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TITLE HOLDER: THESSALLY RESOURCES PTY LTD

HUANDOT MAGNESITE DEPOSIT

Exploration Licence 27724 - 2014 Annual Report

Batchelor Region, Northern Territory

for the Period 07/05/2013 to 06/05/2014

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Annual Report Title Details

Titleholder	Thessally Resources Pty Ltd
Operator (if different from above)	
Tenement Manager/Agent	Austwide Mining Title Management
Titles/Tenements	EL 27724
Mine/Project Name	Huandot
Report title including type of report and reporting period including a date	Annual Report THESSALLY RESOURCES PTY LTD Exploration Licence 27724 Batchelor Region, Northern Territory for the Period 07/05/2013 to 06/05/2014
Personal author(s)	Patrick Maher
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250 000 K map sheet	Pine Creek SD5208
100 000 K map sheet	
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Executive Summary

Exploration Licence 27724 is the only granted title held by Thessally Resources Pty Ltd (Thessally) in the Northern Territory. The title covers the same area as the former ERL128 and hosts the Huandot magnesite deposit.

Between 1987 & 2006 metallurgical test work on magnesite from ERL128 concluded the magnesite was of a suitable quality for magnesium metal production. However, the very tight material quality specifications, as well as more cheaply available magnesite from China and the lack of infrastructure in the area combined to see the project fail to reach production stage.

In early 2012, an economic review carried out by CSA Global associate and industrial minerals expert Mr Murray Lines deemed the project suitable for further marketing and engineering work. Revaluating the magnesite deposit under the terms of present day and projected future market requirements highlighted the current economic potential for the development of a magnesite mine within the area of EL 27724.

Thessally was granted the renewal of EL 27724 for a two year period until the 6th May 2014. In the first year of the renewal period a field program to allow assessment of the critical issues identified during the concept study was completed. Magnesite samples were collected to verify historic results and product specifications.

The results of the test work verified the suitability of the material for the production of; Dead Burned Magnesite (DBM), a feed for caustic calcined magnesia and magnesium metal. The availability of positive and up to date results has also led to the renewed marketing of the Huandot magnesite to potential end users.

To assist with the marketing component of the magnesite products a data room was developed and it contained initial pre-feasibility information to enable the distribution of information on the magnesite project.

In the second term of the renewed licence tenure (this annual reporting period) the primary objectives were to advance the project to a higher level of engineering study.

A Mine Scoping Study was carried out by CSA Global and it reiterates that the Huandot magnesite is suitable for most end use applications as defined by the previous year's test work. It concluded that the deposit remains open and that it can be mined using conventional open pit methods. Importantly, the study highlighted that the project has the potential to be developed into an economically viable mine operation should a suitable customer base be secured.

Some key points from the study are summarised as follows:

- For a generic direct-shipping grade magnesite ore, the estimated mine operating costs are in line with similar operations of the assumed scale and mining rate.

- Financing and capital equipment requirements options will require further review. In the cost scenario prepared, it was assumed the Thessally purchases the crushing and screening equipment. CAPEX reduction can be significantly reduced if contract crushing is pursued although this may be at the expense of increased OPEX.

- Options for material handling from mine to Darwin Port (or alternative local destination) have a significant impact on the cost model.

- Further investigation is required to determine market demand in terms of quantity and product specifications as this will have the biggest impact on production rates and costs.

- Additional mineralogical and geo-metallurgical test work is also required to determine the extent of variability of the purity of the magnesite. This should then be incorporated into the orebody model so that mine scheduling can be based on product type to suit customer requirements.

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1 Introduction

1.1 Location & Access

Exploration Licence 27724 lies approximately 85km south of Darwin and 10km east of the township of Batchelor. Figures 1 & 2 highlight the exploration licence position with respect to the current infrastructure.

Access to the licence from Darwin is via the Stuart Highway to the Batchelor turnoff and then along the Batchelor Road for approximately 3km. Both the Stuart Highway and Batchelor roads are sealed and provide all weather access. During the previous exploration campaigns access to the Huandot deposit itself was via a dirt track north from the Batchelor Road. The track is now in disrepair after several years of no use. An alternative access is via the abandoned Woodcutters mine site.

