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# **ASX ANNOUNCEMENT**

31 January 2014

ASX: PML

# **QUARTERLY ACTIVITIES REPORT OCTOBER 2013 - JANUARY 2014**

Highlights:

- Completed 2020m of phase 1 scout drilling at the Darvii Naruu project in Govi Altai province western Mongolia.
- Analyses of drill and surface samples returned mineralised intersections from Mushroom Reef prospect of 16 m @ 1.01 g/t Au, including 8 metres at 1.87 g/t Au and 1.7% Zn. In addition further high grade Cu mineralisation identified at surface from Anomaly 13, with 19.5% Cu and 9.4% Cu identified in outcrop.
- Completed Petrological study of the drill chips which suggests the pyritic altered zones intersected at Mushroom Reef possibly represent a peripheral alteration zone of a Cu-Au porphyry system.
- The Company held it its annual General meeting on 7th November 2013.
- The Company changed its name from Sentosa Mining Ltd to Parmelia Resources Ltd.



#### **EXPLORATION**

#### Darvii Naruu Project – Mongolia

#### Highlights

- Hole DNRC 016 intersected 16 m @ 1.01 g/t Au, including 8 metres at 1.87 g/t Au and 1.7% Zn, in a highly altered silica-pyrite rich felsic volcanic at the Mushroom Reef prospect.
- Petrological study of the drill chips suggests the pyritic altered zones intersected at Mushroom Reef possibly represent a peripheral alteration zone of a Cu-Au porphyry system.
- Further high grade Cu mineralisation identified at surface from Anomaly 13, with 19.5% Cu and 9.4% Cu identified in outcrop.
- Granodiorite hosted Au–Ag–Cu–As–Zn-Pb mineralisation intersected in drilling at Anomaly 13 suggests hydrothermal genesis and potential exists for a remobilised sulphide system.

During the quarter Parmelia Resources Limited "Parmelia" completed the initial phase 1 scout drilling programme at the Darvii Naruu Copper Gold project in Govi Altai province, western Mongolia. The programme commenced in October 2013 with 2,020 metres of reverse circulation drilling being completed in 18 holes at six different prospects. Initial results at Mushroom Reef and Anomaly 13 are extremely encouraging; encountering significant mineralisation and highly prospective geology at both prospects. To aid in the further interpretation of the phase 1 scout drilling program, Parmelia commissioned a preliminary petrography study which supports Parmelia's concept that the geology at Darvii Naruu has potential for the presence of a porphyry hosted mineral system.

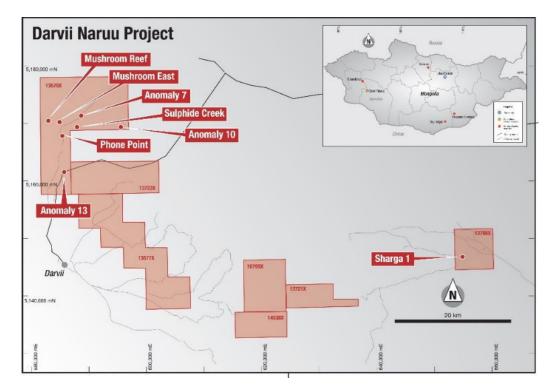


Figure 1 Locality map of prospects at the Darvii Naruu project



# Mushroom Reef

Three holes were drilled to test the Mushroom Reef target (DNRC015 to 017). Central to the target is a narrow, 1.5 metre wide quartz vein which crops at surface for more than 300 metres and is hosted in a variably limonite altered felsic volcanic (see Figure 2). The magnetics over this area showed two moderate sized magnetic high targets which are coincident with a broad Au-Cu geochemical anomaly.

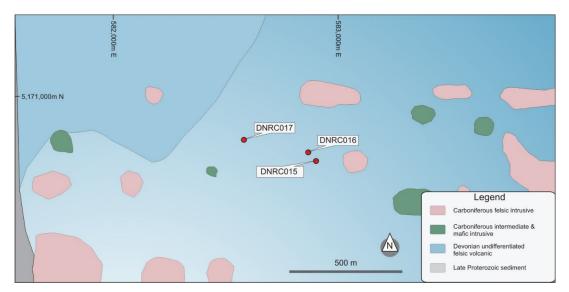


Figure 2 Geology plan at Mushroom Reef showing drill hole collar positions

The first hole DNRC015 (200m) intersected two broad zones of alteration. The first was a 20 metre zone of silicified volcanics with a sulphide content varying between 1% to 4% sulphides between 40 to 60 metres downhole. The second interval intersected was a large 80 metre variably silicified zone with a sulphide content varying from trace to 5% sulphides and was intersected between 112 to 192 m down hole. High grade mineralisation was intersected in this initial silicified zone, being 16 metres down hole at 1.01 g/t Au and 0.8% Zn was recorded, which included 8 metres at 1.87 g/t Au and 1.7% Zn (see Figure 3). Mineralisation is hosted in a highly oxidised, silicified felsic volcanic with 2-4% pyrite.

The second hole drilled at Mushroom Reef was DNRC016 (60m) and intersected the Mushroom Reef vein from 13 to 18 metres. Grades were quite low with 5 metres at 109 ppb Au being intersected. The final hole at Mushroom Reef was 200 metres deep (DNRC017). Smaller zones of silicification occurred throughout the hole with trace to 3% pyrite present; however no significant mineralisation occurred in this hole.



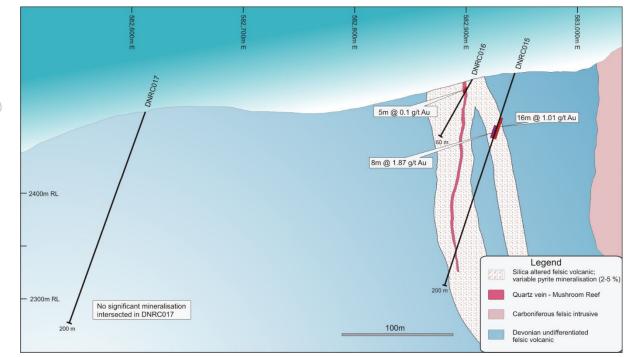


Figure 3 Cross section at Mushroom Reef showing geology and intervals of mineralisation hosted in

Hole ID	From	То	Interval	Au ppb	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm
DNRC015	40	56	16	1013	<2	79	373	4.8	8997
including	48	56	8	1873	<2	103	634	6.5	17930
DNRC016	13	18	5	109	<2	61	70	3.2	537
DNRC017			NSI						

Table 1 Results from holes DNRC015 to DNRC017 drilled at Mushroom Reef

A preliminary petrographical study was completed by Mineralium on six of the RC samples from Mushroom Reef. The majority of the samples were highly enriched in sulphur (up to 4.28 wt%), accounting for the relative abundance of pyrite. This pyrite is hydrothermal in origin and its presence suggests significant hydrothermal fluid flux post-volcanism. Several significant porphyry Cu deposits show a strong zonation of sulphide and metal species, with an outer sulphide zone dominated by pyrite or very high ratios of pyrite to chalcopyrite. Examples include San Manuel (Arizona), Santa Rita (New Mexico) and Safford (Arizona), with the pyritic zone usually corresponding to sericite-silica alteration.

