



New Mt. Porter Gold Mining Targets

Sydney, 19 July 2016: Ark Mines Ltd (ASX: AHK) is pleased to announce two new potential gold mining sources within 400m north and south of its near to production, Mt Porter gold mine. From desktop and field studies, AHK has recognised two sites within ML23839, which have strong gold drill intercepts and sit along strike from Mt. Porter on the Mt. Porter Anticline. The zones have been named Mt. Porter North and Mt. Porter South.

AHK recently undertook an historical review of previous work undertaken by RGC Limited and Homestake Gold Australia on ML23839 and followed this up with two site visits to review drill collars and outcropping.

The similarities between the two new zones and the existing Mt. Porter resource suggest there may be potential for developing a similar resource for the north and the south. Geological mapping has shown the Mt. Porter anticline to be a moderately tight anticline. The axis strikes N - NNW and the plunge is to the north. The anticline is disrupted by numerous N-NW striking faults with displacements of 10s of metres.

Managing Director Roger Jackson said: *" this may be a real shot in the arm for Ark, as these two new gold zones are only hundreds of meters from the Mt. Porter mine and will require very little to develop other than a small amount of infill drilling. We have a permitting template, a haul road, an on site contractor, technical staff and a mill requiring feed. Furthermore we have structural corridors running 5 kms north and south that sit within our enveloping Exploration license 23237, which will present Ark with a real blue sky opportunity"*.

Mt. Porter North Highlights:

- High grade drill intercepts
- West limb exposed at surface
- 350m north of Mt. Porter
- 4m @ 43.05 g/t Au (1.55m @ 43.05 g/t Au True Thickness)
- 8m @ 8.38 g/t Au (7.4m @ 8.38 g/t Au True Thickness)
- 2m @ 5.2 g/t Au (2.01m @ 5.2 g/t Au True Thickness)
- 10m @ 1.56 g/t Au (9.89 @ 1.56 g/t Au True Thickness)
- Strong Au soil geochemical anomaly
- Strong As soil geochemical anomaly

Mt. Porter South Highlights:

- Lower grade 9 -10m thick mineralised zone
- 400m south of Mt. Porter
- 10m @ 1.15 g/t Au (9.82 @ 1.15 g/t Au true thickness)
- 9m @ 1.55 g/t Au (8.83 @ 1.55g/t Au true thickness)
- 19 out of 61 drill holes and 5 out of 16 trenches had significant intersections of gold mineralisation (>1m @ 1 g/t Au)
- Strong Au soil geochemical anomaly
- Strong As soil geochemical anomaly

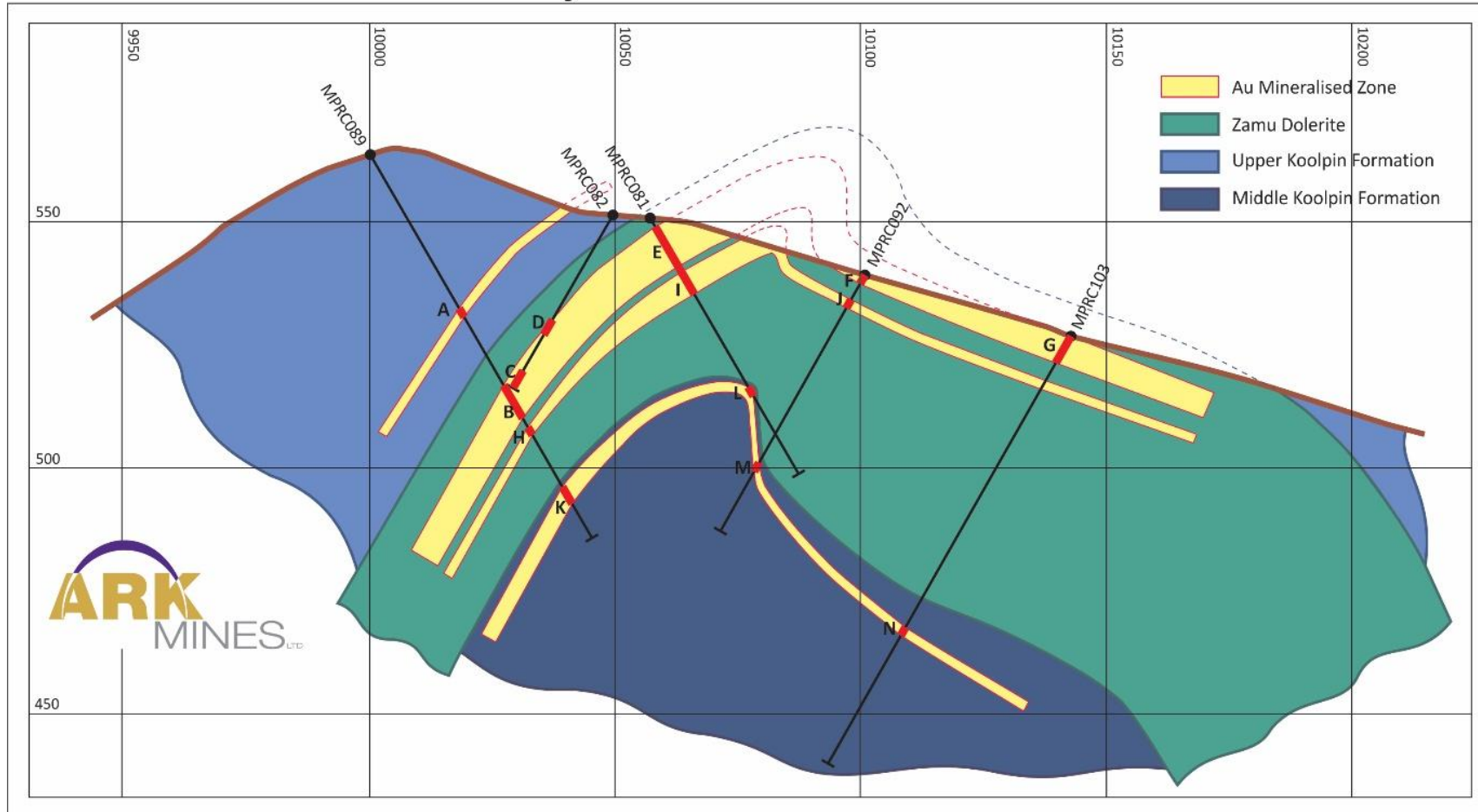


Information Sourced from the Open Files at the NT Mines Department
Homestake Gold Australia AR
Annual Report ERL 116 – Mount Porter
For the period 12/9/95 to 12/9/96
Report No 1996/24



Figure 1 Ark Managing Director holding Mineralised rock exposed at surface along the Mt. Porter Anticline

