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BC Geological Survey
Coal Assessment Report
973

COAL ASSESSMENT REPORT ROMAN NORTHWEST PROPERTY

PEACE RIVER DISTRICT

REPORT ON EXPLORATION ACTIVITIES 2013 - 2014

LOCATED AT UTM: 6084800 N, 628400 E

COAL LICENSES: 409701, 409702, 417533.

COAL LEASE: 417059.

Peace River Coal Inc. - Anglo American Coal Pty Ltd
800 – 700 West Pender Street
Vancouver, British Columbia
V6C 1G8

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March 15, 2015

Section 4.6, Section 6, a portion of Section 7, Attachment 8, and Appendix 4 remain confidential under the terms of the Coal Act Regulation, and have been removed from the public version.

http://www.bclaws.ca/civix/document/id/complete/statreg/251_2004

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COAL ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: ***Coal Assessment Report Roman Northwest Project Peace River District***

TOTAL COST: $5,539,038 (2013 – 2014)

AUTHOR(S): ***David Lortie***

SIGNATURE(S): David Lortie

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): ***CX-9-8, September 7, 2012***

YEAR OF WORK: ***2013- 2014***

PROPERTY NAME: ***Roman Northwest Property***

COAL LICENSE(S) AND/OR LEASES ON WHICH PHYSICAL WORK WAS DONE: ***417059, 409701.***

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: ***Liard***
NTS / BCGS: ***093I 15***
LATITUDE: 54.90
LONGITUDE: -120.00 (at centre of work)
UTM Zone: ***10*** EASTING: ***628,400*** NORTHING: ***6,0848,000***

OWNER(S): ***Peace River Coal Inc.***

MAILING ADDRESS: ***Suite 800 – 700 West Pender Street, Vancouver, BC V6C 1G8***

OPERATOR(S) [who paid for the work]: ***Peace River Coal Inc.***

MAILING ADDRESS: ***Suite 800 – 700 West Pender Street, Vancouver, BC V6C 1G8***

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)
Coal, sandstone, siltstone, mudstone, shale, Gates Formation, folding, faulting

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

1. ***Mitsui Mining Co., Ltd. Report on the Geological Exploration of the Babcock Property, September 1974. Report 605***
2. ***Denison Mines Limited. 1976. Quintette Coal Limited: Information Summary, August 1976. Report 608***
3. ***Denison Mines Limited. 1976. Quintette Coal Limited: 1976 Geological Assessment Report, December 1976. Report 609***

SUMMARY OF TYPES OF WORK IN THIS REPORT		EXTENT OF WORK	ON WHICH TENURES
		(in metric units)	
GEOLOGICAL (scale, area)			
	Ground, mapping		
	Photo interpretation		
GEOPHYSICAL (line-kilometres)			
	Ground (Specify types)	**Seismic 3,700 metres**	***417059, 409701***
	Airborne		
	(Specify types)		
	Borehole		
	Gamma, Resistivity,	**6,750 m**	***417059, 409701***
	Resistivity	**6,750 m**	***417059, 409701***
	Caliper	**6,750 m**	***417059, 409701***
	Deviation	**6,750 m**	***417059, 409701***
	Dip	**6,750 m**	***417059, 409701***
	Others (specify) Sonic	**6,750 m**	***417059, 409701***
	Core	**2,436 m**	***417059, 409701***
	Non-core	**4318 m**	***417059, 409701***
SAMPLING AND ANALYSES			
Total # of Samples			
134	Proximate		***417059, 409701***
47	Ultimate		***417059, 409701***
47	Petrographic		***417059, 409701***
47	Vitrinite reflectance		***417059, 409701***
26	Coking		***417059, 409701***

COAL ASSESSMENT REPORT
ROMAN NORTHWEST

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1 SUMMARY

Roman Northwest is the northwest extension of the Roman Mountain deposit to the northwest of Babcock Creek. The same coal seams are present at both Roman Mountain and the Roman Northwest property. The seams strike in a north-westerly direction along the Murray syncline. This property is a logical extension to the Roman Mountain resource base; increasing the total reserve and resource available for future mining.

Roman and Roman Northwest are located immediately to the southwest of Peace River Coal's Trend Mine. The strata of the Murray Syncline are Upper-Jurassic to Lower-Cretaceous. Coal measures are found in the Bullhead Group and Fort St. John Group which is an alternating sequence of marine and non-marine clastic lithologies. The Minnes Group formations are the oldest strata to outcrop and are located on the northeast and southwest extents of the Murray Syncline. The youngest strata belong to the Hulcross and Gates Formations which occupy the axis of the Murray Syncline. The economic coal seams are contained in the Lower-Cretaceous aged Gates and Gething Formations and likely formed within deltaic depositional environments. The Gates and Gething Formations are separated by the marine deposits of the Moosebar Formation. The strata have been significantly affected by thrust faulting and folding during the Cordilleran orogenesis.

