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## **ASX Announcement**

9 November 2020

## Montem intersects thick coal seams at Chinook Vicary

#### HIGHLIGHTS

- Montem's Chinook Vicary 2020 exploration program completed 13 drillholes, all intersecting thick coal seams
- Maximum apparent cumulative coal thickness across the 13 drillholes was 61.1m with an average apparent cumulative coal thickness of 22.7m
- Drilling confirms the occurrence of near surface, structurally thickened zones of coal suitable for future open-cut extraction
- An assessment of historical coal quality results, completed in Q1 2020, evaluated the product coal at Chinook Vicary as a hard coking coal
- Montem has shipped large diameter core samples to Australia for coal quality and coke testing with results expected in January 2021
- Montem will use information from this drilling to inform a new mine concept study for the Chinook Project, expected in January 2021
- Drilling results will also help further define the Chinook Project Q2 2020 coal Resource Estimate of 149.1Mt (103.8Mt Indicated and 45.3Mt Inferred), and coal Exploration Target Estimate of between 125 Mt – 450 Mt<sup>1</sup>

Montem Resources Limited (ASX: MR1) ("Montem" or the "Company") is pleased to report the completion of its 2020 drill program at Chinook Vicary, in which all drill holes have intersected thick coal seams, confirming near-surface, structurally thickened zones of coal.

The Chinook Project in Alberta, Canada is made up of two areas, Chinook Vicary and Chinook South. The Project contains a coal Resource Estimate of 149.1Mt (103.8Mt Indicated and 45.3Mt Inferred) and a coal Exploration Target Estimate of an additional 125Mt to 450Mt<sup>1</sup> at Chinook Vicary. For further details of the Chinook Project, see Montem ASX announcement released on 15 September 2020, and the Montem Prospectus lodged with the ASX on 31 July 2020.

Montem commenced drilling at Chinook Vicary on 21 September 2020 aiming to define areas of structurally thickened coal seams and confirm the product coal quality as hard coking coal. Overall, 13 drillholes were completed across eight drill sites for a total of 1,411m of reverse circulation (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.

<sup>&</sup>lt;sup>1</sup> 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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Large diameter core samples from coal seams 2, 4 and 5 (see cross-sections below) have been sent to ALS's lab in Queensland, Australia, and will undergo coal quality and coke testing with results expected in early 2021. Visual inspection of the large diameter coal core is encouraging, with cores showing thick bright coal intersections with only minor banding.

Montem's Managing Director and CEO Peter Doyle said: "We are really excited by the success of this drilling. We know the Chinook Vicary area contains high quality hard coking coal, as it was previously mined underground and exported to Japanese steel mills. Historical data pointed to a large resource of low strip ratio coal adjacent to the old underground mine. To get out and drill it and confirm the thick seams and areas of low stripping ratio resources are there, helps confirm our belief that the Chinook Vicary area can host a large open-cut hard coking coal mine. We look forward to getting the coal quality testing results from this drilling in January and completing the new mining concept study for the Chinook Project."



Figure 1: Logging a section of the 22m thick Seam 5 intersection from drillhole CV20-0003-LDC5



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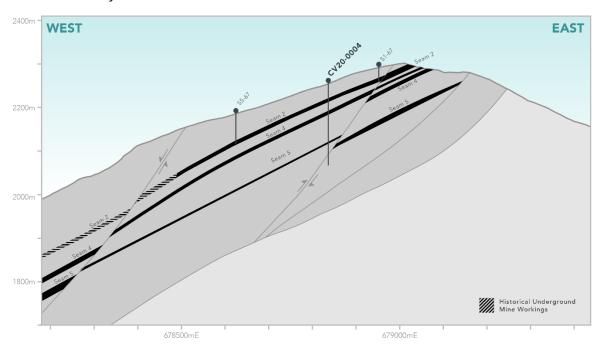
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## Chinook Vicary Cross Section A-A



