Deep Yellow Limited

ASX Announcement **ASX Code: DYL**

First Mount Isa JORC Code Resources

14 January 2010

Initial **Indicated and Inferred Mineral Resource** estimates provided to **Deep Yellow Limited (DYL) by Coffey Mining Pty Ltd (Coffey)** for a number of prospects in the Mount Isa District, Queensland meet DYL's short to medium term strategic objective to outline mineralisation amenable to open pit mining and aggregating **5,000 to 8,000 tonne (11 Mlb to 18 Mlb) of U_3O_8** as satellites to a future central plant in the Mount Isa area. The medium to long term target is to define **12,000 to 15,000 tonne U_3O_8** based on feeding a central processing plant from combined open pit and underground operations.

During 2009 exploration focussed on the RC drill-out of five of fifteen currently defined DYL uranium prospects with a view to outlining potential open pit resources at ~ 400 ppm U_3O_8.

Using a 300 ppm U_3O_8 cut-off the Indicated and Inferred Mineral Resource estimate for the Isa West - Thanksgiving, Bambino and Eldorado North Prospects and the Queens Gift and Slance Prospects totals 3.64 million tonne at 420 ppm U_3O_8 for 1,540 tonne (3.4 Mlbs) of U_3O_8 (Table 1).

Using a 200 ppm U_3O_8 cut-off increases the resource to **2,430 tonne at 340 ppm U_3O_8** indicating a significant potential upside available with decreased operating costs, beneficiation and/or increased uranium prices.

A summary of Coffey's Report is attached as Appendix 1.

Table 1: All Prospects Combined – January 2010 JORC Code Resource Estimate

Category	Cut-off Grade	Tonnes	Grade (ppm U_3O_8)	Metal (Tonnes U_3O_8)	Metal (Mlb U_3O_8)
Inferred	> 200	4,280,000	340	1,440	3.2
	> 300	**2,020,000**	**440**	**890**	**2.0**
Indicated	> 200	2,980,000	330	990	2.2
	> 300	**1,620,000**	**400**	**660**	**1.4**
Combined	> 200	7,260,000	340	2,430	5.4
	> 300	**3,640,000**	**420**	**1,540**	**3.4**

* Note: Figures have been rounded

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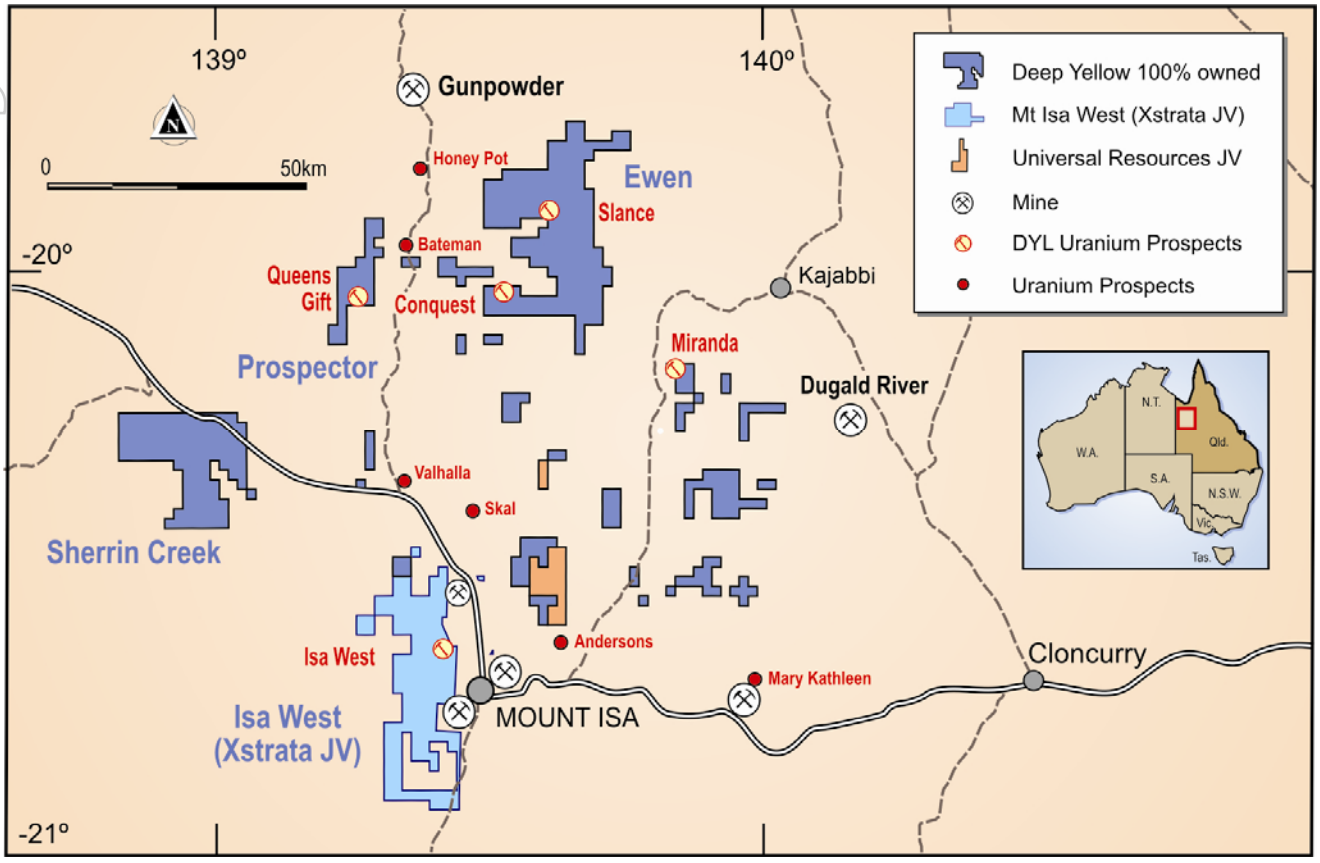

