

31 OCTOBER 2023

SANDY MITCHELL ASSAYS CONFIRM HEAVY AND LIGHT RARE EARTHS MINERALISATION

HIGHLIGHTS

- Every assayed sample from surface to end of hole carried Rare Earth Elements, comprising all critical Light Rare Earths as well as Heavy Rare Earths including dysprosium (Dy), terbium (Tb), holmium (Ho), erbium (Er), thulium (Tm) ytterbium (Yb), yttrium (Y) and excluding only Lutetium. Niobium (Nb205) grades are also consistent in assays; Magnet metals account for 23% of the TREO.
- Total Rare Earth Oxides plus Yttrium and Scandium average grades for every metre assayed 503.5ppm with highest grades of 1175.4ppm;
- Light Rare Earth average grade for every metre assayed 454.3 ppm with the highest grades of 1048 ppm.
- Heavy Rare Earth plus Yttrium average grade for every meter assayed 49.2 ppm with the highest grades of 129.3 ppm.
- Magnetic Rare earth Oxides average grade for every metre assayed 109.4 ppm with the highest grades of 269.7 ppm.
- Assay grades reported are considered commercial and highly encouraging given Sandy Mitchell is a very large 147km² Placer (sand) Deposit meaning the material is amenable to panning a concentrate indicating low-cost, fast start up, straightforward beneficiation by gravity processing.
- The Rare Earths are all hosted in sand, the preferred style of Rare Earth deposit as they do not need to be extracted from clay with chemicals or rock by comminution and processing.
- Drilling covered an area of only 1.3 km² which is 1.2% of the peak radiometric reading on the lease. Stages 2 to 4 will ultimately cover the full anomaly with Stage 2 drilling underway.
- All holes show sand at surface to the bottom of the sand profile; there is no overburden or clay layers
- Assay results from this program with extensional drilling and ongoing test work will form the basis of a Maiden Mineral Resource Estimate (MRE) under the 2012 JORC code.
- Sandy Mitchell's Rare Earths Metallurgical test work advancing; Mineral Technologies confirm samples received, with first phase deliverables expected in Q4 including:
 - Ore characterisation;
 - Metallurgical characterisation and balances including REE mineral beneficiation; and
 - HMC production evaluation including suitability of beneficiation by gravity.
- Proof of mineral and concept study inclusive of REE mineral beneficial evaluation by floatation and conventional techniques (electrostatic magnetic separation). These studies could be used in a class 5 FEL1AACE engineering design study (concept).

- **Final product (Mineral) set to be evaluated for multiple potential commercial markets and build initial business case.**
- **First 100 assays have been reported, further results are pending.**

Ark Mines Limited (ASX:AHK) is pleased to provide assay results at the Company's 100%-owned Sandy Mitchell Rare Earth and Heavy Mineral Project in North Queensland.

The first batch of results (from 1m intervals) for Ark's 144-hole Stage 1 drill program have confirmed that Rare Earths mineralisation is evident in every interval of every hole assayed to-date.

Concurrently, specialist consultant Mineral Technologies is also advancing metallurgical test to characterise the REE's and Heavy Minerals identified within the sands at Sandy Mitchell (*refer ASX Announcement 22 August 2023*).

The Company expects to report further updates on the metallurgy before the end of CY2023, including ore characterisation and HMC production evaluation (including suitability of beneficiation by gravity).

Ark has also commenced studies to evaluation REE mineral beneficiation processes, including floatation and conventional techniques.

Executive Director Ben Emery said: *"These first assays are particularly pleasing and highlight the potential scale of Rare Earths mineralisation at Sandy Mitchell. Stage 2 extension drilling has now commenced, and our on-site team is hard at work on the detailed extension drill program which will ultimately provide us with REE assays across the full rare earths anomaly – an exciting prospect given the highly promising results from the Phase 1 program which covered just 1.2% of the site area where peak radiometric reading was recorded in preliminary testing.*

"We are very confident that Sandy Mitchell has the potential to develop into a large-scale Australian rare earths project that also benefits from minimal environmental impact due to its unique geological profile, where rare earths are hosted in sand and can be extracted by straightforward beneficiation by gravity processing which removes the need for pollutive extraction processes. Also, given the rare earths are hosted in sands, the grades we are reporting today are regarded as commercial as processing to deliver a saleable concentrate is much more straightforward given Mother Nature has done our crushing. The Company now has several updates forthcoming in connection with its works program which will form the basis of a Maiden Mineral Resource Estimate (MRE) at Sandy Mitchell."

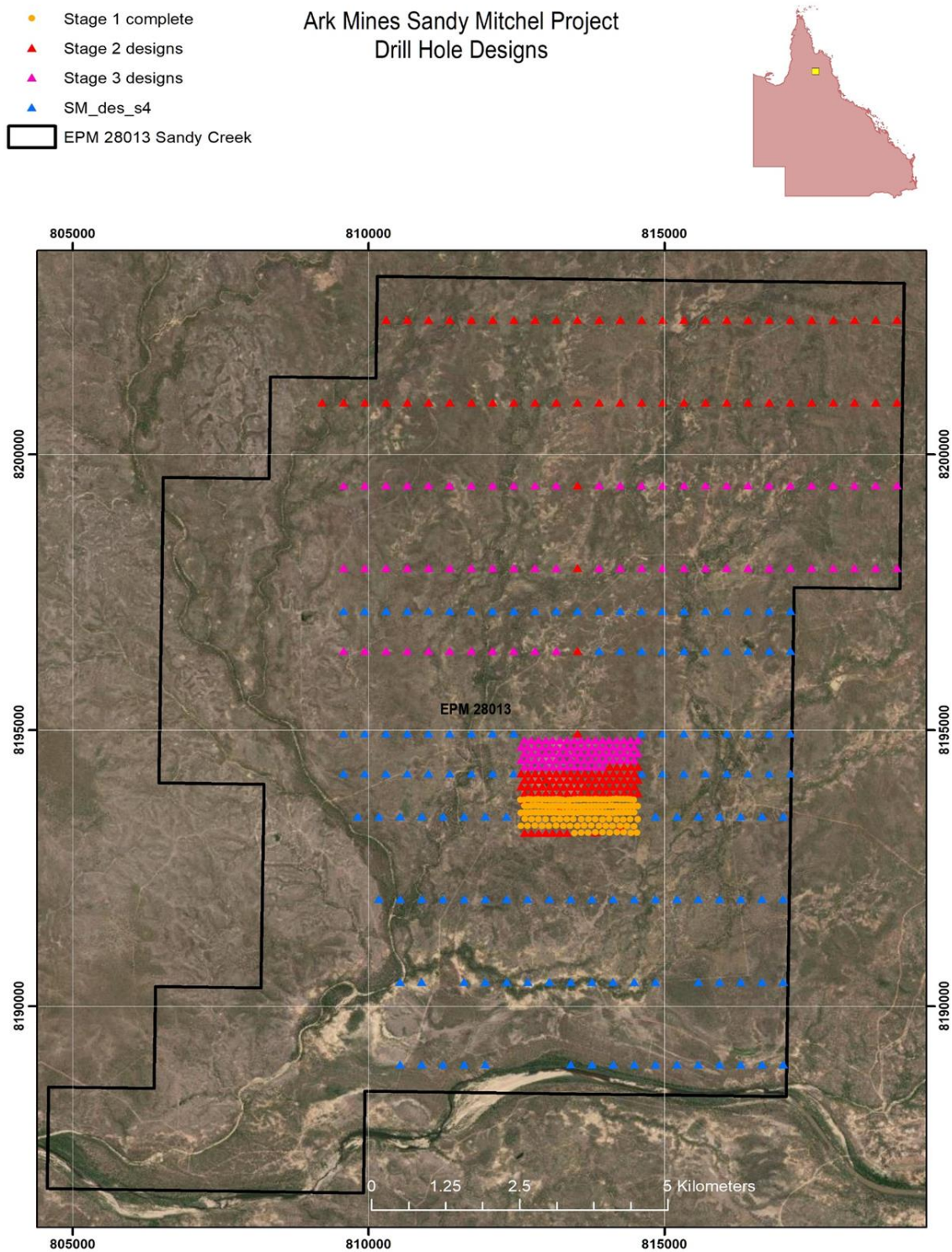


Figure 1: Drill hole locations at the Sandy Mitchell Rare Earth and Heavy Mineral project

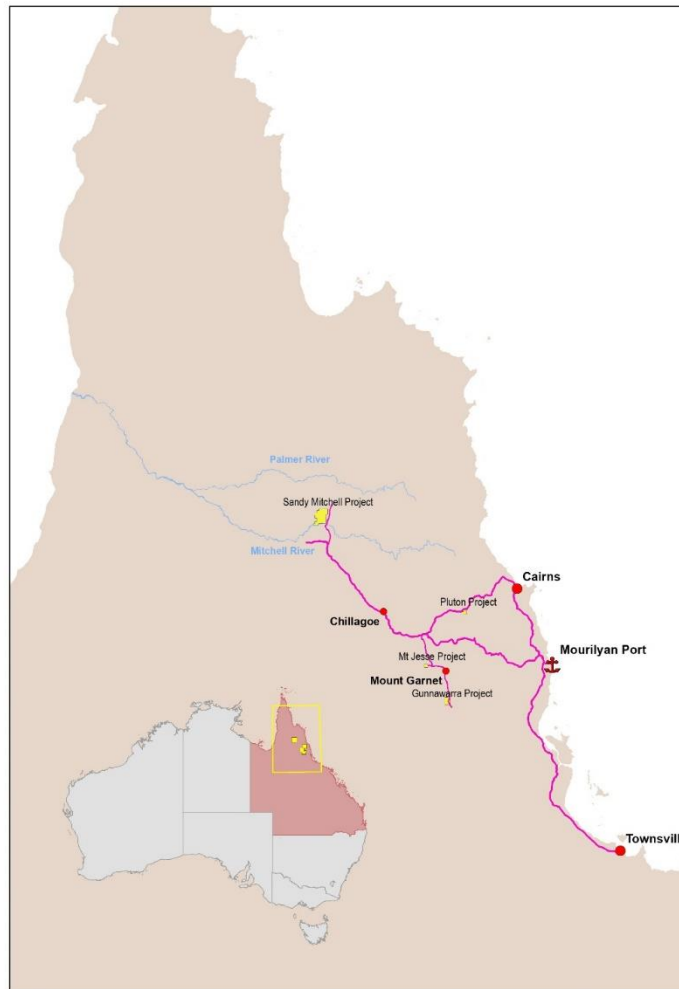


Figure 2 Sandy Mitchell Rare Earth and Heavy Mineral project location

For further information please contact:

Roger Jackson
Executive Chairman
info@arkmines.com.au

Ben Emery
Executive Director
info@arkmines.com.au

Released through: Ben Jarvis, Six Degrees Investor Relations, +61 413 150 448

Or visit our website and social media:
www.arkmines.com | www.twitter.com/arkmineslimited

About Ark Mines Limited

Ark Mines is an ASX listed Australian mineral exploration company focused on developing its 100% owned projects located in the prolific Mt Garnet and Greenvale mineral fields of Northern Queensland and includes:

The Sandy Mitchell Rare Earth and Heavy Mineral Project

- Ark is rapidly advancing the 147km² EPM 28013 'Sandy Mitchell' tenement – an advanced Rare Earths Project in North Queensland with additional 138km² of sub blocks under application
- Very high historical TREO grades including high grade pan concentrates of all critical Light Rare Earths including dysprosium (Dy), terbium (Tb), holmium (Ho), erbium (Er), thulium (Tm) ytterbium (Yb), yttrium (Y) and excluding only Lutetium
- Up to 25% of the TREO is Nd and Pr (magnet metals)
- Rare Earths at 'Sandy Mitchell' are amenable to panning a concentrate
- Planned low-cost, fast start up, straightforward beneficiation by gravity processing

Ark's exploration portfolio also consists of three high quality projects covering 200km² of tenure that are prospective for copper, iron ore, nickel-cobalt and porphyry gold:

Gunnawarra Nickel-Cobalt Project

- Comprised of 11 sub-blocks covering 36km²
- Borders Australian Mines Limited Sconi Project - most advanced Co-Ni-Sc project in Australia
- Potential synergies with local processing facilities with export DSO Nickel/Cobalt partnership options

Mt Jesse Copper-Iron Project

- Project covers a tenure area of 12.4km² located ~25km west of Mt Garnet
- Centred on a copper rich magnetite skarn associated with porphyry style mineralization
- Three exposed historic iron formations
- Potential for near term production via toll treat and potential to direct ship

Pluton Porphyry Gold Project

- Located ~90km SW of Cairns near Mareeba, QLD covering 18km²
- Prospective for gold and associated base metals (Ag, Cu, Mo)
 - Porphyry outcrop discovered during initial field inspection coincides with regional scale geophysical interpretation.

Reliance on historic data

All sample data reported in this release, as disclosed in the body of the release, in the tables in the Appendix and in the JORC table is based on data compiled by the Competent Person from other sources and quoted in their original context. These sources have been referenced in the text and the original Competent Persons statements may be found with the relevant documents. Some of this information is publicly available but has not been reported in accordance with the provisions of the JORC Code and a completed Table 1 of the JORC Code and Competent Persons statement is attached to this Release. Whilst every effort has been made to validate and check the data, these results should be considered in the context in which they appear and are subject to field verification by the Company.

Competent Persons Statement

The Information in this report that relates to exploration results, mineral resources or ore reserves is based on information compiled by Mr Roger Jackson, who is a Fellow of the Australian Institute of Mining and Metallurgy and a Fellow of the Australasian Institute of Geoscientists. Mr Jackson is a shareholder and director of the Company. Mr Jackson has sufficient experience which is relevant

to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Jackson consents to the inclusion of this information in the form and context in which it appears in this report. Mr Jackson confirms information in this market announcement is an accurate representation of the available data for the exploration areas being acquired.

Forward Looking Statements and Important Notice

This report contains forecasts, projections and forward-looking information. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions it can give no assurance that these will be achieved. Expectations and estimates and projections and information provided by the Company are not a guarantee of future performance and involve unknown risks and uncertainties, many of which are out of Vertex Minerals' control.

Actual results and developments will almost certainly differ materially from those expressed or implied. Vertex Minerals has not audited or investigated the accuracy or completeness of the information, statements and opinions contained in this announcement. To the maximum extent permitted by applicable laws, Ark Mines makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and takes no responsibility and assumes no liability for the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission from, any information, statement or opinion contained in this report and without prejudice, to the generality of the foregoing, the achievement or accuracy of any forecasts, projections or other forward looking information contained or referred to in this report.

Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.

