

NEW SOUTH WALES

ALKANE AWARDED NSW EXPLORER OF THE YEAR

At the NSW Miners and Explorers Conference in Sydney on 18 October, Alkane was awarded the inaugural “Explorer of the Year” by Mr Kerry Hickey MP, Minister for Mineral Resources. The award was recognition of Alkane’s outstanding contribution to the industry in New South Wales.

TOMINGLEY GOLD PROJECT (TGP)

Alkane 100% subject to separate royalty agreements with Compass Resources NL, Golden Cross Operations Pty Ltd and Climax Mining Ltd.

The TGP hosts the **Wyoming** gold deposits. Geological modelling has identified a bulk resource of **6.38 million tonnes grading 2.43g/t gold** at 0.75g/t gold cut off (**498,000 ounces**) or **5.26 million tonnes grading 2.76g/t gold** at 1.00g/t gold cut off (**467,000 ounces**).

As advised to the ASX on 11 October, resource modelling with the aim of improving open pit grades and to determine the continuity of higher grade structures for possible underground mining continued as part of the pre-feasibility study. A program of RC (4,450m) and aircore (2,508m) drilling was undertaken to test some of the concepts and continue the exploration for additional open pit resources within proximity to the Wyoming deposits.

The positive results generated by this drilling program continue to support the continuity of high grade shoots within Wyoming One with an intersection in the **Hangingwall Zone of 17m @ 4.72g/t gold including 9m @ 6.70g/t gold**, and several intersections in the ‘376’ structure including **12m @ 3.45g/t gold including 6m @ 5.93g/t gold** and **9m @ 2.94g/t gold including 3m @ 7.54g/t gold**.

Wyoming Resource Development Drilling

A 14 hole RC drilling program (3,448m) was completed to test the potential for extensions to high grade shoots identified by the resource drilling programs at Wyoming One (figure 1). Persistent rain and farm cropping activities have delayed the program and limited access to some targets at this time, but specific areas tested were the east-west ‘376’ structure and the north north-west trending Hangingwall Zone.

The Hangingwall Zone (HWZ) is associated with a steep east dipping carbonaceous siltstone which has been traced over a strike length of more than 300 metres, within which a number of high grade intersections have previously been recorded. Gram-metre plots (figure 2) had indicated a north plunging shoot which was apparently thickening and improving in grade with depth. Five holes were spaced around this shoot to test its lateral extent and down dip potential.

WY 812 returned a substantial intercept (**17m @ 4.72g/t Au including 9m @ 6.70g/t Au**) at 270 metre vertical depth, demonstrating that this shoot has developing resource potential. Diamond core hole WY 811D has been precollared and has a projected pierce point a further 125 metres vertically (approximately 400m deep). The core component of this hole is scheduled to commence late October.

Five RC holes were drilled test the east-west trending ‘376’ structure and to determine the orientation of higher grade shoots within this zone, and also to confirm continuity of higher grades within the feldspar porphyry to the south of ‘376’. All holes intersected the ‘376’ structure and the gram-metre plot (figure 3) has assisted with the orientation of the higher grade zones.

WY 816 intersected mineralisation on the east contact of the porphyry (**39m @ 4.36g/t Au including 3m @ 32.2g/t Au**) before intersecting the ‘376’ (**12m @ 3.45g/t Au including 6m @ 5.93g/t Au**). WY 817 returned broad low grade zones within the porphyry, the hole also tested an internal porphyry structure (**6m @ 5.12g/t Au**) before intersecting the ‘376’ (**9m @ 2.94g/t Au including 3m @ 7.54g/t Au**) at around 220 metres vertical depth, the deepest yet achieved in this zone. Diamond core hole WY 821D has been precollared with a target intercept at around 300 metres vertical depth, 75 metres below WY 817.

