974059

HOLE NO. : GP-90-1
SECTION : 2520.00 EAST

PLUTONIC OPERATIONS LIMITED
GOWRIE PARK

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Northing : 4967.00
Easting : 2520.00
Grid : FIRE TOWER
Direction : Vertical
Inclination : -90.0
Elevation : 9992.00
Azimuth : 180.0
Mag Azimuth :
Length (m) : 24.70
Precol. (m) : 2.8m
BOCO : 0.30m
TFR : 1.90m
Water Table :

DIAMOND DRILL RECORD

Drill Type :LY38
Core Size :
Contractor :N Poltock

Dip Tests Method:

Depth	Az	Dip
24.7	180.0	-90.0

Property : FIRE TOWER
State : Tasmania
GMR : GOG 4440
E.L. No. : GOWRIE PARK
Project No. : 706
Date Started :
Date Completed:
Logged by : G. MacDonald
Relogged by :
Date Logged : May '92
Interpreted : G. MacDONALD
Initialled :

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Width (m)	Au (ppm)
.00	.30	PRECOLLAR					
.30	24.70	VOLCANICLASTIC					
.70	3.80	QUARTZ RICH VOLCANICLASTIC. Orange brown to beige brown, medium grained to coarse grained (generally 1-2mm) sub - angular to sub - rounded, massive, quartz rich volcaniclastic. Rock is strongly silicified and sericitized throughout, weakly carbonate altered. Quartz and sericite alteration is diffuse, carbonate alteration is in spots and blebs. The lower contact is gradational. The rock contains 2% pyrite in fine disseminations and coarse grained blebs and veins up to 1 cm cross-cutting at 45 degrees to the core axis. Pyrite is generally associated with silicification. Rock contains minor, locally 1% galena in fine disseminations and in late stage fine veins at 70 to 80 degrees to the core axis with quartz and/or carbonate. Minor chalcopyrite is associated with pyrite and occasionally with quartz carbonate galena veins. The rock contains quartz carbonate haematite veins at 50 to 60 degrees to the core axis. Quartz fibres in veins show growth sub-perpendicular to the vein orientation. Moderate manganese staining of veins / fractures.	SA000X	.30	1.00	.70	1.94
			SA000Y	1.00	2.00	1.00	2.41
			SA0000	2.00	3.00	1.00	2.32
			SA0001	3.00	4.00	1.00	3.59
			SA0002	4.00	5.00	1.00	2.45
			SA0003	5.00	6.00	1.00	1.17
			SA0004	6.00	7.00	1.00	4.51
			SA0005	7.00	8.00	1.00	3.11
			SA0006	8.00	9.00	1.00	.57
			SA0007	9.00	10.00	1.00	.74
			SA0008	10.00	11.00	1.00	.76
			SA0009	11.00	12.00	1.00	3.26
			SA0010	12.00	13.00	1.00	1.12
			SA0011	13.00	14.00	1.00	1.32
			SA0012	14.00	15.00	1.00	.77
			SA0013	15.00	16.00	1.00	1.43
			SA0014	16.00	17.00	1.00	5.61
			SA0015	17.00	18.00	1.00	1.75
			SA0016	18.00	19.00	1.00	.72
			SA0017	19.00	20.00	1.00	1.55
.30	1.90	As above but orange brown strongly oxidised silicified and sericitized rock with manganese staining of fractures. Rock contains approximately 2% pyrite in blebs and fine veins at low angles to the core axis, approximately 1% galena in fine disseminations and veinlets and approximately 0.5% chalcopyrite in fine disseminations and blebs. From 1.45 to 1.80 the rock contains numerous fine carbonate veinlets with minor galena cross-cutting at 70 to 80 degrees to the core axis. Possibly ghosted fiamme in this rock.	SA0018	20.00	21.00	1.00	.74
			SA0019	21.00	22.00	1.00	3.84
			SA0020	22.00	23.00	1.00	.73
			SA0021	23.00	24.00	1.00	1.72
1.90	3.05	As above but generally beige green, weak to moderately oxidised, silicified, sericitized and carbonate altered rock. From 2.40 to 2.65 the rock contains approximately 5% pyrite in 1 cm	SA0022	24.00	24.70	.70	.40

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Width (m)	Au (ppm)

wide veins with oxidised selvedges at 45 degrees to the core axis. From 1.90 to 2.40 the rock contains minor fine grained galena in fine fractures at high angles to the core axis, very minor disseminated chalcopyrite and minor pyrite in coarse grained clots. From 2.65 to 3.05 the rock contains fine fractures at 80 degrees to the core axis filled with quartz carbonate galena and/or very minor chalcopyrite.

