

THREE NEW ANTHRACITE TARGETS IDENTIFIED AT PANORAMA NORTH PROJECT

HIGHLIGHTS

- Encouraging washability results identify three promising targets which warrant further exploration work
- Coal quality testing and analysis confirms emplacement of high quality anthracite at Panorama North
- Potential product qualities generated from target seams at Panorama North very similar to Groundhog North
- Drilling to recommence in early Q3, 2017

Atrum Coal Limited (“**Atrum**” or the “**Company**”) (ASX: ATU), along with its joint venture partner Japan Oil, Gas and Metals National Corporation (“**JOGMEC**”), are pleased to announce coal quality findings from the 2016 exploration program at the Company’s Panorama North Anthracite Project (“**Panorama North**”), located in British Columbia, Canada.

The Company has received encouraging coal quality results from drilling at Panorama North, with physical and chemical testing of intersected anthracite seams showing they have the potential to produce low ash, low volatile matter, high grade anthracite products.

2016 Exploration Program

Panorama North is positioned on the southern extent of the Groundhog Coalfield, within the Bowser Basin in northwest British Columbia (Figure 1). The property is located 15km south-west of Atrum’s flagship Groundhog North Mining Complex and 130km northeast of Stewart port.

Exploration in 2016 included field mapping, and completing a total of 1,194 fully cored metres within four drillholes (Figure 2).



Registered Office

Level 19, 1 O’Connell St, Sydney,
NSW, 2000
T +61 2 8249 1884
E info@atrumcoal.com
www.atrumcoal.com

Board of Directors

Non-Executive Director C. Burton
Non-Executive Director J. Chisholm
Non-Executive Director M. Jardine
Company Secretary C. Brown

Key Projects

| | |
|--------------|-----------------|
| Groundhog | Ownership: 100% |
| Naskeena | Ownership: 100% |
| Bowron River | Ownership: 100% |

