



American Rare Earths Limited

(ASX:ARR)

An Australian exploration company focused on the discovery & development of Rare Earths and Critical mineral resources in North America and Australia

Commodity Exposure

Rare Earth Elements in the USA

Scandium in Australia

Directors & Management

Creagh O'Connor

Non-Executive Chairman

Keith Middleton

Managing Director

Geoff Hill

Non-Executive Director & Vice Chairman

Denis Geldard

Non-Executive Director

Jim Guiling

Chief Technical Advisor

Wayne Kernaghan

Company Secretary

Capital Structure

Ordinary Shares on Issue 344,308,326

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27 July 2021

June 2021 Quarterly Activities Report

Highlights

- Completing a drilling program at the La Paz Scandium and Rare Earth Elements ("REE") Project in Arizona, USA, identified favourable geology as deep as 122 metres, up to four times the depth of the current 30-metre resource.
- Drilling results exceeded expectations by showing continuous resource mineralisation at previously undrilled depths in all assayed drill holes, with one hole containing consistent REE grades above 300ppm REE cut-off to a depth of 122 metres.
- A resource upgrade is in progress with a robust size increase expected.
- Two holes in the previously undrilled southwest area of the La Paz project point to a potential new ore body discovery.
- Metallurgical testwork on original La Paz resource area rock chips produced positive results supporting additional testwork on the recently drilled diamond core.
- New high-grade Searchlight Rare Earth Project acquired in Nevada USA near Mountain Pass, USA's only operating REE mine.
- The 100% owned Searchlight Project staked claims covering 656 hectares (1,620 acres) is prospective for REE.
- Initial geological review and sampling program conducted on the Searchlight mining claims indicate the presence of concentrated REE.
- Scandium mineral rights were acquired over Split Rocks Project in Western Australia. Historical drilling identified elevated Scandium at shallow depths with 62 samples in 46 holes exceeding 50ppm at 52 metres, including three samples exceeding 100ppm three samples exceeding 90ppm at a depth of less than 24 metres.
- Assay results pending from confirmatory drilling recently completed at Split Rocks.
- Acquisition of the Halleck Creek (formerly known as the Laramie Rare Earth Project) from Zenith Minerals Limited is complete after final approval by the Wyoming Office of State Lands and Investments for the transfer of four state mineral leases to ARR.
- Cash balance on 30 June 2021 is \$3,700,689

American Rare Earths Limited June 2021 Quarterly Activities Report

Drilling completed at La Paz Scandium and Rare Earths Project

A diamond drilling program at the La Paz Scandium and Rare Earths Elements Project commenced in March 2021 and was completed during the quarter (Refer to Photo 1). The drilling conducted by Timberline Drillers was the first to be undertaken at the La Paz project site in nine years since the project's predecessor drilled several deep core holes into the resource during 2011.

The La Paz Project is 100% owned by ARR through its wholly-owned US subsidiaries, Western Rare Earths ("WRE") and La Paz Rare Earth LLC ("LPRE"). The Project is located in La Paz County, Arizona USA, approximately 200km northwest of Phoenix and 320km south-east of Mountain Pass, the only operating Rare Earths mine in the USA (Refer to Figure 1). Access to the project site is via paved and well-maintained dirt roads. La Paz is surrounded by world-class infrastructure within a mining-friendly jurisdiction. The project is a large tonnage, high-value Light Rare Earth Elements ("LREE") deposit containing low penalty elements like radioactive thorium and uranium, potentially becoming the largest REEs project in North America.



Photo 1: Drill rig at the La Paz project site

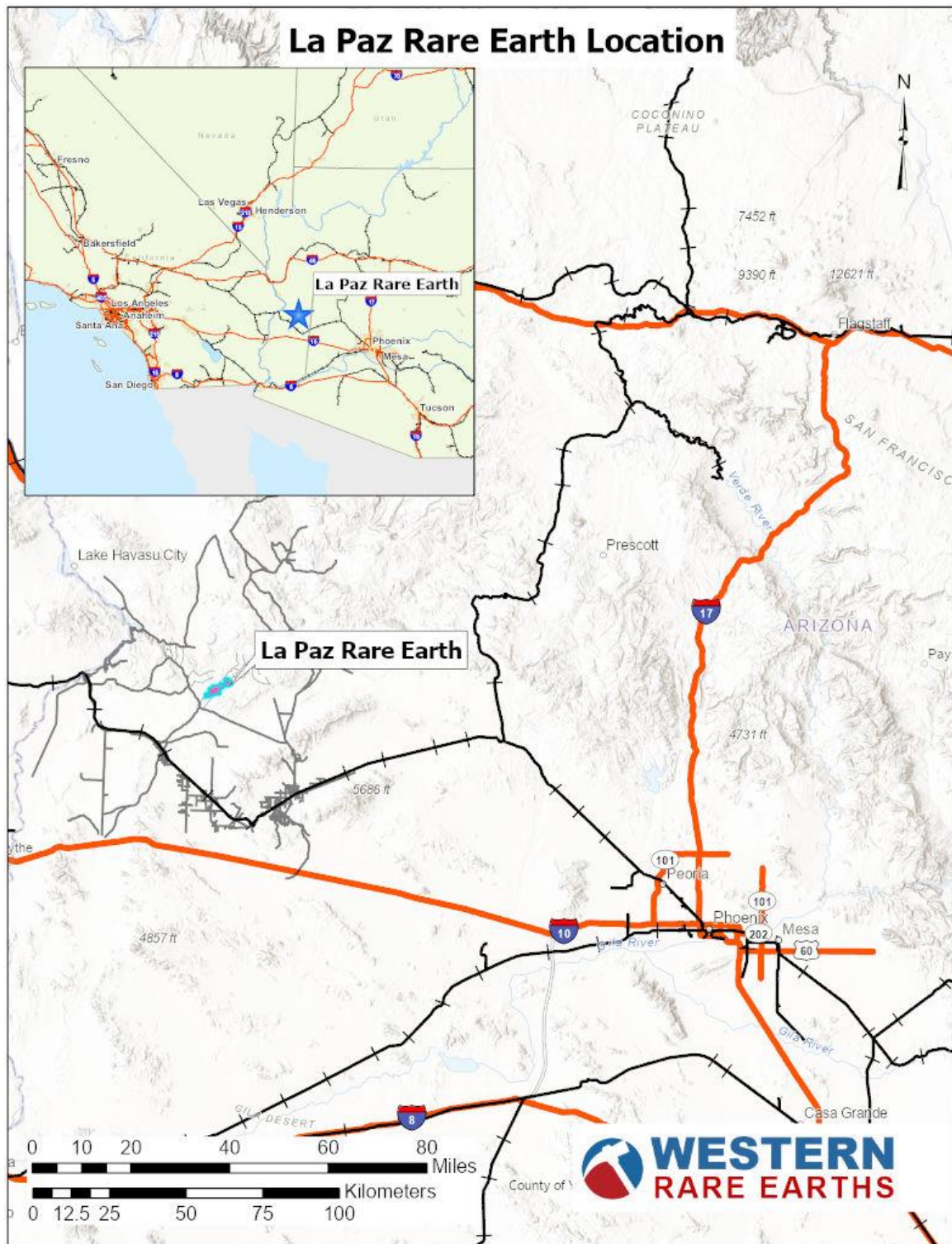


Figure 1: Location of La Paz Rare Earths Project in Arizona USA.

The 2021 drilling program showed favourable geology below the resource was identified by the latest drilling down to a depth of 122 metres. This was four times deeper than the current resource of 30 metres and more than double the planned drilling depth.

Nine new core holes were drilled to a depth ranging between 68 and 122 metres. Green epidote veins were visible in core samples consistent with the potential for REE across the project claim area.

Allanite, which hosts the REE's, is an epidote mineral associated with the veins' green epidote.

The Diamond Drilling campaign and subsequent metallurgy work were designed to:

- Confirm the extremely shallow resource previously drilled to a depth of 30 metres with a cut-off grade of 300ppm REE;
- Discover higher grades of premium valued Scandium mineralisation, REE magnet metals and heavy REE's that were identified in surface sampling over the original resource area averaging 552ppm REE's;
- Potentially extend the resource below the current 30 metres; and
- Test the possible extension of REE mineralisation in the southwest project tenements that share key mineralisation characteristics to the resource and which could extend the existing mineralisation by several kilometres.

Approximately 4,500kg of core samples were obtained from 682 metres of diamond core drilling and transported to an assay laboratory in Sparks, Nevada. The core was photographed and quarter cut in preparation for assaying.

A selection of 500kg assayed core was transported by air to Perth, Western Australia, for metallurgical studies at Nagrom Laboratories. Wood PLC is an internationally recognised consultant guiding advanced mineral processing and metallurgical testwork undertaken on the core. This metallurgical testwork will follow up on the early-stage testing conducted by SGC labs in 2011 and by Saskatchewan Research Council ("SRC") in 2021. The results of the SRC testwork is expected to be available for release to the market in the third quarter of calendar 2021, with the Nagrom final report and worksheet recommendations expected during the fourth quarter of calendar 2021.

Drill results exceeded expectations

The 2021 drilling program at La Paz produced results that exceeded the Company's expectations with many pleasing positive outcomes, including:

- Higher grade assays to four times the depth of the maiden 2011 resource;
- Confirmation of an expected upgrade of the previous maiden resource;
- A potential new prospective target to the south-west of the current resource;
- Consistent high-value Scandium observed in the resource area and new south-west areas;
- Elevated grades of high-value magnet metals (Praseodymium and Terbium) and heavy REEs (Terbium) compared to 2011 drilling;
- Extraordinarily low radioactive elements; and
- An opportunity to upgrade the size and grade of the resource.

Mineralisation was intersected in select drill holes as much as four times the depth as undertaken previously. End of hole mineralisation may be open at depth and laterally from initial drilling in the heart of the resource area.

Technical Summary

Nine diamond drill holes (LP21-01 to LP21-09) were drilled at La Paz. Six holes are located in the original resource area (LP21-01, LP21-05 to LP21-09), while three wide-spaced exploration holes (LP21-02 to LP21-04) were drilled to the southwest extension of the resource area. The location of the drill holes is shown in Figure 2 below.

Initially, the drilling program was for six holes; however, following encouraging results from surface sampling campaigns in 2019 and 2020 was extended further in December 2020. The program was increased by 50% to include three additional holes in the new extended southwest claim areas.

In the resource area, the drilling campaign produced core holes LP21-05 and LP21-01 twinned to previously drilled percussion holes in 2011 C-62 and A-7 respectively. The 2011 drill holes C-62 and A-7 had assays of total REEs above cut-off grade and Scandium. (Refer to Tables C, D, and E disclosed in ASX Release: 21 April 2021 to compare the 2011 assay results to the more detailed geology logged by Mr John Keller during the 2021 program). Photographs of the core from the drilling, including holes LP21-05 and LP21-01, are shown in photos 2 to 5 below.

Allanite and Trianite are known from petrographic studies to be the likely hosts of most Lanthanides (REEs). Still, they are not the necessary host of the Scandium which is believed to be ubiquitous to the gneiss.

As a result of recent metallurgical work, it is known that the higher-grade material is consistent with epidote that may contain Tritanite and Allanite. It is believed that Epidote and related green colouring may be a potential key indicator of this and was visible in the field. Photos 2 to 5 of the core sample trays from holes LP21-01 and LP21-03 to LP21-05 are also consistent with this description.

