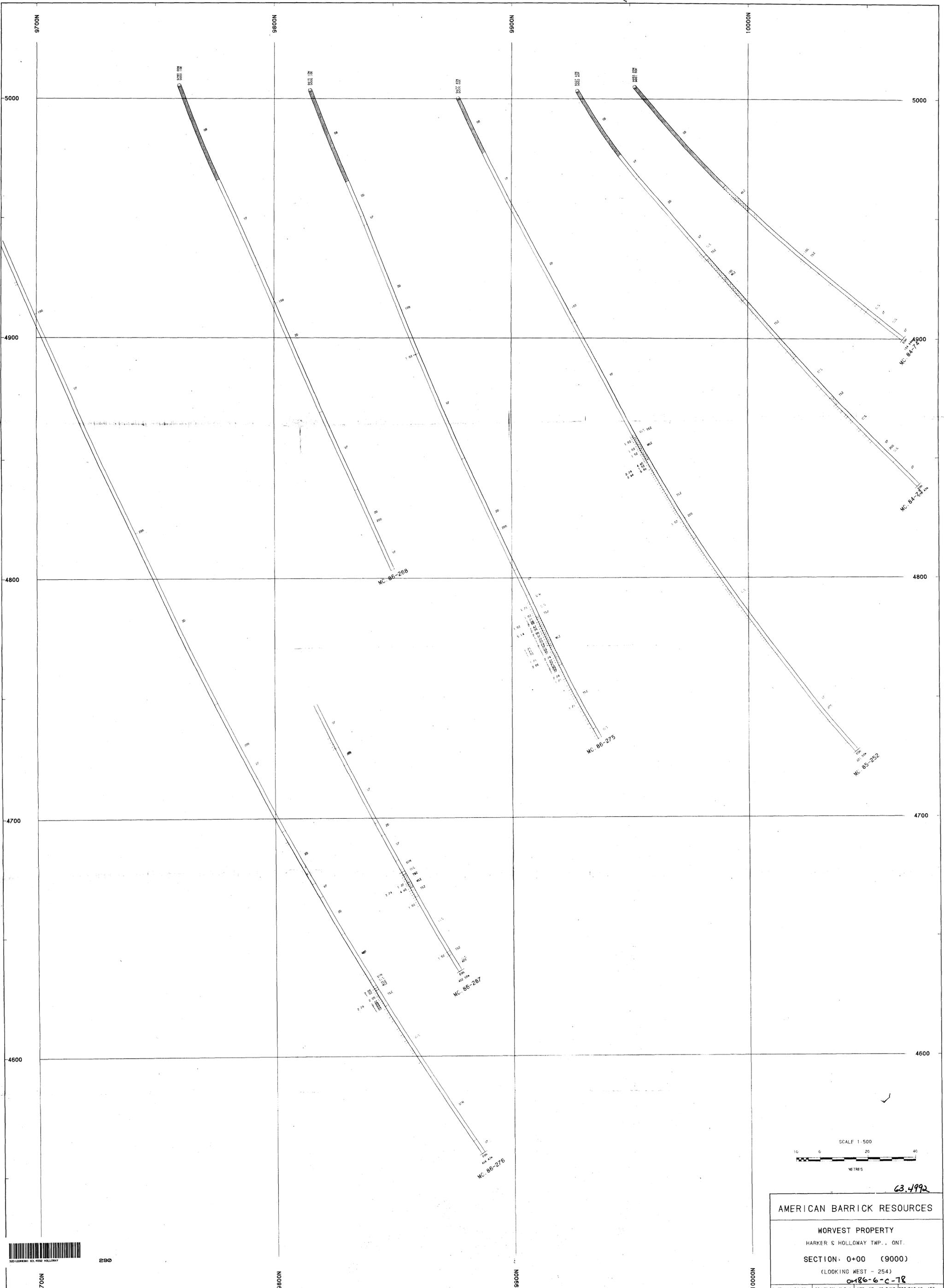
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DATE: 14-04-87 DRAWN BY: M.D.I. NTS. NO. 32 D/12 PROJECT NO. 157



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WORVEST PROPERTY  
HARKER & HOLLOWAY TWP., ONT.

