

## Gold Intercepted in Sandy Mitchell Paleochannel Drilling

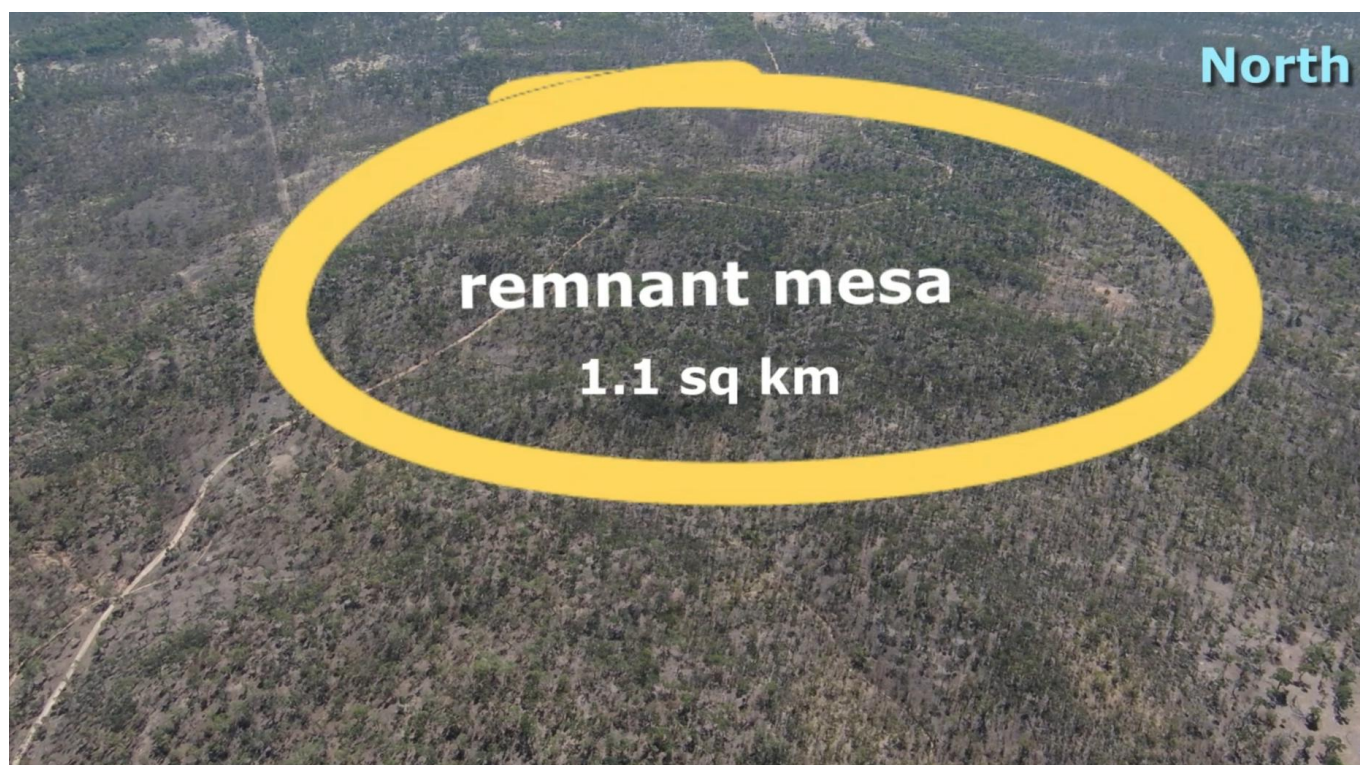
### HIGHLIGHTS

- Shallow gold intercepted in drilling targeting a topographic high paleochannel conglomerate on the Sandy Mitchell Rare Earths and Heavy Minerals Project in North Queensland
- The gold intercepts were hit south of the AHK's Measured Mineral Resource Estimate (MRE) **71.8Mt @ 1,732ppm Monazite Equivalent (MzEq)** (Figure 2)
- While the gold grades are not high, Ark will investigate extracting gold as a credit with the simple gravity processes used to extract the monazite-hosted rare earth elements and heavy minerals in the conglomerate unit
- Key gold intercepts include:
  - 1m at 0.07 g/t Au from 1m, returning 0.46 g/t Au in concentrate (concentration factor 6.77)
  - 1m at 0.27 g/t Au from 5m, returning 4.5 g/t Au in concentrate (concentration factor 16.66)
  - 1m at 0.16 g/t Au from 7m, returning 3.66 g/t Au in concentrate (concentration factor 22.63)
- Drilling, completed following the Resource Expansion Drilling Program in 2025, was undertaken to determine if gold panned in streams in the south area of the Sandy Mitchell tenement was shedding from the topographically high paleochannel Mesa
- Initial assay results received from only 38 of the 166 one-metre intercepts from eight drill holes, with Ark to complete assaying on all remaining drill hole samples
- While Ark's focus remains on developing the Sandy Mitchell REE and Heavy Minerals Project, the gold potential in both the conglomerate and within the sand units will be further investigated
- Daemon de Chaeney appointed Sandy Mitchell Technical Services Manager and Project Geologist

Ark Mines Limited (ASX: AHK) ('AHK', "Ark" or the 'Company') is pleased to announce that gold has been intersected in drilling undertaken in late 2025 at the Company's Sandy Mitchell Rare Earth and Heavy Minerals Project (EPM28013) in North Queensland.

#### Managing Director Ben Emery commented:

*"These initial drilling results have confirmed the presence of gold within the paleochannel system at Sandy Mitchell, separate from our 2025 resource expansion program and driven by the gold we identified in the southern tenement streams. While the gold grades aren't high in isolation, gravity concentration testing has demonstrated the potential for gold credits if the gold carries within the REE and heavy metal mineralisation – an outcome that could add real value to the Heavy Mineral concentrate. We will now complete assaying across all remaining drill samples and look forward to reporting results as they become available."*



*Figure 1. Drone image of the paleochannel conglomerate mesa in the south of the Sandy Mitchell tenement*

## Paleochannel Drill Program

Following completion of the Sandy Mitchell resource expansion drilling program in 2025 and subsequent identification of gold in streams within the southern tenement area, Ark undertook a focused drilling program to test the source of this mineralisation.

