



## New heavy mineral sands discoveries and extensions at Tanga South

Aircore (AC) drilling results for the heavy mineral sands (HMS) mineralised corridor south of Tanga (**Tanga South**) confirms the discovery of multiple new higher grade deposits at Tajiri and Pangani-Tongoni tenements and shows potential to significantly extend the existing Tajiri Mineral Resources.

Early geophysical and geochemical analysis at **Tanga North** (Kitambula) confirms a series of large coherent HMS mineralised zones at surface, ready for target drilling and Mineral Resource delineation by the Company.

These results re-affirm the increasing HMS scale potential and commerciality of Strandline Resources' tenement portfolio in the **Tanga Region**, spreading over 100km's of contiguous coastline. This announcement summarises the key results from the recent Tanga regional AC drilling and reconnaissance programmes:

### HIGHLIGHTS:

- **New HMS Discoveries at Tanga South** – Assay results from drilling key targets has confirmed the discovery of two new higher grade HMS deposits; **Tajiri T4** and **Vumbi** located north of Pangani village:
  - Both HMS discoveries occur from surface and were discovered by drilling coincident topographic and radiometric features.
  - Tajiri T4 is defined by a 3.2km long mineralised zone, 200 – 400m wide and 6 – 9m thick. Higher grade results include: **9m thick @ 6.7% THM, 6m @ 4.5% THM, 6m @ 4.0% THM and 7.5m @ 3.3% THM.**
  - Vumbi mineralisation is some 4.0km long, up to 400m wide with holes along strike ending the mineralisation at 15m deep. Higher grade drill results include: **15m @ 4.2% THM** including 9m @ 5.5% THM, **18m @ 3.6% THM** including 12m @ 4% THM and **7.5m @ 5.2% THM.**
- **Confirmation of Sizeable Tanga South (Tajiri) Mineralisation Extension** – Drilling at Tajiri **T1** has defined a 1.6km long mineralised zone extension 600m wide, at surface and up to 13.5m thick:
  - Higher grade drill results include **6m @ 4.8% THM, 13.5m @ 4.0% THM** including 7.5m @ 5.4% THM and **9m @ 3.6% THM** including 3m @ 5.6% THM.
  - The extension zone shows a high value, titanium dominated mineral assemblage similar to the initial Tajiri Indicated Mineral Resources (59Mt @ 3.7% THM) containing 87% valuable heavy mineral (VHM) including 68% ilmenite, 10% rutile, 5% zircon and 4% leucoxene.
  - Further infill drilling of the extension zone to be undertaken to delineate the higher grade THM prior to an update to the Mineral Resource estimate.
- **Tanga North Priority Drill Targets Defined** – Geophysical and geochemical analysis from a series of radiometric anomalies at Kitambula confirms coherent mineralised zones with strong potential to grow the Mineral Resource inventory in the Tanga Region. AC resource drilling planned from April 2017.

Strandline's Managing Director and CEO, Luke Graham commented, *"These drill results provide a positive step towards building more Mineral Resources in the Tanga Region and further demonstrates the potential scale and grade of a Tanga operation.*

*"The Company will now undertake resource infill drilling to define the higher grade boundaries of the new discoveries at Tanga South, while also embarking on the highly prospective Tanga North maiden drill programme."*

## Tanga Region Exploration – Delineating a Series of High Grade Deposits

The Company has received assay results from its next phase of exploration drilling across the Tanga South tenements at Tajiri and Pangani-Tongoni, located near the port infrastructure of Tanga in north-east Tanzania.

Recent exploration has been very successful in identifying at least two new promising discoveries at Tajiri and the Pangani-Tongoni tenements and confirming a significant higher grade HMS mineralisation extension zone south of the current Tajiri Indicated Mineral Resource (19mt @ 5.1% THM). With some additional infill drilling in the next campaign from April 2017, the Company is confident of increasing its high grade Mineral Resources inventory in this highly mineralised coastal corridor (refer Figure 2).

Further, the Company has qualified the HMS prospectivity of the Tanga North (Kitambula) area through geophysics and reconnaissance and will prioritise drilling multiple higher grade targets in the next campaign.

In parallel with exploration, the Company will progress an internal concept evaluation of project development options and strategies. This includes consideration of a hub style operation in the Tanga Region based on mining a series of ‘economic grade’ HMS deposits along the 100% owned tenement package.

### TANGA SOUTH TAJIRI – DELINEATION OF MINERAL RESOURCES

A total of 302 holes for 3,006m were drilled along the 25km Tajiri mineralised corridor during the AC campaign in the December quarter. All sample intervals were submitted for THM analysis and the results are summarised as follows:

#### Tajiri T1 HMS Resource Extension

The mineralisation from the Tajiri Mineral Resource has been extended some 1600m further to the south with a 200 - 600m wide zone of lower grade mineralisation flanking a 200 - 300m wide zone of higher grade with good continuity across and along strike. The mineralisation begins at surface with thicknesses ranging from 6 - 12m. Infill drilling and a Mineral Resource upgrade of the extended Tajiri Resource (currently 19mt @ 5.1% THM) is planned for next season's drill campaign from April-2017.

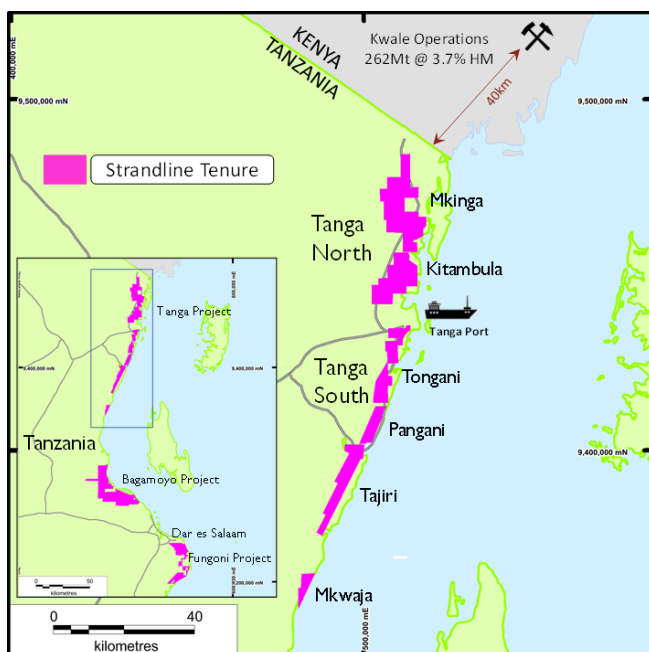


Figure 1 - Strandline's large HMS tenure position in the Tanga region, located along the northern Tanzania coastline

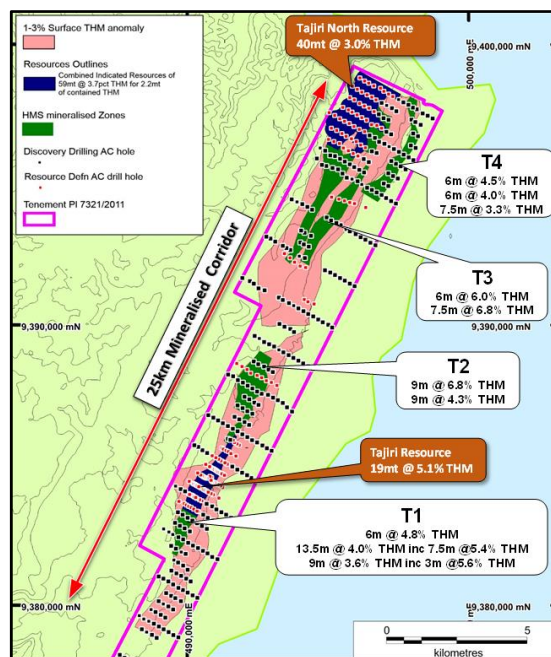


Figure 2 - Tajiri HMS Extensions Zones plus New Mineralisation Zones

### Tajiri T4 HMS Discovery

The Tajiri T4 prospect is defined over 3,200m of strike forming a narrow arcuate radiometric and topographic high some 200 to 400m wide. The drill results have delineated a higher grade core that has shown solid intervals of mineralisation from individual holes some 200m apart with a number of mineralised holes open to the west. The mineralisation begins at surface and has thicknesses between 6 and 9m down hole.

This new discovery has strong potential to add additional Mineral Resources to the Tanga South area with further infill drilling definition. Significant results are presented in Table 1 below.

### Tajiri T2 HMS Mineralised Zone

The Tajiri T2 prospect is located to the north of the Tajiri Mineral Resource and is characterised by a broad zone 200m long and 800m wide mineralisation overlapping a topographic, radiometric and surface geochemical anomaly. The mineralised trend starts at surface and is dissected to the north and south by more recent erosional drainage. The continuity of the broader lower-grade mineralised halo is strong while the individual higher grade core requires additional AC drilling to determine the width and strike potential of the strandline.

