

Channel Sampling Program Highlights TREO Grades up to 13,651 ppm at Halleck Creek

HIGHLIGHTS

- Channel sampling across Cowboy State Mine returned TREO grades up to 13,651 ppm (1.37%)
- 15 of 106 samples exceeded 4,500 ppm TREO
- Magnet rare earth oxides (MREO) averaged 1,023 ppm, approximately 28% of total TREO composition
- Heavy Rare Earth Oxides (HREO) averaged 464 ppm, representing ~13% of TREO composition
- Results will be incorporated into the resource model in support of Pre-Feasibility Study, which remains on track for completion in late 2025

American Rare Earths Limited (ASX: ARR | OTCQX: ARRF | ADR: AMRRY) (ARR or the Company) is pleased to report the results from a mapping and channel sampling program across the Cowboy State Mine (CSM) area, part of the Halleck Creek Rare Earths Project in Wyoming. A total of 106 channel samples were collected across Red Mountain by geologists from Wyoming Rare (USA) Inc (WRI), ARR's wholly owned U.S. subsidiary, in collaboration with technical support from Geosyntec.

Assay results confirmed elevated rare earth mineralisation across the Red Mountain area, including a standout sample grading 1.37% (13,651ppm) Total Rare Earth Oxide (TREO). TREO grades of Red Mountain Pluton (RMP), the rare earth bearing rock type, ranged from 711 ppm to 13,651 ppm with an average of 3,661 ppm. On average, magnet rare earth oxides¹ (MREO) account for approximately 28% of the total rare earth content (1,023 ppm), while heavy rare earth oxides² (HREO) represent around 13% (464 ppm). A total of 15 samples exceeded 4,500 ppm TREO, indicating areas of elevated-grade material within the system. The complete assay data for the channel samples resides in Appendix B.

These results further highlight the southern portion of Red Mountain as hosting some of the highest-grade material observed to date for the CSM area (refer to Figures 1 and 2). The channel sampling data is currently being incorporated into an updated geological model and mineral resource estimate for the CSM area. This model will assist mine planning and support the Pre-Feasibility Study, which remains on track for completion in late 2025.

Chris Gibbs, Chief Executive Officer, said:

"Halleck Creek is shaping up to be the next major rare earths project in the United States. With the high-value core four magnet rare earths including neodymium, praseodymium, dysprosium and terbium consistently present across the Cowboy State Mine, we are advancing one of the few U.S. projects capable of supplying these critical materials at scale."

¹ MREO = Pr6O11, Nd2O3, Tb4O7, and Dy2O3

² HREO = Y2O3, Eu2O3, Gd2O3, Tb4O7, Dy2O3, Ho2O3, Er2O3, Tm2O3, Yb2O3, and Lu2O3



What's especially encouraging is the continued confirmation of these core four rare earths across the sampled area. In particular, terbium and dysprosium are vital for high-temperature magnet performance and remain in extremely limited supply outside of China. Based on our Scoping Study, they are expected to contribute over 25 percent of project revenues, despite representing a small percentage of overall tonnage.

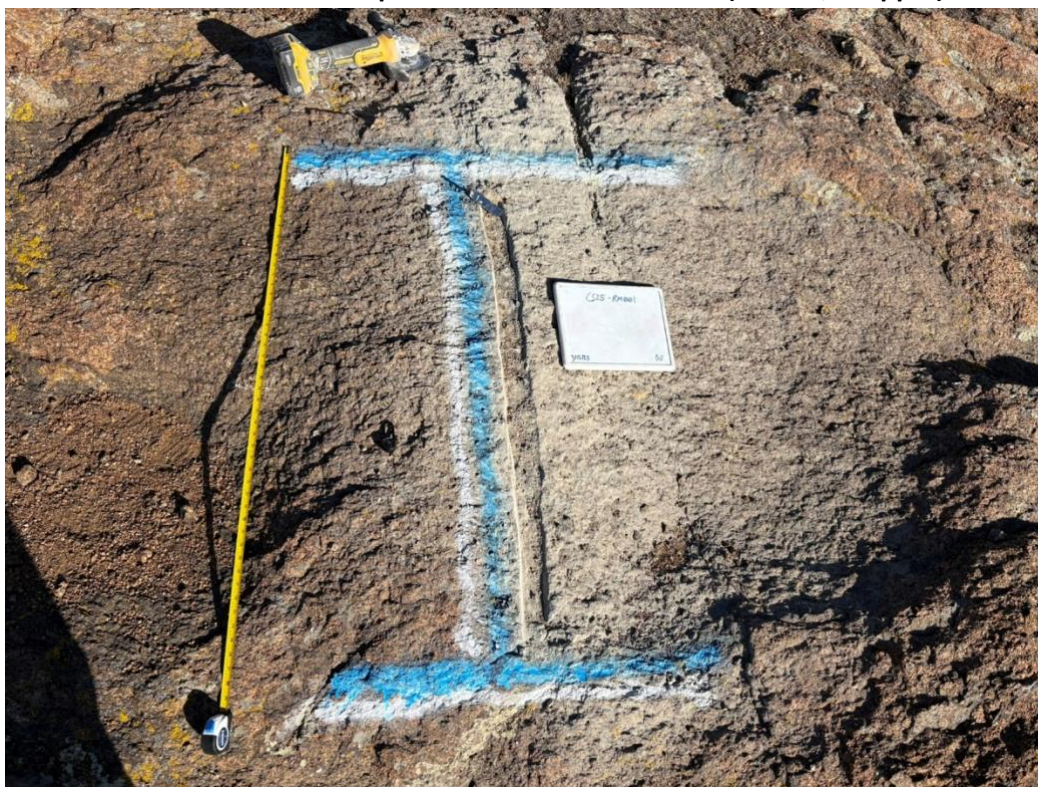
Importantly, we don't need federal permitting reform to move forward. Being located on State lands in Wyoming gives us a clear and streamlined path to development. With China's recent export bans on terbium and dysprosium, the national importance of Halleck Creek as a secure domestic source has never been clearer.

As outlined in our Updated Scoping Study³, a staged development could see first production as early as 2029. With its scale, simplicity and multi-generational resource potential, Halleck Creek has the attributes to become one of America's most significant rare earths projects."

Technical Data:

For each channel sample the location was marked with a metal ID tag and anchored to the outcrop. The location of each sample was collected using a field GPS unit using NAD1983 UTM Zone13 projection. The orientation of the channel sample was marked, geologically logged and photographed. Channel samples, one meter in length, were collected using diamond bladed angle grinders and chisels. The samples were bagged, tagged and stored in WRI's core storage facility.

Plate 1 – Channel Sample Location of CS25-RM001 (TREO 4,703 ppm)



The channel samples were submitted to ALS Global labs for assay using ALS method ME-MS81 and ME-ICP06.

³ ASX Announcement 7 March 2025

The results of the channel sampling program clearly met the objectives of providing well distributed sampling data across Red Mountain at the CSM. WRI may use these results to define detailed exploration and development drilling programs leading into definitive feasibility studies, after the successful completion of the CSM pre-feasibility study. The channel sample data also provides additional data being incorporated into pit designs at CSM for the pre-feasibility study.

