

**JUPITER MINES  
LIMITED**  
ABN 51 105 991 740

**ASX Release**  
18 September 2009

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**Directors/Officers**  
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Andrew Zhou

Greg Durack  
Robert Benussi  
Charles Guy

**Issued Capital:**  
Shares: 321,386,471  
Unlisted Opts: 15,100,000

**ASX Symbol:** JMS

**Currently Exploring for:**

- Iron Ore
- Manganese

## Jupiter Mines Limited

### OAKOVER MANGANESE PROJECT HIGH GRADE MANGANESE ROCKCHIPS

#### KEY POINTS

- **First reconnaissance field trip completed**
- **Field evaluation of eight interpreted manganese anomalies commenced**
- **Rock chip assays ranged from 5.0% to 54.6% manganese**
- **Majority of samples returned > 20% manganese**
- **Fifteen identified anomalous areas remained to be evaluated in the field**
- **VTEM Geophysical Survey to be flown by Geotech Airborne Pty Ltd this month**
- **Jupiter has also applied for an Exploration Licence covering the Paterson Formation at Oakover**

Jupiter Mines Limited (**ASX: JMS**) is pleased to announce that it has completed its first reconnaissance field trip to the Oakover Manganese Project. The primary objective of the field trip was to evaluate the Landsat ETM (Enhanced Thematic Mapper) anomalies interpreted from satellite data. The Landsat ETM satellite data was computer enhanced to highlight geological, structural and mineral alteration zones at Oakover. Of the twenty three anomalous areas identified from the interpretation only eight of the areas have been rock chipped to date, with the majority of the samples returning greater than 20% manganese, and with two samples being greater than 50% manganese, results are summarized in Table 1.

Jupiter's Oakover Manganese Project totals 700 km<sup>2</sup> covering four granted Exploration Licences in the East Pilbara region of Western Australia, with approximately 450 km<sup>2</sup> containing the Archean Carawine Dolomite (~0.5% - 3% Mn source) and the Pinjian Chert Breccia (host) which are the prospective geological units for Woodie Woodie style deposits. Mt Sydney, Ripon Hills and Shaw River Resources Baramine Project are all located in Carawine Dolomite and Pinjian Chert.

The Project area also surrounds the historical Consolidated Minerals Ripon Hills mine area, and is approximately 60 km to the north of the Woodie Woodie mine. Access to regional infrastructure is excellent with the sealed Ripon Hills road servicing the Telfer, Woodie Woodie and Nifty mines which traverses the Project area in the south providing access to Port Hedland approximately 200 kms to the west.

The Exploration Budget this year for the Oakover Manganese Project is \$1.6M which includes a VTEM Geophysical Survey scheduled to be flown this month. Significant field work is planned going forward evaluating the anomalous areas identified from the Landsat ETM interpretations, and also areas from historical work that returned anomalous stream sediment manganese results and areas that were subjected to RAB drilling. The limited field work conducted to date has highlighted the potential of the Project, and with the initial exploration program planned aimed at delineating metallogenic structural controls and corridors for manganese, drill targets will be developed with the objective of testing in the first half of next year.

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Also at Oakover, Jupiter has pegged an Exploration Licence (ELA45/3340) over the Paterson Formation which is located between the current Project tenements. The Paterson Formation is an area of an ancient glacial flow which is a mixture of deposited sediments up to 100 metres in thickness. The new application area totals 640 km<sup>2</sup>, and is interpreted to contain Carawine Dolomite in part as the basement unit beneath the Formation. This concept will be tested with limited flight lines as part of the VTEM Survey being undertaken over the major Project areas. If this concept after evaluation cannot be supported, then the application will be relinquished.

The Oakover Manganese Project is a key focus for Jupiter going forward. The landholding is significant with an aggressive exploration program planned going forward.

Yours faithfully  
**Jupiter Mines Limited**



**Greg Durack**  
**Chief Executive Officer**

*The potential quantity and grade of the of the targets at Oakover Manganese Project ,are conceptual in nature and are for exploration purposes only. There has been insufficient exploration and valuation to define a mineral resource and it is uncertain if future exploration will result in the determination of a mineral resource.*

**Exploration Manager: Charles William Guy Competent Person**

*The information in this announcement that relates to Exploration Results is based on information compiled by Mr Charles William Guy who is a Member of the Australian Institute of Geoscientist and a full- time employee of Jupiter Mines Limited. Charles William Guy has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Charles William Guy consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears. Charles William Guy holds the position of Exploration Manager with Jupiter Mines Limited.*

