Maiden Exploration Core Drilling Planned for Halleck Creek with a 308 - 385 Million Tonne Exploration Target Defined

Highlights

- **Maiden exploration program of nine core drill holes planned for Q1 2022 or early Q2 2022.**
- **Exploration deep drilling will provide initial mineralisation, lithology and fresh rock core material for additional metallurgical and process testing.**
- **Approximately 308 to 385 million tonnes of rare earths mineralised rocks were identified as an Exploration Target for the Halleck Creek project area with an average TREO Grade of 2,330 ppm - 2,912 ppm.**
- **Initial surface sampling of the Overton Mountain area conducted in 2018 revealed average Total Rare Earth Oxide (TREO) values of 3,297 ppm, average Heavy Rare Earth Oxide (HREO) values of 244 ppm, and average Magnetic Rare Earth Oxide (MREO) values of 816 ppm.**
- **In June and July of 2021, a follow-up surface sampling program totalling 197 samples were collected showing an average Total Rare Earth Oxide (TREO) value of 3,187 ppm and a combined Nd and Pr average of 702 ppm.**
- **The results also showed that the Red Mountain Pluton is Light Rare Earth Oxide (LREO) dominant, with an average of 2,836 ppm.**
- **Based on the favourable results of the 2021 surface sampling, the drill program and the exploration target have been designed to determine regional extent of mineralised depth**

American Rare Earths Limited (ASX: ARR) ("the Company") proposes to drill nine exploration core holes in the Halleck Creek project area to determine the regional extent of mineralised depth. Five on Overton Mountain, four on Red Mountain, with a total length of approximately 825 meters. Initial results of the deep core drilling will provide observations of mineralisation, potential resource depths, lithologic boundaries and provide fresh rock core material for additional metallurgical and process testing. Drilling is planned for Q1 2022 or early Q2 2022, depending on regulatory approval of permit applications.

Based on recent mapping and surface sampling, the Company compiled a JORC exploration target report “Exploration Target Summary of the Halleck Creek Project Area” (Report). The Report provides an overview of the geology, results of surface sampling, and exploration target tonnage estimates at Halleck Creek.

The Halleck Creek project area, located in Albany County, Wyoming, comprises two main areas: the northern Overton Mountain area and the southern Red Mountain area. The project is owned by Wyoming Rare (USA) Inc., a wholly owned subsidiary of Western Rare Earths, a wholly owned subsidiary of American Rare Earths, Limited (OTC: ARRNF; ASX: ARR). With favourable results from the maiden exploration drilling, ARR will expand exploration drilling into developing preliminary resource estimates for Halleck Creek.

Mr Chris Gibbs, Managing Director of ARR states, "Surface Samples collected in 2018 and 2021 show high-grade REE mineralisation which is rich in Neodymium and Praseodymium (NdPr) with low penalty elements of Thorium and Uranium. We believe the exploration targets at Halleck Creek with NdPr complement our La Paz deposits in Arizona which contain elevated Terbium and Dysprosium. Thus, giving ARR a complete suite of valuable magnetic rare earths to develop. We are excited about the opportunities these proposed core holes present for the future of Halleck Creek."

Overview

Exploration History

The greater Halleck Creek project area consists of 68 unpatented lode claims, covering approximately 1,265 acres (512 has). The company controls six Wyoming State Mineral Leases in the surrounding area, totalling 1,843.72 acres (756 has). The project is located in Albany County, Wyoming, approximately 40 miles north of Laramie, Wyoming (Figure 1).

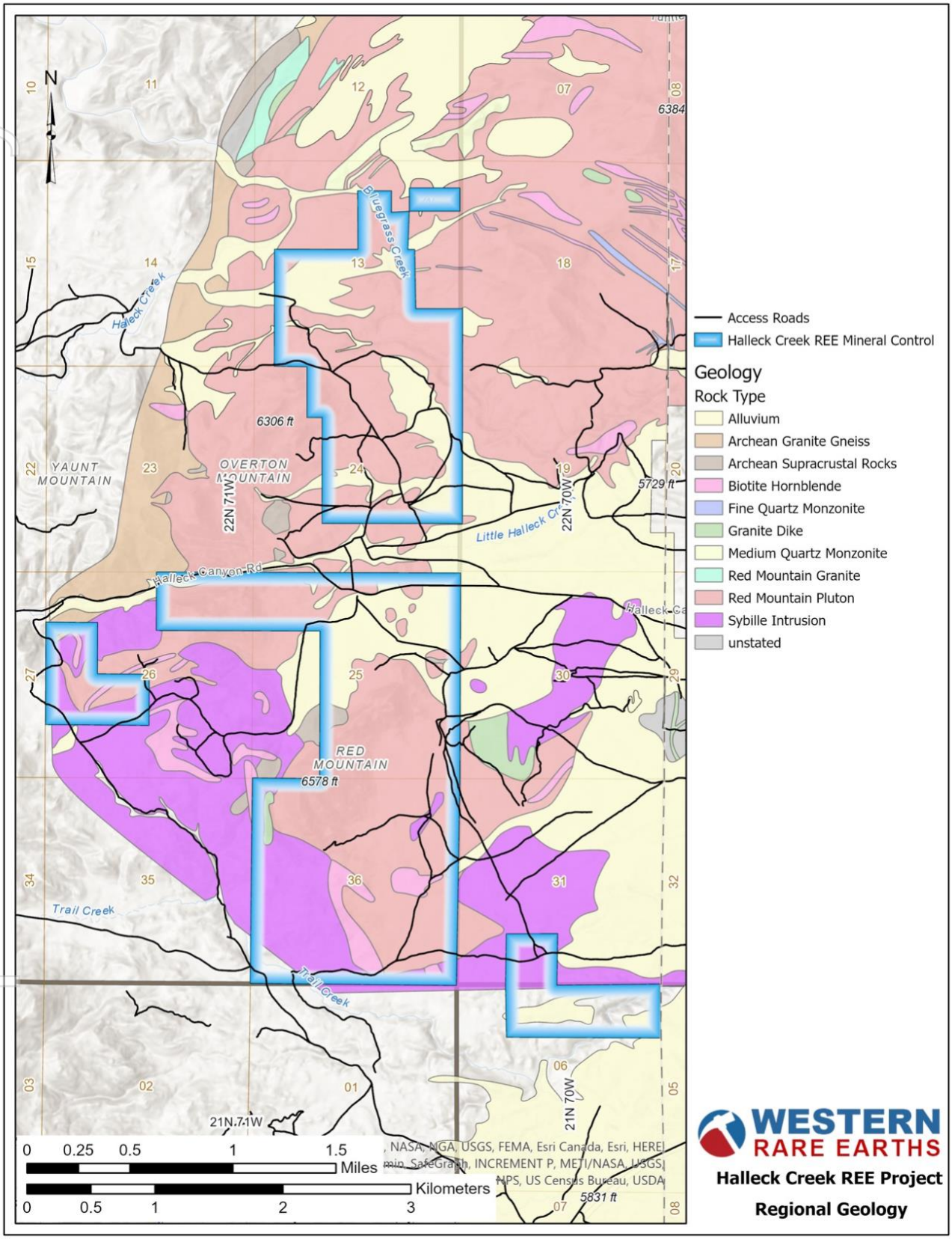
Initial surface sampling of the Overton Mountain area conducted in 2018 by Zenith Minerals, an Australian Mining Company, revealed average Total Rare Earth Oxide (TREO) values of 3,297 ppm, average Heavy Rare Earth Oxide (HREO) values of 244 ppm, and average Magnetic Rare Earth Oxide (MREO) values of 816 ppm.

In June and July of 2021, a follow-up surface sampling program totalling 197 samples were collected from the Halleck Creek project area with favourable and significant results showing an average Total Rare Earth Oxide (TREO) value of 3,187 ppm and a noteworthy, combined Nd and Pr average of 702 ppm. The results also showed that the Red Mountain Pluton is Light Rare Earth Oxide (LREO) dominant, with an average of 2,836 ppm.

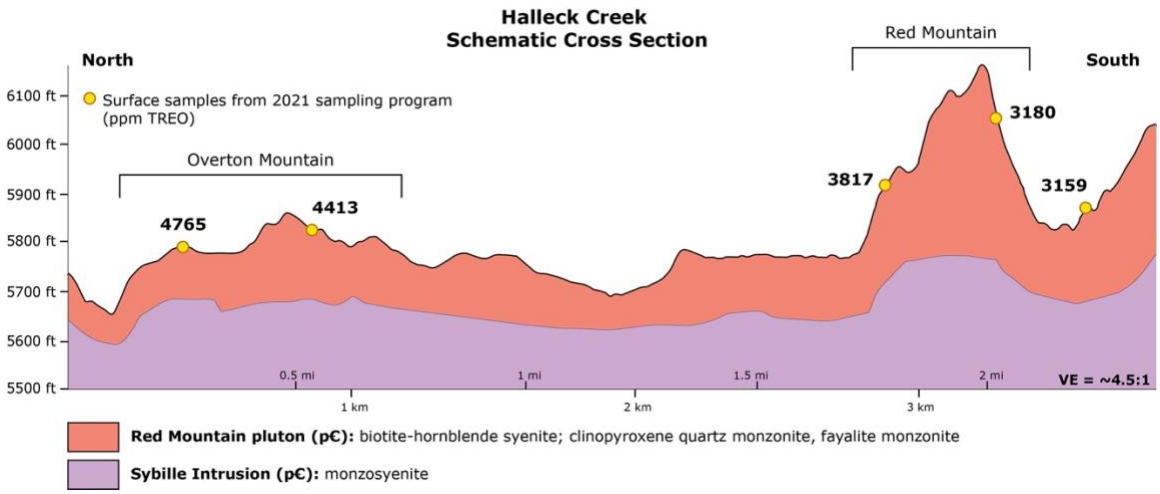
Geology

The encompassing Halleck Creek project area is located within the Laramie Anorthosite Complex (LAC). The LAC consists of three major anorthositic intrusions - Chugwater, Poe Mountain, and Snow Creek. These are rimmed by associated monzonitic intrusions, including the Sybille intrusion, the Maloin Ranch pluton, and the Red Mountain pluton. The Halleck Creek project area is located within the Red Mountain Pluton (RMP), the youngest and smallest intrusion of the LAC.

Four units comprise the RMP, including a fayalite monzonite (FM), clinopyroxene quartz monzonite (CQM), biotite-hornblende quartz syenite (BHS), and the Red Mountain granite (RMG). Three types of dikes also occur within the pluton, including fine quartz monzonite (FQM), medium quartz monzonite (MQM), and biotite-hornblende monzonite (BHM).



Regional Geology



Generalised Cross-Section of the Halleck Creek Project Area

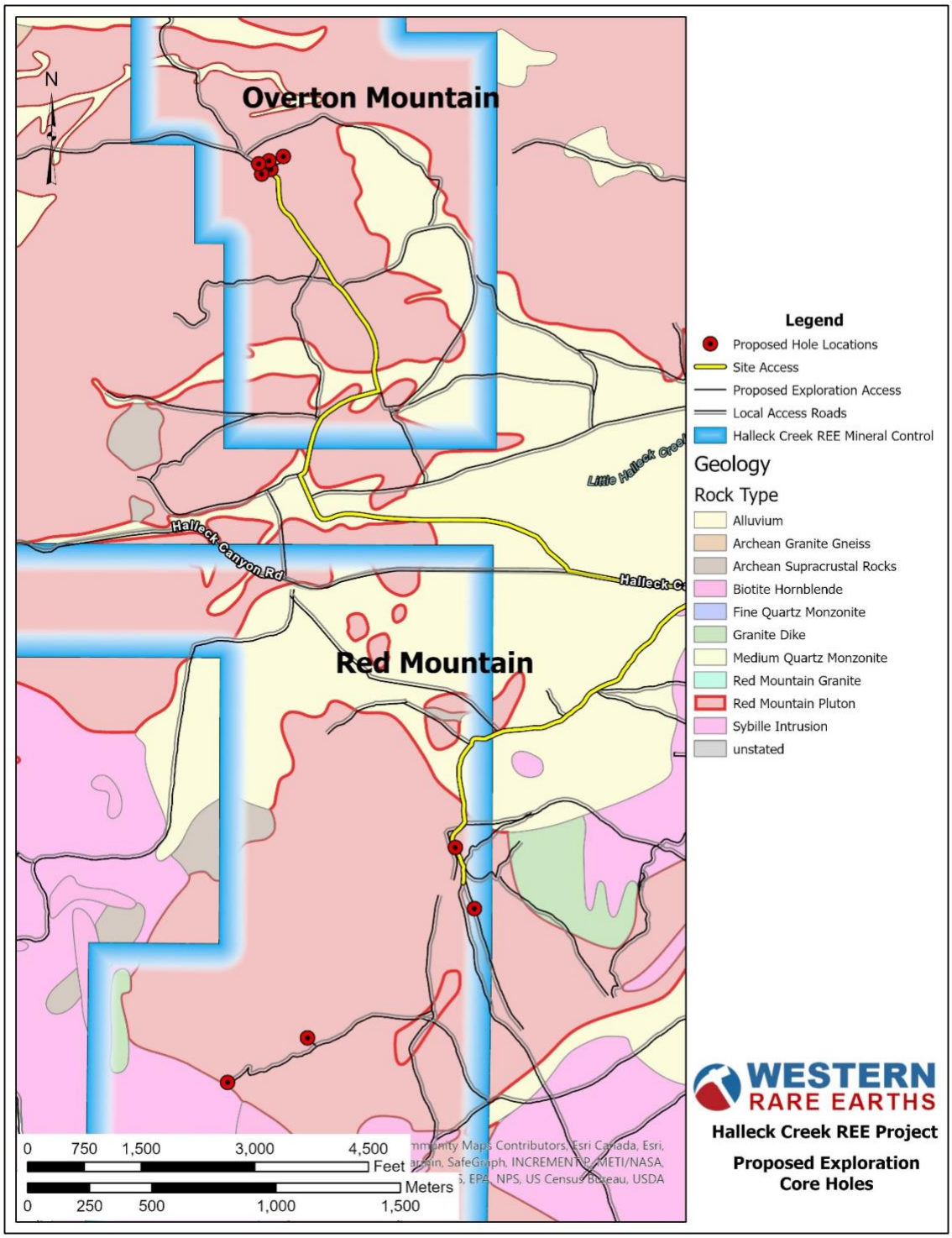
Exploration Drilling

With the wide areas of surface samples with TREO grade exceeding 2,500ppm and preliminary surface mapping, WRE developed a modest nine-hole exploration program. Five holes on Overton Mountain and four holes on Red Mountain, with a total length of approximately 825 meters, determine the regional extent of mineralised depth. The proposed core hole will range between 75 and 100 meters in depth.