The Roman Northwest property extends for approximately two kilometres northwest of Babcock Creek until it intersects the Teck Coal coal licences. Economic coal seams that were targets of the drill program are Early Cretaceous in age and are found within the Gates Formation and the older Gething Formation. Within the Middle Gates Member, the hard-coking coal seams that have been identified as holding an economic potential are: D2, E1, F, G, J, and K1, with the D2 seam being the youngest in age. Within the Gething Formation, the identified seams (youngest to oldest) are: the Bird Seam, GT1, GT2, and GT3. The Gething is typically harder to correlate due to the nature of its deposition, occasionally not all the GT seams are intersected down hole.

Exploration on the Roman Northwest property started in 1975 with a detailed mapping program that cover the ridge areas around the Roman Northwest property. This information was used to develop seam structure contour maps that outlined the basic geology of the property. There was no further work carried out on the property until 2006.

Peace River Coal (PRC) started exploring the property in 2006 to determine the extension of the Roman Mountain Murray Syncline across Babcock Creek. In 2006 and 2007 the drilling was restricted to the drilling of 6 air rotary boreholes along an existing access road.

The main exploration activity on the Roman Northwest property started in 2008 and has continued each year up to 2014.

The focus of all the work has been on Coal Lease 417059 and Coal License 409701.

In 2012 a preliminary geological model was constructed using the data from the 2006 to 2012 exploration programs. This model was used as the bases for the 2013 - 2014 exploration programs carried out on the Roman Northwest Property. Since then the model has been revised twice using the 2013 and the 2014 exploration data.

2 INTRODUCTION

2.1 Purpose of Report

This report has been prepared to report on the exploration activities undertaken from July 2013 until December 2014 on the Roman Northwest property as part of the requirements for holding coal tenure under the British Columbia Coal Act. The exploration program was undertaken under Notice of Work permit CX-9-8.

2.2 Project Description

Peace River Coal Inc. (PRC) is a producer of high-quality metallurgical coal in Canada. In addition to holding significant coal resources in western Canada, PRC conducts mining operations at the Trend Mine in the Tumbler Ridge area of northeast British Columbia

Until December 2006, the Trend Mine was owned and operated by NEMI Northern Energy and Mining Inc. (NEMI). In November 2 2006 NEMI's assets were consolidated with Hillsborough Resources Ltd. and Anglo Canadian Coal Inc. assets to form a new coal mining company, Peace River Coal Limited Partnership (PRCLP). NEMI and Hillsborough Resources Ltd. remained as minority shareholders in PRCLP, and PRC managed the PRCLP assets as general partner.

In October 2011, the NEMI and Hillsborough Resources Ltd. minority interests were sold to PRC. PRC now manages the assets and is a wholly owned subsidiary of Anglo American plc. PRC operates as part of Anglo American's Coal business unit based in Brisbane Australia.

2.3 Property Description & Location

The Roman Northwest coal deposit located on Peace River Coal Inc. owned licenses: 409701, 409702 and 417533 and Coal Lease 417059. This property is located in the Peace River Coalfield of British Columbia approximately 25km south-southwest of the town of Tumbler Ridge. Tumbler Ridge is about 400 km northeast of Prince George, British Columbia by Highways 97 and 29. Dawson Creek is 115 km to the northeast via Highways 97 and 52. Access to the project is gained by paved and gravel roads from Tumbler Ridge, located 20 kilometres to the north (attachment 2). The project encompasses an area extending approximately two kilometres northwest from Babcock Creek. The centre of the property is in UTM Zone 10, NAD 83 at coordinates 6084800 Northing, 628400 Easting.

2.4 Mineral Rights & Surface Title

The Roman Northwest property occurs on several Crown Coal Licences. Table 2.4.1 lists the licences and their present status including data concerning the coal licences. The company advises that the property has not been legally surveyed.

Table 2.4.1: Summary of Mineral Rights

Tenure Type	Coal Lease	Coal Licence	Coal Licence	Coal Licence
Tenure Number	417059	409701	409702	417533
Site	Roman	Roman Northwest	Roman Northwest	Roman Northwest
Name	Roman	Roman Northwest	Roman Northwest	Roman Northwest
Holder	PRC	PRC	PRC	PRC
Holder %	100	100	100	100
Area	3201	298	298	149
Units	Ha	Ha	Ha	Ha
Expiry Date	2030.09.14	2015.03.15	2015.03.15	2015.03.15

2.5 Accessibility, Climate, Infrastructure & Physiography

The Roman Northwest property is accessed via the paved Heritage Highway and an all-season gravel road, Petroleum Development Road 46 (PDR 46), also known as the Core Lodge Road, via Tumbler Ridge. PDR 46 is owned and operated by Canadian Natural Resources Limited (CNRL) and PRC has entered into a Road Use Agreement for its mine access and coal hauling. A seasonal road extends further along the northwestern side of Babcock Creek which allows access to the Roman Northwest property. See Attachment 2.

