ASX ANNOUNCEMENT **ASX: VXL & VXLO**

2 January 2015

Feasibility Study Phase II Expanded Production & Phase III Advanced Manufacturing

- Feasibility study demonstrates an IRR of 46% based on current Ore Reserves.
- Phase II Expansion capex A$37M staged over 3 years.
- Phase III Advanced Product Handling with initial capex of A$13M to meet customer demand for high purity and specialist graphite products.
- Feasibility study establishes globally competitive mine gate opex of between A$400-A$500 per tonne.
- Staged 25000tpa increases to reach 64000tpa of graphite output.
- Advanced logistics management and product handling programs.
- Average graphite sales prices of A$1669 to A$4774 per tonne.

Valence Industries has completed its Feasibility Study for the significant expansion of its currently operating Phase I graphite mining, processing and advanced manufacturing capacity.

The Feasibility Study reflects the continued focus by Valence Industries on a program of advanced manufacturing shifting the emphasis from bulk tonnages to value added product lines and increased margins. The Executive Summary of the Feasibility Study is appended with the key elements discussed below.

Production & Manufacturing Strategy

The Feasibility Study defines an advanced manufacturing program for Valence Industries with two aspects:

(1) base flake graphite concentrate production at the Uley Graphite™ site; combined with

(2) advanced product handling facilities near the port of Adelaide.

Valence Industries has ore reserves exceeding 2Mt to meet current production and sales programs and is drilling its exploration targets on a schedule to match the need for additional future raw material.

Expansion of the facilities at the Uley Graphite™ site will provide additional processing capacity in 25000tpa increments of graphite output to reach 64000tpa to effectively match market demand. This Phase II plant is also designed to deliver significant advances in quality, output reliability and reduced processing costs compared to the existing Phase I plant.

The combined Capex over the program for the Phase II plant expansion program and for establishing Uley Pit 2 will be $37M applied over 3 years.[1]

The Feasibility Study also brings forward some of Valence Industries' Phase III programs with Capex of $13M. The need to provide for efficient and agile supply of multiple flake graphite products, with certainty of cost and supply time, has determined that an Advanced Product Handling facility be located near the company's export port at Adelaide. The location of such a facility is influenced not only by economics, but also Government requirements and its support for value adding opportunities.

The Advanced Product Handling facilities will include sophisticated product blending and packaging operations, micronisation plant and scaleable pilot plant for high purity graphite production. Each of these processes add value and provide greater margin opportunities, reducing reliance on basic flake graphite grades.

The direct operating costs identified in the Feasibility Study reduce significantly from the current Phase I operations and are expected to average in the range of A$400/t to A$500/t at the mine gate and in the range of A$750/t to A$950/t FOB in Port Adelaide.[2]

Based on the diversity of market regions, industries and products targeted by Valence Industries the weighted average sales price for the company's flake graphite products fall in a range of A$1669/t for general products to an average A$4774/t for advanced processed products (*fob* Port Adelaide).[3]

These capital costs, operating costs and sale prices in conjunction with the ore reserve and taking account of general and administrative, marketing, royalty and corporate tax currently give the project an estimated NPV of A$65M and an IRR of 46%.

These financial estimates are based only on the current JORC 2012 Ore Reserve. This is considered a conservative position as the ore reserve and mine plan do not take account of the inferred mineral resources in Uley Pit 2 or the indicated resources in the stockpiles. Current drilling also supports the view that Uley Pit 2 can be extended. NPV per additional reserve tonne contributes $32 per tonne in the financial modelling.

Market Strategy

The analysis of the global graphite market in the Feasibility Study is based on independent research and analysis[4], combined with assessment and research undertaken by Valence Industries with its existing graphite customers and markets. This has confirmed that the graphite market is facing a shortfall in supply over the next few years.

Valence Industries is well placed in relation to other emergent graphite producers as it has the ability to provide material to customers now from existing production facilities, meaning the lengthy qualification process has already commenced. This qualification program and productive capacity enables the conversion of MOUs to sales orders to commence in advance of Phase II production.

To reduce sales pricing risk, the strategy focuses on added product value through multiple combinations of branding, packaging, product purity and size that exceed more than 100 unique graphite product lines. This is consistent with Valence Industries' focus on advanced manufacturing rather than on tonnes produced. This advanced manufacturing program will include certification to meet ISO9001 and ISO14001 standards in line with customer requirements.

[1] Working capital requirements are not included.
[2] Direct operational costs only; excludes corporate taxes, royalties, overhead charges and capital amortisation.
[3] Based on a conversion rate of AUD$1.00 = USD$0.80 (i.e. US$1335 to US$3819 (FOB Port Adelaide))
[4] Independent analysis by Roskill Information Services and Industrial Minerals

The geographic, market and product diversification adopted in Valence Industries' marketing plan also reduces the dependency on any key market or customer.

The political, economic and environmental risks for Valence Industries in Australia are low in comparison to other current and potential flake graphite sources allowing the company to provide a low risk supply of high grade flake graphite to markets where quality and supply certainty are valued.

Further Recommendations

The Board of Valence Industries has adopted a number of recommendations from the Feasibility Study and has directed management to review some optimisation alternatives before commencing significant construction activities.

In addition, recent testing of the Uley Pit 2 ore has identified how a proven overseas minerals treatment technology could be adapted for Uley Graphite™, including for the unique very high grade Arterial Flake™, to further reduce the capital and operating costs, particularly for crushing.

Valence Industries expect that these activities will be completed by the end of the March quarter 2015 and that securing of financing and detailed project planning for construction can continue over that quarter.

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Competent Persons Statement
Valence Industries confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates in this announcement continue to apply and have not materially changed since the announcements previously released as "Valence Doubles Existing ROM Stockpiles" (6/8/14), "Uley Graphite Grade Increases to 11.7%" (17/11/14) and "Maiden High Grade Graphite Ore Reserve" (17/12/2014).

Forward Looking Statements
All statements other than statements of historical fact included in this announcement including, without limitation, statements regarding future plans and objectives of Valence Industries Limited (Valence Industries) are forward-looking statements. When used in this announcement, forward-looking statements can be identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects' or 'intends' and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this announcement, are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the company, its directors and management of Valence Industries, that could cause Valence Industries' actual results to differ materially from the results expressed or anticipated in these statements.
Valence Industries cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. Valence Industries does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by applicable law.

