ASX ANNOUNCEMENT

19 JUNE 2019

CODE: ALY

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ISSUED CAPITAL

SHARES 440,419,481

OPTIONS 22,000,000 (Unlisted)

PROJECTS

WEST LYNN (51% earning up to 80%)

LACHLAN (51% earning up to 80%)

KARONIE (100%)

BRYAH BASIN (20-100%)

Suite 8/8 Clive Street
WEST PERTH WA 6005

Phone: +61 8 9481 4400
Facsimile: +61 8 9481 4404

www.alchemyresources.com.au

Maiden Alumina Resource Estimate
Summervale Prospect, NSW

Highlights

- Maiden alumina resource of **6.6Mt @ 20.8% Al_2O_3**
- Mineralisation open in all directions
- Potential for grade increase with beneficiation of ore
- Aluminium extraction of up to 70% using standard HCl leach
- 99.95% HPA produced on first met sample without process optimisation
- Good potential for optimisation of leaching and heat treatment stages
- Further resource drilling and metallurgical testwork planned

Alchemy Resources Limited **(ASX: ALY)** is pleased to announce that a maiden JORC Code 2012 Edition compliant inferred mineral resource estimate has been completed for the alumina rich kaolin zone of the Summervale Prospect, located 23km northwest of Nyngan, NSW.

The mineral resource estimate totalling **6.6Mt @ 20.8% Al_2O_3** was completed by Resource Evaluation Services (RES) and is reported at an 18% Al_2O_3 lower cut-off as detailed in the table below. The grades are not screened/beneficiated figures.

Deposit	Cut-off (Al_2O_3)	Tonnes (M)	Al_2O_3%	Fe_2O_3%	K_2O%	Na_2O%	TiO_2%	SiO_2%
Summervale	18%	6.55	20.8	2.8	1.79	0.43	1.15	64.2

The inferred mineral resource is reported on a dry tonnage basis (see attached JORC Table 1 for details).

The resource estimate follows an intensive 178 hole drilling campaign completed by Alchemy across the West Lynn and Summervale prospects during 2018, primarily targeting nickel - cobalt mineralisation. This work resulted in the Ni-Co resource estimate announced in February 2019[1] and also identified the extensive alumina rich kaolin layer overlying the Ni-Co mineralisation at Summervale.

The kaolinite zone hosting the alumina mineralisation at Summervale is flat lying, commences from ~15 to 25m below surface, is between 2m and 40m thick (commonly ~10m thick), and is interpreted to be derived from weathered pelite units of the Girilambone Group. Mineralisation remains open along and across strike, showing good potential to deliver additional resources. It is anticipated that the alumina resource could potentially be exploited in conjunction with open pit mining of the underlying Ni-Co resource.

[1] *Refer to Alchemy Resources Limited ASX Announcement dated 19 February 2019*

Initial metallurgical testwork completed by Simulus Laboratories using a hydrochloric acid leach returned aluminium extractions of up to 70%. The leach was completed on a non-screened, non-beneficiated basis, subsequent to a heat treatment at 650^{0}C for 1 hour. Crystallisation and calcination of the leach solution produced 99.95% alumina (HPA). XRD results suggest that aluminium extraction could be improved with optimisation of the heat treatment and leaching stages, enabling the production of >99.99% alumina (4N HPA).

The West Lynn Project forms part of the Heron Resources Limited (ASX: HRR) Farm-in Agreement where Alchemy has earned 51% (earning up to 80%).

Geology and Geological Interpretation

The West Lynn and Summervale Prospects are located over a north-south trending folded belt of serpentinised ultramafics known as the West Lynn Serpentinite, surrounded by sediments of the Girilambone Group within the Girilambone-Wagga Anticlinal Zone in central NSW. The linear orientation of the belt suggests emplacement along regional shears or faults of Alpine-type origin (ophiolite). The West Lynn Serpentinite is derived from the alteration of a medium grained dunite intruded into the metamorphosed Ordovician Girilambone Group. The serpentinite is strongly magnetic compared to the surrounding sediments of the Girilambone Group *(Figure 1)*.

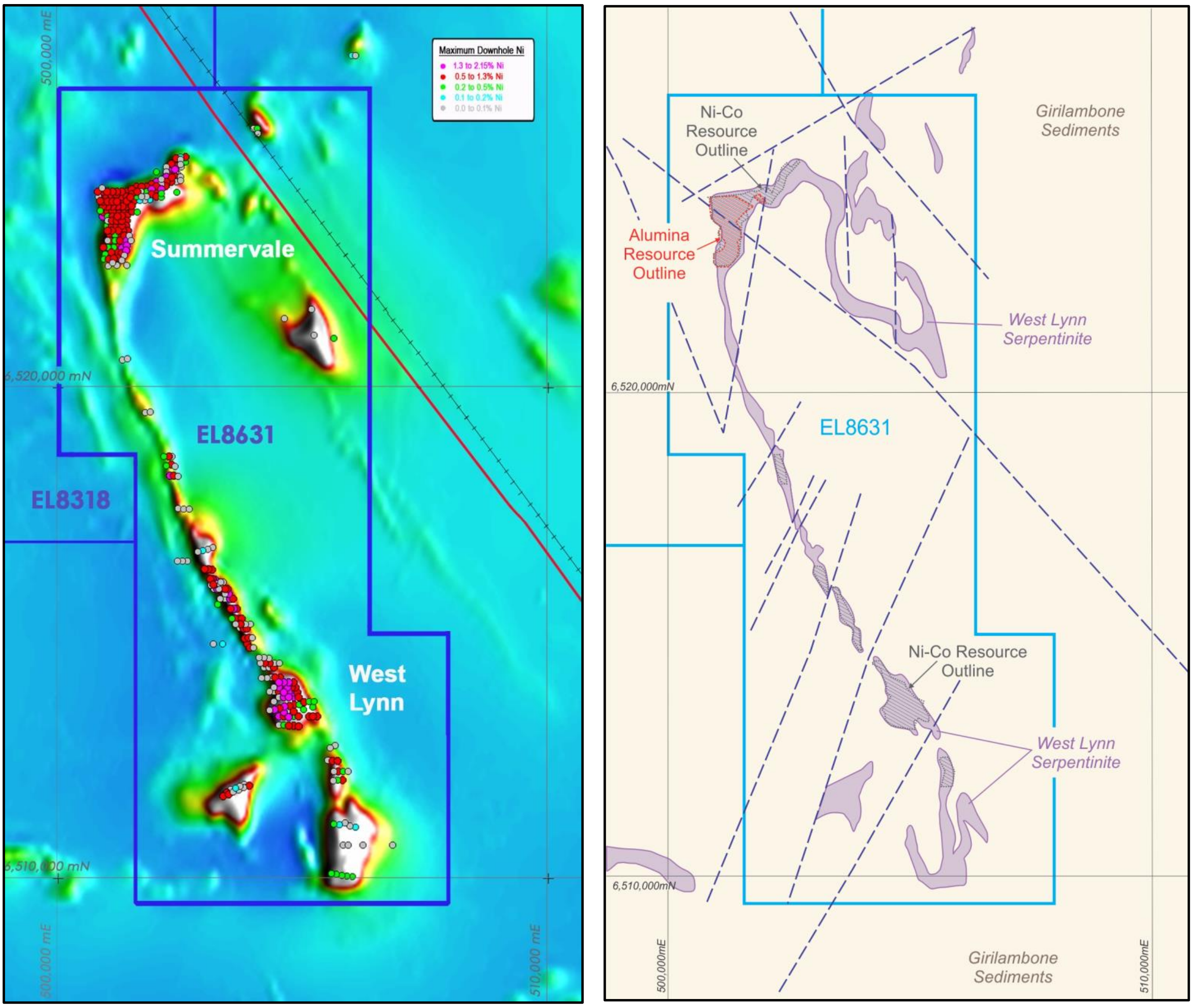

Figure 1: West Lynn Project showing all drilling coloured by maximum downhole Ni (%) over regional aeromagnetic image (left) and Ni-Co and Summervale alumina resource outlines over interpreted structures and bedrock geology (right)

