



ASX Announcement

Outstanding Ore Beneficiation Results Confirmed at a Commercial Scale

Vimy Resources Limited ("**Vimy**" **ASX: VMY**) is pleased to announce that commercial scale pilot test work has confirmed the ore beneficiation results for its Mulga Rock Uranium Project (**MRUP**), as announced to the ASX on 16 March 2015.

The scaled up commercial pilot test work has now confirmed the uranium mineralisation can be easily beneficiated to produce a highly concentrated plant feed.

Beneficiation test work has shown that the uranium mineralisation is primarily associated with the lighter carbonaceous and clay minerals intermixed with non-mineralised silica-rich coarse sands. By removing the silica sand, the volume of ore expected to be processed through the main process plant can be significantly reduced, with minimal loss of uranium.

Uranium grades resulting from this ore beneficiation are 2.7 - 3.4 times greater than the originals, with a mass rejection range of 65-72% of run-of-mine ore achieved. Uranium recoveries ranged from 95-96% to final concentrate

Mike Young, Managing Director and CEO of Vimy Resources, said, *"Proving the ore beneficiation results at commercial scale, using a very simple but effective process to recover the uranium mineralisation, has given the team confidence in the beneficiating process route".*

"This is truly outstanding work by our technical team and will significantly improve the already robust economics of the project."

"Reducing mill throughput by up to 72% whilst recovering up to 96% of the uranium is simply an exceptional result".

Please find following the detailed analysis of the beneficiation test work to date.

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Managing Director and CEO

Dated: 14 July 2015

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Positive Outcomes of Ore Beneficiation

Having now proven the ore beneficiation results at commercial scale, the Company is confident that ore beneficiation will have a significant positive impact on the Project's economics. By more than doubling the run-of-mine uranium head grade the benefits listed below are expected to flow on during the Feasibility Studies relative to the parameters used in the Scoping Study as announced on 6 May 2015:

- **Reduced Capital Costs:** Following installation of the front end beneficiation plant, the process plant capital costs will decrease as the process plant will be approximately half the original proposed size. The final uranium precipitation and packaging plant will remain the same size;
- **Reduced Operating Costs:** Power costs will reduce as the process plant is smaller; reagent consumption will decrease; borefield water requirements will decrease significantly;
- **Reduced Tailings:** Mass of process tailings will be approximately half the original amount;
- **Improved process efficiency:** Higher uranium resin loading capacities will be achieved during resin-in-pulp, resulting in lower resin inventory, lower first fill costs and lower impurities in final yellowcake product; and
- **Reduced maintenance:** Equipment wear rates will reduce as the abrasive sand component would have been removed from the process plant feed.

Ore Beneficiation Process

In practice, run-of-mine (ROM) ore will be initially treated using a mineral sizer and log washer to fully liberate the clay material from the sands. The resulting slurry will be screened at 2mm and the coarse oversized material stacked in a stockpile to be trucked to the main process plant where it will be fed into a Semi-Autogenous Grinding (SAG) mill. The <2mm slurry will be deslimed at 0.045mm using hydrocyclones and the resulting fines sent to the discharge of the SAG mill. The mid-size fraction (<2mm >0.045mm) will then be beneficiated using either a two stage spiral circuit or a two stage Upward Current Classifier (UCC) circuit.

The feed is processed through an initial Rougher stage where the tailings reject (Silica sand) is sent to the pit void and primary uranium concentrate is pumped to the SAG mill circuit. The Rougher middlings are then further processed through a Scavenger stage to recover a secondary mineral concentrate which is combined with the first stage primary concentrate. The sand rejects from the Scavenger stage are also sent to the pit void. Figure 1 on the next page shows a schematic of the proposed ore beneficiation flowsheet.