The channel samples were collected within the allanite bearing Red Mountain Pluton (RMP) unit across Red Mountain. TREO grades of RMP channel samples range from 711 ppm to 13,651 ppm with an average of 3,661 ppm, see Figure 1. Of the TREO, heavy rare earth oxides (“HREO”) account for approximately 13% of the total composition with an average grade of 464 ppm. Likewise, the magnet rare earth oxides (“MREO”) account for approximately 28% of the total composition with an average grade of 1,023 ppm. The channel samples were spaced approximately 200 meters apart, providing coverage across Red Mountain.

The median average TREO of the channel samples for the RMP lithotype is 3,424 ppm, with a mean average of 3,661, see Chart 1. Chart 2 illustrates the normalized Chondrite plot of the RMP lithotype. The two charts illustrate the overall homogeneity of the Red Mountain Pluton.

Chart 1 – TREO Histogram of Channel Samples for the RMP Lithotype

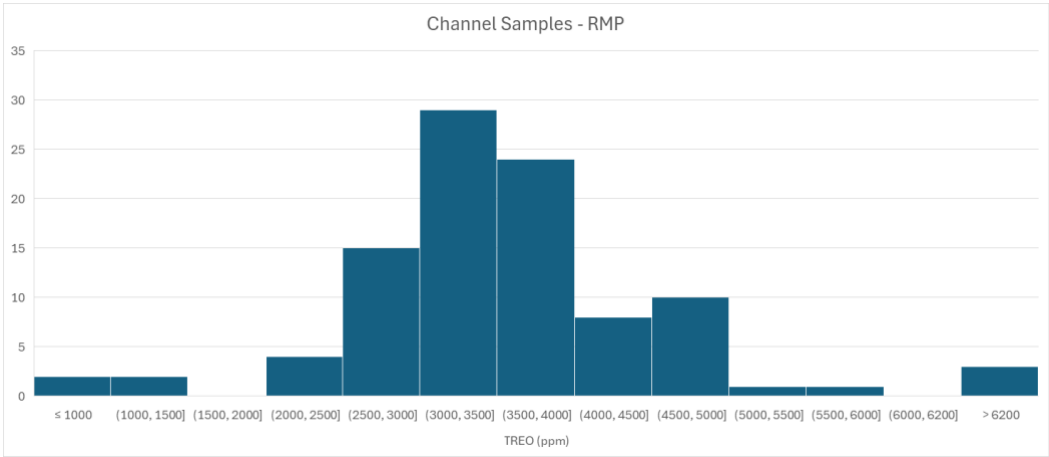
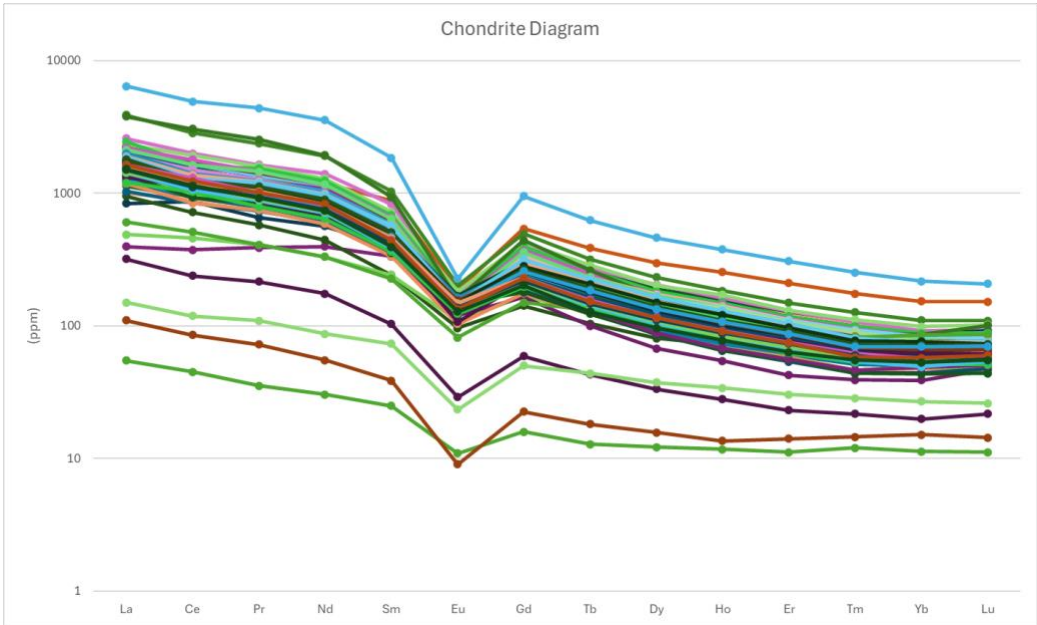


Chart 2 – Normalized Chondrite Plot of Channel Samples for the RMP Lithotype



The RMP unit on Red Mountain covers more than 99% of the area. Occasional, thin granitic intrusive sills or dikes outcrop, with thicknesses generally less than 1-meter. These granitic sills or dikes occasionally occur in drilling data and have little or no impact on overall TREO grade at the CSM. At these locations, WRI collected channel samples above, across, and below the granitic outcrops. Channel samples collected from seven (7) locations of granitic outcrops ranged from 159 ppm to 1,613 ppm TREO, with average grade of 427 ppm TREO. The channel samples of RMP adjacent to the granitic sills or dikes are unaffected by the intrusion and have TREO grades ranging from 3,007 ppm to 5,552 ppm.

WRI geologists updated geological maps based on lithological observations and analysis of geochemical assay data. Figure 1 shows the TREO grade and location of each channel sample. Figure 2 shows geological cross-sections through Red Mountain based on channel samples and drilling data.

The channel sampling results reported here are being incorporated into an updated geological model and Mineral Resource Estimate for the Cowboy State Mine area. This updated Mineral Resource Estimate, and any associated changes to mine planning or project economics, will be reflected in the Pre-Feasibility Study currently underway and expected to be completed later in 2025.

As part of other exploration, WRI also performed channel sampling in the Bluegrass and Countyline area of the Halleck Creek Rare Earths project. ARR will release that information to the market as it becomes available.

In February, WRI submitted a permit application to the Wyoming Department of Environmental Quality with drill hole locations for future development drilling across the CSM. Permitting these holes preemptively gives WRI the option to potentially perform developmental drilling at the CSM once the pre-feasibility study has been completed.

This release was authorised by the Chairman of American Rare Earths.

Investors can follow the Company's progress at www.americanree.com

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Competent Person(s) Statement:

Competent Persons Statement: The information in this document is based on information compiled by personnel under the direction of Mr. Dwight Kinnes. This work was reviewed and approved for release by Mr. Dwight Kinnes (Society of Mining Engineers #4063295RM) who is employed by American Rare Earths and has sufficient experience which is relevant to the style of mineralization 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 JORC Code. Mr. Kinnes consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

About American Rare Earths Limited:

American Rare Earths (ASX: ARR | OTCQX: ARRNF | ADR: AMRRY) is a critical minerals company at the forefront of reshaping the U.S. rare earths industry. Through its wholly owned subsidiary, Wyoming Rare (USA) Inc. (“WRI”), the company is advancing the Halleck Creek Project in Wyoming—a world-class rare earth deposit with the potential to secure America’s critical mineral independence for generations. Located on Wyoming State land, the Cowboy State Mine within Halleck Creek offers cost-efficient open-pit mining methods and benefits from streamlined permitting processes in this mining-friendly state.

