



DIAMUNU DRILLING

TOWNSHIP: HARKER

REPORT NO: 70

WORK PERFORMED FOR:

AMERICAN BARRICK RESOURCES CORP

RECORDED HOLDER: SAME AS ABOVE [1]

: OTHER []

CLAIM NO.	HOLE NO.	FOOTAGE	DATE	NOTE
L802672	MC91-710	249.94 m	Feb 91	(1)
L802672	MC91-711	238.4 m	Feb/Mar 91	(1).
L641390	MC91-712	36.58 m	Mar 91	(1)
L641390	MC91-712A	244.8 m	Mar 91	(1)
L802671	MC91-713	204.5 m	Mar 91	(1)

. 54NM

979.22 m

NOTES:

(1), W 9180.05110

AMERICAN BARRICK RESOURCES CORPORATION

Property: WEST BLOCK Township: HARKER Clair L802672 NTS: 320/5,12

DIAHOND DRILL RECORD

Hole #: MC.91-710

Survey Co-ords:

2200.4 10380.2

Cut-Grid Co-ords: 2200E 10380N

Section:

2200E

5011.0

Elevation: Measurement: METRIC

Date Logged: FEB. 22-28, 1991 G. BASCHUK Logged by: Signature:

Azimuth:

Dip:

-50.0

43.6

Length: 249.9 Contractor: PHILIPPON

Core Size: BQ Date Started: FEB. 20, 1991

Date Completed: FE8. 26, 1991

Core Stored At: HOLT-McDERMOIT MINE Comments: 9.14M OF CASING PULLED

Depth	Azimuth Dip	Depth	Azimuth Dip	Depth	Azimuth Dip
45.72	-49.0	137.16	-48.5	228.60	-49.0
91.44	-48.5	182.88	-48.5	249.94	-49.0

Control Summary	
.00 15.85 CASING -13.11 m of OVERBURDEN.	Action Time Date
15.85 22.33 SYENITE.	Ontario Memo 92 02 104
22.33 30.80 HIGH MAG BASALT.	To From (Name and City)
30.80 35.18 SYENITE.	I.C.N. No. Area Code Telephone No. Ext. Message Taken By
35.18 38.09 HIGH MAG BASALT.	Phoned Please Call Will Call Back Waiting Will Return
38.09 49.99 SYENITE.	On Returned Wishes Appointment Was Here Draft Reply For Provide For Your
49.99 53.66 HIGH MAG BASALT.	☐ File ☐ Draft Reply For ☐ Provide ☐ For Your Information ☐ Type Draft ☐ For Your Approval ☐ Keep Me ☐ Per Discussion ☐ Type Draft ☐ For Your Approval ☐ Informed ☐ Per Discussion
53.66 74.92 SYENITE.	☐ Type Final ☐ Circulate, Initial ☐ Take Appropriate Action ☐ Per Your Request
74.92 159.16 HIGH MAG BASALT.	☐ Make ☐ Return ☐ Note and ☐ Returned ☐ With Comments ☐ See Me ☐ With Thanks
159.16 162.77 SYENITE.	Please Answer Investigate Note and Return
162.77 197.33 HIGH MAG BASALT.	Comments:
197.33 206.85 SYENITE.	Legend
206.85 212.49 BASALT.	% Sul = SULPHIDE PERCENTAGE
212.49 233.82 SYENITE.	GW Grade Width
233.82 249.94 HIGH MAG BASALT.	Auglt Gold grams/Ton
249.94 END OF HOLE.	grams/ Ton
	7540-1452

HC.91-710 Hole :

Page #: ?

To Length & Sul

CW

Au g/t

.00 15.85 CASING

.00 13.11 OVERBURDEN.

91781 13.11 14.39 1.28 .000 TR-1 nil 91782 14.39 15.37 .98 **TR-1** .000 nil 91783 15.37 15.85 .48 TR .005 .01

- 13.11 14.39 SYENITE. Pink red, fine grained intrusive. The central section is red and possibly hematized with 1 to 2% pyrite in isolated blebs commonly as an alteration of magnetite. Locally pyrite is noted within stringers or late stage fractures, 38% core recovery within the interval. Lower contact is at 60 degrees to the core axis. The contact is sharp but a second, narrow syenite continues subparallel to core axis for 15 cm.
- 14.39 15.37 Fine grained massive flow HIGH MAG BASALT. Dark green, strongly magnetic flow with trace to 1% finely disseminated pyrite. Localized pale green blebs up to 5 mm noted. possibly feldspar. These are hard and irregularly shaped. At the lower 15 cm the texture is equigranular and sub-ophitic.
- 15.37 15.85 SYENITE. Fine grained, pink red with 3% black magnetite grains throughout. Iraces pyrite as an alteration to magnetite. Contacts are sharp at 80 and 24 degrees to the core axis. Rare feldspar phenocrysts up to 8 mm long are noted.

15.85 22.33 SYENITE

- 15.85 16.46 Fine grained massive flow? mafic intrusive. green, strongly magnetic, strongly pervasively carbonatized and foliated at 65 degrees to the core axis. Minor purple hued. hard alteration near base containing trace to 1% pyrite.
- 16.46 17.28 Biotitic. Fine grained, gneissic section with 10% biotite, minor chlorite and trace to 1% pyrite. Weakly magnetic. This may be a separate intrusive. Upper contact is at ground core, lower is sharp at 40 degrees to

91784	15.85	16.46	.61	TR-1	.006	.01
91785	16.46	17.28	.82	TR-1	.008	.01
91786	17.28	17.90	.62	TR	.000	nil
91787	17.90	18.85	. 95	TR-1	,000	nil
91788	18.85	19.85	1.00	TR	.000	ni1
91789	19.85	21.00	1.15	TR	.011	.01
91790	21.00	22.33	1.33	TR	.000	nil

Hole #: MC.91-710

Page #: 3

From I

-----Description-----

Sample From To Length & Sul

G₩

Au g/t

the core axis.

17.28 22.33 Fine to modium grained. Pink red, weakly magnetic intrusive with the center medium grained with feldspars up to 3 cm. These are moderately fractured along cleavage planes and hematite filled. Traces pyrite noted. From 17.9 to 18.85 m biotitic intrusives are noted and a 18 cm section of fine grained massive flow.

22.33 30.80 HIGH MAG BASALT

22.33 30.80 Fine grained massive flow. Dark green, strongly magnetic, locally pervasively carbonatized (generally at top) and cut by biotite rich pink to grey white feldspar rich intrusives. Pyrite is generally rare but noted within narrow, white, biotite rich intrusives.

23.24 23.93 SYENITE. Fine to medium grained, pink red intrusive with traces of pyrite. Weakly fractured and weakly magnetic. Contacts are sharp at 30 and 50 degrees to the core axis.

30.80 35.18 SYENITE

30.80 35.18 Fine grained. Pink purple hued, patchy intrusive with weakly hematitic central section. The purple hue is due to hematite. Contacts at 35 and 60 degrees to the core axis.

32.82 33.20 Fractured possibly a fault gouge subparallel to core axis. Syenite is weakly bleached with trace to 1% finely disseminated pyrite.

35.18 38.09 HIGH MAG BASALT

35.18 38.09 Fine grained massive flow. Same as described above from 22.33 to 30.80 m. Locally patches of 80% biotite are noted associated with

91791 22.33 23.24 .91 TR-1 .000 nil 91792 23.24 23.93 .69 TR .000 nil 91793 23.93 25.10 1.17 TR-1 .105 .09

91794 31.82 32.82 1.00 TR .010 .01 91795 32.82 33.20 .38 TR-1 .042 .11 . 91796 33.20 34.20 1.00 TR .100 .10

91797 36.59 37.19 .60 TR .000 nil

Hole #: MC.91-710

Page #: 4

From I

------Pescription-----

Sample From To Length & Sul

Sul

GW.

Au q/t

minor carbonatization. These are near stringers of syenite.

38.09 49.99 SYENITE

38.09 49.99 fine grained green pink intrusive with minor sericite. From the upper contact to approximately 47.2 m the rocks are relatively uniform with patchy hematitic alteration adjacent to magnetite blebs. Upper contact of syenite is sharp at 25 degrees to the core axis. From 47.2 to the lower contact minor green hue is noted due to sericite. Minor bluish coloured possible feldspars noted - plagioclase. Lower contact is sharp at 10 degrees to the core axis.

91798	47.20	48.20	1.00	TR	.000	nil
91799	48.20	49.20	1.00	1R	.000	nil
Q1200	4Q 2N	40 00	70	TD	በበደ	01

49.99 53.66 HIGH MAG BASALT

49.99 53.66 Fine grained massive flow. Dark grey green, commonly fractured unit with 5% quartz-carbonate filled fractures at variable angles to core axis. Locally 1 to 2% pyrite is noted. 30% syenites cut section often with 1 to 2% pyrite at margins. Strongly to moderately pervasively carbonatized throughout. Rare and localized white to grey syenites cut the section containing 1% pyrite Most alteration is concentrated within the upper 2.6 m and over the lower 50 cm.

01801	40 00	50 50	60	TD-1	.066	11
					.100	
91803	51.59	52.59	1.00	TR-1	.140	.14
91804	52.59	53.04	. 45	TR	.014	.03
91805	53.04	53.66	.62	TR-1	.000	nil

53.66 74.92 SYENITE

53.66 59.74 Aphanitic, red syenite with 1% pyrite occurring as fine disseminations within late stage fractures, euhedral crystals and adjacent to magnetite grains. This unit is fine grained with a grey red section from 55.65 to 57.10 m. All contacts are gradational. This may be an altered syenite

91806	53.66	54.66	1.00	1	.150	.15.
91807	54.66	55.65	.99	TR-1	.069	.07
91808	55.65	56.57	.92	TR-1	.046	.05
91809	56.57	57.10	.53	TR-1	.058	.11
91810	57.10	58.10	1.00	TR-1	.580	.58
91811	58.10	59.10	1.00	1	.330	.33
91812	59.10	59.74	.64	1	.250	.39
91813	59.74	61.02	1.28	IR	.192	.15
91814	61.02	62.00	.98	TR	.147	.15

MC.91-710 Hole #:

TR

TR

TR

TR

TR

TR

TR

TR

1

TR

TR-1

TR-1

TR-1

.44

.77

1.00

.74

.63

1.04

.59

.49

TR-1

.028

.030

.050

.199

.000

.031

.014

.046

.130

.178

.038

.260

.018

.088

Page #: 5

.02

.03

.05

.14

nil

.03

.01

.06

.13

.24

.06

,25

.03

.18

From	To	Description	Sample	From	To	Length & Sul	GW	Au g/t
4								

91815 62.00 63.40 1.40

91816 63.40 64.40 1.00

91818 65.40 66.82 1.42

91820 67.26 68.30 1.04

91821 68.30 69.66 1.36

91819 66.82 67.26

91822 69.66 70.43

91823 70.43 71.43

91824 71.43 72.17

91825 72.17 72.80

91826 72.80 73.84

91827 73.84 74.43

91828 74.43 74.92

64.40 65.40 1.00

91817

with the fluids concentrated within the aphanitic, red, possibly hematized sections. Upper contact at 75 degrees to the core axis, the lower is gradational with the syenite below. Highly fractured and rubbled over the lower 40 cm.

59.74 74.92 Pink unit with patchy red, aphanitic sections as described above. Generally the intrusive is fine grained pink to red, weakly magnetic with black magnetite grains noted and white calcite patches averaging 4 mm across. Within the red, aphanitic patches the magnetite is commonly altered to pyrite. All internal contacts are gradational.

intrusive is weakly fractured but The locally exhibits a weak foliation developed defined by the alignment of mafic minerals. Pyrite averages trace with up to 1% within the aphanitic, red sections. The aphanitic, red sections are noted from 66.82 to 67.26 m. 69.66 to 70.43 m. 72.17 to 72.80 m and 73.84 to 74.43 m.