## Chinook Vicary Cross Section B-B

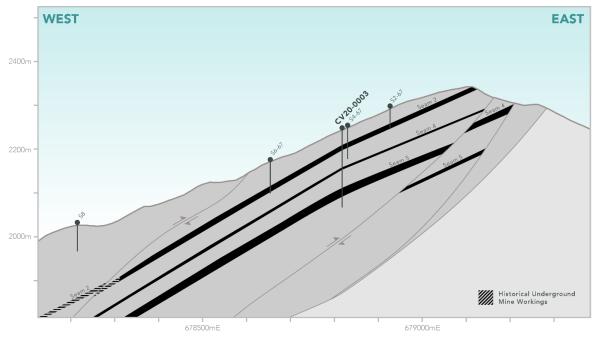


Figure 2: Cross-sections showing low stripping ratio dip-slope coal resources in areas of recent drilling at Chinook Vicary



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### **The Chinook Project**

Montem's Chinook Project encompasses an area of approximately 9,746 hectares which contains multiple historical open-cut and underground coal mines, including the historical underground Vicary Mine. This large project covers a strike length of over 40km of coal measures, and is made up of two areas, Chinook Vicary and Chinook South. In Q2 2020, Dahrouge Geological Consulting Ltd. ("Dahrouge") completed a detailed geological model of the deposit, producing a JORC resource report for the Chinook Project which included a coal Resource Estimate of 149.1Mt (103.8Mt Indicated and 45.3Mt Inferred) and a coal Exploration Target Estimate of an additional 125Mt to 450Mt² at Chinook Vicary.

## 2020 JORC In-place Coal Resource (Mt)

	Measured	Indicated	Inferred	Total Resources
Chinook Vicary	-	52.6	32.2	84.8
Chinook South	-	51.2	13.1	64.3
Total	-	103.8	45.3	149.1

#### 2020 JORC Exploration Target (Mt)<sup>2</sup>

	Exploration Target (Mt) 20:1 SR, 300m depth cutoff	Exploration Target (Mt) 20:1 SR, no depth cutoff
Chinook Vicary	125	450

For further details of the Chinook Project JORC Resource Estimate, see Montem ASX announcement released on 15 September 2020, and the Montem Prospectus lodged with the ASX on 31 July 2020. The Chinook Project JORC Resource report is available for download from the Montem Resources website <a href="https://www.montem-resources.com">www.montem-resources.com</a>

<sup>&</sup>lt;sup>2</sup> 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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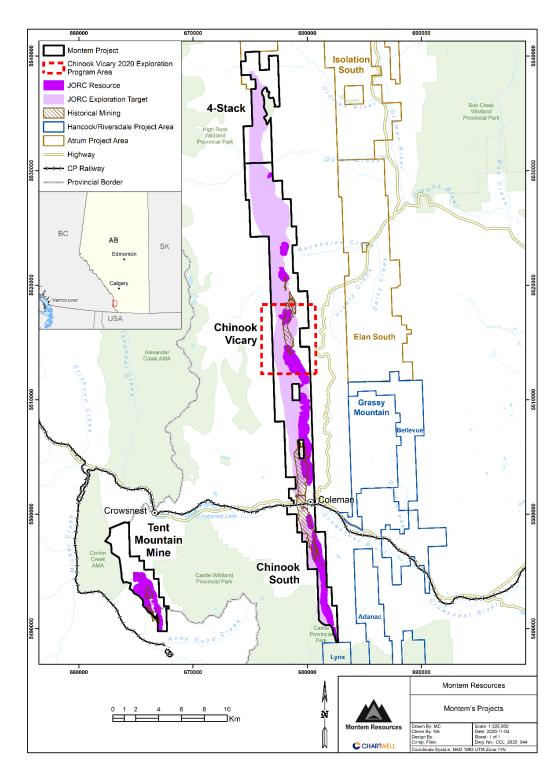


Figure 3: Chinook Project location, adjacent to Hancock Prospecting (Grassy Mountain) and Atrum Coal (Elan South and Isolation South).