With plans for onsite mineral processing and separation facilities, Halleck Creek is strategically positioned to reduce U.S. reliance on imports—predominantly from China—while meeting the growing demand for rare earth elements essential to defense, advanced technologies, and economic security. As exploration progresses, the project’s untapped potential on both State and Federal lands further reinforces its significance as a cornerstone of U.S. supply chain security. In addition to its resource potential, American Rare Earths is committed to environmentally responsible mining practices and continues to collaborate with U.S. Government-supported R&D programs to develop innovative extraction and processing technologies for rare earth elements.

Figure 1 – TREO Map of Channel Samples and Surface Geochemical Samples at the CSM area

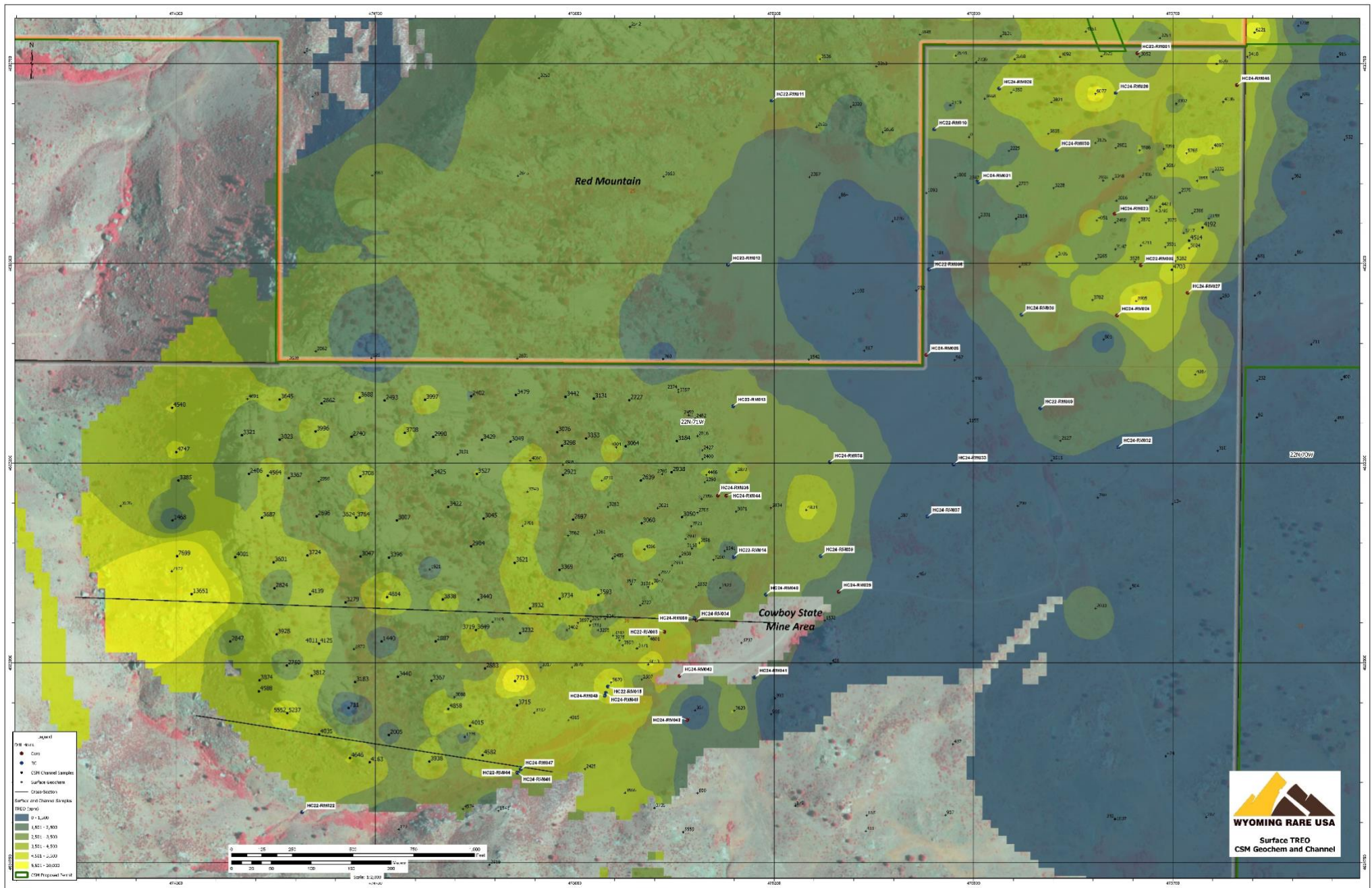
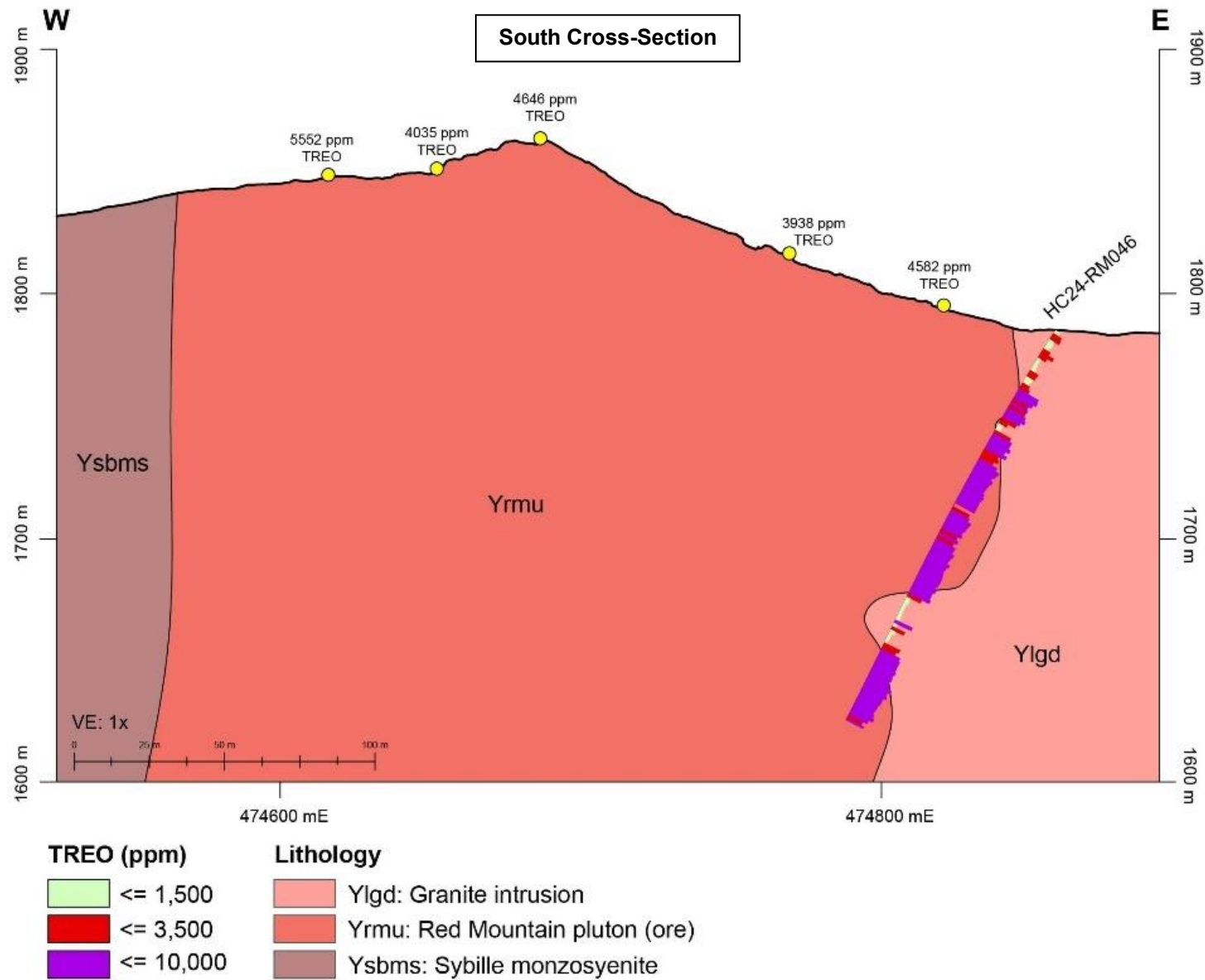
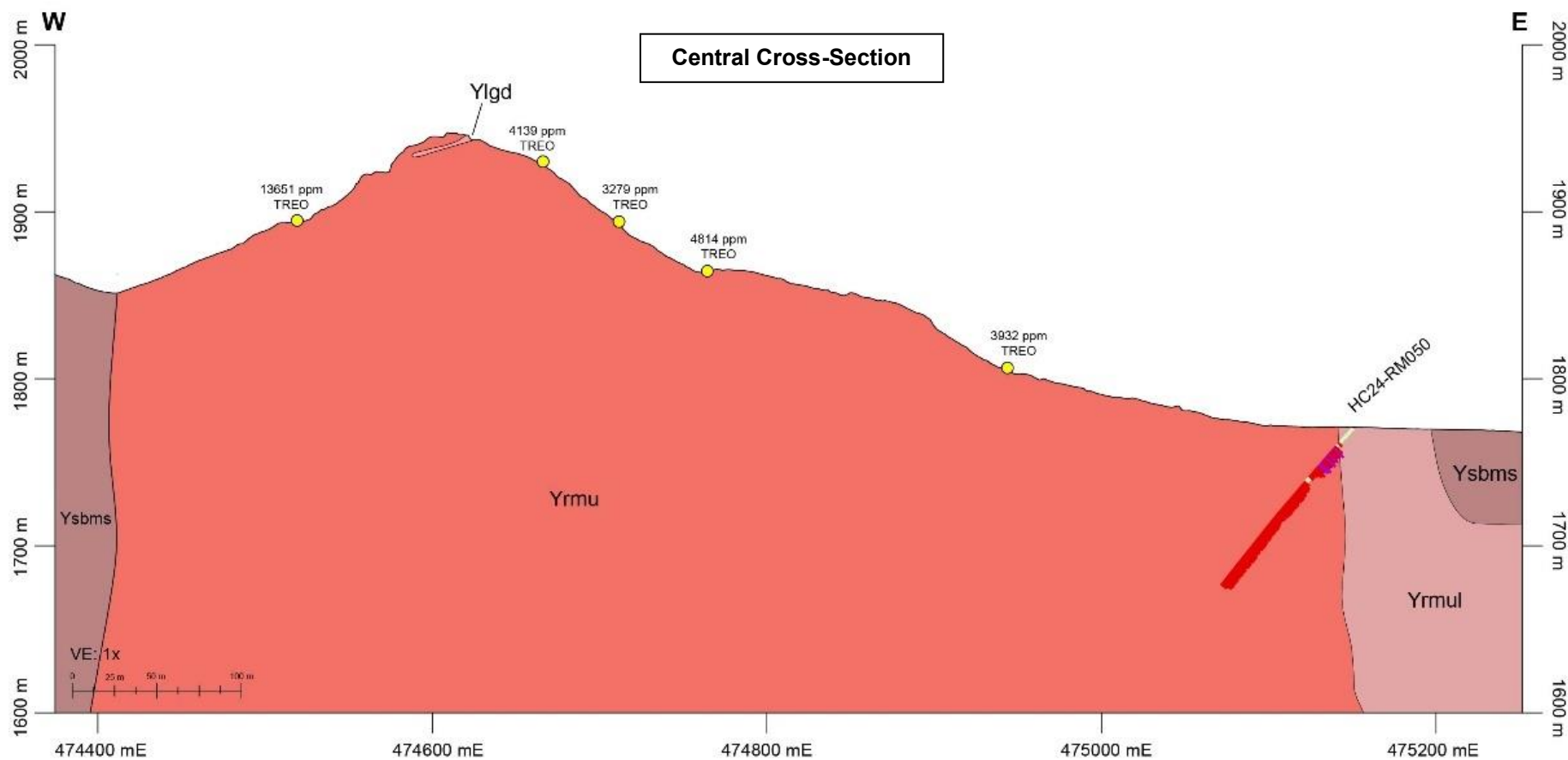