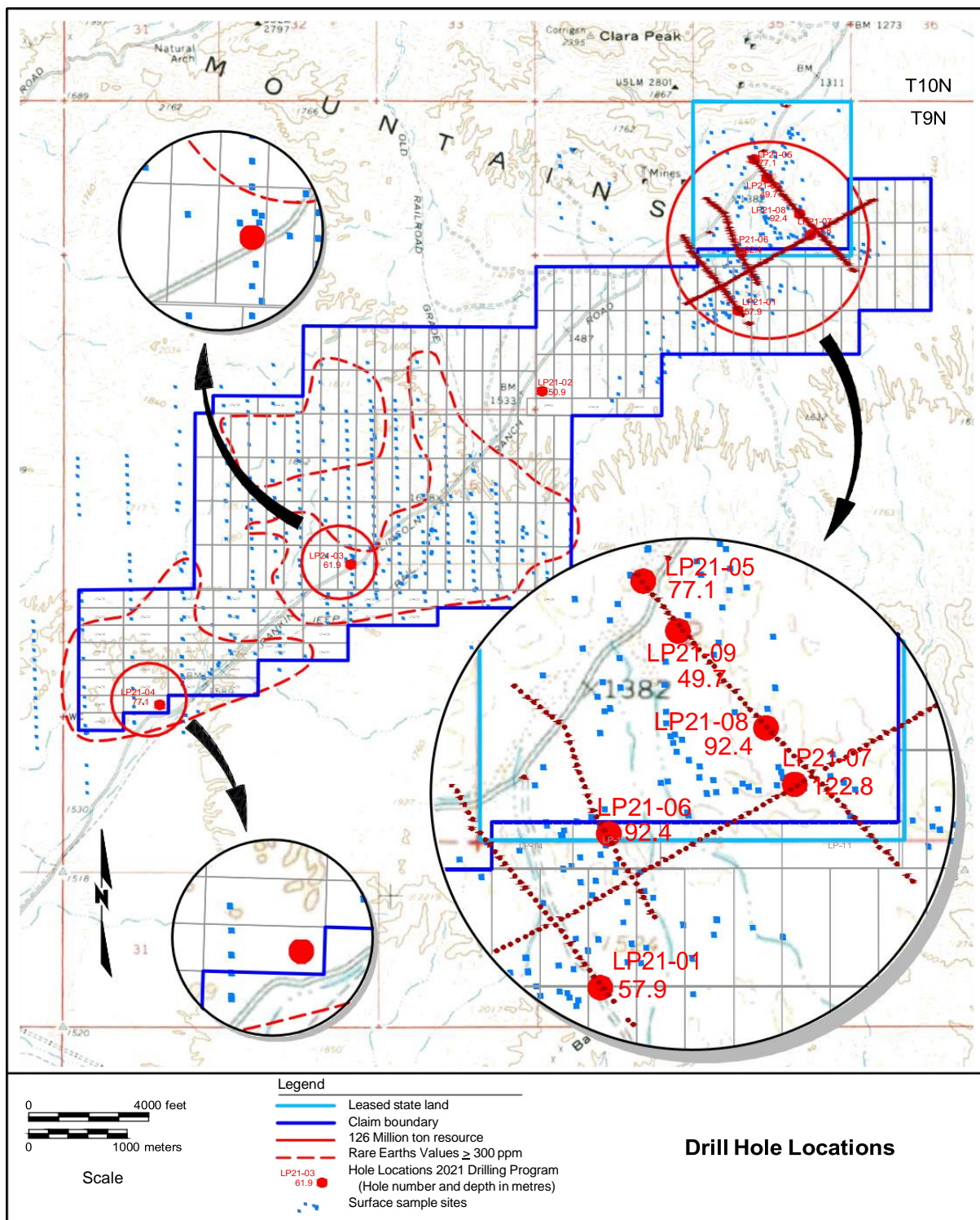


Figure 2: Location of La Paz Drill Holes: Note: The lines of small red dots in the resource area indicate drill hole locations of 2011 percussion drilling which established the extremely shallow resource.

Refer to ASX Release: 21 April 2021 for the fence diagram of historical drilling at the La Paz Rare Earth Project and cross-section graphics. The Company's Senior Consulting Geologist identified in his JORC 2012 Compliant Technical Report published in November 2020 that there was reasonable evidence to support deeper drilling visually indicated in a review of the fence diagram and cross-sections.



Photo 2: Core from Hole 1 in the resource



Photo 3: Core from Hole 5 in the resource



Photo 4: Core from Hole 6 below the resource



Photo 5: Core from Reconnaissance Hole 3

The drilling program was completed and produced several positive outcomes, as discussed below.

Higher grades to current resource

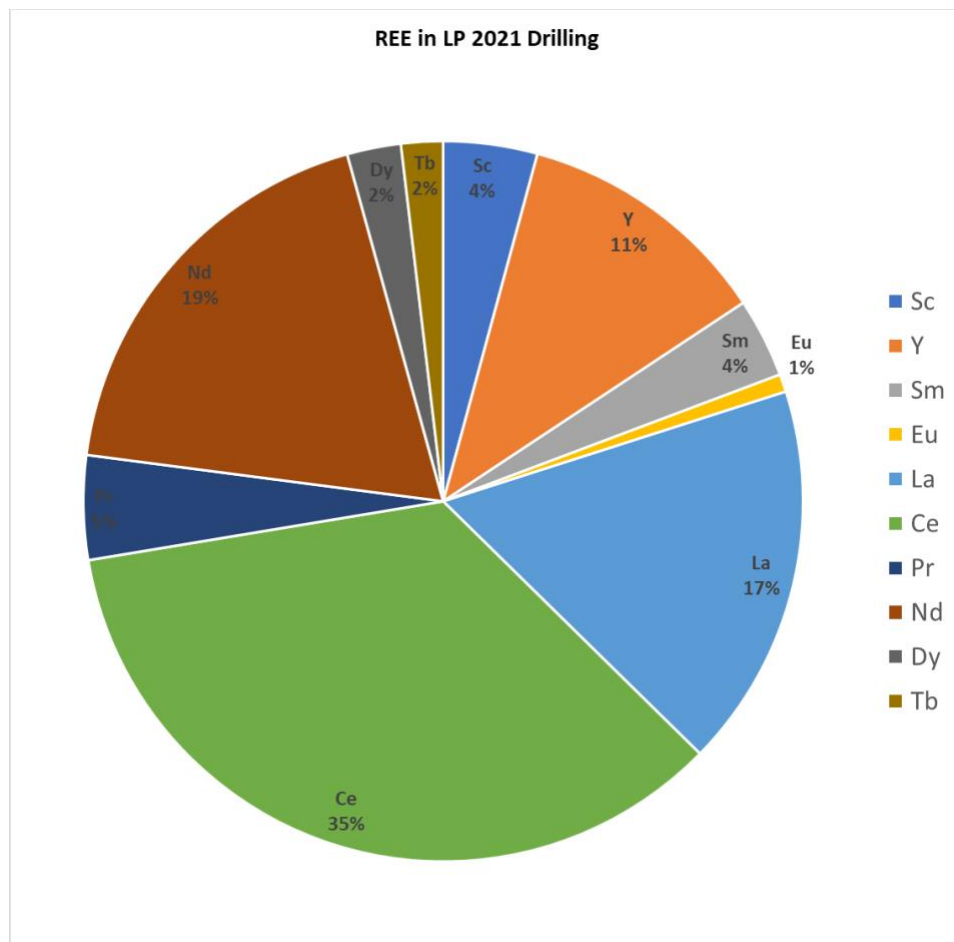
An analysis of the results indicated the presence of higher grade Magnet REEs (Praseodymium (“Pr”), Terbium (“Tb”)), and Samarium (“Sm”) concentrations compared to the previous 2011 percussion drill results. The average Total REE (“TREE”) grade was approximately 398ppm within the 2021 drill hole data compared to 372ppm in the 2011 percussion hole data, based on a cut-off grade of 300ppm. The average TREE of 398ppm is 6.4% greater than the maiden resource average.

The higher average remains similar to the original resource grade average; this has confirmed the historical data and gives a modest lift to the average grade across the original resource. Given this observed higher average assay grades in the core drill campaign, there is now an opportunity for the resource to be upgraded in both size and grade.

The elevated grades in two Critical REEs, Neodymium (“Nd”) and Praseodymium (“Pr”) were observed to be significantly greater than crustal abundance in the 2021 drilling results. Each is considered a critical REE necessary for permanent magnet production used in defence technology and the fast-growing renewable energy and electric vehicle production chains. A summary of weighted average REE elements, utilising a 300ppm cut-off, was used in the maiden resource calculation appears in Table 1 below. An overview of the different REE and primary uses was included as Table 3 in ASX Release: 29 June 2021.

Drill Hole ID	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Dy	Tb
LP21-01	17	45	68	137	20	73	14	3	10	5
LP21-03	15	39	63	131	19	73	13	3	8	8
LP21-04	14	40	72	144	19	74	13	3	8	7
LP21-05	16	43	75	140	19	80	15	4	9	6
LP21-06	17	45	71	146	20	79	15	3	9	4
LP21-07	16	43	68	138	19	72	13	3	9	10
LP21-08	17	49	62	131	16	68	14	3	11	9
LP21-09	17	44	65	131	17	71	13	3	9	5
Wgt Average	16	44	68	138	18	73	14	3	9	7

Table 1: Results of 2021 La Paz Analysis for Select Elements (TREE>=300ppm)



The length of drill hole mineralisation zones exceeded the mineralised zone lengths in the 2011 drilling. The average drill hole thickness of material with TREE grades ≥ 300 ppm in the 2021 core holes data was approximately 45.33 metres compared to 24.1 metres in previous data. The average thickness of 2021 drill holes of TREE >400 ppm was approximately 26.1 metres.

The weighted average grade of Scandium found in the analytical data was 16ppm.

Confirmation of Maiden Resource

As indicated above, 6 of the diamond core drill holes in the resource area were twins of select 2011 percussion drill holes that established the maiden REE resource. By drilling these twinned six holes across the resource area and increasing depth, assay results could be compared and confirmed the 2011 data.

The 2021 drill results were complementary to the previous 2011 percussion drill results and without notable differences. As a consequence, the results provided contributory confirmation of the Company's maiden resource asset.

Potential new ore body discovery

As part of the 2021 drilling program, three exploratory diamond holes (LP21-02, LP21-03, and LP21-04) were drilled to the previously undrilled southwestern extension of the La Paz project area (Refer to Figure 2). Holes LP21-03 and LP21-04 produced encouraging results that point to a prospective target.

The depth of hole LP21-03 was drilled to 61.9 metres (203 feet) and LP21-04 was drilled to 77.1 metres (253 feet). The two drill holes are approximately 2.22km apart, with LP21-03 located approximately 4.75km to the southwest of LP21-01 and LP21-04 is situated further to the southwest.

REE mineralisation zones similar to the maiden resource were contained in drill hole LP21-03 and showed an average TREE of 377ppm over a length of 14.8 metres using a 300ppm TREE cut-off. The more favourable REE mineralisation of the two holes was in drill hole LP21-04 which displayed an average TREE of 401ppm over a length of 48.6 metres using a 300ppm cut-off.

The fence diagram in Figure 3 shows histograms of relative magnetic REE for all nine 2021 drill holes and illustrate how the holes in the southwest area compare to the core holes drilled to the northeast in the main La Paz maiden resource area.

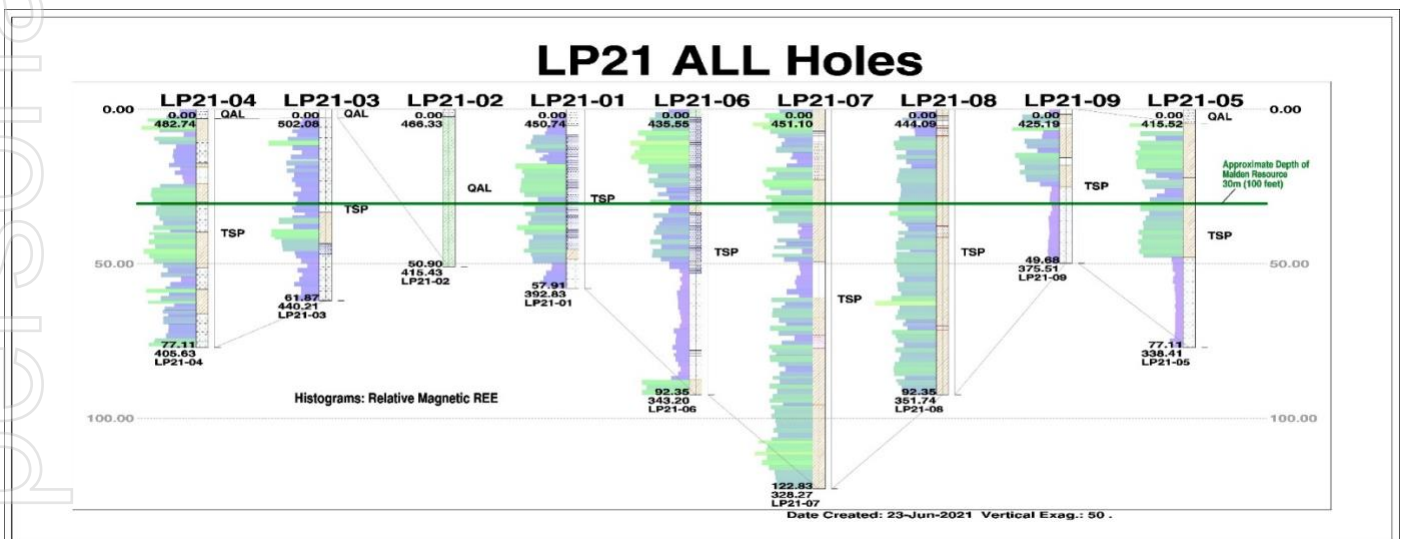


Figure 3: Histograms of Relative Magnetic REE for all LP21 Drill Holes

Given the favourable results in hole LP21-04, staking of additional claims and additional exploration is planned to determine the extent of REE mineralisation in this southwest area of the project.

Consistent Scandium at depth

The 2021 drilling campaign confirmed occurrences of Scandium at depth with grades consistent with historical surface sampling. Analytical assay data indicated Scandium grades with a weighted average grade of 16ppm.

