



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

Heavy Mineral Sands and Cobalt 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 Guilinger

Chief Technical Advisor

Wayne Kernaghan

Company Secretary

#### Capital Structure

Ordinary Shares on Issue 338,058,326

#### American Rare Earths Limited

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10 June 2021

## Acquisition of Scandium Minerals Rights at the Split Rocks Project in Western Australia

### Highlights

- American Rare Earths has acquired scandium mineral rights over the Split Rocks Project in Western Australia
- Near surface scandium exceeding 100ppm in three drilling samples. Significant drill intercepts include:
  - 4m @ 190 ppm scandium from surface;
  - 8m @ 105 ppm scandium from surface;
  - 4m @ 100 ppm scandium from surface, and
  - 20m @ 94 ppm scandium from surface.
- Scandium grades exceeding 50ppm identified in 64 samples from 46 drill holes intercepted at depths less than 52 meters
- Highly anomalous cobalt and nickel mineralisation intercepted with significant drill results including:
  - 30m @ 0.06% cobalt (600 ppm) and 0.75% nickel (7,500 ppm) from 20m depth
  - 12m @ 0.27% cobalt and 1.45% nickel from 20m depth
- Scandium Minerals reside in saprolite clays in near surface laterite deposits
- Confirmatory drilling recently completed, with assays pending, that will provide further data for initial scandium metallurgical testwork.

American Rare Earths ("The Company" or "ARR") is pleased to announce that it has acquired the rights, from Zenith Minerals Limited (ASX: ZNC) ("Zenith"), to explore, develop, and process scandium, nickel, and cobalt ("Scandium Minerals") at the Split Rocks Project in Western Australia.

The acquisition of Scandium Mineral rights over the Split Range Project is consistent with ARR's global objectives to create a rare earths and scandium supply chain.

While the Company remains focused on unlocking the rare earths and scandium mineral potential at its La Paz and Wyoming Projects in the USA, the acquisition of Scandium Mineral rights over the Split Rock Project in WA presents a unique opportunity for the Company to expand its Scandium portfolio and provides further basis for developing our REE strategic materials strategy in the future.

## Acquisition Summary

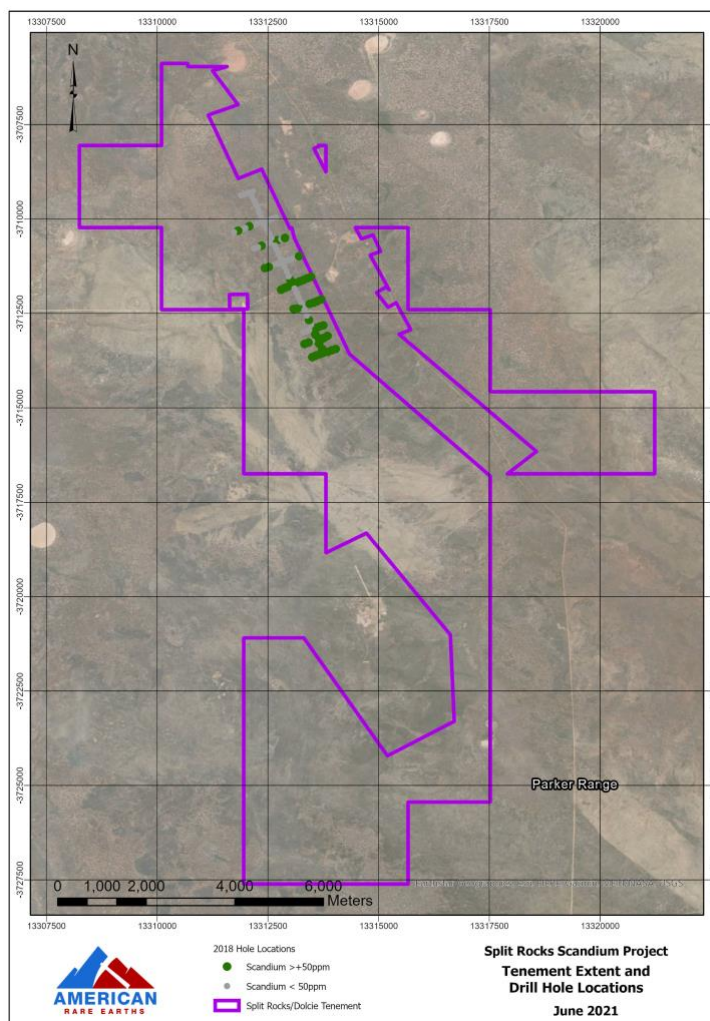
A Binding Term Sheet Scandium – Mineral Rights Option (“Term Sheet”) was executed by ARR, Zenith, and other unrelated private parties in relation to the acquisition of Scandium Mineral rights over the Split Range Project.

Under the Term Sheet, Zenith agrees to grant ARR an exclusive option to acquire Scandium Minerals to a maximum depth of 50 metres (m) from surface within a portion of Zenith’s Split Rocks Project (E77/2388) located in Western Australia (“Scandium Tenement”) (Figure 1).

Scandium mineralisation is hosted within a sequence of ultramafic rocks that have already been assessed by Zenith for their gold potential. Based on exploration work to date there is unlikely to be overlap between scandium and gold mineralised areas. The planned future exploration activities of ARR for scandium and Zenith for gold can proceed with the individual parties benefiting by sharing exploration data generated at their own respective cost.

