

ASX, AIM and Media Release 8 May 2023

Tanzanian exploration – Umba South Phase 1 drill results

Key Points

- Phase 1 reverse circulation drilling program completed at the Umba South prospect in northern Tanzania, with 3,015m in 122 holes drilled.
- Assay results confirm the presence of rutile mineralisation, which averages approximately 20% of the heavy mineral but is highly variable and can range from 5 to 50% of the heavy mineral.
- Three primary geological domains were identified:
 - o Soil/colluvial cover sequence (the primary exploration target) typically quite thin (~1-2m) but can be locally up to 9m thick and has demonstrated widespread rutile mineralisation.
 - o Underlying saprolite material variable thickness with sporadic rutile mineralisation, and does not appear to be sufficiently weathered to represent free-dig material from which rutile is readily liberated.
 - o Bedrock heavy mineral content is variable but typically high grade (~20%); however it is dominated by pyrite a known deleterious element for mineral sands processing, requiring dedicated tailings handling and storage.
- Preliminary mineralogical assessment of drill samples is yet to be completed, with the presence of rutile calculated based on XRF analysis of the non-magnetic fraction of heavy mineral.
- While graphite is present in some drill samples, analysis suggests the overall grade and distribution of mineralisation is not significant.
- A Phase 2 infill drilling program to assess the continuity of saprolite mineralisation has been completed, with the
 results expected to be available in the September 2023 quarter. These results will assist in planning future
 exploration activity at Umba South and elsewhere along the prospective geological zone once necessary approvals
 are obtained.

Base Resources Limited (ASX & AIM: BSE) (**Base Resources** or the **Company**) is pleased to provide assay results from the first phase of drilling at its Umba South Project (**Umba South**) in northern Tanzania (**Phase 1**).

Location of Phase 1 drilling and other exploration activities

Umba South is located near the junction of the Umba and Bombo Rivers in northern Tanzania, approximately 75km west-south-west of the Company's Kwale Operations in Kenya (refer to Figure 1). Exploration at Umba South was designed to test the southern extremity of a prominent north-south trending ridge of quartzite and gneiss that extends 35km north to the Kuranze region of Kenya, where initial rock chip and soil sampling indicated the presence of rutile. With the Company unable to carry out exploration activities in Kuranze due to its prospecting licence applications for that area being on hold following the Government of Kenya's ongoing moratorium on issuance of new mineral rights, efforts were instead directed to the southern portion of the ridge in Tanzania.

Exploration activity in Tanzania has so far been confined to areas south of the Umba River, while the Company seeks to obtain the necessary approvals from various government departments to explore in the Mkomazi Game Controlled Area to the north which hosts the target ridge feature extending north to the Kenyan border (refer to Figure 2).



Details about exploration activities

Exploration at Umba South targeted a high-grade metamorphic sequence within the Mozambique Belt that comprises paragneiss (quartzo-feldspathic gneiss) and sillimanite-kyanite(-garnet) schists. The sequence includes accessory minerals pyrite, rutile, magnetite and graphite, with rutile the primary exploration target. The focus of exploration is secondary rutile mineralisation associated with alluvial and colluvial deposits eroding from the outcropping linear ridges of pyritic quartz-feldspar gneiss, and primary rutile mineralisation within the weathered saprolite material flanking the ridge feature that is sufficiently weathered to represent free-dig material from which rutile can be readily liberated.

In early 2022, mechanised auger sampling of the soil profile to approximately 1m depth on a 500m x 500m sample grid was undertaken across the broader tenement area, with the best results (up to 5% rutile) reported from the flanks of Kigwase Hill. In the June quarter of 2022, rockchip sampling of the outcropping ridge confirmed the presence of rutile mineralisation, with grades of up to 2.5% rutile reported from banded gneiss on Kigwase Hill. Selected rockchip samples were sent for mineralogical analysis, and this confirmed the presence of rutile together with pyrite (in fresh samples), Fe-oxides (in weathered samples), magnetite and altered ilmenite.

A series of test pits were then completed to assess the soil profile, including the nature of contact with the underlying saprolite. Mapping suggests that red-brown soil is typically developed within rubbly colluvium overlying the brown saprolite material. Pit depths ranged from 1.5m to 6.5m and samples of material collected from the test pits were processed at the Kwale Operations laboratory. Encouraging results were obtained from several samples with potential HM products of rutile, leucoxene, altered ilmenite and magnetite generated using conventional mineral sands processing techniques. One of the test pits, pit 11, was investigated in detail and reported in-situ grades of approximately 1% rutile, 1% leucoxene-altered ilmenite and 1% magnetite (refer to Figure 2).

Following the encouraging results from the reconnaissance exploration, the Phase 1 program was planned to obtain preliminary data regarding the sub-surface geology and rutile mineralisation in the vicinity of Kigwase Hill. A 400m North-South x 200m East-West reconnaissance grid was subsequently drilled over Kigwase Hill where access was available, with the terrain and the presence of small-scale gemstone tenure (known as primary mining licences) restricting complete coverage (refer to Figure 3 for the drill hole collar locations). A total of 122 holes were drilled for 3,015m using a RC drill rig with a hammer bit, primarily due to lack of available aircore drill rigs and concerns regarding the ability of aircore to penetrate both the rubbly colluvium and the saprolite. As a result of the drill samples being mechanically pulverised by the hammer bit, the slimes content of samples is likely to be overstated, the oversize content is likely understated, and the sand fraction likely contains mechanically generated sand together with natural sand.

Results from Phase 1 drilling

The sample analysis for rutile has been completed on the sand fraction using conventional mineral sands techniques (and back-calculated for in-situ grades). There is the potential that rutile assays reported may not reflect true in-situ grade and/or represent rutile that is readily amenable to conventional mineral sands processing. Analysis of selected oversize fractions confirmed significant rutile is present in the oversize. For holes TN092 to TN122, the oversize fraction from the first stage of sample processing was crushed and added to the sand fraction prior to HM analysis – such that these holes report a "total" rutile grade (assuming no loss to the slimes fraction), whereas holes TN001 to TN091 report only the rutile from the sand fraction and may therefore only be a "partial" rutile grade.

Drill logging has identified three primary geological domains, as follows:

- Red-brown soil and colluvium with abundant gravel typically 1-2m thick on the eastern flank of Kigwase Hill and 2-4m thick on the western flank of Kigwase Hill. Consistently mineralised and reports high levels of ferruginous HM and significant TiO₂ in the magnetic fraction. The HM is enriched in the upper part of the profile. This domain is confirmed as a viable exploration target for the province, but lacks the depth/thickness at Umba South to have significant economic potential.
- Brown saprolite and saprock weathered bedrock, subdivided into sandy and clayey units. It is thought that this reflects the protolith (quartz rich vs feldspar rich), rather than weathering intensity as there is limited evidence for a well-developed chemical weathering profile with remobilisation and volume reduction. Depth of weathering ranges down to 50m but is typically ~30m distal to the ridge, and localised variability is evident. The HM content is highly variable, and often variable HM magnetic fractions both down and between holes. The saprolite is considered a viable exploration target for the province, but at Umba South it appears to lack the consistent intense weathering that concentrates rutile in the upper profile and promotes free dig mining and simple processing.



• Grey bedrock – fresh gneiss, typically with abundant pyrite. Garnet gneiss logged distal to the ridge, but logging has not attempted to classify the bedrock lithology in detail. The HM content is variable but typically high grade (~20% HM) although dominated by pyrite. The bedrock is not considered a viable exploration target for rutile due to cost and complexity that would be introduced by hard rock mining and comminution, and the negative impact of pyrite mineralisation on mineral processing recoveries and tails storage – with results only reported for geological interest.

Set out in the table below are notable hole intercepts. Due to the variability of mineralisation between the geological domains – and potential mining, mineral processing and tailings handling and storage implications – the rutile mineralisation has been reported by domain and not by total hole intercepts. For a list of all Phase 1 assay results, refer to Table 1 in Appendix 1. Refer also to the cross sections in Figures 4 to 6 for detailed rutile HM analysis of each drill hole.

