



**PARTIAL SURRENDER REPORT FOR PERIOD
27 March 2017 to 13 December 2018**

RED MOUNTAIN PROJECT

EPM26384

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ZNC Report No ZNC0131

Project Name: Red Mountain Project

Tenement Number: EPM26384

Tenement Operator: Zenith Minerals Limited

Tenement Holder: Black Dragon Energy (Aus) Pty Ltd

Report Type: Partial Surrender

Report Title: PARTIAL SURRENDER REPORT FOR PERIOD 27 March 2017 to 13 December 2018 - RED MOUNTAIN PROJECT

Report Period: 27 March 2017 to 13 December 2018

Author: A D'hulst, M Clifford

Date of report: February 2018

Sheet 1:250 000: Mundubbera

Target commodity: Gold, silver, manganese and cobalt

Keywords: Rock sampling, soil sampling, portable XRF, epithermal gold-silver

Prospects drilled: Nil

Lists of Assays: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, Zn, Ag, Au

ABSTRACT:

Location: The project is located 130km southwest of the port of Gladstone

Geology: Permian to Triassic intrusive rocks of the Rawbelle Batholith.

Work Done: Desktop Review, Rock sampling, Soil sampling.

Results: Surface geochemistry over the surrendered area failed to return any significant result.

Conclusions: The 5 sub-blocks were relinquished.

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SUMMARY

This report documents work completed on 5 sub-blocks relinquished from the Red Mountain Project - Exploration Permit for Minerals EPM26348 during the period 27th March 2017 to 13 December 2018.

The initial exploration target of cobalt and manganese (asbolite) associated with the base of the Tertiary sedimentary rocks that overly granitic rocks ascribed to the Rawbelle Batholith failed upon initial exploration reconnaissance; however significant epithermal gold-silver mineralisation in association with manganese carbonate hosted in unmapped felsic volcanic rocks was identified in the field on retained parts of the project.

Exploration work over the relinquished area consisted of a desktop review of historical data, and a field site visit which focused on reconnaissance prospecting, geological mapping, orientation soil sampling and rock chip sampling.

The 5 sub-blocks are considered to have low potential for cobalt-manganese or gold-silver mineralisation and were therefore surrendered.

1.0 INTRODUCTION

This report documents work completed on 5 sub-blocks relinquished from EPM 26384 in December 2018, during its second year of tenure which commenced on 27th March 2018. The initial exploration target was cobalt and manganese but exploration activity by Zenith Minerals was successful in defining epithermal silver-gold mineralisation associated with a previously unknown felsic volcanic sequence.

2.0 LOCATION

The project is located 130km southwest of the port of Gladstone, 160km west of the coastal town of Bundaberg, 390km north-northwest of Brisbane in the North Burnett Region (Figure 1).