In 2018, Zenith announced to the ASX that it had identified the presence of elevated scandium at shallow levels based on drilling encompassing an area approximately three kilometres (km) by one km. Scandium grades greater than 50ppm were observed in 62 samples in 46 drill holes at a maximum depth of 52m (Figure 2). Three samples contain Scandium grades exceeding 100ppm and three additional samples contain Scandium grades exceeding 90ppm (Table 1). All of the high-grade samples occur at depths of less than 24m.

**Figure 1 – Tenement Location Showing Drill Holes with High-Grade Scandium**

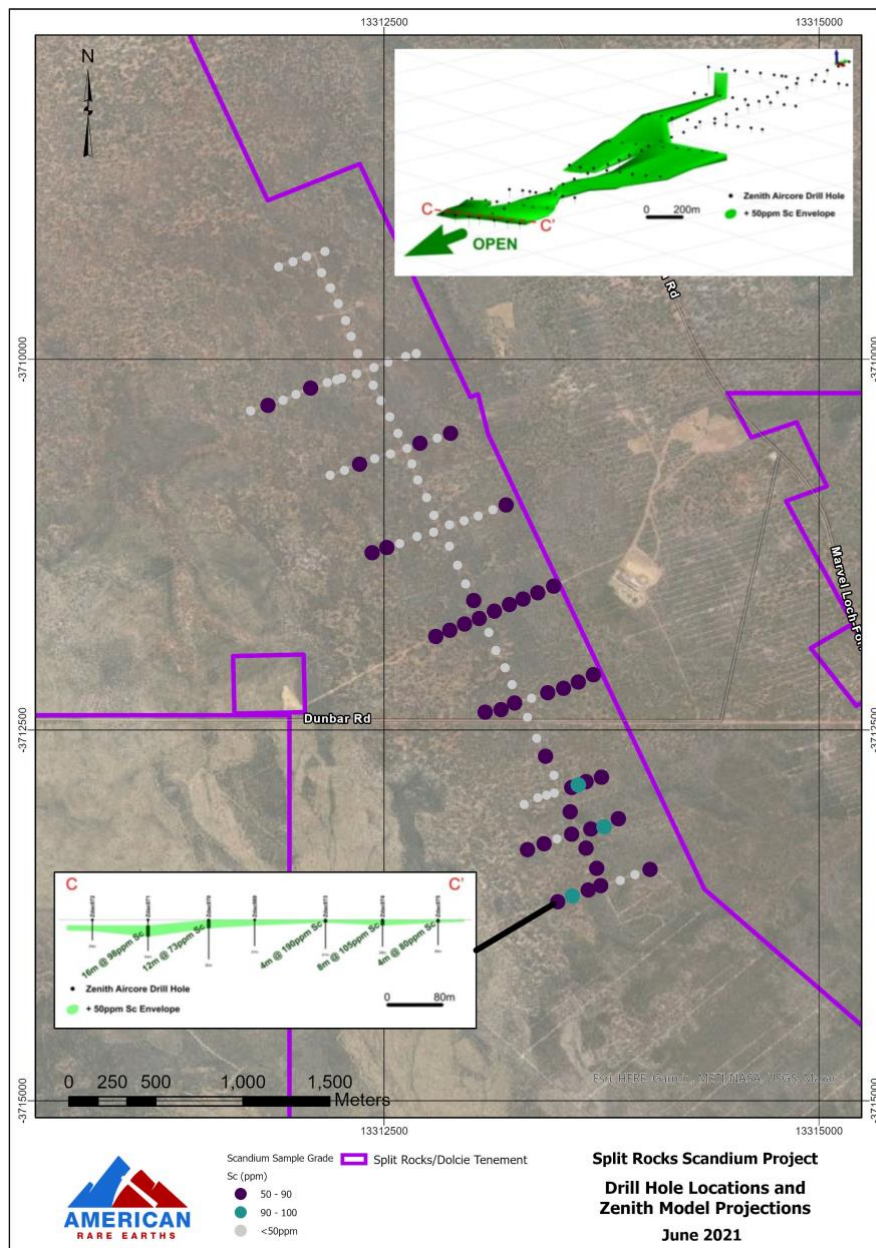


**Table 1 - High Scandium Samples in 2018 Exploration Drilling**

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

Zenith determined the Scandium grades using XRF over four-meter intervals within the drill hole data. Zenith performed additional Scandium analyses at select one-meter intervals, and is currently in the process of providing this data to ARR.