The lower contact is sharp at 70 degrees to the core axis.

74.92 159.16 HIGH MAG BASALT

74.92 89.52 Fine grained massive flow ?. Dark green, strongly magnetic, locally foliated flow. Traces of pyrite are noted associated with late stage calcite and/or quartz stringers at variable angles to core axis. Minor, narrow syenites occur up to 25 cm in width averaging 2 to 3% of the section. Patchy calcite epidote. and rarely quartz is noted. These may be at alteration selvages. Down section, below 100 m selvages are distinct, but above are or may be poorly developed.

80.70 80.77 Clay-grit seam. No core angle defineable with no foliation developed in adjacent rocks 89.52 91.75 Biotitic. Foliated and fractured, calcitic section with localized blue hue. Pyrite averages trace to 1% throughout concentrated at fractures and stringers. From 91.02 to 91.15 m buff, possible sphalerite is noted with 1% pyrite and traces of molybdenite. Foliation is at 45 to 50 degrees to the core

91829	74.92	75.92	1.00	TR-1	.000	nil
91830	75.92	76.92	1.00	TR	.000	nil
91831	88.52	89.52	1.00	TR	.020	.02
91832	89.52	90.52	1.00	TR-1	.020	.02
91833	90.52	91.32	.80	1	.024	.03
91834	91.32	91.75	.43	TR-1	.004	.01
91835	91.75	92.75	1.00	TR-1	.000	nil
91836	92.75	93.80	1.05	TR	.011	.01
91837	138.70	139.30	.60	1-3	.000	nil
91838	141.70	142.30	.60	TR-1	.000	nil
91839	142.30	142.75	. 45	TR-1	.000	nil
91840	142.75	143.55	.80	TR	.000	nil
91841	158.30	159.16	.86	TR	.000	nil

Hole #: MC.91-710

Page #: 6

From I

-----Description

Sample From

To Length & Sul

W /

Au.g/t

axis. Sample 91833 returns 92 ppm Zn.

89.91 Clay-grit seam at 56 degrees to the core axis 91.75 140.00 Pillowed flow. Possibly a continuation of the above flow but with distinct, although often poorly developed, selvages. Strongly magnetic and dark grey green. Biotite is common at the selvages, tocally amygdules are noted. The flow is becoming more biotitic down section.

119.4? Shear zone, Calcitic shear with minor clay slip. The calcite filling contains bluish angular fragments. Shearing is at 42 degrees to the core axis.

139.04 139.14: biotite, quartz and calcite rich selvage with 5% pyrite.

140.00 159.16 Fine to medium grained massive flow. Dark green, fine grained, becoming medium grained down section with approximately 5 to 7% biotite. Strongly magnetic. Sharp lower contact at 45 degrees to the core axis. 1% pyrite within chilled lower contact.

142.30 142.75 SYENITE. Pink to red, aphanitic to fine grained with carbonate leached out of fractures. Irace to 1% pyrite. The upper contact is brecciated with alteration extending 10 cm into overlying basalt. Lower contact is sharp at 60 degrees to the core axis.

159.16 162.77 SYENITE

Fine to medium grained, pink to red, locally white, magnetic intrusive with 1% black magnetite grains and crystals scattered throughout. Trace to 1% pyrite noted locally, generally within reddish sections at the expense of magnetite. Minor fracturing, localized feldspar crystals up to 1 cm long are noted - these are grey in colour. Contacts are sharp at 45 and 21 degrees to the core axis.

91842	159.16	160.00	.84	TR-1	.168	.20
91843	160.00	161.00	1.00	TR	.000	nil
91844	161.00	162.00	1.00	TR	.000	nil
91845	162.00	162.77	.77	TR	.015	.02

162.77 197.33 HIGH MAG BASALT

162.77 180.14 Fine to medium grained massive flow. Dark 91848 164.56 165.23

91846 162.77 163.77 1.00 TR .000 nil 91847 163.77 164.56 .79 TR-1 .000 nil 91848 164.56 165.23 .67 TR .013 .02

Hole	#:	MC.91-710
Page	4:	7

Au g/t

GW

			í
From	To		
•			grey green to black, strongly magnetic with traces of pyrite. 5 to 7% biotite throughout. 1 to 2% pyrite is noted from 164.50 to 164.56 m associated with pervasive carbonatization. Narrow, weakly silicified and strongly pervasively carbonatized patch from 174.00 to 174.15 m with trace to 1% pyrite. Becomes fine grained to the lower contact
		164.56 165	beginning at 177 m. 23 SYENITE. Fine to medium grained, pink, locally red, intrusive with 5% black magnetite crystals and trace to 1% pyrite. Weakly fractured. Traces muscovite noted within intrusive. Contacts are sharp at 54
		175,13 175	and 43 degrees to the core axis. 70 Mafic intrusive. Fine grained, dark grey green, biotite and chlorite rich intrusive with strong magnetics and no carbonatization. Rare white feldspars? are noted near contacts. Contacts are at 45 degrees to the core axis and are diffuse. Possibly the Peanut intrusives metamorphic aureole altered this intrusive
		180.14 197	due to the biotite content and diffuse contacts. 33 Pillowed flow ?. Fine grained, dark green, chlorite rich unit with a sharp, fractured upper contact and with epidote and garnet masses at selvages. Moderately to strongly magnetic throughout. Rare quartz wisps with dark purple halos are noted near upper contact containing 1% pyrite and from approximately 189 to 194.5 m at 15 to
		181.05 182	25 degrees to the core axis. Below 189 m the selvages are poorly developed or non-existent. Localized biotite rich patches are noted suspected to be selvages. 60 Mafic intrusive. Fine grained as described above from 175.13 to 175.70 m but with feldspar crystals scattered throughout. Pinkish blebs are also noted. The lower 20 cm is pale green to pink orange with 2 to 3% amphibole laths. Contacts at 60 and 35 degrees to the core axis. Lower contact at
		188.40 189	selvage. Of SYENITE. Fine to medium grained, pink to locally red intrusive with 3 to 5% black magnetite crystals. Commonly, the magnetite is rimmed by red hematite and locally by pyrite. Lower contact is at 30 degrees to the core axis and is sharp.

91849 165.23 166.00 .000 .77 nil 91850 173.70 174.30 .60 TR .000 nil 91851 180.14 181.05 .91 1R .009 .01 91852 185.00 186.00 1.00 .000 TR nil 91853 187.40 188.40 1.00 TR .000 nil 91854 188.40 189.07 .67 TR .000 nil 91855 189.07 190.07 1.00 .000 IR nil 91856 190.07 191.00 .93 TR .009 .01 91857 191.00 191.50 .50 1 .000 nil 91858 191.50 192.50 1.00 .000 nil 91859 192.50 193.50 1.00 .000 nil 91860 193.50 194.10 .60 TR .000 nil 91861 194.10 194.80 .70 .000 1 nil 91862 194.80 195.80 1.00 .000 TR nil 91863 195.80 197.33 1.53 TR .000 ni1

Sample From To Length & Sul

Hole #:

MC.91-710 8

Page #:

т.

From

o ------Description-----

---- Sample From

Io Length & Sul

GH

Au g/t

197.33 206.85 SYENITE

Fine to medium grained, pink to red to pink grey with sharp contacts. The syenite is magnetic throughout with 1 to 2% magnetite crystals scattered throughout. Commonly the magnetite is altered to pyrite with an increased reddish hue in that vicinity. The reddish hue is more dominant at the top and the pink grey colouration, due to calcite, is dominant at the base. Upper contact is at 50 degrees to the core axis with minor basaltic inclusions and the lower contact is at 22 degrees to the core axis with a weak chill but void of sulphides.

91864 197.33 198.10 TR .000 nil 91865 198.10 198.70 .012 .02 .60 TR-1 91866 198.70 199.70 1.00 TR .000 nil 91867 199.70 200.70 1.00 .000 TR nil 91868 200.70 201.70 1.00 TR .070 .07

206.85 212.49 BASALT

206.85 212.49 Fine grained massive flow. Biotite rich, dark grey with localized patchy pervasive calcite alteration. Nonmagnetic. Possibly an altered diorite.

212.49 233.82 SYENITE

Fine to medium grained, pink to pink grey to locally red hued, magnetic intrusive with 3 to 5% subhedral crystals up to 1 cm across. These crystals are magnetic, dark grey to black, commonly with epidote rich cores and commonly with pyrite. Also calcitic. These may be garnets from magnetite? Locally pyrite concentrations are up to 1% occurring within quartz stringers and fracture fillings and also associated with magnetite crystals. The pyrite is most common within the red hued areas of the intrusive. The contacts are sharp at 28 and 70 degrees to the core axis. Becomes calcitic at base with grey carbonate patches.

91869	212.49	213.50	1.01	TR	.010	.01
91870	213.50	214.50	1.00	TR	.000	nil
91871	214.50	215.50	1.00	TR	020ء	.02
91872	215.50	216.50	1.00	TR	.000	nil
91873	216.50	218.00	1.50	TR	.000	nil
91874	218.00	219.50	1.50	TR-1	.000	nil
91875	219.50	220.40	.90	TR	.000	nil
91876	220.40	221.40	1.00	1	.000	nil
91877	221.40	222.20	.80	1	.000	nil
91878	222.20	223.20	1.00	TR-1	.000	nil
91879	223.20	224.20	1.00	TR-1	.000	nil
91880	224.20	225.70	1.50	TR	.015	.01
91881	225.70	227.20	1.50	TR	.000	nil
91882	227.20	228.20	1.00	TR	.000	nil
91883	228.20	229.20	1.00	TR-1	.000	nil
91884	229.20	230.20	1.00	1R-1	.030	.03
91885	230.20	231.20	1.00	1	.000	nil
91886	231.20	232.20	1.00	TR-1	.000	nil

Hole ∦: MC.91-710 Page #: -----Description-----Sample From To Length & Sul Au g/t 91887 232.20 233.20 1.00 .000 nil 91888 233.20 233.82 .62 .000 nil 91889 233.82 234.82 1.00 TR-1 .000 nil

.000

nil

91890 243.80 244.80 1.00

233.82 249.94 HIGH MAG BASALT

From

233.82 249.94 Fine grained massive flow. Dark grey green, strongly magnetic flow with 5 to 10% biotite. The biotite concentration is decreasing down section as chlorite becomes common below 245 m. Locally, weakly altered calcitic patches are noted with 2 to 3% white calcite fracture fillings and trace to 1% pyrite. Four narrow syenitic intrusives are noted at variable angles to core axis. These are generally 1 to 2 cm wide with one up to 17 cm at 244.25 m.

249.94 END OF HOLE.

AHERICAN BARRICK RESOURCES CORPORATION

Property: WEST BLOCK

Township: HARKER

Claim #: L802672 NTS 370/5,12 DIAHOND DRILL RECORD

Hole #: HC.91-711

Survey Co-ords: 2335.6 10467.2

Cut-Grid Co-ords: 2335E 10467N

Section: 2200E

5011.5

Elevation: Measurement: NETRIC

Date Logged: FEB. 28 - MAR. 5, 1991

Azimuth: Dip:

42.0 -53.0

Length: 238.4 Contractor: PHILIPPON

Core Size: BQ

Date Started: FEB. 26, 1991 Date Completed: FEB. 28, 1991

Core Stored At: HOLT-McDERMOTT MINE

Comments: CASING PULLED

Depth	Azimuth Dip	Depth	Azimuth Dip	Depth	Azimuth Dip
45.72 91.44	-49.0 -49.0	137.16 182.88	-49.5 -51.5	228.60	-51.0

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

.00 12.80 CASING -10.97m of OVERBURDEN.

12.80 74.02 HIGH MAG BASALT.

74.02 191.11 DIABASF.

191.11 238.35 SYENITE.

238,35 END OF HOLE.

Hole #: MC.91-711

Page 1: 2

From To ------ Description------ Sample From To Length % Sul GW Au g/t

.00 12.80 CASING

91891 12.47 13.35 .88 TR .000 nil

.00 10.97 OVERBURDEN.