Resource drilling summary:

Hole No	East	North	Azimuth	Intercept (m)	Grade (g/t Au)	Interval (m)	EOH (m)	Target Zone
WY 810	614310	6393335	270°	3	3.33	294 – 297	330	Hangingwall
WY 811D	614422	6393215	267°	Core	Precollar		324	Hangingwall
WY 812	614320	6393240	270°	17	4.72	297 – 314	314	Hangingwall
incl				9	6.70	300 – 309		
WY 814	614365	6393138	270°	6	1.11	248 - 254	276	Hangingwall
WY 816	614103	6393280	360°	39	4.36	45 - 84	216	Porphyry
incl				3	32.20	45 - 48		
and				27	1.15	93 - 120		
and				9	1.07	159 - 168		
and				12	3.45	183 - 195		'376'
incl				6	5.93	183 - 189		
WY 817	614097	6393235	360°	9	1.42	96 - 105	294	New Zone
and				54	1.47	156 - 210		Porphyry
incl				6	5.12	165 - 171		
and				9	2.94	267 - 276		'376'
incl				3	7.54	270 - 273		
WY 818	614055	6393245	360°	45	1.33	39 - 84	276	New Zone
and				21	1.06	114 - 135		
and				30	1.70	222 - 252		Porphyry
incl				3	5.39	225 - 228		
and				9	2.41	240 - 249		'376'
WY 819	614055	6392375	360°	6	1.25	111 - 117	216	New Zone
and				12	1.33	177 - 189		Porphyry
and				9	1.98	198 - 207		'376'
incl				3	4.16	198 - 201		
WY 820	614030	6393283	360°	3	1.01	99 - 102	210	
and				6	1.18	168 - 174		'376'
and				15	0.88	183 - 198		
incl				3	2.38	186 - 189		
WY 821D	614082	6393195	360°	Core	Precollar		162	'376'

All holes drilled at a nominal inclination of -60°. Gold analysis by 30g fire assay of 3 metre composites.

Two RC holes, WY 809 and 815, tested extensions to the Footwall Zone but both intersected only minor alteration and veining with low grade gold values.

Exploration Drilling

Two RC holes (398m) were drilled to test the orientation of mineralised zones at the **Tomingley Two** target, located 3km north of Wyoming Three. Hole TO 233 generated several intercepts, including **3m @ 4.59g/t Au**, while TO 224 failed to penetrate the thick clay cover.

At **McLeans** located to the south of Wyoming One, four RC holes (606m) tested the continuation of the mineralisation intersected on the southern section of this zone. The results were mixed and further review of this zone is required to determine its resource potential.

A small aircore drilling program also tested the southerly extension to McLeans and to determine the extent of an alteration zone previously identified at Patons East. At **McLeans** 39 holes (1866m) tested a large aeromagnetic anomaly with several holes (MCAC 030, 032, 033) on the most southerly line returning anomalous results.

Patons East is located approximately 1.2km east north-east of Wyoming Three and 16 holes (942m) were drilled to follow up alteration adjacent to previously unknown feldspar porphyry. PE 004 intersected alteration and quartz veining with a **6m intercept returned 2.25g/t Au**. This zone is east of the north-south Tomingley

structural corridor and at this stage appears to have a different orientation, and it may constitute a significant new target.

Exploration drilling summary:

Hole No	East	North	Azimuth	Intercept (m)	Grade (g/t Au)	Interval (m)	EOH (m)	Target Zone
TO 223	615085	6398800	270°	3	4.59	111 – 114	246	Tomingley 2
and				3	1.67	180 – 183		
and				6	1.36	192 - 198		
and				21	0.66	213 – 234		
MCP 061	614300	6391300	270°	6	1.66	105 - 111	144	McLeans
MCAC 030	614060	6390900	270°	9	0.65	51 - 60	61	McLeans
MCAC 032	614019	6390900	270°	3	0.85	45 – 48	61	McLeans
MCAC 033	614101	6390898	270°	3	0.75	36 – 39	50	McLeans
PE 004	615120	6394700	90°	6	2.25	54 – 60	65	Patons East
PE 009	615360	6394450	90°	3	0.57	24 – 27	53	Patons East

All holes drilled at a nominal inclination of -60°. Gold analysis by 30g fire assay of 3 metre composites.