SECTION: 0+00 (9000)  
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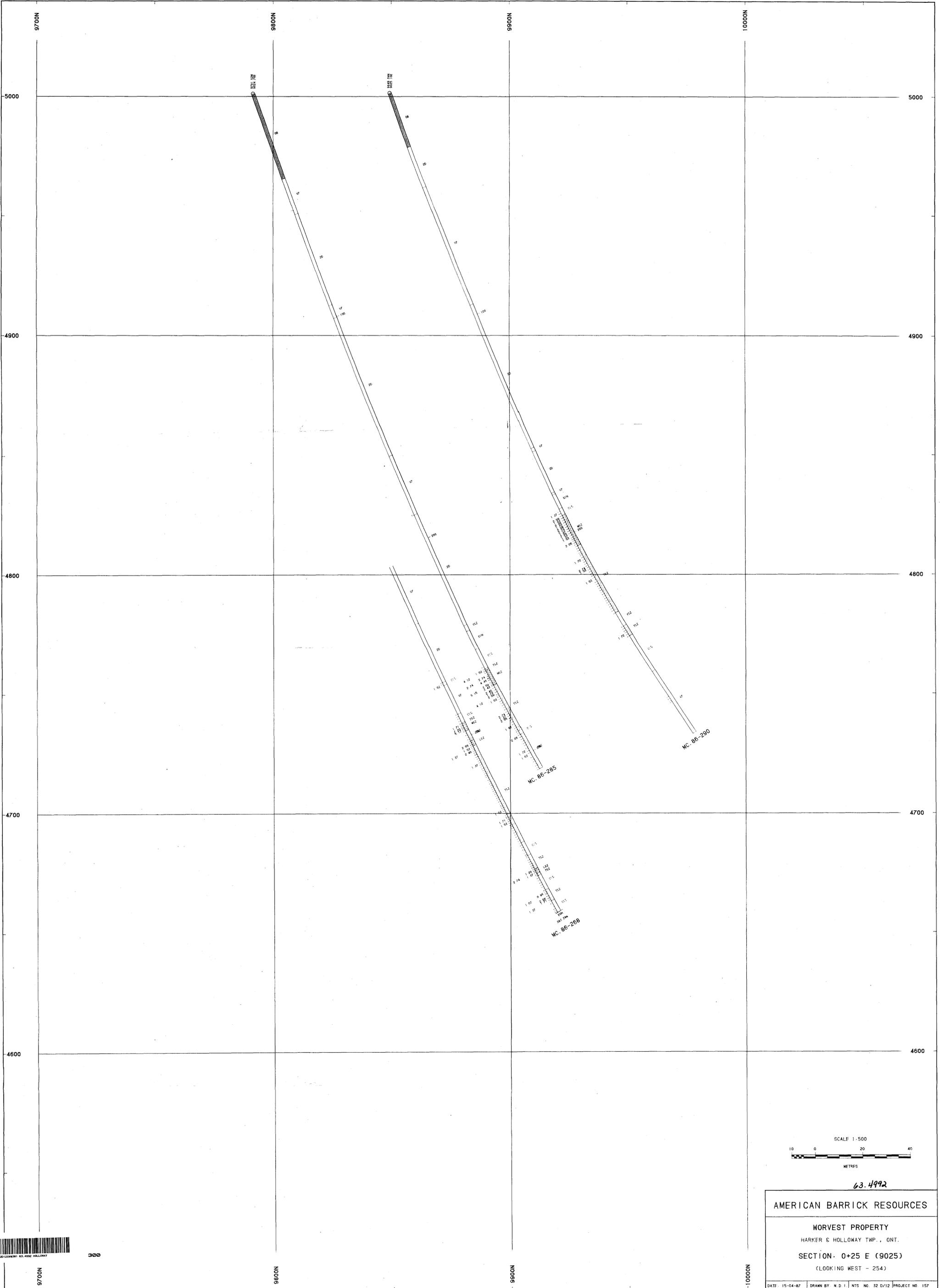
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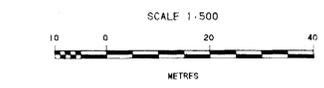
