impact. MINERALS

ASX Code: IPT

OCTOBER 18, 2023 **CORPORATE RELEASE**

Lake Hope HPA Project, WA: PFS and Metallurgical Test Work Update

- The Preliminary Feasibility Study is progressing on schedule, with significant progress made on the metallurgical test work to verify the proprietary and patented Playa One process that converts raw lake clay from Lake Hope into High Purity Alumina (HPA).
- Three of the Five Stages of the Playa One sulphate process have been completed with results that either confirm or improve upon previous results.
- Intermediate aluminium salts have been produced from Stage 3 that require further purification in Stages 4 and 5 to make HPA, with results expected by late this Quarter or early Q1 2024.
- Other PFS progress includes:
  - Environmental baseline studies are to commence in early November.
  - Statutory approvals (PoW) have been received for a geotechnical drill program, shallow water bores and a bulk sample program, which will all commence this Quarter.
  - A meeting with the Western Australian Department of Mines, Industry and Safety Regulations is set for late October to discuss the lodgment of a Mining Lease application.
  - Ongoing discussions with industry analysts, marketing representatives and end users have commenced to secure agreements for product testing.
- An independent review of the Lake Hope Scoping Study is nearly complete.

Impact Minerals' Managing Director, Dr Mike Jones, said, "*We continue progressing rapidly across the entire Pre-Feasibility Study on Lake Hope, particularly with the metallurgical test work. The test work has shown the Playa One Sulphate Process is straightforward and very effective in leaching the unique clays at Lake Hope. We are delighted with the results that have replicated or improved Playa One's previous work. We have zeroed in on the ideal process conditions to make HPA in quantity and are very focused on making improvements that will reduce processing costs. We aim to produce 99.99% or 4N HPA by early next year.*

Our work continues to highlight the competitive advantages of the unique mineral deposit at Lake Hope and its potential to become one of the lowest-cost producers of HPA globally. We look forward to releasing our Scoping Study shortly, following an independent review, which will give a first look at the economics of this exceptional project".

ABN 52 119 062 261
61+ 8 6454 6666
info@impactminerals..com.au
www.impactminerals.com.au

Impact Minerals Pty Limited (ASX:IPT) is pleased to provide an update on the company's Preliminary Feasibility Study (PFS) on the Lake Hope High Purity Alumina (HPA) Project located 500 km east of Perth in Western Australia and, in particular the metallurgical test work program (Figure 1). Impact can earn an 80% interest in the project from Playa One Pty Ltd by completing the PFS (ASX Release March 21st 2023).