### Tajiri T3 HMS Mineralised Zone

The central Tajiri T3 prospect is currently less defined comprising wide spaced drilling with holes spaced 200m along lines 600 to 1,200m apart. The potential of this new drill prospect will be further understood with additional AC drilling to assist in delineating more consistent mineralisation or the discovery of smaller high grade zones within the overall strandline.

**Table 1** - Tanga South (Tajiri) Significant Results

HOLE_ID	Prospect	UTM E (WGS84)	UTM N (WGS84)	DIP	AZIMUTH	EOH	FROM	TO	INTERVAL (m)	DH AVERAGE THM (%)	DH AVERAGE SLIME (%)	Comments
16TJAC495	T1	489596	9382053	-90	360	9	0	6.0	6	4.8	28.9	
16TJAC500	T1	489683	9382460	-90	360	15	0	13.5	13.5	4.0	37.7	Including 7.5m @ 5.4% THM from 4.5m
16TJAC514	T1	489830	9383258	-90	360	15	0	9.0	9	3.6	29.8	including 3m @ 5.6% THM from 4.5m
16TJAC515	T1	490004	9383150	-90	360	15	0	7.5	7.5	2.8	27.9	
16TJAC564	T2	491962	9387063	-90	360	9	0	6.0	6	3.8	31.1	
16TJAC566	T2	492309	9386861	-90	360	10.5	0	9.0	9	4.3	32.0	Including 6m @ 5.7% THM from 3m
16TJAC587	T2	492728	9388544	-90	360	13.5	0	9.0	9	6.8	25.4	Open 800m to the north
16TNAC650	T3	494947	9393861	-90	360	7.5	0	6.0	6	6.0	10.0	
16TNAC651	T3	495110	9393754	-90	360	9	0	7.5	7.5	6.8	11.1	
16TNAC691	T4	497305	9395347	-90	360	15	0	9.0	9	6.7	25.4	
16TNAC695	T4	497405	9395780	-90	360	15	0	6.0	6	3.5	23.8	
16TNAC708	T4	497686	9396106	-90	360	15	0	6.0	6	3.4	18.9	
16TNAC711	T4	497940	9396433	-90	360	15	0	6.0	6	4.0	21.4	Open 800m to the west
16TNAC714	T4	498020	9396862	-90	360	15	0	6.0	6	4.5	21.6	Open 800m to the west
16TNAC731	T4	498016	9397781	-90	360	15	0	7.5	7.5	3.3	22.8	

Generally, the Tajiri mineralised corridor is known for its high value, titanium dominated mineral assemblage (refer ASX release 4 April, 2016) reported from the combined Tajiri Indicated Mineral Resource estimation (59Mt @ 3.7% THM). The Valuable Heavy Mineral (VHM) assemblage of 87.7% has low trash and contaminants and nominally includes the following:

- Ilmenite content of 68% and Rutile 10%
- Leucoxene 4%
- Zircon 5%

It is anticipated that the newly discovered HMS zones along the Tajiri corridor will have a similar suite of high unit value minerals such as zircon, rutile and leucoxene.

## TANGA SOUTH PANGANI-TONGONI DISCOVERY DRILLING

The Company completed its first phase of AC exploration drilling along the Pangani-Tongoni tenement during the fourth quarter 2016. The drill programme comprised 3,003m from 375 drill holes, with 921 samples submitted for THM analysis. The campaign has been successful in defining a number of large coherent mineralised zones identified as:

### Vumbi HMS Discovery

The Vumbi HMS discovery, north of the Pangani Township is characterised by mineralisation some 4km long and up to 200m to 600m wide with several holes along strike of each other ending in mineralisation at 18m depth. The mineralisation occurs at the base of a prominent limestone ridge where the higher grade zone appears to be controlled by a deeper channel within the limestone basement. The Vumbi mineralisation remains open to the north with the northern most hole 16PAAC807 encountering 7.5m @ 6.4% THM. The area was drilled to test a radiometric anomaly and subtle topographic ridge with limited historic surface geochemistry.

Considering the potential scale of the discovery, the Company will prioritise a phase of infill drilling with the view to further delineate the higher-grade domain and Mineral Resource.

### Vumbi East Prospectivity

At Vumbi East, the mineralisation has been identified from a single drill line with the next drill line located some 1.6km to the north. The mineralisation at surface is more ilmenite rich and grades into a garnet-rich basal zone. The drilling information is considered too sparse to determine if this area shows strong grade or geological continuity but the results to date are highly encouraging for a first pass drill programme.

### Kilale Prospectivity

Broad low grade heavy sand mineralisation has been encountered over potentially 3 zones at Kilale. The drill spacing is wide utilising a 1600m x 200m grid with shallow mineralisation defined along strike over 4.8km and width of 2 to 3km. The anomalies are of sufficient grade and size at this early stage to warrant additional follow up investigation. Drill sample logging of the sand in this area also identified an increase in garnet with potentially 10 to 20% of the THM comprising trash within the 3 main anomalies.

Additional mineral assemblage work is required to understand the value of the new prospects identified along the Pangani-Tongoni mineralised corridor. The significant results are presented in Table 2 below.

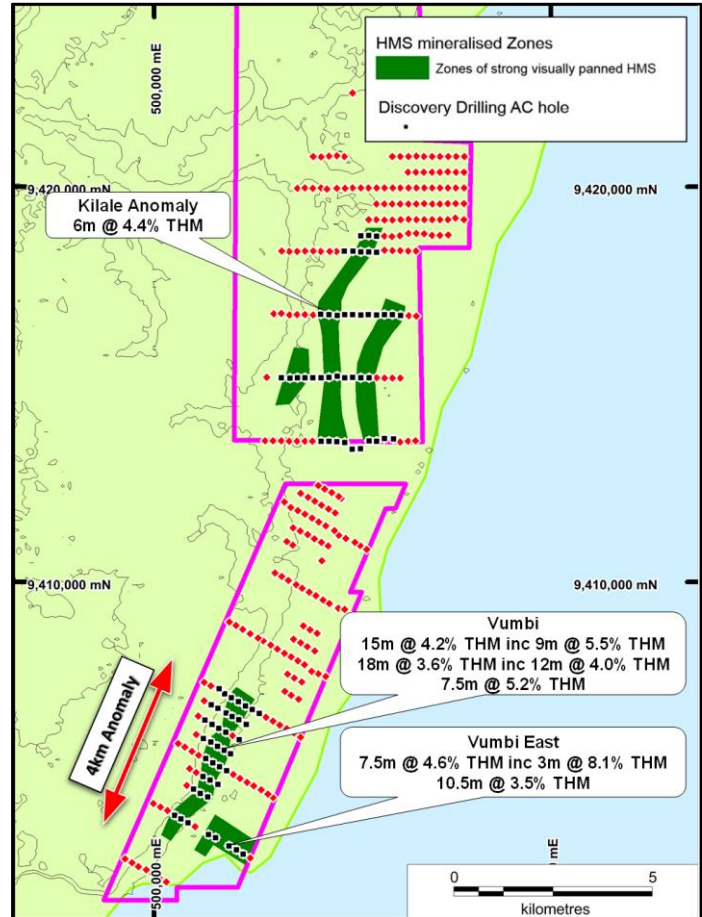


Figure 3 – Pangani-Tongoni HMS Discovery of Vumbi and Kilale

**Table 2** Pangani-Tongoni Significant Results

HOLE_ID	Prospect	UTM E (WGS84)	UTM N (WGS84)	DIP	AZIMUTH	EOH	FROM	TO	INTERVAL (m)	INTERVAL AVERAGE THM (%)	INTERVAL AVERAGE SLIME (%)	Comments
16PAAC749	Vumbi East	501367	9403645	-60	360	15	0	7.5	7.5	4.6	14.5	Including 3m @ 8.1% THM from 4.5m
16PAAC753	Vumbi East	502239	9403154	-60	360	15	0	10.5	10.5	3.5	14.0	open to the northeast 1600m
16PAAC761	Vumbi	501233	9405115	-60	360	12	0	10.5	10.5	3.6	15.4	
16PAAC762	Vumbi	501405	9405023	-60	360	12	0	7.5	<b>7.5</b>	<b>5.2</b>	<b>27.3</b>	
16PAAC772	Vumbi	501644	9405360	-60	360	6	0	6	6	3.3	31.0	
16PAAC773	Vumbi	501474	9405462	-60	360	3	0	3	<b>3</b>	<b>11.9</b>	<b>20.0</b>	
16PAAC774	Vumbi	501299	9405567	-60	360	9	0	7.5	7.5	3.4	35.9	
16PAAC781	Vumbi	501423	9405987	-60	360	15	0	15	<b>15</b>	<b>4.2</b>	<b>38.9</b>	Including 9m @ 5.5% THM from 7.5m
16PAAC787	Vumbi	501800	9406238	-60	360	18	0	18	<b>18</b>	<b>3.6</b>	<b>38.2</b>	Including 12m @ 4.0% THM from 6m
16PAAC796	Vumbi	501960	9406636	-60	360	15	0	13.5	13.5	2.8	38.6	
16PAAC807	Vumbi	502296	9406904	-60	360	9	0	7.5	<b>7.5</b>	<b>6.4</b>	<b>39.8</b>	Open to the northeast 1600m
16TOAC931	Kilale	504399	9416801	-60	360	15	0	6	<b>6</b>	<b>4.4</b>	<b>29.2</b>	Open to the north and south 1600m

## TANGA NORTH EARLY EXPLORATION – KITAMBULA

The Company has recently completed initial exploration activities of its Tanga North tenements, favourably located within 15-20km to the existing Tanga port infrastructure. The Company, through recently flown geophysical data and ground-truthing, has successfully identified a series of radiometric thorium anomalies extending over a promising 9km section of the Kitambula tenement with ground-reconnaissance sampling work verifying high grade HMS mineralisation at surface.