3.05 3.80 As above but beige brown, strongly silicified. The rock contains minor fine quartz galena filled fractures cross-cutting at high angles to the core axis and pyrite filled fractures and blebs associated with silicification, at lower angles to the core axis and probably earlier than the quartz galena veins.

3.80 4.30 QUARTZ FIAMME VOLCANICLASTIC.

Orange brown to beige green massive, moderately oxidised silicified, sericitized and carbonate altered rock with medium grained sub - rounded to sub - angular quartz and coarse grained ghosted fiamme. The rock contains numerous quartz carbonate veins at 35 to 50 degrees to the core axis with manganese staining. The rock contains approximately 2% pyrite in blebs and disseminations.

4.30 6.30 QUARTZ VOLCANICLASTIC.

Beige green, occasionally orange brown where oxidised, massive, silicified, sericitized and carbonate altered rock with sub - rounded to sub - angular medium grained quartz. Rock contains numerous quartz carbonate haematite veins at 60 to 85 degrees to the core axis above 5.55 and from 30 to 60 degrees to the core axis below 5.55. Rock contains trace fine grained disseminated galena and minor chalcopyrite and minor pyrite generally associated with quartz carbonate veining. Rock becomes more sparsely clastic below 5.15. There is moderate autobrecciation by haematite from 5.95 to 6.30. At 4.90 there is a very dark grey / black, siliceous, fine grained interbed (?) or clast (?) of black siltstone at 25 degrees to the core axis. This bed/clast has veins of the same material in the adjacent rock due to soft sediment deformation. Rock has a gradational contact with the underlying fine grained rock.

6.30 7.90 FINE GRAINED VOLCANICLASTIC.

Beige green, strongly silicified, massive fine grained, sericitized and carbonate altered volcaniclastic. Rock contains numerous fine quartz carbonate haematite veins at 45 to 50 degrees to the core axis. Rock contains occasional moderately oxidised patches and variable sulphides. Carbonate alteration is spotty to irregularly finely veined.

6.30 6.45 As above with minor pyrite clots throughout.

6.45 6.70 As above with no obvious sulphides.

6.70 6.95 As above but moderately oxidised zone with haematite veining autobrecciating the rock.

6.95 7.50 As above with occasional dark grey ghosted possible but not convincing, clasts. Rock contains very minor galena in fine quartz veins and occasional clots of pyrite with oxidised

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rims. Carbonate alteration is spotty.

7.50 7.90 As above with numerous fine quartz, minor galena, very minor chalcopyrite filled fractures at 45 to 50 degrees to the core axis. These veins are cross-cut by a 3 mm wide pyrite vein.

7.90 8.15 QUARTZ LITHIC VOLCANICLASTIC.

Beige green, fine grained to coarse grained, massive, silicified sericitized and carbonate altered, sub - rounded quartz and sub - angular lithics volcaniclastic. Quartz is fine grained to medium grained whilst lithics are dark grey to dark grey green, fine grained, siliceous somewhat ghosted medium grained to coarse grained siltstones. The rock contains very minor galena in occasional fractures. Carbonate veining is moderate and is generally sub - perpendicular to the core axis.

8.15 10.80 QUARTZ VOLCANICLASTIC.

Beige green, fine grained to coarse grained (to 4 mm), massive, silicified, sericitized and carbonate, occasionally chlorite, altered quartz volcaniclastic. The rock generally contains fine grained to medium grained quartz though in patches quartz is rare. Quartz is sub - rounded to sub - angular. Rock contains generally minor to very minor pyrite and galena respectively. Rock generally contains quartz carbonate haematite veins at 60 to 70 degrees to the core axis. In places there are late stage quartz veins sub - perpendicular to the quartz carbonate haematite veins.

