Q6. No 5.

Q6 (A)

QUEST EXPLORATION

NOTES ON THE RESULTS OF TEST

WORK ON SAMPLES FROM -

EL9/65 AND EL3/67

KING ISLAND (to date)

67-4527

(5)

67-452

187001

March 10th, 1967

NOTES ON THE RESULTS OF TEST WORK ON SAMPLES

FROM E.L. 9/65 AND E.L. 3/67 KING ISLAND TO DATE

LABORATORY INVESTIGATIONS:

Laboratory work designed to assess total heavy mineral content plus rutile, zircon and other valuable minerals in samples from the King Island field programme was carried out in the C.S.I.R.O. Ore Dressing Laboratories, Melbourne, by Mr. J.A. Thomas, Chemical Engineer, under the direction of Mr. W.M. Billinghurst, Consulting Engineer.

Drill hole samples were passed to the laboratory without treatment, other than quartering. Individual samples, generally representing 5 foot drill hole intervals, weighed about 2 000 grams (4½ lbs). Samples as received were dried and split into two equal fractions, one fraction being used for heavy mineral determination and the other retained.

(a) Heavy Mineral Determinations - Samples for heavy mineral determination, normally about 1 000 grams each, were tabled and the table concentrate representing about 20% of the sample dried and quartered. One quarter fraction was passed to sink/float separation using tetrabromoethane (S.G. 2.95) and total heavy minerals determined.

The results from determinations completed to 8/3/1967 are set out in Table 2 in the Appendix. A summary of the results to date is given in Table 1 below -

TABLE 1 SUMMARY OF HEAVY MINERAL CONTENTS. QUEST EXPLORATION PTY. LIMITED.

FIELD AREA	HEAVY MINERAL CONTENT (%)		Remarks
	Range	Mean	
A	0.122 - 1.14	0.528	Coast north of Sea Elephant River.
B	0.418 - 5.49	1.83	North and South Banks Sea Elephant River.
C	0.571 - 1.97	1.10	South of Sea Elephant River.

The results to date show some heavy mineral in all areas. A significantly higher than average heavy mineral content is shown in holes 18, 22, 23, 25, 26 and 28 over a distance of about 30 chains at the mouth of the Sea Elephant River. Heavy mineral contents in this latter area fall generally in the range 2.0 to 5.5% with drill samples available from depths up to about 10 ft. only.

During table concentration of the samples, organics and soil fines present in the sample are discarded. In some cases, particularly in those samples from the 0 - 5 footage interval the loss in weight from organics and soil is considerable. Data indicating the extent of this loss is set out in Table 5 of the Appendix. It will be seen that losses range from 14% to 38% of dry sample weight.

(b) Rutile/Zircon Determinations - Rutile/Zircon contents of the samples were determined by magnetic separation of heavy mineral fractions or table concentrates followed by spectrographic analysis of the non-magnetic fractions.

Details of the results of rutile and zircon assessments are given in Table 3 of the Appendix. It will be seen that rutile plus zircon contents fall in the range 13.6% to 20.2% of the heavy mineral. This is significantly lower than the levels that would have been expected from previous work carried out by Mt. Isa and King Island Scheelite some years ago.

The relative proportions of rutile and zircon present show that zircon is significantly less abundant than rutile.

In one series of experiments to check whether abnormal amounts of rutile and zircon were reporting to the magnetic fraction a group of samples were separated on the Rapid magnetic separator both in the "as received" state and after leaching with hydrochloric acid. The results are shown in Table 4 of the Appendix.

It will be apparent that hydrochloric acid leaching has no significant effect on the quantity of the non-magnetics separated from the heavy mineral concentrates.

An incidental effect noted during the leaching experiment was a weight loss of the sample amounting to about 3% - 4%. Since leaching was accompanied by some CO_2 emission it is presumed that the weight loss represents decomposition of carbonates present.

(c) Other Valuable Minerals - Examination of samples for valuable minerals other than rutile and zircon is incomplete but both monazite and cassiterite have been noted.

No determinations of recoverable ilmenite, or of grade, have been made as yet.