All weather data was obtained from the Trend Mine weather station. The station is located in UTM Zone 10, NAD 83 at coordinates 6085666 Northing, 630950 Easting and 1,434 m above mean sea level.

The climate within the project area is characterized by long, cold winters, from November through March, and short, cool summers, from June through August. Summer temperatures generally range between 5℃ and 15℃ but maximum values of up to 30℃ have been recorded. Average winter temperatures range between -10℃ and -5℃ with minimum temperatures as low as -30℃. Rainfall occurs during the summer months with an annual average of 306 mm. Snow pack at the Trend South Mine normally averages 200 cm per annum but may exceed 275 cm. Wind speeds vary throughout the year averaging approximately 16 km per hour. Maximum wind speeds of up to 111 km per hour have been recorded.

The centre of the Roman Northwest Project area is located about 100 km south of Dawson Creek, British Columbia and 175 km south of Fort St. John, British Columbia. Dawson Creek and Fort St. John have populations of approximately 11,000 and 17,400 respectively. In addition, the Roman Northwest Project is located approximately 175 km northeast of Prince George, British Columbia and 120 km southwest of Grande Prairie, Alberta both of which have populations greater than 40,000. Each of these cities has regularly scheduled flights to and from major western Canadian cities such as Vancouver, Edmonton and Calgary. Tumbler Ridge is a small town with a population of approximately 2,500 located 20 km to the north of the Roman Northwest Project.

The nearest railhead is the CN Rail Tumbler Subdivision, which terminates 12 km south of Tumbler

Ridge at the Quintette rail load-out. PRC constructed a rail load-out facility in 2005 located approximately 4 km north of the Quintette rail load-out which also connects with the CN Rail Tumbler Subdivision railhead. Distance from this load-out to the Ridley Terminal Inc., in Prince Rupert, British Columbia is approximately 1,000 km. An airstrip is situated 11 km south of Tumbler Ridge along the Heritage Highway. The unmanned airstrip is primarily used for chartered flights. Primary industrial development activities in the region include oil and natural gas exploration and production, coal exploration and mining, forestry and wind energy generation.

The Roman Northwest Project is located in the Rocky Mountain Foothills of British Columbia. The Foothills consist of a series of ridges and valleys that parallel the Rocky Mountains to the west. The topography of the Roman Northwest Project area varies from gentle slopes to rugged cliffs and steep valleys. The total elevation change across the project area is approximately 240 m, from 1,400 m above mean sea level at Babcock Creek to 1,640 m above mean sea level at the top of Roman Northwest property. Mount Kostuik is the highest peak in the area at 1,900m.

All water drainage from the project area will be into the Babcock Creek from the northwest and southeast. The Babcock Creek drains into the Murray River.

2.6 Adjacent Properties

The Roman Northwest Project is located within an area that contains a number of both closed and currently operating metallurgical coal properties including Perry Creek, Bullmoose, Wolverine, Quintette and the Trend Mine.

2.7 Historical Information

Commercial coal deposits were first discovered north of the Roman Northwest Project area beside the Sukunka River in 1965, and this discovery triggered a coal “staking rush” by various companies led mainly by Brameda Resources and Denison Mines Limited.

In 1970 and subsequent years Denison Mines Limited (Denison) acquired a large number of crown coal licences in the Wolverine Valley, Quintette Mountain and Roman Mountain areas.. In April 1971 Denison entered into an agreement with Mitsui Mining Co. Ltd., Alco Standard Corporation and Tokyo Boeki Ltd. to form Quintette Coal Ltd. Several changes in the partnership took place in the 1970’s and 1980’s leaving Denison as the major shareholder and managing partner. By 1983 Denison had accumulated a 50% stake in the partnership with Mitsui Mining Co. Ltd. holding 12.5%. The remainder of the partnership comprised twelve other companies, mainly representing interests in the Japanese steel industry.

This activity occurred in response to global expansion of steel production which stimulated worldwide exploration for coking coal. Intensive exploration from the late 1960’s to the 1980’s followed that culminated in the development of the Quintette and Bullmoose Coal Mines.