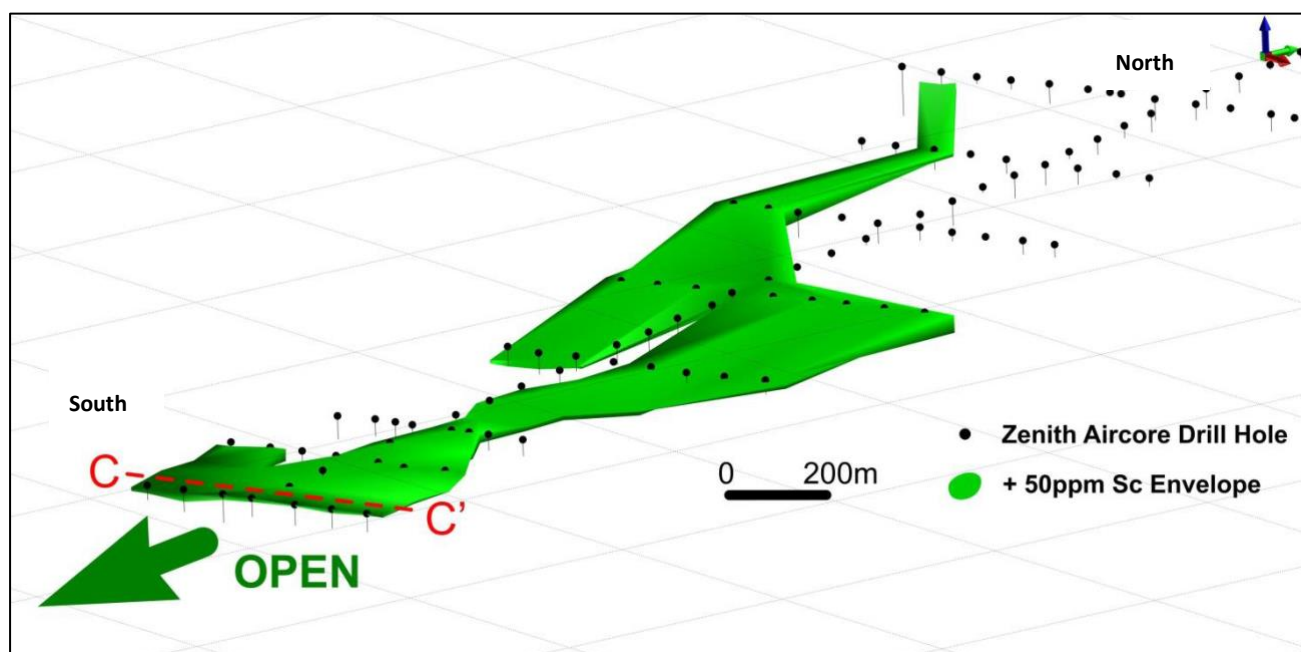
**Figure 2 – Hole Locations with Scandium Data**





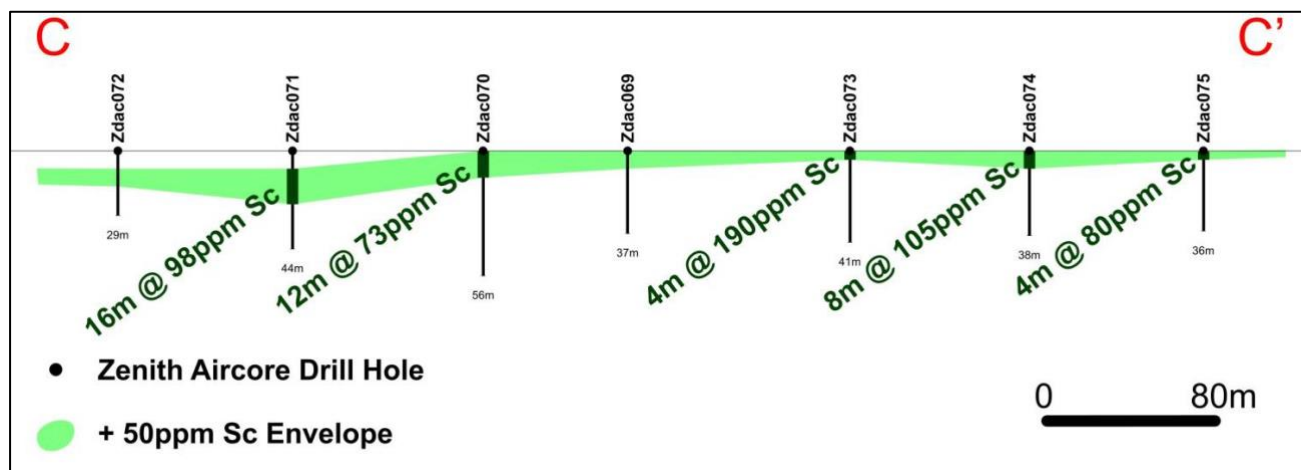
Zenith states that the Scandium Minerals occur in near surface, flat lying, saprolite clay blanket-type bodies. Saprolite clays occur in laterite deposits composed of highly weathered ultramafic rocks. Figure 3 illustrates the tabular extent of scandium identified by the 2018 drilling data collected by Zenith. Figure 4 illustrates a cross-section showing near surface scandium exceeding 50ppm. The scandium mineralization appears to be open to the south based on the Zenith scandium analyses completed to date. Additional exploration is required to confirm this interpretation.