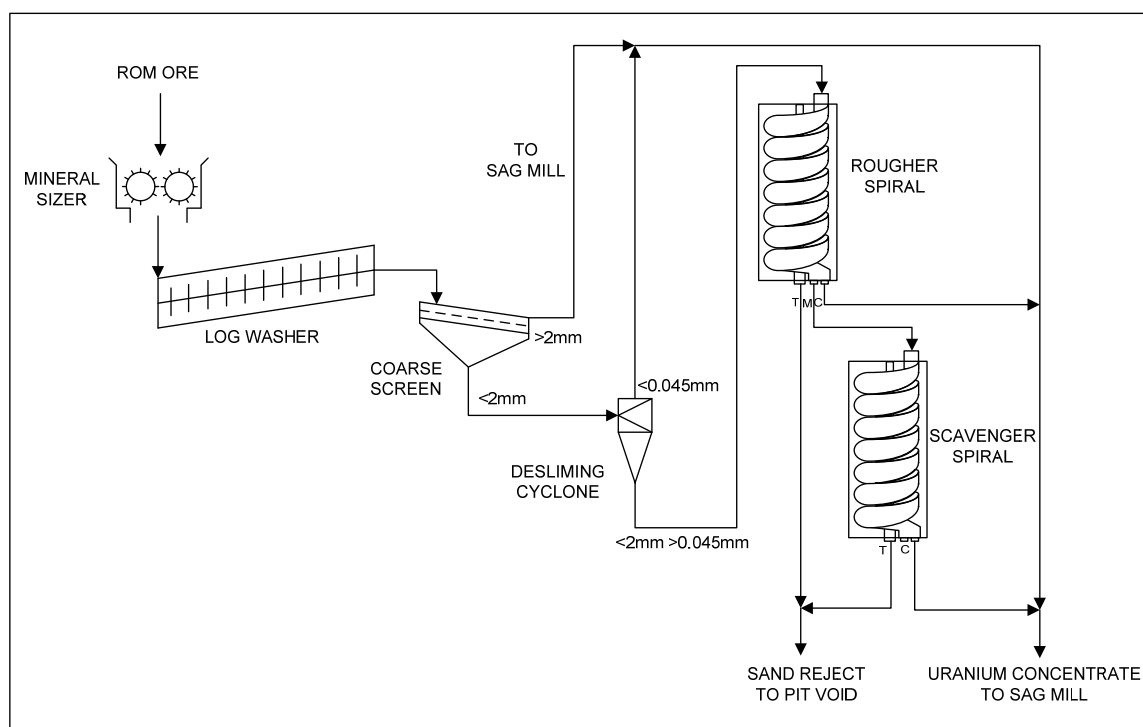


Figure 1: Ore Beneficiation process flowsheet

Primary Ore Beneficiation – Screening

Previous laboratory test work has shown that simply screening the oversized material (+2mm) and the slimes (<0.045mm) from the ROM ore results in an initial beneficiation step by isolating the mid-size (<2mm >0.045mm) silica-rich sands.

Approximately 400 - 500 kg of 200 mm diamond drill core was obtained from Princess and Ambassador and blended using a 150 ppm U_3O_8 cut-off grade. Based on resource optimisation studies it is anticipated the ROM uranium grade will be in the order of 600-800 ppm U_3O_8 for the initial half of the project mine life. The final bulk metallurgical samples were in very close approximation with the expected project ROM grades.

Initial laboratory test work has shown the majority of uranium is present in the ROM oversize +2mm material and the slimes, which are typically less than 0.045mm. The bulk samples were initially wet screened at 2mm and then deslimed at 0.045mm using a double deck Kason screen. Figure 2 on the next page shows the percentage mass and uranium distribution for the two bulk samples. Results are also tabulated and shown in Table 1.