VALENCE INDUSTRIES

ASIA PACIFIC I EUROPE I NORTH AMERICA

Valence Industries Feasibility Study Report

Uley Graphite Phase II Expansion Program & Phase III Advanced Manufacturing

Executive Summary Report

31 December 2014

Valence Industries Feasibility Study Report

Uley Graphite Phase II Expansion Program & Phase III Advanced Manufacturing

Executive Summary

1. Introduction

1.1 Valence Industries

- Valence Industries Limited (Valence Industries) is an Australian company that listed on the Australian Stock Exchange (ASX) in January 2014 (ASX Code: VXL & VXLO) and is the 100% owner of the Uley Graphite™ facilities.
- Valence Industries is an industrial manufacturing company producing high grade flake graphite products for distribution and sale to global markets and multiple industries.
- Valence Industries' is located in Adelaide, South Australia and its Uley Graphite™ operations are located 23 kilometres from Port Lincoln in regional South Australia.

1.2 Feasibility Study Program – Phase II & Phase III

- Valence Industries commenced the Feasibility Study (**FS**) in January 2014 for the purpose of assessing the Phase II expanded operation of its Uley Graphite™ mining and manufacturing facilities. This summary contains the conclusions reached in the Feasibility Study process and now also includes early delivery of elements of Valence Industries' Phase III advanced manufacturing strategies.
- The Feasibility Study report has been drafted by the Valence Industries project team in cooperation with Advanced Focus. The key contributors to and participants in the delivery of the Feasibility Study and their respective areas are as follow:

Area	Participant
Ore Reserve & Mineral Resources	Coffey Mining & Valence Industries
Geology	Coffey Mining & Valence Industries
Mine Plan	Coffey Mining & Valence Industries
Metallurgy	Bluechip Engineering & Valence Industries
Processing & Manufacturing	Bluechip Engineering, Advanced Focus & Valence Industries
Project Logistics	Insync Supply Chain Management (ISCM)
Project Infrastructure	Bluechip Engineering, Insync Supply Chain Management (ISCM), Valence Industries & Clutch Consulting
Project Execution	Advanced Focus, Bluechip Engineering & Badge Construction
Graphite markets	Roskill & Valence Industries
Capital Costs	Bluechip Engineering, Golder Associates, Coffey Mining, Clutch Consulting, Insync Supply Chain Management (ISCM), Badge Construction
Operating Costs	Bluechip Engineering, Golder Associates, Clutch Consulting, Insync Supply Chain Management (ISCM)
Financial Analysis	Fortis Ago, Roskill & Valence Industries

1.3 Key Outcomes

Feasibility Study Dec. 2014				
Ore Reserves[5]	*Total tonnes*	2,035,000 t		
	Contained tonnes	261,000 t		
	Strip Ratio	5.9:1		
	Initial Mine Life	5 Years		
	Average Grade (gC)	12.9%		
Graphite Production Capacity (*tonnes per annum of graphite produced*)	**Capacity Phase**	**Added Capacity**	**Capacity Scheduled**	**Total Capacity**
	Phase I	14,000	2014	14,000
	Phase II & III (Stage 1)	+25,000	2016	39,000
	Phase II & III (Stage 2)	+25,000	2017-2019	64,000
	Phase II & III (Stage 3)	*+25,000*	*Currently unscheduled*	*89,000*
	Phase II & III (Stage 4)	*+25,000*	*Currently unscheduled*	*114,000*
Operating Cash Costs[6] (*per tonne of flake graphite produced*)	Phase I & II *(mine gate)*	A$400 – A$500		
	Phase I, II & III *(FOB Adelaide)*	A$750 – A$950		
Average Sales Price (*per tonne of graphite*)[7]	Phase I & II (*FOB Adelaide*)	A$1,669		
	Phase III (*FOB Adelaide*)	A$4,774		
Capital Costs[8]	Phase II –Plant & Pit (Stage 1 & Stage 2)	A$36.7M *(Uley Site)*		
	Phase II & III (Advanced Product Handling plant)	A$13.2M *(Adelaide)*		

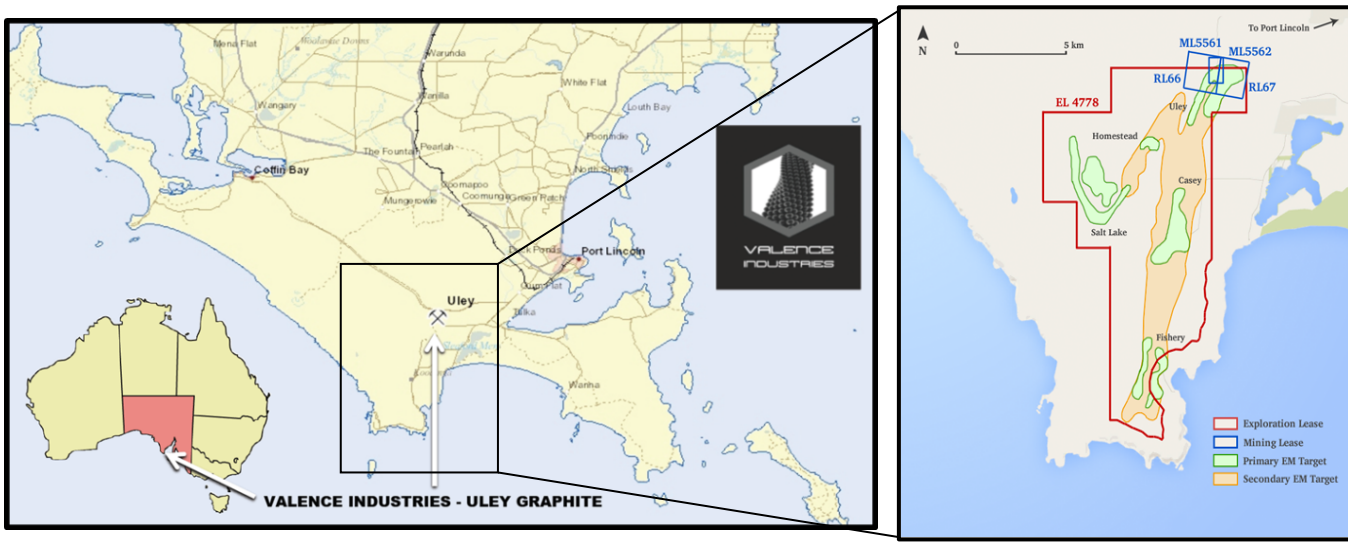
[5] There is an additional 1 million tonnes of Indicated and Inferred Resource within the Uley Pit 2 shell and existing stockpiles which is not included in the current Ore Reserves.
[6] Operating Cash Costs exclude government royalties, head office costs, capital amortisation and marketing costs.
[7] Sales prices are expressed here in Australian Dollars (AUD) but no sales are made in AUD with the majority of sales made in United States Dollars (USD)
[8] Working capital requirements are not included.