In 2019 and 2020, Scandium was reported in surface samples across the project area, specifically in the REE resources area and the southwest of the project area. All of the 2021 diamond core drill holes assayed displayed Scandium grades similar to the historical surface samples and were most prevalent

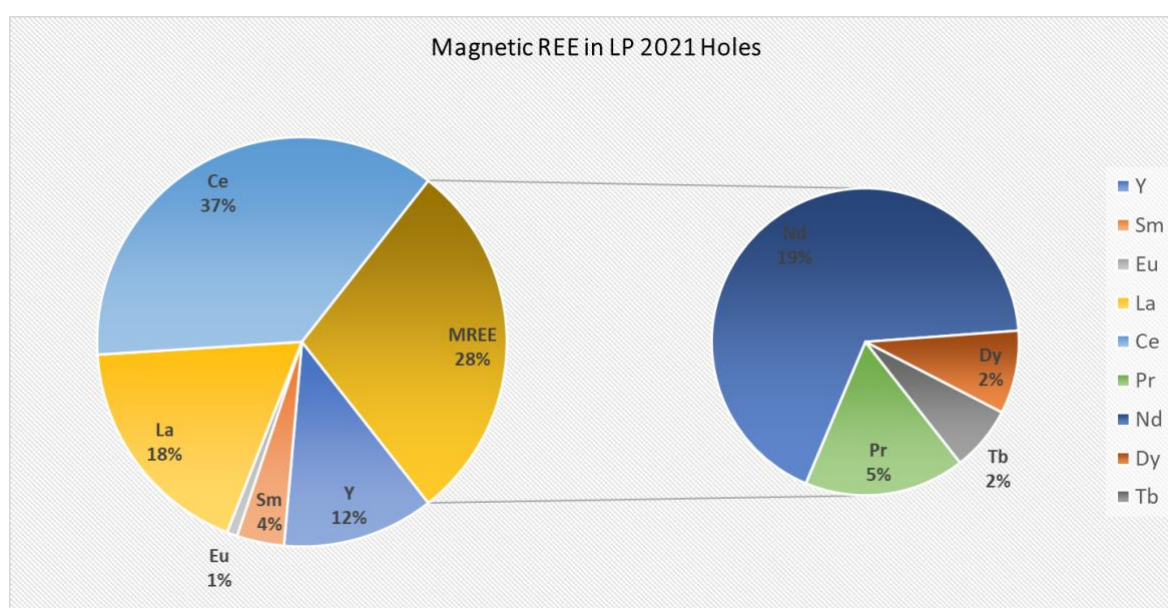
in higher grade REE areas. Interestingly, Scandium appears to be widespread in the REE mineralised zones. The potential for concentrates of Scandium to be of commercially viable grades from REE beneficiation and metallurgy could provide significant economic benefits to the La Paz project.

Elevated grades of Magnetic and Heavy Rare Earths

An analysis of the 2021 drilling results highlighted that Magnetic REEs comprising Pr, Nd, Dy and Tb constituted approximately 27% of the TREE, with the ratio of Nd:Pr being 4:1 and the two elements representing approximately 23% of TREE (Refer to Table 2). Approximately 22% of TREE was Heavy REE.

DHID	Thk (m)	TREE	LREE	HREE	MagREE*	ND:PR Ratio	PRND / TREE	Dy:Tb Ratio	DYTB/ TREE	MagREE / TREE
LP21-01	36.24	398	312	86	107	3.7	23%	2.1	4%	27%
LP21-03	14.78	377	299	78	108	3.8	24%	1.0	4%	29%
LP21-04	48.56	401	322	79	108	3.9	23%	1.2	4%	27%
LP21-05	35.53	414	329	85	114	4.3	24%	1.5	4%	27%
LP21-06	41.76	416	331	84	113	3.9	24%	2.1	3%	27%
LP21-07	90.03	398	311	87	109	3.8	23%	0.9	5%	27%
LP21-08	79.15	389	291	98	103	4.3	22%	1.2	5%	27%
LP21-09	16.62	379	297	82	102	4.1	23%	1.7	4%	27%
Wgt Average	45.33	398	311	87	108	4.0	23%	1.3	4%	27%

Table 2: Results of 2021 La Paz Analysis by REE Group (TREE >=300ppm)



Notably, the ratio of Nd:Pr ratio is market optimal at approximately 4:1 and the pairing of the two elements at that ratio is ideal for input into NdFeB permanent magnet manufacturing. These magnets are required for the production of electric traction motors in electric vehicles. Further, if the in-situ Nd:Pr ratio can be maintained throughout processing, the additional expense of extra separation can be avoided and provide downstream processing cost savings. Another positive is that the US Department of Defence is presently focused on securing a critical heavy REE supply chain, including Tb and Dy.

Extraordinarily low radioactive elements

The 2021 drilling confirmed previous data that radioactive elements found at the La Paz project site are extremely low compared to other USA based projects, including the lowest Thorium level in any US REE mine project. The average weight content of Thorium was 5.1ppm with a maximum assay of 38ppm. The weighted average for Uranium was 0.9ppm with a maximum of 4.4ppm (Refer to Table 3).

DHID	Thorium ppm	Uranium ppm
LP21-01	5.9	1.0
LP21-03	5.1	0.8
LP21-04	6.2	0.9
LP21-05	4.9	1.2
LP21-06	5.7	0.9
LP21-07	4.3	0.6
LP21-08	3.9	0.6
LP21-09	5.4	1.1
Wgt Average	5.1	0.9

Table 3: Average 2021 Drill Hole Grades of Thorium and Uranium

The La Paz project is considered highly unlikely to produce radioactive raw ore. Therefore there is a possibility that beneficiation would not concentrate the Uranium and Thorium to levels requiring special handling. This would see significant cost savings from both permitting and ongoing operations.

Opportunity to upgrade Resource grade and size

Deeper mineralisation was noted in all resource areas, diamond core drill holes and the heart of the strike. The mineralisation was higher than the resource cut-off at depths by as much as 122 metres in hole LP21-07, four times shallower than the original resource. The consistent assay results of mineralisation from the deeper drilling below the maiden resource indicate the potential for the inferred resource to be significantly upgraded in size and grade.

Notably, holes nearest to drill hole LP21-07 also indicated the greatest depth and consistency in mineralisation (Refer to Figure 3 Histograms) and illustrate that additional follow-up and deeper drilling in the heart of the strike is warranted.

The Current La Paz Resource

La Paz was first drilled in 2011 with a maiden resource established later that year via 195 very shallow percussion drill holes to a depth of 30 metres that complied with National Instrument 43-101 guidelines. In 2020, the Company's Chief Technical Consultant Geologist, Mr Jim Guilinger, reviewed the data to confirm the resource and the first formal JORC 2012 classified resource estimate of 128.2Mt @ 373.4ppm (0.037%) Total Rare Earth Elements ("TREE"), announced by ARR (Refer ASX Release: 11 November 2020). Mr Guilinger is Head of Colorado-based independent consultants, World Industrial Minerals LLC and a Competent Person under JORC 2012 and NI 43-101 standards.

The new inventory description, a straight conversion of the maiden resource estimate with no change in actual classified mineralised volumes under either code, is presented in Table 4 below.

La Paz Resource Estimate 2012 JORC				
	Mt	Grade (%)	Contained REE (kg)	Contained REE (Mlbs)
Inferred	112.0	0.037	37,586,080	83.3
Indicated	16.2	0.037	5,436,558	12.1
Total	128.2	0.037	43,022,638	95.4

Table 4: La Paz Rare Earths Project JORC 2012 Classified Mineral Resource Estimate

Mr Guilinger stated in the 2020 JORC 2012 compliant Technical Report, that “After the planned 2021 drilling program we expect to be able to upgrade the Rare Earths resource...” (Refer to Interpretations and Conclusions section of the Technical Report, ASX Release: 24 November 2020).

Following the 2021 drilling program results, ARR is now upgrading the resource, which will be released to the market when the JORC study is complete. In addition, the Company is also completing a GAP analysis focusing on steps required for a scoping study and subsequent Preliminary Economic Assessment. The Company recently engaged Arizona based Zargos, USA, Consulting to provide additional expertise and guidance on the La Paz project going forward.

Metallurgical Testwork

While the diamond drilling program was in progress, The Saskatchewan Research Council (“SRC”) in Canada, were commissioned to complete metallurgical analysis and processing of mineralised rock chip samples collected from the original La Paz resource area.

They undertook an exploratory testwork program, under the guidance of Wood PLC, to initially determine if the ore could be upgraded to a viable concentrate for the treatment in the refinery.

The program comprised of three components:

- Preliminary dry, high-intensity magnetic separation of separate size fractions using a Frantz separator;
- Sighter wet high-intensity magnetic separation (WHIMS) with stage grinding; and
- A bulk wet separation run to generate concentrate for flotation testwork and preliminary acid bake testwork.

The head analysis resulted in a prepared composite with the key element content shown in Table 5.

Component	Unit	Value
LREE	Ppm	448
HREE	Ppm	103
TREE	Ppm	552
Sc	Ppm	16
Fe ₂ O ₃	%	7.15
SiO ₂	%	59.9
Th	Ppm	17
U ₃ O ₈	Ppm	6

Table 5: Key element content of prepared metallurgical composite

This showed silica to be the most significant component of the ore which also had very low thorium and uranium that is considered beneficial from an environmental and handling perspective.

Under the dry magnetic separation component of the testwork program, minus 25 microns was screened out of the ore sample milled to minus 150 microns and then separated into four size categories for separate testing. The preliminary results from this process are summarised below in Table 6.

Size	Mass	Preliminary MS Recovery		Combined Magnetics			
Microns	%	Fe2O3, %	TREE, %	LREE	HREE	TREE	Fe2O3, wt%
106-150	35.4	90.6	82.4	367	74	441	7.1
75-106	17.0	94.6	87.2	688	72	760	8.2
38-75	30.0	88.8	83.0	1020	182	1202	10.5
25-38	17.6	84.5	79.6	1065	192	1257	11.3

Table 6: Preliminary findings from dry magnetic separation component of testwork

The following key observations were noted:

- TREE recovery was relatively stable across the range of sizes tested, from 80 to 87%;
- REE grade increased with finer size fractions, indicating the ore benefits from finer grinding to liberate rare earth minerals, primarily allanite; and
- Iron oxide grades in magnetic concentrate also increase with finer grind sizes, which is expected with high-intensity magnetic separation.

During the wet magnetic separation component of the testwork program, a sub-sample of ore was milled to 80%, passing 75 microns, and subjected to wet LIMS processing at 1,000 gauss to remove magnetite and other diamagnetic minerals. This was subsequently followed by WHIMS processing at 10,000 gauss field strength. The concentrate was then reground to 80%, passing 38 microns and subjected to cleaner WHIMS processing. The results, arranged with different combinations of magnetic products, are summarised below in Table 7.

	Mass, %	TREES, Ppm	TREES Distn, %	Sc, ppm	Sc Distn, %
Feed	100.0	662	100.0	16.0	100.0
LIMS mags	4.0	912	5.5	22.0	5.5
Ro WHIMS mags	19.6	1914	56.8	31.2	38.3
Cl WHIMS mags	6.3	2560	24.4	42.0	16.6
LIMS+Cl WHIMS mags	10.3	1921	30.0	34.2	22.1
LIMS+Ro WHIMS mags	23.7	1744	62.3	29.6	43.8

Table 7: Results from sighter wet magnetic separation component of testwork

The following key findings were noted:

- LIMS processing produced a small concentrate mass with 5.5% of total REOs;
- Rougher WHIMS had an excellent upgrade to 1,914 ppm TREES, containing 56.8% of total feed TREES; and
- Regrinding and cleaner WHIMS saw the concentrate grade increase to 2,560 ppm TREES but at the expense of recovery, reducing to 24.4% of total feed TREES.

Scavenger tests on rougher and cleaner WHIMS tailing also commenced determining if recovery can increase at similar grades. Based on three passes of scavenger WHIMS processing at a field strength of 10,000 gauss, it was determined that recovery of REEs and Scandium with the introduction of rougher scavenging only marginally increased with a reduction of weighted combined grades noted. As a result, progressing with a rougher scavenger WHIMS was not warranted. Scavenging of cleaner WHIMS tailings resulted in increasing REE recovery from 68.8% to 78.5% relative to the preceding rougher scavenging only, with an improved grade to 1,559ppm. Scandium recovery correspondingly

increased from 47.2% to 55.7% for a similar weighted grade that increased from 25.4ppm to 26.7ppm. This indicated that there appeared to be merit in incorporating scavenging of cleaner WHIMS tailings in further testing.

For tabled results of both the rougher and cleaner scavenger runs, refer to ASX Release: 7 April 2021.

A bulk run with only cleaner WHIMS is being undertaken to produce concentrate for flotation testing. Some of this concentrate will also be used for acid bake testwork to generate leachate for enzyme absorption testing at the Lawrence Livermore National Laboratory in California to evaluate potential REE extraction from magnetic concentrate.

In summary, it was noted from a recent metallurgy report that the combination of LIMS magnetic separation plus WHIMS magnetic separation followed by scavenging of cleaner WHIMS tailings resulted in an encouraging 78.5% TREEs recovery from the feedstock into 33.4% of the mass with TREE grade improvement from 652ppm to 1,559ppm. These processing and metallurgy results are in Table 8 below.

