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ASX Announcement

26 October 2020

QUARTERLY ACTIVITIES REPORT

For the Quarter Ended 30 September 2020

Atrum Coal Limited (ASX: ATU) (**Atrum** or the **Company**) is pleased to provide its Quarterly Activities Report for the period ending 30 September 2020.

HIGHLIGHTS

- Intensive site activities were undertaken throughout the quarter at Atrum's 100%-owned Elan Hard Coking Coal Project in southern Alberta, Canada (**Elan Project**).
- **2020 drilling program complete.** The drill program at the Isolation South deposit was safely and successfully completed in early October 2020. It consisted of 125 rotary air blast (**RAB**) holes for approx. 21,500 drilling metres, 32 large diameter (150mm) cored (**LDC**) holes and 5 HQ geotechnical and hydrogeological holes. The program had both an infill and extensional focus, aimed at significantly upgrading resource classification and potentially expanding the Isolation South resource base. Priority was given to infill drilling of the current Inferred resource areas that were included in the Elan Project Scoping Study optimised pit shell but excluded from the mine schedule.
- **Interim Elan Project resource update due this quarter.** Significant upgrades in resource classification at Isolation South are expected, with the potential also for further resource growth.
- **Isolation South Tier 1 HCC.** Detailed clean coal and coking characteristics testwork were completed on composite coal samples from the four LDC holes drilled at Isolation South at the end of last year's field program and the first three LDC holes from the current field program. These combined LDC results have confirmed that Isolation South coal and coke quality is closely correlated to the globally traded Tier 1 HCC products produced at the nearby Elk Valley mines. The coke quality results included excellent hot and cold strength values with a CSR range of 69 - 74%.
- **Continuing field programs.** Coal quality analyses on over 400 further core samples are in process, with more to be submitted. Large-scale carbonisation tests (+500kg moveable wall oven) are also set to be conducted over coming months. Hydrogeological studies, First Nations and other stakeholder consultation, and environmental baseline sampling remains ongoing.
- **Strong PFS progress.** Key PFS workstreams were progressed during the quarter including the completion of several trade-off studies designed to optimise key PFS inputs. The appointment of deeply experienced Canadian coal development professional, Ross Melville, as Study Director (Internal) during the quarter was also a key step in progression of the PFS. Final specialist discipline consultants are expected to be confirmed in October 2020. The Elan Project PFS remains on track for completion by mid-2021.
- **Balance sheet strength.** Atrum held A$13.9 million cash at 30 September 2020 and zero debt (excluding usual creditors balances).
- **Project video.** Atrum has recently released a video snapshot of the Elan Project and its world-class resource and location. This video can be accessed at the Company's website: www.atrumcoal.com

Elan Hard Coking Coal Project (100% Atrum)

2020 drilling program focus

Given the scale and economic potential unearthed at Isolation South during the 2019 field program, and the outcomes of the Elan Project Scoping Study (Isolation South ROM strip ratio of 3.3)[1], all 2020 drilling activities were dedicated to the rapid realisation of this potential. As a result, no drilling was undertaken at Elan South during this year's program.

At Isolation South, 108Mt of Inferred Resources within the optimised pit shell were excluded from the mine schedule and production target in the Elan Project Scoping Study (which totaled 126Mt), in accordance with the current ASX/ASIC regulatory framework (see Atrum ASX release dated 16 April 2020, *Elan Project Scoping Study*)[1].

Targeted upgrade of these Inferred Resource portions of Isolation South into Indicated and/or Measured Resource categories delivers the strong potential for inclusion in the mine schedule for the Elan Project PFS and subsequent conversion to Reserves. This was the priority focus of the 2020 drilling campaign at Isolation South. Successful inclusion presents substantial upside potential to the life-of-mine production target and forecast base case economics presented in the Elan Project Scoping Study results.

Program completion and key results

The major drill program at Isolation South was successfully completed in early October 2020. The program was run safely and efficiently, delivering effective drilling outcomes including strong core recoveries. It had both an infill and extensional focus aimed at further improving confidence in the structural definition of the Isolation South deposit, significantly upgrading resource classification and potentially expanding the total resource base.