Results of the core drilling will provide initial observations of mineralisation at depth, determine potential resource depths and lithologic boundaries, and provide fresh rock core material for detailed metallurgical and process testing. Preliminary geotechnical and hydrological data will also be acquired during this exploration program.

WRE is currently performing additional detailed geological mapping and systematic sampling across the entire project area.

WRE has exploration permits for drill holes on federal claims. WRE is currently waiting on the Wyoming Department of Environmental Quality (WDEQ) to permit on state land and to set bonding requirements for the project area. WRE hopes to begin exploration drilling in Q1 2022 or early Q2 2022, depending on the time required for WDEQ and BLM approvals.



Proposed Halleck Creek Exploration Holes

Exploration Target Estimate

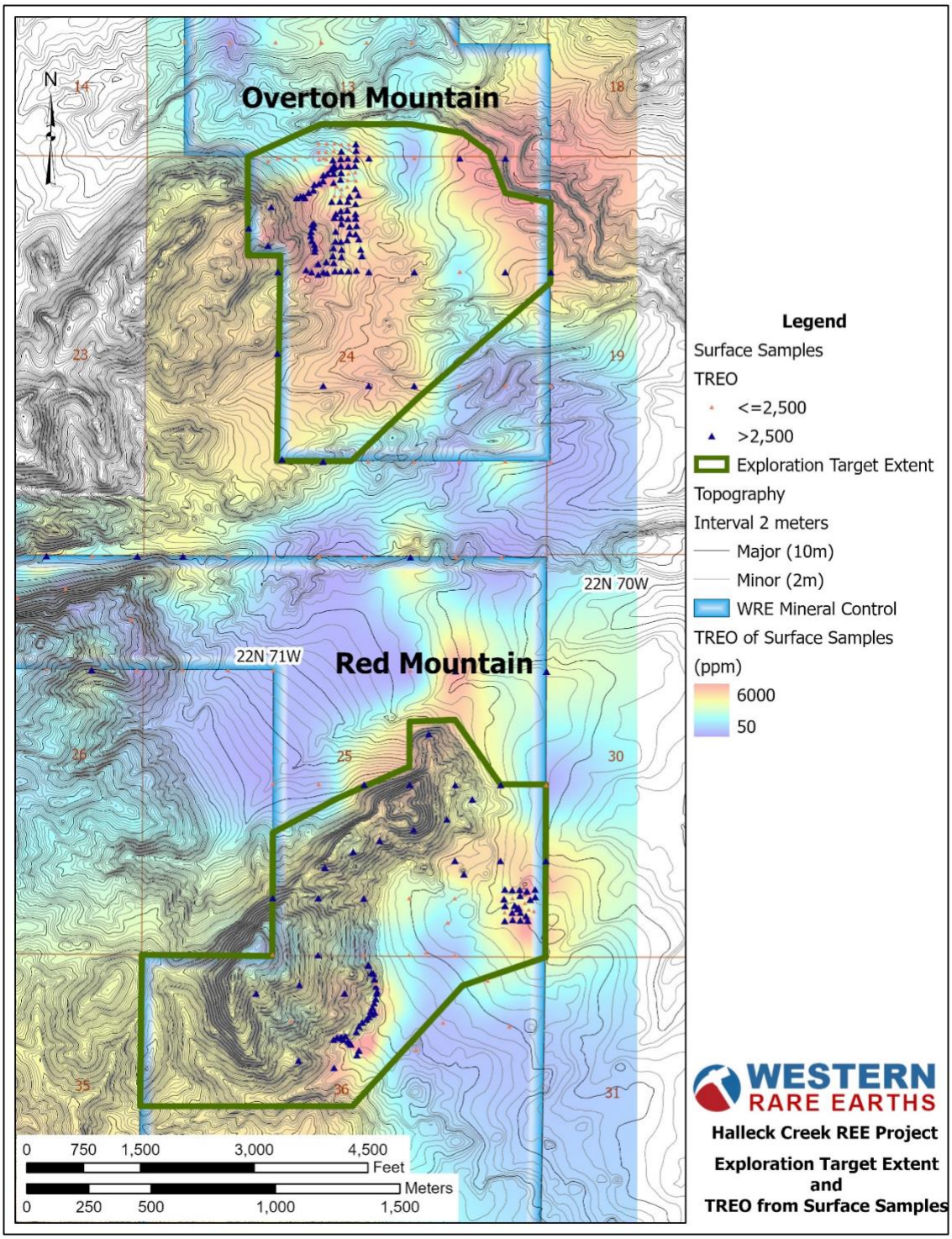
It must be noted that these Exploration Target estimates are based on assumptions made from sparse geological data. The estimates cannot be construed as resources or reserves in any way, shape or form.

WRE built conceptual volumetric models covering the Overton Mountain and Red Mountain claim areas. The volumetric models were developed to estimate the volume of material within the claim areas and evaluate surface sample grades exceeding TREO of 2,500 ppm. The upper surface of the models is topography. The lower surface of the models is set to an elevation of 1,720 meters, which is approximately 30 meters below the average elevation of 1,750 meters msl at the base of Overton Mountain and Red Mountain. The mineralisation is similar to the depths observed at the La Paz REE project in Arizona, approximately 30 meters.

An Exploration Target with a range of approximately 307.8 – 384.7 million tonnes as estimated using the parameters listed above. The average estimated TREO grade ranges from 2,330 – 2,912ppm. It should be noted that a general range of 20% was applied to the tonnage, grade values.

Table 1 – Halleck Creek Exploration Target Estimate

Study Area	Area (ha)	Volume (million cu m)	In-Place Tonnage (million tonnes)	Average TREO Grade (ppm)	Mass TREO (million kg)
Overton Mountain	115	28.3 - 35.4	75.9 - 94.9	2,551 - 3,189	194 - 303
Red Mountain	149	86.5 - 108.2	231.9 - 289.9	2,258 - 2,822	524 - 818
Total	**264**	**114.8 - 143.6**	**307.8 - 384.7**	**2,330 - 2,912**	**717 - 1,120**



Halleck Exploration Target Extent and TREO from Surface Samples

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

Chris Gibbs
Managing Director

This ASX announcement refers to information extracted from market announcements available 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, 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 Person's findings presented have not been materially modified from the original market announcements.

Competent Persons Statement: The information in this Report related to Exploration Results is based on the 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. 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 are 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 of the United States of America, itself emerging as an alternative international supply chain to 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. 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 La Paz's mineral profile incorporated into emerging US advanced rare earth processing technologies. ARR acquired a second USA REE asset in the Searchlight Rare Earths project in the first half of 2021. ARR acquired a third USA REE asset, the Halleck Creek project in Wyoming, in June 2021.

Appendix A

JORC Code, 2012 Edition – Table 1 Halleck Creek Exploration Area

Section 1 Sampling Techniques and Data		
(Criteria in this section apply to all succeeding sections.)		
Criteria	***JORC Code explanation***	**Commentary**
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	• Individual grab rock samples were collected by hand at the surface from in-situ outcrops. A select number of cut channel samples were additionally collected by hand at the surface in-situ.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• Grab samples are believed to be representative of the outcrops they came from.
	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.	• 1-2kg rock samples were collected by a geologist and were broken using a hammer from the outcrop, then crushed in the laboratory and then pulverised before analysis.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or another type, whether the core is oriented and if so, by what method, etc.).*	• No drilling.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	• No drilling.

	Measures are taken to maximise sample recovery and ensure the representative nature of the samples.	• No drilling.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• No drilling.
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.*	• Rock samples were geologically described and photographed according to consistent internal protocol and standards.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	• No logging.
	The total length and percentage of the relevant intersections logged.	• No logging.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	• No drilling.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	• No drilling.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	• Samples were analysed at ALS Laboratories in Reno, Nevada: the samples were crushed, pulverised and assayed by ICP-ME MS81 for REE.
	Quality control procedures adopted for all sub-sampling stages to maximise the representivity of samples.	• ~2kg of rock was crushed and pulverised, and a subsample was taken in the laboratory and sent for analysis.

	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.	• Grab sampling was selective based on geological observations.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	• Each sample was 1kg to 2kg in weight which is appropriate to test for a grain size of material.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• The samples were crushed and assayed for 34 elements by fusion ICP-MS. The procedure will report near total results.
	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.	• No geophysical tools were used in the sampling program.
	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.	• Internal laboratory standards were analysed with rock samples.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	• Consulting company personnel have observed the assayed samples.
	The use of twinned holes.	• No drilling.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• Field data were recorded in field notebooks and sample record books and then entered into a digital database.
	Discuss any adjustment to assay data.	• No adjustments were made.

Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Sample location is based on GPS coordinates +/- 5m accuracy.
	Specification of the grid system used.	• The grid system used to compile data was NAD83 Zone 13N.
	Quality and adequacy of topographic control.	• Topography control is +/- 10m.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	• Both randomly spaced and channelled surface chip sampling.
	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.	• The data alone will not be used to estimate mineral resources or ore reserves.
	Whether sample compositing has been applied.	• None.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• Rock samples were taken of selected outcrops that were considered representative of varying rock types.
	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.	• No drilling.
Sample security	*The measures are taken to ensure sample security.*	• Samples were kept in numbered bags until delivered to the laboratory.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• 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	*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.*	• Wyoming Rare Earths Project Acquisition – Five Unpatented mining claims on BLM US Federal Land totalling 71.6 acres (29 has) were acquired from Zenith Minerals Ltd. • 67 additional unpatented mining claims were staked by ARR, totalling 1193.3 acres (482 has). Overall, the ARR subsidiary controls 3101 acres (1255 has) of mining claims and Wyoming State Leases.
	The security of the tenure held at the time of reporting and any known impediments to obtaining a licence to operate in the area.	• No impediments to holding the claims exist. An annual holding fee of $165/claim ($11,880.00) is payable to the BLM to maintain the claims. To keep the State leases minimum rental payments of $1/acre for 1-5 years; $2/acre for 6-10 years; and $3/acre if held for ten years or longer.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• Before sampling by WIM on behalf of Blackfire Minerals and Zenith Minerals, there was no previous sampling by any other groups within the ARR claim and Wyoming State lease blocks.
Geology	*Deposit type, geological setting and style of mineralisation.*	• The REE's occur within allanite, which arises as a variable constituent of the Red Mountain Pluton. The occurrence can be characterised as a disseminated type of rare earth deposit.
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:*	• No drilling.
	easting and northing of the drill hole collar	• No drilling.
	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.	• No drilling.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	• No high-grade cutting.
	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.	• No aggregation was used.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	• No metal equivalents were used.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	• No drilling.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	• No drilling.
	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').	• No drilling.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to, a plan view of drill hole collar locations and appropriate sectional views.*	• See Figures 2 through Figure 8 in the body of the Report.
Balanced reporting	*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.*	• The average grade of the TREOS's calculated from the collection of 268 samples is 26045 ppm. The lowest grades collected were less than ten ppm TREO, the highest 5553 ppm; less than 10ppm HREO, the highest 518 ppm; less than ten ppm magnet minerals oxide, 1433 ppm the highest grade.

Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported, including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• In hand specimen, this rock is a red-coloured, hard and dense granite with areas of localised fracturing. The rock shows significant iron staining and deep weathering. • Microscopic description: In the hand specimen, the samples represent light coloured, relatively coarse-grained granitic rock composed of visible secondary iron oxide, amphibole, opaques, clear quartz and pink to white coloured feldspar. All of the specimens show moderate to strong weathering and fracturing. Allanite content is variable from trace to 2%. Rare Earths are found within the allanite. • Metallurgical testing to date consisted of concentrating the allanite by both gravity and magnetic separation. The rare earth rich allanite concentrate will be further evaluated for extraction of the rare earths.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Further mapping and sampling are planned to lead to drilling targets.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• In the main body of the report, see the figure for proposed drill hole locations.

Exploration Target Summary of the Halleck Creek Project Area

November 2021

Compiled by
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Western Rare Earths, Inc.
And
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Chief Technical Officer
American Rare Earths, Ltd.

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1.0 Introduction and Location

This report summarizes the geology and presents an Exploration Target tonnage estimate for the Halleck Creek project area located in Albany County, Wyoming. The project area is comprised of two main areas: the northern Overton Mountain area, and the southern Red Mountain area, both owned by Wyoming Rare (USA) Inc., a wholly owned subsidiary of Western Rare Earths, a wholly owned subsidiary of American Rare Earths, Limited (OTCQB:ARRNF; ASX:ARR).

The greater Halleck Creek project area consists of 68 unpatented lode claims, covering approximately 1,265 acres (512 has). The company additionally controls 6 Wyoming State Mineral Leases in the surrounding area, totaling 1,843.72 acres (756 has). The project is located in Albany County, Wyoming, approximately 40 miles north of Laramie, Wyoming (Figure 1).

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Based on the favorable results of 2021 surface sampling, WRE compiled this Exploration Target Summary of the Halleck Creek project area.