Notable drill hole intercepts		
Colluvium	Saprolite	Bedrock
• TN042 - 8m at 1.39% rutile from surface	• TN038 - 15m at 2.54% rutile from 18m	• TN015 - 4m at 3.48% rutile from 18m
• TN094 - 4m at 1.40% rutile from surface	• TN011 - 10m at 2.55% rutile from 13m	• TN009 - 9m at 1.52% rutile from 10m
• TN095 - 4m at 1.24% rutile from surface	• TN015 - 11m at 1.99% rutile from 7m	• TN056 - 6m at 2.11% rutile from 20m
• TN093 - 3m at 1.50% rutile from surface	• TN051 - 17.5m at 1.15% rutile from 0.5m	
	• TN039 - 7m at 2.02% rutile from 6m	
	• TN056 - 6m at 2.02% rutile from 13m	

Graphite is a common accessory mineral within the paragneiss sequence being explored and is routinely observed during panning and logging of the drill samples. Approximately 320 samples from all geological domains were randomly selected for analysis to assess the graphite mineralisation potential, with around a third of samples reporting below detection and the remainder averaging around 0.5% Total Graphitic Carbon including peak values up to 2.5% TGC. The graphite mineralisation is not typically coincident with rutile mineralisation and appears confined to specific stratigraphic units within the drilled sequence. Preliminary assessment suggests that graphite does not represent a viable exploration target due to unfavourable grade and distribution of mineralisation but may have value as a potential co-product where it occurs coincident with rutile.

For further details in respect of the results, refer to the Appendices to this announcement, containing a table of all assay results (refer to Appendix 1) and information provided for the purposes of Sections 1 and 2 of Table 1 of the JORC Code (refer to Appendix 2).

Phase 2 infill drilling and further planned activities

With the Phase 1 program drill spacing unable to establish geological and grade continuity of saprolite mineralisation, an infill drilling program was undertaken in the first quarter of 2023, with 86 holes drilled for 2,128m (Phase 2). Assay results from Phase 2 are expected to be available in the September quarter of 2023, due to delays associated with the export of samples from Tanzania to Kenya and prioritisation of operational assay requirements and near-mine exploration assays at the Kwale Operations laboratory. The Phase 2 results should provide the Company with a more fulsome understanding of the Umba South mineralisation, which will assist in planning future exploration activity at Umba South and elsewhere along the prospective geological zone.

Other further work planned includes:

- Geostatistical assessment of data to establish grade continuity parameters.
- A program of shallow trenching to expose the saprolite and conduct rock chip channel sampling, geological mapping, and collection of saprolite samples to assess physical properties related to mining and processing characteristics.
- Seek to progress approvals to allow exploration access to granted prospecting licences north of the Umba River, particularly PL11686/2021, and conduct reconnaissance exploration in this area to establish if broad areas of rutile mineralisation are present within either colluvial/alluvial material shedding from the prospective ridge line, or strongly weathered saprolite associated with the targeted prospective zone.

A glossary of key terms used in this announcement is on page 30.



Competent Person's Statement

The information in this announcement that relates to the Umba South exploration results is based on, and fairly represents, information and supporting documentation prepared by Mr. Ian Reudavey. Mr. Reudavey is a member of the Australasian Institute of Geoscientists. Mr. Reudavey is employed by Base Resources. Mr. Reudavey has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code and as Qualified Person for the purposes of the AIM Rules for Companies. Mr. Reudavey has reviewed this announcement and consents to the inclusion in this announcement of the Umba South exploration results and the supporting information in the form and context in which the relevant information appears.



Figure 1: Umba Exploration Project location

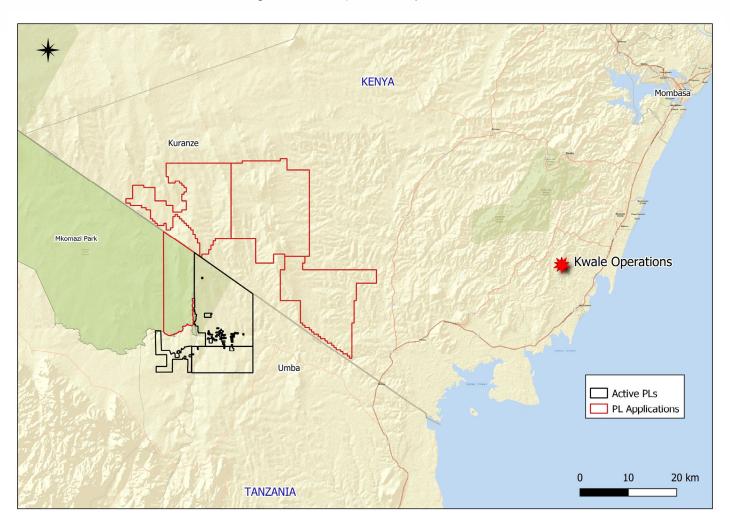




Figure 2: Umba South Project drilling location

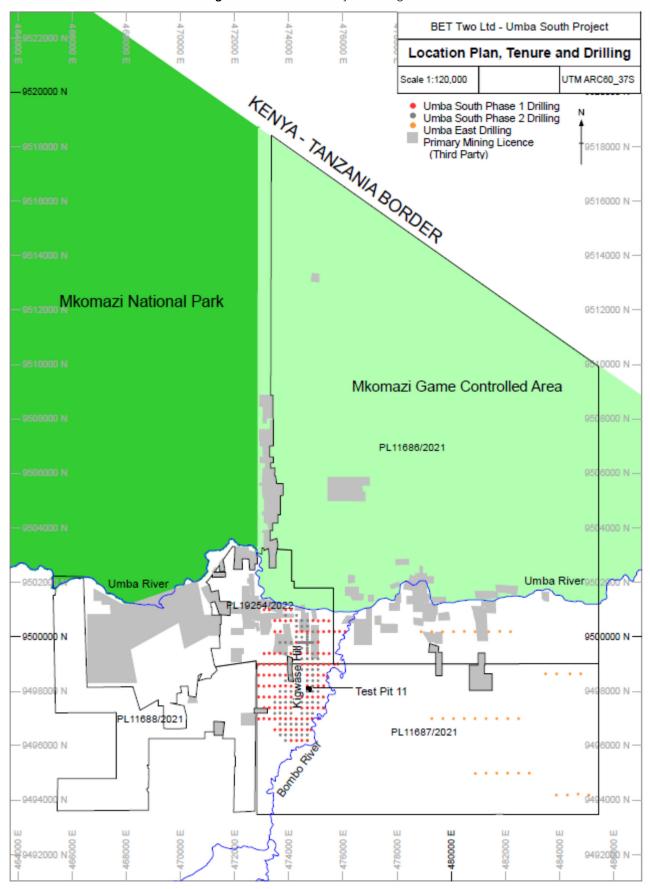




Figure 3: Drill hole collars and cross section locations.