Appendix 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"> <i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	<p>Ark Mines May to June 2023 Sandy Mitchell programme sampling techniques:</p> <ul style="list-style-type: none"> Samples are rock chips and accompanying bulk fines collected on 1m intervals by air core drill using 100mm bit. Sample was passed through an 82.5: 12.5 riffle splitter to yield an aliquot of approx. 1.5 kg collected in prenumbered calico bag, and a reject retained in a numbered plastic bag, with recoveries volumetrically estimates. Historic works by SGS (SGS Oretest Job No: S0580, 2010 for JOGMEC) shows mineralisation to have grainsize < 125µm (very fine sand) and thus the sample mass is adequate for representivity. Sample for total digest assay was sent to North Australian Laboratories for Assay. 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. These were then panned to a concentrate and the subsequent concentrates composited per hole. Pan Con composite samples were sent to IHC Mining where samples were screened to -1mm, heavy minerals were further separated by heavy liquid separation with yields weighed at each stage. The final heavy mineral concentrate was subject to Portable XRF analysis for a limited indicative assay.
Drilling techniques	<ul style="list-style-type: none"> <i>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).</i> 	<p>Ark Mines May to June 2023 Sandy Mitchell programme:</p> <ul style="list-style-type: none"> Drill was by Comacchio track mounted air core rig using 100mm air core bit. All holes were vertical and drilled to refusal or 17.5m, whichever came first.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>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.</i> 	<p>Ark Mines May to June 2023 Sandy Mitchell programme:</p> <ul style="list-style-type: none"> Recovery were assessed by volumetric estimation by the metre based on total sample weights using a digital scale. 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. No relationship between recovery and grade has yet been identified.
Logging	<ul style="list-style-type: none"> <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> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<p>Ark Mines May to June 2023 Sandy Mitchell programme:</p> <ul style="list-style-type: none"> Sample was logged by the metre for all drilling, by the site geology team for both qualitative and quantitative criteria. Drill logs for 100% of drilling are available with overall length of 1488.3m. Logging is sufficient to support resource estimation, mining and metallurgical studies.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <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> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>Ark Mines May to June 2023 Sandy Mitchell programme:</p> <ul style="list-style-type: none"> All sample passed through the drill cyclone dry. 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. Field duplicates were taken at 1:40 by 50:50 riffle splitter. Historic works by SGS (SGS Oretest Job No: S0580, 2010 for JOGMEC) shows mineralisation to have grainsize < 125µm (very fine sand) and thus the sample mass is representative. 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.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <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> <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> 	<p>Ark Mines May to June 2023 Sandy Mitchell programme:</p> <ul style="list-style-type: none"> Metre samples were sent to North Australian Laboratories (NAL) for total digest assay: Samples were weighed then kiln dried and re-weighed. 1 in 5 samples was tested for moisture content. 1 in 3 samples was tested for dry loose bulk density. Sample was then pulverization in an LM-5 to 75% passing 90 µm with assay aliquot selected by laboratory splitter. Al, Ca, Cr, Fe, Mg, P, S, and Ti were assayed by 4 acid digest with ICP-OES finish. Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Th, U, Zr, Hf, Nb, Ta, Si, Sr, Pb were assayed by peroxide fusion in nickel crucibles with ICP-MS finish. Field duplicates were taken at 1:40 by 50:50 riffle split of the assay aliquot. For total digest samples: <ul style="list-style-type: none"> Laboratory repeats were requested at no less than 1 in 40. Standard insertion was carried out by the laboratory at 1 in 12. Assay of blank quartz flushes was requested at 1 in 40. For pan concentrate samples <ul style="list-style-type: none"> Laboratory repeats were requested at no less than 1 in 40. Standard insertion was requested of the laboratory at no less than 1 in 40. Assay of blank quartz flushes was requested at 1 in 40. Total radiometric count was measured on all assay samples using a SAIC Exploranium GR-110G hand held scintillometer, hired from Terra Search Townsville, pre-calibrated. Reading times were 10 second accumulations, which was the machine maximum, with 100x10 second background accumulations taken per day, per measuring station. IHC Mining Laboratory procedures for pan concentrate composite samples was: <ul style="list-style-type: none"> Creation of duplicates by split at a rate of 1 in 24 Screen to -1mm and weigh Heavy liquid separation and weigh Pulverization of the heavy mineral fines by extended grind Portable XRF analysis of the pulp QAQC implemented is believed sufficient to establish accuracy and precision.
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to</i> 	<p>Ark Mines May to June 2023 Sandy Mitchell programme:</p> <ul style="list-style-type: none"> Significant intersections have not yet been determined. Hole SMDH 00014b is twinned by SMDH 00014bt for QAQC purposes. Further twinning is in planning. Data was entered into MS excel then verified against hard copy data, followed by import into Datamine Studio RM for validation. Primary data is stored as hard copy, electronic tables in CSV format and Datamine format. Assay data yielding elemental concentrations for rare

Criteria	JORC Code explanation	Commentary																																																									
	<p><i>assay data.</i></p>	<p>earths (REE) within the sample are converted to their stoichiometric oxides (REO) in a calculation performed using the conversion factors in the table below.</p> <ul style="list-style-type: none"> Rare Earth oxide is the industry accepted form for reporting rare earths. The following calculations have been used for reporting: <ul style="list-style-type: none"> TREO = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3+ Y2O3 CREO = Nd2O3 + Eu2O3 + Tb4O7 + Dy2O3 + Yb2O3 LREO = La2O3 + CeO2 + Pr6O11 HREO = Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3+ Y2O3 ND/Pr = Nd2O3 + Pr6O11 TREO – Ce = TREO – CeO2 %NdPr + NdPr/TREO <table border="1"> <thead> <tr> <th>Element Name</th><th>Element Oxide</th><th>Oxide Factor</th></tr> </thead> <tbody> <tr><td>Ce</td><td>CeO2</td><td>1.2284</td></tr> <tr><td>Dy</td><td>Dy2O3</td><td>1.1477</td></tr> <tr><td>Er</td><td>Er2O3</td><td>1.1435</td></tr> <tr><td>Eu</td><td>Eu2O3</td><td>1.1579</td></tr> <tr><td>Gd</td><td>Gd2O3</td><td>1.1526</td></tr> <tr><td>Ho</td><td>Ho2O3</td><td>1.1455</td></tr> <tr><td>La</td><td>La2O3</td><td>1.1728</td></tr> <tr><td>Lu</td><td>Lu2O3</td><td>1.1371</td></tr> <tr><td>Nd</td><td>Nd2O3</td><td>1.1664</td></tr> <tr><td>Pr</td><td>Pr6O11</td><td>1.2081</td></tr> <tr><td>Sc</td><td>Sc2O3</td><td>1.5338</td></tr> <tr><td>Sm</td><td>Sm2O3</td><td>1.1596</td></tr> <tr><td>Tb</td><td>Tb4O7</td><td>1.1762</td></tr> <tr><td>Th</td><td>ThO2</td><td>1.1379</td></tr> <tr><td>Tm</td><td>Tm2O3</td><td>1.1421</td></tr> <tr><td>U</td><td>U3O8</td><td>1.1793</td></tr> <tr><td>Y</td><td>Y2O3</td><td>1.2699</td></tr> <tr><td>Yb</td><td>Yb2O3</td><td>1.1387</td></tr> </tbody> </table>	Element Name	Element Oxide	Oxide Factor	Ce	CeO2	1.2284	Dy	Dy2O3	1.1477	Er	Er2O3	1.1435	Eu	Eu2O3	1.1579	Gd	Gd2O3	1.1526	Ho	Ho2O3	1.1455	La	La2O3	1.1728	Lu	Lu2O3	1.1371	Nd	Nd2O3	1.1664	Pr	Pr6O11	1.2081	Sc	Sc2O3	1.5338	Sm	Sm2O3	1.1596	Tb	Tb4O7	1.1762	Th	ThO2	1.1379	Tm	Tm2O3	1.1421	U	U3O8	1.1793	Y	Y2O3	1.2699	Yb	Yb2O3	1.1387
Element Name	Element Oxide	Oxide Factor																																																									
Ce	CeO2	1.2284																																																									
Dy	Dy2O3	1.1477																																																									
Er	Er2O3	1.1435																																																									
Eu	Eu2O3	1.1579																																																									
Gd	Gd2O3	1.1526																																																									
Ho	Ho2O3	1.1455																																																									
La	La2O3	1.1728																																																									
Lu	Lu2O3	1.1371																																																									
Nd	Nd2O3	1.1664																																																									
Pr	Pr6O11	1.2081																																																									
Sc	Sc2O3	1.5338																																																									
Sm	Sm2O3	1.1596																																																									
Tb	Tb4O7	1.1762																																																									
Th	ThO2	1.1379																																																									
Tm	Tm2O3	1.1421																																																									
U	U3O8	1.1793																																																									
Y	Y2O3	1.2699																																																									
Yb	Yb2O3	1.1387																																																									
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<p>Ark Mines May to June 2023 Sandy Mitchell programme:</p> <ul style="list-style-type: none"> An initial collar survey by hand held GPS was conducted as a failsafe, with expected accuracy of ±5000mm in x and y, and ±50000mm in z. Full survey by Twine Surveys was subsequently carried out using RTKdGPS with accuracy of ±20mm in x and y, and ±200mm in z Twine’s professional RTK survey was implemented between drill collars and used to generate a digital terrain model for high quality topographic control. All survey data is recorded in MGA 2020 zone 54 and AHD. 																																																									
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for 	<p>Ark Mines May to June 2023 Sandy Mitchell programme:</p> <ul style="list-style-type: none"> Data spacing for the northern 3 lines of drilling is 60m x 120m. Data spacing for the southern 3 lines is 120m x 120m No compositing has been applied to 1m samples for total digest assay. 																																																									

Criteria	JORC Code explanation	Commentary
	<p><i>the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Pan concentrates were composited per drill hole.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>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.</i> 	<p>Ark Mines May to June 2023 Sandy Mitchell programme:</p> <ul style="list-style-type: none"> • Deposit type is fluvial channel placer with channels believed oriented north to north-east and meso scale structure oriented sub-horizontal arcuate. The applied vertical sampling is the optimal orientation for the deposit type. • No bias by orientation or spatial relationships has been identified.
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<p>Ark Mines May to June 2023 Sandy Mitchell programme:</p> <ul style="list-style-type: none"> • Samples were collected after logging and transported at the end of each day to the company locked storage in Chillagoe. • Samples were boxed in closed pumpkin crates, wrapped in plastic for shipping by courier to the laboratory in Pine Creek, NT.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<p>Ark Mines May to June 2023 Sandy Mitchell programme:</p> <ul style="list-style-type: none"> • Full audit of sampling techniques and data available to date was carried out by geological consultants, Empirical Earth Science. • EES notes that the composited concentrate samples results in assay representing diluted material with no internal separation possible. • EES noted that the hand panning process of such fine material is prone to heavy mineral loss, with the possibility that concentrates underrepresent the total heavy mineral fraction. • ESS noted that the pXRF technique used in initial concentrate assays is not suited to yield full REE data, but that the results can inform approximate proxy calculations for the full REE suite. • EES noted that none of these factors apply to the representative metre samples and total digest assays, which meet best practice.

Appendix B: SM Stage 1 partial assay return

					MEAN	503.5	478.5	454.3	429.3	49.2	13.1	124	109.4
					MAX	1175.4	1143.4	1080.7	1048.7	129.3	37.9	279.1	269.7
					MIN	38.8	26.8	36.1	24.1	2.7	0.6	7.2	5.5
BHID	FROM	TO	SID	Recov%	CRCT_cps	TREO+Y+Sc_ppm	TREO+Y_ppm	LREO+Sc_ppm	LREO_ppm	HREO+Y_ppm	HREO_ppm	CREO_ppm	MagREO_ppm
SMDH 00013	0	1	EXP 524000	25	3								
SMDH 00013	3	4	EXP 524003	70	2	478.9	440.9	451.3	413.3	27.6	7.8	100	100.2
SMDH 00013	9	10	EXP 524009	70	0	826.3	780.3	774	728	52.3	15.9	179	179.4
SMDH 00012b	0	1	EXP 524011	40	7	625.1	608.1	568	551	57.1	16.5	150.1	137.6
SMDH 00012b	1	2	EXP 524012	50	17	761.5	738.5	694.7	671.7	66.8	20.2	186	172.6
SMDH 00012b	4	5	EXP 524015	70	0	463.7	437.7	428.9	402.9	34.8	9.3	107.4	101.2
SMDH 00012b	5	6	EXP 524016	70	0	460.4	432.4	418.2	390.2	42.2	12.5	111.3	101.5
SMDH 00012b	6	7	EXP 524017	80	9	381.8	361.8	348.2	328.2	33.6	9.9	90.4	83.4
SMDH 00012b	8	9	EXP 524019	80	3	558.2	527.2	515	484	43.2	12.5	129.6	123.9
SMDH 00012b	9	10	EXP 524020	90	3	382.1	362.1	336.2	316.2	45.9	9.3	102.3	81.3
SMDH 00012b	10	11	EXP 524021	80	4	405.1	384.1	369.2	348.2	35.9	8.2	99.8	89.7
SMDH 00012b	11	12	EXP 524022	75	5	410	382	368.4	340.4	41.6	8.5	101.5	85.4
SMDH 00012b	13	14	EXP 524024	80	2	480.4	457.4	436.1	413.1	44.3	9.6	117.9	103.9
SMDH 00012	0	1	EXP 524025	45	6	688.8	673.8	617.1	602.1	71.7	14.6	177.8	152.2
SMDH 00012	1	2	EXP 524026	60	2	466.5	440.5	420.4	394.4	46.1	9	112.3	94.7
SMDH 00012	2	3	EXP 524027	65	2	242.5	224.5	221.8	203.8	20.7	3.8	60.9	54.1
SMDH 00012	3	4	EXP 524028	70	2	408.2	388.2	362.3	342.3	45.9	8.7	106.9	86.5
SMDH 00012	4	5	EXP 524029	75	6	515.5	487.5	483	455	32.5	9	111	109.7
SMDH 00011b	2	3	EXP 524037	85	4	488.1	462.1	453.1	427.1	35	10.7	112.1	110.4
SMDH 00011b	4	5	EXP 524039	90	13	186.2	163.2	177	154	9.2	1.1	46.6	47.6
SMDH 00011b	7	8	EXP 524042	60	5	313.5	305.5	286.9	278.9	26.6	8.3	74.3	69.6
SMDH 00011	1	2	EXP 524044	60	5	490.9	467.9	445.7	422.7	45.2	11.8	115.2	102.2
SMDH 00010b	1	2	EXP 524049	50	2	618.9	567.9	489.6	438.6	129.3	37.9	188.1	118.1
SMDH 00010b	4	5	EXP 524052	85	9	458.9	432.9	422.2	396.2	36.7	11.3	104.4	98.4
SMDH 00010	0	1	EXP 524055	50	6	1102	1081	1004.7	983.7	97.3	29.5	263.6	247
SMDH 00010	1	2	EXP 524056	55	0	333	308	304.1	279.1	28.9	8.5	79.8	74
SMDH 00010	2	3	EXP 524057	60	5	476.3	462.3	436.1	422.1	40.2	12	118.4	112.4
SMDH 00009b	0	1	EXP 524063	55	12	1175.4	1143.4	1080.7	1048.7	94.7	28.7	279.1	269.7
SMDH 00009b	1	2	EXP 524064	60	7	874.9	845.9	827.5	798.5	47.4	14.1	195	203.3
SMDH 00009b	7	8	EXP 524070	75	11	685.3	660.3	632.7	607.7	52.6	15.3	161.9	154.7
SMDH 00009	0	1	EXP 524071	45	3	538.4	518.4	477.1	457.1	61.3	18.1	139.3	119.6
SMDH 00008b	0	1	EXP 524084	50	12	474.2	451.2	425.5	402.5	48.7	14.9	119.9	107.3
SMDH 00008	1	2	EXP 524096	65	13	472.6	431.6	413.7	372.7	58.9	17.4	118.1	95.8
SMDH 00007b	0	1	EXP 524102	45	19	771.9	745.9	679.2	653.2	92.7	19.9	203.6	164.6
SMDH 00007b	1	2	EXP 524103	5	3	448.5	416.5	371.2	339.2	77.3	15.6	135.2	89.4
SMDH 00007	1	2	EXP 524110	50	4	376	348	329.6	301.6	46.4	8.7	100.3	77.2
SMDH 00007	2	3	EXP 524111	70	7	445.6	422.6	394.6	371.6	51	10.6	119.8	98
SMDH 00006b	1	2	EXP 524121	55	27	779.4	753.4	664	638	115.4	24.1	225.6	166.7
SMDH 00006b	4	5	EXP 524124	75	17	504.9	481.9	444.5	421.5	60.4	11.3	135.4	107.6
SMDH 00006b	8	9	EXP 524128	70	19	832.3	804.3	727.1	699.1	105.2	21.3	234.9	185.7
SMDH 00006b	11	11.5	EXP 524131	45	13	902.6	847.6	795.8	740.8	106.8	22.4	238	191.4
SMDH 00005b	0	1	EXP 524142	20	20	668.6	657.6	616.6	605.6	52	16.7	139.9	133.2
SMDH 00005b	1	2	EXP 524143	25	24	575.8	543.8	538.6	506.6	37.2	11.7	124.6	125
SMDH 00005	1	2	EXP 524149	40	0	437.6	400.6	412.8	375.8	24.8	6.3	90.6	90.7
SMDH 00002b	7	7.5	EXP 524199	50	0	167.3	152.3	158.7	143.7	8.6	1.6	36.7	36.3
SMDH 00001	0	1	EXP 524224	40	13	444.1	407.1	406.3	369.3	37.8	10.6	103.4	94.7
SMDH 00205	0	1	EXP 524238	45	18	534.2	513.2	487.9	466.9	46.3	15.6	126.5	119.9
SMDH 00205	4	5	EXP 524242	40	0	38.8	26.8	36.1	24.1	2.7		7.2	5.5
SMDH 00206	0	1	EXP 524264	40	7	425.2	397.2	385.2	357.2	40	11.4	105.8	96.2

ARK MINES

LTD.