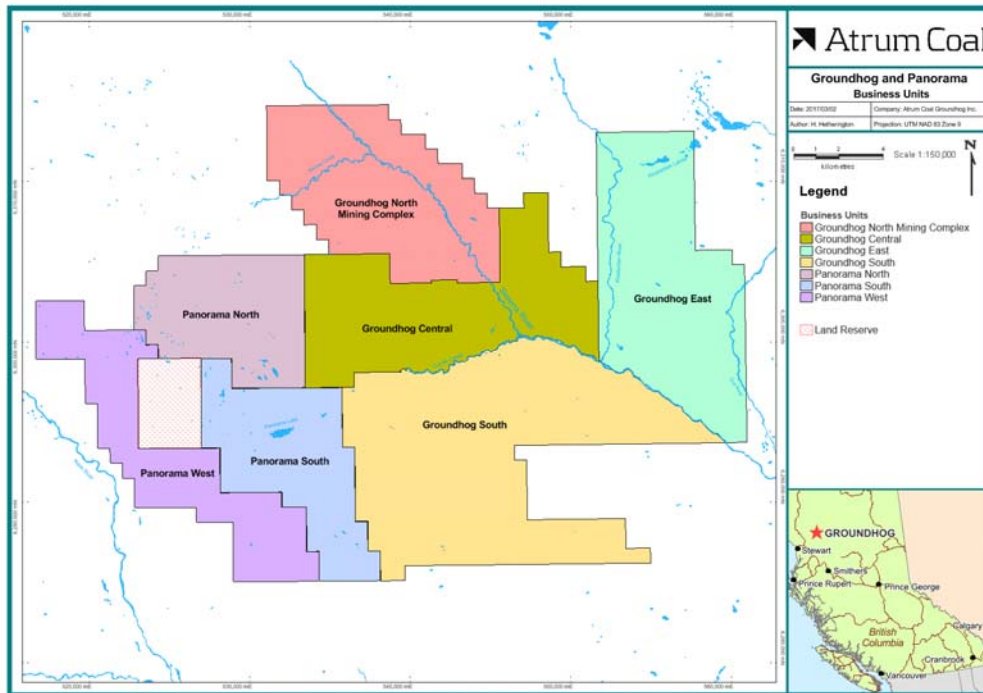


FIGURE 1. LOCATION MAP OF PANORAMA NORTH PROJECT IN BRITISH COLUMBIA, CANADA

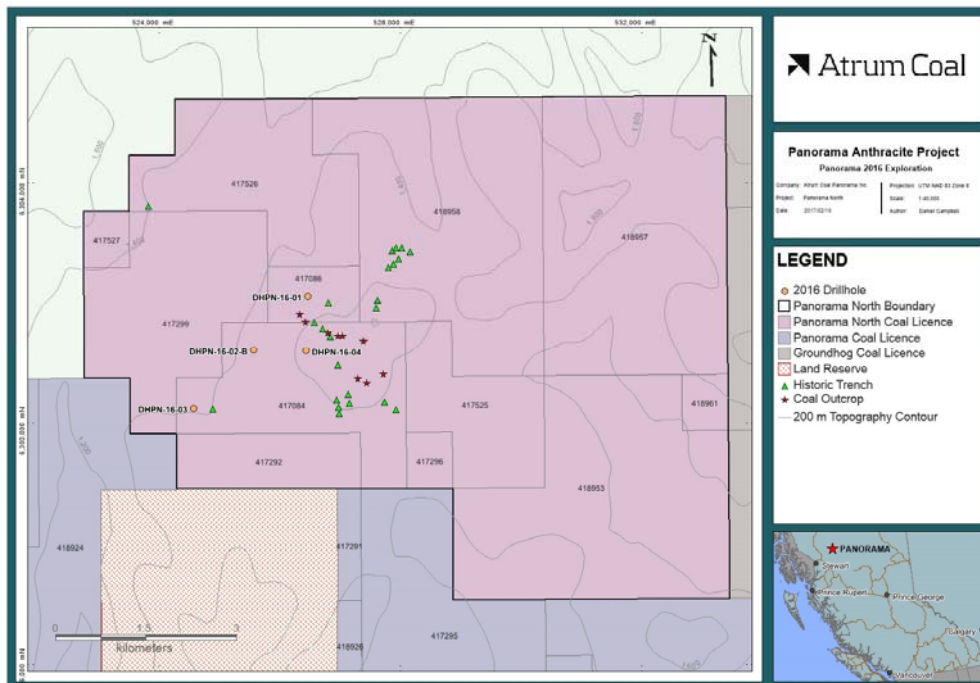


FIGURE 2. MAP OF PANORAMA NORTH PROJECT IN BRITISH COLUMBIA, CANADA

Target Anthracite Seams

The 2016 field season aimed to explore a central zone of the Panorama North property to identify potential economic targets. Diamond core drilling of four holes was completed, with a total of nineteen seams identified within the Currier Formation (Figure 3). Three separate seams (A1, A3 & A5) were identified as prime targets, and these were tentatively correlated across the exploration area.

