MOLYHIL MINING PTY LTD

EL 22349 Molyhil

HUCKITTA 1:250K MAP SHEET

Year 5 Annual Report

May 17 2006 – May 16 2007

Distribution : 1. Molyhil Pty Ltd (THOR Mining PLC Perth Office)

2. Mining Titles Division
Department of Primary Industry, Fisheries and Mines - Darwin, NT

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SUMMARY

Tungsten and Molybdenum mineralisation was originally discovered at Molyhil in 1973. Fama Mines Pty Ltd selectively mined approximately 20,000 tonnes of ore during 1976 - 1977. Petrocarb Exploration NL acquired the operation in 1978 and production continued until late 1981 when Tungsten prices collapsed. Petrocarb published an indicated open cut reserve of 1.8 million tonnes at 0.6% WO_3 and 0.3% MoS_2. The reserve ore grade was primarily based on statistical analysis of mining head grades. Mining experience indicated that the drill estimated grades were low, with production head grades significantly higher.

In June and July 2004, Tennant Creek Gold completed 5 diamond drill holes for 675.59 metres and 23 Reverse Circulation (RC) holes for 3,146.7 metres. A JORC compliant drill indicated resource was subsequently calculated at 2,065,009 tonnes grading 0.304% WO_3 and 0.182% MoS_2. The resource zone remains open at depth and along strike to the south.

In December 2004, 3 trenches were excavated over an 80-metre strike length of the southern orebody and 15 tonnes of ore extracted for metallurgical testwork. An average grade of 0.70% WO_3 and 0.58% MoS_2 was calculated for the 15 tonne sample and is an almost identical grade to Petrocarb historical mined grade. The bulk sample results were considerably higher than assayed intersections from nearby RC drillholes, and provide further evidence that the drill indicated grade substantially underestimates the true grade of the deposit.

In July 2005 Sunsphere commenced a trial underground mining program to confirm the head grade of the deposit relative to the previous drilling and historical grades. Three shafts and crosscuts were excavated in the Southern Lode and totalled 96 and 102m respectively. The extracted ore was crushed, sampled and assayed. Further samples were used for metallurgical Testwork.

The bulk sampling was used to upgrade the JORC resource to a Measured Resource of 370,000t at 0.52% WO_3 and 0.32% MoS_2, an Indicated Resource of 1,750,000t at 0.52% WO_3 and 0.26% MoS_2, and an Inferred Resource of 250,000t at 0.7% WO_3 and 0.2% MoS_2. This resource has been estimated to a depth of 150m (RL250m). The Measured Resource is to a depth of 45m (RL 355m).

Magnetic modelling of the Southern and Yacht Club orebodies indicated the mineralised zone possibly extends to 400-500 metres vertical depth and potentially contains 4-5 million tonnes of high-grade ore, more than double the existing drill indicated tonnage. Further drilling is planned for August-September 2006.

1 INTRODUCTION

This report covers all exploration completed on EL22349 for the period 17 May 2006 to 16 May 2007. The lease contains the Molyhil Mining Lease applications MLA 23825, MLA 24429 and MLA 25721. Exploration Licence EL 22349 is comprised of 259 graticular blocks (829 km^2) and was granted to Imperial Granite and Minerals Pty Ltd on May 17, 2002 (IGM). It was subsequently transferred to Tennant Creek Gold (NT) Pty Ltd on 26 March 2004. In 2005 the Molyhil Tenement Package (EL22349, MLA23825 and MLA24429) was transferred 100% to Sunsphere Pty Ltd. In 2007 Sunsphere Pty Ltd changed had a name change to Molyhil Mining Pty Ltd.

2. LOCATION AND ACCESS

EL 22349 is located on the Huckitta 1:250,000 map sheet (SF53-11) 330km northeast of Alice Springs (Figure 2.1). Access is via the Stuart Highway for 70km north of Alice Springs, then east for 230km along the Plenty Highway until the turnoff to Jinka Station is reached. The unsealed station road leads north for approximately 20km to the Molyhil mine site located on the southern boundary of the licence. The area of the licence is well served by station roads and tracks.

3 NATIVE TITLE AND SITE CLEARANCE

An Exploration Deed was signed by IGM and the Central Land Council prior to the granting of EL 22349 in 2002.

The Native Title Act requires the transferee (T/C Gold (NT) Pty Ltd) to covenant to comply with and be bound by the provision of the Exploration Deed for EL 22349 and assume all of the obligations there under, consequently a Deed of Assumption was prepared by James Nugent (Lawyer for Central Land Council) which was duly signed and executed in May and ratified by the full Council on 30 June 2004.

Prior to the signing of the Deed of Assumption a meeting was held with senior Traditional Owners at the Molyhil mine site on the 19 April 2004 where the following was agreed;

1. Two sacred sites namely the Molyhil Pinnacle and an area of quartz veining 100 metres east of the Pinnacle is excised from the mining lease application. A fence was erected around both sites in early June 2005.

2. Exploration compensation for native titleholders for the 2004 program is set at 5% of in ground expenditure. In the event of a mining start-up the native title holders were offered a 1% gross royalty based on mineral production revenues and a yet to be negotiated annual rent for a mining lease.

3. Sunsphere Pty Ltd ("Sunsphere") will pay forward compensation specified in the Exploration Deed in respect of the 2005 program. It was agreed that the 5% fee be paid within 14 days of receipt by Sunsphere of the CLC work area clearance.

4 GEOLOGY

The Molyhil tenement (EL 22349) covers Early Proterozoic rocks with high magnetic relief along and flanking the Delny-Mt Sainthill Fault (Figure 4.1), a feature developed within a wide west-north-west tectonic zone. This structure was active during the 1800Ma Strangways Event, which affected the entire Arunta Orogenic Domain.

A second dominant east-north-east trending fracture zone (Oomoomilla Fault) intersects the west-north-west fracture west of Molyhil. This intersection has been the locus for repetitive granite intrusion, including the Marshall and Jinka Granites (Figure 4.2). Faults within this tectonic zone have been periodically reactivated with a major remobilisation during the Carboniferous Alice Springs Orogeny.

Magnetic rocks are variously metamorphosed up to granulite facies and polyphase granitoids intrude Arunta Division One and Two mafic and felsic volcanogenic sequences hosting proportions of pelitic and calcareous sediments.

The basement rocks are unconformably overlain by Adelaidian and Palaeozoic marine and terrestrial sedimentary sequences of the intracratonic Georgina Basin.

Mineralisation is widespread within the Huckitta 1:250 000 sheet with past production from the Jervois deposits (Cu, Pg, Zn, Ag, Bi) the Molyhil “skarn” (Mo, W, Cu) and numerous other Cu and W vein deposits. Resources of barite-fluorite have also been established within huge quartz (carbonate-haematite) veins (“Oorabra Reefs”) cutting the Jinka Granite and other basement rocks. These veins also appear to penetrate the basal Adelaidean sedimentary sequence.

The area was subjected to deep weathering and laterisation during late Mesozoic to Miocene time. Most of this old surface has been eroded away with small remnants preserved at the top of Mt Sainthill.

The area was uplifted during the Late Tertiary and erosion continues to the present day. Extensive outwash fans have developed at the base of hills and obscure the basement rocks. A return to arid conditions during the Pleistocence produced sand plains, and loess was deposited throughout the hilly areas. The combination of the effects of deep weathering and extensive younger sedimentary deposits provide for a difficult environment for effective surface geochemical sampling.

5 PREVIOUS EXPLORATION

The discovery of the Molyhil scheelite-molybdenite deposit in 1977 stimulated an up surge in mineral exploration within the licence area. Prospector Lindsay Johannsen first discovered scheelite in layered calc-silicate rock at Molyhil Pinnacle in 1973. Subsequently Fama Mines Pty Ltd selectively mined some 20 tonnes of scheelite at the site. Later, additional scheelite was discovered 800 metres east of the Pinnacle at the Yacht Club deposit which produced 20,000 tonnes of ore averaging 0.5% scheelite to yield 100 tonnes of 70% WO_3 to 1976 (Barraclough, 1979).

In 1977 the Mines Branch Administration conducted a detailed exploration program over the mine site comprising gridding, ground magnetic surveying and diamond drilling (740 metres). This program led to the discovery of the larger Southern orebody comprising both scheelite and molybdenite (Barraclough 1979). Petrocarb NL acquired the mine site in 1978. They upgraded the processing plant and commenced mining the Southern ore body.

Nicron Resources NL acquired a major shareholding in Petrocarb in late 1980. They injected capital to improve mining and milling operations and completed a 20 hole (2137 metre) percussion-drilling program (Woodhill, 1981).

In 1977 Otter Exploration NL kicked off the modern era by flying a regional radiometric survey over the southern half of the Huckitta 1:250 000 map sheet area, through to the present. The initial airborne reconnaissance survey revealed several high amplitude radiometric anomalies. Traces of uraninite (up to 200ppm uranium) were also discovered within mineralised skarn at the Molyhil mine. Airborne radiometric grid surveying of the licence area was completed by August 1977. Significant geochemical results from Otter rock chip and drainage-sampling programs are plotted on Figure 10. Ground follow-up of airborne radiometric anomalies showed they appear to cluster where Adelaidean sediments unconformably overlie Early Proterozoic Arunta Block.

In 1978 Anaconda Australia applied for 78 square kilometres 10km east of Molyhil "an iron-rich scheelite-bearing skarn occurring near the contact of calcareous metamorphic rocks and intrusive granite" to explore for Molyhil analogues.

They erected a 7 x 6 km grid centred on Yam Creek over which they conducted a 100 m line space ground magnetometer survey to see if they could repeat three AMAG anomalies from the AGSO one-mile line space survey. They also collected and analysed 539 soil samples for Cu, Pb, Zn, Ag, Ni, Co, Mn, Cr, V, Fe, Ca, Mg, Al, Ti, Ba, Sr, Mo, U. The above soil data is currently being processed.

High silver values obtained from drainage sampling (12ppm) hand auger and soil sampling (5ppm) indicate several anomalous areas within the old Anaconda grid which require following up.

In 1981 Aerodata flew a 150 m line space AMAG survey over Molyhil for Petrocarb Exploration NL. Fourteen additional magnetic features were delineated by the above survey as possible Molyhil analogues all of which were ground mag'd, however only seven were tested by fences, of shallow Airtrack percussion holes. It is not known which seven AMAG anomalies were drill tested, or whether any of the fourteen were ever tested by a percussion hole either by Petrocarb or Geopeko?

In March 1982 a joint venture agreement was concluded between Nicron Resources/Petrocarb Exploration and Peko-Wallsend Operations Ltd (Geopeko). "The close association between scheelite and molybdenite mineralisation and the massive magnetite, together with fairly broad geological parameters formed the basis of Geopeko's exploration programme". Geopeko embarked on a 1:50 000 scale regional mapping program of the southern half of the Huckitta 1:250 000 map sheet area.

Using the Molyhil deposits magnetic signature as a model to search for additional Molyhil-type mineralised magnetite skarn deposits Geopeko commissioned Austirex International to fly the Eurobra AMAG and Radiometric survey covering 970km^2 centred on the Molyhil mine. Flight line spacing was 150m with a mean terrane clearance of 80m. Flight path recovery was by means of a Range-Range radar positioning and guidance system. TMI contour plans of the survey data were produced at scales of 1:10 000 and 1:50 000. East of Molyhil the Eurobra survey delineated 30 Molyhil – look-alike AMAG anomalies (Scorpion series) all of which were ground mag'd, however only 11 were drill tested for disappointing results, i.e. disseminated magnetite in quartz-feldspar-biotite gneiss or granite.

Two untested radiometric anomalies were also delineated. West of Molyhil the Eurobra survey delineated 44 likely looking AMAG and 2 radiometric anomalies. 21 anomalies were followed up with ground mag and drill tested either by Airtrack fences or deeper percussion holes again for disappointing results with no scheelite grains being detected.

In late 1983 Petrocarb/Nicron, Geopeko consortium farmed out the uranium rights to Uranerz Australia.

Ground radiometry traverses across the Delny-Mt Sainthill shear zone 30 km west of Molyhil delineated two areas of elevated cps readings namely Crystal and Yam Dam prospects. In January 1984 the Austirex International Halfway Dam AMAG and Radiometric survey was flown at a line spacing of 150 m.

However because Geopeko were about to withdraw from the Petrocarb/Nicron joint venture and Uranerz were losing interest in the area because most radiometric anomalies appeared to be over Thorium-rich granites only the AMAG data was processed. No ground checking of any AMAG anomalies was carried out by Geopeko nor were any yet to be identified radiometric anomalies by Uranerz.

Geopeko withdrew from the Petrocarb/Nicron joint venture in early 1983. Petrocarb resumed control of the Molyhil tenements until final relinquishment in 1989; however the only exploration activity undertaken during this period of low tungsten and molybdenum prices was a drainage sampling program centred on Molyhil. Three drainage anomalies were delineated namely 11182 (Pb), 11096 (Zn, Cu) and 11212 (W-Mo) none of which have been followed up.

Roebuck Resources NL applied for EL's 8127 and 8144 in 1989. The area applied for covered the eastern two thirds of EL 22349. Roebuck made the following observations with regard to the prospectivity of the area;

1) Molyhil licences are over fundamental intersecting east northeast and west northwest-trending regional fracture zones. The zone of intersection is the site of two or more phases of Proterozoic granite intrusion namely Marshall and Jinka.
2) A long standing thermal source is evidenced by the Oorabra Reefs intruding Jinka Granite during pre-Adelaidean times followed by a later quartz-fluorite-barite-basemetal sulphide veining event which again intruded basement as well as all levels of Adelaidean sediments over a strike length of 75 km of the Delny-Mt Sainthill Fault zone.
3) The Molyhil skarn deposit occupies a northeast fracture where it intersects the Delny-Mt Sainthill Fault Zone as indicated by a northeast-trending break in the magnetic contour pattern, which is clearly apparent as a photo linear feature.
4) In the Elyuah Range near Gap Bore a Cambrian dolostone contains megacrysts of barite replacing hyoliths along bedding plans for 300 m over a stratigraphic interval of 2-3 metres thus implying a similar replacement mechanism with the gangue of the Pb-Ba Boxhole Bore mineralisation located 55km north of Gap Bore.
5) Black Ridge prospect is a low temperature vein system anomalous in Au, As, Mo, Cu and Pb and occurs at the intersection of a large Oorabra Reef and the east northeast-trending Oomoomilla Fault. There is an underlying small magnetic anomaly at Black Ridge similar to the magnetic highs along the Oomoomilla Fault perhaps indicating more iron-rich vein developments or local concentrations of magnetite within the Oorabra Arkose adjacent to the fault?