The mineral assemblage and mineral chemistry data for Kitambula shows a VHM percentage averaging 85% with the higher value minerals of rutile and zircon ranging between 10 and 15% combined. The TiO<sub>2</sub> department is generally dominated by ilmenite with the TiO<sub>2</sub> content more suitable to the larger sulphate ilmenite market, which is consistent with other operations in the region.

The Company is currently planning its maiden drill campaign for the Tanga North targets to be conducted in the first half of 2017.

## Mineral Resource Estimate Data

**Table 3** Tanga South Project Mineral Resource Estimate (April 2016)

JORC 2012 MINERAL RESOURCE SUMMARY FOR TANGA SOUTH PROJECT										
Summary of Mineral Resources <sup>(1)</sup>					THM assemblage <sup>(2)</sup>					
Deposit	Mineral Resource Category	Tonnage	In situ THM	THM	Ilmenite	Rutile	Zircon	Leucoxene	Slimes	Oversize
		(Mt)	(Mt)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Tajiri	Indicated	19	1.0	5.1	65	12	6	6	34	3
Tajiri North	Indicated	40	1.2	3.0	70	7	5	2	52	3
	<b>Total<sup>(3)</sup></b>	<b>59</b>	<b>2.2</b>	<b>3.7</b>	<b>68</b>	<b>10</b>	<b>5</b>	<b>4</b>	<b>46</b>	<b>3</b>
(1) Mineral Resources reported at a cut-off grade of 1.7% THM										
(2) Mineral assemblage is reported as a percentage of in situ THM content										
(3) Appropriate rounding applied										

Refer to the ASX Announcement dated 4 April 2016 for full details of the JORC 2012 Mineral Resource Estimate for the Tanga South Project.

For further enquiries, please contact:

**Luke Graham**

CEO and Managing Director

Strandline Resources Limited

T: +61 8 9226 3130

E: enquiries@strandline.com.au

For media and broker enquiries:

**Andrew Rowell**

Investor Relations Advisor

Cannings Purple

T: +61 8 6314 6314

E: arowell@canningspurple.com.au

## About Strandline

Strandline Resources Limited (ASX: STA) is a Tanzanian-focused mineral sands developer positioned within the world's major zircon and titanium producing corridor in South East Africa. Strandline has a dominant mineral sands position with a series of 100% owned projects spread along 350km of the Tanzanian coastline.

Strandline's strategy is to develop and operate quality, low cost, expandable mining assets with market differentiation. Leveraging off the exploration success of 2016, the Company's focus is to continue its aggressive exploration and development strategy to progress economically attractive projects based on high unit value titanium and zircon products.

## Competent Person's Statements

The information in this report that relates to Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Dr Mark Alvin, a fulltime Employee of Strandline and Mr Brendan Cummins, a part time employee of Strandline. Dr Alvin is a Member of The Australasian Institute of Mining and Metallurgy and Mr Cummins is a member of the Australian Institute of Geoscientists and they both have sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which has been undertaken to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Alvin and Mr Cummins consent to the inclusion in this release of the matters based on the information in the form and context in which they appear. Both Mr Alvin and Mr Cummins are shareholders of Strandline Resources.

The information in this report that relates to mineral resources for Tanga South is based on, and fairly represents, information and supporting documentation prepared by Mr Greg Jones, (Consultant to Strandline and Principal with GNJ Consulting) and Mr Brendan Cummins (Chief Geologist and employee of Strandline). Mr Jones is a member of the Australian Institute of Mining and Metallurgy and Mr Cummins is a member of the Australian Institute of Geoscientists and both have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Cummins is the Competent Person for the drill database, geological model interpretation and completed the site inspection. Mr Jones is the Competent Person for the resource estimation. Mr Jones and Mr Cummins consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

## Forward Looking Statements

This report contains certain forward looking statements. Forward looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside of the control of Strandline. These risks, uncertainties and assumptions include commodity prices, currency fluctuations, economic and financial market conditions, environmental risks and legislative, fiscal or regulatory developments, political risks, project delay, approvals and cost estimates. Actual values, results or events may be materially different to those contained in this announcement. Given these uncertainties, readers are cautioned not to place reliance on forward looking statements. Any forward looking statements in this announcement reflect the views of Strandline only at the date of this announcement. Subject to any continuing obligations under applicable laws and ASX Listing Rules, Strandline does not undertake any obligation to update or revise any information or any of the forward looking statements in this announcement to reflect changes in events, conditions or circumstances on which any forward looking statements is based.

## Appendix 1

### JORC Code, 2012 Edition – Table 1

#### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• Nature and quality of sampling (eg 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.</li> <li>• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>• Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>• In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g 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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>• Aircore drilling was used to obtain samples at 1.5m intervals</li> <li>• Each 1.5m sample was homogenized within the sample bag by rotating the sample bag</li> <li>• A sample of sand, approx. 20gm, is scooped from the sample bag for visual THM% estimation and logging. The same sample mass is used for every pan sample for visual THM% estimation</li> <li>• The standard sized sample is to ensure calibration is maintained for consistency in visual estimation</li> <li>• A sample ledger is kept at the drill rig for recording sample intervals and sample mass, and photographs are taken of samples for each hole to cross-reference with logging</li> <li>• The large 1.5m Aircore drill samples have an average of about 8kg and were split down to approximately 1000gm by riffle splitter for export to the processing laboratory</li> <li>• The laboratory sample was dried, de-slimed (removal of -45µm fraction) and then had oversize (+1mm fraction) removed. Approximately 100gm of sample was then split to use for heavy liquid separation using TBE to determine total heavy mineral content</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	<ul style="list-style-type: none"> <li>• Aircore drilling with inner tubes for sample return was used</li> <li>• Aircore is considered a standard industry technique for HMS mineralization. Aircore drilling is a form of reverse circulation drilling where the sample is collected at the face and returned inside the inner tube</li> <li>• Aircore drill rods used were 3m long</li> <li>• NQ diameter (76mm) drill bits and rods were used</li> <li>• All drill holes were vertical</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>• Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>• Whether a relationship exists between sample recovery and grade</li> </ul>	<ul style="list-style-type: none"> <li>• Drill sample recovery is monitored by measuring and recording the total mass of each 1.5m sample at the drill rig with a standard spring balance</li> <li>• While initially collaring the hole, limited sample recovery can occur in the initial 0.0m to 1.5m sample interval owing to sample and air loss</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>into the surrounding loose soil</p> <ul style="list-style-type: none"> <li>• The initial 0.0m to 1.5m sample interval is drilled very slowly in order to achieve optimum sample recovery</li> <li>• The entire 1.5m sample is collected at the drill rig in large numbered plastic bags for dispatch to the initial split preparation facility</li> <li>• At the end of each drill rod, the drill string is cleaned by blowing down with air to remove any clay and silt potentially built up in the sample pipes</li> <li>• The twin-tube aircore drilling technique is known to provide high quality samples from the face of the drill hole</li> <li>• Wet and moist samples are placed into large plastic basins to air dry in the field prior to splitting</li> </ul>
Logging	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The 1.5m aircore samples were each qualitatively logged onto paper field sheets prior to digital entry into a Microsoft Excel spreadsheet</li> <li>• The aircore samples were logged for lithology, colour, grainsize, rounding, sorting, estimated THM%, estimated Slimes% and any relevant comments - such as slope, vegetation, or cultural activity</li> <li>• Every drillhole was logged in full</li> <li>• Logging is undertaken with reference to a Drilling Guideline with codes prescribed and guidance on description to ensure consistent and systematic data collection</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The entire 1.5m drill sample collected at the source was dispatched to a sample preparation facility to split with a riffle splitter to reduce sample size</li> <li>• The water table depth was noted in all geological logs if intersected</li> <li>• Samples with aggregates are gently hit with a rubber mallet to break them down so the sample will flow easily through the splitter chutes</li> <li>• A total of 1000 to 1300gm of each sample was inserted into calico sample bags and exported to Western Geolabs in Perth for analysis</li> <li>• Employees undertaking the splitting are closely monitored by a geologist to ensure sampling quality is maintained</li> <li>• Almost all of the samples are sand, silty sand, sandy silt, clayey sand or sandy clay and this sample preparation method is considered appropriate</li> <li>• The sample sizes were deemed suitable to reliably capture THM, slime, and oversize characteristics, based on industry experience of the geologists involved and consultation with laboratory staff</li> <li>• Field duplicates of the samples were completed at a frequency of 1</li> </ul>