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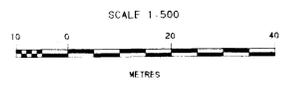
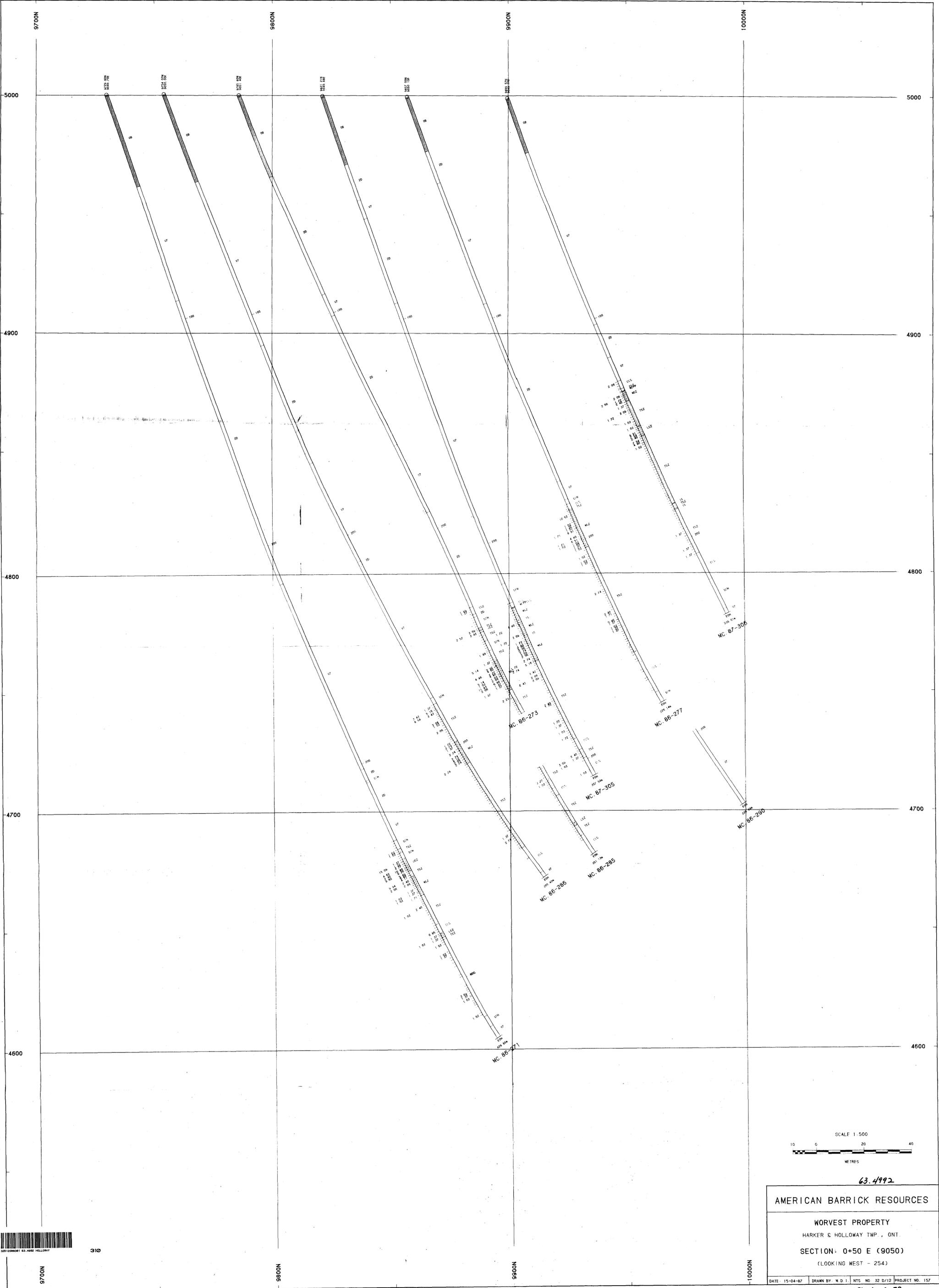
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AMERICAN BARRICK RESOURCES