Further RC and core drilling is being planned to continue the compilation of a new resource model for the Wyoming One deposit and to determine an optimum development scenario for this substantial deposit. Timing of the drilling will be dependent on drill rig availability.

DUBBO ZIRCONIA PROJECT

Australian Zirconia Ltd (AZL) 100%, subject to Astron Limited earning 50%

The review of potential process flow sheet optimisations and modifications continued.

PEAK HILL GOLD MINE

Alkane Exploration Ltd 100%

523 ounces of gold were produced for the September Quarter. Decommissioning of the heaps is continuing and gold will continue to be produced from these operations till the end of this year, generating a small cash surplus.

BODANGORA (gold-copper)

Alkane Exploration Ltd 100%, subject to royalty agreement with Rio Tinto Exploration Pty Limited

The high resolution aeromagnetic and radiometric survey of 1,735 line kilometres completed last quarter is being processed to assist with the geological and structural interpretation of the tenement. This data will be combined with the existing database to guide further target testing.

WELLINGTON (copper-gold)

LFB Resources NL 100%

The Wellington Project is centred 15 kilometres to the south east of the town of Wellington. The project hosts several targets, including the Federal gold and **Galwadgere** copper-gold prospects. Most work by Alkane to date has focussed on Federal but the improving copper price over the last year prompted a reassessment of the potential of Galwadgere.

Following the copper-gold intersections recorded from the **Galwadgere** prospect in May (**GAL 008 47m @ 0.90% Cu and 1.58g/t Au**), a resource drilling program commenced in October to advance the body to Indicated Resource status. Approximately 2,500 metres of RC drilling will test a 400 metre strike length of the known mineralisation on 50 metre centres down to a vertical depth of approximately 150 metres.

The mineralisation at Galwadgere had been traced over a strike length of at least 300 metres on the surface, is up to 30 metres wide and has been tested to a depth of 280 metres, although the bulk of the drilling is above 200 metre vertical depth. The system dips to the east at about 60°, and there is an apparent plunge to the north at 45-

50°. Limited metallurgical work was completed in 1980 and this indicated that the sulphide mineralisation was readily amenable to upgrade by gravity or heavy media separation techniques.

Alkane's drilling in May intersected altered volcanics hosting broad widths of disseminated pyrite-chalcopyrite mineralisation with occasional massive sulphide lenses up to 5 metres thick. While the deposit has previously been categorised as a Volcanogenic Massive Sulphide (VMS) type deposit, and there is some evidence of metal zonation, later structural overprint may have modified the distribution of the metals. The higher gold grades intersected by **GAL008 (9m @ 6.94g/t Au)** and the previous drilling, may be controlled by more discrete structures within the broader alteration zone.

At this stage the mineralised system is open to the south, north and down dip with the deepest hole previously completed, demonstrating continuity of the broad alteration zone and higher grade massive sulphide lenses at a vertical depth of approximately 280 metres (**G040 ~44m @ 0.7% Cu with 0.25m @ 3.50% Cu, 15.5g/t Au, 230g/t Ag**). Galwadgere has the potential to host an open pitable resource with flotation/concentration recovery to produce a copper-gold concentrate.

ORANGE-MOLONG (copper-gold)

LFB Resources NL 100%

The auger soil geochemical survey continued to test structural targets identified on aeromagnetic images covering the area immediately to the south of the Charlies zone where previous drilling has intersected narrow high grade gold-copper intercepts associated with altered monzonite intrusives. Several discrete gold anomalies, up to 150ppb, have been recorded associated with aeromagnetic targets.

MOORILDA (copper-gold)

LFB Resources NL 100%

The high resolution aeromagnetic and radiometric survey of 5,240 line kilometres completed last quarter is being processed to assist with the geological and structural interpretation of the tenement. This data will be combined with the existing database to guide further target testing.