The program of RAB drilling consisted of 125 holes for a total of approximately 21,500 metres of drilling. The RAB program has resulted in a far higher degree of confidence in coal seam continuity, coal seam splitting and coalescing, subcrop zones and delineation of structural features including low angle thrust faults. The program has confirmed that the coal seams of the Mist Mountain Formation are continuous over the optimised pit shell area identified during the Scoping Study.

The results of the RAB program tracked in-line with expectations with the average total apparent coal thickness maintaining approximately 30 metres per hole in the Scoping Study optimised pit shell area. This is consistent with expectations from the geological interpretation and resource models for these domains. The coal intersections were also shallow, with starting depth as low as 3m below surface, and total apparent coal thickness of over 80 metres in several holes (including one over 100 metres).

The coring program consisted of 33 LDC holes for approximately 6,000 metres of drilling. The LDC holes were drilled for the collection and sampling of 150mm diameter drill core for coal quality and washability testing.

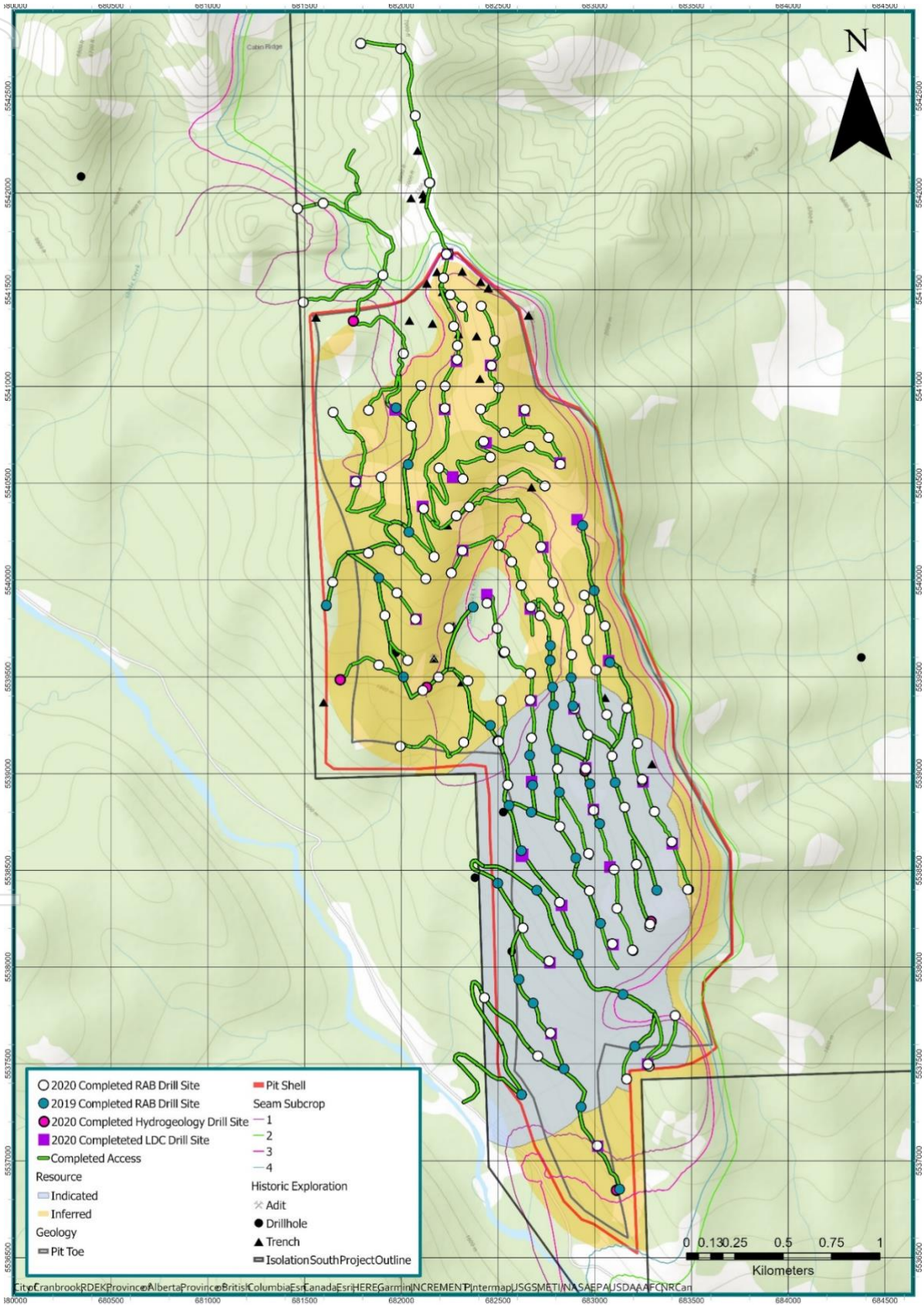
Following completion of the 2020 drill program, an interim update to the overall Elan Project resource is on track for completion in 4Q 2020. This update is set to incorporate all RAB results from the 2020 drilling program plus coal quality testwork results received to date from LDC samples. Substantial upgrades in resource classification at Isolation South are expected, with the potential also for further resource growth.