2. Location & Strategic Plan

2.1 Project Location

- The Valence Industries base in South Australia is a highly favourable location in terms of project risk compared to other prospective graphite producers and, in many instances, compared to existing producers.
- Australia is regarded as one of the lowest political risk locations in the world; there is financial and banking system stability; a functional legal system; and low sovereign. Australia has also rated for a long period in the highest category least likely to be exposed to corruption.
- The existing Uley Graphite™ facilities and Uley Graphite™ Phase II plant expansion and Uley Pit 2 are located 23km south west of the regional centre of Port Lincoln in South Australia (Figure 2.1).

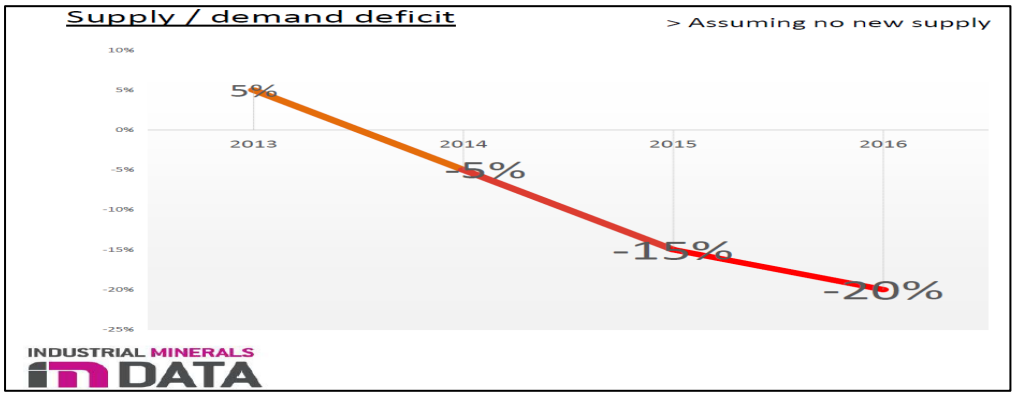
Figure 2.1 – Uley Graphite™ Project Location



2.2 Strategic Plan

- Graphite is an industrial mineral. Valence Industries is therefore operating in a market driven sector where specific appreciation of customer requirements and corresponding customer qualifications from established processing facilities are the dominant drivers. Demand for graphite has continued to grow in recent years and there is currently a shortfall in production. This demand vs supply situation clearly shows a current and projected supply short-fall (Figure 2.2.1).

Figure 2.2.1 - Graphite Supply Demand Deficit



- Valence Industries has gone beyond simple reliance on this identified shortfall in supply and increase in demand and has developed a strategic plan which capitalises on its key assets, namely established processing facilities, resources of coarse high grade flake graphite and deep understanding of the global graphite markets. Entry to the market and development of the company's Phase II & Phase III expansion program has been based on a growth plan focused on achieving higher margins through product quality as opposed to simplistic increased delivery of base concentrate tonnes.
- Phase I , refurbishment of the existing plant, has recently been completed with the capacity to produce 14,000 tonnes per annum of graphite. This provides early sales opportunities and the ability to qualify and supply graphite from an operating facility rather than just bench scale pilot programs that do not meet full qualification requirements.
- The expansion of operations by Valence Industries was the subject of a Scoping Study completed in 2013. That Scoping Study proposed new open pit mining in Uley Pit 2 and an increase in production capacity by up to 50,000 tonnes of graphite output per annum.
- The Feasibility Study has taken two important steps beyond the Scoping Study:
    - Valence Industries has set out a sophisticated program for advanced manufacturing of flake graphite that incorporates staged expansion of its Phase II base processing operations and has brought forward and incorporated key aspects of what the company previously expressed as its Phase III high purity programs to deliver value-added manufacturing and correspondingly increase margins; and
    - Valence Industries' current expansion is based on the existing ore reserve of five years and the company is therefore targeting the progressive conversion to reserves of its JORC 2012 Exploration Targets of between 9,000,000t-12,000,000t at grades between 9% and 12% graphitic carbon staged to match corresponding customer demand. Current drilling is focused on the Uley Pit 2 Extension which has the potential to significantly increase the ore reserve and the mine life. Any such increased ore reserve would positively impact the NPV for the Phase II expansion project and will provide Valence Industries with options that may support future increases in plant output beyond the Phase II output targets depending on market demand.
- This growth path for Valence Industries is a significant advance on the program originally envisaged under the Scoping Study. There is now a greater focus on customer specific graphite products, higher margin products and new opportunities arising as a

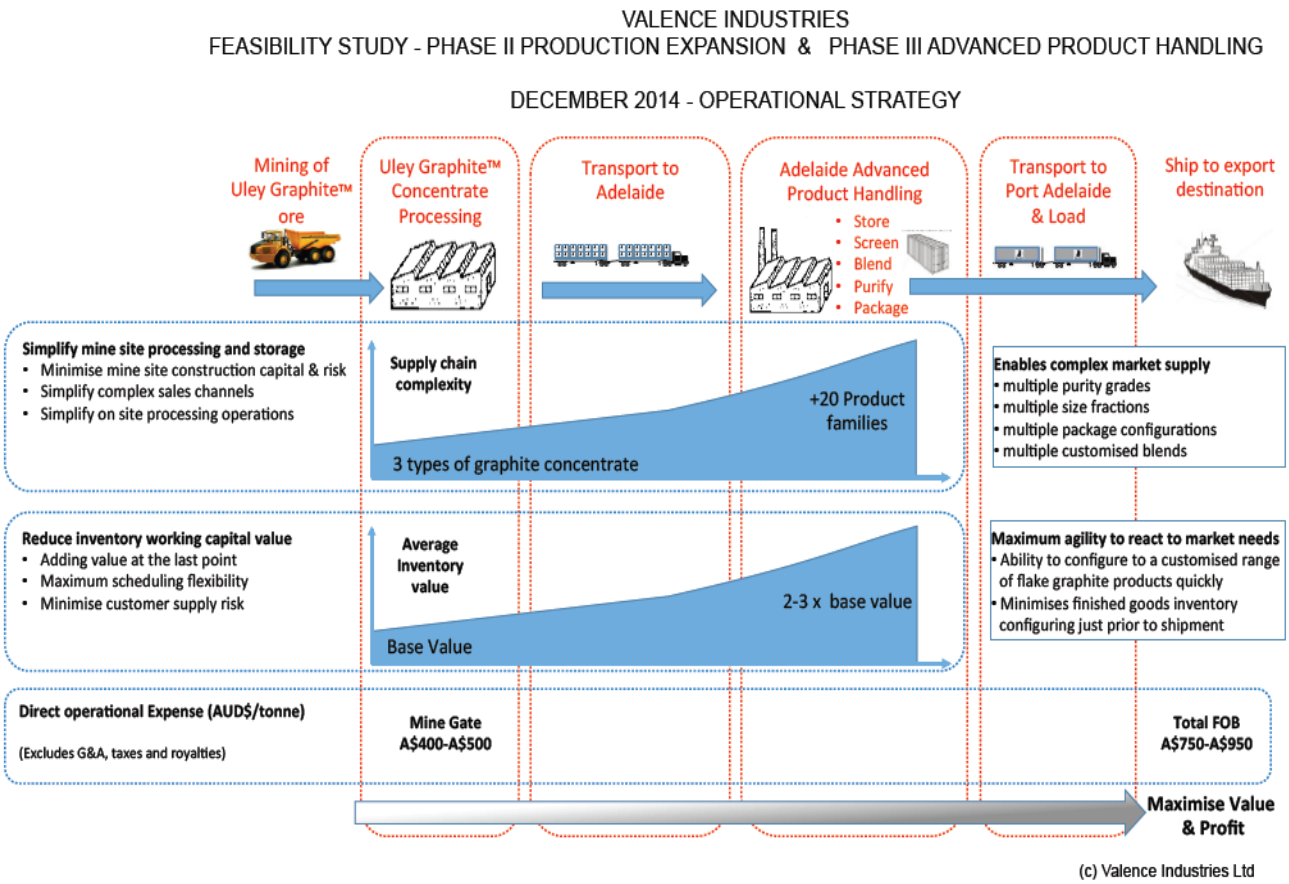
result of the advanced in-fill drilling program and the discovery of high grades of graphite including the unique areas of Arterial Flake™.