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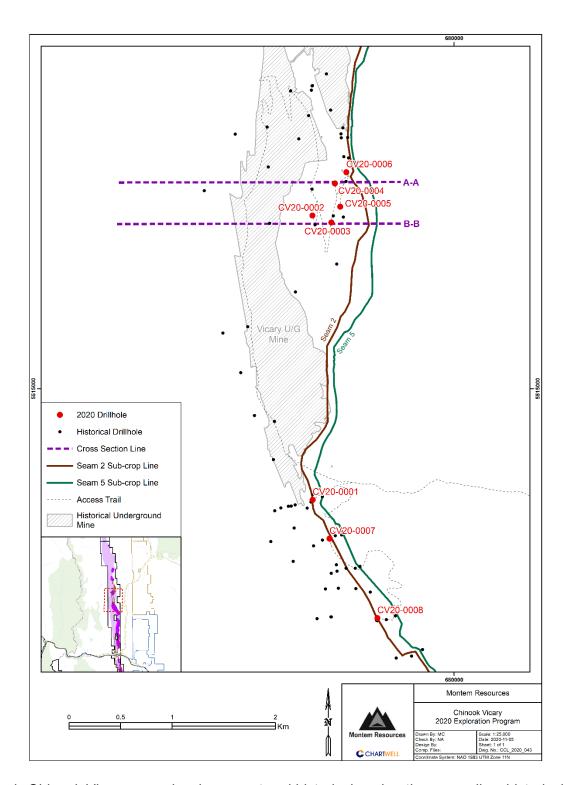


Figure 4: Chinook Vicary area showing recent and historical exploration, as well as historical underground mining areas

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## **ASX Announcement**

## **Chinook Vicary 2020 Drilling Results**

Montem's Chinook Vicary 2020 drilling results are encouraging with multiple significantly thick coal seam intersections encountered. A summary of the Chinook Vicary 2020 RC drilling and six-inch large diameter core drilling results are summarized in Table 1 and Table 2, respectively, with additional information in Appendix 1 and Appendix 2.

The apparent cumulative coal thickness for all Chinook Vicary 2020 RC drillholes averages approximately 22.7m per drillhole with most intersections being at shallow depths.

Table 1: Summary of RC Drillholes Cumulative Coal Intersection Thicknesses

	Depths (m)			Apparent Cumulative Coal Thickness (I			
Drillhole	Total Depth	1st Coal	Last Coal	Seam 2	Seam 4	Seam 5	Total Coal Thickness
CV20-0001	118.4	16.6	106.9	6.9	9.2	2.9	19.0
CV20-0002	220.0	70.6	154.0	3.2	3.6	3.0	9.8
CV20-0003	177.0	34.6	152.5	11.6	1.8	19.4	32.8
CV20-0004	190.0	8.9	140.4	5.5	3.7	3.8	13.0
CV20-0005	195.6	27.3	152.9	3.1	4.6	7.5	15.2
CV20-0006	159.1	at surface	143.2	4.5	2.1	7.6	14.2
CV20-0007	110.0	35.1	95.4	3.4	12.2	1.2	16.7
CV20-0008*	241.0	at surface	217.1	49.2	11.9	-	61.1

Note: All thicknesses are apparent. Insufficient data currently exists to accurately predict true thicknesses.

Table 2: Summary of Six-Inch Large Diameter Core Drillholes Cored Cumulative Coal Intersection Thicknesses

Drillhole	Total Depth (m)	Target Seam	Top of Seam (m)	Base of Seam (m)	Partings (m)	Sampled Thickness (m)	Recovery (%)
CV20-0001-LDC4	57.87	Seam 4	45.52	49.77	1	4.25	>85%
CV20-0003-LDC2	138.02	Seam 2	35.84	47.19	-	11.35	>95%
CV20-0003-LDC5	163.70	Seam 5	132.77	154.80	-	22.03	>95%
CV20-0007-LDC4-B	74.85	Seam 4	38.35	68.10	4.27	25.48	>95%

<sup>\*</sup>Increased apparent thickness due to steeply dipping bedding. Seam 5 is expected to occur at depths greater than 250m.



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Figure 5: Drill rig at drillhole CV20-0006



Figure 6: Exploration access trails on potential open-cut dip-slope mining area

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## **ASX Announcement**

## **Coal Quality**

The coal quality and coke test results from the Chinook Vicary 2020 drill program are expected in January 2021. These results will form the basis of an updated washability, coal quality and coke strength assessment that will inform the proposed 2021 prefeasibility exploration drilling.