Criteria	JORC Code explanation	Commentary
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<p>per 25 primary samples</p> <ul style="list-style-type: none"> <li>Standard Reference Material samples are inserted into the sample stream in the field at a frequency of 1 per 50 samples</li> </ul> <p>The wet panning at the drill site provides an estimate of the THM% which is sufficient for the purpose of determining approximate concentrations of THM in the first instance</p> <p>Aircore sample:</p> <ul style="list-style-type: none"> <li>The individual 1.5m aircore sub-samples (approx. 1000gm) were assayed by Western Geolabs in Perth, Western Australia, which is considered the Primary laboratory</li> <li>The aircore samples were first screened for removal and determination of Slimes (-45µm) and Oversize (+1mm), then the sample was analysed for total heavy mineral (-1mm to +45µm) content by heavy liquid separation</li> <li>The laboratory used TBE as the heavy liquid medium – with density range between 2.92 and 2.96 g/ml</li> <li>This is an industry standard technique</li> <li>Field duplicates of the samples were collected at a frequency of 1 per 25 primary samples</li> <li>Western Geolabs completed its own internal QA/QC checks that included laboratory repeats every 10th sample prior to the results being released</li> <li>Analysis of QA/QC samples show the laboratory data to be of acceptable accuracy and precision</li> <li>The adopted QA/QC protocols are acceptable for this stage test work</li> <li>Test work has been undertaken at a Secondary laboratory (Diamantina Laboratory) to check the veracity of the Primary laboratory data</li> </ul>
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>All results are checked by the Chief Geologist and the Principal consulting geologist, in addition to the independent consulting Resource Geologist</li> <li>The company Chief Geologist and independent Resource geologist make periodic visits to the laboratory to observe sample processing</li> <li>A process of laboratory data validation using mass balance is undertaken to identify entry errors or questionable data</li> <li>Field and laboratory duplicate data pairs (THM/oversize/slimes) of each batch are plotted to identify potential quality control issues</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Standard Reference Material sample results are checked from each sample batch to ensure they are within tolerance (&lt;2SD) and that there is no bias</li> <li>• The field and laboratory data has been updated into a master spreadsheet which is appropriate for this stage in the programme. Data validation criteria are included to check for overlapping sample intervals, end of hole match between 'Lithology', 'Sample', 'Survey' files, duplicate sample numbers and other common errors</li> <li>• Several twin holes were drilled in the programme</li> <li>• No adjustments are made to the primary assay data</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Down hole surveys for shallow aircore holes are not required</li> <li>• A handheld GPS was used to identify the positions of the drill holes in the field. The handheld GPS has an accuracy of +/- 10m in the horizontal</li> <li>• Collars have been re-surveyed using a DGPS system</li> <li>• The datum used is WGS84 and coordinates are projected as UTM zone 37S</li> <li>• The drillhole collar elevation was collected from a detailed Digital Terrain Model collected in 2012</li> <li>• The accuracy of the locations is sufficient for this stage of exploration</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• The infill drilling was designed to bring the current drillhole density to 100m x 50m and the extension drilling was also completed at 100m x 50m to provide a high degree of confidence in the geological model</li> <li>• Each aircore drill sample is a single 1.5m sample of sand intersected down the hole</li> <li>• No compositing has been applied to models for values of THM, slime and oversize</li> <li>• Compositing of samples will be undertaken on HM concentrates for mineral assemblage determination. Composite samples will be classified high grade (&gt;2%THM) and low grade (&lt;2%THM)</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• The aircore drilling was oriented perpendicular to the strike of mineralization defined by drilling data</li> <li>• The strike of the mineralization is sub-parallel to the contemporary coastline and is known to be relatively well controlled by the 20m topographic contour and also coincides with a radiometric anomaly</li> <li>• Drill holes were vertical and the nature of the mineralisation is relatively horizontal</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The orientation of the drilling is considered appropriate for testing the lateral and vertical extent of mineralization without any bias</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Aircore samples remained in the custody of Company representatives while they were transported from the field to Dar es Salaam for final packaging and securing</li> <li>The samples were then sent using a commercial transport company (Deugro) to Perth and delivered directly to the laboratory after quarantine inspection</li> <li>The laboratory inspected the packages and did not report tampering of the samples</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Internal reviews were undertaken</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The exploration work was completed on tenements that are 100% owned by the Company in Tanzania or are able to be acquired for 100% ownership</li> <li>The drill samples were taken from tenements PL 9321/2011, PL 7666/2012 and PL 7960/2012</li> <li>The tenements have exceeded 4 years and have been reduced by 50% but are valid until 20 Dec. 2018</li> <li>Traditional landowners and village Chiefs of the affected villages and farms were consulted supportive of the drilling program</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Historic exploration work was completed by Tanganyika Gold in 1998 and 1999. OmegaCorp undertook reconnaissance exploration in 2005 and 2007. The Company has obtained the hardcopy reports and maps in relation to this Tanganyika and OmegaCorp information</li> <li>• The historic data comprises surface sampling, limited aircore drilling and mapping</li> <li>• Jacana Resources undertook auger drilling in 2012 on an over the mineralised area defined by Tanganyika and Omega</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Two types of heavy mineral placer style deposits are possible in Tanzania               <ol style="list-style-type: none"> <li>1. Thin but high grade strandlines which may be related to marine or fluvial influences</li> <li>2. Large but lower grade deposits related to windblown sands</li> </ol> </li> <li>• The coastline of Tanzania is not well known for massive dunal systems such as those developed in Mozambique, however some dunes are known to occur and cannot be discounted as an exploration model. Palaeo strandlines are more likely and will be related to fossil shorelines or terraces in a marine or fluvial setting. In Tanzania three terraces have been documented and include the Mtoni terrace (1-5m ASL), Tanga (20-40m ASL) and Sakura Terrace (40 to 60m ASL). Strandline mineral sand accumulations related to massive storm events are thought to be preserved at these terraces above the current sea level.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drill hole data are reported in appendices 2 and 3</li> </ul>

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Length weighted intervals are reported in this release</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• The nature of the mineralisation is broadly horizontal, thus vertical aircore holes are thought to represent close to true thicknesses of the mineralisation</li> <li>• Downhole widths are reported</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Figures and plans are displayed in the main text of the Release</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• All material results have been reported and tabulated in appendices 2 and 3. Holes that did not encounter mineralization are not presented</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Mineral assemblage work for the Tajiri North and Tajiri mineral assemblages have been reported</li> <li>• Testwork completed to date have not identified any contaminants in the VHM</li> </ul>
Further work	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>• Additional Aircore drilling is planned (100m x 50m) to extend and infill zones of mineralization</li> <li>• A bulk sample comprising up to 100 kg is planned for collection in 2017 for determination of process recovery and final product specification for the Tajiri Mineral Resources</li> </ul>

