



Montem Resources

Montem Resources Limited

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ASX Announcement

2 August 2021

Montem Increases Coal Resources at the Chinook Project to 172Mt

HIGHLIGHTS

- Chinook Project JORC coal Resource Estimate increases by 23Mt to 172Mt (108Mt Indicated and 64Mt Inferred).
- Chinook Project also contains a coal Exploration Target of an additional 125Mt to 450Mt¹.
- New JORC Resources located within the Chinook Vicary area, which was the target of Montem's Q4 2020 exploration drilling program.
- Coal quality results from the 2020 Chinook Vicary drilling program returned exceptional coke strength results from large diameter core samples with CSR values ranging from 67 to 74 and confirmed that the Chinook Vicary coal attributes fit precisely in the specification range to be marketed as a "Premium Low Vol Hard Coking Coal".
- Chinook Vicary, and the entire Chinook Project, is located within Alberta Coal Development Policy Category 4 lands. Category 4 lands are areas where surface mining is contemplated.
- Montem completed a positive Scoping Study for the Chinook Project in early 2021 with results indicating an economically, and technically viable project, justifying progressing to a Pre-Feasibility Study.

Montem Resources Limited (ASX: MR1) ("Montem" or the "Company") is pleased to announce it has completed a JORC Resource Estimate update for the Chinook Project. The coal Resource Estimate for the Chinook Project has increased by 23Mt to 172Mt (108Mt Indicated and 64Mt Inferred).

The Chinook Project ("Chinook" or the "Project") in Alberta, Canada is made up of two areas, Chinook Vicary and Chinook South (Figure 1). The Project is located entirely within 1976 Coal Development Policy for Alberta Category 4 lands. Along with the 172Mt coal Resource Estimate, the Project also contains a coal Exploration Target Estimate of an additional 125Mt to 450Mt¹ at Chinook Vicary.

¹ The potential quantity and quality of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource in this area of the Project, and it is uncertain if further exploration will result in the estimation of Mineral Resources in this area.



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The JORC Resource Estimate update is located in the Vicary Domain, which makes up the central portion of the Chinook Vicary area (Figure 2).

The Vicary Domain was the target of Montem's 2020 exploration drilling program which confirmed the occurrence of near surface, structurally thickened coal seams suitable for future open-cut extraction². Coupled with a detailed review of historical data, this Resource Estimate update is a direct result of the Chinook Vicary 2020 drilling program.

Coal quality results from the 2020 drilling program were exceptional with working section clean coal composite producing high simulated plant yields with low ash: 9.1%; low volatile matter: 21.4%; low total sulphur: 0.48%; favourable rank (RoMax): 1.31%; and outstanding CSR: 70, confirming that the Chinook Vicary coal attributes fit precisely in the specification range to be marketed as a "Premium Low Vol Hard Coking Coal"³.

Montem Managing Director and CEO, Peter Doyle said:

"We are very pleased with the significant increase of the JORC Resource Estimate for the Chinook Project. This upgrade of the resource is the result of new information from the 2020 exploration which led to a re-interpretation of the geological model for Chinook. This updated Resource Estimate follows announcements detailing the excellent coal quality results received from the 2020 drilling program, as well as the positive Scoping Study we completed for the Chinook Project in early 2021."

"The combined 172Mt of Indicated and Inferred resources at Chinook confirm that the Project holds substantial hard coking coal Resources. These results further validate Montem's vision of developing the Chinook Project into an open-cut premium hard coking coal operation, with development of the Vicary Domain targeted as the priority."

"The next step is to drill out the remaining areas included in the Scoping Study mine plan and progress to a Pre-Feasibility Study. As the entire Chinook Project lies within Alberta 1976 Coal Development Policy Category 4 land, we are able to continue exploration and project planning. We are excited by Chinook and look forward to the next phase of development."

² See Montem Resources Limited (ASX:MR1) 9 November 2020 ASX release "Montem intersects thick coal seams at Chinook Vicary".

³ See Montem Resources Limited (ASX:MR1) 4 March 2021 ASX release "Montem confirms Tier 1 Hard Coking Coal at Chinook Vicary".



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Table 1 – Vicary Domain Resource Estimate Update as of 30th June 2021

Seam	Indicated			Inferred		
	Tonnage (Mt)	Thick (m)	Ash %	Tonnage (Mt)	Thick (m)	Ash %
S2U				0.01	0.7	11.5
S2M	3.76	3.8	11.8	10.49	3.5	11.8
S2M PILLAR				4.62	3.6	12.4
S2L				0.70	1.4	14.1
S5M				3.32	5.0	29.5
Total	3.76	3.8	11.8	19.14	3.7	15.1
Total (Mt - Rounded)		4.0			19.0	

Table 2 – Total Chinook Project Resource Estimate

Year	Area	Resources (Mt)			
		Measured	Indicated	Inferred	Total
2020 ¹	Chinook Vicary	-	52.59	32.24	84.83
2020 ¹	Chinook South	-	51.23	13.09	64.32
2021 ²	Vicary Domain	-	3.8	19.1	22.9
Total Resources		-	107.62	64.43	172.05
Total (Rounded)		-	108	64	172

¹ Competent Person - Dahrouge Geological Consulting Ltd - March 27th, 2020

² Competent Person - Tamplin Resources Pty Ltd - June 30th, 2021

About the Chinook Project

The Chinook Project is located in the Crowsnest Pass region of Alberta, Canada. It is known to contain shallow emplacements of high quality hard coking coal of the Mist Mountain Formation (Kootenay Group) (Figure 3). The Chinook Project is made up of two areas, north of the township of Coleman is referred to as Chinook Vicary, south of the township of Coleman is referred to as Chinook South. Chinook Vicary is further divided into (from south to north) the North, Vicary, and Racehorse domains (Figure 1).



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The Chinook Project contains a coal Resource Estimate of 172Mt (108Mt Indicated and 64Mt Inferred) and a coal Exploration Target Estimate of an additional 125Mt to 450Mt⁴ at Chinook Vicary. Large diameter core samples obtained from Montem's Chinook Vicary 2020 exploration drilling program confirmed the occurrence of Tier 1 Hard Coking Coal.

Less than 30km to the west of the Chinook Project, in the Elk Valley, Teck Resources Ltd. operates four mines producing approximately 25 Mt per annum of predominantly hard coking coal for the global steel industry.

Historical Mining and Exploration Data

The 2021 Chinook Project Resource Estimate update was underpinned by Montem's Chinook Vicary 2020 13 drillhole exploration drilling program along with a review of the considerable database of historical mining and exploration data available for the Project, spanning from the 1960's to the early 1980's. As further detailed in Table 1 (Appendix 1), this review of available historical data collected and compiled information from 85 slimcore drillholes and 33 open drillholes as well as 91 surveyed coal seam floor points from historical underground workings record tracings. Historical geological mapping and field survey data was also used to enhance the geological understanding and model for the Chinook Project Resource Estimate update.

Geology and Resources

The 2021 Chinook Project Resource Estimate update totals 23Mt (4Mt Indicated and 19Mt Inferred). Resources are declared for the S2 and S5M seams within the Vicary Domain of the Project. Inferred Resources include 4.6Mt of historical Vicary Underground Mine workings pillar coal contained in the S2M seam. No Resources are currently declared in the S1, S4, S5U and S5L seams as these seams are currently insufficiently defined to warrant a Resource declaration. These seams remain open to the potential identification of additional resources from future drilling.

The coal measures are contained in a complex geological environment that has been broken out into seven discrete geological fault blocks within the geological

⁴ The potential quantity and quality of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource in this area of the Project, and it is uncertain if further exploration will result in the estimation of Mineral Resources in this area



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model. Tectonic deformation of the coal measures is the major factor that controls the areal extent, thickness variability, lateral continuity, and geometry of coal beds at Chinook Vicary (Figure 3). Coal seams show a highly variable thickness which mainly reflects structural variations as well as the localized thickening of coal seams which occurs in the apex of folds and adjacent to reverse faults.

Concluding Comments

The results from the 2021 Chinook Project Resource Estimate update further confirms the Project has the geology, resource base and coal quality to support open cut development.

Montem's plans are to continue to explore and define the Chinook Project. The main focus remains the Chinook Vicary area, as it shows the highest propensity for low-cost, high quality open cut production. Chinook Vicary is located in Category 4 lands as defined by the Alberta Coal Policy. Category 4 lands contemplate open-cut mining. The Chinook Vicary site is previously disturbed, having hosted historical underground and open-cut coal mines.

Montem will continue to explore areas of Chinook Vicary identified in the Scoping Study mine plan, aiming to define an open-cut project at preliminary feasibility level.



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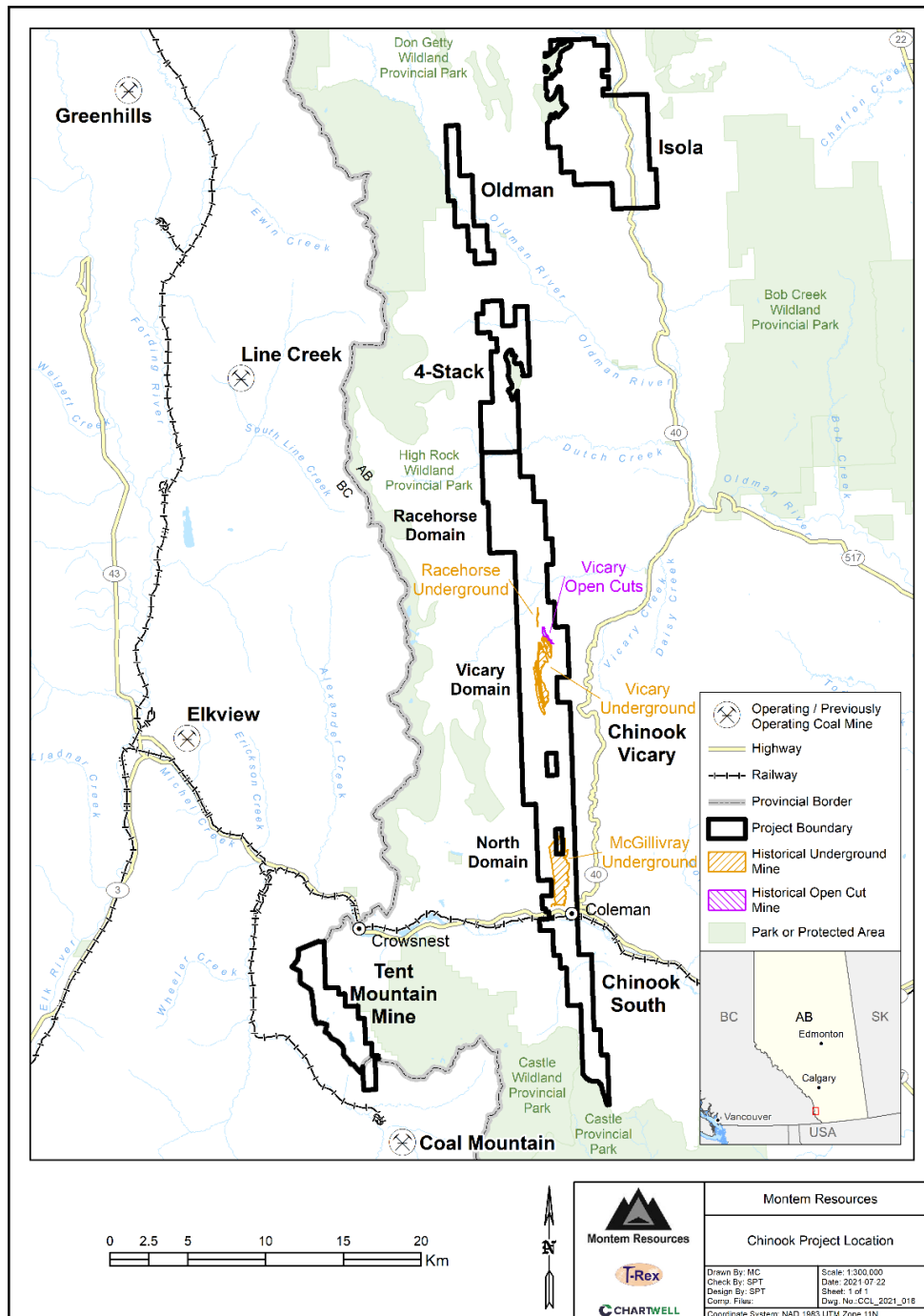


Figure 1: Chinook Project Location



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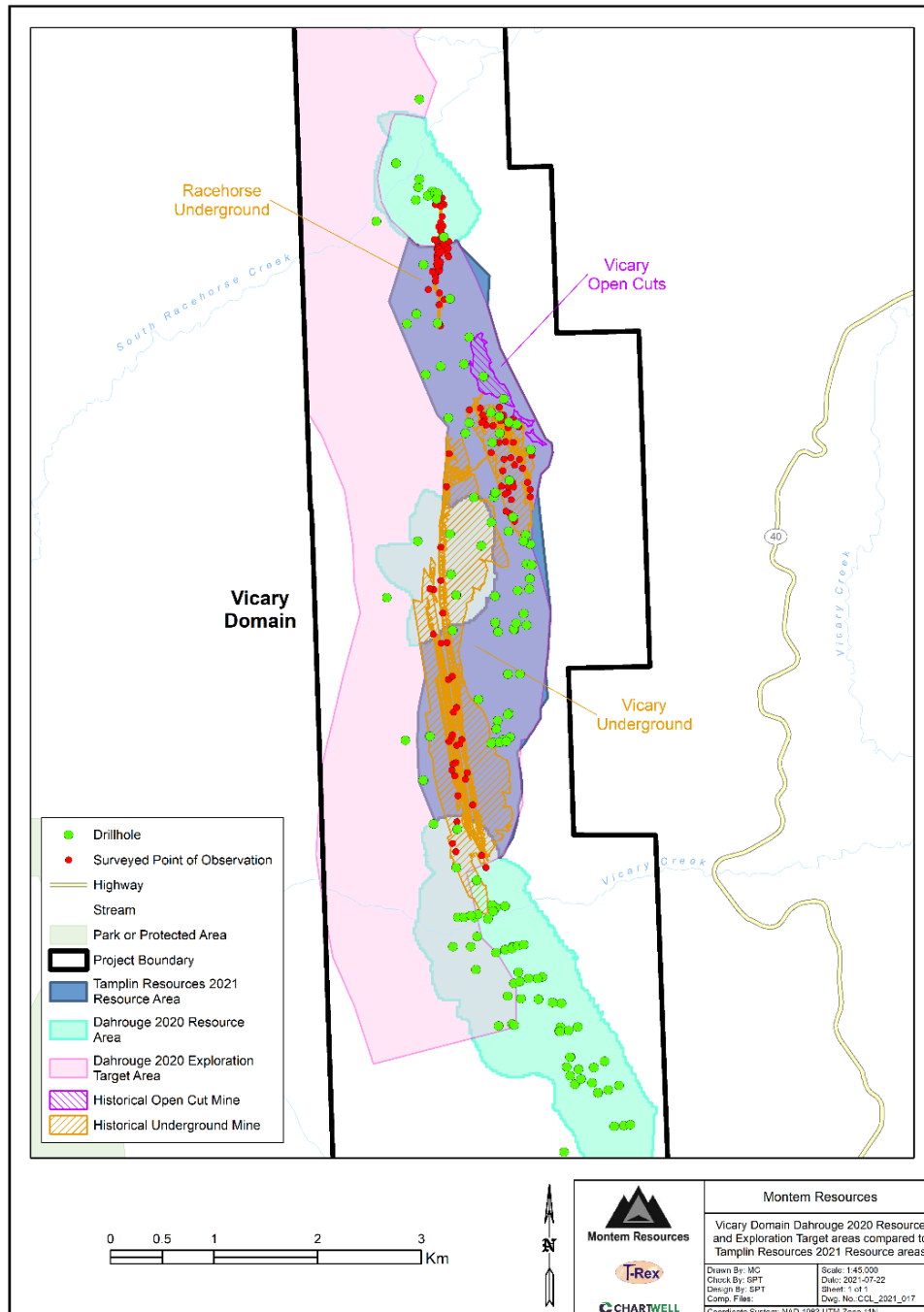


Figure 2 – Vicary Domain 2021 Resource area compared to Chinook Vicary 2021 Resource and Exploration Target areas.



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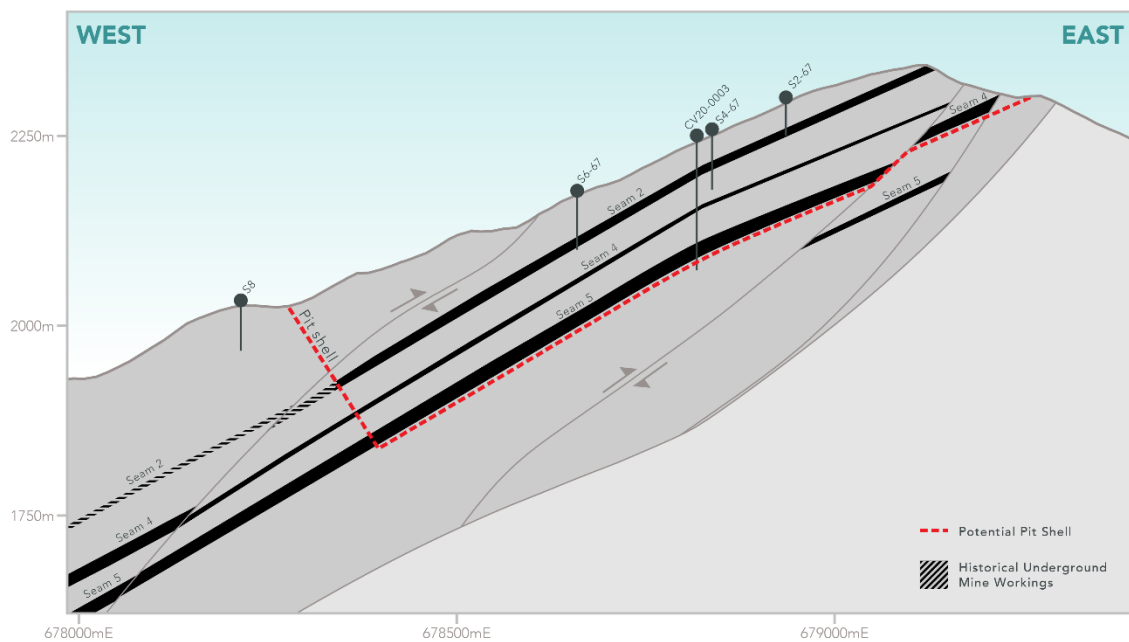


Figure 3 – Typical Chinook Schematic Cross Section

For further information on the Company, our assets and development plans, please visit our website: www.montem-resources.com

Additionally, view Investor Presentations lodged with the ASX.

This ASX release was authorised on behalf of the Board of Directors by Peter Doyle, Managing Director and CEO.

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About Montem Resources

Montem Resources (ASX: MR1) is a steelmaking coal development company that owns and leases coal tenements in the Canadian provinces of Alberta and British Columbia. The



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Company's objective is to become the operator of steelmaking coal mines in Canada by developing its properties in the Crowsnest Pass. The Company is planning an integrated mining complex in the Crowsnest Pass, focusing on low-cost development of open-cut operations that leverage central infrastructure. The first component of this objective is to re-establish mining at the Tent Mountain Mine.