BHID	FROM	TO	SID	Recov%	CRCT_cps	TREO+Y+Sc_ppm	TREO+Y_ppm	LREO+Sc_ppm	LREO_ppm	HREO+Y_ppm	HREO_ppm	CREO_ppm	MagREO_ppm
SMDH 00207	10	10.5	EXP 524295	40	3	197.9	182.9	187.3	172.3	10.6	2.7	42.9	42.1
SMDH 00211	0	1	EXP 524374	20	21	687	659	617.8	589.8	69.2	19.4	168	148
SMDH 00213b	0	1	EXP 524430	50	11	651.7	613.7	578.3	540.3	73.4	22	164.5	139.8
SMDH 00213b	10	11	EXP 524440	20	5	521.7	496.7	464.8	439.8	56.9	16.1	137	118
SMDH 00216	4	5	EXP 524479	40	1	349	312	320.9	283.9	28.1	8.4	78.2	72.6
SMDH 00216b	0	1	EXP 524489	30	4	372.8	347.8	344.5	319.5	28.3	8.5	85.9	81
SMDH 00217	0	1	EXP 524504	25	3	331.4	310.4	305.3	284.3	26.1	7.9	78.2	73
SMDH 00217	2	3	EXP 524506	20	0	444.1	413.1	400.4	369.4	43.7	12.2	104.3	90.8
SMDH 00217b	3	4	EXP 524516	25	2	219.3	204.3	203	188	16.3	3.7	51.7	47.5
SMDH 00218	6	7	EXP 524527	90	4	513.9	488.9	453.4	428.4	60.5	18.5	127.6	106.7
SMDH 00218b	0	1	EXP 524539	30	4	187.3	170.3	170.6	153.6	16.7	3.9	44.4	38.5
SMDH 00219	0	1	EXP 524548	40	9	331.9	317.9	309.7	295.7	22.2	5.4	75.2	70.9
SMDH 00220	1	2	EXP 524566	45	4	217.9	145.9	165.8	93.8	52.1	14.5	68.6	33.3
SMDH 00220	2	3	EXP 524567	90	0	242.9	133.9	192.1	83.1	50.8	13.8	64.3	30.1
SMDH 00015	0	1	EXP 524633	25	8	404.1	384.1	367.8	347.8	36.3	10	96.5	88
SMDH 00014	1	2	EXP 524669	80	8	325.4	307.4	308	290	17.4	5.2	70	72.5
SMDH 00033b	1	2	EXP 524697	30	4	245	230	231.3	216.3	13.7	3.8	51.8	51.8
SMDH 00032	4	5	EXP 524731	95	7	296.7	287.7	281.3	272.3	15.4	4	65.4	66.3
SMDH 00029b	2	3	EXP 524784	50	5	335.9	318.9	308.6	291.6	27.3	8	79	74.8
SMDH 00029b	3	4	EXP 524785	40	5	548.1	530.1	507.6	489.6	40.5	12.4	129	126.9
SMDH 00028b	0	1	EXP 524795	30	14	526.8	509.8	477	460	49.8	15	127.3	116.3
SMDH 00028b	8	8.5	EXP 524803	20	4	121.7	106.7	90.1	75.1	31.6	8.5	44.1	23.4
SMDH 00027b	1	2	EXP 524812	20	1	347.7	330.7	310.8	293.8	36.9	10.2	88.5	76.2
SMDH 00029	0	1	EXP 524817	20	4	636.8	622.8	543.2	529.2	93.6	18.7	188.3	140.9
SMDH 00026b	11	11.5	EXP 524849	50	9	476.1	456.1	423	403	53.1	11.2	123.2	102.2
SMDH 00023b	1	2	EXP 524907	35	0	454.6	436.6	414.8	396.8	39.8	8.3	113.4	103.1
SMDH 00023b	6	7	EXP 524912	80	3	577	557	540.4	520.4	36.6	7.3	139.8	137.7
SMDH 00022b	0	1	EXP 524931	20	5	812.6	795.6	739.5	722.5	73.1	15.2	204.5	185.8
SMDH 00022	0	1	EXP 524941	15	3	758.3	727.3	658.7	627.7	99.6	20.7	209.4	162.9
SMDH 00022	1	2	EXP 524942	25	3	709.6	669.6	608.6	568.6	101	21	194.4	143.3
SMDH 00021	0	1	EXP 524958	20	2	551.8	526.8	490.8	465.8	61	12.9	139.1	114
SMDH 00020	3	4	EXP 524975	20	0	88.6	83.6	82.8	77.8	5.8	0.7	21.1	17.7
SMDH 00019b	0	1	EXP 524980	5	0	543	534	509.1	500.1	33.9	10	109.7	108.6
SMDH 00019b	10	11	EXP 524990	98	0	245.1	207.1	223.5	185.5	21.6	5.6	52.8	45.9
SMDH 00019	0	1	EXP 524994	30	9	499.9	488.9	460.4	449.4	39.5	11.8	109.4	102.5
SMDH 00227	0	1	EXP 525078	10	17	731.5	725.5	679.7	673.7	51.8	15.4	174.2	173.1
SMDH 00228	0	1	EXP 525088	18	12	1031.6	1011.6	953.8	933.8	77.8	24.7	247.4	239.3
SMDH 00235	8	8.5	EXP 525196	50	4	279.7	241.7	216.5	178.5	63.2	21.5	79.9	46.7
SMDH 00252	5	6	EXP 525255	20	3	167.1	161.1	145.4	139.4	21.7	5.1	47.4	36
SMDH 00250	0	1	EXP 525271	20	9	389.8	378.8	335.9	324.9	53.9	15.9	105.9	83.9
SMDH 00248	2	3	EXP 525290	25	15	642.1	619.1	555.7	532.7	86.4	25.4	168.4	134.3
SMDH 00244	1	2	EXP 525337	25	16	720.7	685.7	632.3	597.3	88.4	26.2	182.8	152.1
SMDH 00243	4	5	EXP 525354	15	20	943.6	895.6	851.1	803.1	92.5	28	232.1	210.5
SMDH 00241	0	1	EXP 525365	25	25	937.1	920.1	862	845	75.1	22.9	217.2	210.6
SMDH 00256	3	4	EXP 525400	20	5	570.1	538.1	521.5	489.5	48.6	15.1	137.2	129.2
SMDH 00257	0	1	EXP 525410	15	14	691.6	673.6	631.4	613.4	60.2	18.2	167.5	158.2
SMDH 00257	1	2	EXP 525411	20	18	1000.3	969.3	914.2	883.2	86.1	26.7	239.5	228.7
SMDH 00257	3	4	EXP 525413	20	4	79.6	71.6	74.8	66.8	4.8	0.6	18.8	16.2
SMDH 00260	0	1	EXP 525443	15	19	552.5	532.5	508	488	44.5	12	135.4	126.8
SMDH 00264	11	11.5	EXP 525493	50	6	352.5	341.5	323.4	312.4	29.1	7.6	84.5	78.7
SMDH 00265	1	2	EXP 525495	15	6	386.4	352.4	344.1	310.1	42.3	10.8	98.6	83.3

ARK MINES

LTD.

					MEAN	25	36.2	94.2	207.4	23.3	79.6	14.4	1.7	8.9	1.2
					MAX	109	91.4	235.1	502.3	58.6	195.4	35	3.7	20.6	2.6
					MIN	5	2.7	6.9	9.8	1	4.5	1.2	0.9	0.7	0.6
BHID	FROM	TO	SID	Recov%	CRCT_cps	Sc ₂ O ₃ _ppm	Y ₂ O ₃ _ppm	La ₂ O ₃ _ppm	CeO ₂ _ppm	Pr ₂ O ₃ _ppm	Nd ₂ O ₃ _ppm	Sm ₂ O ₃ _ppm	Eu ₂ O ₃ _ppm	Gd ₂ O ₃ _ppm	Tb ₂ O ₃ _ppm
SMDH 00013	0	1	EXP 524000	25	3										
SMDH 00013	3	4	EXP 524003	70	2	38	19.8	96.1	199.1	21.9	72.6	13.5	1.9	8.2	1.1
SMDH 00013	9	10	EXP 524009	70	0	46	36.4	164.8	354.3	38.7	130.2	23.5	1.9	14.6	1.9
SMDH 00012b	0	1	EXP 524011	40	7	17	40.6	122.8	266.9	29.8	99.4	19	1.7	11.4	1.4
SMDH 00012b	1	2	EXP 524012	50	17	23	46.6	149.1	322	35.3	127	22.6	2.1	13.6	1.8
SMDH 00012b	4	5	EXP 524015	70	0	26	25.5	90.7	190.6	21.6	73.8	14.8	2.3	9.1	1.1
SMDH 00012b	5	6	EXP 524016	70	0	28	29.7	84.8	185.9	21.6	73.2	14.1	1.7	8.9	1.2
SMDH 00012b	6	7	EXP 524017	80	9	20	23.7	72	157	18.1	60.3	11.9	1.4	7.5	0.9
SMDH 00012b	8	9	EXP 524019	80	3	31	30.7	105	229.5	27.1	89.2	19	2.1	12.1	1.4
SMDH 00012b	9	10	EXP 524020	90	3	20	36.6	66.1	152.4	17.2	59	11.9	1.6	8	0.9
SMDH 00012b	10	11	EXP 524021	80	4	21	27.7	74.4	165.5	19.3	65.7	13.1	1.7	8.5	0.9
SMDH 00012b	11	12	EXP 524022	75	5	28	33.1	72.8	165.1	18.4	61.9	12.5	1.4	8.3	0.9
SMDH 00012b	13	14	EXP 524024	80	2	23	34.7	90.1	198.6	22.4	75.9	14.8	1.7	9.6	1.1
SMDH 00012	0	1	EXP 524025	45	6	15	57.1	131.6	292	32.9	110.9	19.9	1.4	13.4	1.5
SMDH 00012	1	2	EXP 524026	60	2	26	37.1	85.1	198.1	21	68.9	12.3	1.5	7.5	0.8
SMDH 00012	2	3	EXP 524027	65	2	18	16.9	46.3	93.4	11.1	40.7	7	1	4.3	
SMDH 00012	3	4	EXP 524028	70	2	20	37.2	75.1	166.2	18	63.1	11.6	1.2	7.1	0.9
SMDH 00012	4	5	EXP 524029	75	6	28	23.5	101.3	225.5	23.7	81.6	13.7	1.5	7.7	0.8
SMDH 00011b	2	3	EXP 524037	85	4	26	24.3	93.5	205.6	23.8	81.9	13.7	1.2	7.4	0.8
SMDH 00011b	4	5	EXP 524039	90	13	23	8.1	31.9	67.6	10.6	35.9	4.1	1.5	2.4	
SMDH 00011b	7	8	EXP 524042	60	5	8	18.3	61.7	134.6	14.9	50.7	9.6	1.3	6.1	0.7
SMDH 00011	1	2	EXP 524044	60	5	23	33.4	96.3	207.4	22.1	74.2	13.2	1.7	7.8	1.1
SMDH 00010b	1	2	EXP 524049	50	2	51	91.4	95.1	210.5	23.3	83.2	14.6	1.9	10	1.5
SMDH 00010b	4	5	EXP 524052	85	9	26	25.4	88.4	192.6	21	72.6	12.4	1.6	7.6	0.8
SMDH 00010	0	1	EXP 524055	50	6	21	67.8	207.5	485.2	52.8	181	35	1.6	20.6	2.4
SMDH 00010	1	2	EXP 524056	55	0	25	20.4	61	130.6	15.6	54.1	10.6	1	6.2	0.7
SMDH 00010	2	3	EXP 524057	60	5	14	28.2	92.1	197.4	23.7	82.3	15.9	1.5	9.2	1.1
SMDH 00009b	0	1	EXP 524063	55	12	32	66	235.1	502.3	58.6	195.4	34.7	2	20.6	2.6
SMDH 00009b	1	2	EXP 524064	60	7	29	33.3	185.4	378.8	43.7	150.2	24.4	2.1	13.9	1.6
SMDH 00009b	7	8	EXP 524070	75	11	25	37.3	140.1	287.1	32.5	113.7	19.9	2.4	12	1.4
SMDH 00009	0	1	EXP 524071	45	3	20	43.2	101.3	218.7	24.9	86.3	15	1.4	9.5	1.3
SMDH 00008b	0	1	EXP 524084	50	12	23	33.8	90.1	189.4	22.5	77.3	13.5	1.3	8.4	1.1
SMDH 00008	1	2	EXP 524096	65	13	41	41.5	86.1	177	20.5	68	12.1	1.3	7.7	0.9
SMDH 00007b	0	1	EXP 524102	45	19	26	72.8	142.6	318.8	35.5	119.2	21.6	1.7	13.8	1.6
SMDH 00007b	1	2	EXP 524103	5	3	32	61.7	72.7	163.3	17.9	64.4	11.4	2	7.5	1.1
SMDH 00007	1	2	EXP 524110	50	4	28	37.7	67.2	143.2	16.6	56.1	10.2	2	6.3	0.8
SMDH 00007	2	3	EXP 524111	70	7	23	40.4	81.2	176.3	20.5	72.1	12.2	1.9	7.4	0.8
SMDH 00006b	1	2	EXP 524121	55	27	26	91.3	141.8	303.8	36.1	118.7	20.8	3.7	13.1	1.9
SMDH 00006b	4	5	EXP 524124	75	17	23	49.1	91.6	206.2	22.7	78.6	12.6	1.4	8.4	0.9
SMDH 00006b	8	9	EXP 524128	70	19	28	83.9	151.5	334.7	37.7	137.1	21.5	3	13.6	1.5
SMDH 00006b	11	11.5	EXP 524131	45	13	55	84.4	161.1	359.8	40.6	139.6	23.2	2.8	13.7	1.6
SMDH 00005b	0	1	EXP 524142	20	20	11	35.3	111.4	338.3	29.8	95.4	17.7	1.2	11.8	1.3
SMDH 00005b	1	2	EXP 524143	25	24	32	25.5	106.5	253.4	27.5	91.3	16	1.6	10.3	1.2
SMDH 00005	1	2	EXP 524149	40	0	37	18.5	84.6	184.1	20.1	66.5	11.5	1.5	7.5	0.7
SMDH 00002b	7	7.5	EXP 524199	50	0	15	7	33.1	66.8	8.1	27.2	4.5	1.5	2.5	
SMDH 00001	0	1	EXP 524224	40	13	37	27.2	85.3	171.9	19.7	69.5	13.5	1.2	8.2	0.9
SMDH 00205	0	1	EXP 524238	45	18	21	30.7	99.3	226.3	25.6	87.1	17	1.5	10.1	1.2
SMDH 00205	4	5	EXP 524242	40	0	12	2.7	6.9	9.8	1	4.5	1.2		0.7	
SMDH 00206	0	1	EXP 524264	40	7	28	28.6	76.8	167.9	20.2	70.2	13.2	1.2	7.7	0.9

ARK MINES

LTD.