## Appendix 2: Tajiri Downhole Drill Intersects

HOLE_ID	UTM E (WGS84)	UTM N (WGS84)	DIP	AZIMUTH	EOH	FROM	TO	INTERVAL (m)	DH AVERAGE THM (%)	DH AVERAGE SLIME (%)
16TUAC433	486772	9376961	-90	360	15	0	15	15	1.2	32.5
16TUAC434	486939	9376864	-90	360	10.5	0	3	3	2.2	23.9
16TUAC435	487112	9376756	-90	360	6	0	3	3	1.5	18.9
16TUAC436	487282	9376665	-90	360	6	0	3	3	0.7	17.9
16TUAC437	487452	9376565	-90	360	9	0	6	6	0.7	27.1
16TUAC438	487630	9376474	-90	360	15	0	15	15	1.0	17.5
16TUAC439	487802	9376373	-90	360	15	0	13.5	13.5	1.7	23.8
16TUAC440	487959	9376263	-90	360	15	0	13.5	13.5	1.2	23.7
16TUAC441	488962	9377506	-90	360	15	0	15	15	1.0	26.0
16TUAC442	488809	9377590	-90	360	15	0	4.5	4.5	0.9	30.0
16TUAC443	488612	9377695	-90	360	15	0	13.5	13.5	1.1	28.8
16TUAC444	488454	9377799	-90	360	15	0	6	6	0.6	30.0
16TUAC445	488279	9377889	-90	360	6	0	3	3	1.5	24.2
16TUAC446	488104	9377986	-90	360	12	0	6	6	0.9	23.4
16TUAC447	487935	9378096	-90	360	15	0	10.5	10.5	1.6	29.7
16TUAC448	487768	9378152	-90	360	15	0	15	15	1.4	20.3
16TUAC449	487601	9378265	-90	360	15	0	15	15	2.4	32.7
16TUAC450	488383	9379172	-90	360	6	0	3	3	0.7	26.4
16TUAC452	488739	9378982	-90	360	6	0	3	3	0.5	28.2
16TUAC453	488911	9378872	-90	360	15	0	6	6	0.9	28.0
16TUAC454	489678	9378886	-90	360	15	0	15	15	1.3	29.5
16TUAC455	489501	9378971	-90	360	15	0	15	15	0.8	27.7
16TUAC456	489330	9379072	-90	360	6	0	3	3	0.7	26.8
16TUAC457	489158	9379177	-90	360	12	0	6	6	0.4	29.8
16TUAC458	488984	9379276	-90	360	9	0	6	6	0.4	26.0
16TUAC459	488813	9379371	-90	360	9	0	4.5	4.5	0.8	21.5
16TUAC464	488873	9379791	-90	360	9	0	7.5	7.5	1.1	22.7
16TUAC465	489055	9379691	-90	360	12	0	6	6	0.4	27.9
16TUAC466	489220	9379596	-90	360	12	0	4.5	4.5	0.5	17.7
16TUAC467	489493	9379881	-90	360	9	0	4.5	4.5	0.5	16.7
16TUAC468	489322	9379986	-90	360	7.5	0	4.5	4.5	0.4	14.1
16TUAC470	488976	9380173	-90	360	3	0	1.5	1.5	1.0	21.5
16TUAC471	489243	9380467	-90	360	6	0	4.5	4.5	1.2	24.9
16TUAC472	489420	9380367	-90	360	9	0	4.5	4.5	2.5	25.1
16TUAC473	489575	9380283	-90	360	6	0	3	3	1.1	23.3
16TUAC474	489766	9380174	-90	360	15	0	15	15	0.6	29.1
16TUAC475	490355	9380292	-90	360	15	0	9	9	1.1	35.7
16TUAC476	490189	9380383	-90	360	7.5	0	1.5	1.5	1.1	35.0
16TUAC477	490011	9380484	-90	360	15	0	15	15	1.3	35.2

HOLE_ID	UTM E (WGS84)	UTM N (WGS84)	DIP	AZIMUTH	EOH	FROM	TO	INTERVAL (m)	DH AVERAGE THM (%)	DH AVERAGE SLIME (%)
16TUAC478	489838	9380577	-90	360	15	0	9	9	1.1	29.6
16TUAC479	489684	9380658	-90	360	6	0	1.5	1.5	2.3	24.0
16TUAC480	489492	9380771	-90	360	4.5	0	1.5	1.5	0.8	20.0
16TUAC481	489321	9380881	-90	360	12	0	9	9	0.8	25.5
16TUAC482	489142	9380977	-90	360	6	0	1.5	1.5	1.2	18.4
16TUAC483	488978	9381062	-90	360	6	0	1.5	1.5	0.9	17.4
16TUAC484	489437	9381273	-90	360	6	0	1.5	1.5	1.7	20.6
16TUAC485	489613	9381174	-90	360	9	0	6	6	1.3	22.5
16TUAC486	489785	9381081	-90	360	6	0	3	3	1.9	20.2
16TUAC487	489957	9380980	-90	360	15	0	15	15	1.3	29.6
16TUAC488	490123	9380881	-90	360	15	0	15	15	1.3	29.8
16TUAC489	490012	9381294	-90	360	15	0	9	9	1.6	28.0
16TUAC490	489847	9381446	-90	360	9	0	4.5	4.5	1.2	22.2
16TUAC491	489672	9381557	-90	360	6	0	1.5	1.5	1.2	24.2
16TJAC493	489935	9381860	-90	360	10.5	0	7.5	7.5	1.0	33.7
16TJAC495	489596	9382053	-90	360	9	0	4.5	4.5	5.4	27.9
16TJAC496	489423	9382153	-90	360	6	0	1.5	1.5	3.2	37.4
16TJAC500	489683	9382460	-90	360	15	0	15	15	3.8	38.0
16TJAC501	489848	9382375	-90	360	15	0	15	15	1.4	30.9
16TJAC502	490024	9382263	-90	360	15	0	12	12	1.1	29.0
16TJAC503	490201	9382163	-90	360	15	0	4.5	4.5	3.7	25.5
16TJAC504	490379	9382070	-90	360	12	0	6	6	1.8	30.7
16TJAC505	490551	9381976	-90	360	12	0	6	6	1.6	37.5
16TJAC506	490717	9381883	-90	360	9	0	4.5	4.5	1.2	42.2
16TJAC507	490882	9381752	-90	360	15	0	15	15	1.4	33.3
16TJAC508	491066	9381676	-90	360	12	0	7.5	7.5	1.3	37.0
16TJAC509	490084	9382669	-90	360	12	0	6	6	1.3	34.6
16TJAC510	489904	9382776	-90	360	15	0	15	15	1.5	33.0
16TJAC511	489734	9382870	-90	360	15	0	15	15	1.8	38.8
16TJAC512	489566	9382970	-90	360	6	0	3	3	1.1	21.4
16TJAC513	489659	9383349	-90	360	9	0	4.5	4.5	0.8	26.1
16TJAC514	489830	9383258	-90	360	15	0	15	15	2.7	33.4
16TJAC515	490004	9383150	-90	360	15	0	13.5	13.5	2.2	32.3
16TJAC516	490175	9383051	-90	360	15	0	15	15	1.8	35.8
16TJAC517	490516	9382855	-90	360	6	0	3	3	1.0	19.7
16TJAC518	490692	9382756	-90	360	6	0	3	3	0.8	19.1
16TJAC519	490349	9382956	-90	360	15	0	10.5	10.5	1.3	29.5
16TJAC520	490913	9383049	-90	360	15	0	12	12	2.8	13.5
16TJAC521	490722	9383149	-90	360	9	0	3	3	1.8	17.5
16TJAC522	490569	9383259	-90	360	6	0	3	3	1.4	24.0
16TJAC524	489763	9384178	-90	360	9	0	6	6	0.8	47.2