Montem completed a Definitive Feasibility Study (DFS) on the Tent Mountain Mine in 2020. Details of the DFS are available on Montem's website. Montem continues to work with regulators to re-start the mine.

Montem is also progressing the Chinook Project which covers historical mines that previously exported hard coking coal to Japanese steel mills. The Chinook Project has the potential to produce a large open-cut hard coking coal mine, and the Company plans to explore, define and develop this mine.

Forward looking statements

This ASX Announcement may contain forward looking statements, which may be identified by words such as "may", "could", "believes", "estimates", "expects" or "intends" and other similar words that connote risks and uncertainties. Certain statements, beliefs, and opinions contained in this ASX Announcement, in particular those regarding the possible or assumed future financial or other performance, industry growth or other trend projections are only predictions and subject to inherent risks and uncertainties. Except as required by law, and only to the extent so required, neither the Company, its Directors nor any other person gives any assurance that the results, performance or achievements expressed or implied by any forward looking statements contained in this ASX Announcement will actually occur and investors are cautioned not to place undue reliance on such forward looking statements. Any forward looking statements are subject to various risk factors, many of which are beyond the control of the Company and its Directors that could cause the Company's actual results to differ materially from the results expressed or anticipated in these statements. The Company has no intention to update or revise any forward looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this ASX Announcement, except where required by law.

Competent Persons Statement

Exploration Results

The information in this document that relates to 2021 Mineral Resource Estimates for the Vicary Domain of the Chinook Project is based on, and fairly represents, information and supporting documentation prepared by Mr. Shaun Tamplin, an employee of Tamplin Resources Pty Ltd (Tamplin Resources) and a member of the Australasian Institute of Mining and Metallurgy (No. 228544). Mr. Tamplin has sufficient experience (20+ years) of



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relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Tamplin consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The information in this release that relates to the 2020 Mineral Resource Estimates and Exploration Target Estimates for the Chinook Project are extracted from the report; "Coal Resources for the Chinook Project Alberta, Canada, April 9, 2020". This document was prepared by Dahrouge Geological Consulting Ltd. and lodged with the ASX on 31 July 2020 and is available to view on the Company's website www.montem-resources.com. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Appendix 1

JORC Code, 2012 Edition – Checklist of Assessment and Reporting Criteria (Table 1 Report)

Vicary Domain of the Chinook Project – JORC Resource Declaration

The following table provides a summary of important assessment and reporting criteria used for the Vicary Domain Resource Declaration in accordance with the Table 1 checklist in The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition). Criteria in each section apply to all preceding and succeeding sections.

Section 1 Sampling Techniques and Data – As of 30th June 2021

Criteria	JORC Code explanation	Commentary
Sampling techniques		<p>A considerable database exists for the Vicary Domain with data acquired intermittently by the tenement's previous and current holders since the 1950's. Structural data is sourced from a total of 5LDC (6") core, 85 slimcore and 33 open boreholes as well as surveys of the historical undergrounds including 91 surveyed floor points. Additional structural non coal and coal outcrop mapping points are utilized in the development of the models structural framework. In total, the model utilized a total of 18,799m of drilling of which 486m was 6" core, 13,332m was slimcore (HQ and NQ) and 4,981m was reverse circulation drilling. Geophysical logs are available for all of the rotary and diamond drill holes drilled after 1972 (27 of 85). Core and chip descriptions were prepared for all the drill holes. 40 boreholes were excluded as they were deemed to be unreliable due to material uncertainties with their collars or unreliable seam picks.</p> <p>The Vicary underground mines produced coal from the Vicary Domain for fifty years but only limited useful coal quality data remains. Historical records indicate that the majority of coal produced was exported to Japan as a metallurgical product. Some of the coal may have also been consumed in the local coke works at Coleman.</p> <p>Historical cored drilling by Coleman Collieries Limited and Manalta achieved variable and very low core recoveries which render the data of limited utility. This issue was addressed</p>

Criteria	JORC Code explanation	Commentary
		<p>during Montem's 2020 exploration program by employing a 6" Large Diameter Core (LDC)drilling method, which achieved excellent coal recoveries (>95%) and sufficient sample mass for detailed washability assessment and coke oven testing. This latter exploration program makes up the bulk of the sizing, washability and clean coal composite data available for the Vicary Domain.</p> <p>Sample intervals within a seam were determined after examination of the geological and geophysical logs, and the sampling scheme adopted for surrounding drill holes. All potentially economic coal seams were sampled but clean coal composite and rheological assessments were generally limited to intersections that were likely to produce a metallurgical product. The model includes 12 plies over 4 seams. Sufficient data was identified to inform a resource declaration for the S2M seam and portions of the S2U, S2L and S5M seams. Insufficient coal quality data was available for the S4U, S4M, S4L seams to declare a resource. Similarly, no resources were declared for the S1, S5U or S5L due to various combinations of data paucity, inconsistency in results and/or poor metallurgical potential.</p> <p>The 2020 samples were drop shattered and wet tumbled to simulate mining and beneficiation processes prior to sizing analysis and float sink testing by size fraction (25mm, 16mm, 8mm, 4mm, 2mm, 1mm). Raw coal analysis was undertaken after completion of the initial drop shatter and dry sizing. Clean coal composites are typically prepared at selected cut-points for each size fraction as directed by Montem for detailed coal quality and carbonisation testing. Procedures include proximate analysis, ash analysis, ultimate analysis, forms of sulphur, ash fusion temperature, hard grove grindability, Gray King Index, Roga Caking Index, Gieseler fluidity, trace elements, maceral analysis and vitrinite reflectance. The LDC core provides an improved representation of size fractions to smaller diameter core samples and is preferred for coal preparation design.</p> <p>Historical holes were drilled over several programs and consequently had a variety of analytical procedures. Analysis included raw sizing and float sink at a limited range of gravities (CF1.40, CF1.50 and CF1.60) as well as some froth floatation tests of the plus 100 mesh size fraction. Ash (%) and FSI was determined on all gravity fractions and/or clean coal composites.</p> <p>Sampled depths and thicknesses were checked against the geophysical log and adjusted accordingly. Coal quality on a ply level is largely limited to raw ash with clean coal composite data mostly on a working or composite section basis.</p>
Drilling		Historical cored holes are NQ (47.6mm) or HQ (63.5mm) single tube core. Open holes

Criteria	JORC Code explanation	Commentary
techniques		<p>were generally 125-165mm diameter and drilled using reverse circulation. The 2020 coring was 149mm (6") large diameter drilling with 125mm RC pilot holes.</p> <p>All holes have been drilled at a range of inclinations and directions in an attempt to intersect strata perpendicular to dip.</p>
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximize sample recovery and ensure representative nature of the samples.</i></p> <p><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></p>	<p>Coal recovery on the recently drilled LDC holes was greater than 95%. Coal recovery on historical cored holes was poor ranging from a low of 20% to a high of 100% (average ~55%) for the identified seam groups. This is due to the extremely friable nature of the coal and considerable internal micro faulting within the seams. This behaviour and slim core coal recovery is typical of coals in the area. When no reliable coal recovery data was available for cored holes, only the recovered thickness of coal was modelled with no allowances made for coal core losses. This methodology maintained a conservative approach to subsequent coal thickness and volumetric estimates. Coal quality data was only included in the model when coal recovery was greater than 80%.</p> <p>A significant dataset of information sourced from cores with recoveries of less than 80% exists for the Project. Although, this information was not used directly in the geological model it was reviewed to inform the likely consistency or lack thereof of the seam by seam quality values across the deposit.</p>
Logging	<p><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></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>Source borehole data for the Vicary Domain model was sourced from the Energy Utility Board (EUB) dataset and historical data compilations in internal reports from previous tenement holders. The datasets includes header information, lithological data, seam intersects, coal quality and collar information.</p> <p>The majority of coal intervals are logged at a moderate level of detail by describing its coal and waste intervals and lithologies. Some older historical holes are limited to summary logs inclusive of seam picks and internal partings. Coal brightness was logged on recent cored holes. Linear coal recoveries are recalculated following adjustments using downhole geophysical logs made to sample length for broken core intervals. Coal recoveries on historical holes are detailed on written logs or in historical reports.</p> <p>Chips and cores are logged in the field and then corrected to geophysics. Corrected lithological and geophysical logs are available for holes in hardcopy and softcopy.</p> <p>All holes drilled post-1972 were wireline logged if possible (i.e. not blocked). The typical suite of logs is sidewall density and gamma neutron tool. Coal and non-coal strata from chip and core descriptions are encoded in a lithology database on a hole by hole basis. Coal seams were correlated between holes with corrections to database made using full screen</p>

Criteria	JORC Code explanation	Commentary
		<p>editor. The standard and level of detail is considered appropriate for mineral resource estimation.</p> <p>Cored holes have been sampled at a ply and seam level. Chips are logged in the field and then corrected to geophysics. Coal brightness is not generally recorded on open holes. Sample top and base records exist for all holes; however, sample depths are generally uncorrected to geophysics which results in mismatching between geophysically corrected borecores and the recorded sample top and base. Sampled intervals were identified using unique sample numbers recorded for each seam where appropriate. Photograph of core and chip holes exist for the 2020 drilling program only.</p> <p>The standard and level of detail is considered appropriate for mineral resource estimation. Total aggregate lengths of cored and open holes are 486m of 6" core, 13,332m of slimcore (HQ and NQ) and 4,981m of reverse circulation drilling.</p>
<p>Sub-sampling techniques and sample preparation</p>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>Montem's 2020 drilling program utilized large diameter cores ((LDC) (149mm or 6" diameter)) to ensure samples were representative, coal seam recoveries were adequate and that sufficient material was available for analytical procedures and sub-samples. Sample preparation, subsampling and quality control procedures were ensured by using NATA accredited commercial labs employing recognised QA procedures and following Australian Standards for coal testing. ALS Brisbane conducted all analyses.</p> <p>All of the laboratory test work for historical holes was completed by certified laboratories in Canada and the US for coal testing work. These included Coal Science and Mineral Testing (a subsidiary of Birtley Laboratories in Calgary), Warnock Hersey Professional Services Ltd, also located in Calgary and some specialized testing of the froth floatation properties by Commercial and General Testing Company of the US. For testing work that requires it, all of these laboratories used or continue to use the procedures of the ASTM.</p> <p>The sample preparation methods utilized for the historical samples were Industry Standard at the time. Details of the sample preparation are not known other than the descriptions provided by the laboratories. The laboratories that performed the historical exploration are all independent commercial laboratories and are not connected in any corporate way to Coleman Collieries or Manalta who are the companies that the work was originally performed for, or now to Montem.</p> <p>Reserve samples are available for the 2020 LDC boreholes.</p>
<p>Quality of assay data and</p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the</i></p>	<p>All coal analysis based on the accepted International standards at the time of analysis (ASTM).</p>

Criteria	JORC Code explanation	Commentary
<p>laboratory tests</p>	<p><i>technique is considered partial or total.</i></p> <p><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></p> <p><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></p>	<p>The coal quality database is in excel format. The resultant database appears to have a valid range of data and exhibits sound regression relationships such as washability –ash.</p> <p>Laboratories engaged to analyse the 2020 coal cores (ALS Brisbane) comply with Australian Standards for sample preparation and coal quality testing and are certified by the National Association of Testing Authorities Australia (NATA). As part of NATA registration there is an obligation to complete all analysis in accordance with relevant round robin checks and other routine checking procedures to ensure they meet the required accuracy for each test.</p> <p>Montem designated coal quality consultant A&B Mylec Pty Ltd (Mylec) provided the instructions to the laboratory for manually compositing individual ply samples and all subsequent analytical works for the 2020/21 drilling. Mylec also reviewed data and procedures and provided advice on results.</p> <p>The laboratory test work for historical holes was completed by certified laboratories in Canada and the US. These included Coal Science and Mineral Testing (a subsidiary of Birtley Laboratories) and Warnock Hersey Professional Services Ltd., both located in Calgary, Alberta, and some specialized testing of the froth flotation properties by Commercial and General Testing Company of the U.S.A. All these laboratories followed or continue to follow ASTM standards, as required.</p> <p>Birtley Laboratories are still in operation. As part of their current certification by the Coal Association of Canada (CAC), there is an obligation to complete relevant round robin checks and other routine checking procedures to ensure that they meet the required accuracy for each test. They have been part of these tests since their inception; however, Birtley has advised they are unsure if this quality control check applied in the 1970's or earlier. As such, it is unclear if the laboratories involved in the historical analysis had a system of blind assaying as part of their quality control.</p> <p>The quality control procedures employed by the laboratories in the past remain standard for the coal testing industry in Canada. All Canadian coal laboratories are subject to periodic testing and certification by an agency of the Canadian Federal Government.</p> <p>Eight reverse circulation (RC) drillholes were also completed at the Vicary Domain including twins of the LDC holes. All RC drillholes are sampled at 1m intervals with subsamples of chips washed and boxed for future reference. Other than drillhole CV20-0008, these samples are not intended to be used for coal quality test work. Seam 2 in CV20-0008 was sampled at 1m intervals and these samples were analysed to determine</p>

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>the coal seam limit of oxidation.</p> <p>Coal intersections used in the geological model were verified by geophysical measurements obtained by wireline logging or manually checking of core logs without geophysics. This work was mostly carried out by the geological staff and contractors working for the previous and current owners (Coleman, Manalta and Montem). The majority of the coal intersection depths and seam correlations have been spot checked by the Competent Person.</p> <p>Raw and washed coal quality data was validated using manual methods. Coal sample depths were compared to geophysical log depths to validate ply thickness and recovery values. Coal sample records relate to uncorrected depths while modeled borehole depths and thicknesses are based on intersections corrected to geophysics.</p> <p>Twinned core holes are not used.</p> <p>Drill hole collar, lithology and basic raw coal quality data is stored in a Vulcan database. All available source records are stored in electronic form on the Montem network.</p>
Location of data points	<p><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></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>The CV0621 geological model incorporates digital topographic data sourced from a LiDAR15 DEM purchased by Montem. The LiDAR15 DEM features 30 cm vertical accuracy. The date of the survey is unknown; however, no significant surface disturbances have occurred in the Vicary Domain since the cessation of mining activities in 1978.</p> <p>Where possible, the base of weathering was picked for each borecore. Base of weathering was picked based on a combination of logged interval records (mostly color) and coal quality data (typically zero swell in near surface coal). In total, 105 boreholes had base of weathering picks with a depth range of 13 - 108m and an average of 32.7m. This equated to a modeled average thickness of 29m in the area containing reported resources.</p> <p>The 2020 drill hole collars were surveyed by a registered surveyor using Leica Differential Realtime Kinematic GPS equipment. Estimated accuracy of the base position at the 95% confidence level is 2.5cm horizontal and 3.4cm vertical. All coordinates are referenced to NAD83 (CSRS) (2002) and shown in the UTM (North) Zone 11 projection. Multiple GPS measurements were observed on each drillhole location and the results averaged to provide redundant observations of each location. Check measurements were made to control points shown on AER Disposition plan DMS090801, a hybrid cadastre plan in the area surveyed in 2016.</p>

Criteria	JORC Code explanation	Commentary
		<p>Historical drill collars were verified from the following datasets:</p> <ul style="list-style-type: none"> • The Albertan Energy Regulator (AER) EUB dataset • Surveyed co-ordinates on historical hard copy logs (local mine grid) • Various hard copy plans of geological data and underground surveys. <p>Collar locations in the EUB dataset were downloaded from the AER website. These were provided as latitude and longitude and were converted to NAD83 UTM11 coordinates using Maptek software.</p> <p>Local grid historical surveyed co-ordinates were sourced for around 50% of boreholes. By using common known points, a transformation matrix was created which enabled the local mine grid to be approximately converted to NAD83 UTM11 coordinates. This was then used to confirm and verify the location of bores itemized in the AER EUB dataset.</p> <p>A final check of collars was performed by geo-referencing historical borehole location plans and comparing collar locations. The mapped location of the boreholes were generally in alignment with the historical hardcopy plans, however, a small number of boreholes did not have a consistent location based on the various datasets and these were excluded from the model. Moreover, any borehole that solely relied on a single hardcopy plan for its location (and was not included in the EUB or local mine grid datasets) was flagged as unreliable and excluded from the model.</p>
<p>Data spacing and distribution</p>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><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></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>Data has been collected over the previous 60 years with the resultant dataset reflecting the standards and Exploration Targets of the time of the works. There is a bias in the borehole dataset towards information on the S2 Seam which represent the principal historical underground target. There are also high concentrations of data around shallower coal occurrences that were likely amenable to shorter term open cut operations. Due to the geological complexity of the deposit. This combined dataset exhibits a high level of variability in data distribution and reliability both in plan and stratigraphically.</p> <p>Many boreholes intersect only part of the sequence i.e. were spudded stratigraphically below one or more seams, or were not drilled deep enough to intersect lower or upper seams.</p> <p>Raw, float and clean coal composite data is stored in an Excel database for each seam (as analyzed). Ash, raw sulphur, FSI, washability, clean coal composite and limited ash chemistry data is also available for seams with declared Resources. Sizing data on a raw and wash basis is available from the 2020 LDC cores.</p>

Criteria	JORC Code explanation	Commentary
		<p>Surveyed underground record tracings are available for all underground workings and have been digitized in by multiple parties and with close alignment. Survey records identify unmined remaining insitu pillars which are included in the Resource declaration as well as 91 survey floor pick-ups used to control the structural position of the S2M seam.</p> <p>The data spacing and distribution is considered by the Competent Person to be collectively sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedure(s) and classifications applied.</p> <p>Where coal intersections have been sampled in multiple sections per seam, compositing of samples, on a length x RD basis, has been applied.</p>
<p>Orientation of data in relation to geological structure</p>	<p><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></p> <p><i>If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p>	<p>The orientation of data in relation to geological structure is not believed to have introduced any sampling bias.</p> <p>The coal resource is contained in the hanging wall above the Coleman Fault; a major north striking reverse fault which results in a marked anisotropy to the deposit with shallow coal occurring along the strike and above of this feature. Six subsidiary splay thrusts are interpreted to ramp off the Coleman Thrust dividing the deposit into seven fault bounded structural domains. Each of these domains are modelled independently. Little is known about the detailed geometry of these latter thrusts other than their surface expression from field mapping and their occurrence in boreholes as fault repeats and crushed / highly disturbed zones. Currently, the thrusts are modelled as single continuous planes with dips of 30-70°; however, in reality they are likely to consist of a wide zone of intense deformation where coal seams have been thickened in response to cataclastic flow of coal from limbs into the hinge areas of tight folds along the flanks of the thrust.</p> <p>The north south anisotropy to the deposit is geostatistically significant but it is also reasonably consistent and well understood. Drilling of the deposit has occurred in east west traverses approximately perpendicular to the strike of the coal.</p> <p>The raw coal quality varies considerably over the property due to the structurally controlled variations in seam development and due to localized structural thickening. Generally, the raw ash content of the coal seams varies from <10 to 40%, with the higher ash intersections generally occurring in the structurally thickened zones. Raw coal analysis, geophysical and lithological logs suggest that the coal seams consist of interbanded sections of clean and dirty coal. The clean coal sections appear capable of producing a metallurgical product, whereas the dirty sections exhibit lower yields and higher product ashes. In this context, it is likely that selective mining practices would be required to assist</p>