CUDAL (gold-copper)

Alkane Exploration Ltd 100%, subject to royalty agreement with Rio Tinto Exploration Pty Limited

The high resolution aeromagnetic and radiometric survey of 3,200 line kilometres completed last quarter is being processed to assist with the geological and structural interpretation of the tenement. This data will be combined with the existing database to guide further target testing.

WESTERN AUSTRALIA

LEINSTER REGION JOINT VENTURE (nickel-gold)

Alkane Exploration Ltd 49%, Jubilee Mines NL 51%

*The four prospects - **Leinster Downs, Miranda, McDonough Lookout and Mt Keith** - are subject to a farm-in agreement with Jubilee Mines NL where Jubilee can earn a 75% interest in the properties by spending \$4.5M before March 2005. In March 2002 Jubilee reported expenditures to earn a 51% interest and have elected to continue to earn a further 24%.*

Jubilee have advised that no field work was carried out during the quarter.

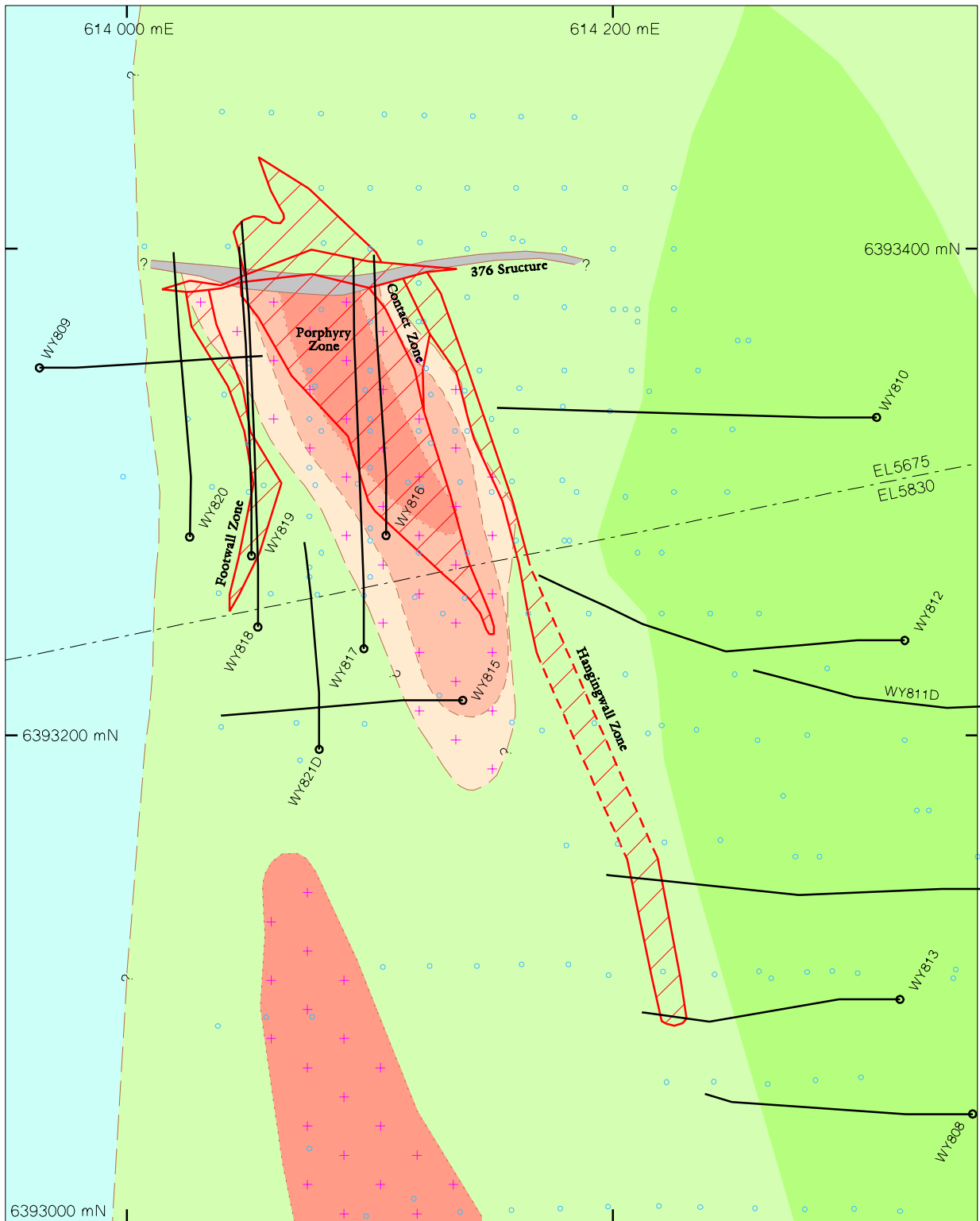
NULLAGINE DIAMOND PROJECT (Western Australia) and WAITANGI (New Zealand) were inactive