BHID	FROM	TO	SID	Recov%	CRCT_cps	Sc ₂ O ₃ _ppm	Y ₂ O ₃ _ppm	La ₂ O ₃ _ppm	CeO ₂ _ppm	Pr ₂ O ₃ _ppm	Nd ₂ O ₃ _ppm	Sm ₂ O ₃ _ppm	Eu ₂ O ₃ _ppm	Gd ₂ O ₃ _ppm	Tb ₂ O ₃ _ppm
SMDH 00207	10	10.5	EXP 524295	40	3	15	7.9	37.5	83.4	9.1	31.6	5.6	2	3.1	
SMDH 00211	0	1	EXP 524374	20	21	28	49.8	128.2	291.9	31.2	107.3	18.4	1.4	11.4	1.5
SMDH 00213b	0	1	EXP 524430	50	11	38	51.4	113.2	267.4	28.3	101.2	17.2	1.6	11.4	1.5
SMDH 00213b	10	11	EXP 524440	20	5	25	40.8	93.4	211.3	23.7	86.4	14.5	1.9	8.6	1.2
SMDH 00216	4	5	EXP 524479	40	1	37	19.7	62.6	136.6	15.1	52.6	9.5	1	6.5	0.8
SMDH 00216b	0	1	EXP 524489	30	4	25	19.8	69.1	155.3	16.3	60.1	11	1.4	6.3	0.8
SMDH 00217	0	1	EXP 524504	25	3	21	18.2	62.6	136.5	14.7	54	9.3	1.7	5.5	0.7
SMDH 00217	2	3	EXP 524506	20	0	31	31.5	81.4	182	19.6	64.5	12.5	1.6	7.8	1.1
SMDH 00217b	3	4	EXP 524516	25	2	15	12.6	40.3	91.3	10	34.5	6.4	1.6	3.9	0.6
SMDH 00218	6	7	EXP 524527	90	4	25	42	96.8	208.6	22.5	75.9	13.7	1.4	9.5	1.3
SMDH 00218b	0	1	EXP 524539	30	4	17	12.8	34.6	71.9	8.5	27.8	5.7	1.6	3.5	
SMDH 00219	0	1	EXP 524548	40	9	14	16.8	65.4	145	14.6	52.6	10.1	2.1	5.9	0.7
SMDH 00220	1	2	EXP 524566	45	4	72	37.6	15	38.8	5.1	21.1	5.8	2.8	5.2	0.9
SMDH 00220	2	3	EXP 524567	90	0	109	37	13.5	33.8	4.5	18.9	5.6	1.7	5.1	0.8
SMDH 00015	0	1	EXP 524633	25	8	20	26.3	75.6	169.2	19.1	63.7	11.4	1.3	7.5	0.8
SMDH 00014	1	2	EXP 524669	80	8	18	12.2	67.2	136.6	16.1	53.1	9.5	1.4	6.1	0.7
SMDH 00033b	1	2	EXP 524697	30	4	15	9.9	50.9	103.7	11.5	38.5	6.4	1.6	3.7	
SMDH 00032	4	5	EXP 524731	95	7	9	11.4	64.7	128.6	14.6	48.6	8.3	2.3	5.2	0.6
SMDH 00029b	2	3	EXP 524784	50	5	17	19.3	65.7	137.5	16.1	53.9	10.8	1	6.6	0.8
SMDH 00029b	3	4	EXP 524785	40	5	18	28.1	108.8	230.7	27.3	92.6	18.2	1.3	10.7	1.3
SMDH 00028b	0	1	EXP 524795	30	14	17	34.8	104.7	218.8	25.3	83.2	16.1	1.5	10.4	1.3
SMDH 00028b	8	8.5	EXP 524803	20	4	15	23.1	15.1	32.7	4.1	14.8	3.8	1.7	2.9	0.6
SMDH 00027b	1	2	EXP 524812	20	1	17	26.7	65.9	139.1	16.7	54.1	9.5	2.3	6.2	0.8
SMDH 00029	0	1	EXP 524817	20	4	14	74.9	116.5	249.9	29.2	102.1	18.4	1.7	11.4	1.5
SMDH 00026b	11	11.5	EXP 524849	50	9	20	41.9	90.9	191.6	22.1	74.2	14	1.2	9	1.1
SMDH 00023b	1	2	EXP 524907	35	0	18	31.5	88.9	187.7	22.4	76	12.8	1.2	7.8	0.9
SMDH 00023b	6	7	EXP 524912	80	3	20	29.3	120	239.9	28.8	103.6	16.8	1.6	9.7	1.1
SMDH 00022b	0	1	EXP 524931	20	5	17	57.9	154.1	353.9	40.1	137.5	23.1	0.9	12.9	1.5
SMDH 00022	0	1	EXP 524941	15	3	31	78.9	134.3	306.9	33.8	119.3	19.9	1.4	12.1	1.5
SMDH 00022	1	2	EXP 524942	25	3	40	80	121.9	282.2	30.2	104	18.2	1.3	10.8	1.4
SMDH 00021	0	1	EXP 524958	20	2	25	48.1	96.9	236.8	24.2	83.2	14.6	1.2	8.9	1.2
SMDH 00020	3	4	EXP 524975	20	0	5	5.1	19.2	35.7	3.9	13.1	2.3	2.2	1.4	
SMDH 00019b	0	1	EXP 524980	5	0	9	23.9	90.3	282.5	23.7	79.5	14.6	0.9	8.6	0.9
SMDH 00019b	10	11	EXP 524990	98	0	38	16	42.1	88.7	10.3	33.1	6.1	1.2	4	
SMDH 00019	0	1	EXP 524994	30	9	11	27.7	80.6	247.6	22.1	73.9	14.7	1.3	9.2	1.3
SMDH 00227	0	1	EXP 525078	10	17	6	36.4	147.5	325.5	37	127.4	21.6	1.7	13	1.5
SMDH 00228	0	1	EXP 525088	18	12	20	53.1	232.4	428.1	47.5	180.8	27.3	2.5	15.2	1.8
SMDH 00235	8	8.5	EXP 525196	50	4	38	41.7	41.2	84.8	9.7	31.5	6.1	1.2	4	0.7
SMDH 00252	5	6	EXP 525255	20	3	6	16.6	33.2	62.3	7.4	25.1	5.5	2.2	3.7	0.6
SMDH 00250	0	1	EXP 525271	20	9	11	38	74.4	152.1	17.5	59.4	12.2	1.5	7.8	1.1
SMDH 00248	2	3	EXP 525290	25	15	23	61	119.6	257.6	28.9	94.7	18.1	2	11.8	1.5
SMDH 00244	1	2	EXP 525337	25	16	35	62.2	128.7	290.9	33.7	106.4	21.3	2.2	14.1	1.9
SMDH 00243	4	5	EXP 525354	15	20	48	64.5	172.6	389.4	44.8	153.8	25.6	1.9	15	1.8
SMDH 00241	0	1	EXP 525365	25	25	17	52.2	183.1	415.3	47.2	151.4	28.8	1.6	17.6	2.1
SMDH 00256	3	4	EXP 525400	20	5	32	33.5	102.4	231.7	26.8	94.7	20.2	1.3	12.4	1.3
SMDH 00257	0	1	EXP 525410	15	14	18	42	134.8	294.6	34.2	114.8	20.8	1.5	12.7	1.5
SMDH 00257	1	2	EXP 525411	20	18	31	59.4	193.9	421.2	50.7	165	31.9	2.1	18.4	2.2
SMDH 00257	3	4	EXP 525413	20	4	8	4.2	16.5	29.5	3.5	12.1	2.1	1.9	1.2	
SMDH 00260	0	1	EXP 525443	15	19	20	32.5	108.5	233.2	25.5	94.2	15.5	1.6	9.5	1.2
SMDH 00264	11	11.5	EXP 525493	50	6	11	21.5	70.5	148	17.4	56.7	11.4	1.7	6.7	0.8
SMDH 00265	1	2	EXP 525495	15	6	34	31.5	69.5	144.8	17.6	60.1	10.1	1.4	6.6	0.9

ARK MINES

LTD.

					MEAN	5.6	1.2	2.5	0.7	2.9	0.7	39.5	3.8	21.6	16.3
					MAX	13.1	2.5	6.7	1.1	15	1	107.5	9.7	54.1	71
					MIN	0.6	0.6	0.6	0.6	0.7	0.6	1.1	0.6	8.6	3
BHID	FROM	TO	SID	Recov%	CRCT_cps	Dy ₂ O ₃ _ppm	Ho ₂ O ₃ _ppm	Er ₂ O ₃ _ppm	Tm ₂ O ₃ _ppm	Yb ₂ O ₃ _ppm	Lu ₂ O ₃ _ppm	ThO ₂ _ppm	U ₃ O ₈ _ppm	Nb ₂ O ₅ _ppm	Sc_ppm
SMDH 00013	0	1	EXP 524000	25	3										
SMDH 00013	3	4	EXP 524003	70	2	4.6	0.7	1.4				39.5	5.8	54.1	25
SMDH 00013	9	10	EXP 524009	70	0	8.6	1.1	2.3		2		63.7	8.3	50.4	30
SMDH 00012b	0	1	EXP 524011	40	7	7	1.3	3.1		3.1	0.6	53.1	9.2	28.6	11
SMDH 00012b	1	2	EXP 524012	50	17	8.5	1.5	3.7	0.6	3.5	0.6	62.1	9.7	31	15
SMDH 00012b	4	5	EXP 524015	70	0	4.7	0.8	1.8		0.9		37	7.1	42.6	17
SMDH 00012b	5	6	EXP 524016	70	0	5.5	1	2.4		2.4		37.2	5.9	33.3	18
SMDH 00012b	6	7	EXP 524017	80	9	4.1	0.8	1.9		2.2		33.3	3.9	27.2	13
SMDH 00012b	8	9	EXP 524019	80	3	6.2	1	2.4		1.5		44.7	4.8	40.9	20
SMDH 00012b	9	10	EXP 524020	90	3	4.2	0.8	1.7		1.7		27	2.7	24.7	13
SMDH 00012b	10	11	EXP 524021	80	4	3.8	0.7	1.3		1.5		31.5	2.7	24.7	14
SMDH 00012b	11	12	EXP 524022	75	5	4.2	0.7	1.6		1.1		31.6	3.9	25.6	18
SMDH 00012b	13	14	EXP 524024	80	2	4.5	0.8	1.7		1.5		35.7	3.1	24	15
SMDH 00012	0	1	EXP 524025	45	6	6.9	1.3	2.7		2.2		54.2	5.2	22.3	10
SMDH 00012	1	2	EXP 524026	60	2	4	0.8	1.7		1.7		36	2.9	19.5	17
SMDH 00012	2	3	EXP 524027	65	2	2.3		0.7		0.8		15.6	1.5	19.7	12
SMDH 00012	3	4	EXP 524028	70	2	4.5	0.8	1.7		0.8		29.2	3.4	23.5	13
SMDH 00012	4	5	EXP 524029	75	6	3.6	0.7	1.7		2.2		40.4	3.5	19.2	18
SMDH 00011b	2	3	EXP 524037	85	4	3.9	0.8	1.9		3.3		41.9	3.8	18.7	17
SMDH 00011b	4	5	EXP 524039	90	13	1.1						11.3	3.2	10	15
SMDH 00011b	7	8	EXP 524042	60	5	3.3	0.6	1.1		2.6		24.1	1.8	22.3	5
SMDH 00011	1	2	EXP 524044	60	5	4.8	0.9	2.2		2.8		36.9	4.5	16.5	15
SMDH 00010b	1	2	EXP 524049	50	2	10.1	2.5	6.7	1.1	15	1	37	5.7	26.2	33
SMDH 00010b	4	5	EXP 524052	85	9	4	0.8	1.7		4		34.7	3.4	17.6	17
SMDH 00010	0	1	EXP 524055	50	6	10.8	1.9	4.3	0.7	8.8	0.6	107.5	6.3	21.6	14
SMDH 00010	1	2	EXP 524056	55	0	3.6	0.7	1.8		1.7		30.8	1.5	22.7	16
SMDH 00010	2	3	EXP 524057	60	5	5.3	0.9	2.3		2.4		47.9	2.1	28.8	9
SMDH 00009b	0	1	EXP 524063	55	12	13.1	2.2	5	0.8	4.3	0.7	99.6	6.4	21.2	21
SMDH 00009b	1	2	EXP 524064	60	7	7.8	1.3	2.4		1		70.4	3.2	21.3	19
SMDH 00009b	7	8	EXP 524070	75	11	7.1	1.3	3		2.5		58.4	3.3	23.9	16
SMDH 00009	0	1	EXP 524071	45	3	7.1	1.4	3.7	0.6	3.4	0.6	42.2	3.3	18.9	13
SMDH 00008b	0	1	EXP 524084	50	12	6.4	1.1	2.7	0.6	3		37.9	2.4	17.2	15
SMDH 00008	1	2	EXP 524096	65	13	6.4	1.3	3.4	0.6	4.1	0.7	41.9	2.2	21.9	27
SMDH 00007b	0	1	EXP 524102	45	19	8.3	1.5	3.5	0.6	3.8	0.6	58.8	4.2	22.5	17
SMDH 00007b	1	2	EXP 524103	5	3	6	1.3	3	0.6	3	0.6	29.9	3.7	26.6	21
SMDH 00007	1	2	EXP 524110	50	4	3.7	0.8	1.6		1.8		25	2.2	14.4	18
SMDH 00007	2	3	EXP 524111	70	7	4.6	0.8	2.1		2.3		31.1	2.1	30.6	15
SMDH 00006b	1	2	EXP 524121	55	27	10	2.1	4.3	0.7	4.4	0.7	45.5	3.7	24.2	17
SMDH 00006b	4	5	EXP 524124	75	17	5.4	1	2.2		1.8		34.7	2	14.9	15
SMDH 00006b	8	9	EXP 524128	70	19	9.4	1.8	3.8	0.6	3.6	0.6	57.2	3.5	22.3	18
SMDH 00006b	11	11.5	EXP 524131	45	13	9.6	1.8	4.1	0.7	4	0.6	58.9	3.4	22.7	36
SMDH 00005b	0	1	EXP 524142	20	20	6.7	1.5	3	0.6	3	0.6	56.1	3.3	18.6	7
SMDH 00005b	1	2	EXP 524143	25	24	5	0.9	2.1		2.5		44.4	2.7	17.6	21
SMDH 00005	1	2	EXP 524149	40	0	3.4	0.7	1.5				32.3	3.1	19.2	24
SMDH 00002b	7	7.5	EXP 524199	50	0	1		0.6				12.2	2	12.7	10
SMDH 00001	0	1	EXP 524224	40	13	4.6	1	2.4		1.7		37.6	4.5	17.9	24
SMDH 00205	0	1	EXP 524238	45	18	6	1.1	2.9		4.4		41.5	3.5	19.9	14
SMDH 00205	4	5	EXP 524242	40	0							1.1	0.6	8.9	8
SMDH 00206	0	1	EXP 524264	40	7	4.9	1	2.2		2.4		34.7	2.8	19	18

ARK MINES

LTD.