Figure 2 – Cross-Sections through the Cowboy State Mine Area



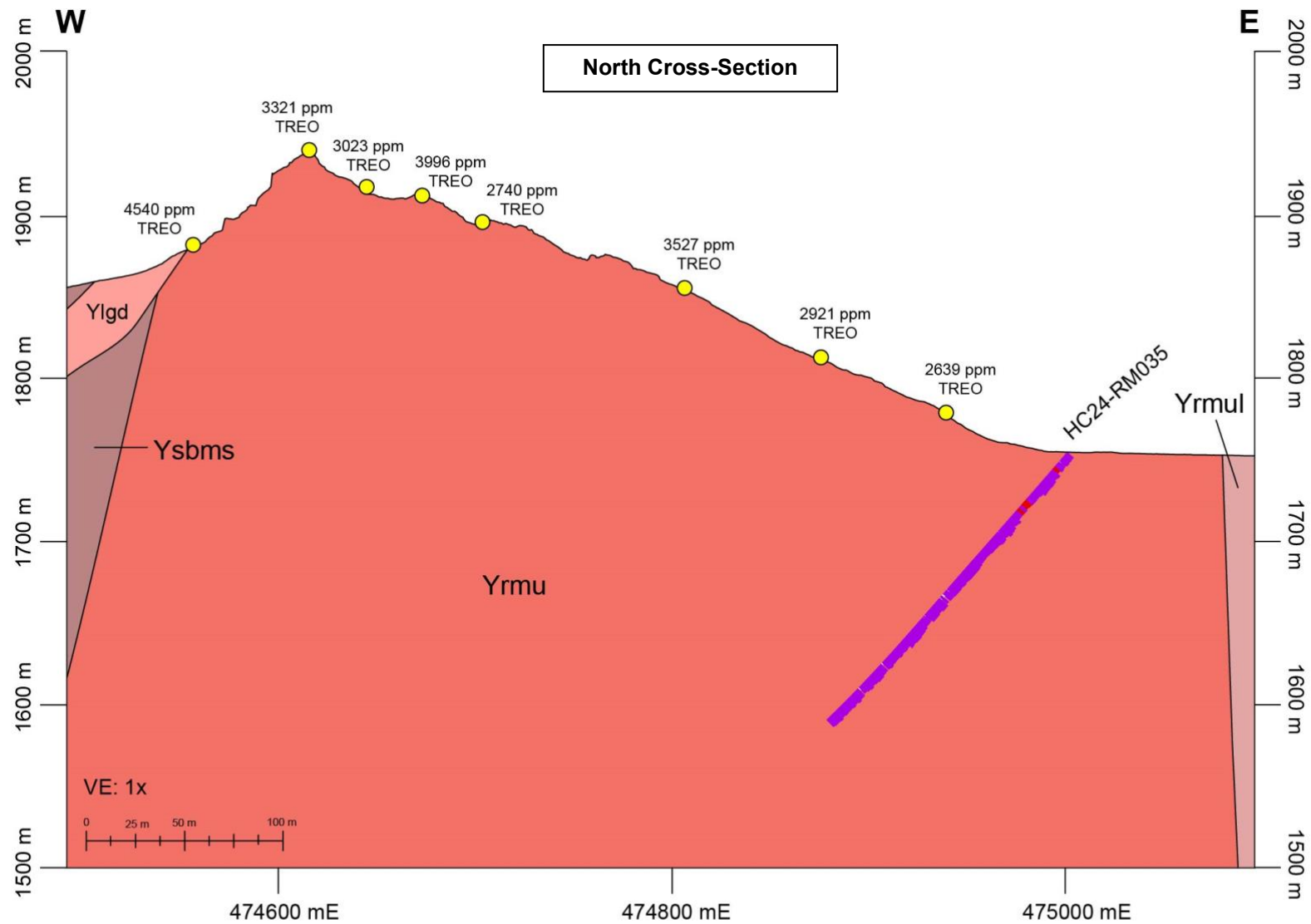


TREO (ppm)

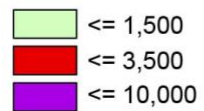
- ≤ 1,500
- ≤ 3,500
- ≤ 10,000

Lithology

- Ylgd: Granite intrusion
- Yrmu: Red Mountain pluton (ore)
- Yrmul: Red Mountain pluton
- Ysbms: Sybille monzosyenite



TREO (ppm)



Lithology



Appendix A – Halleck Creek JORC Table 1

Section 1 Sampling Techniques and Data		
(Criteria in this section apply to all succeeding sections.)		
Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	In March 2025, WRI collected 106 channel samples across Red Mountain in the Cowboy State Mine area of the Halleck Creek Rare Earths project.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	The channel samples were measured, photographed, described at each location. Multiple channel samples were located in areas where sills outcropped. Quality control included inserting certified reference materials (CRMs), blanks, and duplicates into the sampling stream.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	The Red Mountain Pluton (RMP) of the Halleck Creek Rare Earths Project is a distinctly layered monzonitic to syenitic body which exhibits significant and widespread REE enrichment. Enrichment is dependent on allanite abundance, a sorosilicate of the epidote group. Allanite occurs in all three units of the RMP, the clinopyroxene quartz monzonite, the biotite-hornblende quartz syenite, and the fayalite monzonite, in variable abundances.
	<i>In cases where 'industry standard' work has been done, this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems.</i>	The method used for channel sampling is a recognized method for collecting channel samples in deposits like Halleck Creek. Each channel sample is 1 meter in length to provide a representative sample across the outcrop

Section 1 Sampling Techniques and Data		
(Criteria in this section apply to all succeeding sections.)		
Criteria	JORC Code explanation	Commentary
	<i>Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	
<i>Drilling techniques</i>	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or another type, whether the core is oriented and if so, by what method, etc.).</i>	Drilling was not performed during this channel sampling program
<i>Drill sample recovery</i>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Continuous lengths of rock outcrop were collected along each channel sample. Two parallel cuts approximately 8 to 10 cm apart and approximately 8 to 10 cm deep were made with an angle-grinder equipped with diamond saw blades. For a length of 1 meter. The rock material within the cuts was extracted using cold chisels and rock hammers.
	<i>Measures are taken to maximise sample recovery and ensure the representative nature of the samples.</i>	Tarpaulins were laid out across the channel samples to collect the entire rock sample.
	<i>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.</i>	The granitic rocks of the RMP are composed of evenly distributed phenocrysts. There is no relationship or bias due to grain size or orientation.
<i>Logging</i>	<i>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.</i>	All channel samples were visually logged by field geologists. The channel samples were all photographed.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	The channel samples were logged qualitatively, but the assays for each sample are quantitative.
	<i>The total length and percentage of the relevant intersections logged.</i>	The length of each channel samples was logged.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Channel samples were not cut or split.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	The samples were collected on a dry basis.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<p>The channel samples were dry. Sample preparation: 1kg samples split to 250g for pulverising to -75 microns. Sample analysis: 0.5g charge assayed by ICP-MS technique.</p> <p>This sampling preparation method is considered appropriate for the type of material collected and is considered industry standard.</p>
	<i>Quality control procedures adopted for all sub-sampling stages to maximise the representivity of samples.</i>	ARR submitted CRM standard REE samples from CND Labs for analysis. 4 CRM samples were analyzed with the channel samples.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
	<i>Measures are taken to ensure that the sampling is representative of the in situ material collected, including, for instance, results for field duplicate/second-half sampling.</i>	The channel samples were sent to ALS labs for preparation using their standard techniques for sample preparation.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Allanite is generally well distributed across the core and the sample sizes are representative of the fine grain size of the Allanite.
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>	ALS uses a 5-acid digestion and 32 elements by lithium borate fusion and ICP-MS (ME-MS81). For quantitative results of all elements, including those encapsulated in resistive minerals. These assays include all rare earth elements.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	ARR submitted CRM standard REE samples from CND Labs for analysis. 4 CRM samples were analyzed with the channel samples.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
		ALS included blanks and duplicates are part of their internal Qa/Qc procedures.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Consulting company personnel have observed the assayed channel samples. Company personnel sampled the entire length of each hole.
	<i>The use of twinned holes.</i>	No twinned holes were used.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Data entry was performed by ARR personnel and checked by ARR geologists. All field logs were scanned and uploaded to company file servers. All photographs of the core were also uploaded to the file server daily. All scanned documents are cross-referenced and directly available from the database. Assay data was imported into the database directly from electronic spreadsheets sent to ARR from ALS.
	<i>Discuss any adjustment to assay data.</i>	Assay data is stored in the database in elemental form. Reporting of oxide values are calculated in the database using the molar mass of the element and the oxide.
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>	The channel sample locations were surveyed using a Garmin handheld GPS unit.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
	<i>Specification of the grid system used.</i>	The grid system used to compile data was NAD83 Zone 13N.
	<i>Quality and adequacy of topographic control.</i>	Topography control is +/- 10 ft (3 m).
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	The channel samples were collected on a 200-meter grid as topographic access allowed.
	<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>	Spacing supports classification into Indicated and Inferred categories based on geostatistical analysis and grade continuity confirmed through cross-sections and swath plots.
	<i>Whether sample compositing has been applied.</i>	Sample compositing was applied during resource estimation. Assay data from 10mter channel samples has not been composited.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Mineralization at Halleck Creek is a function of fractional crystallization of allanite in syenitic rocks of the Red Mountain Pluton. Mineralization is not structurally controlled and exploration drilling to date does not reveal any preferential mineralization related to geologic structures. Therefore, orientation of channel samples does not bias sampling.
	<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>	Orientation of channel samples does not bias sampling.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sample security	<i>The measures are taken to ensure sample security.</i>	All core was collected from the site daily and stored in a secure, locked facility until the samples were dispatched by bonded courier to ALS Laboratories. Chains of custody were maintained at all times.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No external audits or reviews have been conducted to date. However, 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.	Channel sampling occurred on two Wyoming State mineral licenses 0-43570 and 0-43571 covering approximately 682 acres.
	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 leases exist. 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 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 characterised as a disseminated 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:	Drilling was not performed for this program
	easting and northing of the drill hole collar	Drilling was not performed for this program. However, locations and lengths of each channel sample were collected.
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
	<i>dip and azimuth of the hole</i>	
	<i>downhole length and interception depth</i>	
	<i>Hole length.</i>	
	<i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	Drilling was not performed for this program
Data aggregation methods	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	The channel samples assay results have not been truncated.
	<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>	Assays are representative of each 1-meter sample interval.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalents used.
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p>	Allanite mineralization observed at Halleck Creek occurs uniformly throughout the CQM and BHS rocks of within the Red Mountain Pluton. Therefore, the geometry of mineralisation does not vary with drill hole orientation or angle within homogeneous rock types.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
	<i>If it is unknown and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i>	
<i>Diagrams</i>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to, a plan view of drill hole collar locations and appropriate sectional views.</i>	Locations and assays of each channel sample are in Appendix B. Figure 1 and Figure 2 show the geology of the channel samples.
<i>Balanced reporting</i>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting of Exploration Results.</i>	Reporting of the most recent exploration data is included in the "Technical Report of Exploration and Updated Resource Estimates at Red Mountain of the Halleck Creek Rare Earths Project", December 2024. Previous data is presented in the "Technical Report of Exploration and Maiden Resource Estimates of the Halleck Creek Rare Earths Project", March 2023, and in report "Summary of 2023 Infill Drilling at the Halleck Creek Project Area", November 2023.
<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>	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.