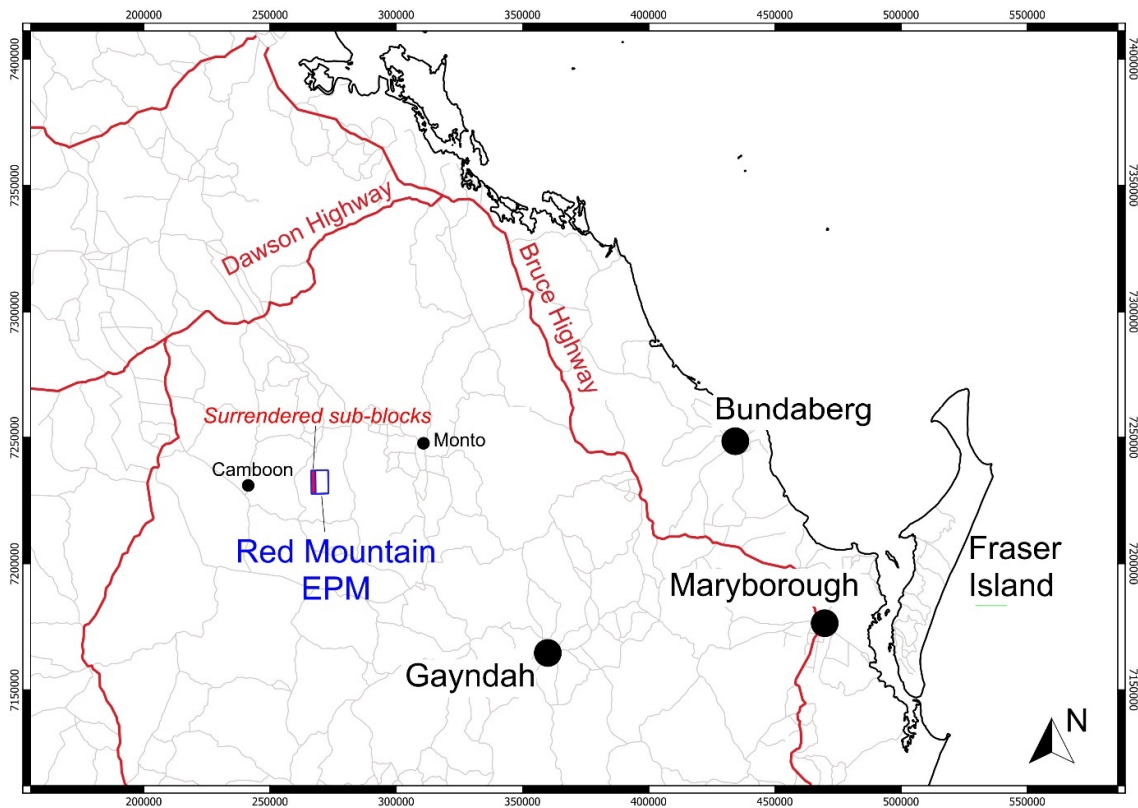


Figure 1. Red Mountain Project Location Map

3.0 TENURE

Exploration Permit for Minerals EPM 26384 was applied for by Black Dragon Energy (Aus) Pty Ltd a wholly owned subsidiary of Zenith Minerals Limited on the 28th October 2016. The EPM was granted on the 27th March 2017.

Table 1: EPM Sub-block area details

BLOCK	BLOCK NUMBER	SUB-BLOCKS	TOTAL
Brisbane	801	r s t u w x y z	8
Brisbane	873	b c d e g h j k m n o p	12

5 sub-blocks were relinquished on 13th of December 2018 (Figure 2). The sub-blocks are 801r, 801w, 873b, 873g, 873m. This report documents work completed over the surrendered area since grant.