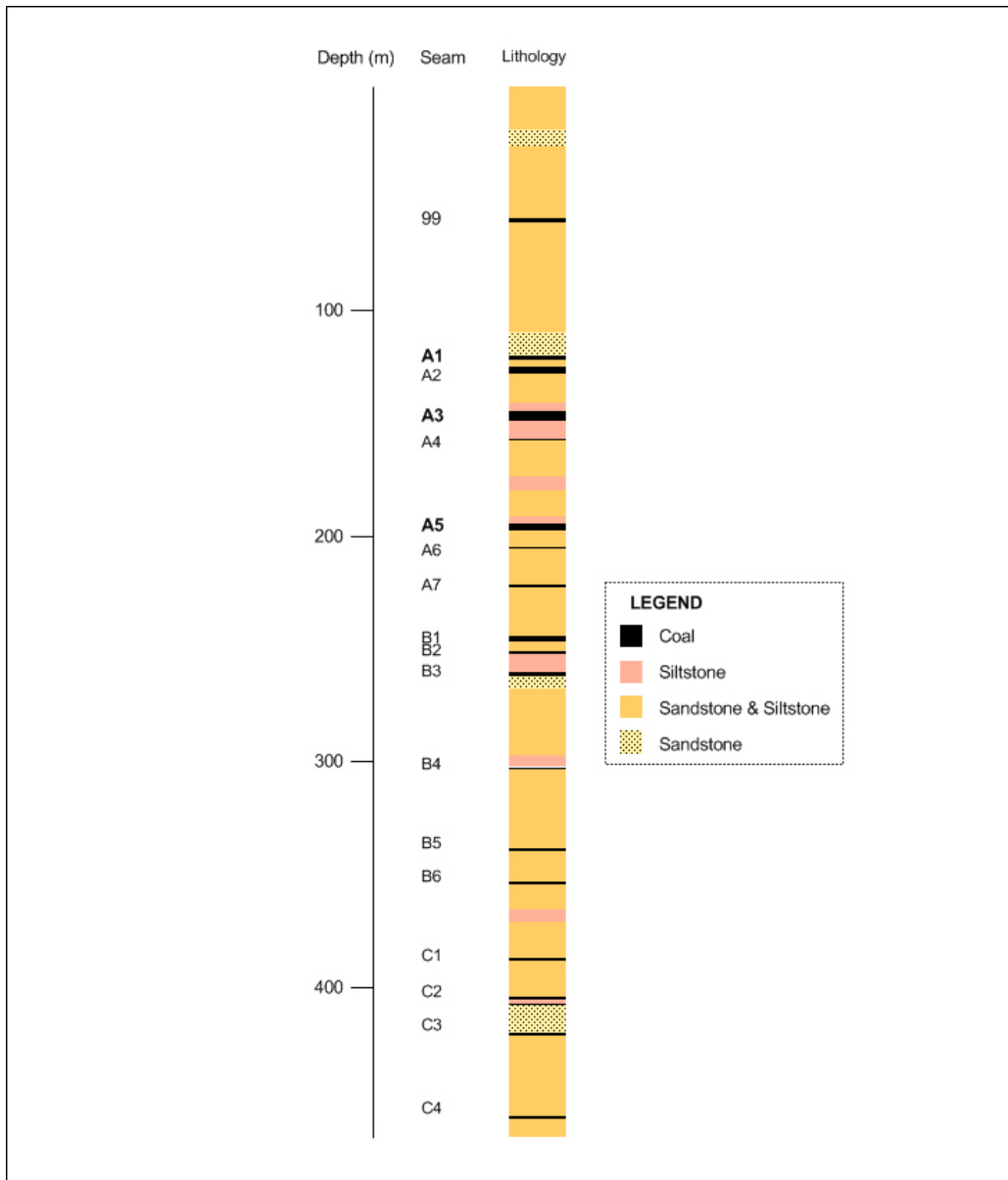


FIGURE 3. STRATIGRAPHIC COLUMN TYPICAL OF PANORAMA NORTH

Coal Quality Results

Laboratory analyses on drillcore samples were performed by Birtley Coal & Mineral Testing of Calgary, Alberta. Samples collected were representative of selected coal units and their associated partings. In total, 149 core samples were collected from the 2016 drilling program, of which 74 individual ply samples were analysed for raw coal quality, including 25 roof and floor samples. Coal seam recovery averaged 80% for all coal intersections, with friable coal an issue for recovery in some coal seams. Roof and floor samples were analysed to simulate dilution in wash plant simulations and clean coal analysis.

Results from handling and washability testing were analysed by A&B Mylec Metallurgical Consultants in Rockhampton, Australia, and used to simulate potential washability of the coal seams. Partition curves were generated, and the results from these simulations are summarised in Table 1.

| SEAM NAME | *RECOVERED & ANALYSED THICKNESS | FEED ASH (%AD) | FEED RD (AD) | YIELD @ 1.70SG (WET @ 9% TM) | M (%AD) | ASH (%AD) | VM (%AD) | FIXED CARBON (%AD) | TS (%AD) | GCV KCAL/KG (DAF) |
|-----------|---------------------------------|----------------|--------------|------------------------------|---------|-----------|----------|--------------------|----------|-------------------|
| A1 | 0.58 | 30.9 | 1.62 | 53.3 | 0.8 | 12.4 | 5.9 | 80.9 | 1.16 | 8423 |
| A3 | 0.61 | 33.3 | 1.62 | 54.3 | 1.0 | 15.3 | 6.3 | 77.4 | 0.70 | 8354 |
| A5 | 1.55 | 33.0 | 1.67 | 47.9 | 1.0 | 13.1 | 6.1 | 79.8 | 0.88 | 8378 |
| B1 | 0.77 | 32.2 | 1.59 | 53.3 | 1.0 | 13.5 | 6.0 | 79.6 | 0.97 | 8335 |
| B3 | 0.77 | 30.6 | 1.7 | 53.4 | 0.8 | 9.5 | 6.1 | 83.6 | 0.56 | 8360 |
| B5 | 0.80 | 26.4 | 1.6 | 59.0 | 0.7 | 9.2 | 4.5 | 85.6 | 0.88 | 8394 |

TABLE 1. AVERAGE PRODUCT COAL QUALITY RESULTS @ 1.70 SG – PANORAMA NORTH

*Thickness variation between Table 1 and Table 3 is attributed to core loss whilst drilling

The simulations indicated the potential product qualities able to be generated from the identified target seams at Panorama North to be very similar to those at Groundhog North.