Ark Mines Mount Porter Project 10800m N Section



Intercept Table

A: 2m at 1.46 g/t Au
B: 8m at 8.38 g/t Au (inc. 4m at 14.35 g/t Au)
C: 4m at 43.05 g/t Au
D: 4m at 1.14 g/t Au
E: 10m at 1.56 g/t Au (inc. 4m at 3.03 g/t Au)

F: 2m at 2.28 g/t Au
G: 6m at 1.39 g/t Au
H: 2m at 1.01 g/t Au
I: 4m at 1.63 g/t Au
J: 2m at 5.20 g/t Au

K: 4m at 0.53 g/t Au
L: 2m at 0.58 g/t Au
M: 2m at 1.46 g/t Au
N: 2m at 0.54 g/t Au

Cutoff grade: 0.50 g/t Au
 Topcut grade: 20.0 g/t Au

Figure 2 Cross section of 10800 400 m North of Mt Porter

Table 1: Significant Intercepts 10,800m N Section

Spatial Data							Intercept Data							
BHID	Easting (m)	Northing (m)	Elevation (m)	Azimuth (degrees)	Dip (degrees)	EOH (m)	Method	Section Label	From (m)	To (m)	Interval (m)	True Thickness (m)	Raw Au Grade (Au g/t)	Top Cut 20 g/t Au Grade (Au g/t)
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	A	36	38	2	1.68	1.46	1.46
								B	54	62	8	7.40	8.38	8.37
								<i>including</i>	54	58	4	3.89	14.35	14.35
								H	64	66	2	1.87	1.01	1.01
								K	78	82	4	3.73	0.53	0.53
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	D	24	28	4	1.51	1.14	1.14
								C	36	40	4	1.55	43.05	20.0
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	E	2	12	10	9.89	1.56	1.56
								<i>including</i>	8	12	4	3.98	3.03	3.03
								I	14	18	4	4.03	1.63	1.63
								L	40	42	2	2.47	0.58	0.58
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	F	0	2	2	2.00	2.28	2.28
								J	6	8	2	2.01	5.20	5.20
								M	44	46	2	1.38	1.46	1.46
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	G	0	6	6	5.92	1.39	1.39
								N	68	70	2	2.06	0.54	0.54

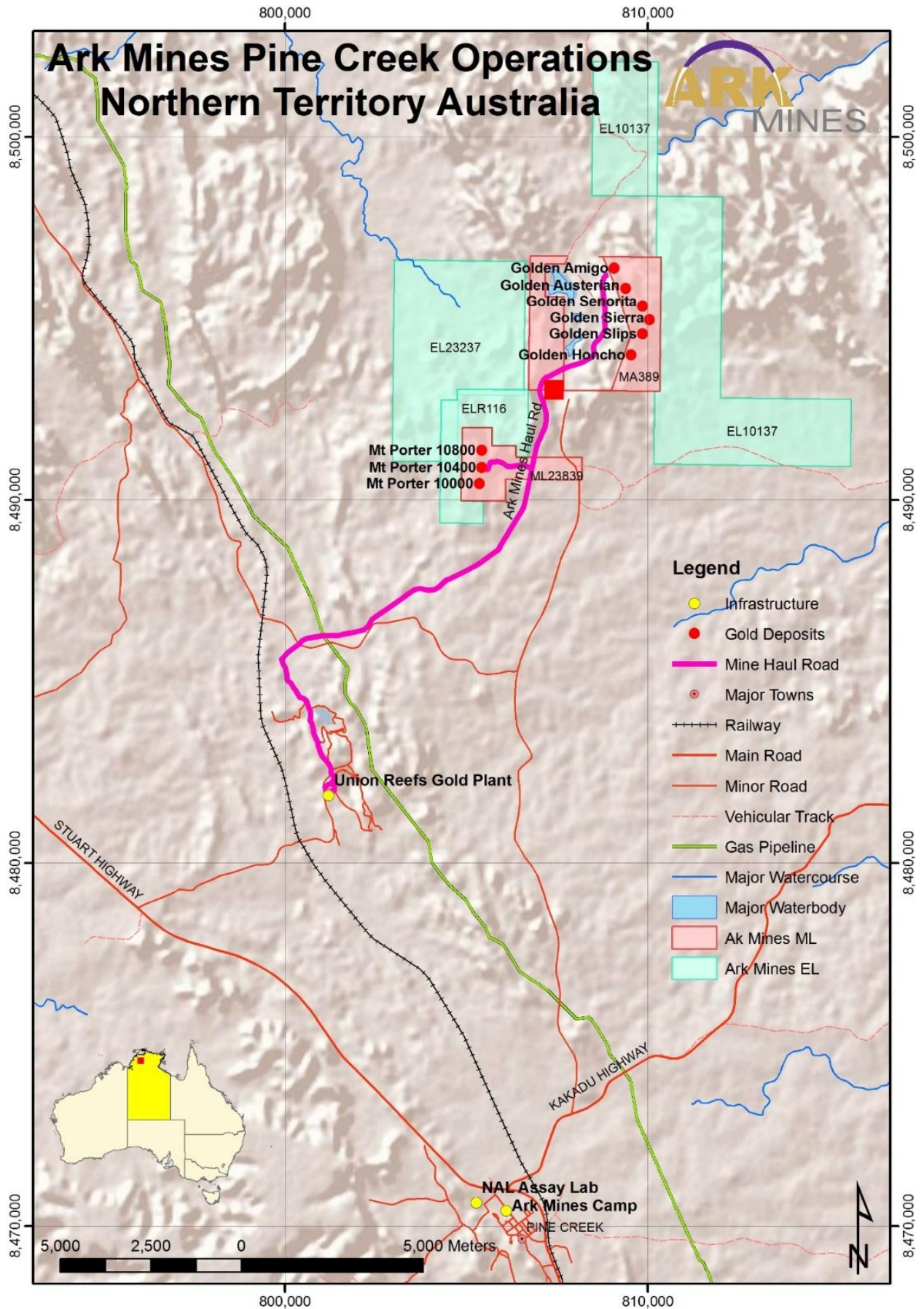
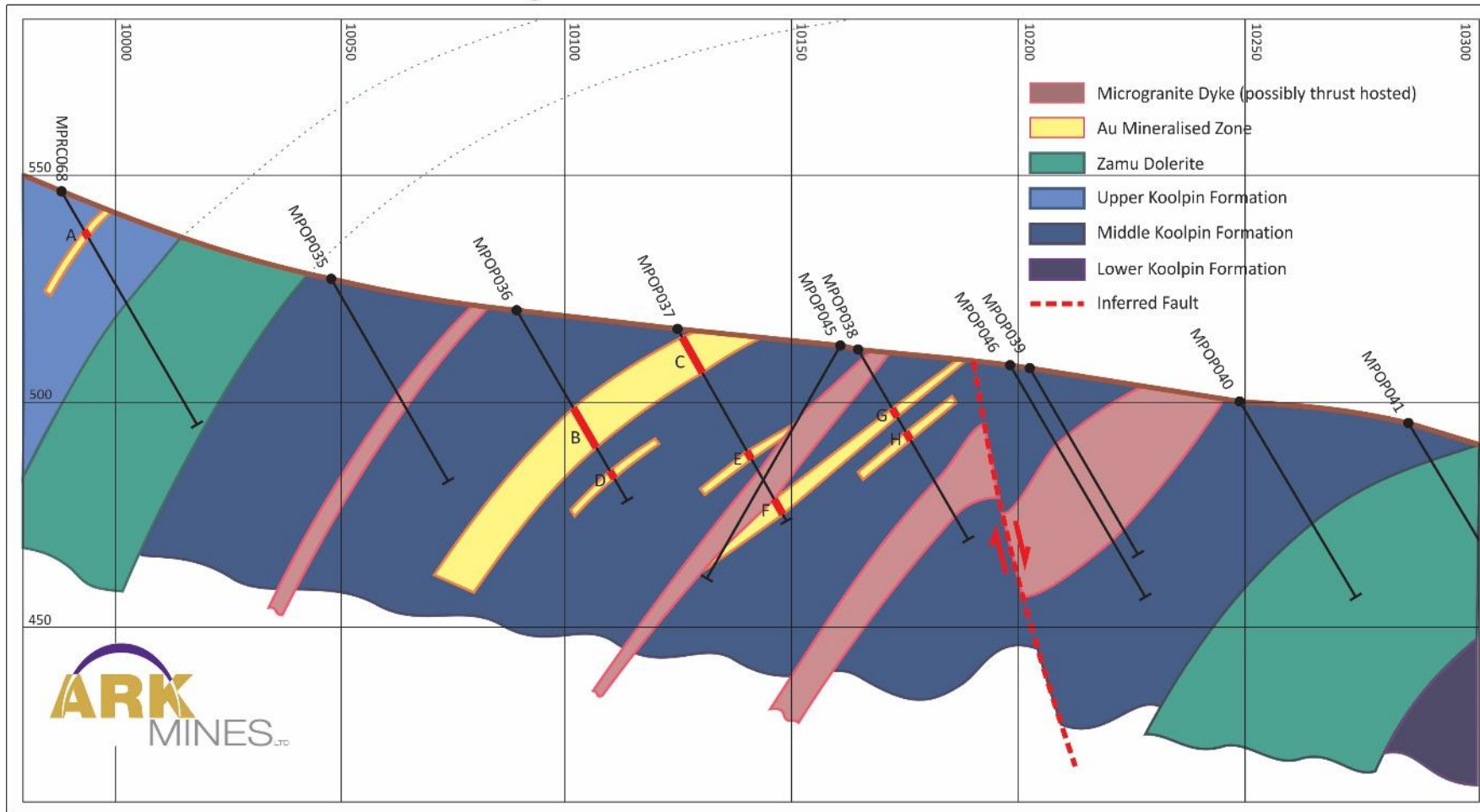