Mineralisation at West Lynn is the result of weathering processes concentrating nickel and cobalt within clays and saprolite derived from the underlying serpentinite. In the Summervale area a zone above and separate to the Ni-Co domain is enriched in alumina and depleted in most other analytes *(Figure 2)*. Mineralogically the alumina domain is primarily kaolin and silica. The protolith for the kaolin is not certain; however petrography suggests a pelitic origin derived from the Girilambone Group sediments. This confirms the observation that the thicker zones with higher alumina grades and are located north and west of the main Ni-Co mineralisation *(Figure 2)*. The area is topographically flat, covered by Quaternary alluvium and dominated by wheat crops.

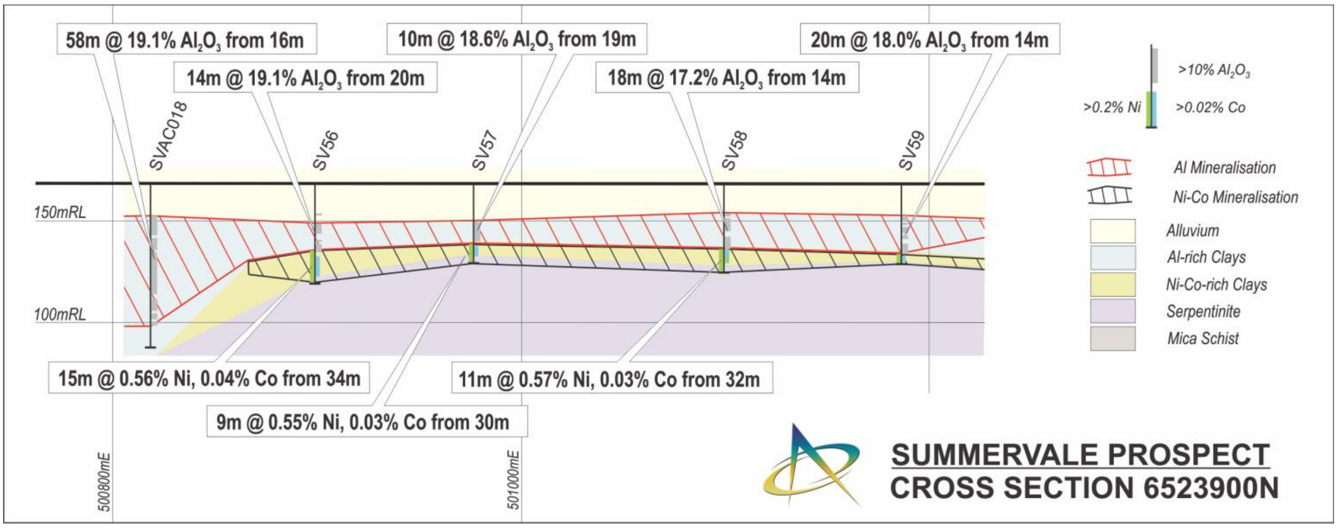

Figure 2: Summervale Prospect cross section 6523900N showing Al-rich clay layer above Ni-Co mineralisation

The confidence in the current geological interpretation of the West Lynn Project is considered to be good. The geology of the flat lying kaolin, laterite and saprolite deposits is relatively simple and geological information obtained from the drilling is supported by geophysical data. Assay data has been used to interpret the alumina mineralisation domain and ore block boundaries based on a nominal 16% Al_2O_3 lower cut-off grade which was selected based on visual inspection of grade continuity between mineralised drill intersections, and statistically supports a homogenous sample population. Mineralisation outlines were snapped to the drill holes and the resulting strings were used to construct wireframe solids to constrain the resource estimation.

Sampling and Sampling techniques

The samples referred to in this report were aircore (AC) and diamond drill samples obtained using an 'industry standard' drill rig, drilling equipment and sampling practices.

There were several historical generations of AC drilling completed by Jervois Mining Ltd (Jervois) between 2005 and 2011. Samples were 2m composites in the 2005 drilling, otherwise all other samples were collected at 1m intervals. There is no record of sample collection methods with the exception of the 2015 AC drilling (holes SV68-78) where the 1m samples were reported to have been riffle split. Alchemy conducted the most recent AC drilling with hole numbers pre-fixed with SVAC or WLAC. AC drilling was used to obtain 1m samples that were collected in plastic buckets from an industry standard cyclone. Each 1m sample was then split using a 3 tier splitter into large green plastic bags (87.5%) stored onsite as reference samples and numbered calico bags (12.5%) for laboratory analysis. A grab sample was carefully obtained in the rare cases where material was too wet to be passed through the sample splitter. All samples (full green plastic and calico sample bags) were weighed onsite as a measure of sample recovery. The AC samples obtained are considered to be representative of the material drilled.

Alchemy diamond core drill samples were obtained using an Atlas Copco CT14 drill rig. Standard drilling equipment and sampling practices were used. Diamond core samples were collected in 3m runs and transferred into plastic core trays. The core was wrapped in plastic to retain moisture for SG "wet" weight measurements. The diamond core samples obtained are considered to be representative of the material drilled.

All Alchemy sampling was carried out using documented drilling and QAQC sampling procedures.

Drilling Techniques

Jervois used different drill contractors over the years as follows – there is no record of drill rig details:

Na001 – 030	2005	G.O.S Drilling
Na122 – 154	2008	No record
SV01 – 44	2009	AMWD Drilling
SV45 – 59	2011	All Search Drilling
SV67 – 80	2015	Collings Drillers

Alchemy AC drilling was completed by McLeod Drilling using a MD150 drill rig with an on-board 2 stage Airman Compressor (250 - 320psi / 700 - 850cfm) using an industry standard 90mm diameter aircore blade bit. The Aircore drilling method was chosen in preference to RC drilling in order to achieve the best possible sample recovery of the clay and saprolite material hosting the Ni-Co and alumina mineralisation. RC hammer drill bits tend to clog up in clay and if subsequent drill penetration is slow a wet sample can result. Aircore drilling is designed for rapid recovery of clay achieving a high quality, dry, contamination free sample.

For the Diamond drilling AC pre-collar drill holes were completed to pre-determined base of alluvium depths by Drillit Consulting Pty Ltd using a track mounted Multidrill 600 with a Sullair 900 cfm x 500 psi compressor, 3.5" rods and a 100mm diameter aircore blade bit.

Diamond drilling tails were completed from the base of each aircore pre-collar hole using an Atlas Copco CT14 drill rig and a conventional triple tube barrel in order to obtain PQ3 core samples down to 64.9m (SVDD001), 49.1m (WLDD001), and 75.4m (WLDD002). PQ3 core samples were wrapped in plastic and put into plastic PQ3 core trays. Due to the shallow hole depths no down hole surveys were collected, and due to the supergene nature of the mineralisation the core was not oriented. The diamond core was reconstructed into continuous runs on an angle iron cradle for down hole depth marking.