Section 2 Reporting of Exploration Results		
(Criteria listed in the preceding section also apply to this section.)		
Criteria	JORC Code explanation	Commentary
		<p>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.</p> <p>Historical metallurgical testing consisted of concentrating the Allanite by both gravity and magnetic separation. The current program employs sequential gravity separation and magnetic separation to produce a concentrate suitable for downstream rare earth elements extraction.</p>
Further work	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Detailed geological mapping and channel sampling is planned to enhance further development drilling to increase confidence levels of resources.
	<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>	See press release text.

SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES ARE NOT BEING REPORTED

SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVES – ORE RESERVES ARE NOT BEING REPORTED

Appendix B – CSM Channel Sample Locations and Assay Data

DHID	Easting	Northing	Elevation	TREO	HREO	MREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3
CS25-RM001	475,748.70	4,632,492.20	1,784.91	4703	499	1329	926	2021	222	886	149	250	15	102	12	60	10	25	3	19	3
CS25-RM002	475,787.16	4,632,545.26	1,777.90	4192	445	1163	829	1818	197	774	129	226	12	88	11	52	9	23	3	18	3
CS25-RM003	475,770.25	4,632,528.77	1,777.90	4514	488	1295	907	1892	217	864	146	250	14	96	12	56	10	25	3	19	3
CS25-RM004	474,582.52	4,632,284.87	2,033.63	3321	484	935	625	1345	151	603	113	259	12	84	11	57	11	26	3	18	3
CS25-RM005	474,615.05	4,632,234.35	2,002.84	4564	536	1243	889	1972	208	813	146	281	13	100	13	63	11	28	4	20	3
CS25-RM006-L	474,581.49	4,632,183.28	2,008.63	319	86	92	52	100	14	54	13	49	2	10	2	9	2	5	1	5	1
CS25-RM006-S	474,581.49	4,632,183.28	2,008.63	159	49	41	23	52	6	23	6	30	1	5	1	5	1	3	0	3	0
CS25-RM007	474,591.40	4,632,236.54	2,022.96	2406	433	677	345	1013	104	423	88	234	11	69	10	52	10	24	3	17	3
CS25-RM008-L	474,574.25	4,632,132.13	1,995.22	4001	504	1051	717	1806	174	671	129	260	12	91	13	64	12	27	3	19	3
CS25-RM008-S	474,574.25	4,632,132.13	1,995.22	270	65	68	45	99	11	41	9	39	1	7	1	6	1	4	1	4	1
CS25-RM009-L	474,679.31	4,632,024.06	1,967.79	4125	453	1109	810	1818	189	727	128	236	10	87	11	54	10	24	3	16	2
CS25-RM009-S	474,679.31	4,632,024.06	1,967.79	178	38	39	25	81	6	23	5	22	1	4	1	4	1	2	0	3	0
CS25-RM009-U	474,679.31	4,632,024.06	1,967.79	4011	524	1111	779	1671	184	723	130	279	12	95	12	62	11	28	3	19	3
CS25-RM010	474,670.12	4,631,983.79	1,958.95	3812	511	1037	666	1671	170	667	127	272	12	89	12	61	11	28	4	19	3
CS25-RM011	474,639.03	4,631,996.66	1,969.62	2750	462	812	467	1077	126	514	104	243	11	81	11	57	10	25	3	18	3
CS25-RM012	474,626.13	4,632,035.57	1,980.90	3928	601	1128	808	1474	181	725	139	326	13	105	14	69	13	32	4	22	3
CS25-RM013	474,623.51	4,632,093.31	1,992.48	2824	503	812	483	1099	124	510	105	268	12	84	12	61	11	28	4	20	3
CS25-RM014	474,622.30	4,632,125.74	1,994.00	3601	594	1045	664	1382	163	665	133	323	12	101	14	70	13	32	4	22	3
CS25-RM015	474,607.64	4,632,181.64	2,010.16	3687	538	1039	692	1492	167	671	127	288	13	94	12	62	12	30	4	20	3
CS25-RM016	474,641.44	4,632,231.15	2,003.15	3367	468	936	643	1388	153	601	114	244	12	85	12	56	10	25	3	18	3
CS25-RM017	474,674.94	4,632,289.76	2,022.65	3996	452	1069	765	1775	181	700	123	232	13	85	11	54	10	24	3	17	3
CS25-RM018	474,682.62	4,632,324.71	2,021.13	2862	393	772	551	1201	127	499	91	206	12	69	9	46	8	22	3	16	2
CS25-RM019	474,495.14	4,632,319.38	2,021.13	4540	979	1434	645	1621	201	895	199	531	16	164	23	116	22	55	7	39	6
CS25-RM020	474,500.33	4,632,263.85	2,009.24	4747	632	1381	925	1898	226	904	162	334	15	117	15	74	14	33	4	23	3
CS25-RM021	474,502.95	4,632,228.20	1,928.16	3385	514	966	634	1345	151	622	119	268	14	91	12	62	11	28	4	21	3
CS25-RM022	474,495.71	4,632,178.37	1,951.02	1468	438	490	162	437	61	295	75	239	13	69	9	50	9	25	3	18	3
CS25-RM023	474,501.28	4,632,133.39	1,942.19	7699	756	2141	1595	3317	375	1423	233	387	17	150	19	91	16	39	5	28	4
CS25-RM024	474,519.54	4,632,086.13	1,944.01	13651	1502	3990	2639	5737	694	2659	420	790	19	289	37	180	32	81	10	56	8
CS25-RM025	474,568.06	4,632,026.67	1,923.59	2847	572	896	412	1048	127	567	121	309	13	95	13	68	13	31	4	22	4
CS25-RM026	474,604.59	4,631,978.02	1,915.67	3874	542	1071	719	1621	175	689	128	287	12	94	13	66	12	30	4	21	3
CS25-RM027	474,603.88	4,631,964.26	1,902.26	4588	565	1309	873	1922	213	860	155	293	13	107	14	67	12	30	4	22	3
CS25-RM028-L	474,639.48	4,631,936.93	1,878.79	5237	665	1474	952	2242	253	961	164	342	15	130	17	79	15	34	4	25	4
CS25-RM028-S	474,639.48	4,631,936.93	1,878.79	232	61	61	37	80	9	37	8	37	1	7	1	6	1	4	0	3	1
CS25-RM028-U	474,639.48	4,631,936.93	1,878.79	5552	662	1587	1065	2334	260	1044	187	343	15	128	16	80	14	34	4	24	4
CS25-RM029	474,679.41	4,631,910.47	1,872.08	4035	589	1150	728	1652	191	742	133	307	14	110	15	69	13	31	4	22	4
CS25-RM030	474,718.16	4,631,880.58	1,848.61	4646	537	1313	909	1965	227	867	141	269	14	110	14	64	12	28	3	20	3
CS25-RM031	474,778.21	4,631,982.40	1,865.38	3440	520	974	645	1376	164	623	112	274	11	96	13	62	11	28	3	19	3
CS25-RM032	474,724.56	4,631,975.82	1,881.23	3183	438	868	596	1345	149	555	100	228	11	81	11	53	10	23	3	16	2
CS25-RM033	474,716.47	4,631,943.43	1,876.65	711	113	204	131	279	34	131	23	62	2	18	3	13	2	6	1	5	1
CS25-RM034	474,766.91	4,631,909.61	1,846.17	2005	300	515	389	839	91	331	55	171	8	43	6	32	6	16	2	14	2
CS25-RM035	474,742.80	4,631,875.39	1,847.39	4163	551	1186	762	1744	200	774	132	284	13	105	14	66	12	29	4	21	3