6) Several geochemical anomalies are defined north of Mt Sainthill towards Deep Bore and Oorabra Rock Hole. Although underlain by Jinka Granite the area hosts four discrete AMAG anomalies including one, which appears to underlie a quartz-chalcopyrite-barite veined altered granite south of Moppata Water Hole. Note: this area coincides with Anaconda's 1979 soil grid.
7) An iron formation cropping out near Mt Sainthill requires following up similarly a Cu-Au mineralised ironstone cropping out on the Huckitta track.

In May 1997 Roebuck farmed out EL 8127 to BHP Minerals who identified the Molyhil region as prospective for world-class examples of Iron oxide, copper gold (IOCG) deposits following the completion of AGSO's "The Metallogenic Potential of Australian Proterozoic Granites" study in 1996 which identified the Alaringela Suite of (1713Ma) granites as being highly prospective for Cu, Pb, Zn and moderately prospective for gold.

The Alaringela Suite includes;

i) Alaringela Igneous Complex on Dneiper 100k sheet
ii) Unca Granite on Jervois Range 100k sheet
iii) Marshall Granite on Jinka 100k sheet.

All these granites are fractionated, oxidised (with red to pink coloration and hematite to magnetite-stable mineralogy) show evidence for a fluid phase, intrude suitable host rocks and appear to be associated with known Cu, Pb, Zn, Ag, Mo & W mineralisation (including the Jervois deposits?).

BHP also believed the Molyhil region to be prospective for world-class examples of Broken Hill Type (BHT) Ag-Pb-Zn (Cu) deposits.

BHP firstly assessed the scope and effectiveness of previous surface geochemical work. Drainage geochemistry is the only technique used extensively on Jinka (the effectiveness of which BHP questioned given the regolith of the area) resulting in a series of minor Cu (Pb-Zn-Ni) drainage anomalies evident in the Mt Sainthill area where Kanandra Granulite gneisses are dominated by quartzo-feldspathic gneiss but also including minor mafic gneiss which could source the 50 – 100 ppm range of Cu values and lesser Pb, Zn and Ni values.

Weak Cu drainage anomalism is also evident along Oomoomilla Fault immediately east of a large (unexplained) magnetic anomaly (Anomaly "A") near Mappata Waterhole. This area is largely covered, however two occurrences of F-Ba+Cu+Fe veins with several small Jinka Granite surface exposures cropout in the area (previous rock chip sampling returned 0.21% Cu).

BHP decided to complete a regolith interpretation of the area prior to commencing any geochemical sampling program which they found to be dominated by transported alluvial and fluvial material primarily related to the Plenty and Marshall River systems. These deposits comprise a polymictic lag of numerous types of lithic fragments dominated by vein quartz, quartzite, granitoid, mafics and felsic gneiss set within a silt-sand matrix. In cropping out areas a lag of ferruginous saprolite (pisoliths) and weathered rock fragments is developed representing remnant Tertiary weathering surface. BHP decided that systematic 1 km x 1 km regional lag sampling would be the best technique to apply across the entire area given the diversity of regolith environments.

The emphasis of the lag sampling was on;

i) areas of residual Tertiary laterite
ii) areas of eroding Arunta outcrop/subcrop and
iii) intervening areas where abundant lag deposits occur.

Spatial analysis of comprehensive regional lag data sets identified two priority anomalies;

i) A cluster of Cu-Pb-Zn-Ag anomalies occurring near Mt Sainthill.
ii) One coherent Ag anomaly east of Mt Sainthill.

The 2004 3,822m Tennant Creek Gold drilling program has defined a JORC compliant drill Indicated Resource of 2.065 million tonnes averaging 0.304% Tungsten oxide and 0.182% Molybdenum sulphide.

The 2005 198m, 1200 tonne bulk sampling program resulted in a JORC compliant upgrade to an estimated Measured Resource of 370,000t at 0.52% WO_3 and 0.32% MoS_2, an Indicated Resource of 1,750,000t at 0.52% WO_3 and 0.26% MoS_2, and an Inferred Resource of 250,000t at 0.7% WO_3 and 0.2% MoS_2. This resource has been estimated to a depth of 150m (RL250m). The Measured Resource is to a depth of 45m (RL 355m).

The Indicated Resource is open at depth and to the south. Magnetic modelling of the Southern and Yacht Club ore bodies indicated the mineralised zone may extend to 500 metres vertical depth; potentially containing 4 - 5 million tonnes of Mo-W ore.

The best result from reconnaissance sampling was obtained from the No.4 Dam ultramafic. Previous explorers had discovered thin veins of anomalous lateritic nickel. This area was visited and confirmed the nickel occurrence (Ni 0.4%, Cu 0.28%). However the small, centimetre scale extent of nickel laterite suggest it is nothing more than isolated surficial scavenging.

Many of the major drainages were examined, few, if any, float samples displaying calc-silicate alteration, sulphides, and gossanous textures were found. Earlier explorers had delineated some uranium hotspots on EL 22349. This warrants some follow up, however due to its sensitive nature, no follow up work was completed on this.

A gossanous siltstone with anomalous U (170ppm), Mo (150ppm) and Cu (130ppm) close to the Elyuah Range unconformity of overlying Georgina Basin Late Proterozoic platform sediments and Early Proterozoic Arunta Block requires further investigation 6 km northeast of Molyhil.

6 YEAR 5 EXPLORATION – WORK COMPLETED

Two RC programmes were completed during the reporting period for a total of 56 holes (TMRC024-054 and 07MHRC001-025). The first programme was completed in September and October 2006 (TMRC024-054) and included 14 reconnaissance water bores (TMRC037-050) supervised by KH Morgan and Associates.

The second programme was completed in March 2007 (07MHRC001-025).

5,723 metres of RC drilling was completed in total. 3,281 samples were sent to ALS and Genalysis in Perth for assay. ALS samples were prepped in Alice Springs and Genalysis samples were prepped in Adelaide.

Significant intercepts from the September-October 2006 programme included (See Appendix 1 for details of the 2006 RC drilling):

Hole ID	Depth From	Depth To	Width	MoS2	WO3
	130	131	1	<0.10	0.33%
	133	135	2	<0.10	0.16%
	139	147	8	0.16%	0.45%
TMRC24	149	155	6	0.63%	0.10%
	135	141	6	0.13%	0.37%
	149	154	5	0.60%	0.22%
	155	174	19	0.64%	0.11%
	inc 156	161	5	0.74%	0.30%
	175	177	2	<0.10%	0.19%
TMRC30	187	194	7	0.18%	0.12%
	154	156	2	0.09%	0.63%
	158	159	1	0.10%	0.11%
	170	189	19	0.33%	0.16%
TMRC31	inc 173	180	7	0.57%	0.38%
	145	150	*5	0.38%	1.25%
	150	151	1	0.16%	<0.10%
	153	159	6	0.13%	0.16%
	161	163	2	<0.10%	0.42%
	164	172	8	0.54%	0.34%
	176	180	4	0.50%	<0.10%
	185	186	1	<0.10%	0.21%
	187	188	1	0.10%	<0.10%
	192	193	1	<0.10%	0.19%
	193	194	1	0.14%	<0.10%
TMRC32	208	211	3	0.61%	0.16%
	145	148	3	0.12%	0.37%
	153	155	2	0.16%	0.42%
	159	169	10	0.23%	0.88%
	inc 163	168	5	0.43%	1.61%
	171	173	2	0.08%	0.23%
TMRC51	179	180	1	0.95%	1.30%

Significant intercepts from the March 2007 RC drilling programme included the following (See Appendix 2 for details of the 2007 RC drilling):

Hole ID	Width (m)	From	To	MoS_{2} %	WO_{3} %
07MHRC001	NSR				
07MHRC002	NSR				
07MHRC003	NSR				
07MHRC004	1	28	29	0.08	2.87
	2	31	33	0.77	0.09
07MHRC005	2	70	72	<0.10	0.48
	1	76	77	<0.10	0.17
	1	77	78	0.76	<0.10
	1	96	97	0.21	0.22
07MHRC006	2	67	69	<0.10	0.48
	1	73	74	0.11	0.16
	1	74	75	0.79	<0.10
	1	93	94	0.21	0.22
07MHRC007	SNR				
07MHRC008	6	34	40	0.29	0.07
	4	42	46	0.22	0.25
07MHRC009	**14**	**9**	**23**	**0.10**	**2.56**
07MHRC010	**19**	**53**	**72**	**0.26**	**2.00**
	7	74	81	0.17	0.26
07MHRC011	SNR				
07MHRC012	**19**	**34**	**53**	**0.21**	**1.14**
	6	61	67	0.12	0.10
07MHRC013	2	78	80	1.07	<0.10
	5	93	98	<0.10	0.48
	3	108	111	<0.10	0.37
	3	112	115	0.42	<0.10
	10	**117**	**127**	**0.43**	**0.52**
	1	131	132	0.42	0.26
07MHRC014	1	108	109	0.73	1.19
	10	**111**	**121**	**0.61**	**1.04**

Hole ID	Width (m)	From	To	MoS_{2} %	WO_{3} %
07MHRC015	5	22	27	0.16	0.37
	11	29	40	0.11	0.65
	6	40	46	0.11	0.02
07MHRC016	6	27	33	0.24	0.04
	11	33	44	0.11	0.43
07MHRC017	**11**	**62**	**73**	**0.96**	**<0.10**
	1	77	78	<0.10	0.20
	4	82	86	0.12	<0.10
	1	123	124	2.03	4.33
07MHRC018	1	50	51	1.63	8.92
	3	73	76	<0.10	0.13
	3	77	80	0.32	0.14
	2	83	85	0.58	0.43
	3	113	116	0.34	0.41
07MHRC019	3	93	96	0.05	0.37
07MHRC020	1	87	88	0.05	0.79
	3	93	96	0.39	0.19
	6	105	111	0.55	0.04
07MHRC021	7	113	120	0.15	0.20
	2	126	128	0.18	0.30
07MHRC022	**7**	**114**	**121**	**0.69**	**0.48**
	2	124	126	0.81	<0.10
	1	132	133	<0.10	0.16
	2	138	140	0.43	0.66
	1	146	147	0.37	<0.10
	1	154	155	0.56	<0.10
07MHRC023	NSR				
07MHRC024	2	22	24	0.17	2.22
	2	39	41	0.37	0.51
	8	46	54	<0.10	0.90
07MHRC025	3	104	107	0.30	<0.10
	3	109	112	0.14	0.23
	2	132	134	<0.10	0.81

The September-October 2006 RC drilling included 14 reconnaissance water bores supervised by KH Morgan and Associates. The programme successfully outlined a suitable aquifer for the mine site water supply along the Oorabra creek drainage approximately 8km north east of the Molyhil mine site near Price's Bore.

RC holes TMRC037-042 are drilled within the aquifer. TMRC 37, 40, 42 and a redrill of Prices Bore have been selected as suitable locations for the mine water supply. For details of the groundwater investigations see Appendix 3.

7.0 YEAR 6 PROPOSED EXPLORATION

Further resource and reconnaissance drilling is required at the Molyhil mine area.
$100,000
A detailed Induced Polarisation (IP) Survey is scheduled to delineate any extensions to known magnetite skarn mineralisation.
$50,000
Reconnaissance rock chip sampling and mapping is required to the east of Molyhil in the Oorabra Reefs area.
$10,000

8.0 CONCLUSIONS

The September 2006 and March 2007 RC drilling programmes identified numerous additional magnetite skarn (BRS or black rock skarn) intercepts in the Yacht Club Lode and down plunge at the south end of the Molyhil deposit on both the Yacht Club and Southern Lodes.

APPENDICES

1 Molyhil Reverse Circulation Drilling Report, 14th September 2006 – 9th October 2006. T .Monks
2 Molyhil Project Reverse Circulation Drilling Program 3rd – 21st March 2007. C. Cox
3 Molyhil Project Groundwater Investigation October 2006. KH Morgan & Associates

APPENDIX 1

Molyhil Reverse Circulation Drilling Report, 14th September 2006 – 9th October 2006. T .Monks

THOR MINING LTD

Molyhil Project, NT

Reverse Circulation Drilling Report

TMRC024 to TMRC054

14th September 2006 – 9thOctober 2006

Author: T Monks
Date: October 2006

Summary

This report documents the September-October 2006 RC drilling program undertaken at the Molyhil project area by Thor Mining Limited. The main aims of the program were:-

- To test deeper underground ore that was inferred to exist from aeromagnetic interpretation.
- To explore for water resources for the proposed plant and camp facility.
- To sample the ore stockpile adjacent to the old pit.
- To undertake geotechnical studies in the vicinity of the proposed plant and tailings storage area

The resource drilling extended the South lode 40m to the south of the current pit and located a potential southward extension of the Yacht Club lode. Significant water resources were located along Oorabra Creek to the northeast of the mine site.
The ROM pad was drilled at approximately 25m centres. The geotechnical drilling and associated studies were completed successfully.

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1.0 Introduction

The Molyhil Project is located 320km ENE east of Alice Springs NT. Thor completed a 46hole Reverse Circulation drilling program for 3412m at Molyhil from 14 September – 9 October 2006.

The program included resource drilling, water exploration, rom sampling and geotechnical drilling. This report summarizes the resources drilling and rom sampling programs. Kevin Morgan and Assoc. supervised the water exploration and will report separately. Golder Associates supervised the geotechnical drilling and again they will report separately.

