



Lodestar Minerals Limited ABN 31 127 026 528

**Registered office**  
Level 2  
45 Stirling Highway  
Nedlands WA 6009

**Tel:** +61 8 9389 8799  
**Fax:** +61 8 9389 8327

**Postal address**  
PO Box 985  
Nedlands WA 6909

**Website**  
[www.lodestarminerals.com.au](http://www.lodestarminerals.com.au)

28 April 2008

### **Detailed EM survey to continue over Abattoir prospect**

- **RC drill program confirms nickel sulphide mineralisation**
- **Regional targets identified in exploration data review**

Lodestar Minerals Limited ("Lodestar") will continue a detailed moving loop electromagnetic survey of its Abattoir prospect near Kambalda after discovering nickel sulphide mineralisation during its recent RC drilling program.

Managing Director Bill Clayton said Lodestar was encouraged by the evidence of nickel sulphide mineralisation in LAPC001, which was one of four drill holes to test the historic nickel sulphide intersections in DDH-7 and DDH-8 that were drilled by Placer in 1970-1971.

DDH-7 and DDH-8 were shallow vertical drill holes that tested the contact between an interpreted gabbro footwall and serpentinised cumulate ultramafic.

Lodestar's nickel project area covers approximately 332m<sup>2</sup> of highly prospective ground in the eastern Goldfields between Kalgoorlie and Kambalda in WA. It is just 12 kilometres from Kambalda and has excellent access to infrastructure.

"We regard the Abattoir ultramafic sequence as a high priority exploration target that will be systematically tested during the coming weeks," Mr Clayton said.

"We have undertaken about 20 per cent of the moving loop EM program and have approximately 8 kilometres of strike remaining to be surveyed."

Drill holes LAPC001 – LAPC004 were drilled at -60° to the west to test beneath the historic intersections to a vertical depth of 130m.

LAPC001 and LAPC002 drilled below DDH-8 while LAPC003 and LAPC004 drilled below DDH-7. The holes were drilled on approximate 40m centres and all intersected the gabbro-ultramafic contact as planned.

The results from LAPC001 confirmed the presence of nickel sulphide mineralisation on the contact position, returning:

- **0.46% Ni, 0.08% Cu, 231ppb Pd and 54ppb Pt between 90 - 96m; and**
- **0.49% Ni, 0.13%Cu, 481ppb Pd and 111ppb Pt between 105 - 108m.**

Drill holes LAPC002 and LAPC004 intersected minor mineralisation on or near the contact position. The recent drilling demonstrated that the gabbro footwall to the ultramafic sequence is intrusive and has disrupted the eastern contact and this may explain the lack of continuity of the mineralisation intersected in the historic drilling.

A detailed moving loop electromagnetic (MLEM) survey has been completed on three lines over the Abattoir prospect and both LAPC002 and LAPC004 have been surveyed using down hole EM methods. The results of the geophysical surveys indicate that there are no significant conductors in the immediate area and therefore reduce the possibility of massive – sulphide style mineralisation at shallow depth below the Abattoir prospect.

Although the drilling program failed to repeat the historic intersections reported from the Placer drilling, it has confirmed the presence of disseminated nickel sulphide mineralisation within the ultramafic sequence and reinforces the concept of the Abattoir ultramafic as a high priority exploration target.

HOLE ID	NORTHING AMG 84	EASTING AMG 84	From (m)	To (m)	Au ppb	Pt ppb	Pd ppb	Ni ppm	Cu ppm
LAPC001	6566348.19	359903.08	90	91	62	54	232	4080	978
LAPC001			91	92	61	63	264	4550	1090
LAPC001			92	93	41	56	244	4440	760
LAPC001			93	94	22	40	166	4900	626
LAPC001			94	95	32	63	275	4370	722
LAPC001			95	96	45	47	205	5600	784
LAPC001			105	106	190	150	621	5480	2290
LAPC001			106	107	132	111	496	5100	566
LAPC001			107	108	91	73	326	4250	1140
LAPC002	6566358.58	359939.06	150	152				5360	86
LAPC004	6566296.6	359919.34	100	104				4200	248

**Table 1 Significant Results - Abattoir Drilling**

### Exploration Review

- A review of historic gold exploration data has identified anomalous nickel-copper values in shallow RAB/aircore drilling. These targets include:
  - 8m @ 0.22% Ni and 465ppm Cu from 40 metres in weathered ultramafic in drill hole SSA512 located at 354244E 6563464N
  - 12m @ 0.2% Ni and 422ppm Cu from 32 metres in weathered ultramafic in drill hole 97SDR042 located at 348704E 6561480N
  - 17m @ 0.26% Ni and 593ppm Cu from 50m, **including 5m @ 0.5% Ni and 900ppm Cu from 60m**, in weathered ultramafic in drill hole FRA\_72000\_07 located at 346000E 6572200N
- A significant Cu anomaly coincident with the eastern limb of the Saddle Hills ultramafic sequence has been identified from a historic, gold - focused auger sampling program