002

187003

APPENDIX

HEAVY MINERAL DETERMINATION OF KING ISLAND BEACH SAND SAMPLES

TABLE 2: ASSESSMENTS OF TOTAL HEAVY MINERALS, PER CENT OF DRY SOIL FREE SAMPLE

HOLE NO.	DEPTH INTERVAL (FEET)					
	0 - 3	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30
1	0.456					
2	1.18					
3	0.758					
4	2.22					
5	1.60					
6	3.15	3.18	1.49			
7	1.71					
8	1.07					
9	0.81					
10	0.418					
11	3.23					
12	2.32					
13	2.01					
14	2.36					
15	0.536					
16	1.81					
17	1.23					
18	3.95	2.74				
19	1.23					
20	1.75					
21	2.41	0.945				
22	2.66	2.61				
23	3.20	1.91	1.27			
24	0.569	0.640	0.476	0.552	0.611	
25	4.60	2.32				
26	3.62	2.36	2.18	1.08		
27	0.530	0.378	0.525			
28		5.49				
33	1.13	0.743	0.816	0.571	0.726	
34	1.37	1.03	1.38	1.19	0.945	
40	0.814	1.12	1.97	0.916	1.29	
41	1.30	0.878	1.62			
56	0.455	0.489	0.323	0.371	0.244	0.419
57	0.484	0.520	0.556	0.701		
58	0.507	1.09				
59	0.348	0.515	0.449	0.281	0.268	0.396
60	1.14	0.951	0.579	0.834	0.963	0.426
61	0.686					
62	0.122	0.163	0.185	0.186	0.256	0.242
63	0.204	0.230	0.346	0.486	0.908	1.73

TABLE 4: RESULTS OF ACID CLEANING EXPERIMENTS

SAMPLE NO.	MAGNETIC FRACTION		NON-MAGNETIC FRACTION		Loss of Weight
	Before Cleaning	After Cleaning	Before Cleaning	After Cleaning	
1-3	23.7 gms	23.6 gms	60.0 gms	52.1 gms	9.6
25	29.8 "	32.1 "	147.6 "	140.0 "	3.0
26	37.5 "	46.9 "	265.9 "	248.5 "	2.7
34	15.4 "	16.2 "	123.6 "	119.0 "	4.1
40	17.1 "	21.0 "	224.4 "	209.4 "	3.4
41	9.3 "	10.3 "	96.7 "	92.2 "	3.4

NOTE: Acid cleaning of table concentrates from holes 1 - 5 (composite sample), 25, 26, 34, 40 and 41 to check the possibility that some rutile and/or zircon was sufficiently coated to report to the magnetic fraction. Cleaning was carried out by agitating in 10% HCI for 20 minutes.

TABLE 5: ORGANIC AND SOIL CONTENT OF SOME SAND SAMPLES

HOLE NO.	FOOTAGE INTERVAL	ORGANIC AND SOIL CONTENT % DRY SAMPLE
33	0 - 5	22.3
56	0 - 5	13.9
57	0 - 5	23.0
58	0 - 5	38.0
59	0 - 5	30.0
60	0 - 5	30.6

TABLE 3: ASSESSMENTS OF RUTILE AND ZIRCON CONTENT

BY CHEMICAL ANALYSIS OF MAGNETIC SEPARATOR PRODUCTS

187005

Sample No.	Heavy Mineral % of Sample	RUTILE		ZIRCON		RUTILE & ZIRCON		Remarks
		% of sample	% of H.H.	% of sample	% of H.H.	% of sample	% of H.H.	
2	1.18	0.111	9.4	0.060	5.1	0.171	14.5	Samples 2, 4 and 5 were heavy fractions from Holes 2, 4 and 5 after heavy liquid separation subjected to magnetic separation on a Frantz high intensity separator.
4	2.22	0.219	9.9	0.134	6.0	0.353	15.9	
5	1.60	0.153	9.6	0.079	4.9	0.232	14.5	
1 - 5	1.28	0.154	12.1	0.09	7.0	0.244	19.1	Sample 1-5 was a Composite table concentrate from Holes 1,2,3,4,& 5 subjected to magnetic separation on a Rapid magnetic separator.
25	3.54	0.373	10.5	0.247	7.0	0.620	17.5	Samples 25,26,34,40 & 41 were composite samples resulting from miting footages samples from each of holes 25,26,34,40 & 41. Table concentrates from each composite were separated on a Rapid magnetic separator.
26	2.31	0.208	9.0	0.106	4.6	0.314	13.6	
34	1.18	0.118	10.0	0.069	5.9	0.187	15.9	
40	1.23	0.130	10.6	0.093	7.5	0.223	18.1	
41	1.30	0.160	12.5	0.102	7.9	0.262	20.2	

In determining Rutile & Zircon contents from analyses for TiO_2 and ZrO_2 in the non-magnetic fractions Rutile was assumed to be 96.4% TiO_2 and Zircon 66% ZrO_2.