Criteria	JORC Code explanation	Commentary
Sample security	<i>The measures taken to ensure sample security.</i>	<p>with managing metallurgical coal quality at the Vicary Domain.</p> <p>No special sample security measures were adopted on this project because the industry regards coal as a low value bulk commodity, and as such the exploration samples do not require special or elaborate sample security measures.</p> <p>Samples have a unique sample number that is provided for analysis. Each item of advice lists project name, borehole, top and base of sample and sample number.</p> <p>Reserve samples are available for the 2020 LDC coring.</p>
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	<p>No formal reviews or audits of the 2021 CV0621 geological model or its derivative resource assessment have occurred.</p> <p>The Chinook Project is contained in a historical mining area with a long history of formal and informal geological assessments including resource and reserve estimates. From the 1970's to the early 1990's Coleman Collieries and Manalta completed internal unpublished Resource/Reserve estimations for the properties that currently make up the Chinook Project inclusive of the Vicary Domain. Subsequent Mineral Resource Estimates were completed in 2005 and 2018 by Norwest Corp. ("Norwest") for the properties that currently make up the Chinook Project. The most recent previous work on the Chinook Project was a JORC Resource estimate prepared by Dahrouge Geological Services (Dahrouge) and is current for the 27th March, 2020. These historical works have developed a dataset based on historical drilling and outcrop data which is now further supplemented by the recent 2020 drilling results. Historical data appears to be of a professional and consistent quality. Data has been excluded where the data sets are materially incomplete or could not be constrained or confirmed.</p> <p>In June 2021, the geological dataset and model was validated by the Competent Person, using reports, tables, contour plans and cross-sections.</p>

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<p>Mineral tenement and land tenure status</p>	<p><i>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.</i></p> <p><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</i></p>	<p>The Vicary Domain of the Chinook Project comprises an area approximately 3 km wide by 11 km long in the Crowsnest Pass region of southwest Alberta. The coal tenure lies within Township 8, 9 and 10, Range 4, West of the 5th Meridian and in National Topographic System map sheet 82-G/10. The Vicary Domain contains approximately 3,771.5ha of coal tenure of which 1,163.5ha are Alberta Freehold Tenements, and 2,608ha are Alberta Coal Leases.</p> <p>The ownership of the Chinook Project and by association the Vicary Domain currently lies with Montem. Montem resources purchased the properties in 2016/17 from Prairie Mines and Royalty ULM which is a fully owned subsidiary of the Westmoreland Coal Company Coal (Westmoreland).</p> <p>Renewal applications have been submitted for the six coal leases expiring in August 2021. Pending renewals, the tenements remain flagged with an active status which permits exploration under the normal approval process.</p> <p>The Vicary Domain commences 10km north of Coleman in an area wholly situated on Crown Land. The Crown Land falls within the Rocky Mountain Forest Reserve, which is managed by the Alberta Government. Land use in the local area is dominated by recreational, traditional, agricultural and forestry activities. A number of dispositions related to forestry, traplines, quarrying and cultural activities are contained in the property.</p> <p>The Vicary Quarry is located within the Vicary Domain near the historical Vicary Underground Mine. Access to the quarry is via the DLO910594 road, it is with the owner and operator of the quarry that Montem entered into a RUA for this DLO. The aggregate quarry has been in production intermittently for approximately 20 years. Currently the quarry is in care and maintenance. There is no production data available for the quarry.</p> <p>Alberta Coal Leases provide the right to exclusively explore the land within the boundaries of the Lease and are granted for a term of 10-15 years (with an option to extend at expiry). An Alberta Coal Leases does not grant surface rights. A surface lease or grant is required or alternatively surface title can be obtained via Freehold title.</p> <p>The coal resource areas within the Vicary Domain and their immediate surrounds fall within the Rocky Mountain Forest Reserve, which is managed by the Alberta</p>

Criteria	JORC Code explanation	Commentary
		<p>Government. Multiple road use agreements are in place to facilitate access to the Chinook Project.</p> <p>In Alberta, a coal lease grants the right to explore the land within the boundaries of the lease. All of the Vicary Domains are designated as 1976 Coal Development Policy for Alberta Category 4 lands. Within Category 4, coal exploration may be permitted under appropriate control. Surface or underground mining or in-situ operations may be permitted subject to proper assurances.</p> <p>Coal leases are also subject to the following legislation and policies:</p> <ul style="list-style-type: none"> • Mines and Minerals Act Parts 2 and 3 of the Mines and Minerals Act pertain specifically to coal leasing. • Mines and Minerals Administration Regulation • Coal Conservation Act A coal lessee requires a Mine Permit and a Mine License to develop a mine in the location of a lease. Approval for development and mining is administered by the Alberta Energy Regulator (AER). • 1976 Coal Development Policy for Alberta • Integrated resource plans, policies, and any local restrictions set by the Government of Alberta under the Mines and Minerals Act and other legislation. • Information Letters relating to Mineral Rights Acquisition and Mineral Rights Tenure <p>Land use in the local area is dominated by recreational, traditional, agricultural and forestry activities.</p>
<p>Exploration done by other parties</p>	<p><i>Acknowledgment and appraisal of exploration by other parties.</i></p>	<p>Mining History</p> <p>Coal was first noted in the district around 1845 by Father Pierre-Jean DeSmet, a Jesuit missionary. Michael Phillips made note of coal exposures along Elk River in 1873 and sent samples to Dr. G.M. Dawson of the Geological Survey of Canada, who later evaluated the coal deposits as part of a mapping program in 1878.</p> <p>The extensive history of coal mining in the Crowsnest Pass region began in 1898 at Fernie BC, and in 1901 at Frank, Alberta. Small underground mining works possibly commenced in the Chinook Vicary area as early as 1903 with the first recorded exploration works carried out in the early 1900's when McGillivray Creek Coal and Coke Company Ltd. ("MCCC") acquired coal rights to the area that now makes up the Chinook</p>

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		<p>Project inclusive of the Vicary Domain.</p> <p>Coal was extracted from several underground mines on the Project using multi-level and multi-seam room and pillar technology between 1903 and 1978. In 1906, MCCC commenced underground mining operations at the McGillivray Mine, which is located in the Chinook Vicary area North Domain. The McGillivray Mine was acquired by Coleman Collieries Ltd. (“Coleman Collieries”) in the early 1950’s and continued operations until 1958 (Chinook Coals, 1989). The AER reports that a total of 10.8 million tonnes (Mt) of product coal were extracted at the McGillivray Mine.</p> <p>In 1957, Coleman Collieries began a new underground operation at Vicary Creek (within the Vicary Domain), targeting the coal S2M coal seam to produce coking coal for the Japanese market. Norcen purchased control of Coleman Collieries in 1971 and began development of the Racehorse Underground Mine and the expansion of the Vicary Underground Mine (made up of the B-Level and No 2 South areas). This expansion was supported by systematic drilling and geological analysis. The AER records that the Vicary Undergrounds produced just under 8Mt of product coal with the majority of production supplying Japanese Steel companies. The Racehorse Underground Mine was abandoned in 1972 due to faulting in the workings. The Vicary Underground Mine (B-Level) was abandoned in 1972 when overlying workings began to shift. The Vicary Underground Mine (No 2 South) ceased operations in 1978.</p> <p>Within the Vicary Domain between 1966 and 1971, limited open-pit mining was carried out by Coleman Collieries at the small Vicary Open Cuts to the east and up dip of Vicary-B Level. The mine was shut down because haulage and road maintenance had become uneconomic (Booth and Leigh, 1973). Historical records suggest that the open cuts targeted the S2 seam, however, the position of the open cuts suggest that they were actually emplaced outside the cropline of the S2 Seam and were actually based on the deeper S4 Seam. Further work is required to confirm this interpretation. The AER reports suggest total production from the open cuts was in the vicinity of 0.2Mt of product coal.</p> <p>Historical Surface Mapping</p> <p>Multiple geological assessments have been undertaken by the various operators over this period resulting in a significant dataset of mapped surface exposures inclusive of rock outcrops, formation mapping, coal seam exposures and thrust fault identification.</p> <p>In 1947, D.J. MacNeil conducted geological mapping in the area that now makes up part of Chinook Vicary. Between 1964 and 1982, Coleman Collieries conducted exploration</p>

Criteria	JORC Code explanation	Commentary
		<p>at Chinook which included geological mapping, drilling, adit drivage and bulk sampling. In 1977, Coleman Collieries contracted Aero Geometrics Ltd. to complete aerial photography, which was used by R.M. Hardy and Associates Ltd. in 1978, to provide a photogrammetric map at a scale of 1:5000; the map was used as a base for a regional 1978 exploration program which included mapping and diamond drilling. Further drilling and geological mapping was carried out by Chinook Coals Ltd. ("Chinook Coals"), a subsidiary of Manalta Coal Ltd. ("Manalta"), between 1986 and 1991. Additionally, Algas Resources Ltd. undertook a drilling program in 1977 to assess the coal bed methane potential of the area.</p> <p>Additional geological mapping programs were carried out to support historical resource and reserve estimates, namely, by V.H. Johnson in 1965, R.L. Dyson in 1973, and L.A. Smith Consulting and Development Ltd. ("Smith") in 1980.</p> <p>Surface geological mapping data is not directly used as points of observation in the geological model; however, it has been used to structurally control the model surfaces, the location of subcrops, near surface seam dip and to assist with the structural interpretation of the project.</p> <p>Historical Drilling</p> <p>Between 1951 and 1982, nearly all exploration work at the Vicary Domain were carried out by International Coal and Coke and by Coleman Collieries. This early work included geological mapping, drilling, adit drivage, coal quality analysis and bulk sampling. The works were focused on determining the extent of Seam S2 in advance of underground mining, although some exploration holes did locally intersect the S4 and S5 Seams. The vast majority of exploration bores were fully cored (NQ or HQ single tube), however, poor core recoveries limits the utilization of the resultant coal quality dataset.</p> <p>Algas Resources Ltd. undertook a drilling program in 1977 to assess the coal bed methane potential of the area. This included one borehole (EX-8-19) within the Vicary Domain.</p> <p>In 1991, further drilling and geological mapping was carried out by Chinook Coals Ltd. ("Chinook Coals"), a subsidiary of Manalta Coal Ltd. ("Manalta"), after they acquired the assets and holdings of Coleman Collieries Ltd. from Norcen Energy Ltd. in September 1985. This included 2 HQ diamond holes and 30 reverse circulation holes in the southern portion of the Vicary Domain.</p> <p>Montem Resources undertook its maiden Chinook Vicary drilling program in 2020. This</p>

Criteria	JORC Code explanation	Commentary
		<p>drilling included 8 reverse circulation (RC) holes and five 6 inch Large diameter cores targeting the S2, S4 and S5 seams within the Vicary Domain. These holes aimed to define areas of structurally thickened coal seams and confirm the product coal quality. Overall, 13 drillholes were completed across eight drill sites for a total of 1,411m of RC drilling and 508m of six-inch large diameter core drilling. Drilling results demonstrated occurrences of near surface, structurally thickened coal seams, suitable for future open-cut extraction.</p> <p>Historical Resource Declarations</p> <p>From the 1970's to the early 1990's Coleman Collieries, Norcen and Manalta completed internal unpublished Resource/Reserve estimations for the properties that currently make up the Chinook Project inclusive of the Vicary Domain. Subsequent Mineral Resource Estimates were completed in 2005 and 2018 by Norwest Corp. ("Norwest") for the properties that currently make up the Chinook Project. The most recent previous work on the Chinook Project was a JORC Resource estimate prepared by Dahrouge Geological Services (Dahrouge) and is current for the 27th March, 2020.</p> <p>This 2020 Dahrouge report details a 149Mt JORC Resource (104Mt Indicated and 45Mt Inferred) and 125-460Mt Exploration Target for the entire Chinook Project. Of this 149Mt, 85Mt (53Mt Indicated and 45Mt Inferred) JORC Resource along with 125-450Mt Exploration Target were located within the Chinook Vicary area of the Project, which includes areas within and to the north and south of the area encompassed by this report. Since this work, 5 cored and 8 open holes have been drilled within the Vicary Domain along with a detailed audit and review of historical information. This new data has enabled the declaration of additional Inferred and Indicated Resources within the Vicary Domain. Notably, the areas of declared resources in this report are mutually exclusive to (or lie outside of) the areas included in the 2020 Dahrouge JORC Resource estimate. That is, the resource areas detailed in this report lie adjacent to but outside those detailed in the 2020 Dahrouge report. That said, these areas are within the boundaries of the 2020 Dahrouges Chinook Vicary Exploration Target of 125-450Mt. In this context, the Vicary Domain resources contained in this report are considered to be cumulative or inclusive with Dahrouges 2020 Chinook Project Resources. All 2021 resources are contained in areas declared as Exploration Targets in Dahrouges 2020 Chinook Project Resources.</p> <p>Other Substantial Data</p> <p>In 1979, R.M. Bustin submitted a PHD Thesis for the University of British Columbia titled</p>

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		<p>“Structural Features of the Coal Measures of the Kootenay Formation, South-eastern Canadian Rocky Mountains”. This document included an informative account of the Vicary Underground Mine along with an assessment of the likely mechanism of structural deformation at Chinook Vicary and the Vicary Domain as it relates to zones of structural thickening.</p>
<p>Geology</p>	<p><i>Deposit type, geological setting and style of mineralization.</i></p>	<p>The Chinook Project is located in the Crowsnest Coalfield, on the Front Ranges of the Canadian Rocky Mountains. Coal bearing sedimentary sequences occur in the Jurassic-Cretaceous Mist Mountain Formation of the Kootenay Group. Economically important coal seams occur throughout the succession. Regionally, the seams are up to 18m thick and vary in rank from south to north, from high volatile bituminous to semi anthracite. Coals of the Mist Mountain Formation outcrop at the Vicary Domain in a general north-south direction along the entire length of the domain and continue into the North Domain to the south and the Racehorse Domain to the north.</p> <p>At the Vicary Domain the thickness of the Mist Mountain Formation is estimated to be approximately 90-150m with Resources declared in the S2 and S5M seams. No resources are declared in the S1, S4, S5U and S5L seams. Each seam is made up of multiple coal, dirty coal and parting horizons. While the coal and sediment intervals appear to be complexly interbedded and interfingered, the seam packages nonetheless have distinct geophysical signatures that can generally be identified along the currently known strike length of the deposit.</p> <p>Coal-bearing sediments of the Late Jurassic to Early Cretaceous were strongly deformed during the Late Cretaceous Laramide Orogeny resulting in the development of north to northwest trending folds and steeply dipping reverse faults, which locally causes the strata to be thrust upwards. Coal zones are generally continuous between major reverse faults however their thickness and distribution is variable within relatively short distances.</p> <p>Tectonic deformation of coal measures is the major factor that controls the present areal extent, thickness variability, lateral continuity, and geometry of coal beds at the Vicary Domain. In most areas of the property the Coleman Thrust cuts through the middle of the Mist Mountain Formation. The Coleman Thrust acts as a basal surface to the coal model and no material resources are thought to exist below the Coleman Thrust. Six overlying splay thrusts from the Coleman thrust have been interpreted from the subsurface and surface data. These thrust faults are locally significant and divide the deposit into seven discrete structural domains of varying styles and complexities. Little is known about the detailed geometry of the splay thrusts other than their sub-surface</p>

Criteria	JORC Code explanation	Commentary
		<p>expression as repeat and structural disturbances. Currently, the thrusts are modelled as single continuous planes with dips of 30°-60°; however, they are likely to actually consist of a wide zone of intense deformation with coal seams in the hinge zones of tight folds and along the flanks of the thrust. The overall geology is represented in the attached figures.</p> <p>During deformation the coal seams formed the loci of interstratal slip, thrust faulting detachment and folding by virtue of the major contrast in competency between coal seams and the adjacent strata. As a result, the coal seams vary markedly in thickness; in some areas coal seams have been thickened as much as an order of magnitude in response to thrust faulting and folding, whereas in others adjacent areas the seams may be completely pinched off or faulted out. In structurally thickened zones the shearing of coal and adjacent strata has resulted in the introduction and dissemination of discrete rock partings which in turn have produced abnormally high ash contents and poor washability characteristics and has made the coal more susceptible to oxidation (Bustin 1979).</p> <p>Major faults have resulted in repetition of the Kootenay Group and have brought coal measures of the Mist Mountain Formation to depths accessible to modern open cut mining methods. Although extensive deformation of coal-bearing strata has enhanced the economic potential of the region, it has also complicated mining and exploration. In some areas, shearing of coals has resulted in increased ash, low yields, locally promoted in situ oxidation and resulted in unpredictable roof conditions, making underground mining difficult.</p> <p>The resource is considered a Medium Volatile A class coal. Based on limited evidence the coal exhibits a low ash, moderate to high phosphorous and moderate sulphur. When washed to a metallurgical specification the product coal is likely to exhibit weak fluidity, moderate to high coke strength and non-reactive maceral content of 40-50%.</p>
<p>Drill hole Information</p>	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <p><i>easting and northing of the drill hole collar</i></p> <p><i>elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</i></p>	<p>The CV0621 geological model was constructed using Vulcan software (version 10.1) based on an isis database containing 284 boreholes of which 145 are directly used in the models creation (88 fall outside the Project area and 51 are excluded due to reliability issues). The S2M seam model was also anchored/registered to 91 surveyed floor pickups from the underground record tracings. Additional structural non-coal outcrop mapping points as well as field maps and cross sections from the 1970's and 1980's were utilized to assist in the development of the models structural framework.</p> <p>The numbers of intersections per coal seam are detailed in Table 14 with a detailed</p>

Criteria	JORC Code explanation	Commentary
	<p><i>dip and azimuth of the hole</i></p> <p><i>down hole length and interception depth</i></p> <p><i>hole length.</i></p> <p><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></p>	<p>summary of intersections presented in Appendix 2.</p> <p>All major seams are correlated between holes with a level of confidence in accordance with their resource status (Indicated or Inferred).</p> <p>Structural data is contained in a Vulcan database; the database has been updated with all exploration data, mapping pickups and other relevant data. Coal quality data is contained in an Excel file but linked to the structural database by both roof and floor picks and seam name.</p>
<p>Data aggregation methods</p>	<p><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></p> <p><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></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>When appropriate, compositing of density is aggregated by volume. Proximate analysis results, sulphur and washability are aggregated by mass. Clean coal results are aggregated by the sum product of yield and mass. These approaches are industry standards. Where quoted, coal quality is for the full seam.</p> <p>Grade cut-offs have not been applied to exploration results in the database.</p>
<p>Relationship between mineralization widths and intercept lengths</p>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></p>	<p>All thicknesses in the geological model are apparent thickness. True thicknesses are calculated and reported in the attached tables. Unless otherwise specified all thicknesses in this document are apparent thicknesses.</p> <p>Given the deposits steep seam dip there is a significant differential between apparent and true thickness in a vertical borehole. Many of the boreholes have been inclined in an attempt to intersect strata perpendicular to the strata dip.</p> <p>Both down hole and interpreted true lengths are reported. The interpreted true lengths are based on accuracy of the seam dip model which is commensurate with the Resource classification.</p>