	Mass, %	TREEs, Ppm	TREEs Distn, %	Sc, ppm	Sc Distn, %
Stage Performance					
<i>Cl Sc non-mags</i>	27.0	1789	31.2	38.0	43.8
<i>Cl Sc WHIMS mags</i>	73.0	1457	68.8	18.0	56.2
<i>Feed (Cl WHIMS non-mags)</i>	100.0	1547	100.0	23.4	100.0
Overall Performance					
<i>LIMS mags + WHIMS mags (Ro + Sc + Cl Sc)</i>	33.4	1559	78.5	26.7	55.7

Table 8: Mineral Processing and Metallurgy Results

The significant reduction in mass and concentration to a higher grade for both REEs and Scandium presents cost-saving opportunities in later stages of beneficiation and metallurgy.

The recent testwork generated concentrate grades similar to those achieved in historical work but using only magnetic separation. The introduction of flotation to reject barren silica is expected to increase the TREE and Scandium concentrate grades further and improve project economics. Flotation is known to remove silicates with efficiency and given the very high silica levels being at almost 60% of feedstock ore. The flotation phase offers an excellent opportunity to remove much of the silicate and to substantially improve the upgrade of the ore.

The next round of testwork focuses on a more extensive concentrator program to explore the use of new generation flotation collectors and promoters to specifically target REEs bearing allanite, as diamond drill core is made available.

A key metric for the next round of testwork on the drill cores will be to maximise the upgrade of REEs and Scandium with high-efficiency recoveries but maintaining muted U/Th combined at less than 100ppm at any stage of the flow sheet. This presents an opportunity for a relatively clean process that will avoid penalties associated with radioactive processing or waste management, making the La Paz deposit unique to its North American peers.

Searchlight Rare Earth Elements Project

In May 2021, ARR announced the acquisition of a new REEs exploration project in Nevada, USA.

The Searchlight Rare Earth project is located in the Crescent precious metal mining district in Clark County of southwest Nevada, approximately 119km (74 miles) south of Las Vegas. The Searchlight Project is approximately 32km (19 miles) west of the Mountain Pass REEs mine, the USA's only integrated operating and processing rare earths mine (Refer to Figure 4).

The project is 100% owned by the Company's USA subsidiary, Western Rare Earths LLC ("WRE"). It consists of an area covering 656 hectares (1,620 acres) comprising 80 contiguous unpatented mining claims staked by the Company in early 2021 after a review of historical area records showed the claims previously prospected for REE were available for acquisition. The mining claims are situated on public Bureau of Land Management ("BLM") land in the mining-friendly state of Nevada (Refer to Figure 5).

The project area is easily accessible by road and has a climate and terrain that supports all-year-round exploration.

Remarkable high grades of REEs, especially the highly sought after Heavy Rare Earth Elements ("HREE"), are indicated by historically available sample data that includes a significant assay result of REEs.

Acquisition of the project followed three days of reconnaissance geological mapping and the collection of 10 surface geochemical rock samples within the Searchlight project area which identified elevated REE grades (Refer to Figure 6).

Technical Summary

The ten rock samples were collected on behalf of the Company by World Industrial Minerals LLC ("WIM") in December 2020. The samples were from monazite-apatite bearing veins in biotite granite and hornblende biotite granite sills in the Early Proterozoic granites within the project area. Sample TH-01 included a total REE of 14,800ppm or 1.48%, shown in Table 9 below (Refer to ASX Release 8 June 2021 in Table 1 for a complete summary of the REE all rock samples).

REE Type	REE (ppm)
Total REE	14,800
HREE	940
Magnetic REE*	3,320
* Magnetic REE include: Nd, Pr, Dy, Tb	

Table 9: REE Summary for Rock Sample TH-01

Hazen Research Inc in Colorado, USA, conducted rock sample analyses that indicated concentrated REE. One sample (TH-01) contained high levels of HREE plus key magnetic elements, including Neodymium (Nd), Praseodymium (Pr), Dysprosium (Dy) and Terbium (Tb) (Refer to ASX Release 20 May 2021 in Appendix A for a summary of analytical results for all the ten rock samples).

Petrographic analysis of rock samples, obtained from DCM Science in Lakewood in Colorado, USA, described sample TH-01 as *"a red coloured, hard and dense granite/gneiss with areas of localised fracturing and crude banding. The rock shows significant iron staining. Microscopic Description: Major Mineralogy: Quartz 30%, Sericite 22%, Plagioclase 18%, Calcite 12%, Goethite / Hematite 12%, Monazite 3% and Chlorite 3%. Trace Mineralogy: Rutile, Mn oxide, Leucoxene, Zircon, Calcite."* Photo 6 below shows the rock sample, TH-01.

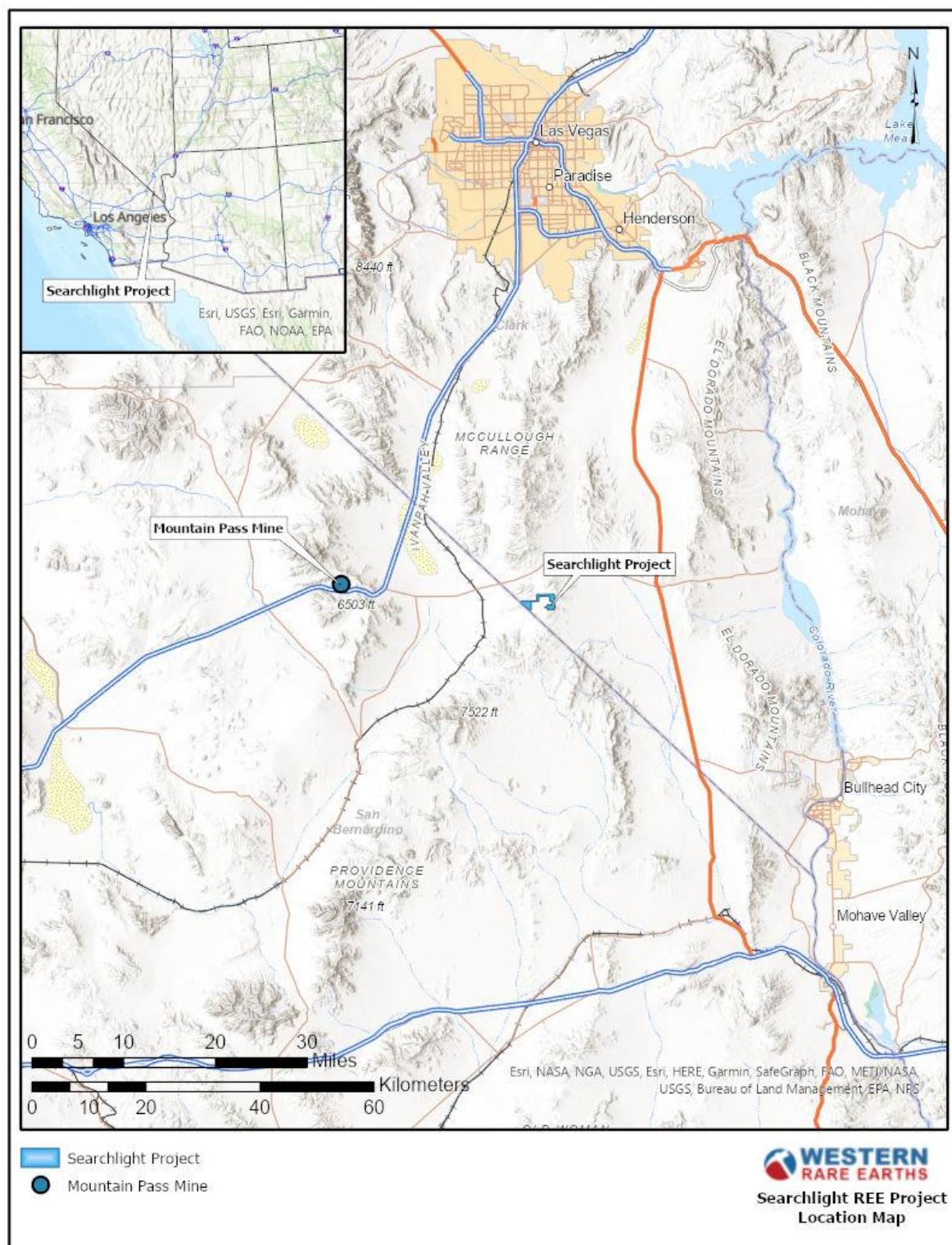


Figure 4: Location of Searchlight Rare Earth Project in Nevada USA

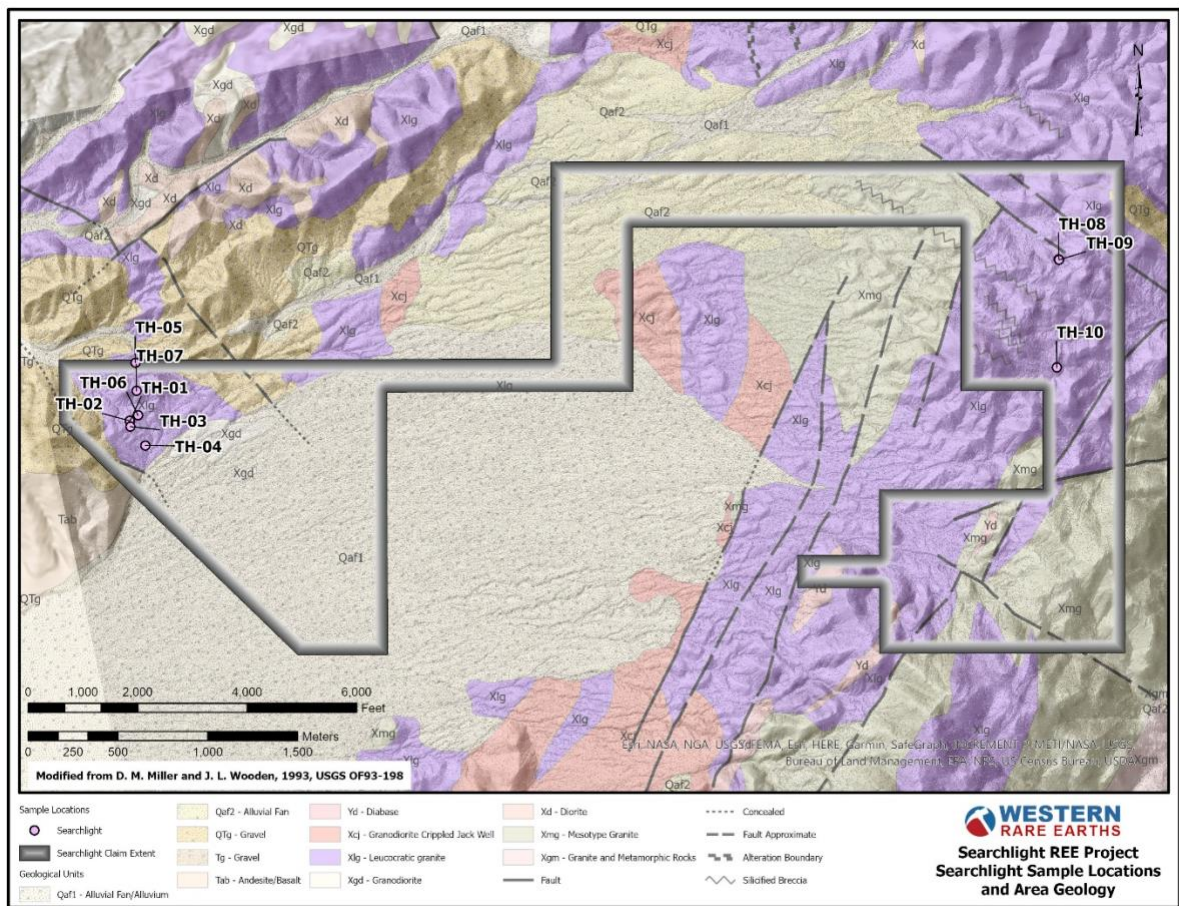


Figure 6: Location of Searchlight Samples and Geology



Photo 6: Rock Sample TH-01

The promising preliminary results from the ten surface samples, which confirmed the high-grade opportunity identified from the historical data, led to the Company filing for the 80 unpatented mining claims in March 2021.

A geological summary report entitled “2021 Technical Report on the Nevada Searchlight Rare Earths Project” was prepared by WIM and contained a summary of background history on the Crescent Mining District, where the Searchlight Project is located. It also included details of the previous exploration carried out in the area which had, sampling and mapping details, analytical results and recommendations for future exploration work. (Refer to ASX Release 8 June 2021, which included the full 2021 Technical Report and a preliminary JORC Table 1 Summary).

WRE is developing phased exploration plans for a systematic geological surface sampling program to be conducted on the Searchlight project area together with detailed geological surface mapping and options for the acquisition of high-resolution aerial imagery and LiDAR data. This exploration will seek additional higher-grade surface veins, develop a structural framework of the vein, joint and fault orientations, and find targets for future exploration drilling.

The near term tasks under the phased exploration plans are summarised below.