10.97 12.80 Fine grained massive flow. Moderately magnetic, dark grey green flow. Weakly fractured.

12.60 Clay-grit seam at 60 degrees to the core axis. Adjacent rocks are moderately to strongly carbonatized with traces of pyrite.

12.80 74.02 HIGH MAG BASALT

12.80 37.02 Fine grained massive flow. Dark green, moderately magnetic and moderately to weakly fractured filled commonly by epidote. Below 25 m white feldspar grains are noted with a pseudo-subophitic texture (similar to END OF HOLE in MC.91-710) and the grain size becomes fine to medium grained. The lower 2 m contains increased epidote stringers and trace to 1% pyrite. Highly fractured at 36.88 m with ground core.

28.20 29.04 SYENITE. Red, fine grained intrusive with traces pyrite near upper contact. Nonmagnetic. Contacts at 22 and 35 degrees to the core axis.

34.27 34.30: syenite with 10% pyrite and 3 to 5% epidote. Highly altered and fractured intrusive at 37 degrees to the core axis.

37.02 37.80 SYENITE. Pink red to orange, fine grained intrusive with few white feldspar phenocrysts up to 3 mm. Traces pyrite, muscovite and epidote with possible sericite along fractures at 55 degrees to the core axis.

37.80 48.35 Fine to medium grained massive flow.

Continuation of above flow with localized dioritic texture. Strongly magnetic.

44.75 45.02 SYENITE at 33 degrees to the core axis. Fine grained, pink red.

nil	000.	TR-1	.50	34.50	34.00	91892
nil	.000	TR	.50	35.00	34.50	91893
nil	.000	TR	1.00	36.00	35.00	91894
.01	.010	TR-1	1.02	37.02.	36.00	91895
.02	.016	TR	.78	37.80	37.02	91896
nil	.000	TR	1.00	38.80	37.80	91897
nil	.000	TR-1	1.00	58.40	57.40	91898
nil	.000	1	.60	59.00	58,40	91899
nil	.000	TR-1	.90	59.90	59.00	91900
nil	.000	TR	1.00	60.90	59.90	91901
nil	.000	IR	.72	61.62	60.90	91902

Hole #: MC.91-711

Page #: 3

GW

Sample From From

To Length & Sul

Au g/t

48.35 53.64 DIABASE. Very fine grained, dark grey, moderately magnetic intrusive with green grey chilled contacts. 5% black laths up to 1 mm long are noted randomly throughout. Upper contact is sharp at 28 degrees to the core axis and the lower contact is within highly fractured core.

53,64 59,90 Flow top. Fine grained, dark green, moderately magnetic unit with green to pale green wisps along a foliation at 50 degrees to the core axis. Brecciation is very minor. Iraces pyrite noted locally along foliation planes. Amygdules noted locally. In part, this may be pillowed flow. The lower 1.5 m red brown, resinous massive contains possibly mineralization. sphalerite or garnet within the matrix. Sample numbers 91899 returns 84 ppm Zn and number 91900 returns 90 ppm Zn.

59,90 61,62 SYENITE. Red intrusive with numerous altered fragments of host basalt and also abundant epidote and hematite alteration. Iraces pyrite. Contacts are at 20 and 40 degrees to the core axis.

61.62 68.70 Fine grained massive flow. Locally wispy, biotitic, chloritic and epidote +/- garnet patches are noted resembling selvages to lower contact. These are rare and only two are noted.

68.70 69.65 SYENITE. Red to orange, fine to medium fractured intrusive containing grained. mafic clots and grey plagioclase crystals. Traces pyrite noted locally. Contacts are sharp and epidote lined at 41 and 35 degrees to the core axis.

. 69.65 74.02 Fine grained massive flow. Green to green moderately fractured. Strongly magnetic. Lower contact is sharp and clean at 55 degrees to the core axis.

70.48 70.87 SYENITE. Fine grained, pink red. Lower 15 cm is porphyritic with 10% white to pale pink plagioclase crystals up to 1 cm long. Contacts are sharp at 35 and 32 degrees to the core axis.

72.55 72.85 SYENITE. Fine grained, pink to red with rare plagioclase phenocrysts up to 4 mm long. Sharp contacts at 49 and 38 degrees to the core axis.

Hole ∦: MC.91-711

Page 1: 4

From

-----Description-----

Sample From

To Length & Sul

GW

Au q/t

191.11 DIABASE

91903 190.20 191.11 .91 .000 TR ni1

Fine to medium grained, grey intrusive with a sharp, chilled upper contact similar to the intrusive described above from 48.35 to 53.64 m. Below, locally sub-ophitic textures are noted but generally the texture is almost gabbroic.

The unit is very weakly fractured and only the odd and/or calcite fracture filling is noted. Magnetics are variable from weak at top to nonmagnetic in medium grained centre with localized very weakly magnetic patches.

From 121.31 to 124.02 m the rocks are medium grained and green with red flecks throughout. Minor leucoxene.

189.40 191.11 Highly fractured. Grey green, fine grained section with numerous fractures commonly with slickensides and localized clay-grit seams. The rocks do not exhibit a foliation. The fractures are at 30 to 35 degrees to the core axis and chlorite lined 189.80 Clay-grit seam. No angle determined.

191.11 238.35 SYENITE

Medium to coarse grained, red to orange, locally mottled intrusive with a sharp, clean upper contact at 25 degrees to the core axis. Locally traces of pyrite are noted.

Below 201 m, the intrusive is porphyritic with red to orange K-spar crystals averaging 1 cm square within a fine grained, muscovite and biotite rich groundmass. the groundmass is rich in calcite. The Locally phenocrysts generally average 60 to 70% of the rock. Hagnetite occurs locally as black crystals often in masses. Localized phases become fine grained and massive with gradational contacts from the porphyritic phases.

194.13 197.65 DIABASE. Weakly to moderately magnetic, grey, fine grained intrusive with chilled contacts at 29 and 28 degrees to the core axis. Mafic laths are noted concentrated contacts. This intrusive is as described above from 48.35 to 53.64 m.

238.35

END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Property: WEST BLOCK Township: MARKER

Claim #: L641390

320/5,12

DIAMOND DRILL RECORD

Hole #: MC.91-712

Survey Co-ords:

1900.0 11052.0

Cut-Grid Co-ords: 1900E 11055N

Section:

1900E 4990.3

Elevation: Measurement: METRIC

Date Logged: MAR. 12-13,1991

Logged by: Signature:

G. BASCHUK

Azimuth: Dip:

Length:

19.0

-50.0 36.6 Contractor: PHILIPPON

Core Size: BQ

Date Started: MAR. 5, 1991 Date Completed: MAR. 6, 1991

Core Stored At: HOLT-McDERMOTT MINE

Comments: HOLE LOST DUE TO CAVING -- 31.70M CASING LOST IN HOLE

Depth Azimuth Dip

Depth Azimuth Dip

Depth Azimuth Dip

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

.00 34.75 CASING -32.31m of OVERBURDEN.

34.75 36.58 SYENITE.

36.58 END OF HOLE.

Hole #: MC.91-712

Page #: 2

From To ------Description------- Sample From To Length & Sul GW Au g/t

.00 34.75 CASING

.00 32.31 OVERBURDEN.

32.31 32.68 Altered fine grained massive flow. Green grey, fine grained, strongly magnetic, pervasively carbonatized basalt with 30% hybrid patches. Trace to 1% pyrite concentrated along syenitic stringers.

32.68 34.75 SYENITE. Medium to coarse grained, pink intrusive with white feldspar crystals and 10% dark green to black amphiboles. Pyrite averages trace to 1% concentrated along fractures associated with hematite and locally as subhedral crystals. Upper contact is sharp at 46 degrees to the core axis.

The section from 34.15 to 34.75 m is grey to pink with 1% pyrite and more intensely fractured than above sections.

34.75 36.58 SYENITE

Continuation of above medium to coarse grained syenite with 10 to 15% amphiboles. Fracturing remains with pyrite averaging trace to 1%. Patchy magnetism. Minor calcite is noted adjacent to mafics.

Hole lost due to caving at 36.58 m. 31.70 m of casing lost down the hole.

36.58 END OF HOLE.

91989 32.31 32.68 .37 TR-1 .048 .13 91990 32.68 33.50 .82 TR-1 .008 .01 91991 33.50 34.15 .65 TR-1 .026 .04 91992 34.15 34.75 .60 1 .018 .03

91993 34.75 35.75 1.00 1 .020 .02 91994 35.75 36.58 .83 TR-1 .042 .05

AMERICAN BARRICK RESOURCES CORPORATION

DIAMOND DRILL RECORD

Property: WEST BLOCK

Township: HARKER Claim #: L641390

320/5,12

Hole #: MC.91-712A

Survey Co-ords:

1895.1 11050.6 Cut-Grid Co-ords: 1900E 11055N

Section:

1900E

Elevation: 4990.3 Measurement: METRIC

Logged by:

Date Logged: MAR. 14, 1991 _G. BASCHUK

Signature:

Azimuth: Dip:

Length:

19.0 -50.0

244.8

Contractor: PHILIPPON

Core Size: BQ

Date Started: MAR. 5, 1991 Date Completed: MAR. 11, 1991

Core Stored At: HOLT-McDERMOTT MINE

Comments: CASING PULLED

Depth	Azimuth Dip	Depth	Azimuth Dip	Depth	Azimuth Dip
45.72 91.44	-51.0 -50.5	137.16 182.88	-50.0 -48.0	228.60	-49.0

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

.00 40.84 CASING -35.66m of OVERBURDEN.

40.84 57.00 SYENITE.

57.00 114.95 HIGH MAG BASALT.

114.95 117.89 SYENITE.

117.89 140.90 HIGH MAG BASALT.

140.90 149.82 SYENITE.

149.82 161.40 HIGH MAG BASALT.

161.40 181.05 SYENITE.

181.05 185.00 HIGH MAG BASALT.

185.00 244.75 SYENITE.

224.75 END OF HOLE.

Hole #: MC.91-712A

Page 1: 2

From To ------ Description----- Sample From To Length & Sul GW Au g/t

.00 40.84 CASING

.00 35.66 OVERBURDEN.

35.66 40.84 SYENITE and HIGH MAG BASALT. Medium grained, pink subhedral feldspars within a generally dark amphibole, feldspar and hematite groundmass. Feldspar phenocrysts are averaging 8 mm across. The unit is not consistently porphyritic but varies to locally fine grained. Traces to locally 1% pyrite are noted generally associated with grey patches of the syenite.

Basaltic inclusions are grey green, fine grained, pervasively carbonatized and magnetic with common narrow syenites. These are hybrids and commonly appear gneissic with biotite rich bands.

The sulphide concentrations noted within MC.91-712 are not as intense in this hole and sulphides are concentrated from 35.78 to 35.95 m with 1 to 2% and from 36.43 to 36.72 m with 1% pyrite.

40.84 57.00 SYENITE

Highly, variably textured intrusive with porphyritic, medium grained sections and very fine grained to fine grained sections all with gradational to locally sharp contacts. The matrix within the medium grained, porphyritic sections is amphibole rich with magnetite and calcite.

The fine grained sections are locally hematized with fracturing and elevated pyrite concentrations up to 1 to 2%.