**Figure 3 – Tabular Extent of Scandium greater than 50ppm**



Zenith Minerals, 2018

**Figure 4 – Shallow Scandium Cross-Section**



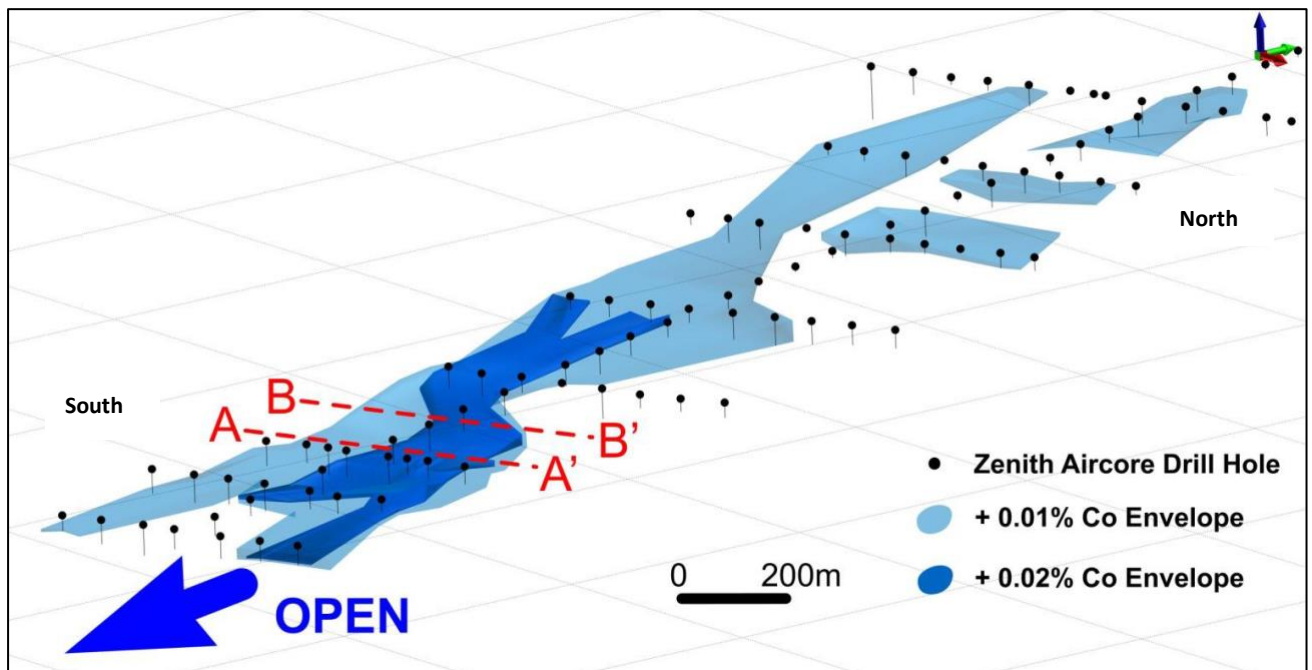
Zenith Minerals, 2018

Figure 5 illustrates the tabular extent of cobalt greater than 200ppm identified from the 2018 drilling data. Figure 6 and Figure 7 illustrate a shallow cross-section at the southern end of the Project, also interpreted from the 2018 drilling data. Numerous drill holes contained cobalt-nickel grades exceeding 200ppm. The samples have nickel grades exceeding 0.72% or 7500ppm, see Table 2.

**Table 2 - High Cobalt-Nickel Samples in 2018 Exploration Drilling**

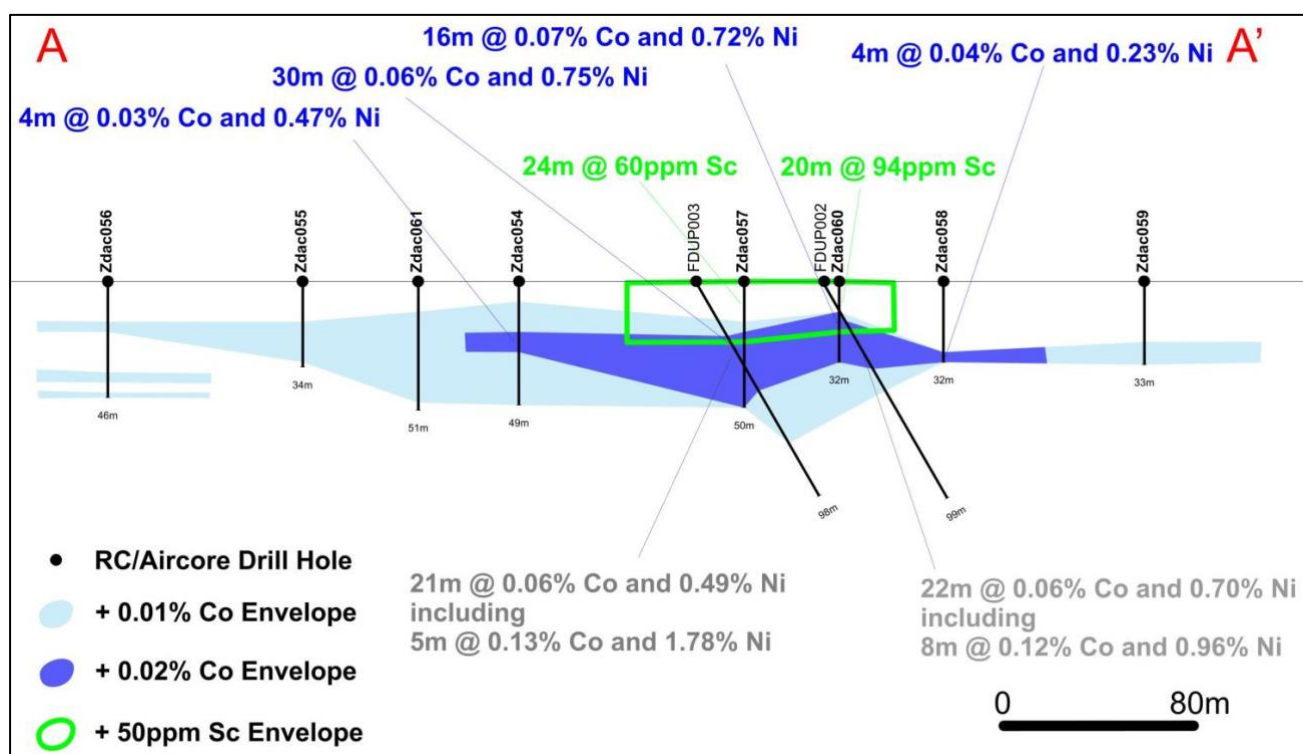
Hole_ID	From (m)	To (m)	Interval (m)	Cobalt %	Nickel %
ZDAC057	20	50	30	0.06	0.75
ZDAC060	16	32	16	0.07	0.72
ZDAC080	20	32	12	0.27	1.45