It is possible that the pyritic altered zones intersected in the Mushroom Reef drilling represent a peripheral alteration zone of a Cu-Au porphyry system. Further host rock alteration studies are currently in progress and any material findings will be released to the market in due course.



#### Anomaly 13

Five holes were drilled at Anomaly 13 (DNRC010 to 014, see Figures 3 and 4). A fence of four holes (DNRC010 to 013) were drilled over the main zone targeting the source of a narrow malachite gossan with the dual objective of obtaining a stratigraphic cross section of the geology. The fifth hole drilled at Anomaly 13 was DNRC014 and targeted the contact between the limonitic rich, carbonate altered ultramafic with the granodiorite.

The objective of the fence of holes was to test the potential mineralisation below a narrow malachite rich outcropping vein, found in the immediate vicinity of the historic float sample which assayed 21.7% Cu. The 20 to 30 cm wide gossanous outcropping vein returned a grade of 19.5% Cu. The hole DNRC014 was drilled to test potential mineralisation below a second malachite gossanous vein found in outcrop 250 metres to the east of the "main zone"; a sample collected from this outcrop returned a value of 9.4% Cu.

Hole DNRC010 (100 m) intersected 3 m @ 0.5 g/t Au, 7.6 g/t Ag and 0.05% Cu between 17 to 20 metres down hole (see Table 2). A 10 metre anomalous zone between 17 and 27 metres intersected 188 ppb Au, 3.7 g/t Ag and 963 ppm As. This anomalism is hosted in an altered granodiorite. The elevated As over this interval is suggestive the anomalous Au, Ag and Cu is of a hydrothermal nature, which is supported by subsequent petrography analyses.

The second hole drilled on this "fence line" is DNRC011 (80 m) and intersected anomalous Au, Ag, Cu, Pb and Zn. The interval intersected was 2 m @ 0.3 g/t Au, 17445 ppm As, 17 g/t Ag, 0.26% Pb and 0.3% Zn. Again, elevated arsenic mineralisation was coincident with the elevated precious and base metals, and suggests hydrothermal fluids are responsible for the transport of these metals.

Anomalous gold mineralisation was intersected in DNRC012 (80 m) and 013 (150 m). Hole DNRC012 intersected 4 m @ 165 ppb Au and DNRC013 intersected 6 m @ 165 ppb Au. The final hole drilled at this prospect was DNRC014 which intersected 4 m @ 0.03% Cu.

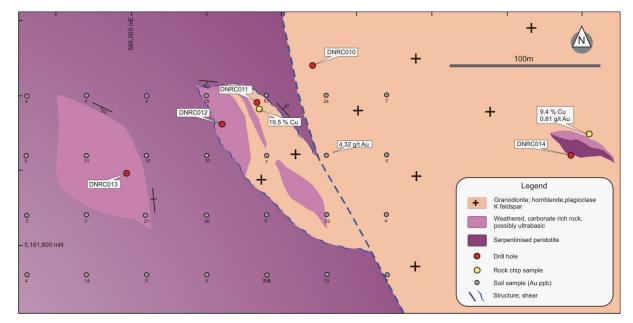


Figure 4 Geology of the Anomaly 13 prospect area with drill holler collar positions



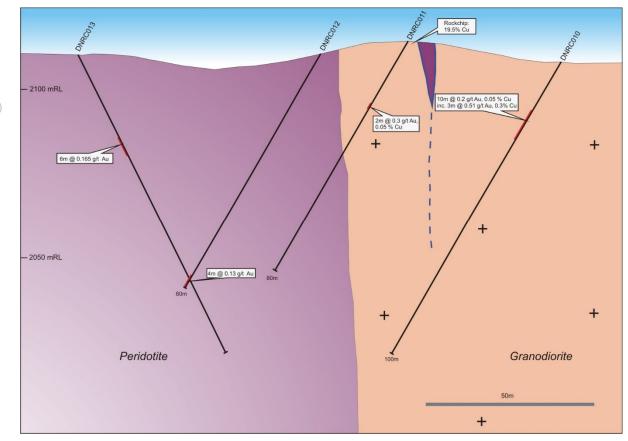


Figure 5 Anomaly 13 cross section showing geology and intervals of mineralisation hosted in granodiorit

Hole ID	From	То	Interval	Au ppb	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm
DNRC010	17	27	11	188	3.7	963	457	114	200
including	17	20	3	505	7.6	2454	2917	160	227
DNRC011	22	24	2	321	17	17445	551	2625	2960
DNRC012	76	80	4	130					
DNRC013	45	51	6	165					
DNRC014	4	8	4				283		

Table 2 Results from holes DNRC010 to DNRC014 drilled at Anomaly 13

A suite of seven RC samples from the Anomaly 13 drilling was analysed as part of the petrographical study. The granodiorite-hosted samples examined from Anomaly 13 show generally similar sulphide assemblages from sample to sample dominated by pyrite with variable amounts of base metal sulphides (chalcopyrite, sphalerite with 'chalcopyrite disease', galena and arsenopyrite). The exceptionally high arsenic sample contained coarsely crystalline arsenopyrite. The textures and assemblages are consistent with a gold and base metal association formed at mesothermal temperatures, and the clear geochemical association is Au-Ag-Cu-As-Zn-Pb. The sulphur content is relatively high and mainly accounted for by abundant pyrite.

The occurrence of gold mineralisation with a strong arsenic (with arsenic mainly in the form of arsenopyrite rather than enargite common to porphyry Cu systems) and base metal association within granodiorites has similarities with some other intrusion-related gold systems such as the Älgträsk deposit in northern Sweden (Bejgarn *et al.* 2011). At Älgträsk, a granodiorite body is host to steeply-



dipping gold-bearing veins and disseminations of pyrite, together with arsenopyrite, chalcopyrite and sphalerite in textures similar to those observed at Anomaly 13. The granodiorite is cut by mafic dykes, and the close spatial relationship between Älgträsk and the Tallberg porphyry Cu deposit suggests there may be a genetic link between the two deposit styles.