Criteria	JORC Code explanation	Commentary
Diagrams	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	See Figures 1 to 12 and Tables 1 to 9
Balanced reporting	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	<p>There is no preferential reporting of results.</p> <p>The Vicary Domain geological model has two primary purposes, a tool for performing JORC Resource estimates over the Vicary Domain tenements, and as a tool for planning future exploration. This work was completed in June 2021 and resulted in the establishment of the CV0621 model.</p> <p>Data has been extensively cross referenced against raw records. Key validation tools include the generation of cross sections and isopach plans and generic Vulcan borehole validation checks.</p> <p>No material information has been excluded and outputs from the model honor the data. Average values have been included for resources reported here and whilst some outlying values may exist the average values are considered representative of Coal Resources.</p>
Other substantive exploration data	<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>	<p>No material potentially deleterious or contaminating substances have been identified other than those specified below.</p> <p>A field mapping dataset exists across the Vicary Domain tenements which has been utilized to develop and refine the structural framework of the geological interpretation.</p> <p>Aerial and topographic interpretation clearly demonstrate the north south striking regional geology of the deposit as it relates to the north south striking westerly dipping thrust belts.</p> <p>There is a substantial historical dataset of geological and mine related reports that supports and builds on the results detailed in this study.</p> <p>The rocks of the Mist Mountain Formation are naturally enriched in Selenium. In alkaline,</p>

Criteria	JORC Code explanation	Commentary
		<p>aerobic conditions, elemental Selenium and selenide minerals are oxidized releasing soluble selenate ions which can be transported in surface water runoff. Large scale surface mining in the Elk Valley in British Columbia has enriched the Elk River in Selenium. Any future development of these tenements will require the development of a Selenium management plan.</p>
<p>Further work</p>	<p><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></p> <p><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></p>	<p>The Vicary Domain is an early stage brownfield property. Potential open cut areas have been identified at a conceptual level and a significant investment in exploration, mining and environmental assessments will be required to elevate this Project to a Prefeasibility (PFS) level. The exploration components of these works would include but not be limited to:</p> <p>Expanding Resources</p> <p>Indicated and Inferred resources can be increased with further drilling as the current resource area excludes those coal seams with insufficient data to demonstrate the coal is capable of producing a metallurgical product. These seams include all of the S4, S5U and S5L and parts of the S2U, S2L and S5M. There is no guarantee that future drilling would be successful in this regard.</p> <p>Additional widespread structural and coal quality drilling would be required to elevate sufficient Resources to an Indicated level so as to support a PFS study.</p> <p>Resources contained in the underground areas of the S2M seam are limited to insitu remnant pillars as detailed in the underground survey records. There is a reasonable possibility that additional resources are present both in unsurveyed remnant pillars and the floor of the seam, particularly in structurally thickened areas. Additional exploration, possibly coupled with geophysical assessments will be required to identify and quantify these potential resources.</p> <p>The resources are open down dip at ratios of between 15:1 to 20:1 bcm/insitu tonnes</p> <p>Coal Quality</p> <p>There is a requirement to continue to expand the coal quality dataset on a ply by ply basis over the areas of merit inclusive of the underground areas. An LDC 150mm (6") coring method is recommended to ensure that sufficient core recovery and sample mass is achieved and representative samples are collected, in order to confirm the samples rheology is suitable for metallurgical markets. This information will also facilitate a</p>

Criteria	JORC Code explanation	Commentary
		<p>detailed assessment of the washability characteristics of the deposit as well as the possible impact of selective versus bulk mining options on the Vicary Domains's product ash and rheological properties. A secondary outcome will be the establishment of a sizing envelope for a future wash plant.</p> <p>Other Substantive Exploration Related Works</p> <p>Installation of piezometers in appropriate exploration holes to establish baseline hydrological investigations will be a requirement of a PFS. Understanding the hydrology in the Vicary Underground Mine and its impact on the regional aquifers will be a key outcome of this work. This work should also assess the spontaneous combustion risk as well as outburst risk of water and gas contained in these underground workings.</p> <p>Conduct geotechnical investigations suitable for pit and dump geotechnical assessments. These study's should include an assessment of the acid forming potential of the waste material, particularly the Cadomin Formation as well as the likely selenium impacts on the surrounding water ways.</p> <p>Investigate possible pit extensions or satellite pits in under explored areas. This would include the areas where no resources are currently declared.</p>

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<p>Database integrity</p>	<p><i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i></p> <p><i>Data validation procedures used.</i></p>	<p>No Measured Resources are declared for the Vicary Domain.</p> <p>All points of observation meet the following criteria</p> <ul style="list-style-type: none"> • geophysically logged cored holes, • logged cored holes without geophysics and • open boreholes with geophysical logs. <p>All laboratories involved in the sample analysis have a system in place for quality control. Their scope has been to ensure the maintenance of acceptable levels of accuracy and precision in the reporting and process selection. Due to the historical nature of the reports no QC records have been maintained for this work. That said, all of the laboratory test work that was performed was completed by certified laboratories in Australia, Canada and the US for coal testing work. For testing work that requires it, all of these laboratories used or continue to use the procedures of the ASTM, as was the case for the samples from the Vicary Domain. The sample preparation methods utilized for the historical samples were Industry Standard at the time.</p> <p>All geological data was collated by Montem geologists who undertake validation checks on each hole before geological logs are finalized.</p> <p>There is basic comparability of data for parameters such as ash and FSI values. It is considered that there is sufficient coal quality data to characterise and evaluate the deposit at the differing resource categories. Structure and coal quality grids and data points are checked for outliers and addressed, with potential anomalies being omitted.</p> <p>Structural data is contained within a Vulcan borehole database. The database was updated with all available exploration data and other relevant data as of June 2021.</p> <p>Raw geological data fully transferred to the Vulcan database has been carried out with due diligence using best geological practice. Data has been selectively cross referenced against raw records. Key validation tools include the generation of cross sections and isopach plans and generic Vulcan borehole validation checks. All model releases are formally documented.</p>
<p>Site visits</p>	<p><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></p>	<p>A site visit was undertaken by the Competent Person (CP) in early March 2018. COVID travel restrictions have prevented a more recent visit.</p>

Criteria	JORC Code explanation	Commentary
	<i>If no site visits have been undertaken indicate why this is the case.</i>	
Geological interpretation	<p><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></p> <p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<p>CV0621 Geological Model Details</p> <ul style="list-style-type: none"> • Model in UTM co-ordinate system NAD83 • Grid origin Structural model: Grid extent 677000N, 5510000E, 680600E, 5524000N. • Grid mesh structural model: 50m x 50m mesh • Vulcan Structural and Coal Quality Database: chn6.val.isis <p>The database has been manually and electronically interrogated to produce Vulcan database (.isis) files representing x,y coordinates and data values for structural parameters such as depth to coal seam roof and floor. The computer generated models of the Vicary Domain deposit were generated using Maptrek's Vulcan Software V10.1</p> <p>Resources have been estimated within the Vicary Domain tenements using Vulcan block modelling software within vertical sided polygons. The model used geological data from drilling, underground survey, outcrop and topographic data as at the end of June 2021. The stratigraphic model was created using Vulcan software (Version 10.1).</p> <p>Structurally, the deposit is moderately well understood and an alternative interpretation, although possible, is unlikely. The main factor affecting coal seam continuity is the interplay of faulting, folding, seam dip, depth of weathering and surface topography. Seams show a highly variable thickness which reflects depositional and structural variations as well as the localized thickening of coal seams which occur in the apex of folds and adjacent to reverse faults. Several areas are still incompletely understood and will require additional exploration prior to a comprehensive mining evaluation.</p> <p>A seam by seam raw ash model was constructed using the cored coal quality data with a recovery of 80% or greater. Elevated ash values were observed in zones of structural thickening and it is likely that these zones will require selective mining to achieve a consistent metallurgical product.</p>
Dimensions	<i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i>	<p>The tenements comprising the Vicary Domain cover an irregular shaped area approximately 11km north south and 3km east west.</p> <p>This statement covers the coal resources within the Vicary Domain tenure. Tenure is both Alberta Freehold Tenements and Alberta Coal Leases.</p>

Criteria	JORC Code explanation	Commentary
		<p>Resources estimated in July 2021 for the period ending 30th June 2021.</p> <p>Resources are limited to coal tenement boundaries; subcrop against base of weathering; a minimum coal thickness of 0.5m, a maximum insitu ash of 35%, a maximum depth of 250m, and a nominal cumulative strip ratio of 20:1bcm/t (this latter constraint is never reached). This approach approximately reflects existing practical recovery limits for thin seam open cut mining.</p>
<p>Estimation and modeling techniques</p>	<p><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></p> <p><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p> <p><i>The assumptions made regarding recovery of by-products.</i></p> <p><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).</i></p> <p><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></p> <p><i>Any assumptions behind modelling of selective mining units.</i></p> <p><i>Any assumptions about correlation between variables.</i></p> <p><i>Description of how the geological interpretation</i></p>	<p>The geological model was developed by Shaun Tamplin, Principal Consultant of Tamplin Resources and the projects Competent Person, using Maptek Version 10.1 Vulcan software.</p> <p>The most recent previous work on the property was a JORC Resource estimate prepared by Dahrouge Geological Services (Dahrouge) and is current for the 27th March, 2020. This 2020 report details a 149Mt JORC Resource (104Mt Indicated and 45Mt Inferred) and 125-460Mt Exploration Target for the entire Chinook Project. Of this 149Mt, 85Mt (53Mt Indicated and 45Mt Inferred) JORC Resource along with 125-450Mt Exploration Target were located within the Chinook Vicary area of the Project, which includes areas within and to the north and south of the area encompassed by this report. Since this work, 5 cored and 8 open holes have been drilled within the Vicary Domain along with a detailed audit and review of historical information.</p> <p>The geological model is a grid model; however, the project utilizes a HARP block model for all its resource reporting requirements. The stratigraphic model was created using Vulcan software and a grid size of 50m. Structural data contained in Vulcan database was updated with all available and valid exploration borehole data, coal quality data and other relevant data as of the date of the report. No mining or surface disturbances have occurred since this time.</p> <p>Interpolation of missing structural data utilized Vulcan's FIXDHD module. Seams were only interpolated outside hole extents, thus ensuring all non-logged seams were pinched to a zero thickness. Underground surveyed floor points (91 in total) were incorporated into the model as surface control points using the S2M Seam as a principal reference surface. This seam was chosen as it had the largest associated dataset. All structural data was interpolated within 7 structurally independent domains with each domain bounded by interpreted reverse faults (the Coleman, Boundary, Vicary and Racehorse 1 to 3 Thrusts). No coal was interpreted as existing below the lowermost Coleman Thrust.</p> <p>After interpolation, seam structure points were modelled using Mapteks hybrid modelling method to create six separate dominical models. This structure surface method is a triangulation based approach (trend order=2, smoothing=10). Seam thickness was modelled with a triangulation algorithm (trend order=0, smoothing=10, maximum triangulation side</p>

Criteria	JORC Code explanation	Commentary
	<p><i>was used to control the resource estimates.</i></p> <p><i>Discussion of basis for using or not using grade cutting or capping.</i></p> <p><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></p>	<p>length=5000m). This methodology was selected after a comparison with inverse distance square techniques demonstrated no material change in Resources.</p> <p>The uppermost S2 and S4 seams are laterally continuous whereas the S1 and S4A are modelled as discontinuous horizons and were pinched out between boreholes whenever they did not exist in adjacent boreholes. That is, these horizons were not interpolated. The S5 is also discontinuous; however pinch outs are generally a function of being cut-off by thrusting rather than being impacted by the depositional environment.</p> <p>Coal quality parameters were modelled using inverse distance squared (Trend order = 0, Power =2, Max. No. of points=10). Only ash and density was modelled. Relative density is assumed to be at nominal 5% moisture which is in line with expected insitu moisture.</p> <p>There is no assumption of selective mining other than the standard open cut mining process of removing partings greater than 300mm in thickness. The geological model is validated by generating and inspecting reports, tables, cross sections, contour plans and comparisons with posted drill hole values. The complex and undulating character of the deposit makes it necessary to utilize interpreted geological controls such as dummy boreholes and extrapolated survey data in order to appropriately characterize the resource. The geological model is validated by generating and inspecting reports, tables, cross sections, contour plans and comparisons with posted drill hole values.</p>
Moisture	<p><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></p>	<p>The basis of the tonnage estimate is in-situ moisture (Mis). In-situ moisture is estimated to be 5% which is in line with the moisture values obtained from historical bulk samples.</p>
Cut-off parameters	<p><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></p>	<p>All open cut resources at the Vicary Domain are less than 250m from the surface. All Resource polygons are nominally limited to strip ratios of less than 20:1 bcm/t; however, the actual strip ratio of the resource areas is less than 15:1 bcm/t. A minimum true coal thickness of 0.5m and 35% ash was applied to all seams.</p> <p>There is no assumption of selective mining other than the standard open cut mining process of removing partings greater than 300mm in thickness.</p>
Mining factors or assumptions	<p><i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining</i></p>	<p>See Cut-off Parameters and estimation and modeling techniques.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></p>	
<p>Metallurgical factors or assumptions</p>	<p><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></p>	<p>Average values have been included for resources reported here and whilst some outlying values may exist the average values are considered representative of Coal Resources.</p> <p>There is no known material data which would place at risk the assumption that the coal can be mined cleanly and/or blended and/or washed to a saleable specification.</p>
<p>Environmental factors or assumptions</p>	<p><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></p>	<p>Any future coal mine development would need to go through the process of preparing an Environmental Impact Assessment (EIA) and submission of an application to the Alberta Energy Regulator (AER) under the Environmental Protection and Enhancement Act (EPEA) and Canadian Environmental Assessment Act 2012 (CEAA).</p> <p>The Province of Alberta continues to provide opportunity to the development of new coal mines. The Coal Development Policy for Alberta (1976 - currently under review) provides the overall Government direction for the full life cycle of coal mining development. The primary policy direction is the establishment of Categories of land within the Province where coal projects will be prohibited, restricted or allowed to proceed subject to technical application processes. Recently, the Policy had been temporarily rescinded and quickly re-instated when significant public interest in this policy peaked. The Province has initiated a broad public input process for the purpose of updating the Coal Policy. While this process is currently underway, the mandate for the committee is to provide an updated policy to the Province by the end of the year.</p> <p>The Province also has several other related policy initiatives that influence the potential for the development of major coal mining projects.</p> <p>Regional Land Use Plans.</p>

Criteria	JORC Code explanation	Commentary
		<p>Across the Province, the Government is undertaking a fine layer of regional plan development and implementation to provide guidance on local land, water and infrastructure directions. There are several existing and future mine projects that are incorporated into completed regional plans.</p> <p>Greenhouse Gas (GHG)</p> <p>The Province has implemented a number of GHG policies that provides direction on the current and future GHG reduction initiatives. These include large emitter's targets and a directed policy to move away from coal fired electricity generation.</p> <p>Water Quality</p> <p>The Province has initiated a number of regional assessments of water quality in surface waters. Several of the key areas of interest are associated with large mining projects.</p> <p>The regulatory landscape of Alberta and Canada continues to provide a pathway for export metallurgical coal projects to gain the necessary approvals in order to develop, operate and close coal mining projects. In particular, the Government of Canada regulations provide clear direction on submission and review/decision processes. There have been a number of recent changes that have created a legislative/regulatory process for coal mining projects that are, while still achievable, increasing difficult. This difficulty is demonstrated by the recent decision by the AER's Joint Review Panel to refuse approval of the nearby Grassy Mountain Metallurgical Coal Mine (Benga Mining Limited - pending further appeals and submissions). The Grassy Mountain Project shares many environmental challenges with the Chinook Project including the presence of selenium enriched overburden, surface water quality constraints, westslope cutthroat trout habitat (and fish habitat more generally), and endangered vegetation (whitebark pine, limber pine and rough fescue–dominated native grasslands). Portions of the Chinook Project are also located within a Mountain Goat and Sheep Range where management practices will be to avoid disturbances that have a direct or indirect adverse effect and to avoid permanent alteration of habitat. The majority of the Chinook Project is located within a Grizzly Bear Protection zone which is declared to provide and preserve either core or secondary grizzly bear habitat</p> <p>Both on a technical standpoint, with regulatory changes such as the CMER putting additional pressures on future operations, and on policy initiatives, such as the increasing global regulation of GHG, necessitating a broader consideration of the potential impacts of mining projects, the pathway to approval continues to be clear however it is narrowing. Projects will require significantly increased investments in the early project developments of technology and</p>

Criteria	JORC Code explanation	Commentary
		<p>agreements for the eventual project lifecycle (A. Etmanski, 2021).</p> <p>Working in support of future projects is the fact that the coal mining industry in Canada is a mature industry with a number of existing operations. Most of the existing technical challenges for future mining projects are already in early development and either exist or will soon exist as operational solutions (A. Etmanski, 2021).</p>
Bulk density	<p><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></p> <p><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></p> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<p>The basis of the tonnage estimate is in-situ moisture (Mis). In-situ moisture is estimated to be 5% and this assumption is based on comparison with similar nearby deposits containing similar rank coal as well as bulk sample data.</p> <p>Relative Density (Tonnage) estimated at 5% moisture</p>
Classification	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></p> <p><i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></p> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<p>No Measured Resources are declared for the Vicary Domain. Indicated Resources were supported by points of observation up to 200-250m apart. Inferred Resources were supported by a spacing of less than 400-500m. Points of observation include cored holes with geophysical logs, lithologically logged cored holes without geophysical logs and open boreholes with geophysical logs. Structural confidence was also informed by surface mapping data and underground surveys. Consideration of the confidence to predict seam continuity, thickness and coal quality have been incorporated in the positioning of resource category limits, in addition to data spacing criteria.</p> <p>Resources are nominally limited to areas with a cumulative strip ratio to the basal seam of less than 20:1 bcm waste/insitu coal tonne and a total depth of less than 250m, however, the current borehole coverage rarely reaches these limits with all resources in the dataset contained in areas with ratios that are generally less than 15:1 bcm/t. In this context resources are considered to be potentially economically extractable via open cut mining.</p> <p>The structural character of the deposit as a whole is moderately well understood in relation to the location and character of the principal geological features.</p>

Criteria	JORC Code explanation	Commentary
		<p>All coal resources in the Vicary Domain have open cut potential. Drill holes are spaced closely enough for coal seam continuity and quality to be assumed justifying Indicated and Inferred status as shown on a seam by seam basis in Figures 4 to 6.</p> <p>The locations of individual coal seam subcrops are only approximate and would require additional drilling if shallow seam mining were to take place.</p> <p>The extent of major faulting and coal washouts may negatively affect the coal resource tonnage for each affected coal seam. Recovery of coal within historical limits of mining may be complicated due to flooded workings and/or spontaneous combustion issues. Additional works on these risks may be required to elevate the status of these resources.</p> <p>Other minor faults with smaller throws are likely to exist throughout the deposit.</p>
Audits or reviews	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	<p>No formal third party audits or reviews have occurred.</p> <p>The model was created by the C.P. on a database prepared by Montem and the previous owners of the Chinook Project. The resultant model was validated by the C.P. in order to prepare this statement.</p>
Discussion of relative accuracy/confidence	<p><i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></p> <p><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></p> <p><i>These statements of relative accuracy and</i></p>	<p>Structurally, the deposit is moderately well understood and an alternative interpretation is possible, but not likely. The current interpretation has not materially changed since the 1970's. Multiple workers have reviewed the interpretation in the ensuing period. The main factor affecting coal seam continuity is the interplay of faulting, folding, seam dip, depth of weathering and surface topography. Seams show a highly variable thickness which reflects depositional and structural variations as well as the localized thickening of coal seams which occur in the apex of folds and adjacent to reverse faults</p> <p>The acquisition of a more reliable and expanded coal quality dataset is the most important criteria to any future expansions to the Vicary Domain Resource Estimate.</p> <p>All remaining coal resources in the Vicary Domain have open cut potential. Resources have a moderate level of confidence. Drill holes are spaced closely enough for coal seam continuity and quality to be assumed justifying Indicated status and Inferred Status within the declaration areas.</p> <p>The extent of coal washouts and faulting may negatively affect the coal resource tonnage for each affected coal seam. Significant faulting and folding is likely to exist throughout the deposit.</p>

Criteria	JORC Code explanation	Commentary
	<i>confidence of the estimate should be compared with production data, where available.</i>	

Appendix 2

Statement of Vicary Domain Resources

This statement covers the Vicary Domain of the Chinook Vicary area of the Chinook Project. The resources are estimated as of the 30th June 2021 and are contained in approximately 3,771.5 ha of coal tenure of which 1,163.5 ha are Alberta Freehold Tenements, and 2,608ha are Alberta Coal Leases as shown on Tables 4 and 5 and Figure 8.