From 46.33 47.40 m the rocks are highly fractured with 1 to 2% pyrite throughout concentrated along the fractures. Fracturing is at 30 to 40 degrees to the core axis. This section is fine grained, red, due to hematite, and is sheared. Lower contact of syenite is sharp and clean at 8 degrees to the core axis cutting

91995	35.66	36.20	.54	TR-1	.000	nil
91996	36.20	36.80	.60	TR-1	.000	nil
91997	36.80	37.46	.66	TR	.000	nil
91998	37.46	38.46	1.00	TR	.000	nil
91999	38.46	39.46	1.00	TR	.020	.02
92000	39.46	40.84	1.38	TR	.000	nil

60701	40.84	41.84	1.00	TR-1	.000	nil
60702	41.84	42.84	1.00	TR	.030	.03
60703	42.84	43.84	1.00	TR-1	.150	.15
60704	43.84	44.84	1.00	TR-1	.050	.05
60705	44.84	45.84	1.00	TR-1	.090	.09
60706	45.84	46.33	.49	TR	.020	.04
60707	46.33	46.94	.61	1-2	.104	.17
60708	46.94	47.40	.46	1-2	.009	.02
60709	47.40	48.00	.60	1	.018	.03
60710	48.00	49.00	1.00	TR	.030	.03
60711	56.00	57.00	1.00	TR	.010	.01

Hole #: MC.91-712A

3 Page #:

From

-Description-----

Sample From

To Length & Sul

Au g/t

the foliation in the underlying basalts.

57.00 114.95 HIGH MAG BASALT

The entire section is a foliated, fine to medium grained, green grey, pervasively carbonatized, magnetic basalt with localized chloritic clots and common pink gneissic bands. Possibly a relict massive flow but alteration is too intense. Biotite is common throughout due to metamorphism.

Sulphides are generally rare but concentrated within areas of hematitic calcite stringers or fractures. These are at variable angles to core axis from 0 to 90 degrees. Foliation is at 50 degrees at 58.25 m, 42 degrees at 62.05 m, 51 degrees at 61.60 m, 20 degrees at 75.60 m, 52 degrees at 86.60 m, 68 degrees at 99.70 m, 55 degrees at 103.90 m and at 56 degrees to the core axis at 113.50

- 62.49 63.63 SYENITE. Saccharoidal, pink to red locally intrusive containing trace to 1% grey pyrite. Contacts at 32 and 44 degrees to the core axis lined with pyrite.
- 65.61 66.01 Kimberlite. Olive green, fine grained, heavy intrusive with calcite and biotite books at contacts. Relict round blebs noted possibly altered olivine. Locally magnetic, strongly pervasively carbonatized throughout. Rare anhedral garnets noted. The upper contact is irregular, the lower is at 50 degrees to the core axis. Sample 29483 taken for thin section.
- 71.52 73.57 Porphyritic SYENITE. Pink feldspars and dark green horblende crystals floating within a pink groundmass. This locally becomes very fine grained with only a pink colouration. The grain styles are highly variable. Upper contact is at 18 degrees to the core axis, lower at 32 degrees to the core axis. From 72.25 to 72.50 m 1% pyrite is noted within a pink to red very fine grained section. Pyrite is concentrated along fractures.
- 76.19 76.37 Mafic Green, fine grained, intrusive. intrusive with contacts at 60 degrees to the core axis containing 2 to 3% very finely disseminated pyrite. Strongly magnetic, noncarbonatized.

77.11 Fractured core.

79.90 80.16 Highly fractured and broken core.

60712	57.00	58.00	1.00	TR-1	1.130	় 1.13
60713	58.00	59.00	1.00	TR	.020	.02
60714	60.00	60.95	.95	TR	.000	nil
60715	60.95	61.55	.60	1	.246	. 41
60716	61.55	62,49	.94	TR-1	.017	.05
60717	62.49	63.63	1.14	TR-1	.148	.13
60718	63.63	64.63	1.00	TR	.140	.14
60719	71.52	72.10	.58	IR	.012	.02
60720	72.10	72.60	.50	1	.015	.03
60721	72.60	73.57	.97	TR	.010	.01
60722	76.17	76.67	.50	1-2	.000	nil
60723	90.60	91.60	1.00	TR	.000	nil
60724	91.60	92.30	.70	1	.000	nil
60725	92.30	92.80	.50	TR-1	.000	nil
60726	92.80	93.50	.70	1-2	.000	nil
60727	93.50	94.86	1.36	1-2	.000	nil
60728	94.86	95.86	1.00	TR	.000	nil
60729	98.35	99.35	1.00	TR-1	.000	nil

Hole #: MC.91-712A

Page #: 4

Au g/t

From To

-----Description-----

Sample From To Length & Sul GW

80.25 80.81 Porphyritic SYENITE. Dark green to black amphibole crystals averaging 8 mm long within a pink felsic groundmass. 15% amphiboles. Contacts at 70 degrees to the core axis.

81.17 84.82 Porphyritic SYENITE. As described above from 80.25 to 80.81 m. Contacts at 12 and 70 degrees to the core axis. No sulphide concentrations.

91.60 94.86 Altered with 1% pyrite concentrated in and adjacent to quartz - carbonate stringers at variable angles to core axis. From 92.90 m to 94.86 m stringer with white silicified halo runs at 0 to 10 degrees to the core axis with 2 to 3% pyrite. A porphyritic syenite is noted from 91.70 to 91.94 m.

94.40 Clay-grit seam subparallel to core axis associated with stringer noted above. The core is highly fractured and rubbled from 93.95 to 94.86 m.

114.95 117.89 SYENITE

114.95 117.89 Fine grained red to pink with traces of pyrite, locally up to 1%. Contacts are sharp at 70 degrees to the core axis with minor assimilation at lower contact. Patchy magnetics throughout occurring as fine magnetite grains. No amphibole phenocrysts. Pyrite is concentrated from 116.58 to 117.89 m averaging 1%.

60730 115.58 116.58 1.00 TR .000 nil 60731 116.58 117.31 .73 1 .000 nil 60732 117.31 117.89 .58 1 .220 .38

117.89 140.90 HIGH HAG BASALT

60733 117.89 118.57 .68 TR .007 .01

Same as described above from 57.00 to 114.95 m. The upper 3.98 m is a combination of porphyritic syenites and intensely carbonatized and foliated host rock. Foliation at 37 degrees at 129.6 m and 47 degrees to the core axis at 140.5 m.

127.52 Clay-grit seam within section of highly rubbled and fractured core. Clay-grit seam at 20 degrees to the core axis.

127.53 128.55 DIABASE. Brown, strongly magnetic, very fine grained, noncalcitic intrusive with

Hole #: MC.91-712A

Page 1: 5

From Id

-----Description-----

Sample From To Length & Sul GW #

Au g/t

fractured and rubbled contacts. Calcite stringers are common at variable angles to core axis. Not a Matachewan DIABASE as noted in other holes.

fault gouge. Relict, annealed, brecciated fault gouge within section of rubbled core.

134.70 137.12 Altered DIORITE. Fine grained, relict textured intrusive that is subophitic weakly carbonatized, strongly magnetic and altered due to hybridization of the host rock from the intrusive. Many of the plagioclase grains are red due to hematization. Lower contact is indistinct over 10 cm that has been subjected to porphyritic syenit**e** intrusion. Upper contact is at 80 to 90 degrees to the core axis.

140.90 149.82 SYENITE

Medium grained, red to orange, porphyritic intrusive with 2 to 3% black amphibole phenocrysts. Assimilation is common at contacts and basaltic inclusions up to 8 cm across are noted but generally unaltered and with sharp contacts. Patchy magnetics throughout, Lower contact at 34 degrees to the core axis.

148.80 Shear at 10 degrees to the core axis.

Syenite is fractured with black fracture fillings often containing 1% finely disseminated pyrite.

60734 147.45 148.45 1.00 TR .000 nil 60735 148.45 149.19 .74 TR-1 .000 nil 60736 149.19 149.82 .63 TR .000 nil

149.82 161.40 HIGH MAG BASALT

149.82 154.83 Fine grained pervasively carbonatized, magnetic and altered section similar to overlying basalts. 1% late stage syenitic intrusives averaging 2 cm in width.

154.83 155.69 Fine grained SYENITE. Red to pink, fine grained intrusive. Sharp, clean contacts at 70 degrees to the core axis.

155.69 156.46 Fine grained massive flow. As described above from 149.82 to 154.83 m.

156.46 158.95 Medium grained SYENITE. Red to pink, Kspar crystals floating within a fine grained

60737 160.03 160.73 .70 TR .042 .06 60738 160.73 161.40 .67 TR .007 .01

Hole #: MC.91-712A

Au q/t

Page 4: б

From

-----Description-----

Sample From To Length & Sul GW

matrix. The crystals average 1 cm across the unit a cumulate texture. Contacts at 60 and 30 degrees to the core axis. Traces pyrite noted rimming magnetite grains.

158.95 160.73 Altered basalt and 40% syenite. Syenites Kspar porphyritic and amphibole porphyritic types locally grading from one to the other. Traces pyrite noted. The lower 70 cm is a foliated hybrid at 30 degrees to the core axis to a gradational lower contact.

160.73 161.40 Foliated fine grained massive flow with syenitic stringers and fragments and with traces of pyrite, Foliation at 20 degrees to the core axis. Strongly magnetic.

161.40 181.05 SYENITE

161.40 164.71 Altered. From 161.40 to 162.51 m the unit a dark red syenite containing 1% pyrite. The lower contact is irregular from 0 to 20 degrees to the core axis. The contact is at approximately 35 degrees to the core axis. 2 to 5% pyrite concentrated at contacts and within a small basaltic inclusion.

From 162.51 to 163.44 m is a basaltic section with 1 to 2% finely disseminated pyrite. Strongly magnetic and pervasively carbonatized. Hinor syenite inclusions noted.

163.44 to 164.71 m: dark red, intensely altered, possibly silicified section with 1% pyrite. A dark black, very fine grained mineral is common throughout, possibly hematite. Lower contact is gradational as the alteration decreases down section.

164.71 169.35 Medium grained porphyritic red unit with Kspar and amphibole phenocrysts. Weakly magnetic. Phenocrysts average 8 mm across.

169.35 181.05 Fine grained porphyritic syenite with no amohibole phenocrysts. The feldspar crystals average 2 mm across and are subhedral. Weakly magnetic. Upper contact is at 70 degrees to the core axis. Lower contact contains fragments of basalt and is highly irregular.

60739 161.40 162.51 1.11 1 1.410 1.27 60740 162.51 163.44 .93 1-2 .019 .02 60741 163.44 164.04 .60 1-2 .120 .20 60742 164.04 164.71 .67 .013 .02 1 60743 164.71 165.71 1.00 TR .000 nil 60744 180.45 181.05 .006 .01

Hole #: MC.91-712A

Page 1: 7

181.05 185.00 HIGH MAG BASALT

181.05 185.00 Fine grained. Green grey, locally with a red hue, strongly pervasively carbonatized and strongly magnetic. Moderately to strongly hematized throughout. At 181.45 m a white, possibly bleached syenite is noted with 1 to 2% pyrite. The unit is also highly brecciated and at 20 degrees to the core axis.

184.40 Fault gouge. White, calcitic rich matrix to syenitic and basaltic fragments within an annealed fault gouge at 14 degrees to the core axis. 1% pyrite in host rock on footwall side.

185.00 244.75 SYENITE

185.00 196.30 Brick red fine grained, hematized intrusive with 1 to 2% pyrite concentrated at upper contact. Upper contact is at 10 degrees to the core axis, lower is gradational. The section contains trace to 1% finely disseminated pyrite throughout with black, possibly hematite, filled fractures at low angles to core axis.

195.17 195.75 Fault gouge?. Calcite and chlorite rich section, possibly relict basaltic inclusion at 10 degrees to the core axis with brecciated syenite adjacent to it. No distinct fault gouge or foliation developed but brecciation is intense. Traces pyrite and chalcopyrite.

196.30 244.75 Fine to medium grained pink to red to locally grey pink intrusive commonly with 5% black amphiboles, chlorite and magnetite grains. Locally, fine grained sections as described above from 169.35 to 181.05 m are noted but with diffuse contacts and rare feldspar phenocrysts. Different styles of intrusive are noted throughout with no distinct contacts.