3. Manufacturing & Processing

3.1 Production Principles

- Evaluation of Uley Graphite™ ore indicates that it is quite friable and requires a simple comminution circuit that can handle clay bearing materials and liberate the graphite without excessive breakage of flake sizes and creation of fines.
- Flotation testwork has validated that a concentrate graded 94% carbon can be achieved from a basic multi stage open circuit flotation circuit at typically 85% recovery. Simple dispersants provide a solution to the separation from any unwanted materials associated with the graphite.
- The collector / frother reagents are hydrocarbon based hence the need for care in the design to prevent any contact between groundwater and residual hydrocarbons in the process water and a corresponding need for ongoing monitoring and reporting engagement with relevant regulators.
- Given that water is a critical issue in the region, additional monitoring testwork and studies will be conducted even at the conclusion of other works associated with the Feasibility Study to ensure optimal water management outcomes and meet regulatory requirements.
- Valence Industries' operational strategy is illustrated in figure 3.1.2 below:

Figure 3.1.2 – Valence Industries Operational Strategy



3.2 Phase II Plant (Uley Graphite™ Facility Expansion)

- The engagement with Valence Industries customers and the evaluation of the market (as outlined above) has seen a considerable change in the production strategy. It is now proposed that the Phase II plant expansion at the Uley Graphite™ site will involve:
  - the continued operation of the Phase I plant and its integration with the Phase II expanded facilities;
  - the construction of the Phase II processing facilities at the site in two stages of 25,000 tonnes per annum each (a total of 50,000 tpa) implemented to match increasing customer demand and stage capital allocation over three years. Land allocation and plant design will allow for potential future expansion in 25,000 tpa increments to a total additional capacity of 100,000 tpa above the current Phase I capacity;
  - the development and conduct of mining operations in Uley Pit 2 to feed both the Phase I plant and the Phase II plant as discussed below; and
  - the delivery of the base graphite concentrate grades from the Uley Graphite™ site to the Phase II & III Advanced Product Handling facility to be located in Adelaide.

3.3 Phase II & Phase III Plant (Advanced Product Handling)

- As part of the program of customer engagement and the assessment of logistics from the Uley Graphite™ site (discussed below) the Feasibility Study has determined that achieving product agility by shifting the final product sorting, blending, treatment, packaging and handling as close to the port for export will add significant value to Valence Industries' focus on advanced manufacturing.
- This means the processing plants at the Uley Graphite™ site will provide the company with base graphite concentrate to be transported as close as possible to the Port of Adelaide. That graphite concentrate will then undergo further value adding and advanced manufacturing treatment in Adelaide.
- The value adding and advanced manufacturing processes to be applied in Adelaide involve a combination of the originally planned Phase II program and what Valence Industries previously described as its Phase III specialist blending and high purity program. This is known as the "Advanced Product Handling" facility.
- The Advanced Product Handling facility will provide for multiple products to be created from the base graphite concentrate, the development of refined and specialist graphite blends and packaging to meet specific customer requirements. This will encompass the serving multiple product families with various combinations resulting in several hundred unique permutations.
- Acceleration of advanced treatment options will need non-mining regulatory approvals for those facilities. Such approvals are not considered to be onerous and it is expected that they can be achieved within the projected time frames expressed in this Feasibility Study.

3.4 Phase III Pilot Plant (High Purity & Specialist Products)

- The Feasibility Study also proposes the implementation of a Phase III high purity and specialist products pilot plant. This is in addition to the early introduction of the Phase III specialist blending in the Advanced Product Handling facility.

- The Phase III High Purity and Specialist Products pilot plant is designed to further verify Valence Industries' capacity to deliver micronised and high purity graphite for a wide range of specialist applications.
- Those specialist graphite applications have the potential to deliver significant added value to the range of specialist graphite product lines already defined by Valence Industries and are consistent with the company's advanced manufacturing focus on delivering higher value products and not on shifting tonnes of graphite.

4. Global Markets & Sales

4.1 Market Capability

- The global graphite market has many similar characteristics to other industrial minerals. It requires extensive experience in that market, specific qualification of graphite products and excellent relations with customers to form a real appreciation of the graphite market dynamics.
- Valence Industries' Managing Director & CEO, Christopher S. Darby, and its Chief Marketing Officer, Christopher Whiteley, have decades of such experience and have been able to provide a confident and accurate analysis of the market and sophisticated input on the key parameters for the development of a strategic plan for the company to exploit its pivotal strength in high quality coarse flake graphite resources set in the context of the current market place. This capability and the conclusions reached have been verified by reference to a range of independent external sources within the Feasibility Study.
- The critical success factor for Valence Industries will be the company's advanced manufacturing focus on delivering higher value products and not on shifting and selling bulk tonnes of graphite.
- Valence Industries' established Phase I processing facilities, have placed the company in a unique position to continue to provide material for customer evaluation and qualification processes, and that program is designed to ensure conversion of MoU's and customer programs to firm sales contracts.

4.2 Graphite Products & Quality

- The Uley Graphite™ facilities first produced graphite in the early 1900s and, prior to the recent Phase I recommissioning program, the plant also produced graphite up to 1993.
- The Uley Graphite™ products are highly regarded in the global market and current customer demand is significant.
- The target for Valence Industries from the existing Phase I operations and with the Phase II expansion is the delivery of high quality graphite products to meet advanced technical specifications with a specific focus on supplying higher value-added graphite products.
- As part of its overall advanced manufacturing philosophy and its drive for product quality and reliability for commitment for advanced manufacturing customer requirements, the Company is committed to gaining ISO accreditation for its operations..