Data spacing and distribution

At Summervale aircore holes were drilled at 100m x 100m spacings over a 2.7km NE-SW trending strike length *(Figure 3)*. The distribution of data is considered sufficient to establish geological and grade continuity suitable for an inferred resource. One diamond hole (SVDD001) was drilled as a twin of an existing Alchemy aircore hole (SVAC033). The diamond hole was collared 3m from the aircore hole.

Sample analysis method

Jervois used the ALS laboratory in Orange (NSW) for all drill sample analysis (2005-2015). The Jervois analysis details vary for each generation as follows:

Na001-030 samples were analysed by XRF with unknown method code for Ni, Co and Sc. Pulps for holes Na002, Na004-006, Na154, and SV02 were sourced from Jervois and submitted to ALS Orange for analysis via method code ME-XRF-12n which involves fused disc XRF for a suite of 18 elements (incl. Al_2O_3) and ME-GRA05 for LOI determination, described as H_2O/LOI by TGA furnace. Na122-130 were analysed by method code ME-ICP93 for Nickel Laterites by Fusion ICPAES for a suite of 20 elements and ME-GRA05 for LOI determination. Original laboratory results are available.

SV01-80 were analysed by method code ME-XRF-12n for a suite of 29 elements and ME-GRA05 for LOI determination as described above. Original laboratory results are available.

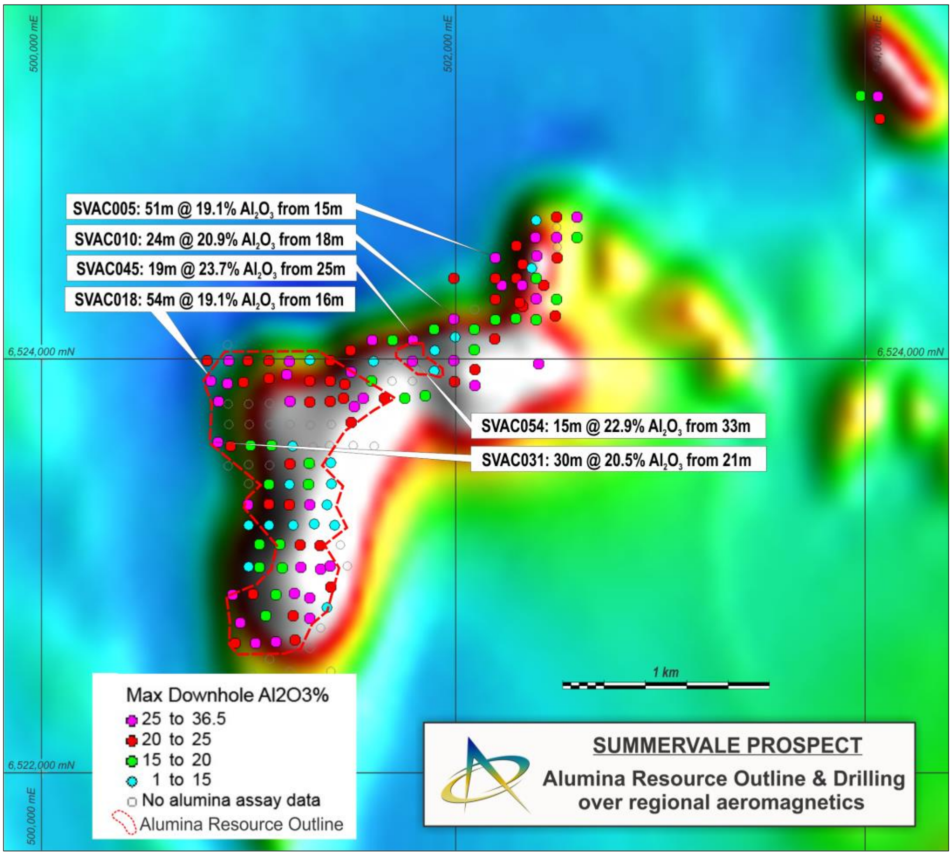

Figure 3: Summervale deposit showing all drilling coloured by maximum downhole Al_2O_3(%), significant drill intercepts, and Al_2O_3 resource outline (red) over regional aeromagnetic image.

All Alchemy drill samples were sent to the ALS Orange for analysis. Preparation of the samples follows industry laboratory best practice method PUL-21 involving logging of sample weights, drying the entire sample in an electric oven set at 105ºC+5ºC for several hours (drying time dependent on moisture content), then crushing the entire sample to >70% passing -6mm. A split of 2.5kg to 3kg (AC) and 250g – 1kg (core) was taken and then pulverized to 85% passing 75µm using an Essa LM5 grinding mill. A representative sample was split and bagged for analysis. AC and core pulps were analysed using ALS method code ME-XRF-12n (as described above) on a 0.70g pulp producing results for 18 analytes. Eight Alchemy core samples were also selected for Au analysis using ALS method code Au-AA24. This method uses a 50g pulp subjected to fire assay with an AAS finish.

Laboratory sample QAQC involves the use of certified reference materials (CRM), blanks, splits, and replicates as part of in-house laboratory procedures. Commercially available reference materials with a suitable range of values for testing elements related to Nickel laterite ores and additional multi-element analysis were used by the laboratory. Laboratory standards LAT-CS19, LEA-16, NCSDC73303, OREAS 15b, OREAS 184, OREAS 195, OREAS 197, OREAS 198, OREAS 199, OREAS 215, OREAS 61f, OREAS 907, OREAS-45e and SARM-5 were used.

Alchemy inserted 1 CRM standard with a suitable range of values, 1 duplicate and 1 blank every 50 samples. CRM standards used were OREAS 186, 197, 198, 199 and 44e. Results indicate that assay values are within acceptable error limits. AC samples and field duplicates were 1m intervals. Diamond core samples were 1m ¼ core samples except for where lithological boundaries were better represented by smaller or larger sample lengths (no less than 0.4m and no greater than 2m). Duplicates were 1m ⅛ core samples.

Results show that all QAQC assay values and duplicate sample results (ALS and Alchemy) are within 1 standard deviation and within acceptable error limits.

Estimation methodology

This Mineral Resource estimate is based on a number of factors and assumptions:

- All the available AC drilling data as at 1 June 2019 was used for the Mineral Resource estimation. Assay data from the diamond drill hole was not used in the estimation.
- The deposit was interpreted on vertical sections to define the mineralised geological domains and material type domains (kaolin) that were used to flag the density and grade sample data for statistical analysis and estimation. Sections were spaced a nominal 100 m apart. A 16% Al_2O_3 edge cut off was used to define the mineralised kaolin domain and the ore block outlines.
- The survey control for collar positions was considered adequate for the purposes of this study. Drill hole collars were registered to the topographic surface to eliminate minor elevation discrepancies, particularly in the historical data.
- A review of the quality assurance and quality control (QAQC) data was completed. The QAQC program included company standards and blanks as well as a comparison of AC/Diamond twinned holes. Overall, the data was deemed satisfactory for the current resource classification.
- Statistical and geostatistical analysis was carried out on drilling data composited to 1m intervals downhole. Variogram structures were considered by RES to be of insufficient quality to undertake a kriged estimation.
- An un-rotated block model of the deposit was created using 50m x 50m x 5m parent cells and 6.25m x 6.25m x 0.625m sub-cells.
- An Inverse distance algorithm (ID^2) was used to estimate grades into the model using Surpac software. A 3-pass estimate was used, with each pass relaxing the search criteria. Pass 2 doubled the size of the search radius; Pass 3 doubled the radius again and reduced the minimum samples to 1. A minimum of 2 and maximum of 32 samples was used for each estimate. A first pass search radius of 100m x 50m x 5m was used.
- Al_2O_3, CaO, Cr_2O_3, Fe_2O_3, K_2O, LOI, MgO, MnO, Na_2O, P_2O_5, SiO_2 and TiO_2 were estimated for all kaolin domain blocks. Due to lower numbers of sample analyses MnO is considered by RES to be an indicative estimate only. The same search parameters were used for each analyte in order to maintain as best possible the statistical relationship between the analytes. There is a poor to medium correlation between the analytes.
- Top cutting was applied to MnO, SiO_2 and Cr_2O_3 only. The estimation was run by domain and material type using only samples from within the domain boundary
- The model and estimation were validated visually, and statistically comparing the model to the drill data. The model was considered to be a robust representation of the drilling data.
- Dry bulk density was assigned by material type based on values measured from the diamond drill hole samples. Although statistically unrepresentative the values obtained were reasonably consistent and within the ranges expected for kaolin material. The kaolin domain has been assigned a bulk density of 1.87 tm^{-3}

