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EL 2547

QUORN

FIRST ANNUAL AND RELINQUISHMENT REPORT FOR THE PERIOD 8/9/98 TO 7/9/99

Submitted by

Minotaur Gold NL
1999

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EXPLORATION LICENCE 2547 QUORN

1ST ANNUAL TECHNICAL AND RELINQUISHMENT REPORT

FOR THE PERIOD

8TH SEPTEMBER 1998 TO 7TH SEPTEMBER 1999

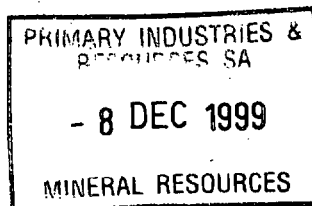
A. P. Belperio
Chief Geologist

20th November 1999

SUMMARY

Ground magnetic, partial leach and soils geochemistry does not support a kimberlite origin for a linear suite of circular magnetic anomalies along the western margin of the Willochra Basin

MAP REFERENCE
ORROROO (1:250,000)
QUORN 6533 (1:100,000)



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Note: Ground magnetic data for Table 3 and 4 are provided in digital form only.

INTRODUCTION

Exploration Licence 2547 (Quorn), covering an area of 272 km² of mostly low gradient alluvial spreads on the western margin of the Willochra Plain, was granted to Minotaur Gold NL on the 8th September 1998 for an initial period of one year with an exploration commitment of \$55,000 (Figure 1). The tenement lies principally within marginal cropping land and straddles the main Wilmington to Quorn road. The tenement was acquired to investigate the origin of a north-south trending series of small circular magnetic anomalies that coincided with the western margin of the Willochra Basin.

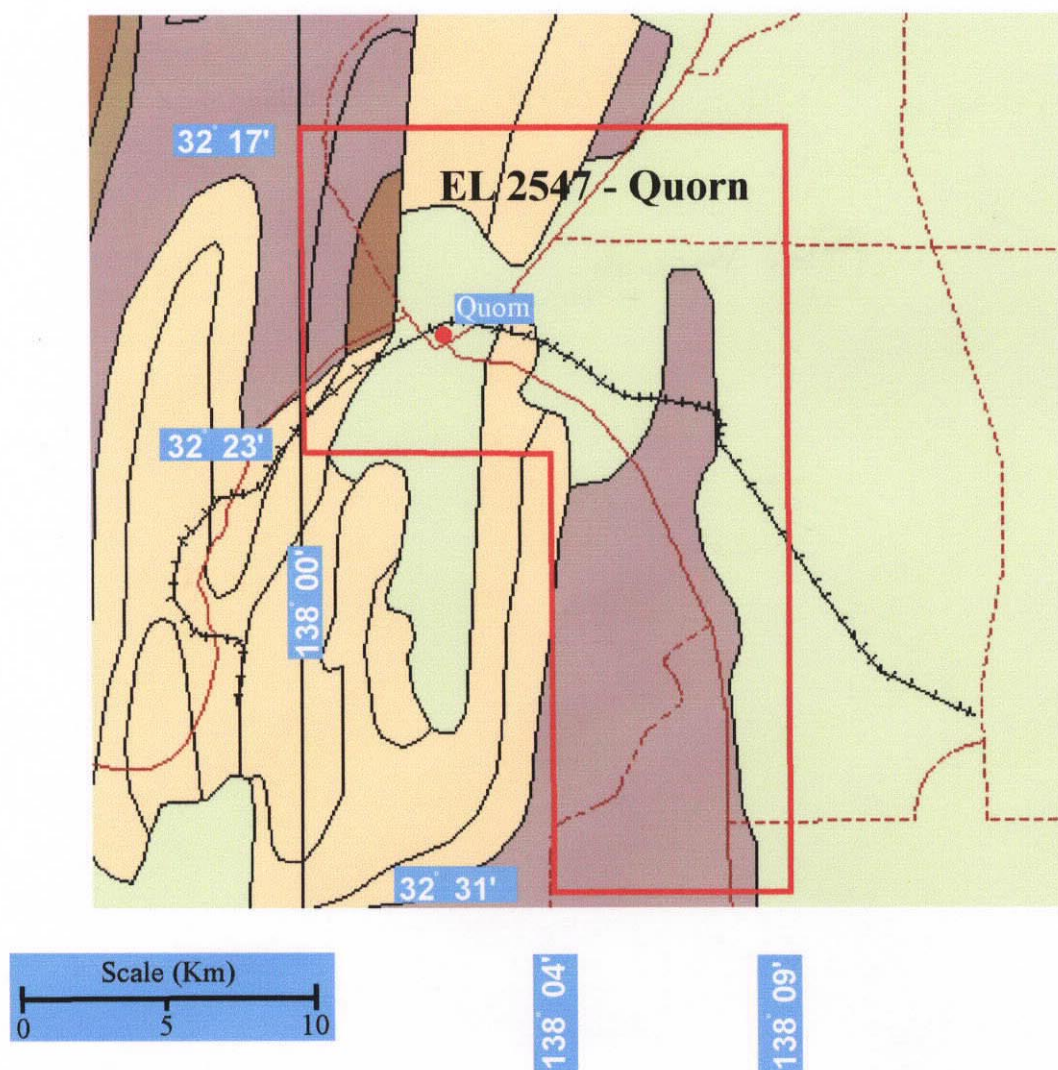


Fig.1 Location of Quorn EL2547.

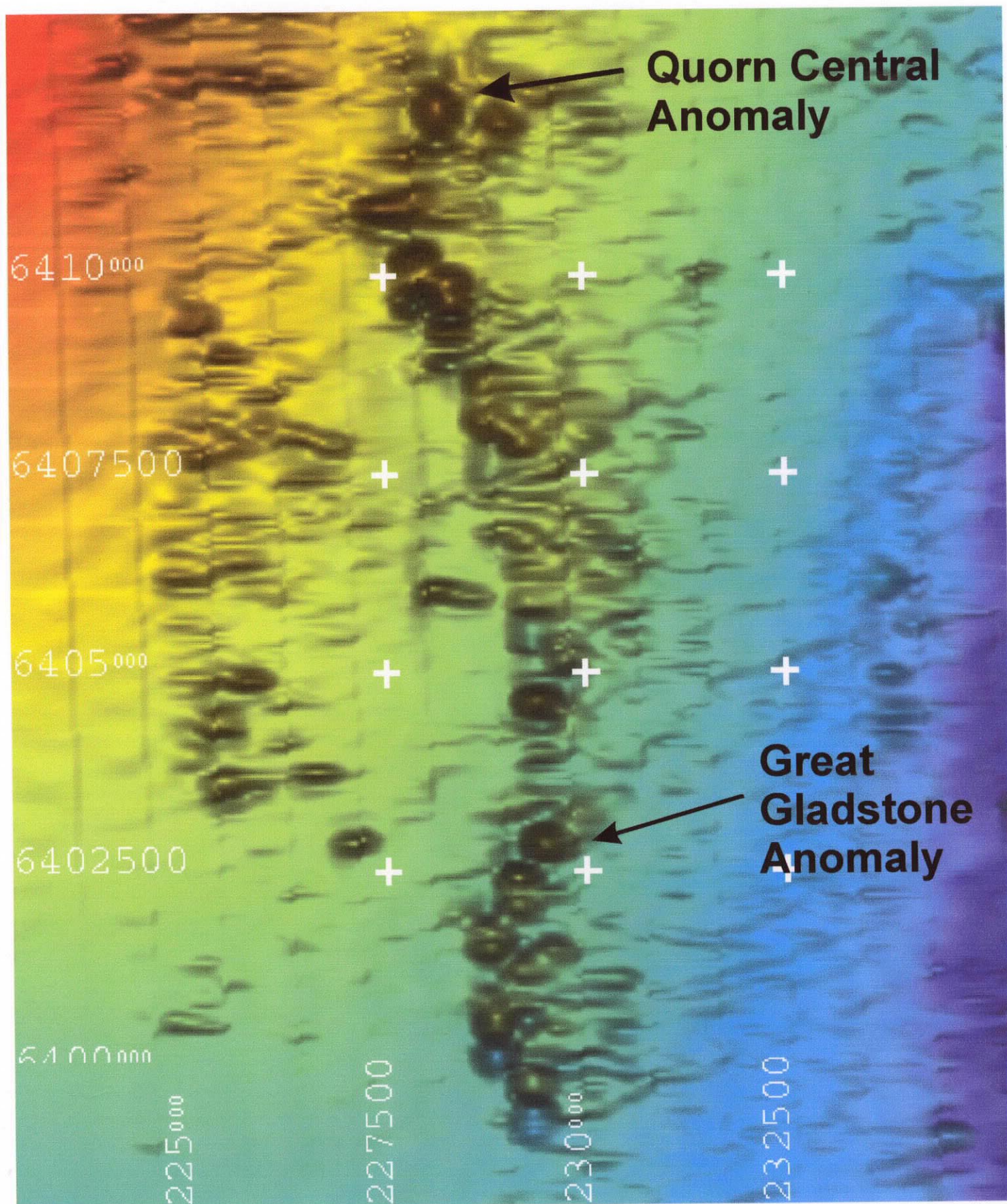


Figure 2: TMI aeromagnetic image of the southern part of EL 2547

GEOLOGICAL FRAMEWORK

The central Flinders Ranges, comprises a thick sequence of weakly deformed Neoproterozoic to Cambrian sedimentary strata that record a history of intracratonic sagging (Willouran Callanna Group), early rifting (Torrensian Burra Group), global cooling (Sturtian Umeratana Group) and finally the development of a passive margin (Marinoan Wilpena Group and Cambrian Hawker Group). The Quorn area includes prominent quartzite and sandstone ridges of ABC Quartzite equivalents, dropping off sharply onto the flat alluvial covered plains of the Cainozoic Willochra Basin.

A prominent linear series of circular magnetic anomalies marks the approximate western edge of the down-faulted Willochra Basin (Figure 2). These anomalies were interpreted as either

- mafic intrusive plugs along the structural margin
- kimberlitic intrusives along the structural margin or
- diapiric or skarn – like bodies of Fe-Cu-Ba similar to the exposed Great Gladstone prospect and Donnelly's ironstone quarry.

Several float samples in the vicinity of the anomalies proved positive in Fe and Cu. The latter model, although the most likely explanation for the anomalies, provide little incentive as exploration models because of their small known size.