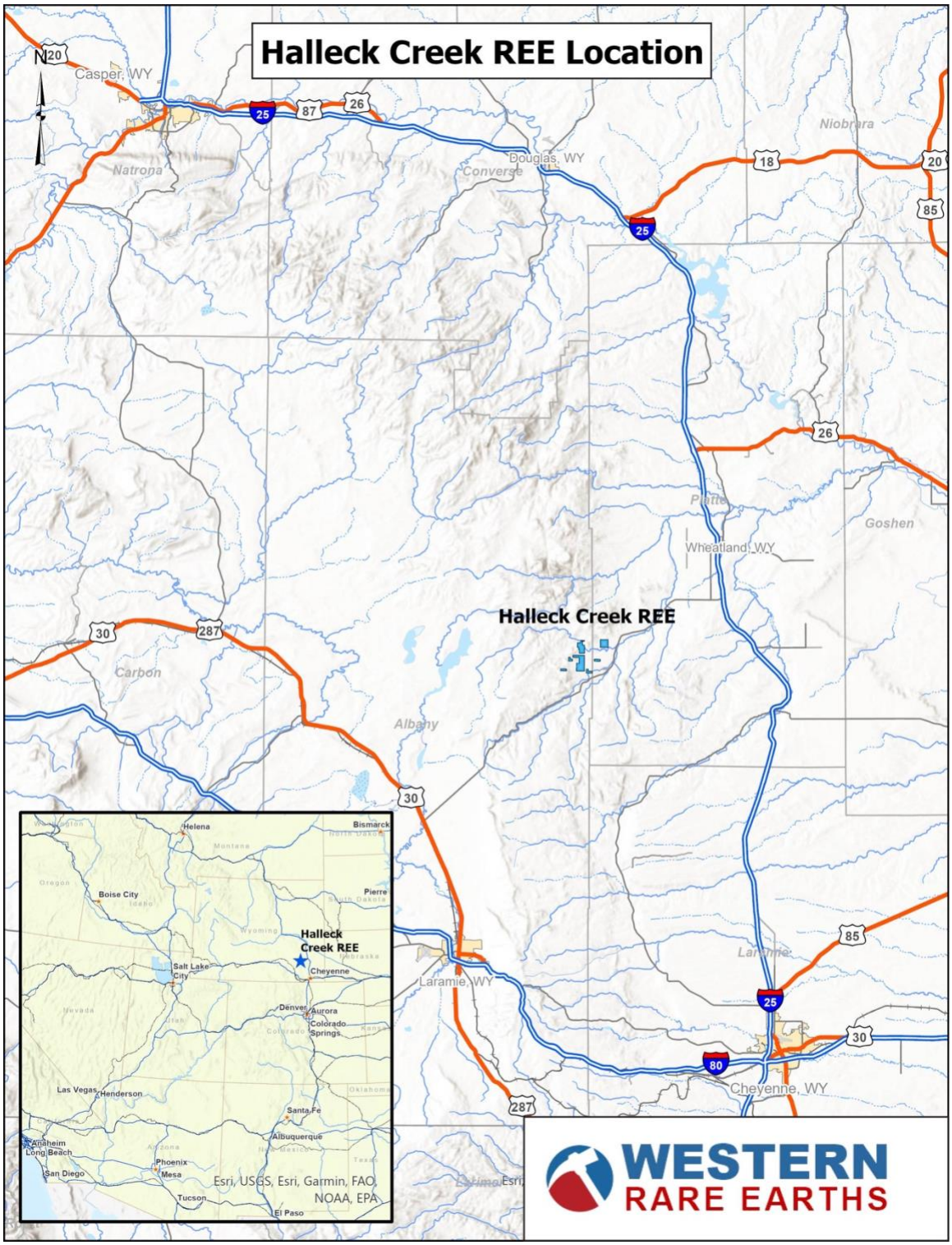

Figure 1 – Halleck Creek Project Location

2.0 Geology and Exploration History

General Geology

The encompassing Halleck Creek project area is located within the Laramie anorthosite complex (LAC), which represents the northernmost component of widespread 1.4 Ga magmatism in the western United States. The LAC massif forms the core of the central Laramie Range, a Laramide aged uplift in southeastern Wyoming, and was emplaced ca. 1.437 ± 2.4 Ga. The LAC was intruded over the trace of the Cheyenne Belt, which is a major terrane boundary that juxtaposes Archean rocks of the Wyoming Province to the north with accreted rocks of the Proterozoic Colorado Province to the south. This collisional event is known as the Medicine Bow Orogeny, which occurred between 1.78-1.76 Ga.

The LAC consists of three major anorthositic intrusions, the Chugwater anorthosite (ca. 1435.95 ± 0.687 Ma), the Poe Mountain anorthosite (1434.4 ± 0.6 Ma, and the Snow Creek anorthosite (ca. 1432-1434 Ma) which are rimmed by associated monzonitic intrusions that include the Sybille intrusion (1435.7 ± 2.2 Ma), the Maloin Ranch pluton (1434.3 ± 2.1 Ma to 1435.6 ± 2.5 Ma), and the Red Mountain pluton (1431.3 ± 1.4 Ma). Slightly predating the LAC (1437.7 ± 2.4 Ma) is the northern Sherman batholith, which is composed mainly of fayalite granite with minor monzodiorite. The southern lobe of the Sherman was contemporaneously emplaced with the final intrusions of the LAC (1437.8 ± 3.2 Ma to 1430.6 ± 2.5 Ma) and is dominated by biotite-hornblende granite with minor monzodiorite, minor fayalite granite, and minor pyroxene granite. The Halleck Creek project area is located within the Red Mountain Pluton (RMP), the youngest and smallest intrusion of the LAC (Figure 2, Figure 3).

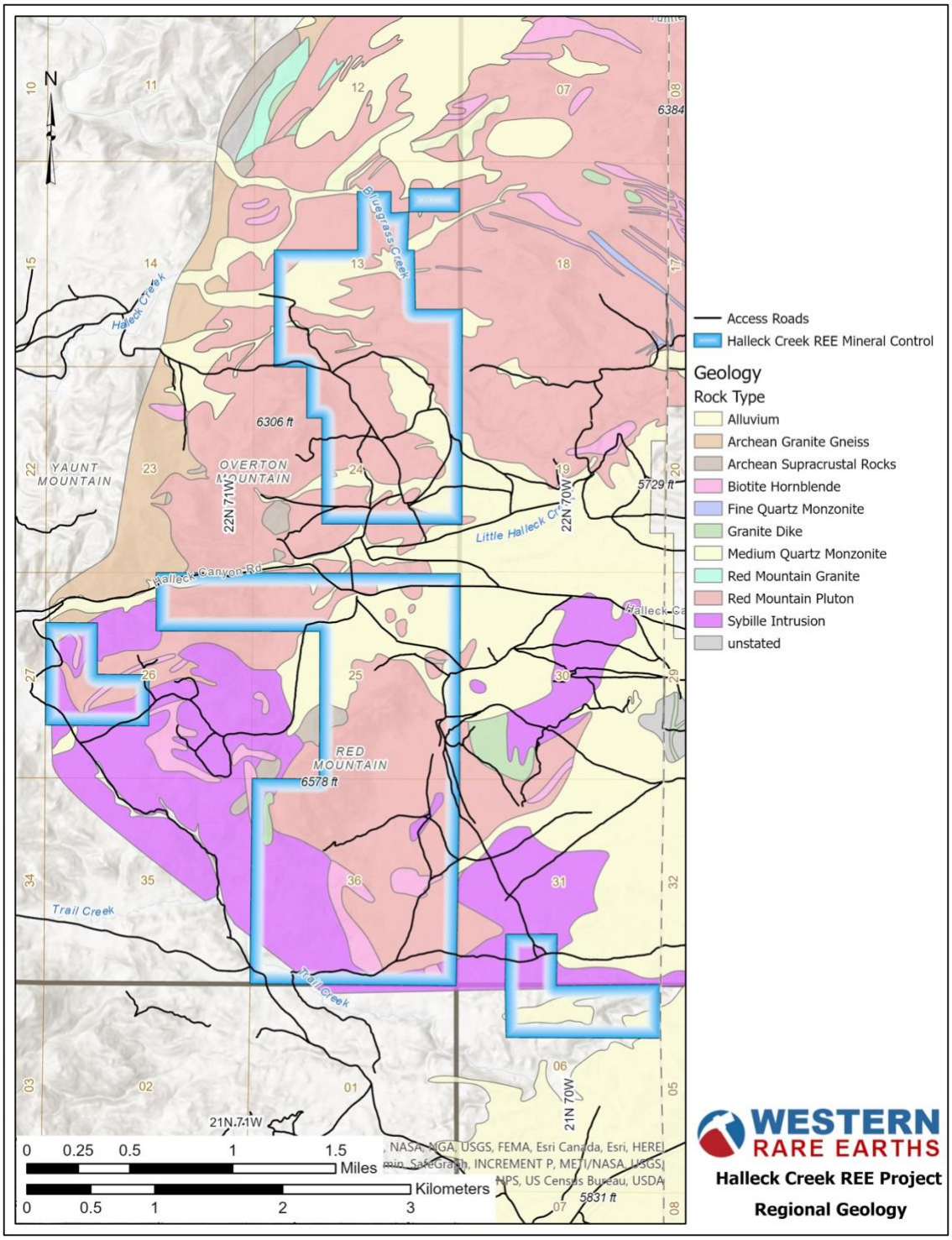

Figure 2 – Halleck Creek Regional Geology

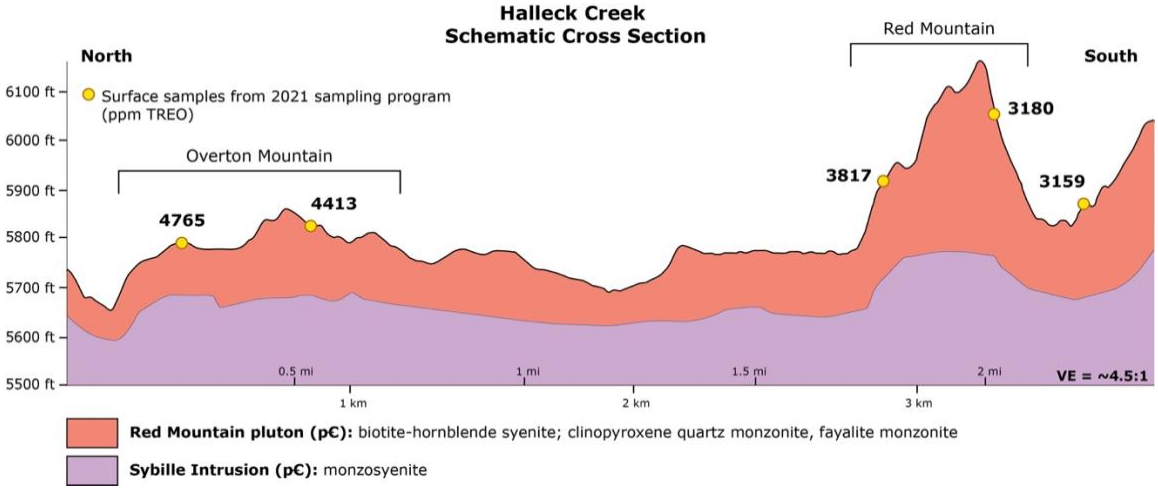

Figure 3 – Halleck Creek Generalized Cross-Section

The four units which comprise the RMP include a fayalite monzonite (FM), clinopyroxene quartz monzonite (CQM), biotite-hornblende quartz syenite (BHS), and the Red Mountain granite (RMG). Three types of dikes also occur within the pluton, including fine quartz monzonite (FQM), medium quartz monzonite (MQM), and biotite-hornblende monzonite (BHM). The rocks of the Red Mountain pluton, excluding the RMG, are nearly indistinguishable in the field: they are equigranular, medium-grained, and red-weathering. However, their subtle differences can be discerned through detailed petrography and whole rock geochemistry. Additionally, the pluton is geochemically distinct from the adjacent Sherman batholith and Sybille intrusion due to its higher FeOt/(FeOt + MgO), higher K2O, stronger enrichment in REEs, and at any given silica content it has lower abundances of TiO2, FeO, MgO, CaO, and P2O5.

Most of the units in the pluton carry mantle-like Nd, Sr, and Pb isotopic compositions similar to the least contaminated anorthositic and ferrodioritic rocks of the LAC, indicating that the pluton evolved mainly via differentiation. Substantial crustal assimilation occurred only in the late dikes and the RMG.

Allanite is a sorosilicate within the epidote group, which contain a significant number of rare-earth elements (REEs) and has been identified as the primary REO host in the Halleck Creek project area. The FM, CQM, and BHS contain disseminated allanite of variable quantities (up to 2 weight %) throughout the pluton. However, detailed petrographic work completed by Anderson and Frost (2003) discovered that the CQM contains more allanite than the other two rock types. As a result, the CQM will be the main target, although the FM and BHS will be thoroughly assessed. The CQM forms a discontinuous rim around the pluton, either inboard from the FM or on the pluton margin itself and comprises less than 10% of the entire pluton. In conclusion, the high REE concentrations within the CQM correlate with high modal abundance of allanite.

Exploration History

In 2010 Blackfire Minerals, an Australian mining company, acquired the current set of State Leases ARR now controls for the purpose of REE exploration activities. Based on research completed by World Industrial Minerals, anomalous REE values were discovered in the Red Mountain area as part of a PhD thesis completed by Anderson (1995). Much of Red Mountain was covered by a State Mineral lease that was subsequently acquired. In 2011, after initial sampling, the project was subsequently dropped due to low REE prices.

In 2018, the project was reactivated by Zenith Minerals, an Australian Mining Company, who applied for the same state leases and staked 5 additional claims on land in which the BLM owned both the surface and minerals. Additional sampling was completed both on the State Lease applications and the mining claims on the BLM Land. Sample results of the 87 samples collected from the 2019 sampling program showed broad areas of higher mineralization above 2000 ppm TREO (Appendix B).

In June and July of 2021, a follow up surface sampling program totaling 181 samples were collected. The sample results, shown in full in Appendix C, show widespread significant REO values across broad areas in the north and south project areas of Halleck Creek (Table 1, Figure 4, Figure 5).