HOLE_ID	UTM E (WGS84)	UTM N (WGS84)	DIP	AZIMUTH	EOH	FROM	TO	INTERVAL (m)	DH AVERAGE THM (%)	DH AVERAGE SLIME (%)
16TJAC525	489921	9384091	-90	360	15	0	15	15	1.4	39.0
16TJAC526	490681	9383649	-90	360	6	0	3	3	0.5	26.1
16TJAC527	490884	9383559	-90	360	6	0	1.5	1.5	1.3	29.2
16TJAC528	491034	9383449	-90	360	6	0	3	3	1.1	26.9
16TJAC529	491207	9383353	-90	360	6	0	1.5	1.5	1.0	25.8
16TJAC530	491376	9383258	-90	360	7.5	0	4.5	4.5	1.6	23.6
16TJAC531	491553	9383155	-90	360	12	0	6	6	1.2	26.4
16TJAC532	491732	9383057	-90	360	6	0	4.5	4.5	1.5	38.5
16TJAC534	492271	9384570	-90	360	6	0	3	3	1.7	24.4
16TJAC535	492124	9384673	-90	360	6	0	4.5	4.5	0.7	19.7
16TJAC536	491943	9384761	-90	360	6	0	3	3	0.8	20.5
16TJAC537	491775	9384864	-90	360	6	0	3	3	0.7	27.7
16TJAC538	491598	9384974	-90	360	6	1.5	1.5	0	0.7	22.6
16TJAC539	490705	9385467	-90	360	15	0	15	15	1.0	36.9
16TJAC540	490534	9385559	-90	360	15	0	15	15	1.2	38.4
16TJAC541	490382	9385684	-90	360	7.5	0	3	3	1.3	38.8
16TJAC542	490244	9385741	-90	360	9	0	7.5	7.5	1.7	30.9
16TJAC543	490744	9386816	-90	360	4.5	0	3	3	0.4	36.8
16TJAC544	490922	9386720	-90	360	15	0	15	15	1.1	39.8
16TJAC545	491086	9386621	-90	360	13.5	0	10.5	10.5	0.9	34.1
16TJAC546	491263	9386523	-90	360	15	0	15	15	1.1	34.1
16TJAC547	491436	9386424	-90	360	10.5	0	7.5	7.5	1.5	36.1
16TJAC548	491436	9385972	-90	360	15	0	15	15	1.3	28.9
16TJAC549	491523	9385926	-90	360	15	0	10.5	10.5	2.1	33.0
16TJAC550	491613	9386325	-90	360	15	0	15	15	1.2	29.8
16TJAC551	491781	9386240	-90	360	15	0	12	12	1.4	30.4
16TJAC552	491953	9386132	-90	360	6	0	3	3	1.1	28.3
16TJAC553	492128	9386033	-90	360	6	0	3	3	1.0	23.6
16TJAC554	492300	9385925	-90	360	4.5	0	3	3	1.0	28.6
16TJAC555	492482	9385839	-90	360	3	0	1.5	1.5	0.9	27.4
16TJAC556	492663	9385735	-90	360	6	0	4.5	4.5	0.5	25.3
16TJAC557	492824	9385636	-90	360	6	0	4.5	4.5	1.4	26.1
16TJAC558	492993	9385541	-90	360	9	0	7.5	7.5	0.8	39.4
16TJAC559	492194	9386464	-90	360	7.5	0	6	6	1.8	30.1
16TJAC560	492028	9386564	-90	360	9	0	7.5	7.5	2.1	34.7
16TJAC561	491847	9386665	-90	360	15	0	12	12	1.1	36.4
16TJAC562	491677	9386754	-90	360	6	0	3	3	1.3	23.7
16TJAC563	491787	9387158	-90	360	10.5	0	9	9	1.4	34.6
16TJAC564	491962	9387063	-90	360	9	0	6	6	3.9	30.4
16TJAC565	492129	9386954	-90	360	15	0	12	12	1.3	28.2
16TJAC566	492309	9386861	-90	360	10.5	0	9	9	4.3	32.0

HOLE_ID	UTM E (WGS84)	UTM N (WGS84)	DIP	AZIMUTH	EOH	FROM	TO	INTERVAL (m)	DH AVERAGE THM (%)	DH AVERAGE SLIME (%)
16TJAC567	492031	9387471	-90	360	7.5	0	4.5	4.5	2.6	34.5
16TJAC568	492201	9387374	-90	360	7.5	0	6	6	2.4	25.1
16TJAC569	492375	9387259	-90	360	9	0	6	6	1.5	27.3
16TJAC570	492531	9387175	-90	360	7.5	0	4.5	4.5	1.1	27.6
16TJAC571	493719	9386938	-90	360	12	0	7.5	7.5	1.1	32.9
16TJAC572	493536	9387086	-90	360	9	0	6	6	1.0	28.2
16TJAC573	493388	9387251	-90	360	6	0	3	3	1.1	28.6
16TJAC574	493216	9387349	-90	360	6	0	3	3	1.0	24.4
16TJAC575	493043	9387441	-90	360	15	0	15	15	3.6	17.6
16TJAC576	492869	9387533	-90	360	15	0	15	15	3.1	18.3
16TJAC577	492641	9387576	-90	360	12	0	7.5	7.5	1.4	30.8
16TJAC578	492480	9387660	-90	360	15	0	15	15	1.6	20.1
16TJAC579	492315	9387762	-90	360	4.5	0	1.5	1.5	5.6	31.4
16TJAC580	492142	9387861	-90	360	10.5	0	7.5	7.5	2.5	36.7
16TJAC581	491977	9387970	-90	360	12	0	9	9	1.9	34.1
16TJAC582	491795	9388064	-90	360	10.5	0	7.5	7.5	2.0	30.9
16TJAC583	491625	9388197	-90	360	9	0	7.5	7.5	1.0	30.7
16TJAC584	491446	9388263	-90	360	9	0	6	6	1.1	28.6
16TJAC585	492359	9388725	-90	360	9	0	6	6	2.1	25.4
16TJAC586	492522	9388628	-90	360	9	0	7.5	7.5	2.0	33.9
16TJAC587	492728	9388544	-90	360	13.5	0	10.5	10.5	6.0	32.1
16TJAC588	492885	9388435	-90	360	12	0	7.5	7.5	1.1	42.0
16TJAC589	493037	9388355	-90	360	9	0	1.5	1.5	2.0	31.6
16TJAC590	494462	9388463	-90	360	12	0	7.5	7.5	0.8	29.1
16TJAC591	494291	9388560	-90	360	15	0	15	15	1.5	26.3
16TJAC592	494119	9388654	-90	360	15	0	15	15	1.5	26.3
16TJAC593	493942	9388759	-90	360	15	0	15	15	1.1	39.9
16TJAC594	493770	9388855	-90	360	15	0	15	15	1.2	35.1
16TJAC595	493600	9388951	-90	360	15	0	15	15	1.5	38.6
16TJAC596	493416	9389050	-90	360	15	0	15	15	2.1	40.9
16TJAC598	493085	9389258	-90	360	7.5	0	4.5	4.5	1.2	41.0
16TJAC599	492901	9389343	-90	360	9	0	4.5	4.5	1.7	33.1
16TJAC600	492722	9389418	-90	360	9	0	4.5	4.5	1.2	37.4
16TNAC602	492385	9389640	-90	360	6	0	4.5	4.5	1.2	27.7
16TNAC603	491949	9391703	-90	360	4.5	0	1.5	1.5	0.6	19.9
16TNAC604	492220	9391590	-90	360	6	0	3	3	0.4	26.1
16TNAC605	492355	9391507	-90	360	9	0	7.5	7.5	0.6	56.1
16TNAC606	492525	9391333	-90	360	3	0	1.5	1.5	2.0	24.8
16TNAC607	492742	9391263	-90	360	4.5	0	3	3	1.6	20.3
16TNAC608	493257	9391007	-90	360	6	0	3	3	1.4	20.4
16TNAC609	493394	9390919	-90	360	6	0	3	3	1.3	25.1

HOLE_ID	UTM E (WGS84)	UTM N (WGS84)	DIP	AZIMUTH	EOH	FROM	TO	INTERVAL (m)	DH AVERAGE THM (%)	DH AVERAGE SLIME (%)
16TNAC610	493607	9390812	-90	360	6	0	3	3	1.1	26.2
16TNAC612	493943	9390621	-90	360	10.5	0	10.5	10.5	1.1	27.9
16TNAC613	493271	9390067	-90	360	15	0	15	15	2.1	32.6
16TNAC614	493448	9389964	-90	360	15	0	15	15	2.3	28.6
16TNAC615	493657	9389886	-90	360	15	0	15	15	1.3	43.8
16TNAC616	493785	9389776	-90	360	15	0	15	15	2.9	20.1
16TNAC617	494127	9390525	-90	360	15	0	15	15	1.6	36.1
16TNAC618	494293	9390420	-90	360	15	0	15	15	1.9	26.5
16TNAC619	494469	9390332	-90	360	15	0	15	15	1.1	36.0
16TNAC620	494647	9390226	-90	360	15	0	15	15	1.0	30.6
16TNAC621	494813	9390129	-90	360	15	0	15	15	1.0	29.9
16TNAC622	495003	9390036	-90	360	15	0	12	12	0.7	32.6
16TNAC623	495150	9389936	-90	360	15	0	15	15	1.0	27.6
16TNAC624	495936	9391414	-90	360	15	0	15	15	1.1	38.5
16TNAC625	495774	9391504	-90	360	13.5	0	7.5	7.5	1.0	39.0
16TNAC626	495594	9391614	-90	360	9	0	7.5	7.5	1.0	34.8
16TNAC627	495427	9391706	-90	360	12	0	9	9	1.5	46.1
16TNAC628	495248	9391807	-90	360	15	0	12	12	1.0	38.0
16TNAC629	495079	9391905	-90	360	12	0	6	6	0.8	31.5
16TNAC630	494887	9391979	-90	360	9	0	4.5	4.5	0.9	32.6
16TNAC631	494173	9392414	-90	360	9	0	7.5	7.5	2.6	38.0
16TNAC633	493655	9392709	-90	360	9	0	6	6	1.6	39.5
16TNAC634	493524	9392775	-90	360	9	0	7.5	7.5	1.1	35.5
16TNAC635	493391	9392853	-90	360	7.5	0	6	6	1.1	27.1
16TNAC636	493124	9393004	-90	360	12	0	10.5	10.5	1.4	40.8
16TNAC637	492959	9393109	-90	360	7.5	0	4.5	4.5	1.0	30.4
16TNAC638	492809	9393177	-90	360	3	0	1.5	1.5	0.9	13.8
16TNAC639	494016	9392973	-90	360	12	0	9	9	2.0	32.0
16TNAC640	494131	9392906	-90	360	6	0	4.5	4.5	2.6	30.6
16TNAC641	494314	9392822	-90	360	6	0	4.5	4.5	3.0	15.7
16TNAC642	494392	9393213	-90	360	9	0	6	6	2.2	38.8
16TNAC643	494168	9393317	-90	360	10.5	0	7.5	7.5	2.1	29.5
16TNAC644	494044	9393399	-90	360	9	0	7.5	7.5	2.2	26.2
16TNAC645	493707	9394506	-90	360	7.5	0	6	6	1.4	21.1
16TNAC647	494086	9394345	-90	360	6	0	4.5	4.5	0.9	21.5
16TNAC648	494261	9394244	-90	360	15	0	15	15	0.9	19.5
16TNAC649	494429	9394141	-90	360	7.5	0	6	6	2.0	18.2
16TNAC650	494947	9393861	-90	360	7.5	0	6	6	6.0	10.0
16TNAC651	495110	9393754	-90	360	9	0	7.5	7.5	6.8	11.1
16TNAC652	495300	9393663	-90	360	3	0	1.5	1.5	2.8	6.6
16TNAC654	495650	9393458	-90	360	4.5	0	1.5	1.5	1.5	15.8