Figure 3 Location of Arks Tenements, haul road and Mine locations

Figure 3: Ark Mines Mount Porter Project 10000m N Section



Intercept Table

A: 2m at 1.12 g/t Au

B: 10m at 1.15 g/t Au

C: 9m at 1.55 g/t Au (inc. 4m at 2.69 g/t Au)

D: 2m at 1.03 g/t Au

E: 2m at 0.61 g/t Au

F: 4m at 0.56 g/t Au

G: 2m at 0.74 g/t Au

H: 2m at 1.03 g/t Au

Cutoff grade: 0.50 g/t Au

Topcut grade: 20.0 g/t Au

Figure 4 Cross section of the 10000 zone 400 m south of Mt Porter Mine site

Table 2: Significant Intercepts 10,000m N Section

Spatial Data							Intercept Data							
BHID	Easting (m)	Northing (m)	Elevation (m)	Azimuth (degrees)	Dip (degrees)	EOH (m)	Method	Section Label	From (m)	To (m)	Interval (m)	True Thickness (m)	Raw Au Grade (Au g/t)	Topcut 20 g/t Au Grade (Au g/t)
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	A	10	12	2	1.83	1.12	1.12
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	nil						
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	B	25	35	10	9.82	1.15	1.15
								D	41	43	2	1.85	1.03	1.03
								nil	47	49	2	1.90	0.93	0.93
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	C	2	11	9	8.83	1.55	1.55
								<i>including</i>	5	9	4	3.80	2.69	2.69
								E	31	33	2	1.87	0.61	0.61
								F	43	47	4	3.81	0.56	0.56
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	nil						
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	G	15	17	2	1.93	0.74	0.74
								H	21	23	2	1.90	1.03	1.03
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	nil						
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	nil						
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	nil						
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	nil						