2.0 Drilling

Arrinooka Drilling from Perth were contracted to undertake the drilling. The equipment used on the program consisted of

- 1 RC drill rig mounted on an 8 x 8 truck with an onboard compressor.
- A truck mounted booster and auxiliary compressor.
- 1 support truck carrying fuel, water and additional drill rods.
- 1 4WD Rodeo dual cab ute for crew movements.

One driller and 3 offsiders manned the rig for the entire program.

The reverse circulation drilling was completed using a 5½-inch face sampling hammer bit.

Site preparation was undertaken using a Cat920 FEL supplied by Alice Springs Bush Haulage.

2.1 Drilling Overview

The drilling program is summarized in the accompanying table. Collar data is included as Appendix 1

	meters	holes	Days	Supervisor
Resource drilling	2038	10	16	Thor Mining
Water Exploration	1015	14	7	Kevin Morgan and Assoc
ROM sampling	84	7	1	Thor Mining
Geotechnical drilling	275	15	2	Golder Associates
Total	3412	46	26	

Drilling commenced on the14 September and completed 26 days later. As consultants were employed to supervise the water exploration and geotechnical drilling these programs were given priority and the resource drilling was undertaken when the rig was available.

All the drill holes hit standing water at around the 30m drill depth from the surface. Higher water flows were observed in deeper holes, and more toward the southern area. Generally all of the samples were kept dry.

Camera surveys were taken down the rod string and limited to dip readings only. Stainless steel rods were not used because of the highly magnetic nature of the ore body. It is anticipated that the drilling deviation is acceptable (<3^{o} offline) given the wide (10-40m) tabular nature of the skarn.

Most of the drilling was in hard, fresh rock, but seldom required a bit change down hole. Attention was made whilst drilling in the ore zone to keep the hole clean and sample dry.

3.0 Sampling

Every metre of the drilling was collected via a cyclone & splitter. Photographs of the sampling system are included in Appendix 2.

The bulk samples were collected in large plastic bags and laid out in rows adjacent to the hole. The lab split, 2-6kg, was collected in calico bags and laid out with the bulk sample. The splitter was blown clean between rods, and when possible every meter whilst in the ore zone.

Samples for assay were collected at meter intervals in and adjacent to the ore zones and as 5 meter composites in barren rock. The cyclone splits were used for the one meter samples whereas the 5 meter composites were spear sampled from the cuttings in the large plastic bags .The site geologist decided the sampling regime whilst the field assistant allocated numbers sequentially down-hole and annotated individual bags.

No samples were taken wet and <1% taken moist. This data was included with the lithological log.

The samples were then collated and driven to ALS laboratories in Alice Springs for sample preparation.

Sample numbers are given in Appendix 1

3.0 Geological Logging

A Thor Mining geologist supervised all resource drill holes. A lithological log was completed for each hole using standard Thor Mining log sheets derived from those used by Tennant Creek Mining on the 2004 drilling campaign. This geological data was then entered into the database using generic geological logging codes.

Magnetic susceptibility measurements were taken for each meter. This was done by simply placing the instrument against the sample bag and taking a reading, results Lithological logs and magnetic susceptibility data is included as Appendix 1

Logging of geotechnical and water holes will be presented in the reports on these phases of the program.

4.0 Discussion

The following discussion is based on field observation without the benefit of any analytical data.

Magnetic data indicates that the mineralized system extends to some 400m below surface. Further the drilling has indicated that the lodes, South and Yacht Club, have a steep easterly dip and steep southerly plunge. The current resource drilling was aimed at testing the system below 100m.

The accompanying table shows the mineralized intersects based on lithological logging and magnetic susceptibility.

Hole id	From	To
TMRC024	130	155
TMRC025		
TMRC026		
TMRC027		
TMRC028		
TMRC029		
TMRC030	135	178
TMRC030	188	192
TMRC031	153	159
TMRC031	170	188
TMRC032	153	181
TMRC032	188	195
TMRC032	205	211
TMRC051	145	181
TMRC051	206	210

South Lode

Holes TMRC30 was drilled to test the down plunge extension of the South lode mineralization. A visually strong zone of molybdenum mineralization was cut below 135m. Subsequently two further hole, TMRC32 and 51 were drilled to test this zone. Hole32 was drilled 20m east of hole30 and hole51 drilled 20m south of hole32. Both cut similar, although not as visually intense, zones of mineralization as in hole30.

These holes indicate that the South lode mineralization is continuing along strike to the south of the pit proposed in the current feasibility study. A further point of note is that the latter two holes show no evidence of the steep southerly plunge predicted from previous drilling.

Holes TMRC 25-27 were drilled to test South Lode at depth. The holes intersected only barren granite.

Yacht Club

Hole TMRC 24 was drilled to test South lode at depth. No mineralization was cut at the predicted depth extension of South lode at approx190m. Rather a 25m zone of mineralization was cut below 135m.Based on the data from the 2004 drilling this intersect is most likely a southward extension of the Yacht Club lode. Hole TMRC31 located 20m further south cut this zone of mineralization. This would extend Yacht Club southward to 10170N, a significant extension and potentially pushing the open pit resource eastward.

An old RC collar was noted a further 40m south of hole31 with skarn fragments in the spoil around the collar. This hole may extend Yacht Club even further southwards.

Hole TMRC27 was drilled to test South lode but in doing so cut the down dip extension of the projected position of Yacht Club based on the intersects in holes24 and 31. No mineralization was cut.

Hole 29

Hole TMRC 29 was drilled to test a zone of calcsilicate and gossan to the north of the old rom pad. The hole was drilled southwards at -60^{o} from a location 40m to the north of the calcsilcate/granite contact. The hole cut 16m of fine-grained clastic sediments above 120m of barren granite.

The calcsilicate/gossan zone does not have depth continuity, at least on the section drilled.

5. Recommendations

The drilling has left both Yacht Club and South lodes open to the south. Further drilling will be required once the data, including analyses, is fully assessed to ensure the optimum pit and waste dump design.

6. Rehabilitation

All holes for the drill program have been pegged, labeled and plugged using plastic hole plugs inserted into the PVC collar. Drilling refuse was cleaned up after each hole. The plastic bags are yet to be removed as the further samples may be taken.

APPENDIX 2

Molyhil Project Reverse Circulation Drilling Program 3rd – 21st March 2007. C. Cox

THOR

MINING PLC

REVERSE CIRCULATION DRILLING PROGRAM

Molyhil Project

3rd-21st March

by: Christopher Cox

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Figures

Tables

Appendix

Summary

This report documents the March 2007 RC drilling program undertaken at the Molyhil project area by Thor Mining PLC. The objective of this program was to conduct resource drilling at the Molyhil prospect to increase current resource and reserve inventory.

The drilling completed at Molyhil was designed to further define the pit resource of the South Lode and Yacht Club ore bodies as well as in fill the up-dip extensions of the newly discovered Hanging wall zone. In addition, several deeper RC holes were also completed to convert Inferred Resources to Indicated Resources. Twenty one of the holes intersected good widths of black rock skarn with a significant number of holes intersecting mineralisation outside of the current pit design.

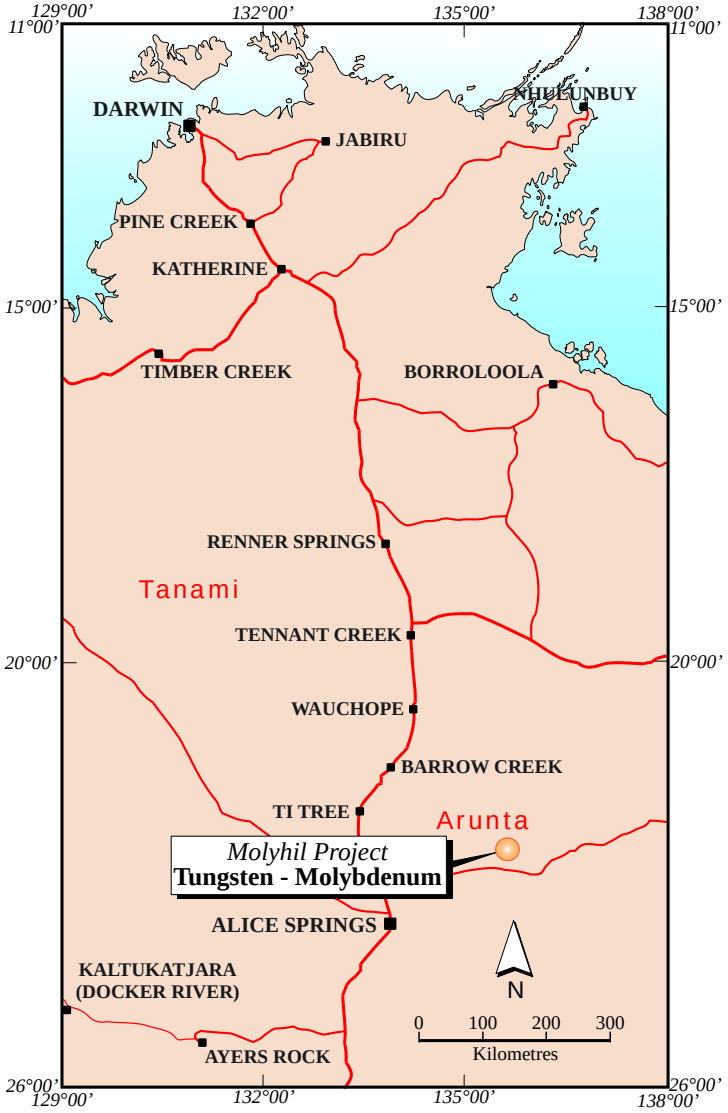

Figure 1: Map of the Molyhil location in the Northern Territory

1.0 Introduction

Molyhil Project is located 320km ENE of Alice Springs NT (Figure1). Thor completed a 25hole, 2586m Reverse Circulation drilling program at Molyhil from Saturday 3rd of March to the 21st March 2007.

This report summarizes the resource drilling program which was designed to increase current resource and reserve inventory.

2.0 Drilling

Arrinooka Drilling from Perth were contracted to undertake the drilling program. The equipment used on the program consisted of:

- 1 RC drill rig mounted on an 8 x 8 truck with an onboard compressor.
- A truck mounted booster and auxiliary compressor.
- 1 support truck carrying fuel, water and additional drill rods.
- 1 4WD Rodeo dual cab ute for crew movements.

One driller and 2 offsiders managed the rig at any one time, with a total of two drillers and three offsiders on site over the period of the drilling program.

The reverse circulation drilling was completed using a 5½-inch face sampling hammer bit, with 3-6 metres of plastic casing per drill hole. A photo of the rig setup is included in the appendix section.

Camp setup, preparation of the drill sites and maintenance of the Plenty River and Marshall River were all undertaken by Alice Springs Bush Haulage.

All drill hole preparation was determined in accordance to the Molyhil Local Grid, which was created by Brian Blakeman Surveys, in November 2006.

2.1 Drilling Overview

The drilling program is summarised in the accompanying table, with collar data available in section 5.0 of this report.

Table 1: Drilling data summary

Drilling	Metres	Holes	Days	Supervisor
RC Resource Drilling	2038	25	18	Thor Mining

Drilling commenced on Saturday the 3rd of March and finished on the 21st of March, with a total of 18 days drilling. The drilling was delayed at Molyhil due to heavy rainfall in the area, preventing access across the Plenty and Marshall River.

All the drill holes hit standing water at around the 30m drill depth from the surface. Higher water flows were observed in deeper holes, and more toward the southern

sections of the licence area. Generally all of the samples were kept dry, even without the use of the booster on one particular afternoon.

Down-hole camera surveys were taken for the first 5 drill holes, however were limited to dip readings only due to the highly magnetic nature of the ore body. Whilst surveying drill hole MHRC021, the camera was dropped from 100m to the bottom of the 174m hole, consequently destroying the instrument. As a result, dip readings were not taken from the holes drilled there after.

Most of the drilling was in hard, fresh rock with weaker oxidised and weathered zones generally occurring in the first 3m. A number of drill bits and pistons were broken through out the program; however this was accepted as human error rather than due to the hard nature of the rock that was drilled.

3.0 Sampling

Every metre drilled was collected via a cyclone and splitter. Photographs of the sampling system (Photo 1) are included in the appendix.

The bulk samples were collected in large plastic bags and laid out in rows adjacent to the hole. The lab split, 2-6kg, was collected in calico bags and laid out with the bulk sample. The splitter was blown clean between rods, and where possible every metre whilst in the ore zone.

Samples for assay were collected at metre intervals in and adjacent to the ore zones and as 3 metre composites in barren rock. The cyclone calico bag splits were used for all the sampling, with all samples placed in sets of three in poly-weave bags, which were then sent to ALS Laboratories in Alice Springs for sample Preparation. The prepared samples were then sent to ALS Laboratories in Perth for analysis. Due to delays in sample prep at the Alice Springs Laboratory, a number of high priority samples were resampled, and sent to Adelaide for prep and analysis (see Table.

4.0 Geological Logging

Drill logging was completed on an Itronix Gobook 3, using Ocris 2.0 field logger. The lithological coding was based on Haddington Resources Limited logging codes, which needed adjustments to suit Molyhil rock types.

Magnetic susceptibility measurements were recorded for each metre drilled, with the readings taken by simply placing the instrument against the sample bag. Downhole camera dip readings were also completed for the first 5 holes drilled and recorded in the logging database, however as previously discussed was not continued.

5.0 Discussion

The drilling completed at Molyhil was designed to further define the pit resource of the South Lode and Yacht Club ore bodies as well as in fill the up-dip extensions of the newly discovered Hanging wall zone. In addition, several deeper RC holes were also completed to convert Inferred resources to Indicated resources. Twenty one of the holes

intersected black rock skarn with a significant number of holes intersecting mineralisation outside of the current pit design.

The accompanying table shows mineralised intercepts based on lithological logging and magnetic susceptibility.