Figure 1: Project Locations

The details of the Indicated and Inferred Resource estimates for each of the Prospects is given in Tables 2 and 3.

Table 2: Isa West Project – January 2010 JORC Code Resource Estimate

Category	Cut-off Grade	Tonnes	Grade (ppm U_3O_8)	Metal (Tonnes U_3O_8)	Metal (Mlb (U_3O_8)
Thanksgiving Prospect					
Inferred	> 200	1,180,000	370	440	1.0
	> 300	**660,000**	**470**	**310**	**0.7**
Indicated	> 200	800,000	340	270	0.6
	> 300	**470,000**	**400**	**190**	**0.4**
Combined	> 200	1,980,000	360	710	1.6
	> 300	**1,130,000**	**440**	**490**	**1.1**
Bambino Prospect					
Inferred	> 200	1,410,000	310	430	0.9
	> 300	**670,000**	**370**	**240**	**0.5**
Indicated	> 200	790,000	320	250	0.6
	> 300	**370,000**	**390**	**140**	**0.3**
Combined	> 200	2,200,000	310	680	1.5
	> 300	**1,040,000**	**370**	**390**	**0.9**
Eldorado North Prospect					
Inferred	> 200	260,000	410	110	0.2
	> 300	**160,000**	**500**	**80**	**0.2**
Combined	> 200	260,000	410	110	0.2
	> 300	**160,000**	**500**	**80**	**0.2**
Total Isa West					
Inferred	> 200	2,850,000	340	970	2.1
	> 300	**1,490,000**	**420**	**630**	**1.4**
Indicated	> 200	1,590,000	330	520	1.1
	> 300	**840,000**	**390**	**330**	**0.7**
Combined	> 200	4,440,000	340	1,490	3.3
	> 300	**2,330,000**	**410**	**960**	**2.1**

* Note: Figures have been rounded

Table 3: Isa North Prospects – January 2010 JORC Code Resource Estimate

Category	Cut-Off Grade	Tonnes	Grade (ppm U_3O_8)	Metal (Tonnes U_3O_8)	Metal (Mlb U_3O_8)
Queens Gift					
Inferred	> 200	1,190,000	280	330	0.7
	> 300	**310,000**	**410**	**130**	**0.3**
Indicated	> 200	1,100,000	310	340	0.8
	> 300	**540,000**	**380**	**210**	**0.5**
Combined	> 200	2,290,000	300	680	1.5
	> 300	**850,000**	**390**	**330**	**0.7**
Slance					
Inferred	> 200	240,000	550	130	0.3
	> 300	**220,000**	**580**	**130**	**0.3**
Indicated	**> 200**	**290,000**	**450**	**130**	**0.3**
	> 300	**240,000**	**490**	**120**	**0.3**
Combined	> 200	540,000	500	270	0.6
	> 300	**460,000**	**540**	**250**	**0.5**
Total Isa North					
Inferred	> 200	1,430,000	330	470	1.0
	> 300	**530,000**	**480**	**260**	**0.6**
Indicated	> 200	1,390,000	340	480	1.0
	> 300	**780,000**	**420**	**330**	**0.7**
Combined	> 200	2,820,000	330	940	2.1
	> 300	**1,310,000**	**440**	**580**	**1.3**