Cut-off grade

A nominal modelling cut-off grade of 16% Al_2O_3 was used to interpret ore blocks and model 3D wireframes outlining the mineralised domains. A reporting lower cut-off of 18% Al_2O_3 was used representing a cut-off grade that reports a tonnage and grade at an expected mineable level.

Mining and metallurgical methods and parameters

It is anticipated that the alumina resource could potentially be exploited in conjunction with open pit mining of the underlying Ni-Co resource. No metallurgical assumptions or predictions are reflected in the resource block model.

Preliminary metallurgical testwork was conducted by Simulus Laboratories to assess the amenability of the Summervale kaolin to a standard kaolin to High Purity Alumina (HPA) process. The testwork was conducted on one (9.6kg) composite kaolin sample comprised of eight 1200 gram 1m aircore samples collected from eight different drill holes scattered throughout the resource.

The leach was completed on a non-screened, non-beneficiated basis, subsequent to a heat treatment at 650^{0}C for 1 hour. A standard hydrochloric acid leach returned aluminium extractions from the kaolin sample of 67% after a 1 hour leach period at 105^{0}C. Re-leaching of the residue increased the aluminium extraction to 70%.

XRD analysis revealed that 81% of the aluminium in the original sample was in the form of kaolin, and 55% of the aluminium in the leach residue was in the form of kaolinite, suggesting that with optimisation of the heat treatment and leaching stages aluminium extraction could be improved.

Multiple stages of crystallisation tests on the leach liquor demonstrated that the impurities are rejected by the process. After four stages of crystallisation the crystals generated were converted to HPA by calcination and were 99.95% pure, demonstrating that the Summervale sample is suitable for the generation of HPA.

Additional testwork including the optimisation of the leaching and heat treatment processes is planned. It is envisaged that by reducing contaminants and achieving better leach recoveries the production of >99.99% alumina (4N) could be achieved.

Mineral Resource Statement

The resource estimate is classified in accordance with the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC, 2012). The Summervale estimate was completed by Stephen Godfrey of Resource Evaluation Services, who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mr Godfrey has sufficient and relevant experience in modelling and resource estimation be considered a “Competent Person” as defined the JORC Code (2012).

The resource is classified as Inferred. The classification was considered appropriate based on drill hole spacing, sample intervals, geological interpretation and representativeness of all available assay and density data. The classification reflects the low confidence in short range grade estimations in the model.

The resource is based on the interpolated block model *wl_022019K.mdl*. The resource is reported within the interpreted mineralised domain. Table 1 reports the resource at a reporting cut-off grade of 18% Al_2O_3. Figure 4 illustrates the grade-tonnage curve for the kaolin domain. Table 2 is the grade tonnage curve data for cut -off grades from 2% to 32% Al_2O_3.

Table 1: Summervale Prospect Alumina Resource - 18% Al_2O_3 Cut Off

Classification	Inferred
Tonnes	6,551,300
Al_2O_3	20.81
CaO	0.11
Cr_2O_3	0.06
Fe_2O_3	2.8
K_2O	1.79
LOI	7.16
MgO	1.14
MnO	0.01
Na_2O	0.43
P_2O_5	0.02
SiO_2	64.24
TiO_2	1.15

