

16th November 2011

Australian Securities Exchange Limited

Via Electronic Lodgement

### POSITIVE SCOPING STUDY - GLENBURGH GOLD PROJECT

#### **HIGHLIGHTS:**

Independent Scoping Study concludes that the Glenburgh Gold Project could support viable development:

- Pre Tax Operating Surplus of between \$90 and \$200 million
- Life of mine revenue of between \$410 and \$525 million
- Projected cash operating costs of ~\$890/oz
- Capital costs of ~\$53 million
- IRR of between 38% and 92%
- Payback of between 24 and 30 months
- 1.2Mtpa throughput
- Production of 292,000 oz over 6 years
- Feasibility Studies to commence

Gascoyne Resources Limited is pleased to report positive findings from an independent Scoping Study completed on the Company's 100% owned Glenburgh Gold Project in Western Australia. The study concluded that given ongoing exploration success the project can support a viable development under a range of scenarios.

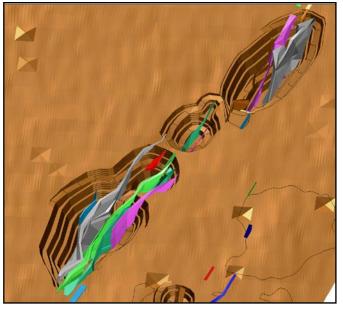


Figure One: Oblique view of the Icon and Apollo conceptual pits

The Scoping Study was completed by Linton Putland and Associates as well as a number of other independent consultants and investigated several development options, including CIL / CIP treatment with diesel or gas fired power as well as a potential heap leach operation. The preferred path forward is for a 1.2mtpa CIL / CIP processing plant with gas fired power station. Following pit optimisation work, an open pit mining inventory of 6.2Mt @ 1.55 g/t gold (at 0.7g/t gold cut-off) was used as the basis of the financial modelling. The current Inferred resource at Glenburgh is 13.8Mt @ 1.2g/t gold (0.5 g/t cut-off), including 9.9Mt @ 1.4g/t gold (0.7g/t cut-off).

The project is sensitive to gold price with base case (\$1,400 oz gold price) positive pre tax operating cash flow of \$90 million which increases to \$200 million at \$1,800 oz gold price, from a 6 year open cut operation (see Figure two and Table 1).

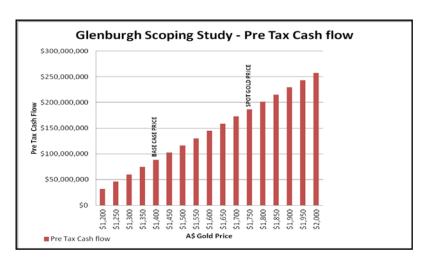
#### Disclaimer:

The current Glenburgh resource is classified as Inferred and as a result, is not sufficiently defined to allow conversion to an ore reserve; the financial analysis in the study is conceptual in nature and should not be used as a guide for investment. It is uncertain if additional exploration will allow conversion of the Inferred resource to a higher confidence resource (Indicated or Measured) and hence if a reserve could be determined for the project in the future. Exploration and Production targets referred to in this release are conceptual in nature and include areas where there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

This release has been prepared by Gascoyne Resources Limited and contains forecasts and forward looking statements. Such forecasts, projections and information are not a guarantee of future performance, involve unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied.

All dollar (\$) figures mentioned in this release are expressed as Australian dollars







**Figure Two:** Glenburgh Scoping Study – Pre Tax Cash Flow Changes with Gold Price

Table 1: Summary of Glenburgh Scoping Study Financial Model

Gold Price (A\$/oz)	Pre Tax Operating Cash Flow	Revenue (\$ M)	IRR	CAPEX	Payback (months)	NPV <sub>8%</sub>
CIL/CIP gas power \$1400 (base case)	\$88 M	\$408	38%	\$53 M	30	\$53 M
CIL/CIP gas power \$1600	\$145 M	\$466	64%	\$53 M	27	\$97 M
CIL/CIP gas power Current ~\$1725	\$180 M	\$502	81%	\$53 M	25	\$125 M
CIL/CIP gas power \$1800	\$201 M	\$525	92%	\$53 M	24	\$141 M

The Scoping Study examined the key inputs for project development. These include metallurgy, resource and exploration potential, pit optimisations, conceptual pit designs, process flow designs, conceptual mining and milling schedules, hydro geology for both dewatering and process supply, environmental and permitting investigations. These inputs were then incorporated in financial modelling of several development options. The inputs are discussed briefly below:

#### Metallurgy:

For the Scoping Study, two composite samples have been used for testwork. These are both from the largest resource – the Icon deposit. They are both primary sulphide samples and have both returned excellent results



with recoveries of  $\sim$  95%. Geologically and mineralogically, these samples are considered to be representative of the primary sulphide mineralisation at Glenburgh. Approximately 90 % of the resource is classified as primary sulphide.