Below 230 m the colour changes drastically

60745	181.05	181.65	.60	1	.000	nil
60746	181.65	182.65	1.00	TR	.000	nil
60747	182.65	183.65	1.00	TR	.270	.27
60748	183.65	184.23	.58	TR-1	.052	.09
60749	184.23	185.00	.77	1	.023	.03

60750 185.00 186.00 1.00 .000 ni1 60751 186.00 187.00 1.00 .000 1-2 nil 60752 187.00 188.00 1.00 1 .040 .04 60753 188.00 189.00 1.00 1-2 .000 nil 60754 189.00 190.00 1.00 .050 1-2 .05 60755 190.00 191.00 1.00 1 .030 .03 60756 191.00 192.00 1.00 1-2 .000 nil 60757 192.00 193.00 1.00 1 .000 nil 60758 193.00 194.00 1.00 .000 1 nil 60759 194.00 195.17 1.17 1-2 .152 .13 60760 195.17 195.75 .58 TR-1 .081 .14 60761 195.75 196.30 .55 TR .000 nil 60762 208.50 209.10 .60 .138 1 .23 60763 209.10 209.70 .60 .084 .14

AHERICAN BARRICK RESOURCES CORPORATION

Hole #: MC.91-712A

Page 1: 8

From To ------Description------- Sample From To Length & Sul GW Au g/t

to grey as the feldspars are now all white. The transition is gradational over 1 to 2 m.

244.75 END OF HOLE.

AMERICAN BARRICK RESOURCES CORPORATION

Property: WEST BLOCK

Township: HARKER

Claim #: L802671 320/5,12 DIAMOND DRILL RECORD

Hole #: MC.91-713

Survey Co-ords: 1898.4 10670.5

Cut-Grid Co-ords: 1900E 10675N

Section: 1900E

4995.8

Elevation: Measurement: METRIC

Date Logged: MAR. 6-8, 1991

Logged by: Signature:

S. BASCHUK

Azimuth: Dip:

-51.0

.0

204.5 Length:

Contractor: PHILIPPON

Core Size: BQ

Date Started: MAR. 1, 1991 Date Completed: HAR. 5, 1991

Core Stored At: HOLT-McDERMOTT MINE

Comments: CASING PULLED

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth Dip
45.72 91.44		-46.5 -46.5	137.16 182.88		-46.0 -46.0	204.52	-45.0

.00 15.85 CASING -14.94m of OVERBURDEN.

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

15.85 17.46 HIGH MAG BASALT.

17.46 27.24 Chert and GREYWACKE.

27.24 58.33 HIGH MAG BASALT.

58.33 89.50 SYENITE.

89.50 107.85 HIGH MAG BASALT.

107.85 115.14 Chert and GREYWACKE.

115.14 129.75 HIGH MAG BASALT.

129.75 135.17 SYENITE.

135.17 145.33 FOLIATED BASALT- MAG.

145.33 156.48 SYENITE.

156.48 204.52 FOLIATED BASALT- MAG.

204.52 END OF HOLE.

Hole #: MC.91-713

Page 1: 2

From To -------Description-------Sample From To Length % Sul GW Aug/t

.00 15.85 CASING

.00 14.94 OVERBURDEN.

15.85 17.46 HIGH MAG BASALT

15.85 16.85 DIORITE. Medium grained, green grey, sub-ophitic unit with moderate to strong magnetics. Sharp lower contact at 31 degrees to the core axis. Lower contact is not chilled.

16.85 17.46 Fine grained massive flow. Dark green, strongly magnetic, weakly fractured unit with indistinct lower contact associated with silicification and weak brecciation.

17.46 27.24 CHERT GREYWACKE

Fine grained, grey to grey green, locally granular, poorly bedded sediments with localized cherts and cherty halos to late stage fracture fillings. Bedding is at 50 to 60 degrees to the core axis. Pyrite concentrations are generally low and average traces with locally up to 1 to 2%. Locally feldspar crystals are noted resembling the crystal flow of the GNZ. The entire section is highly to moderately fractured with RQD of approximately 50%. The lower 1.24 m is grey, weakly carbonatized and contains trace to 1% very finely disseminated pyrite. Narrow syenite noted from 27.13 to 27.18 m at 34 degrees to the core axis.

19.89 20.25 SYENITE. Medium grained, pink to red and grey blue intrusive at 55 degrees to the core axis.

26.70 Fault gouge with annealed brecciation and calcite stringer at 28 degrees to the core axis. 1% pyrite in adjacent rocks.

	•					
nil	.000	TR	1.04	18.50	17.46	91904
nil	.000	TR-1	1.00	19.50	18.50	91905
nil	.000	TR-1	1.00	20.50	19.50	91906
nil	.000	TR-1	1.00	21.50	20.50	91907
nil	.000	TR	1.00	22.50	21.50	91908
nil	.000	TR-1	1.00	23.50	22.50	91909
nil	.000	TR	1.00	24.50	23.50	91910
nil	.000	TR	1.00	25.50	24.50	91911
nil	.000	TR	.60	26.10	25.50	91912
nil	.000	TR-1	.50	26.60	26.10	91913
.01	.006	TR-1	.64	27.24	26.60	91914

MC.91-713 Hole #:

Page 1: 3

From

------ Sample From

To Length & Sul

Au g/t

27.24 58.33 HIGH MAG BASALT

91915 27.24 28.24 1.00 .000 nil

27.24 58.33 Fine to medium grained massive flow DIORITE Dark grey green, weakly fractured, massive unit. Fine grained at top becoming medium grained with sub-ophitic texture by 30 m. The fine grained and medium grained sections gradually phase in and out all the way through the section. The sub-ophitic texture is best defined in sections with increased fracturing. The unit is moderately to strongly magnetic throughout. Localized patches of white feldspar crystals averaging 1 to 2 mm are noted. 2 narrow syenites are noted from 55.72 to 55.96 m at 55 degrees to the core axis.

58.33 89.50 SYENITE

91916 58.33 59.33 1.00 TR-1 .000 nil

Medium to locally fine grained, brick red intrusive with green mafic clots. Magnetite grains noted throughout with pyrite rimming near upper contact. Upper contact is somewhat diffuse at 35 to 40 degrees to the core axis.

Patchy, fine grained sections are noted. The entire unit is mottled with a high variability of textures. Lower contact is at 50 degrees to the core axis.

92.93 97.78 Fine 'grained massive flow DIORITE?. Fine

89.50 107.85 HIGH MAG BASALT

89.50 92.04 Chill margin to syenite with assimilated	91919	96.30
host rock. Rocks are green to locally black	91920	97.10
with a red gneissic banding at 0 to 50	91921	97.78
degrees to the core axis. No sulphides.	91922	98.80
92.04 92.93 SYENITE. Fine to locally coarse grained, red	91923	99.90
intrusive with sharp contacts at 34 and 47	91924	100.60
degrees to the core axis.	91925	101.20

grained, strongly magnetic, dark green unit

91917	94.50	95.50	1.00	IR	.000	nil
91918	95.50	96.30	.80	TR-1	.000	nil
91919	96.30	97.10	.80	1	.000	nil
91920	97.10	97.78	.68	TR	.000	nil
91921	97.78	98.80	1.02	TR-1	.204	.20
91922	98.80	99.90	1.10	TR-1	.000	nil
91923	99.90	100.60	.70	TR	.000	nil
91924	100.60	101.20	.60	TR-1	.000	nil
91925	101.20	102.20	1.00	TR	.000	nil
91926	103.50	104.50	1.00	TR	.000	nil
91927	104.50	105.30	.80	TR-1	.000	nil

MC.91-713 Hole :

4 Page 1:

From

-----Description-----

Sample From To Length & Sul GW Au g/t

with chilled margins. Locally, late stage fractures contain 1 to 2% pyrite with 1% in adjacent host. Stringers and/or fractures are at 20 to 30 degrees to the core axis and are concentrated from 95.50 to 97.10 m. The lower 90 cm is a chilled, hybrid zone.

91928 105.30 106.10 .80 .000 nil 91929 106.10 106.60 .50 TR-1 .000 nil 91930 106.60 107.85 1.25 TR .000 nil

97.78 99.90 SYENITE. Fine to medium grained, speckled intrusive with sharp contacts. Only upper contact is hybridized into the host rock. The unit is red with black and pink to giving the speckled orange grains appearance. Traces pyrite noted. Contacts are sharp at 57 and 55 degrees to the core

99.90 107.85 Fine to medium grained massive flow DIORITE ?. Dark green grey, moderately to strongly magnetic unit with locally, a well developed sub-ophitic texture. Localized patches are dark purple, siliceous with 1% pyrite and increased fracturing. These have gradational contacts and the silicification is pervasive. The lower contact of this section is gradational to the underlying sediments, possibly cooked.

107.85 115.14 CHERT GREYWACKE

Similar to section from 17.46 to 27.24 m. Dark grey with purple hue at top becoming pale green to grey down section with locally well bedded sections. Cherts are dominant at top with greywacke common down section. Bedding is at 72 degrees at 109.45 m and at 70 degrees to the core axis at 113.2 m. Sulphides are generally concentrated within cherty sections averaging 1% and locally associated with narrow syenites averaging trace to 1% pyrite. Syenite noted from 110.87 to 111.05 m at 63 degrees to the core axis. Nonmagnetic.

91931	107.85	108.45	.60	TR	.000	nil
91932	108.45	109.05	.60	1	.000	nil
91933	109.05	110.05	1.00	TR-1	.000	nil
91934	110.05	111.05	1.00	TR	.000	nil
91935	111.05	112.05	1.00	TR	.020	.02
	112.05		1.03	TR-1	.000	nil
91937	113.08	114.10	1.02	TR-1	.000	nil
91938	114.10	115.14	1.04	TR	.000	nil

115.14 129.75 HIGH MAG BASALT

115.14 121.40 Fine grained massive flow. Green, fine grained, weakly to moderately fractured unit. Strongly to moderately magnetic. The fractures are epidote and calcite rich

91939	115.14	116.00	.86	TR	.000	nil
91940	117.00	117.80	.80	TR	.000	nil
91941	117.80	118.60	.80	TR-1	.120	.15
91942	118.60	119.60	1.00	TR	.000	nil
91943	119.60	120.65	1.05	TR-1	.000	nil
91944	120.65	121.40	.75	TR	.000	nil

Hole #: MC.91-713 Page #: 5

From To

-----Description-----

with green alteration halos. From 117.80 to 118.60 m the rocks are purple hued, silicified and contain trace to 1% pyrite concentrated within a buff to pink calcite rich patch.

121.40 126.37 Mafic intrusive. Fine grained, green brown groundmass with 10% mafic laths up to 1 cm long. Laths are chlorite, biotite and possibly actinolite. 1% finely disseminated pyrite is noted throughout the intrusives. Locally white feldspar crystals are noted similar to those noted within the crystal flow. Upper contact is sharp at 51 degrees to the core axis, the lower contact is irregular and contains fragments of underlying unit. Basalt section similar to overlying unit occur from 122.47 to 122.88 m and from 125.00 to 125.75 m. Moderately to weakly magnetic throughout.

124.55 M: 2 cm wide buff, carbonatized patch at 22 degrees to the core axis containing 5% finely disseminated pyrite. Contacts are weakly diffuse.

126.37 129.75 Fine grained crystal flow. Grey green, weakly to moderately magnetic flow with 5 to 10% white feldspar crystals averaging 1 mm across. Weak silicification with carbonatization is noted from 129.25 to 129.45 m with 5% late stage calcite and/or quartz filled fractures. Irace to 1% pyrite within this narrow section.

129.75 135.17 SYENITE

Fine grained, red to locally red grey to brick red intrusive with minor chlorite clots. Narrow fine grained crystal flow inclusion is noted from 132.14 to 132.40 m with 1 to 2% pyrite at lower contact. Generally the intrusive contains traces of pyrite with trace to 1% concentrated over the lower 1.57 m. The lower contact is ground by drillers. Upper contact is at 58 degrees to the core axis.