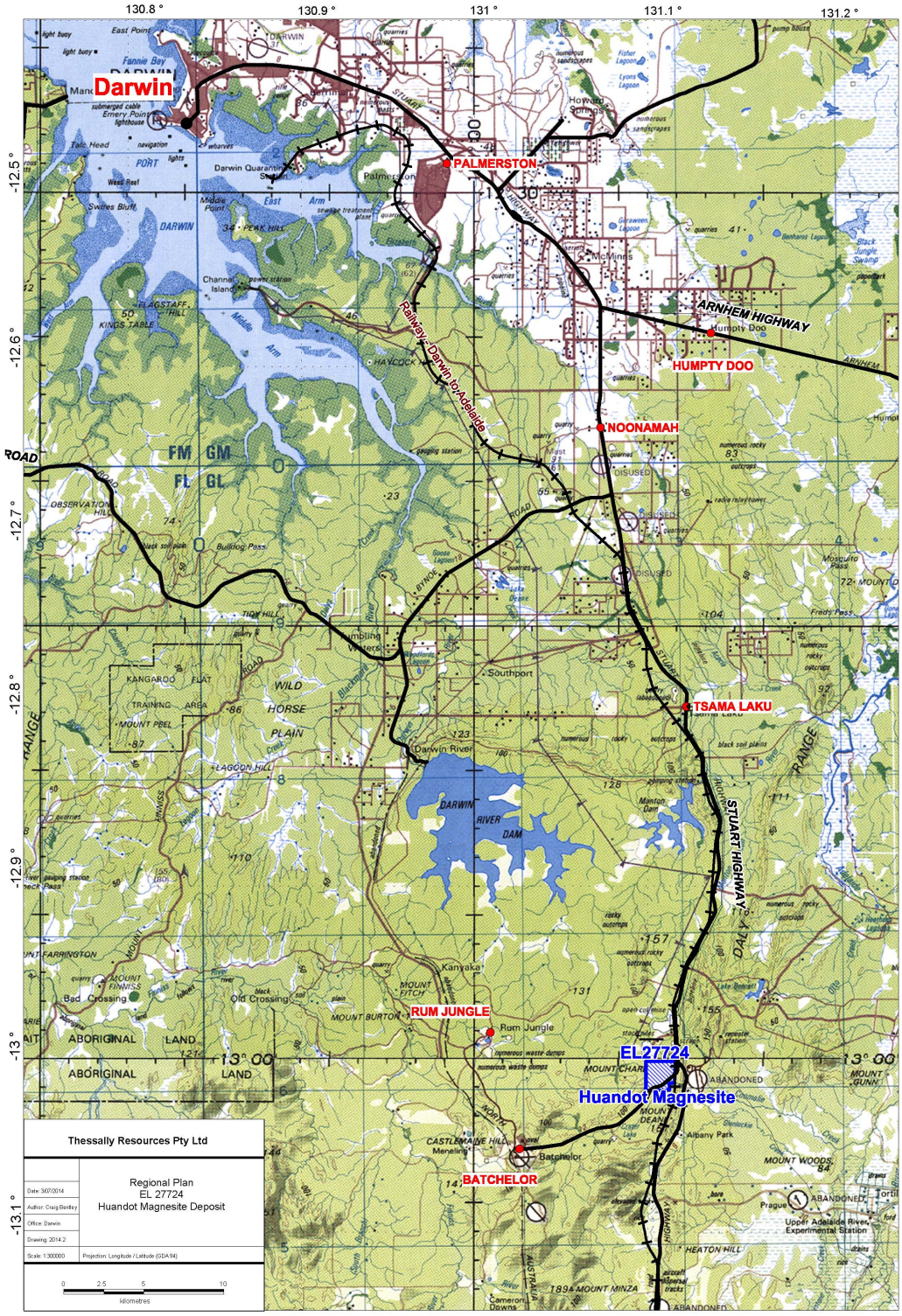

Figure 1. Regional Location Plan

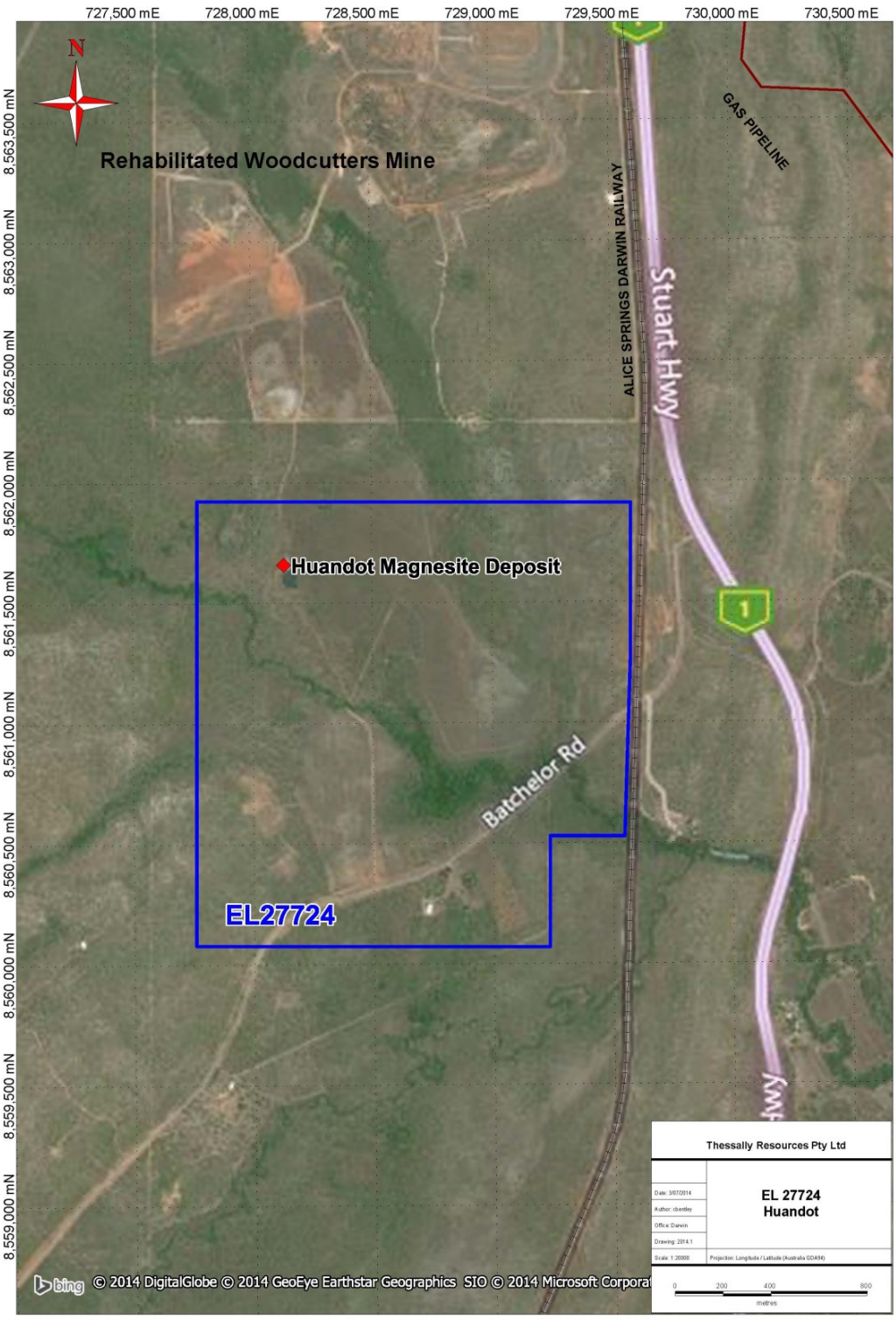

Figure 2. EL 27724 (Huandot) Location Plan

2 Tenure

Exploration Licence 27724 was originally granted to Thessally Resources Pty Ltd (Thessally) (ACN 140 005 643) for a period of two years on the 7th May, 2010.

Thessally has been granted a renewal of EL27724 for a term of two years until the 6th May 2014 by the Northern Territory Department of Mines and Energy. The licence consists of one graticular block.