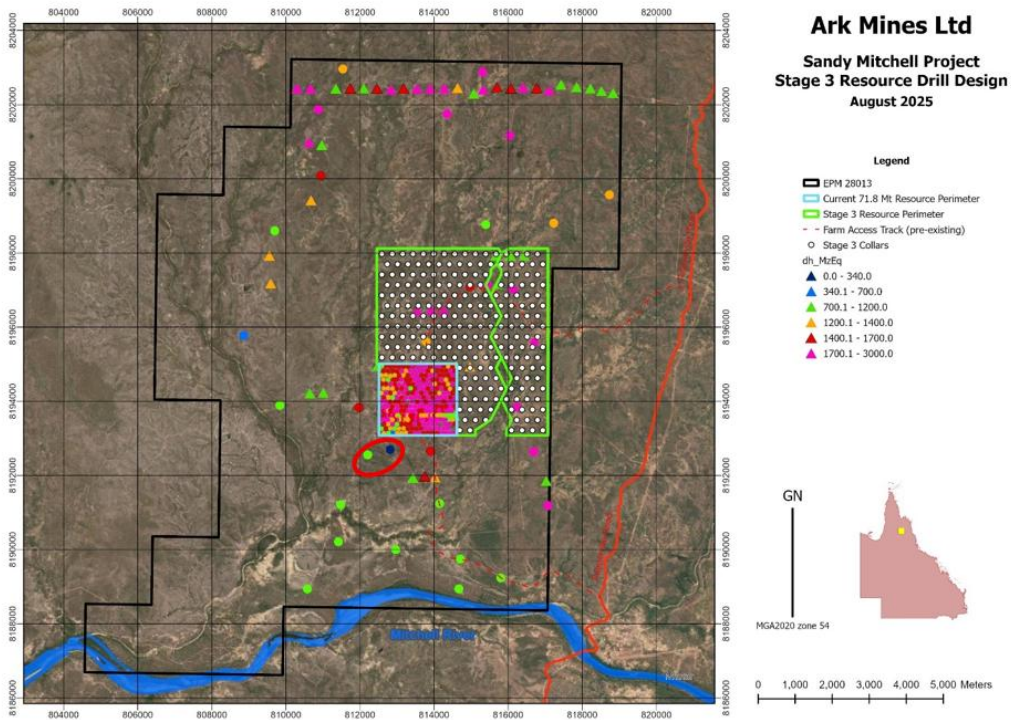
Drilling was designed to determine whether gold panned in streams in the south of the Sandy Mitchell tenement was shedding from the topographically elevated paleochannel Mesa.

The gold intercepts were returned south of Sandy Mitchell's Measured Mineral Resource Estimate of **71.8Mt at 1,732ppm Monazite Equivalent (MzEq)**. The gold grades are not high but demonstrate potential to add value to the Heavy Mineral concentrates if the gold carries within the Rare Earth and heavy mineralisation.

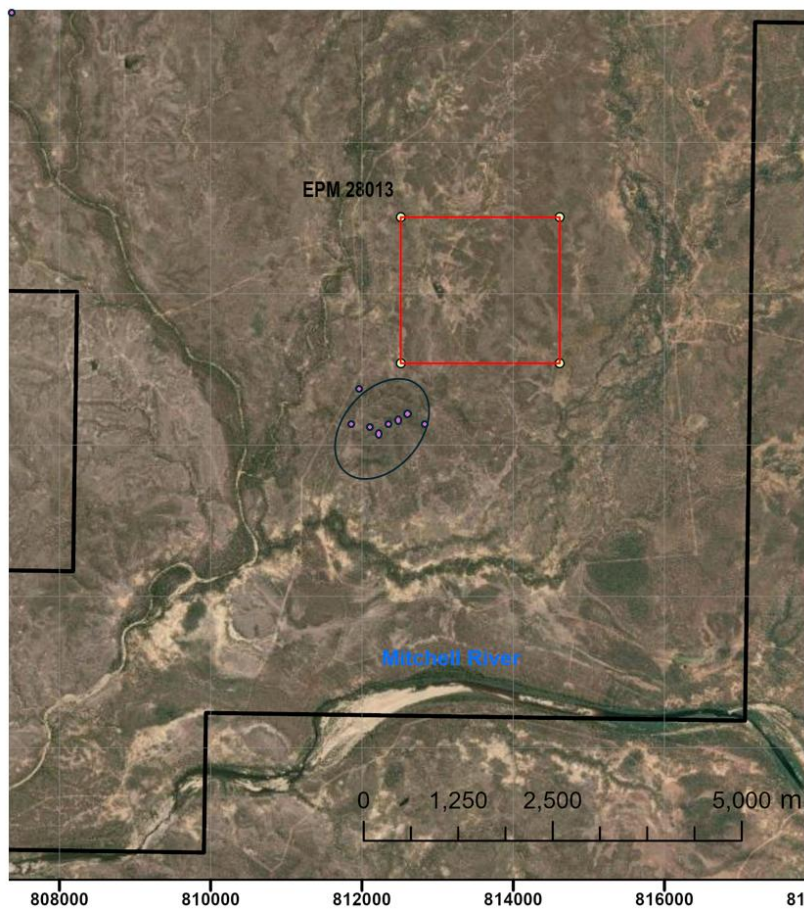
Notable results from Hole 1 of this drill program include:

- 1m at 0.07 g/t Au from 1m, returning 0.46 g/t Au in concentrate (concentration factor 6.77)
- 1m at 0.27 g/t Au from 5m, returning 4.5 g/t Au in concentrate (concentration factor 16.66)
- 1m at 0.16 g/t Au from 7m, returning 3.66 g/t Au in concentrate (concentration factor 22.63)

Initial assay results have been received from 38 of the 166 one-metre intercepts across eight drill holes (refer Table 1), with the Company progressing assaying of the remaining samples.