The drill hole anomalies occur in clay-weathered ultramafic lithologies on both the western and eastern limbs of the Saddle Hills ultramafic sequence, in areas of no or minimal outcrop, that have not been subject to sub-surface nickel exploration. The anomalies represent previously unrecognised nickel sulphide targets in areas of poorly defined ultramafic stratigraphy and will be investigated further during 2008.

Hole ID	EASTING AMG 84	NORTHING AMG 84	Depth from	Depth to	Cu ppm	Ni ppm
97SDAC001	348264	6561925	28	32	258	1900
97SDR042	348704	6561480	32	36	284	1990
			36	40	390	2260
			40	44	849	1740
97SDR063	348143	6562304	40	44	270	2200
FRA_72000_05	346050	6572000	34	39	380	1450
FRA_72200_07	346000	6572200	50	55	470	1400
			55	60	380	1800
			60	65	900	5000
			65	67	670	1600
FRA_74400_04	345650	6574400	23	28	660	1180
MCA72000_2	347800.3	6571999.6	37	41	275	4700
SSA512	354244.02	6563464.12	14	16	258	1970
			40	42	272	2720
			42	44	642	1620
			44	46	522	2090
			46	48	424	2640
SSA512A	360550	6560950	14	16	258	1970
			40	42	272	2720
			42	44	642	1620
			44	46	522	2090
			46	48	424	2640

**Table 2 Ni-Cu anomalies identified in historic gold exploration data**

Historic auger sampling over the Saddle Hills ultramafic sequence returned highly anomalous Cu values coincident with the ultramafic sequence and associated aeromagnetic feature. The Cu anomaly extends over a strike length of one kilometre with Cu values ranging up to 740ppm. Ni values generally range between 20 to 100ppm.

A Cu anomaly of this size and magnitude suggests a sulphide source, possibly related to the underlying ultramafic sequence. The location of coincident Ni-Cu anomalies in surrounding drill holes FRA\_72000\_05, FRA\_72200\_07, FRA\_74400\_04 and MCA72000\_2 is believed to be significant. Consequently, this area represents a priority target for future MLEM surveys - following completion of the Abattoir program.

The results of the exploration review are considered very encouraging for future exploration success on the Penfold Nickel Project (PNP) as they indicate potential for nickel sulphide mineralisation within the Saddle Hills ultramafic sequence – the second major ultramafic sequence located within the PNP, representing approximately 21 kilometres of strike extent.