The metallurgical samples returned a recovery using a "standard" flow sheet of ~ 95%, with between 45 and 50% being recovered by gravity separation. Test work has also indicated acceptable heap leach recoveries, and the Scoping Study included examination of a heap leach option.

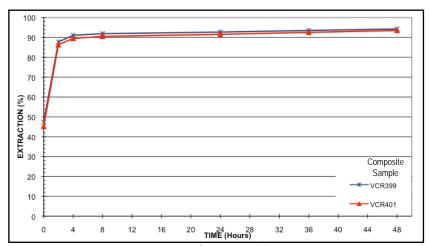


Figure Three: CIP / CIL Gold Recovery vs Time.

### Resource and Exploration:

The current Glenburgh JORC resource was updated in August 2011 with all available data up to the end of July. The resource was estimated in-house and reviewed by Runge limited, an independent global resource consultancy.

The Inferred resource is 13.8Mt @ 1.2 g/t gold for 520,000 oz of gold (at a 0.5 g/t cutoff) ), including 9.9Mt @ 1.4g/t gold (0.7g/t cut-off).

Subsequent to the resource being estimated, a number of very significant discoveries have been made at Glenburgh. The recent discovery of the Torino prospect (RC intersection 43m @ 2.3 g/t gold) and the high grade plunging shoot at the Zone 126 deposit (RC intersections 20m @ 11.1g/t, 17m @ 6.8g/t) highlight the resource upside potential for the project (see Figure Eight and Nine).

#### Pit optimisations and conceptual pit designs:

A number of pit optimisations have been completed on the resource at a variety of gold price assumptions. These resulted in mineral inventories of between 180,000 oz of gold (at A\$1,200 oz gold price) and 325,000 oz of contained gold (at A\$1,800 oz gold price) and using the assumed costs for diesel power generation.

The base case gold price that has been used is A\$1,400. This result resulted in a 13 conceptual pits being designed (see Figures Four & Five).

The pit designs can generally be broken into 4 areas:

- 1. North Eastern Area This area has 4 small pits and includes the North East 3, Zone 126, Zone 102 and Hurricane areas of the resource. These pits are small but are of higher grade.
- 2. Apollo and Icon Area The Apollo and Icon pits are by far the largest of all the pits and contain the majority of the mining inventory as defined in the pit designs.
- 3. Shelby and Mustang Area -These 2 pits are small and relatively low grade.
- 4. Tuxedo Area These pits are small and modest grade.

The parameters for the pit designs are shown in Table 2 below.



Table 2 - Pit Design Parameters

General Minimum Mining		
Width	15 m	
Wall Angles		
Approx overall pit		~50 deg
Batters	All	70 deg
Berms	Vertical Interval	20 m
	Horizontal width	5 m
Pit Ramps		
Ramp Gradient		1:9
Ramp Width	Double Lane	23 m
	Single Lane	15 m

The pit design parameters were based on those used in the pit optimisations the assumed scale of mining equipment anticipated to be used on the project, and statutory requirements relating to open pits in Western Australia.