Table 1 – REO Sample Summary for Halleck Creek

			Average REO values (ppm)				
Study Area	**Rock Unit**	**No. Samples**	**Total REO**	**Light REO**	**Heavy REO**	**Magnetic REO**	**NdPr**
Overton Mountain	Red Mountain Pluton	105	3,349	3,002	347	790	742
Red Mountain	Red Mountain Pluton	92	3,002	2,646	356	713	661
Grand Total		**197**	**3,187**	**2,836**	**351**	**754**	**702**

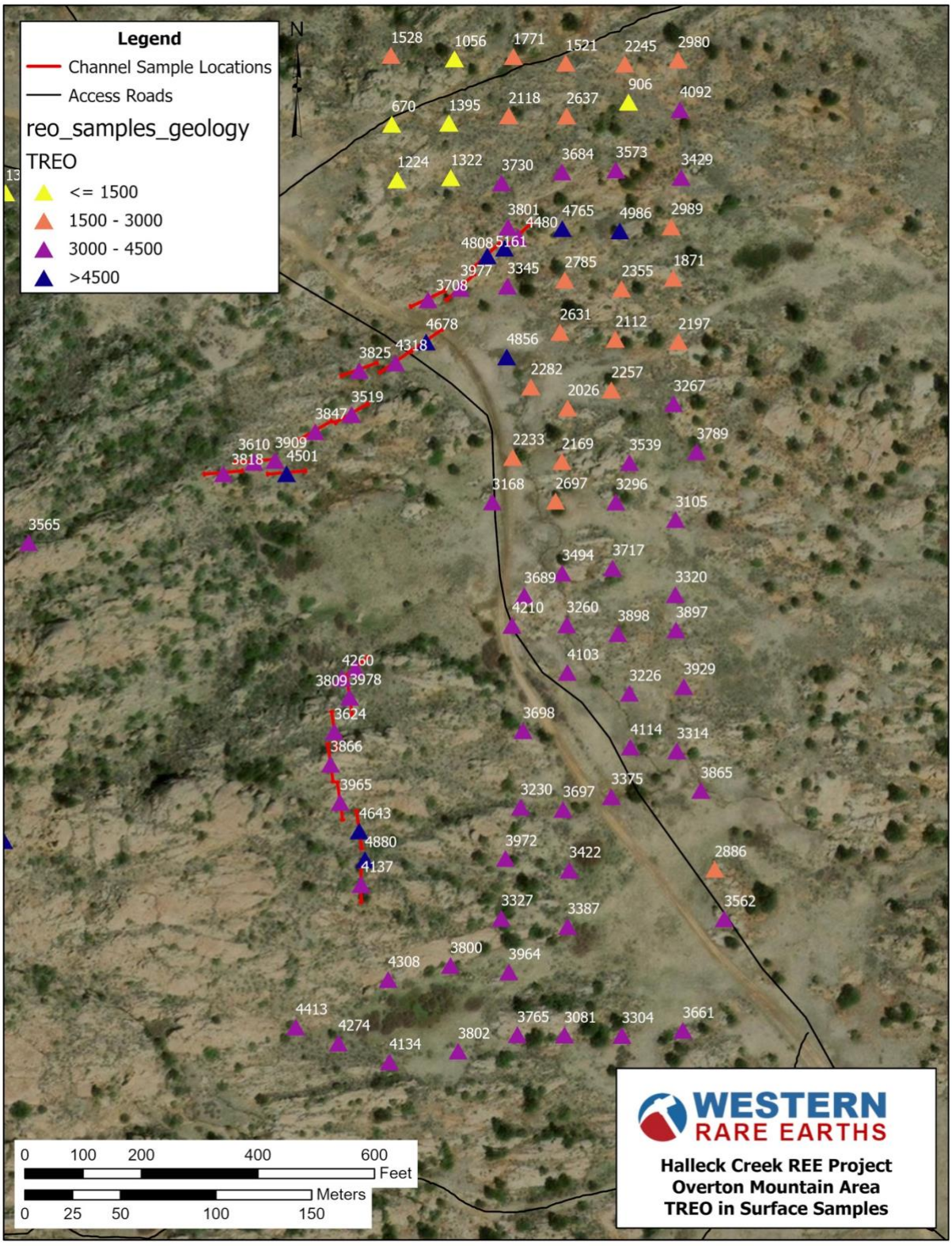

Figure 4 – Overton Mountain TREO Distribution

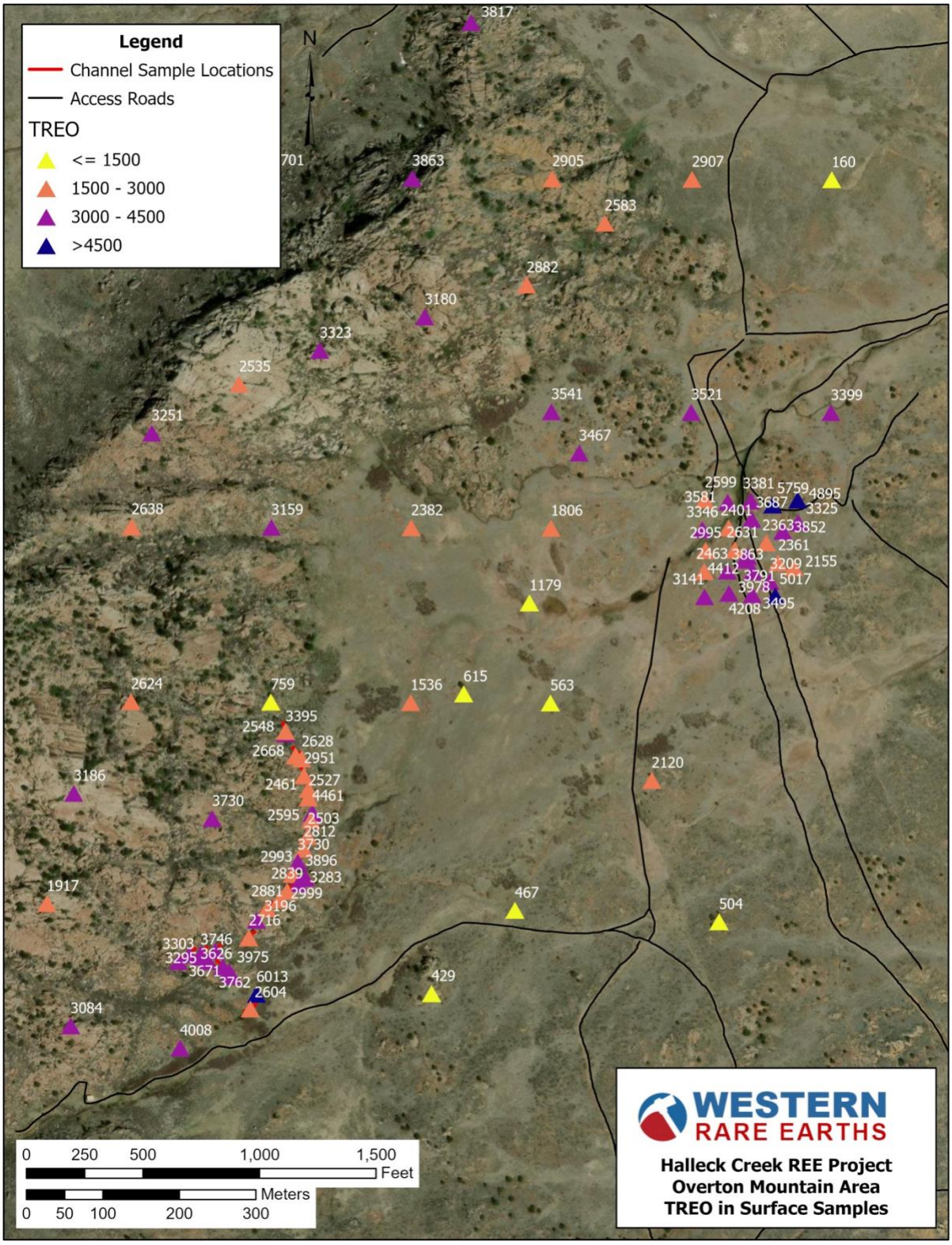

Figure 5 – Red Mountain TREO Distribution

3.0 Surface and Mineral

Surface Control

The surface lands within the Halleck Creek project area are predominantly privately owned, however a small portion of land in the region is administered by the Bureau of Land Management (BLM) (Figure 6).

Mineral Control

Most of the mineral lands within the Halleck Creek project area belong to the US Federal government, administered by the Bureau of Land Management (BLM). WRE controls 68 unpatented federal lode claims covering 1,265 acres (512 ha) across the Halleck Creek Project area (Figure 7). WRE controls an additional 6 Wyoming State Mineral Leases which total 1,842.73 acres (744.5 ha).