A single ultramafic sample from Anomaly 13 was analysed and had a low modal sulphide content, dominated by minute chalcopyrite particles and scattered pyrite crystals. The nickel content of the sample was very low. The sulphide textures observed do not conform to magmatic textures and the anomalous gold (196ppb) in the absence of a high magmatic sulphide content indicates that the minor sulphide and gold content in this sample is likely to be of hydrothermal origin. Full PGE analysis is essential in understanding the genesis of this sample and is currently being analysed. Possibilities exist for a reworked sulphide system similar to Avebury in Tasmania.

#### **Mushroom East**

A total of five holes (DNRC003 to DNRC007) were drilled at Mushroom East targeting the quartzgossan-malachite zones observed at surface. All holes intersected varying widths of quartzchalcopyrite-pyrite mineralisation of varying down hole depths; however, minor anomalous zones of copper mineralisation were encountered. A larger massive sulphide zone was anticipated, however, was not intersected.

Two anomalous zones of copper mineralisation was intersected in hole DNRC003 (60m). A one metre zone between 20 and 21 metres intersected a zone of quartz-chalcopyrite vein mineralisation grading 0.4% Cu. The second anomalous zone of copper mineralisation was intersected between 56 to 60 metres downhole, recording an interval of 4 metres at 0.13% Cu (see Table 3).

Hole ID	From	То	Interval	Au ppb	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm
DNRC003	20	21	1				4060		
	56	60	4				1300		
DNRC004	77	84	7				2508		
DNRC005			NSI						
DNRC006	78	82	4				1430		
DNRC007			NSI						

Table 3 Results from holes DNRC010 to DNRC014 drilled at Mushroom East

#### Sulphide Creek

Two holes were drilled at Sulphide Creek including DNRC001 (140 metres) and 002 (150 metres). DNRC001 targeted a 5 metre wide zone of alteration identified from surface mapping. A significant zone of silica, fuchsite and pyrite alteration was intersected between 89 to 99 metres. This is a zone of hydrothermal alteration and initially thought to have potential for gold mineralisation. Samples between 88 to 104 metres exhibit elevated As and averages 298 ppm over a 16 metre interval. An anomalous interval of 4 m @ 45 ppb Au is recorded between 100 and 104 metres.

The second hole to be drilled at Sulphide Creek was DNRC002 and targeted a 3 to 4 metre zone of gossanous material with malachite staining. No visible zone corresponding to the surface outcrop was identified in the logging, and it is plausible the target zone has steepened in dip and the hole has missed the intended target. A four metre composite between 60 and 64 metres intersected elevated Au and As relative to background values. This anomalous interval is 4 m @ 0.3 g/t Au and 46 ppm As.



## **Phone Point**

Two shallow holes, DNRC008 (60 m) and DNRC009 (80 m), targeted quartz veining surrounded by iron oxide alteration just south of the SGC potassic anomaly K6. A narrow quartz vein with minor sulphide content was intersected in both holes. No significant mineralisation was encountered in either hole.

#### Anomaly 7

The final hole of the programme was DNRC018 (150m). This prospect had been identified earlier by stream sediment sampling to have anomalous Au and Ni. The SGC report identified a large potassic anomaly (K4) which is coincident with the soils anomaly (Anomaly 7). The hole intersected high mag basalts and pyroxenites. A zone of variably silicified pryoxenite with quartz veining (trace to 1% sulphides) was intersected between 28m to 50m. There was no anomalous mineralisation intersected in this hole.

## Jaurdi Hills Project

Following the drilling of a number of potential targets in early 2013 at the company's Jaurdi Hills project north of Coolgardie in Western Australia (see Figure 1), resource and pit optimisation work at the Panther prospect was completed with evaluation of a potential joint venture, earn in or sale of the in-situ gold resource and exploration tenements continuing.

#### HISTORIC AND PREVIOUSLY REPORTED EXPLORATION SUMMARY

#### Panther

- Reverse circulation hole drilled in the previous quarter at Panther intersected a wide, high grade interval of 17 metres at 5.29 g/t Au from 83 metres down hole supporting historic high grade results beneath the old open pit
- Resource estimate and pit optimisation for mineralisation below historic pit now completed.

#### Wealth of Nations

- 5 metres at 4.77 g/t Au from 55 metres down hole
- New zone of gold mineralisation tracking to surface

#### Jaurdi Mining Centre

- 2 metres at 3.65 g/t Au from 66 metres down hole
- 3 metres at 1.65 g/t Au from 135 metres down hole
- 1 metre at 2.04 g/t Au from 41 metres down hole
- Geological model of gold mineralisation confirmed at JMC



#### Background

The Jaurdi Hills Project is located approximately 40km northwest of Coolgardie. The town site of Coolgardie is located 550km east of Perth and 40km west of Kalgoorlie. The project tenements lie on the western flank of the Dunnsville/Doyle Dam Granodiorite Dome. The geology of the project area is dominated by the lower basaltic unit of the Dunnsville-Ubini Greenstone Belt (DUGB), which is intruded by several narrow dolerite and gabbro sills. The basalt sequence is underlain by komatiites which are mapped on the western margin of the project. The main structural features within the project area are the Jaurdi Shear Zone along the east side of the project and a northeast trending fault that passes approximately through the middle of the project separating the Dunnsville granodiorite dome in the north from the Doyle Dam granodiorite dome to the south.

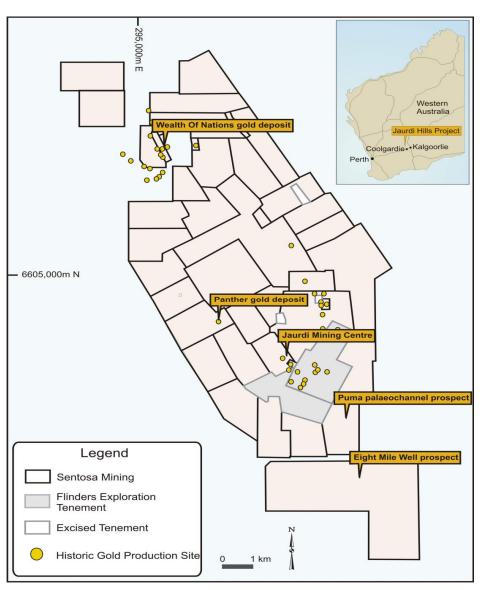


Figure 6 Sentosa tenement package at the Jaurdi Hills Project



## Panther

Four reverse circulation (RC) holes were drilled at Panther in the previous quarter targeting the shallow mineralisation below the open pit; with significant mineralisation (17m down hole at 5.29 g/t Au; including 1m at 19.06 g/t Au from 83m and 2m @ 19.46 g/t Au from 97m) intersected in hole JRC134. This result is extremely encouraging as it represents a true width of 14.7 metres and supports the ore body geometry previously intersected in historic drilling results as reported in Table 1 and Figure 2.