HOLE_ID	UTM E (WGS84)	UTM N (WGS84)	DIP	AZIMUTH	EOH	FROM	TO	INTERVAL (m)	DH AVERAGE THM (%)	DH AVERAGE SLIME (%)
16TNAC655	495775	9393372	-90	360	4.5	0	1.5	1.5	0.8	18.3
16TNAC656	495983	9393270	-90	360	4.5	0	1.5	1.5	0.6	12.4
16TNAC657	496162	9393164	-90	360	4.5	0	1.5	1.5	1.0	15.9
16TNAC658	496327	9393068	-90	360	4.5	0	3	3	0.9	19.3
16TNAC659	496507	9392965	-90	360	6	0	3	3	1.1	22.8
16TNAC660	496685	9392873	-90	360	6	0	4.5	4.5	0.9	20.5
16TNAC661	497410	9394360	-90	360	4.5	0	3	3	2.7	12.1
16TNAC662	497237	9394453	-90	360	4.5	0	3	3	1.8	12.4
16TNAC663	497062	9394558	-90	360	6	0	1.5	1.5	0.8	14.3
16TNAC664	496902	9394667	-90	360	12	0	9	9	1.2	23.9
16TNAC665	496723	9394756	-90	360	15	0	15	15	2.4	32.3
16TNAC666	496552	9394847	-90	360	15	0	15	15	1.4	41.1
16TNAC667	496387	9394929	-90	360	6	0	3	3	4.4	29.4
16TNAC669	496050	9395159	-90	360	6	0	4.5	4.5	1.6	46.1
16TNAC671	495661	9395283	-90	360	4.5	0	1.5	1.5	2.5	36.6
16TNAC672	495513	9395433	-90	360	9	0	6	6	2.1	41.9
16TNAC673	495353	9395577	-90	360	7.5	0	4.5	4.5	1.8	36.2
16TNAC674	495160	9395633	-90	360	10.5	0	9	9	1.5	31.4
16TNAC675	494934	9395697	-90	360	10.5	0	7.5	7.5	1.9	37.0
16TNAC676	494778	9395742	-90	360	6	0	4.5	4.5	1.6	34.8
16TNAC677	494598	9395966	-90	360	3	0	1.5	1.5	2.7	35.7
16TNAC679	494897	9396241	-90	360	9	0	6	6	1.4	44.7
16TNAC680	495245	9396060	-90	360	10.5	0	7.5	7.5	2.7	39.7
16TNAC681	495077	9396073	-90	360	9	0	6	6	2.3	34.8
16TNAC682	495424	9395954	-90	360	13.5	0	12	12	1.5	34.4
16TNAC683	495595	9395861	-90	360	9	0	6	6	2.2	36.5
16TNAC684	495769	9395756	-90	360	7.5	0	4.5	4.5	2.0	35.1
16TNAC685	495935	9395664	-90	360	4.5	0	1.5	1.5	2.2	27.1
16TNAC686	496112	9395565	-90	360	12	0	9	9	0.9	50.7
16TNAC687	496279	9395467	-90	360	4.5	0	3	3	1.8	34.6
16TNAC688	496980	9395073	-90	360	15	0	15	15	1.8	32.0
16TNAC689	497141	9394983	-90	360	13.5	0		0	1.2	26.6
16TNAC690	497145	9395446	-90	360	15	0	15	15	1.1	27.4
16TNAC691	497305	9395347	-90	360	15	0	15	15	4.9	27.5
16TNAC692	497478	9395250	-90	360	9	0	7.5	7.5	1.8	26.6
16TNAC693	497752	9395582	-90	360	15	0	15	15	0.8	27.5
16TNAC694	497577	9395686	-90	360	15	0	15	15	1.2	23.2
16TNAC695	497405	9395780	-90	360	15	0	15	15	2.0	25.8
16TNAC696	497250	9395877	-90	360	15	0	15	15	1.4	32.6
16TNAC697	496724	9396168	-90	360	9	0	7.5	7.5	1.4	35.9
16TNAC698	496444	9395841	-90	360	6	0	1.5	1.5	1.3	36.6

HOLE_ID	UTM E (WGS84)	UTM N (WGS84)	DIP	AZIMUTH	EOH	FROM	TO	INTERVAL (m)	DH AVERAGE THM (%)	DH AVERAGE SLIME (%)
16TNAC699	496270	9395947	-90	360	9	0	7.5	7.5	1.3	45.4
16TNAC700	496557	9396226	-90	360	15	0	12	12	2.1	39.4
16TNAC701	496660	9396704	-90	360	9	0	6	6	3.2	32.9
16TNAC702	496472	9396791	-90	360	7.5	0	6	6	1.8	38.5
16TNAC703	496815	9396563	-90	360	15	0	12	12	1.4	32.0
16TNAC704	497000	9396498	-90	360	9	0	6	6	1.0	41.9
16TNAC706	497340	9396303	-90	360	15	0	15	15	1.3	32.4
16TNAC707	497520	9396201	-90	360	15	0	15	15	0.7	25.0
16TNAC708	497686	9396106	-90	360	15	0	15	15	1.8	23.8
16TNAC709	497862	9396008	-90	360	12	0	9	9	0.9	23.6
16TNAC710	498031	9395910	-90	360	39	0	39	39	2.4	23.6
16TNAC711	497940	9396433	-90	360	15	0	15	15	2.0	16.5
16TNAC712	498117	9396349	-90	360	12	0	12	12	0.7	19.9
16TNAC713	498193	9396761	-90	360	15	0	15	15	1.6	17.7
16TNAC714	498020	9396862	-90	360	15	0	15	15	2.4	18.4
16TNAC715	497244	9396828	-90	360	12	0	12	12	1.2	36.9
16TNAC716	497075	9396920	-90	360	15	0	15	15	1.2	35.2
16TNAC717	497147	9397348	-90	360	9	0	9	9	2.3	33.8
16TNAC718	496971	9397405	-90	360	4.5	0	1.5	1.5	3.7	28.3
16TNAC719	496801	9397545	-90	360	9	0	7.5	7.5	3.2	40.3
16TNAC720	496905	9397950	-90	360	3	0	1.5	1.5	1.0	21.9
16TNAC722	497271	9397761	-90	360	15	0	15	15	2.3	33.5
16TNAC723	497433	9397652	-90	360	15	0	15	15	1.7	37.5
16TNAC724	497959	9397356	-90	360	15	0	15	15	1.7	26.1
16TNAC725	498105	9397268	-90	360	15	0	15	15	1.1	21.4
16TNAC726	498295	9397166	-90	360	15	0	15	15	1.2	24.6
16TNAC727	498721	9397392	-90	360	15	0	15	15	1.2	26.6
16TNAC728	498538	9397491	-90	360	15	0	15	15	0.9	30.8
16TNAC729	498364	9397577	-90	360	39	0	39	39	2.2	26.3
16TNAC730	498151	9397721	-90	360	15	0	15	15	1.2	20.4
16TNAC731	498016	9397781	-90	360	15	0	15	15	2.4	24.0
16TNAC732	497851	9397878	-90	360	6	0	3	3	5.2	34.5
16TNAC733	497680	9397971	-90	360	6	0	3	3	1.5	44.1