- Detailed geological mapping and sampling to better delineate REE-bearing vein and fracture structures to define trenching/drilling targets;
- Ground/drone radiation survey over alluvial covered areas to identify radiometric trends to define trenching/drilling targets;
- Pending the above results, permit a trenching program under the less-than-5 acre NOI permitting process; and
- If trenching is successful, reclaim trenches and permit a less-than-5 acre NOI drilling program.

WRE is also engaged in preliminary discussions with controlling interests of adjacent active mining claims in the region to acquire geological data within the Searchlight Rare Earth Project area.

Acquisition of Split Rocks Project Scandium Mineral Rights

In June 2021, ARR announced the acquisition of Scandium Mineral Rights over the Split Rocks Project. The Split Rocks Project is located in the under-explored Forrestania greenstone belt in Western Australia, which was acquired from Zenith Minerals Limited (“Zenith”) (Refer to Figure 7). Scandium is a highly valuable rare earth mineral and represents a unique opportunity for the Company to expand its Scandium portfolio.

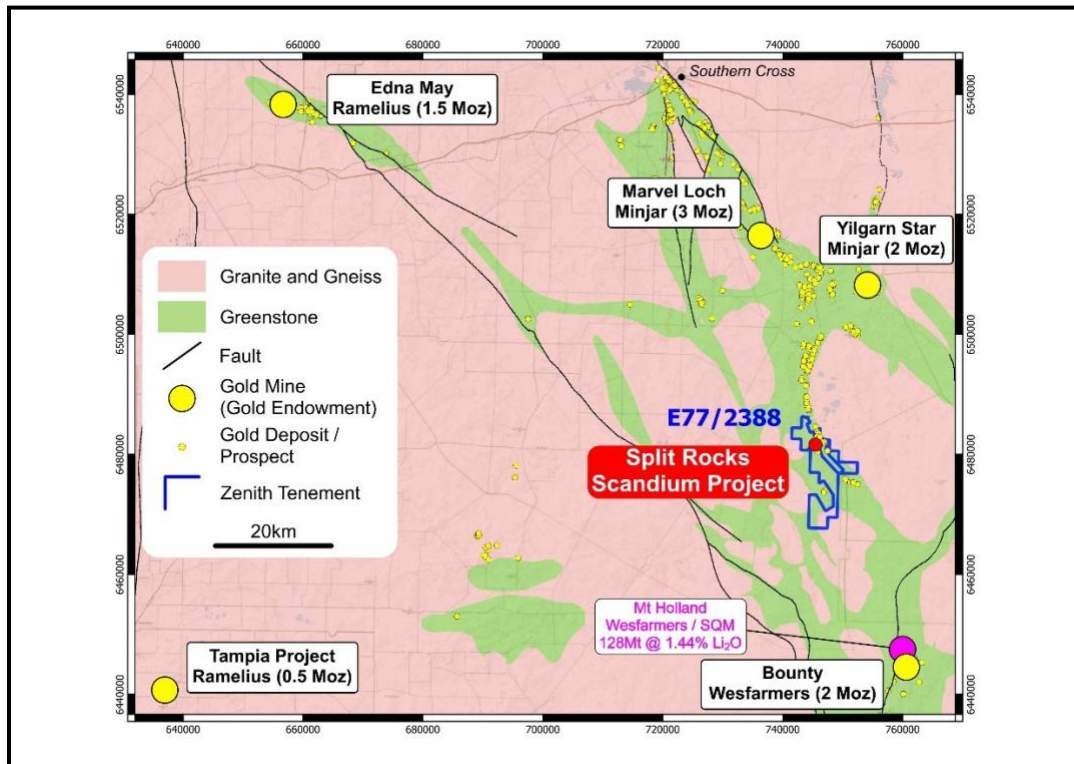


Figure 7: Location of Split Rocks Scandium Project in Western Australia

Under a Binding Term Sheet Scandium – Mineral Rights Option (“Term Sheet”) signed by ARR, Zenith and other unrelated private parties, Zenith granted ARR an exclusive option to acquire the rights to Scandium, Nickel and Cobalt (“Scandium Minerals”) at the Split Rocks Project in Western Australia up to a maximum depth of 50 metres from the surface within a section of Zenith’s Split Rocks Project tenement E77/2388. The terms of the agreement include an option fee plus milestone consideration payments as follows:

- A\$50,000 within seven days of execution (“Option Fee”); and
- Subsequent consideration of:
 - a) A\$400,000 worth of ARR shares within six months of execution;
 - b) A\$100,000 following an ARR ASX Release of a JORC Scandium Mineral Resource containing no less than 10m metric tonnes at an average grade of at least 5ppm of Scandium; and
 - c) 5,000,000 ARR shares on the grant of a Scandium Mining Lease (“Milestone Payments”).

The Option is also subject to a commitment by ARR to fund exploration related expenditure of at least A\$10,000 during the Option Period of two years. Upon exercising the Option to acquire the Scandium project, ARR agrees to pay Zenith a royalty of 3% of the net smelter generated from any Scandium Minerals or Scandium Mineral Resources. The Scandium Tenement E77/2388 is 100% owned by Zenith via a wholly-owned subsidiary, Black Dragon Energy (Aus) Pty Ltd.

Split Rocks hosts elevated Scandium grades above 50ppm obtained from 62 samples out of 46 drill holes that were intercepted at depths less than 52 metres and near-surface Scandium exceeding 100ppm obtained from 3 drilling samples. Three additional samples contain Scandium grades above 90ppm. These high-grade samples all occur at depths of less than 24 metres (Refer to Table 10) that Zenith reported in 2018 from drilling in an area of approximately 3km by 1km (Refer to Figure 8).

Hole_ID	From (m)	To (m)	Interval (m)	Sc (ppm)
ZDAC073	0	4	4	190
ZDAC074	0	8	8	105
ZDAC067	0	4	4	100
ZDAC071	8	24	16	98
ZDAC060	0	20	20	94
ZDAC087	0	4	4	90

Table 10: High Scandium Samples obtained by Zenith in 2018

Scandium mineralisation is present within a sequence of ultramafic rocks, which Zenith has already assessed for gold. Based on previous explorations, it is unlikely that there will be any overlap of the Scandium and gold mineralisation areas. Accordingly, future exploration programs for Scandium and gold by ARR and Zenith, respectively, can be expected to proceed without any impediment to the other party. At the same time, both entities will benefit from the sharing of exploration data generated at their own respective cost.

Apart from Scandium, highly anomalous cobalt and nickel mineralisation have been intercepted in its previous exploration drilling by Zenith, with the following results.

- 30 metres @ 0.06% cobalt (600ppm) and 0.75% nickel (7,500ppm) from 20 metres; and
- 12 metres @ 0.27% cobalt and 1.45% nickel from 20 metres.

Zenith has reported that Scandium Minerals occur in near-surface flat-lying saprolite clay blanket type bodies. Saprolite clays occur in laterite deposits made up of highly weathered ultramafic rocks. Zenith has also indicated that based on Scandium analyses completed to date, the Scandium mineralisation appears to be open to the south of the project area. For further background information on Zenith's previous exploration and drill results for Scandium, Cobalt and Nickel. (Refer to ARR's ASX Release: 10 June 2021)

ARR plans to review all relevant geological data provided by Zenith on the Scandium Minerals and after compiling and processing the data, will then:

- Determine next steps for project development, including a definition of a preliminary resource estimate as the data allows; and
- Develop exploration plans to define Scandium occurrences at Split Rocks focussing on areas to the south of the project.

Zenith's drilling with pending assays will also provide additional data for initial Scandium metallurgical testwork.

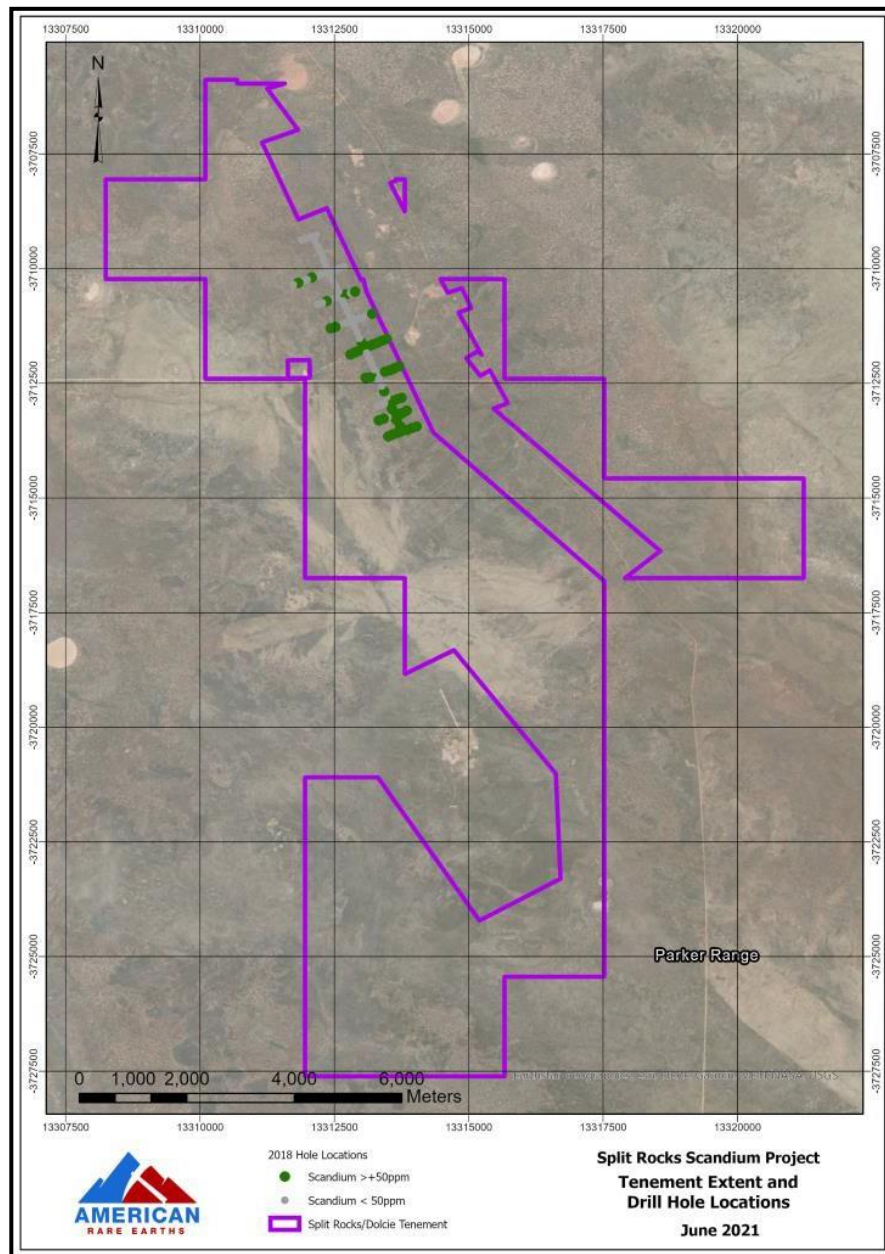


Figure 8: Split Rocks Drill Holes with High-Grade Scandium

Completion of Halleck Creek Rare Earths Project Acquisition

On 30 June 2021, ARR announced the completion of the acquisition of the Halleck Creek REEs Project (formerly known as the Laramie Project) in Wyoming, USA, from Zenith Minerals Limited’s (“Zenith”) 100% Australian owned subsidiary, Wyoming Rare Pty Ltd (“Wyoming Rare”). This followed approval on 3 June 2021 by the Wyoming Office of State Lands and Investment for the transfer of four mineral leases to Wyoming Rare (USA) Inc (“WyR”). Under the transaction, the Company acquired all of the issued capital held by Zenith in Wyoming Rare, including all Halleck Creek related data, samples, maps and exploration permits (i.e. precursors to mineral leases). According to the Share Purchase Agreement (“SPA”) with Zenith, which was amended in December 2020 to extend the completion date, the acquisition consideration was 2.5 million ARR ordinary shares (set for A\$0.02 per share) plus A\$50,000 cash.

The Company previously settled 50% of the acquisition by issuing 1.25 million ARR shares and paying A\$25,000 to Zenith. The balance was due upon receipt of regulatory approvals of a pending mineral lease and royalty agreement from the State of Wyoming, which was paid upon completing the transaction in June 2021. The final consideration paid to Zenith was the remaining A\$25,000 and the issue of 1.25 million shares in ARR.

The Halleck Creek REEs Project is located in the southern Laramie Mountain range of southeastern Wyoming USA, approximately 70km northeast of Laramie, Wyoming and 30km southwest of Wheatland, Wyoming (Refer to Figure 9), with access to existing road and rail infrastructure.