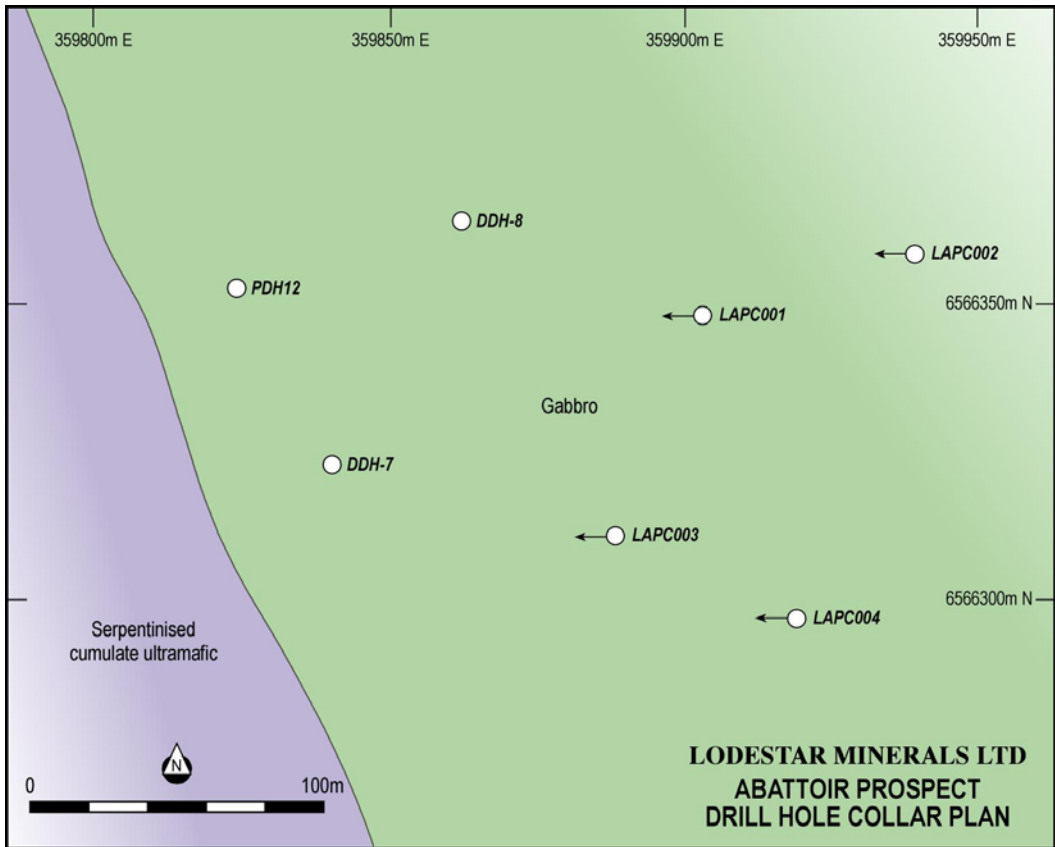


Figure 1 Drill hole collar plan

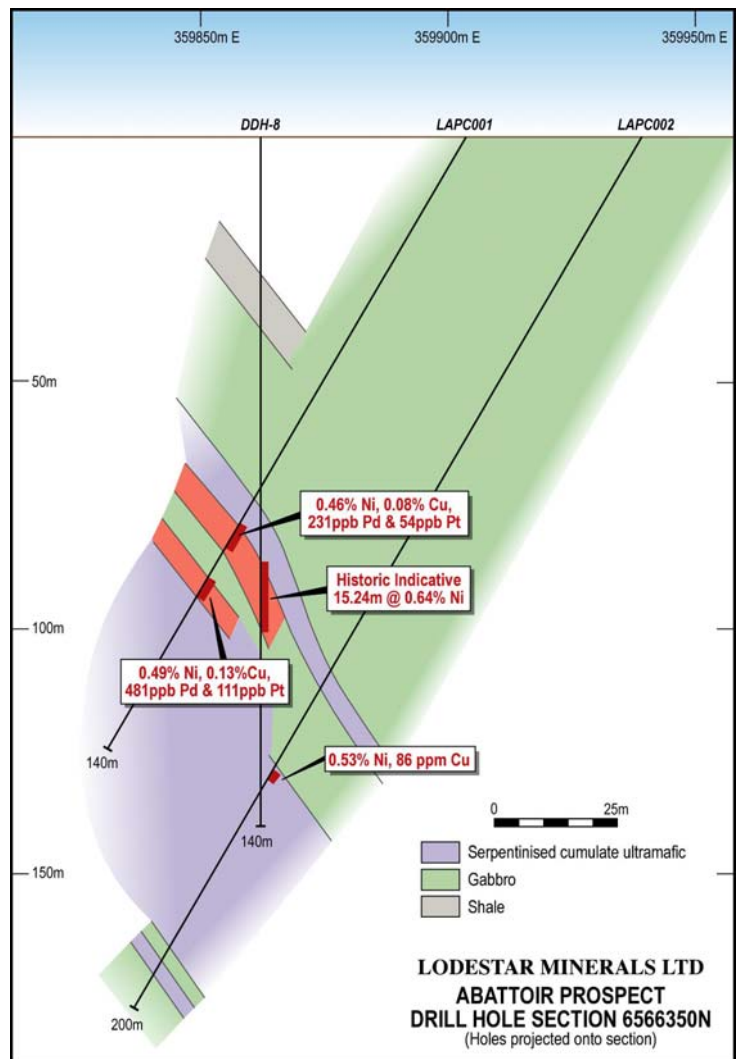


Figure 2 Interpreted drill hole section 6566350N

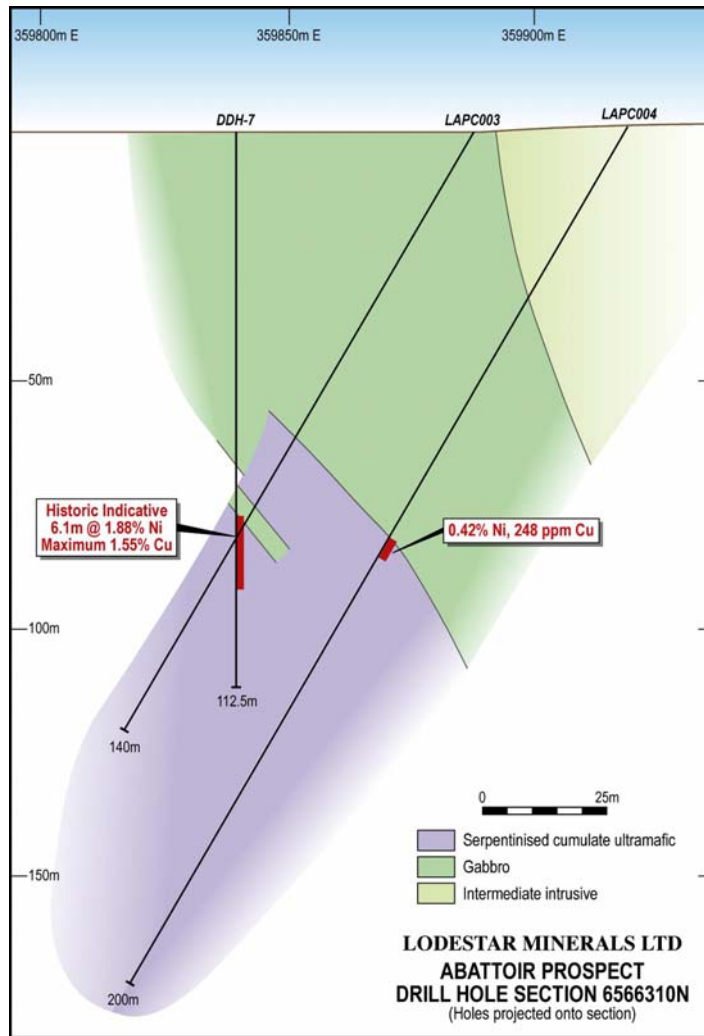