Sample	From	To	Length	% Sul	6M	Au g/t
91945	121.40	122.47	1.07	1	.000	nil
91946	122.47	122.88	.41	TR	.000	nil
91947	122.88	124.00	1.12	TR-1	.000	nil
91948	124.00	125.00	1.00	TR-1	.000	nil
91949	125.00	125.75	.75	TR	.000	nil
91950	125.75	126.37	.62	TR-1	.000	nil
91951	129.00	129.75	.75	TR-1	.000	nil

91952	129.75	130.75	1.00	TR	.160	.16
91953	132.60	133.60	1.00	TR	.000	nil
91954	133.60	134.20	.60	1	.012	.02
91955	134.20	135.17	.97	TR-1	.000	nil

	ANERICAN BARKICK RESOURCES CUK	PUKATIUN	-				Hole #: Page #:	MC.91-713 6
From To	oDescription	Sample	From	To	Length	% Sul	GW	Au g/t
	135.17 145.33 Variolitic flow top. Dark green to purple green, fine grained, foliated, moderately to strongly magnetic basalt with purple, silicified variolites up to 2 cm in diameter averaging 1 cm across. This section contains localized, patchy silicification occurring in purple bands and buff to purple halos to quartz stringers. The silicified bands are concentrated over the upper 2 m and are at 60 to 65 degrees to the core axis. The upper contact is highly rubbled. From 41.6 to 41.9 m quartz stringers with 3 to 5% pyrite are noted at 20 to 30 degrees to the core axis. The foliation of the section is at 45 to 55 degrees to the core axis.	91957 91958 91959 91960 91961 91962 91963 91964 91965 91966	135.17 136.20 137.00 138.00 139.00 140.00 141.60 142.20 142.80 143.80 144.60	137.00 138.00 139.00 140.00 141.00 141.60 142.20 142.80 143.80 144.60	.80 1.00 1.00 1.00 .60 .60 .60 .80	TR TR-1 TR TR-1 TR TR TR TR TR TR TR TR TR	.000 .000 .000 .000 .000 .000 .000 .072 .000	nil
145.33 156	Fine grained, red to grey with localized red orange, hematitic sections containing 1% pyrite. Weakly to moderately magnetic. Noncarbonatized. Upper contact is sharp at 28 degrees to the core axis, lower contains few inclusions and is at 62 degrees to the core axis. Hematitic sections are noted from 146.21 to 146.89 m and from 152.18 to 152.66 m.	91969 91970 91971 91972	145.33 146.21 146.89 151.18 152.18 152.66	146.89 147.89 152.18 152.66	.68 1.00 1.00 .48	TR-1 1 TR TR TR-1	.197 .040 .230 .077	.50 .29 .04 .23 .16 nil
156.48 204	.52 FOLIATED BASALT- MAG 156.48 204.52 Amygdular flow top. Continuation of above section from 135.17 to 145.33 m but purple variolitic sections are rare. The unit is a fine grained, foliated, green to locally dark green basalt with localized dark purple to pale purple grey silicified and pervasively carbonatized sections with traces of pyrite. Amygdules are common	91975 91976 91977 91978 91979 91980 91981 91982 91983	156.48 157.48 164.90 165.90 166.50 167.50 168.50 177.00 184.92	158.40 165.90 166.50 167.50 168.50 178.00 185.92 200.00	.92 1.00 .60 1.00 1.00 1.00 1.00 1.00	TR TR TR 1 TR TR TR TR	.000 .000 .000 .000 .020 .020 .010 .010	nil nil nil nil nil nil .02 nil .01 nil

below 167 m and are locally noted

comprising up to 5% of the rock averaging

1 mm diameter. Narrow syenites are noted

91984 200.00 201.00 1.00 91985 201.00 201.80 .80 91986 201.80 202.20 .40

TR-1

TR-1

TR-1

.000

.000

.000

nil

nil

nil

MC.91-713 Hole #: Page 1:

From

-----Description-----

Sample From To Length & Sul Au g/t

91987 202.20 203.18 91988 203.18 204.18 1.00

.98 .000 nil TR .000 nil

cutting this section at variable angles to core axis.

The host rock is commonly chlorite and biotite rich due to contact metamorphism. The lower 2.32 m is weakly foliated. chlorite and biotite rich but generally unaltered.

- 157.65 158.00 Clay-grit seam within rubbled section. above fault gouge are strongly Rocks foliated and fractured at 40 to 50 degrees to the core axis.
- 166.00 166.14: altered, silicified section resembling QVZ. Alteration is purple grey to locally buff centered on a quartz stringer containing 1 to 2% pyrite. Stringer and adjacent alteration is at 47 degrees to the core axis.
- 174.33 174.80 SYENITE. Three narrow syenites at 42 degrees to the core axis.
- 176.33 176.71 SYENITE at 25 degrees to the core axis.
- intrusive. Fine grained, green, 188.35 189.22 Mafic weakly foliated intrusive containing 5% white to pale green, anhedral grains. Contacts are sharp at 42 and 30 degrees to the core axis.
- 189,66 190.39 Mafic intrusive. As described above from 188.35 to 189.22 m. Contacts at 50 and 24 degrees to the core axis.
- 197.07 198.71 SYENITE. Pink, fine grained to locally medium grained, speckled intrusive with black grains. Upper contact at 74 degrees to the core axis, lower at 45 degrees to the core axis.
- 198.71 202.20 VARIABLY SILICIFIED BASALT. Dark purple. pervasively silicified section with biotite nonsilicified patches. rich Strongly magnetic. Pyrite averages trace to 1% throughout.
- 202.00 Fault gouge at 60 to 70 degrees to the axis. No clay-grit seam, only brecciated and annealed 1 cm patch with sharp contacts.

204.52 END OF HOLE,



A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 1 of 2

Assay Certificate

1W-2404-RA2

Company:

AMERICAN BARRICK RES. EXPL.

Date: FEB-28-91

Project:

Copy 1. BOX 1203, KIRKLAND LAKE P2N 3M7

2. FAX TO 567-4320

We hereby certify the following Assay of 57 split core samples submitted FEB-25-91 by .

Sample Number	Au g/tonne	Au check g/tonne	Zn ppm			
91781 91782 91783 91784 91785	NII NII 0.01 0.01 0.01	NII				
91786 91787 91788 91789 91790	NI 1 NI 1 NI 1 0.01 NI 1	••••	• • • • • • • • •	•		
91791 91792 91793 91794 91795	NII NII 0.08 0.01 0.11	0.09	•	•		
91796 91797 91798 91799 91800	0.10 NII NII NII 0.01					
91801 91802 91803 91804 91805	0.11 0.10 0.14 0.03 Ni1			,		
91806 91807 91808 91809 91810	0.15 0.07 0.05 0.11 0.51	0.65			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

#710

P.161-64: (57

Certified by Domos Harles

P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705) 642-3244. FAX (705) 642-3300



A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 2 of 2

Assay Certificate

1W-2404-RA2

Company:

AMERICAN BARRICK RES, EXPL.

Date: FEB-28-91

Project:

Copy 1. BOX 1203, KIRKLAND LAKE P2N 3M7

Attn:

2. FAX TO 567-4320

We hereby certify the following Assay of 57 split core samples submitted FEB-25-91 by.

Sample	Ац	Au check	Zn	
Number	g/tonne	g/tonne	ppm	
91811	0,33			
91812	0.39	0.38		·
91813	0.15			
91814	0.15			
91815	0.02			
91816	0.03		••••••	• • • • • • • • • • • • • • • • • • • •
91817	0.05			
91818	0.14			
91819	Nil			
91820	0.03			
91821	0,01			
91822	0.06			
91823	0.13			•
91824	0.24			
91825	0.06			
91826	0.26	0.24		
91827	0.03			
91828	0.18			
91829	NII			
91830	NII			
91831	0.02			
91832	0.02			
91833	0.03		92	•
91834	0.01			
91835	NI 1			•
91836	0.01		•••••	
91837	Nil			
	• • • •			

P.161-64

Certified by Soma Hartman

P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705) 642-3244, FAX (705) 642-3300



A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 1 of 2

Assay Certificate

1W-2435-RA1

Company:

AMERICAN BARRICK RES. EXPL.

Date: MAR-05-91

Project: Attn: Copy 1. BOX 1203, KIRKLAND LAKE P2N 3M7

2. FAX TO 567-4320

We hereby certify the following Assay of 54 SPLIT CORE samples submitted MAR-01-91 by .

Sample Number	Au g/tonne	Au check g/tonne	•
91838	· Nil		
91839	NII		
91840	NII		·
91841	NII	0.10	
91842	0.21	0.19	
91843	Ni l		
91844	Nil		
91845	0.02		
91846	Nil		
91847	Nil		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
91848	0.02		
91849	NII		
91850	NII		
91851	0.01	A11.1	
91852	Nil	Nil	
91853	Ni I		
91854	Nil		
91855	NII		
91856	0.01		
91857	NII	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
91858	Nil		
91859	NII		
91860	NII		
91861	NII		
91862	NII	NII	
91863	NII		
91864	NII		
91865	0.02		
91866	NII		
91867	NII		

4710 6711

Certified by Dona Dardner

Pol61-64 (54

P.O. Box 10, Swastika, Ontario PoK 1T0

Telephone (705) 642-3244.

FAX (705)642-3300



Sw.stika Laboratclies

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Assay Certificate

Page 2 of 2

1W-2435-RA1

Сотралу:

AMERICAN BARRICK RES. EXPL.

Date: MAR-05-91

Project:

Copy 1. BOX 1203, KIRKLAND LAKE P2N 3M7

2. FAX TO 567-4320

We hereby certify the following Assay of 54 SPLIT CORE samples submitted MAR-01-91 by.

٨	Sample	Au	Au check	
Λ	Number	g/tonne	g/tonne	
7	91868	0.09	0.04	•
1	91869	0.01		
1	91870	NII		
1	91871	0.02		
	91872	Nil		
1	91873	NII		
1	91874	NII		
- 1	91875	NII		
0	91876	NII		i ·
%	91877	NII	·	·
	91878	NII		
*	91879	NII		
.10	91880	0.01		•
Λ	91881	NII		
1	91882	NII		
	91883	Nil		
1	91884	0.03	0.02	
1	91885	NII		
1	91886	NII		
	91887	Nil		
	91888	NII		
1	91889	NII		
	91890	NII		
	91891	Nil		
- [* • * • • • • • • • • • • • • • • • • •		
	# 111			
- 13	71 (11			

Centred by Long Fandon

P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705) 642-3244. FAX (705) 642-3300



Assaying - Consulting - Representation

Page 1 of 3

Assay Certificate

1W-2467-RA1

Company:

AMERICAN BARRICK RES. EXPL.

Date: MAR-12-91

Project:

Copy 1. P.O.BOX 1203, KIRKLAND LAKE, ONT. P2N 3M7

MR. G. TOUSIGNANT Attn:

2. FAX TO 567-4320

We hereby certify the following Assay of 84 CORE samples submitted MAR-08-91 by .

	Sample Number	Au g/tonne	Au check g/tonne	Zn ppm		
; (91892 91893	NII NII				
	91894	NI 1 0.01				
•	91895 91896	. 0.02				
机	1 91897 91898	NII NII				
_	91899	NII		8 4 90		
1	91900 91901	NII Nil		70		
- (91902	NII NII	NII			
4	91903 91904	NII				•
	91905 91906	NII NII				
	91907 91908	NI I NI I		•		
	91909	NI I NI I				
V	91910 91911	NII		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
州	3 91912 91913	NI I NI I			. 1	
	91914 91915	0.01 Ni l				,
	91916	NII				
	91917 91918	NI I NI I				
	91919 91920	NII NI			İ	
, √	91921	0.23	0.17		,	

4711 6713

West Block

P. 161-64:

P.O. Box 10, Swastika, Ontario PoK 1T0 Telephone (705) 642-3244, FAX (705)642-3300



Swastika Laborateries

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 2 of 3

Assay Certificate

1W-2467-RA1

Company:

AMERICAN BARRICK RES. EXPL.