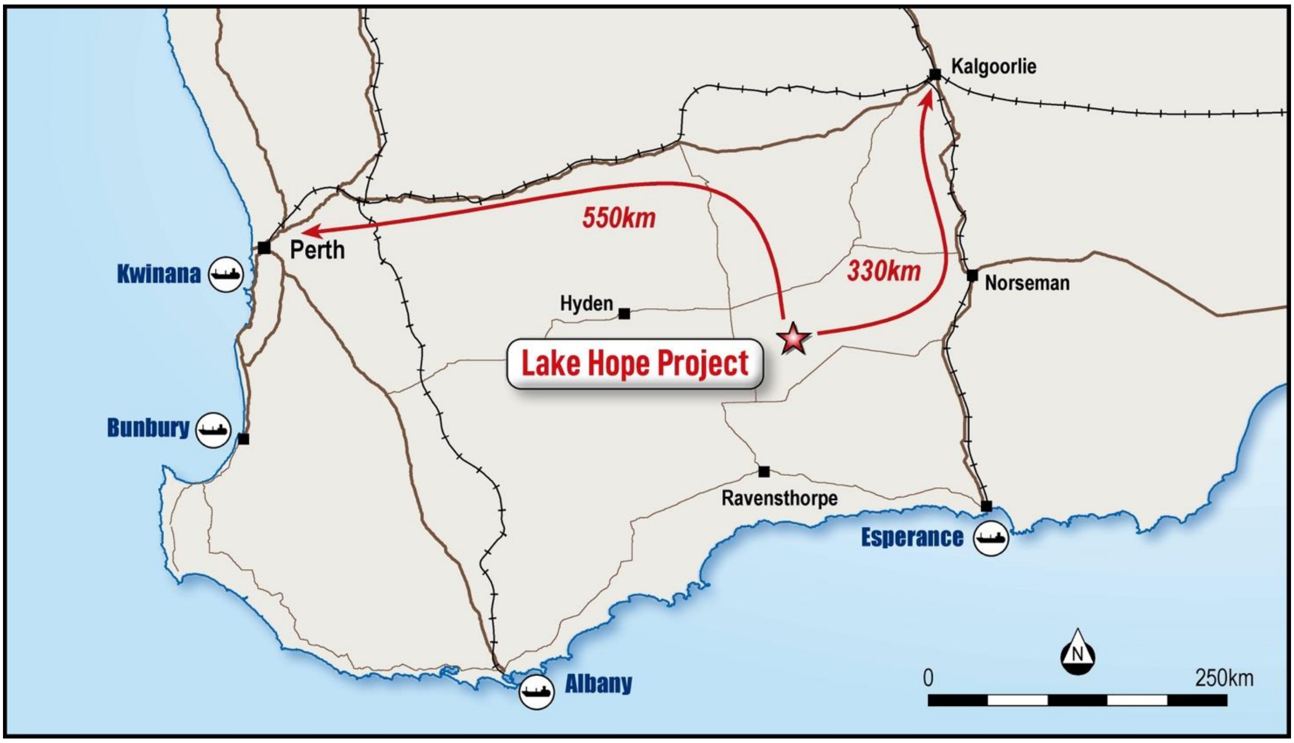

Figure 1. Location of the Lake Hope Project.

The Lake Hope Project contains a unique deposit of clay, which contains about 880,000 tonnes of alumina (Al_2O_3) in the top two metres of two small salt lakes on E63/2086. The deposit comprises Indicated and Inferred Resources of 3.5 million tonnes at an average grade of 25.1% alumina (ASX Release 19th June 2023). This alumina will be converted into HPA via Playa One's proprietary and patented 'Sulphate Process' (ASX Release March 21st 2023).

The unique nature of the mineralogy and the extremely fine-grained nature of the lake clays will deliver significant cost advantages to the mining and processing of the ore to produce HPA. The clays are free-digging and require no crushing, screening or other on-site preparation and accordingly, it is envisaged that the clay will be trucked offsite to a pre-permitted industrial site, most likely either in Kalgoorlie or Perth (Figure 1 and ASX Release March 21st 2023).

The clay mineralogy also allows leaching by a sulphuric acid (H_2SO_4) dominant process, the Playa One Sulphate Process. This process offers several advantages over other methods being trialled to produce HPA, particularly hydrochloric acid (HCl) leaching of kaolin. This requires the kaolin to be mined, crushed and screened by conventional mining techniques and then leached with hydrochloric acid and calcined at high temperatures in the first stages of the process.

The Playa One Sulphate Process allows direct leaching of the raw lake clays using a cheaper, more readily available and environmentally friendly acid and also removes the need for upfront calcining. This offers significant cost savings in energy, acid consumption as well as capital expenditure requirements in the grade of steel required in a processing plant.

Both the Sulphate Process and hydrochloric-kaolin process use hydrochloric acid and calcining in the later stages of purification to produce HPA but on much smaller volumes of material.

About the Playa One Sulphate Process

The PFS metallurgical test work has focused on replicating and optimising the Playa One Sulphate Process, which produced 99.99% Al_2O_3 (so-called "4N HPA") from representative material (ASX Release March 21st 2023). The test work program is being managed by Impact with laboratory work completed at ALS Metallurgy, Balcatta, Western Australia and with consultants Strategic Metallurgy.

The Playa One Sulphate Process is straightforward and comprises five key stages (Figure 2). The test work program is focused on the optimisation of the principal operating conditions of each stage.

Numerous experiments have now been completed for the first three stages of the process: Stage 1 Wash circuit, Stage 2 Roast circuit, and Stage 3 Intermediate alumina salt production (Figure 2).

The Intermediate alumina salt samples have been submitted for Stage 4 purification by conventional hydrochloric acid gas sparging. Material from Stage 4 will then be submitted for HPA production by calcining in Stage 5 (Figure 2).

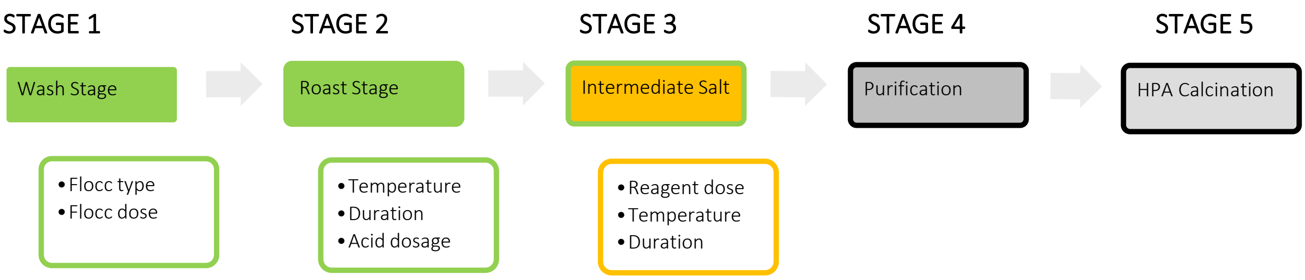

Figure 2. Summary of the Sulphate Process and Tests Completed in the Optimisation Test Work.