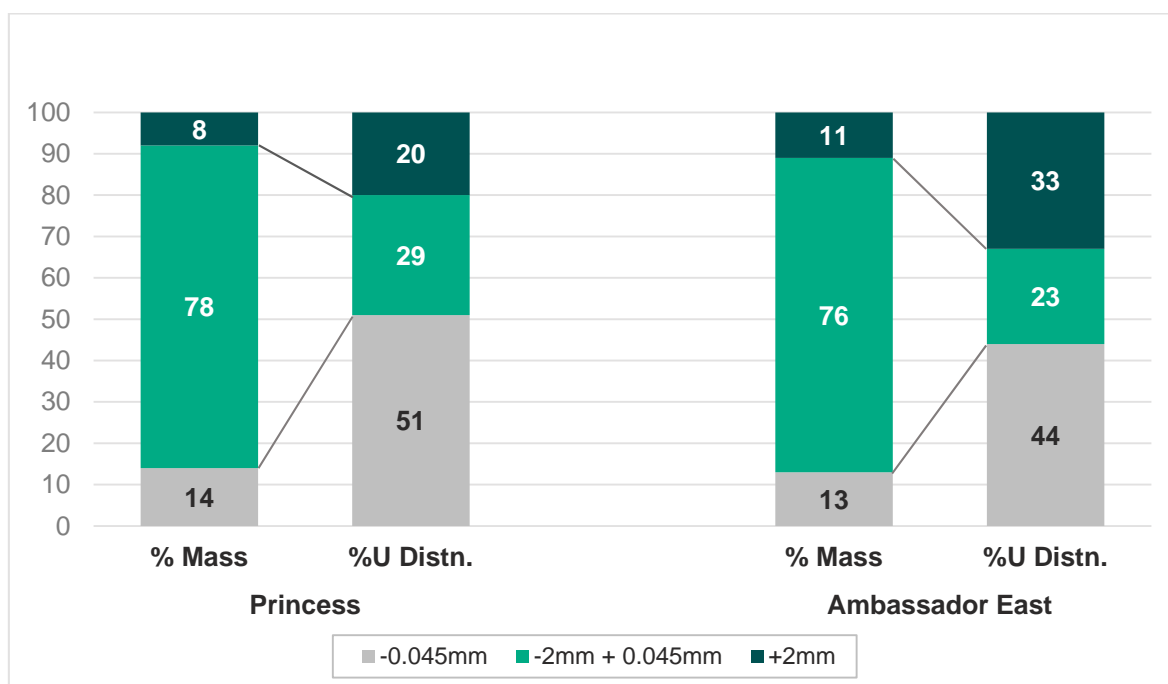


Figure 2: Percentage of mass and uranium distribution from screening products

By simply screening the ROM ore feed to recover the slimes (<0.045mm) and the coarse (>2mm) size fractions, 75-78% of the uranium can be recovered in 22-24% of the original mass.

The bulk test work has confirmed the majority of uranium present in the ore is mainly associated with the <0.045mm fraction or the 'slimes' fraction and the 'coarse' material greater than 2mm. The fines are predominantly fine carbonaceous material and clays, while the coarse oversized material (>2mm) is typically hard carbonaceous lumps, claystone and sulphide nodules.

The mid-size fraction (<2mm >0.045mm) represents about 75% of the initial ore feed while only containing 20-30% of the uranium.

Table 1: Primary Ore Beneficiation – Screening

Size Fraction	Princess		Ambassador	
	% Mass	% U ₃ O ₈ Distribution	% Mass	% U ₃ O ₈ Distribution
>2mm	8.2	20.1	10.7	32.8
<2mm >0.045mm	78.0	29.0	75.9	22.9
<0.045mm	13.8	54.9	13.4	44.3
Total	100	100	100	100

Secondary Ore Beneficiation – Gravity Separation

The mid-size screen fraction (<2mm >0.045mm) containing the bulk of the silica-rich sand was then processed using a two-stage gravity separation circuit. The Ambassador sample was processed using a two-stage spiral circuit, with the middlings from the first stage Rougher spiral re-processed through a second stage Scavenger spiral to recover any remaining uranium present in the Rougher middlings. The concentrates from the Rougher and Scavenger spiral stages were combined, while the tailings from each stage were rejected. Figure 3 shows an image of the spiral pilot plant and the Ambassador ore passing down the spiral.



Figure 3: Image of Rougher spiral (left) and Ambassador Ore flow down the spiral (right)

For the Princess bulk sample, the first stage of gravity separation used a Flotex Rougher upward current classifier (UCC) with the overflow from the UCC then re-processed through a second stage Cleaner spiral. The concentrate from the Cleaner spiral represented the final concentrate, while the tailings from the Rougher UCC and Cleaner spiral were rejected.

Figure 4 shows an image of a Flotex UCC pilot unit used for this test work program. A UCC works via an upward current of water which is injected into the bottom of the vessel and flows upwards through the coarse-heavy sand bed. The water flowrate determines the mineral density that will float upwards and overflow. Fresh feed enters as a slurry via an inlet into the vessel and is shown by the dashed white lines in the image. The heavy sand sinks to the bottom of the vessel and is periodically discharged through an automated pinch valve. The light uranium bearing carbonaceous and clay material overflows into a launder.