Product qualities, are typical for high grade anthracite. It is expected that future petrographic analysis of the vitrinite content and vitrinite reflectance will confirm the high rank of these coals.

Resource Estimate

Coal resources for the Panorama North project have not been estimated. Current geological information derived by the Company does not yet support the development of a detailed geological model and the subsequent calculation of resources.



FIGURE 4. CORE LOGGING AT PANORAMA NORTH

Future Work Considered

The Company will undertake further exploration in 2017 to better understand the resource potential of Panorama North.

The Company is in the final stages of planning the 2017 program, and has confirmed a work program and budget with partner JOGMEC. Drilling at Panorama North is expected to recommence in early Q3 2017, and Atrum will update the market on the success of future exploration.

Competent Person Statement

The information in this announcement that relates to Coal Resources were estimated in accordance with the guidelines set out in the JORC Code 2012 Edition and are based on and fairly represents information and supporting documentation compiled and reviewed by Mr. Shaun Tamplin, a Competent Person who is a full-time employee of Tamplin Resources Pty Ltd, a Member of The Australasian Institute of Mining and Metallurgy (AusIMM Membership No. 228544).

With more than 20 years of experience in open cut and underground coal mining, Mr. Tamplin has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration to qualify him as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves."

Neither Mr. Tamplin nor Tamplin Resources Pty Ltd has any material interest or entitlement, direct or indirect, in the securities of Atrum or any companies associated with Atrum. Fees for the preparation of this report are on a time and materials basis.

Mr. Tamplin consents to the inclusion in this announcement of the matters based on the information, in the form and context in which it appears.

For further information, contact:

James Chisholm
Non-Executive Director
M +61 419 256 690
james@atrumcoal.com

Chris Brown
Company Secretary
M +61 402 060 141
cbrown@atrumcoal.com

Nathan Ryan
Investor Relations
M +61 420 582 887
nathan@atrumcoal.com

JORC TABLE 1

SECTION 1 - SAMPLING TECHNIQUES AND DATA

| Criteria | JORC Code explanation | Commentary |
|-----------------------|---|--|
| Sampling techniques | <p><i>Nature and quality of sampling (eg 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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3 kg was pulverised to produce a 30g 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 (eg submarine nodules) may warrant disclosure of detailed information.</i></p> | <p>For the 2016 Panorama North exploration program, all coal seams intersected were sampled. Coal plies were sampled discretely based on lithological characteristics and quality. All non-coal material and partings were sampled separately and noted in the lithological description. The immediate roof and floor samples were collected for geotechnical testing. Apart from one borecore (DHPN-16-02b) all sampling was completed with geophysical logs to determine core and coal loss and allocate accordingly. The qualified samples were then transported to the laboratory via courier.</p> <p>Coal quality samples from the Atrum Coal Drilling program were sent to Birtley Coal and Mineral Testing in Calgary, Canada. In total, 149 core samples were collected from the 2016 drilling program, of which 74 individual ply samples were analysed for raw coal quality, including 25 roof and floor samples. Air dry moisture from the raw coal quality analysis of all coal samples, excluding roof floor, and in-seam partings, averages 1.0%, and ranges from 0.6% to 1.7%. Air dry ash averages at 32.3%, and ranges from 10.1% to 54.4%. Total sulphur on an air-dry basis averages 1.55% and ranges from 0.24% to 4.39%. The high sulphur values in some raw coal samples appear to correlate with pyrite nodules in the core.</p> <p>Identified seams which have potential to become economic targets were composited and analysed for clean coal quality, in representative working sections, which were generally full-seam analysis. From the initial ply samples, 11 composite samples were made to represent potential product intervals as well as to begin characterising the coal within the project area. Smaller samples were crushed to top size limit (12 mm) while larger coal samples had sufficient mass to conduct pretreatment and dry and wet sizing analysis. Comprehensive washability testing was carried out on composites. Subsequent analysis consisted of raw coal proximate, SE, TS, RD; and washability completed on likely working sections. The results were analysed by A&B Mylec Metallurgical Consultants in Rockhampton, Australia, and used in simulating potential washability of the coal seams. Partition curves were generated, and the results from these simulations are shown in Table 1.</p> <p>All samples for coal quality are based on cored holes only. All coal quality samples were prepared and analysed using Canadian and International Standard testing methodologies.</p> |
| Drilling techniques | <p><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core 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).</i></p> | <p>Most boreholes are vertical but one borehole was inclined as it is a redrill of another hole from the same drill pad.</p> <p>All coal quality holes were fully cored using a HQ3 size core barrel producing a 61.1 mm core diameter.</p> <p>Triple tubing was used to try and maximize coal recovery.</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 maximise sample recovery and</i></p> | <p>An assessment of core recovery was completed by comparing the recovered thickness measured during geological logging and by the driller, to geophysical picked thicknesses from the geophysical logs.</p> |