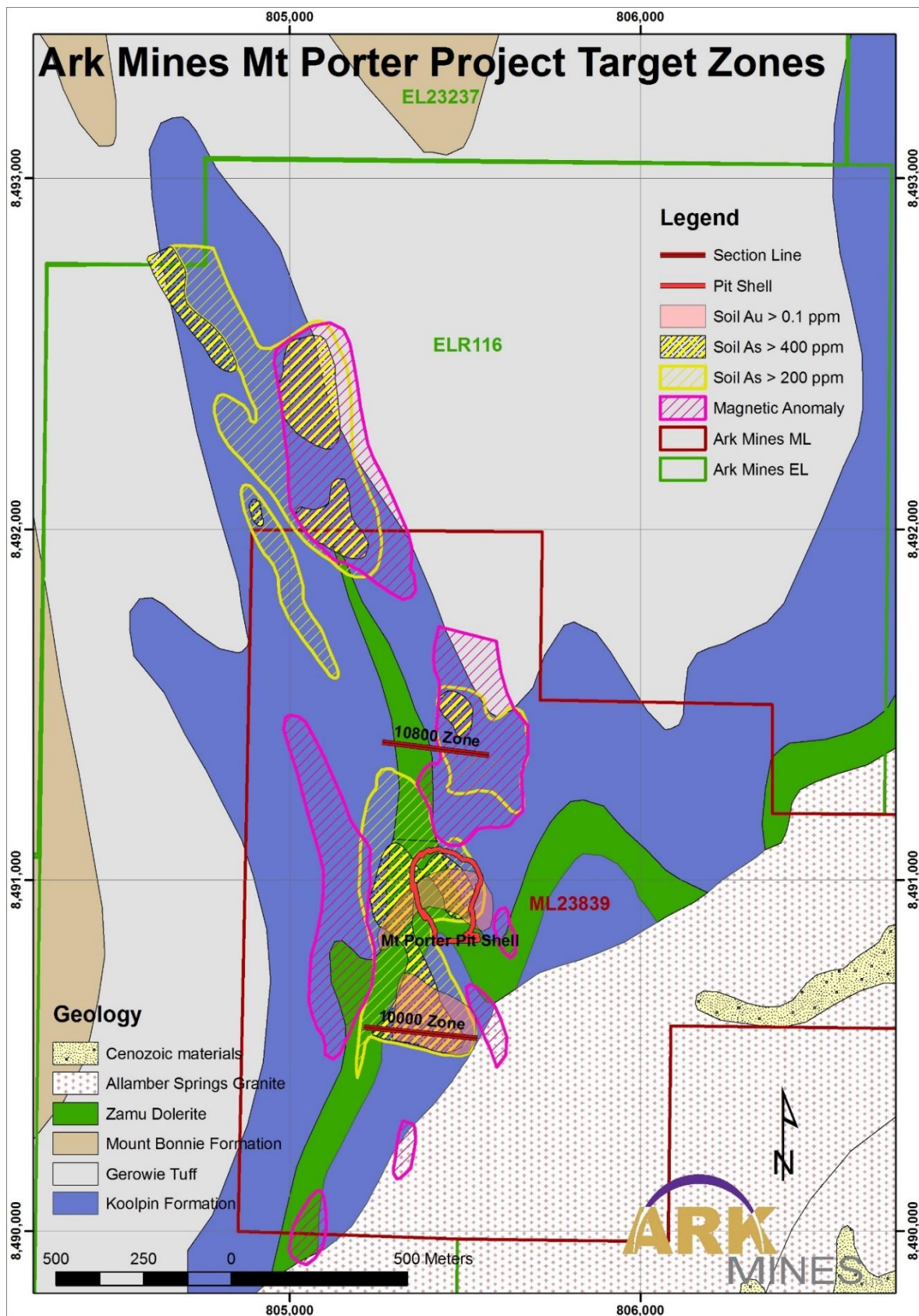


Figure 5 Mt Porter anticline Geochemical, magnetic, and drilling targets

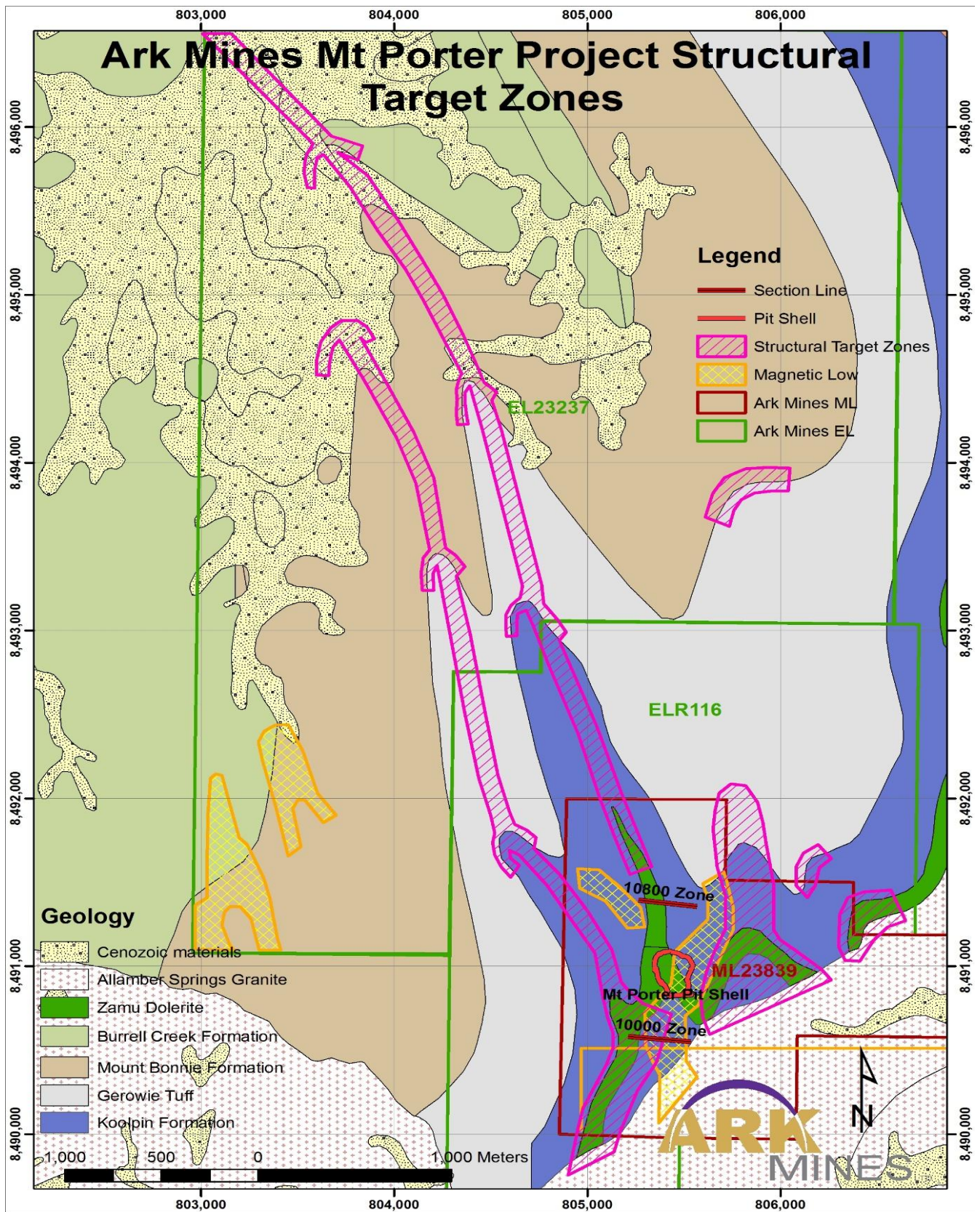


Figure 6 Ark Structural targets

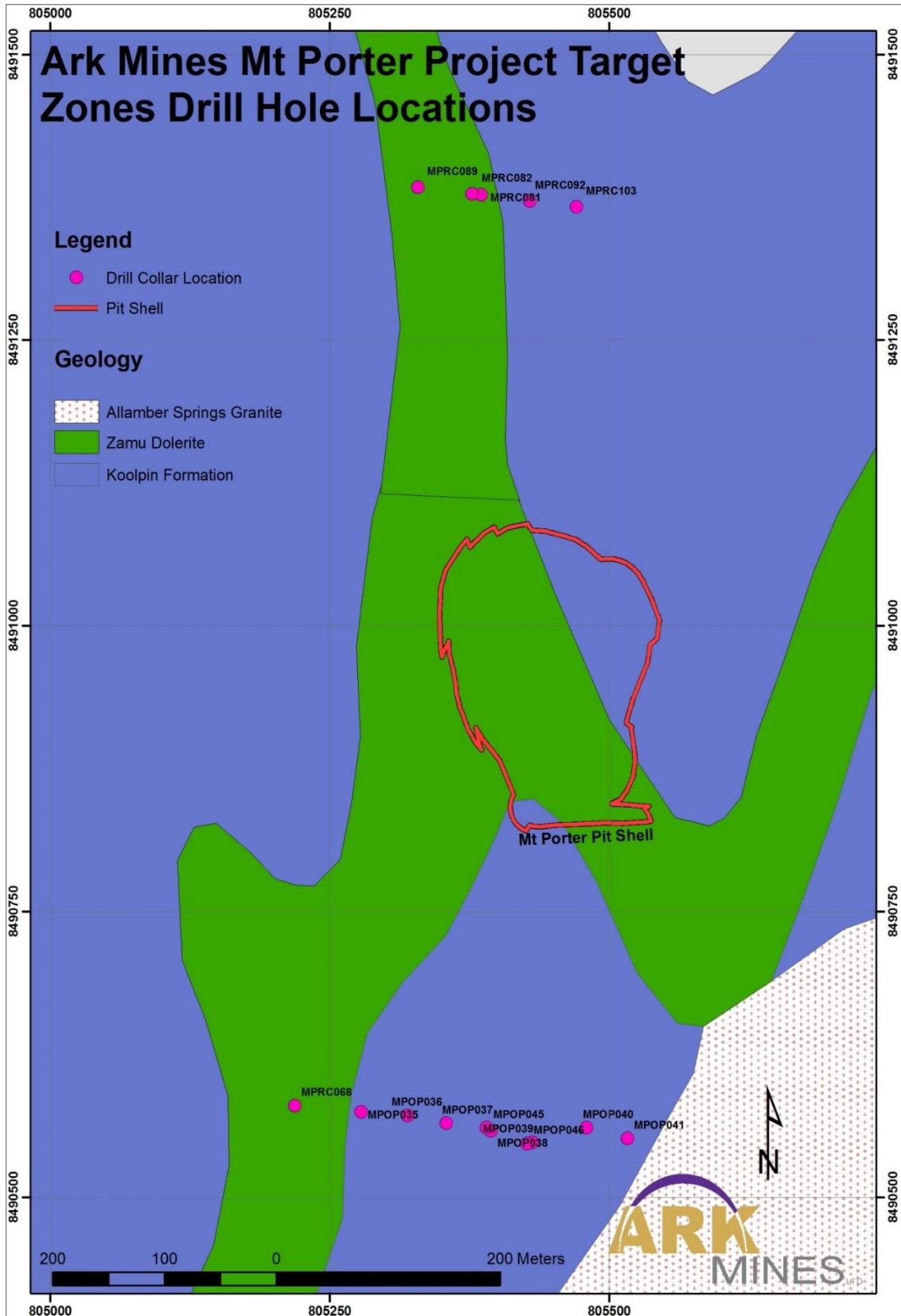


Figure 7 Drill collar locations

JORC Code, 2012 Edition – Table 1 – Mount Porter Prospect – ML 23839 – Drilling Results – JORC 2012

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"> Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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. 	<ul style="list-style-type: none"> For all holes prefixed MPOP, drilling was carried out by open hole percussion (OP) with drill cuttings collected over two metre intervals. For all holes prefixed MPRC, drilling was carried out by reverse circulation (RC) with drill cuttings collected over two metre intervals. Samples were passed through a cyclone and riffle splitter in order to obtain a larger sample collected in a plastic bag, and a smaller representative sample weighing approximately 3kg collected in a calico bag for each two metres drilled. Field duplicates were produced at an average rate of 1 in 10 samples, by passing primary sample through a riffle splitter. All 3kg interval samples were submitted to the laboratory, pulverised to produce a 50g charge for fire assay and then analysed for gold. Field duplicates were submitted to the laboratory within the sample sequence. Field standards were not inserted into the original sample sequence but instead industry standard Gannett standards for a range of values were used with each laboratory job. Each sample collected was noted qualitatively for moisture content with the vast majority of samples collected being essentially dry.
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> Gaden Drilling was contracted to undertake OP drilling. Civil Drilling was contracted to undertake RC drilling. Drilling was completed using a 5 3/8 inch (13.562cm) face sampling hammer. All drilling was inclined at 60 degrees (refer Table 3 for details). No downhole surveys were undertaken for this program.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> A visual estimate of percentage recovery was made for each two metres drilled. Each sample was qualitatively logged for moisture content and sample size consistency of the smaller calico bag sample continuously monitored while drilling.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> All drill cuttings qualitatively logged and representative cuttings collected in chip trays on two metre intervals. Qualitative logging includes colour, lithology, description, weathering, alteration and mineralisation. Each hole was logged over the entire interval drilled.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub- 	<ul style="list-style-type: none"> See sampling section for a description of sampling and duplicate sampling techniques. Duplicate samples were taken using the same riffle splitting method as collected from the drilling rig when the holes were drilled. Duplicate sample results for a range of assay values indicate that original assay results are largely reproducible, with no obvious sample bias.

Criteria	JORC Code explanation	Commentary