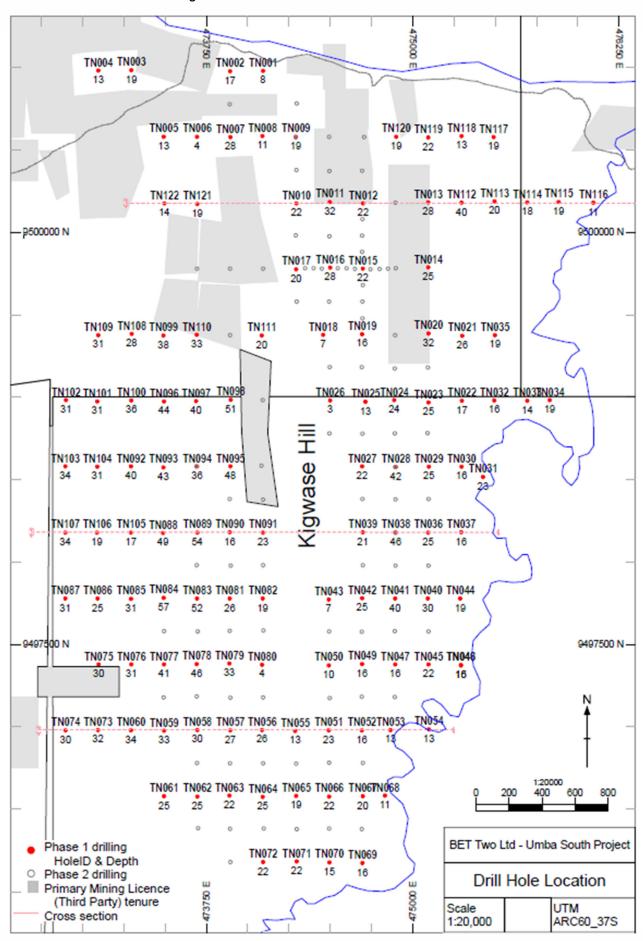




Figure 4: Cross section showing assayed rutile HM grade on northing 9500178

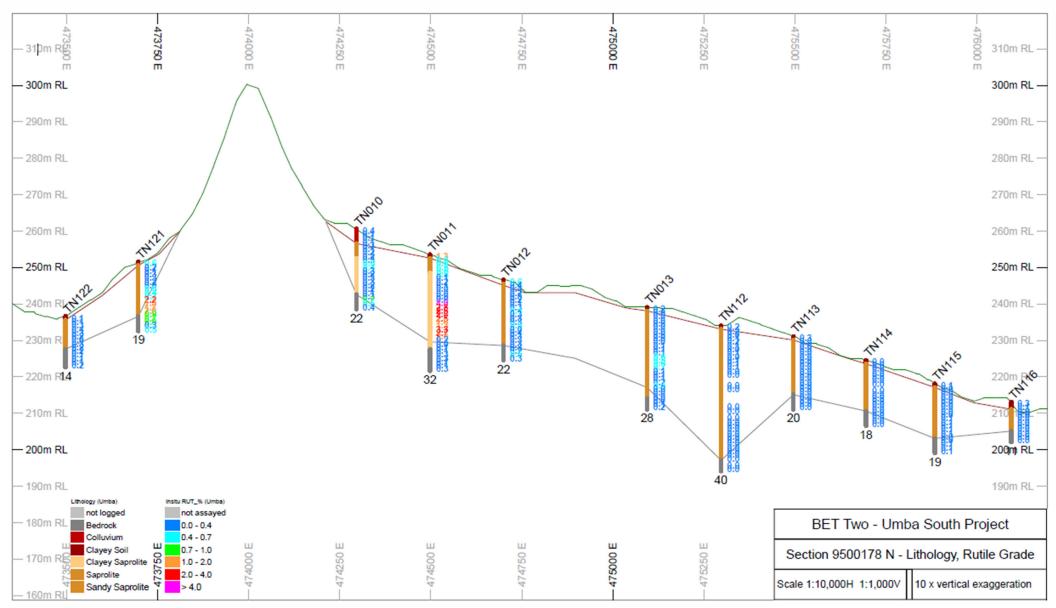




Figure 5: Cross section showing assayed rutile HM grade on northing 9498178

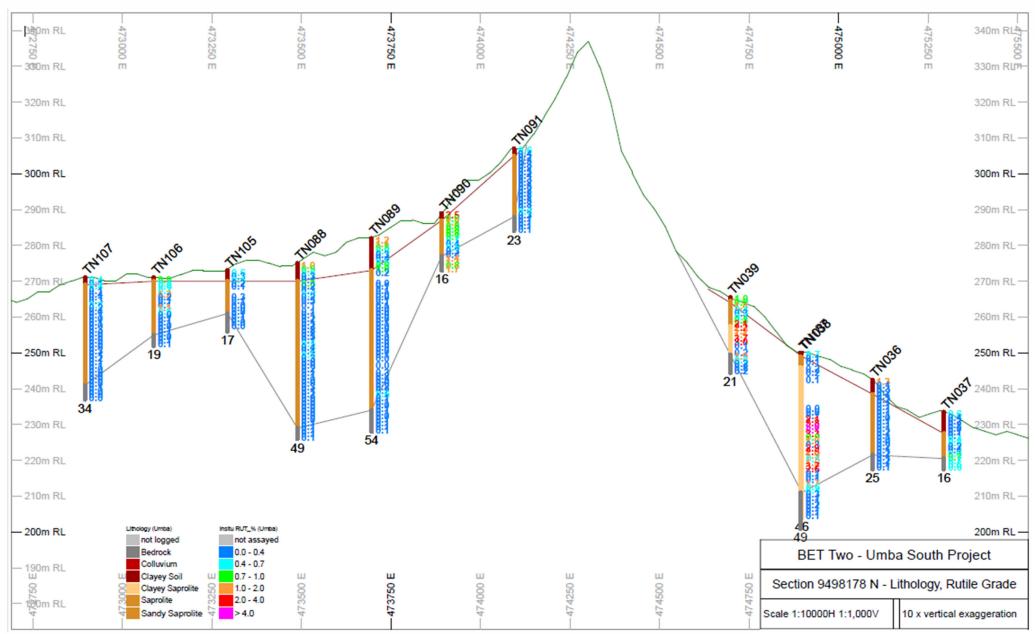
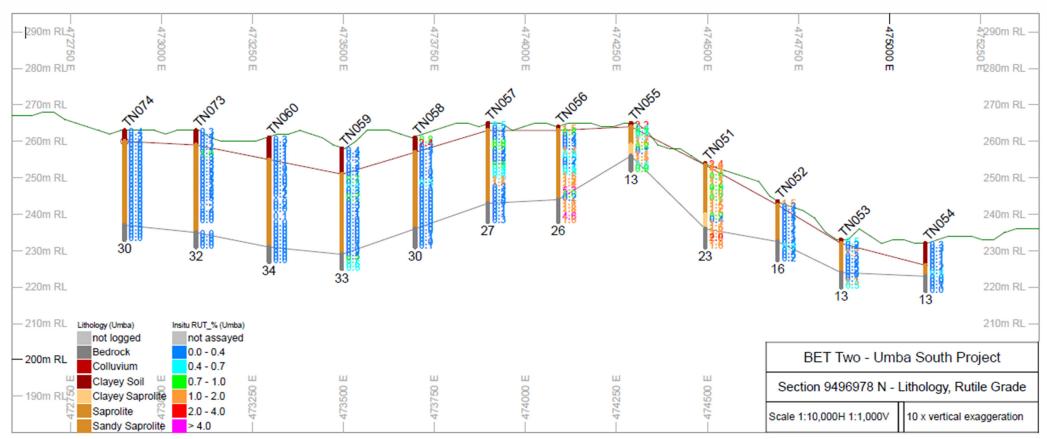




Figure 6: Cross section showing assayed rutile HM grade on northing 9496978





Appendix 1

Table 1: Umba South Exploration Project drill hole table. All drill holes have dip of -90 degrees and azimuth of 360 degrees (i.e. vertical).

Section N	Hole ID	Easting	Northing	RL SRTM	Survey	Hole Depth	Unit	Interval	From	То	HM (%)	Rut (%)
9500978	TN001	474096	9500978	222	HHGPS	8	TOTAL	8	0	8	-	NSF
	TN002	473895	9500977	219	HHGPS	17	TOTAL	17	0	17	-	NSF
	TN003	473297	9500983	234	HHGPS	19	TOTAL	19	0	19	-	NSF
	TN004	473098	9500980	242	HHGPS	13	TOTAL	13	0	13	-	NSF
9500578	TN005	473494	9500579	233	HHGPS	13	TOTAL	13	0	13	-	NSF
	TN006	473696	9500578	228	HHGPS	4	TOTAL	4	0	4	-	NSI
	TN007	473897	9500576	238	HHGPS	28	TOTAL	28	0	28	-	NSI
	TN008	474091	9500583	245	HHGPS	11	TOTAL	11	0	11	-	NS
	TN009	474293	9500578	239	HHGPS	19	CS	1	0	1	5.9	0.7
							SAP	9	1	10	5.3	0.8
							BDR	9	10	19	22.3	1.5
							TOTAL	19	0	19	13.4	1.1
	TN117	475491	9500576	225.5	HHGPS	19	TOTAL	19	0	19	-	NS
	TN118	475297	9500582	227.5	HHGPS	13	TOTAL	11			-	NS
	TN119	475096	9500575	230	HHGPS	22	TOTAL	22	0	22	-	NS
	TN120	474901	9500579	231.5	HHGPS	19	TOTAL	19	0	19	-	NS
500178	TN010	474297	9500174	260.5	HHGPS	22	TOTAL	22	0	22	-	NS
	TN011	474499	9500183	253.5	HHGPS	32	CS	1	0	1	7.2	1.3
							SAP	12	1	13	-	NS
							SAP	11	13	24	8.0	2.3
						including	SAP	10	13	23	8.6	2.5
							BDR	8	24	32	-	NS
							TOTAL	32	0	32	6.0	0.9
	TN012	474701	9500175	246.5	HHGPS	22	TOTAL	22	0	22	-	NS
	TN013	475095	9500180	239	HHGPS	28	TOTAL	28	0	28	-	NS
	TN112	475298	9500179	234	HHGPS	40	TOTAL	40	0	40	-	NS
	TN113	475497	9500186	231	HHGPS	20	TOTAL	20	0	20	-	NS
	TN114	475696	9500180	224.5	HHGPS	18	TOTAL	18	0	18	-	NS
	TN115	475885	9500183	218	HHGPS	19	TOTAL	19	0	19	-	NS
	TN116	476095	9500179	213	HHGPS	11	TOTAL	11	0	11	-	NS
	TN121	473698	9500171	251.5	HHGPS	19	CS	1	0	1	-	NS
							SAP	9	1	10	-	NS
							SAP	5	10	15	33.6	1.6
							BDR	4	15	19	-	NS
							TOTAL	19	0	19	29.5	0.7
	TN122	473498	9500174	236.5	HHGPS	14	TOTAL	14	0	14	-	NS
499778	TN014	475096	9499786	244	HHGPS	25	TOTAL	25	0	25	-	NS
	TN015	474700	9499779	255	HHGPS	22	CS	1	0	1	-	NS
							SAP	17	1	18	35.6	1.4
						including	SAP	11	7	18	8.9	1.9
							BDR	4	18	22	34.4	3.4
							TOTAL	22	0	22	19.6	1.7
	TN016	474501	9499785	261	HHGPS	28	TOTAL	28	0	28	-	NS