4.3 Customers & Markets

- Valence Industries has a range of existing customers across a number of regions and in an array of industries. Those customers are located in countries across the Asia Pacific, Europe and North America.

- Valence Industries has signed MOUs for a combined total 80,000 tonnes of graphite for delivery over the next three years.
- Sales agreements for uncommitted long term production and for higher value sales are being negotiated with a range of customers and are scheduled in line with the relevant qualification process and the capacity of Valence Industries to deliver production.
- Currently anticipated demand under Valence Industries' sales forecasts is expected to exceed the Phase I plant production capacity by March 2016.

4.4 Graphite Pricing

- Valence Industries has established an average sales prices across its range of flake graphite products and this has been verified in the sales agreements and MOUs entered into by the company to date.
- There is a significant sales price difference between the graphite concentrate which leaves the Uley Graphite™ site and the multiple graphite product lines for Phase II and Phase III which will be manufactured at the Advanced Product Handling facility in Adelaide. There is also a sales price difference between those original flake graphite product lines derived from Phase I and Phase II and those product lines derived from the value adding arising from Phase III operations.
- That average sales price difference between the flake graphite products from the Phase I and Phase II general product streams and the flake graphite products from the Phase III production streams that require secondary processing are shown in the table below:

Average Sales Price (*per tonne of graphite*) [9]	Phase I & II (*FOB Adelaide*)	A$1,669
	Phase III (*FOB Adelaide*)	A$4,774

5. Ore Reserves & Mining

5.1 Mining

- The sales tonnages proposed by Valence Industries are modest in comparison to the wider mining industry. This is driven by customer demand and Valence Industries' focus on value adding and advanced manufacturing.
- A consequence of the scale is that Valence Industries' mining requirements are more closely aligned to a medium to large quarry rather than a traditional high capacity mine site. It is therefore possible to engage local quarrying contractors to provide and operate the earthmoving equipment required to feed the processing plants.
- It is expected that campaign mining will be used to achieve some efficiency at these volumes, since normal mining economies of scale are not achievable.
- Drilling and blasting is not required. Valence Industries' contractors will utilise excavator(s) for loading 40t haul trucks for ore haulage and waste removal duties.
- Valence Industries staff will undertake strict grade control as this can have significant cost impacts.

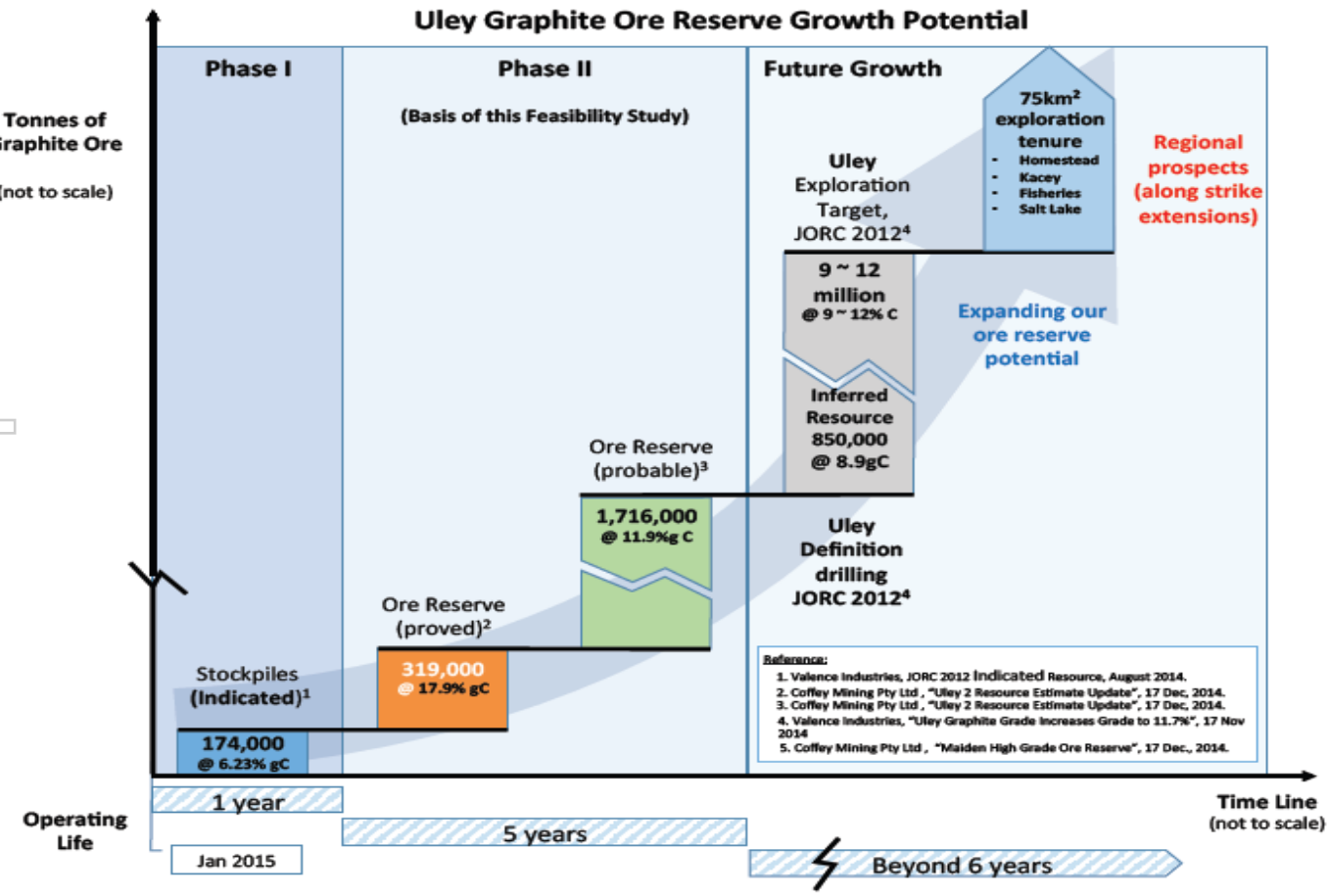
[9] Sales prices are expressed here in Australian Dollars (AUD) but no sales are made in AUD with the majority of sales made in United States Dollars (USD)

- There is a relatively high waste to ore ratio (5.9:1) but this more reflects the mineralisation style rather than the overburden situation and is likely to be refined in future.
- Initial waste will be used primarily for construction of the tailings storage facilities. Areas are available within a reasonable distance of the plant / pit area to mitigate long haulage distances for waste material.
- The stockpiled ore will be laid out to facilitate blending ahead of its introduction to the processing plant.