* Note: Figures have been rounded

At **Isa West**, the Thanksgiving and Bambino Prospects are open to depth and the Eldorado North Prospect has only been drilled to 60 metre vertical depth and is open to depth and to the south.

The **Queens Gift Prospect** remains the single largest alteration system within which four mineralised lenses have been identified to date. The intensity and width of the alteration zone and mineralisation give good upside potential to developing resources below 200 metre vertical depth.

Resource drilling at **Slance** was terminated in early December due to a combination of rig breakdown and high water flows causing recovery problems. Drilling will commence on this relatively higher grade deposits in April 2010.

The individual resource estimates for each prospect are in line with that expected from surface mapping and 2008 wide spaced drilling and auger well for the continuation JORC Code resource drilling programmes as part of the short to medium-term strategic plan (2010-2012) to outline 5,000 to 8,000 tonnes of U_3O_8 in the Mount Isa District at ~ 400 ppm U_3O_8 grade.

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Managing Director

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The information in this report to which relates to the Mineral Resource is based on information compiled by Neil Inwood. Neil Inwood is a Member of The Australasian Institute of Mining and Metallurgy. Neil Inwood is employed by Coffey Mining Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Mineral Resources and Reserves".

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Leon Pretorius a Fellow of The Australasian Institute of Mining and Metallurgy. Dr Pretorius has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which 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' . Dr Pretorius consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Where eU_3O_8 and/or cU_3O_8 is reported it relates to values attained from radiometrically logging boreholes with Auslog equipment using an A675 slimline gamma ray tool. All probes are calibrated either at the Pelindaba Calibration facility in South Africa or at the Adelaide Calibration facility in South Australia.

Deep Yellow Limited (DYL) is an Australian based pure uranium exploration company with extensive operations in Namibia and Australia.

DYL's principal development focus is in Namibia through its 100% owned subsidiary Reptile Uranium Namibia P/L (Reptile) at the mid to high grade Omahola Project and the extensive secondary calcrete deposits contained in the Tumas-Oryx-Tubas palaeochannel and fluviatile sheetwash systems.

The Omahola Project comprises the INCA uranium and iron and Tubas Red Sand (TRS) uranium deposits. JORC Code resource estimates for Omahola are being completed and management are confident it will underpin the stated objective of becoming a producer of 1,000 to 1,500 tonne of U_3O_8 per year at a grade of 400 ppm or better from the combined deposits.

As part of the transition from explorer to producer DYL and Reptile have been building a team of in-house expertise and consultants to complete the required studies and various reports and permit applications.

The Australian focus is on resource delineation in the Mount Isa district of Queensland and greenfields exploration in the Northern Territory. A pipeline of other projects in both countries are continually being examined and there is extensive exploration potential for new discoveries.

MT ISA PROJECTS – JANUARY 2010 URANIUM RESOURCE – COFFEY MINING PTY LTD

The Mineral Resource estimates for the Mt Isa Uranium Projects in Queensland have been finalised. Separate Ordinary Kriged (OK) estimates were undertaken for: the Bambino, Eldorado and Thanksgiving Prospects from within the Isa West Project Area; the Queens Gift Prospect from within the Prospector Gift Project Area; and the Slance North-East and Slance North-West Prospects from within the Ewen Project Area (see Figure 1).

The Mineral Resource Statement as at the 11th January, 2010 is tabulated below in Tables 1 to 3. Figures 2 to 4 show the location of the modelled mineralised zones and the drilling.

The information in the report to which this statement is attached that relates to the Mineral Resource and is based on information compiled by Neil Inwood. Neil Inwood is a Member of The Australasian Institute of Mining and Metallurgy. Neil Inwood is employed by Coffey Mining Pty Ltd and visited the Mt Isa projects site in September 2009.