Infrastructure development included the construction of the town of Tumbler Ridge, 129 km of rail line, 95 km of highway, 127 km of high voltage transmission line, a new port at Ridley Island and the upgrading of the 752 km existing rail line from Prince George to the port at Prince Rupert.

The Quintette Mine made its first coal shipment in December 1983 and operated until August 2000. The mine had a raw coal production capacity in excess of 6 million tonnes per annum, making it one of Canada’s largest mines. Production came from four open pits named Mesa, Wolverine, Shikano and Babcock. Clean coal production capacity was 2.3 million tonnes per annum, although shipments toward the end of the mine’s life in 2000 ranged from 1.4 to 1.9 million tonnes per annum.

The Bullmoose Mine produced 34 million tonnes of high quality metallurgical coal from 1983 until its closure in April 2003. Teck, which acquired the property through the purchase of Brameda Resources, operated the mine and owns the majority of the remaining mine assets along with minority partners.

In response to decreasing economic certainty and rulings by federal authorities to reduce coal prices, Teck Corporation took control of Quintette Coal Limited from Denison in 1991 and the Quintette Operating Corporation was created. As a result of diminishing coal prices the Roman Northwest licenses reverted to the crown in 1999 to 2000.

Since 2004, four new open pit coal mines have opened in the region. Two of these which are the Wolverine and Trend Mines, are located in the Tumbler Ridge area and produce metallurgical coal. The others, the Pine Valley Coal Mine and the Brule Mine, are located in the Chetwynd area. The Brule Mine produces Pulverized Coal Injection (PCI) coal while Pine Valley produces both PCI and metallurgical coal.

Ownership of the Roman Northwest coal licenses were obtained by NEMI in early 2000. When NEMI joined the PRC partnership in 2006 control of the Roman Northwest coal licenses were transferred to PRC.

2.8 Exploration by Other Parties

Denison Mines Limited carried out exploration work on the Roman Northwest area in 1975. The work included detailed surface geological and topographical mapping, structural interpretation and mechanical exploration including drilling. Activities in the field included rotary percussion and diamond core drilling.

3 EXPLORATION

3.1 Historical Drilling

Denison carried out drilling exploration on the Roman Northwest property in 1975, the focus of the drilling was to the east of the current Roman Northwest property.

3.2 2006 – 2012 Drilling

Exploration activities were carried out on the Roman Northwest property by PRC from 2006 - 2012. During this time a total of 169 rotary percussion boreholes, 24 diamond core boreholes and 16 large diameter core boreholes were completed. The Roman Northwest work extended up to and included the exploration drilling on the Core Lodge road on the western side of the Babcock Creek in 2006 and 2007. Exploration on Roman Northwest further west of the Core Lodge road started in 2008 and continued in 2009.

The Roman Northwest 2008 – 2009 work consisted of 46 rotary percussion boreholes, 2 diamond core borehole, 3 large diameter core boreholes and 18 trenches. The boreholes on the Core Lodge road are included in both the Roman Northwest and Roman Mountain projects.

The 2010 – 2012 exploration programs consisted of 88 rotary percussion boreholes, 11 diamond core borehole, 5 large diameter core boreholes and 24 trenches. This work increased the geological confidence level in the resource and also extends the explored area into the second kilometre.

3.3 2013 – 2014 Drilling

PRC exploration conducted an exploration program in the summer of 2013 to better understand the Roman Northwest property and specifically to define coal seams of the Gates formation to a concept or inferred level of resource definition based on a planned desktop pit. The drilling program consisted of 17 trenches and 27 boreholes. A total of 3168 metres of new drilling was completed on this property in the course of the 2013 summer drilling program.

In early 2014 the drill program started in 2013 was continued on the Roman Northwest property by Peace River Coal Inc. The work consisted of 11 rotary percussion boreholes and 9 PQ core boreholes and 1 trench. A total of 20 drillholes were completed from which 2129 meters of rotary and 1563 meters of PQ core was obtained. All core holes were actually combined rotary and core drilling, selectively coring coal intervals with geological guidance from drilled rotary pilot holes.

The cost for the 2013 - 2014 exploration programs are recorded in Attachment 11

Table 3.1 outlines a summary of drilling and trenching on the Roman Northwest property.

Drill core from the HQ and PQ fully cored boreholes drilled in Roman Northwest over various years are stored at the Trend Mine Site.

3.4 Drill Sample Recovery

Sample analyses were undertaken according to prescribed standard analytical flow sheets. A pre-requisite for analyses to be undertaken on any individual sample was that for raw analyses the coal core recovery had to exceed 60% and for wash ability analyses the coal core recovery had to exceed 65%. Samples were evaluated on a case by case basis to determine if the results were to be included in the quality model.