5.2 Resources

- Valence holds tenements in a globally recognised graphite bearing region that hosts numerous targets for further drilling. The work undertaken in 2014 across Uley Pit 2 verified that target identification process was not only valid but delivered some intersections of graphite with over 60% graphite content. Some of this high grade graphitic mineralisation outcrops and extends for up to 150m in depth with significant intersections across the ore body.
- Over 90% of the JORC 2012 Measured and Indicated Resources has been converted to and Ore Reserve – another successful outcome for Valence Industries in 2014. Current JORC 2012 Ore Reserves underwrite production for more than 5 years while the next phase of drilling is underway with an objective to significantly increase the existing ore reserve.

Figure 5.2 – Uley Graphite™ Ore Reserve Growth Potential



5.3 Uley Pit 2 Optimisation and Design

- Gemcom Whittle pit optimisation software was used to define economically optimal open cut shapes to guide the detailed pit designs and sequencing assuming a average base graphite price of USD$1,400 per tonne (AUD$1,750 per tonne).
- Pit shells were used to guide the detailed pit design for Uley Pit 2 including berm and bench configurations recommended by geotechnical consultants Coffey Mining.
- The Uley Pit 2 design contemplates a starter pit to 16 metres depth to fit with current regulatory approvals and an Uley Pit 2 cutback to extend the depth following further regulatory approvals.

5.4 Ore Reserves

Classification	Tonnage	Average Grade %C
Proved	319,000	17.9
Probable	1,716,000	11.9
Total	**2,034,000**	**12.9**

6. Mineral Resources & Exploration Targets

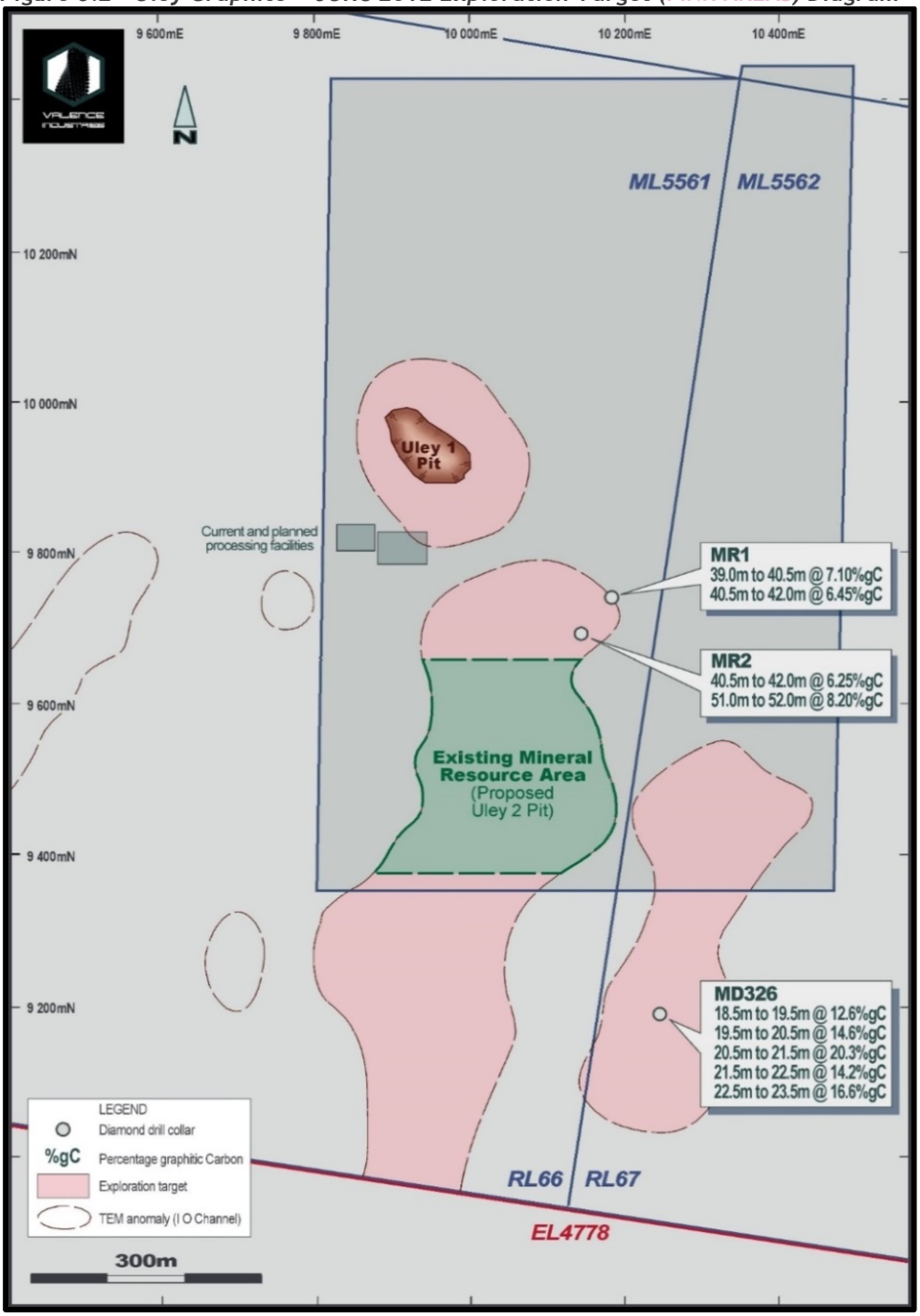
6.1 Mineral Resources

Classification	Tonnage	Average Grade %C	Contained Tonnes
Measured	340,000	17.92	60,000
Indicated	1,850,000	11.84	220,000
Indicated (Stockpiles)	174,000	6.23	10,866
Inferred (Uley Pit 2)	850,000	8.89	80,000
Total	**3,214,000**	**11.54**	**370,866**

6.2 Exploration Targets

Classification	Tonnage	Average Grade %C	Location
Exploration Target	9,000,000 to 12,000,000	9 to 12	ML5561 & ML 5562 RL66 & RL 67 Immediate Vicinity of Uley Pit 2

Figure 6.2 - Uley Graphite™ JORC 2012 Exploration Target (PINK AREAS) Diagram



6.3 Other Resources & District Exploration

- Similar style mineralisation and potential for additional resources has been identified near the Uley Graphite™ deposit on Valence Industries 75km^2 Exploration Licence. Partial drilling of those additional areas by a previous explorer has shown encouraging graphite assays at a number of locations along the strike including Homestead, Kasey, Fisheries and salt lake and were previously reported.
- This information from Coffey Mining referred to above was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information relating to those areas has not materially changed since it was last reported.