Neil Inwood has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Mineral Resources and Reserves".

APPENDIX 1: MT ISA PROJECTS – JANUARY 2010 URANIUM RESOURCE COFFEY MINING PTY LTD

Table 1
Mt Isa Uranium Projects - Queensland
Isa West Prospects - January 2010 Resource Estimate

OK Estimate Reported above Various Lower U_3O_8 Cut-offs
Parent cell 12m N by 6m X by 12m Z (All deposits)
Density of 2.9t/m^3 for Fresh and 2.64 t/m^3 for Weathered Material

Category	Range	Tonnes	Grade (U_3O_8)	Metal (Tonnes U_3O_8)	Metal (MLb U_3O_8)
Thanksgiving					
Inferred	> 100	1,490,000	330	490	1.1
	> 200	1,180,000	370	440	1.0
	> 300	660,000	470	310	0.7
Indicated	> 100	980,000	310	300	0.7
	> 200	800,000	340	270	0.6
	> 300	470,000	400	190	0.4
Combined	> 100	2,470,000	320	790	1.7
	> 200	1,980,000	360	710	1.6
	> 300	1,130,000	440	490	1.1
Bambino					
Inferred	> 100	1,980,000	260	520	1.1
	> 200	1,410,000	310	430	0.9
	> 300	670,000	370	240	0.5
Indicated	> 100	990,000	280	280	0.6
	> 200	790,000	320	250	0.6
	> 300	370,000	390	140	0.3
Combined	> 100	2,970,000	270	800	1.8
	> 200	2,200,000	310	680	1.5
	> 300	1,040,000	370	390	0.9
Eldorado					
Inferred	> 100	270,000	400	110	0.2
	> 200	260,000	410	110	0.2
	> 300	160,000	500	80	0.2
Combined	> 100	270,000	400	110	0.2
	> 200	260,000	410	110	0.2
	> 300	160,000	500	80	0.2
Total					
Inferred	> 100	3,740,000	300	1,110	2.5
	> 200	2,850,000	340	970	2.1
	> 300	1,490,000	420	630	1.4
Indicated	> 100	1,970,000	290	580	1.3
	> 200	1,590,000	330	520	1.1
	> 300	840,000	390	330	0.7
Combined	> 100	5,710,000	300	1,690	3.7
	> 200	4,440,000	340	1,490	3.3
	> 300	2,330,000	410	960	2.1

* Note: Figures have been rounded

APPENDIX 1: MT ISA PROJECTS – JANUARY 2010 URANIUM RESOURCE COFFEY MINING PTY LTD

Table 2
Mt Isa Uranium Projects - Queensland
Isa North Prospects - January 2010 Resource Estimate

OK Estimate Reported above Various Lower U_3O_8 Cut-offs
Parent cell 20m N by 10m X by 20m Z – Queens Gift
Parent cell 12m N by 6m X by 12m Z – Slance
Density of 2.85t/m^3 for Fresh and 2.64 t/m^3 for Weathered Material

Category	Range	Tonnes	Grade (U_3O_8)	Metal (Tonnes U_3O_8)	Metal (MLb U_3O_8)
Queens Gift					
Inferred	> 100	2,310,000	220	500	1.1
	> 200	1,190,000	280	330	0.7
	> 300	310,000	410	130	0.3
Indicated	> 100	1,500,000	270	410	0.9
	> 200	1,100,000	310	340	0.8
	> 300	540,000	380	210	0.5
Combined	> 100	3,810,000	240	910	2.0
	> 200	2,290,000	300	680	1.5
	> 300	850,000	390	330	0.7
Slance					
Inferred	> 100	250,000	540	140	0.3
	> 200	240,000	550	130	0.3
	> 300	220,000	580	130	0.3
Indicated	> 100	290,000	450	130	0.3
	> 200	290,000	450	130	0.3
	> 300	240,000	490	120	0.3
Combined	> 100	540,000	490	270	0.6
	> 200	540,000	500	270	0.6
	> 300	460,000	540	250	0.5
Total					
Inferred	> 100	2,560,000	250	640	1.4
	> 200	1,430,000	330	470	1.0
	> 300	530,000	480	260	0.6
Indicated	> 100	1,790,000	300	540	1.2
	> 200	1,390,000	340	480	1.0
	> 300	780,000	420	330	0.7
Combined	> 100	4,350,000	270	1,180	2.6
	> 200	2,820,000	330	940	2.1
	> 300	1,310,000	440	580	1.3