Section N	Hole ID	Easting	Northing	RL SRTM	Survey	Hole Depth	Unit	Interval	From	То	HM (%)	Rut (%)
	TN017	474296	9499775	272	HHGPS	20	CS	1	0	1	9.4	1.00
							SAP	12	1	13	4.7	0.78
						including	SAP	9	4	13	5.6	0.91
							SAP	5	13	18	-	NSR
							BDR	2	18	20	-	NSR
							TOTAL	20	0	20	-	NSR
9499378	TN018	474460	9499377	273.5	HHGPS	7	CS	1	0	1	5.9	0.98
							SAP	2	1	3	11.9	1.00
							BDR	4	3	7	15.8	0.77
							TOTAL	7	0	7	14.4	0.86
	TN019	474696	9499380	259.5	HHGPS	16	CS	1	0	1	56.3	1.87
							SAP	11	1	12	13.9	0.77
						including	SAP	2	7	9	10.7	1.43
							BDR	4	12	16	20.9	0.89
							TOTAL	16	0	16	18.3	0.87
	TN020	475097	9499384	244	HHGPS	32	TOTAL	32	0	32	-	NSR
	TN021	475301	9499370	238	HHGPS	26	CS	1	0	1	-	NSR
							SAP	21	1	22	8.0	0.25
						including	SAP	3	1	4	5.2	0.95
							BDR	4	22	26	-	NSR
							TOTAL	26	0	26	-	NSR
	TN035	475499	9499375	227	HHGPS	19	TOTAL	19	0	19	-	NSR
	TN099	473491	9499373	253	HHGPS	38	CS	7	0	7	1.9	0.29
						including	CS	2	0	2	4.0	0.72
							SAP	27	7	34	-	NSR
							BDR	4	34	38	-	NSR
							TOTAL	38	0	38	-	NSR
	TN108	473299	9499383	246.5	HHGPS	28	TOTAL	28	0	28	-	NSR
	TN109	473097	9499375	255.5	HHGPS	31	TOTAL	31	0	31	-	NSR
	TN110	473693	9499377	261	HHGPS	33	CS	8	0	8	4.7	0.78
						including	CS	3	0	3	7.2	1.41
						3	SAP	21	8	29	_	NSR
							BDR	4	29	33	_	NSR
							TOTAL	33	0	33	_	NSR
	TN111	474088	9499373	275	HHGPS	20	CS	1	0	1	21.4	1.90
				~	3. 3		SAP	16	1	17	-	NSR
							BDR	3	17	20	_	NSR
							TOTAL	20	0	20	-	NSR
9498978	TN022	475299	9498977	229	HHGPS	17	CS	6	0	6	_	NSR
5.50570	114022	1,5255	5 150577	223		Ι,	SAP	8	6	14	17.2	0.60
						including	SAP	4	6	10	16.5	0.82
						meraumg	BDR	3	14	17	-	NSR
							TOTAL		0	17		NSR
	TN023	475098	9498967	235	HHGPS	25	CS	5	0	5	7.1	0.67
	TINUZS	473038	J4J0J0/	233	ппигз							
						including	CS SAD	3 17	0	<i>3</i>	6.9	0.84 NCD
							SAP	17	5	22	-	NSR



Section N	Hole ID	Easting	Northing	RL SRTM	Survey	Hole Depth	Unit	Interval	From	То	HM (%)	Rut (%)
							BDR	2	22	25	-	NSR
							TOTAL	25	0	25	-	NSR
	TN024	474890	9498980	248	HHGPS	24	CS	3	0	3	6.7	1.24
							SAP	17	3	20	-	NSR
							BDR	4	20	24	-	NSR
							TOTAL	24	0	24	-	NSR
	TN025	474715	9498970	256.5	HHGPS	13	CS	1	0	1	4.5	0.93
							SAP	8	1	9	4.7	0.53
						including	SAP	4	3	7	5.0	0.92
							BDR	4	9	13	-	NSR
							TOTAL	13	0	13	-	NSR
	TN026	474501	9498979	275	HHGPS	3	CS	0.5	0	1	12.4	1.96
							BDR	2.5	0.5	3	25.9	2.14
							TOTAL	3	0	3	23.6	2.11
	TN032	475495	9498978	225.5	HHGPS	16	TOTAL	16	0	16	-	NSR
	TN033	475696	9498976	223	HHGPS	14	TOTAL	14	0	14	-	NSR
	TN034	475832	9498981	225	HHGPS	19	TOTAL	19	0	19	-	NSR
	TN096	473495	9498973	264	HHGPS	44	CS	6	0	6	3.8	0.60
						including	CS	2	0	2	6.8	1.07
							SAP	34	6	40	10.8	0.39
						including	SAP	4	6	10	5.5	0.83
						including	SAP	3	37	40	46.0	0.79
							BDR	4	40	44	-	NSR
							TOTAL	44	0	44	-	NSR
	TN097	473690	9498974	269	HHGPS	40	CS	8	0	8	4.3	0.44
						including	CS	1	0	1	10.0	1.14
							SAP	27	8	35	7.4	0.49
						including	SAP	10	10	20	5.8	0.89
							BDR	5	35	40	35.2	1.63
							TOTAL	40	0	40	-	NSR
	TN098	473899	9498982	271.5	HHGPS	51	CS	5	0	5	8.8	0.57
						including	CS	2	0	2	14.1	0.84
							SAP	42	5	47	-	NSR
							BDR	4	47	51	-	NSR
							TOTAL	51	0	51	-	NSR
	TN100	473297	9498979	256.5	HHGPS	36	TOTAL	36	0	36	-	NSR
	TN101	473092	9498973	257	HHGPS	31	TOTAL	31	0	31	-	NSR
	TN102	472902	9498980	256.5	HHGPS	31	CS	5	0	5	1.0	0.25
						including	CS	1	0	1	2.7	0.86
							SAP	22	5	27	-	NSR
							BDR	4	27	31	28.1	1.33
							TOTAL	31	0	31	-	NSR
9498578	TN027	474695	9498578	266	HHGPS	22	CS	1	0	1	7.5	0.71
							SAP	17	1	18	-	NSR
							BDR	4	18	22	25.4	1.00
							TOTAL	18	0	18	-	NSR