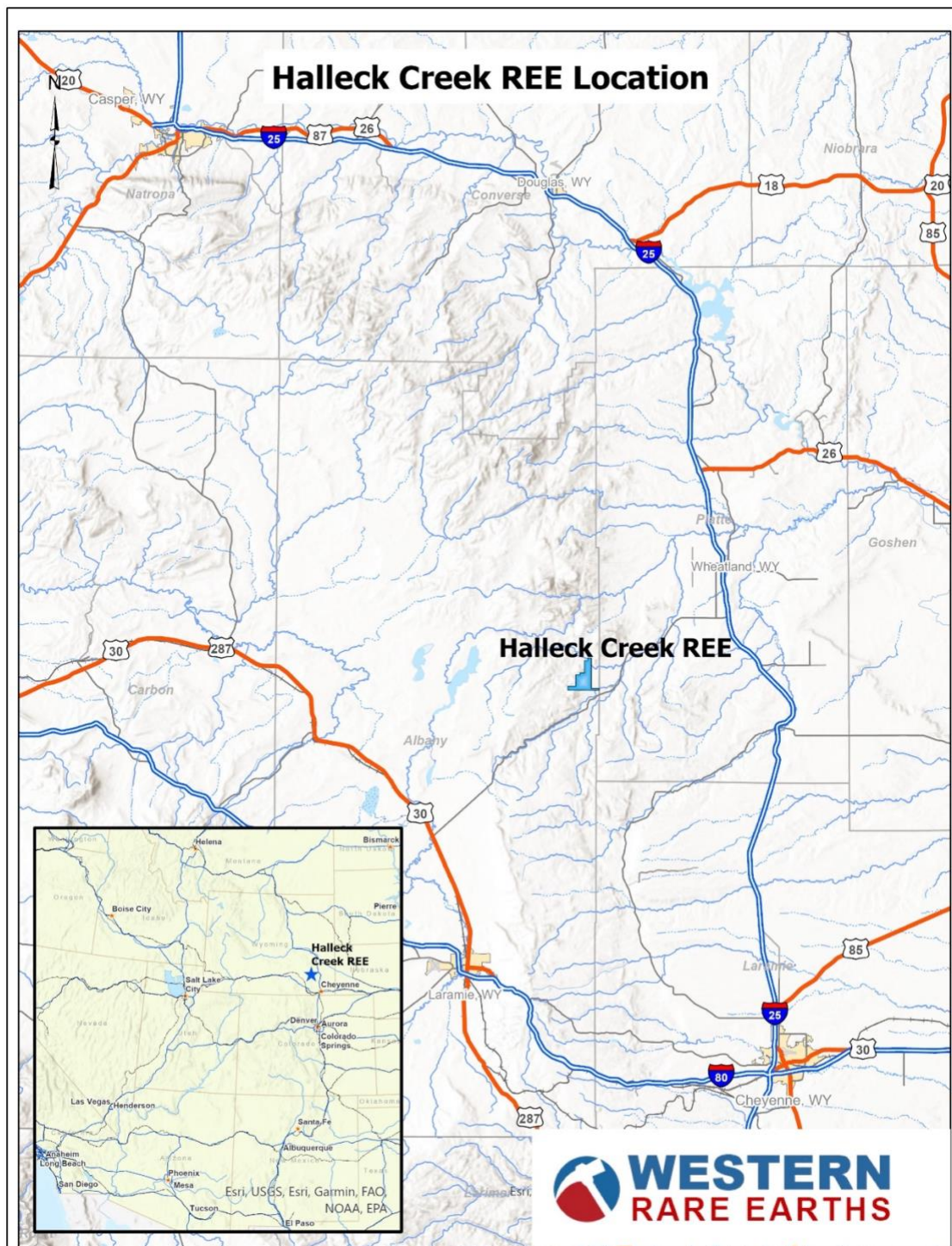


Figure 9: Location of the Halleck Creek Project

In addition to the five lode claims of 29 hectares acquired from Zenith, WRE significantly expanded the project area by staking a further 44 lode claims during June 2021, covering an additional area of 341 hectares. The project now covers a total area of approximately 1,109 hectares. It has 49 unpatented lode mining claims in Albany County, Wyoming, with an area of roughly 370 hectares (914 acres) and 4 Wyoming State Mining Leases covering an area of approximately 739 hectares (1,825 acres) in Albany and Platte Counties, Wyoming (Refer Table 11).

The State Mining Leases were under consideration by the State of Wyoming for more than two years without progress. They were transferred to WyR in June 2021 after ARR's USA based management team got involved in resolving an issue that required regulatory commission approval quickly.

Claim Type	Area (Ac)	Area (Ha)	Claims
Federal Lode	914	370	49
REX Claims	71	29	5
Claims Staked June 2021	842	341	44
State Lease	1,825	739	4
State	1,825	739	4
Grand Total	2,738	1,108	57

Table 11: Halleck Creek Project Claims

According to project information previously reported by Zenith to the ASX (on 6 November 2019 and 11 February 2020), total REEs oxide grades of up to 0.6% (6,000ppm TREO) were observed in rock samples collected from the project area and the primary rocks exposed on the Halleck Creek REE property. The Red Mountain Pluton is composed of the following three intrusive units:

- Fayalite Monzonite (Olivine rich unit);
- Clinopyroxene Quartz Monzonite; and
- Biotite Hornblende Quartz Syenite.

These rock types contain disseminated allanite of variable quantities up to 2% (by weight%) present throughout the Pluton. The younger granite dikes also have varying amounts of allanite. Based on the petrographic work completed to date, the allanite is the primary host of the REE's. Allanite is only sparsely present in the older Sybille intrusive, and sampling indicates minimal REE mineralisation.

WRE is now compiling geological information acquired from Zenith as reported in ASX Releases by Zenith (ASX: ZNC) on 6 November 2019 and 11 February 2020. During this process, the project area will be expanded further by staking additional mining lode claims and exploration plans prepared that will include the following activities:

- Additional geological mapping and sampling;
- Core drilling;
- Acquisition of aerial LiDAR imagery; and
- Potential surface geophysical studies.

The Company considers that the Halleck Creek project is an exciting addition to its US-based projects and compliments the 100% owned substantial flagship La Paz REEs project in Arizona, USA. The Halleck Creek project is another project that has exceptionally low penalty elements such as Thorium and Uranium.

Broken Hill Base and Precious Metals Projects

During the June 2021 Quarter, ARR commenced relinquishing its Broken Hill regional tenement holdings (EL 8773, EL 8776 and EL 8775) to focus the Company's resources on the development of its minerals projects in North America and Australia. As part of the relinquishment process, the following documents were lodged for each tenement:

- Final and Annual Report on Exploration Activities;
- Final and Annual Community Consultation Report; and
- Environmental and Rehabilitation Compliance Report.

Relinquishment of the tenements was effective on 9 July 2021.

Investment in Cobalt Blue Holdings Limited ("COB")

ARR holds 6,000,448 COB shares worth A\$1,590,118, based on a COB closing (bid) price of A\$0.265 on 30 June 2021. The Company has a A\$3M Promissory Note ("PN") interest-free for years one to three with interest payable in arrears at 6% per annum for years four and five. The PN is currently in year two and secured over title to tenements.

ARR also holds rights to a Net Smelter Return ("NSR") royalty of 2% on all cobalt production from the Thackaringa Project, which was sold to Cobalt Blue Holdings Limited in February 2020.

Corporate

During the June 2021 Quarter:

- A total of 6,250,000 shares were issued comprising 1,250,000 shares issued to Zenith Minerals Limited as final consideration due upon completion of the acquisition of the Halleck Creek Rare Earths Project in Wyoming USA; and 5,000,000 shares issued upon the exercise of options at A\$0.02 each;
- The Company's incurred \$599,724 of exploration expenses;
- The Company's cash position as of 30 June 2021 was \$3,700,689; and
- The Company continues to hold a substantial holding of 6,000,448 listed shares in Cobalt Blue Holdings Limited (ASX: COB) worth A\$1,590,118 at 30 June 2021 and deferred consideration via promissory notes from the sale of ARR's Thackaringa assets in February 2020.

Outlook for September 2021 Quarter

The outlook for Company activities during the September 2021 quarter is as follows:

- Staking of additional unpatented lode mining claims at the La Paz Rare Earths Project.
- Commencement of advanced metallurgical test work on the La Paz core samples.
- Completion of a Gap analysis in preparation of a PEA for the La Paz Rare Earth Project.
- Recruitment of technical team to advance the delivery of a PEA on the La Paz Rare Earths Project.
- Staking of additional unpatented lode mining claims at Halleck Creek Rare Earths Project.

This market announcement has been authorised for release to the market by the Board of American Rare Earths Limited.

Keith Middleton
Managing Director

This ASX announcement refers to information extracted from market announcements, which are available for viewing on ARR's website <https://americanrareearths.com.au>

ARR confirms it is not aware of any new information or data that materially affects the information included in the original market announcements. In the case of Mineral Resources' estimates, that all material assumptions and technical parameters underpinning the calculations in the relevant market announcements continue to apply and have not materially changed. ARR confirms that the form and context in which the Competent Person's findings presented have not been materially modified from the original market announcements.

Competent Persons Statement: The information in this report that relates to Exploration Results is based on information compiled by Mr Jim Guilinger. Mr Guilinger is a Member of a Recognised Overseas Professional Organisation included in a list promulgated by the ASX (SME Registered Member of the Society of Mining, Metallurgy and Exploration Inc). Mr Guilinger is Principal of independent consultants World Industrial Minerals LLC. Mr Guilinger has sufficient experience relevant to the style of mineralisation and type of deposit under consideration. To the activity, they are undertaking as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Guilinger consents the matters in the report is based on the information in the form and context in which it appears.

About American Rare Earths

American Rare Earths Limited (ASX: ARR) is the only Australian company listed on the ASX with assets in the growing rare earth metals sector in the United States of America. They are emerging as an alternative international supply chain to counter China's market dominance of a global rare earth market expected to balloon to US\$20 billion by the mid-2020s. ARR owns 100% of the world-class La Paz rare earth project, located 170km northwest of Phoenix, Arizona. The project's highly shallow 2012 JORC resource (128.2Mt @ 373.4ppm (0.037%) Total Rare Earth Elements) is less than 30m below surface and is contained within just 525 acres of ARR's total La Paz footprint of 5,143 acres that points to potential resource upside. As a large tonnage, bulk deposit, La Paz is also potentially the largest rare earth deposit in the USA and benefits from containing exceptionally low penalty elements such as radioactive thorium and uranium. ARR plans to deliver its first Preliminary Economic Assessment for La Paz by 2022 and is working with leading USA research institutions to have La Paz's mineral profile incorporated into emerging US advanced rare earth processing technologies. ARR has acquired two additional USA rare earth assets, the Searchlight Rare Earths project in Nevada and the Halleck Creek project in Wyoming. In addition ARR has acquired the Scandium Mineral Rights over the Split Rocks Project located in Western Australia.

Annexure 1**American Rare Earths Limited Tenement Schedule as of 30 June 2021****Australia**

Mining tenements at the beginning of the quarter			Mining tenements acquired or disposed of/expired during the quarter		Mining tenements held at the end of the quarter	
Reference	Beneficial Interest %	Location	Reference	Location	Reference	Location
EL8773	100%	Broken Hill Region	-	-	EL8773	Broken Hill Region
EL8776	100%	Broken Hill Region	-	-	EL8776	Broken Hill Region
EL8775	100%	Broken Hill Region	-	-	EL8775	Broken Hill Region

Annexure 2**American Rare Earths Limited Tenement Schedule as of 30 June 2021****La Paz, Arizona, USA**

Mining tenements at the beginning of the quarter				Mining tenements acquired or disposed of/expired during the quarter		Mining tenements held at the end of the quarter		
Serial Number	Claim Name	Claimant Name	Beneficial Interest %	Reference	Location	Serial Number	Claim Name	Claimant Name
639 Acres	Lease Number 008-120965-00	LA PAZ RARE EARTH LLC	100%	-	-	639 Acres	Lease Number 008-120965-00	LA PAZ RARE EARTH LLC
AMC456814 - AMC456827	LA PAZ 1-14	LA PAZ RARE EARTH LLC	100%	-	-	AMC456814 - AMC456827	LA PAZ 1-14	LA PAZ RARE EARTH LLC
AMC456846 - AMC456882	LA PAZ 33-69	LA PAZ RARE EARTH LLC	100%	-	-	AMC456846 - AMC456882	LA PAZ 33-69	LA PAZ RARE EARTH LLC
AMC456884	LA PAZ-71	LA PAZ RARE EARTH LLC	100%	-	-	AMC456884	LA PAZ-71	LA PAZ RARE EARTH LLC
AMC456886	LA PAZ-73	LA PAZ RARE EARTH LLC	100%	-	-	AMC456886	LA PAZ-73	LA PAZ RARE EARTH LLC
AMC456888	LA PAZ-75	LA PAZ RARE EARTH LLC	100%	-	-	AMC456888	LA PAZ-75	LA PAZ RARE EARTH LLC
AMC456905 - AMC456914	LA PAZ 92 - 101	LA PAZ RARE EARTH LLC	100%	-	-	AMC456905 - AMC456914	LA PAZ 92 - 101	LA PAZ RARE EARTH LLC
AMC458543 - AMC458654	LA PAZ 108 - 219	LA PAZ RARE EARTH LLC	100%	-	-	AMC458543 - AMC458654	LA PAZ 108 - 219	LA PAZ RARE EARTH LLC
AMC461270 - AMC461311	LA PAZ 220 - 261	LA PAZ RARE EARTH LLC	100%	-	-	AMC461270 - AMC461311	LA PAZ 220 - 261	LA PAZ RARE EARTH LLC