Table 2: Molyhil 2007 drilling collar data

Hole ID	E_GDA94	N_GDA94	RL	Grid_Azi	Dip	Depth	"BRS" Intercept
07MHRC001	577097.94	7483040.09	414.57	270	-60	108	NONE
07MHRC002	577124.18	7483046.30	414.5	270	-60	132	NONE
07MHRC003	577069.53	7483003.57	414.02	270	-60	48	NONE
07MHRC004	577069.53	7483006.95	413.93	270	-60	60	31-33m
07MHRC005	577125.97	7483018.06	413.71	270	-60	102	73-76m
07MHRC006	577130.01	7483019.18	413.68	270	-70	138	72-76m
07MHRC007	577014.48	7482939.75	400.84	270	-60	24	3-9m
07MHRC008	577035.20	7482941.98	402.12	270	-60	54	30-48m
07MHRC009	577070.12	7482962.68	412.46	270	-60	42	10-27m
07MHRC010	577091.01	7482968.61	410.12	270	-70	108	49-95m
07MHRC011	577021.28	7482934.96	401.25	270	-60	36	12-26m
07MHRC012	577095.51	7482942.80	409.74	270	-70	102	33-70m
07MHRC013	577141.98	7482962.83	412.09	270	-60	150	81-83m, 87-89m, 96-100m, 106-132m
07MHRC014	577163.96	7482968.95	411.80	270	-60	150	106-125m
07MHRC015	577032.09	7482906.80	401.26	270	-60	60	8-46m
07MHRC016	577040.29	7482907.42	401.53	270	-60	66	17-45m
07MHRC017	577116.83	7482932.09	412.20	270	-60	126	58-84m, 93-100m
07MHRC018	577135.73	7482934.60	411.70	270	-60	144	73-117m
07MHRC019	577085.31	7482908.17	409.33	270	-60	132	90-106m
07MHRC020	577101.74	7482909.92	409.10	270	-60	144	86-121m
07MHRC021	577174.05	7482936.02	411.32	270	-60	174	112-164m
07MHRC022	577091.40	7482834.02	411.22	270	-60	162	113-154m
07MHRC023	577167.13	7482871.14	410.59	270	-60	84	NONE
07MHRC024	577040.02	7482909.36	401.50	270	-70	78	13-68m
07MHRC025	577153.31	7482930.57	411.48	270	-60	162	102-150m
Total drilled metres						**2,586**	

Holes 07MHR007 to 07MHR0010 confirmed the up-dip position of mineralisation on both the Yacht Club and Southern mineralised zones, intersecting good widths of black rock skarn ('BRS') ranging from 6m to 56m. Drilling also targeted areas at or near the base of both the Stage 1 and Stage 2 pit designs, with drill holes 07MHR012 to 07MHR014 in this area again intersecting significant widths of black rock skarn.

At the southern end of the Stage 2 pit design, RC drill holes 007MHR021, 07MHR022 and 07MHR025 all intersected black rock skarn just below 110m, just below the final depth of the proposed pit.

5.1 Discussion - First assay results returned

Since receiving a number of the assays back from ALS, the interpreted logged BRS intercepts as seen in table 1 appear to over estimate the ore grade, due to the disseminated mineralised nature of the BRS. Drill logging of MHRC013 acknowledged three small lenses of BRS mineralisation, followed by 26m of BRS within the block model zone. Assay results have since shown the non uniform nature of the BRS, having only 10m of .95% combined ore grade, out of the 27m of logged BRS.

Drill Hole MHRC022 was logged as having a 52m BRS intercept outside of the current stage 2 pit shell design. However assay results have revealed this zone of BRS to have only minimal mineralisation (see table 4). Pending assay results from MHRC025, which also had intercepts in this localised zone, may show more encouraging results, validating an extension to the pit design.

Assay results from drill hole MHRC014 confirm a 10m intercept of 1.65% combined Mos2/Wo3 grade. This mineralised section was intercepted above the previous interpreted block model. The results from drill hole MHRC014 and MHRC021 have intercepted BRS outside the modeled zone, highlighting the need for a new interpretation of the Yacht Club ore body (and potentially southern lode).

The Information obtained, suggests that the ore body may be more of a folded structure, formed at depth rather than a tabular shape. Previous interpretations also mapped the Yacht Club ore body as having a dip of 80˚E, plunging 65˚S, however the recent drilling results show a shallower plunge of <25 degrees in the northern section of the Yacht Club lode, with an inferred steeper plunge south of 20000mN(Local). It is clear however that the lode is a folded structure and further resource drilling to the south will provide a better understanding of the Yacht Club ore body.

6.0 Recommendations

- Further resource drilling to the south of holes MHRC021 and 25, to ascertain the extent of this intercept, and to identify this zone as being hanging wall zone or Yacht Club.
- Further resource drilling down dip in the southern sections of the ore bodies to verify the extent of resource for Southern Lode, Yacht Club Lode and Hanging Wall.

7.0 Rehabilitation

All holes for the drill program have been pegged, labeled and plugged using plastic hole plugs in the PVC collar. Drilling refuse was cleaned up after each hole, ensuring that the area was left in the same condition before drilling. Plastic sample bags will be removed at a later date, as further sampling has had to have been done.

Appendix

Figure 1: Drilling rig, with cyclone and splitter hitched behind the booster truck

Table 3: Priority samples sent to Adelaide

AD07037621	
Sample Interval	**Sample No.**
A101544 - A101551	8
A101608 - A101551	20
A101709 - A101738	30
A101768 - A101797	30
A101830 - A101889	60
A101986 - A102005	20
A102114 - A102149	36
Sub Total	**204**
AD07037622	
Sample Interval	**Sample No.**
A102206 - A102247	42
A102324 - A102371	48
A102392 - A102411	20
A102524 - A102575	52
Sub Total	**162**
Total	**366**

Table 4: Summary of ore grade intercepts based on received assay results

Sample	From. (m)	To. (m)	Section_N	RL	T.T	Interval (m)	Mo + W Average	Metal Factor
	78	80	20028.69N	412.09	2	2	1.07	2.14
	117	127	20028.69N	412.09	10	10	0.95	9.5
	108	109	20027.97N	411.8	1	1	1.92	1.92
	111	121	20027.97N	411.8	10	10	1.65	16.5
	62	73	20006.87N	412.2	11	11	1.06	11.66
	123	124	20006.87N	412.2	1	1	5.35	5.35
	114	121	19920.87N	411.22	6	7	1.17	7.02
	124	126	19920.87N	411.22	2	2	0.82	1.64
	138	140	19920.87N	411.22	2	2	1.09	2.18

APPENDIX 3

Molyhil Project Groundwater Investigation October 2006. KH Morgan & Associates

PROJECT 972

GROUNDWATER INVESTIGATION

MOLYHIL PROJECT

FOR

THOR MINING PLC

20 OCTOBER 2006

CONSULTING GEOLOGISTS
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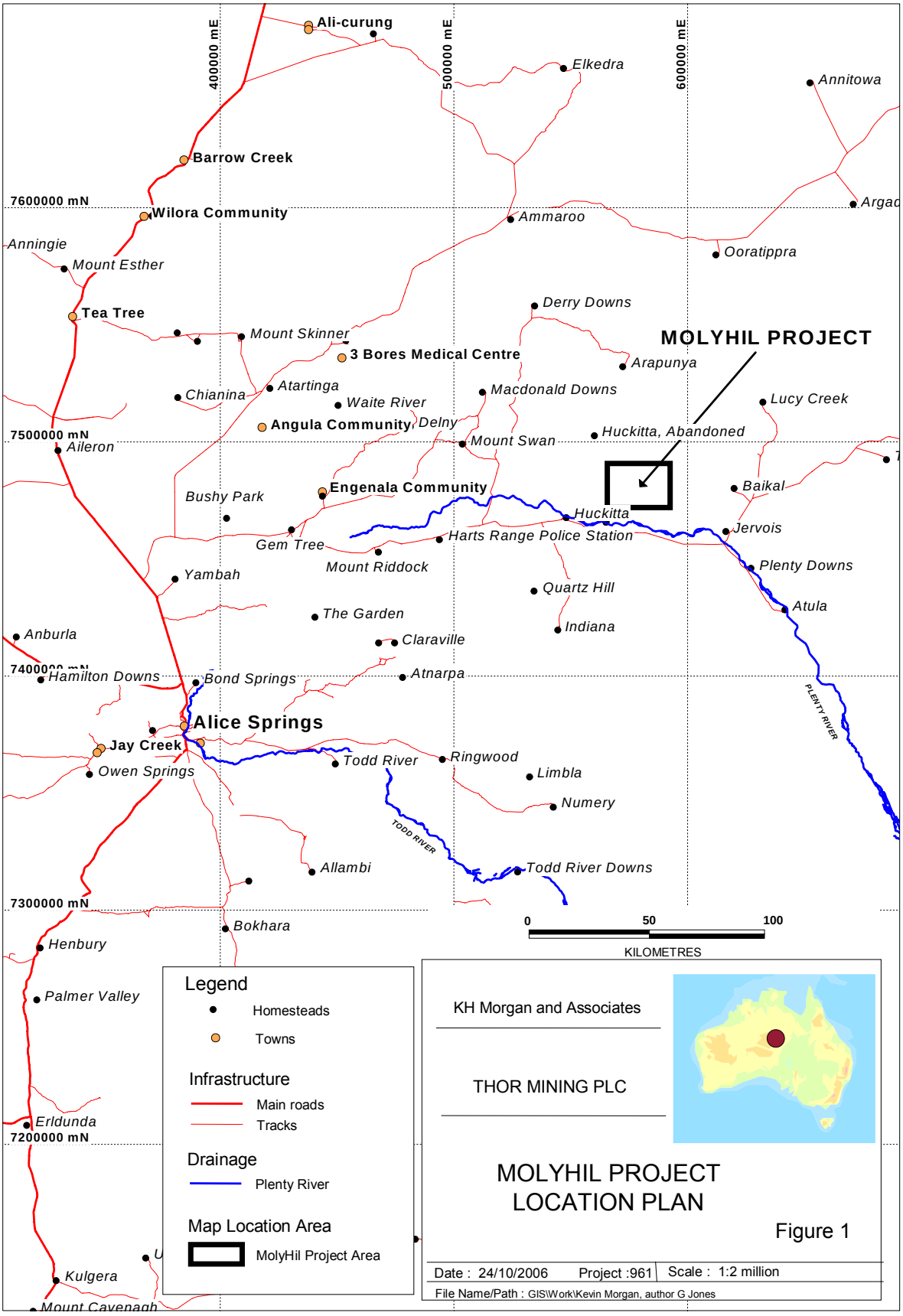
Ali-curung
400000 mE
500000 mE
600000 mE
Elkedra
Annitowa
Barrow Creek
7600000 mN
Wilora Community
Ammaroo
Anningie
Mount Esther
Ooratippra
Tea Tree
Derry Downs
Mount Skinner
MOLYHIL PROJECT
3 Bores Medical Centre
Arapunya
Chianina
Atartinga
Macdonald Downs
Lucy Creek
Waite River
Angula Community
Delny
7500000 mN
Aileron
Mount Swan
Huckitta, Abandoned
Engenala Community
Baikal
Bushy Park
Huckitta
Jervois
Harts Range Police Station
Gem Tree
Mount Riddock
Plenty Downs
Yambah
Quartz Hill
Atula
The Garden
Indiana
Anburla
Claraville
7400000 mN
Hamilton Downs
Bond Springs
Atnarpa
PLENTY RIVER
Alice Springs
Jay Creek
Todd River
Ringwood
Limbla
Owen Springs
Numery
TODD RIVER
Allambi
Todd River Downs
7300000 mN
0
50
100
KILOMETRES
Bokhara
Henbury
Legend
Homesteads
Towns
Infrastructure
Main roads
Tracks
Drainage
Plenty River
Map Location Area
MolyHil Project Area
Palmer Valley
KH Morgan and Associates
THOR MINING PLC
Erldunda
7200000 mN
MOLYHIL PROJECT
LOCATION PLAN
Figure 1
Kulgera
Date : 24/10/2006
Project :961
Scale : 1:2 million
File Name/Path : GIS\Work\Kevin Morgan, author G Jones
Mount Cavenagh

GROUNDWATER INVESTIGATION
MOLYHIL PROJECT

THOR MINING PLC

1. INTRODUCTION

This report has been prepared to provide preliminary planning information resultant from a groundwater exploration and evaluation programme conducted on site 1 to 8 October 2006.

Molyhil, an identified resource of molybdenite and scheelite, is located approximately 240 kilometres northeast from Alice Springs (Figure 1), centred latitude 220º 45'S, longitude 135º 45'E. The project, which is proceeding to Feasibility status, requires identification of a suitable water resource.

At this stage of feasibility the project is estimated to require approximately 400,000 tpa of water to process 300,000 tpa of ore over a mining and processing life of between three to five years. This requirement equates to a maintained groundwater supply of $46m^3h^{-1}$ (kLh^{-1}) or $12.7Ls^{-1}$.

A supply of approximately $6.5m^3h^{-1}$ ($1.8Ls^{-1}$) of potable quality water will be required for the residential village and general workshop purpose.

2. EXISTING GROUNDWATER INFORMATION

The Molyhil region contains sparse distribution of stock bores, the closest being Gap Bore which 7 kilometres to the northeast of the mine (7483463N/0583655E) near a confluence of a tributary of Ooraba Creek where it crosses Cambrian dolomite. This bore has a salinity of approximately $2000mgL^{-1}$ TDS. It is equipped with a 4 metre windmill and is located approximately 30 metres from an abandoned steel cased bore.

Four bores have been sunk close to a dam located 700 metres northwest from the pit. These bores have been drilled to intersect a prominent west-northwest ridge of pelitic and arenite sediments of the Grant Bluff Formation.

Three of the bores have registration plates with numbers NTG12192, NTG12389 and NTG12036. Two of these bores described in reports, RN11520 and RN12036, are reported to yield $5m^3h^{-1}$.

Bore field information is as following:

Bore 1

Location	10 metres west of dam (7483513N/576621E)
Reduced level	approximately 445 metres
NTG registration	12192
Casing	200 millimetre steel.

This bore is thought to be Fama Mines WB2 which was drilled to 46 metres and cased with 100 millimetre PVC. The bore was test pumped for two hours at $5m^3h^{-1}$ with a drawdown of 5.5 metres and recovered in fifteen minutes.