MINOTAUR EXPLORATION PROGRAM :

Coincident ground magnetic profiles and soil geochemistry (AMDEL Deepleach technique) were undertaken along N-S and E-W profiles over three of the discrete magnetic anomalies (Figure 2); viz

Great Gladstone centred at approximately 229500E 6402900N
Quorn Central centred at approximately 228100E 6412150N
Quorn North centred at approximately 228150E 6417800N

Data including GPS locations are given in Tables 2, 3 and 4. Selected profiles are shown in Figures 3, 4 and 5.

The Great Gladstone anomaly (60nT) showed little positive response in soil geochemistry for base metals (Figure 3) and a modest response to Ni and rare earth elements indicating a possible ultramafic association. Notably, the Cu response was lower than that associated with the Great Gladstone workings.

The Quorn North anomaly revealed a magnetic profile that closely mimicked the known extent of ferruginised Tertiary sediments (Figure 4). Soil geochemistry showed no particular association with magnetic features and the anomaly was rejected as not significant. A single Tertiary gravel sample submitted for diamond and kimberlite indicator assessment proved negative.

The Quorn Central anomaly was more significant (250nT), and soil geochemistry by partial leach suggested a possible association with rare earths (Figure 5). The east – west sampling line was repeated for conventional soils assay including a range of kimberlitic indicator elements. These were twinned with soil soils from over known kimberlites (Table 5). The key kimberlitic indicator elements Mg, Cr, Ni, P, Ti, Ba, Nb, Ce, La, and Nd were all highly anomalous over the known kimberlites, but uniformly low over the Quorn Central traverse (Figure 6).

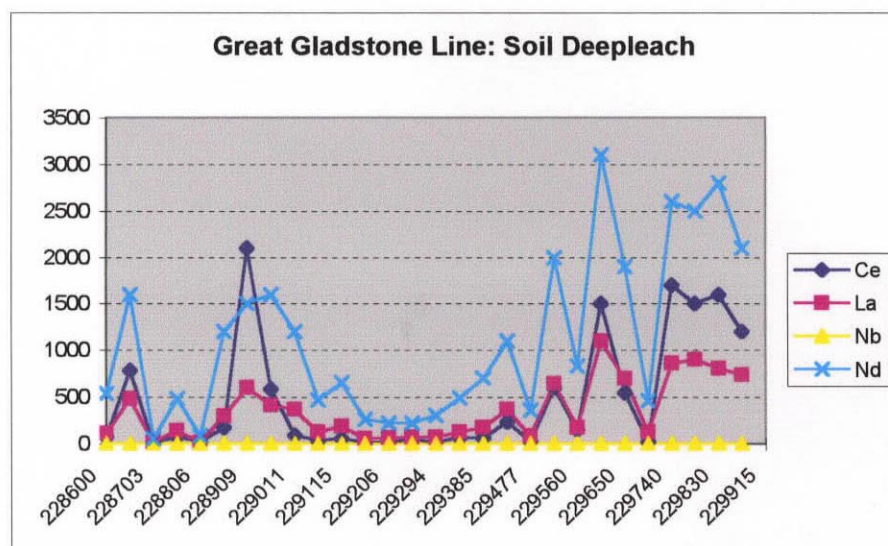
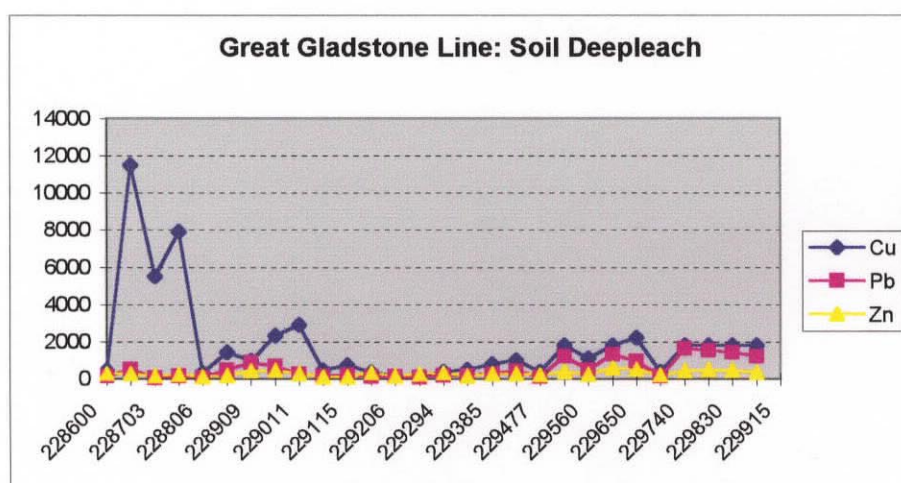
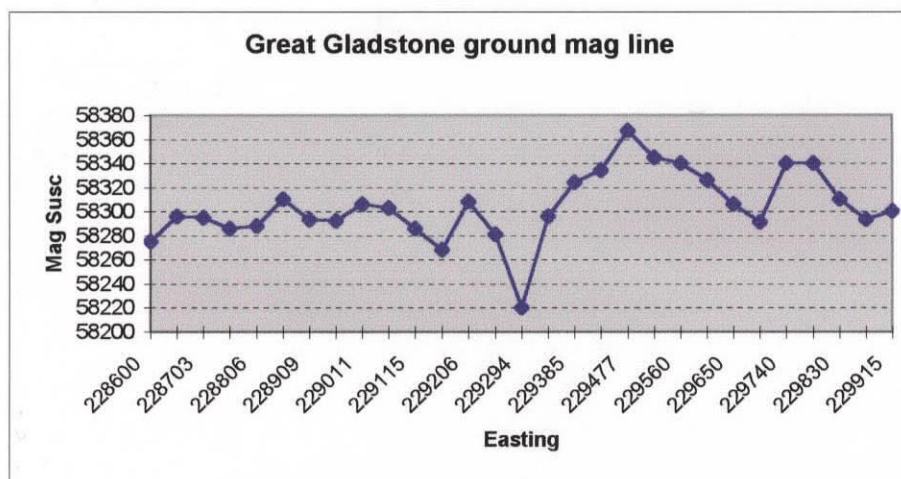


Figure 3. Great Gladstone magnetic anomaly: selected ground magnetic and soil geochemistry (Deepleach) profiles.

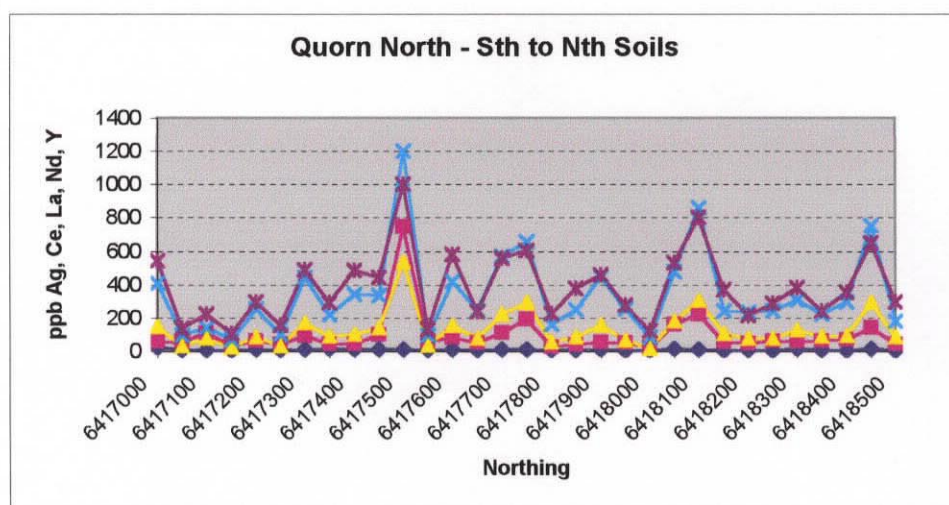
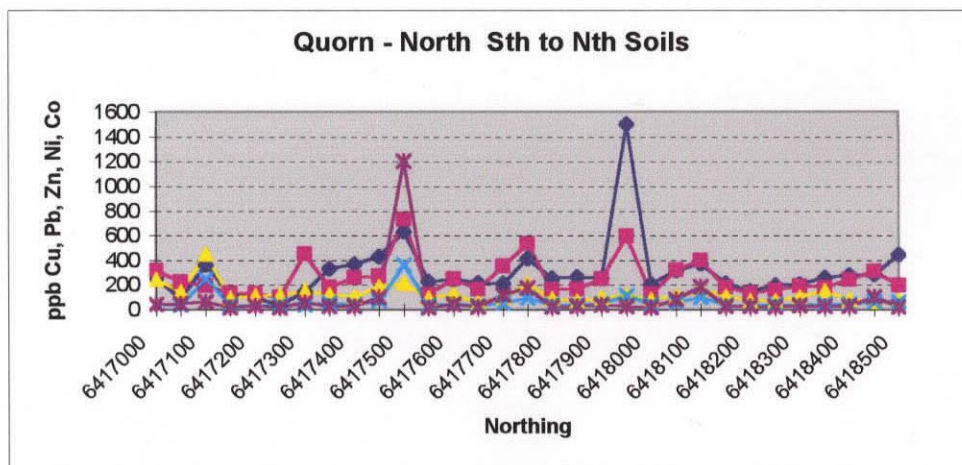
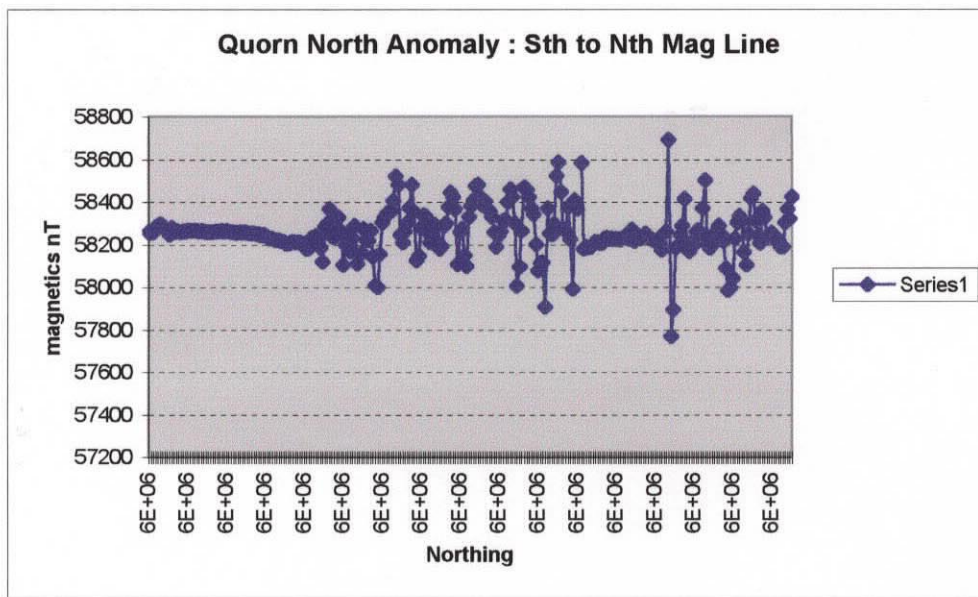