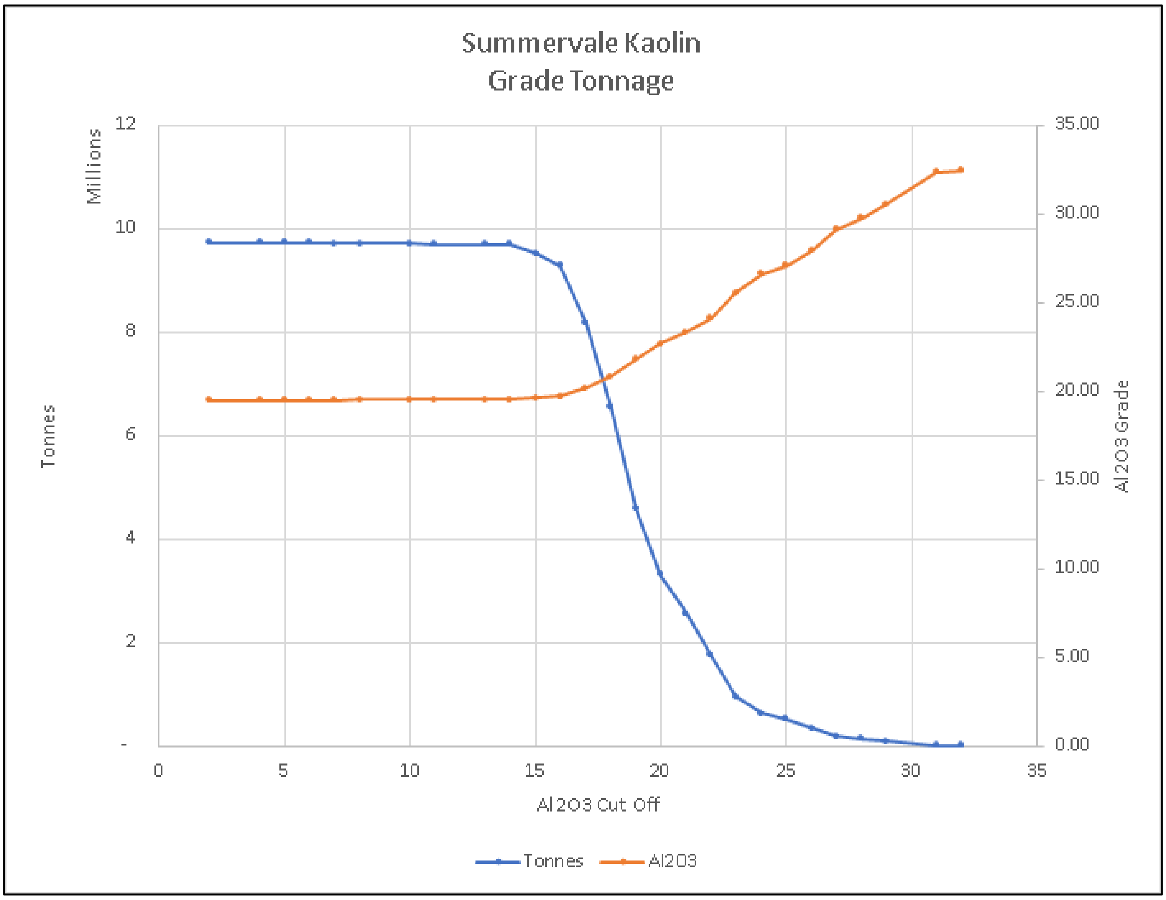

Figure 4: Grade Tonnage Curve – Kaolin Domain

Table 2: Grade Tonnage Curve Data

Cut Off	**Tonnes**	**Al_2O_3**	**CaO**	**Cr_2O_3**	**Fe_2O_3**	**K_2O**	**LOI**	**MgO**	**MnO**	**Na_2O**	**P_2O_5**	**SiO_2**	**TiO_2**
2	9,724,412	19.51	0.10	0.05	2.63	2.03	6.40	1.04	0.01	0.39	0.02	66.51	1.05
4	9,723,682	19.51	0.10	0.05	2.63	2.03	6.40	1.04	0.01	0.39	0.02	66.51	1.05
5	9,723,499	19.51	0.10	0.05	2.63	2.03	6.40	1.04	0.01	0.39	0.02	66.51	1.05
6	9,723,453	19.51	0.10	0.05	2.63	2.03	6.40	1.04	0.01	0.39	0.02	66.51	1.05
7	9,720,531	19.51	0.10	0.05	2.62	2.03	6.40	1.04	0.01	0.39	0.02	66.51	1.05
8	9,716,285	19.52	0.10	0.05	2.61	2.03	6.40	1.04	0.01	0.39	0.02	66.51	1.05
10	9,709,209	19.53	0.10	0.05	2.60	2.03	6.40	1.04	0.01	0.39	0.02	66.51	1.05
11	9,699,713	19.54	0.10	0.05	2.57	2.03	6.40	1.04	0.01	0.39	0.02	66.51	1.05
13	9,699,530	19.54	0.10	0.05	2.57	2.03	6.40	1.04	0.01	0.39	0.02	66.51	1.05
14	9,695,969	19.54	0.10	0.05	2.56	2.03	6.40	1.04	0.01	0.39	0.02	66.51	1.05
15	9,518,693	19.63	0.10	0.05	2.56	2.04	6.43	1.04	0.01	0.39	0.02	66.37	1.05
16	9,288,002	19.73	0.10	0.05	2.59	2.03	6.48	1.05	0.01	0.40	0.02	66.20	1.06
17	8,176,913	20.16	0.11	0.06	2.69	1.95	6.75	1.09	0.01	0.41	0.02	65.38	1.11
18	**6,551,300**	**20.81**	**0.11**	**0.06**	**2.80**	**1.79**	**7.16**	**1.14**	**0.01**	**0.43**	**0.02**	**64.24**	**1.15**
19	4,604,099	21.79	0.11	0.07	3.13	1.51	7.74	1.19	0.01	0.47	0.02	62.45	1.26
20	3,318,976	22.69	0.12	0.06	3.46	1.25	8.31	1.27	0.01	0.50	0.02	60.68	1.39
21	2,570,063	23.32	0.11	0.06	3.48	1.15	8.64	1.29	0.01	0.51	0.02	59.80	1.41
22	1,759,927	24.13	0.11	0.07	3.57	1.07	9.12	1.36	0.01	0.51	0.02	58.42	1.41
23	961,022	25.54	0.08	0.11	3.25	1.00	9.51	1.12	0.01	0.47	0.02	57.45	1.34
24	640,620	26.61	0.06	0.14	2.84	0.89	9.45	0.54	0.01	0.42	0.02	57.68	1.30
25	529,452	27.08	0.06	0.15	2.57	0.86	9.61	0.53	0.01	0.43	0.02	57.38	1.28
26	343,411	27.94	0.06	0.19	2.14	0.87	9.82	0.49	0.01	0.42	0.02	56.95	1.15
27	193,437	29.14	0.06	0.30	2.23	0.59	10.40	0.47	0.01	0.44	0.03	55.69	0.97
28	139,428	29.78	0.06	0.31	2.40	0.47	10.81	0.44	0.01	0.44	0.02	54.38	0.92
29	90,030	30.55	0.06	0.34	1.63	0.40	11.20	0.43	0.01	0.45	0.02	54.02	0.69
31	24,288	32.37	0.09	0.74	2.67	0.26	11.97	0.64	0.02	0.54	0.03	50.32	0.71
32	21,640	32.44	0.09	0.80	2.88	0.11	12.48	0.62	0.02	0.56	0.03	48.73	0.69

Compliance with the JORC Code Assessment Criteria

The JORC Code (2012) describes a number of criteria, which must be addressed in the documentation of Mineral Resource estimates, prior to public release of the information. These criteria provide a means of assessing whether the data inventory used in the estimate is adequate for that purpose. The resource estimate stated in this document was based on the criteria set out in Table 1 of that Code. These criteria have been discussed in the main resource report and are summarised below. Only sections relevant to the reported resource have been addressed.

Please direct enquiries to:

Mr Leigh Ryan – Managing Director

Telephone: +61 8 9481 4400 Email: Leigh@alchemyresources.com.au

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The information in this report that relates to Exploration Results is based on information compiled by Mr Leigh Ryan, who is the Managing Director of Alchemy Resources Limited and holds shares and options in the Company. Mr Ryan is a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ('JORC Code 2012'). Mr Ryan consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources at the Summervale Prospect is based on information compiled by Stephen Godfrey, who is an employee of Resource Evaluation Services Pty Ltd, a consultant to Alchemy Resources Limited. Mr Godfrey is a Fellow of the Australasian Institute of Mining and Metallurgy and a member of the Australian Institute of Geoscientists, and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ('JORC Code 2012'). Mr Godfrey consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr>
<td>Sampling techniques</td>
<td>

Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.
Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.
Aspects of the determination of mineralisation that are Material to the Public Report.
In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.

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Alchemy Resources Ltd (ALY) conducted the most recent AC drilling with hole numbers pre-fixed with SVAC or WLAC. AC drilling was used to obtain 1m samples that were collected in plastic buckets from an industry standard cyclone. Each 1m sample was then split using a 3-tier splitter into large green plastic bags (87.5%) stored onsite as reference samples and numbered calico bags (12.5%) for laboratory analysis.
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<tr>
<td>Drilling techniques</td>
<td>

Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).

</td>
<td>
Jervois used different drill contractors over the years as follows – there is no record of drill rig details:
<table>
<tr><th>Year</th><th>Start</th><th></th><th>Finish</th><th>Drilling Contractor</th></tr>
<tr><td>2005</td><td>Na001</td><td>–</td><td>Na030</td><td>G.O.S Drilling</td></tr>
<tr><td>2008</td><td>Na122</td><td>–</td><td>Na154</td><td>Not Reported</td></tr>
</table>
</td>
</tr>
</table>