	<p>sampling stages to maximise representivity of samples.</p> <ul style="list-style-type: none"> Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> The nature, quality and appropriateness of the sampling technique are considered adequate for the style of mineralisation. Sample sizes are considered appropriate for the nature and grain size of the gold mineralisation intersected.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> A certified and accredited laboratory, Australian Assay Laboratory (AAL) was used for all assays. Samples were analysed utilising the industry standard fire assay technique, using a 50g charge and ICP-AAS finish (0.01ppm detection limit). All assays over 1 ppm have been routinely re-assayed at least once and in some cases twice to establish acceptable levels of accuracy and precision. Internal certified QA/QC is carried out by AAL. In addition, industry standard Gannett standards for a range of values were used with each laboratory job, included at the end of each sample sequence.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Primary data is verified on paper reports certified by the laboratory and significant intersections initially calculated by direct reference to the drill logs produced in the field. The data is then entered into Excel spreadsheets for further processing and cross validation checks. No adjustment has been made to the data except replacing L for gold assays <0.01ppm with a numerical value of 0.005, equating to half the assay method detection limit.
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. 	<ul style="list-style-type: none"> All co-ordinates are recorded in Local Mine Grid, using Differential GPS (dGPS). Local Mine Grid was established by appropriately qualified surveyors using established control points and Total Station survey, with validation using high accuracy (20mm) Real Time Kinematic (RTK) GPS. Accurate conversion parameters between Local Mine Grid and national Grid GDA94 MGA Zone 52 were established by appropriately qualified surveyors and validated using RTKGPS. Drill hole collar locations were established using hand held GPS, then surveyed by appropriately qualified surveyors post drilling, to provide suitably accurate spatial control for each drill hole. Surveyors provided easting, northing and elevation coordinates in both local and national grids to an accuracy of at least $\pm 1-2\text{m}$ and RLs within approximately $\pm 0.1-0.2\text{m}$. Due to the commonly shallow depths of the holes (average <60m) no downhole surveys were carried out for the program.
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 the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Line spacing between drilling lines is approximately 50m ± 5. Collar spacing on drilling lines is approximately 50m ± 5. The data spacing is adequate for the current exploration stage of the prospects, and to guide further drilling. No sample compositing has been carried out for the current program (see above).
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> The south target drilling program has been designed to identify and intersect moderately west dipping lode structures with easterly directed holes at inclinations of 60° and it is considered that this provides a consistent unbiased result. Limited numbers of westerly directed holes have not biased interpretation (see Figure 3). The north target drilling program has been designed to identify and intersect moderately west dipping lodes on a western fold limb using easterly directed holes with an inclination of approximately 60°, and shallow east dipping lodes on an eastern fold limb using westerly directed holes with an inclination of approximately 60°. Limited numbers of westerly directed holes on the western limb have not biased interpretation (see Figure 1), and it is considered that this

