COMBINED ANNUAL REPORT FOR PERIOD
1ST JANUARY 2010 TO 31ST DECEMBER 2010

MLN 719 - 725 & MCN 273
MATHISON CREEK BARITE
NORTHERN TERRITORY

FERGUSSON RIVER SD52-12

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Sibelco Australia Limited
Report No: RH201103
ABSTRACT

Sibelco Australia Limited completed no work on MLN719-725 and MCN273 during the period 1st January 2010 to 31st December 2010. MLN719-725 and MCN273 cover the Mathison Creek Barite Deposit.

Due to depressed market conditions for OD (Oil Drilling) grade barite, Sibelco is currently only sourcing barite from its Dunbar Mine in South Australia. However, the Mathison Creek deposit is a strategic reserve which Sibelco intends to continue when market conditions change.

Sibelco has in the past conducted extensive geological mapping, costeaming and drilling programmes to delineate the resource. This work defined a resource of approximately 100,000 tonnes over 4 barite lodes.
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1 INTRODUCTION

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1.1 Location and Access

Mathison Creek barite deposit is located approximately 400km south southeast of Darwin and 100km southwest of Katherine in the Northern Territory as shown in Figure 1

Access to the area from Katherine is as follows:

- 87km west on Victoria Highway to Flora River nature park intersection
- 22km north west on unsealed park road to Parkers Bore
- 5km southwest along cleared fence line to Mathison Creek
- Barite lodes are located approximately 2.5km southwest of Mathison Creek crossing.

Figure 1: Location Diagram
1.2 Tenure

The leases are located within West Mathison pastoral leases. Seven Mining Leases (MLN719-MLN725) and one Mineral Claim (MC273) cover the main barite lodes. The tenure covers an area of 84ha

The current leases were originally granted to WJ Fisher between 1979 and 1983. Transfer of the leases to Unimin Australia Limited (Normandy Industrial Minerals Limited at the time of transfer) was finalized in 1999. Unimin Australia Limited is now known as Sibelco Australia Limited.

The following table outlines the details of the tenements.

<table>
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<tr>
<th>Lease No</th>
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1.3 Target Commodity

Barite is a relatively soft inert mineral with a high specific gravity of up to 4.5. These properties favour the use of barite as a weighting agent in oil well drilling mud for the purpose of suppressing high formation pressures and preventing blowouts.

Additional physical properties such as high brightness, opacity and low oil absorption allow barite to be used as a filler and extender in paint, friction materials, rubber and other industrial applications.

1.4 Geology

The barite veins are hosted within the Antrim Plateau Volcanics (APV). APV comprises a basal altered olivine basalt with inter-layered sub-arkose overlain by shale, sandstone, dolomite and ironstone. This sequence is relatively horizontal with a slight dip to the west to southwest.

The barite is restricted to the basalt member of the APV and does not penetrate the overlying sedimentary members.
The barite veins have a northwest strike, vertical dip and an average thickness of 1m. Barite lodes outcrop discontinuously along their strike length due to the Quaternary alluvium cover. Some barite exposures stand up to 0.3m above the ground surface.

Eight major lodes have been recognized and are referred to as Lode A to H.

The barite displays a banded texture, each being separated by growth lines. The thicker bands have coarse crystalline barite which is free of contaminants. Thinly banded barite has a radiating texture of platy barite crystals and in places contain significant impurities such as goethite, limonite, drusy quartz and chert nodules.

The veins pinch and swell along strike and down dip with thickness variations of 0.1m to 7.0m.
1.5 Previous Work

During the 1970’s the veins were mapped and surveyed using tape and compass by Euralba Mining NL and A-Z Geological Consultants Pty Ltd. Following mapping a channel sampling program was carried that collected 23 samples, with various analysis testing for BaSO4, Fe2O3, acid soluble and water soluble Ca and Mg, SiO2 and specific gravity.

During the late 1970’s to early 1980’s all the current tenements were granted to WJ Fisher.

Drilling and costeaneing was conducted by the present owners during 1998 and focused on evaluating the three largest barite lodes. 11 reverse circulation (RC) holes for were drilled, totaling 301 metres (Figure 2a to Figure 2d). 81 costeans were excavated to prove continuity along strike (Figure 2a to Figure 2d). Total barite resource for the evaluated lodes was estimated at 6600tonne per vertical metre. The sampling and analysis indicated the grade to be suitable for oil well drilling with average specific gravity >4.2 and water soluble alkali earths <250ppm. Poor visual colour precludes any industrial usage.

2 WORK CONDUCTED DURING THE REPORTING PERIOD

No work has been undertaken during the current reporting period, although Sibelco has defined a resource and considers Mathison Creek an important strategic barite resource. Numerous factors are present that inhibit the exploitation of barite from the site. These include the depressed market conditions for OD (Oil Drilling) grade barite. The current distribution of barite markets, lack of existing infrastructure and cost advantage of other supplies.

3 ENVIRONMENTAL

No ground disturbing activities were undertaken during the period.

4 FUTURE WORK

Continual monitoring of market conditions and financial reviews are undertaken to determine the viability of Mathison Creek with respect to Sibelco’s existing Dunbar operation and other external suppliers.

No field work is necessary as the deposit has been sufficiently defined in terms of quality and quantity.

5 CONCLUSION

No work has been undertaken during the current reporting period, although Sibelco has defined a resource and considers Mathison Creek an important strategic barite resource.
It is envisaged that Mathison Creek has the ability to supply the Timor Sea and North-West Shelf petroleum exploration however the exploitation of the resource is reliant on favorable market conditions.

6 EXPENDITURE SUMMARY

The expenditure associated with report preparation and lease management is as follows:

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<tr>
<th>Tenement Type</th>
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Table 1: Exploration Expenditure

7 REFERENCES

REPORT NUMBER: RH201103

TITLE: COMBINED ANNUAL REPORT FOR PERIOD 1st January 2010 to 31st December 2010 MLN 719 - 725 & MCN 273 MATHISON CREEK NORTHERN TERRITORY

AUTHOR: R. HUNT

DATE: JANUARY 2011

PROSPECT NAME: MATHISON CREEK

OWNER/OPERATOR: SIBELCO AUSTRALIA LIMITED

KEY WORDS: BARITE INDUSTRIAL MINERALS

COMMODITY: BARITE

GEOLOGICAL UNITS: ANTRIM PLATEAU VOLCANICS

1:250,000 MAP SHEET: FERGUSSON RIVER SD5212

1:100,000 MAP SHEET: BOWMAN 5288