Page	Section N	Hole ID	Easting	Northing	RL SRTM	Survey	Hole Depth	Unit	Interval	From	То	HM (%)	Rut (%)
Page		TN028	474899	9498575	254	HHGPS	42		1	0		7.1	1.18
Page									4			-	
Part								TOTAL		0	42	-	NSR
Part		TN029	475099	9498577	241	HHGPS			2	0	2		
No.							including	CS	1	0	1	9.8	0.97
No.												-	
TRO30								BDR	3			-	
Page 12 Page 13 Page 14 Page 14 Page 14 Page 15 Page								TOTAL	25	0	25	-	NSR
Page		TN030	475297	9498577	229.5	HHGPS	16	CS	1	0	1	-	NSR
Part								SAP	10	1	11	-	NSR
TN031								BDR	5	11	16	15.0	0.61
No							including	BDR	2	11	13	18.2	1.10
No								TOTAL	16	0	16	14.2	0.51
Note		TN031	475427	9498515	226	HHGPS	23	TOTAL	23	0	23	-	NSR
Note		TN092	473296	9498579	266.5	HHGPS	40	CS	7	0	7	-	NSR
No.								SAP	29	7	36	5.7	0.47
TN094							including	SAP	10	19	29	11.6	1.03
TN093								BDR	4	36	40	-	NSR
Part								TOTAL	40	0	40	-	NSR
No.		TN093	473492	9498573	271	HHGPS	43	CS	7	0	7	4.5	0.81
NSR							including	CS	3	0	3	7.3	1.50
NSA								SAP	33	7	40	-	NSR
TN094								BDR	3	40	43	-	NSR
Note								TOTAL	43	0	43	-	NSR
Note		TN094	473696	9498579	276	HHGPS	36	CS	6	0	6	6.1	1.05
Note							including	CS	4	0	4	7.6	1.40
Note								SAP	25	6	31	5.9	0.65
Note							including	SAP	5	6	11	3.4	0.70
TN095							including	SAP	14	17	31	7.0	0.81
TN095 473897 9498579 286.5 HHGPS 48 CS 7 0 7 6.1 0.92 Including CS 4 0 4 7.3 1.24 SAP 37 7 44 6.8 0.30 SAP 9 13 22 18.0 0.78 BDR 4 44 48 - NSR TOTAL 48 0 48 - NSR TOTAL 48 0 3 3.0 0.47 Including CS 3 0 3 3.0 0.47 Including CS 3 0 3 3.0 0.89 SAP 23 7 30 - NSR SAP 23 7 30 3 - NSR SAP 23 7 30 3 - NSR SAP 23 7 30 3 - NSR TOTAL 34 0 34 - NSR TOTAL 34 0 34 - NSR TOTAL 34 0 34 - NSR TOTAL 34 0 31 - NSR SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP SAP S								BDR	2	34	36	40.7	2.25
NSR								TOTAL	36	0	36	8.7	0.79
NSR		TN095	473897	9498579	286.5	HHGPS	48	CS	7	0	7	6.1	0.92
NSR							including	CS	4	0	4	7.3	1.24
NSR								SAP	37	7	44	6.8	0.30
TN103							including	SAP	9	13	22	18.0	0.78
TN103 472898 9498579 265 HHGPS 34 CS 7 0 7 3.0 0.47 Including CS 3 0 3 3.0 0.89								BDR	4	44	48	-	NSR
NSR								TOTAL	48	0	48	-	NSR
SAP 23 7 30 - NSR BDR 4 30 34 - NSR BDR 4 30 34 - NSR TOTAL 34 0 34 - NSR TOTAL 34 0 34 - NSR TOTAL 34 0 34 - NSR TOTAL 31 0 31 0 31 - NSR TOTAL 31 0 31 31		TN103	472898	9498579	265	HHGPS	34	CS	7	0	7	3.0	0.47
SAP 23 7 30 - NSR BDR 4 30 34 - NSR BDR 4 30 34 - NSR TOTAL 34 0 34 - NSR TOTAL 34 0 34 - NSR TOTAL 34 0 34 - NSR TOTAL 31 0 31 0 31 - NSR TOTAL 31 0 31 31							including	CS	3	0	3	3.0	0.89
TN104 473092 9498576 265.5 HHGPS 31 TOTAL 34 0 34 - NSR 9498178 TN036 475096 9498177 242.5 HHGPS 25 CS 4 0 4 6.6 0.46 including CS 1 0 1 15.2 1.29										7	30	-	
TN104 473092 9498576 265.5 HHGPS 31 TOTAL 34 0 34 - NSR 9498178 TN036 475096 9498177 242.5 HHGPS 25 CS 4 0 4 6.6 0.46 including CS 1 0 1 15.2 1.29								BDR		30	34		
TN104 473092 9498576 265.5 HHGPS 31 TOTAL 31 0 31 - NSR 9498178 TN036 475096 9498177 242.5 HHGPS 25 CS 4 0 4 6.6 0.46 including CS 1 0 1 15.2 1.29											34	-	
9498178 TN036 475096 9498177 242.5 HHGPS 25 CS 4 0 4 6.6 0.46 including CS 1 0 1 15.2 1.29		TN104	473092	9498576	265.5	HHGPS	31					-	
including CS 1 0 1 15.2 1.29	9498178											6.6	
											21		



Section N	Hole ID	Easting	Northing	RL SRTM	Survey	Hole Depth	Unit	Interval	From	То	HM (%)	Rut (%)
							BDR	4	21	25	-	NSR
							TOTAL	25	0	25	-	NSR
	TN037	475295	9498179	233.5	HHGPS	16	TOTAL	16	0	16	-	NSR
	TN038	474899	9498176	250	HHGPS	46	CS	1	0	1	-	NSR
							SAP	38	1	39	3.0	1.13
						including	SAP	15	18	33	5.3	2.54
							BDR	7	39	46	-	NSR
							TOTAL	46	0	46	3.6	0.96
	TN039	474699	9498179	265.5	HHGPS	21	CS	1	0	1	5.0	0.98
							SAP	15	1	16	3.7	1.21
						including	SAP	7	6	13	5.4	2.02
							BDR	5	16	21	-	NSR
							TOTAL	21	0	21	5.7	1.06
	TN088	473490	9498175	275	HHGPS	49	CS	5	0	5	4.0	0.58
						including	CS	2	0	2	5.7	0.98
							SAP	41	5	46	-	NSR
							BDR	3	46	49	-	NSR
							TOTAL	49	0	49	-	NSR
	TN089	473697	9498177	282	HHGPS	54	CS	9	0	9	5.4	0.76
						including	CS	3	0	3	7.8	1.06
							SAP	39	9	48	-	NSR
							BDR	6	48	54	-	NSR
							TOTAL	54	0	54	-	NSR
	TN090	473893	9498179	289	HHGPS	16	CS	2	0	2	8.7	1.69
							SAP	10	2	12	3.6	0.65
						including	SAP	6	2	8	4.3	0.82
							BDR	4	12	16	23.2	1.28
		474005	0.400176	207	LILLEDG	22	TOTAL	16	0	16	9.1	0.94
	TN091	474095	9498176	307	HHGPS	23	TOTAL	23	0	23	-	NSR
	TN105	473295	9498177	273	HHGPS	17	TOTAL	17	0	17	- 44.2	NSR
	TN106	473089	9498176	271	HHGPS	19	CS	1	0	1	11.2	0.87
							SAP	15 2	1	16	-	NSR
							BDR	3	16	19	-	NSR
	TN107	472007	0400177	271	ППСВС	2.4	TOTAL	19	0	19	-	NSR
9497778	TN107	472897	9498177	271	HHGPS	34	TOTAL	34	0	34	-	NSR
949///8	TN040	475094	9497776	242	HHGPS	30	TOTAL	30	0	30	- ги	NSR
	TN041	474895	9497776	254	HHGPS	40	CS	5	0	5	5.4	0.55
						including	CS SAD	1	0	<i>1</i> 34	18.1	1.43
							SAP BDR	29 6	5 34	34 40	- 29.1	NSR 0.79
	TNO42	171605	0407770	262	ППСВС	רב	TOTAL	40	0	40	- 6 1	NSR 1 20
	TN042	474695	9497779	262	HHGPS	25	CS SAD	8 12	0	8	6.1	1.39
						including	SAP SAP	12 <i>3</i>	8 <i>8</i>	20 11	6.2 <i>3.1</i>	0.51
						including			8 20	11 25		0.85 0.71
							BDR	5			15.9	0.71
							TOTAL	25	0	25	8.1	0.83