Figure 3 Interpreted drill hole section 6566310N

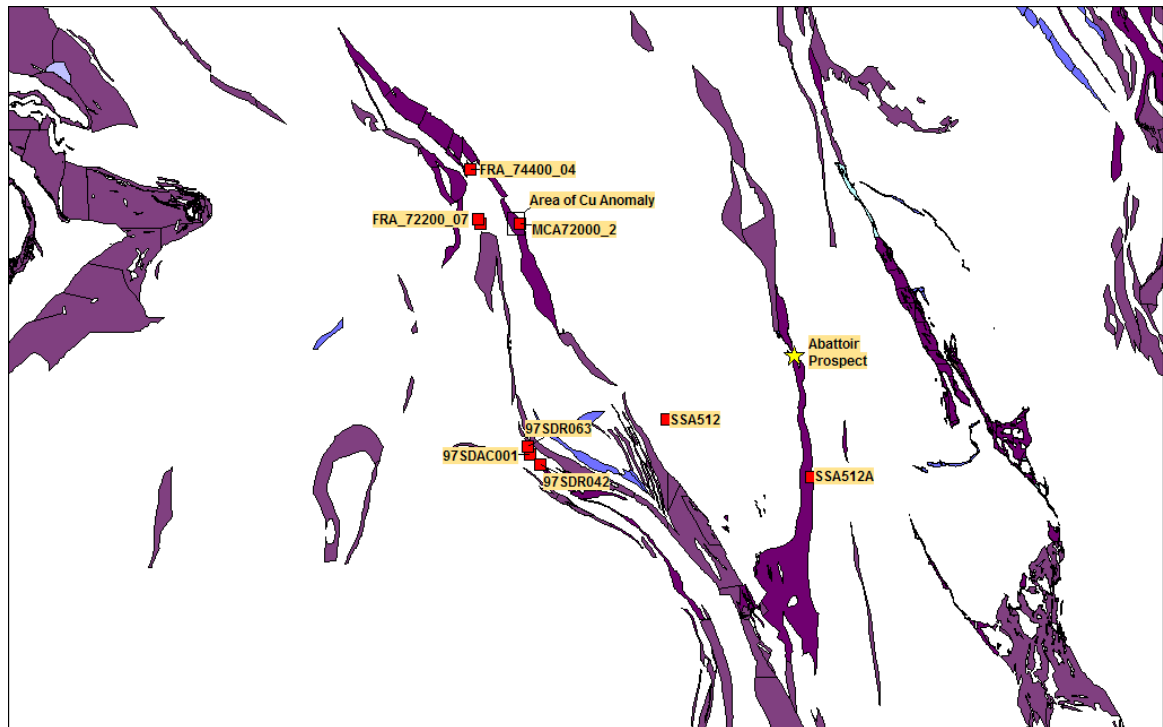


Figure 4 Location of drill hole Ni-Cu anomalies showing distribution of major ultramafic units