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>2009</td><td>SV01</td><td>–</td><td>SV44</td><td>AMWD Drilling</td></tr>
<tr><td>2011</td><td>SV45</td><td>–</td><td>SV59</td><td>All Search Drilling</td></tr>
<tr><td>2015</td><td>SV67</td><td>–</td><td>SV80</td><td>Collings Drillers</td></tr>
</table>
ALY AC drilling was completed by McLeod Drilling using a MD150 drill rig with an on-board 2 stage Airman Compressor (250 - 320psi / 700 - 850cfm) using an industry standard 90mm diameter aircore blade bit.
The Aircore drilling method was chosen in preference to RC drilling in order to achieve the best possible sample recovery of the lateritic clay and saprolite material hosting the Ni-Co-Al mineralisation. RC hammer drill bits tend to clog up in clay and if subsequent drill penetration is slow a wet sample can result. Aircore drilling is designed for rapid recovery of clay achieving a high quality, dry, contamination free sample.
For the Diamond drilling AC pre-collar drill holes were completed to pre-determined base of alluvium depths by Drillit Consulting Pty Ltd using a track mounted Multidrill 600 with a Sullair 900cfm x 500psi compressor, 3.5” rods and a 100mm diameter aircore blade bit.
Diamond drilling tails were completed from the base of each aircore pre-collar hole using an Atlas Copco CT14 drill rig and a conventional triple tube barrel in order to obtain PQ3 core samples down to 64.9m (SVDD001), 49.1m (WLDD001), and 75.4m (WLDD002). PQ3 core samples were wrapped in plastic and put into plastic PQ3 core trays. Due to the shallow hole depths no down hole surveys were collected. The diamond core was reconstructed into continuous runs on an angle iron cradle for down hole depth marking.
</td></tr>
<tr><td>Drill sample recovery</td><td>

Method of recording and assessing core and chip sample recoveries and results assessed.
Measures taken to maximise sample recovery and ensure representative nature of the samples.
Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.

</td><td>
There were no available records of historical recoveries for AC samples obtained by Jervois.
ALY AC sample recoveries and moisture content estimates were logged / recorded into spreadsheets by the supervising geologist.
Each 1m sample (split green plastic and calico sample bag) was weighed after being collected. This gives an indication of recovery of drill material relative to all other 1m samples and the theoretical weight.
ALY Diamond core RQD measurements were not collected as the core was predominantly lateritic and saprolitic clay. Weathered serpentinite was encountered was intersected at the ends of some holes.
Diamond core recoveries were recorded as a percentage for every metre interval. Recoveries were sufficient through the upper section of each hole but were difficult to
</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		maintain in places where the drilling encountered 'crumbly sandy lateritic material'. No relationship exists between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	Jervois completed geological logging for all AC holes recording lithology and a sample description. For all ALY drilling geological logging was completed on all AC and diamond holes, with colour, weathering, grain-size, lithology, alteration, mineralogy, veining, textures, structure and comments on other significant features noted. Logging of mineralisation and veining is quantitative. All holes were logged in full. No structural or geotechnical logging was undertaken. No judgement has yet been made by independent qualified consultants as to whether both AC and Diamond samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. 100% of relevant intersections have been logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	There is no record of Jervois's sampling techniques except for holes SV68-78 where the 1m samples were said to have been riffle split. ALY AC samples were riffle split if the sample was dry, and carefully grab sampled by hand when wet. Wet samples were rare. Sample preparation is considered appropriate with respect to quality of aircore sample collection. ALY diamond core samples were cut in half along the core axis then quartered using a paint scraper or in less weathered zones an Almonte diamond core saw. For both AC and Diamond samples one commercial laboratory standard, one blank sample (diorite blue metal) and one duplicate was inserted every 50 samples (i.e. 6% QAQC samples). Statistical analysis of duplicate sample data for Ni, Co, Zn, Al_2O_3, Fe_2O_3 and Cr_2O_3 shows a high level of repeatability and a lack of bias between the original and duplicate samples. Sample sizes are considered appropriate for the style of drilling, mineralisation, the thickness and consistency of the intersections, the sampling methodology and the assay ranges for the primary elements analysed.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or*	Jervois used the ALS laboratory in Orange (NSW) for all drill sample analysis (2005-2015). The Jervois analysis details vary for each generation as follows: Na001-030 samples were analysed by XRF with unknown method code for Ni, Co and Sc.

Criteria	JORC Code explanation	Commentary
	total. • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	Pulps for holes Na002, Na004-006, Na154, and SV02 were sourced from Jervois and submitted to ALS Orange for analysis via method code ME-XRF-12n which involves fused disc XRF for a suite of 18 elements (incl. Al2O3) and ME-GRA05 for LOI determination, described as H2O/LOI by TGA furnace. Na122-130 were analysed by method code ME-ICP93 for Nickel Laterites by Fusion ICPAES for a suite of 20 elements and ME-GRA05 for LOI determination. Original laboratory results are available. SV01-80 were analysed by method code ME-XRF-12n for a suite of 29 elements and ME-GRA05 for LOI determination as described above. Original laboratory results are available. All Alchemy drill samples were sent to the ALS Orange for analysis. Preparation of the samples follows industry laboratory best practice method PUL-21 involving logging of sample weights, drying the entire sample in an electric oven set at 105ºC+5ºC for several hours (drying time dependent on moisture content), then crushing the entire sample to >70% passing -6mm. A split of 2.5kg to 3kg (AC) and 250g – 1kg (core) was taken and then pulverized to 85% passing 75µm using an Essa LM5 grinding mill. A representative sample was split and bagged for analysis. AC and core pulps were analysed using ALS method code ME-XRF-12n (as described above) on a 0.70g pulp producing results for 18 analytes. Eight Alchemy core samples were also selected for Au analysis using ALS method code Au-AA24. This method uses a 50g pulp subjected to fire assay with an AAS finish. Laboratory sample QAQC involves the use of certified reference materials (CRM), blanks, splits, and replicates as part of in-house laboratory procedures. Commercially available reference materials with a suitable range of values for testing elements related to Nickel laterite ores and additional multi-element analysis were used by the laboratory. Laboratory standards LAT-CS19, LEA-16, NCSDC73303, OREAS 15b, OREAS 184, OREAS 195, OREAS 197, OREAS 198, OREAS 199, OREAS 215, OREAS 61f, OREAS 907, OREAS-45e and SARM-5 were used. Alchemy inserted 1 CRM standard with a suitable range of values, 1 duplicate and 1 blank every 50 samples. CRM standards used were OREAS 186, 197, 198, 199 and 44e. Results indicate that assay values are within acceptable error limits. AC samples and field duplicates were 1m intervals. Diamond core samples were 1m ¼ core samples except for where lithological boundaries were better represented by smaller or larger sample lengths (no less than 0.4m and no greater than 2m). Duplicates were 1m ⅛ core samples. Results show that all QAQC assay values and duplicate sample results (ALS and Alchemy) are within 1 standard deviation and within acceptable error limits.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	Reported drill hole intercepts are compiled by the Company's Managing Director (MD) who is also the competent person. Each of the 3 diamond holes twinned Alchemy aircore holes as follows; SVDD001 – SVAC033, WLDD001 – WLAC010 and WLDD002 – WLAC045.