Table 3.1: Summary of Boreholes and Trenches Roman Northwest

Year	Total boreholes		Rotary boreholes		HQ/PQ core boreholes		Large diameter core boreholes		Trenches
	number	metres	number	metres	number	Metres	number	metres	number
1975	1	96	1	96	0	0	0	0	0
2006	3	0	3	0	0	0	0	0	0
2007	3	0	3	0	0	0	0	0	0
2008	18	3372	16	3113	1	171	1	88	0
2009	33	7992	30	7492	1	382	2	118	18
2010	22	3349	16	2856	1	310	5	183	22
2011	58	14389	56	14094	2	295	0	0	0
2012	24	4128	16	2946	8	1182	0	0	2
2013	27	3136	17	2209	2	200	8	727	17
2014	20	3619	11	2109	9	1510	0	0	1
Totals	**209**	**40081**	**169**	**34915**	**24**	**4050**	**16**	**1116**	**60**

3.5 Geological & Geophysical Logging

All the PRC rotary and core boreholes were logged by borehole geophysical techniques employing the following Century Geophysical Corporation tools:

- gamma / neutron / deviation;
- gamma / density / resistivity / calliper;
- dipmeter / deviation;
- through the rod logs used a gamma-gamma.

Century Geophysical Corporation carried out the geophysical logging. Deliverables included compiled raw geophysical data based on industry standards; digital and paper logs, based on PRC Standard Operating Procedures. In addition to lithological measurements, strata dip and borehole deviation was also measured.

Borehole collar positions and trench locations for the Hillsborough and PRC exploration programs were initially surveyed using a GPS operated by the field geologist, with follow-up by a professionally registered land surveyor.

All coal seams were picked according to the company's Standard Operating Practice (SOP). The geophysical logs were used as the basis for measuring coal sample recoveries and detecting and recording coal seam lithology variations.

The copies of the geophysical logs from the 2013 - 2014 boreholes are contained in Appendix 1.

3.6 Geophysical Data

In 2013 there was a near surface seismic program was carried out on two seismic lines that intersected the property. The program was the first attempt at using ground geophysics on a PRC property and the work was carried out under supervision of an exploration team from Anglo American Exploration Canada. The work was carried out by DMT Geosciences LTD.

As stated in their report, "The objective of the geophysical investigation was to design and acquire high resolution 2D seismic in an area with relatively rugged terrain that varies from treed to barren soils and bedrock outcrop. The coal seam targets have significant dip angles over 450 and complex structure in the desired imaging range of the top 50 m to over 700 m depth. Most of the area requires man portable seismic recording gear and drilling equipment.

The lines on which seismic data were acquired are: Roman Northwest 02 (RNW02), RNW04, RNW05, and Roman Mountain 02 (RM02)

Tests were conducted with dynamite, vibrator and weight drop sources on line Roman Northwest-04 (RNW04). DMT proceeded with the use of .25 kg and .125 kg dynamite charges as sources for a 2D seismic geophysical project on the remaining lines of RNW02, RNWO5 and RM02 mostly with hand auguring holes where necessary.

In most cases drilling and loading of the holes was done 1 day up to 11 days in advance of shooting (detonating the loaded charges) and recording the shots. Drilling and loading of the holes was done by personnel of GPD under the supervision of DMT's Project Seismic Certified Blaster, James Golby (#100657). Explosive charges, loading tools, shot wire, detonators, bentonite and leads were sourced from Dyno Nobel Canada Inc. (DNC).

Deliverables on digital archive accompanying this report include: all original raw data in SEG2 format for the surface seismic and VSP, all final processed seismic data in SEGY format, figures and interpretation."

The final report of their findings from this program can be found in Appendix 5.

3.7 Data Density

The borehole data for Roman Northwest is sufficient to support the current resource statement for both the Canadian 43-101 requirements for structure and the JORC standard for quality. The boreholes were mainly drilled on cross section with an average of 150 m between drilled cross sections

3.8 Data Location / Topographical Data

The Roman Northwest area was flown for an aerial survey in 2005 using LIDAR technology with the generation of detail contours and DTM data. This data was used as the basis for the topographic surface used in the geological Resource Model.

3.9 Data Orientation Relative to Geological Structure

Wherever possible, boreholes have been logged with a verticality tool to survey tilt and azimuth down the hole. The data was loaded into MineSight which displays the seam locations based on the downhole survey. Boreholes without downhole surveys were considered as vertical for the purpose of geological modelling. Percussion rotary boreholes tend to deviate more than core holes and are likely to turn into the bedding.