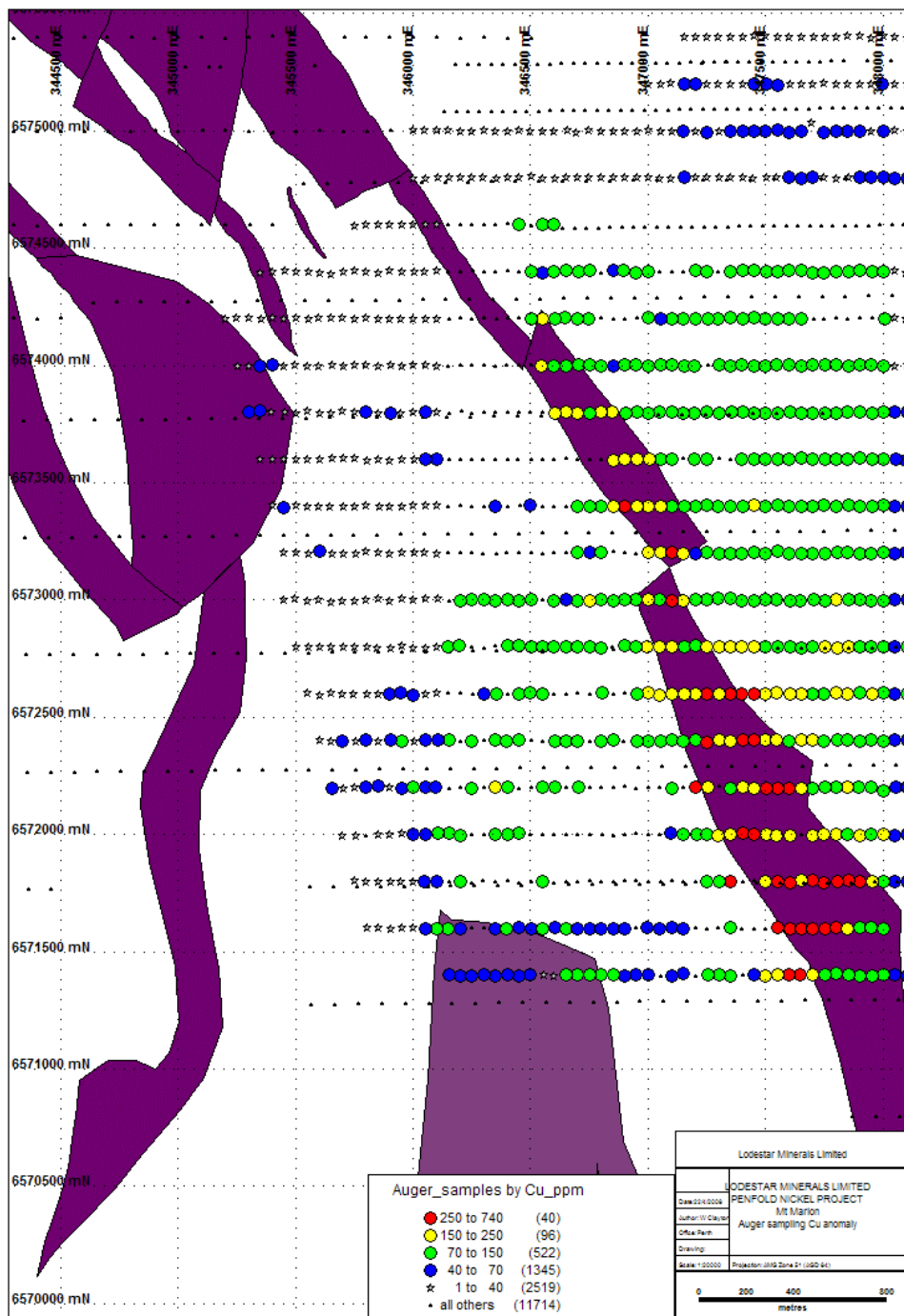


Figure 5 Saddle Hills auger sampling showing Cu anomalism in relation to ultramafic units

For further information, visit [www.lodestar.com.au](http://www.lodestar.com.au) or contact:

Bill Clayton  
Managing Director  
T: 9389 8799

Peter Harris  
Professional Public Relations  
T: 9388 0944

Yours faithfully  
**LODESTAR MINERALS LIMITED**



**BILL CLAYTON**  
Managing Director

**Competent Person Statement**

*The information in this report that relates to Exploration Results is based on information compiled by Bill Clayton, Managing Director, who is a Member of the Australasian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2004 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Clayton consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.*