Annexure 3**American Rare Earths Limited Tenement Schedule as of 30 June 2021****Halleck Creek, Wyoming USA**

Mining tenements at the beginning the of quarter				Mining tenements acquired during the quarter		Mining tenements held at the end of the quarter		
Serial Number	Claim Name	Claimant Name	Beneficial Interest %	Reference	Location	Serial Number	Claim Name	Claimant Name
REX 1 - 5	Halleck Creek	Western Rare (USA) Inc	100%			REX 1 - 5	Halleck Creek	Wyoming Rare (USA) Inc
				REX 6 - 24	Wyoming	REX 6 - 24	Halleck Creek	Wyoming Rare (USA) Inc
				0-43568 - 0-43571	Wyoming	0-43568 - 0-43571	Halleck Creek	Wyoming Rare (USA) Inc

Annexure 4**American Rare Earths Limited Tenement Schedule as of 30 June 2021****Searchlight, Nevada USA**

Mining tenements at the beginning the of quarter				Mining tenements acquired during the quarter		Mining tenements held at the end of the quarter		
Serial Number	Claim Name	Claimant Name	Beneficial Interest %	Reference	Location	Serial Number	Claim Name	Claimant Name
				T-01 - T-80	Nevada	T-01 - T-80	Nevada	Western Rare Earths Inc

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

American Rare Earths Limited

ABN

83 003 453 503

Quarter ended ("current quarter")

30 June 2021

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	12	113
1.2 Payments for		
(a) exploration & evaluation	-	(34)
(b) development	-	-
(c) production	-	-
(d) staff costs	-	-
(e) administration and corporate costs	(373)	(1,192)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	-	60
1.5 Interest and other costs of finance paid	(4)	(11)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(365)	(1,064)

2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	(9)
(d) exploration & evaluation	(600)	(1,314)
(e) investments	(15)	(54)
(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	2,469
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material): Lease payment	(17)	(62)
2.6	Net cash from / (used in) investing activities	(632)	1,030

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	100	2,590
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(2)	(239)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	98	2,351

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at the beginning of the period	4,615	1,434
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(365)	(1,064)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(632)	1,030
4.4	Net cash from / (used in) financing activities (item 3.10 above)	98	2,351

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	(15)	(50)
4.6	Cash and cash equivalents at the end of the period	3,701	3,701

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	3,658	4,572
5.2	Call deposits	43	43
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at the end of the quarter (should equal item 4.6 above)	3,701	4,615

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	The aggregate amount of payments to related parties and their associates included in item 1 ¹	100
6.2	The aggregate amount of payments to related parties and their associates included in item 2	-
<i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i>		

¹Reimbursement of expenses, payment of fees and consulting fees to current directors

7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	3,000 ²	-
7.4	Total financing facilities	3,000	-
7.5	Unused financing facilities available at quarter end		3,000
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
	² \$3M five-year promissory note maturing 17 January 2025		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(365)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(600)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(965)
8.4	Cash and cash equivalents at quarter end (item 4.6)	3,701
8.5	Unused finance facilities available at quarter end (item 7.5)	3,000
8.6	Total available funding (item 8.4 + item 8.5)	6,701
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	6.94
	<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8	If item 8.7 is less than two quarters, please provide answers to the following questions:	
8.8.1	Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
	Answer: N/A	
8.8.2	Has the entity taken any steps, or does it propose to take any steps to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
	Answer: N/A	

8.8.3 Does the entity expect to continue its operations and meet its business objectives and, if so, on what basis?

Answer: N/A

Note: where item 8.7 is less than two quarters, questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

² \$3M five-year promissory note maturing 17 January 2025

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date:

Authorised by:
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: *Exploration for and Evaluation of Mineral Resources* and AASB 107: *Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

JORC TABLE 1

JORC Code, 2012 Edition – Table 1 La Paz Rare Earth Project		
Section 1 Sampling Techniques and Data		
(Criteria in this section apply to all succeeding sections.)		
Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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 downhole gamma sondes, handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	Historical drilling: In 2011, the prospect was drill tested by 195 percussion drill holes ranging from 40' (13m) to 100' (30m depth) for a total of 18,805' (5,731)m. Drilling was completed on three parallel section lines across strike and 1 section line along strike, with holes spaced 100' along section lines.
		March 2021 Core Drilling: WRE drilled nine diamond core holes of HQ size ranging from 168 feet to 403 feet in depth with a total length of 2,238 feet (682 meters), 6 Holes core were twins of select percussion holes drilled in 2011.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Representative 1kg samples were collected from each 5' (1.52m) interval of drilling
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	
	<i>In cases where 'industry standard' work has been done, this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m 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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	A 250g sub-sample was pulverised to -75 microns and a 0.5g charge was assayed for REEO by ICP-MS using standard industry procedures at ALS Chemex, Reno, Nevada.
Drilling techniques	<i>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 another type, whether the core is oriented and if so, by what method, etc.).</i>	Historical drilling: A track-mounted percussion rig supplied by Dynamic Rock Solutions LLC, Salome, Arizona, was used to drill 195 3.5" diameter percussion holes. Drilling began on April 20th, 2011 and was completed on May 31st 2011. Hole depths varied from 40- 100', with 142 out of 195 holes drilled to 100' depth. A total of 18,805' (5,731m) was drilled.

		March 2021 Core Drilling: Timberline Drilling, Inc. from Elko, Nevada, used a track-mounted core rig to drill HQ diameter core holes. Six holes were in the La Paz Resource area and three additional holes were drilled on the remainder of the property. See the Drill Hole Location Map. Drilling commenced on 11 March 2021, and concluded on 31 March 2021. Drill hole depths varied between 168 feet and 403 feet for a total length of 2,238 feet (682 meters).
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	A sampling of ~200g per foot drilled to produce a composite~1kg sample for every 5' drill interval which is considered representative of each interval.
		March 2021 Core Drilling: Core recovery was 98% ±. The core material was sent to America Assay Labs in Sparks, Nevada for assay.
	Measures are taken to maximise sample recovery and ensure the representative nature of the samples.	All drilling was carried out above the water table to minimize possible contamination
	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.	
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.	A representative sample of each 5' interval was retained in chip trays for logging. Geological logging is considered to have been logged to a level of detail appropriate to support Mineral Resource Estimates.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Chip sample logging is qualitative in nature
	The total length and percentage of the relevant intersections logged.	Drill holes were logged in full based on representative samples from every 5' interval.
		March 2021 Core Drilling: All Core was logged and photographed on-site by qualified geologists.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	No core samples were collected in the 2011 drilling.

		March 2021 Core Drilling: All Core was shipped to American Assay Labs for further logging and testing. Additional samples were selected for metallurgical testing.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	Percussion chips were collected in a bucket for every 5' interval. The site geologist prepared a representative 1kg sample from each 5' interval.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	All samples were dry. Sample preparation: 1kg samples split to 250g for pulverising to -75 microns. Sample analysis: 0.5g charge assayed by ICP-MS technique
	<i>Quality control procedures adopted for all sub-sampling stages to maximise the representivity of samples.</i>	The 1kg samples were delivered to an accredited laboratory for sample preparation and analysis
	<i>Measures are taken to ensure that the sampling is representative of the in situ material collected, including, for instance, results for field duplicate/second-half sampling.</i>	Sample preparation techniques are considered industry practice and are conducted at the accredited external laboratory; all deemed appropriate to the style of mineralization and suitable for determining Mineral Resource Estimates
		March 2021 Core Drilling: After logging, photographing, samples were boxed and securely banded for shipping to American Assay Labs. The lab performed assays, additional photography and cutting in preparation for studies and mineral processing and metallurgy. Chans of custody were always maintained.
Quality of assay data and laboratory tests	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	
	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Sample analysis: A 250g split from each sample was pulverised to - 75 micron and a 0.5g subsample fused with lithium borate, then subjected to a 4-acid digest and then assayed by ICP-MS for 38 elements.
	<i>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.</i>	No geophysical tools, spectrometers, handheld XRF instruments, etc were used.

	<i>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.</i>	The laboratory used standard quality control procedures incorporating duplicate samples, standards and blanks.
<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	An independent consultant geologist verified significant intercepts as part of the resource estimation.
	<i>The use of twinned holes.</i>	No twinned holes were used.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Initially, all chip trays for each hole interval were stored in a secure facility in Bouse, Arizona. All drill hole logs, associated interval assay results were stored electronically within the company. All geologic data was entered onto log sheets manually then subsequently entered into the computer. Data always was secure
		WRE collected QAQC samples during sample preparation. WRE is in the process of statistically analysing the sample QAQC sample results.
	<i>Discuss any adjustment to assay data.</i>	None
<i>Location of data points</i>	<i>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.</i>	Downhole surveyed were not used due to the short length (max 30m depth). Hole collars were surveyed using a handheld GPS.
		March 2021 Core Drilling: Locations were determined using Handheld GPS units. Downhole surveys were not performed due to relatively shallow depths.
	<i>Specification of the grid system used.</i>	Historic 2011 Drilling: UTM grid system NAD 1927 Zone 12
		March 2021 Core Drilling: UTM grid system NAD 1983 Zone 12. (The entire project was updated to use NAD 1983 UTM Zone 12 projections.
	<i>Quality and adequacy of topographic control.</i>	Drill hole elevations were estimated using existing USGS topographic base maps as control.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	

	<i>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.</i>	The data spacing and distribution are considered sufficient for the current level of early exploration of the areas of interest
	<i>Whether sample compositing has been applied.</i>	Samples have not been composited as all sample intervals were equal (5').
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Close-spaced vertical drill holes were used to overcome any structural bias of the fine-grained disseminated REEO mineralisation.
		March 2021 Core Drilling: New diamond core from 6 twinned holes completed in the resource area to confirm the reserve and acquire a detailed geological understanding of the mineralized zones. See Drill Hole Location Map.
		March 2021 Core Drilling: Three exploration core holes were drilled in the southwest portion of the claim area to follow up on surface samples and to explore additional mineralized zones at depth. See Drill Hole Location Map.
	<i>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.</i>	
Sample security	<i>The measures are taken to ensure sample security.</i>	Drill samples were kept in a secure storage locker before dispatch by bonded courier to the laboratory.
		March 2021 Core Drilling: All Core was collected from the drill rig daily and stored in a secure, locked facility until bonded courier dispatched the core to America Assay Labs. Chains of custody were always maintained.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews have been conducted. An extensive review of the data has been undertaken to update the historical and current planned exploration activity.

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 tenement schedule is included in the appendix of this report. The tenements are in the form of 20-acre United States Bureau of Land Management lode mining claims. The total land package controlled by the Company in the La Paz Project Area consists of 261 unpatented lode mining claims totalling 5392.26 acres (2178.47 has). The State Exploration Permit totals 640 acres (259 has). The mining claims are 100% owned by the Company with no royalties. All claims are outside of any wilderness or national park and environmental settings. A historic railroad line crosses a portion of the claims outside of any historical or planned exploration programs. The State leased land is subject to a State royalty (yet undetermined) once the exploration activity has advanced to the exploitation level. At this point, the State engineers and geologists will evaluation any defined mineral deposit and determine an appropriate royalty.
		The QP is unaware of any environmental liabilities attached to the La Paz claims and is not a Qualified Person to environmental issues. An archaeological survey of the La Paz claims conducted by Professional Archaeological Services of Tucson, Arizona, dated March 20, 2011, was submitted to the Arizona State Land Department. The survey found no substantial areas of archaeological significance (P.A.S.T., 2011). The author is not a Qualified Person to archaeological issues.
	The security of the tenure held at the time of reporting and any known impediments to obtaining a licence to operate in the area.	As long as annual Arizona State lease holding fees and annual claim holding fees are paid to both the BLM and the County (La Paz) in which the claims reside, tenure is secure.