3.10 Reporting Archives / Database

The geological data for Roman Northwest property is in electronic format with the exception of early historic borehole data from the 1975. New field information is collected digitally and then transferred directly into acQuire.

PRC uses the Mincom MineSight software package for all geological modelling purposes.

An acQuire database for Peace River Coal has been set up and is now the primary geological database for all borehole and trench data. Data is transferred from acQuire into a MineSight model to facilitate interrogation and modelling.

The validation of non-core borehole data includes the following:

- inspection, encoding and loading of lithological logs,
- visual inspection and loading geophysical logs,
- correction of coal seam depths and thicknesses to geophysical picks, and
- checking of seam correlations with surrounding boreholes

The validation of cored borehole data includes the following:

- inspection, encoding and loading of lithological logs,
- visual inspection and loading geophysical logs,
- correction of coal seam depths and thicknesses to geophysical picks,
- apportioning core losses,
- checking of seam correlations with surrounding boreholes, and
- ensuring sample depths and thicknesses correspond to corrected log depths and thicknesses

4 COAL ANALYSIS

4.1 Sampling

Coal seams were sampled from HQ and PQ size diamond core and bulk samples which were obtained from large diameter (150 mm) cores (LD). With respect to coal handling, description, and sampling the following industry standards and procedures applied:

- At the drill, PQ core was placed in wooden core boxes with PQ diameter sized partitions that were covered prior to being transported to the logging area for description and sampling. As per industry standards, a plastic sleeve or plastic sheets were used to wrap the coal core sections. Coal seam cores were geologically logged in detail, and core recoveries obtained by comparing the lithology logs to the detailed density / gamma geophysical logs.
- Photos of core were taken ensuring box number and / or borehole number was visible.
- Sample increments were selected on a geological basis, modified, as necessary, for core recovery. Geologists conducted all sampling. For each sample interval the entire core was submitted for analysis. A suite of selected immediate roof and floor lithologies were also sampled. In general, samples with a core recovery greater than 65% were submitted for analysis and the analytical results are imported into the acQuire database.
- Typically, samples were placed in thick plastic bags with each bag containing two sample tags that recorded borehole number, seam, and bag number. Samples were double-bagged and placed in plastic buckets for shipping. Duplicate tags were retained by the company.
- All samples were stored in a cool, dry environment prior to dispatch to the laboratory. Current practice is to ship samples in a timely manner.
- Large diameter cores were employed for bulk sampling. Initially this was in order to obtain sufficient sample mass for coking tests, but it soon became evident that core recoveries for large diameter cores were superior to HQ cores and in some instances were used instead of HQ samples. These cores were measured, described and sampled at the drill rig. The approach taken to sample selection, collection and bagging was similar to that described for HQ cores as noted above. Sample recoveries and intervals were finalized by reference to the geophysical logs at the core shed
- Denison's (i.e. historical) coal core logging and sampling followed prescribed guidelines to ensure a consistent approach by each geologist and to provide consistency from one project to another. Their approach to sample selection met industry standards of the time. Historical approaches to both core logging and sampling are consistent with those employed by PRC in the 2013 - 2014 exploration programs.

4.2 Sub-Sampling and Sample Preparation

On the Roman Northwest property sample preparation was handled differently depending on when the samples were taken.

Historical samples obtained by Denison during 1975 were analysed by Cyclone Engineering Sales Limited in Edmonton, AB and the Department of Energy, Mines and Resources, Clover Bar Lab., AB. The sampling procedures are available for review.

4.3 Assay, Analysis and Laboratory

Denison: Denison samples were sent to a coal laboratory and the samples were analysed according to a supplied flow sheet. All core drilled was HQ in size. The core was dried then crushed to ½".

PRC: Sample preparation and analyses were undertaken according to the standard analytical flow sheets included in flow sheets at the end of this section.

- Raw coal analyses were limited to samples where core recovery was >60%.
- Washability analyses were limited to samples where core recovery was >65%.
- Only samples with >65% recovery were included in the quality model.

PRC carried out extensive attrition testing on the LDC samples, a seam composite was created from component samples before any attrition testing was undertaken. HQ cores were crushed after being composited. An HQ type sample was split from the LDC samples in order to provide a means of comparing and calibrating the results from the two types of samples. In 2013 a change was made in core size, borehole core size was increased to PQ to provide better core recovery.

Separate flow sheets were used for HQ and PQ size core and 150 mm large diameter core (LDC), as given in Attachment 7.

4.4 Size Analysis

Denison created composite from the individual crushed components and screen the composites at 28 mesh and the -28 mesh was split and one split was screen at -100 mesh.