Figure 4. Quorn North: selected magnetic and soil geochemistry (Deepleach)

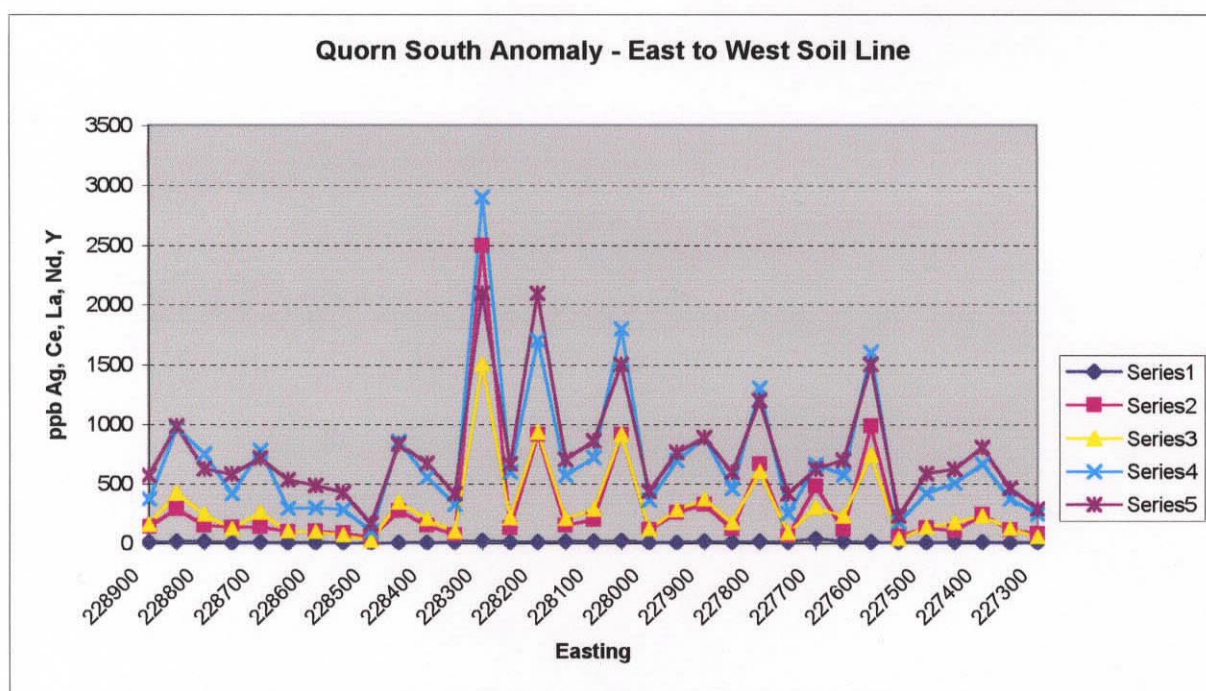
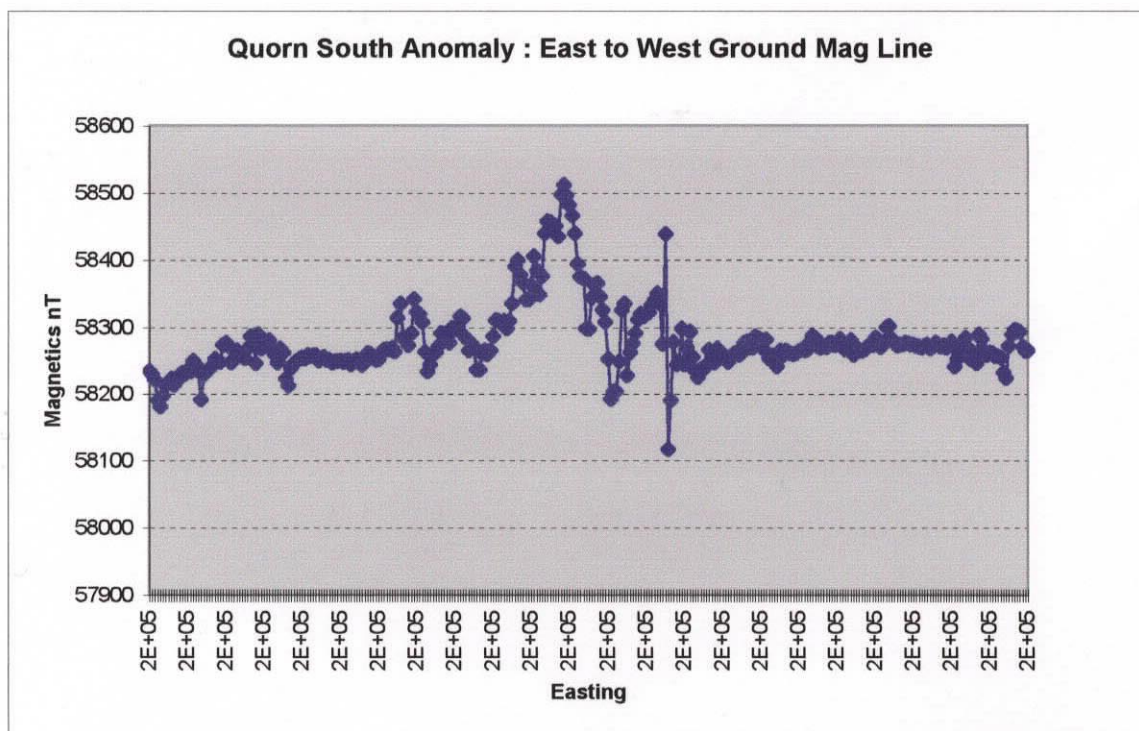
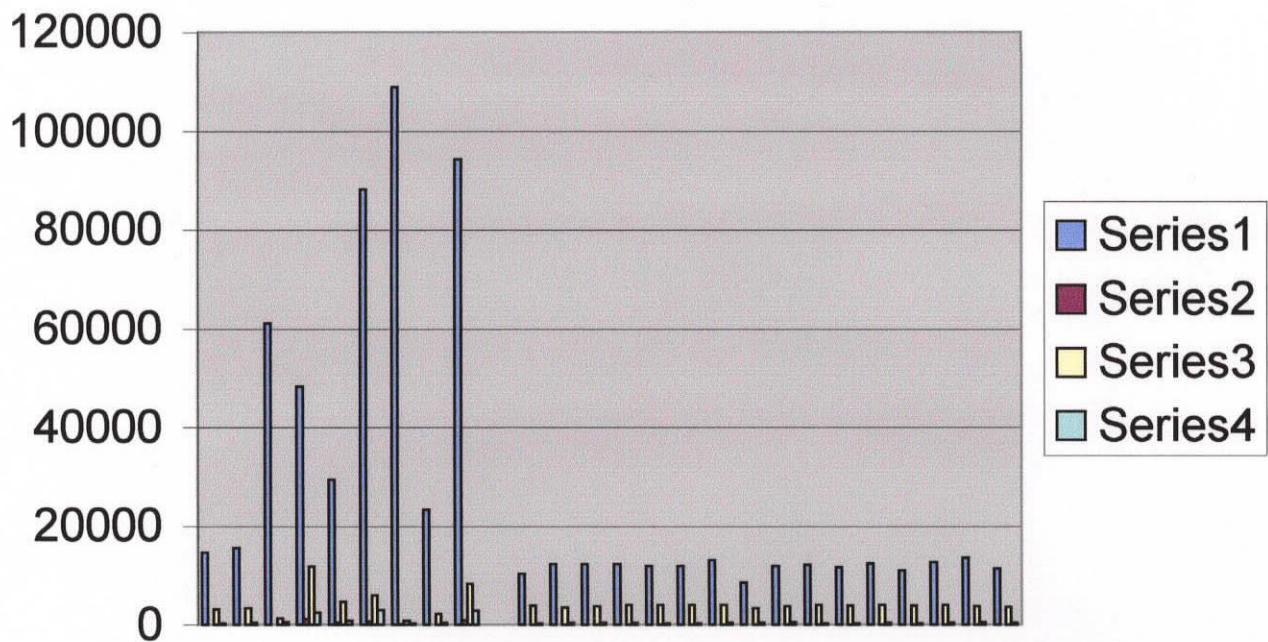


Figure 5. Quorn Central: selected magnetic and soil geochemistry profiles (Deepleach)

Data Comparison: Mg Ni Ti Ba



Data Comparison: Nb Ce La Nd

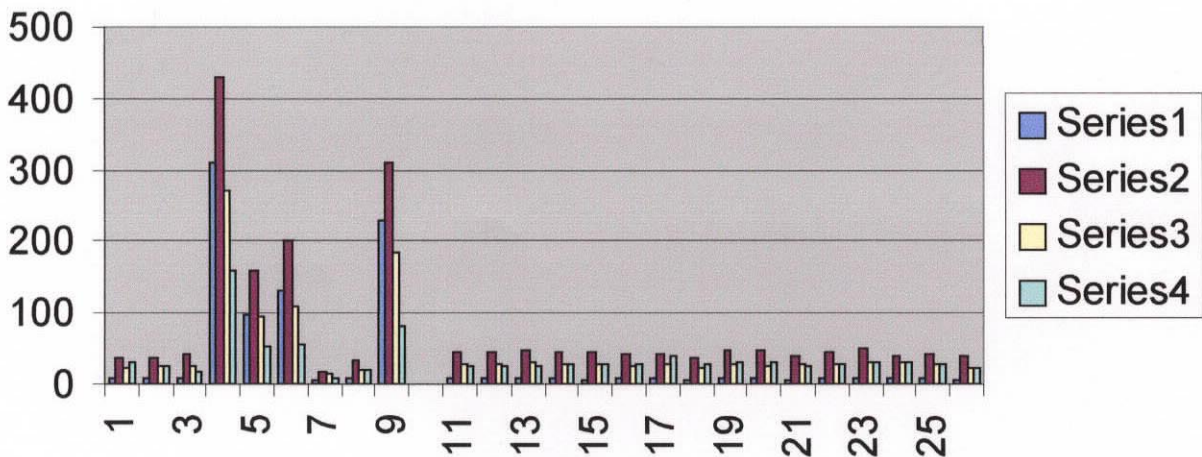


Figure 6. Comparative soil geochemistry over known kimberlites (LHS) and samples over the Quorn Central magnetic anomaly (RHS).