Table 3 below summarizes an assessment of historical Chinook Vicary coal quality results, completed in Q1 2020 as part of the JORC Resource Estimate, which evaluated the product coal at Chinook Vicary as hard coking coal.

Table 3: Chinook Vicary Clean Coal Quality Summary (Historic Data)

			Seam 2	Seam 4/4A	Seam 5
	VM (air dry)	%	23.8	20.7	22.0
Chemistry	Ash (air dry)	%	7.8	12.2	8.8
Chemistry	Sulphur (air dry)	%	0.51	0.56	0.50
	Phosphorus (dry)	%	0.092	0.046	0.016
	CSN		7	4	6
Rheology	Max Fluidity Average	ddpm	60	10	5
Kileology	Max Fluidity Range	ddpm	50 - 100	10 - 20	5 – 15
	Total Dilatation	%	55 - 60	35 - 40	10 - 15
	SiO <sub>2</sub> in Ash	%	49.1	59.3	58.2
	Fe <sub>2</sub> O <sub>3</sub> in Ash	%	2.6	1.2	2.7
Ash Chemistry	CaO in Ash	%	5.1	1.6	2.5
	Base/Acid Ratio	%	0.11	0.04	0.09
	Ash Basicity Index		0.84	0.54	0.76
	Reflectance Ro		1.28	1.30	1.25
	Vitrinite	%	43	24.1	n.a.
Petrography	Reactive Semifusinite	%	24	32	n.a.
Petrography	Total Reactives	%	68	57	n.a.
	Inert Semifusinite	%	24	32	n.a.
	Total Inerts	%	32	43	n.a.
Coke Strongth	DI 30/15 (Calculated)	%	93.6	85.3	n.a.
Coke Strength	CSR (Estimated)	%	60 - 65	45 - 50	55 - 60



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## **Mining Concept Study**

In 2019 Montem completed a mining concept study for the Chinook Project, which indicated the potential for multiple open-cut mines at Chinook, with the Chinook Vicary area identified as having a significant opportunity to establish a large scale, low strip ratio open-cut mine. For further details of the Chinook Project mining concept study, see ASX announcement released on 15 September 2020, and the Montem Prospectus lodged with the ASX on 31 July 2020.

The 2020 Chinook Vicary drilling program was designed to confirm the potential for low strip ratio open-cut mining at Chinook Vicary, and results from the recent drilling will be used to guide an update to the mining concept study. The Chinook Vicary area is particularly attractive, not only because the hard coking coal was previously exported to Japan, but the site also has significant existing infrastructure, including direct road access to rail 15km south, and proximity to power. The update to the mining concept study is focusing on developing multiple mines to feed common infrastructure, maximizing early revenue, and minimizing the capital required for fixed assets. Montem expects to complete the updated mining concept study in early 2021.

#### **Future work**

Additional exploration across the Chinook Project will be ongoing, and Montem is planning a significant drilling program for 2021 to support a Preliminary Feasibility Study. Also, in preparation to apply to the regulator for Terms of Reference for an Environmental Impact Assessment, environmental monitoring of the proposed mining areas will be undertaken.

For further information on the Company, our assets and development plans, please visit our website: <a href="https://www.montem-resources.com">www.montem-resources.com</a>

Additionally, view our initial Investor Presentation which has been 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 operating in the Crowsnest Pass district in southern Alberta, Canada. The Company's objective is to become the operator of steelmaking coal mines in Canada by developing its properties. The Company is planning an integrated mining complex in the Crowsnest Pass, focusing on low cost development of open-cut mines that leverage central infrastructure. The first component of this objective is to reestablish mining at the Tent Mountain Mine.

Montem completed a Definitive Feasibility Study (DFS) on the Tent Mountain Mine in 2020. The DFS is providing guidance for the re-start project, with the aim to be exporting coal in 2022. Details of the DFS are available on Montem's website: <a href="https://www.montem-resources.com">www.montem-resources.com</a>

Montem has a large pipeline of development assets centered around the Chinook Project. The Chinook Project covers historical mines that previously exported hard coking coal to Japanese steel mills. The Chinook Project has the potential to produce multiple open-cut hard coking coal mines, and the Company plans to explore, define and develop these mines.