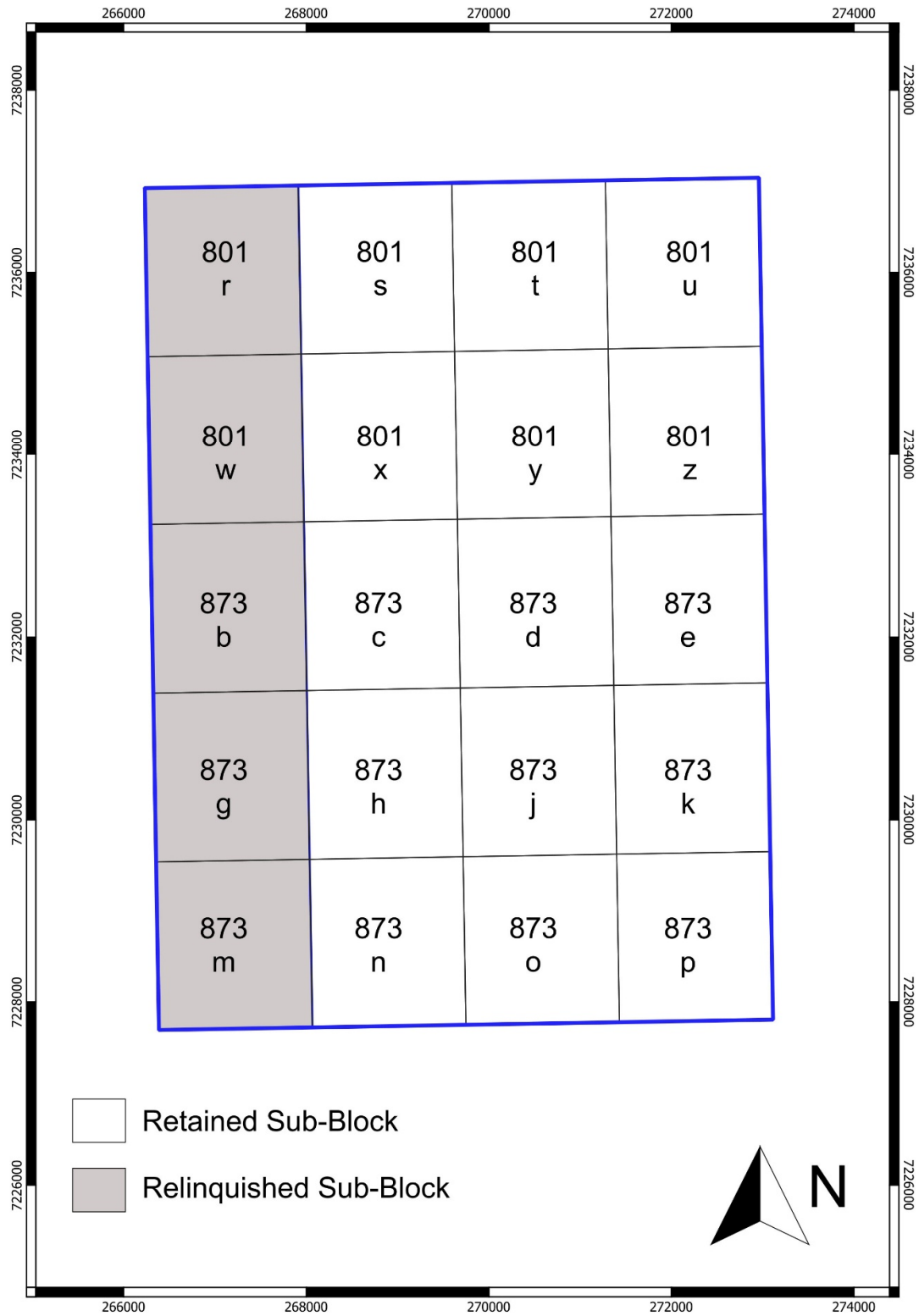


Figure 2. EPM 26384 Map

4.0 GEOLOGY

Permian to Triassic intrusive rocks of the Rawbelle Batholith dominate the central part of the region. The batholith comprises granite, granodiorite, adamellite and gabbro (Figure 3).