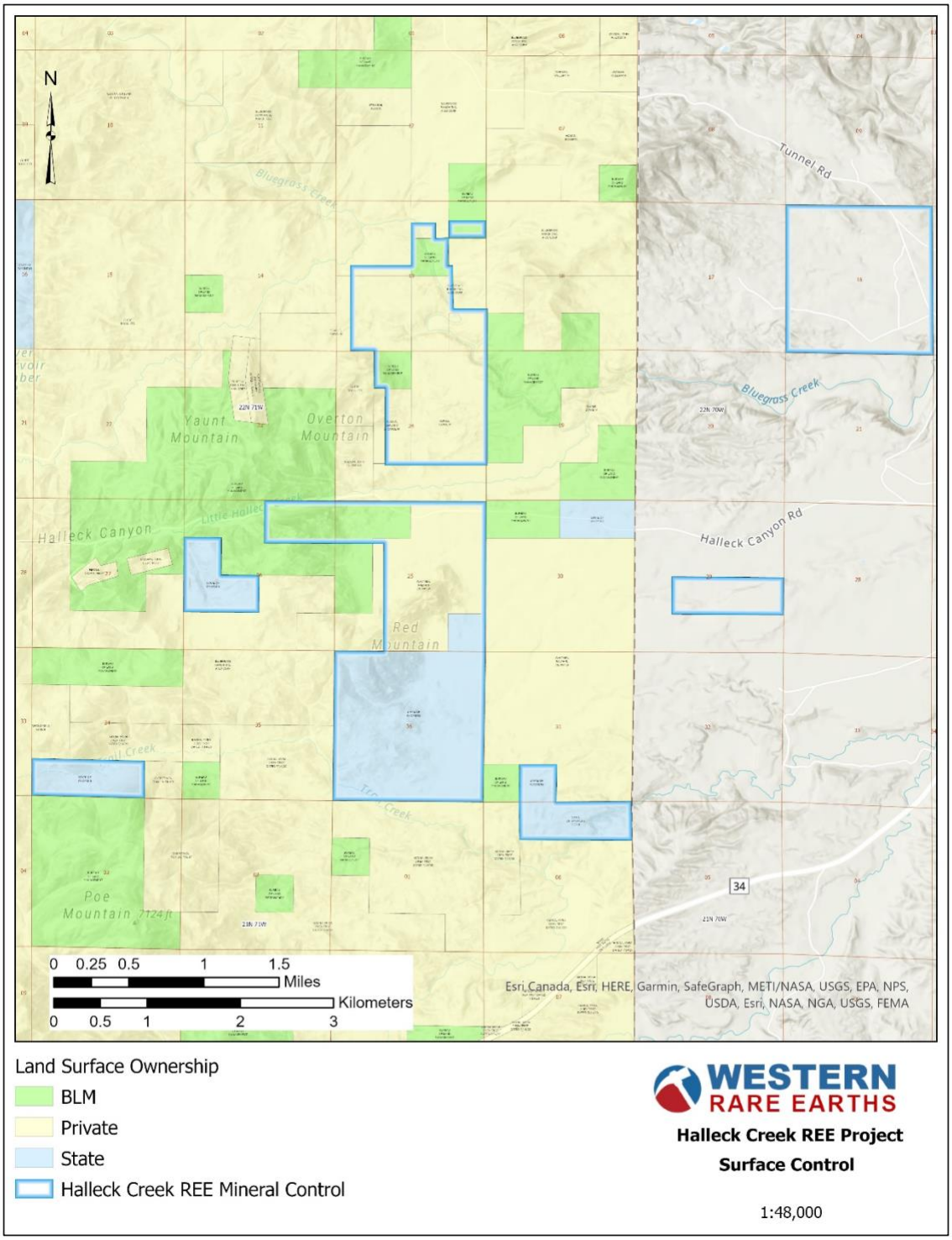

Figure 6 – Halleck Creek Surface Control

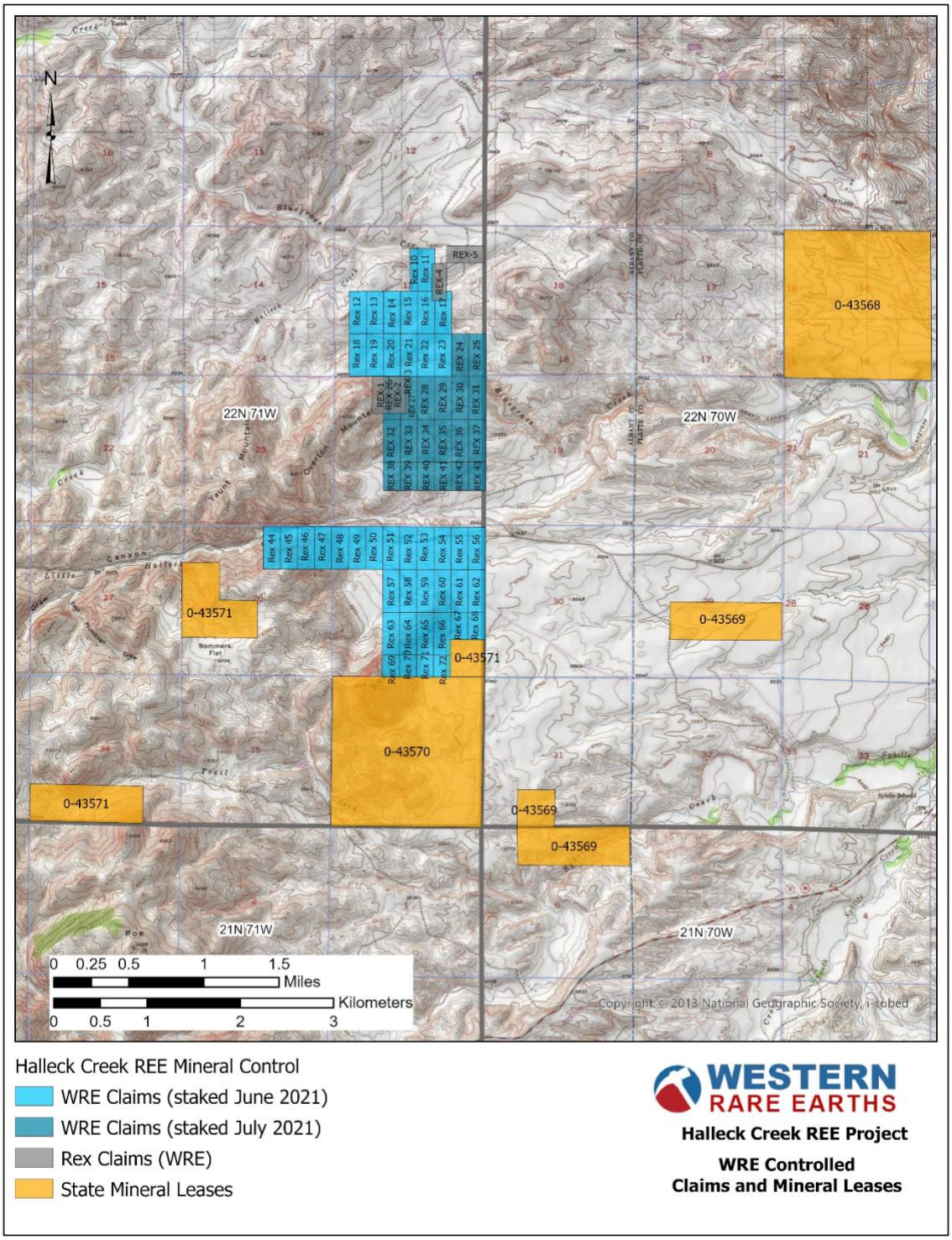

Figure 7 – Halleck Creek Claim and Lease Control

4.0 Environmental, Permitting and Community Issues

This is an early state exploration project and as such no environmental studies or permitting have been undertaken. The social impact of the project is currently unknown.

5.0 Exploration Target Tonnage Estimates

WRE built conceptual volumetric models covering the Overton Mountain and Red Mountain claim areas. The volumetric models were developed to estimate the volume of material within the claim areas and to evaluate surface sample grades exceeding TREO of 2,500 ppm. The upper surface of the models is topography. The lower surface of the models is set to an elevation of 1,720 meters, which is approximately 30 meters below the average elevation of 1,750 meters msl at the base of Overton Mountain and Red Mountain. The 30-meter depth of mineralization coincides with similar depths of mineralization observed at the La Paz REE project in Arizona.

WRE downloaded topographic data from the USGS national map covering the Halleck Creek project area. WRE created topographic models for the Overton Mountain and the Red Mountain areas using a 2-meter grid cell size.

Using the surface sample data points as guidelines, WRE created polygon blocks to represent Exploration Target extents (Figure 8). WRE created conceptual Exploration Target shells by draping the exploration target polygon blocks onto topography, then projecting the polygons downward, using a 45-degree angle, to an elevation of 1,720 meters msl.

WRE created a simple grid surface representing TREO in ppm using surface sample data covering the Halleck Creek project area. This TREO surface is not a true representation of TREO grades in three dimensions. However, the TREO surface does account for lateral variation in TREO grades in surface samples.

WRE estimated in-place Exploration Target tonnage and volume of material within the Overton Mountain shell and the Red Mountain shell. WRE used an average relative density of 2.68 g/cc to derive in-place tonnes from volume. The estimated volumes and tonnage do not represent mineable area. Permitting and environmental factors have not been accounted for in these

estimates. These estimates represent the total volume of material that occurs within these areas.

It must be clearly noted that these Exploration Target estimates are based on assumptions made from sparse geological data. The estimates cannot be construed as resources or reserves in any way shape or form.

Table 2 summarizes the estimated in-place Exploration Target volumes and tonnages for the Overton Mountain and Red Mountain areas. A range of 20% was applied to the volume, tonnage and TREO grade values.

Table 2 – Halleck Creek Exploration Target Estimates

Study Area	Area (ha)	Volume (million cu m)	In-Place Tonnage (million tonnes)	Average TREO Grade (ppm)	Mass TREO (million kg)
Overton Mountain	115	28.3 - 35.4	75.9 - 94.9	2,551 - 3,189	194 - 303
Red Mountain	149	86.5 - 108.2	231.9 - 289.9	2,258 - 2,822	524 - 818
Total	**264**	**114.8 - 143.6**	**307.8 - 384.7**	**2,330 - 2,912**	**717 - 1,120**

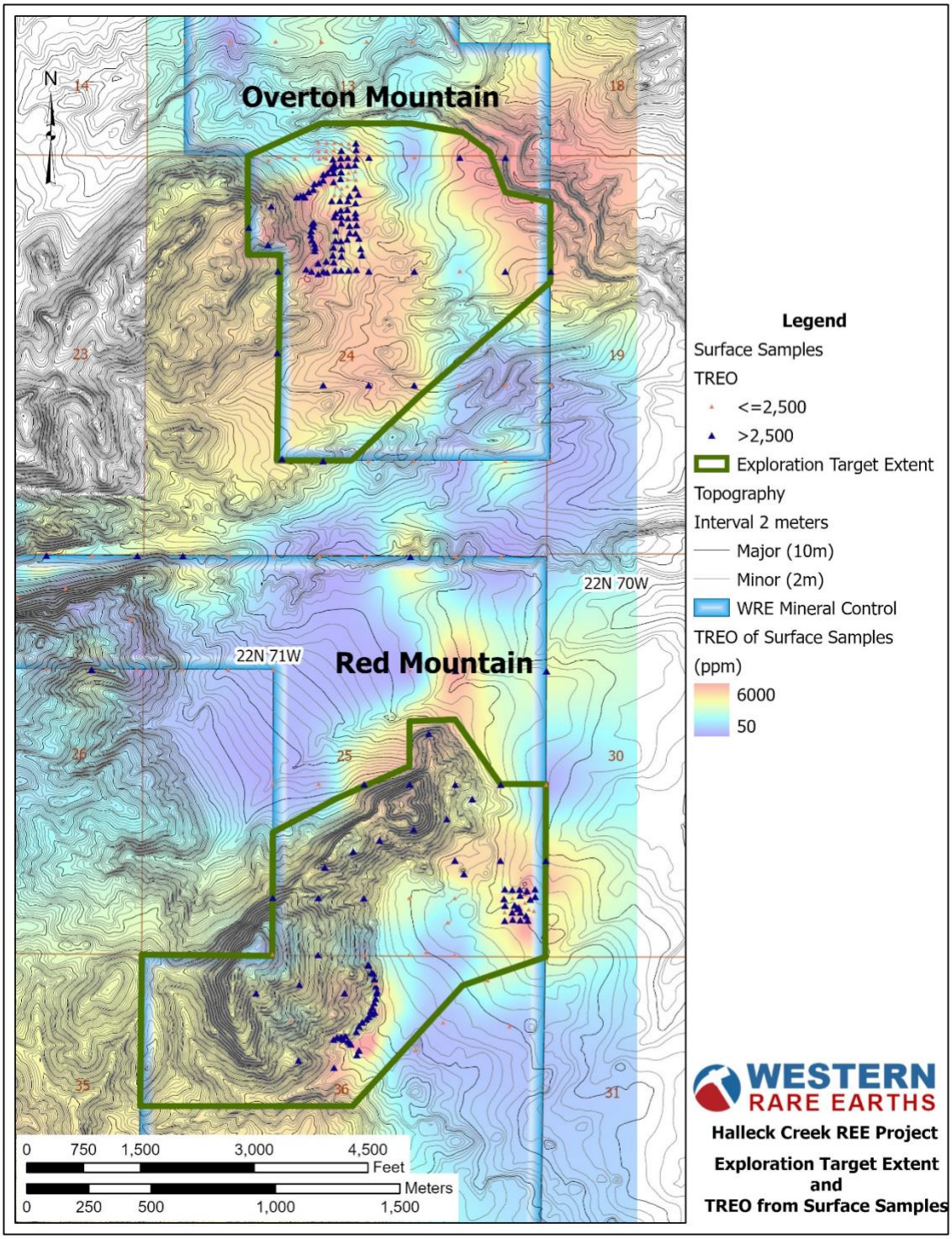

Figure 8 - Exploration Target Areas and TREO from Surface Samples

6.0 Halleck Creek Regional Exploration Drilling

WRE proposes to drill nine (9) exploration core holes, five on Overton Mountain, four on Red Mountain, with a total length of approximately 825 meters in the Halleck Creek project area to determine regional extent of mineralized depth (Figure 9).

The proposed holes in each of the respective sub-areas have been clustered in regions which show the highest potential for TREO concentration based on the favorable surface sampling results from the 2019 and 2021 programs. The hole locations are also restricted by ease of drill rig access. Each of the nine holes will be drilled to approximately 100 meters.

Results of the core drilling will provide initial observations of mineralization at depth, determine potential resource depths and lithologic boundaries, and provide fresh rock core material for detailed metallurgical and process testing. Preliminary geotechnical and hydrological data will also be acquired during this exploration program.

WRE is performing additional detailed geological mapping in conjunction with the exploration drilling.

WRE compiled a Notice of Intent for the Halleck Creek project area and submitted the documentation to the BLM and Wyoming Department of Environmental Quality (WDEQ) for approval. WRE hopes to begin exploration drilling in Q1 2022 or early Q2 2022 depending on time required for BLM and WDEQ approvals.

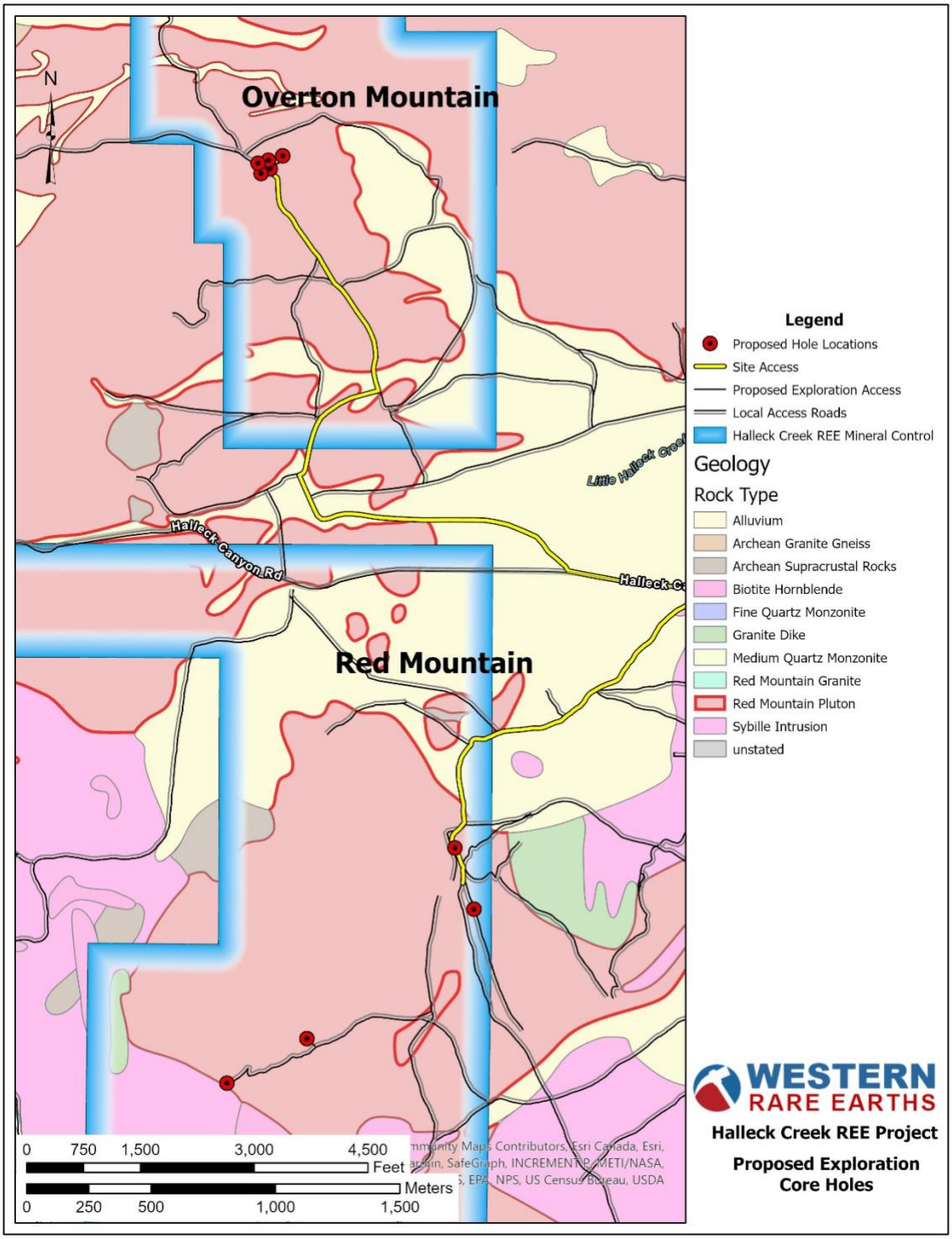

Figure 9 – Halleck Creek Proposed Drilling

7.0 Certificates of Qualifications

CERTIFICATION OF QUALIFICATIONS

Dwight M. Kinnes, CPG (Author)

Chief Technical Officer

American Rare Earths, Ltd.