**Figure 5 – Tabular Extent of Cobalt greater than 200ppm**



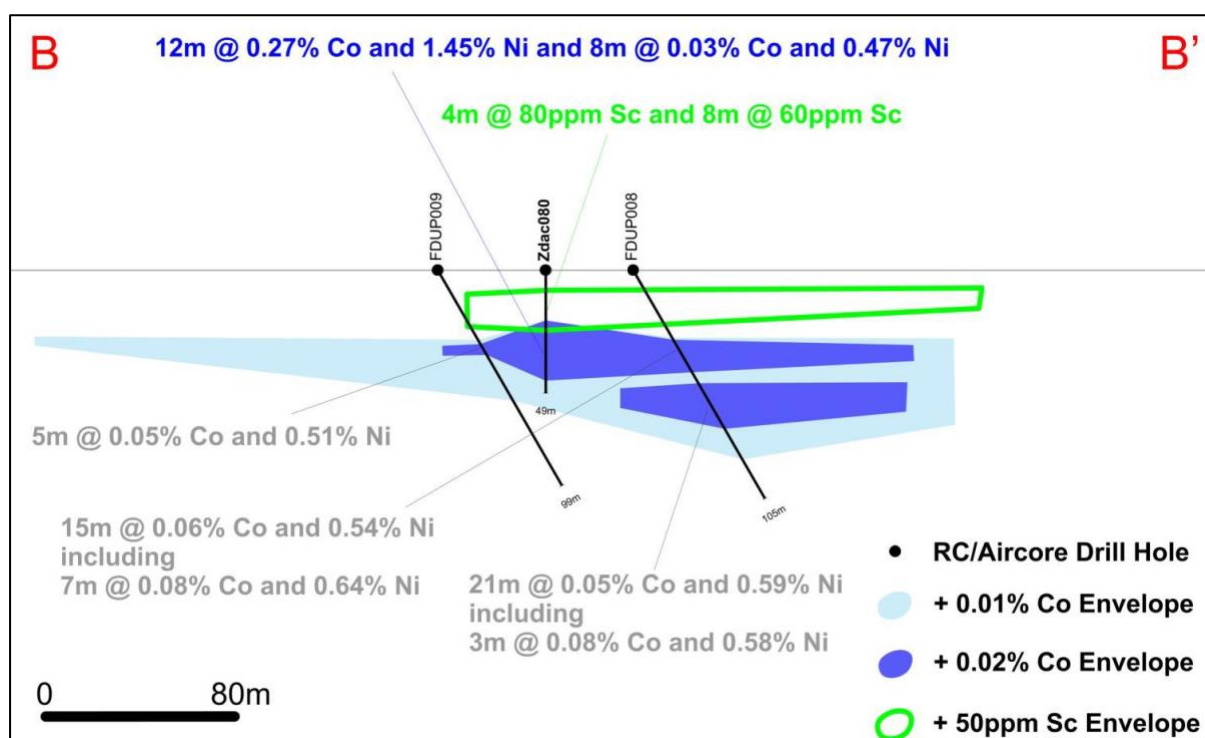
Zenith Minerals, 2018

Figure 6 – Shallow Cobalt Cross-Section A-A'



Zenith Minerals, 2018

Figure 7 – Shallow Cobalt Cross-Section B-B'



Zenith Minerals, 2018

Zenith is in the process of compiling and providing all relevant geological data to ARR with respect to Scandium Minerals. ARR will compile, review, and process this data to determine the next steps of development, including determining preliminary resource estimates, as data allows. ARR will then develop exploration plans to further delineate Scandium occurrences at Split Rocks focusing on areas to the south.

### **Table 3: Drill Collar Table**

See attached Drill Collar Table showing individual hole ID depth and other relevant data. See Table 3 below.

### **Commenting on the acquisition of Scandium Mineral Rights from Zenith, Managing Director of the Company, Keith Middleton said:**

*“Scandium, a rare and highly valuable mineral, has been discovered through ARR’s recent exploration and development activities at both of the Company’s Arizona and Wyoming Rare Earths Projects in the USA. Additional work is currently being undertaken to validate the scandium resource in its own right at both projects. Zenith minerals, from whom ARR originally acquired the Wyoming Project, uncovered attractive Scandium grades at their Split Rock Project in Western Australia. While the Company remains focused on unlocking the rare earths and scandium mineral potential in the USA, the acquisition of Scandium Mineral rights over the Split Rock Project in WA presents a unique opportunity for the Company to expand its Scandium portfolio, and provides further basis for developing our REE strategic materials strategy in the future,” he concluded.*

### **Agreement terms**

The Option is subject to the payment by ARR of an option fee and milestone payments as follows:

- A\$50,000 within 7 days of execution (“Option Fee”); and
- (a) A\$400,000 worth of ARR shares within 6 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 50 ppm of scandium; and
- (c) 5,000,000 ARR shares on the grant of a Scandium Mining Lease (“Milestone Payments”).

The Scandium Tenement is 100% owned by Zenith via a wholly owned subsidiary, Black Dragon Energy (Aus) Pty Ltd.

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.

Upon exercising its 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.