Resources are estimated for the period ending 30th of June 2021 (Tables 1 and 3)

Figures 4 - 6 show Resource areas for each seam group.

Table 3 – Vicary Domain Resources by Depth Increment as of the 30th June 2021

Depth	<100m						100-200m						200-250m					
	Indicated			Inferred			Indicated			Inferred			Indicated			Inferred		
Seam	(Mt)	Thick (m)	Ash%	(Mt)	Thick (m)	Ash%	(Mt)	Thick (m)	Ash%	(Mt)	Thick (m)	Ash%	(Mt)	Thick (m)	Ash%	(Mt)	Thick (m)	Ash%
S2U	-			-	0.7	11.5	-			-			-			-		
S2M	-			4.1	1.9	11.8	-			6.4	4.6	11.8	-			-		
S2M PILLAR	3.8	3.8	11.8	1.0	4.0	11.4	-			3.2	3.4	12.7	-			0.4	3.9	12.4
S2L	-			0.6	1.4	13.9	-			0.1	1.5	14.9	-			-		
S5M	-			3.3	5.0	29.5	-			-			-			-		
Total (Mt)	3.8	3.8	11.8	9.0	3.2	18.4	-			9.7	4.2	12.1	-			0.4	3.9	12.4

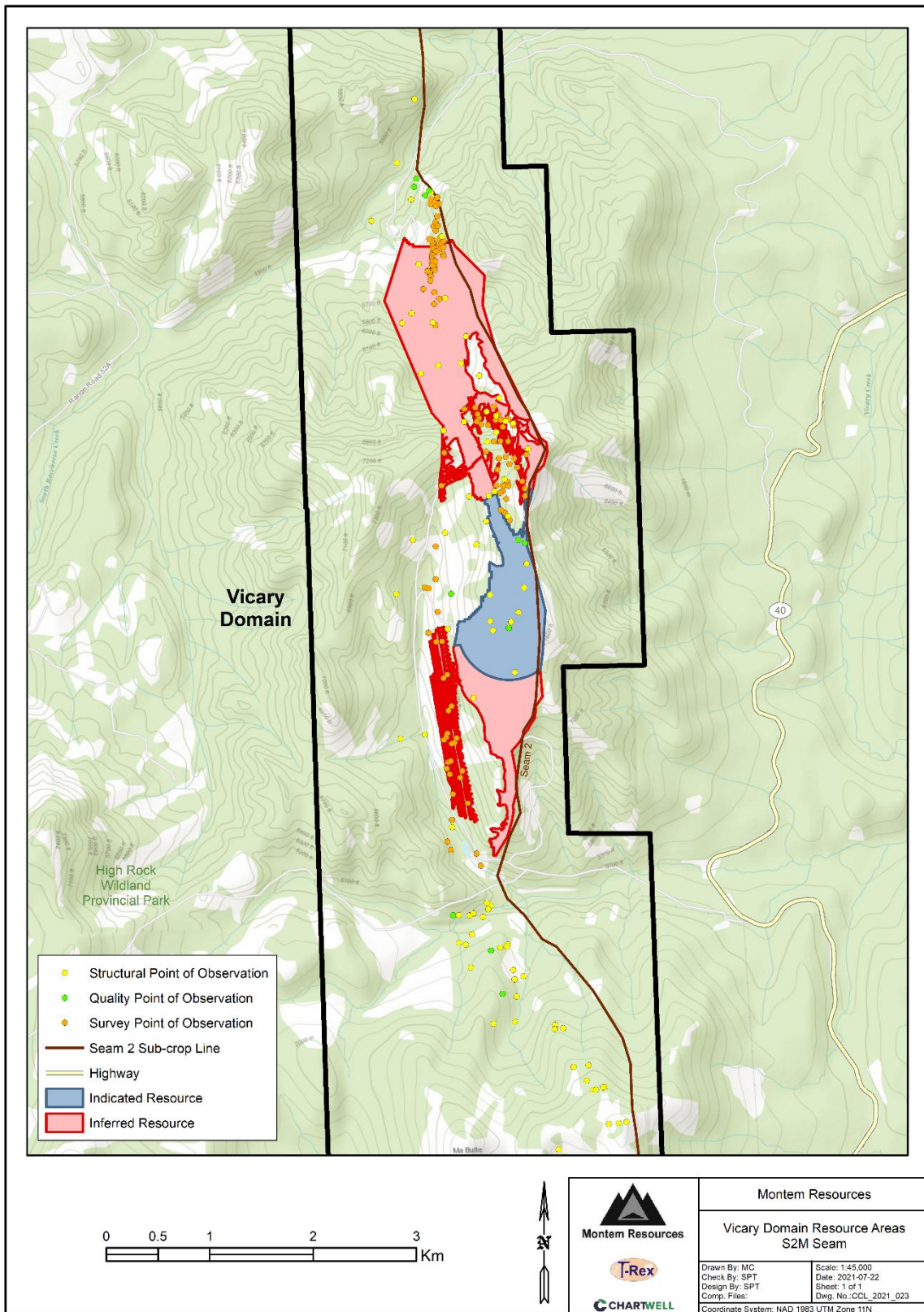


Figure 4 – Vicary Domain Resource Areas – S2M Seam

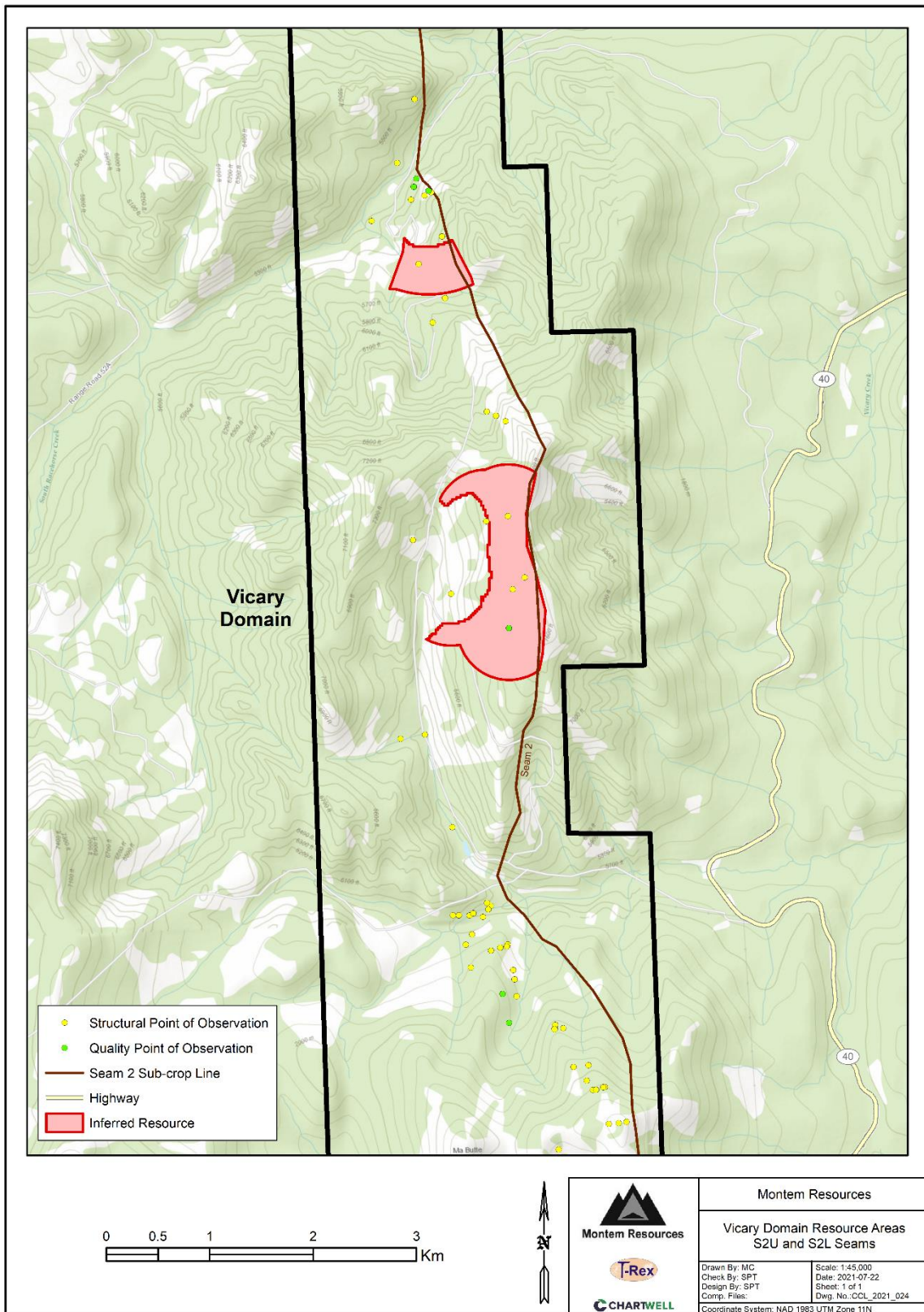


Figure 5 – Vicary Domain Resource Areas – S2U and S2L Seam

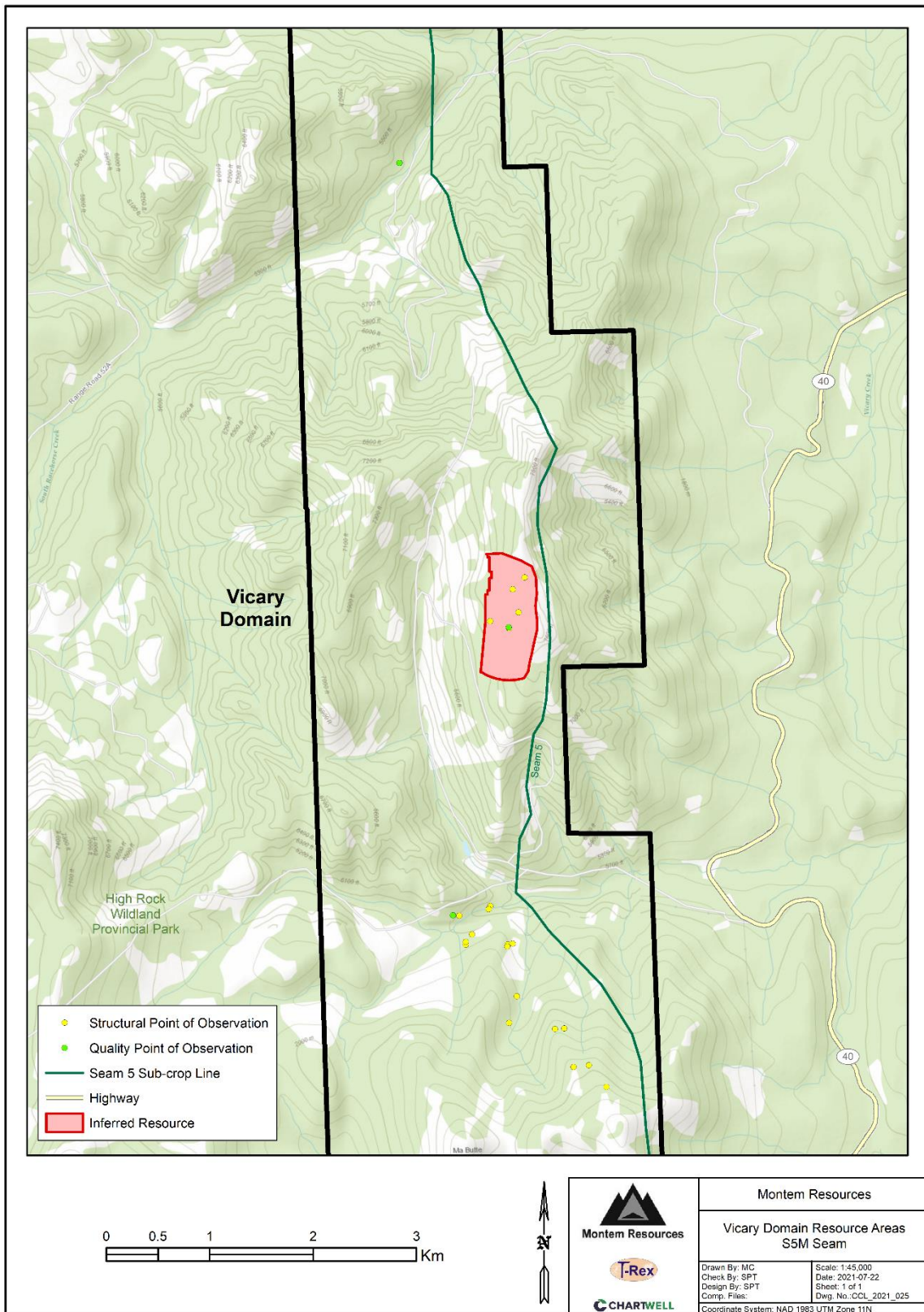


Figure 6 – Vicary Domain Resource Areas – S5M Seam

Appendix 3 Supporting Figures and Tables

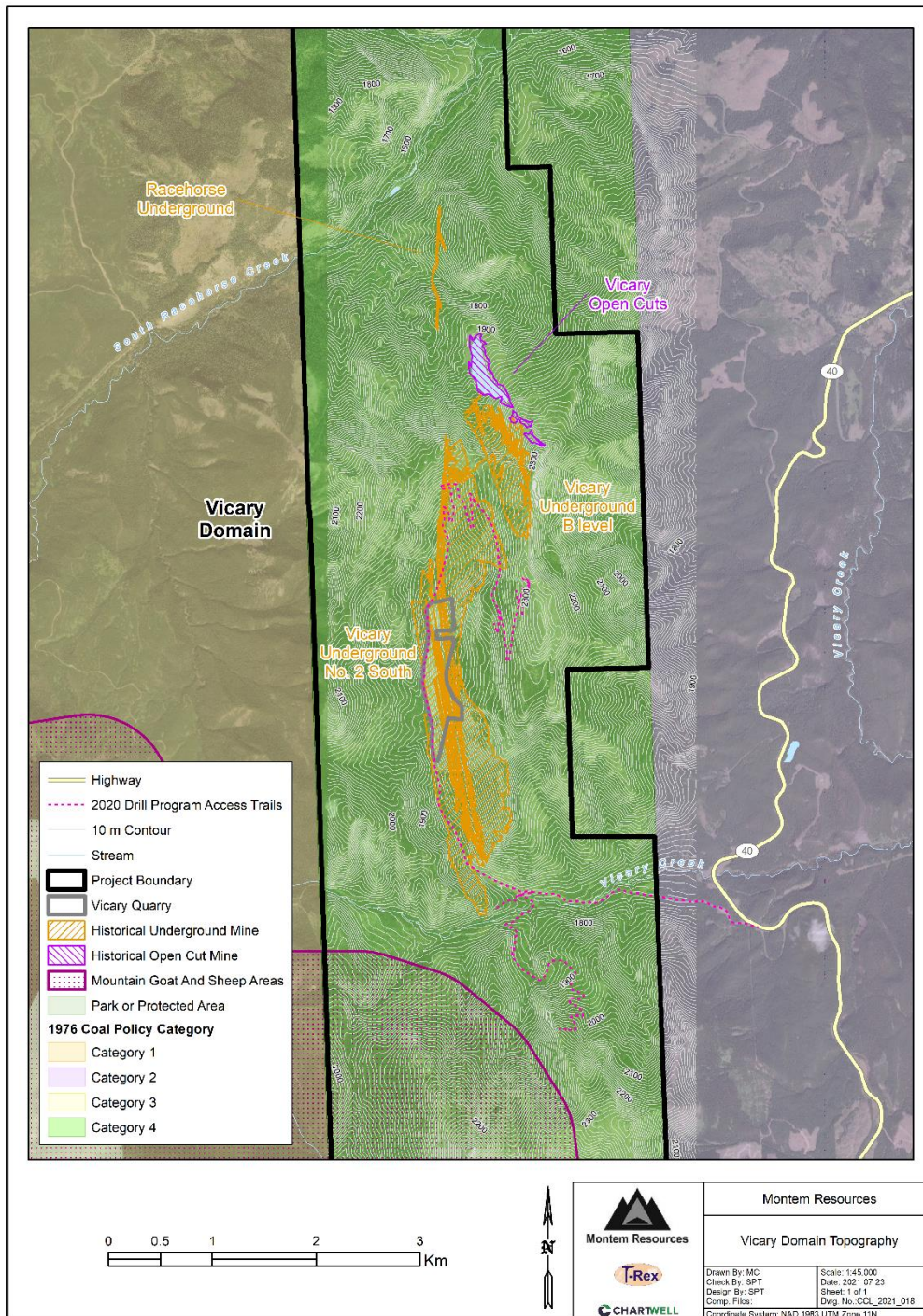


Figure 7 – Vicary Domain Topography

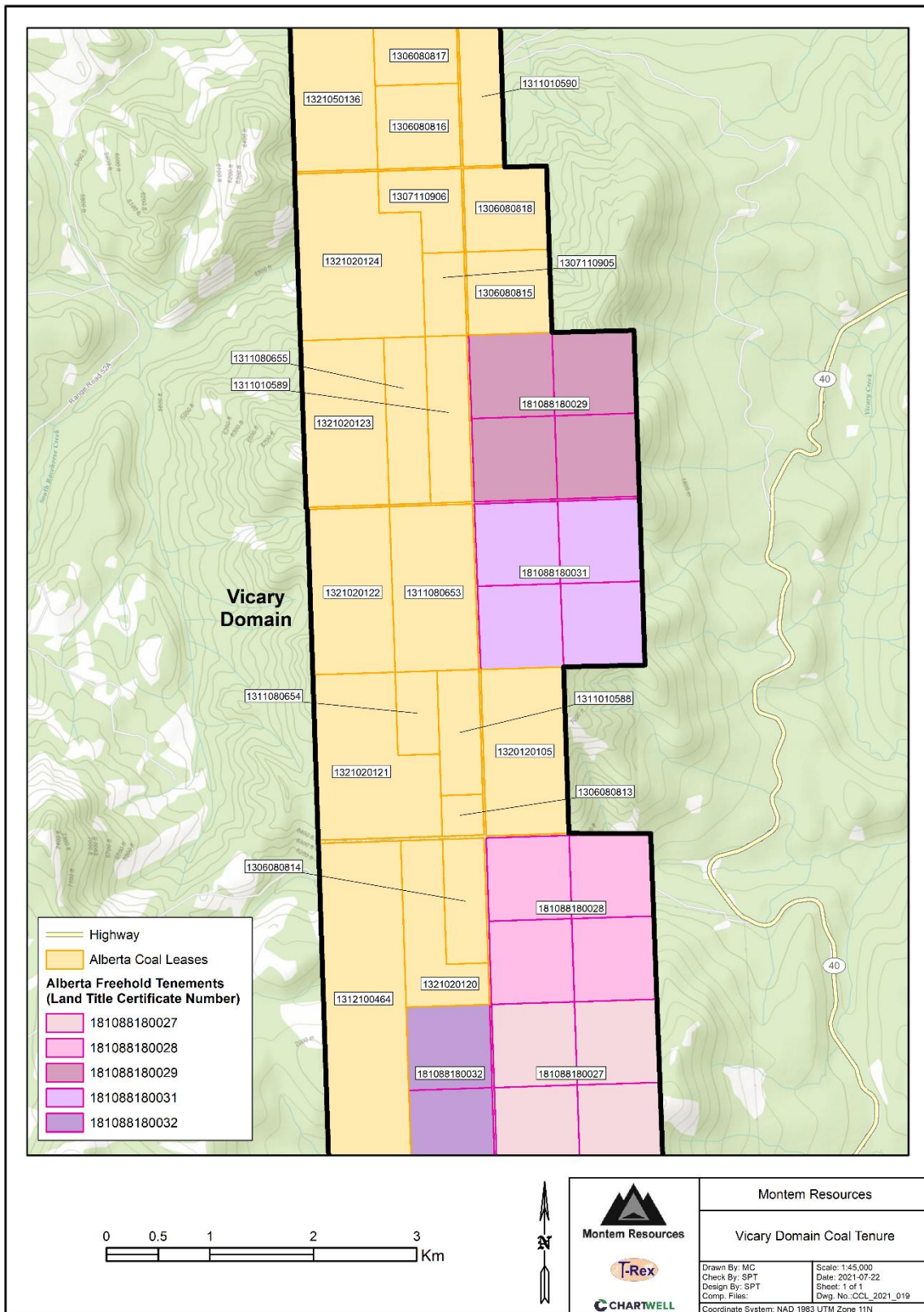


Figure 8 – Vicary Domain Coal Tenure

Coal Lease No.	Status	Area (ha)	Legal Land Description	Designated Representative	Current Expiry Date	Coal Category		
01306050823	ACTIVE	128	5-04-010: 18W	MONTEM RESOURCES ALBERTA OPERATIONS LTD.	2036-05-21	CATEGORY 4 - EXPLORATION IS PERMITTED UNDER NORMAL APPROVAL PROCESS, SURFACE AND SUB-SURFACE MINING UNDER NORMAL APPROVAL PROCESS		
01307110906	ACTIVE	48	5-04-010: 7L9,L15,L16		2022-11-10			
01306080813	ACTIVE	16	5-04-009: 30L1		2021-08-11			
01306080815	ACTIVE	64	5-04-010: 8SW		2021-08-11			
01306080817	ACTIVE	64	5-04-010: 18NE		2021-08-11			
01306080816	ACTIVE	64	5-04-010: 18SE		2021-08-11			
01306080818	ACTIVE	64	5-04-010: 8NW		2021-08-11			
01307110905	ACTIVE	32	5-04-010: 7L1,L8		2022-11-10			
01306080814	ACTIVE	48	5-04-009: 19L8,L9,L16		2021-08-11			
01311010589	ACTIVE	64	5-04-010: 6L1,L8,L9,L16		2026-01-04			
01311010590	ACTIVE	64	5-04-010: 17L4,L5,L12,L13		2026-01-04			
01311080653	ACTIVE	128	5-04-009: 31E		2026-08-04			
01311080654	ACTIVE	32	5-04-009: 30L10,L15		2026-08-04			
01311080655	ACTIVE	64	5-04-010: 6L2,L7,L10,L15; 19SE,L9,L10,L15;		2026-08-04			
01312100464	ACTIVE	880	5-04-008: 30NE,L2,L7; 31E; 32L12,L13 5-04-009: 6W; 7W; 18W; 19W		2027-10-04			
01320120105	ACTIVE	128	5-04-009: 29W		2035-12-16			
01321020120	ACTIVE	80	5-04-009: 19L1,L2,L7,L10,L15		2036-02-12			
01321020121	ACTIVE	160	5-04-009: 30W,L2,L7		2036-02-12			
01321020122	ACTIVE	128	5-04-009: 31W		2036-02-12			
01321020123	ACTIVE	128	5-04-010: 6W		2036-02-12			