This report covers work carried out on the EL's during the second year of the renewed tenure and covers the period 7th May 2013 to 6th May 2014.

The licence covers the same area as the former ERL128 owned by several companies related to the Normandy Mining Group.

Exploration Licence 27724 hosts the Huandot magnesite deposit. Between 1987 & 2006 metallurgical test work on magnesite from ERL128 concluded the magnesite was of a suitable quality for magnesium metal production. However, the very tight material quality specifications, as well as more cheaply available magnesite from China and the lack of infrastructure in the area combined to see the project fail to reach production stage. Recent work by Thessally has shown that present and forecasted requirements in the magnesite marketplace as well as local infrastructure developments are redefining the value of the deposit.

3 Geological Setting & Previous Work

The Huandot mineralisation lies on the eastern margin of the Archaean Rum Jungle and Waterhouse complexes. These are unconformably overlain by the Lower Proterozoic clastic and dolomitic sediments from the Namoona and Mt Partridge Groups. In the licence area the units of the Mt Partridge Group dominate with clastics of the Crater Formation; stromatolitic dolomite of the Coomalie Dolostone; mudstone and calcareous mudstone of the White Formation and interbedded mudstone and quartzite of the Wildman Siltstone. The Huandot mineralisation is localised within the Coomalie Dolostone.

A detailed description of the geology is given in the 2011 Annual Report for EL27724 (Lindsay-Park, 2011).

Prior to the granting of the licence to Thessally, a considerable amount of exploration activity has been completed in and around exploration licence 27724. The detail description of the previous exploration work is given in the 2011 Annual Report for EL27724 (Lindsay-Park, 2011).

In the first year of the tenure of EL 27724, CSA Global Pty Ltd (CSA), acting on behalf of Thessally as the company's geological consultants, completed a significant exercise of research, collation of historic exploration reports and data capture to build a project database for the Huandot magnesite deposit. CSA then completed a desk top review of the previous exploration and evaluation work to assess the potential of the project.

The review highlighted the potential for development of the magnesite mineralisation that occurs within the tenement and therefore a plan for year 2 was prepared. The primary objective was to complete a study to enable an independent review of the technical aspects of the Huandot magnesite project based on the historic resource estimates.

A description of the work carried out in the second year of tenure is given in the 2012 Annual Report for EL27724 (Maher, 2012). Thessally was fortunate to secure the services of Mr. Murray Lines (via an associate arrangement with CSA). Mr Lines is a noted industrial minerals expert and geologist with a speciality in the marketing and assessment of magnesite deposits.

The review (c.f. Lines, 2012) noted that the Huandot project is suitable for further marketing and engineering work. His confidence was based on his review of the historic resource estimates, past mine design details as well as past operating and capital cost estimates with relevance to the present and forecasted booming market for magnesite products.

3.1 Product Specification Studies & Marketing

In the third year of tenure, the primary objective was to complete a field program to allow assessment of the critical sampling and product issues identified during the concept study (c.f. Lines, 2012).

Primarily the field work aimed to obtain material for further test work. The next step was to obtain up to date results which would assist the marketing of the magnesite to a new potential user or customer base.

3.1.1 Field Visit & Sampling

CSA was engaged by Thessally to plan a work program to secure the magnesite samples for test work and product specification. Mr Murray Lines (CSA Associate) visited EL27724 in October 2012 with Craig Bentley and Patrick Maher (Geologists, CSA Darwin office) to collect samples and to ascertain project logistical parameters.

Grab samples were collected at various stockpile locations on EL27724 for analysis at NSL Chemicals Ltd in Singapore and at Amdel Labs in Darwin. The purpose of the sampling was to test the magnesite as feed for Dead Burned Magnesite (DBM) product and also for caustic calcined magnesia.

The NSL Chemical Lab result indicated that the Huandot material was suitable to be a potential substitute in the market for Chinese DBM.

The Amdel Lab results (c.f. Maher 2013) provided excellent correlation with historically reported results (c.f. Lines, 2012) and verified the suitability of the material for the production of a DBM product, as a feed for caustic calcined magnesia and for use in magnesium metal production.

3.1.2 Magnesite Product Marketing

A review the global magnesite market to identify potential customers and assess supply-demand issues was also carried out by CSA.