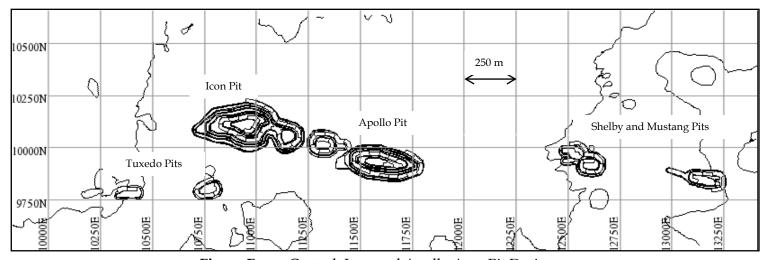


Figure Four: Central, Icon and Apollo Area Pit Designs



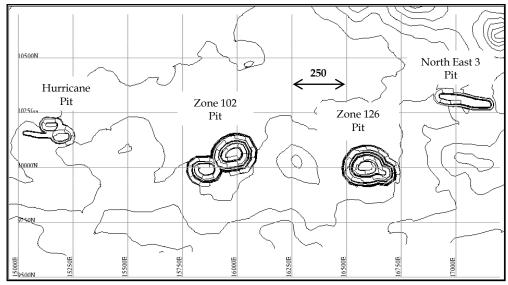


Figure Five: North Eastern Pit Designs

# <u>Potential Mining Inventories:</u>

Based on the pit designs completed for each of the areas mining inventories were calculated using the Glenburgh resource model. A total mining inventory of 6.2Mt @ 1.55 g/t gold for 307,000 oz gold at an overall waste to ore ratio of 7.3:1 was used for the financial modelling.

The mining inventories were estimated using a lower cut-off grade of 0.7g/t Au in all cases. This was approximately the cut-off grade determined by the optimisations. The current global JORC Inferred resource at a 0.7g/t cut off is 9.9Mt @ 1.4g/t gold (440,000 oz contained).

Consistent with the optimisation a 95% mining recovery factor was applied and a dilution factor of 10% of ore tonnes was applied in the mining inventory.

In order to recognise the exploration potential for the project an additional pit has been included in the mining inventory. For the purposes of the Scoping Study, it was assumed that through continued exploration success Gascoyne will define an additional open pittable deposit of 1.9Mt @ 1.50g/t Au and that that this "exploration "pit will be of the same scale as the Icon pit, with the approximate average grade of the overall inventory. The successful exploration completed recently suggests that the grade of any new resources may in fact be higher that for the existing resources.

#### **Mining Schedules:**

In addition to the mining inventories, volumes were calculated for each of the pit designs using Surpac mining software. These volumes were used to develop mining schedules for each of the pit designs.

The mining schedules were developed on a monthly basis with mining commencing in Month 7 and to provide sufficient mill feed for a 1.2 million tonne per annum milling operation, commencing in Month 10.

Mining production rates were based on 10 hour working shifts and 2 shifts per day. Allowance was made in each month for maintenance time and shift changes.

A combination of 80 and 120 tonne diesel hydraulic excavators and 40 to 85 tonne dump trucks were assumed for the schedule.



### Hydrogeology:

As part of the Scoping Study, the access to a reliable process water supply as well pit dewatering requirements have been assessed. A desk top review of all available data suggests that dewatering the pits will not result in significant water being available for mineral processing, however a number of process water supplies have been identified approximately 15km to the west of the proposed processing facility.

The main target is one of the basal sandstone aquifers of the Carnarvon Basin. The edge of the Carnarvon Basin near the Glenburgh project is interpreted to be structurally controlled, which provides a number of potential water bore sites which could provide the  $\sim 1$  million tonnes of water required for the project per year.

#### Environmental / Permitting Investigations:

Environmental base line studies have already commenced on the project. To date no significant issues have been identified from the field or desktop reviews for the project.

Preliminary indications suggest that the project will fall within the memorandum of understanding between the Department of Mines and Petroleum (DMP) and the Department of Environmental Conservation that should allow the project to be permitted by the DMP. This will stream line the permitting timelines as it is unlikely that an environmental impact study will be required for the project.

## **Processing Flow Sheet:**

From the metallurgical testwork, a "standard" three stage crush with a single ball mill has been used for the process flow sheet. Given 50% of the gold reported to a gravity concentrate in test work, a gravity circuit has been incorporated into the flow sheet. See Figure Six for the conceptual process flow diagram.