| Criteria | JORC Code explanation | Commentary |
|--|---|---|
| | <p><i>ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and quality and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p> | <p>Coal seam recoveries were typically greater than 80%.</p> <p>Observations suggest that core loss is concentrated on the more fragile coal bands, particularly when interbedded with claystone. Consequently, samples with losses tend to have higher ash results than those with high recovery. No statistics have been performed to test this observation.</p> |
| Logging | <p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Coal 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>All core was geologically logged, marked and photographed before sampling. Geological and geotechnical features were identified and logged.</p> <p>Cored holes have detailed lithological and geophysical logs. All core descriptions are encoded in a digital lithology database on a hole by hole basis. Coal seams correlated between holes with corrections to database made using lithological and geophysical characteristics.</p> <p>Drill holes have been geophysical logged with a minimum density, neutron, gamma and verticality unless operational difficulties prevented full or partial logging of the drill hole (as in DHPN-16-02B).</p> <p>The calibration of the geophysical tools was conducted by the geophysical logging company, Century Wireline Services.</p> |
| Sub-sampling techniques and sample preparation | <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 maximise 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>All core samples were double bagged on site and transported to the Laboratory for testing.</p> <p>Birtley Coal & Minerals Testing comply with Canadian and International Standards for sample preparation and sub sampling. Large wash samples were pre-treated and dry sized before sample splitting and analysis. Proximate analysis was completed on a portion of the original sample.</p> <p>Raw analysis procedure keeps 1/3 of the sample as reserve. No geotechnical testing has been done to date.</p> |
| Quality of assay data and laboratory tests | <p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></p> | <p>Birtley Coal & Minerals Testing comply with the Canadian and International Standards for coal quality testing and as such conduct the verifications for coal quality analysis outlined in the standards.</p> <p>Coal quality results were verified upon receiving them. No adjustments have been made to the coal quality data.</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 ash-cv, ash-rd and washability – ash.</p> <p>Birtley Coal & Minerals adheres to ASTM and ISO preparation and testing specifications and has a Quality Control process in place. Birtley has participated in the CANSPEX Proficiency Testing Program since its inception and the test results are consistently in the preferred groupings. Their regular client base consists of all the major coal producers in western Canada as well as international clients.</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>Coal Quality results were verified by A&B Mylec Pty Ltd.</p> <p>No adjustments have been made to the Coal quality data.</p> <p>Coal intersections 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 company personnel (Database Geologist).</p> <p>Twinned holes are not used.</p> <p>All available field records, lab reports, core photographs, survey data etc. are stored in electronic form on the Atrum network, and hard copy in borehole folders at the company's Canadian offices.</p> <p>Anomalous results are checked and reanalysed using their reserve sample as required.</p> <p>The resultant database is cross referenced to ensure it has a valid range of data and exhibits sound regression relationships such as ash-cv, ash-rd and washability –ash.</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 Coal 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>Survey of the coal quality boreholes for the Atrum Coal exploration program was completed by Atrum geologists with a Trimble GEO XH surveying drill holes to <60 cm accuracy. The collar levels were also audited against high-resolution LIDAR generated topographic surface contours.</p> |
| Data spacing and distribution | <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 quality continuity appropriate for the Coal Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <p><i>Whether sample compositing has been applied.</i></p> | <p>Data spacing is sufficient to establish a degree of geological and quality continuity; however, data distribution is quite limited to a small area.</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>The Distance between drill holes generally ranges from 850 m to 1400m.</p> <p>The data spacing and distribution is considered by the Competent Person to be sufficient to establish the degree of geological and grade continuity appropriate for this exploration update. No Mineral Resource and Ore Reserves have been declared for the project.</p> |
| Orientation of data in relation to geological structure | <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 mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p> | <p>Most boreholes are vertical but one borehole was inclined as it is a redrill of another hole from the same drill pad. Drillholes were aligned to best intersect regional structures perpendicular to their orientation. Significant portions of each drillhole exhibit consistent flat bedding.</p> <p>Seam thicknesses are assumed to be true thickness.</p> <p>The orientation of data in relation to geological structure is not believed to have introduced any sampling bias.</p> |
| Sample security | <p><i>The measures taken to ensure sample security.</i></p> | <p>Sample security was ensured under a chain of custody between Atrum Coal personnel on site and the coal testing laboratories (Birtley).</p> <p>Reserves of samples drilled are stored and maintained at the laboratories for further testing if necessary.</p> |