Details of the test work program results are given at the end of this report.

In summary, the metallurgical optimisation program for Stage 1 to Stage 3 has delivered results consistent with or exceeding Playa One's previous test work. It has also produced significant data for future process modelling work.

Impact has now produced high-quality intermediate salts with several elements below the detection limits of 100 ppm and with remaining contaminants in line with previous work and thus far validating the Playa One Sulphate Process.

Next Steps in the Test Work Program

The samples of intermediate salt have been submitted for purification in Stage 4 purification by hydrochloric acid- gas sparging with subsequent calcining in Stage 5 to produce HPA.

Preliminary results are expected by the end of 2023 to commercial low detection limits of 0.1 ppm to 2 ppm for 70 elements. Further confirmation may be required via ultra-low detection limit assaying at a specialist laboratory.

Further test work will then focus on using the optimised conditions for each stage on bulk samples in one run to demonstrate the repeatability of the process and its ability to produce significant quantities of HPA. This work is expected to start in Q1 2024 and will lead to further refinements before engaging in metallurgical and hydrometallurgical flow sheet modelling to complete this part of the PFS.

UPDATE ON THE SCOPING STUDY AND PRE-FEASIBILITY STUDY

A Scoping Study, which will provide preliminary economics for the Lake Hope project, is being independently reviewed based on the positive results from the metallurgical test work, financial modelling, and marketing information received to date. This review will be completed shortly.

In addition to the metallurgical test work, which is about 80% complete, and with the recent Heritage clearance from the Ngadju Peoples (ASX Release 27th July 2023), other parts of the Pre-Feasibility Study are also progressing quickly as follows:

1. Impact has received statutory Programme of Works approval for a 25-hole geotechnical drilling program and a permit for test pits and bulk sampling. This work will commence shortly and into early 2024. It will provide data for geotechnical and mine planning purposes and bulk samples for future test work and pilot plant programs.
2. Impact has sponsored two Masters level projects at the University of Western Australia. One study will focus on the optimisation of the crystallisation of the final HPA product, and the second study will focus on CO_2 emissions intensity modelling. This will allow disclosure of the carbon intensity of the Lake Hope Project and its potential low-carbon credentials within the ESG Reporting Framework recently adopted by Impact (ASX Release 9th October 2023).
3. Environmental flora and flora baseline studies will commence in early November. Initial desktop reviews have been completed, with no known risks identified, and regulatory outreach has been initiated.
4. Logistics studies into the optimal location for a processing plant are ongoing, and early-stage discussions with local government authorities have commenced.
5. Early engagement with the Western Australian Department of Mines Industry Regulation and Safety (DMIRS) about the mining lease application for Lake Hope has also commenced, and an important baseline meeting is set for later in October. Impact has lodged the required Mining Proposal Scoping Document, which forms the basis for pre-application discussions with DMIRS about the proposed mining envelope, environmental factors and the ongoing work program. Pending receipt of feedback on the Mining Scoping Document, Impact would then be able to lodge a Mining Lease Application, possibly later this year.
6. Impact has progressed discussions with industry analysts, marketing representatives and end-users to determine the target market and potential customers. This will be a crucial focus for the company in 2024 when meaningful quantities of HPA can be provided for product qualification.

The PFS remains on track for completion by Q3-Q4 2024.

COMPLIANCE STATEMENT

This report contains new Exploration Results for metallurgical test work.

Dr Michael G Jones
Managing Director

RESULTS OF THE METALLURGICAL TEST WORK PROGRAM

Five samples for the test work were prepared from a 25 kg bulk sample of the lake clays from Lake Hope. Details of the bulk sample (LHMET001), including its location and head assays for alumina (the target oxide) and other major oxides that are contaminants, are given in Table 4 below.

Scanning Electron Microscope (SEM) work completed by RSC Mineral consultants has shown the clay is mostly comprised of mineral particles that are exceptionally fine-grained and between 40 and 300 nanometres in size (Figure 3).

This offers advantages both to mining because on-site beneficiation is not required and processing because the material has an almost infinite surface area for leaching, which greatly enhances the kinetics of the sulphuric acid digestion.

The extremely fine particle size is beyond the SEM's resolution for mineral identification; therefore, X-ray diffraction has been relied upon. Chemical mapping by the SEM shows general uniformity and homogeneity throughout the mud.