DI Chalmers











Technical Director

ALKANE EXPLORATION LTD

Unless otherwise stated this report is based on information compiled by Mr DI Chalmers, FAusIMM, FAIG, a director of the Company, who is a competent person as defined in the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves, September 1999, and accurately reflects the information compiled by the competent person.



Legend

-  Mineralized zone
-  376 Structure
-  Massive, well foliated pelitic siltstone (Cotton Formation)
-  Crowded feldspar +/- pyroxene phytic volcanics and high-level intrusives 200m RL (-70m)
-  Crowded feldspar +/- pyroxene phytic volcanics and high-level intrusives 100m RL (-170m)
-  Crowded feldspar +/- pyroxene phytic volcanics and high-level intrusives 0m RL (-270m)
-  Andesitic volcanoclastic sandstones, siltstones and minor conglomerates
-  Strongly sheared, chlorite-talc schist (Ultramafic?)
-  Alkane drillhole October Quarter 2004
-  Previous Alkane drillhole collar

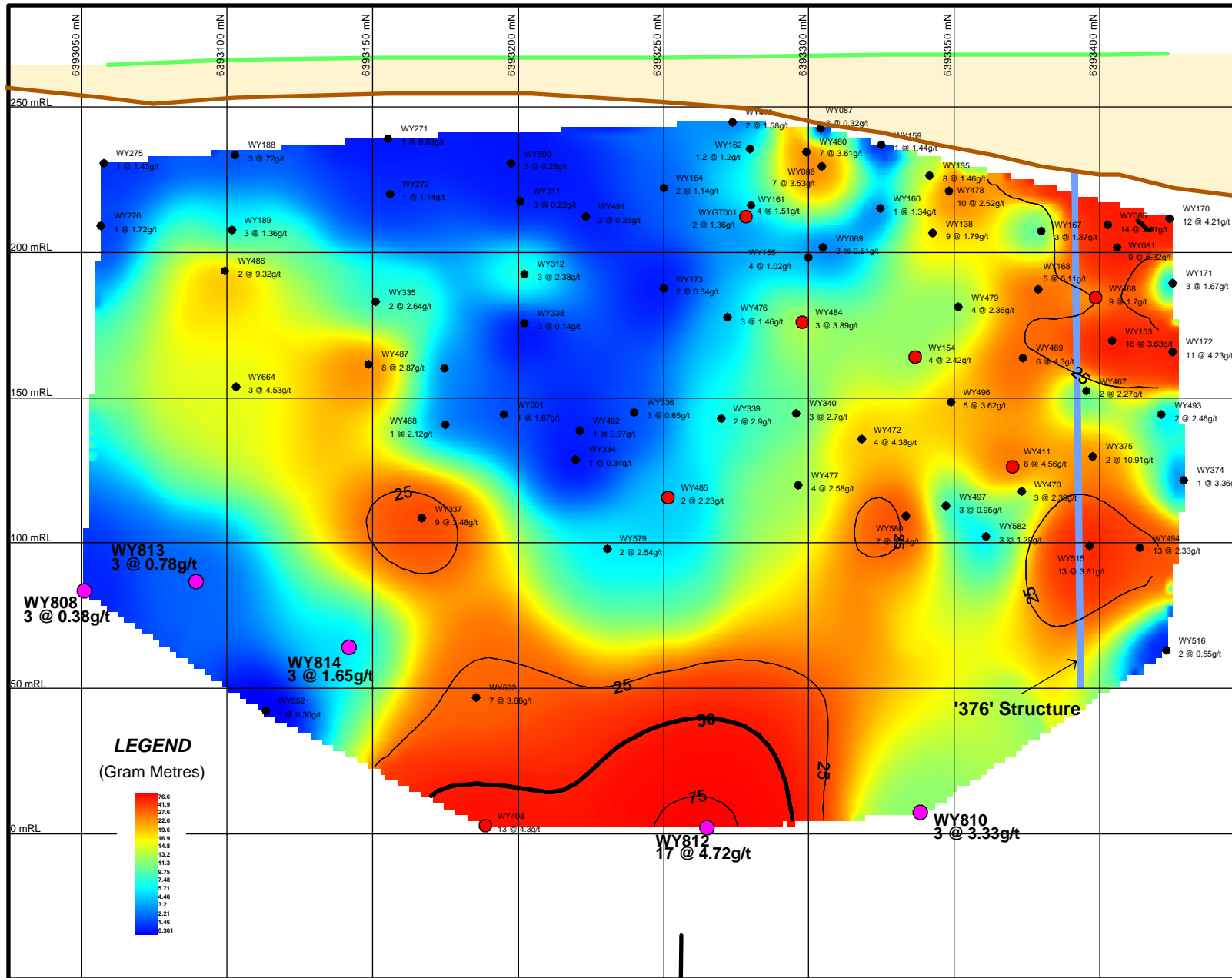


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**TOMINGLEY GOLD PROJECT
WYOMING PROSPECT**

**Wyoming One
Simplified
Geological Interpretation
and Drillhole Locations**

October Quarter 2004



GEOLOGICAL LEGEND



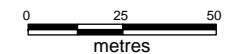
DRILL HOLE LEGEND

- RC/AC drill hole showing Intercept & Grade
- WY411 Diamond drill hole showing Intercept & Grade
- Recently completed drill hole