| Criteria | JORC Code explanation | Commentary |
|--------------------------|--|---|
| <i>Audits or reviews</i> | <i>The results of any audits or reviews of sampling techniques and data.</i> | <p>Sampling was performed by Atrum Coal personnel. Birtley undertook internal audits and checks in line with the Canadian and International standards.</p> <p>The coal quality database has been reviewed by <i>A&B Mylec</i>. The exploration data was validated by the Competent Person, using reports, tables, plans and cross-sections.</p> |

SECTION 2 - REPORTING OF EXPLORATION RESULTS

| Criteria | JORC Code explanation | Commentary |
|--|---|---|
| <i>Mineral tenement and land tenure status</i> | <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 licence to operate in the area.</i></p> | <p>Coal tenures relate to the Panorama North project, which is 100% owned by Atrum Coal.</p> <p>The project consists of 12 granted coal licences totalling 7,359 hectares</p> <p>Security of tenure is not compromised and there are no known impediments.</p> <p>The boreholes were drilled in Coal Permits 417086 & 417084.</p> |
| <i>Exploration done by other parties</i> | <i>Acknowledgment and appraisal of exploration by other parties.</i> | <p>Gulf Canada Resources Inc. conducted exploration programs in 1980 and 1981 at Panorama, consisting of helicopter-supported mapping at 1: 10,000 scale and hand-trenching. The hand-trenching was implemented to prove the thickness of coal seams and to collect coal quality samples. Coal surface exposures greater than 0.50 m were trenched. In total, 96 trenches were logged: 42 from 1980 and 54 from 1981. All coal seams with a trench thickness greater than 0.50 m were sampled for coal analyses. Coal quality analyses were carried out by Cyclone Engineering Sales Ltd. for the 1980 trench samples. Samples from both exploration programs underwent vitrinite reflectance analysis by David E. Pearson & Associates Ltd. in Victoria, B.C. The examined coals were concluded to be of anthracite grade (Gulf Canada Resources Inc., 1981).</p> <p>The trench data was utilized to assist in targeting exploration drill holes. The coal quality results from the trenching are not reported herein due to uncertainties regarding the adequacies of sampling techniques and the high likelihood that the surface samples have been weathered.</p> <p>Exploration drilling within and near the Panorama North project has been reviewed and evaluated for data purposes and relevance.</p> |
| <i>Geology</i> | <i>Deposit type, geological setting and style of mineralisation.</i> | <p>The Panorama North project lies within the Bowser Basin, which is the largest contiguous basin in the Canadian Cordillera, developed because of tectonic compression and uplift of the Coast Mountains during the Upper Jurassic.</p> <p>The dominant structural feature is the NW/SE trending Biernes Synclinorium. It resulted from northeast-southwest compression during the first phase of deformation ("F1"). Thrusting related to the F1</p> |