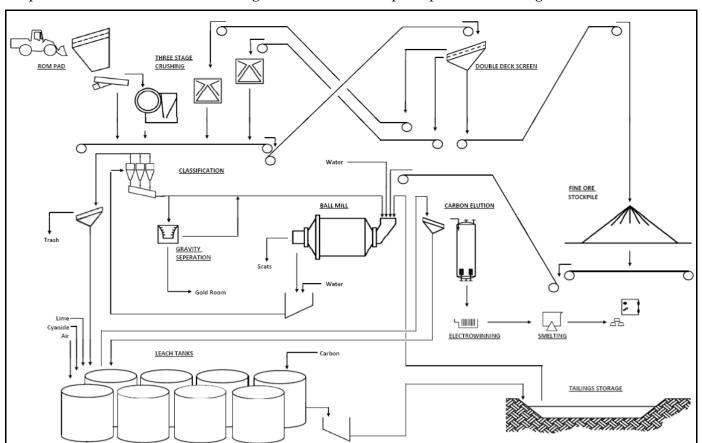


Figure Six: Conceptual process flow diagram for the Glenburgh Scoping Study.



#### Process Schedule:

The processing schedules were designed to commence processing ore from month 10 with a 3 month ramp up period to full production of 1.2 million tonnes per annum.

The processing schedules assume the higher grade ore sources have priority, with the exception of the exploration upside, which would be processed last.

The processing schedules assume that high grade ore mined during a month is preferentially processed with the balance made up from either stockpiled ore or ore from the next pit in the priority list.

Metallurgical recovery in the processing schedules was set at a constant 95% based on metallurgical test work. A summary of the processing schedule is shown in Table 3 below.

DESCRIPTION YEAR 1 YEAR 2 YEAR 3 YEAR 4 YEAR 5 YEAR 6 TOTAL TOTAL MILL FEED Tonnes 180,000 1,200,000 1,200,000 1,200,000 1,200,000 1,180,000 6.2 Mt Grade - g/t 1.91 1.97 1.62 1.21 1.38 1.50 1.55 Production 11,000 72,000 59,000 44,000 51,000 54,000 292,000

**Table 3 - Milling Schedule Summary** 

Note: this excludes the low grade material that has to be mined to extract the higher grade material. This could add an additional year to the production.

### **Capital Cost Estimate:**

The capital cost estimate has been developed from first principles and includes a "fit for purpose" process plant and associated infrastructure and allowances for ancillary equipment.

Two options were developed covering a new and second hand plant. The second hand plant has been assumed for the purpose of the scoping study. The capital costs are summarised in Table 4:

Table 4 - Summary of Capital Costs

ITEM	New plant	Second hand	
EPCM Contract for Process plant	\$ 49 M	\$ 37M	
Other site costs (TSF, water supply, camp, airstrip upgrade, roads)	\$ 9 M	\$ 8 M	
Owners costs (first fill critical spares and insurance)	\$ 2 M	\$ 1.3 M	
Owners Management	\$ 0.9 M	\$ 0.9 M	
Project Contingency (12% of capital)	\$ 7.3 M	\$ 5.6 M	
TOTAL	\$ 68 M	\$ 52.7 M	

Note: Discrepancies are as a result of rounding.

At the end of the project a salvage value of \$10.8 million has been assumed.

In addition to the initial construction capital, waste mined whereby the strip ratio from any 10 m flitch is greater than 15:1 has also been capitalised.



### **Process Costs:**

The process costs are sensitive to power generation costs. As a result, the preferred power generation method is containerised LPG gas powered generation. This results in a power cost of approximately 12.5c/kwhr, and helps achieve a relatively low processing cost.

The operating costs are summarised in Table 5 below.

**Table 5 - Summary of Operating Costs** 

Operating Costs	Total \$M	\$/t	\$/BCM	\$/oz
Ore Mining	14	2.18	0.70	46
Waste Mining	67	10.85	3.49	229
Drill & Blast	43	6.94	2.23	147
Grade Control	2	0.30	0.10	6
Milling	85	13.80	4.45	292
Mine Site Distributions	3	0.48	0.16	10
Admin Distributions	33	5.35	1.73	113
Royalties Payable (state, project and assumed NT)	13	2.15	0.69	46
TOTAL COST	\$260 million	\$ 42	\$ 14	\$ 889

## Forward Program:

With the completion of the Scoping study, a twelve month Feasibility Study on the Glenburgh project will commence. Details of the Feasibility study will be announced as they become available.

In addition to the Feasibility Studies, exploration will continue on the project with the following activities planned.

- Follow up RC drilling at the Torino Prospect.
- Follow up RC and diamond drilling at the high grade plunging "shoot" at Zone 126.
- Additional RC drilling to test the down dip, down plunge and strike extensions of the known gold deposits at Glenburgh.
- Exploration RC drilling at the South Western target zone, to define additional targets along strike from the Torino prospect.
- An update to the resource estimate.