I, DWIGHT M. KINNES, Qualified Professional Member (QP) #4063295RM of the Society of Mining Engineers (SME), HEREBY CERTIFY THAT:

1. I am currently employed as chief technical officer with American Rare Earths, Ltd, with an office in Centennial, CO 80122.

2. I am a graduate of Colorado State University, with a B.S. degree in Geology (1986), I have been practicing my profession since 1986.

3. I am a registered member of the Society Of Mining Engineers (SME), number 4063295.

4. From 1986 to present I have been actively employed in various capacities in the mining industry in numerous locations in North America, South America, Asia, Australia, and Europe.

5. I am the Co-Author of the Technical Report titled "Exploration Target Summary of the Halleck Creek Project Area" dated November 1, 2021 (the "Technical Report") and accept professional responsibility for all sections of this report.

6. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, The Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

7. I am employed by American Rare Earths, Ltd.

8. I consent to the filing of this Technical Report with any stock exchange and other regulatory authority and publication by them, including publication of this Technical Report in the public company files on their websites accessible by the public.

DATED in Centennial, Colorado, USA this 1st day of November, 2021.

Dwight M. Kinnes, CPG (4063295RM – SME)

CERTIFICATION OF QUALIFICATIONS
JAMES R. GUILINGER
CONSULTING GEOLOGIST
WORLD INDUSTRIAL MINERALS LLC

I, JAMES R. GUILINGER, Qualified Professional Member (QP) #01260280RM of the Society Of Mining Engineers (SME), HEREBY CERTIFY THAT:

1. I am currently employed as a consulting geologist with World Industrial Minerals LLC, PO Box 130, Arvada, Colorado, USA 80004.

2. I am a graduate of the University of Colorado, with a B.A. degree in Geology (1973), I have been practicing my profession since 1974.

3. I am a member of the Society Of Mining Engineers (SME) RM, number 01260280 RM.

4. From 1974 to present I have been actively employed in various capacities in the mining industry in numerous locations in North America, Asia, Europe and the Middle East.

5. I have read the Technical Report titled "Exploration Target Summary of the Halleck Creek Project Area" dated November 1, 2021 (the "Technical Report) and concur with the findings in this report as presented by the Author.

6. I have had extensive prior involvement working in rare earths and on rare earths properties similar to Searchlight since the mid 1980's in various capacities as an employee of mining companies and as a consulting geologist.

7. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, The Technical Report Contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

8. I am independent of ARR.

9. I consent to the filing of this Technical Report with any stock exchange and other regulatory authority and publication by them, including publication of this Technical Report in the public company files on their websites accessible by the public.

DATED in Arvada, Colorado, USA this 1st day of November, 2021.

James Guilinger RM01260280

CERTIFICATION OF QUALIFICATIONS

Sara V. Stotter, MS (Author)

Geologist

Western Rare Earths, Inc.

I, SARA V. STOTTER, HEREBY CERTIFY THAT:

1. I am currently employed as a geologist with Western Rare Earths, Inc, with an office in Laramie, WY 82070.

2. I am a graduate of Bucknell University, with a B.S. degree in Geology (2016), and a graduate of the University of Montana, with a M.S. degree in Geology (2019), I have been practicing my profession since 2019.

3. From 2019 to present, I have been actively employed in capacities related to the mining industry in various locations throughout the United States.

4. I am the Co-Author of the Technical Report titled "Exploration Target Summary of the Halleck Creek Project Area" dated November 1, 2021 (the "Technical Report") and accept professional responsibility for all sections of this report.

5. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, The Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

6. I am employed by Western Rare Earths, Inc.

7. I consent to the filing of this Technical Report with any stock exchange and other regulatory authority and publication by them, including publication of this Technical Report in the public company files on their websites accessible by the public.

DATED in Laramie, Wyoming, USA this 1st day of November, 2021.

Sara V. Stotter, MS

8.0 Documentation

Anderson, J.L., 1983, Petrology and geochemistry of the Red Mountain pluton, Laramie Anorthosite Complex, Wyoming [Ph.D. thesis]: University of Wyoming, 164 p.

Anderson, C.I., Frost, C.D., and Frost, B.R., 2003, Petrogenesis of the Red Mountain pluton, Laramie anorthosite complex, Wyoming: implications for the origin of A-type granite: Precambrian Research, v. 124, p. 243-267, doi:10.1016/S0301-9268(03)00088-3.

Frost, C.D., Frost, B.R., Lindsley, D.H. , Chamberlain, K.R., Swapp, S.M., and Scoates, J.S., 2010, Geochemical and Isotopic Evolution of the Anorthositic Plutons of the Laramie Anorthosite Complex: Explanations For Variations in Silica Activity and Oxygen Fugacity of Massif Anorthosites: The Canadian Mineralogist, v. 48, p. 925-946, doi: 10.3749/canmin.48.4.925.

World Industrial Minerals, 2021, "2021 Technical Report on the Wyoming Halleck Creek Rare Earths Project: Western Rare Earths".

Appendix A – JORC Table 1

JORC Code, 2012 Edition – Table 1 Halleck Creek Exploration Area		
Section 1 Sampling Techniques and Data		
(Criteria in this section apply to all succeeding sections.)		
Criteria	***JORC Code explanation***	**Commentary**
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	• Individual grab rock samples were collected by hand at the surface, from in-situ outcrops. A select number of cut channel samples were additionally collected by hand at the surface in-situ.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• Grab samples are believed to be representative of the outcrops they came from.
	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.	• 1-2kg rock samples were collected by a geologist, samples were broken using a hammer from outcrop. Rock samples were crushed in the laboratory and then pulverized before analysis.

Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or another type, whether the core is oriented and if so, by what method, etc.).*	• No drilling.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	• No drilling.
	Measures are taken to maximise sample recovery and ensure the representative nature of the samples.	• No drilling.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• No drilling.
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.*	• Rock samples were geologically described and photographed according to consistent internal protocol and standards.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	• No logging.
	The total length and percentage of the relevant intersections logged.	• No logging.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	• No drilling.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	• No drilling.

	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	• Samples were analysed at ALS Laboratories in Reno Nevada: the samples were crushed, pulverized and assayed by ICP-ME MS81 for REE.
	Quality control procedures adopted for all sub-sampling stages to maximise the representivity of samples.	• ~2kg of rock was crushed and pulverized and a subsample was taken in the laboratory and sent for analysis.
	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.	• Grab sampling was selective based upon geological observations.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	• 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	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• The samples were crushed and assayed for 34 elements by fusion ICP-MS. The procedure will report near total results.
	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.	• No geophysical tools used in the sampling program.
	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.	• Internal laboratory standards were analyzed with rock samples.
	The verification of significant intersections by either independent or alternative company personnel.	• Consulting company personnel have observed the assayed samples.

Verification of sampling and assaying	*The use of twinned holes.*	• No drilling.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• Field data were all recorded in field notebooks and sample record books and then entered into a digital database.
	Discuss any adjustment to assay data.	• No adjustments were made.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Sample location is based on GPS coordinates +/- 5m accuracy.
	Specification of the grid system used.	• The grid system used to compile data was NAD83 Zone 13N.
	Quality and adequacy of topographic control.	• Topography control is +/- 10m.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	• Both randomly spaced and channeled surface chip sampling.
	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.	• The data alone will not be used to estimate mineral resource or ore reserve.
	Whether sample compositing has been applied.	• None.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• Rock samples were taken of selected outcrops that were considered representative of varying rock types.
	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.	• No drilling.

Sample security	*The measures are taken to ensure sample security.*	• Samples were kept in numbered bags until delivered to the laboratory.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• 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	*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.*	• Wyoming Rare Earths Project Acquisition – 5 Unpatented mining claims on BLM US Federal Land totaling 71.6 acres (29 has) were acquired from Zenith Minerals Ltd. • Sixty seven (67) additional unpatented mining claims were staked by ARR that totaled 1193.3 acres (482 has). Overall, the ARR subsidiary controls 3101 acres (1255 has) of mining claims and Wyoming State Leases.
	The security of the tenure held at the time of reporting and any known impediments to obtaining a licence to operate in the area.	• No impediments to holding the claims exist. To maintain the claims an annual holding fee of $165/claim ($11,880.00) is payable to the BLM. To maintain the State leases minimum rental payments of $1/acre for 1-5 years; $2/acre for 6-10 years; and $3/acre if held for 10 years or longer.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• Prior to sampling by WIM on behalf of Blackfire Minerals and Zenith Minerals there was no previous sampling by any other groups within the ARR claim and Wyoming State Lease blocks.
Geology	*Deposit type, geological setting and style of mineralisation.*	• The REE's occur within allanite which occurs as a variable constituent of the Red Mountain Pluton. The occurrence can be characterized as a disseminated type rare earth deposit.
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:*	• No drilling.
	easting and northing of the drill hole collar	• No drilling.
	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.	• No drilling.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	• No high-grade cutting.
	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.	• No aggregation used.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	• No metal equivalents used.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	• No drilling.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	• No drilling.
	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').	• No drilling.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to, a plan view of drill hole collar locations and appropriate sectional views.*	• See Figures 2 through Figure 8 in body of Report.
Balanced reporting	*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.*	• The average grade of the TREOS's calculated from the collected of 268 samples is 26045 ppm. The lowest grades collected were less than 10 ppm TREO, the highest 5553 ppm; less than 10ppm HREO, the highest 518 ppm; less than 10 ppm magnet minerals oxide, 1433 ppm the highest grade.

Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported, including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• In hand specimen this rock is a red colored, hard and dense granite with areas of localized fracturing. The rock shows significant iron staining and deep weathering. • Microscopic description: In hand specimen the samples represent light colored, fairly coarse-grained granitic rock composed of visible secondary iron oxide, amphibole, opaques, clear quartz and pink to white colored feldspar. All of the specimens show moderate to strong weathering and fracturing. Allanite content is variable from trace to 2%. Rare Earths are found within the allanite. • Metallurgical testing to date consisted of concentrating the allanite by both gravity and magnetic separation. The rare earth rich allanite concentrate will be further evaluated for extracton of the rare earths.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Further mapping and sampling is planned leading to drill targets.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• In the main body of the report, see Figure 8 for proposed drill hole locations.

Appendix B – Zenith Minerals Assay Data (ppm) from 2018 Sampling Program

Sample_ID	TREO	LREO	HREO	MREO	La2O3	Ce2O3	Pr2O3	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb2O3	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ThO2	UO2
RMP-001	2949	2577	372	697	579	1265	134	510	88	197	9	64	9	45	8	20	3	16	2	45	7
RMP-002	3170	2705	466	703	597	1382	136	504	88	265	8	70	10	53	10	26	4	20	3	47	7
RMP-003	1641	1302	340	394	297	599	70	280	54	191	12	44	6	38	7	20	3	18	3	28	9
RMP-004	1334	1011	325	327	194	482	55	229	50	181	12	41	6	37	7	20	3	17	2	21	5
RMP-005	4808	4412	394	1113	985	2248	224	834	123	190	15	78	9	47	8	21	3	19	3	79	6
RMP-006	3909	3530	379	953	819	1701	188	714	106	190	16	69	9	44	7	20	3	18	3	61	5
RMP-007	4260	3828	432	993	898	1886	198	737	107	230	13	75	9	49	9	22	3	20	3	68	7
RMP-008	4202	3627	576	996	862	1726	195	724	116	328	12	87	12	66	12	32	4	24	4	52	5
RMP-009	1277	989	289	317	216	447	56	224	44	168	8	37	5	31	6	16	2	14	2	16	3
RMP-010	2555	2189	367	586	494	1086	113	426	71	210	7	54	8	40	8	20	3	16	3	45	5
RMP-011	6013	5304	709	1520	1214	2481	300	1113	188	353	16	140	18	91	15	38	4	29	4	99	11
RMP-012	3975	3457	519	971	766	1671	183	709	125	260	13	99	13	66	11	29	3	21	3	72	8
RMP-013	4461	4066	394	1081	945	1972	220	804	123	188	13	83	10	49	8	21	3	17	3	89	10
RMP-014	4008	3557	451	917	762	1836	179	671	111	229	10	82	11	57	10	25	3	20	3	93	9
RMP-015	3746	3310	435	882	714	1671	170	645	111	213	12	85	11	56	9	24	3	18	3	73	7
RMP-016	3896	3568	327	930	816	1763	188	694	107	150	13	71	8	41	6	17	2	13	2	79	9
RMP-017	429	370	60	101	88	176	20	73	12	30	4	9	1	7	1	3	0	3	0	16	2
RMP-018	467	357	110	112	76	167	20	79	16	58	10	13	2	11	2	6	1	5	1	14	4
RMP-019	2120	1889	231	472	412	983	93	345	58	115	8	42	5	29	5	13	2	11	2	52	5
RMP-020	504	459	45	109	97	248	23	80	13	21	3	8	1	5	1	2	0	2	0	16	2
RMP-021	3565	3217	347	841	721	1609	166	626	95	171	13	65	8	41	7	19	3	17	3	59	5
RMP-022	3517	3109	408	830	683	1554	160	612	101	207	13	71	9	50	8	23	3	20	3	54	6