01321020124	ACTIVE	176	5-04-010: 7W,L2,L7,L10		2036-02-12			
01311010588	ACTIVE	48	5-04-009: 30L8,L9,L16		2026-01-04			
Total		2608						

Table 4 - Alberta Coal Leases – Vicary Domain

Renewal applications have been submitted for the six coal leases expiring in August 2021.

Land Title Certificate Number	LINC Number	Land Key Number	M	RGE	TWP	SEC	QS and/or LSD	Area (Ha)	Coal Category
181088180027	0025255002	0504009173	5	4	9	17	NW	259	4
	0025255010	0504009172					SW		
	0025255028	0504009174					NE		
	0025255036	0504009171					SE		
181088180028	0025256090	0504009203	5	4	9	20	NW	259	4
	0025256108	0504009202					SW		
	0025256116	0504009204					NE		
	0025256124	0504009201					SE		
181088180029	0025192254	0504010054	5	4	10	5	NE	259	4
	0025192261	0504010051					SE		
	0025192279	0504010053					NW		
	0025192287	0504010052					SW		
181088180031	0025251133	0504009324	5	4	9	32	NE	257	4
	0025251141	0504009321					SE		
	0025251159	0504009323					NW		
	0025251166	0504009322					SW		
181088180032	0025255044	0504009184	5	4	9	18	NE	129.5	4
	0025255052	0504009181					SE		
Total								1163.5	

Table 5 - Alberta Freehold Tenements – Vicary Domain

Year	Type	No of Holes	Operator	Geophysical Logs	Coal Quality	Meters Drilled
1964	DDH	6	Coleman Collieries	-		714
1965	DDH	10	Coleman Collieries	-		848
1966	DDH	12	Coleman Collieries	-		1,182
1967	DDH	13	Coleman Collieries	-	3	991
1968	DDH	1	Coleman Collieries	-	1	31
1969	DDH	3	Coleman Collieries	-	3	156
1970	DDH	11	Coleman Collieries	-		1,861
1972	DDH	5	Coleman Collieries	-		1,843
1973	DDH	10	Coleman Collieries	10	5	2,384
	DDH	1	Algas Resources Ltd	1		360
1974	DDH	2	Coleman Collieries	2		695
1977	DDH	1	Coleman Collieries	1		360
1978	DDH	8	Coleman Collieries	8	3	1639
1991	RC	25	Manalta	25		3,570
	DDH	2	Manalta	2		268
2020	6" LDC	5	Montem	5	3	486
	RC	8	Montem	8		1,411
Total		123		62	18	18,799

Table 6 – Summary of Vicary Domain Data used in the 2021 (CV0621) Geological Model

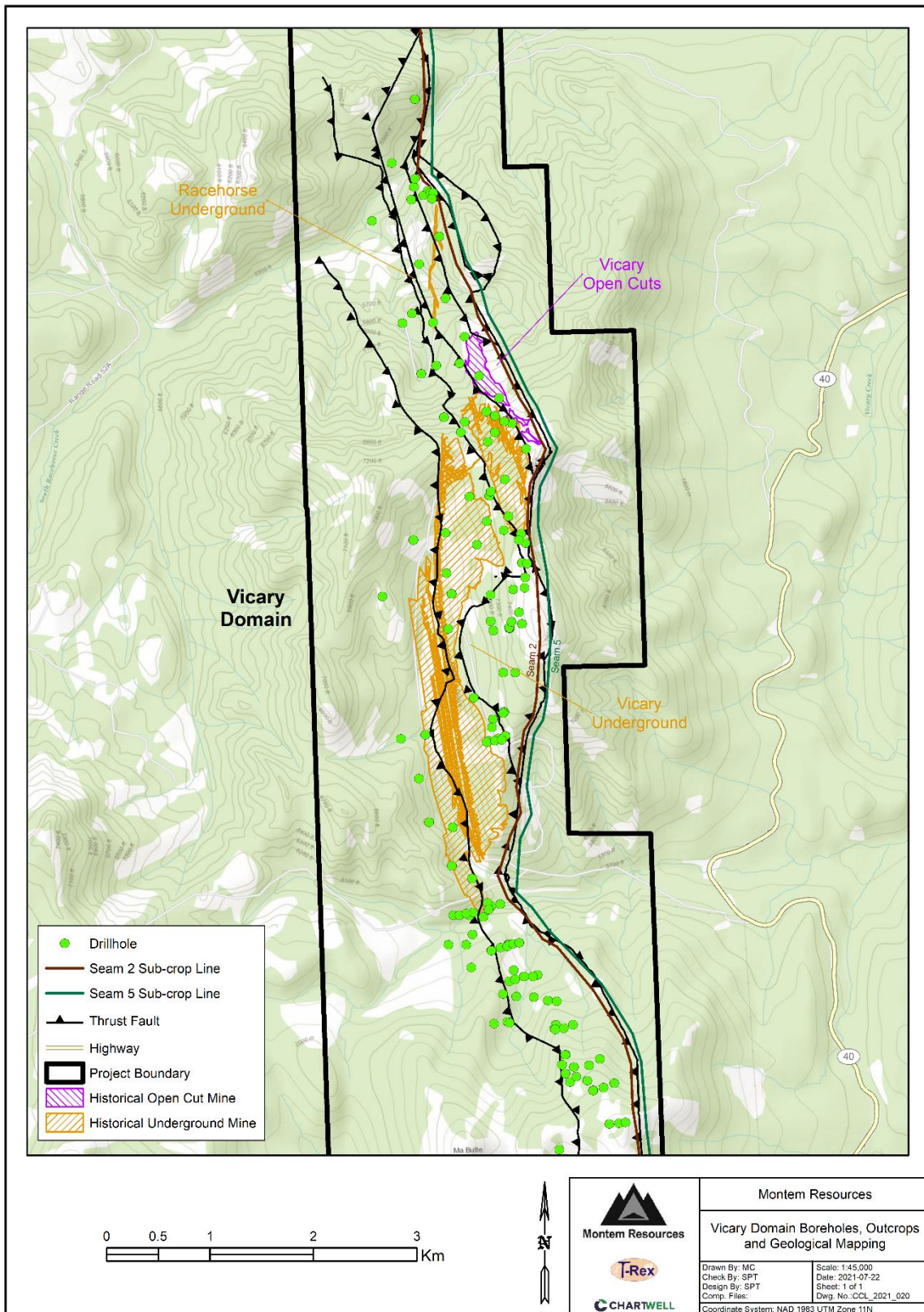


Figure 9 – Vicary Domain Boreholes, Outcrops and Geological Mapping

Seam	Thickness (m)	Ash%	RD (gm/cc)	Waste Volume	Waste Thick (m)
S1	0.9	-	-	159,773,600	53.9
S2U	0.6	10.4	1.35	47,066,561	19.6
S2M	4.1	11.9	1.33	2,110,243	1.8
S2L	1.3	14.1	1.38	1,127,931	1.1
S4AU	0.5	35.0	1.55	49,221,770	17.1
S4AL	1.2	35.0	1.55	2,140,877	3.3
S4U	4.3	17.3	1.43	84,290,556	24.6
S4M	2.6	20.9	1.46	14,911,602	8.1
S4L	0.9	23.0	1.48	1,744,687	1.3
S5U	2.9	28.0	1.53	44,300,665	15.9
S5M	4.1	30.7	1.56	5,180,652	5.0
S5L	0.9	36.7	1.62	1,667,697	0.9
Total	24.1	22.3	1.46	413,536,840.8	152.6

Notes: All thickness are true thickness; Shaded Seams excluded from Resource Estimate due to lack of quality data and/or inconsistent results.