7. Waste Management & Civil Works

The waste handling proposal developed in conjunction with Golders and Associates and Bluechip Engineering features:

- Thickening of waste slurry streams (tailings) from the Phase I & Phase II plants;
- Final belt filtration of the solids from the thickener;
- Maximum recovery of water at all points to be recycled as process water;
- Placement of filtered solids into the Tails Storage Facility (TSF);
- The majority of mine waste to be used to construct dam structure to store filtered solids in the TSF;
- Process water dam structure lined to avoid residual hydrocarbons used in the flotation process from entering groundwater;
- Mine waste with appropriate material characteristics utilised for roadworks, initial civil works and safety berms; and
- TSF to be progressively rehabilitated.

8. Logistics & Infrastructure

8.1 Logistics & Adelaide Facilities

- Consultation with existing global customers and detailed analysis of how packaged material would be transported from the Uley Graphite™ site and efficiently distributed globally in led Valence Industries to the conclusion that the final product differentiation and packaging plant for Phase II needed to be as close to the port of export as possible.
- The only practical export port is Port Adelaide since the final packaged products must be containerised and there is no container facility at Port Lincoln.

8.2 Infrastructure

- Valence Industries has extensive established infrastructure at its Uley Graphite facilities associated with its current Phase I operations. This includes established land ownership, electricity, water, roads, workshops, laboratories, administration buildings and the substantial local supporting infrastructure at the regional centre of Port Lincoln just 23 kilometres away on a tarmac highway.
- New infrastructure in the feasibility study includes on-site supporting civil infrastructure, haul road upgrades, power upgrades and supplemental water supply.

9. Project Execution

9.1 Execution Approach

- Both the Phase II plant expansion and the Phase II development of Uley Pit 2 are brown-field expansions of the existing Phase I graphite mining and processing operations.
- The execution of the Phase II project is based on an Engineering, Procurement and Construction Management (EPCM) philosophy managed by Badge Constructions and a Valence Industries project control group and incorporating Early Contractor Involvement (ECI) for key strategic construction, engineering and plant supply.
- Specialist contractors for engineering, electrical, instrumentation, automation, installation and commissioning are engaged by Valence Industries from a short-list of preferred suppliers utilising a competitive request for quote (RFQ) program

9.2 Schedule

Capacity Phase	Added Capacity	Capacity Scheduled	Total Capacity
Phase I	14,000	2014	14,000
Phase II & III (Stage 1)	+25,000	2016	39,000
Phase II & III (Stage 2)	+25,000	2017-2019	64,000

10. Capital & Operating Costs

10.1 Capital Costs

Capital Phase	Cost Area	Capital Cost Amount
Phase II – Plant & Pit (Stage 1 & Stage 2) *(Uley Site)* *(Inclusive of contingency of ±15%)*	Phase II, Stage 1, Plant Expansion	A$18.6M
	Phase II, Stage 2, Plant Expansion	A$8.6M
	Uley Pit 2 & Support Infrastructure	A$8.5M
	Site Infrastructure & Other	A$1.0M
	Total	**A$36.7M**
Phase II & III Advanced Product Handling *(Adelaide)* *(Inclusive of contingency of ±15%)*	Phase II APH Facilities	A$6.3M
	Phase III APH Pilot Plant	A$5.6M
	Site Infrastructure & Other	A$1.3M
	Total	**A$13.2M**

[10] Working capital requirements are not included.

10.2 Operating Costs

Operating Cash Costs[11] (*per tonne of flake graphite produced*)	
Phase I & II *(mine gate)*	A$400 – A$500
Phase I, II & III *(FOB Adelaide)*	A$750 – A$950

11. Regulatory & Legal

11.1 Ownership

- Valence Industries Limited through its 100% owned subsidiary Valence Industries Operations Pty Ltd owns the real property on which the Uley Graphite™ operations are located for the Phase II expansion as well as the established Phase I processing facilities and the associated Mining Leases, Retention Leases and Exploration Licence.

11.2 Environment

- Valence Industries has a strong commitment to meeting best practice in the area of environmental protection within the scope of its operations. Consistent with this approach is the pursuit of ISO14001 accreditation and the substantive commitments which the company has given under the detailed Program for Environment Protection and Rehabilitation approved by the South Australian Government on 23 December 2014 for Phase I and Phase II operations from the Uley Graphite™ site.

11.3 Tenements & Permits

- Valence Industries Limited through its 100% owned subsidiary Valence Industries Operations Pty Ltd owns the following tenements. The Mining Leases represent the area the subject of the expansion programs at the Uley Graphite™ site under the Feasibility Study:

Number	Type	Status	Grant Date	Expiry Date	Area (Ha)
ML5561	Mining Lease	Current	Mar 1999	Mar 2017	44 ha
ML5562	Mining Lease	Current	Mar 1999	Mar 2017	22 ha
RL 66	Retention Lease	Current	Oct 1987	Oct 2016	225 ha
RL 67	Retention Lease	Current	Oct 1987	Oct 2016	187.5 ha
EL 4778	Exploration Licence	Current	Oct 2011	Oct 2016	75km^2

- Valence Industries Limited through its 100% owned subsidiary Valence Industries Operations Pty Ltd was issued with regulatory approval to conduct its Phase I and the proposed Phase II expansion operations at the Uley Graphite™ site in December 2014.

[11] Operating Cash Costs exclude government royalties, head office costs and marketing costs.

- The existing regulatory approval permits mining to a depth of 16 metres. Valence Industries will need to obtain further regulatory approvals to mine below 16 metres on its existing Mining Leases. The company reasonably anticipates that those approvals will be received ahead of any operational requirements to mine below 16 metres.
- Valence Industries will need to obtain further regulatory approvals including additional mining licences in future to extend its mining operations onto those areas currently the subject of its exploration drilling program for the Uley Pit 2 Extension. The company reasonably anticipates that those approvals and leases can be in place ahead of any operational requirements.
- The land on which the Mining Leases, Retention Leases and Exploration Licence are located is freehold land which has been farmed for periods in excess of 150 years.

12. Financial Analysis

12.1 Key financial assumptions

- In order to assess the project economics and viability of the proposed expansion operations in the Feasibility Study, a full life of mine cash flow model was constructed.
- The financial model incorporates the following key operating elements:
  - Phase I (existing) plant with 14,000 tpa capacity;
  - Phase II new expanded processing facility incorporating capacity to an additional 50,000 tpa concentrate in two stages as follow:

Capacity Phase	Added Capacity	Capacity Scheduled	Total Capacity
Phase II & III (Stage 1)	+25,000	2016	39,000
Phase II & III (Stage 2)	+25,000	2017-2019	64,000

  - Phase II & Phase III Advanced Product Handling facilities in Adelaide.