For full details on the 2020 exploration program at the Elan Project and drilling results, see Atrum ASX release dated 14 October 2020, Successful Completion of Isolation South Drilling Program. The Company confirms it is not aware of any new information or data that materially affects the results set out in the

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Company's announcement dated 14 October 2020 and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

Figure 1: Isolation South - location of 2020 drilling program RAB, LDC and HQ holes completed



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Other field program workstreams

Coal quality analysis, hydrogeological studies, First Nations and other key stakeholder consultation, and further environmental baseline sampling remains ongoing.

Tier 1 HCC at Isolation South

In early October 2020, Atrum released detailed clean coal and coking/carbonisation characteristics testwork completed from the first three (3) large diameter cored (**LDC**) holes drilled at Isolation South during the current field program.

These coal quality results follow those released in early July 2020 from the four LDC holes drilled at Isolation South at the end of the previous field program. They are also complemented by earlier petrographic analysis of 51 RAB samples and the significant volumes of historical coal quality testwork conducted on the Isolation South deposit by previous owners of the Elan Project tenements.

The most recent testing was conducted across three different international laboratories. It comprised 28 composite core samples for clean coal quality results and 10 samples across all four (4) proposed production coal seams for the coke quality and carbonisation results.

These LDC results have again confirmed that Isolation South coal and coke quality is closely correlated to the globally traded Tier 1 HCC products produced at the nearby Elk Valley mines.

Key highlights include:

- Excellent coke hot and cold strength values with a CSR range of 69 – 74%.
- Medium to lower volatile coal seams as indicated by a mean maximum vitrinite reflectance (RoMax) range of 1.08 – 1.18% allowing multiple saleable product alternatives.
- Low to moderate product ash content (7.0 – 9.0%) that fits well with all coke makers while maximising plant yields. Future product/shipment ash content is expected to be 8 – 9%.
- Low to moderate total sulphur (0.58 – 0.88%).
- Extremely low phosphorous content (0.006 – 0.027%).
- Very low deleterious elements (chlorine and mercury: 0.01 – 0.06% each).
- Typical WC Fluidity range commensurate with the rank range (55 to 1,384 ddpm).
- High reactive maceral content ranging from 63% to 81%.
- Excellent, highly acidic ash chemistry, hence very low basicity index (0.06 – 0.07) supporting high CSRs.
- Excellent seam/blend SHO (volume contraction/expansion) and wall pressure (0.4-0.5 psi).
- Favorable Coke Drum Indices (DI 150/15: 84-85%).

Further coal characterisation and large-scale carbonisation (+500kg moveable wall oven) tests are to be conducted from the total 33 LDC hole drilling program that has now been completed. Coal quality analyses on more than 400 further core samples are already in process. All coal and coke quality testwork from this program is designed to support the Elan Project PFS, which is on track for completion in mid-2021.