Table 7– Vicary Domain Average True Thickness of Coal and Waste Rock

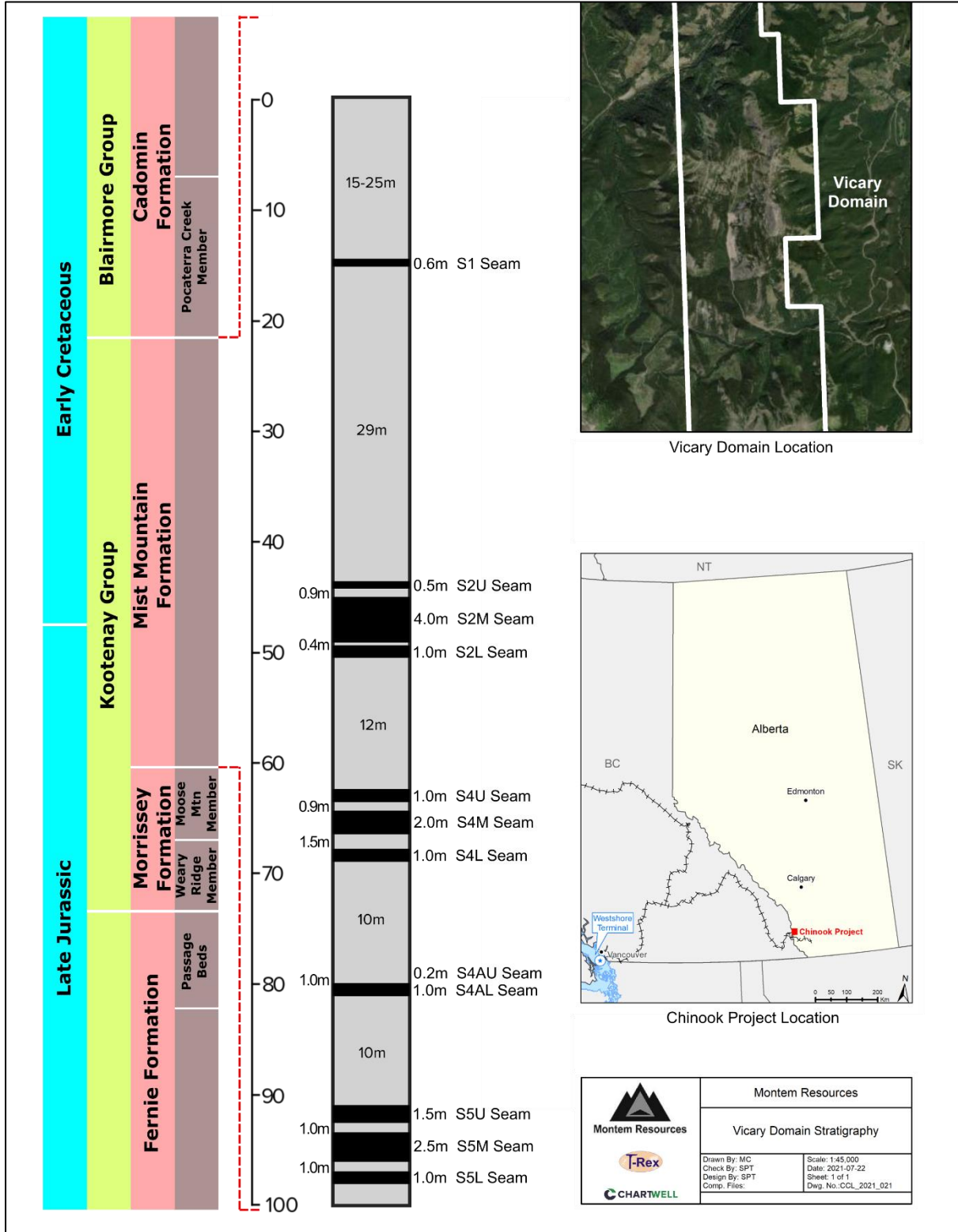


Figure 10 –Vicary Domain Stratigraphy

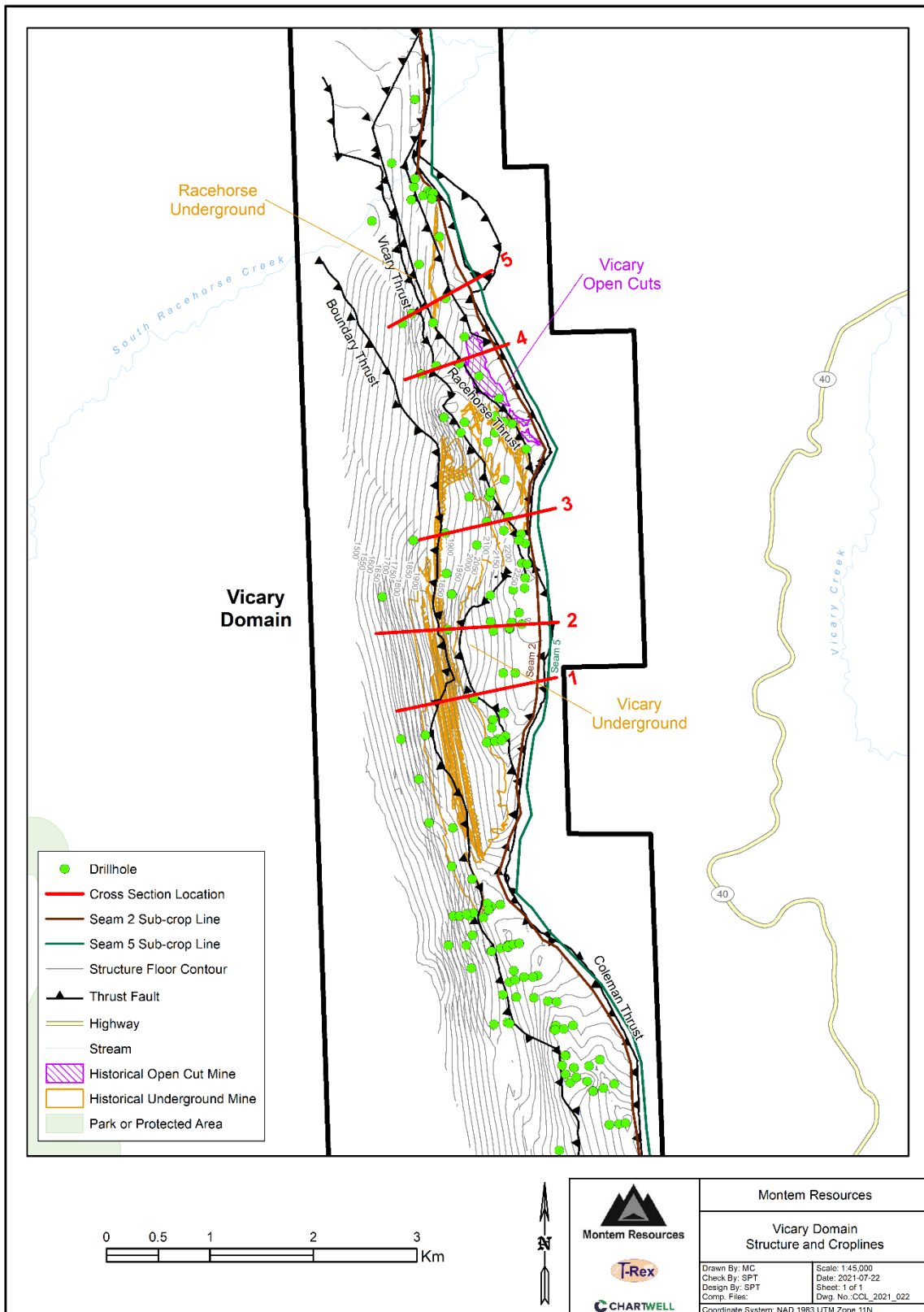
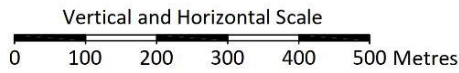
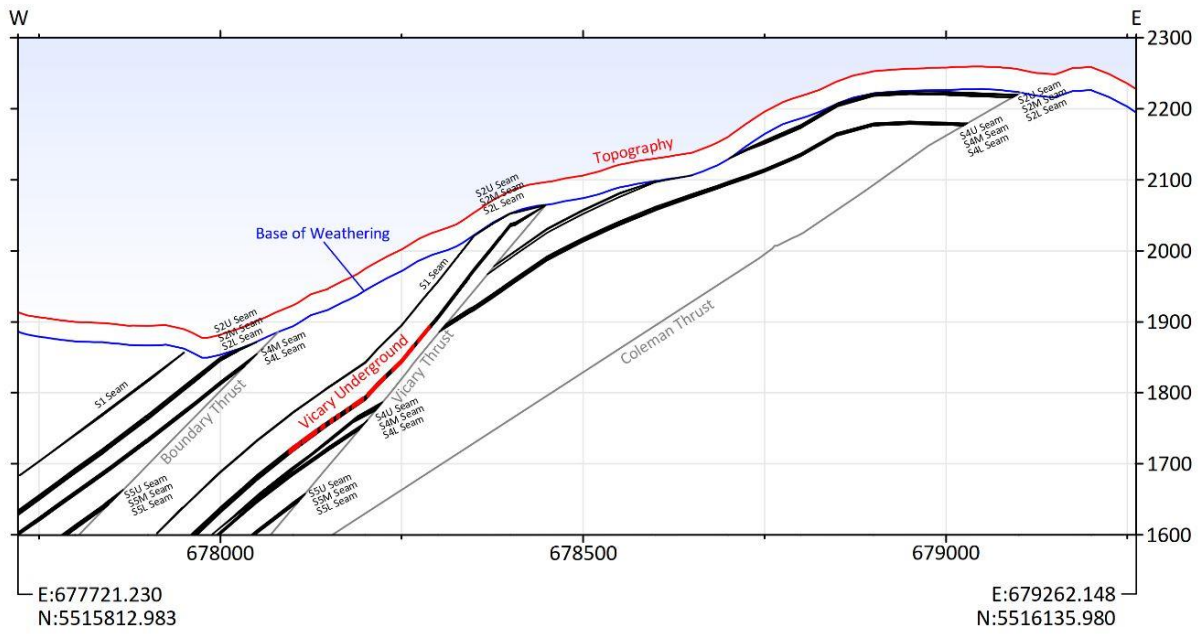
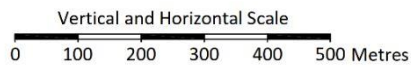
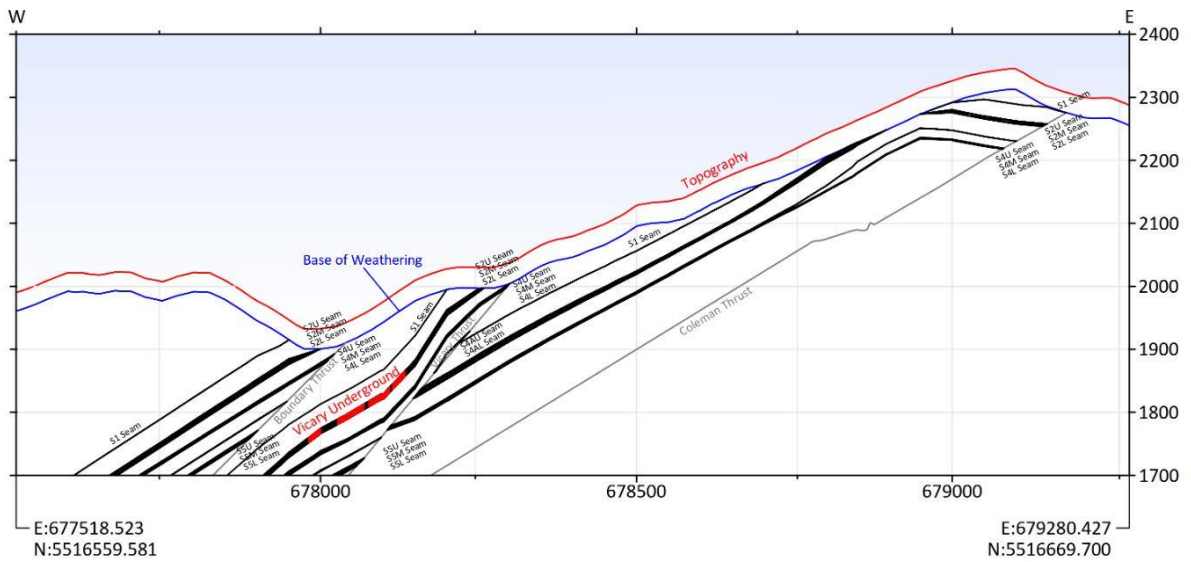


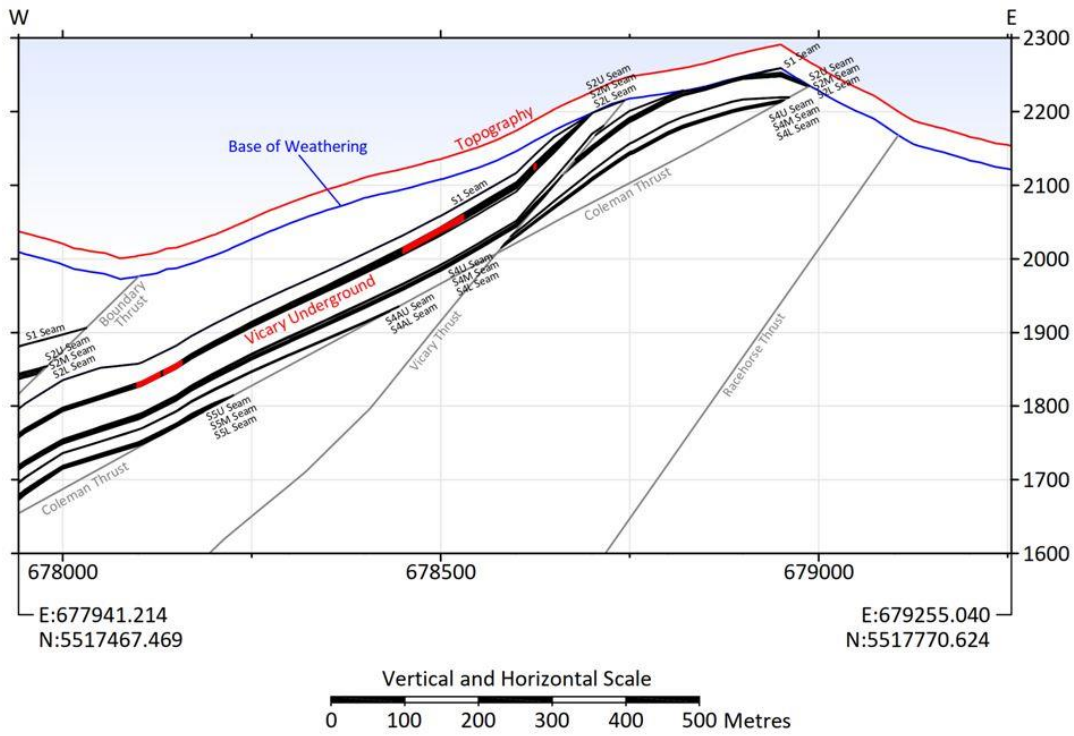
Figure 11 – Vicary Domain Structure and Croplines



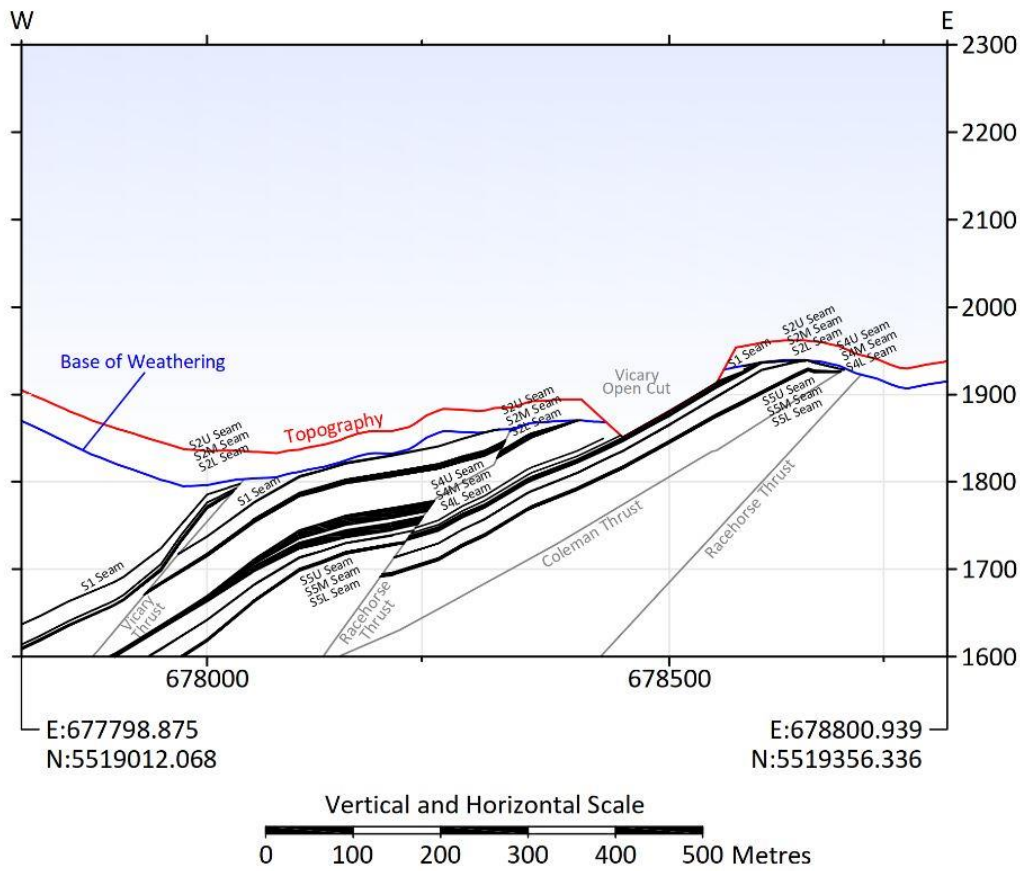
Cross Section 1



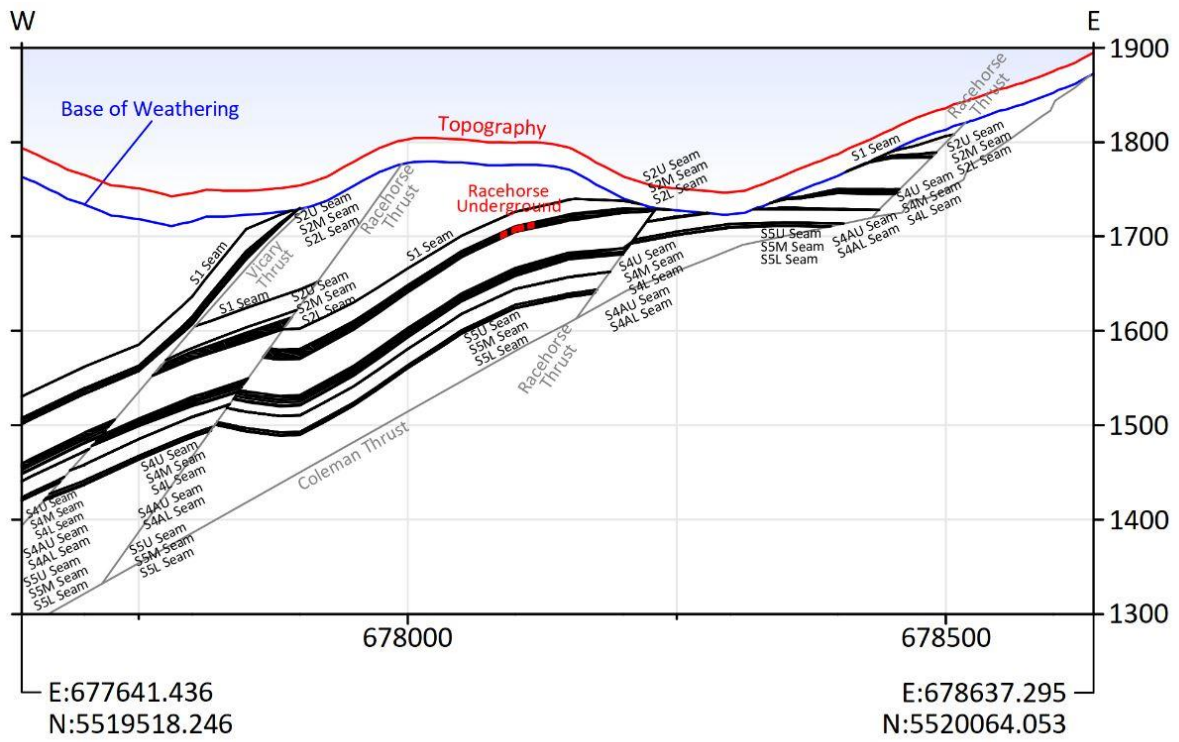
Cross Section 2



Cross Section 3



Cross Section 4



Cross Section 5

Figure 12 – Vicary Domain Cross Sections 1 to 5

Appendix 4 Drillhole Data

Table 8 – Drillholes Utilized

Drillhole	Drillhole Type	(UTM NAD 83 Zone 11)			Total Depth (m)	Inclination (°)	Azimuth (°)	Year
		Easting	Northing	Elevation				
CV20-0001	RC	678,629.6	5,513,925.6	1,793	118	-90	-	2020
CV20-0001-LDC4	6" LDC	678,633.0	5,513,927.7	1,793	58	-90	-	2020
CV20-0002	RC	678,628.3	5,516,673.9	2,169	220	-90	-	2020
CV20-0003	RC	678,810.5	5,516,605.6	2,243	177	-90	-	2020
CV20-0003-LDC2	6" LDC	678,808.8	5,516,608.7	2,243	116	-90	-	2020
CV20-0003-LDC5	6" LDC	678,807.4	5,516,616.5	2,243	164	-90	-	2020
CV20-0004	RC	678,844.5	5,516,983.4	2,267	190	-90	-	2020
CV20-0005	RC	678,901.0	5,516,760.8	2,289	196	-90	-	2020
CV20-0006	RC	678,960.2	5,517,096.8	2,316	159	-90	-	2020
CV20-0007	RC	678,796.7	5,513,554.5	1,844	110	-90	-	2020
CV20-0007-LDC4	6" LDC	678,796.5	5,513,551.4	1,843	73	-90	-	2020
CV20-0007-LDC4B	6" LDC	678,796.3	5,513,548.6	1,843	75	-90	-	2020
CV20-0008	RC	679,256.1	5,512,777.0	2,080	241	-90	-	2020
DC10	DDH	675,656.0	5,529,075.0	1,956	246	-90	-	1978
DC11	DDH	676,435.0	5,529,745.0	1,737	243	-90	-	1978
DC12	DDH	675,855.0	5,529,364.0	1,905	165	-90	-	1978
EX-8-19	DDH	678,389.0	5,513,551.0	1,822	360	-90	-	1977
G1	DDH	678,930.0	5,517,240.0	2,320	27	-90	-	1967
G2	DDH	678,980.0	5,517,230.0	2,303	29	-90	-	1967
G3	DDH	678,965.0	5,517,430.0	2,287	35	-90	-	1967
G4	DDH	678,920.0	5,517,520.0	2,300	24	-90	-	1967
G5	DDH	678,248.3	5,516,940.0	-	25	-90	-	1967
G6	DDH	678,800.0	5,517,690.0	2,257	49	-90	-	1967
G7	DDH	678,900.0	5,517,460.0	2,293	29	-90	-	1967
MD73-1	DDH	679,773.4	5,511,820.3	2,330	170	-90	-	1973
MD73-2	DDH	679,720.0	5,510,975.0	2,172	214	-90	-	1973
MD73-3	DDH	679,230.0	5,510,240.0	1,954	366	-90	-	1973
MD73-4	DDH	679,290.3	5,511,573.4	2,201	334	-90	-	1973
MD74-7	DDH	679,560.0	5,512,240.0	2,204	209	-90	-	1974
RH1	DDH	677,885.0	5,520,870.0	1,606	31	-60	90	1968
RH10	DDH	677,670.5	5,521,101.0	1,603	166	-60	90	1978
RH11	DDH	677,893.9	5,521,716.9	1,719	185	-90	-	1978
RH12	DDH	678,063.3	5,522,835.1	1,773	148	-90	-	1978
RH13	DDH	678,023.1	5,523,306.1	1,887	263	-90	-	1978
RH14	DDH	677,970.6	5,523,039.7	1,810	212	-90	-	1978
RH15	DDH	678,171.1	5,523,614.8	1,955	257	-90	-	1978
RH2	DDH	677,895.0	5,520,947.6	1,597	69	-60	90	1969
RH3	DDH	678,020.0	5,520,832.4	1,667	33	-60	90	1969
RH4	DDH	677,975.0	5,520,786.6	1,661	54	-60	90	1969
RH5	DDH	678,045.0	5,520,815.0	1,683	29	-55	82	1970
RH6	DDH	678,070.0	5,520,810.0	1,694	42	0	145	1970
RH7	DDH	678,060.0	5,520,755.0	1,706	59	0	126	1970
S1-67	DDH	678,955.0	5,516,997.9	2,304	44	-90	-	1967
S10	DDH	678,495.0	5,517,415.0	2,104	116	-90	-	1964
S11	DDH	678,190.0	5,517,530.0	2,029	154	-90	-	1964
S12	DDH	678,590.0	5,517,640.0	2,172	139	-90	-	1964
S14	DDH	678,765.0	5,518,045.0	2,237	120	-90	-	1964
S16	DDH	678,970.0	5,518,340.0	2,270	50	-60	90	1965
S17	DDH	678,835.0	5,518,585.0	2,176	34	-60	90	1965
S18	DDH	678,670.0	5,518,500.0	2,098	40	-60	90	1965
S19	DDH	678,710.0	5,518,830.0	2,067	51	-60	90	1965
S2-67	DDH	678,930.0	5,516,650.7	2,301	41	-90	-	1967
S20	DDH	678,515.0	5,519,045.0	1,940	17	-60	90	1965
S21	DDH	678,100.0	5,519,145.0	1,832	149	-60	90	1965
S22	DDH	678,615.0	5,517,885.0	2,196	145	-90	-	1965
S23	DDH	678,625.0	5,517,925.0	2,202	75	-90	-	1965
S24	DDH	678,630.0	5,517,930.0	2,203	123	-60	90	1965
S25	DDH	678,420.0	5,517,880.0	2,141	163	-90	-	1965
S26	DDH	678,760.0	5,518,605.0	2,135	40	-60	90	1966
S27	DDH	678,670.0	5,518,660.0	2,077	34	-60	90	1966
S28	DDH	678,585.0	5,518,700.0	2,030	23	-60	90	1966
S29	DDH	678,375.0	5,519,425.0	1,891	92	-60	90	1966
S3-67	DDH	678,865.0	5,516,180.7	2,244	50	-90	-	1967
S30	DDH	678,325.0	5,519,165.0	1,891	94	-60	90	1966
S31	DDH	678,375.0	5,518,600.0	2,038	147	-90	-	1966
S32	DDH	678,600.0	5,518,410.0	2,104	72	-90	-	1966
S33	DDH	677,955.0	5,519,065.0	1,843	208	-90	-	1966
S34	DDH	677,775.0	5,519,555.0	1,758	189	-90	-	1966
S35	DDH	677,860.0	5,520,745.6	1,625	123	-90	-	1966
S36	DDH	678,190.0	5,519,795.0	1,782	58	-90	-	1966