Bore 2

Location	22 metres west of dam (7483509N/576611E)
Reduced level	approximately 446 metres
NTG registration	no registration number
Casing	150 millimetre steel with 100 millimetre PVC

Bore 3

Location	approximately 30 metres west of dam (7483515N/576607E)
Reduced level	approximately 446 metres reduced level
NTG registration	12389
Casing	150 millimetre steel

Bore 4

Location	approximately 48 metres west of dam (7483522N/576592E)
Reduced level	444 metres
NTG registration	12036
Casing	150 millimetre steel

Application is being made to the Northern Territory Government for further data on these bores.

Prices Bore

Prices Bore, located approximately 6 kilometres northeast from the Molyhil Pit, is connected to the old workings by a 100 millimetre (?) fibro-cement pipeline.

Although two bores are present, only one is currently operable and this is reported to be partly obstructed by a bend or failure of the steel casing. The bore is located on a raised concrete pad approximately 1 metre above ground level and has a steel framed cover.

The bores have been sunk into Cambrian Arrinthunga Formation consisting of dolstone and limestone with minor silt and quartz arenite interbeds.

Summary inspection of the bore is as follows:

Location	approximately 6 kilometres northeast from the pit (7485456N/582086E)
Reduced level	428 metres
NTG registration	13000, AWRC Basin No 1007
Drilled for	Petrocarb Exploration NL
Drilled by	Gory and Cole
Date drilled	11 to 12 February 1981
Depth	73 metres
Casing	3 metres 200 millimetre steel collar; 56 metres 150 millimetre steel casing
Screen	12 metres of perforation between 48 to 56 metres
Standing water level	41 metres
Water encountered	46 and 50 metres
Salinity	530 ppm TDS, pH 7.6
Yield	the bore was test pumped for three days by Rockwater Pty Ltd at a rate of 3000 gph ($13.5m^3h^{-1}$) with a 1.1 metre drawdown

Test pumping data suggests that, theoretically, the bore can be pumped at a much higher rate than $13.5m^3h^{-1}$. However, as a result of its poor condition it will require redrilling and reconstruction to provide a sustainable water supply.

Molyhil Pit Water

Detailed water chemistry data of five samples, understood to have been obtained from the Molyhil Pit, were submitted to Australian Laboratory Services, Queensland, 26 March 2004 by Neil Biddle of Hallmark Consolidated Ltd.

These samples have a pH range of 7.63 to 8.24 and a total salinity range of 84,400mgL^{-1} to 86,000mgL^{-1} TDS. Heavy metal content is relatively low for waters of this high salinity, suggesting either poor release or ready reabsorption from, or into, the parent rock.

Exploration Drilling

Water has been reported only rarely in exploration drilling at Molyhil. Drillhole MH19 was reported to have encountered a flow of approximately 0.8Ls^{-1} of saline water.

3. HYDROGEOLOGY

The hydrogeology of the region is a product of the interaction of four natural phenomena: geology, climate, topography and geomorphic development. These four factors are briefly described within the following paragraphs.

3.1 Geology

Molyhil is contained in a northwesterly striking sequence of Proterozoic dominantly clastic sedimentary rocks assigned to the Mopunga Group. This little metamorphosed sequence, consisting of sandstone, siltstone and shale is intruded by the Jinka Granite and Marshall Granite. Molyhil's molybdenite/scheelite mineralisation is contained on a steeply dipping sequence of marble, calc-silicate and quartz feldspathic highly metamorphosed rocks forming a roof pendant in the Jinka Granite. The Jinka Granite has been dated by the BMR by Rb/Sr at 1690My.

Immediately to the north of the deposit is a prominent northwesterly striking ridge of arenite and wacke, designated as the Grant Bluff Formation.

Keels of Cambrian sediment are down-folded and down-faulted into the Mopunga Group sediments.

Cambrian rocks form a narrow northwesterly trending linear syncline passing 5 kilometres to the north of Molyhil. A second downfolded strike concordant keel occurs approximately 4 kilometres to the south of the mine. The boundaries of these downfolded belts are partially controlled by strike faults.

The Cambrian rocks are outliers of the Georgina Basin which is extensively developed to the northeast of this region.

The basal units of the Cambrian sequence occurring to the north of Molyhil comprise a basal sequence of quartz arenite assigned as the Mt Baldwin Formation. This formation is overlain by a sequence of carbonates consisting of the dominant dolostone Errarra Formation which is, in turn, overlain by the poorer outcropping calcareous siltstone and limestone Arthur Creek Formation.

These three Cambrian formations are the principal environment for groundwater development for the Molyhil Mine.

3.2 Climate

Climate of the Molyhil region is arid in that it has low, unreliable temporal and spatial distribution of rainfall, a warm climate exhibiting widely seasonal and daily temperature extremes and a constant high evaporation excess over rainfall. Its position deep within the large Australian land mass limits the amount of moisture available for the generation of ‘weather’.

Climate is similar to that of Alice Springs which has an average rainfall of 279.1 millimetres (see climate averages Appendix 1). Rain can fall anytime of the year with the months November to March having the highest rainfall and highest intensity falls, the latter being of importance for the generation of stream run-off and groundwater recharge.

Average annual evaporation is in the order of 2400 millimetres which is approximately a factor of nine times that of rainfall. This high evaporation excess has significance in the storage of surface water and the generation of saline groundwater conditions on flow paths away from locations of rainfall recharge.

Climate northward from the Harts Range area develops more distinct seasonal patterns with higher impacts from cyclonic storm events. For example, at Tennant Creek, 500 kilometres to the north-northwest, annual average rainfall increases to 460 millimetres in which more than 50 percent of the falls in the months of January and February are assisted by tropical cyclones centred in the Gulf of Carpentaria or from the Indian Ocean (see Appendix 1).

The Bureau of Meteorology predicts that October to December 2006 has probability of higher than average rainfall.

Prevailing winds are from the east-southeast to southeast; evidenced by trees having a tendency to lean towards the northwest.

Alice Springs average daily minimum and maximum temperatures for July are 14º and 19.6º Celsius, and for January 21.3º and 36.3º Celsius.

3.3 Topography

Topography of the Molyhil area can be divided into two types which, principally, are dependent on the composition of the underlying bedrock.

The Proterozoic rocks containing Molyhil and the area to the south give rise to wide plainlands covered by thin sheets of alluvium and colluvium with an elevation ranging between 390 to 405 metres reduced level. The plainlands are broken by isolated rocky outliers of crystalline Proterozoic rock with form dependent on bedrock structures. These beds, such as Mt Sainthill, rise to 546 metres reduced level. Immediately to the north of Molyhil is a narrow steep dipping band of Proterozoic arenite which forms a prominent west-northwest trending ridge with a relief of approximately 25 metres from the plainland.

The second topographic type is provided by Cambrian sedimentary rocks which form a series of northwest trending hogback dip-slope ridges passing 5 kilometres to the north of the mine. Grant Bluff, on the Elyuah Range within this structure, stands at 450 metres reduced level.

Drainage is by a set of sand based intermittent and structurally consequent creeks. Oorabra Creek, the main trunk drainage, is a superimposed system draining southward across the regional strike to Marshall River, a tributary of the inland draining Plenty River.

3.4 Geomorphic Development

The region has been subjected to a geologically relatively recent erosion event possibly resultant from uplift locally removing evidence of the older peneplained or plateau surface which is present outside the Molyhil area.

Hill forms are rock structurally controlled with the tops exhibiting broken rock outcrop. The isolated hills are surrounded by wide shallow fills of alluvium/colluvium suggesting maturing of landscape development.

The hydrogeological significance of this geomorphic development is that most of the former lateritic profile has been removed by erosion. Only relatively thin remnants of saprolite are present with weathered crystalline rocks occurring at a depth of 2 to 6 metres below the surface.

In this location the occurrence of groundwater depends on storage in the oxidation transition zone and in wider distributed fractured and leached zones associated with fault and fracture zones within the non-oxidised bedrock. As a consequence, groundwater storage is restricted to the limit of these structures. The development of groundwater resources is therefore dependent on storage in structures with access to recharge.

For this reason, exploratory drill sites were located on structural lineaments crossing or associated with the main creeks and drainage paths. The probability of recharge in these structures is associated with stream flow resultant from intensive rain events.

4. DRILLING PROGRAMME

An exploratory drilling programme was conducted 1 to 8 October 2006 utilising Arrinooka Drilling which was on-site conducting resource drilling.

Arrinooka drilling rig at TMRC30, outside water flow

The drill rig is a truck mounted Hydco with an onboard Atlas Copco XRV Compressor with an output of 1000 cfm at 360 psi. An auxiliary XRVS97b compressor was mounted on a support truck with an output of 1000cfm at 360psi. A Hurricane Airdrill M82D booster was also mounted on the support truck. An AUDR rod handler was mounted on the drill truck along with a 100 metre rod rack.

Drilling was by reverse circulation air hammer utilising a 140.5 millimetre (5.5in) hammer bit. Outside return was maintained through a collar stuffing box and discharge pipe. Samples were collected through a dust control trailer mounted cyclone.

Black water flow from 83 metres at drillhole TMRC41

TMRC42 site, note large ‘cork’ tree in background on lineament

Large cork trees on TMRC42. Large cork trees are frequently associated with shallow water bearing structures

TMRC47 location

Drilling was by reverse circulation air hammer utilising a 140.5 millimetre (5.5in) hammer bit. Outside return was maintained through a collar stuffing box and discharge pipe. Samples were collected through a dust control trailer mounted cyclone.

During the program, fourteen holes were drilled for a total of 1077 metres. Six of the holes were in Cambrian carbonate rocks, 6 to 10 kilometres northerly from the mine, to locate the principal process water source.

Eight holes were drilled into the Proterozoic rocks mostly to the south of the mine in an attempt to locate a proximal potable water supply. A summary of drill results is presented on Table 1. Detailed drill logs are in Appendix 2 and location of the drillholes in shown on Figure 2.

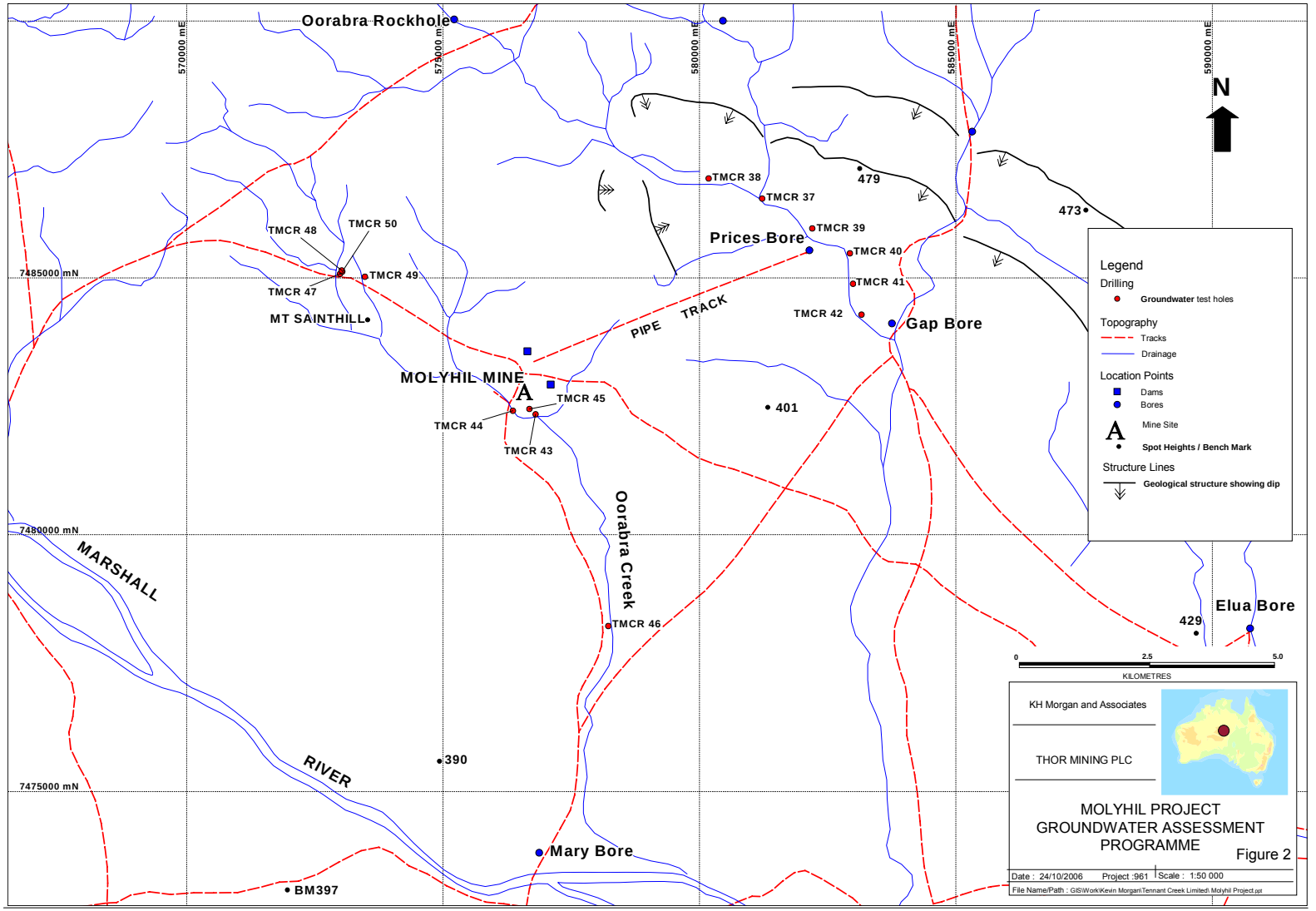
Oorabra Rockhole
570000 mE
575000 mE
580000 mE
585000 mE
590000 mE
N
TMCR 38
TMCR 37
479
473
TMCR 48
TMCR 50
TMCR 49
TMCR 47
7485000 mN
MT SAINTHILL
Prices Bore
TMCR 39
TMCR 40
TMCR 41
TMCR 42
Gap Bore
PIPE TRACK
MOLYHIL MINE
A
TMCR 45
TMCR 44
TMCR 43
401
Oorabra Creek
7480000 mN
MARSHALL
TMCR 46
429
Elua Bore
RIVER
390
7475000 mN
Mary Bore
BM397
Legend
Drilling
Groundwater test holes
Topography
Tracks
Drainage
Location Points
Dams
Bores
Mine Site
Spot Heights / Bench Mark
Structure Lines
Geological structure showing dip
0
2.5
5.0
KILOMETRES
KH Morgan and Associates
THOR MINING PLC
MOLYHIL PROJECT
GROUNDWATER ASSESSMENT
PROGRAMME
Figure 2
Date : 24/10/2006
Project :961
Scale : 1:50 000
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Table 1 Summary drill data results, Molyhil Project, Thor Mining PLC