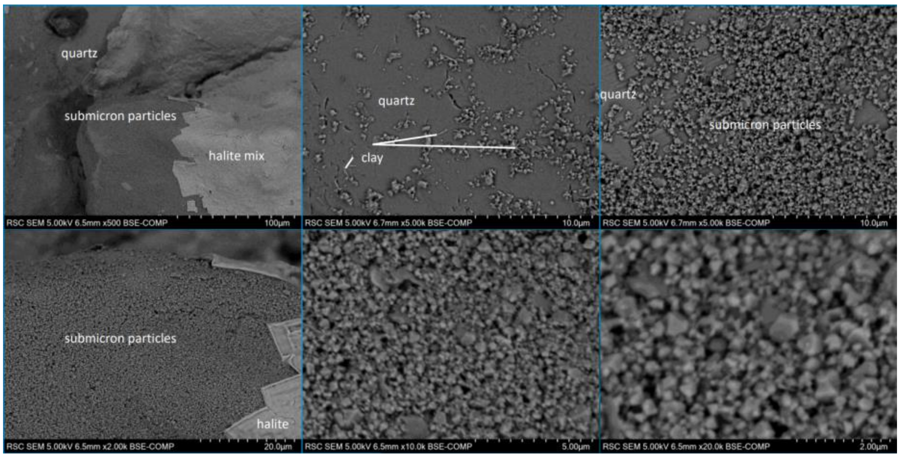

Figure 3. SEM imagery of typical mineralisation in the lake clays.

Results for each Stage of the Sulphate Process from the test work program are detailed below (Figure 2). Sample IDs with the prefix HY are laboratory IDs for samples prepared from the bulk sample LHMET001.

STAGE 1 Wash Circuit

Stage 1 comprises washing the clay to remove easily soluble sodium chloride salt (NaCl), which amounts to 3% to 5% of the lake clay by mass to reduce the amount of sodium, a critical contaminant for HPA, entering the purification circuit.

Washing

Washing involves mixing the raw mud with typically available fresh scheme water, adding flocculant chemicals, and settling out of the solids to feed to Stage 2, the acid roast stage. The wash water is then proposed to be desalinated and reused in-circuit.

Assays for the raw clay and washed mud are shown in Table 1 and show that about 74% of the sodium, 45% of the magnesium and 61% of the calcium are removed by washing. Removal of iron, potassium, vanadium, and phosphorus is limited.

Element		RAW MUD LHMET001	WASH COMP HY15362	% Extraction
Al	%	14.3	15	0.01
Ca	%	0.06	0.03	61.85
Fe	%	2.29	2.39	0.23
K	%	5.33	5.64	0.73
Mg	%	0.42	0.27	45.46
Mn	%	<0.01	N/A	~~
Na	%	2.44	0.704	74.34
P	%	0.04	0.04	14.80
Si	%	9.28	9.82	~~
Ti	%	0.19	0.18	~~
V	%	0.002	0.004	3.36

Table 1. Assays of Raw Clay (mud) and Washed Clay

Flocculation Testing

Various cationic, anionic, and non-ionic flocculant chemical additives commonly used to precipitate suspended solids from mining slurries were tested. Flocculation test work was carried out on a Flocculant dosage of 0.01% in addition to a 10% pulp volume. Settling times were from one to two hours on average.

The results show that the mud is insensitive to flocculant type (Figure 4).