Project:

MR. G. TOUSIGNANT

Date: MAR-12-91

Copy 1. P.O.BOX 1203, KIRKLAND LAKE, ONT. P2N 3M7

2. FAX TO 567-4320

We hereby certify the following Assay of 84 CORE samples submitted MAR-08-91 by .

	Sample Number	Au g/tonne	Au check g/tonne	Zn ppm	
Į.	91922 91923 91924	NII NII		4 11 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	
	91925 91926	NII NII NII			
	91927 91928 91929	NI NII			· · · · · · · · · · · · · · · · · · ·
	91929 91930 91931	NII NII NII			
ι,Λ	91932 91933 91934	NII NII NII			
13	91935 91936	0.02 Ni i	0.01		
	91937 91938 91939	NII NII NII			
	91940 91941	Ni 1 0.14	0.16		
	91942 91943 91944	NII NII NII			
	91945 91946	NII NII	•••••	••••••	
	91947 91948 91949	NII NII NII			
	91950 91951	Nil Nil		48888888	

Certified by Candin

P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705) 642-3244. FAX (705) 642-3300

Page 3 of 3

Assay Certificate

1W-2467-RA1

company

AMERICAN BARRICK RES. EXPL.

Date: MAR-12-91

Projecti Attn:

MR. G. TOUSIGNANT

Copy 1. P.O.BOX 1203, KIRKLAND LAKE, ONT. P2N 3M7

2. FAX TO 567-4320

We hereby certify the following Assay of 84 CORE samples submitted MAR-08-91 by .

Sample	Au	Au check	Zn			
Number	g/tonne	g/tonne	. ppm			
91952	0.16	0.16	*********	,	 	•
91953	NII	• • • • • • • • • • • • • • • • • • • •				
91954	0.02				•	
91955	Ni 1					
91956	NII					
91957	NII	*********	*******	,	 	•
91958	NII					
91959	NII					
91960	Nil					
91961	· NII				 	_
91962	Nii			,		_
91963	Ni I					
91964	0.12					
91965	NII					
91966	NII				 	٠.
91967	NII					_
91968	0.48	0.51				
91969	0.29	•				
91970	0.04					
91971	0.24	0.21			 	••
91972	0.16					
91973	Nil		,			
91974	NII				•	
91975	Nil			•		

Certified by L. Condin

P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705) 842-3244 FAX (705) 842-3300



Swijtika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Assay Certificate

1W-2482-RA1

Company:

AMERICAN BARRICK RES. EXPL.

Project: Attn:

MR. G. TOUSIGNANT

Date: MAR-13-91

Copy 1. P.O.BOX 1203, KIRKLAND LAKE, ONT. P2N 3M7

2. FAX TO 567-4320

We hereby certify the following Assay of 13 CORE samples

submitted MAR-12-91 by,

	Sample Number	Au g/tonne	Au check g/tonne	•
13/18	91976 91977 91978 91979 91980	Ni l Ni l Ni l 0.02 Ni l		
	91981 91982 91983 91984 91985	0.01 Nil Nil Nil Nil	0.01	
	91986 91987 91988	NII NII NII		

Po 161-64:

#713 Nest Block.

P.O. Box 10, Swastika, Ontario P0K 1T0 FAX (705)642-3300 Telephone (705) 642-3244.



Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 3 of 3

Assay Certificate

1W-2509-RA1

Company:

AMERICAN BARRICK RES. EXPL.

Date: MAR-20-91

Project: Attn: Copy 1. BOX 1203, KIRKLAND LAKE P2N 3M7

2. FAX TO 567-4320

We hereby certify the following Assay of 75 SPLIT CORE samples submitted MAR-15-91 by .

	Sample Number	Au g/tonne		check tonne	
ina	60761 60762 60763 91989 91990	Ni 1 0.23 0.14 0.13 0.01	••••	0.13	
*112	91991 91992 91993 91994 —91995	0.04 0.03 0.02 0.05 NI1	• • •		
#7121	91996 91997 91998 91999 — 92000	Ni 1 Ni 1 Ni 1 0 . 02 Ni 1			

Certified by Donna Landner

P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705) 642-3244 FAX (705) 642-3300



Established 1928

S vastika Labora ories

Assaying - Consulting - Representation

Assay Certificate

1W-2509-RA1

AMERICAN BARRICK RES. EXPL.

Date: MAR-20-91

Page 1 of 3

Project: Attn:

Copy 1. BOX 1203, KIRKLAND LAKE P2N 3M7

2. FAX TO 567-4320

We hereby certify the following Assay of 75 SPLIT CORE samples submitted MAR-15-91 by .

	Sample	Au	Au check		
	Number	g/tonne	g/tonne		
Γ	60701	NII			
.	60702	0.03	•		
Į	60703	0.15			
	60704	0.05		•	
1	60705	0.09		i	
- (60706	0.04			
ļ	60707	0.17	0.16		
ì	60708	0.02			
	60709	0.03		j	
	60710	0.03			
V	60711	0.01		į	
٧	60712	1.18	1.08	:	
	60713	0.02			
N	60714	Nil			
Ja V	60715	0.40	0.41		
/0	60716	0.05			
,	60717	0.13			
	60718	0.14		· · · · · · · · · · · · · · · · · · ·	
1	60719	0.02		i	
1	60720	0.03			
	60721	0.01		:	
1	60722	: NII		;	•
	60723	Nil			
1	60724	NII			,
1	60725	Nil			
1	60726	Ni 1			
	60727	NH	NH		
	60728	NII		;	
,	60729	NII			
1	60730	NII			

Po161-64:

#712 E712A

West Block. P.O. Box 10, Swastika, Ontario POK 1TO

Telephone (705) 642-3244

FAX (705)642-8300



Sv astika Laborat-ries

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 2 of 3

Assay Certificate

1W-2509-RA1

Company:

AMERICAN BARRICK RES. EXPL.

Date: MAR-20-91

Project: Attn: Copy 1. BOX 1203, KIRKLAND LAKE P2N 3M7

4 6

2. FAX TO 567-4320

We hereby certify the following Assay of 75 SPLIT CORE samples submitted MAR-15-91 by.

Sample Number	Au g/tonne	Au check g/tonne	
60731	NI!		
60732	0.36	0.40	
60733	0.01		•
60734	NII		
60735	Nil		
60736	NII		
60737	0.06		
60738 60739	0.01 1.28	1.26	•
60740	0.02	1.20	
60741	0.20		
60742	0.20		
60743	NII		
60744	0.01		
60745	NI 1	•	
60746	NII		
60747	0.27		
60748	0.09		
60749	0.03		
60750	NII		
60751	Nil		•
60752	0.04		
60753 60754	NI 1 0.05		
60755	0.03		
60756	Nil	••••••	
60757	NII NII		
60758	Nil		
60759	0.13		
60760	0.17	0.11	

Centified by Dona Sardin

P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705) 642-3244, FAX (705) 642-3300



Report of Work Conducted

Transaction Number DOCUMENT No.

N9180 • 05110

ST MON IA BU I S3

Photos a dentity

nation will be used for correspondence. Questions about relopment and Mines, Fourth Floor, 159 Cedar Street,

Ontario Personal information c this collection should Sudbury, Ontario, P3E

- Instructions: Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining

900

- A separate copy of this form must be completed for each Work Group.
- Technical reports and maps must accompany this form in duplicate.

	- A sketc	ch, showing the claims	the work is assign	ed to, must accom	pany this form.	ř.
Rec	orded Holder(s)			A. A.	Cilent No.	
1.22	AMEA	RICAN BAR.	AKK Reso	CACES CO	7). Telephone	2/19
Add [:	1	53 GOVEAN M LANE	and AMAD U	P2N	Telephone I	10. ************************************
Mini	ing Division	·	Township/Area	- KINKLAND K	M or G Plan	No.
Da	ARDIER A	LAXE	HARA	YER LW.	0 6-3	643
We		Eeb 2001		To: MAN	RCH 13 CA, 1	991
Wo	rk Performed (Chec	k One Work Group O	nly)		,	,
	Work Group			Туре	**************************************	
	Geotechnical Survey			1		• .
V	Physical Work, Including Drilling	DIAMON,	D DRILLI	NG		
	Rehabilitation					
	Other Authorized Work					
	Assays					
	Assignment from Reserve					
Tota	al Assessment Work	Claimed on the Attac	hed Statement of C	osts \$,846	1
		y reject for assessme			•	ed if the recorded
		erify expenditures claim				
Per	sons and Survey Co	ompany Who Perforr	ned the Work (Give	Name and Addres	ss of Author of Re	port)
	Nam		,		iress	
P	PHILIDDAN 1	20.1/2	R- 3 6186	Day Mar. NICA	DALDA QU	lax Fin
<u> </u>	PHILIPPON 1 BASCHUIL, G	· warning	, ,	ROUYN NOA G , KIBNLAN	NOVIG	V 75 56/
13	SASCHUN, G	ARY	58 HARDIN	G , KIRNLAN	AN LAKE	Pan 3N3
		1		1	1	;
(atte	ach a schedule if nece	essary)		Westerness and Conserve and Con		
Car	tification of Benefic	elel Interest * See N	lote No. 1 on reve	ree eide		: ***
		vork was performed, the cla		Date	Recorded Holder or A	gent (Signature)
rep		irrent holder's name or held u		11-14-91	gelles Tax	ingnam
Cer	tification of Work R	eport				
		nal knowledge of the facts	set forth in this Work rep	ort, having performed ti	he work or witnessed a	ame during and/or after
1	completion and annexed ne and Address of Person C			• • • • • • • • • • • • • • • • • • • •		I .
	Tousland	INT GILL	3, 17 RAI	ND W. KIN	PALAND L	ANIE PZN 3L9
Tele	pone No.	9.NT 61KK 16 857 11-14		Certified By (Signature)		
	705-567-6	857 11-14	-91	Yelles	Yourin o	
For	Office Use Only					
1		Date Recorded	Mining Recor	der	Received Stamp	
1	140526.00	NOVEMBER Deemed Approval Date	4 1 .	_	AED L	1
	30320.00	Data Notice for Amendments	Nove	MBER 14,199		

(BANKED)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	4-641390	l	22,321	2,006	18,000	2,321
	1-802671	(14,766	800	10,400	3,566
	1-802672	(33,759	800	30,000	2,959
	4-641387	1		2,000		
	1-641 389	1		2,000		
	1-641389	1		2,000		
	1-64/39/			2,000		·
	L-64/392	4 (2,000		
	2-641 393	1		2,24		·
	1-641 394	1		2,000		
	1-641395			2,009		
	L-641396	; 1		2,000		
•	4-64/397	z)		2,000		
*	L-641398	- (2,000		
	L-641399	1		2,000	See	
And the second s	1-641400	1 -		2,000	Schedule	A
	L-641401	1.		2,000		
	Total Number of Claims		Total Value Work	Total Value Work Applied	Total Assigned From	Total Reserve

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (\sim) one of the following:

- Gredits are to be cut back starting with the claim listed last, working backwards.
 - Credits are to be cut back equally over all claims contained in this report of work. જાં -
- In the event that you have not specified your choice of priority, option one will be implemented. Credits are to be cut back as priorized on the attached appendix. က်

Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims. Note 2:

Note 1:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

If work has been performed on patented or leased land, please complete the following:

Signature

0241 (03/91)

Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims. Work Report Number for Applying Reserve Value of Value Value Number Reserve: Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (~) one of the following: Claim Number (see Note 2) of Claim Units Assessment Work Done Applied to this Claim Assigned Work to be trom Claimed at on this Claim this Claim a Future Date 1-802 659 800 202 658 900 900 L-8:02 in the event that you have not specified your choice of priority, option one will be implemented. Credits are to be cut back equally over all claims contained in this report of work. Coredits are to be cut back starting with the claim listed last, working backwards. Credits are to be cut back as priorized on the attached appendix. 70,846 62,000 58,400 37 8846 Total Value Work Total Value **Total Number** Total Assigned **Total Reserve**

of Claims

ite 2: If work has been performed on patented or leased land, please complete the following:

certify that the recorded holder had a beneficial interest in the patented in leased land at the time the work was performed.