**Figure 2. MRE outlined in blue, recent expanded drilling in green and the mesa in a red circle.**



**Figure 3. Sandy Mitchell Mining Licence in red, Paleochannel mesa in blue, and RC drill holes in pink**

## Next Steps

Following these initial results, Ark will assay the remaining samples from the conglomerate drilling for gold. Additionally, the Company intends to identify further gold credits contained within the sands across the wider Sandy Mitchell Project area, with the design of an infill drill program underway.

The Company is also continuing to progress key workstreams, results from the recently completed resource expansion drilling will contribute to an updated Mineral Resource Estimate, which in turn will form a key input into the Pre-Feasibility Study.

An updated Scoping Study, incorporating improved processing pathways and metallurgical optimisation, will be released shortly and is anticipated to highlight further economic advantages for the project.

The recent granting of the Mining Licence paves the way for AHK to advance the Sandy Mitchell Project from exploration towards mine development.

## Sandy Mitchell Appointment

Ark Mines also advises that it has appointed Daemon de Chaeney as the Technical Services Manager and Company Geologist for the Sandy Mitchell Project.

Mr de Chaeney is a highly experienced geologist and will be responsible for delivering the Sandy Mitchell updated Scoping Study, Pre-Feasibility Study and site works.

**Table 1. Gold intercept table including metre grades and upgraded by gravity concentrate grades.**

#	SAMPLE ID	Au (ppm) Concentrated	SPL WT (g)	CON WT (g)	CONCENTRATION FACTOR	CALC HEAD ASSAY Au (ppm)
1	1G 1-2	0.46	4974.30	734.80	6.77	0.07
2	1G 5-6	4.5	7112.52	427.00	16.66	0.27
3	1G 6-7	<0.05	3684.90	699.17	5.27	<0.01
4	1G 7-8	3.66	3232.56	142.82	22.63	0.16
5	2G 1-2	<0.05	6229.02	974.38	6.39	<0.01
6	2G 2-3	<0.05	5591.97	1182.92	4.73	<0.01
7	2G 5-6	<0.05	4276.80	1117.37	3.83	<0.01
8	2G 6-7	<0.05	6135.03	1453.13	4.22	<0.01
9	2G 7-8	0.07	3543.10	806.25	4.39	0.02
10	2G 8-9	<0.05	4554.94	1047.01	4.35	<0.01
11	3G 1-2	<0.05	5358.15	1019.16	5.26	<0.01
12	3G 2-3	<0.05	7922.94	551.54	14.37	<0.01
13	3G 6-7	<0.05	5640.68	1094.57	5.15	<0.01
14	3G 7-8	<0.05	5947.45	710.99	8.37	<0.01
15	3G 8-9	<0.05	3915.62	1146.81	3.41	<0.01
16	3G 9-10	<0.05	4374.05	982.55	4.45	<0.01
17	4G 0-1	<0.05	4614.95	1017.15	4.54	<0.01
18	4G 1-2	<0.05	5711.32	1385.93	4.12	<0.01
19	4G 4-5	<0.05	5000.61	813.27	6.15	<0.01
20	4G 5-6	<0.05	2131.90	819.41	2.60	<0.01
21	4G 6-7	<0.05	8591.16	486.51	17.66	<0.01
22	4G 7-8	<0.05	6467.52	403.75	16.02	<0.01
23	5G 0-1	<0.05	8918.61	1118.80	7.97	<0.01
24	5G 1-2	<0.05	6665.91	1004.17	6.64	<0.01

25	5G 5-6	<0.05	5803.66	544.09	10.67	<0.01
26	5G 6-7	<0.05	4499.35	438.38	10.26	<0.01
27	5G 7-8	<0.05	3488.93	1006.34	3.47	<0.01
28	5G 8-9	<0.05	3343.75	955.14	3.50	<0.01
29	6G 1-2	<0.05	2060.81	544.02	3.79	<0.01
30	6G 3-4	<0.05	2739.76	746.01	3.67	<0.01
31	6G 5-6	<0.05	2712.29	566.81	4.79	<0.01
32	7G 1-2	<0.05	1143.70	407.82	2.80	<0.01
33	7G 3-4	<0.05	2520.60	1086.07	2.32	<0.01
34	7G 5-6	<0.05	2502.38	391.19	6.40	<0.01
35	8G 1-2	<0.05	2053.41	632.83	3.24	<0.01
36	8G 3-4	<0.05	4226.25	1123.80	3.76	<0.01
37	8G 5-6	<0.05	3566.11	794.21	4.49	<0.01
38	8G 7-8	<0.05	1832.62	572.63	3.20	<0.01
39	OREAS 237b	2				
40	OREAS 235b	1.42				
41	OREAS 237b	1.9				
42	OREAS 235b	1.45				

This announcement has been approved for release to the ASX by the Board of Ark Mines Limited.

– ENDS –

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## APPENDICE A

### 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>	<p>Ark Mines October 2025 Sandy Mitchell Mesa programme sampling techniques:</p> <ul style="list-style-type: none"> <li>Samples are rock chips and accompanying bulk fines collected on 1m intervals by RC drill using 100mm bit.</li> <li>Sample was passed through an 82.5: 12.5 riffle splitter to yield a representative aliquot of approx. 1.5 kg collected in prenumbered calico bag, and a remainder retained in a numbered plastic bag, with recoveries volumetrically estimated with periodic checks by mass using digital scale, compared against laboratory loose bulk density measurements.</li> <li>Sample for total digest assay was sent to Northern Metallurgy Laboratories for Assay.</li> <li>Sample for pan concentration was sub-sampled by spade channel through the remainder sample to a mass of approx. 1kg per metre as determined by digital scales. These were then panned to a concentrate and the subsequent concentrates composited per hole.</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>	<p>Ark Mines October 2025 Sandy Mitchell programme:</p> <ul style="list-style-type: none"> <li>Drill was by wheel mounted RC rig using 100mm bits.</li> <li>All holes were vertical and drilled to re</li> <li>All holes were vertical</li> </ul>