* Note: Figures have been rounded

Table 3
Mt Isa Uranium Projects - Queensland
All Prospects Combined - January 2010 Resource Estimate

OK Estimate Reported above Various Lower U_3O_8 Cut-offs

Category	Range	Tonnes	Grade (U_3O_8)	Metal (Tonnes U_3O_8)	Metal (MLb U_3O_8)
All Resources Combined					
Inferred	> 100	6,300,000	280	1,750	3.9
	> 200	4,280,000	340	1,440	3.2
	> 300	2,020,000	440	890	2.0
Indicated	> 100	3,770,000	300	1,120	2.5
	> 200	2,980,000	330	990	2.2
	> 300	1,620,000	400	660	1.4
Combined	> 100	10,060,000	290	2,870	6.3
	> 200	7,260,000	340	2,430	5.4
	> 300	3,640,000	420	1,540	3.4

* Note: Figures have been rounded

APPENDIX 1: MT ISA PROJECTS – JANUARY 2010 URANIUM RESOURCE COFFEY MINING PTY LTD

Notes for the resource estimation include:

- Drilling coverage for the project areas ranges from a nominal 50m by 50m to 25m by 25m. The drillholes are typically orientated perpendicular to the trend of the targeted mineralisation with a typically hole setup dip of 60°. Only RC and diamond drilling and sampling undertaken by Deep Yellow were used in the estimate.
- The Deep Yellow RC samples are collected at 1m intervals in mineralised zones into a three tiered splitter to obtain a 2-3kg final sample. Diamond core is halved with samples taken every metre in mineralisation. Sample processing is undertaken at Amdel Laboratories in Mt Isa and consists of drying for 24 hours, crushing in a LM5 pulverised, splitting of an approximate 200g sub-sample, then analysis for uranium by pressed pallet XRF.
- The bulk of the assays (~92%) used for the resource were analysed using XRF (chemical), however a small percentage (~8%) of factored 1m downhole gamma assays were also used. After detailed statistical analysis, the supplied original eU_3O_8 radiometric data was calibrated to the mean of the XRF data by the use of a factor (0.89 for Bambino/Thanksgiving and 0.8 for Queens Gift).
- A total of 53 drillholes were used to inform the estimate for Thanksgiving, 58 for Bambino, 13 for Eldorado, 99 for Queens Gift and 29 for Slance. A total of 987 individual chemical and 5 radiometric assays were used to inform the Thanksgiving estimate, 1,172 individual chemical and 132 radiometric assays informed the Bambino estimate, 138 chemical assays informed the Eldorado estimate, 2,456 chemical and 325 radiometric assays informed the Queens Gift estimate, and 262 individual chemical assays informed the Slance estimate.
- Density data was collected from the diamond core utilising the water immersion method (both with and without wax) with backup data by air pycnometry of RC pulps. A total of 116 density readings and 425 air pycnometry readings were available to evaluate the density for each of the deposits.
- A nominal 100ppm U_3O_8 lower cutoff was used to define the mineralised zones from each of the prospects. The resulting mineralisation interpretations showed generally good geological and sectional continuity.
- The topographic surface was defined using a combination of DGPS pickup of the drillhole collars and local DTM surfaces for the individual deposit. A DTM surface representing the base of oxidation/base of weathering was determined based upon Deep yellow's geological logging. A density of 2.64t/m^3 was used to report any weathered material for the modelled mineralisation.

- The assay data was composited to 2m downhole with statistical analyses on the 2m composites undertaken. Variography and search neighbourhood analysis were also conducted as input into grade estimation. High grade cutting was applied to the composites prior to estimation.
- The method used to obtain grade estimates within the mineralised zones for U_3O_8 was block Ordinary Kriging (OK). Density was applied to each of the deposits based upon a statistical analysis of the density and sg data. An insitu dry bulk density of 2.9t/m^3 was used for reporting the Isa West Prospects and 2.85t/m^3 for the Queens Gift and Ewen Prospects.
- The available Umpire and blank QAQC data has been evaluated and found to be appropriate for use in the current resource estimation studies. Further work is required to incorporate the standards data into a format suitable for QAQC analysis.
- Resource classification was developed from the confidence levels of key criteria including drilling methods, geological understanding and interpretation, sampling, data density and location, grade estimation and the quality of the estimate. Material deeper than a nominal 250m from surface was not classified.
- The extent of mineralisation has not been terminated for the deposits and further drilling is required to fully delineate the mineralisation.
- Updates of some density, QAQC, downhole survey and topographic data are expected to be available for future estimation studies, but this information is not expected to materially impact on the current Resource estimates.