- Graphite price assume differential weighted averages per tonne for base graphite product lines and for value added graphite product lines as follow:

Product Source / Product Lines	Average Sales Price (*per tonne of graphite*) [12]
Phase I & II (*FOB Adelaide*)	A$1,669
Phase III (*FOB Adelaide*)	A$4,774

12.2 Model construction

- The model has been constructed principally to model After Tax Free Cash to Equity and as such be representative of cash flows that are likely to be received by VXL shareholders over the life of the expanded operations. The table below summarises the functional elements of the model:

Element	Assumption / Input
Model Start Date	Dec 2014
Modelling period	Monthly
Key Financial Output	Free Cash Flow to Equity
Real/Nominal Basis	Real
Exchange Rate USD/AUD	0.80
Discount rate	10% (after tax)
Tax Modelling	After tax
Graphite Resource Mined	2,035kt (Uley pit 2)

[12] Sales prices are expressed here in Australian Dollars (AUD) but no sales are made in AUD with the majority of sales made in United States Dollars (USD)

12.3 Financial summary

Utilising the above base case assumptions, the economic model in the Feasibility Study produces a series of outcomes some of which are summarised as follows:

Description		Outcome
NPV 10 (after tax)		$65m
IRR		46%
Total Ore Mined		2,035 kt
Average Head Grade		12.9%
Life of Mine		5 Years
Total Graphite Concentrate Sold		235kt
Capex[13]	Phase II –Plant & Pit (Stage 1 & Stage 2)	A$36.5M *(Uley Site)*
	Phase II & III (Advanced Product Handling plant)	A$13.2M *(Adelaide)*
Opex[14] (*per tonne of flake graphite produced*)	Phase I & II *(mine gate)*	A$400 – A$500
	Phase I, II & III *(FOB Adelaide)*	A$750 – A$950

12.4 Sensitivities

- Ore reserves have a substantial impact on the current NPV of the Phase II expansion project. It is anticipated that additional ore reserves will be identified from the current drilling programs for the Uley Pit 2 Extension on a portion of the company's JORC 2012 Exploration Target. Those drilling programs and the conversion to ore reserves are being scheduled to coincide with customer demand for production.
- Some of the key sensitivities modelled for both NPV and IRR are as follow:

NPV Sensitivity Table (A$m)	Valence Industries – NPV at ranges from Feasibility Study Base Case				
	-20%	-10%	Base	+10%	+20%
Capex	$74M	$69M	NPV $65M	$60M	$55M
Opex	$83M	$74M	NPV $65M	$55M	$46M

IRR Sensitivity Table (%)	Valence Industries – IRR at ranges from Feasibility Study Base Case				
	-20%	-10%	Base	+10%	+20%
Capex	58%	51%	IRR 46%	41%	37%
Opex	58%	52%	IRR 46%	40%	35%

[13] Working capital requirements are not included.
[14] Operating Cash Costs exclude government royalties, head office costs and marketing costs.

13. Risk Analysis

13.1 Project Finance

- Valence Industries is well advanced in its discussions with a number of international project financiers shortlisted and expects to mandate lead arrangers in Q1 2015.
- Valence Industries has received offers of mezzanine debt, contract factoring and convertible instruments which it is evaluating.
- Following assessment of the risk analysis on funding sources the balance of any funding requirements not met by debt is intended to be sourced from equity.

13.2 Project Delivery

- All of the key personnel involved in the Phase II expansion project have significant experience in the delivery of complex global mining, infrastructure and construction projects with specific knowledge and understanding of graphite processing and industrial minerals across the group.
- The two phase nature of the project also mitigates the project risk. The Phase II and Phase III expansion is being built off the base of an existing operational Phase I processing facility with committed customers and sales.

14. Recommendations & Opportunities

- A series of recommendations were made and opportunities identified in the Feasibility Study. These include a number of commercially sensitive and strategic opportunities for Valence Industries.
- Included in those recommendations and opportunities were the following conclusions:
    - It is recommended that Valence Industries conduct a review of optimisation alternatives before commencing significant construction activities. Key among these items is the more recently identified customer driven need for Advanced Product Handling facilities close to Port Adelaide. The location of such a facility is influenced not only by economics, but also Government requirements and its support for value adding opportunities. These discussions mean selecting the best location needs careful consideration and may change the mix between capital and operating costs for this facility. These discussions by their nature could take several months.
    - Recent testing of the Uley Pit 2 ore has identified how a proven overseas minerals treatment technology could be adapted for Uley Graphite™, including for the unique very high grade Arterial Flake™. It is recommended that assessment of these technologies occur for the purpose of further reducing the capital and operating costs, particularly for crushing. This work can happen in the normal time frame for Valence Industries' financiers and their independent experts to review the project and for detailed design and equipment selection to take place.

15. Disclaimer & Forward Looking Statement

Valence Industries confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates in this announcement continue to apply and have not materially changed since the announcements previously released as “Valence Doubles Existing ROM Stockpiles” (6/8/14), “Uley Graphite Grade Increases to 11.7%” (17/11/14) and “Maiden High Grade Graphite Ore Reserve” (17/12/2014).

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This release contains "forward-looking information". All information contained in this release that is not clearly historical in nature may constitute forward-looking information. Generally, such forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the company to be materially different from those expressed or implied by such forward-looking information, including but not limited to: (i) volatile stock price; (ii) the general global markets and economic conditions; (iii) the possibility of write-downs and impairments; (iv) the risk associated with exploration, development and operation of mineral deposits; (v) the risk associated with establishing title to mineral properties and assets; (vi) the risks associated with entering into joint ventures; (vii) fluctuations in commodity prices; (viii) the risks associated with uninsurable risks arising during the course of exploration, development and production; (ix) competition faced by the resulting issuer in securing experienced personnel and financing; (x) access to adequate infrastructure to support mining, processing, development and exploration activities; (xi) the risks associated with changes in the mining regulatory regime governing the resulting issuer; (xii) the risks associated with the various environmental regulations the resulting issuer is subject to; (xiii) risks related to regulatory and permitting delays; (xiv) risks related to potential conflicts of interest; (xv) the reliance on key personnel; (xvi) liquidity risks; (xvii) the risk of potential dilution through the issue of common shares; (xviii) the Company does not anticipate declaring dividends in the near term; (xix) the risk of litigation; and (xx) risk management. Forward-looking information is based on assumptions management believes to be reasonable at the time such statements are made, including but not limited to, continued exploration activities, no material adverse change in metal prices, exploration and development plans proceeding in accordance with plans and such plans achieving their stated expected outcomes, receipt of required regulatory approvals, and such other assumptions and factors as set out herein. Although the Company has attempted to identify important factors that could cause actual

results to differ materially from those contained in the forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such forward-looking information. Such forward-looking information has been provided for the purpose of assisting investors in understanding the Company's business, operations and exploration plans and may not be appropriate for other purposes. Accordingly, readers should not place undue reliance on forward-looking information. Forward-looking information is made as of the date of this news release, and the Company does not undertake to update such forward-looking information except in accordance with applicable listing rules and securities laws.