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, and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates 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 Michael Clifford, who is a Member of the Australian Institute of Geoscientists and an employee of Zenith Minerals Limited. Mr Clifford has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Clifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### **Material ASX Releases Previously Released**

Zenith Minerals has released all material information that relates to Exploration Results, Mineral Resources and Reserves, Economic Studies and Production for the Company's Projects on a continuous basis to the ASX and in compliance with JORC 2012. Zenith confirms that it is not aware of any new information that materially affects the content of this ASX release relating to scandium, cobalt and nickel exploration results at the Split Rocks project and that the material assumptions and technical parameters remain unchanged



**Table 3 – Drill Collar Table**

Hole_ID	Type	Easting	Northing	Datum	Hole Depth	Dip	Azimuth	Comment
ZAC106	AC	745299	6481080	GDA94_50	52	-60	60	No scandium assay
ZAC107	AC	745252	6481060	GDA94_50	53	-60	60	
ZAC108	AC	745211	6481035	GDA94_50	69	-60	60	
ZAC109	AC	745167	6481014	GDA94_50	69	-60	60	
ZAC110	AC	745128	6480988	GDA94_50	57	-60	60	
ZAC124	AC	746238	6479757	GDA94_50	36	-60	68	
ZAC125	AC	746191	6479741	GDA94_50	42	-60	68	
ZAC126	AC	746147	6479722	GDA94_50	45	-60	68	
ZAC127	AC	746103	6479700	GDA94_50	42	-60	68	
ZAC128	AC	746060	6479684	GDA94_50	52	-60	68	
ZAC129	AC	746123	6479768	GDA94_50	19	-60	68	
ZAC130	AC	746159	6479836	GDA94_50	50	-60	68	
ZAC131	AC	746104	6479814	GDA94_50	34	-60	68	
ZAC132	AC	746064	6479797	GDA94_50	24	-60	68	
ZAC133	AC	746011	6479779	GDA94_50	7	-60	68	
ZAC134	AC	745966	6479760	GDA94_50	21	-60	68	
ZDAC001	AC	744995	6482626	GDA94_50	42	-90	0	
ZDAC002	AC	744920	6482603	GDA94_50	2	-90	0	
ZDAC003	AC	744896	6482595	GDA94_50	1	-90	0	
ZDAC004	AC	744849	6482579	GDA94_50	8	-90	0	
ZDAC005	AC	744767	6482549	GDA94_50	39	-90	0	
ZDAC006	AC	744694	6482514	GDA94_50	18	-90	0	
ZDAC007	AC	744630	6482482	GDA94_50	14	-90	0	
ZDAC008	AC	744555	6482455	GDA94_50	41	-90	0	

ZDAC009	AC	744471	6482425	GDA94_50	96	-90	0	
ZDAC010	AC	745079	6482659	GDA94_50	31	-90	0	
ZDAC011	AC	745148	6482689	GDA94_50	9	-90	0	
ZDAC012	AC	745236	6482718	GDA94_50	34	-90	0	
ZDAC013	AC	745289	6482734	GDA94_50	5	-90	0	
ZDAC014	AC	744766	6483305	GDA94_50	12	-90	0	
ZDAC015	AC	744698	6483276	GDA94_50	25	-90	0	
ZDAC016	AC	744626	6483249	GDA94_50	10	-90	0	
ZDAC017	AC	744856	6483332	GDA94_50	41	-90	0	
ZDAC018	AC	745149	6482161	GDA94_50	28	-90	0	
ZDAC019	AC	745071	6482136	GDA94_50	7	-90	0	
ZDAC020	AC	744996	6482106	GDA94_50	40	-90	0	
ZDAC021	AC	744922	6482072	GDA94_50	19	-90	0	
ZDAC022	AC	744850	6482046	GDA94_50	17	-90	0	
ZDAC023	AC	745231	6482191	GDA94_50	40	-90	0	
ZDAC024	AC	745295	6482219	GDA94_50	32	-90	0	
ZDAC025	AC	745379	6482247	GDA94_50	11	-90	0	
ZDAC026	AC	745446	6482274	GDA94_50	17	-90	0	
ZDAC027	AC	745349	6481708	GDA94_50	40	-90	0	
ZDAC028	AC	745268	6481685	GDA94_50	7	-90	0	
ZDAC029	AC	745181	6481647	GDA94_50	49	-90	0	
ZDAC030	AC	745119	6481625	GDA94_50	44	-90	0	
ZDAC031	AC	745045	6481598	GDA94_50	21	-90	0	
ZDAC032	AC	745428	6481748	GDA94_50	26	-90	0	
ZDAC033	AC	745500	6481770	GDA94_50	18	-90	0	
ZDAC034	AC	745570	6481796	GDA94_50	5	-90	0	

ZDAC035	AC	745642	6481830	GDA94_50	28	-90	0	
ZDAC036	AC	745708	6481855	GDA94_50	25	-90	0	
ZDAC037	AC	745560	6481208	GDA94_50	26	-90	0	
ZDAC038	AC	745488	6481177	GDA94_50	34	-90	0	
ZDAC039	AC	745414	6481142	GDA94_50	31	-90	0	
ZDAC040	AC	745345	6481108	GDA94_50	26	-90	0	
ZDAC041	AC	745636	6481247	GDA94_50	49	-90	0	
ZDAC042	AC	745710	6481283	GDA94_50	52	-90	0	
ZDAC043	AC	745778	6481313	GDA94_50	43	-90	0	
ZDAC044	AC	745851	6481347	GDA94_50	36	-90	0	
ZDAC045	AC	745929	6481383	GDA94_50	34	-90	0	
ZDAC046	AC	745721	6480719	GDA94_50	30	-90	0	
ZDAC047	AC	745654	6480682	GDA94_50	42	-90	0	
ZDAC048	AC	745576	6480668	GDA94_50	39	-90	0	
ZDAC049	AC	745806	6480744	GDA94_50	4	-90	0	
ZDAC050	AC	745885	6480773	GDA94_50	55	-90	0	
ZDAC051	AC	745964	6480797	GDA94_50	25	-90	0	
ZDAC052	AC	746036	6480831	GDA94_50	24	-90	0	
ZDAC053	AC	746112	6480871	GDA94_50	28	-90	0	
ZDAC054	AC	745904	6480197	GDA94_50	49	-90	0	
ZDAC055	AC	745822	6480171	GDA94_50	34	-90	0	
ZDAC056	AC	745754	6480134	GDA94_50	46	-90	0	
ZDAC057	AC	745989	6480226	GDA94_50	50	-90	0	
ZDAC058	AC	746061	6480258	GDA94_50	32	-90	0	
ZDAC059	AC	746137	6480282	GDA94_50	33	-90	0	
ZDAC060	AC	746023	6480241	GDA94_50	32	-90	0	