Criteria	JORC Code explanation	Commentary
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 and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>• Recoveries were assessed by volumetric estimation by the metre based on total sample weights using a digital scale with comparison made via laboratory loose bulk density measurements.</li> <li>• Sample was passed through a cyclone with a gated chute to allow fines to fall out of the air stream. The chute was kept closed until the end of each metre had been drilled, then opened to collect sample, and closed prior to recommencement of drilling.</li> <li>• No relationship between recovery and grade has been identified.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>• Sample was logged by the metre for all drilling, by the site geology team for both qualitative and quantitative criteria.</li> <li>• Drill logs for 100% of drilling</li> <li>• Logging is sufficient to support resource estimation, mining and metallurgical studies.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• 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.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• All sample passed through the drill cyclone dry.</li> <li>• Sub-sampling for laboratory assay was by 87.5:12.5 riffle splitter: the bulk sample was passed evenly through the riffles with the assay aliquot collected in a pre-numbered calico bag, and the reject collected in a numbered plastic bag.</li> <li>• Field duplicates were taken at 1:40 by 50:50 riffle splitter.</li> <li>• Sample for pan concentration was sub-sampled by spade channel through the reject to a mass of approx. 1kg per metre as determined by digital scales.</li> </ul>
Quality of assay data	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul style="list-style-type: none"> <li>• Metre samples were sent to Northern Laboratories for total digest assay:</li> <li>• Samples were weighed then kiln dried and re-weighed.</li> </ul>

Criteria	JORC Code explanation	Commentary
and laboratory tests	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<p><b>Sample Preparation</b></p> <ul style="list-style-type: none"> <li><b>Drying:</b> Each sample was dried at 105°C for 12 hours.</li> <li><b>Crushing:</b> Each dried sample was then put through a roll crusher followed by a keegor mill.</li> <li><b>Weighing:</b> The dry crushed sample was then weighed prior to tabling.</li> </ul> <p><b>Gravity Concentration</b></p> <ul style="list-style-type: none"> <li><b>Tabling:</b> Each dried sample was then hand fed onto a 600 x 1200mm laboratory size shaking table and a rougher concentrate was captured into a stainless steel sample tray.</li> <li><b>Drying:</b> Following tabling each concentrate fraction was then loaded into a drying oven at 105°C and left to dry until the sample reached a constant mass.</li> <li><b>Weighing:</b> The dried concentrate samples were then weighed and the mass recorded.</li> </ul> <p><b>Sample Preparation</b></p> <ul style="list-style-type: none"> <li><b>Pulverizing:</b> The concentrate sample for each fraction was then pulverized to 95% passing 75µm in an ESSA LM2 pulverizer. Barren quartz flushes of the pulverizing bowl were conducted between each sample to eliminate the risk of cross-contamination between samples.</li> </ul> <p><b>Assaying</b></p> <ul style="list-style-type: none"> <li>Each concentrate sample was then determined by an accelerated sodium cyanide leach using LeachWELL Assay Tabs with AAS finish. The samples were leached in 2000ml HDPE jars that were continuously agitated on a bottle roller.</li> </ul> <p>The leach parameters were as follows:            1 Leachwell Assay Tab            400ml of water            200 grams of sample            Continuous agitation            4 hr leach time            pH &gt;10.5</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Significant intersections have not been separately determined or reported.</li> <li>No twin holes were undertaken</li> <li>Data was entered into MS excel then verified against hard copy data, followed by import into Datamine Studio RM for validation.</li> <li>Primary data is stored as hard copy, electronic tables in CSV format and Datamine format.</li> </ul>

Criteria	JORC Code explanation	Commentary
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>An initial collar survey by hand held GPS was conducted as a failsafe, with expected accuracy of <math>\pm 5000\text{mm}</math> in x and y, and <math>\pm 50000\text{mm}</math> in z.</li> <li>All survey data is recorded in MGA 2020 zone 54 and AHD.</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 holes are not spaced -</li> <li>No compositing has been applied to 1m samples for total digest assay.</li> <li>Pan concentrates were composited per drill hole.</li> <li>Preliminary metallurgical sample was composited as discussed under <i>Laboratory Tests</i>.</li> <li>Representative metre samples for total digest assay were not composited, residual sub-metre hole ends were similarly assayed separately to preserve geometric representation.</li> <li>representation.</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>Deposit type is Paleochannel conglomerate – essentially flat lying</li> <li>The applied vertical sampling is the optimal orientation for the deposit type.</li> <li>No bias by orientation or spatial relationships has been identified.</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>Samples were collected after logging and transported at the end of each day to the company locked storage in Chillagoe.</li> <li>Samples were boxed in closed pumpkin crates, wrapped in plastic for shipping by courier to the laboratory in Herberton.</li> <li>Bagged reject was stored on site in Ark's fenced secure bag farm and covered in UV resistant tarping for future use except for auger samples where rejects were not collected.</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>Not Audited</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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 licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>EPM 28013 Sandy Mitchell is 100% owned by Ark Mines Limited and was purchased on the 23<sup>rd</sup> of February 2023.</li> <li>This tenement was formally EPM18308.</li> <li>There are no third party agreements.</li> <li>No known issues impeding on the security of the tenure of Ark Mines ability to operate in the area exist.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>A number of companies and individuals have explored the area for gold and base metals and for heavy minerals. The summaries presented below are from the IRTM source:</p> <ul style="list-style-type: none"> <li>ATP 597M was granted to Laskan Minerals Pty Ltd in 1969 over the Reid Creek area, north of the Mitchell River. From assays of rock chip and stream sediment samples, it was concluded that there was little chance of economic mineralisation occurring in the Authority. Although good monazite grades were obtained, the samples were from creeks with little available wash. Good concentrations of monazite and ilmenite were present in large areas of sandy, alluvial sheet wash in the Reid's Creek area. It was believed that there was a potential for economic exploitation if the monazite concentrations occurred in a large enough volume of sandy material. No further work was reported.</li> <li>In 1970, Altarama Search Pty Ltd was granted ATP 833M over the Mitchell River in the Reid Creek, Sandy Creek and Mount Mulgrave Homestead area. Four hundred stream sediment samples, at an average density of 1.25 samples/km<sup>2</sup>, were collected for assay. Copper and lead contents were low. Half of the zinc results were considered to be possibly anomalous. A two population distribution was obtained for zinc, with a standard threshold of about 15 ppm. It was suggested that the two population distributions represented normal background ranges present in different strata. No other work was carried out.</li> </ul>