BHID	FROM	TO	SID	Recov%	CRCT_cps	Dy ₂ O ₃ _ppm	Ho ₂ O ₃ _ppm	Er ₂ O ₃ _ppm	Tm ₂ O ₃ _ppm	Yb ₂ O ₃ _ppm	Lu ₂ O ₃ _ppm	ThO ₂ _ppm	U ₂ O ₃ _ppm	Nb ₂ O ₅ _ppm	Sc_ppm
SMDH 00207	10	10.5	EXP 524295	40	3	1.4		0.6		0.7		14.6	1.1	18	10
SMDH 00211	0	1	EXP 524374	20	21	8	1.6	3.5	0.6	3.6	0.6	56.2	4	21.5	18
SMDH 00213b	0	1	EXP 524430	50	11	8.8	1.9	3.9	0.8	4.4	0.7	51.8	4.7	28.3	25
SMDH 00213b	10	11	EXP 524440	20	5	6.7	1.6	2.9		3.1	0.6	38.3	3.1	24	16
SMDH 00216	4	5	EXP 524479	40	1	4.1	0.7	1.5		1.3		23.6	2.9	23	24
SMDH 00216b	0	1	EXP 524489	30	4	3.8	0.7	1.5		1.7		27.2	2.9	16.9	16
SMDH 00217	0	1	EXP 524504	25	3	3.6	0.7	1.5		1.4		20.5	2.4	22.6	14
SMDH 00217	2	3	EXP 524506	20	0	5.6	1.1	2.1		2.3		32.1	4.4	28.8	20
SMDH 00217b	3	4	EXP 524516	25	2	2.4		0.7				23.3	3.3	9.4	10
SMDH 00218	6	7	EXP 524527	90	4	7	1.5	3.2	0.6	4.3	0.6	39.3	5.1	23.7	16
SMDH 00218b	0	1	EXP 524539	30	4	2.2		0.9		0.8		14.2	4.8	11.9	11
SMDH 00219	0	1	EXP 524548	40	9	3	0.7	1				28.2	4.6	13.6	9
SMDH 00220	1	2	EXP 524566	45	4	6.2	1.4	3		3		2.8	2.5	13.6	47
SMDH 00220	2	3	EXP 524567	90	0	5.9	1.4	2.9		2.8		2.5	2.7	11.7	71
SMDH 00015	0	1	EXP 524633	25	8	4.4	0.9	1.9		2		32.1	4	10.7	13
SMDH 00014	1	2	EXP 524669	80	8	2.6		1.1		0.8		25.5	2.6	25.2	12
SMDH 00033b	1	2	EXP 524697	30	4	1.8		0.9		1.1		19.5	1.8	12.3	10
SMDH 00032	4	5	EXP 524731	95	7	2.5		0.9				24.8	2.1	11.3	6
SMDH 00029b	2	3	EXP 524784	50	5	4	0.7	1.6		0.9		29.8	3.5	11.2	11
SMDH 00029b	3	4	EXP 524785	40	5	5.7	0.9	2.3		2.2		48.2	4.7	14.4	12
SMDH 00028b	0	1	EXP 524795	30	14	6.5	1.1	2.9		3.2		43	6	18.5	11
SMDH 00028b	8	8.5	EXP 524803	20	4	3.9	0.7	1.8		1.5		3.4	1.3	8.6	10
SMDH 00027b	1	2	EXP 524812	20	1	4.6	0.8	2.3		1.7		23.4	2.1	19.3	11
SMDH 00029	0	1	EXP 524817	20	4	8.1	1.6	3.5	0.6	3.4		49.8	4.6	27.3	9
SMDH 00026b	11	11.5	EXP 524849	50	9	4.8	0.9	1.9		2.5		37.8	3.7	15.2	13
SMDH 00023b	1	2	EXP 524907	35	0	3.8	0.7	1.5		1.4		41.9	3.8	20.5	12
SMDH 00023b	6	7	EXP 524912	80	3	4.2	0.7	1.3				46.4	3.8	25.2	13
SMDH 00022b	0	1	EXP 524931	20	5	6.7	1.3	2.7		3		75.4	5	16	11
SMDH 00022	0	1	EXP 524941	15	3	8.3	1.6	3.7	0.7	4.1	0.8	65.8	4.8	21.5	20
SMDH 00022	1	2	EXP 524942	25	3	7.7	1.7	4	0.7	4.6	0.9	53.9	4	24.6	26
SMDH 00021	0	1	EXP 524958	20	2	5.4	1.1	2.5		2.7		50.2	2.9	18.2	16
SMDH 00020	3	4	EXP 524975	20	0	0.7						4.3	1.4	11.3	3
SMDH 00019b	0	1	EXP 524980	5	0	4.5	0.9	2.2		1.5		46.5	4.8	12.4	6
SMDH 00019b	10	11	EXP 524990	98	0	2.5		1.4		1.7		17.3	3.9	27.9	25
SMDH 00019	0	1	EXP 524994	30	9	5.2	0.9	2.7		1.7		46.2	5	17.7	7
SMDH 00227	0	1	EXP 525078	10	17	7.2	1.1	3		2.6		65.7	5.7	32.8	4
SMDH 00228	0	1	EXP 525088	18	12	9.2	1.8	4.6	0.8	5.8	0.7	66.6	6	45.8	13
SMDH 00235	8	8.5	EXP 525196	50	4	4.8	1.3	4.8	0.9	8	1	13.2	4.4	16.2	25
SMDH 00252	5	6	EXP 525255	20	3	2.9	0.6	1				10.7	4.1	9.2	4
SMDH 00250	0	1	EXP 525271	20	9	5.9	1.3	3.3	0.7	3.6		27.8	3.1	27.6	7
SMDH 00248	2	3	EXP 525290	25	15	9.2	1.9	5.1	0.9	6	0.8	46.7	3.9	33.2	15
SMDH 00244	1	2	EXP 525337	25	16	10.1	2.1	5.1	0.9	5.4	0.7	58.9	5.8	31.9	23
SMDH 00243	4	5	EXP 525354	15	20	10.1	2.2	5.7	1	6.4	0.8	77.4	2.8	25.7	31
SMDH 00241	0	1	EXP 525365	25	25	9.9	1.6	4	0.7	4.6		82.5	5.2	17.9	11
SMDH 00256	3	4	EXP 525400	20	5	6.4	1.1	3		3.3		57.7	3.1	20.3	21
SMDH 00257	0	1	EXP 525410	15	14	7.7	1.4	3.1	0.6	3.3	0.6	57.6	4.1	17.3	12
SMDH 00257	1	2	EXP 525411	20	18	10.8	1.9	4.9	0.9	5.2	0.8	83.2	5.1	21.5	20
SMDH 00257	3	4	EXP 525413	20	4	0.6						5.2	1.8	11.3	5
SMDH 00260	0	1	EXP 525443	15	19	5.9	1	2.5		1.4		46.7	4	19.2	13
SMDH 00264	11	11.5	EXP 525493	50	6	3.8	0.7	1.5		0.8		31.4	3.9	20	7
SMDH 00265	1	2	EXP 525495	15	6	4.7	1	2.6		1.6		27.1	4.4	18.5	22

					MEAN	28.5	80.3	168.9	19.2	68.2	12.4	1.4	7.7	1	4.9	1
					MAX	72	200.5	408.9	48.5	167.5	30.2	3.2	17.9	2.2	11.4	2.2
					MIN	2.1	5.9	8	0.8	3.9	1	0.8	0.6	0.5	0.5	0.5
BHID	FROM	TO	SID	Recov%	CRCT_cps	Y_ppm	La_ppm	Ce_ppm	Pr_ppm	Nd_ppm	Sm_ppm	Eu_ppm	Gd_ppm	Tb_ppm	Dy_ppm	Ho_ppm
SMDH 00013	0	1	EXP 524000	25	3											
SMDH 00013	3	4	EXP 524003	70	2	15.6	81.9	162.1	18.1	62.2	11.6	1.6	7.1	0.9	4	0.6
SMDH 00013	9	10	EXP 524009	70	0	28.7	140.5	288.4	32	111.6	20.3	1.6	12.7	1.6	7.5	1
SMDH 00012b	0	1	EXP 524011	40	7	32	104.7	217.3	24.7	85.2	16.4	1.5	9.9	1.2	6.1	1.1
SMDH 00012b	1	2	EXP 524012	50	17	36.7	127.1	262.1	29.2	108.9	19.5	1.8	11.8	1.5	7.4	1.3
SMDH 00012b	4	5	EXP 524015	70	0	20.1	77.3	155.2	17.9	63.3	12.8	2	7.9	0.9	4.1	0.7
SMDH 00012b	5	6	EXP 524016	70	0	23.4	72.3	151.3	17.9	62.8	12.2	1.5	7.7	1	4.8	0.9
SMDH 00012b	6	7	EXP 524017	80	9	18.7	61.4	127.8	15	51.7	10.3	1.2	6.5	0.8	3.6	0.7
SMDH 00012b	8	9	EXP 524019	80	3	24.2	89.5	186.8	22.4	76.5	16.4	1.8	10.5	1.2	5.4	0.9
SMDH 00012b	9	10	EXP 524020	90	3	28.8	56.4	124.1	14.2	50.6	10.3	1.4	6.9	0.8	3.7	0.7
SMDH 00012b	10	11	EXP 524021	80	4	21.8	63.4	134.7	16	56.3	11.3	1.5	7.4	0.8	3.3	0.6
SMDH 00012b	11	12	EXP 524022	75	5	26.1	62.1	134.4	15.2	53.1	10.8	1.2	7.2	0.8	3.7	0.6
SMDH 00012b	13	14	EXP 524024	80	2	27.3	76.8	161.7	18.5	65.1	12.8	1.5	8.3	0.9	3.9	0.7
SMDH 00012	0	1	EXP 524025	45	6	45	112.2	237.7	27.2	95.1	17.2	1.2	11.6	1.3	6	1.1
SMDH 00012	1	2	EXP 524026	60	2	29.2	72.6	161.3	17.4	59.1	10.6	1.3	6.5	0.7	3.5	0.7
SMDH 00012	2	3	EXP 524027	65	2	13.3	39.5	76	9.2	34.9	6	0.9	3.7	L	2	L
SMDH 00012	3	4	EXP 524028	70	2	29.3	64	135.3	14.9	54.1	10	1	6.2	0.8	3.9	0.7
SMDH 00012	4	5	EXP 524029	75	6	18.5	86.4	183.6	19.6	70	11.8	1.3	6.7	0.7	3.1	0.6
SMDH 00011b	2	3	EXP 524037	85	4	19.1	79.7	167.4	19.7	70.2	11.8	1	6.4	0.7	3.4	0.7
SMDH 00011b	4	5	EXP 524039	90	13	6.4	27.2	55	8.8	30.8	3.5	1.3	2.1	L	1	L
SMDH 00011b	7	8	EXP 524042	60	5	14.4	52.6	109.6	12.3	43.5	8.3	1.1	5.3	0.6	2.9	0.5
SMDH 00011	1	2	EXP 524044	60	5	26.3	82.1	168.8	18.3	63.6	11.4	1.5	6.8	0.9	4.2	0.8
SMDH 00010b	1	2	EXP 524049	50	2	72	81.1	171.4	19.3	71.3	12.6	1.6	8.7	1.3	8.8	2.2
SMDH 00010b	4	5	EXP 524052	85	9	20	75.4	156.8	17.4	62.2	10.7	1.4	6.6	0.7	3.5	0.7
SMDH 00010	0	1	EXP 524055	50	6	53.4	176.9	395	43.7	155.2	30.2	1.4	17.9	2	9.4	1.7
SMDH 00010	1	2	EXP 524056	55	0	16.1	52	106.3	12.9	46.4	9.1	0.9	5.4	0.6	3.1	0.6
SMDH 00010	2	3	EXP 524057	60	5	22.2	78.5	160.7	19.6	70.6	13.7	1.3	8	0.9	4.6	0.8
SMDH 00009b	0	1	EXP 524063	55	12	52	200.5	408.9	48.5	167.5	29.9	1.7	17.9	2.2	11.4	1.9
SMDH 00009b	1	2	EXP 524064	60	7	26.2	158.1	308.4	36.2	128.8	21	1.8	12.1	1.4	6.8	1.1
SMDH 00009b	7	8	EXP 524070	75	11	29.4	119.5	233.7	26.9	97.5	17.2	2.1	10.4	1.2	6.2	1.1
SMDH 00009	0	1	EXP 524071	45	3	34	86.4	178	20.6	74	12.9	1.2	8.2	1.1	6.2	1.2
SMDH 00008b	0	1	EXP 524084	50	12	26.6	76.8	154.2	18.6	66.3	11.6	1.1	7.3	0.9	5.6	1
SMDH 00008	1	2	EXP 524096	65	13	32.7	73.4	144.1	17	58.3	10.4	1.1	6.7	0.8	5.6	1.1
SMDH 00007b	0	1	EXP 524102	45	19	57.3	121.6	259.5	29.4	102.2	18.6	1.5	12	1.4	7.2	1.3
SMDH 00007b	1	2	EXP 524103	5	3	48.6	62	132.9	14.8	55.2	9.8	1.7	6.5	0.9	5.2	1.1
SMDH 00007	1	2	EXP 524110	50	4	29.7	57.3	116.6	13.7	48.1	8.8	1.7	5.5	0.7	3.2	0.7
SMDH 00007	2	3	EXP 524111	70	7	31.8	69.2	143.5	17	61.8	10.5	1.6	6.4	0.7	4	0.7
SMDH 00006b	1	2	EXP 524121	55	27	71.9	120.9	247.3	29.9	101.8	17.9	3.2	11.4	1.6	8.7	1.8
SMDH 00006b	4	5	EXP 524124	75	17	38.7	78.1	167.9	18.8	67.4	10.9	1.2	7.3	0.8	4.7	0.9
SMDH 00006b	8	9	EXP 524128	70	19	66.1	129.2	272.5	31.2	117.5	18.5	2.6	11.8	1.3	8.2	1.6
SMDH 00006b	11	11.5	EXP 524131	45	13	66.5	137.4	292.9	33.6	119.7	20	2.4	11.9	1.4	8.4	1.6
SMDH 00005b	0	1	EXP 524142	20	20	27.8	95	275.4	24.7	81.8	15.3	1	10.2	1.1	5.8	1.3
SMDH 00005b	1	2	EXP 524143	25	24	20.1	90.8	206.3	22.8	78.3	13.8	1.4	8.9	1	4.4	0.8
SMDH 00005	1	2	EXP 524149	40	0	14.6	72.1	149.9	16.6	57	9.9	1.3	6.5	0.6	3	0.6
SMDH 00002b	7	7.5	EXP 524199	50	0	5.5	28.2	54.4	6.7	23.3	3.9	1.3	2.2	L	0.9	L
SMDH 00001	0	1	EXP 524224	40	13	21.4	72.7	139.9	16.3	59.6	11.6	1	7.1	0.8	4	0.9
SMDH 00205	0	1	EXP 524238	45	18	24.2	84.7	184.2	21.2	74.7	14.7	1.3	8.8	1	5.2	1
SMDH 00205	4	5	EXP 524242	40	0	2.1	5.9	8	0.8	3.9	1	L	0.6	L	L	L
SMDH 00206	0	1	EXP 524264	40	7	22.5	65.5	136.7	16.7	60.2	11.4	1	6.7	0.8	4.3	0.9

ARK MINES

LTD.