Drillhole number	Location	Total depth (m)	Water struck (m)	Water level (m)	Main aquifer (m)	Yield (m^3h^{-1})	Salinity (ppm) TDS	Collar, casing, slotting, screen	Remarks
TMRC37	7486367N/581093E	96	42	37	39 -46			2.0m 150mm PVC foam cemented	Could not test cavern 39 to 41 metres, production bore potential
TMRC38	7486936N/580176E	102	30		30 -33 48 -49?	0.4	≈300	2.0m 150mm PVC foam cemented	
TMRC39	7485987N/582193E	102	61 78 91		61 -94	7.6	480	3.0m 150mm PVC foam cemented	Collar washed out, bridged at 2 metres below ground level
TMRC40	7485472N/582949E	78	40.5		40.5-68	9.0	710	2.0m 150mm PVC foam cemented	Proposed production bore
TMRC41	7484884N/582993E	102	42		42 -51 87 -94	14.4	1050	3.2m 150mm PVC foam cemented	Potential production bore, bridged at 2 metres
TMRC42	7484285N/583149E	96	40.5 (?)	31	40 -52	(?)	1570	3.0m 150mm PVC foam cemented	Could not test due to caverns
TMRC43	7482341N/576805E	66	Dry			Seepage		3.0m 150mm PVC foam cemented	
TMRC44	7482412N/576362E	72	Dry			0.4		4.0m 150mm PVC foam cemented	
TMRC45	7482449N/576684E	30	10	9	10 -14	Seepage	5200	2.0m 150mm PVC foam cemented	
TMRC46	7478223N/578223E	45	44(?)	22(?)		Seepage		6.0m 150mm PVC foam cemented	
TMRC47	7485076N/572992E	54				Seepage		6.0m 150mm PVC foam cemented	
TMRC48	7485145N/573024E	60						6.0m 150mm PVC foam cemented	
TMRC49	7485021N/573476E	60	45	20	45 -47	Small	6430	3.0m 150mm PVC foam cemented	
TMRC50	7485175N/573017E	42	24		23 -24	Less 0.4	2180	3.0m 150mm PVC foam cemented	Backfilled with drill hose

5. GROUNDWATER CHEMISTRY

5.1 Total Analyses

Samples from four drillholes were submitted to Australian Laboratory Services for detailed water analyses on filtered samples. A summary of the results is shown on Table 2. Detailed analyses certificates are presented in Appendix 3.

The waters are low in chloride relative to the ratio of chloride in sea water suggesting addition of other ions. This conclusion is further suggested from the calcium plus magnesium ratio which is much higher than sea water and shows that these ions have been added by dissolution of carbonate rocks.

Sulphates are also much higher than in sea water, apart from indicating maturing arid conditions, this amount of sulphide is almost certainly the result of sulphide oxidation. The sulphide source is unknown and requires investigation.

Boron ratio is marginally higher than that of sea water and possibly suggests a tourmaline rock source in the catchment.

The bromine ratio potentially reflects a meteoric source for recharge.

Table 2 Groundwater chemistry, Molyhil Project

Chemical component 12.10.2006	LOR	TMRC39	TMRC40	TMRC41	TMRC42
Analyte grouping/analyte	Client Sample ID (Secondary):				
EA005P: pH by PC Titrator					
pH value (pH Unit)	0.01	8.1	7.99	7.75	7.84
EA015: TDS					
TDS @ 180˚C	1	340	550	1460	1970
ED037P: alkalinity by PC Titrator					
Hydroxide alkalinity as $CaC0_3$	1	<1	<1	<1	<1
Carbonate alkalinity as $CaC0_3$	1	<1	<1	<1	<1
Bicarbonate alkalinity as $CaC0_3$	1	255	307	318	384
Total alkalinity as $CaC0_3$	1	255	307	318	384
ED040F: Dissolved major anions					
Sulphate as SO_4 2-	1	15	61	360	548
Sulphur as S	1	5	20	120	183
Silica	0.1	-	13.4	18.1	-
ED045G: Chloride discrete analyser					
Chloride	1	7.5	180	439	653
ED093F: Dissolved major cations					
Calcium	1	46	85	120	126
Magnesium	1	31	72	107	156
Sodium	1	15	65	254	414
Potassium	1	15	8	11	26
EG005T: Total metals by ICP-AES					
Iron	0.05	0.14	1.57	2.97	-
EG020F: Dissolved metals by ICP-MS					
Aluminium	0.01	<0.01	<0.01	<0.01	-
Antimony	0.001	0.003	0.008	0.021	-
Arsenic	0.001	<0.001	0.014	0.073	-
Beryllium	0.001	<0.001	<0.001	<0.001	-
Barium	0.001	0.226	0.117	0.078	-
Cadmium	0.0001	<0.0001	<0.0001	<0.0001	-
Chromium	0.001	<0.001	<0.001	<0.001	-
Copper	0.001	<0.001	<0.001	<0.001	-
Lead	0.001	<0.001	<0.001	<0.001	-
Manganese	0.001	0.037	0.22	0.112	-
Molybdenum	0.001	0.013	0.015	0.004	-
Selenium	0.01	<0.010	0.027	0.025	-
Silver	0.001	<0.001	<0.001	<0.001	-
Strontium	0.001	0.228	0.428	0.916	-
Tin	0.001	<0.001	<0.001	<0.001	-
Uranium	0.001	0.005	0.242	0.066	-
Zinc	0.005	0.01	0.012	0.024	-
Boron	0.05	0.13	0.16	0.24	-
Bromine	0.1	<0.1	0.9	1.4	-
Tungsten	0.001	0.063	<0.001	<0.001	-

Analysis expressed as mg/L except where shown

Table 2 Groundwater chemistry, Molyhil Project

Chemical component 12.10.2006	LOR	TMRC39	TMRC40	TMRC41	TMRC42
Analyte grouping/analyte	Client Sample ID (Secondary):				
EG035F: Dissolved mercury by FIMS					
Mercury	0.0001	<0.0001	<0.0001	<0.0001	-
EK040P: Fluoride by PC Titrator					
Fluoride	0.1	1.4	1	1	-
EK057G: Nitrate as N by discrete analyser					
Nitrate as N	0.01	<0.010	<0.010	<0.010	-
EK058G: Nitrate as N by discrete analyser					
Nitrate as N	0.01	0.01	0.07	0.01	-
EK059G: NOX as N by discrete analyser					
Nitrite + Nitrate as N	0.01	0.01	0.07	0.01	-
EK067G: Total phosphorous as P by discrete analyser					
Total Phosphorous as P	0.01	<0.01	0.05	0.15	-
EN055: Ionic balance					
Total anions (meq/L)	0.01	5.61	12.5	26.2	37.5
Total cations (meq/L)	0.01	5.89	13.2	26.2	37.7
Ionic balance(%)	0.01	2.44	2.96	0.16	0.27

Analysis expressed as mg/L except where shown

5.2 Groundwater Classification

Common water ions have been converted to milli-equivalents per litre and plotted on Schoeller diagrams (Figure 3) where they are compared to the chemistry of sea water, a stable chemical system. The drillhole waters are of much lower total salinity than sea water and reflect different ionic ratios.

Drillholes TMRC39 and TMRC40 are relatively low in sodium plus potassium suggesting adsorption or ion exchange as a result of excessive amounts of calcium and magnesium added from the limestones. Drillholes TMRC41 and TMRC42 show sea water ratio of these ions relative to chloride.

5.3 Ionic Ratios

A method for the further evaluation of water chemistry is to compare ionic ratios with that of sea water. Ratios of selected ions are presented on Table 3.

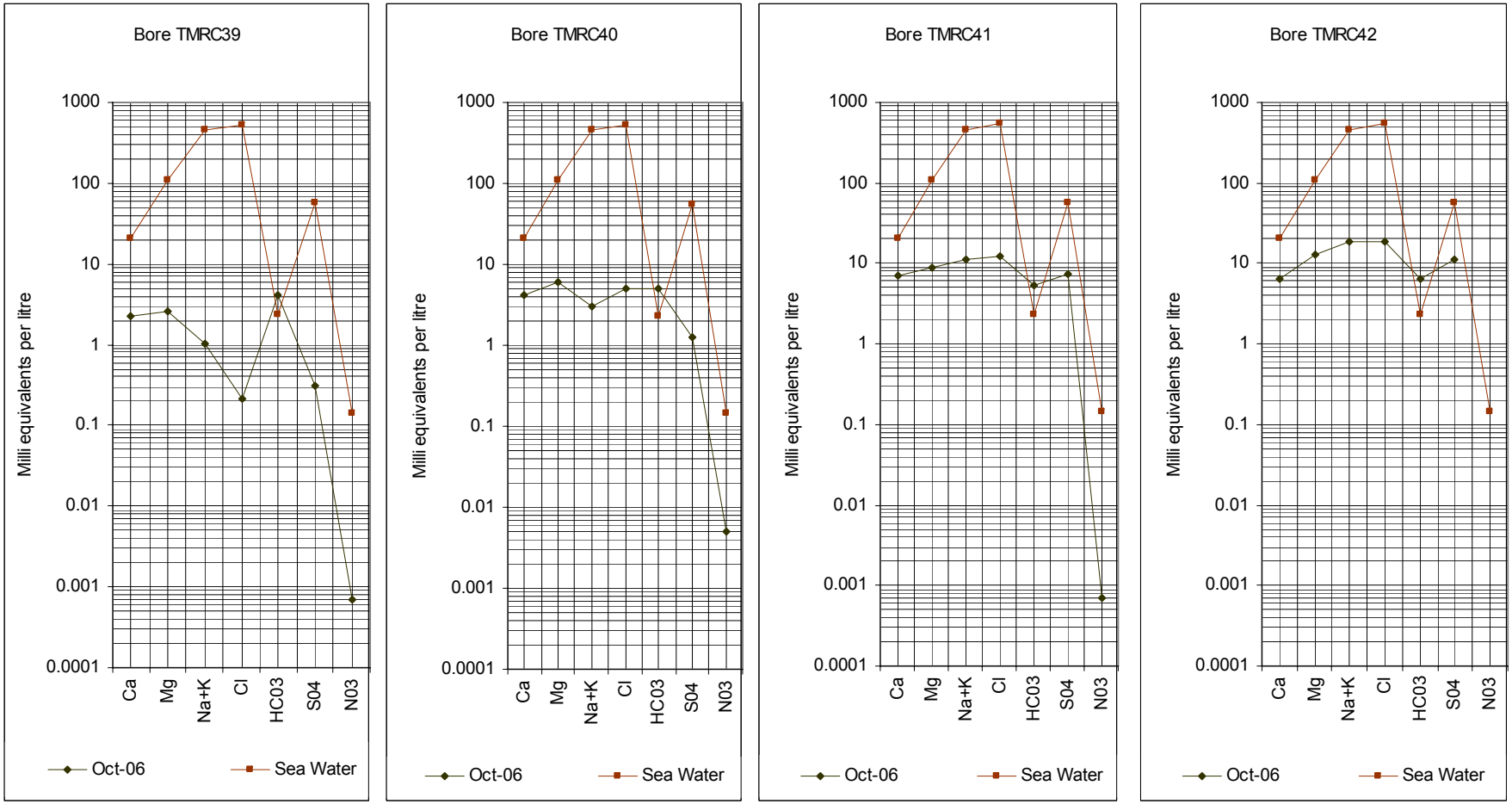
Bore TMRC39
Bore TMRC40
Bore TMRC41
Bore TMRC42
Milli equivalents per litre
1000
100
10
1
0.1
0.01
0.001
0.0001
Ca
Mg
Na+K
Cl
HC03
S04
N03
Oct-06
Sea Water

Figure 3

Table 3 Ionic ratios, water analyses, October 2006, Molyhil Project

Bore	Parameter	$\frac{Cl}{TDS}$ ($x10^{-1}$)	$\frac{Ca+Mg}{TDS}$ ($x10^{-2}$)	$\frac{Ca+Mg}{Cl}$ ($x10^{-2}$)	$\frac{SO_4}{TDS}$ ($x10^{-2}$)	$\frac{SO_4}{Cl}$ ($x10^{-2}$)	$\frac{N}{TDS}$ ($x10^{-4}$)	$\frac{N}{Cl}$ ($x10^{-4}$)	$\frac{Br}{TDS}$ ($x10^{-4}$)	$\frac{Br}{Cl}$ ($x10^{-4}$)	$\frac{B}{TDS}$ ($x10^{-4}$)	$\frac{B}{Cl}$ ($x10^{-4}$)
Sea Water		5.49	5.10	9.20	7.80	14.21	19.38	35.26	19.40	35.30	1.30	2.37
MHWE3		0.22	22.65	1026.67	4.41	200.00	<0.29	<13.33	<2.94	<133.33	3.82	173.33
MHWE4		3.27	28.55	87.20	11.09	33.89	1.27	3.89	16.36	50.00	2.91	8.89
MHWE5		3.00	15.55	51.71	24.66	82.00	0.07	0.23	9.59	31.89	1.64	5.47
MHWE6		3.31	14.31	43.19	27.82	83.92	-	-	-	-	-	-

5. CONCLUSIONS AND RECOMMENDATIONS

Six drillholes, TMRC37 to TMRC42, amounting to 576 metres tested the Cambrian carbonate rocks 6 to 10 kilometres northerly from the mine site.

Salinities gradually increased from west to east and downstream along the creek line from 300mgL^{-1} TDS in TMRC38 to 1570mgL^{-1} TDS in TMRC42.