For full details on the recent Isolation South LDC coal quality results, see Atrum ASX release dated 7 October 2020, Isolation South Tier 1 HCC. The Company confirms it is not aware of any new information

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or data that materially affects the coal quality results set out in the Company's announcement dated 7 October 2020 and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

Elan tenements

During the quarter, all the lease applications for the Elan project have been converted into 17 leases covering a total area of 22,690 hectares. The annual cost for all leases amounts to $57,000 per annum.

ASX Additional Information

ASX listing rule 5.3.1 - Exploration and evaluation expenditure during the quarter was $9,465,000. Details of exploration activity during the September 2020 quarter are set out in this report and are mostly associated with drilling, coal quality test work, environmental baseline studies, trade-off studies for the Pre-Feasibility Study (PFS) and reporting with respect to the Company's Elan Project in Canada.

ASX listing rule 5.3.2 - There were no substantive mining production or development activities during the quarter.

ASX listing rule 5.3.5 - Appendix 5B, Section 6.1 – description of payments: During the September quarter 2020, the Company paid directors fees totaling $72,000 to non- executive directors and $117,000 to the Managing Director.

Elan Project PFS progress

A number of key PFS workstreams were progressed during the quarter including the completion of several trade-off studies designed to optimise key PFS inputs. The trade-off studies build on the outcomes from the Scoping Study and provide sharper definition and inputs for the PFS in relation to:

- Mine and clean coal production rates;
- Mine waste options and opportunities to maximise in-pit backfilling;
- CHPP configuration and preferred location;
- Coal transportation corridors and train load-out locations;
- Projected water balance and management options;
- Power supply alternatives; and
- Rail and port capacity and commercial options.

Atrum has adopted an Integrated Delivery Team model for management of the PFS. This approach is expected to provide the appropriate balance between owner leadership and action, multi-party interface and knowledge sharing, direct access to specific expertise and overall flexibility.

Leadership of the Integrated Delivery Team for the Elan Project PFS comprises:

- Atrum Managing Director– Andy Caruso;
- Study Director (Internal) – Ross Melville; and
- Key discipline consultant representatives.

The appointment of deeply experienced Canadian coal development professional, Ross Melville, as Study Director (Internal) during the quarter is a key step in progression of the PFS. Ross has approximately 40

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years of diversified experience in multinational engineering, procurement, EPCM contracting and owner environments. His expertise includes project management, process engineering, feasibility study preparation, basic and detailed engineering, procurement, construction management and plant commissioning. This includes 17 years of managing plant operations and maintenance at operating mines in Canada and the United States.

Ross was Project Director, Teck Resources, for all owner activities and consultant services within the Feasibility Study for the Quintette Re-Start Project. The Quintette Re-Start Project involves a C$858 million, metallurgical coal mine redevelopment in north-east British Columbia. The Feasibility Study evaluated a 3.5 Mtpa metallurgical coal operation for an initial life of 12 years. He was more recently Project Manager supporting Teck Resources in the execution and construction of the Fording River Active Water Treatment Facility in south-east British Columbia. This facility is designed to remove selenium and nitrate from historically mine affected water as part of Teck's ongoing work under the Elk Valley Water Quality Plan.

Ross is based in western Canada and is therefore optimally positioned to coordinate key Atrum personnel and consultants as part of the Integrated Delivery Team model for the PFS.

Key discipline consultants retained on an initial basis for the PFS trade-off studies include:

- Palaris – geology;
- SRK (Vancouver) – mining;
- Sedgman – processing;
- Hatch – infrastructure and logistics;
- WaterSmart – water management options; and
- Power Grid Specialists Corporation – power assessment.

Final specialist discipline consultants for the PFS are expected to be confirmed by late October 2020.

The Elan Project PFS remains on track for completion by mid-2021.

For full details on the key PFS workstreams and delivery framework, see Atrum ASX release dated 7 September 2020, Elan Project PFS On Track.

Groundhog / Panorama Anthracite Projects

Panorama North JV (Atrum 65%, JOGMEC 35%)

The Company and JOGMEC entered into an agreement whereby JOGMEC has the option to earn in 10% interest in the Groundhog project against a total expenditure of C$1M within 3 years. JOGMEC will also refund the Company for the annual leases paid to the local government.