Criteria	JORC Code explanation	Commentary
		<p>provides a consistent unbiased result.</p> <ul style="list-style-type: none"> As the drilling orientation has been appropriate with respect to the lode orientation which is predictable at this stage of exploration, it is not considered that a sampling bias has been introduced.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Sample numbers were recorded on the drill logs against the logged interval at the time of sampling by Rension Goldfields Consolidated Exploration Pty Ltd (RGC Exploration) personnel. Sample intervals sent to the laboratory have been collected in individually numbered calico bags and then loaded into large plastic bags annotated with the sample sequence. These bags have then been transported directly from the drill site to the AAL laboratory in Pine Creek by RGC Exploration personnel. Coarse residue and assay pulps were securely stored at the AAL laboratory in Pine Creek.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No audits or reviews undertaken at this stage of the exploration program.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> All results pertaining to the current program are from ML 23839, recently purchased by AHK and soon to complete. ML 23839 is located on PL 815/ Mary River West Station. AHK has consulted with the Traditional Owners (TOs) of ML 23839, the Jaywon People on cultural heritage and the TOs have been kept informed of exploration activities carried out by AHK.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The exploration work referred to in this announcement was carried out by Rension Goldfields Consolidated Exploration Pty Ltd including open hole percussion drilling in 1989 and reverse circulation drilling in 1989 and 1990.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The drilling has targeted shallow to moderately dipping quartz vein associated saddle lode mineralisation on both east and west limbs of the north northwest trending Mount Porter Anticline, within the low grade meta-pelites of the Koolpin Formation and the Zamu Dolerite. The Mount Porter Anticline is close to isoclinal and has a shallow northerly plunge. The Palaeoproterozoic Koolpin formation is dominated by lower greenschist facies meta-mud and meta-silt stones with sulphide facies banded iron formation horizons. The Palaeoproterozoic Zamu Dolerite is fine to medium grained gabbroic intrusive emplaced as regionally extensive sills within the Koolpin Formation. The Southern Target is approximately 280m along strike to the south of the AHK Mount Porter Resource. The Northern Target is approximately 260m along strike to the north of the AHK Mount Porter Resource.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and 	<ul style="list-style-type: none"> All drill hole information is retained in the AHK database and full drill hole details are shown in Table 3 accompanying this document. No material information is excluded.

Criteria	JORC Code explanation	Commentary
	<p><i>this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></p>	
Data aggregation methods	<ul style="list-style-type: none"> 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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> In reporting of mineralised intercepts quoted in this announcement, these are shown both with and without top cuts, using standard length weighted averaging techniques with a maximum internal dilution of two metres, non-consecutive for mineralised intervals stated > 0.5 g/t gold. The top-cut applied in table 1 and 2 was statistically determined at 20 g/t gold, the raw grade in table 1 and 2 is the uncut grade over the same intercept. Higher grade results, generally over 2m lengths within longer lengths of lower grade results are indicated where considered significant (refer Tables 1 and 2). There are no metal equivalents reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> For each intercept, intercepts quoted are as both downhole widths with the drill holes angles at 60°, and as true thickness based on the sectional interpretation of lode geometry as represented in Figures 1 and 3. The geometry of the mineralisation relative to drill hole angle is shown in Figures 1 and 3.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> See Figures 7, showing drill hole locations
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Table 3 accompanying this document also describes targeted sub-economic mineralised gold intercepts.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Earlier geomagnetic, rock chip, soil and trench sampling results have been incorporated into targeting the current drilling (see Figure 4 and 5), and contribute to the geological understanding and interpretation, but do not inform the reported intercepts. From targeting shallow, easily mineable gold mineralisation the depth of partial oxidation has been observed down to 20-40m vertical depth. Water table is variable depending on topographic height but generally in the range of 40-50m downhole depth.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Further work is in planning for both North and South Targets, based on staged infill drilling the currently drill 50m by 50m grid to provide greater definition and continuity along and across strike, and extension drilling aligned to mapping and mineralisation modelling to take in the extents of the targets. Assaying on infill drilling will incorporate density and waste rock characterisation work preparatory for mine planning.



Table 3: Drilling Data 10,800m N & 10,000m N Sections

Spatial Data							Intercept Data				
BHID	Easting (m)	Northing (m)	Elevation (m)	Azimuth (degrees)	Dip (degrees)	EOH (m)	Method	From (m)	To (m)	Interval (m)	Raw Au Grade (Au g/t)
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	0	2	2	0.005
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	2	5	3	0.08
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	5	7	2	0.15
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	7	9	2	0.04
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	9	11	2	0.02
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	11	13	2	0.09
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	13	15	2	0.08
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	15	17	2	0.11
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	17	19	2	0.02
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	19	21	2	0.07
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	21	23	2	0.07
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	23	25	2	0.06
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	25	27	2	0.03
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	27	29	2	0.02
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	29	31	2	0.02
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	31	33	2	0.01
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	33	35	2	0.01
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	35	37	2	0.04
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	37	39	2	0.06
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	39	41	2	0.02
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	41	43	2	0.02
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	43	45	2	0.03
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	45	47	2	0.02
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	47	49	2	0.01
MPOP035	10047.7	10004.6	526.9	90	60	51	OP	49	51	2	0.01
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	0	2	2	0.005
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	2	5	3	0.1
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	5	7	2	0.04
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	7	9	2	0.37
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	9	11	2	0.06
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	11	13	2	0.03
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	13	15	2	0.03
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	15	17	2	0.35
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	17	19	2	0.23
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	19	21	2	0.15
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	21	23	2	0.08
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	23	25	2	0.1
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	25	27	2	0.78
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	27	29	2	0.72
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	29	31	2	1.16