Montem is also progressing development opportunities at the greenfield exploration Isola, 4-Stack and Oldman projects.

#### **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.



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### **Competent Persons Statement**

#### **Exploration Results**

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

Neither Tamplin Resources nor any of the authors of this report have any material present or contingent interest in the outcome of the report, nor do they have any pecuniary or other interest that could be reasonably regarded as being capable of affecting their independence or that of Tamplin Resources. Tamplin Resources has no beneficial interest in the outcome of the technical assessment being capable of affecting its independence. Tamplin Resources fee for completing the Report will be based on its normal professional daily rates plus reimbursement of incidental expenses. The payment of the professional fee is not contingent upon the outcome of the report.

The information in this release that relates to Coal Quality, Mineral Resource Estimates and Exploration Target Estimates at 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.



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## **Appendix 1 Chinook Vicary 2020 Drillhole Details**

Drillhole Name	Туре	Easting	Northing	Elevation (m)	Total Depth (m)	Azimuth (°)	Dip (°)
CV20-0001	RC	678,630	5,513,926	1,793	118.4	-	90
CV20-0001-LDC4	6" LDC	678,633	5,513,928	1,793	57.9	-	90
CV20-0002	RC	678,628	5,516,674	2,169	220	-	90
CV20-0003	RC	678,810	5,516,606	2,243	177	-	90
CV20-0004	RC	678,844	5,516,983	2,267	190	-	90
CV20-0005*	RC	678,897	5,516,759	2,289	195.6	-	90
CV20-0006*	RC	678,956	5,517,093	2,315	159.1	-	90
CV20-0003-LDC2*	6" LDC	678,802	5,516,616	2,243	138	-	90
CV20-0003-LDC5*	6" LDC	678,805	5,516,612	2,243	163.7	-	90
CV20-0007*	RC	678,793	5,513,551	1,847	110	-	90
CV20-0007-LDC4*	6" LDC	678,793	5,513,547	1,847	73.4	-	90
CV20-0008*	RC	679,256	5,512,783	2,078	241	-	90
CV20-0007-LDC4-B*	6" LDC	678,793	5,513,543	1,847	74.9	-	90

Note: UTM projected grid NAD83 Zone 11N

<sup>\*</sup>Final survey pending

## Appendix 2 - JORC Code, 2012 Edition – Table 1 Report

## **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Five 6" large diameter cored (LDC) drillholes have been completed at Chinook Vicary, including one redrill (CV20-0007-LDC4-B), for the collection of LDC samples.</li> <li>Sampling has been undertaken on LDC (149mm or 6" diameter) holes and all holes are logged and sampled for coal quality test work</li> <li>Samples are taken on ply intervals and will be manually composited in the laboratory after ARD analysis is completed. Montem Resource's (Montem) designated coal quality consultant A&amp;B Mylec Pty Ltd (AB Mylec) will provide the instructions to the laboratory for manually compositing individual ply samples.</li> <li>Linear coal recovery for the 2020 program was greater than 95%. Any coal seams sampled with &lt;80% linear core recovery are not tested at the laboratory.</li> <li>Eight reverse circulation (RC) drillholes have been completed at Chinook Vicary. 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 will be analysed to determine the coal seam line of oxidation.</li> <li>Base of weathering surface defined by a combination of visual estimates and chemical analysis on core and RC samples when available coal samples.</li> <li>All holes logged and corrected to geophysical logs. The standard suite of logs for RC drillholes is inclusive of long and short spaced density, caliper, gamma, sonic, deviation and dipmeter. The standard suite of logs for LDC drillholes is inclusive of long and short spaced density, caliper, gamma and deviation</li> <li>Sampled intervals were assigned unique sample numbers and recorded for each seam.</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core).	<ul> <li>The LDC drillholes are drilled with PDC or tungsten bits and use double tube core barrels.</li> <li>The LDC holes were geophysically logged to total depth and</li> </ul>