### Appendix 3. Pangani - Tongoni Downhole Drill Intersects

HOLE_ID	UTM E (WGS84)	UTM N (WGS84)	DIP	AZIMUTH	EOH	FROM	TO	INTERVAL (m)	DH AVERAGE THM (%)	DH AVERAGE SLIME (%)
16PAAC745	500510	9404133	-90	360	4.5	0	3	3	1.5	15.5
16PAAC746	500676	9404041	-90	360	6	0	6	6	2.0	16.5
16PAAC747	500855	9403946	-90	360	7.5	0	3	3	1.5	24.5
16PAAC749	501367	9403645	-90	360	15	0	15	15	3.6	27.0
16PAAC750	501549	9403569	-90	360	15	0	15	15	0.9	25.9
16PAAC751	501887	9403359	-90	360	15	0	13.5	13.5	2.9	16.7
16PAAC752	502074	9403258	-90	360	15	0	15	15	2.0	11.5
16PAAC753	502239	9403154	-90	360	15	0	12	12	3.0	15.5
16PAAC755	501346	9404594	-90	360	9	0	6	6	2.5	17.3
16PAAC756	501160	9404692	-90	360	6	1.5	4.5	3	2.5	22.0
16PAAC757	500993	9404795	-90	360	6	0	3	3	1.0	10.5
16PAAC761	501233	9405115	-90	360	12	0	10.5	10.5	3.7	15.4
16PAAC762	501405	9405023	-90	360	12	0	10.5	10.5	4.7	28.3
16PAAC763	501605	9404919	-90	360	6	0	4.5	4.5	2.3	25.7
16PAAC771	501820	9405265	-90	360	6	1.5	4.5	3	2.0	39.0
16PAAC772	501644	9405360	-90	360	6	0	4.5	4.5	3.7	32.7
16PAAC773	501474	9405462	-90	360	3	0	3	3	11.5	20.0
16PAAC774	501299	9405567	-90	360	9	0	9	9	2.8	39.2
16PAAC780	501239	9406076	-90	360	3	0	1.5	1.5	1.0	33.0
16PAAC781	501423	9405987	-90	360	15	0	15	15	4.2	38.7
16PAAC782	501594	9405878	-90	360	9	0	6	6	2.0	41.3
16PAAC783	501767	9405781	-90	360	9	0	6	6	2.5	26.8
16PAAC784	501927	9405687	-90	360	6	0	4.5	4.5	1.0	31.0
16PAAC785	502145	9406047	-90	360	6	0	3	3	1.0	27.5
16PAAC787	501800	9406238	-90	360	18	0	18	18	3.7	40.9
16PAAC788	501626	9406339	-90	360	1.5	0	1.5	1.5	2.0	23.0
16PAAC789	501456	9406437	-90	360	4.5	0	3	3	1.5	18.0
16PAAC790	501281	9406546	-90	360	6	0	4.5	4.5	1.0	41.0
16PAAC793	501437	9406925	-90	360	4.5	0	3	3	0.5	30.0
16PAAC794	501605	9406838	-90	360	6	0	3	3	1.0	28.5
16PAAC795	501812	9406726	-90	360	3	0	1.5	1.5	4.0	27.0
16PAAC796	501960	9406636	-90	360	15	0	15	15	2.6	37.0
16PAAC797	502134	9406549	-90	360	7.5	0	6	6	2.0	30.8
16PAAC798	502315	9406437	-90	360	6	0	4.5	4.5	1.0	28.3
16PAAC805	502648	9406710	-90	360	6	0	4.5	4.5	1.3	35.0
16PAAC806	502468	9406810	-90	360	12	0	9	9	1.2	28.2
16PAAC807	502296	9406904	-90	360	9	0	7.5	7.5	6.4	39.8
16PAAC808	502121	9407005	-90	360	9	0	7.5	7.5	2.4	38.4
16PAAC809	501941	9407111	-90	360	15	0	15	15	1.9	23.9

HOLE_ID	UTM E (WGS84)	UTM N (WGS84)	DIP	AZIMUTH	EOH	FROM	TO	INTERVAL (m)	DH AVERAGE THM (%)	DH AVERAGE SLIME (%)
16PAAC810	501776	9407211	-90	360	3	0	1.5	1.5	1.0	25.0
16PAAC811	501638	9407341	-90	360	9	0	7.5	7.5	0.6	45.0
16TOAC894	504204	9413597	-90	360	12	0	9	9	1.7	34.5
16TOAC895	504399	9413599	-90	360	15	0	15	15	1.2	40.0
16TOAC896	504600	9413588	-90	360	15	0	15	15	1.5	43.0
16TOAC897	504798	9413561	-90	360	12	0	10.5	10.5	2.6	37.7
16TOAC898	504991	9413401	-90	360	6	0	3	3	2.0	39.0
16TOAC899	505199	9413407	-90	360	9	0	6	6	1.0	40.3
16TOAC900	505414	9413603	-90	360	9	0	6	6	1.8	47.0
16TOAC901	505601	9413599	-90	360	15	0	15	15	1.6	46.5
16TOAC902	505797	9413666	-90	360	6	0	3	3	3.0	39.5
16TOAC903	506026	9413652	-90	360	6	0	3	3	1.5	37.0
16TOAC911	505411	9415205	-90	360	12	0	10.5	10.5	1.6	35.3
16TOAC912	505201	9415204	-90	360	15	0	13.5	13.5	1.4	43.4
16TOAC913	505000	9415208	-90	360	7.5	0	4.5	4.5	1.0	44.0
16TOAC914	504800	9415203	-90	360	15	0	15	15	0.6	41.6
16TOAC915	504608	9415238	-90	360	15	0	15	15	0.9	42.0
16TOAC916	504406	9415214	-90	360	18	0	18	18	0.6	36.2
16TOAC917	504201	9415201	-90	360	9	0	4.5	4.5	1.0	45.7
16TOAC918	503997	9415200	-90	360	12	0	10.5	10.5	0.9	50.4
16TOAC919	503801	9415207	-90	360	21	0	18	18	1.2	46.5
16TOAC920	503605	9415201	-90	360	10.5	0	7.5	7.5	1.4	38.4
16TOAC921	503421	9415191	-90	360	15	0	13.5	13.5	1.9	41.0
16TOAC922	503205	9415199	-90	360	15	0	15	15	2.9	26.3
16TOAC930	504194	9416810	-90	360	15	0	13.5	13.5	1.1	43.4
16TOAC931	504399	9416801	-90	360	15	0	12	12	2.7	41.4
16TOAC932	504609	9416777	-90	360	15	0	12	12	1.4	45.4
16TOAC933	504799	9416802	-90	360	6	0	3	3	2.0	38.0
16TOAC934	504997	9416799	-90	360	6	0	3	3	1.5	51.5
16TOAC935	505208	9416789	-90	360	3	0	1.5	1.5	2.0	33.0
16TOAC936	505399	9416796	-90	360	4.5	0	3	3	1.5	35.0
16TOAC937	505606	9416793	-90	360	9	0	9	9	1.2	21.0
16TOAC938	505798	9416795	-90	360	15	0	12	12	2.0	25.8
16TOAC939	506001	9416800	-90	360	12	0	12	12	1.6	31.9
16TOAC940	506211	9416776	-90	360	12	0	10.5	10.5	1.7	30.1
16TOAC948	505601	9418372	-90	360	6	0	3	3	2.0	28.5
16TOAC949	505403	9418382	-90	360	6	0	3	3	2.0	21.5
16TOAC950	505201	9418388	-90	360	13.5	0	12	12	1.6	50.5
16TOAC951	505012	9418401	-90	360	6	0	3	3	2.0	41.5
16TOAC952	504790	9418406	-90	360	4.5	0	3	3	2.0	38.5
16TOAC961	505202	9418795	-90	360	9	0	6	6	1.5	50.8

HOLE_ID	UTM E (WGS84)	UTM N (WGS84)	DIP	AZIMUTH	EOH	FROM	TO	INTERVAL (m)	DH AVERAGE THM (%)	DH AVERAGE SLIME (%)
16TOAC962	505403	9418800	-90	360	6	0	4.5	4.5	2.7	33.3
16TOAC963	505605	9418784	-90	360	6	0	3	3	2.5	43.0
16TOAC1065	507403	9424800	-90	360	15	0	13.5	13.5	1.4	35.2
16TOAC1066	507593	9424799	-90	360	15	0	15	15	1.4	37.0
16TOAC1067	507806	9424798	-90	360	18	0	18	18	1.8	34.7
16TOAC1068	508018	9424800	-90	360	15	0	15	15	2.1	31.0
16TOAC1069	508204	9424804	-90	360	15	0	3	3	1.8	27.3
16TOAC1083	509001	9426401	-90	360	9	0	9	9	1.5	47.8
16TOAC1084	509196	9426404	-90	360	15	0	13.5	13.5	3.9	30.3
16TOAC1085	509401	9426404	-90	360	15	0	15	15	3.1	35.1
16TOAC1086	509599	9426405	-90	360	15	0	15	15	2.1	42.3