| Criteria | JORC Code explanation | Commentary |
|---------------------------------|---|---|
| | | <p>deformation is more intense in the southern part of the Groundhog Coalfield than in the northern part. The second, less intense, phase of deformation (“F2”) resulted from NW/SE compression. The F2 deformation is superimposed on the broad, open type of F1 folding. The F2 imprint is visible in a series of plunge changes in the F1 folds in the order of up to 5° F2 thrusts are generally flat lying and related to the hanging wall of drag folds. Displacement tends to be along bedding surfaces. The F2 fold structures superimposed on the major F1 synclinerium vary in wave length from 100 m to 700 m and vary in amplitude up to 100 m.</p> <p>It is apparent that the structure of the Groundhog Coalfield can range from benign to complicated in localised zones due to the two phases of deformation. In broad terms, Panorama’s structure is characterised by broad, gentle synclines spanning distances up to 4 km with tightly folded zones on the syncline flanks. It is estimated that the tight folding occurs over narrow zones approximately 500 m to 700 m in width. Strata within these tightly folded zones features complex thrusting, blind thrusts and recumbent folding. Exploration targets within this structural regime are likely to occur in the flat lying synclines between thrusts, however, more complex small deposits of thicker fault accumulated anthracite may also exist in the folded zones.</p> |
| <i>Drill hole Information</i> | <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 metres) of the drill hole collar</i></p> <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>All holes have been lithologically logged, with coal logs for all cored holes</p> <p>See Table 2 for a summary of available bore data. All major seams are correlated between holes with a low level of confidence.</p> <p>All samples taken at a ply by ply level for RD and ash determination and then composited into working sections for subsequent working section analysis and clean coal composites. Core recovery is generally adequate; roof and floor dilution samples and analysis generally limited to ash and RD.</p> <p>Structural data contained in digital database; database updated with all exploration data, survey pickups and other relevant data. Coal quality data contained in Excel but linked to structural database by both roof and floor picks and seam name.</p> |
| <i>Data aggregation methods</i> | <p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum quality truncations (eg cutting of high grades) and cut-off qualities are usually Material and should be stated.</i></p> <p><i>Where aggregate intercepts incorporate short lengths of high quality results and longer lengths of low quality 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>Coal intersections may have been sampled in multiple sections per seam, so 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. Grade cut offs have not been applied to exploration results in the database.</p> |
| <i>Relationship between</i> | <p><i>These relationships are particularly important in the reporting</i></p> | <p>Drillhole data limits the extent of geological knowledge regarding the horizontal extent of the coal seams.</p> |

| Criteria | JORC Code explanation | Commentary |
|--|---|--|
| <i>mineralisation widths and intercept lengths</i> | <p><i>of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></p> | <p>Coal seams were intersected close to true thickness of the coal seams. Few intersections are at a high angle to the coal seam.</p> <p>Seam thicknesses have been corrected to geophysics to ensure accuracy.</p> |
| <i>Diagrams</i> | <p><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></p> | <p>All appropriate diagrams are contained within above announcement.</p> |
| <i>Balanced reporting</i> | <p><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high qualities and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p> | <p>All available exploration data for the Panorama North project area has been considered, including referencing to historical data.</p> <p>There is no preferential reporting of results.</p> <p>Data has been extensively cross referenced against raw records.</p> <p>All coal quality data collated has been under the guidance of A&B Mylec Pty Ltd. Their scope has been to ensure the maintenance of acceptable levels of accuracy and precision in the reporting and process selection. They have also audited reported results and ensured that laboratory losses are allocated appropriately.</p> <p>No information has been excluded. Whilst some outlying values may exist, the average values are considered representative of the Project.</p> |
| <i>Other substantive exploration data</i> | <p><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> | <p>No further exploration data were gathered and/or utilised.</p> |
| <i>Further work</i> | <p><i>The nature and scale of planned further work (eg 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>Further work consisting of additional drilling and seismic survey is being evaluated. The Company is currently planning an additional drilling program aimed at testing the continuity of the coal resources across the Panorama North project area.</p> |

PANORAMA 2016 DRILLING SUMMARY

| Drillhole | Easting | Northing | Elevation | Dip | Azimuth | Core Diameter | Date Completed | Total Depth | Casing Depth |
|-------------|-----------|------------|-----------|-----|---------|---------------|----------------|-------------|--------------|
| DHPN-16-01 | 526453.42 | 6302111.73 | 1523.32 | -90 | 0 | HQ3 | 06/10/2016 | 335.40 | 8.10 |
| DHPN-16-02A | 525577.73 | 6301193.54 | 263.50 | -90 | 0 | HQ3 | 06/10/2016 | 41.00 | 19.50 |
| DHPN-16-02B | 525577.73 | 6301193.54 | 263.50 | -80 | 225 | HQ3 | 14/10/2016 | 263.50 | 36.00 |
| DHPN-16-03 | 524569.69 | 6300240.65 | 1411.28 | -90 | 0 | HQ3 | 11/10/2016 | 326.00 | 8.10 |
| DHPN-16-04 | 526431.15 | 6301202.19 | 1636.50 | -90 | 0 | HQ3 | 17/10/2016 | 269.00 | 3.00 |