DHID	Easting	Northing	Elevation	TREO	HREO	MREO	La203	Ce203	Pr6011	Nd203	Sm203	Y203	Eu203	Gd203	Tb407	Dy203	Ho203	Er203	Tm203	Yb203	Lu203
CS25-RM036	474,820.21	4,631,977.70	1,858.37	3367	527	956	596	1364	159	610	111	279	12	92	13	63	12	28	4	21	3
CS25-RM037	474,841.50	4,631,942.32	1,841.30	4858	625	1411	1004	1904	244	927	154	331	14	120	15	71	13	31	4	23	3
CS25-RM038	474,868.75	4,631,921.02	1,823.01	4015	509	1130	771	1677	195	738	125	265	13	98	13	59	11	25	3	19	3
CS25-RM039	474,764.70	4,632,082.15	1,880.01	4814	573	1325	904	2094	231	864	148	295	13	112	14	68	12	30	4	22	3
CS25-RM040	474,757.86	4,632,026.66	1,860.50	1440	335	416	201	537	65	247	55	181	9	50	8	41	8	19	3	14	2
CS25-RM041	474,825.53	4,632,026.87	1,836.12	2887	412	832	505	1201	137	535	97	203	11	85	11	52	9	21	3	15	2
CS25-RM042-L	474,876.14	4,632,041.12	1,830.32	3649	372	1005	687	1640	176	661	113	177	12	85	10	45	8	18	2	13	2
CS25-RM042-S	474,876.14	4,632,041.12	1,830.32	211	49	55	38	75	9	33	7	28	1	7	1	5	1	3	0	3	0
CS25-RM042-U	474,876.14	4,632,041.12	1,830.32	3719	388	1045	722	1621	182	691	115	187	12	88	10	47	8	19	2	13	2
CS25-RM043	474,931.51	4,632,037.04	1,808.68	3232	330	912	644	1394	159	608	97	157	11	74	9	39	7	16	2	13	2
CS25-RM044	474,887.43	4,631,992.79	1,831.85	2883	229	742	544	1400	134	500	76	107	10	50	6	26	5	11	2	10	2
CS25-RM045	474,925.07	4,631,977.11	1,815.39	7713	543	2133	1554	3562	402	1440	212	250	13	134	15	64	11	26	4	22	4
CS25-RM046	474,927.79	4,631,946.79	1,813.86	3715	504	1034	658	1591	174	670	118	264	12	93	12	60	11	27	3	19	3
CS25-RM047	474,817.61	4,631,876.34	1,813.86	3938	549	1105	688	1677	185	709	130	283	13	103	14	67	12	29	4	21	3
CS25-RM048	474,884.39	4,631,884.21	1,808.68	4582	555	1327	876	1904	230	871	146	286	12	109	14	66	12	28	4	21	3
CS25-RM049	474,712.46	4,632,075.68	1,900.43	3279	541	939	660	1215	156	598	109	290	12	94	13	63	12	29	4	21	3
CS25-RM050	474,667.99	4,632,085.83	1,934.57	4139	521	1140	803	1750	201	739	125	274	12	96	13	62	11	27	4	19	3
CS25-RM051	474,664.76	4,632,134.25	1,918.41	3724	531	1038	762	1468	176	672	115	284	12	94	13	62	12	28	4	19	3
CS25-RM052	474,676.31	4,632,183.39	1,936.70	2696	408	745	503	1098	124	476	87	216	11	72	10	48	9	22	3	15	2
CS25-RM053	474,629.82	4,632,279.37	1,982.42	3023	470	835	544	1241	140	532	96	248	12	83	11	56	11	25	3	18	3
CS25-RM054	474,630.08	4,632,329.78	1,997.05	3645	504	1048	697	1468	178	682	116	265	13	93	12	60	11	26	3	18	3
CS25-RM055	474,720.08	4,632,283.16	1,964.74	2740	408	764	518	1108	128	489	89	215	12	71	10	48	9	21	3	16	3
CS25-RM056	474,731.20	4,632,233.49	1,955.29	3708	466	1019	721	1566	176	668	111	244	13	87	11	53	10	24	3	18	3
CS25-RM057-D	474,725.70	4,632,181.88	1,944.32	1613	405	414	249	596	65	247	51	239	7	46	8	43	9	25	3	22	3
CS25-RM057-L	474,725.70	4,632,181.88	1,944.32	3764	355	1017	800	1640	187	679	103	184	9	71	9	39	7	18	2	14	2
CS25-RM057-R	474,725.70	4,632,181.88	1,944.32	3624	432	1030	762	1462	182	672	114	228	12	78	11	51	9	22	3	16	2
CS25-RM058	474,731.42	4,632,132.90	1,911.10	3047	405	844	592	1265	146	544	95	210	12	72	10	49	9	22	3	16	2
CS25-RM059	474,730.22	4,632,332.09	2,069.29	3688	501	1082	794	1382	187	703	121	264	14	92	12	59	10	26	3	18	3
CS25-RM060	474,761.50	4,632,328.42	2,035.76	2493	425	714	425	990	116	450	87	227	12	69	10	51	9	23	3	18	3
CS25-RM061	474,786.93	4,632,287.81	2,011.07	3708	470	1029	693	1585	176	667	117	245	13	83	12	57	10	25	3	19	3
CS25-RM062	474,822.45	4,632,282.80	2,000.40	2990	411	837	579	1222	144	539	95	216	12	71	10	49	9	22	3	17	2
CS25-RM063	474,812.15	4,632,329.35	1,973.88	3997	484	1131	819	1634	196	741	123	251	14	88	12	59	10	25	3	19	3
CS25-RM064	474,870.03	4,632,333.92	1,948.89	2402	296	674	489	985	118	439	75	155	9	53	7	35	6	15	2	12	2
CS25-RM065	474,926.16	4,632,335.39	1,924.20	3479	385	978	733	1437	173	646	105	198	13	73	9	45	8	20	2	15	2
CS25-RM066	474,988.51	4,632,333.17	1,891.89	3442	392	977	710	1419	172	643	106	204	12	73	10	46	8	20	2	15	2
CS25-RM067	475,023.95	4,632,330.72	1,881.23	3131	354	898	640	1290	157	593	97	180	12	68	9	42	7	18	2	14	2
CS25-RM068	475,068.36	4,632,328.90	1,861.41	2727	298	766	572	1133	135	507	82	148	12	58	7	35	6	15	2	13	2
CS25-RM069	475,134.43	4,632,182.44	1,702.31	3050	287	859	643	1302	155	573	90	141	12	58	7	34	6	14	2	11	2
CS25-RM070	475,083.93	4,632,174.74	1,722.42	3060	354	874	630	1253	153	576	94	181	12	67	9	42	7	18	2	14	2
CS25-RM071	475,083.03	4,632,228.37	1,727.30	2639	286	749	563	1082	132	495	81	142	12	55	7	34	6	15	2	11	2
CS25-RM072	475,121.43	4,632,238.56	1,715.72	2938	312	828	607	1235	148	549	87	157	11	60	8	36	6	16	2	14	2
CS25-RM073	475,128.04	4,632,277.62	1,734.31	3184	295	897	677	1357	161	602	92	144	12	60	8	34	6	15	2	12	2
CS25-RM074	475,029.48	4,632,084.89	1,748.33	3593	433	1026	741	1456	179	670	114	222	12	81	11	52	9	23	3	17	3