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Sample #	Easting	Northing	Tenement	Prospect	Mn% Prospect	Mn%	Fe%	Al2O3%	SiO2%	P%	LOI%	
OKCE090001	288818	7669112	E45/2639	MN1	Average	54.6	1.8	1.8	7.0	0.04	8.9	
OKCE090002	288811	7669132	E45/2639	MN1		25.8	2.2	1.5	51.0	0.05	6.0	
OKCE090003	288807	7669132	E45/2639	MN1		5.0	3.3	2.7	82.1	0.03	1.9	
OKCE090004	288811	7669118	E45/2639	MN1		29.0%	30.7	3.2	2.0	40.6	0.06	7.7
OKCE090005	276096	7651009	E45/2641	LRS	33.8%	41.7	12.3	3.0	7.3	0.09	12.6	
OKCE090006	276033	7651020	E45/2641	LRS		28.6	22.7	1.1	14.0	0.05	11.3	
OKCE090007	275973	7651153	E45/2641	LRS		20.7	26.2	1.0	21.1	0.11	10.3	
OKCE090008	276104	7651294	E45/2641	LRS		45.2	11.1	2.1	4.5	0.03	12.1	
OKCE090009	276191	7651407	E45/2641	LRS		20.6	35.9	2.3	7.1	0.02	8.9	
OKCE090010	276185	7651495	E45/2641	LRS		38.6	13.9	3.2	8.5	0.04	12.0	
OKCE090011	276129	7651560	E45/2641	LRS		28.7	26.5	1.9	6.9	0.03	11.9	
OKCE090012	276047	7651603	E45/2641	LRS		46.0	11.3	1.2	5.3	0.03	11.7	
OKCE090013	275448	7643016	E45/2641	RHSE		43.8%	43.7	11.6	2.2	4.7	0.05	12.7
OKCE090014	275432	7643103	E45/2641	RHSE			51.0	6.2	1.8	3.8	0.02	11.9
OKCE090015	275328	7643131	E45/2641	RHSE			47.4	8.6	2.1	5.0	0.03	11.8
OKCE090016	275219	7643232	E45/2641	RHSE			36.4	20.1	3.1	3.0	0.04	12.2
OKCE090017	275510	7643112	E45/2641	RHSE	49.6		10.6	0.7	1.5	0.01	11.9	
OKCE090018	275583	7643235	E45/2641	RHSE	34.7		3.4	2.0	33.6	0.03	8.5	
OKCE090019	295370	7661912	E45/2639	Vanadium	33.8%		33.8	10.7	0.5	26.9	0.15	9.1
OKCE090020	273680	7644287	E45/2641	MN10	35.6%		32.9	5.1	2.0	33.8	0.06	8.3
OKCE090021	273635	7644315	E45/2641	MN10		30.9	9.9	1.1	30.2	0.05	8.6	
OKCE090022	273518	7644343	E45/2641	MN10		43.0	9.1	1.4	11.7	0.10	10.9	
OKCE090023	272401	7644383	E45/2641	MN11	20.8%	14.5	13.1	0.9	42.3	0.04	10.7	
OKCE090024	272317	7644390	E45/2641	MN11		23.4	14.1	1.0	34.8	0.03	8.7	
OKCE090025	272295	7644492	E45/2641	MN11		24.4	15.7	1.0	30.9	0.04	9.4	
OKCE090026	271977	7644687	E45/2641	MN12		21.9	31.4	0.7	11.0	0.14	11.1	
OKCE090027	271934	7644628	E45/2641	MN12	25.6%	31.0	17.2	1.0	20.0	0.10	9.9	
OKCE090028	271837	7644630	E45/2641	MN12		28.1	16.1	0.7	25.8	0.05	9.3	
OKCE090029	271792	7644601	E45/2641	MN12		26.3	25.4	0.8	13.8	0.06	11.0	
OKCE090030	271738	7644643	E45/2641	MN12		20.9	24.6	0.4	24.7	0.04	9.3	
OKCE090031	273895	7645018	E45/2641	MN13		34.2%	45.7	6.2	0.7	10.5	0.02	12.3
OKCE090032	273875	7645095	E45/2641	MN13			34.0	15.1	1.9	16.1	0.06	11.1
OKCE090033	273877	7645135	E45/2641	MN13			22.9	33.0	0.9	6.7	0.06	11.3
Rock chips assayed by ALS/Chemex Perth by ME XRF12 method												
Average Prospect Mn% not weighted					>40%	Mn	Fe					
					30-40%							
					20-30%							