The three other RC holes drilled as part of this programme (JRC135, 136 and 137) intersected low grade to barren material. The drilling of the four holes has strengthened the understanding of the control of mineralisation and it is interpreted as a moderate, north plunging quartz vein breccia pipe with a true width of up to 15 metres (see Figure 3). Further holes have been designed to test the down plunge continuity of the structurally thickened ore shoot and a preliminary resource is currently being built using the historical drill information (see Table 1 - historic results) and the new geological interpretation.

Hole ID	Collar	Location M	GA_51	Dip	Azimuth	Depth	From	То	Interval	Grade	Desciption
	mE	mN	mRL			(m)	(m)	(m)	(m)	(g/t Au)	
PA394-935	297411	6603076	400	-90	000	33	7	21	14	1.82	14m @ 1.82g/t Au
JHA070	297416	6603069	428	-90	000	60	40	53	13	1.05	13m @ 1.05g/t Au
JHR173	297430	6603031	428	-60	070	62	4	16	12	1.28	12m @ 1.28g/t Au
JHR174	297400	6603020	428	-60	070	71	30	34	4	1.75	4m @ 1.75g/t Au
PA394-728	297413	6603096	394	-90	000	40	9	19	10	2.84	10m @ 2.84g/t Au
PA394-748	297418	6603084	394	-90	000	24	12	22	10	8.1	10m @ 8.1g/t Au
JHA071	297399	6603107	428	-90	000	60	42	46	4	4.49	4m @ 4.49g/t Au
JHD002	297361	6603131	428	-60	070	80	69.1	80	10.9	3.31	10.9m @ 3.31g/t Au
JHA067	297411	6603094	428	-90	000	60	48	50	2	2.78	2m @ 2.78g/t Au
JRC065	297361	6603075	428	-60	070	80	79	80	1	2.26	1m @ 2.65g/t Au
JHA065	297415	6603112	428	-90	000	60	53	55	2	1.46	2m @ 1.46g/t Au
PA394-766	297371	6603137	394	-90	000	60	40	46	6	1.37	6m @ 1.37g/t Au
PA394-765	297375	6603128	394	-90	000	60	51	60	9	5.15	9m @ 5.15g/t Au
PA394-217	297399	6603163	394	-90	000	34	26	31	5	3.63	5m @ 3.63g/t Au
PA23670-01	297433	6603021	428	-90	000	10	7	10	3	1.67	3m @ 1.67 g/t Au
PA23680-01	297438	6603033	428	-90	000	10	7	10	3	1.68	3m @ 1.68 g/t Au
JHA060	297394	6603143	428	-90	000	60	52	60	8	6.19	5m @ 1.64g/t Au
JRC071	297361	6603195	428	-60	070	101	63	64	1	24.6	1m @ 24.6g/t Au
JHA042	297398	6603209	428	-90	000	60	56	60	4	4.67	4m @ 4.42g/t Au
JRC072	297324	6603181	428	-60	070	136	106	111	5	2.33	5m @ 2.33g/t Au
JHA049	297388	6603226	429	-90	000	60	51	57	6	3.07	6m @ 3.07g/t Au
PA402-009	297415	6603233	402	-90	000	8	3	7	4	3.30	4m @ 3.30g/t Au
JRC092	297395	6603250	429	-90	000	82	27	28	1	4.25	1m @ 4.25g/t Au
JRC091	297409	6603256	429	-90	000	81	26	29	3	1.09	3m @ 1.09 g/t Au
JRC094	297394	6603292	429	-90	000	82	32	35	3	1.08	3m @ 1.08 g/t Au
JRC093	297418	6603302	429	-90	000	82	18	20	2	2.11	2m @ 2.11g/t Au
JHR147	297373	6603153	428	-60	070	70	58	65	7	6.51	7m @ 6.51g/t Au
JRC064	297389	6603122	428	-60	070	76	54	56	2	1.74	2m @ 1.74g/t Au
JHA063	297425	6603148	429	-90	000	60	29	30	1	15.2	1m @ 15.2g/t Au
PA23807-1	297421	6603163	429	-90	000	59	40	50	10	1.43	10m @ 1.43g/t Au
PA23825-3	297396	6603173	428	-90	000	78	54	61	7	2.16	7m @ 2.16g/t Au
PA23807-3	297402	6603156	428	-90	000	72	59	60	1	17.7	1m @ 17.7g/t Au
JHA051	297380	6603178	428	-90	000	60	46	47	1	16.7	1m @ 16.7g/t Au
JRC073	297400	6603210	429	-60	070	60	45	56	11	1.01	11m @ 1.01g/t Au
JRC081	297398	6603324	428	-60	070	60	20	23	3	2.30	3m @ 2.30 g/t Au

Table 4 Historic drill holes beneath the Panther open pit



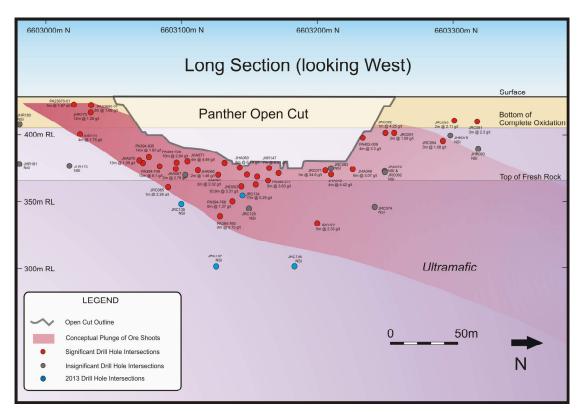


Figure 7 Long section of the Panther pit demonstrating moderate north plunge

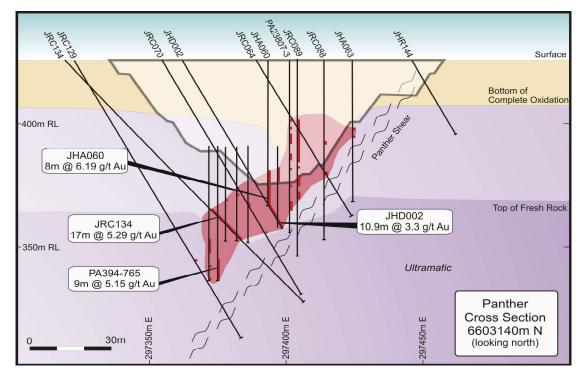


Figure 8 Cross Section 6603140mN showing structurally thickened ore shoot



#### Wealth of Nations

RC drilling at Wealth of Nations in the previous quarter has yielded significant gold mineralisation in hole JRC 133 which intersected **5m @ 4.77 g/t Au from 55m (including 1m at 12.87 from 56m).** Sentosa is encouraged with this result as it represents a zone of mineralisation not previously identified which potentially can be tracked to surface (see Figure 4). The mineralisation is hosted in quartz veins within sheared basalt which lies stratigraphically above a black shale unit. The mineralisation is only 47 metres below surface and further shallow RC holes have been designed to expand the current understanding of the spatial relationship of the mineralisation.