CONCLUSIONS

Although a possible association between magnetic anomaly and kimberlitic indicator can be inferred for the Great Gladstone and Quorn Central magnetic anomalies from the deep leach data, the clearly negative response from conventional soil geochemistry downgrades the potential for kimberlite pipes as the cause of the magnetic anomalies. A more likely Fe-Cu-Ba association related to diapirism does not present an economically-significant drilling target.

Relinquishment of the ground is recommended.

All geochemical and ground magnetic data sets are included as spreadsheet files on the attached floppy diskette.

TABLE 1

QUORN Rock Chips

	Easting	Northing		Collector			Au	Au Dupl	Ag	As	Co	Cu	Fe	Mn	Mo	Ni	Pb	Zn
	(AMG Zone 54	AGD66)					1ppb	1ppb	0.5ppm	1ppm	1ppm	1ppm	100ppm	5ppm	1ppm	1ppm	3ppm	1ppm
							AA10	AA10	IC2E	IC2E	IC2E	IC2E	IC2E	IC2E	IC2E	IC2E	IC2E	IC2E
QSRC-01	228000	6412950	Rock chip.	R. Jones	Ironstone.	QSRC-01	10	8	-0.5	29	9	190	314000	550	5	36	84	38
QSRC-02	228000	6412950	Rock chip.	R. Jones	Ironstone.	QSRC-02	7	-9000	-0.5	32	12	170	328000	700	6	41	90	35
QNRC-01	228150	6417000	Rock chip.	R. Jones	Mafic	QNRC-01	2	-9000	-0.5	4	6	125	79500	600	-1	29	22	100

TABLE 2:

Great Gladstone Ground Magnetic and Soil Geochemistry (Deepleach 4 8AD1068)

Eastings	Northing	Sample	Mag Suse.	Au	Pt	Pd	Cu	Pb	Zn	Ag	As	Ni	U	Co	Cd	Bi	Mo	Sb	Tl	Se
228600	6402950	GG0000	58275	0.07	<0.01	0.22	433	151	278	<0.05	4	46	<1	25	4	<0.1	7	<1	<1	7
228651	6402944	GG0050	58296	0.04	0.05	0.19	11500	473	274	<0.05	<1	1100	<1	1000	8	0.6	<1	<1	<1	16
228703	6402938	GG0100	58295	0.06	0.02	0.08	5500	40	139	<0.05	3	23	1	13	3	<0.1	<1	<1	<1	4
228754	6402932	GG0150	58286	<0.01	<0.01	0.33	7900	136	191	<0.05	1	133	<1	74	4	<0.1	<1	<1	<1	8
228806	6402926	GG0200	58288	<0.01	<0.01	0.04	316	71	107	<0.05	4	21	1	6	5	<0.1	<1	<1	<1	3
228857	6402920	GG0250	58310	0.01	<0.01	0.18	1400	451	179	<0.05	<1	185	<1	75	7	0.2	<1	<1	<1	11
228909	6402914	GG0300	58293	0.06	<0.01	0.63	965	870	408	<0.05	8	1200	2	3400	23	1.3	2	<1	<1	19
228960	6402908	GG0350	58292	0.17	<0.01	0.11	2300	660	458	<0.05	<1	1200	<1	1300	15	0.2	<1	<1	<1	14
229011	6402902	GG0400	58306	0.09	<0.01	0.24	2900	224	288	<0.05	<1	258	<1	133	8	<0.1	<1	<1	<1	13
229063	6402896	GG0450	58303	<0.01	<0.01	0.21	459	138	99	<0.05	1	35	<1	17	5	<0.1	<1	<1	<1	11
229115	6402890	GG0500	58286	<0.01	<0.01	0.12	707	219	96	<0.05	<1	53	<1	24	5	<0.1	<1	<1	<1	6
229160	6402889	GG0550	58268	<0.01	<0.01	0.15	347	89	304	<0.05	2	35	<1	11	1	<0.1	<1	<1	<1	2
229206	6402888	GG0600	58308	0.01	<0.01	0.07	136	97	130	<0.05	1	25	<1	9	2	<0.1	<1	<1	<1	2
229251	6402887	GG0650	58281	<0.01	<0.01	0.09	140	77	228	<0.05	<1	31	<1	17	3	<0.1	<1	<1	<1	4
229294	6402886	GG0700	58220	<0.01	<0.01	0.12	387	174	314	<0.05	3	32	<1	9	8	<0.1	<1	<1	<1	4
229340	6402885	GG0750	58296	<0.01	<0.01	0.07	484	183	131	<0.05	2	48	<1	32	4	<0.1	<1	<1	<1	4
229385	6402884	GG0800	58324	0.3	<0.01	0.16	775	266	270	<0.05	<1	63	<1	30	3	<0.1	<1	<1	<1	4
229431	6402883	GG0850	58334	<0.01	<0.01	0.05	1000	401	264	<0.05	<1	171	<1	106	9	<0.1	<1	<1	<1	12
229477	6402882	GG0900	58367	<0.01	<0.01	0.06	376	120	195	<0.05	3	26	<1	16	4	<0.1	<1	<1	<1	7
229523	6402881	GG0950	58345	<0.01	<0.01	0.03	1800	1200	379	<0.05	<1	708	<1	450	11	<0.1	<1	<1	<1	15
229560	6402880	GG1000	58340	<0.01	<0.01	0.13	1100	486	243	<0.05	6	146	<1	84	3	<0.1	<1	<1	<1	17
229605	6402879	GG1050	58326	<0.01	<0.01	0.24	1800	1300	584	<0.05	<1	1600	<1	1200	28	0.2	<1	<1	<1	24
229650	6402878	GG1100	58306	<0.01	<0.01	0.26	2200	926	520	<0.05	<1	671	<1	378	11	<0.1	<1	<1	<1	12
229695	6402877	GG1150	58291	0.19	<0.01	0.02	368	149	215	<0.05	1	30	<1	9	8	<0.1	<1	<1	<1	5
229740	6402877	GG1200	58340	<0.01	<0.01	0.02	1800	1600	397	<0.05	<1	1400	<1	1200	29	0.2	<1	<1	<1	18
229785	6402876	GG1250	58340	<0.01	<0.01	0.23	1800	1500	469	<0.05	<1	1600	<1	1200	17	0.2	<1	<1	<1	15
229830	6402875	GG1300	58310	<0.01	<0.01	0.04	1800	1400	459	<0.05	<1	1400	<1	1300	24	0.2	<1	<1	<1	15
229875	6402875	GG1350	58293	<0.01	<0.01	0.22	1800	1200	339	<0.05	<1	1200	<1	1000	23	0.1	<1	<1	<1	16
229915	6402874		58300																	
	AMDEL Deepleach 4			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
				0.01	0.01	0.01	1	1	1	0.05	1	1	1	1	1	0.1	1	1	1	1
				IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M

TABLE 2:

Great Gladstone Ground Magnetic and Soil Geochemistry (Deepleach 4 8AD1068)

Te	Ce	La	Nb	Nd	W	Y	Zr
<1	70	107	<1	537	<1	709	6
<1	780	482	<1	1600	1	1400	53
<1	10	13	<1	56	<1	94	<1
<1	74	139	<1	479	<1	561	32
<1	18	16	<1	79	<1	70	8
<1	173	292	<1	1200	<1	1100	19
<1	2100	597	<1	1500	1	1500	177
<1	581	414	<1	1600	1	1700	14
<1	92	367	<1	1200	<1	1600	20
<1	33	123	<1	470	<1	676	4
<1	52	184	<1	652	<1	720	19
<1	15	56	<1	263	<1	448	3
<1	21	61	<1	223	<1	252	6
<1	38	70	<1	223	<1	245	3
<1	24	69	<1	299	<1	627	2
<1	59	123	<1	484	<1	662	3
<1	63	171	<1	702	<1	830	9
<1	234	366	<1	1100	<1	1400	29
<1	30	81	<1	357	<1	495	3
<1	599	638	<1	2000	1	1800	14
<1	151	170	<1	828	<1	924	24
<1	1500	1100	<1	3100	2	2600	18
<1	540	695	<1	1900	1	1900	26
<1	19	125	<1	458	<1	650	2
<1	1700	856	<1	2600	2	2000	14
<1	1500	899	<1	2500	2	2000	18
<1	1600	802	<1	2800	2	1900	12
<1	1200	734	<1	2100	1	1900	12
ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	1	1	1	1	1	1	1
IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M	IC8M

TABLE 3:

Quorn North Soil Geochemistry (Deepleach 3.5 9AD 0884)