RMP-023	4751	4307	444	1159	1048	2027	239	858	129	220	13	86	10	53	9	25	3	21	3	79	8
RMP-024	4880	4428	451	1158	1055	2144	239	856	131	224	14	87	11	54	9	25	3	21	3	84	7
RMP-025	1939	1638	302	466	349	805	86	338	59	163	8	45	6	35	6	18	2	16	2	33	4
RMP-026	3728	3105	625	858	710	1511	162	609	112	353	9	91	13	75	13	36	5	28	4	44	7
RMP-027	2691	2318	373	625	514	1153	121	451	79	199	8	61	8	45	8	22	3	18	3	50	5
RMP-028	3084	2623	462	730	569	1296	136	524	98	238	11	79	11	59	10	27	3	20	3	66	7
RMP-029	1917	1628	290	435	325	854	81	310	60	150	7	48	7	37	6	17	2	13	2	46	5
RMP-030	2990	2526	465	707	554	1241	131	505	95	242	12	79	11	60	10	26	3	19	3	50	11
RMP-031	3186	2763	423	747	595	1388	142	541	98	213	12	77	10	54	9	24	3	18	3	60	8
RMP-032	3730	3323	406	919	800	1548	178	680	112	199	13	82	10	51	8	21	3	16	3	67	6
RMP-033	3395	3033	362	831	691	1462	161	618	99	177	12	71	9	44	7	19	3	16	3	68	8
RMP-034	615	471	144	156	95	214	27	112	23	76	11	19	3	15	3	8	1	8	1	11	4
RMP-035	1179	916	263	302	177	427	51	216	44	142	10	38	5	30	5	16	2	14	2	18	6
RMP-036	3467	3022	445	864	721	1388	165	635	108	227	12	82	10	54	9	25	3	20	3	57	7
RMP-037	4412	3945	466	1029	828	2033	204	755	129	227	14	92	12	59	10	26	3	19	3	81	7
RMP-038	696	546	151	165	118	258	29	117	22	84	11	18	3	16	3	8	1	7	1	12	2
RMP-039	117	31	86	18	5	13	2	7	4	56	0	5	1	8	2	5	1	8	1	22	6
RMP-040	498	372	126	107	88	176	20	74	15	78	5	12	2	12	2	7	1	7	1	13	2
RMP-041	759	667	91	140	135	389	29	100	16	53	3	11	2	9	2	6	1	6	1	37	6
RMP-042	2456	1966	491	553	441	958	103	387	76	296	8	59	9	53	10	27	4	24	3	37	7
RMP-043	6730	5774	957	1589	1314	2801	316	1138	202	541	15	149	21	114	20	51	6	38	5	81	11
RMP-044	4480	4089	390	1024	907	2101	209	762	114	199	14	71	9	45	8	20	3	19	3	71	6
RMP-045	5161	4724	436	1222	1094	2334	257	905	132	220	15	83	10	50	9	22	3	19	3	85	7
RMP-046	3977	3599	377	924	800	1824	185	687	105	192	14	68	8	44	8	20	3	17	3	69	6
RMP-047	3708	3348	360	856	748	1695	170	637	99	184	14	64	8	42	7	19	2	17	3	61	5
RMP-048	4678	4274	402	1103	978	2125	232	816	123	203	15	75	9	47	8	20	3	18	3	76	6
RMP-049	4318	3929	388	1019	919	1929	208	759	113	197	15	72	9	44	8	20	3	17	3	70	6

RMP-050	3825	3467	357	884	769	1763	178	658	101	183	14	64	8	41	7	18	2	16	3	63	6
RMP-051	3519	3163	356	824	705	1585	164	612	98	182	14	63	8	41	7	19	3	16	3	58	5
RMP-052	3847	3478	368	922	816	1683	187	685	105	187	15	67	8	43	7	19	2	17	3	63	5
RMP-053	4501	4117	383	1047	937	2070	214	781	117	192	15	71	9	44	8	20	3	18	3	75	6
RMP-054	3610	3275	334	829	718	1683	167	616	94	168	13	61	8	39	7	17	2	16	3	60	6
RMP-055	3818	3470	347	900	795	1720	182	671	102	175	14	64	8	40	7	18	2	16	3	65	6
RMP-056	3978	3589	388	908	807	1824	182	673	105	204	12	67	8	45	8	20	3	18	3	73	6
RMP-057	3624	3268	355	851	762	1603	173	631	98	185	13	62	8	40	7	19	2	17	3	64	5
RMP-058	3866	3507	358	890	820	1744	180	661	102	185	12	65	8	42	7	18	2	16	3	67	6
RMP-059	3965	3579	385	922	828	1775	186	682	107	199	12	69	9	45	8	20	3	17	3	66	5
RMP-060	4643	4213	429	1093	996	2058	230	804	125	220	13	80	10	50	9	22	3	20	3	78	6
RMP-061	3809	3426	382	871	787	1720	175	645	100	203	12	65	8	43	8	20	3	18	3	70	6
RMP-062	4137	3732	405	943	827	1910	188	698	111	209	12	73	9	49	8	21	3	18	3	73	6
RMP-063	2527	2254	273	607	516	1093	118	450	74	135	11	52	7	32	6	14	2	12	2	50	6
RMP-064	2461	2215	246	579	507	1092	115	430	70	123	11	46	6	29	5	13	2	11	2	54	5
RMP-065	2951	2666	284	701	618	1302	139	523	83	142	12	55	7	33	6	14	2	12	2	59	8
RMP-066	2628	2342	286	628	534	1142	122	465	77	143	12	54	7	34	6	14	2	13	2	49	7
RMP-067	2668	2382	286	634	529	1182	125	469	77	144	12	53	7	34	6	15	2	13	2	52	6
RMP-068	2548	2289	259	602	523	1126	119	447	72	130	11	47	6	31	5	13	2	12	2	49	5
RMP-069	2595	2286	310	632	538	1075	123	468	78	166	11	54	7	34	6	15	2	13	2	56	6
RMP-070	2503	2234	269	602	502	1093	117	447	74	133	12	51	6	32	5	14	2	12	2	48	5
RMP-071	2812	2519	293	684	582	1206	135	509	85	144	12	57	7	35	6	15	2	13	2	55	6
RMP-072	3730	3379	350	880	771	1671	176	654	107	173	12	70	9	42	7	17	2	14	2	75	7
RMP-073	2993	2703	289	705	619	1333	141	523	87	143	11	56	7	35	6	15	2	12	2	63	9
RMP-074	3283	2972	310	777	683	1462	154	577	95	152	11	62	8	38	6	16	2	13	2	67	7
RMP-075	2839	2529	309	680	570	1241	132	503	83	148	12	64	8	38	6	16	2	13	2	54	5
RMP-076	2999	2670	329	729	622	1278	141	540	87	159	11	67	8	40	7	17	2	13	2	58	6

RMP-077	2881	2558	322	692	568	1259	134	511	86	157	11	65	8	39	7	17	2	13	2	55	6
RMP-078	3196	2836	360	784	644	1364	149	582	95	176	11	73	9	44	7	19	2	15	2	63	7
RMP-079	2716	2397	318	646	507	1211	123	476	81	156	11	63	8	39	7	17	2	14	2	54	6
RMP-080	3124	2704	421	753	577	1339	142	548	97	211	12	78	11	52	9	23	3	18	3	55	6
RMP-081	3261	2831	431	790	609	1394	149	577	101	215	12	82	11	54	9	23	3	18	3	58	6
RMP-082	3626	3159	467	864	663	1591	163	631	112	236	12	89	12	59	10	25	3	19	3	62	6
RMP-083	3303	2857	446	799	597	1425	149	582	104	226	12	82	11	57	10	24	3	18	3	65	6
RMP-084	3295	2858	438	806	626	1382	152	590	105	222	12	82	11	54	9	24	3	18	3	58	7
RMP-085	3762	3326	436	907	719	1652	173	668	113	216	13	85	11	54	9	24	3	17	3	69	7
RMP-086	3671	3247	423	904	711	1578	174	668	114	211	12	85	11	52	9	22	3	17	2	68	7
RMP-087	2604	2333	272	623	509	1165	121	462	76	133	9	54	7	33	6	15	2	11	2	63	7

Appendix C – Surface Sampling Assay Data (ppm) from 2021 Program

Sample_ID	TREO	LREO	HREO	MREO	La2O3	Ce2O3	Pr2O3	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb2O3	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ThO2	UO2
L001	1528	1242	287	359	234	635	64	259	51	159	11	38	5	31	6	18	2	16	2	27	4
L002	1056	822	235	261	157	397	44	185	38	126	11	32	5	27	5	15	2	12	2	18	3
L003	1771	1491	281	421	274	778	75	307	58	146	12	43	6	33	6	16	2	15	2	30	3
L004	1521	1254	268	352	216	673	61	254	52	140	12	40	6	31	6	16	2	14	2	25	4
L005	2245	1977	267	515	367	1070	97	381	66	134	12	47	6	32	5	15	2	13	2	38	4
L006	906	715	191	227	128	351	38	162	35	100	9	28	4	22	4	11	1	10	2	15	2
L007	2980	2706	274	666	571	1431	129	498	80	133	12	50	6	33	5	15	2	14	2	48	4
L008	4092	3748	343	928	812	1953	184	695	108	166	12	68	8	42	7	18	2	17	3	73	5
L009	2637	2287	350	639	440	1178	118	471	82	179	12	59	7	43	7	21	2	17	3	42	5
L010	2118	1825	293	502	357	941	92	370	67	151	12	49	6	34	6	17	2	14	2	32	3
L011	1395	1159	237	337	230	575	62	244	48	125	11	36	4	26	5	13	2	12	2	23	3
L012	670	490	181	170	100	216	29	117	26	103	7	22	3	20	3	11	1	10	1	10	2
L013	1224	1003	221	295	199	495	53	214	41	119	10	31	4	24	4	13	2	12	2	21	3
L014	1322	1054	268	351	223	461	60	254	53	142	11	41	5	31	6	16	2	14	2	17	3
L015	3730	3395	334	866	788	1689	170	649	100	164	12	63	8	40	7	18	2	16	2	61	5
L016	3684	3352	331	844	728	1732	166	631	98	161	12	63	8	40	7	18	2	16	2	60	5
L017	3573	3263	309	777	684	1763	153	580	91	151	11	57	7	38	6	17	2	16	2	60	4
L018	3429	3096	332	806	686	1554	156	603	98	163	12	63	8	40	7	19	2	16	2	60	4
L019	2989	2673	315	695	598	1339	133	518	86	160	9	58	7	37	6	18	2	15	2	45	4
L020	4986	4562	422	1122	961	2414	217	843	134	204	11	86	10	52	9	23	3	20	3	93	6
L021	4765	4381	382	1104	1016	2193	218	832	123	185	13	76	9	47	7	21	3	18	3	80	7
L022	3801	3472	327	877	774	1769	171	659	101	158	12	64	8	40	6	18	2	16	2	63	5
L023	3345	3040	304	779	678	1535	151	584	92	148	12	58	7	37	6	17	2	14	2	55	4
L024	2785	2495	289	641	551	1265	122	478	79	142	12	53	7	35	6	16	2	14	2	41	4
L025	2355	2063	292	511	386	1147	97	373	66	153	9	47	6	35	6	17	2	14	2	42	3
L026	1871	1564	307	447	298	806	81	324	57	166	9	45	6	37	6	19	2	15	2	33	7
L027	2197	1921	277	529	405	964	100	393	59	147	11	43	5	31	5	16	2	15	2	39	4

L028	2112	1809	304	509	354	925	94	374	63	164	10	47	6	35	6	17	2	14	2	35	3
L029	2631	2338	293	637	542	1122	122	477	74	152	11	50	6	33	6	16	2	14	2	44	5
L030	4856	4437	417	1182	1014	2168	233	892	128	204	15	83	9	49	8	23	3	20	3	82	6
L031	2282	1975	307	567	436	945	106	420	67	163	11	51	6	36	6	17	2	14	2	40	4
L032	2026	1741	285	494	365	862	92	364	58	152	11	44	6	33	6	17	2	14	2	35	5
L033	2257	1975	283	536	410	1005	102	397	61	150	11	44	6	32	6	17	2	14	2	41	4
L034	3267	2915	351	794	681	1394	153	595	89	184	13	60	7	40	7	20	2	17	2	56	4
L035	3789	3431	358	926	790	1658	178	699	102	178	13	68	8	42	7	19	2	17	2	63	5
L036	3539	3160	379	843	726	1548	162	629	94	196	13	66	8	45	8	21	3	17	2	64	5
L037	2169	1857	312	508	355	975	95	371	63	167	11	48	6	36	6	18	2	15	2	42	5
L038	2233	1904	329	536	361	989	99	392	65	180	10	47	6	38	7	20	2	17	2	45	5
L039	3168	2790	378	766	642	1345	146	568	87	201	12	62	8	45	7	22	3	17	2	63	5
L040	2697	2362	336	648	541	1144	121	482	73	179	11	54	6	39	7	19	2	17	2	45	5
L041	3296	2942	354	781	652	1468	150	583	89	185	12	61	7	41	7	20	3	16	2	59	5
L042	3105	2751	353	776	646	1284	147	581	90	180	12	64	8	41	7	19	2	17	3	49	5
L043	3320	3020	299	786	667	1523	154	590	86	147	11	57	7	36	6	16	2	14	2	60	5
L044	3717	3363	353	907	774	1628	176	684	100	180	13	65	8	41	7	19	2	16	2	66	6
L045	3494	3159	334	845	742	1523	164	635	93	169	13	62	7	39	6	18	2	14	2	58	5
L046	3689	3251	437	837	802	1572	162	616	98	233	13	70	9	52	9	25	3	21	3	54	6
L047	4210	3804	405	993	911	1843	194	744	109	212	13	70	9	47	8	22	3	18	3	67	6
L048	3260	2939	320	794	688	1406	152	600	90	163	12	59	7	36	6	17	2	15	2	56	4
L049	3898	3561	336	913	787	1806	178	688	104	165	12	65	8	40	6	19	2	16	2	65	5
L050	3897	3552	344	987	803	1695	193	745	112	166	13	69	8	42	7	19	2	16	2	65	5
L051	3929	3542	386	954	820	1714	184	715	108	196	10	73	9	47	8	21	3	18	3	68	6
L052	3226	2879	346	781	661	1388	149	583	95	175	10	65	8	41	7	19	2	16	2	58	5
L053	4103	3727	375	971	809	1892	189	729	110	186	11	73	8	46	7	20	2	17	3	77	6
L054	3698	3347	350	891	753	1652	171	671	100	173	11	68	8	42	7	19	2	16	3	61	4
L055	4114	3739	374	999	870	1806	194	752	114	186	9	75	8	45	7	20	2	17	2	72	5
L056	3314	2986	328	793	668	1480	152	595	90	167	9	61	7	39	7	18	2	16	2	62	5
L057	3865	3481	383	924	809	1695	180	692	104	199	11	68	8	45	8	22	3	17	3	73	6