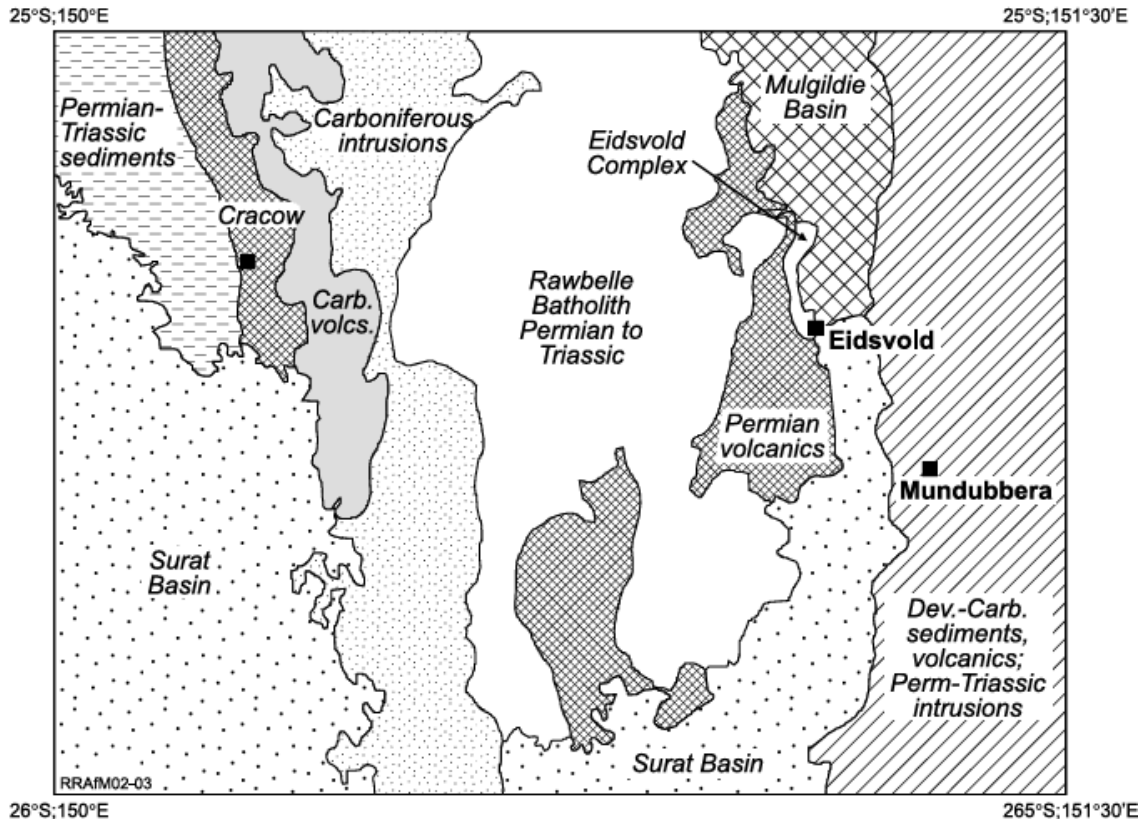


Figure 3. Simplified Geology of the Mundubbera 1:250,000 sheet (modified after Whitaker et al., 1975)

Overlying the Permian to Triassic intrusive rocks in the centre of the region is an extensive but thin Cenozoic sandstone with a variably preserved ferruginous cap. An erosional scarp commonly marks the perimeter of the Cenozoic sandstone thereby forming the “Central Plateau”, and a pediment of mottled saprolite extends from its base. To the east of the Central Plateau are numerous knolls and mesas of sandstone resulting from incomplete erosion of a formerly extensive sandstone sheet (Jones 2003). Red Mountain and its associated mesas appear to be such a regolith feature.

5.0 PREVIOUS EXPLORATION

South Pine Mines Pty Ltd undertook regional scale reconnaissance rock chip sampling and a systematic stream sediment sampling program focused around the Rossmore silver occurrence from 1981 to 1982. Details of that work are documented in McDonald (1982). In the 25 years prior to the exploration activity by South Pine Mines Pty Ltd, McDonald (1982) advises that there was no exploration activity in the area.

Sampling by South Pine Mines Pty Ltd returned a high-grade cobalt (Co) rock chip sample result of (0.41%Co) with associated high-grade manganese (22%Mn) occurring in close

proximity to Tertiary sedimentary rocks that overly granitic rocks ascribed to the Rawbelle Batholith suite. Two other high-grade Mn samples (17%Mn & 40%Mn) were taken a further 1.5km and 2.5km north respectively; neither of those samples was assayed for Co. The three high-grade Mn samples outline a trend over 4km of strike (Figures 4 & 5) and represent a high-quality exploration target for near surface asbolite (Co-Mn mineralisation) similar to deposits exploited in the Democratic Republic of Congo, New Caledonia and Zambia, whilst the deeper potential for primary Co mineralisation has never been explored.

Sample ID	Co (%)	Mn (%)	Description
E10274	0.41	22	Nodular pyrite, Red Mtn SW side
E10719		40	Black earthy manganese wad, Red Mountain
E10722			Fine grained pyritic black shale from Red Mtn
E10720, 23 & 24			Quartzite - Red Mtn
E10605		17	Micaceous/manganese zone adjacent to qtz vein