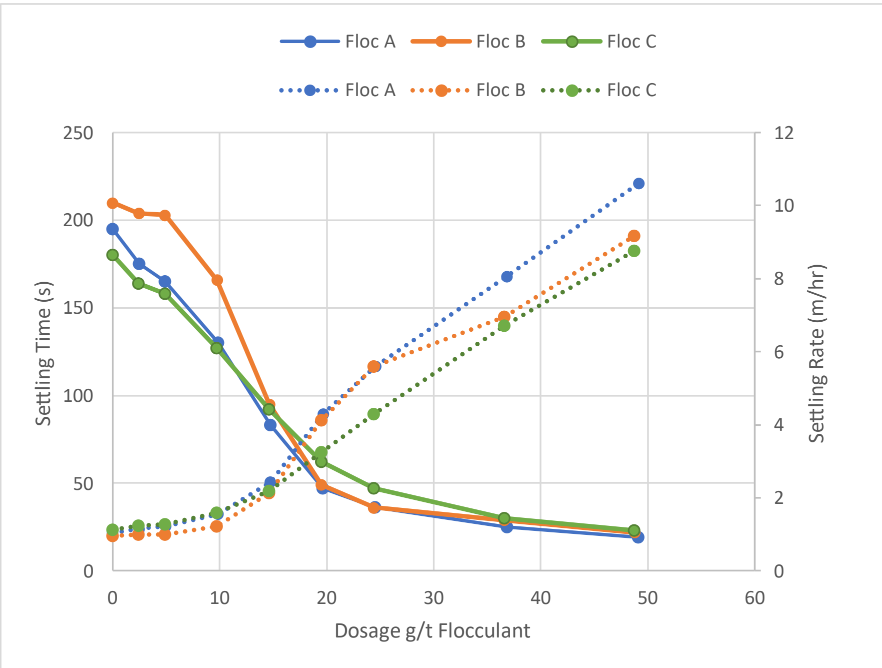

Figure 4. Flocculation Performance Testing LHMET001

STAGE 2 Acid Roast

Although the expected cost of a wash circuit is likely to be a modest component of the capital expenditure required to build a full-scale processing plant, test work for Stage 2 onwards has been completed both on washed clay from Stage 1 and unwashed, raw clay to determine if the Wash Circuit can be eliminated.

Optimal Roasting Temperature

Roast temperature variability testing was undertaken on washed clay (HY15632) and raw clay (LHMET001) at 150°C, 180°C, 210°C and 250°C, at a constant acid addition of 750 kg/t, and constant roast time.

Results showed that increased temperature correlates with increased recovery of alumina salts and other metals for both the washed and unwashed clay (Figure 5 and Table 2). Alumina recovery peaked at 89.5% at 250°C, the maximum temperature tested and in line with previous testing. Further testing at 300°C is in progress.

There was no significant difference in the results between the washed and unwashed clay (Table 2).

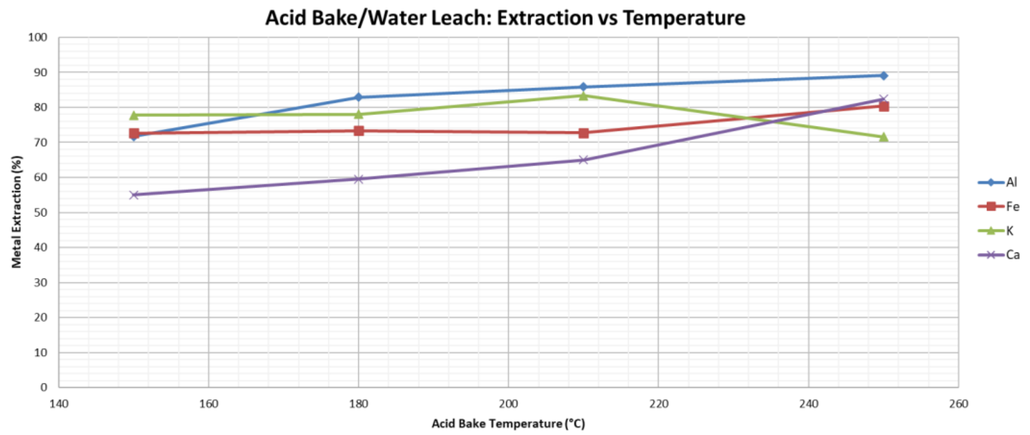

Figure 5. Acid bake metal extraction (Sample LHMET001 only shown)

Sample ID	Type	Temp °C	Al %	Ca %	Fe %	K %	Mg %	Na %	P %	Si %	V %
HY15632	Washed	~	15	0.03	2.39	5.64	0.27	0.704	0.04	9.82	0.004
HY16152	Residue	150	9.42	0.03	1.45	2.78	0.17	0.30	0.02	19.73	0.001
HY16153	Residue	180	6.33	0.03	1.57	3.06	0.08	0.24	0.02	23.33	0.001
HY16154	Residue	210	6.04	0.03	1.86	2.69	0.09	0.32	0.03	25.33	0.003
LHMET001	Raw	~	14.80	0.06	2.29	5.33	0.42	2.44	0.04	9.28	0.002
HY16151	Residue	250	4.4	0.03	1.27	4.28	0.06	0.30	0.02	25.24	0.001
HY16152	Extraction	150	72%	55%	73%	78%	72%	81%	77%	9%	89%
HY16153	Extraction	180	83%	59%	73%	78%	88%	86%	80%	4%	95%
HY16154	Extraction	210	86%	65%	73%	83%	88%	84%	74%	10%	74%
HY16151	Extraction	250	89%	82%	80%	72%	95%	81%	82%	4%	91%

Table 2. Acid roast temperature variability tests and metal extractions

Acid Dosage Test

Tests to determine the optimal sulphuric acid dosage were completed at amounts between 580 kg/t and 750 kg/t of sulphuric acid. Results showed that 750 kg/t of sulphuric acid is the ideal dosage, with minor reductions in alumina extractions at lower dose rates. This was in line with previous work by Playa One.