WORVEST PROPERTY  
 HARKER & HOLLOWAY TWP., ONT.  
 SECTION 0+25 E (9025)  
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DATE: 15-04-87 DRAWN BY: W.D.I. NTS: NO. 32 D/12 PROJECT NO. 157

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AMERICAN BARRICK RESOURCES

WORVEST PROPERTY  
 HARKER & HOLLOWAY TWP., ONT.  
 SECTION: 0+50 E (9050)  
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DATE: 15-04-87 DRAWN BY: M.D.T. NTS. NO. 32 D/12 PROJECT NO. 157

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310

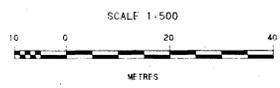
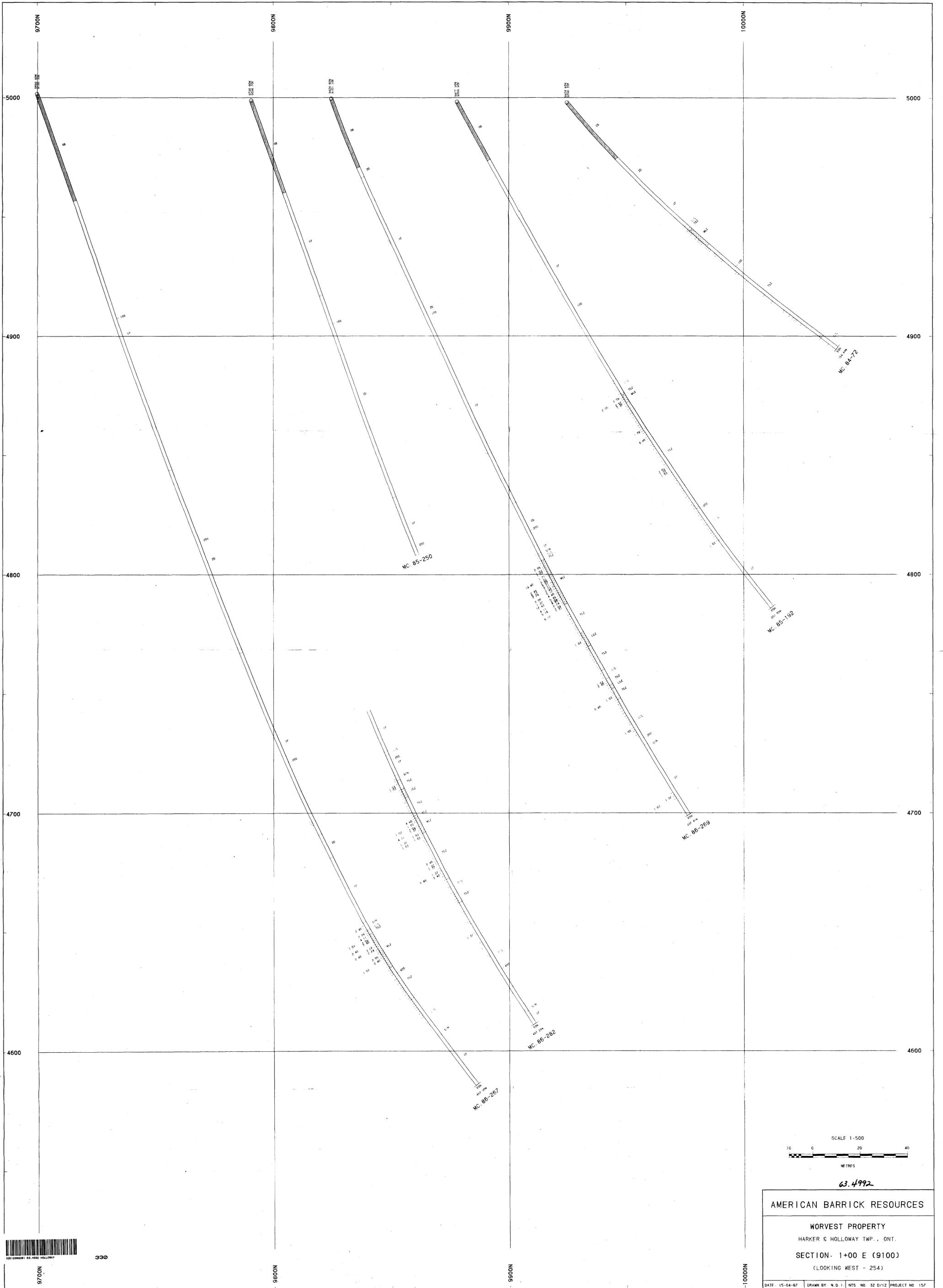
9700N

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AMERICAN BARRICK RESOURCES  
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 HARKER & HOLLOWAY TWP., ONT.  
 SECTION: 1+00 E (9100)  
 (LOOKING WEST - 254)