Criteria	JORC Code explanation	Commentary
	diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).	sample intervals are adjusted to the geophysical log depths (where necessary)  • All eight RC holes completed in 2020 are reverse circulation drillholes with a 5 1/4" diameter hammer drill bit  • All of the drillholes completed in 2020 were geophysical logged to total depth in the open hole, or through drill pipe in the event of severe hole instability
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Drill sample recovery only relevant for cored holes. Open hole samples limited to determination of base of weathering only. That is, chip coal quality results are only indirectly used in the model for determination of base of weathering surfaces and the identification of other alterations (if present).</li> <li>Volumetric recoveries are calculated following adjustments using downhole geophysical logs. Coal quality assessments will only be conducted on seam intersections with recoveries of 80% or greater.</li> <li>The program achieved an average linear core recovery of greater than 95%. At the time of this report the samples were enroute to the laboratory and as such volumetric recoveries are not available.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Chips and cores were logged in the field and corrected to down hole geophysics.</li> <li>RC drillholes were geophysically logged with down hole tools including long and short spaced density, caliper, and gamma, sonic, deviation and dipmeter. LDC drillholes were geophysically logged with down hole tools including long and short spaced density, caliper, gamma and deviation.</li> <li>Coal and rock lithologies from chip and core descriptions were entered into a lithology database. Coal seams were identified and correlated between holes. The standard and level of detail is considered appropriate for mineral resource estimation.</li> <li>The seam intervals in RC holes and hammered sections of the LDC holes have been determine from the geophysical log signatures</li> <li>All RC drillholes were sampled at 1m intervals with sub-samples of chips washed and boxed.</li> </ul>

Criteria	JORC Code explanation	Commentary
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>analytical procedures and sub-samples.</li> <li>Sample preparation, subsampling and quality control procedures ensured by using NATA accredited commercial labs employing recognised QA procedures and following Australian Standards for</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	Laboratories engaged to analyse coal cores from the Chinook Vicary resource 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.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Coal intersections from the Chinook Vicary 2020 drill program were verified by geophysical measurements obtained by wireline logging, carried out by an independent contractor, supported by digital photographs. Coal intersection depths and seam correlations have been validated by the Competent Person and company personnel (Database Geologist).</li> <li>Twinned holes are used on LDC holes (one RC pilot and the other spot cored).</li> </ul>