STAGE 3 Intermediate Salt Production

Reagent Dosage

The roasted mud from Stage 2 is then washed with water to dissolve the aluminium salts (and other salts) to produce an acidic Pregnant Leach Solution (PLS), which is then mixed with a reagent to create an intermediate aluminium salt. This is a crucial step in removing most of the major contaminants (iron, calcium and sodium) before presentation to Stages 4 and 5, the final purification circuit.

Varying amounts of reagent were added to the unwashed clay (HY16444 to HY16447) and washed clay (HY16736) to determine the optimal reagent dosage that maximises aluminium salt extraction and minimises contaminant extraction. The results are shown in Figure 6 for the unwashed clay with assays for all samples shown in Table 3, together with a previous sample tested by Playa One (2022) for comparison.

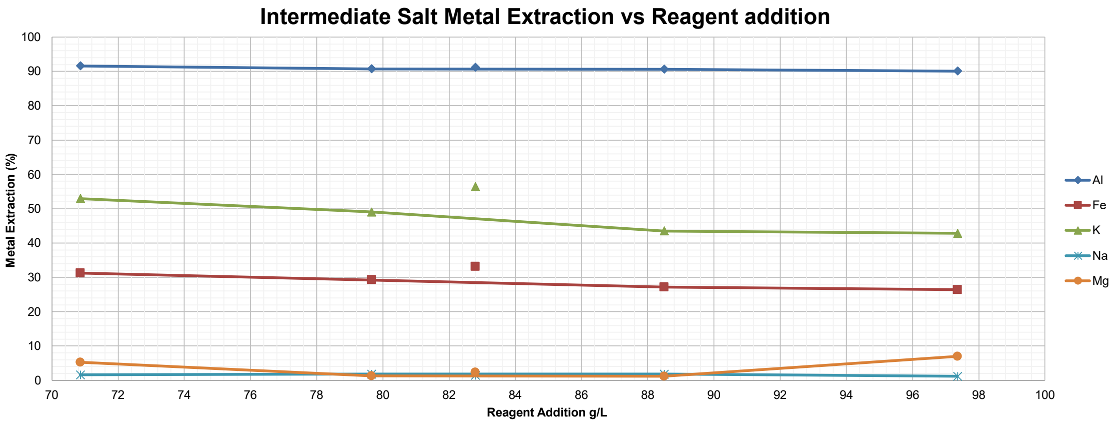

Figure 6. Reagent addition and intermediate salt quality tests LHMET001

Sample ID	Originator	Reagent g/L	Al %	Ca %	Fe %	K %	Mg %	Na %	P %	Si %	V %
HY16444	Raw	71	8.74	<0.01%	0.49	0.28	0.02	0.028	<0.01%	0.10	<0.001%
HY16736	Washed	72	7.56	<0.01%	0.34	0.34	<0.01%	0.006	<0.01%	0.02	<0.001%
HY16445	Raw	83	9.04	<0.01%	0.5	0.28	<0.01%	0.034	<0.01%	0.30	<0.001%
HY16446	Raw	88	8.96	<0.01%	0.49	0.26	<0.01%	0.038	<0.01%	0.45	0.001
HY16447	Raw	97	8.79	<0.01%	0.45	0.24	0.03	0.022	<0.01%	0.27	0.002
HY11134	Playa One	106	9.48	0.03	0.48	<0.1%	0.004	0.03	<0.01%	0.1	<0.001%

Table 3. Intermediate salt quality from current work and HY11134 Playa One original work

The results of both the unwashed and washed clay show that 90% of the alumina is precipitated from the PLS despite varying the reagent addition. This indicates only modest amounts of reagent may be required in the processing circuit, and in general, the reagent consumption is about 30% less than previous work completed by Playa One. This may result in cost savings in the final process design phase.

In addition, the purity of the intermediate salt is excellent for this Stage of the process, with many elements below the assay method's 0.01% (100ppm) detection limit. Only sodium of the major contaminants showed a significant difference between the washed (sodium content of 60 ppm) and unwashed (sodium content of 220 ppm to 400 ppm). This is a promising development for removing the Stage 1 Wash Circuit. The sodium content of 60 ppm in the washed mud is a significant improvement over Playa One's previous work.

The samples of intermediate salt from both washed and unwashed mud have been submitted for Stage 4 purification by hydrochloric acid- gas sparging. This will produce ultrapure aluminium hexachlorohydrate (ACH), which will be subsequently calcined in Stage 5 to produce HPA. The final product will be submitted for accurate and precise assay at a suitably qualified laboratory.

In summary, the metallurgical optimisation program for Stage 1 to Stage 3 has delivered results consistent with or exceeding Playa One's previous test work. It has also produced significant data for future process modelling work.