Table 1: Oakover Manganese Project - Anomalous Areas Evaluated



**Figure 1 - Ripon Hills South East (E45/2641) Prospect Field Observations**

The Ripon Hills South East prospect is a coincident significant stream sediment anomaly and known Mn occurrence on the Yilgalong 1:100,000 geology sheet. It is only ~3km north of the sealed Ripon Hills Rd (Woodie Woodie to Port Hedland road). It has a surface extent of ~600m x 300m. The Mn mineralisation occurs within the Pinjian Chert Breccia. Well bedded Carawine Dolomite underlies the prospect and a dolerite dyke runs close by. The six rock chips collected average 43.8% Mn with a maximum of 47.4%Mn; photo shows recent fire on outcrop.



**Figure 2 - MN1 Prospect Field Observations (E45/2639)**

The MN1 prospect lies on E45/2639 on the east side of the Oakover River. This ~300m x 200m Mn mineralisation pod in Pinjian Chert Breccia is ~3km rough walk east of a station track. The four rock chips collected average 29% Mn with a maximum of 54.6% Mn.

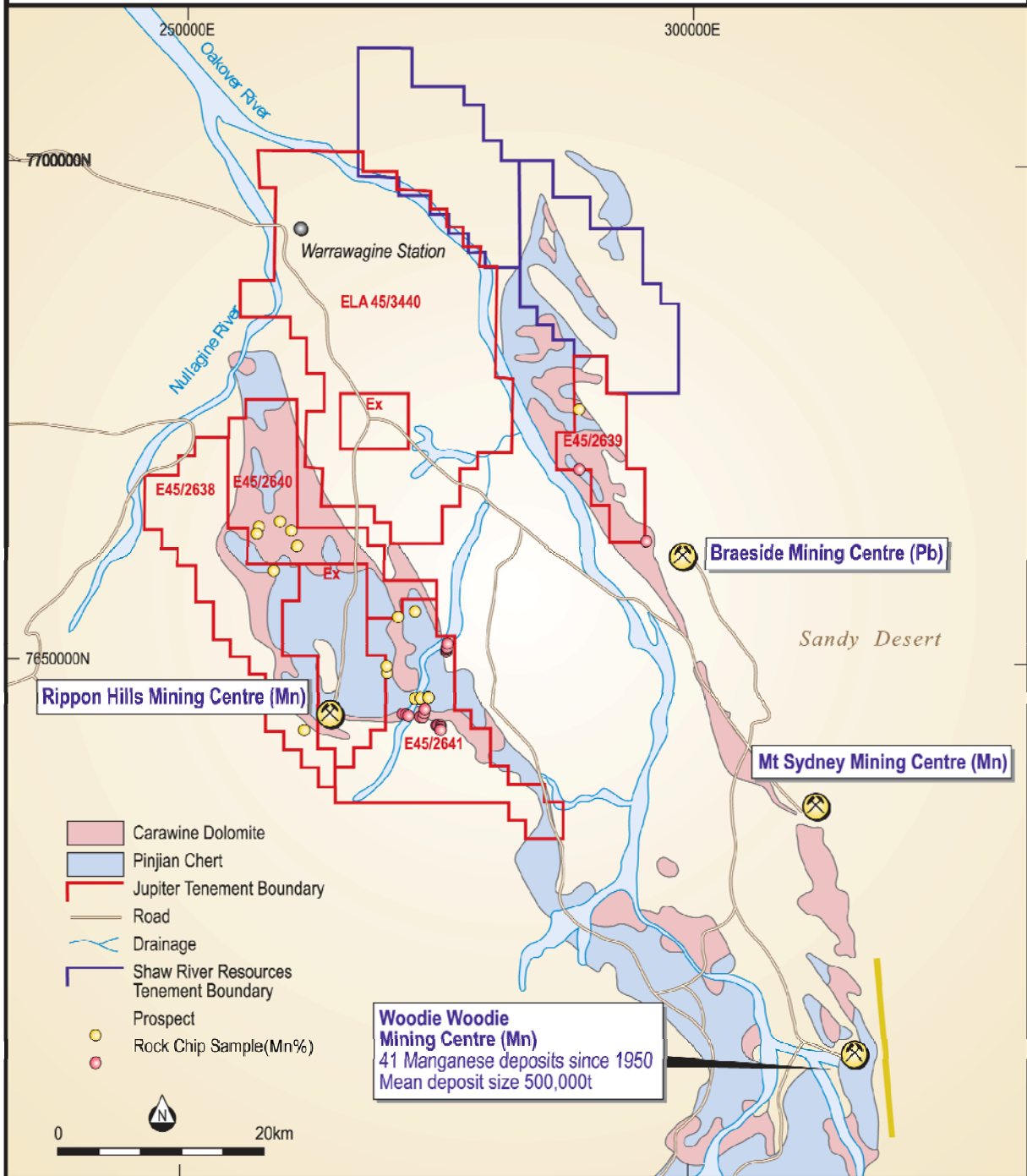
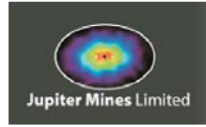