Corporate

MD appointment

In May 2020, Atrum appointed Andrew Caruso as Chief Executive Officer (CEO), effective from 12 May 2020.

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On 12 August 2020, Andrew was appointed to the Atrum Board as Managing Director.

For full details on Andrew's appointment and experience, see Atrum ASX release dated 12 August 2020, *Andrew Caruso Appointed to the Board*.

Mr Glen Koropchuk appointed to the Atrum Board as a non-executive director

On 15 October 2020, Atrum appointed Mr Glen Koropchuk as a non-executive director. Mr Koropchuk is a mining engineer with extensive international experience in mine development and operations encompassing over 35 years. He brings substantial project management and business development expertise, and a strong skillset in Corporate Social Responsibility (CSR), stakeholder engagement, permitting and sustainable development.

Mr Koropchuk's work history includes over 27 years in key management and operational roles for the Anglo American (**Anglo**) and De Beers Group, working extensively across the Americas and Africa. Previous senior positions held include:

- COO for De Beers Canada Inc (encompassing the Snap Lake and Victor diamond mines, and the C$1B Gahcho Kue project).
- CEO of Peace River Coal Inc (Anglo's 1.5Mtpa metallurgical coal mine in British Columbia, Canada).
- Head of Operational Performance for Anglo American's three joint venture coal interests in the Americas (including the 32Mtpa Carbones de Cerrejon mine).
- COO of Anglo's 2 Russian gold joint venture's (Trans-Siberian Gold and Polymetal)
- General Manager of the Anglo-Randgold Resources Morila gold mine in Mali.
- Project Manager for the 21st Century project at Anglo's Kopanang gold mine in South Africa.

Exercise of listed options

During the quarter, Atrum received $60,000 as proceeds for the exercise of 300,000 listed options at a strike price of A$0.20 each.

Cash and debt position

Tranche 2 of the share placement announced in April 2020 was settled in early July 2020, resulting in an inflow of A$6.7 million in additional equity funds.

Atrum held A$13.9 million cash at 30 September 2020. The Company has no debt, excluding usual creditors balances.

Project video

Atrum has recently released a video snapshot of the Elan HCC Project and its world-class resource and location. This video can be accessed at the Company's website: www.atrumcoal.com

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This ASX release was authorised on behalf of the Atrum Coal Board by:

Andrew Caruso, Managing Director and CEO

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About Atrum Coal

Atrum Coal (ASX: ATU) is a metallurgical coal developer. The Company's flagship asset is the 100%-owned Elan Hard Coking Coal Project in southern Alberta, Canada. Elan hosts large-scale, shallow, thick, hard coking coal (HCC) deposits with a current resource estimate of 454Mt (142Mt Indicated and 312Mt Inferred)[1]. Comprehensive coal quality testing from the 2018 and 2019 exploration programs, combined with review of substantial historical testwork data for the broader Elan Project, has confirmed Tier 1 HCC quality.

Elan's southern boundary is located approximately 13 km from an existing rail line with significant excess capacity, providing direct rail access to export terminals in Vancouver and Prince Rupert. It shares its southern boundary with Riversdale Resources' Grassy Mountain Project, which is in the final permitting stage for a 4.5Mtpa (saleable) open-cut HCC operation. Around 30km to the west, Teck Resources operates four mines (the Elk Valley complex) producing approximately 25Mtpa of premium HCC for the seaborne market.

Atrum completed a Scoping Study in April 2020 which demonstrated the strong technical and economic viability of development of the Elan Project[1].

[1] For full Scoping Study and resource details refer to Atrum ASX release dated 16 April 2020, *Elan Project Scoping Study*. Atrum confirms that all material assumptions underpinning the production target and forecast financial information within the Scoping Study, and the resource estimate outlined above, continue to apply and have not materially changed.