Impact has now produced high-quality intermediate salts with several elements below the detection limits of 100 ppm and with remaining contaminants in line with previous work and thus far validating the Playa One Sulphate Process.

The intermediate salts from washed and unwashed clay have been submitted for Stage 4 purification by hydrochloric acid-gas sparging. This will produce ultrapure aluminium hexachlorohydrate to be subsequently calcined in Stage 5 to produce HPA.

Sample Information

Sample	MGA E	MGA N	Source	Al_2O_3%	K_2O%	Fe_2O_3%	CaO%	Na_2O%	SiO_2%	MgO%	MnO%	P_2O_5%
LHMET001	243,880	6,409,250	East Lake	28.77	7.25	3.03	0.05	3.29	15.8	0.79	x	0.082

Table 4. Sample location and assays of major oxides for bulk sample LHMET001.

Assay and Metallurgical Information

All testing was undertaken at ALS Metallurgy Pty Ltd, Balcatta, Western Australia, under the supervision of a qualified metallurgist. All data is presented as received. Assays were undertaken at ALS Geochemistry using 4-Acid digestion with ICP-OES multi-element quantification or lithium borate fusion with XRF finish, where appropriate. The metallurgical test work is incomplete, and the results are preliminary.

About the Lake Hope Project

The Lake Hope Project covers numerous prospective salt lakes between Hyden and Norseman in southern Western Australia, a Tier One jurisdiction. It comprises five granted exploration licences (E63/2086, EL63/2317, 2318 and 2319, and EL74/673), covering the Lake Hope deposits already discovered, together with three further exploration licence applications (ELA63/2730, ELA74/779 and ELA74/764) which are poorly explored. The tenements cover about 238 km2 and are all 100% owned by Playa One Pty Limited.

Impact has the right to earn an interest in the company Playa One Pty Limited as follows (ASX Releases 1st and 4th May 2023):

1. Upon completion of a PFS, Impact can enter an incorporated joint venture with the Playa One shareholders (through an entity representing them, Playa Two Pty Ltd). If so, it will acquire an immediate 80% interest in Playa One by issuing up to 120 million fully paid ordinary shares capped at a maximum value of $8 million (based on the 5-day VWAP before the election) to the Playa One Shareholders.
2. Upon completion of a Definitive Feasibility Study to be sole-funded by Impact, Impact will issue up to 100 million fully paid ordinary shares capped at a maximum value of $10 million (based on the 5-day VWAP before the ASX announcement of the completion of the DFS) to the Playa One Shareholders.
3. Playa One shareholders will be free-carried to a Decision to Mine. Impact will maintain all Playa One tenements in good standing during this time.
4. If a Decision to Mine is made, the Playa One Shareholders may contribute to mine development costs or be diluted. If their interest falls below 7.5%, it will convert to a 2% net smelter royalty.

The Lake Hope Project contains globally unique high-grade aluminium clay minerals in the top few metres of a playa lake, which has unique physical and chemical properties that allow for low-cost mining and offsite metallurgical processing via a novel and cost-disruptive acid leaching process.

Preliminary economic studies indicate that the production of HPA and related products from Lake Hope will be cost-competitive with current producers and other developers in Australia and globally.

Competent Persons Statement

The review of exploration activities and results in this report is based on information compiled by Dr Mike Jones, a Member of the Australian Institute of Geoscientists. He is a director of the company and works for Impact Minerals Limited. He has sufficient experience relevant to the style of mineralisation and types of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mike Jones has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The review of metallurgical results contained in this report is based on information compiled by Mr Roland Gotthard, a Member of the Australasian Institute of Mining and Metallurgy and a consultant to Impact Minerals Limited. He has sufficient experience relevant to the style of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr Gotthard has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The data in this report that relates to Mineral Resource estimates for the Lake Hope Project is based on information evaluated by Mr Simon Tear, who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Tear is a Director of H&S Consultants Pty Ltd, and he consents to the inclusion in the presentation of the Mineral Resources in the form and context in which they appear.