S/NO	EASTING	NORTHING	DEPTH	TYPE	Fe	Cr	Mg	Ti	Au	Pt	Pd	Cu	Pb	Zn	Ag	As	Ni	U	Co	Cd	Bi	Mo	Sb	Tl	Se	Te	Ce
QN-01	228150	6417000	25-30	SOILS	0.4	<0.1	600	<0.1	0.28	0.04	<0.01	253	317	244	24	3	43	<1	41	7	0.4	<1	<1	<1	<1	<1	57
QN-02	228150	6417050	25-30	SOILS	0.6	<0.1	650	<0.1	<0.01	<0.01	<0.01	90	221	147	7.9	7	36	<1	47	4	<0.1	<1	<1	<1	<1	<1	52
QN-03	228150	6417100	25-30	SOILS	1.2	<0.1	600	0.1	0.17	<0.01	<0.01	363	193	446	6.3	16	248	<1	60	13	<0.1	<1	<1	<1	<1	<1	113
QN-04	228150	6417150	25-30	SOILS	0.6	<0.1	600	<0.1	0.42	<0.01	<0.01	122	135	94	4.4	<1	36	<1	17	5	<0.1	<1	<1	<1	<1	<1	30
QN-05	228150	6417200	25-30	SOILS	0.4	<0.1	600	<0.1	0.12	<0.01	0.18	91	132	112	13	<1	32	<1	29	5	<0.1	<1	<1	<1	<1	<1	61
QN-06	228150	6417250	25-30	SOILS	0.6	<0.1	500	<0.1	<0.01	<0.01	0.04	37	97	115	8.7	<1	36	<1	17	6	<0.1	<1	<1	<1	<1	<1	42
QN-07	228150	6417300	25-30	SOILS	0.6	<0.1	650	<0.1	0.09	<0.01	<0.01	144	448	149	11	<1	35	<1	57	12	<0.1	<1	<1	<1	<1	<1	91
QN-08	228150	6417350	25-30	SOILS	0.3	<0.1	650	<0.1	0.25	<0.01	0.03	333	182	122	14	<1	50	<1	26	4	<0.1	<1	<1	<1	<1	<1	43
QN-09	228150	6417400	25-30	SOILS	0.3	<0.1	700	<0.1	0.52	<0.01	0.26	366	257	105	9.6	4	37	<1	26	3	<0.1	<1	<1	<1	<1	<1	43
QN-10	228150	6417450	25-30	SOILS	0.3	<0.1	650	<0.1	0.05	<0.01	0.04	432	268	186	12	<1	70	<1	98	9	<0.1	<1	<1	<1	<1	<1	101
QN-11	228150	6417500	25-30	SOILS	2.7	<0.1	600	<0.1	<0.01	<0.01	<0.01	633	731	213	12	<1	364	<1	1200	14	<0.1	<1	<1	<1	<1	<1	743
QN-12	228150	6417550	25-30	SOILS	<0.2	<0.1	600	<0.1	0.02	<0.01	0.03	229	124	92	8.7	1	35	<1	18	3	<0.1	<1	<1	<1	<1	<1	59
QN-13	228150	6417600	25-30	SOILS	0.3	<0.1	650	<0.1	0.19	<0.01	<0.01	241	247	126	13	2	49	<1	43	6	<0.1	<1	<1	<1	<1	<1	80
QN-14	228150	6417650	25-30	SOILS	0.2	<0.1	600	<0.1	0.02	<0.01	<0.01	216	167	51	9.1	<1	29	<1	19	2	<0.1	<1	<1	<1	<1	<1	49
QN-15	228150	6417700	25-30	SOILS	0.3	<0.1	550	<0.1	0.01	<0.01	0.13	212	352	96	12	<1	54	<1	120	4	<0.1	<1	<1	<1	<1	<1	112
QN-16	228150	6417750	25-30	SOILS	0.6	<0.1	550	<0.1	0.13	<0.01	<0.01	416	535	207	11	<1	94	<1	177	10	<0.1	<1	<1	<1	<1	<1	192
QN-17	228150	6417800	25-30	SOILS	0.2	<0.1	650	<0.1	0.18	<0.01	0.09	256	164	87	7.4	<1	38	<1	19	3	<0.1	<1	<1	<1	<1	<1	26
QN-18	228150	6417850	25-30	SOILS	0.3	<0.1	600	<0.1	<0.01	<0.01	0.14	264	164	67	7.4	<1	36	<1	24	3	<0.1	<1	<1	<1	<1	<1	38
QN-19	228150	6417900	25-30	SOILS	0.3	<0.1	650	0.1	0.16	<0.01	0.03	253	247	92	13	<1	47	<1	36	3	<0.1	<1	<1	<1	<1	<1	54
QN-20	228150	6417950	25-30	SOILS	0.3	<0.1	550	<0.1	<0.01	<0.01	0.08	1500	597	114	5	<1	115	<1	27	4	<0.1	<1	<1	<1	<1	<1	51
QN-21	228150	6418000	25-30	SOILS	0.2	<0.1	550	<0.1	<0.01	<0.01	0.12	206	128	82	2.3	<1	41	<1	14	4	<0.1	<1	<1	<1	<1	<1	22
QN-22	228150	6418050	25-30	SOILS	0.4	<0.1	800	<0.1	0.04	<0.01	0.02	317	319	109	16	11	59	<1	85	10	<0.1	<1	<1	<1	<1	<1	160
QN-23	228150	6418100	25-30	SOILS	0.4	<0.1	110	<0.1	0.05	<0.01	0.18	374	401	168	12	<1	97	<1	185	11	<0.1	<1	<1	<1	<1	<1	222
QN-24	228150	6418150	25-30	SOILS	0.3	<0.1	650	<0.1	<0.01	<0.01	0.19	214	180	110	5.4	<1	38	<1	28	5	<0.1	<1	<1	<1	<1	<1	54
QN-25	228150	6418200	25-30	SOILS	0.3	<0.1	650	<0.1	0.01	<0.01	0.13	151	136	71	6.5	<1	30	<1	26	4	<0.1	<1	<1	<1	<1	<1	47
QN-26	228150	6418250	25-30	SOILS	0.3	<0.1	500	<0.1	<0.01	<0.01	0.16	197	160	71	4.5	<1	40	<1	21	3	<0.1	<1	<1	<1	<1	<1	60
QN-27	228150	6418300	25-30	SOILS	0.3	<0.1	600	<0.1	0.01	<0.01	0.19	206	189	101	17	<1	38	<1	33	5	<0.1	<1	<1	<1	<1	<1	56
QN-28	228150	6418350	25-30	SOILS	0.4	<0.1	600	<0.1	<0.01	<0.01	0.03	259	183	156	6.6	<1	48	<1	24	7	<0.1	<1	<1	<1	<1	<1	60
QN-29	228150	6418400	25-30	SOILS	0.2	<0.1	500	<0.1	0.24	<0.01	<0.01	279	244	78	4.8	3	44	<1	25	9	<0.1	<1	<1	<1	<1	<1	68
QN-30	228150	6418450	25-30	SOILS	0.3	<0.1	600	<0.1	0.23	<0.01	0.11	286	311	61	16	<1	62	<1	101	9	<0.1	<1	1	<1	<1	<1	141
QN-31	228150	6418500	25-30	SOILS	0.2	<0.1	550	<0.1	0.17	<0.01	0.07	447	199	70	3.2	5	61	<1	23	6	<0.1	<1	2	<1	<1	<1	43
QN-32	229000	6417800	25-30	SOILS	0.4	<0.1	430	<0.1	0.37	0.02	0.05	218	464	187	3.7	8	61	<1	117	6	<0.1	<1	3	<1	<1	<1	94
QN-33	228950	6417800	25-30	SOILS	0.3	<0.1	500	<0.1	0.11	<0.01	0.22	173	245	33	3.5	5	36	<1	63	4	<0.1	<1	3	<1	<1	<1	51
QN-34	228900	6417800	25-30	SOILS	0.5	<0.1	69	<0.1	0.46	<0.01	<0.01	469	437	137	24	2	112	<1	152	4	<0.1	<1	<1	<1	<1	<1	185
QN-35	228850	6417800	25-30	SOILS	1.6	<0.1	650	<0.1	0.58	0.13	0.03	730	911	157	15	1	561	<1	1100	17	<0.1	<1	<1	<1	<1	<1	812
QN-36	228800	6417800	25-30	SOILS	0.3	<0.1	700	<0.1	0.76	0.02	0.18	360	266	62	20	7	51	<1	51	3	<0.1	<1	<1	<1	<1	<1	59
QN-37	228750	6417800	25-30	SOILS	0.5	<0.1	650	<0.1	0.44	<0.01	0.19	451	499	84	18	<1	109	<1	287	8	<0.1	<1	<1	<1	<1	<1	204
QN-38	228700	6417800	25-30	SOILS	0.2	<0.1	135	<0.1	0.54	0.02	0.18	300	347	16	18	5	49	<1	38	3	<0.1	<1	<1	<1	<1	<1	58
QN-39	228650	6417800	25-30	SOILS	<0.2	<0.1	600	<0.1	0.33	<0.01	0.05	274	170	114	12	4	40	<1	27	7	<0.1	<1	<1	<1	<1	<1	54
QN-40	228600	6417800	25-30	SOILS	0.8	<0.1	420	<0.1	0.89	<0.01	0.06	684	749	68	25	<1	265	<1	645	5	<0.1	<1	<1	<1	<1	<1	392
QN-41	228550	6417800	25-30	SOILS	0.4	<0.1	550	<0.1	0.49	<0.01	<0.01	354	340	95	16	<1	47	<1	57	6	<0.1	<1	<1	<1	<1	<1	90
QN-42	228500	6417800	25-30	SOILS	0.3	<0.1	550	<0.1	0.46	<0.01	0.05	316	256	107	17	<1	49	<1	27	8	<0.1	<1	<1	<1	<1	<1	59
QN-43	228450	6417800	25-30	SOILS	0.2	<0.1	650	<0.1	0.22	0.08	0.09	214	167	10	11	<1	39	<1	17	5	<0.1	<1	<1	<1	<1	<1	36
QN-44	228400	6417800	25-30	SOILS	0.2	<0.1	650	<0.1	0.27	<0.01	0.15	187	166	22	7.9	<1	34	<1	15	5	<0.1	<1	<1	<1	<1	<1	34
QN-45	228350	6417800	25-30	SOILS	<0.2	<0.1	550	<0.1	0.23	<0.01	0.07	248	187	60	9.6	<1	37	<1	18	4	<0.1	<1	<1	<1	<1	<1	39
QN-46	228300	6417800	25-30	SOILS	0.3	<0.1	550	<0.1	0.21	<0.01	0.12	222	284	104	25	4	50	<1	42	5	<0.1	<1	<1	<1	<1	<1	76
QN-47	228250	6417800	25-30	SOILS	0.3	<0.1	600	<0.1	0.56	<0.01	0.11	295	184	66	6	2	45	<1	25	3	<0.1	<1	<1	<1	<1	<1	31
QN-48	228200	6417800	25-30	SOILS	0.2	<0.1	550	<0.1	0.48	<0.01	0.11	297	284	29	18	<1	46	<1	49	4	<0.1	<1	<1	<1	<1	<1	63
QN-17	228150	6417800	25-30	SOILS	0.2	<0.1	650	<0.1	0.18	<0.01	0.09	256	164	87	7.4	<1	38	<1	19	3	<0.1	<1	<1	<1	<1	<1	26
QN-49	228100	6417800	25-30	SOILS	0.2	<0.1	370	<0.1	0.31	<0.01	0.19	264	200	53	6.9	2	32	<1	19</								