**Figure 3 - MN12 Prospect (E45/2641) avg 25.6% Mn overlying bedded Carawine Dolomite.  
- MN12 Prospect being ~400m x 200m in surface extent.**

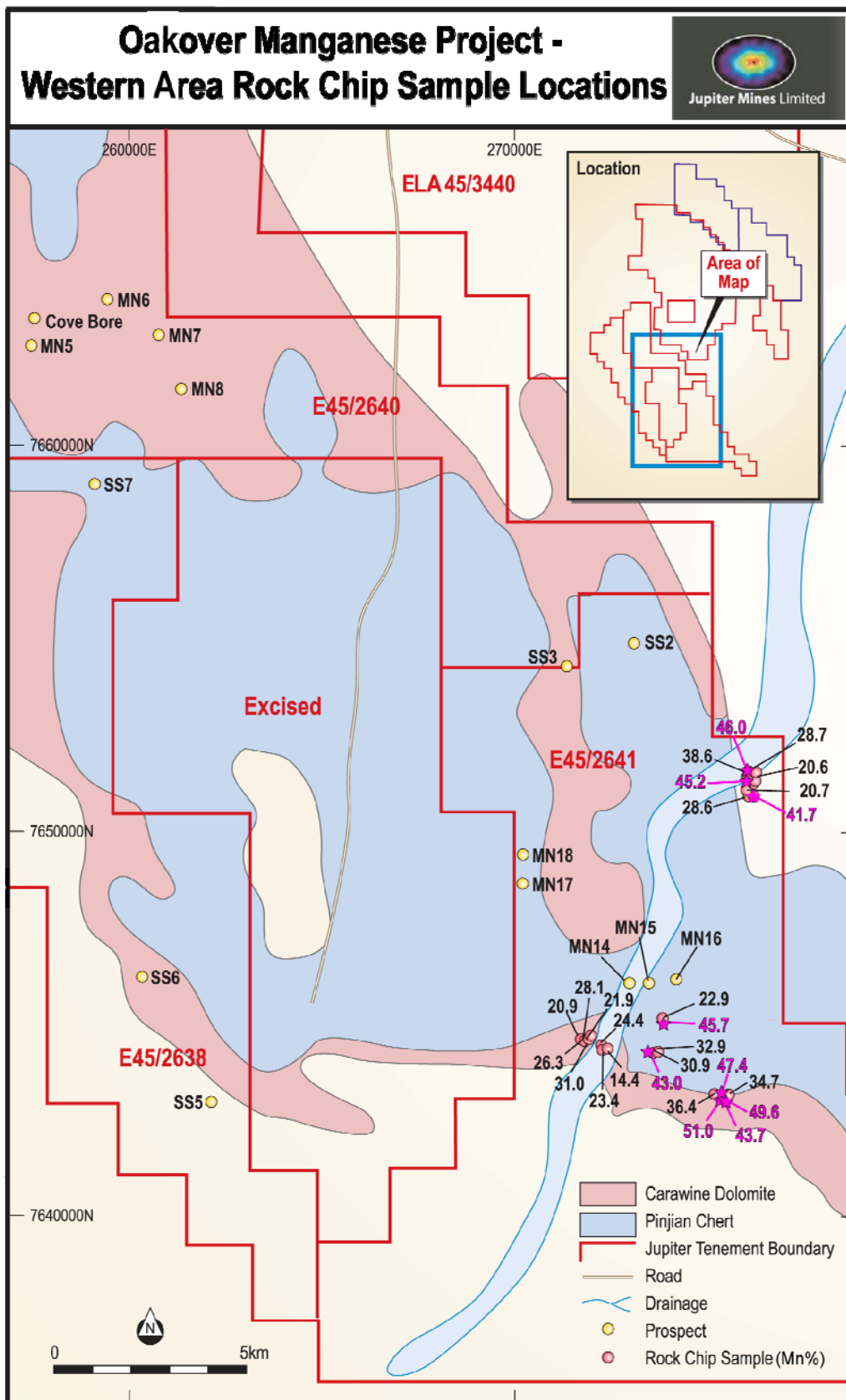
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# Oakover Manganese Project