With PRC the following size fractions were screened until 2012:

- HQ: 12.5 x 0.25 mm; 0.25 x 0 mm; and
- LDC: 31.5 x 9.5 mm; 9.5 x 1.0 mm; 1.0 x 0.15 mm; 0.15 x 0 mm.

After a review of the size fractions currently used by the Trend Mine CHHP the following size fractions were used for screening starting in 2013.

- PQ: 12.7 x 0.15 mm; 0.15 x 0 mm; and
- LDC: 31.5 x12.7mm; 12.7 mm x 1.42 mm; 1.42 x 0.15 mm; 0.15 x 0 mm.

4.5 Raw Coal & Non-Coal Analysis

Refer to attached flow sheets for a detail explanation of the pre-treatment and size analysis carried out on PRC samples (Attachment 7). In the Roman Northwest area borehole core is sampled by components, which are analysed for ARD, then the components are combined to form seam composites. No compositing was undertaken within the MineSight model.

The Raw coal composites are analysed for Proximate Analysis, Sulphur, FSI and Relative Density, as given in Table 4.5.1 which shows average Raw data by seam for the Roman Northwest Project, based on the number of samples as given in Table 4.5.2.

Table 4.5.1: Raw Coal Seam Average Quality

SEAM	D2	E1	E2	F	G	J	K1	K2	BIRD	GT1	GT2
True Thickness	2.56	1.78	1.14	2.21	3.77	4.58	0.92	0.98	2.67	3.61	0.97
Bottle Density	1.49	1.42	1.55	1.39	1.43	1.4	1.35	1.46	1.48	1.91	1.37
In-situ Density	1.48	1.41	1.53	1.38	1.42	1.39	1.34	1.45	1.47	1.88	1.36
In-situ Moisture	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Moisture	0.97	0.9	0.7	0.75	0.72	0.68	0.61	0.67	0.73	0.66	0.6
Ash	22.6	21.12	30.07	15.26	17.97	13.16	8	20.28	24.63	59.9	12.27
Volatile Matter	22.95	22.99	21.26	23.87	22.68	22.53	21.81	20.37	17.58	11.04	17.99
Fixed Carbon	53.49	54.99	47.97	60.12	58.64	63.64	69.57	58.67	57.06	28.4	69.13
FSI	4	6	5	8	6	6	6	6	3	1	2
Sulphur	0.46	0.42	0.39	0.39	0.41	0.26	0.5	0.81	2.31	0.59	0.41
Lab Comp yield	77.77	72.19	46.52	88.44	79.42	84.92	94.33	73.88	75.75	79.91	88.94
Simulated Yield (incl plant efficiency)	69.84	67.84	38.96	83.43	73.97	83.34	91.54	70.53	72.15	75.82	86.86

Table 4.5.2: Raw Coal Sample Count

SEAM	D2	E1	E2	F	G	J	K1	K2	BIRD	GT1	GT2
True Thickness	2.56	1.78	1.14	2.21	3.77	4.58	0.92	0.98	2.67	3.61	0.97
Bottle Density	8	7	9	8	12	14	4	6	1	1	-
In-situ Density	8	7	9	8	12	14	4	6	1	1	-
In-situ Moisture	8	7	9	8	12	14	4	6	1	1	-
Moisture	8	7	9	8	12	14	4	6	1	1	-
Ash	8	7	9	8	12	14	4	6	1	1	-
Volatile Matter	8	7	9	8	12	14	4	6	1	1	-
Fixed Carbon	8	7	9	8	12	14	4	6	1	1	-
FSI	8	7	9	8	12	14	4	6	1	1	-
Sulphur	8	7	9	8	12	14	4	6	1	1	-

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4.7 Verification

All boreholes drilled are geophysically logged. Seam depths are adjusted to the geophysics routinely with these adjusted depths entered into the acQuire database for modelling. Coal quality sampling occurs after the hole has been geophysically logged thus enabling an assessment of core loss to be made. This has also ensured a consistency of sampling of plies.

All results that were received from the lab were checked for accuracy and the results were compared to samples from similar coal seams in the area. Any results that were questionable were queried and returned to the lab for retesting.

Each of the Birtley and ALS laboratories used for coal testing by PRC adheres to ASTM analytical standards for coal. In addition the two laboratories regularly participate in round robin exercises that allow comparison of inter-laboratory sample analyses thus assuming accuracy of analyses results between laboratories.

5 GEOLOGY

5.1 Geology General

The Roman Northwest Project is located in the south-central region of the Peace River Coalfield and lies within the Quintette Trend Fold Zone. It is composed of Mesozoic strata that form part of the Rocky Mountain Foothills of north-eastern British Columbia. The strata have been significantly affected by thrust faulting and folding that occurred during the Cordilleran orogeny. Refer to Attachment 8 for an overview of the detailed geology and Attachment 9 for general stratigraphic columns and Appendix 3 for representative cross sections.