Section N	Hole ID	Easting	Northing	RL SRTM	Survey	Hole Depth	Unit	Interval	From	То	HM (%)	Rut (%)
	TN043	474493	9497771	278	HHGPS	7	CS	4	0	4	13.5	0.66
						including	CS	3	0	3	16.8	0.83
							BDR	3	4	7	20.4	1.29
							TOTAL	7	0	7	16.4	0.93
	TN044	475289	9497777	235	HHGPS	19	TOTAL	19	0	19	-	NSR
	TN081	473894	9497776	285	HHGPS	26	CS	2	0	2	6.0	0.92
							SAP	20	2	22	12.9	0.47
						including	SAP	3	17	21	13.5	0.79
							BDR	4	22	26	-	NSR
							TOTAL	26	0	26	-	NSR
	TN082	474093	9497777	300	HHGPS	19	CS	1	0	1	8.9	0.80
							SAP	14	1	15	-	NSR
							BDR	4	15	19	-	NSR
							TOTAL	19	0	19	-	NSR
	TN083	473695	9497777	281.5	HHGPS	52	CS	2	0	2	6.1	1.42
							SAP	46	2	48	-	NSR
							BDR	4	48	52	-	NSR
							TOTAL	52	0	52	-	NSR
	TN084	473494	9497780	276	HHGPS	57	CS	2	0	2	7.0	1.00
							SAP	49	3	52	-	NSR
							BDR	5	52	57	-	NSR
							TOTAL	57	0	57	-	NSR
	TN085	473295	9497775	270.5	HHGPS	31	CS	2	0	2	-	NSR
							SAP	25	2	27	8.3	0.46
						including	SAP	7	16	23	12.9	0.83
							BDR	4	27	31	-	NSR
							TOTAL	31	0	31	-	NSR
	TN086	473094	9497777	272	HHGPS	25	TOTAL	25	0	25	-	NSR
	TN087	472897	9497777	273	HHGPS	31	CS	1	0	1	5.3	1.00
							SAP	26	1	27	-	NSR
							BDR	4	27	31	-	NSR
							TOTAL	31	0	31	-	NSR
9497378	TN045	475098	9497377	236	HHGPS	22	TOTAL	22	0	22	-	NSR
	TN046	475293	9497373	230	HHGPS	15	TOTAL	15	0	15	-	NSR
	TN047	474896	9497377	244	HHGPS	16	CS	1	0	1	11.2	1.71
							SAP	9	1	10	11.1	0.72
						including	SAP	5	1	6	10.2	0.81
							BDR	6	10	16	33.3	1.32
							TOTAL	16	0	16	19.4	1.01
	TN048	475294	9497371	230	HHGPS	16	TOTAL	16	0	16	-	NSR
	TN049	474695	9497378	252	HHGPS	16	CS	1	0	1	6.6	1.73
							SAP	8	1	9	4.8	1.09
							BDR	7	9	16	20.4	1.00
							TOTAL	16	0	16	11.7	1.09
	TN050	474493	9497371	267	HHGPS	10	CS	1	0	1	9.4	1.22
							SAP	5	1	6	6.7	1.35



Section N	Hole ID	Easting	Northing	RL SRTM	Survey	Hole Depth	Unit	Interval	From	То	HM (%)	Rut (%)
							BDR	4	6	10	19.0	1.43
							TOTAL	10	0	10	11.9	1.37
	TN075	473099	9497377	270	HHGPS	30	CS	4	0	4	1.5	0.35
						including	CS	1	0	1	2.4	0.74
							SAP	22	4	26	-	NSR
							BDR	4	26	30	-	NSR
							TOTAL	30	0	30	-	NSR
	TN076	473297	9497376	271	HHGPS	31	TOTAL	31	0	31	-	NSR
	TN077	473495	9497377	270.5	HHGPS	41	CS	3	0	3	5.9	0.62
						including	CS	2	0	2	6.0	0.92
							SAP	33	3	36	-	NSR
							BDR	5	36	41	-	NSR
							TOTAL	41	0	41	-	NSR
	TN078	473694	9497378	273.5	HHGPS	46	CS	9	0	9	9.6	0.62
						including	CS	2	0	2	9.6	2.06
							SAP	33	9	42	-	NSR
							BDR	4	42	46	-	NSR
							TOTAL	46	0	46	-	NSR
	TN079	473892	9497382	281	HHGPS	33	CS	2	0	2	8.5	2.06
							SAP	26	2	28	-	NSR
							BDR	5	28	33	-	NSR
							TOTAL	33	0	33	-	NSR
	TN080	474090	9497375	286	HHGPS	4	SAP	1	0	1	9.9	0.73
							BDR	3	1	4	21.0	1.27
							TOTAL	4	0	4	18.2	1.13
9496978	TN051	474494	9496976	254	HHGPS	23	CS	0.5	0	1	10.4	2.38
							SAP	17.5	0.5	18	5.0	1.15
							BDR	5	18	23	26.7	1.85
							TOTAL	23	0	23	9.9	1.35
	TN052	474693	9496976	243.5	HHGPS	16	CS	1	0	1	9.1	1.49
							SAP	10	1	11	-	NSR
							BDR	5	11	16	-	NSR
		474067	0.400070				TOTAL	16	0	16	-	NSR
	TN053	474867	9496978	233	HHGPS	13	TOTAL	13	0	13	-	NSR
	TN054	475099	9496983	232	HHGPS	13	TOTAL	13	0	13	-	NSR
	TN055	474290	9496973	265	HHGPS	13	CS	1	0	1	7.2	2.19
							SAP	8	1	9	6.7	0.84
							BDR	4	9	13	20.8	1.04
		474000	0.4000==			2.6	TOTAL	13	0	13	11.1	1.01
	TN056	474090	9496978	264	HHGPS	26	CS	1	0	1	7.6	1.52
							SAP	19	1	20	6.4	0.94
						including	SAP	6	13	19	14.2	2.02
							BDR	6	20	26	30.2	2.11
		.=			:		TOTAL	26	0	26	12.0	1.23
	TN057	473897	9496976	265	HHGPS	27	CS	2	0	2	-	NSR
							SAP	20	2	22	11.0	0.45



Section N	Hole ID	Easting	Northing	RL SRTM	Survey	Hole Depth	Unit	Interval	From	То	HM (%)	Rut (%)
						including	SAP	3	14	17	15.2	1.05
							BDR	5	22	27	-	NSR
							TOTAL	27	0	27	-	NSR
	TN058	473697	9496978	261	HHGPS	30	CS	4	0	4	6.2	0.94
						including	CS	2	0	2	8.7	1.60
							SAP	21	4	25	-	NSR
							BDR	5	25	30	-	NSR
							TOTAL	30	0	30	-	NSR
	TN059	473496	9496975	258	HHGPS	33	TOTAL	33	0	33	-	NSR
	TN060	473296	9496976	261	HHGPS	34	TOTAL	34	0	34	-	NSR
	TN073	473095	9496978	263	HHGPS	32	TOTAL	32	0	32	-	NSR
	TN074	472899	9496976	263	HHGPS	30	TOTAL	30	0	30	-	NSR
9496578	TN061	473496	9496575	253.5	HHGPS	25	TOTAL	25	0	25	-	NSR
	TN062	473698	9496572	254	HHGPS	25	CS	4	0	4	3.6	0.60
						including	CS	2	0	2	5.3	1.12
							SAP	16	4	20	-	NSR
							BDR	5	20	25	-	NSR
							TOTAL	25	0	25	-	NSR
	TN063	473891	9496579	253.5	HHGPS	22	CS	2	0	2	-	NSR
							SAP	15	2	17	8.4	0.38
						including	SAP	2	15	17	17.2	1.31
							BDR	5	17	22	17.7	1.50
						including	BDR	3	19	22	20.6	2.13
							TOTAL	22	0	22	-	NSR
	TN064	474093	9496571	249	HHGPS	25	CS	2	0	2	11.5	0.92
							SAP	19	2	21	-	NSR
							BDR	4	21	25	-	NSR
							TOTAL	25	0	25	-	NSR
	TN065	474295	9496576	251	HHGPS	19	CS	2	0	2	12.5	1.00
							SAP	13	2	15	6.0	0.53
						including	SAP	2	2	4	9.7	0.74
							BDR	4	15	19	24.7	1.09
							TOTAL	19	0	19	11.4	0.71
	TN066	474495	9496573	244.5	HHGPS	22	CS	2	0	2	9.4	1.18
							SAP	15	2	17	-	NSR
							BDR	5	17	22	-	NSR
							TOTAL	22	0	22	-	NSR
	TN067	474700	9496575	238	HHGPS	20	TOTAL	20	0	20	-	NSR
	TN068	474833	9496578	233	HHGPS	11	TOTAL	11	0	11	-	NSR
9496178	TN069	474698	9496173	235	HHGPS	16	TOTAL	16	0	16	-	NSR
	TN070	474497	9496176	243	HHGPS	15	TOTAL	15	0	15	-	NSR
	TN071	474300	9496182	245	HHGPS	22	TOTAL	22	0	22	-	NSR
-	TN072	474095	9496179	243	HHGPS	22	TOTAL	22	0	22	-	NSR