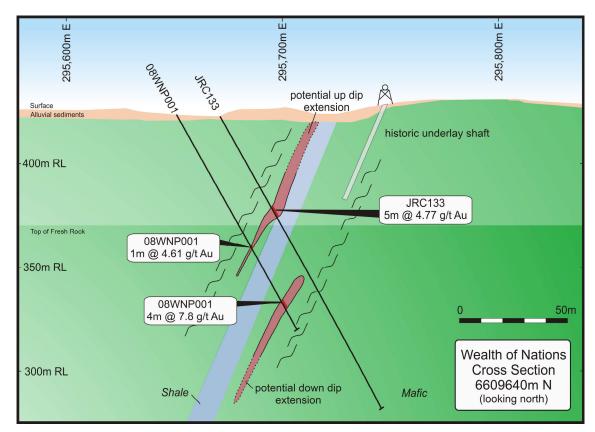


Figure 9 Wealth of Nations Cross Section 6609640mN: JRC133 5m @ 4.77g/t Au

# Jaurdi Mining Centre

Two holes were drilled at Jaurdi Mining Center as part of Sentosa's February 2013, drill programme. Both holes intersected mineralisation which was consistent with the geological model. Multiple mineralised horizons were intersected in hole JRC138 (see Figure 5) and include **1m at 0.76 g/t Au from 3m, 2m at 3.5 g/t Au from 66m (including 1m at 6.59 from 66m) and 3m @ 1.65 g/t Au from 135m (including 1m @ 4.67 g/t Au from 137m).** The second reverse circulation hole drilled at JMC, JRC139 (see Figure 6), **intersected 1m at 2.04 g/t Au from 41m.** 



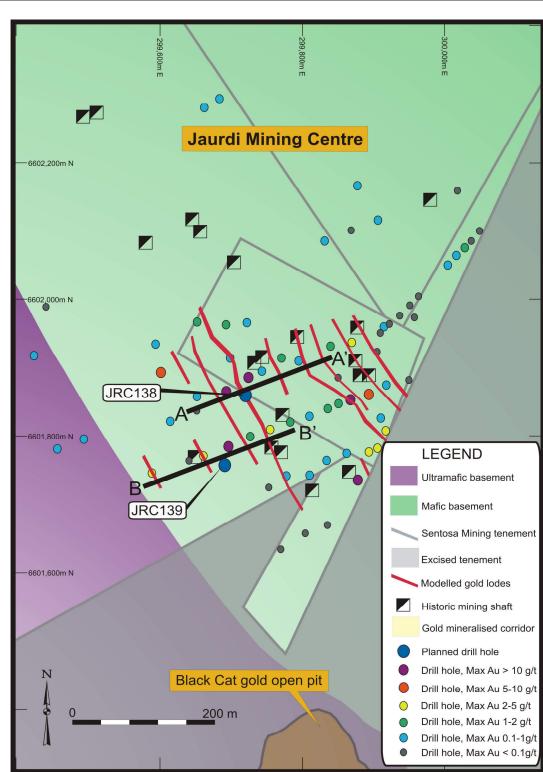


Figure 10 Plan view of JMC showing oblique sections A – A' and B – B'



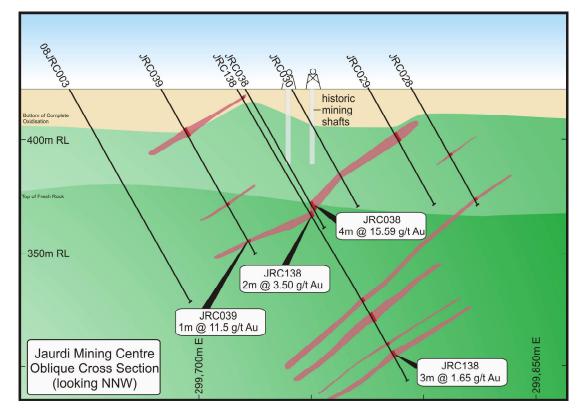


Figure 11 Jaurdi Mining Centre Oblique Cross Section A – A': JRC138 2m @ 3.50 g/t Au

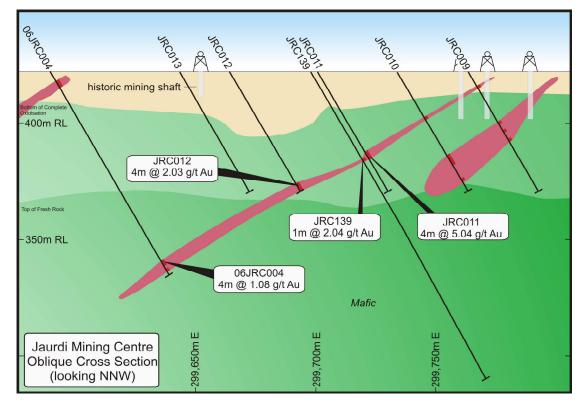


Figure 12 Jaurdi Mining Centre Oblique Cross Section B – B': JRC139 1m @ 2.04 g/t Au



#### **Eight Mile Dam**

A fence of four historic reverse circulation holes were drilled twenty metres south of the historic hole EMR003 (1m @ 69.7 g/t Au). All four holes failed to intersect significant mineralisation. Further study continues to unravel this enigmatic result.

#### **CORPORATE ACTIVITIES**

#### Annual General Meeting "AGM"

Parmelia Resources Limited held its AGM on the 7th of November 2013. All of the resolutions contained in the Notice of Annual General Meeting dated 11 October 2013 were passed by the requisite majority of security holders.

#### **Entitlement Issue of Options**

As foreshadowed in the previous quarterly and at the companies AGM on the 7th November 2013, it is the intention of the Company to also undertake a non-renounceable pro rata entitlement issue of Options on the same terms as the previous Placement free attaching options ("Entitlement Offer") that was completed on the 4th October 2013. The Entitlement Offer will be undertaken on the basis of 1 new Option for every 2 shares held at a price of 0.5 cents per Option to raise up to \$130,000. Participants in the previous Placement will be able to participate in the Entitlement Issue. The company will advise the market of further details of the Entitlement Offer as soon as it is practical to do so.