L058	3375	3046	329	820	699	1480	157	616	92	165	10	62	7	40	6	19	2	15	2	58	4
L059	3697	3325	371	888	758	1628	171	665	102	188	11	69	8	45	7	21	3	18	3	66	5
L060	3230	2940	289	745	637	1517	145	559	85	141	10	57	7	35	6	16	2	14	2	60	4
L061	2886	2507	379	697	561	1215	129	514	86	201	10	62	8	46	8	22	3	18	2	48	6
L062	3422	3050	372	802	724	1480	153	597	94	193	11	66	8	44	8	21	3	17	2	57	5
L063	3972	3614	356	942	854	1757	183	709	110	176	12	70	8	42	7	19	2	16	2	65	5
L064	3327	2997	329	755	642	1560	145	565	89	164	11	62	7	39	7	18	2	16	3	58	5
L065	3387	3035	351	780	664	1548	149	583	94	180	10	64	8	41	7	19	3	16	2	60	4
L066	3562	3159	403	824	728	1560	158	612	99	213	10	70	9	45	8	23	3	20	3	58	6
L067	3964	3583	380	945	881	1695	183	711	109	191	12	74	9	43	8	20	3	16	3	56	5
L068	3800	3430	369	902	771	1701	174	677	107	184	12	70	8	44	8	21	3	18	3	63	5
L069	4308	3919	388	990	873	1996	192	745	115	193	12	76	9	45	8	22	3	18	3	75	5
L070	4413	3994	418	1074	986	1861	209	807	124	209	12	84	10	49	8	23	3	18	3	70	5
L071	4274	3847	427	998	866	1922	191	748	120	215	12	82	10	49	9	23	3	20	3	70	5
L072	4134	3682	451	986	864	1769	188	737	121	238	12	80	10	52	9	25	3	20	3	73	6
L073	3802	3431	370	885	786	1707	170	664	104	188	11	69	8	43	7	20	3	18	3	62	5
L074	3765	3388	376	883	786	1664	169	663	106	191	11	72	8	44	7	21	3	17	3	64	5
L075	3081	2751	330	704	612	1394	133	526	86	173	9	59	7	38	6	18	2	16	2	56	4
L076	3304	2985	319	753	658	1529	144	566	90	162	10	59	7	37	6	17	2	15	2	57	4
L077	3661	3327	333	859	778	1634	167	646	101	168	10	65	8	38	7	18	2	15	2	62	5
L078	3687	3265	422	923	793	1486	172	691	117	213	12	83	10	51	9	22	3	16	3	61	6
L079	3381	3033	348	749	573	1671	140	556	99	168	11	68	8	44	8	20	2	15	2	67	8
L080	5759	5081	678	1415	1048	2530	260	1052	190	337	13	137	17	87	15	37	4	26	4	106	11
L081	4895	4346	549	1216	973	2076	229	906	157	272	13	111	14	68	12	30	4	22	3	79	7
L082	3325	2941	384	784	619	1492	147	582	102	197	11	71	9	47	8	21	3	16	2	64	6
L083	2155	1875	281	507	347	996	92	374	67	144	7	49	6	34	6	16	2	13	2	59	11
L084	2361	2103	258	554	410	1106	104	413	73	130	8	48	6	31	5	14	2	11	2	53	5
L085	2363	2071	292	559	399	1086	103	414	72	148	9	53	7	36	6	16	2	14	2	53	6
L086	3852	3396	456	926	729	1683	171	688	123	229	12	87	11	56	10	25	3	19	3	64	6
L087	3209	2851	358	755	592	1462	141	561	97	180	10	67	9	45	8	20	3	15	2	61	5

L088	5017	4507	509	1208	982	2242	228	905	150	254	13	101	12	63	11	27	3	21	3	80	7
L089	3495	3030	465	832	645	1511	151	612	111	243	12	80	11	58	10	27	3	19	3	59	7
L090	4208	3772	435	1015	844	1849	193	758	126	217	12	85	11	54	9	23	3	18	3	72	6
L091	3141	2791	350	728	610	1413	137	539	94	175	11	66	8	44	8	19	2	14	2	48	4
L092	2463	2215	247	574	447	1161	110	429	71	123	9	47	6	29	5	13	2	11	2	46	6
L093	3863	3418	445	899	704	1763	167	667	120	225	12	82	11	55	10	25	3	18	3	68	7
L094	3978	3580	397	949	800	1769	180	710	120	194	12	80	10	49	8	21	2	16	2	68	5
L095	3791	3366	426	921	722	1664	171	687	119	215	12	80	10	53	9	24	3	18	3	57	5
L096	2631	2310	321	644	469	1161	120	477	84	162	11	59	7	40	7	18	2	13	2	41	4
L097	2995	2612	384	694	459	1425	126	511	96	199	10	66	9	48	8	22	3	17	3	58	6
L098	2401	2096	305	568	443	1055	108	416	74	159	10	54	7	37	6	17	2	13	2	54	5
L099	3581	3147	433	844	681	1572	158	622	114	220	12	81	10	55	9	23	3	18	3	62	7
L100	3346	2951	395	785	654	1468	147	577	104	197	11	75	9	51	8	21	3	16	2	59	7
L101	2599	2245	354	631	462	1118	116	464	85	182	11	65	8	44	7	19	2	14	2	41	4
WR-01-021	2991	2558	433	736	537	1253	135	540	92	237	8	68	9	53	9	24	3	20	3	53	5
WR-01-022	2150	1836	315	514	433	861	98	374	67	179	6	47	6	35	6	17	2	15	2	32	3
WR-01-023	2400	2051	349	557	434	1034	106	405	73	196	7	52	7	39	7	20	3	17	3	43	4
WR-01-024	1483	1177	307	358	244	561	64	254	52	175	8	41	6	34	6	18	2	16	2	25	3
WR-01-025	1129	878	252	266	174	429	47	187	41	144	9	31	5	27	5	15	2	13	2	21	3
WR-01-026	877	637	240	220	118	294	37	152	36	138	9	28	4	26	5	14	2	13	2	14	3
WR-01-027	1855	1537	319	403	326	797	76	286	54	185	8	41	6	35	6	18	2	17	2	31	2
WR-01-028	99	75	24	19	14	42	4	13	3	15	0	2	0	3	0	1	0	2	0	16	3
WR-01-029	1924	1583	342	425	340	802	80	301	60	203	6	43	6	38	7	20	3	17	2	34	7
WR-01-030	2245	1873	373	533	405	911	99	383	74	210	7	55	8	43	8	22	3	18	3	38	4
WR-01-031	1697	1230	470	408	250	568	68	278	64	281	10	55	9	53	10	28	3	22	3	38	7
WR-01-032	1940	1653	287	468	331	829	87	344	62	153	12	45	6	32	5	16	2	14	2	32	4
WR-01-033	1172	1034	138	281	236	497	56	208	36	68	13	22	3	15	2	7	1	6	1	21	2
WR-01-080	232	191	41	54	42	91	10	39	8	23	2	5	1	4	1	2	0	2	0	12	4
WR-01-081	134	82	52	30	17	37	5	19	4	31	1	4	1	5	1	4	1	4	1	27	12
WR-01-082	53	31	22	10	7	14	2	7	1	13	0	1	0	2	0	2	0	2	0	18	4

WR-01-083	1407	1130	278	360	222	529	63	261	53	150	12	41	5	31	5	16	2	14	2	24	3
WR-01-084	3621	3279	342	844	746	1634	167	631	101	175	11	63	7	39	7	18	2	16	2	62	6
WR-01-085	143	28	117	22	4	9	2	8	4	77	0	7	2	10	2	7	1	9	1	22	7
WR-01-086	1524	1266	258	380	257	608	69	278	53	138	13	38	5	29	5	14	2	13	2	28	4
WR-01-087	505	350	156	97	83	175	18	61	14	101	0	12	2	16	3	10	2	10	1	32	8
WR-01-088	2582	2302	280	607	497	1158	118	451	77	145	10	51	6	32	5	15	2	12	2	48	5
WR-01-089	3025	2721	303	708	650	1314	139	526	90	152	11	58	7	36	6	16	2	13	2	54	4
WR-01-090	2079	1812	268	490	382	914	93	359	64	140	11	45	6	32	5	14	2	11	2	39	3
WR-01-091	635	521	114	133	123	262	27	93	17	68	2	12	2	11	2	8	1	8	1	93	18
WR-01-092	120	91	30	26	20	45	5	18	3	16	2	3	0	3	1	2	0	3	0	49	6
WR-01-093	276	221	55	57	49	114	11	39	7	34	1	6	1	6	1	3	1	3	0	72	6
WR-01-094	3316	2866	451	799	680	1345	154	577	104	232	13	79	10	57	9	25	3	18	3	56	5
WR-01-095	480	332	148	99	66	172	18	63	14	94	2	13	2	16	3	9	1	8	1	19	4
WR-01-096	121	76	45	26	18	31	5	18	4	30	0	4	1	4	1	2	0	3	1	31	5
WR-01-097	45	38	7	9	11	17	2	6	1	4	0	1	0	1	0	0	0	0	0	7	0
WR-01-098	2709	2302	408	668	489	1112	129	479	91	211	12	70	9	51	9	23	3	18	3	57	6
WR-01-099	1978	1647	332	499	335	787	91	362	70	173	13	56	7	40	7	19	2	14	2	28	4
WR-01-100	4296	3931	364	964	880	2033	199	714	110	173	15	74	9	43	7	20	2	16	3	68	5
WR-01-101	105	66	39	23	14	30	4	14	4	23	1	4	1	4	1	3	0	3	0	36	5
WR-01-102	239	186	53	51	41	94	10	34	7	32	1	6	1	6	1	3	0	3	0	59	8
WR-01-104	405	310	95	95	68	144	18	66	14	47	12	12	2	10	2	5	1	4	1	3	1
WR-01-105	502	333	170	96	80	163	17	58	15	105	1	14	3	18	4	13	2	12	1	36	12
WR-01-106	745	608	138	182	130	287	34	131	25	71	11	19	3	15	3	8	1	7	1	16	3
WR-01-107	224	173	51	45	42	86	9	30	6	30	2	6	1	5	1	3	0	3	0	19	4
WR-01-108	2790	2474	315	661	536	1241	132	486	80	159	11	57	7	36	6	18	2	16	2	47	5
WR-01-109	904	698	207	237	133	318	41	169	35	108	11	31	4	23	4	12	2	11	2	14	3
WR-01-110	1345	1095	251	328	208	545	61	234	46	133	13	36	5	28	5	15	2	13	2	22	4
WR-01-111	841	552	291	237	87	219	36	165	42	159	12	40	5	31	6	17	2	16	2	6	2
WR-01-112	188	129	59	38	28	62	7	25	6	37	1	5	1	5	1	4	1	4	1	35	7
WR-01-113	411	327	85	79	81	167	17	53	10	51	1	9	1	8	2	5	1	5	1	60	6

WR-01-114	3701	3273	428	847	758	1628	171	614	103	217	14	78	10	52	9	23	3	18	3	68	8
WR-01-115	3863	3385	478	884	713	1750	173	638	114	237	15	89	11	62	11	27	3	19	3	65	6
WR-01-116	3817	3317	501	886	773	1615	175	638	114	259	14	88	11	62	11	29	3	21	3	55	7
WR-01-117	2905	2457	449	688	482	1259	130	491	96	230	12	79	10	57	10	26	3	18	3	41	5
WR-01-118	2907	2351	558	722	491	1110	130	507	108	290	12	97	13	71	13	32	4	24	3	38	4
WR-01-119	160	101	60	35	23	45	6	22	5	35	1	6	1	6	1	4	1	4	0	11	2
WR-01-120	3399	2945	454	702	452	1775	135	499	99	229	12	81	11	58	10	27	3	20	3	71	6
WR-01-121	3521	3075	446	830	710	1492	163	602	106	224	13	85	10	55	9	25	3	19	3	58	6
WR-01-122	2583	2204	379	640	487	1048	126	458	83	194	12	66	9	47	8	22	3	17	3	37	5
WR-01-123	3541	3106	435	827	767	1468	167	600	102	227	13	78	10	51	9	23	3	18	3	49	6
WR-01-124	2882	2503	380	661	509	1302	130	476	88	191	12	69	9	47	8	22	3	17	2	54	6
WR-01-125	3180	2811	369	740	640	1388	148	539	95	182	11	72	9	45	8	20	2	16	2	59	6
WR-01-126	3323	2956	367	734	658	1529	150	531	91	184	12	68	9	46	8	20	2	16	2	61	6
WR-01-127	2535	2218	317	577	452	1162	115	416	76	157	10	59	7	39	7	19	2	14	2	46	5
WR-01-128	3251	2905	345	752	687	1425	153	549	90	170	12	67	8	42	7	19	2	15	2	61	8
WR-01-129	3056	2646	410	703	552	1364	136	505	91	207	11	73	9	52	9	24	3	19	2	58	6
WR-01-130	2638	2335	302	596	476	1235	119	433	76	150	12	55	7	37	7	17	2	13	2	50	5
WR-01-131	3159	2848	311	721	671	1413	147	528	88	149	12	64	7	38	6	17	2	13	2	60	6
WR-01-132	2382	2092	290	566	461	1036	114	413	68	149	12	51	6	33	6	17	2	13	2	46	5
WR-01-133	1806	1600	206	438	340	796	89	320	55	98	11	38	5	25	4	12	1	9	1	40	5
WR-01-134	563	487	76	106	122	258	24	73	12	45	1	9	1	8	2	5	1	5	1	89	8
WR-01-135	1536	1317	220	333	297	677	66	237	42	116	10	34	5	26	5	12	2	10	1	30	3
WR-01-136	759	539	221	219	82	224	34	155	42	114	10	36	5	26	5	12	2	10	2	10	5
WR-01-137	2624	2266	359	625	442	1176	114	456	81	180	11	64	8	47	8	21	2	15	2	45	5
WR-01-138	124	46	78	25	9	16	3	13	5	48	1	7	1	8	2	5	1	6	1	25	8