004

005

Week ending 17-2-67

187006

Hole No.	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	Remarks
1	0 - 4½					To water level
2	0 - 4½					"
3	0 - 5					"
4	0 - 4½					"
5	0 - 5					"
6	0 - 5	5 - 10	10 - 14			"
7	0 - 5					"
8	0 - 4½					"
9	0 - 4					"
10	0 - 4					"
11	0 - 5	5 - 7				"
12	0 - 5	5 - 6				"
13	0 - 5	5 - 5½				"
14	0 - 5	5 - 6				"
15	0 - 4					"
16	0 - 5	5 - 6				"
17	0 - 4					"
18	0 - 5	5 - 10	10 - 12½			"
19	0 - 4					"
20	0 - 4					"
21	0 - 5	5 - 10	10 - 12			"
22	0 - 5	5 - 10	10 - 12			"
23	0 - 5	5 - 10	10 - 14			"
24	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	Water level not reached
25	0 - 5	5 - 10				To water level
26	0 - 5	5 - 10	10 - 15	15 - 20		"
27	0 - 5	5 - 10	10 - 15	15 - 16		"
28	0 - 5	5 - 10	10 - 15	15 - 18		"
29	0 - 5	5 - 10	10 - 15			"
30						"
31						"
32						"
33						"
34						"
35						"
36						"
37						"
38						"
39			15 - 18			"

187007

Samples despatched 22/2/-67

006

Hole No.	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	Remarks
40						To water level
41						"
42						"
43						"
44						"
45						"
46						"
47						"
48			Casing	Casing 15 - 18		Water level at 10 feet
49			Casing			"
50						To water level
51				Casing	Bottom in brown pug at 20'	
52				Casing	Casing	Shingled 25'
53			Casing	15 - 18	Inflow of water	
54				Onto rock		
55		Casing	casing	lost pump		

The above holes were drilled roughly at mile intervals, going north, from approx. 20 chains North of Eldorado Creek. They were sited 100' in land from H.W.M.

This is in the coastal strip.

007

187008
Samples despatched 25-2-67

Holes located in Northern Section

	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30
56						
57			15 - 18			
58						
59						
60						

The above holes are all situated in the section north of the Sea Elephant river.

Lines of 3 holes each 10 chains apart and first line roughly 230°W from Sea Elephant river mouth.

Second line 240°W roughly one mile North of line 1.

008

18700 9

Samples despatched 28/2-67

Hole No.	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30
60						25 - 28
61						
62						
63						
64						
65						25 - 28
66						25 - 27½
67						25 - 29

Second line 59 - 660'W - 60 - 660'W - 61

Third line 62 - 500'W - 63 - 660'W - 64

275° Mt. Counsel

125° Counsellor Island

200'W H.W.M.

Fourth line 65 - 500'W - 66 - 660'W - 67

1 mile N of third line 200'W of H.W.M.

187010

Samples despatched 1st March

	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30
68						25 - 27½
69						25 - 27
70						clay and water
71						
72						
73						

Line 68 - 69 - 70 - 1 mile N of line 65 - 66 - 67

68 - 560'W 240° - 69 - 66'W 240° - 70

Line 71 - 72 - 73 - 1 Mile N of line 68 - 69 - 70

71 - 100'W - H.W.M. - 600' - 240°W - 72 - 660'W 240° - 73

.010.

187011

Samples despatched 1/3/67

	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30
74						25 - 26
75						
76						

Line 74 - 75 - 76 approx. 1 mile north line 71 - 72 - 73

74 - 100'W - H.W.M.

75 - 660'W 240° 74

76 - 500'W 240° 75

187012

011

ADDITIONAL LABORATORY DATA SINCE 8/3/67

ASSESSMENTS OF TOTAL HEAVY MINERALS, PER CENT OF DRY SOIL FREE SAMPLE

HOLE NO.	DEPTH INTERVAL (FEET)					
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30
64	0.629	1.11	0.980	1.06		
65	0.203	0.189	0.214	0.224	0.252	0.151
66	0.186	0.240	0.291	0.770	0.392	0.327

ASSESSMENTS OF RUTILE AND ZIRCON CONTENT BY CHEMICAL ANALYSIS OF MAGNETIC SEPARATOR PRODUCTS.