DRILL HOLE INTERCEPTS

- WY810 - 3m @ 3.33g/t
- WY812 - 17m @ 4.72g/t

Scale 1:2,000

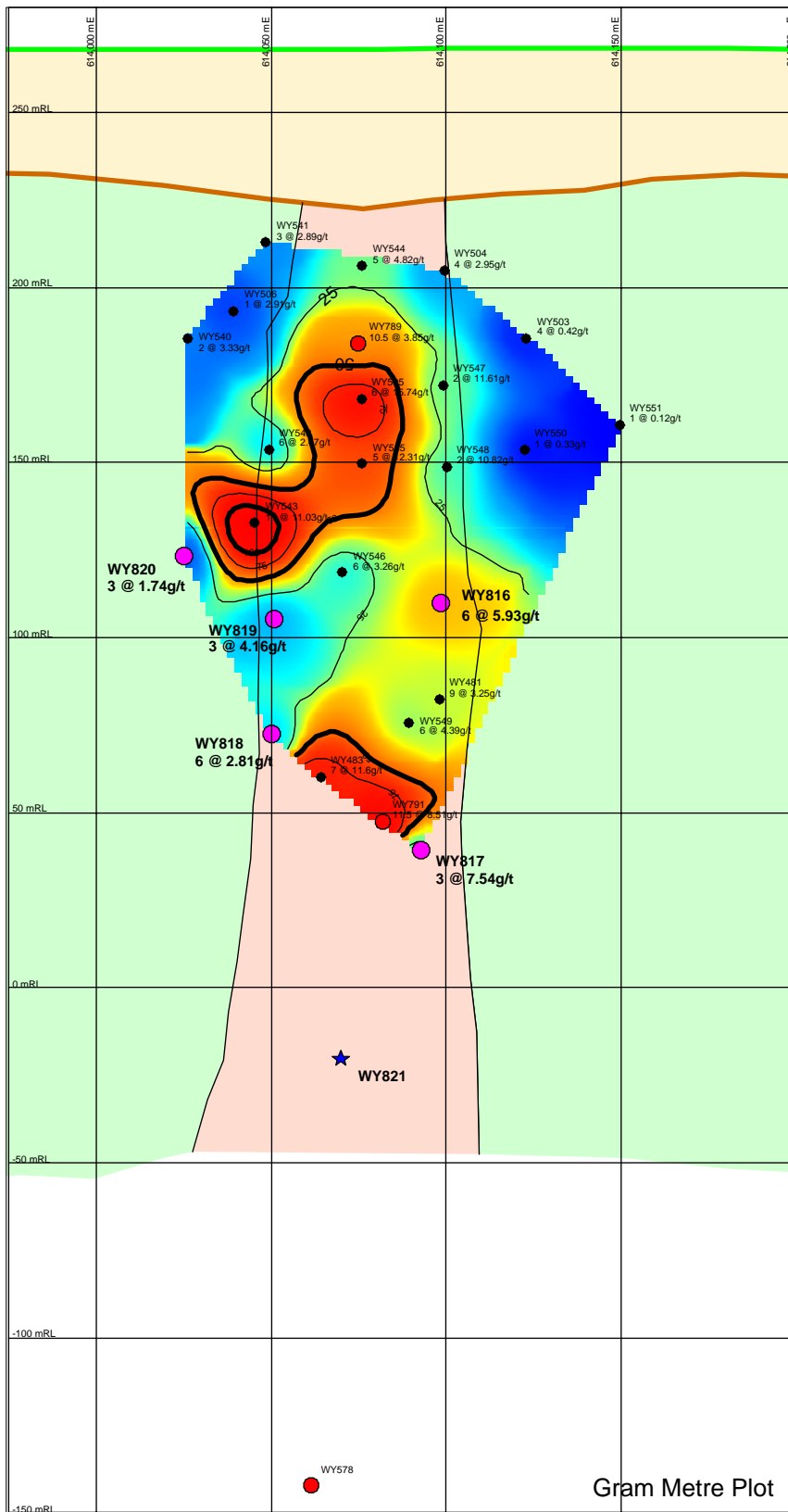


ALKANE EXPLORATION LTD
 ABN 35 000 689 216

TOMINGLEY GOLD PROJECT
 NEW SOUTH WALES

Wyoming One Prospect
Hangingwall Zone
Long Section

↓ Approx pierce point
 WY811
 -70m below section



GEOLOGICAL LEGEND

- Alluvials
- Feldspar porphyry
- Andesitic volcanoclastic sediments

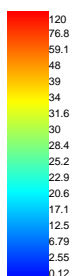
DRILL HOLE LEGEND

- WY506 ● RC drill hole showing Intercept & Grade
1 @ 2.91g/t
- WY791 ● Diamond drill hole showing Intercept & Grade
11.5 @ 8.51g/t
- Recently completed drill hole
- ★ Approximate position of diamond
drill hole WY821

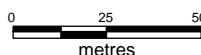
DRILL HOLE INTERCEPTS

- WY816 - 39m @ 4.36g/t (Contact)
- WY816 - 6m @ 5.93g/t ('376')
- WY817 - 54m @ 1.47g/t (Porphyry)
- WY817 - 3m @ 7.54g/t ('376')
- WY818 - 45m @ 1.33g/t
- WY818 - 30m @ 1.70g/t (Porphyry)
- WY818 - 9m @ 2.41g/t ('376')
- WY819 - 12m @ 1.33g/t
- WY819 - 3m @ 4.16g/t ('376')

LEGEND (Gram Metres)



Scale 1:2,000



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TOMINGLEY GOLD PROJECT
NEW SOUTH WALES
Wyoming One Prospect
'376' Zone
Long Section