8.15 8.25 As above with very minor pyrite associated with fine quartz veins and minor manganese staining.

8.25 8.70 As above with possible ghosted clasts dark green and unconvincing. Rock contains minor pyrite clots.

8.70 8.90 As above but rock strongly autobrecciated by cross-cutting haematite veins. Rock contains minor galena in fine quartz veins.

8.90 9.20 As above but more fine grained with diffuse dark green patches. Rock contains carbonate very minor pyrite and galena and occasional irregularly cross-cutting haematite veins.

9.20 10.80 As above but rock contains pyrite, 2%, in coarse grained clots and minor galena in fine cross-cutting quartz veins. Rock contains carbonate veining associated with dark green chlorite patchys. Rock contains ovoid siliceous pods parallel to the core axis.

10.80 10.95 BLACK SILTSTONE.

Very dark grey siltstone bed or clast. The upper contact is diffuse and marked by a zone of quartz. The lower contact is sharp and at 20 degrees to the core axis. The siltstone is cross-cut by irregularly oriented quartz veins

10.95 14.95 QUARTZ LITHIC VOLCANICLASTIC.

Beige green, medium grained to coarse grained, massive, silicified, sericitized and carbonate altered, quartz, variably lithic volcaniclastic. The quartz is medium grained to coarse grained (up to 4 mm), sub - rounded to sub - angular. Lithics include black siltstone, beige green fine grained siliceous siltstone and dark green,

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fine grained, siltstone. Lithics are sub - angular to sub - rounded. Rock contains occasional cross-cutting quartz carbonate haematite veins at 45 degrees to the core axis. Rock contains very minor galena and chalcopyrite and minor pyrite throughout.

10.95 11.95 As above with very minor galena, chalcopyrite and minor pyrite in fine veinlets.

11.95 12.35 As above but moderately oxidised due to cross-cutting haematite veinlets. Rock contains minor clots of pyrite.

12.35 13.35 As above but rock contains minor pyrite in clots and veins and very minor galena associated with late stage fine quartz veins.

13.35 14.15 As above but moderately oxidised with minor chalcopyrite in open space fractures after quartz carbonate haematite veins.

14.15 14.95 As above but with 1 to 2% pyrite and 1% chalcopyrite in irregular blebs and associated with cross-cutting quartz veins.

14.95 17.15 QUARTZ VOLCANICLASTIC.

Beige green, medium grained, massive, silicified, sericitized and altered quartz volcaniclastic. The quartz is medium grained and sub - rounded to sub - angular. Rock contains minor to 2% pyrite and very minor chalcopyrite and galena in veins and blebs. The rock contains minor quartz carbonate haematite veining variably oriented. Rock is generally strongly carbonate / clay veined.

14.95 16.15 As above with minor pyrite and very minor chalcopyrite, weakly veined.

16.15 17.00 As above with 2% pyrite and very minor chalcopyrite. Rock more strongly veined.

17.00 17.15 As above but moderately oxidised and negligible sulphides.

17.15 24.70 QUARTZ LITHIC FIAMME VOLCANICLASTIC.

Beige green medium grained to coarse grained, massive, quartz, lithic and fiamme volcaniclastic, silicified, sericitized and carbonate altered. Quartz is medium grained to coarse grained (up to 4mm) and sub - rounded. Lithics are medium grained to coarse grained (up to 50 mm) and include rafts of black siltstone, dark green, fine grained, sediments, pale green, fine grained, siliceous tuffaceous clasts. Fiamme are chloritic (to 100 mm). The rock is weak to moderately quartz carbonate veined, generally at 70 degrees to the core axis. The rock contains approximately 1 to 2% pyrite throughout as clots and disseminations and occasionally trace to very minor galena and chalcopyrite associated with the quartz carbonate veins. Carbonate alteration is in fine irregularly oriented veinlets generally altered to clay.

24.70 E.O.H.