Criteria	JORC Code explanation	Commentary
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	The original data is collected by qualified geologists and geo-technicians working under the supervision of a qualified geologist and entered onto paper or Excel spreadsheets. Validation rules are in place to ensure no data entry errors occurred. Data is loaded into a Microsoft Access database by an experienced database administrator, stored on the company server in Perth and reviewed by the ALY MD, who is a competent person. Where only elemental analyses were available, the values were converted to oxide equivalents for statistical analysis and estimation. No other assay data adjustments have been made.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	A Trimble Geoexplorer 6000 DGPS was used to locate all ALY AC collar positions, with an expected <1m vertical and horizontal accuracy. The grid system used for all collar locations is the UTM Geocentric Datum of Australia 1994 (MGA94 Zone 55). The drill collar and down hole location accuracy is considered appropriate for inferred and indicated resource estimations for this style of mineralisation.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	At Summervale, aircore holes were drilled at 100m x 100m spacings over a 2.7 km NE-SW trending strike length. The Diamond holes twinned 3 aircore holes with no more than 5m from the original hole. One diamond hole was drilled at the Summervale Prospect and two diamond holes were drilled at the West Lynn prospect. The distribution is considered sufficient to establish geological and grade continuity suitable for an Inferred resource.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	Holes have been drilled vertically to achieve unbiased sampling of the flat lying lithologies and mineralisation. Each hole was setup on surface at a -90 degree inclination (vertical) . At the ore zone the drill hole azimuth was ~90 degrees to the strike of mineralisation, and the hole inclination was ~90 degrees to the dip of mineralisation. True width is therefore the same as the downhole intercept widths reported. No orientation based sampling bias has been identified.
Sample security	• *The measures taken to ensure sample security.*	Sample security measures are unknown for historical drilling. All ALY AC drill samples were collected in pre-numbered calico bags and transported to the ALS laboratory in Orange via courier and company vehicles. Drill spoils collected into large

Criteria	JORC Code explanation	Commentary
		green bags are stored in a farm shed at Gundaur Station near the Summervale deposit. Core trays were palletised and trucked from site to Orange, NSW. The core trays are stored in a secure storage shed in Orange. Calico sample bags were used for core samples. Five calico sample bags were put into large green plastic bags for transport to ALS Orange. Residual core samples and sample pulps are stored at ALS Orange until they are re-located to the Rangott Mineral Exploration Pty Ltd office in Orange for permanent storage.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	An internal review of the sampling techniques, and sample data capture concluded that both are of sufficient quality to carry out a resource estimation. RES agrees with this conclusion. No external audit or review of the sampling techniques or sample data capture has been conducted to date other than that conducted by RES during the current inferred resource estimate.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	Type – Exploration Licence (currently in good standing). Reference name – West Lynn. Reference numbers – EL8631. Location – 25 km northwest of Nyngan, in north central NSW. Ownership – 49% Ochre Resources Pty Ltd, 51% Alchemy Resources (NSW) Pty Ltd (Stage 1 earn-in recently achieved by Alchemy – Stage 2 allows Alchemy to earn 80% by spending an additional $0.5M prior to 30 May 2021). Overriding royalties - None The land is 95% freehold. No Wilderness Reserves, National Parks, Native Title sites or registered historical sites are known. No environmental issues are known.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Exploration work across the West Lynn and Summervale areas has been limited to targeting gold and base metals since the late 1970s. 38 RC holes were drilled by Anaconda at the West Lynn Prospect in 1999/2000 to a max depth of 60m. These holes were successful in discovering nickel and cobalt mineralisation in lateritic clays associated with underlying serpentinites.

Criteria	JORC Code explanation	Commentary
		Jervois applied for the ground in 2007 and began to explore for nickel-cobalt mineralisation over magnetic anomalies related to underlying ultramafic serpentinite units. AC drilling programs conducted over a period of 8 years has defined two prospects (West Lynn and Summervale) containing Ni-Co-Al mineralisation within clay and saprolite derived from the underlying weathered serpentinite units. Alchemy recognised an alumina rich kaolinite layer above the Ni-Co mineralisation.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Deposit Type – Alumina-rich Residual Kaolin Geological setting – The West Lynn Ni-Co-Al deposit (comprising the West Lynn and Summervale Prospects) is directly associated with a north-south trending folded belt of serpentinised ultramafics known as the West Lynn Serpentinite surrounded by sediments of the Girilambone Group within the Girilambone-Wagga Anticlinal Zone in central NSW. The linear orientation of the belt suggests emplacement along regional deformation or faults of Alpine-type origin (ophiolite). The West Lynn Serpentinite is derived from the alteration of a medium grained dunite which intruded into the metamorphosed Ordovician Girilambone Group. The serpentinite is strongly magnetic compared to the surrounding sediments of the Girilambone Group. The Girilambone Group is comprised of phyllites, quartz-mica and chlorite schists, quartzite, laminated siltstone (all with pervasive quartz veins) and conglomerates of Cambrian-Ordovician age; with numerous late Silurian to early Devonian intrusives of ultramafic to intermediate composition. The area is topographically flat, covered by Quaternary-aged alluvium and dominated by wheat crops. Ni-Co mineralisation is the result of weathering processes concentrating Ni, Co and Al within clays and saprolite derived from the underlying serpentinite. At the Summervale Prospect a zone above and separate to the Ni-Co domain is enriched in alumina and depleted in most other analytes. Mineralogically the alumina domain is primarily kaolin and silica. The protolith for the kaolinite layer is not certain, but petrographic studies suggest a pelitic origin probably derived from the Girilambone Group sediments. This confirms the observation that the better alumina grades are slightly offset to the west of the main Ni-Co mineralisation.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation*	Drill results form the basis of the inferred resource estimate, however specific Alchemy drill results and details are tabulated within the body of previous ASX announcements including: Alchemy Resources Limited ASX announcement dated 13 April 2018 Alchemy Resources Limited ASX announcement dated 27 August 2018 Alchemy Resources Limited ASX announcement dated 22 October 2018 Alchemy Resources Limited ASX announcement dated 10 December 2018

Criteria	JORC Code explanation	Commentary
	above sea level in metres) of the drill hole collar ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Exploration results are not being reported. In previous reports for West Lynn, intercepts are from 1m individual samples. Any averaged intercepts are down hole length weighted averages. No metal equivalent reporting is used.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Due to the nature of the targeted mineralisation being flat lying, all drilling was vertical, and subsequently all intercepts reported are downhole widths. Downhole intersections are considered to be the true width /thickness of the mineralisation.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Where appropriate, plans and cross sections have been included in the body of this announcement.
Balanced reporting	• *Where comprehensive reporting of all Exploration*	Exploration results are not being reported.

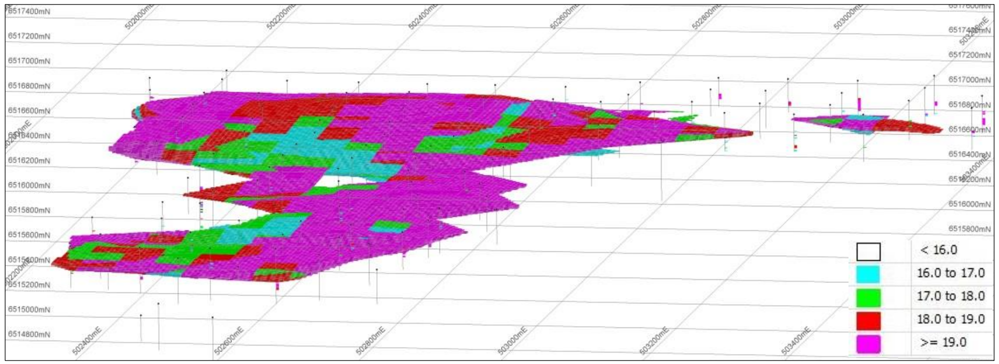
Criteria	JORC Code explanation	Commentary
	Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Specific Gravity (SG), or Bulk Density (BD) was determined using the wet immersion method on whole PQ diameter core. Core was wrapped in plastic film to retain in situ moisture and to protect core during transport. Individual core samples weighed in air and subsequently weighed while immersed in water using calibrated digital scales for in situ specific gravity. The sample was then placed in a gas-fired drying over at approximately 80°C for 48 hours. Poorly consolidated samples were coated in lacquer or wax to minimise sample desiccation during drying. On removal from the oven the sample was again weighed in air and subsequently weighed while immersed in water for determination of a dry specific gravity. In situ and dry specific gravity was calculated using the formula SG (gcm-3 or tm-3) = weight of sample in air / (weight in air – weight immersed in water). Sufficient samples were selected from the range of lithologies for specific gravity determination for the purposes of calculating resources for the range of resource lithological categories expected. Dry Bulk Density (DBD) was used in the resource estimation. Metallurgical testwork was conducted by Simulus Laboratories to assess the amenability of the Summervale kaolin to a standard kaolin to High Purity Alumina (HPA) process. The testwork was conducted on one (9.6kg) composite kaolin sample (SVKaolComp001 – see photo below) comprised of 8 (1200g) 1m aircore samples collected from 8 different drill holes scattered throughout the resource.  The leach was completed on a non-screened, non-beneficiated basis, subsequent to a heat treatment at 650^{0}C for 1 hour. A standard hydrochloric acid leach returned aluminium extractions from the kaolin sample of 67% after a 1 hour leach period at 105^{0}C. Re-leaching