Appendix 2

JORC Code, 2012 Edition

Section 1 Sampling Techniques and Data

Criteria	Explanation	Comment
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Reverse circulation hammer drilling was used to obtain 1m samples from which approximately 2.0 kg was riffle split to produce a sub-sample for HM analysis utilizing heavy liquid separation, magnetic separation and XRF assay. All holes were sampled over consistent 1m intervals. All holes were drilled using a reverse circulation method to collect 25% of the sample via cyclone separation of drill returns with a 4-way splitter attachment at the base of the cyclone discharging into a calico bag. Samples are collected from alternate discharge chutes of the splitter, and assessment of duplicate samples collected at routine intervals show that no bias is evident from the cyclone splitter. Samples were analysed by mineral sands industry standard techniques of screening, desliming and heavy liquid separation using SPT (sodium polytungstate: SG = 2.85g/cm³). XRF analysis of HM magnetic fractions was used to define the VHM content.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	All drilling was undertaken using a Smith Capital 10R3H track mounted reverse circulation drill rig operated by Amazon Mineworks Tanzania. All holes were drilled vertically, with the drill rig levelled using hydraulic jacks. Drill rod diameter is $4^1/2^n$ with 3m rods fitted with a face sampling $5^3/8^n$ button hammer bit.



Criteria	Explanation	Comment
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Sample size is monitored by the rig geologist and logged quantitatively as either good, moderate or poor, with good meaning not contaminated and appropriate sample size (recovery), moderate meaning not contaminated, but sample over or under sized, and poor meaning contaminated or grossly over/undersized. Samples from the Phase 1 drilling at Umba South were logged as ~80% dry good, ~16% dry poor and ~3% moist good. The drill rig uses a face sampling pneumatic hammer bit and operates at air pressures of 24 Bar and low rotation speeds (45-65 rpm) to maximize sample recovery. There is no correlation evident between sample recovery and grade, resulting in no sample bias.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.	All samples were visually checked and logged on site by the rig geologist and logged for lithotype, grain size, colour, hardness, and moisture content. A small subsample was taken for each drill interval and manually panned for estimation of slimes and HM content. Any relevant comments e.g., water table, gangue HM components and stratigraphic markers were included to aid in the subsequent geological modelling. The use of a pneumatic hammer bit is believed to have modified the grain size characteristics of the sample, with potential overstatement of slimes content and understatement of the oversize fraction. The drilling technique makes logging and assessment of the geotechnical parameters of the material unreliable.



Criteria	Explanation	Comment
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	An approximate 25% split of the drilled sample interval is collected from the drill cyclone. The calico sample bags from site were air dried before sub-sampling. Any material that was bound together by clay was manually attritioned so it would pass through the splitter. The material was split using a 25 mm three tier riffle splitter to produce a sub-sample for assay submission of approximately 2.0 kg in a small calico sample bag. For one sample in every 20, an additional sample was collected from an alternate discharge chute on the cyclone mounted splitter for QAQC purposes. Results of field duplicates confirm the sampling process is generating representative results. The sample preparation technique, sample size and riffle aperture used is considered
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	appropriate for mineral sands analysis. Samples were analysed by conventional mineral sands techniques of screening, desliming and heavy liquid separation using SPT (sodium polytungstate: SG = 2.85g/cm³). XRF analysis of HM magnetic fractions was used to define the VHM content. All 3,015 drill samples were submitted to the Base Titanium laboratory at the Kwale Operations in Kenya. The separation of HM was by sodium polytungstate (SPT) at density 2.85 g/cc. All samples were: Dried, weighed. Sample rotary split to produce ~400 g sample. Sample wet screened using 45 μm and 1 mm sieves, to generate oversize and sand fractions, with slimes lost during screening and calculated by difference. For samples UD2121 to UD3015 the oversize fraction was crushed until minimal oversize was present, with heavy liquid separation being undertaken on the combined mass of as received sand fraction and lab generated sand fraction. SPT heavy liquid separation of sand fraction to generate a HM fraction.



Criteria	Explanation	Comment
		 HM fraction subject to magnetic separation on a roll magnet to generate a high susceptibility (HS) fraction, magnetic (Mag) fraction and non-magnetic (NonMag) fraction. XRF analysis of Mag fractions, with rutile (assumed 95% TiO₂) calculated from TiO₂ assay of NonMag by dividing by 0.95. NonMag fraction subject to Nitric acid dissolution to determine pyrite content, with rutile grade adjusted to reflect XRF normalisation. Select float fraction samples were despatched to BV Centurion SA for analysis of TGC, with assay grades adjusted to reflect losses to slimes and oversize. Various quality control samples were submitted routinely to assure assay quality. A total of 150 duplicate field samples, 301 lab duplicate sample preparation samples, and an unspecified number of internal laboratory standards, repeats and blanks have been assayed at Kwale Operations' site laboratory.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	Drilling, logging and sampling undertaken by contract geologists following on-site training by Base Titanium's Exploration Manager. Twinned holes have been completed but assay results are not yet available for comparison. Drill hole logging and site sample data is collected electronically and regularly emailed to the exploration office in Kwale, Kenya. Assay data is captured electronically via LIMS and merged with logging and sample data in Datashed. No adjustment to assay data has been made – but it is noted that rutile grades from holes TN001 to TN091 reflect rutile in the sand fraction only, while for holes TN092 to TN122 the rutile grades reflect the combined sand and (crushed) oversize fraction.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.	Drill hole collars were surveyed using handheld GPS. All drill holes are vertical, down hole surveys were deemed unnecessary. Grid system used throughout the program is UTM, Zone 37S, ARC60 datum. Topographic data was derived from a DTM generated from SRTM 30m spaced point data and all drill collars were levelled to the SRTM topographic surface for consistency.



Criteria	Explanation	Comment
		The topographic control is considered adequate for reporting of exploration results but will require improved definition for any future resource estimation.
Data spacing and distribution	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	The drilling program that forms the basis of this announcement is based upon 200m hole spacing along E-W oriented lines with 400m between lines. The drill program was designed to test a prominent N-S trending ridge of quartzite and gneiss that reported anomalous rock chip and soil geochemistry. The current data spacing, and distribution is likely not sufficient to establish geological and grade continuity and additional work programs are being implemented to better understand the geological controls on mineralisation. No sample compositing has been applied.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	All drill holes were drilled vertically. The mineralisation drilled comprises a subhorizontal soil and weathered saprolite profile, and primary bedrock. The geological structure of the bedrock comprises 40° to 50° E dipping metamorphic fabric, and it is likely this is also evident in the saprolite as deep / intense weathering is not evident. Drill lines were drilled north - south, east - west within 10 degrees of the topographic ridgeline that reflects the strike of the metamorphic fabric. A bias to sampling has likely been introduced via vertical drilling of a moderately dipping geological unit, but as the geological controls on mineralisation are not fully understood at this time – the potential bias is still under assessment. Reported mineralisation widths in the bedrock and likely saprolite will be significantly greater (up to 1.5x) than true width.
Sample security	The measures taken to ensure sample security.	All samples from the drilling rig were transported to the Umba South exploration camp daily, where they are stored in a shed with a secure compound. Once sample preparation is completed, the sub-samples for assay are placed in drums for transport to both Tanga (for government assessment) and ultimately the Kwale Operations in Kenya. The samples bags were labelled by both marker and paper tags with a unique sample number.



Criteria	Explanation	Comment
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No external audits of the sampling techniques and data have been carried out, but the techniques and data have been reviewed by experienced Base Titanium and Base Resources personnel. The sample analytical procedure has undergone several internal reviews with modifications occurring as required. The results of mineralogical analysis are awaited to further review the analytical procedure.