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		<ul style="list-style-type: none"> <li>ATP 2580M was granted to Tacam Pty Ltd over Sandy Creek and its tributaries. Stream sediment samples averaged 0.18% monazite (0.01 to 0.45%), 0.07% rutile (0.15% in terraces), and 0.06% zircon (0.14% in terraces). The area had low economic potential and the Authority was abandoned in August 1981.</li> <li>The principals involved in Tacam Pty Ltd combined with Metcalfe Holdings Pty Ltd in 1986 to take up 4 Authorities to Prospect - 4400,4401,4402 and 4403 centred on Mt Mulgrave, Arkara Creek, Sandy Creek and the Kennedy River respectively. The investigations were for the possibility of locating large-scale heavy minerals in association with major drainages and lower slope eluvial deposits associated with Cretaceous weathering as indicated in previous investigations. EPM 4400, 4401, 4402 and 4403</li> <li>Barron and O'Toole focused on Mt Mulgrave for Ilmenite, rutile, REE, Monzonite, Zircon, and Gold. Tenement EPM 4400 consisted of 96 sub-blocks centred on Mount Mulgrave (7665, 7765), EPM 4401 consisted of 97 sub-blocks centred on Arkara Creek (7665), EPM 4402 consisted of 100 sub-blocks centred on Sandy Creek (7665) and EPM 4403 consisted of 86 sub-blocks centred on Kennedy River (7666, 7766) were granted to P.T.C. Barron, A. O'Toole and Metcalfe Holdings Pty Ltd on 22 September 1986 to explore for heavy minerals and precious metals. After three years of exploration the EPMs were surrendered on 22 August 1989.</li> <li>Tenement EPM 10185 consisted of 157 sub-blocks was granted to Palmer Gold Pty Ltd on 25 October 1994 for an initial 2 year period. The exploration permit was renewed for a further 3 years on 25 October 1996 and surrendered on 3 October 2001. The tenement was situated 200km west of Cooktown.</li> </ul> <p>Rationale</p> <p>Significant gold-silver, tin and base metal deposits are known from the Georgetown and southern Dargalong Inliers to the south of EPM 10185 (e.g. Etheridge, Croydon and Oaks goldfields), from the Hodgkinson Province to the east (e.g. Palmer, Hodgkinson, Russell River, Starcke, Jordon Ck, Mareeba and Mount Peter</p>

Criteria	JORC Code explanation	Commentary
		<p>goldfields, and Herberton-Mt Garnet tinfield), and the Coen Inlier to the north (e.g. Alice River &amp; Potallah goldfields). However, other than brief reference to sub-economic alluvial gold occurrences near the junction of the Palmer and Mitchell Rivers, and in the Staaten, Lynd and Walsh Rivers (Culpeper 1993), no precious or base metal deposits are known to occur within rocks of the Yambo Inlier.</p> <p>Application for the area was made after structural interpretation of the region showed prospectivity for gold occurrence. Base metal anomalies delineated from previous exploration were also targeted for follow-up work.</p> <ul style="list-style-type: none"> <li>• In 2007 exploration activity was carried out by BHP Billiton Minerals Pty Ltd under an extremely large area (2,850 sub-blocks) of the Coen Yambo area from 2005 to 2007. EPM's 14438 and 14445 covered the majority of the Yambo Inlier. BHP targeted Ni sulphide and PGM and carried out AEM surveying, field mapping and sampling and drilling. The AEM targets were found to be related to sedimentary lithological units or obvious shear zones.</li> <li>• In 2007 - 2009 - MTY Resources Ltd undertook bulk sampling program along with a Panned Concentrate sampling program.</li> <li>• In 2012 Waverley Nominees undertook an Augur sampling program.</li> </ul>
<p><i>Geology</i></p>	<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>• The tenement covers a portion of the southern extent of the Yambo Inlier, one of the several Proterozoic inliers to the west of the Palmerville Fault System. Rocks of the Yambo Inlier covered by the tenement comprise those of the middle Proterozoic Yambo Metamorphic Group of mainly amphibolites and gneisses ranging in age from ~1690 Ma to ~1585 Ma.</li> <li>• The dominant Yambo member on the tenement is the Chelmsford Gneiss, and this is thought to be the source of REE sands.</li> <li>• These rocks have been intruded by Silurian-Devonian granites of the Lukinville Suite which form an integral part of the Cape York Batholith. Within the tenement</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>they form a belt roughly 10 km wide trending NNW.</p> <ul style="list-style-type: none"> <li>• Extensive intrusions of Carboniferous-Permian dolerites occur throughout the Inlier, with only a few occurrences within the tenement.</li> <li>• The tenement is largely gold deficient except for the gold reporting to sediments within the Palmer River to the north. Recent Governmental radiometric surveys have highlighted areas of anomalous radiometric emission within the Yambo Inlier. The project tenements cover the majority of the anomalous radiometric areas.</li> <li>• The project area in the tenement has a 3 to 25m, average 10.3m (stage 1 drilling) to 12.3m (stage 2 drilling), covering of disaggregated fine to very fine sand with sparse pebble or cobble horizons. These sands carry REE as monazite and lesser xenotime, zircon, rutile, illmenite and garnet. The sands are believed to derive from weathering of the Chelmsford Gneiss, with minimal fluvial transport largely constrained to the upper 2m. There is minor clay in the top 1 to 2m of sand which extends from daylight to the bedrock.</li> </ul>
<p><i>Drill hole Information</i></p>	<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>• Ark Mines drill data, refer to table in Appendix C</li> </ul>
<p><i>Data aggregation methods</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such</i></li> </ul>	<ul style="list-style-type: none"> <li>• No high or Low-grade top/bottom-cut has been applied to the data presented in Appendix C, which is the total data set.</li> <li>• No equivalents were used</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>aggregation should be stated and some typical examples of such aggregations should be shown in detail.</p> <ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
<p>Relationship between mineralisation widths and intercept lengths</p>	<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 mineralisation is essentially flat lying, and thus intercept width on the vertical holes drilled is at or approaching the geometric minimum width, which is optimal.</li> <li>Consequently, only down hole length are reported and these are equivalent to true thickness.</li> </ul>
<p>Diagrams</p>	<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>Diagrams as appropriate accompany the announcement</li> </ul>
<p>Balanced reporting</p>	<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>Appendix B, contains the total data set.</li> </ul>
<p>Other substantive exploration data</p>	<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>All data material to this report that has been collected to date has been reported textually, graphically or both.</li> </ul>
<p>Further work</p>	<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> </ul>	<ul style="list-style-type: none"> <li>Ark plans further gravity beneficiation and metallurgical test work on a larger sample basis, investigating several different techniques to determine optimal processing.</li> <li>Ark also plans pilot plant test work and other feasibility</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>studies.</li> <li>Ark plans further gold assaying of samples in store</li> </ul>