Thessally engaged CSA to develop a data room to assist in with the marketing component of the Huandot Deposit and the magnesite products. The data room was also extremely useful in providing initial pre-feasibility information to interested potential customers.

The marketing of the product information was ongoing and a market analysis study was carried out by Thessally. The market analysis study allowed further work to be focused on addressing specific issues which may allow, facilitate or hinder the development of a mine within EL 27724.

4 Mine Scoping study

In this second term of the renewed licence tenure, Thessally engaged CSA to carry out a Preliminary Desktop Mine Scoping Study.

The work highlighted that the Huandot magnesite deposit

- is suitable for most end use applications as defined by the previous year's test work;
- remains open along strike; and
- can be mined using conventional open pit methods (c.f. Table 1 "Simplified Resource Model).

4.1 Open pit mining parameters

The key parameters consider by CSA in the scoping study concerned the following:

1. Drill and blast from surface and mining single shift over 7 months during the dry season. The 'stop work' rainfall threshold for mining only is considered to be >5mm per day.
2. Processing (crushing and screening) and product transportation (75 km) to the Darwin Port to continue throughout the year when ROM stockpiles allow.
3. Average annual total movement (mined ore and waste) over 11 years is approx. 230,000 Bank Cubic Meters (BCM) per annum (c.f. Table 2).
4. Average annual ore movement over 11 years is approx. 112,000 BCM or 319,000 tonnes per annum (c.f. Table 2).
5. Mine fleet includes; 3 x Caterpillar 773D off highway trucks (54 tonne payload capacity) Komatsu PC1250-7 Excavator, Caterpillar D9R dozer, 16G Grader and water-cart
6. Processing fixed plant includes: Primary jaw crusher and secondary cone crusher Screens and conveyers, etc.
7. Processing mobile plant includes; Front End Loader and Integrated Tool carrier CAT 330B excavator and rock breaker tool

SG 2.85		Bench Height	Length	Width	Total	Ore	Waste	Total	Ore	Waste	% Ore	% Waste
Elevation	Elevation	m	m	m	BCM	BCM	BCM	Tonnes	Tonnes	Tonnes	%	%
1070	1065	5	650	175	568,750	113,750	455,000	1,620,938	64,838	1,037,400	20%	80%
1065	1060	5	600	175	525,000	105,000	420,000	1,496,250	59,850	957,600	20%	80%
1060	1055	5	550	175	481,250	288,750	192,500	1,371,563	493,763	219,450	60%	40%
1055	1050	5	400	165	330,000	247,500	82,500	940,500	529,031	58,781	75%	25%
1050	1045	5	400	165	330,000	247,500	82,500	940,500	529,031	58,781	75%	25%
1045	1040	5	400	150	300,000	240,000	60,000	855,000	547,200	34,200	80%	20%
1040	1035	5	400	125	250,000	200,000	50,000	712,500	456,000	28,500	80%	20%
1035	1030	5	350	75	131,250	105,000	26,250	374,063	239,400	14,963	80%	20%
1030	1025	5	300	75	112,500	90,000	22,500	320,625	205,200	12,825	80%	20%
1025	1020	5	300	75	112,500	101,250	11,250	320,625	259,706	3,206		
					3,141,250	**1,738,750**	**1,402,500**	**8,952,563**	**3,384,019**	**2,425,706**		

Table 1. Applied 'Simplified Resource Model'.
(Includes a Specific Gravity (SG) of 2.8 and bench height of 5 metres).

Physicals	Tonnes	BCM
Mined Ore	3,511,003	1,231,931
Mined Waste	3,676,095	1,289,858
Total Movement	7,187,098	2,521,789
Ore Delivered On Board	3,034,859	
Recovery	86%	
Mining Rate Ore t/yr	**319,182**	**111,994**
Mining Rate Total per year	**653,373**	**229,254**

Strip Ratio	**w/o**	**0 .8**

Table 2. Mining Rates (assuming an 11 year operating period).