TABLE 3:

Quorn North Soil Geochemistry (Deepleach 3.5 9AD 0884)

La	Nb	Nd	W	Y	Zr	Ba	Sr
145	<1	408	<1	540	3	5200	6600
30	<1	96	<1	138	<1	3500	9500
77	<1	141	<1	221	30	6000	8400
22	<1	70	<1	106	<1	7200	7400
86	<1	253	<1	295	<1	3900	6200
32	<1	98	<1	159	<1	5800	9100
169	<1	441	<1	487	<1	6000	5300
89	<1	218	<1	293	<1	6900	7600
100	<1	342	<1	482	<1	1400	10500
139	<1	334	<1	441	<1	7000	6000
535	<1	1200	<1	1000	<1	4900	4100
36	<1	94	<1	134	<1	13000	9000
153	<1	418	<1	578	<1	13000	8200
75	<1	244	<1	236	<1	8300	6500
222	<1	569	<1	555	<1	6600	7700
293	<1	657	<1	602	<1	8700	6900
52	<1	162	<1	228	<1	16500	6500
84	<1	249	<1	377	<1	8700	8400
157	<1	446	<1	458	<1	17000	7200
65	<1	254	<1	276	<1	15000	7500
15	<1	83	<1	121	<1	21500	9800
182	<1	477	<1	528	<1	984	12000
302	<1	861	<1	802	<1	8900	9900
104	<1	241	<1	369	<1	20500	6700
75	<1	235	<1	213	<1	8800	5400
77	<1	240	<1	288	<1	8900	10000
127	<1	306	<1	379	<1	9500	7100
90	<1	224	<1	242	<1	15000	6400
92	<1	297	<1	352	<1	32500	12500
293	<1	750	<1	647	1	12000	8400
86	<1	182	<1	295	<1	23500	9800
134	<1	306	<1	277	7	6700	3200
114	<1	262	<1	208	<1	7300	4000
311	<1	639	<1	812	6	3200	11500
578	<1	1200	<1	1500	<1	9100	7600
150	<1	396	<1	526	<1	1700	12500
353	<1	942	<1	674	<1	8300	6300
175	<1	436	<1	589	<1	7500	10500
69	<1	204	<1	340	<1	11000	5700
547	<1	1300	<1	1000	3	7200	7400
184	<1	579	<1	582	<1	3800	10000
137	<1	404	<1	507	<1	13500	7000
74	<1	246	<1	287	<1	15000	6000
42	<1	185	<1	207	<1	13500	6300
53	<1	281	<1	278	<1	12500	6200
172	<1	402	<1	573	<1	9500	6300
25	<1	117	<1	181	<1	12000	7400
172	<1	474	<1	508	<1	7300	7400
52	<1	162	<1	228	<1	16500	6500
86	<1	232	<1	346	<1	7000	8600
63	<1	260	<1	385	<1	1800	11500
80	<1	248	<1	285	1	10500	10500
180	<1	490	<1	598	1	4600	9900
99	<1	255	<1	296	22	7700	5500
34	<1	116	<1	185	7	6100	6400
14	<1	99	<1	151	<1	4800	3800
25	<1	107	<1	198	<1	5100	5600
36	<1	101	<1	181	<1	3900	4700
18	<1	96	<1	160	<1	5400	5500
34	<1	81	<1	131	<1	4700	6300
71	<1	215	<1	356	<1	5100	8500
46	<1	154	<1	242	<1	4300	6800
21	<1	83	<1	129	<1	3900	5700
85	<1	264	<1	416	<1	4600	6600
86	<1	236	<1	368	<1	4800	6900
74	<1	221	<1	366	<1	5300	5100
90	<1	256	<1	363	<1	4000	6100
177	<1	513	<1	516	<1	4500	5500
975	<1	2200	<1	1600	<1	5000	4200
34	<1	153	<1	208	<1	2000	8900
65	<1	241	<1	360	<1	1400	11000

TABLE 4

Quorn Central - Deepleach 35 Results

S/NO	EASTING	NORTHING	DEPTH	TYPE	Fe	Cr	Mg	Ti	Au	Pt	Pd	Cu	Pb	Zn	Ag	As	Ni	U	Co	Cd	Bi
QS-01	228100	6412500	25-30	SOILS	0.5	<0.1	750	<0.1	0.2	<0.01	<0.01	500	402	403	21	<1	161	<1	139	7	<0.1
QS-02	228100	6412450	25-30	SOILS	<0.2	<0.1	750	<0.1	0.07	<0.01	<0.01	3100	925	389	5.4	<1	121	<1	33	4	<0.1
QS-03	228100	6412400	25-30	SOILS	0.5	<0.1	700	<0.1	0.24	<0.01	<0.01	480	380	325	8.6	<1	94	<1	123	8	<0.1
QS-04	228100	6412350	25-30	SOILS	0.2	<0.1	450	<0.1	0.22	<0.01	0.23	266	292	296	8.8	<1	35	<1	27	9	<0.1
QS-05	228100	6412300	25-30	SOILS	2.2	<0.1	250	<0.1	0.08	<0.01	0.04	717	578	181	17	<1	694	<1	1900	9	<0.1
QS-06	228100	6412250	25-30	SOILS	<0.2	<0.1	550	<0.1	0.21	<0.01	<0.01	549	143	89	6.8	<1	39	<1	21	2	<0.1
QS-07	228100	6412200	25-30	SOILS	0.2	<0.1	700	<0.1	0.18	<0.01	0.01	944	441	117	13	<1	74	<1	35	3	<0.1
QS-08	228100	6412150	25-30	SOILS	0.2	<0.1	750	<0.1	0.24	<0.01	0.04	560	360	135	15	<1	62	<1	47	6	<0.1
QS-09	228100	6412100	25-30	SOILS	0.2	<0.1	550	<0.1	0.24	<0.01	0.07	337	231	103	15	<1	44	<1	54	3	<0.1
QS-10	228100	6412050	25-30	SOILS	<0.2	<0.1	650	<0.1	0.07	<0.01	0.05	433	214	148	5.9	<1	52	<1	29	5	<0.1
QS-11	228100	6412000	25-30	SOILS	0.2	<0.1	600	<0.1	0.26	<0.01	0.07	12000	4600	225	10	<1	359	<1	65	4	<0.1
QS-12	228100	6411950	25-30	SOILS	0.3	<0.1	700	<0.1	0.11	<0.01	0.02	429	300	158	9.3	<1	65	<1	71	5	<0.1
QS-13	228100	6411900	25-30	SOILS	<0.2	<0.1	550	<0.1	0.22	<0.01	0.09	288	120	87	7.7	<1	31	<1	23	2	<0.1
QS-14	228100	6411850	25-30	SOILS	<0.2	<0.1	83	<0.1	0.12	<0.01	0.05	423	203	102	18	<1	43	<1	29	3	<0.1
QS-15	228100	6411800	25-30	SOILS	<0.2	<0.1	550	<0.1	0.23	0.06	0.06	310	188	123	10	<1	44	<1	28	4	<0.1
QS-16	228100	6411750	25-30	SOILS	0.2	<0.1	600	<0.1	0.04	0.02	<0.01	335	321	173	33	<1	76	<1	132	9	0.1
QS-17	228100	6411700	25-30	SOILS	0.3	<0.1	550	<0.1	0.31	<0.01	<0.01	388	372	232	19	<1	73	<1	98	7	<0.1
QS-18	228100	6411650	25-30	SOILS	<0.2	<0.1	380	<0.1	0.3	0.15	0.14	295	231	207	23	1	61	<1	49	8	<0.1
QS-19	228100	6411600	25-30	SOILS	<0.2	<0.1	500	<0.1	0.33	0.06	0.15	424	219	203	10	4	53	<1	38	6	<0.1
QS-20	228100	6411550	25-30	SOILS	<0.2	<0.1	200	<0.1	0.3	<0.01	0.04	291	104	79	13	2	39	<1	26	3	<0.1
QS-21	228100	6411500	25-30	SOILS	<0.2	<0.1	550	<0.1	0.27	<0.01	0.07	276	198	194	19	2	51	<1	43	7	<0.1
QS-22	228100	6411450	25-30	SOILS	<0.2	<0.1	175	<0.1	0.26	0.08	0.01	269	151	138	10	1	47	<1	27	6	<0.1
QS-23	228100	6411400	25-30	SOILS	<0.2	<0.1	460	<0.1	0.19	<0.01	<0.01	283	191	213	15	1	51	<1	36	8	<0.1
QS-24	228100	6411350	25-30	SOILS	<0.2	<0.1	270	<0.1	0.16	<0.01	0.15	279	101	115	6.1	3	44	<1	26	4	<0.1
QS-25	228100	6411300	25-30	SOILS	<0.2	<0.1	190	<0.1	0.12	<0.01	<0.01	281	157	157	8.2	2	56	<1	39	7	<0.1
QS-26	228900	6412150	25-30	SOILS	<0.2	<0.1	390	<0.1	0.28	<0.01	<0.01	573	390	330	10	2	69	<1	50	12	<0.1
QS-27	228850	6412150	25-30	SOILS	0.4	<0.1	550	<0.1	0.29	<0.01	0.1	459	378	151	16	<1	95	<1	138	4	<0.1
QS-28	228800	6412150	25-30	SOILS	0.3	<0.1	500	<0.1	0.22	0.04	<0.01	342	275	120	15	<1	62	<1	95	3	<0.1
QS-29	228750	6412150	25-30	SOILS	0.2	<0.1	600	<0.1	0.27	<0.01	0.05	405	230	246	7.1	2	61	<1	62	4	<0.1
QS-30	228700	6412150	25-30	SOILS	<0.2	<0.1	500	<0.1	0.08	0.03	<0.01	282	254	160	13	<1	50	<1	39	6	<0.1
QS-31	228650	6412150	25-30	SOILS	<0.2	<0.1	550	<0.1	0.22	0.16	0.1	377	248	222	4.9	5	57	<1	36	6	<0.1
QS-32	228600	6412150	25-30	SOILS	<0.2	<0.1	66	<0.1	0.07	<0.01	<0.01	309	160	196	5.3	1	52	<1	39	7	<0.1
QS-33	228550	6412150	25-30	SOILS	<0.2	<0.1	550	<0.1	0.16	0.15	0.07	429	212	167	4.7	2	62	<1	38	5	<0.1
QS-34	228500	6412150	25-30	SOILS	<0.2	<0.1	68	<0.1	0.18	<0.01	0.13	336	111	175	2.3	4	51	<1	29	4	<0.1
QS-35	228450	6412150	25-30	SOILS	<0.2	<0.1	650	<0.1	0.24	<0.01	<0.01	395	313	222	8	<1	77	<1	56	5	<0.1
QS-36	228400	6412150	25-30	SOILS	0.2	<0.1	650	<0.1	0.21	0.07	<0.01	514	245	194	7.8	2	62	<1	33	3	<0.1
QS-37	228350	6412150	25-30	SOILS	<0.2	<0.1	260	0.1	0.09	0.05	<0.01	267	216	198	8.6	<1	49	<1	30	7	<0.1
QS-38	228300	6412150	25-30	SOILS	6	<0.1	500	<0.1	0.11	<0.01	0.03	599	903	237	19	<1	675	<1	1900	13	<0.1
QS-39	228250	6412150	25-30	SOILS	<0.2	<0.1	750	<0.1	0.17	0.1	0.04	296	196	129	10	<1	52	<1	36	2	<0.1
QS-40	228200	6412150	25-30	SOILS	1.1	<0.1	550	0.1	0.28	0.16	0.16	680	617	218	13	<1	389	<1	776	11	<0.1
QS-41	228150	6412150	25-30	SOILS	0.2	<0.1	180	<0.1	0.14	0.04	<0.01	304	230	159	14	<1	64	<1	56	5	<0.1
QS-08	228100	6412150	25-30	SOILS	0.2	<0.1	750	<0.1	0.24	<0.01	0.04	560	360	135	15	<1	62	<1	47	6	<0.1
QS-42	228050	6412150	25-30	SOILS	1.1	<0.1	500	<0.1	0.2	0.01	<0.01	570	511	146	23	<1	329	<1	808	9	<0.1
QS-43	228000	6412150	25-30	SOILS	<0.2	<0.1	700	<0.1	0.22	<0.01	<0.01	307	192	128	5.4	<1	48	<1	30	4	<0.1
QS-44	227950	6412150	25-30	SOILS	0.2	<0.1	700	<0.1	0.21	0.06	0.04	391	239	147	4.7	1	57	<1	41	5	<0.1
QS-45	227900	6412150	25-30	SOILS	0.4	<0.1	550	<0.1	0.3	<0.01	<0.01	465	345	143	17	1	74	<1	116	7	<0.1
QS-46	227850	6412150	25-30	SOILS	<0.2	<0.1	550	<0.1	0.24	0.15	0.16	321	197	95	8.7	3	49	<1	34	3	<0.1
QS-47	227800	6412150	25-30	SOILS	0.8	<0.1	600	<0.1	0.14	0.13	0.12	543	678	319	17	<1	193	<1	746	16	<0.1
QS-48	227750	6412150	25-30	SOILS	<0.2	<0.1	600	0.1	0.04	<0.01	0.07	249	132	258	8.2	1	57	<1	34	3	<0.1
QS-49	227700	6412150	25-30	SOILS	0.9	<0.1	600	0.1	0.2	<0.01	0.03	795	566	309	38	<1	188	<1	633	10	<0.1
QS-50	227650	6412150	25-30	SOILS	0.3	<0.1	440	0.1	0.18	0.01	0.14	375	265	165	15	<1	64	<1	60	4	<0.1
QS-51	227600	6412150	25-30	SOILS	1.3	<0.1	600	<0.1	0.05	0.05	<0.01	641	574	208	11	<1	305	<1	674	7	<0.1
QS-52	227550	6412150	25-30	SOILS	<0.2	<0.1	20	<0.1	0.09	0.09	<0.01	297	120	111	4.9	2	47	<1	31	2	<0.1
QS-53	227500	6412150	25-30	SOILS	<0.2	<0.1	195	<0.1	0.13	0.02	0.04	357	245	230	5.6	2	66	<1	52	6	<0.1
QS-54	227450	6412150	25-30	SOILS	<0.2	<0.1	600	0.1	0.12	<0.01	0.17	486	286	212	13	<1	72	<1	54	6	<0.1
QS-55	227400	6412150	25-30	SOILS	0.3	<0.1	550	<0.1	0.12	0.04	0.03	372	263	124	12	1	66	<1	53	3	<0.1
QS-56	227350	6412150	25-30	SOILS	0.2	<0.1	490	0.1	0.17	0.01	<0.01	356	180	283	6.2	1	58	<1	52	6	<0.1
QS-57	227300	6412150	25-30	SOILS	<0.2	<0.1	28	<0.1	0.09	<0.01	0.1	261	184	162	3.5	2	46	<1	37	4	<0.1