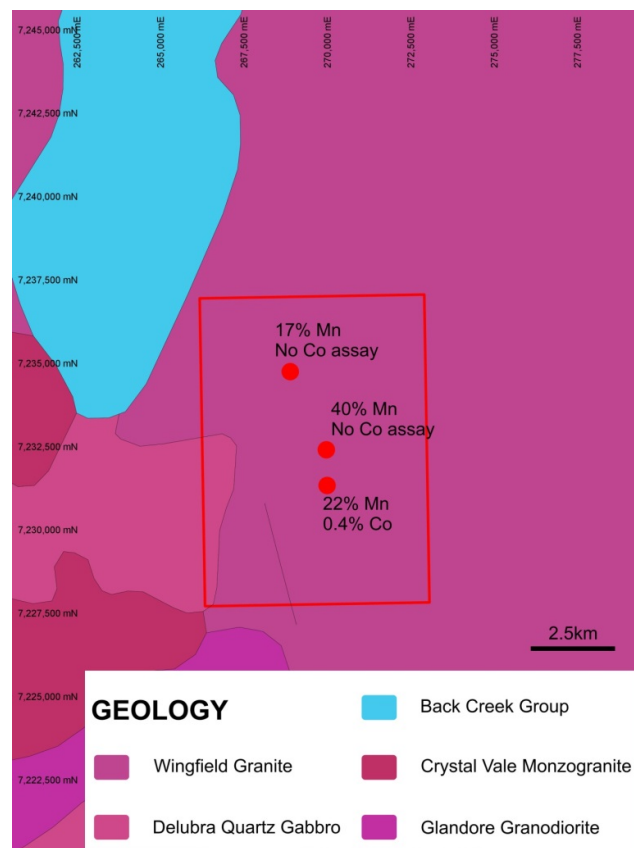


Figure 4. Red Mountain Project Basement Geology – (GDA94 Zone 56)

Several companies held the ground in the following decades focusing on the porphyry copper / epithermal potential of the area. No other company mentioned Mn or Co mineralisation in their historical reports apart from Greystoke Mines Ltd in 2010 which notes 3 rock and stream sediment samples with anomalous cobalt and/or manganese in ferricrete (up to 144ppm Co, up to 0.98% Mn) southeast of the exploration permit. The table below summarizes work completed by those companies:

Period	Company	Permit No	Purpose
1981-1981	South Pine Mines Pty Ltd	EPM 3189M	Base and Precious Metals
1983-1985	Powerseal (Miami) Pty Ltd	EPM 3613M	Precious Metals
1992	Newcrest Mining Ltd	EPM 8219	Porphyry-breccia style gold deposit
1992-1993	Johnson & Goody	EPM 8834	Rutile & Porphyry Cu-Mo
1996-2000	Westralian Sands Ltd / Iluka Resources Ltd	EPM 9580	Rutile & Porphyry Cu-Mo
2006-2007	Cullen Exploration Pty Ltd	EPM 15480	Porphyry Cu-Mo & Epithermal
2006-2014	Queensland Ores Holding Pty Ltd	EPM 15542	Porphyry Cu-Mo
2008-2010	Poppies Resources Pty Ltd	EPM 16416	Porphyry Cu-Mo & Epithermal
2008-2010	Greystoke Mines Pty Ltd	EPM 16906	Porphyry Cu-Mo

Barlyne Mining Pty Ltd held EPM 18808 located north of Red Mountain. In 2012, Archer Resources Ltd to which Barlyne Mining is a wholly owned subsidiary completed a 1,276 soil sample campaign, along with 17 rock chips and 40 stream sediment samples. Several prospects were defined. The three main prospects are:

- **Red Mountain Prospect:**
Significant gold and silver values in soils, up to 57ppb Au and 2,070ppb Ag. Copper and molybdenum values increase to north. Mineralisation is open in most directions.
- **Rossmore Silver Mine:**
This Prospect is located outside of EPM 26384
- **Pinnacle Cattle yard:**
Gold up to 134ppb in soils. Up to 0.7% and 0.2g/t Au in malachite-bearing sheared amphibolite rock chips.