Signalure

Date

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim		Value Assigned trom this Claim	Reserve: Work to be Claimed at a Future Date
	1-802 673	1		800			
	F 802 674	1		8:00		•	
	L-641402			2:000			
·	L-641 403	<u>l</u>		2.000			
`.	L-641404			3.000			
<u> </u>	L-641405	Ĺ		2.000			
	L-641406	1		3,000			
	1-641410	1		2.000		···	
	L-641411	,(2,000			
	L-641412	1		2.800			
	L-641413	<i>i</i> .		2.000	\	· · · · · · · · · · · · · · · · · · ·	
	1-641414	:		2,000 52			
	L-641415	}		2.000			
	1-641416	1		2,000			
	L-802668			9:00	1	See	
	L-802 669			8.00		Schedulct	4
·. •	L-802656			9.00 .			
•	Total Number of Cleims		Total Value Work	Total Value Work Applied	L	Total Assigned	Total Reserve

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of which claims you wish to priorize the defetion of credits. Please mark (\sim) one of the following:

- $oldsymbol{arGamma}$ Credits are to be cut back starting with the claim listed last, working backwards.
 - Credits are to be cut back equally over all claims contained in this report of work.
 - Credits are to be cut back as priorized on the attached appendix. બં લં

Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims. × + • ×

in the event that you have not specified your choice of priority, option one will be implemented.

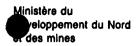
If work has been performed on patented or leased land, please complete the following:)te 2:

certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

4014 WASH

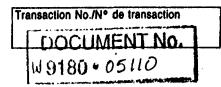


Ministry of Northern Development and Mines



Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation



Mining Act/Loi sur les mines

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4º étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Туре	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre	11570	
	Field Supervision Supervision sur le terrain		11570
Contractor's and Consultant's Fees	Туре		
Droits de l'entrepreneur	ASSATER	3033	
et de l'expert- conseil	ASSAYER DAILLER	56243	59176
Supplies Used Fournitures utilisées	Туре		
			79.6
Equipment Rental	Туре		
Location de matériel			
	Total Dir Total des co	ect Costs	70846

2. Indirect Costs/Coûts indirects

Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Туре	Descrip	tion	Amount Montant	Totals Total global
Transportation Transport	Туре			
Ì				
•				
Food and Lodging Nourriture et hébergement				
Mobilization and Demobilization Mobilisation et démobilisation				
	Sub To Total partiel	tal of Indir des coûts		
Amount Allowable Montant admissible				
Total Value of Assessment Credit (Total of Direct and Allowable d'évaluation (Total des coûts directs et indirects admissibles				

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note: Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

- Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
- Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
× 0.50 =	

Remises pour dépôt

- Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
- 2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs cl-dessous.

Valeur totale du crédit d'évaluation	Evaluation totale demandée
× 0,50 =	

Certification Verifying Statement of Costs

I hereby certify:

that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as Axabasa And And And And And I am authorized (Recorded Holder, Agent, Position in Company)

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :

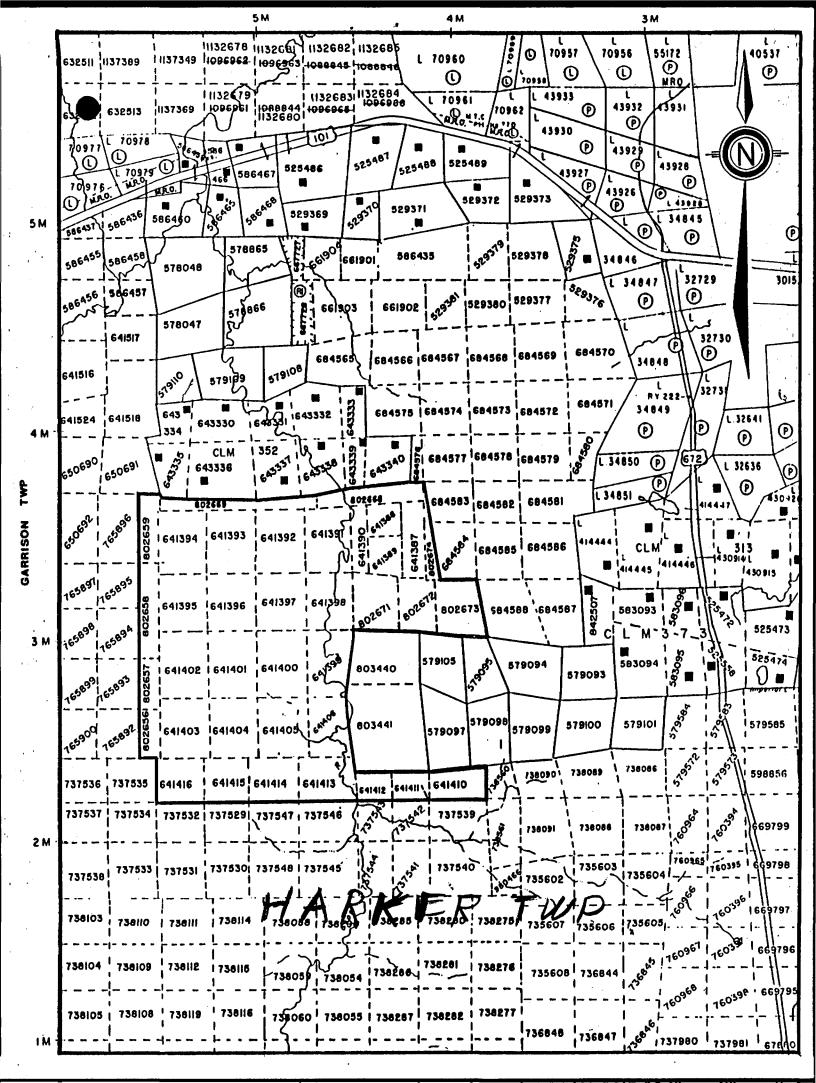
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ je suis autorisé (titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature	Date
Gller Tourige and	11-14-91

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.





Assess. Lib

Recording Office 4 Government Road East KIRKLAND LAKE, Ontario P2N 1A2

Ministry of

Ministère du

Northern Development

953 Government Road W.

KIRKLAND LAKE, Ontario

American Barrick Resources Corp.

Développement du Nord

and Mines

et des Mines

February 04, 1992

P.O. Box 1203

OUR FILE: W9180.05110

ONTARIO GEOLOGICAL SURVEY GIS - ASSESSMENT FILES

FEB 24 1992

RECEIVED

Dear Sir:

P2N 3M7

SUBJECT: RECORDING OF PHYSICAL WORK (DIAMOND DRILLING) PERFORMED ON MINING CLAIMS L 641390 ETAL. IN THE TOWNSHIP OF HARKER, LARDER LAKE MINING DIVISION

The above work has been recorded as of November 14, 1991. All the work applied to mining claims L 641390 etal. cannot be applied because the maximum amount applied to any mining claim(current year plus five(5) additional years) has been reached according to your claim record sheets[SEE SUBSECTION 4.-(5)]. Also the maximum that can be assigned in any assessment year is \$12000.00 therefore the amount applied has been further reduced[SEE SUBSECTION 7.(3)].

Your statement of costs shows only the contractor's fee without any breakdown of expenses or indirect costs. Upon review of other diamond drill report submissions it was shown that under most circumstances these indirect costs did not exceed the 20% of the direct costs which are allowable. After discussions with the Chief Mining Recorder and the other mining recorders it was agreed that due to the transition into the new Mining Act and the fact that in most circumstances the indirect costs do not exceed the 20% amount allowable, we would accept initial submissions of this nature without the breakdown of direct and indirect costs. In future submissions please ensure that the contractor's fees are broken down into direct and indirect costs. Failure to comply with this practice could have adverse affects on the status of your claims.

Should this or any previously submitted work be reduced at a later stage, the amount applied to these claims may fall below this maximum. In order to reassign these credits or any other credits from your Reserve you will have to submit a new work report form and use the Work Group 'Assignment from Reserve'.

The enclosed Assessment Work Credits form (Schedule A) outlines the work credits which will be recorded on your claims.

Yours truly

Martin Cuda Mining Recorder

Larder Lake Mining Division

(705) 567-9241

enclosures

ASSESSMENT WORK CREDIT

SCHEDULE A

DATE: December 14, 1991
RECORDER'S REPORT NUMBER: W9180.05110

RECORDED HOLDER: American Barrick

CLIENT NUMBER: 102119

Resources Corp.

TOWNSHIP OR AREA: Harker

ASSIGNMENT WORK PERFORMED: \$70846.00

CLAIM NUMBER(S.)	VALUE OF WORK DONE ON THIS CLAIM	
L 641390	\$22321.00	
L 802671	14766.00	
L 802672	31633.00	
L 802673	2126.00	
L 802671 L 802672	14766.00 31633.00	

Total Assessment Credit applied: \$40526.00

Level of Assessment Credit Recorded \$40526.00

Amount Credited to the Reserve: \$30320.00

CLAIM NUMBER(S)	VALUE APPLIED TO THIS CLAIM	VALUE ASSIGNED FROM THIS CLAIM	PAGE 3 RESERVE:
L 641390	\$ 1600.00	\$ 12000.00	A 0701 700
802671	400.00	12000.00	\$ 8721.00 2366.00
802672	400.00	12000.00	19233.00
641387	1600.00	0.00	
641388	1600.00	0.00	0.00 0.00
641389	1600.00	0.00	0.00
641391	1600.00	0.00	0.00
641392	1600.00	0.00	0.00
641393	1600.00	0.00	0.00
641394	1600.00	0.00	0.00
641395	1600.00	0.00	0.00
641396	1600.00	0.00	0.00
641397	1600.00	0.00	0.00
641398	1600.00	0.00	0.00
641399	1600.00	0.00	0.00
641400	1600.00	0.00	0.00
641401	1600.00	0.00	0.00
802673	400.00	1726.00	0.00
802674	400.00	0.00	0.00
641402	1600.00	0.00	0.00
641403	1600.00	0.00	0.00
641404	1600.00	0.00	0.00
641405	1600.00	0.00	0.00
641406	1600.00	0.00	0.00
641410	1600.00	0.00	0.00
641411	1600.00	0.00	0.00
641412	1600.00	0.00	0.00
641413	1600.00	0.00	0.00
641414	526.00	0.00	0.00
641415	0.00	0.00	0.00
641416	0.00	0.00	0.00
802668	0.00	0.00	0.00
802669	0.00	0.00	0.00
802656	0.00	0.00	0.00
802657	0.00	0.00	0.00
802658	0.00	0.00	0.00
802659	0.00	0.00	0.00



7550-0023(2147-89.12)

Ministry of Tourism and Recreation

Things To Do TODAY

Date: February 03, 1992

				Completed
1	Notes	TO FILE:		
2			· · · · · · · · · · · · · · · · · · ·	
3	Total	Meterage	954.14 m.	
4		0	3130.34 ft	
5				
6	Total	Samples:	263 allass	ayed for Aug/T
7				
8.	Hd	just ments	457.54	
9	Claim	L802672	458,29	\$ 31633.00
0		802673	30.75	2126.00
1		_	488. 29 m.	\$ 33759.00
2.—	4			
T_4_	The transfer of the state of th	en er staden en gewennen er er staden staden staden staden staden staden bestellt staden en en entstelle stade	naugus 200 (nitrosentes sur lab hara) i paganan-amaga at appaga ang hapaga mayanahaha labid libadha da	
Vote	S:			
				
	······································	·		
				
			· · · · · · · · · · · · · · · · · · ·	
				
•••				

***************************************			and a first first contract and a second cont	