BHID	FROM	TO	SID	Recov%	CRCT_cps	Y_ppm	La_ppm	Ce_ppm	Pr_ppm	Nd_ppm	Sm_ppm	Eu_ppm	Gd_ppm	Tb_ppm	Dy_ppm	Ho_ppm
SMDH 00207	10	10.5	EXP 524295	40	3	6.2	32	67.9	7.5	27.1	4.8	1.7	2.7	L	1.2	L
SMDH 00211	0	1	EXP 524374	20	21	39.2	109.3	237.6	25.8	92	15.9	1.2	9.9	1.3	7	1.4
SMDH 00213b	0	1	EXP 524430	50	11	40.5	96.5	217.7	23.4	86.8	14.8	1.4	9.9	1.3	7.7	1.7
SMDH 00213b	10	11	EXP 524440	20	5	32.1	79.6	172	19.6	74.1	12.5	1.6	7.5	1	5.8	1.4
SMDH 00216	4	5	EXP 524479	40	1	15.5	53.4	111.2	12.5	45.1	8.2	0.9	5.6	0.7	3.6	0.6
SMDH 00216b	0	1	EXP 524489	30	4	15.6	58.9	126.4	13.5	51.5	9.5	1.2	5.5	0.7	3.3	0.6
SMDH 00217	0	1	EXP 524504	25	3	14.3	53.4	111.1	12.2	46.3	8	1.5	4.8	0.6	3.1	0.6
SMDH 00217	2	3	EXP 524506	20	0	24.8	69.4	148.2	16.2	55.3	10.8	1.4	6.8	0.9	4.9	1
SMDH 00217b	3	4	EXP 524516	25	2	9.9	34.4	74.3	8.3	29.6	5.5	1.4	3.4	0.5	2.1	L
SMDH 00218	6	7	EXP 524527	90	4	33.1	82.5	169.8	18.6	65.1	11.8	1.2	8.2	1.1	6.1	1.3
SMDH 00218b	0	1	EXP 524539	30	4	10.1	29.5	58.5	7	23.8	4.9	1.4	3	L	1.9	L
SMDH 00219	0	1	EXP 524548	40	9	13.2	55.8	118	12.1	45.1	8.7	1.8	5.1	0.6	2.6	0.6
SMDH 00220	1	2	EXP 524566	45	4	29.6	12.8	31.6	4.2	18.1	5	2.4	4.5	0.8	5.4	1.2
SMDH 00220	2	3	EXP 524567	90	0	29.1	11.5	27.5	3.7	16.2	4.8	1.5	4.4	0.7	5.1	1.2
SMDH 00015	0	1	EXP 524633	25	8	20.7	64.5	137.7	15.8	54.6	9.8	1.1	6.5	0.7	3.8	0.8
SMDH 00014	1	2	EXP 524669	80	8	9.6	57.3	111.2	13.3	45.5	8.2	1.2	5.3	0.6	2.3	L
SMDH 00033b	1	2	EXP 524697	30	4	7.8	43.4	84.4	9.5	33	5.5	1.4	3.2	L	1.6	L
SMDH 00032	4	5	EXP 524731	95	7	9	55.2	104.7	12.1	41.7	7.2	2	4.5	0.5	2.2	L
SMDH 00029b	2	3	EXP 524784	50	5	15.2	56	111.9	13.3	46.2	9.3	0.9	5.7	0.7	3.5	0.6
SMDH 00029b	3	4	EXP 524785	40	5	22.1	92.8	187.8	22.6	79.4	15.7	1.1	9.3	1.1	5	0.8
SMDH 00028b	0	1	EXP 524795	30	14	27.4	89.3	178.1	20.9	71.3	13.9	1.3	9	1.1	5.7	1
SMDH 00028b	8	8.5	EXP 524803	20	4	18.2	12.9	26.6	3.4	12.7	3.3	1.5	2.5	0.5	3.4	0.6
SMDH 00027b	1	2	EXP 524812	20	1	21	56.2	113.2	13.8	46.4	8.2	2	5.4	0.7	4	0.7
SMDH 00029	0	1	EXP 524817	20	4	59	99.3	203.4	24.2	87.5	15.9	1.5	9.9	1.3	7.1	1.4
SMDH 00026b	11	11.5	EXP 524849	50	9	33	77.5	156	18.3	63.6	12.1	1	7.8	0.9	4.2	0.8
SMDH 00023b	1	2	EXP 524907	35	0	24.8	75.8	152.8	18.5	65.2	11	1	6.8	0.8	3.3	0.6
SMDH 00023b	6	7	EXP 524912	80	3	23.1	102.3	195.3	23.8	88.8	14.5	1.4	8.4	0.9	3.7	0.6
SMDH 00022b	0	1	EXP 524931	20	5	45.6	131.4	288.1	33.2	117.9	19.9	0.8	11.2	1.3	5.8	1.1
SMDH 00022	0	1	EXP 524941	15	3	62.1	114.5	249.8	28	102.3	17.2	1.2	10.5	1.3	7.2	1.4
SMDH 00022	1	2	EXP 524942	25	3	63	103.9	229.7	25	89.2	15.7	1.1	9.4	1.2	6.7	1.5
SMDH 00021	0	1	EXP 524958	20	2	37.9	82.6	192.8	20	71.3	12.6	1	7.7	1	4.7	1
SMDH 00020	3	4	EXP 524975	20	0	4	16.4	29.1	3.2	11.2	2	1.9	1.2	L	0.6	L
SMDH 00019b	0	1	EXP 524980	5	0	18.8	77	230	19.6	68.2	12.6	0.8	7.5	0.8	3.9	0.8
SMDH 00019b	10	11	EXP 524990	98	0	12.6	35.9	72.2	8.5	28.4	5.3	1	3.5	L	2.2	L
SMDH 00019	0	1	EXP 524994	30	9	21.8	68.7	201.6	18.3	63.4	12.7	1.1	8	1.1	4.5	0.8
SMDH 00227	0	1	EXP 525078	10	17	28.7	125.8	265	30.6	109.2	18.6	1.5	11.3	1.3	6.3	1
SMDH 00228	0	1	EXP 525088	18	12	41.8	198.2	348.5	39.3	155	23.5	2.2	13.2	1.5	8	1.6
SMDH 00235	8	8.5	EXP 525196	50	4	32.8	35.1	69	8	27	5.3	1	3.5	0.6	4.2	1.1
SMDH 00252	5	6	EXP 525255	20	3	13.1	28.3	50.7	6.1	21.5	4.7	1.9	3.2	0.5	2.5	0.5
SMDH 00250	0	1	EXP 525271	20	9	29.9	63.4	123.8	14.5	50.9	10.5	1.3	6.8	0.9	5.1	1.1
SMDH 00248	2	3	EXP 525290	25	15	48	102	209.7	23.9	81.2	15.6	1.7	10.2	1.3	8	1.7
SMDH 00244	1	2	EXP 525337	25	16	49	109.7	236.8	27.9	91.2	18.4	1.9	12.2	1.6	8.8	1.8
SMDH 00243	4	5	EXP 525354	15	20	50.8	147.2	317	37.1	131.9	22.1	1.6	13	1.5	8.8	1.9
SMDH 00241	0	1	EXP 525365	25	25	41.1	156.1	338.1	39.1	129.8	24.8	1.4	15.3	1.8	8.6	1.4
SMDH 00256	3	4	EXP 525400	20	5	26.4	87.3	188.6	22.2	81.2	17.4	1.1	10.8	1.1	5.6	1
SMDH 00257	0	1	EXP 525410	15	14	33.1	114.9	239.8	28.3	98.4	17.9	1.3	11	1.3	6.7	1.2
SMDH 00257	1	2	EXP 525411	20	18	46.8	165.3	342.9	42	141.5	27.5	1.8	16	1.9	9.4	1.7
SMDH 00257	3	4	EXP 525413	20	4	3.3	14.1	24	2.9	10.4	1.8	1.6	1	L	0.5	L
SMDH 00260	0	1	EXP 525443	15	19	25.6	92.5	189.8	21.1	80.8	13.4	1.4	8.2	1	5.1	0.9
SMDH 00264	11	11.5	EXP 525493	50	6	16.9	60.1	120.5	14.4	48.6	9.8	1.5	5.8	0.7	3.3	0.6
SMDH 00265	1	2	EXP 525495	15	6	24.8	59.3	117.9	14.6	51.5	8.7	1.2	5.7	0.8	4.1	0.9

ARK MINES

LTD.

					MEAN	2.2	0.6	2.6	0.6	34.7	3.2	1.2	36.8	15.1	1.5	136.7
					MAX	5.9	1	13.2	0.9	94.5	8.2	2.9	92.6	37.8	9.9	584.7
					MIN	0.5	0.5	0.6	0.5	1	0.5	0.5	5.8	6	0.5	25.1
BHID	FROM	TO	SID	Recov%	CRCT_cps	Er_ppm	Tm_ppm	Yb_ppm	Lu_ppm	Th_ppm	U_ppm	Zr_ppm	Hf_ppm	Nb_ppm	Ta_ppm	Sr_ppm
SMDH 00013	0	1	EXP 524000	25	3											
SMDH 00013	3	4	EXP 524003	70	2	1.2	L	L	L	34.7	4.9	1.7	36.1	37.8	6.4	304.1
SMDH 00013	9	10	EXP 524009	70	0	2	L	1.8	L	56	7	1.9	38.9	35.2	3.8	160.2
SMDH 00012b	0	1	EXP 524011	40	7	2.7	L	2.7	0.5	46.7	7.8	1.6	31.2	20	3	76
SMDH 00012b	1	2	EXP 524012	50	17	3.2		3.1	0.5	54.6	8.2	2	38.4	21.7	3.1	84.8
SMDH 00012b	4	5	EXP 524015	70	0	1.6	L	0.8	L	32.5	6	1.2	21.9	29.8	3.3	202.5
SMDH 00012b	5	6	EXP 524016	70	0	2.1	L	2.1	L	32.7	5	1.2	24	23.3	2.3	262.8
SMDH 00012b	6	7	EXP 524017	80	9	1.7	L	1.9	L	29.3	3.3	1.1	21.8	19	1.7	80
SMDH 00012b	8	9	EXP 524019	80	3	2.1	L	1.3	L	39.3	4.1	1.1	22.6	28.6	1.6	109.2
SMDH 00012b	9	10	EXP 524020	90	3	1.5	L	1.5	L	23.7	2.3	1.2	34.9	17.3	1.6	121.2
SMDH 00012b	10	11	EXP 524021	80	4	1.1	L	1.3	L	27.7	2.3	1.2	37.3	17.3	1.2	126
SMDH 00012b	11	12	EXP 524022	75	5	1.4	L	1	L	27.8	3.3	1.5	48.4	17.9	2	123.1
SMDH 00012b	13	14	EXP 524024	80	2	1.5	L	1.3	L	31.4	2.6	1.1	34.9	16.8	1.1	188.2
SMDH 00012	0	1	EXP 524025	45	6	2.4	L	1.9	L	47.6	4.4	2.4	74.9	15.6	4.7	52.6
SMDH 00012	1	2	EXP 524026	60	2	1.5	L	1.5	L	31.6	2.5	1.2	36.6	13.6	1	145.7
SMDH 00012	2	3	EXP 524027	65	2	0.6	L	0.7	L	13.7	1.3	0.8	27.8	13.8	1.5	219.1
SMDH 00012	3	4	EXP 524028	70	2	1.5	L	0.7	L	25.7	2.9	0.8	26.2	16.4	1.9	152.9
SMDH 00012	4	5	EXP 524029	75	6	1.5	L	1.9	L	35.5	3	1.1	44.2	13.4	1.6	141.3
SMDH 00011b	2	3	EXP 524037	85	4	1.7	L	2.9	L	36.8	3.2	0.6	23.1	13.1	1.5	139.6
SMDH 00011b	4	5	EXP 524039	90	13	L	L	L	L	9.9	2.7	0.8	30.9	7	1.2	218.1
SMDH 00011b	7	8	EXP 524042	60	5	1	L	2.3	L	21.2	1.5	0.5	17.9	15.6	1	191.9
SMDH 00011	1	2	EXP 524044	60	5	1.9	L	2.5	L	32.4	3.8	1.1	45.4	11.5	1.4	202
SMDH 00010b	1	2	EXP 524049	50	2	5.9		13.2	0.9	32.5	4.8	1.7	65.8	18.3	2.1	156
SMDH 00010b	4	5	EXP 524052	85	9	1.5	L	3.5	L	30.5	2.9	1.1	42.8	12.3	1	198.2
SMDH 00010	0	1	EXP 524055	50	6	3.8	0.6	7.7	0.5	94.5	5.3	1.1	43.9	15.1	1.6	59.2
SMDH 00010	1	2	EXP 524056	55	0	1.6	L	1.5	L	27.1	1.3	0.9	30	15.9	0.8	77.4
SMDH 00010	2	3	EXP 524057	60	5	2	L	2.1	L	42.1	1.8	1	31.6	20.1	1	136.1
SMDH 00009b	0	1	EXP 524063	55	12	4.4	0.7	3.8	0.6	87.5	5.4	1.7	53.4	14.8	1.1	44.9
SMDH 00009b	1	2	EXP 524064	60	7	2.1	L	0.9	L	61.9	2.7	0.8	28.5	14.9	0.6	175.6
SMDH 00009b	7	8	EXP 524070	75	11	2.6	L	2.2	L	51.3	2.8	0.9	31	16.7	5.6	251.4
SMDH 00009	0	1	EXP 524071	45	3	3.2	0.5	3	0.5	37.1	2.8	1	32.2	13.2	0.8	52.7
SMDH 00008b	0	1	EXP 524084	50	12	2.4	0.5	2.6	L	33.3	2	1.3	43.7	12	0.6	48.8
SMDH 00008	1	2	EXP 524096	65	13	3	0.5	3.6	0.6	36.8	1.9	1.3	40.4	15.3	0.9	86.1
SMDH 00007b	0	1	EXP 524102	45	19	3.1	0.5	3.3	0.5	51.7	3.6	1.2	39.3	15.7	1.3	103.6
SMDH 00007b	1	2	EXP 524103	5	3	2.6	0.5	2.6	0.5	26.3	3.1	0.6	19.9	18.6	1.4	108.4
SMDH 00007	1	2	EXP 524110	50	4	1.4	L	1.6	L	22	1.9	0.8	22.8	10.1	0.7	161.7
SMDH 00007	2	3	EXP 524111	70	7	1.8	L	2	L	27.3	1.8	0.6	18.7	21.4	0.8	186
SMDH 00006b	1	2	EXP 524121	55	27	3.8	0.6	3.9	0.6	40	3.1	0.6	18.2	16.9	1.7	138
SMDH 00006b	4	5	EXP 524124	75	17	1.9	L	1.6	L	30.5	1.7	0.5	14.2	10.4	0.7	123.6
SMDH 00006b	8	9	EXP 524128	70	19	3.3	0.5	3.2	0.5	50.3	3	0.7	20.4	15.6	0.8	194.4
SMDH 00006b	11	11.5	EXP 524131	45	13	3.6	0.6	3.5	0.5	51.8	2.9	0.6	17.7	15.9	1	215.4
SMDH 00005b	0	1	EXP 524142	20	20	2.6	0.5	2.6	0.5	49.3	2.8	0.7	21.3	13	1	32.8
SMDH 00005b	1	2	EXP 524143	25	24	1.8	L	2.2	L	39	2.3	0.7	22.5	12.3	1	120.3
SMDH 00005	1	2	EXP 524149	40	0	1.3	L	L	L	28.4	2.6	1.2	39.3	13.4	1.2	63.6
SMDH 00002b	7	7.5	EXP 524199	50	0	0.5	L	L	L	10.7	1.7	0.5	15.7	8.9	0.8	252.8
SMDH 00001	0	1	EXP 524224	40	13	2.1	L	1.5	L	33	3.8	1.5	49.7	12.5	1.3	31.3
SMDH 00205	0	1	EXP 524238	45	18	2.5	L	3.9	L	36.5	3	1.2	36.8	13.9	0.9	56.4
SMDH 00205	4	5	EXP 524242	40	0	L	L	L	L	1	0.5	L	12.6	6.2	L	110.1
SMDH 00206	0	1	EXP 524264	40	7	1.9	L	2.1	L	30.5	2.4	1.1	32.5	13.3	1	82.4

ARK MINES

LTD.