TABLE 4

Quorn Central - Deepleach 35 Results

Mo	Sb	Tl	Se	Te	Ce	La	Nb	Nd	W	Y	Zr	Ba	Sr
<1	2	<1	<1	<1	540	584	<1	1200	<1	1400	<1	6200	12500
<1	1	<1	<1	<1	119	127	<1	316	<1	468	<1	15000	15500
<1	<1	<1	<1	<1	529	427	<1	1100	<1	1300	<1	3200	12500
<1	<1	<1	<1	<1	73	109	<1	318	<1	382	<1	23500	11500
<1	<1	<1	<1	<1	1400	1100	<1	2000	<1	1600	<1	6500	9700
<1	<1	<1	<1	<1	44	30	<1	117	<1	197	<1	14500	17000
<1	<1	<1	<1	<1	176	242	<1	677	<1	740	<1	6200	14000
<1	<1	<1	<1	<1	196	285	<1	720	<1	859	<1	11500	16000
<1	<1	<1	<1	<1	120	225	<1	659	<1	747	<1	4000	15000
<1	2	<1	<1	<1	138	171	<1	425	<1	661	<1	16500	18000
8	<1	<1	<1	<1	225	257	<1	698	<1	912	<1	3200	17000
<1	<1	<1	<1	<1	227	289	<1	739	<1	1000	<1	6100	17000
<1	<1	<1	<1	<1	57	55	<1	211	<1	281	<1	9700	14000
<1	<1	<1	<1	<1	73	113	<1	418	<1	471	<1	7400	14000
<1	<1	2	<1	<1	77	134	<1	417	<1	473	<1	6700	15000
<1	<1	<1	<1	2	195	413	<1	976	<1	1100	<1	7300	11000
<1	<1	<1	<1	<1	218	284	<1	846	<1	887	<1	6500	14000
<1	<1	<1	<1	2	157	220	<1	582	<1	869	<1	14000	17000
<1	<1	<1	<1	<1	78	58	<1	193	<1	313	<1	30000	14500
<1	<1	<1	<1	<1	58	61	<1	250	<1	378	<1	7000	14000
<1	<1	<1	<1	<1	102	159	<1	468	<1	650	<1	15500	13000
<1	<1	<1	<1	<1	73	63	<1	244	<1	350	<1	16500	16500
<1	<1	<1	<1	<1	89	117	<1	359	<1	556	<1	15500	14000
<1	<1	<1	<1	<1	57	31	<1	143	<1	243	<1	12000	14500
<1	<1	<1	<1	<1	99	98	<1	296	<1	391	5	10500	12000
<1	<1	<1	<1	<1	140	154	<1	376	<1	572	<1	16000	12500
<1	<1	<1	<1	<1	290	425	<1	971	<1	983	<1	5200	13000
<1	<1	<1	<1	<1	152	241	<1	756	<1	626	<1	5000	12500
<1	<1	<1	<1	<1	133	122	<1	415	<1	586	<1	4500	16000
<1	<1	<1	<1	<1	141	257	<1	780	<1	717	<1	15000	11500
<1	<1	<1	<1	<1	98	104	<1	294	<1	536	<1	27500	17500
<1	<1	<1	<1	<1	100	95	<1	301	<1	485	<1	15000	14500
<1	<1	<1	<1	2	88	71	<1	283	<1	429	<1	8000	14500
<1	<1	<1	<1	<1	50	19	<1	104	<1	168	<1	21500	15000
<1	<1	<1	<1	<1	275	340	<1	854	<1	835	<1	8300	13500
<1	<1	<1	<1	<1	151	204	<1	559	<1	676	<1	4100	14500
<1	<1	<1	<1	<1	70	98	<1	329	<1	420	1	19000	13000
<1	<1	<1	<1	<1	2500	1500	<1	2900	<1	2100	1	4700	7000
<1	<1	<1	<1	<1	130	209	<1	600	<1	670	<1	6100	14500
<1	<1	<1	<1	<1	916	929	<1	1700	<1	2100	<1	8100	14500
<1	<1	<1	<1	<1	148	203	<1	570	<1	707	<1	13500	13500
<1	<1	<1	<1	<1	196	285	<1	720	<1	859	<1	11500	16000
<1	<1	<1	<1	<1	915	915	<1	1800	<1	1500	<1	6200	13000
<1	<1	<1	<1	2	114	116	<1	365	<1	437	<1	11000	15000
<1	<1	<1	<1	1	255	277	<1	696	<1	766	<1	3700	13000
<1	<1	<1	<1	1	325	370	<1	891	<1	887	<1	3200	10500
<1	<1	<1	<1	<1	116	170	<1	459	<1	599	<1	4000	14500
<1	<1	<1	<1	<1	667	604	<1	1300	<1	1200	<1	7500	5700
<1	<1	<1	<1	<1	57	85	<1	250	<1	420	<1	18000	11000
<1	<1	<1	<1	2	483	299	<1	664	<1	624	<1	9000	7600
<1	<1	<1	<1	<1	111	226	<1	576	<1	699	<1	13500	11500
<1	<1	<1	<1	<1	984	743	<1	1600	<1	1500	1	6100	12000
<1	<1	<1	<1	2	61	40	<1	176	<1	232	<1	15500	15500
<1	<1	<1	<1	1	126	132	<1	422	<1	588	<1	16000	13500
<1	<1	<1	<1	<1	100	173	<1	507	<1	625	<1	14000	9900
<1	<1	<1	<1	<1	241	228	<1	669	<1	806	<1	2700	13000
<1	<1	<1	<1	1	111	123	<1	374	<1	463	<1	9800	13500
<1	<1	<1	<1	3	79	52	<1	247	<1	287	<1	18000	12000