Further results and information will be provided as they become available.

On behalf of the Board of Gascoyne Resources Ltd

Michael Dunbar Managing Director



Information in this announcement relating to mineral resources and exploration results is based on data compiled by Gascoyne's Managing Director Mr Michael Dunbar who is a member of The Australasian Institute of Mining and Metallurgy. Mr Dunbar has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons under the 2004 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Dunbar consents to the inclusion of the data in the form and context in which it appears.

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#### BACKGROUND ON GASCOYNE RESOURCES

Gascoyne Resources Limited was listed on the ASX in December 2009 following the amalgamation of the gold assets of Helix Resources Limited and Giralia Resources NL in the Gascoyne Region of Western Australia.

Gascoyne Resources is endowed with

- 100% of the Glenburgh Project in Western Australia, which has an inferred resource of: 13.8 Mt @ 1.2g/t Au for 520,000oz gold from several prospects within a 20km long shear zone. Considerable resource growth potential exists around the deposits as well as at regional targets that have had limited exploration over the last 15 years.
- Advanced exploration projects at Mt James where drilling has outlined a +1 g/t Au mineralisation over at least 2.5km strike within a 300m thick package of sheared mafic amphibolites and BIFs: and at Bustler Well where previous RC drilling returned narrow high grade intersections including 1m @ 37.4g/t Au, 2m @ 9.08 g/t Au and 3m @ 7.62 g/t Au from a 150m long quartz-shear lode.
- Soil geochemical anomalies at Bassit Bore with rock chip results of up to 73g/t Au.

Gascoyne Resources' immediate primary focus is to continue the evaluation of the Glenburgh gold deposits to delineate meaningful increases in the resource base and to identify and test additional targets in the Glenburgh mineralised system and to explore for additional gold resources on the exploration properties. Success in these activities is expected to lead to the development of a gold project based on the Glenburgh gold deposits.