Difficulty was experienced in obtaining reliable airlift yields from the drillholes due to karstic formation. Drillhole TMRC39 airlifted at 7.6m^3h^{-1}, TMRC40 at 9m^3h^{-1} and TMRC41 at 14.4m^3h^{-1}. The presence of cavernous ground below standing water level suggests that the bores have potential for high yields following construction and test pumping.

Difficulty was also experienced in obtaining reliable standing water levels as a result of hole collapse immediately following withdrawal of the drill rods.

Eight drillholes, TMRC43 to TMRC50, were drilled generally southward from the mine in attempt to locate a proximal potable water supply in fractured Proterozoic rocks. These drillholes demonstrated saline water and small yields. Any potable source located in this southern area is likely to become saline in this environment and no further exploration is recommended.

A review of data on Prices Bore indicates that this bore has potential for a yield higher than the tested yield of 13.5m^3h^{-1}. The casing of this bore is in poor condition and the bore would need to be redrilled to be a reliable water source.

It is recommended that:

1 TMRC50 is constructed as a test production bore. This site should be drilled to a depth of 68 metres at 300 millimetre diameter and cased with design slotted 200 millimetre PN12 PVC. Following construction the bore should be prepared for test pumping. An observation piezometer should be drilled to 68 metres at a distance of approximately 15 metres at a selected location to provide data for the test pumping programme.

2 TMRC42 is constructed as a test production bore to a depth of 52 metres with 200 millimetre PN12 PVC and, similarly to TMRC40, the well is to be supported with a cased observation piezometer and subjected to a controlled continuous rate 48 hour pumping test.

3 Prices Bore is redrilled and constructed as a source for potable water or as a support water supply source for the project.

An alternative potable water supply could be obtained by reverse osmosis treatment of the process water source.

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20 October 2006

CONDITIONS OF ISSUE

This report has been provided for in-house planning purposes only. This report, in full or part, should not be issued to parties outside Thor Mining PLC without discussions with KH Morgan and Associates

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APPENDIX 1

CLIMATE DATA

Climate averages for Alice Springs

Element	January	February	March	April	May	June	July	August	September	October	November	December	Annual	Number of years	Percent complete
Mean daily maximum temperature ºC	35.9	34.9	32.3	27.5	23	19.7	20	23	27	31.1	33.9	36	29	75.6	100
Mean number days where maximum temperature = 40ºC	5.5	2.8	0.8	0	0	0	0	0	0	0.6	2.4	5.1	17	75.6	100
Mean number days where maximum temperature = 35ºC	19.7	16.4	9.7	1.4	0	0	0	0.1	1.3	9	14.2	19	91	75.6	100
Mean number days where maximum temperature = 30ºC	28.1	24.5	22.8	9.5	2	0.1	0.1	2.5	10	18.9	24.2	27	170	75.6	100
Highest daily maximum temperature ºC	46.7	44.4	45	39.1	38.3	31.4	31	36	37.6	45	45.6	48	48	75.8	100
Mean daily minimum temperature ºC	20.8	20.1	17.1	12.2	7.7	4.9	3.7	6	9.7	14.4	17.6	20	13	75.6	100
Mean number days where minimum temperature = 2ºC	0	0	0	0	2.7	8.6	13	6.4	1	0	0	0	31	75.6	100
Mean number days where minimum temperature = 0ºC	0	0	0	0	0.6	4.3	7.4	2.9	0.1	0	0	0	15	75.6	100
Lowest daily minimum temperature ºC	10	8.9	3.9	1.8	-3	-5.6	-7.2	-3.9	-1.1	2.4	4.1	7.8	-7.2	75.8	100
Mean 9am air temperature ºC	29	27.9	25	20.1	15.2	11.5	11	14	19.2	24	27.1	29	21	75.8	100
Mean 9am wet bulb temperature ºC	18.5	18.4	16.5	13.3	10.3	7.7	6.7	8.5	11.3	14.3	16.6	18	13	75.8	100
Mean 9am dew point ºC	10.3	11	9.5	6.7	4.7	2.9	1	1	2.1	4.4	7.1	9.1	5.8	75.8	100
Mean 9am relative humidity, percent	36	40	41	45	52	58	54	44	35	32	33	34	42	75.8	100
Mean 9am wind speed - km/hour	12.1	10.5	9.7	9	7.6	6.5	7	9.1	11.8	13.6	12.3	12	10	71.8	92
Mean 3pm air temperature ºC	34.6	33.8	31.4	26.7	22.3	18.9	19	22	26.2	30	32.5	34	28	75.7	100
Mean 3pm wet bulb temperature ºC	20.5	20.3	18.8	16	13.6	11.5	11	12	14.6	17	18.7	20	16	75.7	100
Mean 3pm dew point ºC	10.2	10.4	9	6.5	4.8	3.2	1.3	1.5	2.6	5.1	7.3	9.2	5.9	75.7	100
Mean 3pm relative humidity, percent	26	28	28	31	35	38	34	28	25	24	24	26	29	75.7	100
Mean 3pm wind speed - km/hour	13	12.9	11.9	10.9	10	9.7	10	11	11.5	11.6	10.9	11	11	71.7	94
Mean monthly rainfall, millimetres	42.7	41.4	33.1	16.4	16.1	14.6	14	10	9.4	20.1	25.1	36	279	114	100
Median (5th decile) monthly rainfall, millimetres	22.6	14.3	11.6	2.8	2.9	5.1	0.8	1.3	1.6	16.3	17.8	18	258	111	
9th decile of monthly rainfall, millimetres	110	135.7	87.6	58	51.3	47.7	35	31	33.9	47.9	56	96	482	111	
1st decile of monthly rainfall, millimetres	0	0	0	0	0	0	0	0	0	0	0.7	0	138	111	
Mean number raindays	3.4	3.3	2.8	1.7	2.1	2	1.6	1.4	1.5	3.1	3.8	4	31	107	94
Highest monthly rainfall, millimetres	314	235.8	363	117	109	81.8	245	158	89.7	116	139	288		114	100
Lowest monthly rainfall, millimetres	0	0	0	0	0	0	0	0	0	0	0	0		114	100
Highest recorded daily rainfall, millimetres	107	105.4	166	72.1	47.5	62.8	135	69	47.2	57.9	67.6	118	166	112	98
Mean number clear days	12.9	12	14.7	15.2	15.1	14.5	17	18	17.8	14.8	11.9	12	176	75.2	99
Mean number cloudy days	5.1	4.3	3.6	3.6	4.4	4.4	3	2.5	2	3.6	4.5	5.5	47	75.2	99
Mean daily evaporation, millimetres	9.9	9.5	8.1	6.1	4.1	3	3	4.1	6	7.7	8.8	9.5	6.6	53.7	84

Tennant Creek climate averages

Element	January	February	March	April	May	June	July	August	September	October	November	December	Annual	Number of years	Percent complete
Mean daily maximum temperature ºC	36.8	35.6	34.3	31.6	27.6	24.6	24.5	28	31.5	34.6	36.4	37.2	32	34.8	100
Mean number days where maximum temperature = 40ºC	5.7	2.7	0.3	0	0	0	0	0	0	0.7	3.2	6.1	19	34.8	100
Mean number days where maximum temperature = 35ºC	22.9	16.6	14.2	3.4	0.1	0	0	0.2	5.5	16.4	21.5	24.8	126	34.8	100
Mean number days where maximum temperature = 30ºC	29.5	26.1	28.2	22.5	8.4	1.9	1.8	8.5	20.7	27.4	28.9	30.2	234	34.8	100
Highest daily maximum temperature ºC	44	44.5	40.7	37.6	35.5	32.9	34.7	36	38.9	41.6	43.4	44.7	45	35	100
Mean daily minimum temperature ºC	25	24.5	23.2	20.3	16.4	13	12.2	15	18.3	21.6	23.7	24.9	20	34.8	100
Mean number days where minimum temperature = 2ºC	0	0	0	0	0	0	0	0	0	0	0	0	0	34.8	100
Mean number days where minimum temperature = 0ºC	0	0	0	0	0	0	0	0	0	0	0	0	0	34.8	100
Lowest daily minimum temperature ºC	17.2	17.2	14.6	11.6	6.7	5.3	4.5	6	7.4	11.6	10.7	17.8	4.5	35	100
Mean 9am air temperature ºC	29.2	28.2	27	24.1	19.9	16.3	15.7	19	23.1	26.8	28.9	29.8	24	34.9	100
Mean 9am wet bulb temperature ºC	21	21.3	19	15.6	12.7	10.2	9.2	11	13.3	16	18.5	20.3	16	34.9	100
Mean 9am dew point ºC	15	16.3	12.5	7.5	5.1	2.7	0.6	0	1.7	4.6	9.1	12.9	7.3	34.9	100
Mean 9am relative humidity, percent	49	55	46	38	40	42	38	31	28	29	35	42	39	34.9	100
Mean 9am wind speed - km/hour	16.8	16.6	19.6	23.7	24.8	24.2	23.5	25	25.6	25	21.4	18.2	22	35.2	101
Mean 3pm air temperature ºC	35.4	34.3	33.3	30.8	26.9	23.9	23.8	27	30.7	33.5	35.1	35.8	31	34.3	99
Mean 3pm wet bulb temperature ºC	21.9	22.2	20.5	18	15.7	13.6	12.9	14	16.2	18.1	20	21.2	18	34.3	99
Mean 3pm dew point ºC	12.2	14	10.8	7.1	4.7	2	-0.1	-1	0.6	3.4	7.4	10.4	6	34.3	99
Mean 3pm relative humidity, percent	30	36	30	25	26	25	22	18	17	19	22	26	25	34.3	99
Mean 3pm wind speed, kilometre/hour	15.1	15.8	17.5	17.2	16.6	16.2	15.3	16	15.9	14.3	13.7	14	16	34.7	99
Mean monthly rainfall, millimetres	100.5	129.9	58.2	15.7	8.4	4.5	5	1.9	7.9	19.5	36.8	72.1	460	34.8	100
Median (5th decile) monthly rainfall, millimetres	88.2	96.6	34.2	2	0	0	0	0	1.2	16	28	44.8	403	34	
9th decile of monthly rainfall, millimetres	257	345.5	171.9	57.1	33	15.4	14	6.6	27.5	48.8	81.9	186	776	34	
1st decile of monthly rainfall, millimetres	11	5.8	0.7	0	0	0	0	0	0	0	2.9	8.2	219	34	
Mean number raindays	9.4	9.6	6.3	2	1.5	0.6	0.7	0.8	1.8	4	6	7.6	50	34.8	100
Highest monthly rainfall, millimetres	280.2	377	237.6	135.4	50.8	85.3	74.2	18	55.6	75.5	160	250		34.8	100
Lowest monthly rainfall, millimetres	2.2	1	0	0	0	0	0	0	0	0	1.8	1.8		34.8	100
Highest recorded daily rainfall, millimetres	138.4	153.6	95.2	102.8	22.6	45.5	62.2	18	29.6	51.6	71.6	135	154	34.9	100
Mean number clear days	6.5	4.5	10.6	14.9	18.6	20.2	22.8	22	20.1	16.8	10.5	7.8	176	35	100
Mean number cloudy days	12.5	12.8	9.3	5.6	4.3	2.6	2.1	1.8	2.4	4.8	6.3	10.1	75	35	100
Mean daily hours sunshine	9.4	8.9	9.3	9.8	9.7	10	10.2	11	10.2	10	9.7	9.7	9.8	34.8	100
Highest recorded wind gust, km/hour	116.6	101.9	94.7	98.3	81.4	77.8	79.6	78	76	104	100	106	117	34.9	100
Mean daily evaporation, millimetres	12.9	11.5	11.5	11	8.9	7.5	7.6	9.5	12	13.5	13.8	13.5	11	34.9	100

APPENDIX 2

DRILL LOGS

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC037
Date drilled	1 October 2006
Location	0581093E/7486367N, northeastern corner of creek junction
Total depth	96 metres
Standing water level	42 metres approximately
Water encountered	37 metres (?); dry mud bridge at 26 metres (02.10.2006), air still escaping on hole completion
Main aquifer	39(?) to 46 metres
Yield and test method	could not airlift from cavern
Salinity	not tested
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS97b compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	S Morfit and D Galante
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	2m 150mm vinidex PVC drill casing
casing	-
screens and slots	-
development	-
gravel pack	-

Drillhole	TMRC037	
Depth (m)	Lithology	
0 - 2	Brown stony alluvium quartzite, dolomite clasts in silty red-brown sand.	
2 - 6	Orange to yellowish oxidised (dolomite?).	
6 - 30	Yellow powder (dolomite?).	
	19	Orange-yellow, damp, still powdery.
	25 - 30	Orange-brown, damp, clayey, soft (lateritic dolstone?).
30 - 96	30 - 39	Red-brown to deep orange-brown, soft and hard bands. Poor sample return in soft layers.
	39 - 41	Cavern.
	42	Red-brown broken dolomite, damp. Temporary water from cyclone at 42 metres.
	43	No sample return, wet broken brown massive dolomite. No water from outside return or cyclone.
	54	Dusty sample. Harder drilling. Pinkish dolomite.
	58 - 68	Grey hard massive dolomite. Slow drilling (1.5m/min).
	68 - 96	Red-brown softer dolomite.

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC038
Date drilled	1 October 2006
Location	0580176E/7486367N
Total depth	102 metres
Standing water level	-
Water encountered	30 metres
Main aquifer	30 to 33 metres, 48 to 49 metres
Yield and test method	airlift outside return, small seepage, approximately 0.1Ls^{-1}
Salinity	approximately 300mg/L TDS
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS97b compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	S Morfit
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	2m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Drillhole	TMRC038
Depth (m)	Lithology
0 - 2	Brown broken dolomite argillite and fine silt.
2 - 12	Pale yellow soft weathered argillite.
12 - 18	Brown, red-brown argillite.
18 - 26	Yellow to khaki, soft claystone.
26 - 33	Brown, very damp clay. Little sample return. Wet clay 30 to 33 metres.
33 - 35	Khaki argillite.
	35 Grey brittle argillite/dolomite. Yellowish-pale grey brittle argillaceous dolomite, in places, dendritic structured.
43 - 48	Red-brown brittle argillaceous dolomite.
48 - 49	Brown wet soft clay. Minor muddy water from cyclone, then dry.
49 - 66	Brown to red-brown argillite.
	53 - 64 Wet clay and argillite.
66 -102	Brown hard brittle medium grained to poorly sorted quartz arenite.
	72 Small seepage at rod change possibly from 30 to 33 metres.
	78 Siltstone and brittle shale. Slower drilling.