BHID	FROM	TO	SID	Recov%	CRCT_cps	Er_ppm	Tm_ppm	Yb_ppm	Lu_ppm	Th_ppm	U_ppm	Zr_ppm	Hf_ppm	Nb_ppm	Ta_ppm	Sr_ppm
SMDH 00207	10	10.5	EXP 524295	40	3	0.5	L	0.6	L	12.8	0.9	0.5	19.9	12.6	1	333.1
SMDH 00211	0	1	EXP 524374	20	21	3.1	0.5	3.2	0.5	49.4	3.4	1.4	46.4	15	0.9	57.1
SMDH 00213b	0	1	EXP 524430	50	11	3.4	0.7	3.9	0.6	45.5	4	1.3	48.2	19.8	1.4	60.4
SMDH 00213b	10	11	EXP 524440	20	5	2.5	L	2.7	0.5	33.7	2.6	0.9	31.6	16.8	1.3	185.4
SMDH 00216	4	5	EXP 524479	40	1	1.3	L	1.1	L	20.7	2.5	1.9	65.3	16.1	1	251.3
SMDH 00216b	0	1	EXP 524489	30	4	1.3	L	1.5	L	23.9	2.5	1.3	44.2	11.8	0.7	46.5
SMDH 00217	0	1	EXP 524504	25	3	1.3	L	1.2	L	18	2	2.1	71.4	15.8	1	60.8
SMDH 00217	2	3	EXP 524506	20	0	1.8	L	2	L	28.2	3.7	1.2	39.7	20.1	1.5	163.6
SMDH 00217b	3	4	EXP 524516	25	2	0.6	L	L	L	20.5	2.8	1.3	38.3	6.6	1.2	299.9
SMDH 00218	6	7	EXP 524527	90	4	2.8	0.5	3.8	0.5	34.5	4.3	1.8	60.3	16.6	1.5	62.5
SMDH 00218b	0	1	EXP 524539	30	4	0.8	L	0.7	L	12.5	4.1	2.4	75.7	8.3	1.4	153
SMDH 00219	0	1	EXP 524548	40	9	0.9	L	L	L	24.8	3.9	2	58.4	9.5	1.2	117.4
SMDH 00220	1	2	EXP 524566	45	4	2.6	L	2.6	L	2.5	2.1	0.6	11.8	9.5	1.4	102.4
SMDH 00220	2	3	EXP 524567	90	0	2.5	L	2.5	L	2.2	2.3	1	18.7	8.2	1.2	152.4
SMDH 00015	0	1	EXP 524633	25	8	1.7	L	1.8	L	28.2	3.4	1.8	60.7	7.5	0.8	60.2
SMDH 00014	1	2	EXP 524669	80	8	1	L	0.7	L	22.4	2.2	1.2	37.9	17.6	1	80.7
SMDH 00033b	1	2	EXP 524697	30	4	0.8	L	1	L	17.1	1.5	0.9	29.1	8.6	0.8	158.6
SMDH 00032	4	5	EXP 524731	95	7	0.8	L	L	L	21.8	1.8	1.3	37.2	7.9	L	222
SMDH 00029b	2	3	EXP 524784	50	5	1.4	L	0.8	L	26.2	3	1.3	42.4	7.8	L	67.9
SMDH 00029b	3	4	EXP 524785	40	5	2	L	1.9	L	42.4	4	1.9	60.2	10.1	1.1	63.7
SMDH 00028b	0	1	EXP 524795	30	14	2.5	L	2.8	L	37.8	5.1	2.4	80	12.9	1.3	107.6
SMDH 00028b	8	8.5	EXP 524803	20	4	1.6	L	1.3	L	3	1.1	L	7.8	6	0.7	329.4
SMDH 00027b	1	2	EXP 524812	20	1	2	L	1.5	L	20.6	1.8	0.6	20.5	13.5	0.7	230.7
SMDH 00029	0	1	EXP 524817	20	4	3.1	0.5	3	L	43.8	3.9	1.5	50.4	19.1	1.6	121.5
SMDH 00026b	11	11.5	EXP 524849	50	9	1.7	L	2.2	L	33.2	3.1	1	38.6	10.6	1.3	73.7
SMDH 00023b	1	2	EXP 524907	35	0	1.3	L	1.2	L	36.8	3.2	0.8	24.1	14.3	1.5	77.2
SMDH 00023b	6	7	EXP 524912	80	3	1.1	L	L	L	40.8	3.2	1	32.5	17.6	1.4	123.9
SMDH 00022b	0	1	EXP 524931	20	5	2.4	L	2.6	L	66.3	4.2	0.7	22.4	11.2	1.1	27.9
SMDH 00022	0	1	EXP 524941	15	3	3.2	0.6	3.6	0.7	57.8	4.1	1	31.4	15	1.3	27.9
SMDH 00022	1	2	EXP 524942	25	3	3.5	0.6	4	0.8	47.4	3.4	0.7	23.8	17.2	1.3	35
SMDH 00021	0	1	EXP 524958	20	2	2.2	L	2.4	L	44.1	2.5	0.9	29	12.7	0.7	35.5
SMDH 00020	3	4	EXP 524975	20	0	L	L	L	L	3.8	1.2	L	5.8	7.9	L	364
SMDH 00019b	0	1	EXP 524980	5	0	1.9	L	1.3	L	40.9	4.1	1.1	29.9	8.7	0.8	34
SMDH 00019b	10	11	EXP 524990	98	0	1.2	L	1.5	L	15.2	3.3	0.9	32.1	19.5	1.1	177.8
SMDH 00019	0	1	EXP 524994	30	9	2.4	L	1.5	L	40.6	4.2	1.1	32.2	12.4	1	40.9
SMDH 00227	0	1	EXP 525078	10	17	2.6	L	2.3	L	57.7	4.8	0.5	14.6	22.9	9.9	48
SMDH 00228	0	1	EXP 525088	18	12	4	0.7	5.1	0.6	58.5	5.1	1.2	35.1	32	2.7	50.6
SMDH 00235	8	8.5	EXP 525196	50	4	4.2	0.8	7	0.9	11.6	3.7	2.9	92.6	11.3	1	25.1
SMDH 00252	5	6	EXP 525255	20	3	0.9	L	L	L	9.4	3.5	1.6	43.2	6.4	0.6	202.3
SMDH 00250	0	1	EXP 525271	20	9	2.9	0.6	3.2	L	24.4	2.6	1.9	62.4	19.3	1.1	75
SMDH 00248	2	3	EXP 525290	25	15	4.5	0.8	5.3	0.7	41	3.3	1.5	47	23.2	1.5	129.8
SMDH 00244	1	2	EXP 525337	25	16	4.5	0.8	4.7	0.6	51.8	4.9	1.5	48.1	22.3	1	88.3
SMDH 00243	4	5	EXP 525354	15	20	5	0.9	5.6	0.7	68	2.4	1.1	32.7	18	0.7	176.3
SMDH 00241	0	1	EXP 525365	25	25	3.5	0.6	4	L	72.5	4.4	2.3	78.1	12.5	0.6	46.7
SMDH 00256	3	4	EXP 525400	20	5	2.6	L	2.9	L	50.7	2.6	1.3	40.2	14.2	0.5	584.7
SMDH 00257	0	1	EXP 525410	15	14	2.7	0.5	2.9	0.5	50.6	3.5	1.8	56.2	12.1	0.6	87
SMDH 00257	1	2	EXP 525411	20	18	4.3	0.8	4.6	0.7	73.1	4.3	2.2	69.3	15	0.7	154.7
SMDH 00257	3	4	EXP 525413	20	4	L	L	L	L	4.6	1.5	L	10.7	7.9	L	384.5
SMDH 00260	0	1	EXP 525443	15	19	2.2	L	1.2	L	41	3.4	0.8	27	13.4	1	158
SMDH 00264	11	11.5	EXP 525493	50	6	1.3	L	0.7	L	27.6	3.3	0.8	28.3	14	1.2	177
SMDH 00265	1	2	EXP 525495	15	6	2.3	L	1.4	L	23.8	3.7	1.1	38.5	12.9	1.2	69.2

					MEAN	16.8	2.1	7.4	129177	27476.6	86.6	41901.8	14270.6	228.2	171.9	2401
					MAX	50	6.6	36.7	343350	154375	189	107625	34965	834	1424	6555
					MIN	1.9	0.5	3.7	51695	292	8	10408	2472	52	23	656
BHID	FROM	TO	SID	Recov%	CRCT_cps	Pb_ppm	Sn_ppm	W_ppm	Al_ppm	Ca_ppm	Cr_ppm	Fe_ppm	Mg_ppm	P_ppm	S_ppm	TI_ppm
SMDH 00013	0	1	EXP 524000	25	3											
SMDH 00013	3	4	EXP 524003	70	2	19.6	6.6	13.9	91418	78776	53	39568	19486	273	140	2180
SMDH 00013	9	10	EXP 524009	70	0	17.5	5.8	10.5	94248	28763	142	40148	15980	264	168	2805
SMDH 00012b	0	1	EXP 524011	40	7	22.1	5.8	15.3	72958	4306	48	29197	5591	135	175	1701
SMDH 00012b	1	2	EXP 524012	50	17	23.2	5.6	12.3	103964	7354	123	28698	8357	161	136	2082
SMDH 00012b	4	5	EXP 524015	70	0	16.6	4.9	11.4	77767	14490	69	37716	15990	205	250	2101
SMDH 00012b	5	6	EXP 524016	70	0	13	4.3	10.4	77801	78559	134	36081	18786	297	270	2139
SMDH 00012b	6	7	EXP 524017	80	9	8.1	3.5	6.8	124925	22059	76	36291	13864	310	81	2120
SMDH 00012b	8	9	EXP 524019	80	3	25.1	4.4	7.4	83615	16508	189	46428	14646	547	54	2866
SMDH 00012b	9	10	EXP 524020	90	3	12.6	4.5	6.6	103900	14797	61	52531	13350	550	66	1907
SMDH 00012b	10	11	EXP 524021	80	4	18.3	4.3	8.5	107600	19447	159	46733	13140	341	74	2085
SMDH 00012b	11	12	EXP 524022	75	5	10	3.1	6.5	104500	13708	72	61304	15410	352	67	2691
SMDH 00012b	13	14	EXP 524024	80	2	15.1	3.2	8.6	143800	20845	148	48464	14970	418	81	2281
SMDH 00012	0	1	EXP 524025	45	6	12.7	5.9	6.7	80540	3013	38	28914	4084	207	90	1347
SMDH 00012	1	2	EXP 524026	60	2	19	3.2	7.3	86540	20307	147	47279	11600	142	211	2732
SMDH 00012	2	3	EXP 524027	65	2	5.8	2.7	6.6	116500	134529	54	41754	17960	189	225	1713
SMDH 00012	3	4	EXP 524028	70	2	10.2	2.7	6.5	110300	56378	161	44340	14680	275	126	2385
SMDH 00012	4	5	EXP 524029	75	6	12.1	2.9	8.3	125600	25353	75	55335	24379	486	106	2455
SMDH 00011b	2	3	EXP 524037	85	4	10.6	2.4	8.3	75989	33170	157	41381	16751	144	79	2694
SMDH 00011b	4	5	EXP 524039	90	13	11.4	2.7	36.7	150700	48668	64	35795	16560	215	75	1868
SMDH 00011b	7	8	EXP 524042	60	5	10.2	2.1	8.4	115200	38340	165	13062	7050	59	25	842
SMDH 00011	1	2	EXP 524044	60	5	15.2	2.5	8.6	119700	27486	47	34514	14659	129	125	2292
SMDH 00010b	1	2	EXP 524049	50	2	23.2	2.9	8.9	186100	25124	141	49067	16065	205	77	2789
SMDH 00010b	4	5	EXP 524052	85	9	14.5	1.8	4.6	119700	31104	47	35385	14423	153	45	2400
SMDH 00010	0	1	EXP 524055	50	6	27.7	2.7	6.5	136000	4427	133	34220	9819	270	58	2326
SMDH 00010	1	2	EXP 524056	55	0	19.8	1.6	3.7	102342	14954	47	41773	14051	172	101	2770
SMDH 00010	2	3	EXP 524057	60	5	25.7	1.6	5.6	108294	45613	46	32282	14569	159	61	2060
SMDH 00009b	0	1	EXP 524063	55	12	22.8	2.5	5.5	78514	7461	104	47980	11318	291	524	3274
SMDH 00009b	1	2	EXP 524064	60	7	17.3	1.5	5.2	100196	17947	105	38808	14738	144	78	2865
SMDH 00009b	7	8	EXP 524070	75	11	21.5	3.5	5.8	101306	19976	37	37604	15086	207	43	2865
SMDH 00009	0	1	EXP 524071	45	3	17.7	1.9	4	75702	4888	132	29286	8481	147	51	2302
SMDH 00008b	0	1	EXP 524084	50	12	16.7	1.5	4.8	75998	14116	45	49668	11273	219	178	3529
SMDH 00008	1	2	EXP 524096	65	13	25.6	1.5	4.6	87764	17933	139	44985	13748	221	131	3066
SMDH 00007b	0	1	EXP 524102	45	19	25	2.1	5.3	264404	44254	52	46277	16419	181	165	2074
SMDH 00007b	1	2	EXP 524103	5	3	20.5	2.2	4.8	283531	59556	97	47601	26600	133	214	2331
SMDH 00007	1	2	EXP 524110	50	4	15.2	1.3	7.6	343350	23100	43	37353	24220	125	247	1985
SMDH 00007	2	3	EXP 524111	70	7	12.6	1.4	9	274718	49490	125	35036	28105	141	196	1934
SMDH 00006b	1	2	EXP 524121	55	27	35.7	1.3	8.6	209085	7190	43	42967	18200	157	199	2119
SMDH 00006b	4	5	EXP 524124	75	17	17.7	1.2	4.8	270030	43498	145	31454	25480	220	149	1753
SMDH 00006b	8	9	EXP 524128	70	19	41.5	1.7	7.7	234963	13679	47	43275	19810	275	89	2081
SMDH 00006b	11	11.5	EXP 524131	45	13	31.3	2.3	6	298345	18928	165	48594	23730	314	114	2409
SMDH 00005b	0	1	EXP 524142	20	20	35.8	2	7.1	100378	2099	58	86333	3948	264	123	2959
SMDH 00005b	1	2	EXP 524143	25	24	8.8	1.7	5.1	123509	9415	103	45523	16695	131	219	3045
SMDH 00005	1	2	EXP 524149	40	0	8.5	1.6	7.6	143171	7680	55	59654	18615	105	132	3955
SMDH 00002b	7	7.5	EXP 524199	50	0	8.7	3.1	9.9	134922	88550	99	23496	21450	84	169	1990
SMDH 00001	0	1	EXP 524224	40	13	10.3	2.5	7.3	95621	2430	46	42452	4980	191	149	3301
SMDH 00205	0	1	EXP 524238	45	18	10.6	1.7	7.5	117633	2856	107	37860	8892	147	157	2751
SMDH 00205	4	5	EXP 524242	40	0	1.9	0.9	5.5	125374	117988	16	20141	14735	94	260	1388
SMDH 00206	0	1	EXP 524264	40	7	50	1.1	7.4	124545	3784	117	31235	9501	209	71	1499

ARK MINES

LTD.