#### **Commercial Negotiations on Jaurdi Hills**

The company continues to evaluate potential commercial opportunities on its Jaurdi Hills project these include possible, joint ventures, earn in deals or sale of the in-situ gold resource at Panther as well as the adjoining extensive and promising exploration tenement portfolio.

#### **New Opportunities**

The company continues to evaluate several additional opportunities and are actively engaged in negotiations with respect to these possible opportunities. Further details will be made available to the market if and when negotiations reach a successful conclusion.

For further information concerning Parmelia's activities or the exploration plans for the future please contact Nigel Gellard, Executive Chairman at:

Phone +61 (0)8 6141 3500 Fax +61 (0)8 6141 3599 www.parmeliaresources.com

Nigel Gellard Executive Chairman

#### **Competent Persons Statement**

This news release was authorised by Mr Darryl Mapleson of BM Geological Services who is a Fellow of the Australian Institute of Mining and Metallurgy. Mr. Mapleson is a Principal Geologist and a full time employee of BM Geological Services. Mr Mapleson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to act as a competent person as defined in the 2012 edition of the "Australasian Code for reporting of Exploration results, Mineral Resources and Ore Reserves".



## **APPENDIX 1**

# Drill Hole Collars – Darvii RC Programme 2013

Hole ID	Prospect	mE	mN	mRL	Dip	Azi	Depth
DNRC001	Sulphide Creek	587796	5169206	2337	-60	40	140
DNRC002	Sulphide Creek	587749	5169255	2332	-65	222	150
DNRC003	Mushroom East	585010	5170543	2363	-70	162	80
DNRC004	Mushroom East	585062	5170557	2351	-60	250	100
DNRC005	Mushroom East	585063	5170558	2350	-80	260	150
DNRC006	Mushroom East	584670	5170761	2369	-60	60	100
DNRC007	Mushroom East	584791	5170177	2376	-60	300	80
DNRC008	Phone Point	585116	5168017	2473	-60	20	60
DNRC009	Phone Point	585118	5168015	2472	-60	90	80
DNRC010	Anomaly 13	585621	5161720	2109	-60	240	100
DNRC011	Anomaly 13	585583	5161696	2116	-60	240	80
DNRC012	Anomaly 13	585561	5161681	2111	-60	240	80
DNRC013	Anomaly 13	585497	5161648	2111	-60	90	150
DNRC014	Anomaly 13	585795	5161665	2108	-60	30	60
DNRC015	Mushroom Reef	582934	5170702	2461	-60	310	200
DNRC016	Mushroom Reef	582905	5170736	2457	-60	300	60
DNRC017	Mushroom Reef	582615	5170790	2427	-60	290	200
DNRC018	Anomaly 7	588564	5171584	2083	-60	290	150
Total							2020



#### **APPENDIX 2**

# JORC Code, 2012 Edition – Table 1 report – Darvii Naruu RC Drilling Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representation and the	The sampling has been carried out using Reversed Circulation Drilling ( <b>RC</b> ). Eighteen holes were drilled in this reported programme at six different prospects. The holes were drilled to depths between 60 metres and 200 metres and angled at -60 to -70 degrees at varying azimuths (as stratigraphic and topographical variations demanded). The drill hole location was picked up by handheld GPS. Sampling was carried out under Parmelia's protocols and
	appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 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 (e.g. submarine nodules) may warrant disclosure of detailed information.	QAQC procedures as per industry best practice. See further details below. The RC hole was drilled with a 5.5 inch face-sampling bit, 1m samples collected through a cyclone and collected in a 40 Kg plastic bag. Composite samples were typically collected on four metre intervals using a spear sampling technique to obtain 3 to 4 Kg sample. All samples were fully pulverised at the lab to -75um, to produce either a 2g charge for 4 Acid Digest with an ICP-OES finish or a 50g charge for Fire Assay with AAS finish.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	An RC drilling rig, owned and operated by AIDD LLC, was used to collect the samples. The face-sampling RC bit has a diameter of 5.5 inches (137.5 mm).
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	The majority of samples were dry. Ground water ingress occurred into some holes at variable depths of between 90 to 145 metres, depending on locality in valleys. Drilling operator's ensured water was lifted from the face of the hole at each rod change to ensure water did not interfere with drilling and to make sure samples were collected dry until water ingress was unavoidable. Wet drilling occurred in holes DNRC001, 002, 006 and 017. RC recoveries were visually estimated, and recoveries recorded in the log as a percentage. Recovery of the samples was good, generally estimated to be full, except for some sample loss at the collar of the hole.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC face-sample bits and dust suppression were used to minimise sample loss. Drilling airlifted the water column above the bottom of the hole to ensure dry sampling. RC samples are collected through a cyclone with the full sample deposited in a plastic bag and the lab samples between 3 to 4 Kg collected, to enable a full sample pulverisation.
	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.	It is not possible to determine if a relationship exists between recovery and grade at this stage of the programme.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	All chips were geologically logged by Bewsher Mapleson LLC geologists, using the Parmelia Resources geological logging legend.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging of RC chips records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray.
	The total length and percentage of the relevant intersections logged	All holes were logged in full.