Criteria	JORC Code explanation	Commentary
		of the residue increased the aluminium extraction to 70%. XRD analysis revealed that 81% of the aluminium in the original sample was in the form of kaolin, and 55% of the aluminium in the leach residue was in the form of kaolinite, suggesting that with optimisation of the heat treatment and leaching stages aluminium extraction could be improved. Multiple stages of crystallisation tests on the leach liquor demonstrated that the impurities are rejected by the process (Table below). After four stages of crystallisation the crystals generated were converted to HPA by calcination and were 99.95% pure, demonstrating that the Summervale sample is suitable for the generation of HPA. (table below) Crystallisation was conducted by sparging gaseous HCl into the liquor, which reduces the aluminium solubility and results in the crystallisation of aluminium chloride hexahydrate (ACH) as per the following reaction. $AlCl_3(aq) + HCl(g) + 6\ H_2O(l) \rightarrow AlCl_3 \cdot 6\ H_2O(s) + HCl(aq)$ Additional testwork including the optimisation of the leaching and heat treatment processes is planned. It is envisaged that by reducing contaminants and achieving better leach recoveries the production of >99.99% alumina (4N) could be achieved.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	A close spaced sampling/drilling program has been recommended to improve the geostatistical understanding of the deposit. Additional metallurgical testwork including the optimisation of the leaching and heat treatment processes is planned

Test Number	ACH	Impurities (ppm)										ACH purity (%)
	%Al	Ca	Cr	Fe	K	Mg	Mn	Na	Ni	V	Zn	
0110	6.82	70	35	201	335	266	4	782	4	8	1	97.56
0111	10.2	2	23	24	<5	34	1	153	1	<0.5	6	99.76
0112	12.8	2	18	1	<5	3	<0.5	24	<0.5	0.7	3	99.96
0113	10.2	<2	18	1	0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	99.98

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	Provisional manual data validation checks were run by ALY. RES undertook internal referential integrity checking of the database including: • Visual checking of drill hole collar locations relative to surface topography • Consistency of end of hole depths in the collar, survey, geology and assay datasets • Gaps and overlapping sampling and logging intervals in the geology and sample / assay datasets
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	No site visit by the Resource Competent Person was undertaken due to logistical constraints. A site visit is proposed during the next exploration program.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	The confidence in the current geological interpretation of the West Lynn Project is considered to be good. The geology of the flat lying deposits is relatively simple and geological information obtained from the drilling is supported by geophysical data. Assay data has been used to interpret mineralisation domains and ore block boundaries based on a nominal 16% Al_2O_3 lower cut-off grade which was selected based on visual inspection of grade continuity between mineralised drill intersections. Statistically, 16% Al_2O_3 supports an homogenous sample population. Mineralisation outlines were snapped to the drill holes and the resulting strings were used to construct wireframe solids to constrain resource estimation.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The Summervale Kaolin domain is continuous over 1400m ranging in width from 250m to 900m wide (averaging ~400m). Mineralised pods commence from 15m to 20m below surface and are from 2m to 40m thick, but commonly ~10m thick.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation*	Statistical and geostatistical analysis was carried out on drilling data composited to 1m intervals downhole. Variogram structures were considered by RES to be of insufficient quality to undertake a kriged estimation. An un-rotated block model of the deposit was created using 50x50x5m parent cells and

Criteria	JORC Code explanation	Commentary
	parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	6.25x6.25x0.625 sub-cells. An Inverse distance algorithm (ID2) was used to estimate grades into the model using Surpac software. A 3-pass estimate was used, with each pass relaxing the search criteria. Pass 2 doubled the size of the search radius; Pass 3 doubled the radius again and reduced the minimum samples to 1. A minimum of 2 and maximum of 32 samples was used for each estimate. A first pass search radius of 100x50x5 m was used. Al_2O_3, CaO, Cr_2O_3, Fe_2O_3, K_2O, LOI, MgO, MnO, Na_2O, P_2O_5, SiO_2 and TiO_2 were estimated for all Kaolin domain blocks. Due to lower numbers of sample analyses MnO is considered by RES to be an indicative estimate only. The same search parameters were used for each analyte in order to maintain as best possible the statistical relationship between the analytes. There is a poor to medium correlation between the analytes. Top cutting was applied to MnO, SiO_2 and Cr_2O_3 only. The estimation was run by domain and material type using only samples from within the domain boundary. The resource model and estimation were validated visually, and statistically compared to the drill data. The model was considered to be a robust representation of the drilling data. The model (& drill hole traces) coloured by Al_2O_3 (%) are plotted below in 3D (looking NNW). 

Criteria	JORC Code explanation	Commentary
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	All tonnages are dry.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	A nominal modelling grade cut-off grade of 16% Al_2O_3 was used to interpret and model 3D wireframes outlining the mineralised domains. A reporting cut-off of 18% Al_2O_3 was used representing a cut-off grade that reports a tonnage and grade at an expected mineable level.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	It is anticipated that the alumina resource could potentially be exploited in conjunction with open pit mining of the underlying Ni-Co resource. No metallurgical assumptions or predictions are reflected in the resource block model.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	No metallurgical assumptions or predictions are reflected in the resource block model. Preliminary metallurgical testing indicates a High Purity Alumina (HPA) product is achievable from the Summervale Kaolin deposit.
Environmental factors or	• *Assumptions made regarding possible waste and process residue disposal options. It is*	No significant environmental constraints are envisaged.

Criteria	JORC Code explanation	Commentary
assumptions	*always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Dry bulk density was assigned by material type based on values measured from the diamond drill hole samples. Although statistically unrepresentative the values obtained were reasonably consistent and within the ranges expected for the kaolin material. The Kaolin domain has been assigned a bulk density of 1.87 tm^{-3}.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the*	The Summervale Kaolin resource has been classified as Inferred. This is primarily a reflection of the drill spacing and the low confidence in the short-range estimation of grades. The resource classification constraints take into account all of the JORC Table 1 assessment parameters. The Mineral Resource estimate appropriately reflects the view of the Competent Person.

Criteria	JORC Code explanation	Commentary
	Competent Person's view of the deposit.	
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	Audits and reviews are confined to internal corporate procedures, and desktop review by RES.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The public reporting of the Mineral Resource estimate is in accordance with JORC Code (2012 edition) guidelines. The statement relates to global estimates of tonnes and grade. The competent person regards this global estimate as being a robust representation of the in-situ tonnes and grade.