Figure 2

Drillhole Location and Interpreted Mineralisation – Queens Gift Project

Queens Gift Prospect

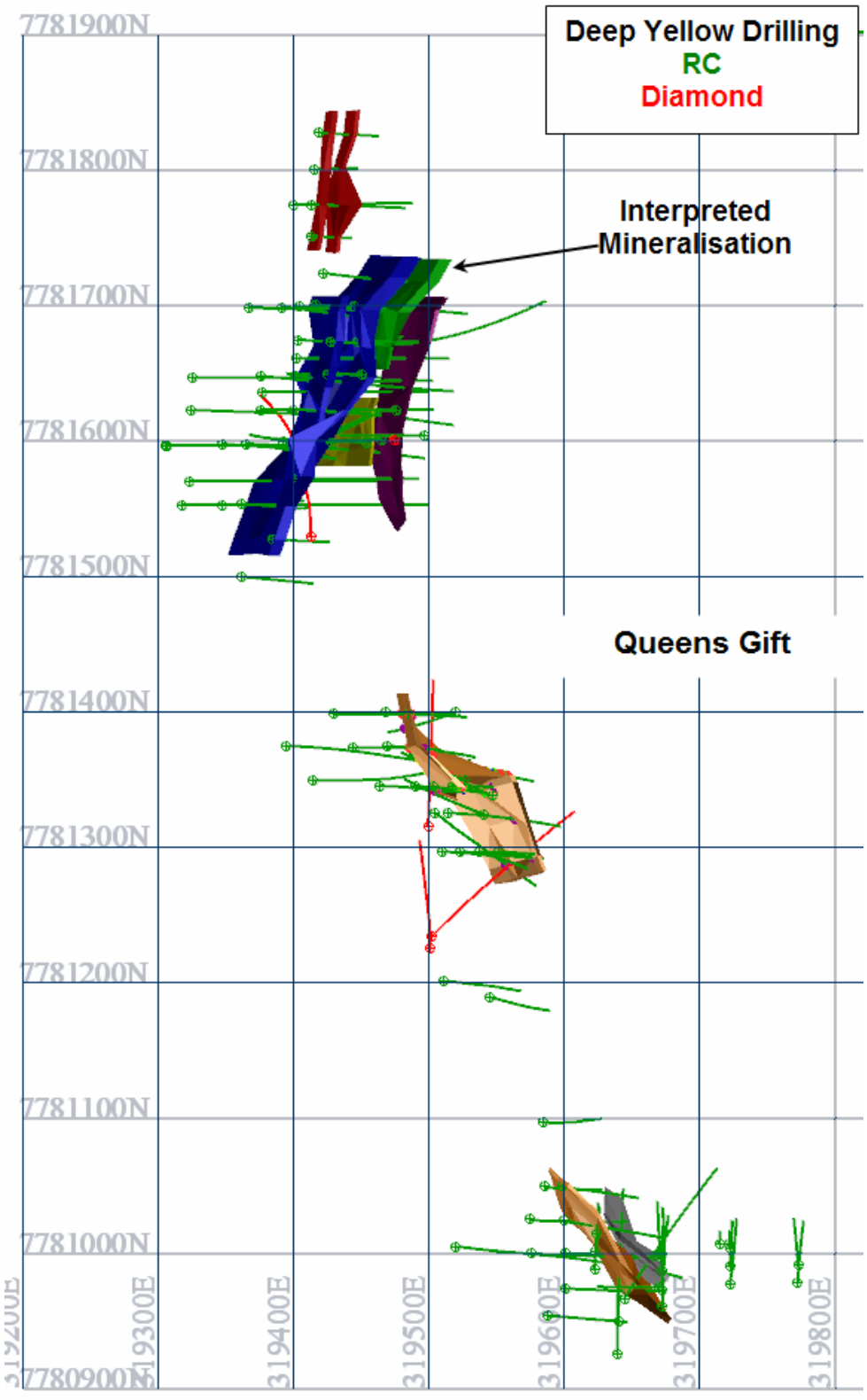

Figure 3

Drillhole Location and Interpreted Mineralisation - Ewen Project