ZDAC061	AC	745866	6480186	GDA94_50	51	-90	0	
ZDAC062	AC	745983	6479958	GDA94_50	50	-90	0	
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ZDAC064	AC	745847	6479906	GDA94_50	52	-90	0	
ZDAC065	AC	745765	6479875	GDA94_50	45	-90	0	
ZDAC066	AC	746078	6479986	GDA94_50	34	-90	0	
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ZDAC070	AC	746057	6479637	GDA94_50	56	-90	0	
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ZDAC077	AC	746051	6479876	GDA94_50	30	-90	0	
ZDAC078	AC	745979	6480088	GDA94_50	46	-90	0	
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ZDAC082	AC	745783	6480635	GDA94_50	43	-90	0	
ZDAC083	AC	745711	6480823	GDA94_50	39	-90	0	
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ZDAC085	AC	745637	6481022	GDA94_50	36	-90	0	
ZDAC086	AC	745606	6481126	GDA94_50	28	-90	0	

ZDAC087	AC	745536	6481312	GDA94_50	25	-90	0	
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ZDAC089	AC	745462	6481515	GDA94_50	10	-90	0	
ZDAC090	AC	745424	6481625	GDA94_50	13	-90	0	
ZDAC091	AC	745353	6481805	GDA94_50	10	-90	0	
ZDAC092	AC	745320	6481906	GDA94_50	48	-90	0	
ZDAC093	AC	745278	6482009	GDA94_50	12	-90	0	
ZDAC094	AC	745252	6482103	GDA94_50	45	-90	0	
ZDAC095	AC	745188	6482280	GDA94_50	14	-90	0	
ZDAC096	AC	745151	6482374	GDA94_50	31	-90	0	
ZDAC097	AC	745109	6482469	GDA94_50	24	-90	0	
ZDAC098	AC	745074	6482558	GDA94_50	37	-90	0	
ZDAC099	AC	745003	6482741	GDA94_50	40	-90	0	
ZDAC100	AC	744973	6482841	GDA94_50	33	-90	0	
ZDAC101	AC	744948	6482932	GDA94_50	10	-90	0	
ZDAC102	AC	744913	6483030	GDA94_50	12	-90	0	
ZDAC103	AC	744878	6483121	GDA94_50	23	-90	0	
ZDAC104	AC	744836	6483209	GDA94_50	13	-90	0	
ZDAC166	AC	746171	6479673	GDA94_50	32	-90	0	No scandium assay
ZDAC167	AC	746135	6480176	GDA94_50	35	-90	0	
ZDAC168	AC	746047	6480151	GDA94_50	37	-90	0	
ZDAC169	AC	746109	6479732	GDA94_50	8	-90	0	
ZDAC170	AC	746127	6479676	GDA94_50	8	-90	0	
ZDAC192	AC	746430	6479774	GDA94_50	8	-90	0	
ZDAC193	AC	746393	6479762	GDA94_50	5	-90	0	
ZDAC194	AC	746364	6479745	GDA94_50	8	-90	0	



ZDAC195	AC	746337	6479736	GDA94_50	5	-90	0	
ZDAC196	AC	746287	6479721	GDA94_50	8	-90	0	
ZDAC197	AC	746252	6479704	GDA94_50	5	-90	0	
ZDRC001	RC	745147	6482376	GDA94_50	122	-90	0	
ZDRC002	RC	745074	6482560	GDA94_50	144	-90	0	
ZDRC003	RC	744947	6482935	GDA94_50	180	-90	0	
ZDRC004	RC	745022	6483018	GDA94_50	114	-90	0	
ZDRC005	RC	744827	6482957	GDA94_50	174	-90	0	
ZDRC006	RC	744871	6483120	GDA94_50	150	-90	0	
ZDRC007	RC	746069	6479744	GDA94_50	88	-60	68	
ZDRC072	RC	745950	6480216	GDA94_50	130	-60	73	

## Appendix A

### Zenith Minerals Split Rock Scandium Minerals

#### NOTE: All data supplied by Zenith Minerals

##### 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 (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	4m composite aircore drill samples were collected at depths ranging from 0 to 90m depth. Samples were collected via a cyclone.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Samples are considered to be representative of the intervals sampled.
	<i>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.</i>	Aircore drilling was used to obtain 4 m composite samples from which 2 kg was pulverised with analysis by XRF for nickel, cobalt and scandium and fire assay for gold, with lithium by sodium peroxide fusion with ICPMS.
Drilling techniques	<i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	Aircore drilling, reverse circulation face sample bit

Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Selected samples were weighed in the field and using an estimated bulk density calculated weights were compared against weighed samples to check against visual estimates of recovery. Recovery data was recorded for each drilled metre.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Aircore drilling, reverse circulation face sample bit ensured good recoveries through-out the drill program, all samples were dry.
	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.	Excellent sample recoveries through-out drill program no bias likely.
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.	All drill samples were logged by a qualified geologist and descriptions recorded in a digital data base.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Qualitative logging, representative sample retained for each drill metre.
	The total length and percentage of the relevant intersections logged.	100%
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	No core
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	4m composite samples, by tube sample
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were analysed at SGS Laboratories in Perth, 2 kg was pulverised and a representative subsample was analysed by XRF for nickel, cobalt and scandium and by fire assay for gold, with lithium by sodium peroxide fusion with ICPMS.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	~200g of sample was pulverised and a sub-sample was taken in the laboratory and analysed.
	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.	Duplicate samples were taken in the field and analysed as part of the QA/QC process

	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Each sample was approximately 2kg in weight which is appropriate to test for the grain size of material sampled.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Samples were analysed at SGS Laboratories in Perth, 2 kg was pulverised and a representative subsample was analysed by XRF for nickel, cobalt and scandium. Scandium was assayed using the XRF technique. The concentrations present at Split Rocks are in some instances toward the lower 10ppm limit of the technique for scandium analysis. Resampling of the mineralised zones at 1m intervals and analysis with a higher precision analytical technique is in progress. Note fire assay was used for gold, with lithium by sodium peroxide fusion with ICPMS.
	<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>	n/a
	<i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	Blanks, certified reference material for nickel, cobalt, gold and lithium, and duplicate samples were included in the analytical batches and indicate acceptable levels of accuracy and precision. No certified reference material was included for scandium. Resampling of the mineralised zones at 1m intervals and analysis with a higher precision analytical technique is in progress and appropriate certified reference material will be included with the new assays for resamples.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	At least 2 Zenith company personnel have been to the prospect area and observed samples and representative drill chip samples
	<i>The use of twinned holes.</i>	No twin holes
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Field data were all recorded on paper logs and sample record books and then entered into a database
	<i>Discuss any adjustment to assay data.</i>	No adjustments were made.
Location of data points	<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>	Sample location is based on GPS coordinates +/-5m accuracy

	<i>Specification of the grid system used.</i>	The grid system used to compile data was MGA94 Zone 50
	<i>Quality and adequacy of topographic control.</i>	Topography control is +/- 10m.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Drilling is on 80m spaced holes with lines 500m apart, with 100m spaced holes along the base line
	<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>	Resampling of composite samples is required before any resource estimation can be made contemplated
	<i>Whether sample compositing has been applied.</i>	Simple weight average mathematical compositing applied
<i>Orientation of data in relation to geological structure</i>	<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>	All Zenith drilling is vertical and is close to representing true width thickness of the sub-horizontal cobalt – nickel, scandium saprolite mineralisation. Orientations of gold and lithium mineralisation are less certain and further drilling is required to confirm the true orientations of gold and lithium mineralisation
	<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>	No bias considered based on current interpretation of sub-horizontal cobalt, nickel & scandium saprolite mineralisation
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	All samples were taken by Zenith personnel on site and retained in a secure location until delivered directly to the laboratory by Zenith personnel.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	The sampling techniques and data have been reviewed by two company personnel who are qualified as Competent Persons



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 Split Rocks Project is located within 100% Zenith owned exploration licences E77/2388. The project is located predominantly in vacant crown land.
	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.	All tenements are 100% held by Zenith and are in good standing with no known impediment to future granting of a mining lease.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Drilling was completed and reported in previous exploration report, A56331 – Forrestania Gold NL – 1998.
Geology	Deposit type, geological setting and style of mineralisation.	The Forrestania greenstone belt is host to Archaean lode gold mesothermal systems, the area of Zenith's projects has been metamorphosed to amphibolite facies. Forrestania greenstone belt - this emerging lithium district is host to the new Earl Grey lithium deposit containing 128Mt @ 1.44% Li <sub>2</sub> O (KDR ASX Release 5th Dec 2016). Cobalt, nickel & scandium mineralisation reported herewith is hosted in strongly weathered saprolitic clays overlying ultramafic rocks.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Drill collars are provided in Table 3, whilst significant cobalt and nickel results are included in Table 3, scandium in Table 2. Additional regional aircore and RAB drill holes for which there are no cobalt, no nickel, and no scandium assays have not been reported.
	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	

	<i>down hole 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>	Simple arithmetic weight averaging with minimum cut-off grade of 0.02% cobalt and including up to 4m of internal dilution. Simple arithmetic weight averaging with minimum cut-off grade of 50ppm for scandium and including up to 4m of internal dilution.
	<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>	As above and included in Tables
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalents used.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	All Zenith drilling is vertical and is close to representing true width thickness of the sub-horizontal cobalt – nickel, scandium saprolite mineralisation.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	As above
	<i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	Length reported are down-hole lengths but are believed to be close to true thickness

<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>	Refer to descriptions and diagrams in body of 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 practiced to avoid misleading reporting of Exploration Results.</i>	Refer to descriptions and diagrams in body of text
<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>	No other meaningful or material exploration data to be reported at this stage
<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>	1m resampling of composite samples is required before any resource estimation can be made contemplated. Follow-up drill testing is planned to test strike and width potential of the cobalt, nickel & scandium mineralisation.
	<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>	Metallurgical testwork in progress. Follow-up drilling to be planned after receipt of 1m resamples of initial composite samples.