DATE: 15-04-87 DRAWN BY: M.D.I. NTS. NO. 32 D/12 PROJECT NO. 157

0486-6-C-78



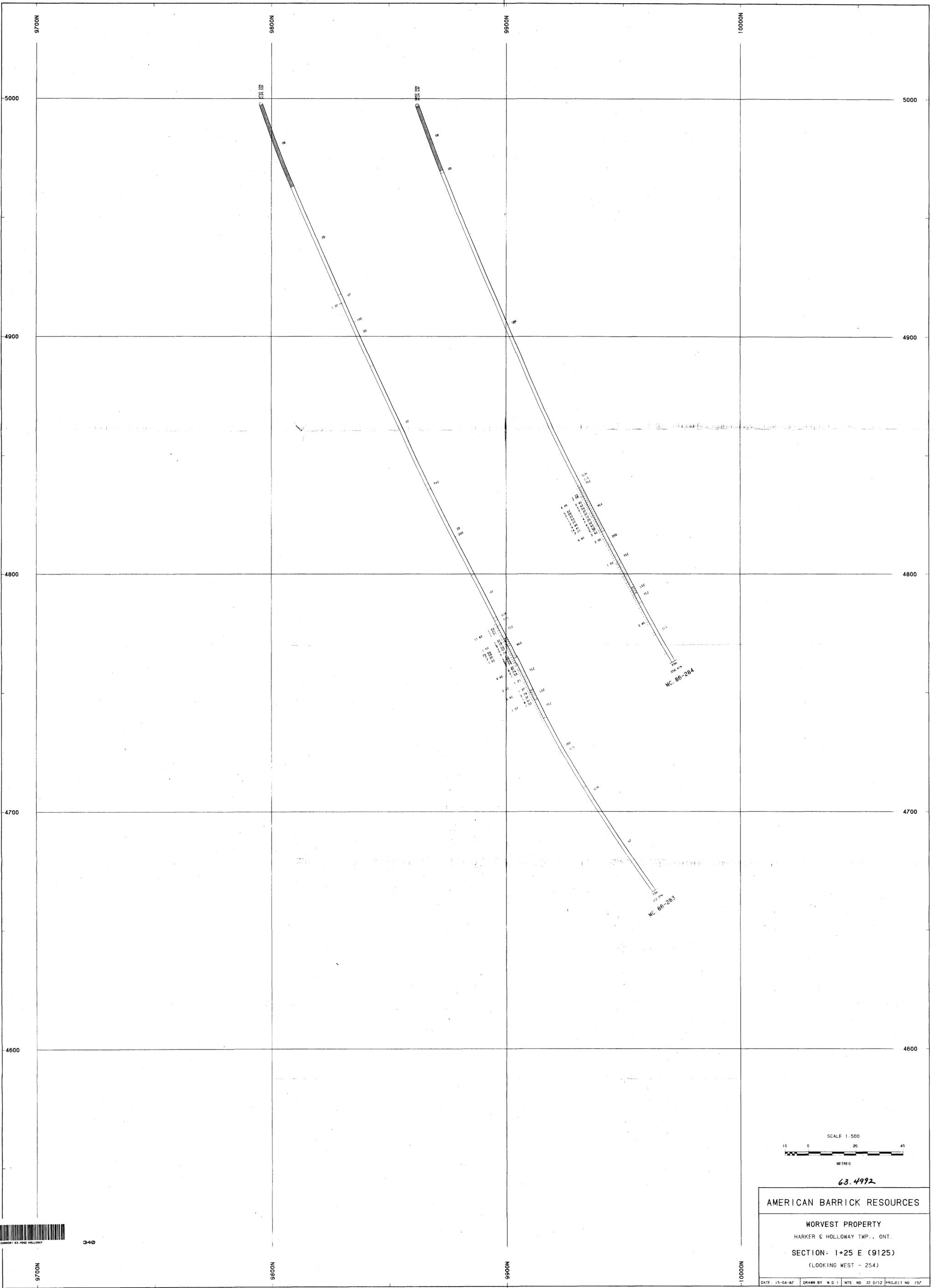
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