MPOP036	10089.1	10006.7	520.2	90	60	49	OP	31	33	2	1.76
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	33	35	2	1.33
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	35	37	2	0.46
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	37	39	2	0.39
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	39	41	2	0.36
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	41	43	2	1.03
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	43	45	2	0.49
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	45	47	2	0.42
MPOP036	10089.1	10006.7	520.2	90	60	49	OP	47	49	2	0.93
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	0	2	2	0.005
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	2	5	3	0.65
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	5	7	2	2.58
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	7	9	2	2.8
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	9	11	2	0.63
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	11	13	2	0.32
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	13	15	2	0.16
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	15	17	2	0.21
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	17	19	2	0.12
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	19	21	2	0.11
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	21	23	2	0.04
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	23	25	2	0.005
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	25	27	2	0.21
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	27	29	2	0.29
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	29	31	2	0.14
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	31	33	2	0.61
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	33	35	2	0.45
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	35	37	2	0.41
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	37	39	2	0.28
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	39	41	2	0.09
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	41	43	2	0.16
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	43	45	2	0.55
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	45	47	2	0.56
MPOP037	10124.5	10004.2	515.8	91	60	49	OP	47	49	2	0.28
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	0	2	2	0.005
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	2	5	3	0.07
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	5	7	2	0.02
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	7	9	2	0.01
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	9	11	2	0.03
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	11	13	2	0.08
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	13	15	2	0.2
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	15	17	2	0.74
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	17	19	2	0.24
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	19	21	2	0.46
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	21	23	2	1.03
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	23	25	2	0.19



MPOP038	10164.8	10002.7	511.5	97	60	49	OP	25	27	2	0.02
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	27	29	2	0.05
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	29	31	2	0.04
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	31	33	2	0.01
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	33	35	2	0.005
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	35	37	2	0.01
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	37	39	2	0.005
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	39	41	2	0.01
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	41	43	2	0.01
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	43	45	2	0.06
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	45	47	2	0.04
MPOP038	10164.8	10002.7	511.5	97	60	49	OP	47	49	2	0.03
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	0	2	2	0.005
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	2	5	3	0.07
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	5	7	2	0.05
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	7	9	2	0.02
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	9	11	2	0.01
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	11	13	2	0.03
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	13	15	2	0.02
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	15	17	2	0.005
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	17	19	2	0.02
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	19	21	2	0.01
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	21	23	2	0.01
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	23	25	2	0.005
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	25	27	2	0.005
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	27	29	2	0.005
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	29	31	2	0.005
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	31	33	2	0.005
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	33	35	2	0.005
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	35	37	2	0.005
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	37	39	2	0.005
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	39	41	2	0.05
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	41	43	2	0.05
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	43	45	2	0.005
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	45	47	2	0.005
MPOP039	10202.8	9997.0	507.6	90	60	48	OP	47	48	1	0.005
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	0	2	2	0.005
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	2	5	3	0.03
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	5	7	2	0.01
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	7	9	2	0.005
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	9	11	2	0.005
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	11	13	2	0.005
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	13	15	2	0.005
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	15	17	2	0.005
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	17	19	2	0.005



MPOP040	10249.4	10015.6	499.7	90	60	50	OP	19	22	3	0.02
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	22	25	3	0.17
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	25	28	3	0.2
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	28	30	2	0.09
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	30	32	2	0.1
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	32	34	2	0.08
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	34	36	2	0.03
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	36	38	2	0.02
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	38	40	2	0.02
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	40	42	2	0.03
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	42	44	2	0.01
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	44	46	2	0.02
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	46	48	2	0.03
MPOP040	10249.4	10015.6	499.7	90	60	50	OP	48	50	2	0.01
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	0	2	2	0.005
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	2	5	3	0.05
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	5	7	2	0.34
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	7	9	2	0.05
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	9	11	2	0.07
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	11	17	6	0.07
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	17	19	2	0.07
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	19	21	2	0.06
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	21	23	2	0.05
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	23	25	2	0.03
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	25	27	2	0.03
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	27	29	2	0.03
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	29	31	2	0.02
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	31	33	2	0.01
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	33	35	2	0.03
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	35	37	2	0.02
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	37	39	2	0.02
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	39	41	2	0.02
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	41	43	2	0.02
MPOP041	10286.9	10010.7	494.7	90	60	45	OP	43	45	2	0.01
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	0	2	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	2	5	3	0.02
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	5	7	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	7	9	2	0.02
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	9	11	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	11	13	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	13	15	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	15	17	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	17	19	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	19	21	2	0.01
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	21	23	2	0.005



MPOP045	10160.9	10004.8	512.0	270	60	59	OP	23	25	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	25	27	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	27	29	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	29	31	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	31	33	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	33	35	2	0.01
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	35	37	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	37	39	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	39	41	2	0.01
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	41	43	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	43	45	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	45	47	2	0.01
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	47	49	2	0.005
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	49	51	2	0.01
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	51	53	2	0.36
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	53	55	2	0.12
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	55	57	2	0.25
MPOP045	10160.9	10004.8	512.0	270	60	59	OP	57	59	2	0.12
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	0	2	2	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	2	5	3	0.08
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	5	7	2	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	7	9	2	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	9	11	2	0.02
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	11	13	2	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	13	15	2	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	15	17	2	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	17	19	2	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	19	20	1	0.01
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	20	23	3	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	23	27	4	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	27	31	4	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	31	35	4	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	35	39	4	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	39	43	4	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	43	47	4	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	47	51	4	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	52	55	3	0.005
MPOP046	10198.5	9995.3	507.8	90	60	59	OP	55	59	4	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	0	2	2	0.01
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	2	4	2	0.1
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	4	6	2	0.16
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	6	8	2	0.14
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	8	10	2	0.16
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	10	12	2	1.12
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	12	14	2	0.14



MPRC068	9988.0	10003.0	546.7	90	60	60	RC	14	16	2	0.02
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	16	18	2	0.06
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	18	20	2	0.04
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	20	22	2	0.04
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	22	24	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	24	26	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	26	28	2	0.02
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	28	30	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	30	32	2	0.06
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	32	34	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	34	36	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	36	38	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	38	40	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	40	42	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	42	44	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	44	46	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	46	48	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	48	50	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	50	52	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	52	54	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	54	56	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	56	58	2	0.005
MPRC068	9988.0	10003.0	546.7	90	60	60	RC	58	60	2	0.005
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	0	2	2	0.34
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	2	4	2	0.6
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	4	6	2	0.5
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	6	8	2	0.66
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	8	10	2	2.9
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	10	12	2	3.16
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	12	14	2	0.62
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	14	16	2	0.88
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	16	18	2	2.38
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	18	20	2	0.18
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	20	22	2	0.1
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	22	24	2	0.05
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	24	26	2	0.005
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	26	28	2	0.005
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	28	30	2	0.005
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	30	32	2	0.005
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	32	34	2	0.1
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	34	36	2	0.3
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	36	38	2	0.3
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	38	40	2	0.2
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	40	42	2	0.58
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	42	44	2	0.42