Criteria	JORC Code explanation	Commentary
Location of	Accuracy and quality of surveys used to locate drill holes (collar)	<ul> <li>Drillhole collar, lithology and correlations are stored in a digital database. All available source field records, lab reports, core photographs, survey data etc. are stored in electronic form on Montem's network.</li> <li>At the time of this report 5 of the drill holes have had their collar</li> </ul>
data points	and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.  Specification of the grid system used. Quality and adequacy of topographic control.	locations finalized with the remaining 8 holes provisionally located and awaiting final survey.  • The finalized collar locations are determined by a registered surveyor using Leica Differential Realtime Kinematic GPS equipment. Estimated accuracy of the base position at the 95% confidence level is 2.5 cm horizontal and 3.4 cm 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.  • Pending final survey drill hole collars are located by a handheld Garmin GPS. Estimated accuracy of collar location is ±6 m horizontal and vertical elevations are determined by registration of the handheld horizontal position onto the topographic model surface.  • All holes were drilled verticality and are accompanied by deviation geophysical logs.  • The topographic surface utilized for the geological model was sourced from LiDAR 15 DEM data. These surfaces were merged using Leapfrog™ merge mesh function creating one continuous surface running the length of the Property. All drillholes with finalized survey were registered to this topographic surface to verify GPS data. There was generally a close alignment of this information.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The Chinook Vicary area described in this report forms part of the larger Chinook Project. This resource is comprised of the properties historically known as the Chinook South, Chinook North and Vicary-Racehorse, comprising a total area of 9,746ha. Prior to the 2020 exploration program (consisting of 8 RC and 5LDC holes – 1,919m total) the Chinook Project had resource models constructed using a database of 483 drillholes, totalling</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>57,749m. Further details on these historical holes can be sourced in "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 31st July 2020 and is available to view on Montem's website www.montem-resources.com.</li> <li>Drilling at Chinook Vicary commenced on 21 September 2020 and a total of 1,411m of RC drilling and 508m of six-inch LDC drilling were completed on 8 drill sites. Generally, holes were drilled either adjacent to or proximal to existing historical rotary drillholes.</li> <li>Large diameter core samples from coal seams 2, 4 and 5 were collected and have been shipped to a laboratory in Australia to undergo coking coal testing with results expected in early 2021.</li> <li>The drillholes drilled during the 2020 exploration program have been drilled in two areas. 3 RC and 2 LDC drillholes (including one redrill) with an approximate 700m spacing were drilled in the southern area. An additional 5 RC and 3 LDC holes were drilled 3km further north in the northern area. These latter holes were up-dip of the historical underground workings and had a spacing of approximately 200m.</li> <li>The primary aim of the 2020 exploration program at Chinook Vicary was to obtain samples from a range of coal seam intersections so as to broadly characterize the coal quality characteristics of the deposit. A secondary aim was to investigate anomalously thick coal intersections to determine if the thickenings were caused by structural thickenings or steeply dipping bedding.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>The coal resource on the Chinook Property is bounded by the Coleman, Isolation and McConnell thrusts which strike north-south. This results in a marked anisotropy to the deposit which is geostatistically significant but it is also reasonably consistent and well understood.</li> <li>Historical drilling of the deposit has occurred in east west traverses of closely spaced drillholes approximately perpendicular to the strike of the coal. Many historical holes were drilled at angles to intersect seams as nearly perpendicular as feasible. Downhole deviation logs and collar surveys constrain drillhole data in 3 dimensional space.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>All holes drilled during the 2020 exploration program are vertically orientated. Electronic deviation data from each hole is collected to capture the downhole inclination and deviation of each hole. When modelled, this information will assist in correcting the apparent seam thicknesses to true thicknesses in the geological model and future resource estimates.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>The LDC drillhole core is photographed, sampled, labelled and bagged before being submitted to the testing laboratories</li> <li>Samples have a unique sample number that is provided on tags in the bag, outside the bag and in separate digital and hard copy sample advice. Each item of advice lists project name, drillhole, top and base of sample and sample number.</li> <li>All laboratory records provided include sample identification numbers and weighed sample mass</li> <li>All measures are taken to ensure sample security represents best practice by industry standards.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>COVID-19 prevented a site visit during the 2020 exploration program, however, the C.P. has previously visited site in 2018.</li> <li>Tamplin Resources completed a 100% validation of the 2020 exploration drillholes coal seam intersections, creating an independent database for exploration reporting.</li> <li>Processing and coal quality consultants AB Mylec have reviewed and provided input into the sizing and washability components of the testing program.</li> </ul>

**Section 2 Reporting of Exploration Results** 

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Chinook Property is a narrow north-south trending parcel from 1 to 5 km wide and about 40 km long. It consists of 53 Alberta coal leases and 58 freehold leases held by Montem. Coal Lease agreements provide the right to exclusively explore the land within the boundaries of the lease and are granted for a term of 15 years.</li> <li>The Chinook Coal leases are valid to between Dec. 2020 and Sept. 2032 and can be renewed.</li> <li>The Property falls within the Rocky Mountain Forest Reserve, which is managed by the Alberta Government. The Property is also partially located within environmental sensitive areas including Mountain Goat and Sheep areas.</li> <li>An Exploration Permit for the Chinook Project inclusive of Chinook Vicary was granted to Montem Resources by the Alberta Energy Regulator (AER) covering the exploration activities undertaken during the 2020 exploration program.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Historical work on the Chinook Property began in the early 1900's when International Coal and Coke Company Ltd. acquired coal rights to the Chinook South area, and McGillivray Creek Coal and Coke Company Ltd. ("MCCC") acquired coal rights to the Chinook Vicary area (Vicary-Racehorse and Chinook North).</li> <li>Since this time a variety of corporations have conducted intermittent exploration and mining activities across the Project including, Coleman Collieries Ltd, Norcen Energy Resources, Algas Resources, Manalta Coal Ltd, Luscar and Westmoreland Mining LCC. Further details on historical exploration can be sourced in "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 31st July 2020 and is available to view on Montem's website www.montem-resources.com.</li> <li>Approximately 30Mromt of coal was extracted from several underground mines on the Property using multi-level and multi-seam room and pillar technology between 1903 and 1978. All mining ceased at Chinook Vicary in 1978 and no historical exploration has occurred on the property since Manalta's 1991 exploration program.</li> </ul>