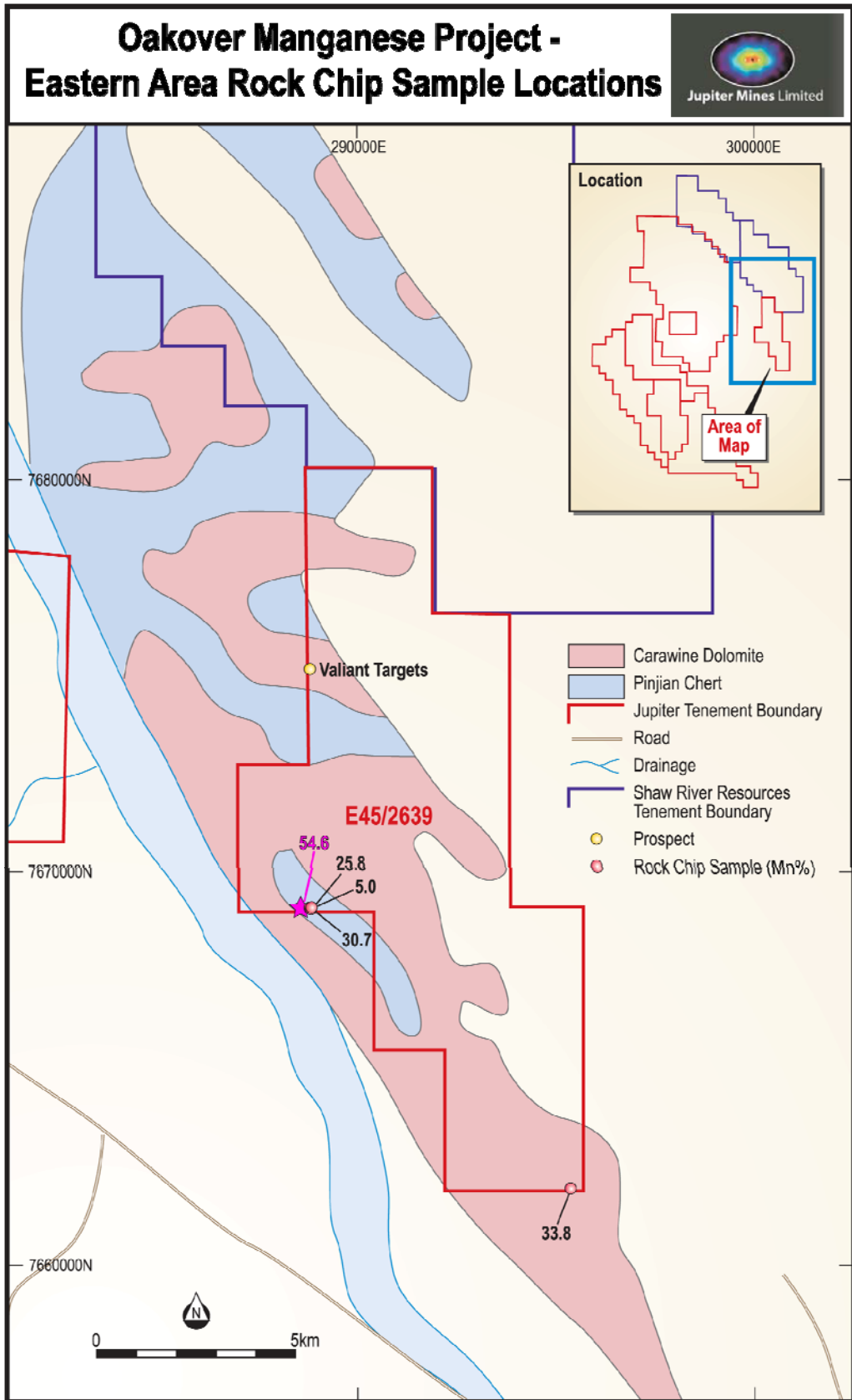
Attachment 1. Oakover Manganese Project

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Attachment 2. Western Area Rock Chip Sample Locations

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Attachment 3. Eastern Area Rock Chip Sample Locations