DHID	Easting	Northing	Elevation	TREO	HREO	MREO	La203	Ce203	Pr6011	Nd203	Sm203	Y203	Eu203	Gd203	Tb407	Dy203	Ho203	Er203	Tm203	Yb203	Lu203
CS25-RM075	474,981.14	4,632,080.39	1,758.70	3734	482	1084	746	1492	187	704	123	250	12	90	12	58	10	25	3	19	3
CS25-RM076	474,944.07	4,632,068.20	1,773.94	3932	493	1131	778	1603	194	736	128	254	13	91	13	60	10	26	3	20	3
CS25-RM077	474,879.18	4,632,079.08	1,859.58	3440	476	972	636	1425	164	624	115	251	12	84	12	57	10	25	3	19	3
CS25-RM078	474,834.35	4,632,079.35	1,867.51	3838	534	1119	771	1492	190	723	128	283	13	96	13	65	11	28	3	19	3
CS25-RM079	474,766.95	4,632,131.77	1,913.23	3396	439	962	665	1394	166	623	109	232	11	77	11	53	9	23	3	17	3
CS25-RM080-S	474,776.91	4,632,178.26	1,907.44	439	139	117	62	139	17	65	17	84	2	15	3	15	3	8	1	7	1
CS25-RM080-U	474,776.91	4,632,178.26	1,907.44	3007	412	859	607	1187	147	555	99	220	9	73	10	48	9	22	3	16	2
CS25-RM081	474,821.53	4,632,235.17	1,920.24	3425	416	976	706	1388	170	637	108	215	12	77	11	50	9	21	3	16	2
CS25-RM082	474,877.16	4,632,236.53	1,912.62	3527	438	1007	715	1431	175	656	112	224	13	82	11	53	9	23	3	17	3
CS25-RM083	474,841.48	4,632,195.24	1,901.65	3422	488	982	678	1345	166	630	115	258	13	86	12	59	10	25	3	19	3
CS25-RM084	474,885.68	4,632,180.65	1,891.28	3045	395	872	588	1247	149	566	100	204	12	72	10	47	8	21	3	16	2
CS25-RM085	474,869.95	4,632,145.84	1,871.47	2984	376	800	541	1321	137	517	92	199	9	65	9	45	8	20	3	16	2
CS25-RM086	474,924.59	4,632,125.33	1,857.76	3621	456	1028	741	1462	177	670	115	239	12	82	11	55	9	24	3	18	3
CS25-RM087	474,980.77	4,632,116.37	1,844.34	3369	429	915	589	1499	157	589	106	220	12	78	11	52	9	23	3	18	3
CS25-RM088	474,984.06	4,632,271.79	1,840.69	3298	357	933	666	1394	164	614	103	179	13	70	9	43	7	18	2	14	2
CS25-RM089	474,997.85	4,632,179.15	1,840.08	2697	318	735	495	1196	125	481	82	161	10	60	8	39	7	16	2	13	2
CS25-RM090	474,985.01	4,632,235.26	1,853.79	2921	331	806	586	1247	140	530	87	167	11	63	8	41	7	17	2	13	2
CS25-RM091	474,883.62	4,632,279.14	1,901.34	3429	370	920	670	1523	161	605	100	188	12	70	9	45	8	20	2	14	2
CS25-RM092	474,919.40	4,632,276.90	1,878.18	3049	341	826	588	1345	142	542	91	172	11	64	9	42	7	18	2	14	2
CS25-RM093	474,977.97	4,632,288.80	1,841.60	3076	355	854	617	1302	147	561	94	180	12	66	9	43	8	19	2	14	2
CS25-RM094	475,014.23	4,632,281.01	1,835.20	3353	365	931	668	1443	161	616	100	184	11	70	9	45	8	19	2	15	2
CS25-RM095	475,063.84	4,632,271.07	1,824.53	3064	320	833	624	1333	146	552	89	159	11	62	8	38	7	17	2	14	2