Sample No.	Heavy Mineral % of sample.	RUTILE		ZIRCON		RUTILE + ZIRCON	
		% of sample	% of H.M.	% of sample	% of H.M.	% of sample	% of H.M.
59	0.375	0.0355	9.5	0.0275	7.3	0.630	16.8
60	0.808	0.0808	10.0	0.0631	7.8	0.1439	17.8

67-452

012

ADDITIONAL LABORATORY DATA SINCE 8/3/67

ASSESSMENTS OF TOTAL HEAVY MINERALS, PER CENT OF DRY SOIL FREE SAMPLE

HOLE NO.	DEPTH INTERVAL (FEET)					
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30
64	0.629	1.11	0.980	1.06		
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66	0.186	0.240	0.291	0.770	0.392	0.327

ASSESSMENTS OF RUTILE AND ZIRCON CONTENT BY CHEMICAL ANALYSIS OF MAGNETIC SEPARATOR PRODUCTS.

Sample No.	Heavy Mineral % of sample.	RUTILE		ZIRCON		RUTILE + ZIRCON	
		% of sample	% of H.M.	% of sample	% of H.M.	% of sample	% of H.M.
59	0.375	0.0355	9.5	0.0275	7.3	0.630	16.8
60	0.803	0.0803	10.0	0.0631	7.8	0.1439	17.8

013

DETAILED DRILLING AREA 'A'

OFF KING ISLAND N°3 1+2
SCALE 2" - 1 mile.
all lines approximate only.

5 cm

013

EL 3/67.

EL 9/65.

AREA 'A'

187014

014

DETAILED DRILLING AREAS 'B' AND 'C'

Tracing off
Sea Elephant River
Vuing Island.
Scale 4" to 1 mile

187015

N

5 cm

Holes 1, 2, 3 at 100' spaces

Holes 4, 5, 6, 7, 8, 9, 10 at 100' spaces

Holes 11, 12, 13, 14, 15, 16, 17 at 100' spaces

Holes 18, 19, 300' to 20, 100' to 21

Holes 22, 300' to 23, 240' to 24

Holes 25, 26, 200' to 27

All holes start 100' W of H.W.M.

Hole 28

AREA 'B'

Intercostigan line 160 N
line 50° magnetic

EL 9/65

10 chns

5 chns

37

31

29

30

36

EL 9/65

45

Holes 31, 32, 33, 34, 35, 36 at 5 chns intervals

Holes [illegible] 42, 43, 44, 45 at 5 chns intervals

AREA 'C'

Hole No	0-5'	5-10	10-15	15-20	20-25	REMARKS.
1	0-4½					TO WATER LEVEL
2	0-4½					"
3	0-5					"
4	0-4½					"
5	0-5					"
6	0-5	5-10	10-14			"
7	0-5					"
8	0-4½					"
9	0-4					"
10	0-4					"
11	0-5	5-7				"
12	0-5	5-6				"
13	0-5	5-5½				"
14	0-5	5-6				"
15	0-4					"
16	0-5	5-6				"
17	0-4					"
18	0-5	5-10	10-12½			"
19	0-4					"
20	0-4					"
21	0-5	5-10	10-12			"
22	0-5	5-10	10-12			"

Hole Nos.	0-5	5-10	10-15	15-20	20-25	REMARKS
23	0-5	5-10	10-14			TO WATER LEVEL
24	0-5	5-10	10-15	15-20	20-25	WATER LEVEL NOT REACHED
25	0-5	5-10				TO WATER LEVEL
26	0-5	5-10	10-15	15-20		"
27	0-5	5-10	10-15	15-16		"
28	0-5	5-10	10-15	15-18		"
29	0-5	5-10	10-15			"

017

187018

Wednesday 17-2-65

Hole Nos	0-5'	5-10	10-15'	15-20	20-25	25-30	30-35'	REMARKS
30	–	–	–	–	–			TO WATER LEVEL
31	–	–	–	–	–			"
32	–	–						"
33	–	–	–	–	–			"
34	–	–	–	–	–			"
35	–	–	–	–	–			"
36	–	–	–	–	–			"
37	–	–	–	–	–			"
38	–	–	–	–	–			"
39	–	–	–	15-18				"
40	–	–	–	–	–			"
41	–	–	–					"
42	–	–	–	–	–			"
43	–	–	–	–	–			"
44	–	–	–	–	–			"
45	–	–	–	–	–	–	–	"
46	–	–	–	–	–	–	–	"
47	–	–						"
48	–	–	Casing –	Casing 15-18				WATER LEVEL AT 10 FEET
49	–	–	Casing. –					— " —
50	–	–	–	–	–	–	–	TO WATER LEVEL

018

Sample despatched 22/2-'67

8

187019

Hole No	0-5	5-10	10-15	15-20	20-25
51	—	—	—	casing.	bottom in brown peaty clay
52	—	—	—	casing	casing — sheeted 25'
53	—	—	casing —	15-18	in flow of water.
54	—	—	—	onto rock.	
55	—	casing —	casing —	lost pump.	