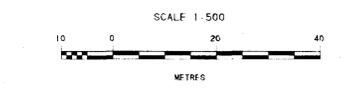
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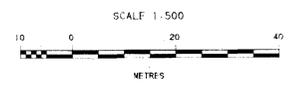
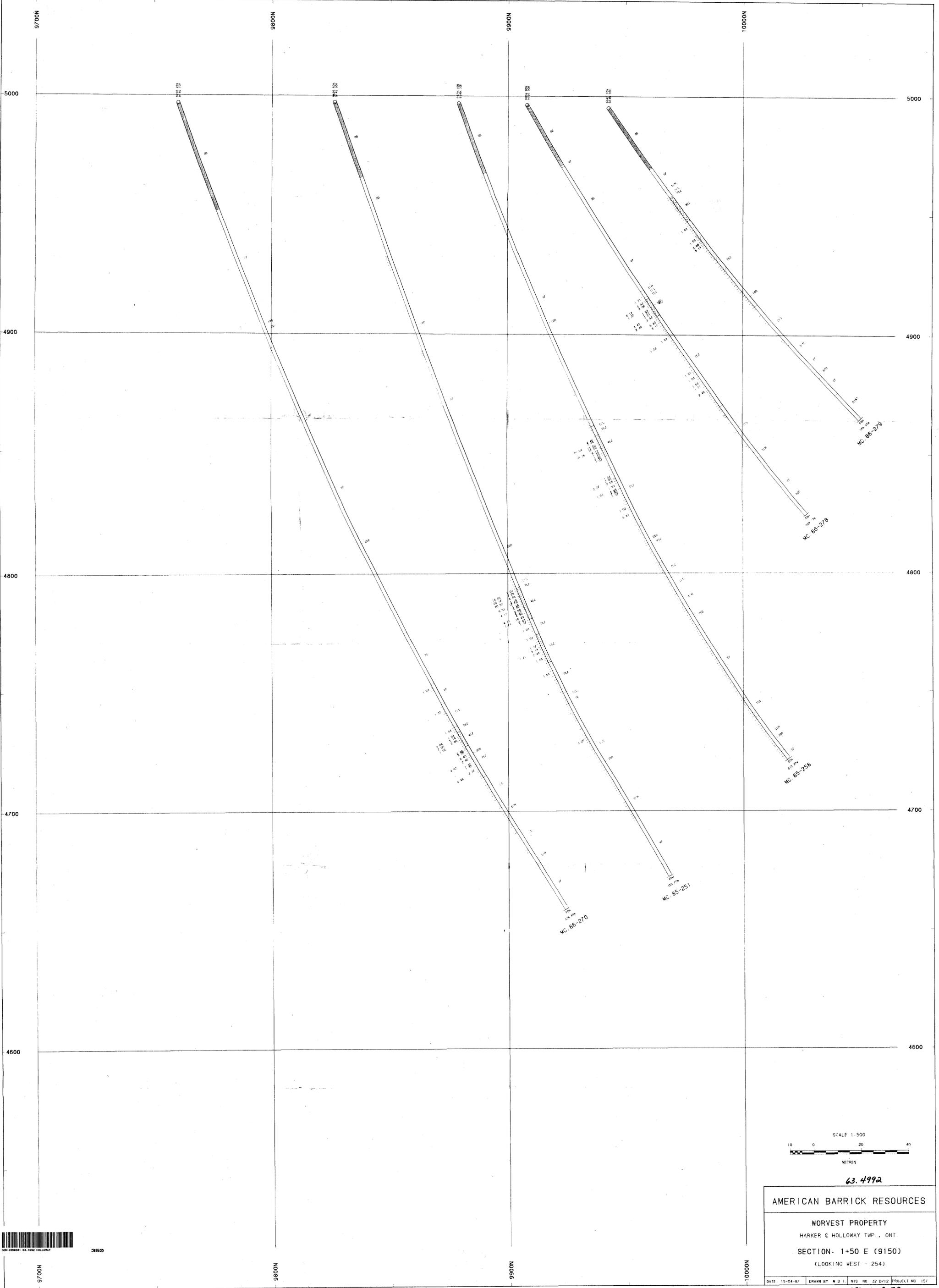
63.4992