Cost Drivers	Tot $	$/t	$/BCM
Capital Mine Development	5,265,000		
Mine Operating Costs per ore tonne mined			
Ore Mining	10,619,584	3.02	8.62
Waste Mining	14,557,829	3.96	11.29
Drill & Blast	12,724,049	3.62	10.33
Lighting Plant & LV's	921,740	0.26	0.75
Equipment Hire& Dewatering	428,704	0.12	0.35
Dayworks General	1,167,182	0.33	0.95
Total Contract Mining (exclud. Capex)	40,419,088	11.51	32.81
Crushing and screening ($/t ore)	31,506,294	8.97	
Power ($/t ore)	743,333	0.21	
Grade Control ($/t ore)	1,897,174	0.54	1.54
Mine Administration ($/t ore)	20,795,657	5.92	
Rehab ($/t ore)	302,615	0.09	
Ore Haulage To Darwin Port	63,754,419	21.01	
Darwin Port Logistics and Fees	60,697,178	20.00	
Royalties Payable	7,587,147	2.50	
TOTAL COST (Including Capex) Delivered on Board:	232,967,906	$77	

Table 3. Mine operating costs

4.2 Mine Study Overview

In their preliminary desktop Mine Scoping Study, CSA note that detailed ore-body modeling, and mine scheduling based on customer requirements / specifications will have a significant impact on mining costs.

A Total Mine Operating Cost Delivered on Board is estimated at AUS$77. This is an indicative cost (+/- 50%) and the breakdown of the costs drivers are shown in Table 3.

The study indicates magnesite can be mined using open pit method at a mining cost of $11.50 per tonne delivered to surface (c.f. Table 3).

The study highlights that the estimated mine operating costs are in line with similar operations of the assumed scale and mining rate. Material handling logistics to a ship via the Darwin Port (or alternative local destination) have a significant impact on the operating cost model.

Financing and capital equipment requirements options will require more detailed review. In the scenario outlined on Table 3, the company purchases the crushing and screening capital and there needs to be further investigation into these costs.

CSA Global also notes that land compensation payments have not been included and that there has been no accounting for an on-site laboratory (if required).

A final Raw Magnesite Product price of AUS$100 is assumed, however the estimate is based on historic prices out of Europe. Up to date product pricing and market trends can be purchased from various industry organizations and final pricing scenario will require updating.

Further investigation is required to determine market demand in terms of quantity and product specifications as this will have the biggest impact on production rates and costs.

Additional mineralogical and geo-metallurgical test work is also required to determine the extent of variability of the purity of the magnesite. CSA recommend that this information should then be incorporated into the orebody model so that mine scheduling can be based on product type to suit customer requirements.

5 Conclusions & Recommendations

The Mine Scoping Study carried out by CSA has reiterated that the Huandot magnesite is suitable for most end use applications as defined by the previous year's test work.

The study concludes that the deposit remains open and that it can be mined using conventional open pit methods. The project has the potential to be developed into an economically viable mine operation should a suitable customer base be secured.

Some key points from the study are summarised as follows:

1. For a generic direct-shipping grade magnesite ore, the estimated mine operating costs are in line with similar operations of the assumed scale and mining rate.

2. Financing and capital equipment requirements options require further review. In the scenario set out on Table 3, it is assumed the Company purchases the crushing and screening equipment. CAPEX reduction can be significantly reduced if contract crushing is pursued although this may be at the expense of increased OPEX.

3. Options for material handling from mine to Darwin Port (or alternative local destination) have a significant impact on the cost model.

4. Further investigation is required to determine market demand in terms of quantity and product specifications as this will have the biggest impact on production rates and costs.

5. Additional mineralogical and geo-metallurgical test work is required to determine the extent of variability of the purity of the magnesite.

Thessally's primary objectives during the upcoming year of the renewed licence term are to:

- Engage local consultants to review environmental, land ownership and potential mine development issues;

- Develop work programs to secure further magnesite samples for mineralogical and geo-metallurgical testing;

- Plan additional engineering studies;

- Advanced an end user products, material & market study; and

- Secure a longer term of tenure via an Exploration Retention Lease so that title to the area is guaranteed.

6 References

Lindsay-Park, K. 2011. Report No: R249.2011 Annual Report on Exploration Licence 27724. June 2011, CSA Global Pty Ltd. Submitted to NT DoR

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