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APPENDIX A: TENEMENTS LIST

Tenure Number	Owner	Business Unit	Tenure Type	Area (Ha)
394847	Atrum Coal Groundhog Inc.	Groundhog	Licence	259
417080	Atrum Coal Groundhog Inc.	Groundhog	Licence	565
417081	Atrum Coal Groundhog Inc.	Groundhog	Licence	636
417082	Atrum Coal Groundhog Inc.	Groundhog	Licence	212
417084	Atrum Coal Panorama Inc.	Panorama North	Licence	708
417085	Atrum Coal Groundhog Inc.	Groundhog	Licence	1,031
417086	Atrum Coal Panorama Inc.	Panorama North	Licence	142
417088	Atrum Coal Groundhog Inc.	Groundhog	Licence	777
417089	Atrum Coal Groundhog Inc.	Groundhog	Licence	142
417094	Atrum Coal Groundhog Inc.	Groundhog	Licence	71
417095	Atrum Coal Groundhog Inc.	Groundhog	Licence	425
417096	Atrum Coal Groundhog Inc.	Groundhog	Licence	71
417098	Atrum Coal Groundhog Inc.	Groundhog	Licence	1,204
417292	Atrum Coal Panorama Inc.	Panorama North	Licence	279
417296	Atrum Coal Panorama Inc.	Panorama North	Licence	71
417297	Atrum Coal Groundhog Inc.	Groundhog	Licence	918
417298	Atrum Coal Groundhog Inc.	Groundhog	Licence	1,059
417299	Atrum Coal Panorama Inc.	Panorama North	Licence	779
417520	Atrum Coal Groundhog Inc.	Groundhog	Licence	212
417521	Atrum Coal Groundhog Inc.	Groundhog	Licence	142
417525	Atrum Coal Panorama Inc.	Panorama North	Licence	425
417526	Atrum Coal Panorama Inc.	Panorama North	Licence	707
417527	Atrum Coal Panorama Inc.	Panorama North	Licence	71
417528	Atrum Coal Groundhog Inc.	Groundhog	Licence	142
418587	Atrum Coal Groundhog Inc.	Groundhog	Licence	1,411
418588	Atrum Coal Groundhog Inc.	Groundhog	Licence	1,412
418589	Atrum Coal Groundhog Inc.	Groundhog	Licence	1,273
418953	Atrum Coal Panorama Inc.	Panorama North	Licence	1,346
418955	Atrum Coal Groundhog Inc.	Groundhog	Licence	1,265
418957	Atrum Coal Panorama Inc.	Panorama North	Licence	1,415
418958	Atrum Coal Panorama Inc.	Panorama North	Licence	1,345
418961	Atrum Coal Panorama Inc.	Panorama North	Licence	71
1320080043	Elan Coal Ltd.	Elan	Coal Lease	1,616
1320080044	Elan Coal Ltd.	Elan	Coal Lease	1,536
1320080045	Elan Coal Ltd.	Elan	Coal Lease	1,724
1320080046	Elan Coal Ltd.	Elan	Coal Lease	1,694
1320080047	Elan Coal Ltd.	Elan	Coal Lease	2,304
1320080048	Elan Coal Ltd.	Elan	Coal Lease	2,165
1320080049	Elan Coal Ltd.	Elan	Coal Lease	1,952
1320080050	Elan Coal Ltd.	Elan	Coal Lease	1,840
1320080051	Elan Coal Ltd.	Elan	Coal Lease	1,024
1320080052	Elan Coal Ltd.	Elan	Coal Lease	1,664
1320080053	Elan Coal Ltd.	Elan	Coal Lease	112

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Tenure Number	Owner	Business Unit	Tenure Type	Area (Ha)
1320080054	Elan Coal Ltd.	Elan	Coal Lease	272
1320080055	Elan Coal Ltd.	Elan	Coal Lease	1,726
1320080056	Elan Coal Ltd.	Elan	Coal Lease	1,936
1320080057	Elan Coal Ltd.	Elan	Coal Lease	48
1320080058	Elan Coal Ltd.	Elan	Coal Lease	822
1320080059	Elan Coal Ltd.	Elan	Coal Lease	256

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