BHID	FROM	TO	SID	Recov%	CRCT_cps	Pb_ppm	Sn_ppm	W_ppm	Al_ppm	Ca_ppm	Cr_ppm	Fe_ppm	Mg_ppm	P_ppm	S_ppm	Ti_ppm
SMDH 00207	10	10.5	EXP 524295	40	3	4.6	1.1	7.6	189405	36913	25	27141	20535	108	87	1656
SMDH 00211	0	1	EXP 524374	20	21	19.5	1.5	5.4	117300	3998	112	64397	9635	196	152	2358
SMDH 00213b	0	1	EXP 524430	50	11	27.3	1.4	5.3	136735	2880	48	61681	14465	229	122	2701
SMDH 00213b	10	11	EXP 524440	20	5	24.4	1.2	4	191475	15675	148	42114	19050	367	57	2258
SMDH 00216	4	5	EXP 524479	40	1	2.5	1.1	6	183540	37425	66	41788	32010	154	177	1675
SMDH 00216b	0	1	EXP 524489	30	4	14.9	1.3	5.6	164450	5961	120	50714	6945	198	265	1888
SMDH 00217	0	1	EXP 524504	25	3	8.7	1.4	4.9	182045	9270	94	75527	20550	125	488	2640
SMDH 00217	2	3	EXP 524506	20	0	9.1	1	6.8	149385	22650	154	41748	22893	291	133	2798
SMDH 00217b	3	4	EXP 524516	25	2	2.1	2.3	9.6	131330	154375	8	11571	27430	162	136	783
SMDH 00218	6	7	EXP 524527	90	4	4.7	1.1	5.6	198030	32175	121	49161	7300	834	156	3233
SMDH 00218b	0	1	EXP 524539	30	4	12.8	1.5	8.9	124890	15775	27	30597	8966	232	764	1551
SMDH 00219	0	1	EXP 524548	40	9	16.2	1.5	8.3	148815	20650	96	29713	10436	236	156	1824
SMDH 00220	1	2	EXP 524566	45	4 L		3.2	13.4	97842	39838	47	107625	27599	529	196	6555
SMDH 00220	2	3	EXP 524567	90	0 L		2.2	7.2	118105	122600	68	89796	29081	496	164	6395
SMDH 00015	0	1	EXP 524633	25	8	6.5	0.7	7.4	130525	7631	47	30177	7322	159	102	1522
SMDH 00014	1	2	EXP 524669	80	8	9.2	0.8	4.4	138741	9488	121	49486	19513	113	57	3154
SMDH 00033b	1	2	EXP 524697	30	4	7.8	0.8	5.4	170877	12427	49	33504	16016	118	65	2444
SMDH 00032	4	5	EXP 524731	95	7	11.2	0.9	5.2	114536	50835	75	10408	12055	121	64	953
SMDH 00029b	2	3	EXP 524784	50	5	6.3	0.5	6.5	96408	6930	42	34948	9430	148	195	1400
SMDH 00029b	3	4	EXP 524785	40	5	8.6	1.4	6.5	85830	4758	138	32788	9669	189	516	1643
SMDH 00028b	0	1	EXP 524795	30	14	13.4	1.8	9.5	109901	6789	48	32648	8457	183	75	1972
SMDH 00028b	8	8.5	EXP 524803	20	4	9.3	0.9	7.3	119995	47765	76	24230	17173	684	94	1496
SMDH 00027b	1	2	EXP 524812	20	1	16.4	0.9	7.4	150792	32875	29	26219	14209	135	83	2204
SMDH 00029	0	1	EXP 524817	20	4	16.6	0.9	7	162540	8449	160	29038	8592	166	1424	1490
SMDH 00026b	11	11.5	EXP 524849	50	9	8	1.7	7.8	142695	23238	49	50144	19305	323	183	2467
SMDH 00023b	1	2	EXP 524907	35	0	7.1	1.1	7.7	220860	3495	126	47026	13553	185	118	2513
SMDH 00023b	6	7	EXP 524912	80	3	6.5	1.1	9.2	144315	61063	46	38757	11408	130	84	1936
SMDH 00022b	0	1	EXP 524931	20	5	20.6	1.5	6.9	101102	3115	113	87853	2472	244	337	1591
SMDH 00022	0	1	EXP 524941	15	3	20	1.5	8.2	204930	2650	59	70616	3600	240	207	2450
SMDH 00022	1	2	EXP 524942	25	3	25.9	0.5	5	177930	4385	119	79066	4793	185	252	3179
SMDH 00021	0	1	EXP 524958	20	2	4.7	0.6	4.4	193860	2116	59	59371	5261	177	61	2500
SMDH 00020	3	4	EXP 524975	20	0	9.2 L		4	51695	44418	80	11223	11410	52	45	1054
SMDH 00019b	0	1	EXP 524980	5	0	37.9	1.3	6.5	83465	292	62	81914	3221	211	111	1834
SMDH 00019b	10	11	EXP 524990	98	0	4.5	0.8	6.9	82122	89034	144	48811	22713	118	204	3901
SMDH 00019	0	1	EXP 524994	30	9	13.2	1	7.3	149093	4333	55	53938	6156	155	55	3000
SMDH 00227	0	1	EXP 525078	10	17	18	1.2	12.9	79082	664	94	36108	6419	149	77	2873
SMDH 00228	0	1	EXP 525088	18	12	26.3	3.5	5.6	134618	7729	49	48474	6804	181	437	3667
SMDH 00235	8	8.5	EXP 525196	50	4	11.9	0.6	10	83366	14003	163	24808	6569	184	88	1668
SMDH 00252	5	6	EXP 525255	20	3	49.3	1.8	7.2	111168	3559	8	13161	4975	515	23	656
SMDH 00250	0	1	EXP 525271	20	9	12.6 L		4.8	88530	4280	146	34909	11409	190	119	2605
SMDH 00248	2	3	EXP 525290	25	15	33 L		6.7	80210	12198	49	39762	13973	340	68	3470
SMDH 00244	1	2	EXP 525337	25	16	40.1 L		5	76755	6081	100	48425	14204	183	127	3855
SMDH 00243	4	5	EXP 525354	15	20	14.7	0.5	5.1	92820	47463	57	42476	21344	283	206	3473
SMDH 00241	0	1	EXP 525365	25	25	21.3	0.9	6.2	53976	587	146	27366	5141	275	98	3462
SMDH 00256	3	4	EXP 525400	20	5	14.9 L		7.4	63583	85925	33	34945	34965	425	616	2995
SMDH 00257	0	1	EXP 525410	15	14	15.2 L		5.9	54470	19950	131	25744	7783	189	227	2871
SMDH 00257	1	2	EXP 525411	20	18	30.8	1.3	6.9	76700	34988	52	34345	15755	270	348	3295
SMDH 00257	3	4	EXP 525413	20	4	7.4 L		5.5	74156	79475	49	16123	21690	80	257	914
SMDH 00260	0	1	EXP 525443	15	19	12.6 L		6.9	94784	12663	41	35157	13489	210	89	2070
SMDH 00264	11	11.5	EXP 525493	50	6	17.1	0.9	7.5	67104	33500	111	24034	13061	135	53	1459
SMDH 00265	1	2	EXP 525495	15	6	20.9	1.2	7.1	108581	5951	42	40862	9745	132	177	2245

ARK MINES

LTD.

					MEAN	32.2	1.6
					MAX	48.8	1.8
					MIN	19.9	1.5
BHID	FROM	TO	SID	Recov%	CRCT_cps	SI_%	BD
SMDH 00013	0	1	EXP 524000	25	3		
SMDH 00013	3	4	EXP 524003	70	2	31.1	
SMDH 00013	9	10	EXP 524009	70	0	33.1	
SMDH 00012b	0	1	EXP 524011	40	7	36.5	
SMDH 00012b	1	2	EXP 524012	50	17	39.5	1.59
SMDH 00012b	4	5	EXP 524015	70	0	33.6	
SMDH 00012b	5	6	EXP 524016	70	0	26.2	
SMDH 00012b	6	7	EXP 524017	80	9	30.3	
SMDH 00012b	8	9	EXP 524019	80	3	32.2	
SMDH 00012b	9	10	EXP 524020	90	3	35.5	1.79
SMDH 00012b	10	11	EXP 524021	80	4	35.3	
SMDH 00012b	11	12	EXP 524022	75	5	31.3	
SMDH 00012b	13	14	EXP 524024	80	2	32.1	
SMDH 00012	0	1	EXP 524025	45	6	34.9	
SMDH 00012	1	2	EXP 524026	60	2	30.3	1.55
SMDH 00012	2	3	EXP 524027	65	2	22.9	
SMDH 00012	3	4	EXP 524028	70	2	32.3	
SMDH 00012	4	5	EXP 524029	75	6	28.3	
SMDH 00011b	2	3	EXP 524037	85	4	26.8	
SMDH 00011b	4	5	EXP 524039	90	13	31.1	1.65
SMDH 00011b	7	8	EXP 524042	60	5	26.8	
SMDH 00011	1	2	EXP 524044	60	5	26.3	
SMDH 00010b	1	2	EXP 524049	50	2	27.7	
SMDH 00010b	4	5	EXP 524052	85	9	31.4	
SMDH 00010	0	1	EXP 524055	50	6	34.8	1.49
SMDH 00010	1	2	EXP 524056	55	0	30.3	
SMDH 00010	2	3	EXP 524057	60	5	31.1	
SMDH 00009b	0	1	EXP 524063	55	12	32.1	
SMDH 00009b	1	2	EXP 524064	60	7	30	
SMDH 00009b	7	8	EXP 524070	75	11	28.1	1.71
SMDH 00009	0	1	EXP 524071	45	3	34.4	
SMDH 00008b	0	1	EXP 524084	50	12	31.4	
SMDH 00008	1	2	EXP 524096	65	13	29.2	
SMDH 00007b	0	1	EXP 524102	45	19	33.5	1.67
SMDH 00007b	1	2	EXP 524103	5	3	26.3	
SMDH 00007	1	2	EXP 524110	50	4	35.6	
SMDH 00007	2	3	EXP 524111	70	7	32.3	
SMDH 00006b	1	2	EXP 524121	55	27	30.7	
SMDH 00006b	4	5	EXP 524124	75	17	32.5	
SMDH 00006b	8	9	EXP 524128	70	19	31.8	1.63
SMDH 00006b	11	11.5	EXP 524131	45	13	34.8	
SMDH 00005b	0	1	EXP 524142	20	20	35.2	
SMDH 00005b	1	2	EXP 524143	25	24	28.7	
SMDH 00005	1	2	EXP 524149	40	0	27.7	
SMDH 00002b	7	7.5	EXP 524199	50	0	27.7	1.77
SMDH 00001	0	1	EXP 524224	40	13	47.2	
SMDH 00205	0	1	EXP 524238	45	18	33.9	
SMDH 00205	4	5	EXP 524242	40	0	26.3	
SMDH 00206	0	1	EXP 524264	40	7	33.7	

ARK MINES

LTD.

BHID	FROM	TO	SID	Recov%	CRCT_cps	SI_%	BD
SMDH 00207	10	10.5	EXP 524295	40	3	32.9	1.67
SMDH 00211	0	1	EXP 524374	20	21	27.2	
SMDH 00213b	0	1	EXP 524430	50	11	25.8	
SMDH 00213b	10	11	EXP 524440	20	5	33.2	
SMDH 00216	4	5	EXP 524479	40	1	28.2	
SMDH 00216b	0	1	EXP 524489	30	4	26.5	1.59
SMDH 00217	0	1	EXP 524504	25	3	29.7	
SMDH 00217	2	3	EXP 524506	20	0	25.7	
SMDH 00217b	3	4	EXP 524516	25	2	19.9	
SMDH 00218	6	7	EXP 524527	90	4	23.4	
SMDH 00218b	0	1	EXP 524539	30	4	36.7	1.67
SMDH 00219	0	1	EXP 524548	40	9	34.4	
SMDH 00220	1	2	EXP 524566	45	4	27.8	
SMDH 00220	2	3	EXP 524567	90	0	21.6	
SMDH 00015	0	1	EXP 524633	25	8	36	
SMDH 00014	1	2	EXP 524669	80	8	36.8	1.49
SMDH 00033b	1	2	EXP 524697	30	4	42.3	
SMDH 00032	4	5	EXP 524731	95	7	32	
SMDH 00029b	2	3	EXP 524784	50	5	44.5	
SMDH 00029b	3	4	EXP 524785	40	5	48.7	
SMDH 00028b	0	1	EXP 524795	30	14	48.8	1.7
SMDH 00028b	8	8.5	EXP 524803	20	4	40.4	
SMDH 00027b	1	2	EXP 524812	20	1	42.2	
SMDH 00029	0	1	EXP 524817	20	4	33.2	
SMDH 00026b	11	11.5	EXP 524849	50	9	31.5	
SMDH 00023b	1	2	EXP 524907	35	0	33.5	1.65
SMDH 00023b	6	7	EXP 524912	80	3	28.3	
SMDH 00022b	0	1	EXP 524931	20	5	28.2	
SMDH 00022	0	1	EXP 524941	15	3	23.9	
SMDH 00022	1	2	EXP 524942	25	3	32.6	
SMDH 00021	0	1	EXP 524958	20	2	32.3	1.61
SMDH 00020	3	4	EXP 524975	20	0	38.1	
SMDH 00019b	0	1	EXP 524980	5	0	38.3	
SMDH 00019b	10	11	EXP 524990	98	0	28.4	
SMDH 00019	0	1	EXP 524994	30	9	30.6	
SMDH 00227	0	1	EXP 525078	10	17	35.2	1.56
SMDH 00228	0	1	EXP 525088	18	12	42.3	
SMDH 00235	8	8.5	EXP 525196	50	4	38.5	
SMDH 00252	5	6	EXP 525255	20	3	48.2	
SMDH 00250	0	1	EXP 525271	20	9	31	
SMDH 00248	2	3	EXP 525290	25	15	28.7	1.61
SMDH 00244	1	2	EXP 525337	25	16	32.6	
SMDH 00243	4	5	EXP 525354	15	20	28.5	
SMDH 00241	0	1	EXP 525365	25	25	41.5	
SMDH 00256	3	4	EXP 525400	20	5	26.9	
SMDH 00257	0	1	EXP 525410	15	14	32.2	1.72
SMDH 00257	1	2	EXP 525411	20	18	31.2	
SMDH 00257	3	4	EXP 525413	20	4	24.9	
SMDH 00260	0	1	EXP 525443	15	19	30.5	
SMDH 00264	11	11.5	EXP 525493	50	6	30.1	
SMDH 00265	1	2	EXP 525495	15	6	28.5	1.6