The above holes, were drilled roughly at 100' intervals, going North, from approx 2½ chains North of Eldorado Creek. They were sited 100' inland from H.W.M.

This is in the coastal strip.

Samples despatched 25-2-67 9 187020

019

Holes located in Northern Section

	0-5'	5-10	10-15'	15-20	20-25	25-30		
56	–	–	–	–	–	–		
57	–	–	15-18					
58	–	–						
59	–	–	–	–	–	–		
60	–	–	–	–	–			

The above holes are all situated in the section north of the Sea Elephant river.

Line of 3 holes each, 10 chains apart and first line roughly 230° W from Sea Elephant River mouth.

second line 240° W roughly one mile North of line 1.

✓

020

Samples despatched 28/2-'67

Hole No.	0-5	5-10	10-15	15-20	20-25	25-30		
60						25-28		
61	—							
62	—	—	—	—	—	—		
63	—	—	—	—	—	—		
64	—	—	—	—				
65	—	—	—	—	—	25-28		
66	—	—	—	—	—	25-27½		
67	—	—	—	—	—	25-29		

Second line 59 - 660'W - 60 - 660'W - 61
third line 62 - 500'W - 63 - 660'W - 64
275° Mt. Counsel
125° Counsellor Island.
200' W. H.W.M.
fourth line 65 - 500'W 66 - 660'W - 67.
1 mile N of third line.
200' W of H.W.M.

✓

Samples dispatched 1st March.

	0-5'	5-10	10-15	15-20	20-25	25-30		
68	—	—	—	—	—	25-27½		
69	—	—	—	—	—	25-27		
70	—	—	—	—	—	clay + water		
71	—	—	—	—	—	—		
72	—	—	—	—	—	—		
73	—	—	—	—	—			

Line 68-69-70 - 1 mile N of line 65-66-67.
68 - 560' W 240° - 69 - 660' W 240° - 70

Line 71-72-73 - 1 mile N of line 68-69-70
71 - 100' W - H.W.M. - 600' - 240° W - 72 - 660' W 240° - 73.

Samples dispatched 1-3-67

12
187023

022	0-5'	5-10	10-15'	15-20	20-25	25-30	
74	—	—	—	—	—	25-26	
75	—	—	—	—	—	—	
76	—	—	—	—	—	—	

Line 74-75-76 approx 1 mile North line 71-72-73

74 - 100' W - H.W.M.

75 - 660' W 240° 74

76 - 500' W 240° 75

023

187024

March 10, 1967.

NOTES ON THE RESULTS OF TEST WORK ON SAMPLES FROM EL9/65 and EL3/67 KING ISLAND TO DATE

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Laboratory work designed to assess total heavy mineral content plus rutile, zircon and other valuable minerals in samples from the King Island field programme was carried out in the C.S.I.R.O. Ore Dressing Laboratories, Melbourne, by Mr. J. A. Thomas, Chemical Engineer, under the direction of Mr. W. M. Billinghurst, Consulting Engineer.

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../2

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(c) Other Valuable Minerals - Examination of samples for valuable minerals other than rutile and zircon is incomplete but both monazite and cassiterite have been noted.

No determinations of recoverable ilmenite, or of grade, have been made as yet.

025

187026

APPENDIX

HEAVY MINERAL INVESTIGATION ON KING ISLAND.

BEACH SAND SAMPLES.