Drillhole	Drillhole Type	(UTM NAD 83 Zone 11)			Total Depth (m)	Inclination (°)	Azimuth (°)	Year
		Easting	Northing	Elevation				
S37	DDH	678,070.0	5,519,560.0	1,811	103	-90	-	1966
S38	DDH	677,935.0	5,520,125.0	1,684	83	-90	-	1967
S39	DDH	677,865.0	5,519,650.0	1,748	201	-90	-	1967
S4-64	DDH	678,640.0	5,515,650.0	2,120	53	-90	-	1964
S4-67	DDH	678,830.0	5,516,670.0	2,256	78	-90	-	1967
S40	DDH	677,860.0	5,522,535.0	1,636	69	-90	-	1967
S41	DDH	677,480.0	5,520,540.0	1,594	227	-90	-	1967
S42	DDH	678,175.0	5,518,645.0	2,035	273	-60	180	1970
S43	DDH	678,130.0	5,520,390.0	1,768	111	-65	90	1970
S44	DDH	677,760.0	5,515,540.0	1,893	289	-90	-	1970
S45	DDH	677,995.0	5,515,580.0	1,866	292	-90	-	1970
S46	DDH	677,933.0	5,515,155.0	1,880	275	-90	-	1970
S47	DDH	678,597.0	5,513,955.0	1,818	73	-90	-	1970
S48	DDH	678,425.5	5,513,833.5	1,784	201	-90	-	1970
S49	DDH	678,032.0	5,514,734.1	1,872	254	-90	-	1970
S5-64	DDH	678,750.0	5,515,790.0	2,178	52	-90	-	1964
S5-67	DDH	678,625.0	5,516,930.0	2,197	80	-90	-	1967
S51	DDH	678,557.0	5,513,819.5	1,768	63	-90	-	1970
S6-67	DDH	678,655.0	5,516,585.0	2,173	78	-90	-	1967
S7	DDH	678,465.0	5,515,935.0	2,102	120	-90	-	1964
S8	DDH	678,215.0	5,516,600.0	2,030	66	-90	-	1964
S9	DDH	678,200.0	5,517,140.0	2,010	177	-90	-	1964
UG1	DDH	678,248.3	5,516,940.0	1,832	55	-43	90	1968
UG2	DDH	678,248.3	5,516,940.0	1,832	73	0	0	1968
UG3	DDH	678,248.3	5,516,940.0	1,832	12	0	0	1968
UG4	DDH	678,248.3	5,516,940.0	1,832	45	-5	45	1968
V-74-1	DDH	678,450.0	5,513,650.0	1,800	295	-90	-	1974
V-74-2	DDH	678,440.0	5,513,330.0	1,878	400	-90	-	1974
V1-72	DDH	677,880.0	5,517,460.0	2,059	392	-90	-	1972
V10-73	DDH	678,266.0	5,513,835.6	1,817	344	-90	-	1973
V11-73	DDH	678,851.4	5,513,306.3	1,851	89	-90	-	1973
V12-73	DDH	678,635.3	5,513,494.7	1,902	248	-90	-	1973
V2-72	DDH	677,580.0	5,516,915.0	2,052	486	-60	81	1972
V3-72	DDH	678,218.9	5,513,551.5	1,812	369	-62	81	1972
V4-72	DDH	678,659.1	5,512,788.9	1,976	364	-90	-	1972
V5-72	DDH	678,790.0	5,512,807.5	1,914	232	-70	81	1972
V6-73	DDH	678,810.0	5,512,795.0	1,905	263	-90	-	1973
V7-73	DDH	678,747.4	5,513,075.4	1,949	303	-90	-	1973
V8-73	DDH	678,260.0	5,514,685.0	1,807	168	-90	-	1973
V9-73	DDH	678,250.0	5,514,315.0	1,849	293	-90	-	1973
V91-01C	DDH	678,723.2	5,513,522.8	1,878	168	-90	-	1991
V91-02	RC	679,866.7	5,511,829.2	2,346	206	-90	-	1991
V91-03	RC	679,930.5	5,511,836.5	2,354	151	-70	80	1991
V91-04C	DDH	678,788.0	5,513,534.6	1,850	100	-90	-	1991
V91-05	RC	679,716.2	5,512,173.4	2,257	169	-69	80	1991
V91-06	RC	678,844.1	5,513,561.2	1,823	142	-90	-	1991
V91-07	RC	679,717.3	5,512,173.5	2,257	142	-90	-	1991
V91-08	RC	679,080.9	5,513,260.9	1,840	82	-90	-	1991
V91-09	RC	679,618.6	5,512,145.5	2,243	127	-90	-	1991
V91-11	RC	679,617.7	5,512,145.2	2,243	147	-70	80	1991
V91-12	RC	678,904.6	5,513,570.3	1,810	73	-90	-	1991
V91-13	RC	679,578.1	5,512,388.0	2,178	156	-90	-	1991
V91-14	RC	678,949.3	5,513,244.7	1,841	96	-90	-	1991
V91-15	RC	679,243.7	5,512,737.7	2,093	96	-70	80	1991
V91-16	RC	679,334.5	5,512,743.4	2,076	159	-90	-	1991
V91-17	RC	679,423.6	5,512,777.9	2,045	87	-90	-	1991
V91-18	RC	679,683.3	5,512,448.7	2,165	73	-90	-	1991
V91-19	RC	679,431.9	5,512,371.1	2,187	224	-90	-	1991
V91-20	RC	679,821.9	5,512,214.8	2,198	92	-90	-	1991
V91-21	RC	679,265.0	5,513,005.0	1,963	82	-90	-	1991
V91-22	RC	679,251.1	5,512,733.8	2,100	220	-90	-	1991
V91-23	RC	678,720.5	5,513,943.3	1,787	82	-90	-	1991
V91-24	RC	679,180.2	5,513,012.0	1,977	179	-68	80	1991
V91-25	RC	678,458.6	5,513,863.5	1,796	191	-90	-	1991
V91-26	RC	678,808.1	5,513,196.9	1,887	196	-90	-	1991
V91-27	RC	678,875.4	5,513,051.1	1,882	201	-90	-	1991
V91-28	RC	679,045.0	5,513,045.0	1,906	92	-90	-	1991
V91-29	RC	678,322.7	5,513,835.9	1,807	233	-90	-	1991
V91-30	RC	678,863.3	5,513,216.8	1,864	159	-90	-	1991
V91-31	RC	678,392.1	5,513,852.8	1,805	251	-90	-	1991
V91-32	RC	678,609.5	5,513,892.8	1,787	195	-90	-	1991

Table 9 – Drillhole Intersections by Seam

hole name	fault zone	horizon	roof	floor	thick	parting	hole name	fault zone	horizon	roof	floor	thick	parting	hole name	fault zone	horizon	roof	floor	thick	parting	hole name	fault zone	horizon	roof	floor	thick	parting		
S36	FB4	S1	32.9	33.2	0.3	-	RH1	FB3	S2L	27.1	27.4	0.3	-	RH1	FB3	S2M	22.0	26.5	4.6	-	V91-14	FB6	S2M	17.4	23.0	3.0	2.7		
S38	FB4	S1	43.1	43.3	0.2	-	RH2	FB3	S2L	34.4	34.8	0.3	-	RH2	FB3	S2M	33.2	33.8	0.6	-	V91-15	FB6	S2M	23.1	24.0	0.9	-		
G6	FB5	S1	24.4	24.5	0.2	-	RH3	FB3	S2L	30.2	30.5	0.3	-	RH3	FB3	S2M	26.2	29.9	3.7	-	V91-16	FB6	S2M	16.3	18.0	1.7	-		
RH14	FB5	S1	110.4	111.3	0.9	-	RH5	FB3	S2L	15.5	15.9	0.3	-	RH4	FB3	S2M	36.7	49.4	12.2	0.5	V91-19	FB6	S2M	52.5	57.0	4.5	-		
S21	FB5	S1	24.8	26.5	1.7	-	S43	FB3	S2L	71.3	73.2	1.8	-	RH5	FB3	S2M	9.3	14.5	5.2	-	V91-22	FB6	S2M	35.4	36.9	1.5	-		
S31	FB5	S1	59.6	59.6	-	-	RH10	FB4	S2L	111.4	111.6	0.2	-	S35	FB3	S2M	59.4	66.5	7.1	-	V91-25	FB6	S2M	154.7	157.3	2.6	-		
S39	FB5	S1	118.3	118.6	0.3	-	RH11	FB4	S2L	141.1	141.2	0.1	-	S43	FB3	S2M	68.1	71.0	2.9	-	V91-27	FB6	S2M	126.3	128.5	2.2	-		
S42	FB5	S1	215.8	216.4	0.6	-	S36	FB4	S2L	54.1	57.6	3.5	-	RH10	FB4	S2M	108.6	111.2	2.6	-	V91-30	FB6	S2M	94.1	96.7	2.6	-		
MDH73-5	FB6	S1	206.5	206.5	-	-	S37	FB4	S2L	97.4	99.8	2.5	-	RH11	FB4	S2M	139.5	140.4	0.9	-	V91-32	FB6	S2M	17.2	26.0	8.8	-		
S33	FB6	S1	120.4	120.7	0.3	-	S38	FB4	S2L	75.9	80.2	4.3	-	S16	FB4	S2M	42.1	48.7	6.6	-	MD73-3	FB7	S2M	82.8	84.5	1.7	-		
S34	FB6	S1	159.4	159.4	-	-	CV20-0003-LDC2	FB5	S2L	43.0	47.2	4.2	-	S17	FB4	S2M	27.7	33.2	5.5	-	S44	FB7	S2M	279.0	284.8	5.8	-		
S45	FB6	S1	232.0	233.2	1.2	-	CV20-0004	FB5	S2L	8.9	14.4	5.5	-	S19	FB4	S2M	7.2	16.3	9.2	-	S45	FB7	S2M	40.8	42.7	1.8	-		
S48	FB6	S1	144.2	144.3	0.2	-	CV20-0006	FB5	S2L	-	4.5	4.5	-	S20	FB4	S2M	8.5	15.9	7.3	-	V10-73	FB7	S2M	240.2	254.1	13.9	-		
V11-73	FB6	S1	72.4	72.7	0.4	-	G6	FB5	S2L	38.3	38.4	0.2	-	S29	FB4	S2M	29.9	36.4	6.6	-	V2-72	FB7	S2M	278.3	286.4	8.1	-		
V-74-2	FB6	S1	379.3	379.6	0.3	-	RH12	FB5	S2L	94.6	95.7	1.1	-	S30	FB4	S2M	37.2	42.4	5.1	-	V3-72	FB7	S2M	223.1	227.4	4.3	-		
V7-73	FB6	S1	259.0	259.3	0.3	-	RH14	FB5	S2L	148.6	149.1	0.6	-	S35	FB4	S2M	62.7	69.8	7.1	-	V91-29	FB7	S2M	91.8	92.1	0.3	-		
V91-01C	FB6	S1	98.8	98.9	0.2	-	S27	FB5	S2L	32.3	32.5	0.2	-	S36	FB4	S2M	49.2	53.8	4.6	-	V-74-2	FB6	S2M	386.0	390.0	4.0	-		
V91-05	FB6	S1	43.9	44.4	0.6	-	S28	FB5	S2L	20.1	20.4	0.3	-	S37	FB4	S2M	95.3	97.2	2.0	-	V7-73	FB6	S2M	272.3	284.0	11.6	-		
V91-25	FB6	S1	110.2	110.2	-	-	CV20-0001	FB6	S2L	23.9	24.7	0.8	-	S38	FB4	S2M	70.0	75.7	5.8	-	V8-73	FB6	S2M	151.0	156.0	5.0	-		
V91-29	FB6	S1	230.5	230.9	0.4	-	CV20-0001-LDC4	FB6	S2L	19.6	20.8	1.3	-	S39	FB4	S2M	189.6	198.7	9.1	-	V91-01C	FB6	S2M	126.1	131.2	4.7	0.5		
V91-30	FB6	S1	85.1	85.3	0.2	-	CV20-0007	FB6	S2L	35.1	38.5	3.4	-	CV20-0002	FB5	S2M	70.6	73.8	3.2	-	V91-02	FB6	S2M	100.5	101.7	1.3	-		
S44	FB7	S1	232.6	233.3	0.8	-	CV20-0007-LDC4	FB6	S2L	24.7	26.7	2.1	-	CV20-0003	FB5	S2M	37.9	42.3	4.3	-	V91-03	FB6	S2M	43.1	43.6	0.4	-		
S46	FB7	S1	170.8	171.6	0.8	-	CV20-0008	FB6	S2L	56.8	70.5	12.8	0.9	CV20-0003-LDC2	FB5	S2M	38.8	42.9	4.1	-	V91-04C	FB6	S2M	33.8	35.7	1.9	-		
S49	FB7	S1	196.3	196.9	0.6	-	EX-8-19	FB6	S2L	274.2	276.0	1.8	-	CV20-0003-LDC5	FB5	S2M	35.8	47.2	11.4	-	V91-05	FB6	S2M	59.3	60.2	0.9	-		
V10-73	FB7	S1	183.3	183.7	0.5	-	MD73-1	FB6	S2L	139.4	140.3	1.0	-	CV20-0005	FB5	S2M	27.3	30.4	3.1	-	V91-07	FB6	S2M	72.2	73.1	1.0	-		
V2-72	FB7	S1	238.7	239.3	0.6	-	MD73-2	FB6	S2L	155.3	157.0	1.7	-	G2	FB5	S2M	22.0	25.9	4.0	-	V91-09	FB6	S2M	103.5	106.1	2.4	0.1		
V8-73	FB7	S1	89.6	90.0	0.4	-	MD73-4	FB6	S2L	274.3	276.2	1.9	-	G3	FB5	S2M	24.5	28.4	3.9	-	V91-11	FB6	S2M	94.9	95.6	0.7	-		
							MD74-7	FB6	S2L	193.4	194.0	0.6	-	G6	FB5	S2M	36.6	37.5	0.9	-	V91-13	FB6	S2M	42.9	45.2	2.3	-		
							S12	FB6	S2L	82.3	86.6	4.3	-	G7	FB5	S2M	22.3	28.0	5.8	-									
							S47	FB6	S2L	44.5	44.7	0.2	-	RH12	FB5	S2M	76.9	78.1	1.3	-	RH1	FB3	S2U	19.8	20.4	0.6	-		
							S48	FB6	S2L	198.0	198.9	0.9	-	RH13	FB5	S2M	204.8	205.8	0.9	-	RH3	FB3	S2U	18.3	20.1	1.8	-		
							S51	FB6	S2L	56.1	59.4	3.4	-	RH14	FB5	S2M	135.3	138.3	3.0	-	RH4	FB3	S2U	32.0	33.4	1.4	-		
							V11-73	FB6	S2L	85.8	89.0	3.2	-	RH15	FB5	S2M	187.4	187.7	0.3	-	S43	FB3	S2U	67.8	68.0	0.2	-		
							V12-73	FB6	S2L	227.5	227.9	0.4	-	S14	FB5	S2M	112.2	117.2	5.0	-	RH11	FB4	S2U	138.2	139.1	1.0	-		
							V1-72	FB6	S2L	341.6	343.2	1.6	-	S1-67	FB5	S2M	37.3	41.1	3.8	-	S35	FB4	S2U	62.2	62.6	0.5	-		
							V-74-2	FB6	S2L	390.1	390.8	0.6	-	S18	FB5	S2M	33.4	38.4	5.0	-	S36	FB4	S2U	48.5	49.1	0.6	-		
							V7-73	FB6	S2L	286.4	287.1	0.7	-	S21	FB5	S2M	49.1	51.5	2.4	-	CV20-0003	FB5	S2U	34.6	37.6	3.0	-		
							V8-73	FB6	S2L	156.4	157.6	1.2	-	S22	FB5	S2M	142.3	144.8	2.4	-	CV20-0003-LDC2	FB5	S2U	35.8	38.6	2.8	-		
							V91-01C	FB6	S2L	132.1	133.2	1.1	-	S24	FB5	S2M	80.2	81.5	1.4	-	RH12	FB5	S2U	73.4	73.7	0.3	-		
							V91-02	FB6	S2L	103.6	105.3	1.7	-	S26	FB5	S2M	34.3	38.1	3.8	-	RH14	FB5	S2U	129.9	130.5	0.6	-		
							V91-03	FB6	S2L	44.1	45.2	1.2	-	S27	FB5	S2M	27.1	31.1	4.0	-	S26	FB5	S2U	32.8	34.0	1.2	-		
							V91-04C	FB6	S2L	35.9	37.8	1.9	-	S28	FB5	S2M	13.4	19.2	5.8	-	S27	FB5	S2U	26.8	27.0	0.2	-		
							V91-05	FB6	S2L	63.0	64.0	1.0	-	S30	FB5	S2M	36.7	41.9	5.1	-	S41	FB5	S2U	213.5	214.0	0.5	-		
							V91-07	FB6	S2L	75.5	76.3	0.7	-	S31	FB5	S2M	89.8	91.4	1.7	-	CV20-0007	FB6	S2U	28.2	29.0	0.8	-		
							V91-09	FB6	S2L	107.1	108.0	0.9	-	S32	FB5	S2M	65.7	72.2	6.6	-	CV20-0008	FB6	S2U	-	25.3	20.1	5.3		
							V91-11	FB6	S2L	96.4	97.3	0.8	-	S33	FB5	S2M	156.8	157.4	0.6	-	EX-8-19	FB6	S2U	265.7	267.8	2.1	-		
							V91-15	FB6	S2L	25.8	26.4	0.6	-	S33-67	FB5	S2M	19.6	23.5	3.9	-	MD73-2	FB6	S2U	147.9	148.7	0.8	-		
							V91-16	FB6	S2L	19.2	19.8	0.6	-	S39	FB5	S2M	144.8	153.6	8.8	-	MD73-4	FB6	S2U	267.2	267.6	0.3	-		
							V91-19	FB6	S2L	59.2	59.6	0.5	-	S41	FB5	S2M	220.1	225.3	5.2	-	MD74-7	FB6	S2U	181.9	182.3	0.4	-		
							V91-22	FB6	S2L	38.5	45.9	7.4	-	S42	FB5	S2M	253.9	271.6	17.7	-	S47	FB6	S2U	41.8	42.5	0.8	-		
							V91-25	FB6																					