Slance NW and Slance NE Prospects

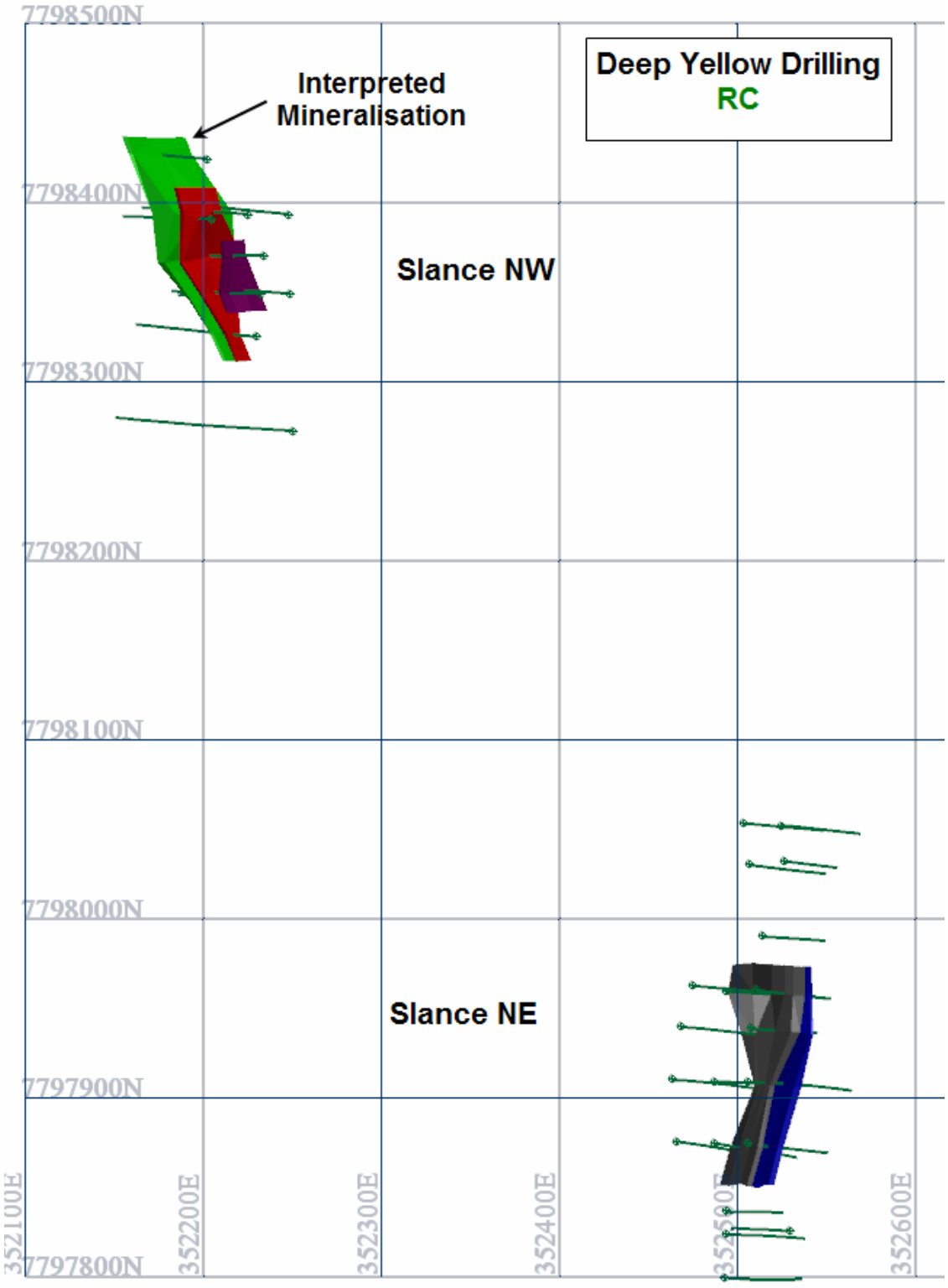

Figure 4

Drillhole Location and Interpreted Mineralisation - Isa West Project

Thanksgiving, Bambino and Eldorado Prospects