## Appendices B Hole collar Location, Depth and RL

BHID	SID	HMSCID	X_East	Y_North	Z_Elev	From	To	Date	Sample weight	Comments
1G	SM2120	GHEX01	813253	8192532	203	0	1		3.5	conglomerate
1G	SM2121	GHEX02	813253	8192532	203	1	2		6.4	conglomerate
1G	SM2122	GHEX03	813253	8192532	203	2	3		7.02	conglomerate
1G	SM2123	GHEX04	813253	8192532	203	3	4		5.59	conglomerate
1G	SM2124	GHEX05	813253	8192532	203	4	5		7.58	conglomerate
1G	SM2125	GHEX06	813253	8192532	203	5	6		7.81	conglomerate
1G	SM2126	GHEX07	813253	8192532	203	6	7		4.21	conglomerate
1G	SM2127	GHEX08	813253	8192532	203	7	8		3.92	decomposed metamorphics
1G	SM2128	GHEX09	813253	8192532	203	8	9		6.66	decomposed metamorphics
1G	SM2129	GHEX10	813253	8192532	203	9	10		3.05	decomposed metamorphics
1G	SM2130	GHEX11	813253	8192532	203	10	11		5.36	decomposed metamorphics
1G	SM2131	GHEX12	813253	8192532	203	11	12		6.62	decomposed metamorphics
1G	SM2132	GHEX13	813253	8192532	203	12	13		3.87	decomposed metamorphics
1G	SM2133	GHEX14	813253	8192532	203	13	14		3.46	decomposed metamorphics
1G	SM2134	GHEX15	813253	8192532	203	14	15		6.49	decomposed metamorphics
1G	SM2135	GHEX16	813253	8192532	203	15	16		5.73	decomposed metamorphics
1G	SM2136	GHEX17	813253	8192532	203	16	17		6.72	decomposed metamorphics
1G	SM2137	GHEX18	813253	8192532	203	17	18		8.02	decomposed metamorphics
1G	SM2138	GHEX19	813253	8192532	203	18	19		4.56	decomposed metamorphics
1G	SM2139	GHEX20	813253	8192532	203	19	20		8.09	decomposed metamorphics
1G	SM2140	GHEX21	813253	8192532	203	20	21		9.77	decomposed metamorphics
1G	SM2141	GHEX22	813253	8192532	203	21	22		6.28	decomposed metamorphics
1G	SM2142	GHEX23	813253	8192532	203	22	23		6.24	decomposed metamorphics
1G	SM2143	GHEX24	813253	8192532	203	23	24		9.76	decomposed metamorphics
1G	SM2144	GHEX25	813253	8192532	203	24	25		6.63	metamorphic basement
1G	SM2145	GHEX26	813253	8192532	203	25	26		6.51	metamorphic basement
1G	SM2146	GHEX27	813253	8192532	203	26	27		9.56	metamorphic basement
2G	SM2086	GHEX28	813058	8192733	203	0	1		4.54	conglomerate
2G	SM2087	GHEX29	813058	8192733	203	1	2		6.89	conglomerate
2G	SM2088	GHEX30	813058	8192733	203	2	3		6.12	conglomerate
2G	SM2089	GHEX31	813058	8192733	203	3	4		4.25	conglomerate
2G	SM2090	GHEX32	813058	8192733	203	4	5		2.27	conglomerate
2G	SM2091	GHEX33	813058	8192733	203	5	6		5.58	conglomerate
2G	SM2092	GHEX34	813058	8192733	203	6	7		7.62	conglomerate
2G	SM2093	GHEX35	813058	8192733	203	7	8		3.89	decomposed metamorphics