MPRC081	10057.0	10814.0	550.5	90	60	60	RC	44	46	2	0.18
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	46	48	2	0.42
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	48	50	2	0.03
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	50	52	2	0.02
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	52	54	2	0.005
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	54	56	2	0.005
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	56	58	2	0.005
MPRC081	10057.0	10814.0	550.5	90	60	60	RC	58	60	2	0.005
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	0	2	2	0.36
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	2	4	2	0.34
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	4	6	2	0.08
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	6	8	2	0.12
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	8	10	2	0.18
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	10	12	2	0.36
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	12	14	2	0.12
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	14	16	2	0.16
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	16	18	2	0.36
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	18	20	2	0.24
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	20	22	2	0.2
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	22	24	2	0.06
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	24	26	2	1.22
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	26	28	2	1.06
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	28	30	2	0.32
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	30	32	2	0.18
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	32	34	2	0.18
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	34	36	2	0.005
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	36	38	2	42.6
MPRC082	10049.0	10814.0	550.8	270	60	40	RC	38	40	2	43.5
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	0	2	2	0.01
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	2	4	2	0.005
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	4	6	2	0.005
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	6	8	2	0.01
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	8	10	2	0.005
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	10	12	2	0.02
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	12	14	2	0.1
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	14	16	2	0.02
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	16	18	2	0.04
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	18	20	2	0.02
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	20	22	2	0.08
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	22	24	2	0.005
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	24	26	2	0.005
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	26	28	2	0.04
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	28	30	2	0.01
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	30	32	2	0.08
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	32	34	2	0.08



MPRC089	10000.0	10814.0	563.2	90	60	90	RC	34	36	2	0.16
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	36	38	2	1.46
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	38	40	2	0.46
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	40	42	2	0.06
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	42	44	2	0.04
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	44	46	2	0.005
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	46	48	2	0.005
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	48	50	2	0.02
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	50	52	2	0.04
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	52	54	2	0.06
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	54	56	2	13.1
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	56	58	2	15.6
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	58	60	2	3.48
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	60	62	2	1.32
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	62	64	2	0.46
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	64	66	2	1
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	66	68	2	0.08
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	68	70	2	0.2
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	70	72	2	0.16
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	72	74	2	0.16
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	74	76	2	0.46
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	76	78	2	0.22
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	78	80	2	0.5
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	80	82	2	0.56
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	82	84	2	0.12
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	84	86	2	0.1
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	86	88	2	0.02
MPRC089	10000.0	10814.0	563.2	90	60	90	RC	88	90	2	0.04
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	0	2	2	2.28
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	2	4	2	0.42
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	4	6	2	0.38
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	6	8	2	5.2
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	8	10	2	0.32
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	10	12	2	0.34
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	12	14	2	0.32
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	14	16	2	0.36
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	16	18	2	0.2
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	18	20	2	0.3
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	20	22	2	0.04
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	22	24	2	0.22
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	24	26	2	0.4
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	26	28	2	0.2
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	28	30	2	0.32
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	30	32	2	0.14
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	32	34	2	0.14



MPRC092	10101.0	10814.0	539.0	270	60	60	RC	34	36	2	0.08
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	36	38	2	0.01
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	38	40	2	0.12
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	40	42	2	0.04
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	42	44	2	0.12
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	44	46	2	1.46
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	46	48	2	0.06
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	48	50	2	0.005
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	50	52	2	0.005
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	52	54	2	0.02
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	54	56	2	0.04
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	56	58	2	0.02
MPRC092	10101.0	10814.0	539.0	270	60	60	RC	58	60	2	0.03
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	0	2	2	0.96
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	2	4	2	1.92
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	4	6	2	1.3
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	6	8	2	0.38
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	8	10	2	0.18
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	10	12	2	0.45
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	12	14	2	0.05
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	14	16	2	0.21
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	16	18	2	0.36
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	18	20	2	0.05
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	20	22	2	0.33
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	22	24	2	0.28
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	24	26	2	0.1
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	26	28	2	0.07
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	28	30	2	0.06
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	30	32	2	0.2
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	32	34	2	0.01
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	34	36	2	0.01
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	36	38	2	0.06
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	38	40	2	0.04
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	40	42	2	0.03
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	42	44	2	0.02
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	44	46	2	0.01
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	46	48	2	0.005
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	48	50	2	0.005
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	50	52	2	0.005
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	52	54	2	0.005
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	54	56	2	0.005
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	56	58	2	0.005
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	58	60	2	0.005
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	60	62	2	0.005
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	62	64	2	0.005



MPRC103	10143.0	10814.0	526.1	270	60	100	RC	64	66	2	0.05
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	66	68	2	0.06
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	68	70	2	0.54
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	70	72	2	0.06
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	72	74	2	0.005
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	74	76	2	0.01
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	76	78	2	0.02
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	78	80	2	0.05
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	80	82	2	0.05
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	82	84	2	0.04
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	84	86	2	0.07
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	86	88	2	0.08
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	88	90	2	0.18
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	90	92	2	0.12
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	92	94	2	0.2
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	94	96	2	0.08
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	96	98	2	0.005
MPRC103	10143.0	10814.0	526.1	270	60	100	RC	98	100	2	0.08



About Ark Mines

Ark Mines Ltd (ASX: AHK) is a publicly listed company with Gold Tenements in Northern Territory and New South Wales. Ark's two Exploration Licences (ELs) in New South Wales (NSW) lie within the Lachlan Fold Belt. This area is the focus for significant Exploration in NSW and the epicentre of many major polymetallic and precious metal Mines.

FURTHER INFORMATION: Roger Jackson, Managing Director, Ark Mines Limited: +61400 408 550

The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves has been compiled by Roger Jackson BSc , Grad Dip Fin Man, Dip Ed, AICD, who is a Member of The Australasian Institute of Mining and Metallurgy and who has more than five years' experience in the field of activity being reported on. Mr Jackson is a director of the Company. Mr Jackson has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Jackson consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Note:

Runge Limited who purchased the assets of Resource Evaluations Pty Ltd have reviewed the documentation relating to the Mount Porter resource and have confirmed that this resource estimation conforms to the reporting guidelines of the JORC Code (2004).

Note

In early 2004 , an updated resource estimate was completed for Arafura by Reseval Pty Ltd. Published Identified Resources for the Mt. Porter 10400 Zone deposit, calculated in compliance with the requirements of the JORC Code, now stand at:

	Cut-off 1.7 g/t
Indicated Resources	300,000 t @ 3.1 g/t Au
Inferred Resources	55,000 t @ 2.6 g/t Au
TOTAL RESOURCES	355,000 t @ 3.0 g/t Au
	34,000ozs