The information in this announcement related to the Minerals Resource for the Lake Hope Project is based on information announced to the ASX on 19th June 2023. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (e.g. 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. • Description of 'industry standard' work	• Sampling comprised a representative 10kg sample dug from a pit • Samples were obtained from 0.5 to 1m depth with a weight of ~10kg, with the whole sample bagged in plastic buckets. • LHMET sample preparation and analysis was completed at a commercial laboratory (Intertek WA) using industry standard practices. • Metallurgical samples are representative powders produced in the laboratory using normal metallurgical processes
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).	• No drilling has been reported so this criteria does not apply.
Drill sample recovery	• 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.	• No drilling has been reported so this criteria does not apply.
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.	• Mineralisation collected in LHMET001 is visually and chemically identical to material throughout the East Lake • Mineralogy is impossible to determine visually • Photography of intact core specimens exists for 40 holes. For push tube holes where core was not intact enough to be meaningful, no photos were taken. • Photography of 140 of 160 auger hole samples exists • Logging is qualitative in nature as the grain size is too fine to allow visual identification of mineralogy even under hand lens or electron microscope • X-ray diffraction analysis was undertaken on 100 samples. XRD was used to infer mineralogical composition to a minimal level of confidence and infer alunite percentages for samples via regression of XRF assays using a ratio of 1% alunite per 2.26% Al_2O_3 on a dry basis
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.	• 0.5m sampling intervals were utilised where practicable • Whole core sample intervals were submitted for analysis • Samples were dried, crushed to 1mm and then riffle split to give a 300g sub sample that was then pulverised to 80% passing 75 microns, which homogenised the clay. • Limited pulverising QAQC has been undertaken to ensure laboratory homogenisation of the samples. • No wet samples were encountered. Most samples would be classed as moist clay. • Sample preparation techniques are considered appropriate. • 49 Field duplicates were taken. For auger drilling this involved sampling 50% to each duplicate from the opposite sides of the auger. A video is available to show this process. For the push tube drilling, cores were cut in half with a knife to produce a duplicate of the sample. • Sample sizes are appropriate to grain size of the material being sampled

Criteria	JORC Code explanation	Commentary
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 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• *LHMET samples were assayed via lithium borate fusion and XRF quantification via FB1/XRF10 or FB1/XRF30. The technique is considered a total digest technique.* • *The assay method is considered appropriate for the material and elements reported* • *Sampling methodology* • *Flocculation testing was undertaken at ALS Laboratories, Balcatta, using a 56mm tube with 100ml at 10% pulp density, and a variety of 0.01% flocculant added* • *Metallurgical solids are assayed by ALS Geochemistry using 4-acid or fusion digests and ICP-MS or XRF quantification, respectively. These are considered total digestions.* • *Metallurgical liquors are assayed via solution ICP-MS and halides by ISE* • *Percent extractions are calculated by ALS Metallurgy based on solid and liquid assays* • *SEM imagery by RSC Consultants using backscatter electron and energy dispersive spectrometry*
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• *LHMET001 to LHMET005 has been assayed at Intertek and at ALS Laboratories* • *Metallurgical samples have not been independently verified* • *Data is stored on a professional relational database maintained by Impact Minerals Limited* • *Assays below detection limit of the respective methodology are highlighted.*

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 table of sample locations is provided in the report* • *Sample locations recorded with handheld GPS accurate to within 1m* • *MGA Zone 50 South* • *Topographic control is provided by DGPS and drone topographic control*
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.*	• *Bulk samples taken from a selection of mineralized blocks to represent 25% Al_2O_3, 25.5% Al_2O_3, 26% Al_2O_3 and 26.5% Al_2O_3 resource blocks.*
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.*	• *The mineralization is considered representative of the mineral deposit from which is sourced*
Sample security	• *The measures taken to ensure sample security.*	• *Samples were sealed in individually numbered plastic buckets and bags with zip ties* • *Samples were delivered to the laboratory directly by company personnel to ensure complete chain of custody*
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• *No audits or reviews of sampling techniques and data have been completed.*

Section 2 Reporting of Exploration Results

Criteria listed in the preceding section also apply to this section

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.	• E63/2086 Lake Hope • E63/2317 • E63/2318 • E63/2319 • E64/673 • E64/674 • 100% Playa One Pty Ltd • Native Title Agreements are in place with Native Title parties • Heritage Surveys have been conducted and no Aboriginal Cultural Heritage exists over the mineralization or Mineral Resource • No national parks, nature reserves or other licenses interact with E63/2086
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• *Nil*
Geology	• *Deposit type, geological setting and style of mineralisation.*	• *Mineralisation comprises a flat-lying evaporitic lake sequence and is bound by the margins of the lake by sand dunes* • *Mineralisation comprises light brown to light grey, dense, plasticine consistency salt* • *The salt is a nanometre sized colloidal precipitate of aluminium minerals and silica* • *Salt lakes within evaporitic basins within the granite terrane of the Yilgarn Craton, Western Australia* • *Lacustrine evaporite sulphate salts hosted within flat-lying sheet deposits*
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 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.*	• *All drill hole information has previously been reported ASX Release March 21st 2023 and June 19th 2023.*
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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.*	• *Intersections containing multiple samples are weighted by length into a total intersection* • *No lower cut-off grade is used at this time* • *No upper cut-off is used as the material is homogeneous*