TABLE 5

Quorn Central Kimberlitic Indicator Geochemistry

Sample	Easting	Northing	Depth	Quorn Traverse		Ag	As	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Ti	V	Zn	
						1 ppm	3 ppm	10 ppm	2 ppm	2 ppm	2 ppm	2 ppm	100 ppm	10 ppm	10 ppm	5 ppm	3 ppm	10 ppm	2 ppm	5 ppm	5 ppm	10 ppm	2 ppm	2 ppm	
						IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	IC3E	
Qk-1	227800	6412150	20-40cm	Alluvial soil	QK-1	-1	6	15500	-2	11	63	26	36900	14900	10300	340	-3	4150	27	290	15	3850	90	58	
Qk-2	227850	6412150	20-40cm	Alluvial soil	QK-2	-1	6	47700	-2	10	52	29	34000	13900	12300	330	-3	4400	34	280	10	3550	92	54	
Qk-3	227900	6412150	20-40cm	Alluvial soil	QK-3	-1	6	22300	-2	9	50	23	32700	12100	12300	330	-3	7450	24	210	15	3750	88	50	
Qk-4	227950	6412150	20-40cm	Alluvial soil	QK-4	-1	8	18800	-2	10	58	27	35300	13300	12300	360	-3	7000	26	260	15	4000	91	58	
Qk-5	228000	6412150	20-40cm	Alluvial soil	QK-5	-1	8	14500	-2	11	54	27	39100	14900	11900	420	-3	6700	27	270	15	4050	95	62	
Qk-6	228050	6412150	20-40cm	Alluvial soil	QK-6	-1	10	18000	-2	10	55	27	37900	15400	11900	420	-3	4850	28	240	15	4050	94	62	
Qk-7	228100	6412150	20-40cm	Alluvial soil	QK-7	-1	8	28500	-2	10	37	28	37200	14800	13100	380	-3	6150	28	240	15	4050	99	63	
Qk-8	228150	6412150	20-40cm	Alluvial soil	QK-8	-1	10	40900	-2	11	65	25	41800	11400	8550	330	-3	2650	23	280	15	3400	110	50	
Qk-9	228200	6412150	20-40cm	Alluvial soil	QK-9	-1	12	39700	-2	8	49	28	37100	14700	11900	320	-3	4700	27	250	15	3700	100	58	
Qk-10	228250	6412150	20-40cm	Alluvial soil	QK-10	-1	10	20400	-2	10	52	28	37500	14700	12200	370	-3	6850	28	260	15	4000	97	60	
Qk-11	228300	6412150	20-40cm	Alluvial soil	QK-11	-1	10	21200	-2	10	51	27	36400	13900	11600	370	-3	4450	27	230	10	3950	98	59	
Qk-12	228350	6412150	20-40cm	Alluvial soil	QK-12	-1	8	24900	-2	11	51	28	38000	14900	12500	370	-3	5450	28	260	10	4050	98	61	
Qk-13	228400	6412150	20-40cm	Alluvial soil	QK-13	-1	10	26400	-2	10	49	27	37600	15000	11000	380	-3	3800	25	240	15	3900	96	58	
Qk-14	228450	6412150	20-40cm	Alluvial soil	QK-14	-1	12	15300	-2	11	59	29	39700	14900	12700	380	-3	6000	30	240	15	4050	100	62	
Qk-15	228600	6412150	20-40cm	Alluvial soil	QK-15	-1	8	34300	-2	8	45	28	35100	12900	13600	300	-3	6000	25	230	15	3750	99	55	
Qk-16	228800	6412150	20-40cm	Alluvial soil	QK-16	-1	4	42500	-2	9	40	25	33000	13100	11400	330	-3	5500	23	260	10	3650	91	51	
					CLEANOU	-1	6	138000	-2	8	43	12	26300	15200	14600	500	-3	10500	22	700	15	3100	66	47	
					CLEANOU	-1	6	134000	-2	7	49	14	23100	16100	15600	480	-3	10800	22	700	10	3300	69	47	
					C-1	-1	8	53200	-2	12	26	12	14100	15700	61200	230	-3	7200	42	85	25	1350	42	97	
					Soils developed over known kimberlites	C-2	-1	10	104000	-2	86	1200	94	85800	6550	48300	1950	-3	4950	1200	3350	25	11800	145	130
					C-3	-1	10	103000	-2	31	370	39	39200	12300	29300	750	-3	2900	340	950	15	4750	81	51	
					C-4	-1	20	157000	-2	46	650	57	45000	5100	88200	950	-3	1850	700	1800	15	5900	76	42	
					C-5	-1	4	157000	-2	6	21	8	7350	6900	109000	200	-3	1900	100	75	5	750	18	27	
					C-6	-1	8	91600	-2	9	74	14	24800	13000	23300	230	-3	5050	24	140	10	2200	58	26	
					C7	-1	20	112000	-2	65	950	74	62700	8600	94400	2050	-3	2800	950	2700	20	8250	125	55	

TABLE 5

Quorn Central Kimberlitic Indicator Geochemistry

Bi	Ba	Ga	Nb	Rb	Se	Sr	Th	U	Y	Ce	La	Gd	Nd	Sm	Yb	Nb	Ba	Sr	La	Ce	Rb	Zn	Ni
5 ppm	5 ppm	0.1 ppm	0.5 ppm	0.1 ppm	0.5 ppm	0.1 ppm	0.02 ppm	0.02 ppm	0.05 ppm	0.05 ppm	0.05 ppm	0.05 ppm	0.02 ppm	0.02 ppm	0.05 ppm	2 ppm	10 ppm	2 ppm	20 ppm	20 ppm	2 ppm	10 ppm	10 ppm
IC3E	IC3E	IC3M	IC3M	IC3M	IC3M	IC3M	IC3M	IC3M	IC3M	IC3R	IC3R	IC3R	IC3R	IC3R	IC3R	XRF1	XRF2	XRF3	XRF4	XRF5	XRF6	XRF7	XRF1
-5	250	21.5	8	54	-0.5	115	9	1.15	20.5	44	27.5	4.4	26.5	4.6	2	10	240	130	40	50	69	30	25
-5	370	23.5	9	53	-0.5	270	8.5	0.9	22.5	44.5	28.5	3.6	25	4.2	1.65	14	360	195	70	40	63	30	35
-5	430	17.5	7	50	-0.5	160	9	1.1	17.5	48	29.5	4.2	26.5	4.9	1.7	11	430	165	60	50	61	25	20
-5	340	22.5	8	46.5	-0.5	165	10.5	1.1	17	45	27	4.5	28	5.5	2	12	320	175	60	40	67	30	25
-5	330	27.5	6	65	-0.5	145	9.5	1.25	16.5	46	28	4.4	28.5	4.8	1.75	11	310	170	60	50	78	35	25
-5	290	22.5	8	51	-0.5	155	8.5	1.05	18.5	42.5	26.5	4.6	28.5	4.8	2.1	12	270	150	50	60	73	35	25
-5	410	25	7	59	-0.5	175	11.5	1.5	18.5	41.5	28.5	6	40	6	2.5	10	400	200	70	40	72	45	25
-5	390	21.5	6	44	-0.5	140	10	1.1	13	37.5	23.5	4.2	28.5	4.6	2	10	390	145	50	50	58	20	25
-5	500	25	7	50	-0.5	240	9	1.1	19	46.5	28	4.3	30	4.4	2	11	490	200	40	40	71	30	30
-5	310	27	9.5	51	-0.5	220	9.5	1.25	20	47.5	26.5	4.7	30	4.9	1.95	11	290	170	50	40	73	30	25
-5	260	21.5	6.5	47	-0.5	155	10	1.1	15.5	38	27	4.2	25	5	1.75	10	260	160	60	50	70	30	20
-5	420	20	7.5	58	-0.5	185	9	0.96	23	46	27.5	4.4	28	4.3	1.6	11	400	195	50	60	72	35	25
-5	290	23	8.5	53	-0.5	155	10.5	1.05	21.5	50	30	4.9	31	5	1.95	11	280	155	60	40	71	30	25
-5	430	23	9	59	-0.5	175	10	1.2	16	38.5	31	5.5	32	4.9	2.1	12	380	175	60	50	78	40	25
-5	550	22	7.5	44.5	-0.5	200	8.5	1.1	18.5	42	27.5	4.3	27	5	1.9	10	550	220	50	50	63	30	25
-5	410	18	6.5	40	-0.5	200	8.5	1.05	16.5	40	22.5	3.6	23	4.2	1.75	11	390	220	60	40	63	25	20
-5	330	14.5	7	47	-0.5	900	8	2.4	20.5	36	23	5.5	29.5	5	2.6	10	380	850	60	60	63	20	15
-5	350	15.5	8.5	57	-0.5	900	8	2.3	23.5	37	24	4.2	24.5	4.6	2.1	13	380	750	50	40	63	20	20
-5	480	12	9.5	34.5	-0.5	250	8.5	1.45	17.5	43	25	3	18	3.4	1.45	14	500	220	60	50	44	80	45
-5	2400	1.3	310	27	-0.5	500	49	2.3	28.5	430	270	12.5	160	16	2.1	300	2900	480	300	380	36	135	1550
-5	850	14	99	53	-0.5	240	16.5	1.1	17.5	160	95	6	52	7.5	1.4	76	950	210	90	90	55	25	380
-5	2900	-0.1	130	29.5	-0.5	490	21.5	1	12.5	200	110	5	56	7.5	0.85	145	3250	450	160	160	40	20	850
-5	290	5	6.5	17	3	900	3.6	0.74	7.5	17.5	13	1.4	9	1.65	0.7	9	310	800	40	-20	19	-10	115
-5	340	13	7.5	37.5	2.5	185	7	0.82	13.5	32.5	19.5	2.8	18.5	3.3	1.2	9	360	170	60	30	48	-10	20
-5	2750	2.2	230	60	-0.5	500	31	1.65	18.5	310	185	7	80	10.5	1.1	230	3150	450	200	270	76	35	1150