AMERICAN BARRICK RESOURCES

WORVEST PROPERTY  
 HARKER & HOLLOWAY TWP., ONT.  
 SECTION: 1+25 E (9125)  
 (LOOKING WEST - 254)

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0486-6-C-78



63.4992

AMERICAN BARRICK RESOURCES

WORVEST PROPERTY  
 HARKER & HOLLOWAY TWP., ONT

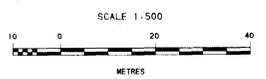
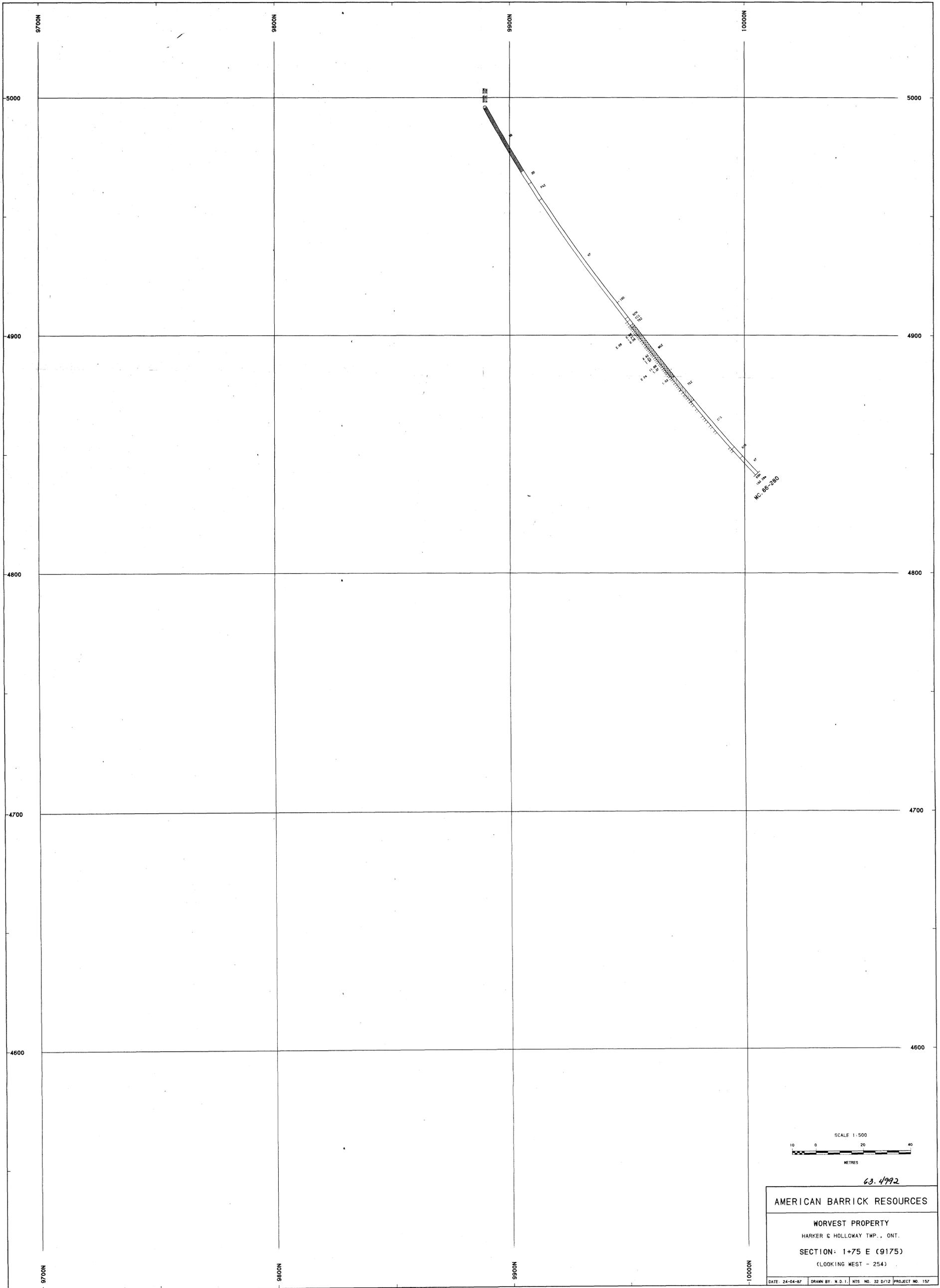
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 (LOOKING WEST - 254)

DATE 15-04-87 DRAWN BY M.D.I. NTS. NO. 32 D/12 PROJECT NO. 157



350

0186-6-C-78



63.4992

AMERICAN BARRICK RESOURCES

WORVEST PROPERTY  
 HARKER & HOLLOWAY TWP., ONT.  
 SECTION: 1+75 E (9175)  
 (LOOKING WEST - 254)

DATE: 24-04-87 | DRAWN BY: N.D.I. | NTS. NO. 32 D/12 | PROJECT NO. 157

0186-6-C-78