Section 2 Reporting of Exploration Results

Criteria	Explanation	Comment
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The Umba South project is located within Prospecting Licences PL 11686/2021, PL 11687/2021, and PL 19524/2022, which are held by BET Two Ltd, Base Resources' wholly owned, Tanzanian subsidiary. Several Primary Mining Licences (PMLs) for gemstones, up to 10ha in size, occur at Umba South and BET Two has entered into access agreements with the PML holders allowing exploration drilling activity to be carried out in areas of interest. At the time of reporting, the BET Two tenure is in compliance with all requirements and there are no known impediments to obtaining a licence to operate in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No previous exploration for rutile is believed to have been undertaken in the Umba South area, with historical prospecting limited to reconnaissance sampling for gemstones.
Geology	Deposit type, geological setting and style of mineralisation.	The project area is underlain by part of the Mozambique Belt – a major N-S trending geological structure extending along the Eastern Coast of Africa. High-grade metamorphic rocks in the project area occur as prominent N-S trending ridgelines, with rutile being a common accessory mineral together with reported occurrences of graphite, pyrite, sillimanite, kyanite, garnet and gemstones (primarily tourmaline). The primary focus of exploration is eluvial / alluvial HM (rutile) deposits
		sourced from the mineralised ridges, and / or saprolitic deposits enriched in rutile that are sufficiently weathered to represent free-dig material from which rutile is readily liberated.
		The eluvial profile developed at Umba South is typically quite thin (~1-2m) but can locally be up to 9m thick. Rutile mineralisation is widespread throughout this unit proximal to the ridgeline at Umba South and is present as HM grains within gravelly clayey sand and soil.
		The saprolite present at Umba South has variable depth and the weathering profile is not well developed. Rutile mineralisation occurs



Criteria	Explanation	Comment
		sporadically throughout this unit and appears related to specific lithological zones that are enriched in rutile. The nature of the saprolite rutile mineralisation has not been established at this time.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: - easting and northing of the drill hole collar - elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - dip and azimuth of the hole - down hole length and interception depth - hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	BET Two has conducted two drilling programs to date, with this announcement relating to the Phase 1 reconnaissance drilling for which assay results are complete. A total of 122 holes for 3,015m with an average depth of 25m were completed for Phase 1. All holes were drilled vertically. See drill hole location plan - Figure 2. Drill hole collars and significant assays are presented in Table 1 in Appendix 1.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration results are reported as length-weighted average grades of rutile mineralisation using a nominal 0.7% rutile cut-off grade. No top-cutting has been applied. Grades reflect in-situ rutile content based upon analysis of the sand fraction. Aggregate downhole significant intercepts were calculated using the following parameters: • Minimum 3m interval of mineralisation. • Maximum 2m interval of internal "low grade" allowed provided the aggregate grade exceeds 0.7%, with multiple "low-grade" intervals permitted. For clarity the aggregate downhole intercept is also tabulated by geological domain. No metal equivalent values were used.



Criteria	Explanation	Comment
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The mineralised eluvial soil horizon forms a relatively flat lying blanket and is intersected by vertical holes; hence the intercept length is approximately equivalent to the mineralization thickness. The mineralised saprolite material likely has rutile mineralisation reflecting the primary metamorphic fabric, as the weathering profile is relatively shallow and weak with minimal mass reduction and chemical mobilisation. The metamorphic fabric dips 40° – 50° to the east and this would result in down hole mineralisation lengths being up to 1.5 times true width.
		The mineralised bedrock has rutile mineralisation aligned with the primary metamorphic fabric (as above) and this would result in down hole mineralisation lengths being up to 1.5 times true width.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Plan of Drill hole locations see Figure 2 and representative drill hole cross sections see Figures 4 to 6. Tabulation of drill intercepts see Table 1 of Appendix 1. Due to the limited understanding of geological controls on mineralisation only simplified representative cross-sections are reported at this time.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All drill hole collar locations are tabulated, including those with no significant assays.



Criteria	Explanation	Comment
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples — size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Metallurgical testwork on samples collected from shallow test pits within the soil /eluvial domain highlighted the presence of altered ilmenite (averaging ~65% TiO ₂) within the heavy mineral assemblage. Significant TiO ₂ can be present within the Mags fraction of the HM from rutile mineralised zones, but in the absence of mineralogical data and a more refined analytical technique it has not been possible to quantify this TiO ₂ as an ilmenite that has economic potential. The geotechnical characteristics of the saprolite material being drilled is not able to be reliably determined given the RC hammer drilling method. This is potentially significant as the economic potential of the rutile mineralisation within the saprolite will be partially determined by the mining method (cost) and the processing required to generate rutile product (e.g. liberation of rutile grains, efficient recovery processes). There is a risk that the saprolite may require drill and blast hardrock mining methods (at high cost) and that rutile mineralisation may require comminution (at high cost) to achieve liberation and amenability to conventional mineral sands processing methods. If this were the case a substantially higher economic cut-off grade would need to be applied. Similarly, the bedrock mineralisation will necessitate hard rock mining methods and comminution to achieve rutile liberation – and there is no certainty that metallurgical testwork will deliver economic outcomes. The bedrock mineralisation also contains a significant amount of pyrite - a known deleterious element for mineral sands processing, together with its unfavourable environmental impact necessitating dedicated tailings handling and storage.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Once necessary approvals have been obtained for the Game Controlled Area north of the Umba River, future work will consist of reconnaissance exploration to establish if broad areas of rutile mineralisation are present within either colluvial/alluvial material shedding from the prospective ridge line, or strongly weathered saprolite associated with the targeted prospective zone.



Criteria	Explanation	Comment
		Samples from Umba South have been sent for detailed mineralogical analysis to assist with geological interpretation, validation of analytical flowsheet, metallurgical assessment, and economic potential. A program of trenching or core-drilling at Umba South would provide samples of the saprolite that will allow geotechnical assessment and detailed mapping / logging of the geology and mineralisation.



Glossary

Base Titanium	Base Resources' wholly-owned Kenyan subsidiary, Base Titanium Limited.	
BDR	Bedrock geological domain.	
BET Two	Base Resources' wholly-owned Tanzanian subsidiary, BET Two Limited.	
Collar	Location of a drill hole.	
CS	Colluvium and Soil geological domain.	
DTM	Digital terrain model.	
Easting	A figure representing eastward distance on a map.	
GPS	Global positioning system.	
HHGPS	Handheld global positioning system.	
HM	Heavy mineral.	
JORC Code	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, as published	
	by the Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute	
	of Geoscientists and Minerals Council of Australia.	
Mag	Magnetic fraction of HM.	
Non-mag	Non magnetic fraction of HM.	
Northing	A figure representing northward distance on a map.	
NSR	No significant result.	
RC	Reverse circulation.	
SAP	Saprolite (weathered bedrock) geological domain.	
SPT	Sodium polytungstate solution used for heavy liquid separation.	
SRTM	Shuttle radar topography mission flown by space shuttle Endeavour to acquire radar data used to create global	
	land elevation dataset.	
TGC	Total graphitic carbon.	
TiO ₂	Titanium dioxide.	
UD	Umba drilling sample prefix.	
UTM	Universal Transverse Mercator is a plane coordinate grid system.	
VHM	Valuable heavy mineral.	
XRF	A spectroscopic method used to determine the chemical composition of a material through analysis of	
	secondary X-ray emissions, generated by excitation of a sample with primary X-rays that are characteristic of a	
	particular element.	

---- ENDS -----

For further information contact:

Australian investor and media queries

Citadel Magnus Cameron Gilenko and Michael Weir Tel: +61 (8) 6160 4900

UK Media Relations

Tavistock Communications
Jos Simson and Gareth Tredway
Tel: +44 (0) 207 920 3150

This release has been authorised by the Base Resources Disclosure Committee.

About Base Resources

Base Resources is an Australian based, African focused, mineral sands producer and developer with a track record of project delivery and operational performance. The Company operates the established Kwale Operations in Kenya, is developing the Toliara Project in Madagascar and is conducting exploration in Tanzania. Base Resources is an ASX and AIM listed company. Further details about Base Resources are available at www.baseresources.com.au.