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC039
Date drilled	2 October 2006
Location	0582193E/7485987N
Total depth	102 metres
Standing water level	hole bridged at 2 metre depth
Water encountered	61 metres, 78 metres, 91 metres
Main aquifer	61 to 94 metres
Yield and test method	$2Ls^{-1}$ bucket fill blowdown
Salinity	$480mgL^{-1}$ TDS, water sample
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS97b compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	S Morfit
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	3m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Drillhole	TMRC039
Depth (m)	Lithology
0 - 5	Brown oxide faced claystone and brown silt.
5 - 12	White-brown mottled broken claystone, after calc rock (dolomite?).
12 - 20	Dark mauve to grey hard flaking mudstone.
20 - 33	Pale grey blocky fracturing silicified (porcellanised) dolomite. Some faces with Fe staining.
	24 - 33 Massive, no obvious fractures.
33 - 54	Brown to pale mauve silicified hard brittle silicified claystone.
54 - 65	Pale grey massive silicified claystone.
65 -102	Red-brown brittle claystone. Possible small water make. Less 0.1Ls^{-1} from outside return. Could be from high up in the hole. Driller reported water at 61 metres in pale grey-mauve mudstone.
	78 Flow approximately 0.3Ls^{-1} outside water flow ceased when drilling.
	84 Blown-down sub test; 0.25Ls^{-1}, 400mgL^{-1} TDS. Water sample, clear settled.
	90 Onwards, faster drilling.
	93 - 94 Coarse chips. Sample wet, increased flow. Collar blow-out. Add 1.5 metres of collar.
	100 Flaking purple-brown pelite. Samples dry.
	102 480mgL^{-1} TDS; flow 1.5Ls^{-1}(+). Blow-down sub, 2Ls^{-1}.

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC040
Date drilled	3 October 2006
Location	0582949E/7485472N
Total depth	78 metres
Standing water level	bridged at 26 metres
Water encountered	40.5 metres
Main aquifer	40.5 to 68 metres
Yield and test method	2.5Ls^{-1} on hole completion, bucket fill outside return with booster on
Salinity	710mgL^{-1} TDS, very muddy, black turbidity
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS97b compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	S Morfit
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	2m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Drillhole	TMRC040	
Depth (m)	Lithology	
0 - 5	Brown-pale brown granular silt sand supported alluvium-colluvium.	
5 - 18	Brown, grey-brown highly weathered hard argillite to silicic chips, possibly replaced carbonate.	
18 - 24	Dark grey silicified dolomite. Hard.	
24 - 26	Brown oxidised dolomite. Softer drilling.	
26 - 31	Dark grey, flaking hard dolomite.	
31 - 40	Dark grey broken with Fe facings.	
40 - 51	Pale yellow-grey silicified argillite(?).	
	40.5	Water.
	43 - 51	Broken brown oxide faced dolomite chips. No water returns.
51 - 54	Red-brown pelitic rock.	
54 - 56.5	54	Cavern 2.5 metres.
56.5- 58	Black mud.	
58 - 59	Grey pelite.	
60 - 65	Cavern.	
65 - 68	Black mud; 2.5Ls^{-1}, 710mgL^{-1} TDS. Flow limited by airlift method.	
68 - 74	Dark grey silicified(?) pelite (after carbonate?).	
74 - 78	Purple-red pelite. Test with booster on, 2.5Ls^{-1}, water black and muddy.	

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC041
Date drilled	4 October 2006
Location	0582993E/7484884N, eastern bank of creek
Total depth	102 metres
Standing water level	bridged at 26 metres on hole completion
Water encountered	42 metres
Main aquifer	42 to 51 metres, 87 to 94 metres
Yield and test method	4.6Ls^{-1} bucket fill outside return
Salinity	1050mgL^{-1} TDS
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS97b compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	D Galante, S Morfit and M Bentley
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	3.2m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Drillhole	TMRC041	
Depth (m)	Lithology	
0 - 4	Brown angular cobble alluvial scree and silty alluvium sand.	
4 - 7	Grey-brown broken dolomite.	
7 - 15	White to pale grey and brown dolomite.	
15 - 46	Pale grey-white massive crystalline dolomite.	
	37	Damp onwards. Adhering dust on particles, yellowish colouration. Circular biogenic(?) structures. Small vughs.
	42	Water. Softer drilling.
	44	Outside flow approximately $0.4Ls^{-1}$, highly yellow coloured turbid water.
46 - 47	White massive non-oxidised dolomite.	
47 - 52	Broken oxidised dolomite.	
	51	Brown oxidation, broken dolomite.
52 - 87	Grey to dark grey massive hard dolomite. Flow $1Ls^{-1}$ to $2Ls^{-1}$. Possible flow increase 47 to 52 metres.	
	54	Outsider return flow $0.75Ls^{-1}$. Massive non-oxidised dolomite, conical 4 centimetre (1cm diameter at top) long biogenic structures.
	72	Blocked inner tube, round trip. On re-entry, a large amount of cave-in required redrilling.
	83	Minor breaks.
87-102	Pale grey dolomite(?), Fe faces. Discharge water turned black. Increase in flow, $2(+)Ls^{-1}$.	
	94	Onwards, grey to dark grey dolomite.
	102	Flow $4Ls^{-1}$, $050mgL^{-1}$ TDS.

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC042
Date drilled	5 October 2006
Location	0583149E/7484285N
Total depth	96 metres
Standing water level	31 metres
Water encountered	40.5 metres
Main aquifer	40(?) to 52 metres, 76 to 78 metres
Yield and test method	could not test due to cavernous ground
Salinity	1570mgL^{-1} ppm TDS
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS97b compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	S Morfit, D Galante and M Bentley
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	3m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Drillhole	TMRC042
Depth (m)	Lithology
0 - 2	Red-brown to brown silty sand and pebble alluvium. Sub-angular clasts.
2 - 4	Yellow-brown broken colluvial dolomite(?) debris.
4 - 8	Yellow-brown highly oxidised claystone.
8 - 21	Yellow to brown indurated clay. Damp and, in places, sticky.
21 - 34	Pale grey oxidised dolomite with increasing solids with depth. Brown staining.
34 - 37	Cavern.
37 - 40	Yellow stained pale grey dolomite.
40 - 43	Cavernous. Small sample return. Highly yellow stained dolomite.
43 - 52	Yellow to pale grey crystalline dolomite.
52 - 58	Dark grey dolomite. Minor Fe oxide faces.
58 - 61	Grey to dark grey dolomite.
61 - 96	Dark grey dolomite.
	67 - 78 Yellow clayey strongly oxidised.
	90 Minor cyclone water after rod change.
	88 Slow hard drilling. Cyclone temporary lift, 1570mgL^{-1} ppm TDS.

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC043
Date drilled	6 October 2006
Location	0576805E/7482341N
Total depth	66 metres
Standing water level	-
Water encountered	-
Main aquifer	-
Yield and test method	dry, seepage water in hole after standing overnight
Salinity	-
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS97b compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	S Morfit, D Galante and D Lloyd
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	3m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Depth (m)		Lithology
0 - 4		Brown angular sand granule sand and granite skeletal.
4 - 20		Grey weathered medium grained pink feldspar biotite granite.
	15	Slightly weathered.
20 - 66		Grey non-oxidised granite.
	43	Minor oxidation.
	47	Minor breaks; coarser fragments, slight oxidation.
	54	Slight oxidation, coarser grained.

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC044
Date drilled	6 October 2006
Location	0576362E/7482412N
Total depth	72 metres
Standing water level	-
Water encountered	-
Main aquifer	-
Yield and test method	dry
Salinity	-
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS97b compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	P Kennedy, S Western, D Galante and M Bentley
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	4m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Depth (m)	Lithology
0 - 3	Red-brown silt alluvium.
3 - 5	Pale grey hard calcrete.
5 - 12	Brown highly oxidised insitu granite skeletal.
12 - 16	Brown oxidised grey medium to coarse grained granite.
16 - 30	Slightly oxidised granite.
30 - 72	Non-oxidised grey medium grained pink feldspar grey plagioclase biotite granite.
42 - 44	Slight brown oxidation.

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC045
Date drilled	6 October 2006
Location	0576684E/7482449N
Total depth	30 metres
Standing water level	9 metres
Water encountered	10 metres
Main aquifer	10 to 14 metres
Yield and test method	0.1Ls^{-1} bucket fill
Salinity	5200mgL^{-1} ppm TDS
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS97b compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	P Kennedy, S Western, D Galante and M Bentley
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	2m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Depth (m)	Lithology
0 - 1	Red-brown alluvial.
1 - 3	Brown granite skeletal.
3 - 14	Brown weathered fragmenting granite. Water at 10 metres.
10	Water. Weathered coarse granite.
14	Flow approximately 0.1Ls^{-1} from outside return. 543mgL^{-1} TDS.
14 - 30	Grey harder little oxidation. Granite.
30	Test 5200mgL^{-1} TDS; yield 0.1Ls^{-1}; standing water level 9 metres.

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC046
Date drilled	6 to 7 October 2006
Location	0578223E/7478223N
Total depth	45 metres
Standing water level	22 metres
Water encountered	44 metres
Main aquifer	-
Yield and test method	seepage
Salinity	-
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS97b compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	P Kennedy, S Western, D Galante and M Bentley
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	6m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Depth (m)	Lithology
0 - 5	Red-brown silty supported granite skeletal alluvium/colluvium.
5 - 27	Pale grey highly weathered fragmental fine grained muscovite granite oxidation gradually decreasing with depth.
27 - 45	Grey to dark grey slightly oxidised to fresh, fine to medium grained biotite granite.
44	Samples. Damp.

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC047
Date drilled	7 October 2006
Location	0572992E/7485076N
Total depth	54 metres, 447.53 metres reduced level
Standing water level	-
Water encountered	not detected by drilling
Main aquifer	-
Yield and test method	seepage
Salinity	-
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS97b compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	S Western, P Kennedy, D Galante and M Bentley
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	3m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Depth (m)	Lithology
0 - 16	Brown stained weathered medium grained biotite granite.
16 - 54	Grey slightly oxidised to nearly fresh biotite granite.

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC048
Date drilled	7 October 2006
Location	0573024E/7485145N
Total depth	60 metres
Standing water level	-
Water encountered	-
Main aquifer	-
Yield and test method	-
Salinity	-
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS976 compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	P Kennedy, S Western, D Galante and M Bentley
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	3m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Depth (m)	Lithology
0 - 2	Yellow-brown silt and oxidised pelite.
2 - 14	Yellow to brown oxide faced grey fragmental pelite.
14 - 21	Harder, brittle oxide faced pelite.
	15 - 16 Yellow strongly oxidised pelite.
21 - 60	Medium to darker grey hard silicified pelite little evidence of oxidation.
	52 - 54 Brown softer oxidised pelite, no water on standing for five minutes.

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC049
Date drilled	7 to 8 October 2006
Location	0573476E/7485021N
Total depth	60 metres
Standing water level	20 metres
Water encountered	46 metres
Main aquifer	46 to 47 metres
Yield and test method	low, not tested
Salinity	6430mgL^{-1} ppm TDS
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS97b compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	S Western, P Kennedy, D Galante and M Bentley
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	3m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Drillhole	TMRC049
Depth (m)	Lithology
0 - 3	Red-brown silty sand.
3 - 6	Brown oxidised fragmental granite.
6 - 20	Grey to pink coarse grained highly weathered. Pink feldspar biotite granite.
20 - 45	Less oxidised, less fractured granite, as above.
	28 Onwards, slower drilling.
	37 Very slow drilling with booster off. Small volume of water after standing overnight. 6430mgL^{-1} ppm TDS.
45 - 46	Oxidised contact granite and silicic rock.
46 - 47	Oxidised faced chips grey silicic rock.
47 - 60	Grey, sightly oxide faced chips, grey silicic rock.

Project	Thor Mining PLC Molyhil Project
Drillhole number	TMRC050
Date drilled	8 October 2006
Location	0573017E/7485175N
Total depth	42 metres
Standing water level	-
Water encountered	24 metres
Main aquifer	23 to 24 metres
Yield and test method	-
Salinity	-
Drilling contractor	Arrinooka Drilling, P Kennedy
Drilling rig	Hydco Atlas Copco XRV compressor 1000cfm 360cfm. Auxiliary XRVS976 compressor 360psi 1000cfm. Booster Hurricane Airdrill M82D with AUDR rod handler
Drilling method	reverse circulation, air
Hole sizes, bits, depths	5.5 inch (140.5mm) hammer bit
Driller	S Western, P Kennedy, D Galante and M Bentley
Logged by	KH Morgan
Down-hole logs	-
Completion details:	
collar and cementing	3m 150mm PVC, foam cemented
casing	-
screens and slots	-
development	-
gravel pack	-

Depth (m)	Lithology
0 - 1	Red-brown silty sand and granite fragments.
1 - 6	Grey to whitish highly clayey oxidised pegmatitic granite.
6 - 26	Grey soft pelitic rock becoming harder and fracturing with brown oxide faces past 24 metres.
	24 Water 2180 ppm TDS. Seepage.
26 - 42	Grey hard chipping non-oxidised pelite. Small flow less 0.1Ls^{-1}.

APPENDIX 3

ALS ENVIRONMENTAL ANALYSIS CERTIFICATES

APPENDIX 4

RC Drilling Digital Data

DRILL_COLLAR_DATA_EL22349_2007
DRILL_LITHOLOGY_DATA_EL22349_2007
DRILL_ASSAY_DATA_EL22349_2007
DRILL_SURVEY_DATA_EL22349_2007