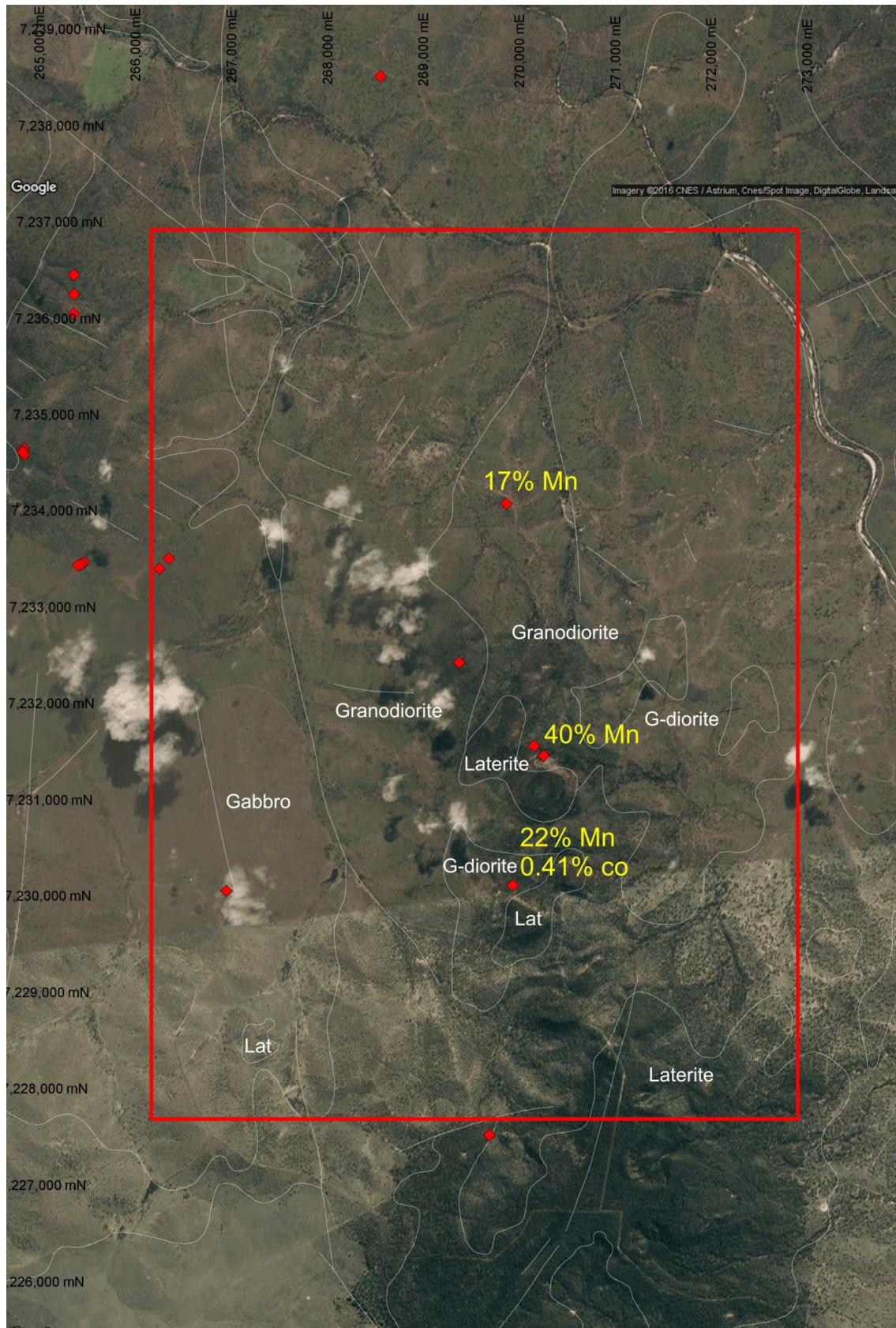


Figure 5. Historic Rock Chip Sample Results – Red Mountain Project (ADG66-Zone 56)

6.0 ZENITH MINERALS EXPLORATION

6.1. Historical Review

During the reported period, Zenith Minerals completed a review of historical exploration work within the whole tenement. Zenith's staff generated targets by studying remote sensing imagery, regional geophysical datasets and historical exploration activities.

6.2. Surface Sampling

One rock sample was collected over the surrendered area (Figure 6). The bucky white quartz vein sample did not return any significant result.

8 soil samples were collected by Zenith Minerals staff over the area. Results up to 100ppb Ag were returned.

Extra rock and soil were also analysed by portable XRF in the field. 3 rocks and 32 soil samples were analysed. Results are attached to the report.