TABLE 2. BOREHOLE DETAILS.

| Seam Thickness and Analytical Procedures | | | | |
|--|------------|-------------|------------|------------|
| Seam | DHPN-16-01 | DHPN-16-02B | DHPN-16-03 | DHPN-16-04 |
| A1 | 1.81 | | | 0.7 |
| A2 | 0.28 | | | 0.2 |
| A3 | 1.22 | 0.42 | 2.3 | 2.11 |
| A4 | | 0.69 | 0.89 | 0.79 |
| A5 | 2.34 | 0.62 | 0.49 | 1.11 |
| A6 | | 1.05 | 0.19 | 2.53 |
| A7 | | | 0.26 | 0.89 |
| B1 | | 1.11 | 0.63 | 0.17 |
| B2 | | 0.49 | 0.51 | |
| B3 | | 0.84 | 0.51 | |
| B4 | | | 0.36 | |
| B5 | | | 0.85 | |
| B6 | | | 0.62 | |
| C1 | | | 0.45 | |
| C2 | | | 0.36 | |
| C3 | | | 0.3 | |
| C4 | | | 0.45 | |
| C5 | | | 0.36 | |





| | |
|---|--|
|  | Apparent Relative Density |
|  | Relative density, Proximate Analysis, TS, CV |
|  | Small Coal Washability |
|  | Large Coal Washability |

TABLE 3. BOREHOLE SEAM THICKNESS AND ANALYTICAL PROCEDURE SUMMARY.

| Seam | Raw Seam by Seam Coal Qualities - Panorama Project | | | | | | | |
|------|--|-------------------------|-----------|---------|---------|---------------------|---------|---------|
| | Number of Intersections | Moisture (%) Average | Ash (ad%) | | | Total Sulphur (ad%) | | |
| | | | Average | Minimum | Maximum | Average | Minimum | Maximum |
| A1 | 2 | 1.28 | 44.55 | 10.12 | 72.65 | 1.42 | 0.37 | 3.18 |
| A2 | 2 | NA | NA | NA | NA | NA | NA | NA |
| A3 | 4 | 1.11 | 39.93 | 19.83 | 65.8 | 0.94 | 0.13 | 2.25 |
| A4 | 3 | 0.86 | 29.2 | 18.02 | 45.59 | 1.55 | 0.31 | 2.43 |
| A5 | 4 | 0.98 | 40.35 | 22 | 64.71 | 2.08 | 0.33 | 5.17 |
| A6 | 3 | NA | NA | NA | NA | NA | NA | NA |
| A7 | 2 | NA | NA | NA | NA | NA | NA | NA |
| B1 | 3 | 0.95 | 33.05 | 16.15 | 46.61 | 2.17 | 0.56 | 4.39 |
| B2 | 2 | 0.91 | 40.67 | 40.67 | 40.67 | 0.76 | 0.76 | 0.76 |
| B3 | 2 | 0.74 | 37.8 | 24.11 | 54.37 | 1.12 | 0.24 | 2.15 |
| B4 | 1 | NA | NA | NA | NA | NA | NA | NA |
| B5 | 1 | 0.98 | 23.29 | 15.1 | 31.47 | 1.17 | 0.58 | 1.76 |
| B6 | 1 | 1.1 | 26.12 | 26.12 | 26.12 | 1.86 | 1.86 | 1.86 |
| C1 | 1 | NA | NA | NA | NA | NA | NA | NA |
| C2 | 1 | NA | NA | NA | NA | NA | NA | NA |
| C3 | 1 | NA | NA | NA | NA | NA | NA | NA |
| C4 | 1 | NA | NA | NA | NA | NA | NA | NA |
| C5 | 1 | NA | NA | NA | NA | NA | NA | NA |

TABLE 4. RAW COAL QUALITIES - SEAM BY SEAM BASIS.