0.11		
Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	No core was collected.
sample	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled	One-metre drill samples are collected below a rig mounted cyclone, and an average 2-3 kg sample is collected in
preparation	wet or dry.	an un-numbered calico bag, and positioned on top of the plastic bag. >80% of samples were dry.
preparation	For all sample types, the nature, quality and appropriateness of the sample	Samples were prepared at the SGS Mongolia Laboratory in Ulaan Batar. Samples were dried, and the whole sample pulverised to 90% passing 75um, and a sub-sample of approx. 200g retained. A nominal 50g was used for
	preparation technique.	the fire assay analysis and a 2g charge was used for four acid digest. The procedure is industry standard for this
		type of sample.
	Quality control procedures adopted for all sub-sampling stages to maximise	A single field duplicate sample was taken from every hole at a rate of approximately 1 in 35 samples. At the
	representation of samples.	laboratory, regular Repeats and Lab Check samples are assayed.
	Measures taken to ensure that the sampling is representative of the in situ material	The technique to collect the composited samples was by the "spear" or "tube" technique. It was ensured the
	collected, including for instance results for field duplicate/second-half sampling.	sample tube was speared down the side of the bag to the bottom of the bag, to ensure the entire sample in the
	concelea, including for instance results for field duplicate/second-half sumpling.	bag was intersected.
	Whether sample sizes are appropriate to the grain size of the material being	Sample sizes are considered appropriate to give an indication of mineralisation given the particle size and the
	sampled.	preference to keep the sample weight at a targeted 3 to 4kg mass.
Quality of assay	The nature, quality and appropriateness of the assaying and laboratory procedures	Samples were analysed at the SGS Mongolia Laboratory in Ulaan Batar. The analytical method used was a 50g Fire
data and	used and whether the technique is considered partial or total.	Assay with AAS finish for gold and PGE's, and four acid digest for a multi element suite. The techniques are
laboratory tests		considered to be appropriate for the material and mineralization. The method gives a near total digestion of the
_		material intercepted in RC drilling.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the	Not applicable.
	parameters used in determining the analysis including instrument make and model,	
	reading times, calibrations factors applied and their derivation, etc.	
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates,	Parmelia Resources protocol for this scout RC drill programme was for a single standard (Certified Reference
	external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of	Material), blank and field duplicate to be inserted per hole drilled, regardless of the hole depth. A total of 647
	bias) and precision have been established.	samples was submitted as part of the programme, with 18 standards, 18 blanks and 18 field duplicates. This at a
		rate of approximately 3 Standards, 3 Blanks and 3 Duplicates per 100 samples. For the programme reported the
		relevant assays were part of a total sample submission of 701 samples. In addition, 25 of the original pulps were
		submitted to an Umpire Laboratory. The second laboratory used was Actlabs Asia LLC in Ulaan Baatar.
		At the SCS I observe any log econy Deposite Lab Standards and Diaple are explored in addition CC Lab blanks, 50
		At the SGS Laboratory, regular assay Repeats, Lab Standards and Blanks are analysed. In addition 66 Lab blanks, 50 Lab Repeats and 79 Lab standards were inserted as part of their internal QA/QC programme.
		Results of the Field and Lab QAQC were analysed on assay receipt. On analysis, all assays passed QAQC protocols,
		showing no levels of contamination or sample bias. Analysis of field duplicate assay data suggests appropriate
		levels of sampling precision have been achieved for the sampling technique employed.
Verification of	The verification of significant intersections by either independent or alternative	Significant results were checked by the Mongolian Exploration Manager for Bewsher Mapleson LLC. (Bewsher
sampling and	company personnel.	Mapleson LLC is a Mongolian subsidiary of BM Geological Services Pty Ltd, Australia).
assaying	The use of twinned holes.	Twin holes were not employed during this part of the programme.
	Documentation of primary data, data entry procedures, data verification, data	All field logging is carried out using a customised logging sheet in hardcopy and transferred into an Access
	storage (physical and electronic) protocols.	database. Assay files are received electronically from the Laboratory. All data is stored in the Darvii Naruu Access
		database and managed by Bewsher Mapleson LLC in Ulaan Baatar.
	Discuss any adjustment to assay data.	No assay data was adjusted.
Location of data	Accuracy and quality of surveys used to locate drill holes (collar and down-hole	RC locations were determined by hand-held GPS, with an accuracy of 5m in Northing and Easting.
points	surveys), trenches, mine workings and other locations used in Mineral Resource	For angled drill holes, the drill rig mast is set up using a clinometer. No down hole surveying was used in this scout
	estimation.	programme.
		No follow-up down hole directional surveying using a North-seeking Gyroscopic tool will be completed.
	Specification of the grid system used.	Grid projection is WGS84, UTM Zone 46 Northern Hemisphere.
	Quality and adequacy of topographic control.	RL's are collected using hand held GPS which is satisfactory for this initial programme.



Criteria	JORC Code explanation	Commentary
Data spacing and	Data spacing for reporting of Exploration Results.	Not applicable to a scout drilling programme.
distribution	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.	Not applicable to this data.
	Whether sample compositing has been applied.	Samples were collected as four metre composites. One metre samples will b collected on one metre intervals.
Orientation of data in relation to	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	This is not considered material at this stage of exploration.
geological structure	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.	This is not considered material at this stage of exploration.
Sample security	The measures taken to ensure sample security.	Samples were transported by company transport to the SGS Mongolia LLC laboratory in Ulaan Baatar. Umpire samples (pulps) were despatched by Bewsher Mapleson LLC staff to Actlabs Asia LLC in Ulaan Baatar for assaying.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling and assaying techniques are industry-standard. No specific audits or reviews have been undertaken at this stage in the programme.

# 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	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 RC drilling occurred within tenement 13576X, which is fully owned by Parmelia Resources Limited. No third party issues exist with the tenure at the Darvii Naruu project.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is in good standing with MRAM (Mineral Resource Authority of Mongolia).
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No previous exploration has been completed on this prospect by other parties.
Geology	Deposit type, geological setting and style of mineralisation.	The understanding of the styles of mineralisation present at Darvii Naruu is at an early stage. Mineralisation intersected at Mushroom Reef possibly represents a peripheral alteration zone of a Cu-Au porphyry system. Intrusions into Devonian strata of numerous, relatively small stocks and dykes of variable composition. At three locations the mafic intrusions (diorite and/or gabbro) hosted malachite in quartz + limonite breccias. It has the necessary age, composition and mineralisation to lend support to a porphyry genesis. In addition to the outcropping mineralisation and sericite + FeO alteration assemblages, it overlies a weak magnetic feature and is surrounded by significant, long-lived deep crustal structural lineaments in a dynamic accretionary tectonic setting. Mineralisation at Anomaly 13 is hosted in a granodiorite at the contact of a Riphean aged ultabasic rock (peridotites) Sulphide textures observed in polished sections do not conform to magmatic textures and the anomalous gold in the absence of a high magmatic sulphide content indicates that the sulphides and gold content is likely to be of hydrothermal origin. Possibilities exist for a reworked sulphide system similar to Avebury in Tasmania.



Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	Refer to Appendix 1 in the body of the text.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and event brief events in corporate short lengths of being the above in data.	Grades are reported as down-hole length-weighted averages of grades above 0.2 ppm Au and where Cu grades are considered to be anomalous to background values. No top cuts have been applied to the reporting of the assay results. Higher grade intervals are included in the reported grade intervals.
	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.	No metal equivalent values are used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The geometry of the mineralisation is not well understood at Mushroom Reef or Anomaly 13. All intervals reported are "down hole" intervals.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures 1 to 5 in the body of text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	No misleading results have been presented in this announcement.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Drill hole location data are plotted on the interpreted geology map for Mushroom Reef and Anomaly 13 (see Figures 2 and 4).
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Further work is yet to be planned.