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Montem's Chinook Project is located in the province of Alberta, in the Crowsnest Pass area of the Crowsnest Coalfield, on the Front Ranges of the Canadian Rocky Mountains</li> <li>Coal-bearing sedimentary sequences occur within the Mist Mountain Formation of the Late Jurassic to Early Cretaceous aged Kootenay Group, which was strongly deformed during the Late Cretaceous Laramide Orogeny. This resulted in the development of faults.</li> <li>The Chinook Project is located on a series of small thrust faults within the Lewis Thrust Sheet. The thrusting is evident as a succession of generally west-dipping thrust faults and associated folds with predominantly west-dipping axial surfaces. Coal deposits of this type are generally characterized by linear strikes along thrusts and associated tight folds, some with steeply inclined or overturned limbs.</li> <li>The principal seams on at Chinook Vicary, in descending order are S2, S4, S4A and S5. From south to north there are variations in these seams. Their thickness and number of plies varies in the 2020 RC exploration holes with cumulative coal thicknesses ranging from 9.8 to 61.1 m.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul> <li>Drillhole information and coal intersections material to the 2020 exploration program at Chinook Vicary are tabulated for all RC and LDC holes completed in 2020 at Chinook Vicary, in Appendix 1 and the body of this ASX announcement.</li> <li>Material information includes:</li> <li>Easting, northing and elevation of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and total coal interception depth</li> <li>hole length.</li> </ul>

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Coal intersections may have been sampled in multiple sections per seam, so compositing of density is aggregated by volume.</li> <li>Grade cut-offs have not been applied to exploration results in the database.</li> <li>Only coal thicknesses of greater than 0.6m are compiled in cumulative coal thicknesses reported within this announcement.</li> </ul>
Relationship between mineralizatio n widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>Unless otherwise specified all thicknesses in this document are apparent thicknesses. Structural thickening of seams are known to occur on the Chinook Property, however, steeply dipping seams can also result in the anomalously thick intersections.</li> <li>Based on the limited information available all RC drillholes with the exception of CV20-0008 appear to contain strata dips of 25-40° with CV20-0008 being much steeper (possibly approaching vertical). Except for CV20-0008, this range of strata should equate to a true thickness of seams being approximately 70% of the apparent thicknesses reported in this report. More work will need to be undertaken to determine true seam thicknesses. This will be addressed through use of drillhole deviation survey data, seismic survey, and updated structural interpretation/fault modelling</li> </ul>
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	<ul> <li>Refer to figures and tables included in this announcement.</li> <li>Further details on historical exploration can be sourced in "Coal Resources for the Chinook Project Alberta, Canada, April 9, 2020". This document is available to view on Montem's website www.montem-resources.com.</li> </ul>
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>There is no preferential reporting of results.</li> <li>All drillholes drilled have been reported.</li> <li>Previous ASX announcements and Prospectus information have provided details on Coal Resources at Chinook Vicary.</li> </ul>
Other substantive	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk	<ul> <li>Near surface RC coal intersections have been bagged and sampled at 1m intervals. These samples will be washed and tested for Proximate analysis, FSI, light transmittance and CV to</li> </ul>

Criteria	JORC Code explanation	Commentary
exploration data	samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	better ascertain the chemical depth of weathering at the Chinook Property.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>No coal quality results have been received from the 2020 drillholes. This work is ongoing and a future announcement will inform results.</li> <li>Montem are currently preparing an application for an extensive RAB and LDC drilling program at Chinook Vicary to support a prefeasibility level study of the resource. This work is ongoing with the intent of gaining approvals from AER for exploration works to commence in the spring of 2021.</li> </ul>