Table 2 and Table 3 show the results from the final ore beneficiation. The results show the carbonaceous (% C) material has been effectively recovered to the final concentrate. There is still a relatively high amount of silica associated with the concentrate and this is most likely due to the presence of fine clay minerals. It is also worth noting the vast majority of base metals (Cobalt, Copper, Nickel and Zinc) are also recovered to the final concentrate.



Figure 4: Image of Flotex UCC (left) and Princess ore being processed (right)

Table 2: Secondary (Final) Ore Beneficiation – Gravity Separation for Princess

Stream	% Mass of ROM	C (%)	Si (%)	Co (ppm)	Cu (ppm)	Ni (ppm)	Zn (%)	U ₃ O ₈ (ppm)
+2mm	8.2	23.60	23	1020	1920	2400	0.92	1601
-45um	13.8	22.20	15	500	2200	1100	1.25	2610
Cleaner Spiral Con	5.6	24.8	22.1	260	2040	680	0.8	2323
Final Con	27.7	23.2	18.8	606	2084	1402	1.05	2252
% Distribution	27.7	96.9	13.2	86.2	89.4	79.2	85.4	94.9

Rougher UCC Tail	68.0	0.3	47.3	37.1	82.8	140	0.1	41
Cleaner Spiral Tail	4.3	0.6	46.0	40.0	275.	160	0.2	118
Final Tail	72.3	0.3	47.3	37.3	94.2	141.2	0.1	39.0
% Distribution	72.3	3.1	86.8	13.8	10.6	20.8	14.6	5.1

Table 3: Secondary (Final) Ore Beneficiation – Gravity Separation for Ambassador

Stream	% Mass of ROM	C (%)	Si (%)	Co (ppm)	Cu (ppm)	Ni (ppm)	Zn (%)	U ₃ O ₈ (ppm)
+2mm	10.7	21.90	16.8	2780	1120	5700	0.87	2210
-45um	13.4	15.70	21.3	580	675	1300	0.55	2387
Rougher Con	7.7	12.70	33.3	280	440	680	0.21	1613
Scavenger Con	3.1	2.58	44.7	100	140	280	0.07	356
Final Con	35.0	15.76	24.7	1145	712	2421	0.53	1980
% Distribution	35.0	98.4	21.9	89.0	91.4	84.8	93.6	95.9

Rougher Tail	39.8	0.15	47.3	100	40	280	0.02	52
Middling Tail	25.2	0.12	48.0	40	30	160	0.016	35
Final Tail	65.0	0.14	48	77	36	233	0.019	39
% Distribution	65.0	1.6	78.1	11.0	8.6	15.2	6.4	4.1

Table 4 provides an overall summary of the beneficiation results showing the initial uranium grade of the starting material and the final beneficiated mineral concentrate. Results show the initial ore feed is upgraded by 2.7 – 3.4 times, while rejecting 65-72% of the initial mass. Uranium losses were very low with only 4-5% loss incurred in the silica sand rejects.

Table 4: Overall summary of beneficiation results on a run-of-mine ore basis

Deposit	Initial Head Grade ppm U ₃ O ₈	Beneficiated Ore Grade ppm U ₃ O ₈	Uranium Upgrade *	% Mass Rejected	% Uranium Loss
Princess	657	2252	3.43	72	5.1
Ambassador	723	1980	2.74	65	4.1

*Calculated by dividing beneficiated uranium grade by initial head grade.

Next Steps

Investigations will also commence on undertaking heavy liquid separation test work on Vimy's extensive drill core sample library to develop a Geomet model to predict the percent ore beneficiation that can be achieved in each block of the Resource model.

An extended continuous pilot program will be performed as part of the Feasibility study to confirm equipment sizing and specifications.

About Vimy

Vimy Resources Limited (**ASX: VMY**) is a Perth-based resource development company. Vimy's primary focus is the development of the Mulga Rock Uranium Project. Mulga Rock is one of Australia's largest undeveloped uranium resources and is located 240km ENE of Kalgoorlie in the Great Victoria Desert of Western Australia.

For a comprehensive view of information that has been lodged on the ASX online lodgement system and the Company website please visit asx.com.au and vimyresources.com.au respectively.

Directors and Management

The Hon. Cheryl Edwardes – Chairman
Mike Young – CEO and Managing Director
Julian Tapp – Executive Director
David Cornell – Non-Executive Director
Aaron Hood – Non-Executive Director
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