# **Appendix 5B**

Rule 5.3

# Mining exploration entity quarterly report

Name of entity

Parmelia Resources Limited

#### ABN

48 142 901 353

Quarter ended ("current quarter") December 2013

#### Consolidated statement of cash flows

	isonuated statement of cash nows		Year to date
Cash f	flows related to operating activities	Current quarter	6 Months
Cushi	nons related to sperating activities	\$A'000	\$A'000
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for		(1.5.1)
	(a) exploration and evaluation	(388)	(464)
	(b) development	-	-
	(c) production	-	-
1.0	(d) administration	(223)	(256)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature		_
1.5	received	4	5
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Other	-	-
	Net Operating Cash Flows	(606)	(714)
	Cash flows related to investing activities		
1.8	Payment for purchases of:		
1.0	(a)prospects	_	_
	(b)equity investments	_	_
	(c) other fixed assets	_	_
1.9	Proceeds from sale of:		
1.0	(a)prospects	_	-
	(b)equity investments	_	-
	(c)other fixed assets	-	-
1.10	Loans to other entities	-	-
1.11	Loans repaid to other entities	-	-
1.12	Other (provide details if material)	-	-
	Net investing cash flows	-	_
1.13	Total operating and investing cash flows		
	(carried forward)	(606)	(714)

1.13	Total operating and investing cash flows (brought forward)	(606)	(714)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc. net		
	of costs	719	1,069
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other	-	-
	Net financing cash flows	719	1,069
	Net increase (decrease) in cash held	113	355
1.20	Cash at beginning of quarter/year to date	542	300
1.20	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	655	655

# Payments to directors of the entity and associates of the directors Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	28
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Director fees

#### Non-cash financing and investing activities

- 2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows
- 2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

#### **Financing facilities available**

Add notes as necessary for an understanding of the position.

		Amount available \$A'000	Amount used \$A'000
3.1	Loan facilities	-	-
3.2	Credit standby arrangements	-	-

## Estimated cash outflows for next quarter

		\$A'000
4.1	Exploration and evaluation	223
4.2	Development	-
4.3	Production	-
4.4	Administration	71
		294
	Total	

# **Reconciliation of cash**

show	nciliation of cash at the end of the quarter (as n in the consolidated statement of cash flows) to lated items in the accounts is as follows.	Current quarter \$A'000	Previous quarter \$A'000
5.1	Cash on hand and at bank	71	16
5.2	Deposits at call	585	527
5.3	Bank overdraft		
5.4	Other (provide details)		
	Total: cash at end of quarter (item 1.22)	655	543

# Interests in Mining Tenements

Disclosure in accordance with ASX Listing Rule 5.3.3

6.1	Project/ Tenements	Location	Held at end of quarter	Acquired during the quarter	Disposed during the quarter
	Jaurdi Hills:				
	P16/2411,	Western Australia	100%	-	-
	P16/2413,	Western Australia	100%	-	-
	P16/2414,	Western Australia	100%	-	-
	P16/2438,	Western Australia	100%	-	-
	P16/2439,	Western Australia	100%	-	-
	P16/2440,	Western Australia	100%	-	-
	P16/2441,	Western Australia	100%	-	-
	P16/2442,	Western Australia	100%	-	_
	P16/2443,	Western Australia	100%	-	-
	P16/2444,	Western Australia	90%	-	_
	P16/2460,	Western Australia	100%	-	-
	P16/2627,	Western Australia	100%	-	-
	P16/2653,	Western Australia	100%	_	_
	P16/2654,	Western Australia	100%		_
	P16/2655,	Western Australia	100%	-	-
	P16/2656,	Western Australia	100%	-	-
	P16/2657,	Western Australia	100%	-	-
	P16/2658,			-	-
	P16/2659,	Western Australia	100%	-	-
	P16/2678,	Western Australia	100%	-	-

6.1	Project/ Tenements	Location	Held at end of quarter	Acquired during the quarter	Disposed during the quarter
	M16/35,	Western Australia	90%	-	-
	M16/113,	Western Australia	90%	-	-
	M16/114,	Western Australia	100%	-	-
	M16/193,	Western Australia	90%	-	-
	M16/194,	Western Australia	100%	-	-
	M16/201,	Western Australia	90%	-	-
	M16/202,	Western Australia	90%	-	-
	M16/203,	Western Australia	90%	-	-
	M16/204,	Western Australia	90%	-	-
	M16/205,	Western Australia	90%	-	-
	M16/254,	Western Australia	90%	-	-
	M16/255,	Western Australia	100%	-	-
	M16/301,	Western Australia	100%	-	-
	M16/365,	Western Australia	100%	-	-
	M16/425,	Western Australia	100%	-	-
	M16/462,	Western Australia	100%	-	-
	E15/1061,	Western Australia	100%	-	-
	P16/2672,	Western Australia	100%	-	-
	P16/2673,	Western Australia	100%	-	-
	P16/2674,	Western Australia	100%	-	-
	P16/2675	Western Australia	100%		

6.2	Farm-in Agreements / Tenements	Location	Held at end of quarter	Acquired during the quarter	Disposed during the quarter

6.3	Farm-out Agreements / Tenements	Location	Held at end of quarter	Acquired during the quarter	Disposed during the quarter

#### Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

		Total number	Number quoted	Amount paid up per security (see note 3) (cents)
7.1	<b>Preference</b> +securities (description)			

		Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy- backs, redemptions				
7.3	<sup>+</sup> Ordinary securities	58,758,331	58,758,331		
7.4	Changes during quarter (a) Increases through issues	25,883,331	25,883,331	\$0.045	\$0.045
	(b) Decreases through returns of capital, buy- backs				
7.5	+Convertible debt securities (description)	-	-	-	-
7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted	-	-	-	-
7.7	<b>Options</b> (description and conversion factor)	2,000,000 335,000 15,941,667 4,500,000		<i>Exercise price</i> 25 cents 28 cents 15 cents 6.5 cents	<i>Expiry date</i> 25 August 2014 30 June 2014 15 November 2016 31 October 2016
7.8	Issued during quarter	15,941,667 4,500,000		15 cents 6.5 cents	15 November 2016 31 October 2016
7.9	Exercised during quarter				
7.10	Expired during quarter	13,169,372 3,000,000		25 cents 25 cents	17 December 2013 17 December 2013
7.11	<b>Debentures</b> (totals only)				
7.12	Unsecured notes (totals only)				

# **Compliance statement**

- This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act.
  - This statement does give a true and fair view of the matters disclosed.

Sign here:

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..... Date: 31 January 2014 (Company secretary)

Print name: Jay Stephenson