Further information is available at www.gascoyneresources.com.au

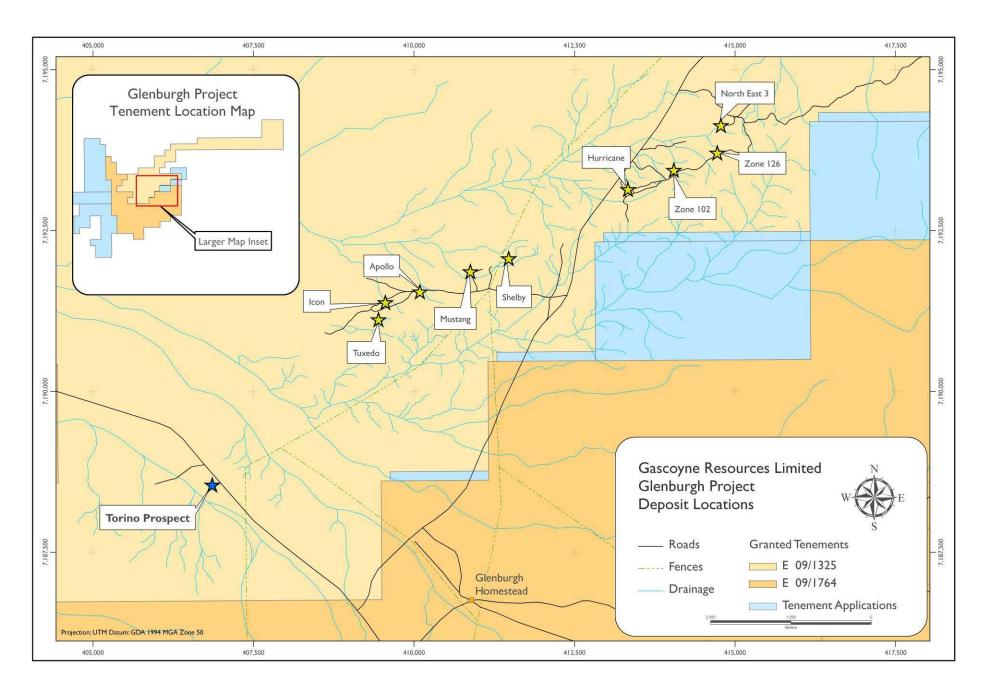


Figure Seven: Glenburgh Project - Prospect Locations

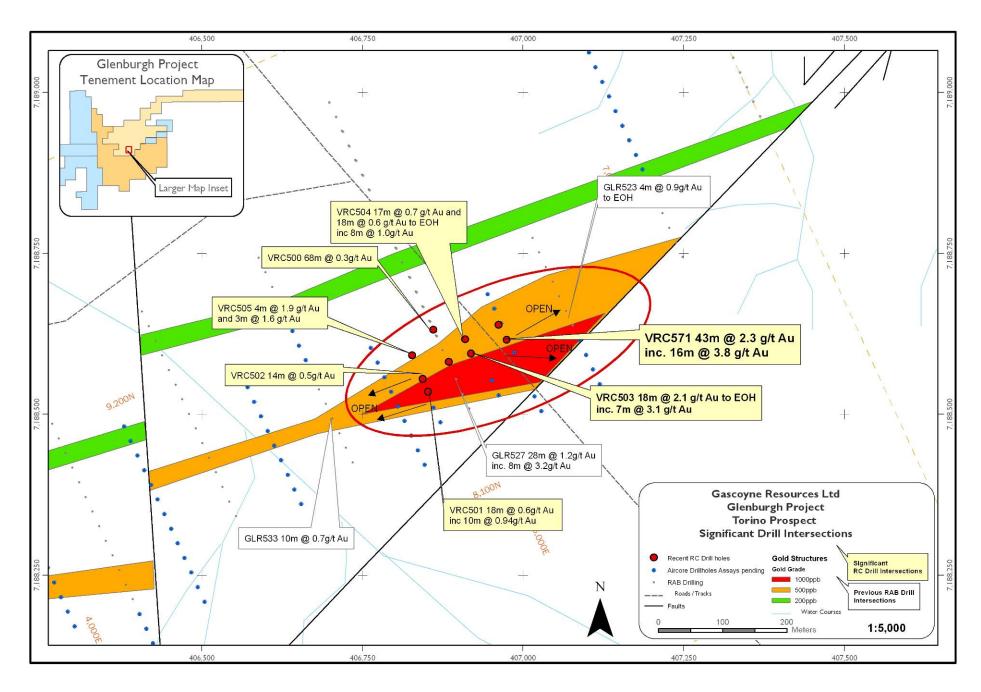
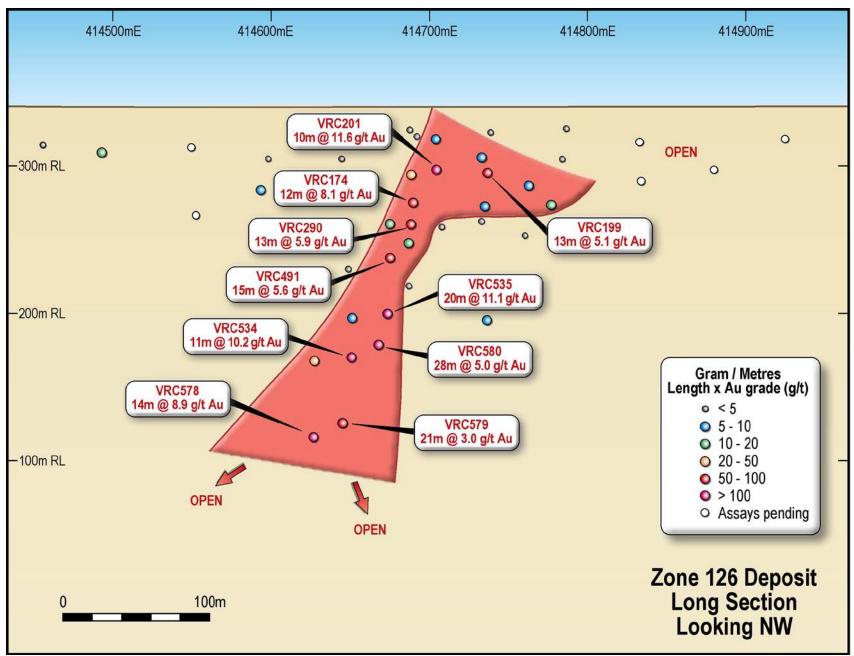


Figure Eight: Torino Prospect Drill Intersection



**Figure Nine:** Zone 126 Long Section of Plunging High Grade Shoot