<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>REEs were first recognised in June 2010 by John Petersen, a geologist. He submitted for analysis a reconnaissance sample from the Swansea and Bill Williams River areas that analysed 459.98 ppm Total Rare Earth Elements (TREE). A further 119 samples returned TREE values of 20.6 to 674.21 ppm. Scandium varied from 1.1 to 30.2 ppm. AusAmerican then conducted a confirmation sampling exercise of 22 samples that returned values of 6 to 588 ppm TREE, followed in February 2011 by a sample grid of 199 samples that returned 49 to 714 ppm TREE. 195 percussion drill holes were drilled in early 2011, with additional sampling was conducted in 2019 and 2020.</p> <p>AusAmerican Mining Corporation carried out all drilling, and the company was listed on the ASX.</p>
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The project lies within the Harcuvar metamorphic core complex within the Basin and Range Province of Arizona. Mineralisation is hosted in alkali granitic gneiss and, to a lesser extent, a structurally superimposed suite of continental red beds. REEOs occur in Allanite (epidote), which appears as fine-grained disseminations and micro-fracture fillings.</p>
<i>Drill hole Information</i>	<i>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:</i>	<p>AusAmerican in 2011 contracted Dynamic Rock Solutions LLC of Salome, Arizona, to conduct exploratory drilling using a track-mounted percussion drill. Drilling began on April 20, 2011, and was completed on May 31, 2011. One hundred and ninety-five 3.5" diameter holes were complete to obtain samples of the rock types present. Holes varied in depth from 40 to 100 feet: most holes (142 of 195) were drilled to 100 feet, and total drilling totalled 18,805 feet. Distances between holes were 100 feet, and holes were situated along four lines: Lines A, B, and C were oriented NW-SE, and one, Line D, was oriented in the NE direction and crossed the other lines. The map below illustrates the La Paz percussion drill hole locations and the sample lines.</p>

		March 2021 Core Drilling: Timberline Drilling, Inc. from Elko, Nevada, used a track-mounted core rig to drill HQ diameter Core six holes were in the La Paz resource area and three additional holes were drilled on the remainder of the property. See the Drill Hole Location Map. Drilling commenced on 11 March 2021 and concluded on 31 March 2021. Drill hole depths varied between 168 feet and 403 feet for a total depth of 2,238 feet (682 meters).
	<i>easting and northing of the drill hole collar</i>	March 2021 Core Drilling: Locations of the March 2021 Core Hole data are in Appendix B of the ASX Release Technical Report 29 June 2021.
	<i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i>	
	<i>dip and azimuth of the hole</i>	
	<i>downhole length and interception depth</i>	
	<i>Hole length.</i>	
	<i>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.</i>	
<i>Data aggregation methods</i>	<i>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.</i>	Drill holes cuttings were collected at five-foot intervals. An approximate 2 lb. (1.36 kg) sample was submitted to ALS Chemex laboratory in Reno, Nevada, for geochemical analysis. A total of 3269 samples were submitted: all were analysed for 60 elements, including REE, Y and Sc. REE assay results from the percussion drilling program are summarised in an Appendix at the back of the report
	<i>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.</i>	March 2021 Core Drilling: All core was packaged in 10-feet long sections in core boxes. No aggregations of the Core were performed.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	
<i>Relationship between mineralisation widths and</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	The vertical drill hole orientations, 5' sample lengths are considered appropriate to the style of flat-lying bulk tonnage mineralisation

<i>intercept lengths</i>	<i>If it is unknown and only the downhole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	
<i>Diagrams</i>	<i>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.</i>	See drill hole location map in text
<i>Balanced reporting</i>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting of Exploration Results.</i>	Exploration results are included in the body of this report under both the "Exploration" and "Drilling" Sections. March 2021 Core Drilling: Assay results are presented in Appendix D of the press release.
<i>Other substantive exploration data</i>	<i>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.</i>	Metallurgical test work was completed following the 2011 drilling program. Drillhole LP-B7 was twinned, and 16 samples were submitted to Saskatchewan Research Council, Saskatoon, Saskatchewan, Canada for pre-concentration and preliminary leaching tests. Representative rock specimens were submitted to SGS Canadian Laboratories, Vancouver, Canada, from within the resource areas to determine overall mineral assemblages and liberations/associations of REEs carriers. March 2021 Core Drilling: Approximately 500 kg of Core has been shipped to Nagrom Labs, in Perth Australia, for additional mineral processing and metallurgical testing.
<i>Further work</i>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	March 2021 Core Drilling: Approximately 500 kg of Core has been shipped to Nagrom Labs, in Perth Australia, for additional mineral processing and metallurgical testing.

JORC Code, 2012 Edition – Table 1 Searchlight Rare Earths Project

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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 downhole 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 1 m 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. 	<ul style="list-style-type: none"> Individual grab rock samples and were collected by hand at the surface from in-situ outcrops. Grab samples are believed to be representative of the outcrops they came from. A geologist collected 1-2kg rock samples which were broken with a hammer from the outcrop. Rock samples were crushed in the laboratory and then pulverised before analysis.
Drilling techniques	<ul style="list-style-type: none"> 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 another type, whether the core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> No drilling
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures are taken to maximise sample recovery and ensure the 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. 	<ul style="list-style-type: none"> No drilling

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Rock samples were geologically described and photographed. No logging
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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 the representivity of samples. Measures are taken to ensure that the sampling represents the in situ material collected, including results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> No drilling Samples were analyzed at Hazen Laboratories in Golden, Colorado; the samples were crushed, pulverised and assayed by ICP-ME MS81 for REE ~2kg of rock was crushed and pulverised and a subsample was taken in the laboratory and sent for analysis. Grab sampling was selective based on geological observations. Each sample was 1kg to 2kg in weight which is appropriate to test for grain size of material.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> The samples were crushed and assayed for 34 elements by fusion ICP-MS. The procedure will report near-total results. No geophysical tools were used in the sampling program. Internal laboratory standards were used when analysing rock samples.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	<ul style="list-style-type: none"> Consulting company personnel have observed and collected the assayed samples. No drilling.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Field data were all recorded in field notebooks and sample record books and then entered into a digital database. No adjustments were made.
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sample location is based on GPS coordinates +/- 5m accuracy. The grid system used to compile data was NAD27 Zone 12N. Topography control is +/- 10m
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Both randomly spaced surface chip sampling The data will not be used independently to estimate mineral resource or ore reserve None
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Rock samples were taken of selected outcrops that were considered representative of varying rock types. No drilling
Sample security	<ul style="list-style-type: none"> The measures are taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were kept in numbered bags until delivered to the laboratory.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Sampling techniques are consistent with industry standards.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Wyoming Rare Earths Project Acquisition – 81 unpatented mining claims on BLM US Federal Land totalling approximately 1620 acres were staked in the Searchlight Project Area. The claims are 100% owned by WRE (100% owned ARR subsidiary). No impediments to holding the claims exist. An annual holding fee of \$165/claim (\$13,365) is payable to the BLM to maintain the claims.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Sampling in the region was completed by Elissa Resources Ltd on adjacent mining claims controlled by Red Hill Energy.
<i>Geology</i>	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The deposit is within veins/veinlets in pre-Cambrian granites/gneisses. REE elements are hosted in monazite and apatite found in veins and veinlets within the granites/gneisses.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 downhole 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. 	<ul style="list-style-type: none"> No drilling
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> No high-grade cutting No aggregation used No metal equivalents used

Criteria	JORC Code explanation	Commentary
	<p><i>typical examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> No drilling No drilling No drilling
<i>Diagrams</i>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> See maps in the body of the Report discussing "claims staked" and "sample locations."
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> Total REE's range in samples: 14,800 – 220ppm; HREE's: 940-20ppm See Figures in the report for sample site locations and assay values.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> <i>In hand, this rock is a red-coloured, hard and dense granite/gneiss with localised fracturing and crude banding areas. The rock shows significant iron staining.</i> <i>Microscopic Description:</i> <i>Major Mineralogy: Quartz 30% Sericite 22% Plagioclase 18% Calcite 12%</i> <i>Goethite/Hematite 12% Monazite 3% Chlorite 3%</i> <i>Trace Mineralogy: Rutile, Mn oxide, Leucoxene, Zircon, Calcite,</i>
<i>Further work</i>	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Additional mapping and sampling are planned to meet drilling targets.

Note that Sections 3 and 4 are not relevant for any reporting for this early-stage exploration Project

JORC Code, 2012 Edition – Table 1 Halleck Creek Rare Earths Project

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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 downhole 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 (e.g., 'reverse circulation drilling was used to obtain 1 m 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 (e.g., submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> [note: all work listed is historic and carried out by previous property owner] Individual grab rock samples and systematic traverse chip samples, along measured lines, were collected every 1m and composited up to 20m in length. These were collected by hand at the surface from in-situ outcrops. Grab samples are believed to be representative of the outcrops they came from A geologist collected 1-2kg rock samples, samples were broken using a hammer from outcrop. Rock samples were crushed in the laboratory and then pulverised before analysis.
Drilling techniques	<ul style="list-style-type: none"> 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 another type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> No drilling
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Rock samples were geologically described and photographed. Qualitative logging
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all cores 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. 	<ul style="list-style-type: none"> No drilling Samples were analysed at ALS Laboratories in Reno Nevada, the samples were crushed, pulverised and assayed by ICP-ME MS81 for REE and subsequently, the pulps were re-assayed for Scandium. ~2kg of rock was crushed and pulverised and a subsample was taken in the laboratory and sent for analysis. Grab sampling was selective based upon geological observations, whilst composite traverse chip sampling was systematic. Each sample was 1kg to 2kg in weight which is appropriate to test for grain size of material.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The samples were crushed and assayed for 38 elements by fusion ICP-MS. The procedure will report near-total results. No geophysical tools were used in the sampling program. Internal laboratory standards were analysed with rock samples.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	<ul style="list-style-type: none"> Two consulting company personnel have observed the assayed samples. No drilling

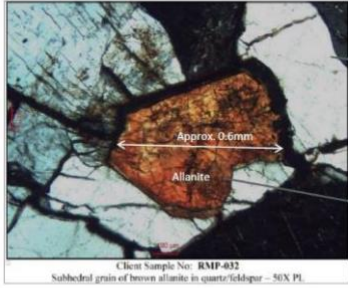


Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Field data were all recorded in field notebooks and sample record books and then entered into a digital database. No adjustments were made.
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sample location is based on GPS coordinates +/- 5m accuracy. The grid system used to compile data was NAD27 Zone 13N. Topography control is +/- 10m
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Both randomly spaced and on 1m long continuous surface chip sampling The data alone will not be used to estimate mineral resource or ore reserve Systematic traverse chip samples along measured lines with samples taken every 1 m and composited up to 20m in length, individual composites were then combined by length weighted averaging.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Rock samples were taken of selected outcrops that were considered representative of varying rock types and systematic composites. No drilling
Sample security	<ul style="list-style-type: none"> The measures are taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were kept in numbered bags until delivered to the laboratory.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Sampling techniques are consistent with industry standards.

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	<ul style="list-style-type: none"> 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, 	<ul style="list-style-type: none"> Wyoming Rare Earths Project Acquisition - Share Purchase Agreement with Zenith Minerals Limited executed with 5 BLM

Criteria	JORC Code explanation	Commentary
	<p><i>historical sites, wilderness or national park and environmental settings.</i></p> <ul style="list-style-type: none"> <i>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.</i> 	<p>claims now held by Wyoming Rare (USA) [a wholly-owned subsidiary of ARR] amended completion date extended to 30 June 2021 for the finalised acquisition of Wyoming State Leases. Exploration on the State leases was historically completed under an exploration permit issued by the State of Wyoming.</p> <ul style="list-style-type: none"> As above, the leases are applications with no known impediment to future granting of exploitation rights.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> As previously mentioned, Zenith Minerals (the company from which the property was acquired) completed all of the explorations herein described.
<i>Geology</i>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> The deposit is within a large scale anorthosite complex. REE elements are hosted in allanite, which is contained within syenite that is part of that complex.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>downhole length and interception depth</i> <i>hole length.</i> <i>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.</i> 	<ul style="list-style-type: none"> No drilling
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> No high-grade cutting No aggregation used No metal equivalents used

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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 downhole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known'). 	<ul style="list-style-type: none"> No drilling No drilling No drilling
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> See map in the body of Report ASX release 30 June 2021 under "Wyoming Project Acquisition Section."
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> Traverse TREO values as follows: 332m @0.24% ; 80m @0.4%: 60m @ 0.39%, 40M @0.35%; 60m @0.37%; 137m @0.37%; 72m @ 0.33%; 60m @0.34% and 17m@ 0.24%
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<div> <p>Large scale at surface REE target Metallurgy is key to projects potential</p>  <p>Client Sample No: RMP-032 Subhedral grain of brown allanite in quartz feldspar – 50X PL</p> <p>REE mineral allanite is coarse grained (0.4mm to 2.5mm) as distinct mineral grains. DCM reported that "...the large size of the allanite crystals should facilitate liberation upon grinding".....from the syenite host rock¹</p> <p>Next Steps: Further metallurgical test work</p> <div> <p>Non-magnetic Concentrate (very low REE content) – 73% of mass</p>  </div> <div> <p>Magnetic Concentrate (high REE content) – 27% of mass</p>  </div> <p>Mineral separation by magnetic methods recovered 67% of the REE minerals into 27% of the mass whilst rejecting 73% of the waste material at a crush size of -0.5mm</p> <p>Mineral separation using gravity methods recovered 76% of the REE minerals into 22% of the mass whilst rejecting 78% of the waste material at a crush size of -2mm</p> </div> <ul style="list-style-type: none"> The magnetic separation resulted in recoveries of REE rich allanite exceeding 85%

Criteria	JORC Code explanation	Commentary
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Further mapping and sampling are planned to lead to drilling targets.