2G	SM2094	GHEX36	813058	8192733	203	8	9		5.05	decomposed metamorphics
2G	SM2095	GHEX37	813058	8192733	203	9	10		4.13	decomposed metamorphics
2G	SM2096	GHEX38	813058	8192733	203	10	11		3.85	decomposed metamorphics
2G	SM2097	GHEX39	813058	8192733	203	11	12		3.9	decomposed metamorphics
2G	SM2098	GHEX40	813058	8192733	203	12	13		6.57	decomposed metamorphics
2G	SM2099	GHEX41	813058	8192733	203	13	14		3.67	decomposed metamorphics
2G	SM2100	GHEX42	813058	8192733	203	14	15		3.88	decomposed metamorphics
2G	SM2101	GHEX43	813058	8192733	203	15	16		4.19	decomposed metamorphics
2G	SM2102	GHEX44	813058	8192733	203	16	17		4.13	decomposed metamorphics
2G	SM2103	GHEX45	813058	8192733	203	17	18		4.49	decomposed metamorphics
2G	SM2104	GHEX46	813058	8192733	203	18	19		7.48	decomposed metamorphics
2G	SM2105	GHEX47	813058	8192733	203	19	20		5.14	decomposed metamorphics
2G	SM2106	GHEX48	813058	8192733	203	20	21		2.57	decomposed metamorphics
2G	SM2107	GHEX49	813058	8192733	203	21	22		9.01	decomposed metamorphics
2G	SM2108	GHEX50	813058	8192733	203	22	23		6.15	decomposed metamorphics
2G	SM2109	GHEX51	813058	8192733	203	23	24		5.06	decomposed metamorphics
2G	SM2110	GHEX52	813058	8192733	203	24	25		8.11	decomposed metamorphics
2G	SM2111	GHEX53	813058	8192733	203	25	26		5.86	decomposed metamorphics
2G	SM2112	GHEX54	813058	8192733	203	26	27		6.75	decomposed metamorphics
2G	SM2113	GHEX55	813058	8192733	203	27	28		7.12	decomposed metamorphics
2G	SM2114	GHEX56	813058	8192733	203	28	29		6.21	decomposed metamorphics
2G	SM2115	GHEX57	813058	8192733	203	29	30		5.34	decomposed metamorphics
2G	SM2116	GHEX58	813058	8192733	203	30	31		8.41	decomposed metamorphics
2G	SM2117	GHEX59	813058	8192733	203	31	32		5.73	decomposed metamorphics
2G	SM2118	GHEX60	813058	8192733	203	32	33		7.14	metamorphic basement
2G	SM2119	GHEX61	813058	8192733	203	33	34		10.5	metamorphic basement
3G	SM2001	GHEX62	812432	8192517	201	0	1		0.42	conglomerate
3G	SM2002	GHEX63	812432	8192517	201	1	2		6.62	conglomerate
3G	SM2003	GHEX64	812432	8192517	201	2	3		8.67	conglomerate
3G	SM2004	GHEX65	812432	8192517	201	3	4		7.83	conglomerate
3G	SM2005	GHEX66	812432	8192517	201	4	5		6.33	conglomerate
3G	SM2006	GHEX67	812432	8192517	201	5	6		8.61	conglomerate
3G	SM2007	GHEX68	812432	8192517	201	6	7		6.12	conglomerate
3G	SM2008	GHEX69	812432	8192517	201	7	8		6.68	conglomerate
3G	SM2009	GHEX70	812432	8192517	201	8	9		4.44	decomposed metamorphics
3G	SM2010	GHEX71	812432	8192517	201	9	10		4.74	decomposed metamorphics
3G	SM2011	GHEX72	812432	8192517	201	10	11		5.66	decomposed metamorphics
3G	SM2012	GHEX73	812432	8192517	201	11	12		8.82	decomposed metamorphics
3G	SM2013	GHEX74	812432	8192517	201	12	13		5.15	decomposed metamorphics
3G	SM2014	GHEX75	812432	8192517	201	13	14		5.62	decomposed metamorphics
3G	SM2015	GHEX76	812432	8192517	201	14	15		9.13	decomposed metamorphics
3G	SM2016	GHEX77	812432	8192517	201	15	16		6.51	decomposed metamorphics
3G	SM2017	GHEX78	812432	8192517	201	16	17		7.41	decomposed metamorphics
3G	SM2018	GHEX79	812432	8192517	201	17	18		9.29	decomposed metamorphics
3G	SM2019	GHEX80	812432	8192517	201	18	19		6.64	decomposed metamorphics
3G	SM2020	GHEX81	812432	8192517	201	19	20		7	decomposed metamorphics
3G	SM2021	GHEX82	812432	8192517	201	20	21		9.45	decomposed metamorphics