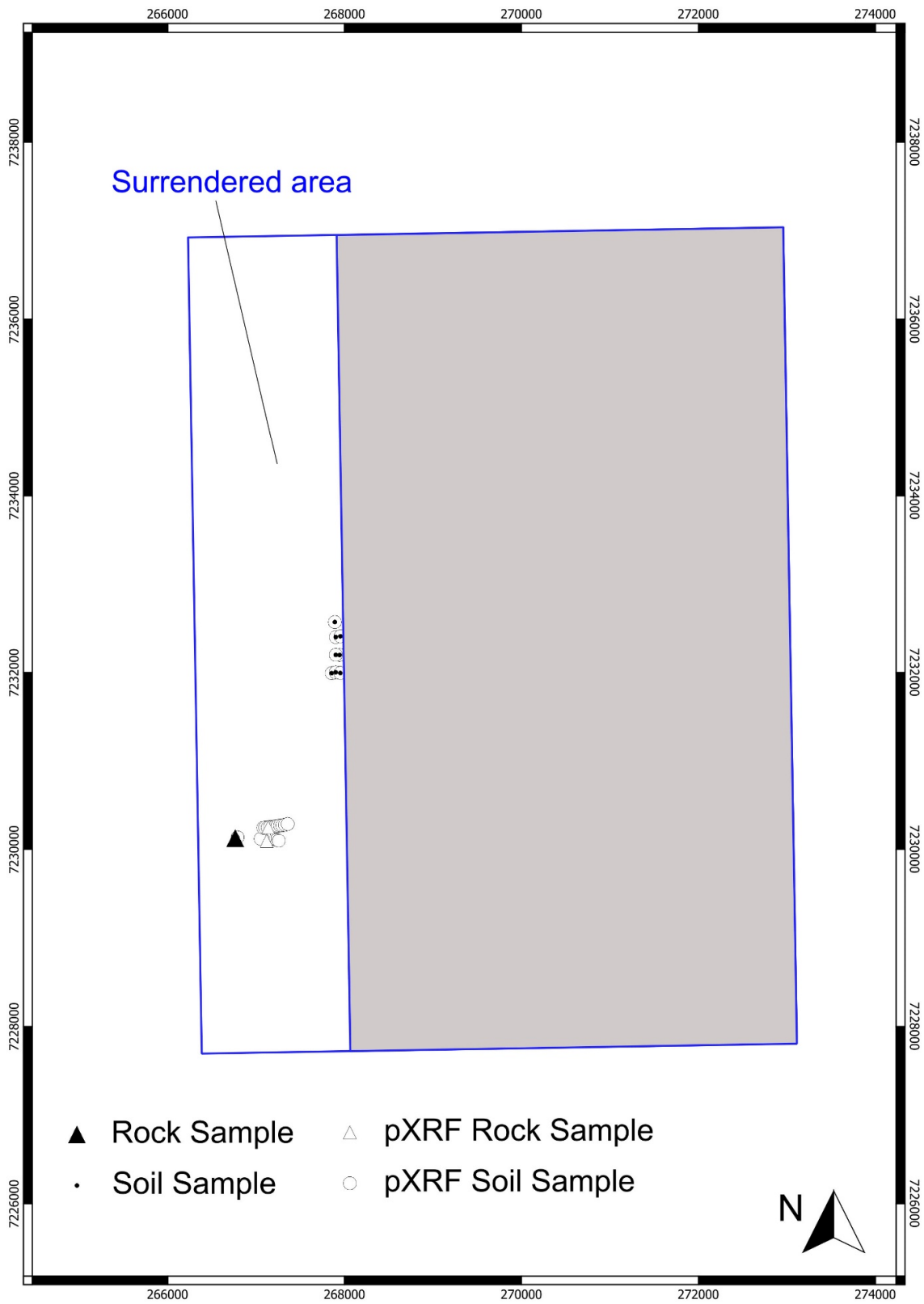


Figure 6. Rock and Soil samples over surrendered area

7.0 CONCLUSIONS AND RECOMMENDATIONS

The five surrendered sub-blocks are not considered prospective for either cobalt/manganese or gold/silver mineralisation and were therefore relinquished.

8.0 REFERENCES

Clifford M. and D'hulst A. (2018) Annual report for Period 27 March 2017 to 26 March 2018 – Red Mountain Project. Department of Natural Resources, Mines and Energy

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Jones M. (2003) CRC LEME Mundubbera 1:250 000 Sheet Queensland, DMNR Report