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1	0.456					
2	1.18					
3	0.758					
4	2.32					
5	1.60					
6	3.15	3.18	1.49			
7	1.71					
8	1.07					
9	0.81					
10	0.418					
11	3.23					
12	2.32					
13	2.01					
14	2.26					
15	0.536					
16	1.81					
17	1.23					
18	3.95	2.74				
19	1.23					
20	1.75					
21	2.41	0.945				
22	2.66	2.61				
23	3.20	1.91	1.27			
24	0.569	0.640	0.476	0.552	0.611	
25	4.60	2.32				
26	3.62	2.36	2.18	1.08		
27	0.530	0.378	0.525			
28		5.49				
33	1.13	0.743	0.816	0.571	0.736	
34	1.37	1.03	1.38	1.19	0.945	
40	0.814	1.12	1.97	0.916	1.29	
41	1.30	0.878	1.62			
56	0.455	0.489	0.323	0.371	0.244	0.419
57	0.484	0.520	0.356	0.701		
58	0.507	1.09				
59	0.348	0.515	0.449	0.281	0.268	0.396
60	1.14	0.951	0.579	0.834	0.963	0.426
61	0.686					
62	0.122	0.163	0.185	0.186	0.256	0.242
63	0.204	0.230	0.346	0.486	0.908	1.73

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TABLE 4: RESULTS OF ACID CLEANING EXPERIMENTS.

SAMPLE NO.	MAGNETIC FRACTION		NON-MAGNETIC FRACTION		Loss of Weight %
	Before Cleaning	After Cleaning	Before Cleaning	After Cleaning	
1-5	23.7 gms	23.6 gms	60.0 gms	52.1 gms	9.6
25	29.8 "	32.1 "	147.6 "	140.0 "	3.0
26	37.5 "	46.9 "	265.9 "	248.5 "	2.7
34	15.4 "	16.2 "	125.6 "	119.0 "	4.1
40	17.1 "	21.0 "	224.4 "	209.4 "	3.4
41	9.3 "	10.3 "	96.7 "	92.2 "	3.4

NOTE: Acid cleaning of table concentrates from holes 1 - 5 (composite sample), 25, 26, 34, 40 and 41 to check the possibility that some rutile and/or zircon was sufficiently coated to report to the magnetic fraction. Cleaning was carried out by agitating in 10% HCl for 20 minutes.

TABLE 5: ORGANIC AND SOIL CONTENT OF SOME SAND SAMPLES.

HOLE NO.	FOOTAGE INTERVAL	ORGANIC AND SOIL CONTENT % DRY SAMPLE
33	0 - 5	22.3
56	0 - 5	13.9
57	0 - 5	23.0
58	0 - 5	38.0
59	0 - 5	30.0
60	0 - 5	30.6

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TABLE 3: ASSESSMENTS OF RUTILE AND ZIRCON CONTENT BY CHEMICAL ANALYSIS OF MAGNETIC SEPARATOR PRODUCTS.

Sample No.	Heavy Mineral % of sample.	RUTILE. % of sample	RUTILE. % of H.M.	ZIRCON % of sample	ZIRCON % of H.M.	RUTILE + ZIRCON % of sample	RUTILE + ZIRCON % of H.M.	REMARKS.
2	1.18	0.111	9.4	0.060	5.1	0.171	14.5	Samples 2, 4 & 5 were heavy fractions from Holes 2, 4 & 5 after heavy liquid separation subjected to magnetic separation on a Frants high intensity separator.
4	2.22	0.219	9.9	0.134	6.0	0.353	15.9	
5	1.60	0.153	9.6	0.079	4.9	0.232	14.5	
1 - 5	1.28	0.154	12.1	0.09	7.0	0.244	19.1	Sample 1-5 was a Composite table concentrate from Holes 1,2,3,4,&5 subjected to magnetic separation on a Rapid magnetic separator.
25	3.54	0.373	10.5	0.247	7.0	0.620	17.5	Samples 25,26,34,40 & 41 were composite samples resulting from mixing footage samples from each of holes 25,26,34,40 & 41. Table concentrates from each composite were separated on a Rapid magnetic separator. In determining Rutile & Zircon contents from analyses for TiO_2 and ZrO_2 in the non-magnetic fractions Rutile was assumed to be 96.4% TiO_2 and Zircon 66% ZrO_2.
26	2.31	0.208	9.0	0.106	4.6	0.314	13.6	
34	1.18	0.118	10.0	0.069	5.9	0.187	15.9	
40	1.23	0.130	10.6	0.093	7.5	0.223	18.1	
41	1.30	0.160	12.3	0.102	7.9	0.262	20.2	

DETAILED DRILLING AREA 'A'

OFF KING ISLAND Nos 1+2

SCALE 2" – 1 mile

all lines approximate only.

5 cm

70 75 79

EL 3/67.

73 72 71

70 69 68

EL 9/65.

67 66 65

AREA 'A'

64 63 62

61 60 59

58 57 56

1870039