3G	SM2022	GHEX83	812432	8192517	201	21	22		6.56	metamorphic basement
3G	SM2023	GHEX84	812432	8192517	201	22	23		8.38	metamorphic basement
3G	SM2024	GHEX85	812432	8192517	201	23	24		10.6	metamorphic basement
4G	SM2025	GHEX86	812862	8192667	203	0	1		5.36	conglomerate
4G	SM2026	GHEX87	812862	8192667	203	1	2		7.68	conglomerate
4G	SM2027	GHEX88	812862	8192667	203	2	3		6.24	conglomerate
4G	SM2028	GHEX89	812862	8192667	203	3	4		5.44	conglomerate
4G	SM2029	GHEX90	812862	8192667	203	4	5		5.1	conglomerate
4G	SM2030	GHEX91	812862	8192667	203	5	6		2.48	conglomerate
4G	SM2031	GHEX92	812862	8192667	203	6	7		9.85	decomposed metamorphics
4G	SM2032	GHEX93	812862	8192667	203	7	8		7.23	decomposed metamorphics
4G	SM2033	GHEX94	812862	8192667	203	8	9		8.08	decomposed metamorphics
4G	SM2034	GHEX95	812862	8192667	203	9	10		5.88	decomposed metamorphics
4G	SM2035	GHEX96	812862	8192667	203	10	11		6.17	decomposed metamorphics
4G	SM2036	GHEX97	812862	8192667	203	11	12		6.31	decomposed metamorphics
4G	SM2037	GHEX98	812862	8192667	203	12	13		5.71	decomposed metamorphics
4G	SM2038	GHEX99	812862	8192667	203	13	14		5.76	decomposed metamorphics
4G	SM2039	GHEX100	812862	8192667	203	14	15		8.14	decomposed metamorphics
4G	SM2040	GHEX101	812862	8192667	203	15	16		4.44	decomposed metamorphics
4G	SM2041	GHEX102	812862	8192667	203	16	17		7.59	decomposed metamorphics
4G	SM2042	GHEX103	812862	8192667	203	17	18		7.64	decomposed metamorphics
4G	SM2043	GHEX104	812862	8192667	203	18	19		3.83	decomposed metamorphics
4G	SM2044	GHEX105	812862	8192667	203	19	20		7.43	decomposed metamorphics
4G	SM2045	GHEX106	812862	8192667	203	20	21		8.11	decomposed metamorphics
4G	SM2046	GHEX107	812862	8192667	203	21	22		5.58	decomposed metamorphics
4G	SM2047	GHEX108	812862	8192667	203	22	23		5.89	decomposed metamorphics
4G	SM2048	GHEX109	812862	8192667	203	23	24			metamorphic basement
4G	SM2049	GHEX110	812862	8192667	203	24	25		6.67	metamorphic basement
4G	SM2050	GHEX111	812862	8192667	203	25	26		7.7	metamorphic basement
5G	SM2051	GHEX112	813042	8192872	203	0	1		9.66	conglomerate
5G	SM2052	GHEX113	813042	8192872	203	1	2		7.22	conglomerate
5G	SM2053	GHEX114	813042	8192872	203	2	3		7.99	conglomerate
5G	SM2054	GHEX115	813042	8192872	203	3	4		4.71	conglomerate
5G	SM2055	GHEX116	813042	8192872	203	4	5		4.48	conglomerate
5G	SM2056	GHEX117	813042	8192872	203	5	6		6.63	conglomerate
5G	SM2057	GHEX118	813042	8192872	203	6	7		5.01	conglomerate
5G	SM2058	GHEX119	813042	8192872	203	7	8		3.82	decomposed metamorphics
5G	SM2059	GHEX120	813042	8192872	203	8	9		3.63	decomposed metamorphics
5G	SM2060	GHEX121	813042	8192872	203	9	10		3.08	decomposed metamorphics
5G	SM2061	GHEX122	813042	8192872	203	10	11		4.73	decomposed metamorphics
5G	SM2062	GHEX123	813042	8192872	203	11	12		6.82	decomposed metamorphics
5G	SM2063	GHEX124	813042	8192872	203	12	13		4.45	decomposed metamorphics
5G	SM2064	GHEX125	813042	8192872	203	13	14		5.5	decomposed metamorphics
5G	SM2065	GHEX126	813042	8192872	203	14	15		7.13	decomposed metamorphics
5G	SM2066	GHEX127	813042	8192872	203	15	16		5.32	decomposed metamorphics
5G	SM2067	GHEX128	813042	8192872	203	16	17		5.57	decomposed metamorphics
5G	SM2068	GHEX129	813042	8192872	203	17	18		7	decomposed metamorphics

5G	SM2069	GHEX130	813042	8192872	203	18	19		3.02	decomposed metamorphics
5G	SM2070	GHEX131	813042	8192872	203	19	20		6.57	decomposed metamorphics
5G	SM2071	GHEX132	813042	8192872	203	20	21		6.13	decomposed metamorphics
5G	SM2072	GHEX133	813042	8192872	203	21	22		5.15	decomposed metamorphics
5G	SM2073	GHEX134	813042	8192872	203	22	23		4.47	decomposed metamorphics
5G	SM2074	GHEX135	813042	8192872	203	23	24		3.65	decomposed metamorphics
5G	SM2075	GHEX136	813042	8192872	203	24	25		4.47	decomposed metamorphics
5G	SM2076	GHEX137	813042	8192872	203	25	26		7.64	decomposed metamorphics
5G	SM2077	GHEX138	813042	8192872	203	26	27		6.68	decomposed metamorphics
5G	SM2078	GHEX139	813042	8192872	203	27	28		4.39	decomposed metamorphics
5G	SM2079	GHEX140	813042	8192872	203	28	29		4.97	decomposed metamorphics
5G	SM2080	GHEX141	813042	8192872	203	29	30		7.31	decomposed metamorphics
5G	SM2081	GHEX142	813042	8192872	203	30	31		6.4	decomposed metamorphics
5G	SM2082	GHEX143	813042	8192872	203	31	32		6.29	decomposed metamorphics
5G	SM2083	GHEX144	813042	8192872	203	32	33		8.48	metamorphic basement
5G	SM2084	GHEX145	813042	8192872	203	33	34		6.05	metamorphic basement
5G	SM2085	GHEX146	813042	8192872	203	34	35		7.47	metamorphic basement
6G	SM4573	GHEX147	813273	8192553	202	0	1		0.43	conglomerate
6G	SM4574	GHEX148	813273	8192553	202	1	2		2.64	conglomerate
6G	SM4575	GHEX149	813273	8192553	202	2	3		4.38	conglomerate
6G	SM4576	GHEX150	813273	8192553	202	3	4		2.91	conglomerate
6G	SM4577	GHEX151	813273	8192553	202	4	5		6.57	conglomerate
6G	SM4578	GHEX152	813273	8192553	202	5	6		4.2	conglomerate
7G	SM4579	GHEX153	813069	8192812	203	0	1		0.19	conglomerate
7G	SM4580	GHEX154	813069	8192812	203	1	2		1.21	conglomerate
7G	SM4581	GHEX155	813069	8192812	203	2	3		1.51	conglomerate
7G	SM4582	GHEX156	813069	8192812	203	3	4		2.83	conglomerate
7G	SM4583	GHEX157	813069	8192812	203	4	5		4.84	conglomerate
7G	SM4584	GHEX158	813069	8192812	203	5	6		2.77	conglomerate
8G	SM4585		812959	8192769	203	0	1			conglomerate
8G	SM4586	GHEX159	812959	8192769	203	1	2		2.22	conglomerate
8G	SM4587	GHEX160	812959	8192769	203	2	3		2.99	conglomerate
8G	SM4588	GHEX161	812959	8192769	203	3	4		4.67	conglomerate
8G	SM4589	GHEX162	812959	8192769	203	4	5		5.03	conglomerate
8G	SM4590	GHEX163	812959	8192769	203	5	6		3.96	conglomerate
8G	SM4591	GHEX164	812959	8192769	203	6	7		4.61	conglomerate