Within the Roman Northwest property, three stratigraphic units are particularly valuable for regional correlation. These are the prominent Cadomin Formation conglomerate and the recessive Moosebar Formation and Hulcross Formation shales. The two main coal-bearing units, the Gates Formation and the Gething Formation, are easily distinguished based on their stratigraphic relationship to the Cadomin and Moosebar Formations.

5.2 Coal Seam Geology

5.2.1 Gates Formation

The Gates Formation is the most significant hard coking coal coal-bearing sequence for surface mining in northeast British Columbia. Coal seams of economic thickness are continuous from the Bullmoose Mountain area to the Alberta provincial border, a distance of almost 140 km.

Coal seams and major lithological units correspond closely to those found at the nearby Trend Mine. Eleven coal seams have been identified in the Roman Northwest Project area. These are named A, at the top of the sequence then B, C, D, E, F, G, I, J and K. Within these coal seams, individual coal splits are distinguished by a number (e.g., Seams E1, E2 and E3). Of the eleven seams, only the D2, E1, E2, F, G, J, K1 and K2 Seams are considered to have economic potential for development.

Seam thickness data, for Gates and Gething Formations seams, obtained from the geological model, are shown in Table 5.2.1. These values are based on borehole intersections, with true thickness interpolated from seam structure in the geological model.

The D Seam package, the uppermost economic package within the project area, consists of the upper D1 and the lower D2 Seams. It is also common to have one or two coaly zones between D1 and D2. Only the D2 Seam is of economic importance.

The D Seam package is only present in the Roman Northwest north limb area and occurs immediately below the Babcock Member Conglomerate. D2 has an average thickness of 2.9 metres and displays gradational contacts with carbonaceous claystone at the top and bottom of the seam. The top is a sharp contact with immediate minor parting while the bottom contact is more gradational. The D2 Seam has little variation of thickness and quality throughout the Roman Northwest Project area. The average raw ash content (adb), raw FSI and raw sulphur content values for the seam are 22.6%, 4 and 0.46%, respectively.

The E Seam Zone occurs approximately 20 m to 25 m below the D Seam. It is composed of as many as three seams but only the E1 Seam is of economic importance over the whole property. E2 has been identified in some areas of the property as having a thickness that will make it economic to mine.

The E1 Seam is persistent throughout the Roman Northwest Project area with the main variations occurring in the number and thickness of partings. These partings rarely exceed 0.3 m in thickness and are normally regarded as intra-seam partings or rock bands. Typically E1 Seam raw ash content (adb), raw FSI and raw sulphur values are 21.1%, 6 and 0.42% respectively. In general the lower part of the seam has higher ash content.

The F Seam occurs 15 m to 20 m below the E Seam and is persistent throughout the project area. The roof of the F Seam is claystone that gives a high gamma log response. This contrasts with the low gamma response of the seam and consequently facilitates identification and correlation. The lower part of the F Seam sometimes displays a high ash zone and gradational lower contact to the seam floor. Raw Ash content (adb), raw FSI and raw sulphur content values for the seam are 30.1%, 8 and 0.39% respectively.

The G Seam is located 40 m and 50 m below the F Seam. The G Seam is developed over the entire Roman Northwest Project area. The G Seam tends to thicken to the northwest Variation is common in the G Seam with average thicknesses ranging between 2.6 on the Roman Northwest South Limb, 4.8 metres on the north limb and 5.8 metres for the south syncline area. The top contact is generally sharp. The upper third or half of the seam contains thin claystone laminae while the bottom metre grades into a carbonaceous siltstone that forms the floor of the seam.

The seam average raw ash content (adb), raw FSI and raw sulphur content values are 18.0%, 6 and 0.41%, respectively.

The G Seam frequently displays anomalous thicknesses due to fault repetition and fold axis structural thickening. The seam is generally thicker in the fold hinge and on the south-western limb of the syncline.

The J Seam is separated from the G Seam by a carbonaceous claystone zone 2.5 to 3.0 m thick. This zone may contain one or more coaly stringers that are referred to as the I Seam. The J Seam has an average thickness ranging from 2.6 metres to 7.9 metres depending on the area. The upper half of the seam may contain thin shaley partings, but the lower half has very low ash consistently with a low gamma signature and sharp contact. The upper half of the seam may contain thin shaley partings, but the lower half is always clean with a low gamma signature and sharp basal contact.

The J Seam normally forms the base of the Gates Formation economic coal zone and has a raw ash content (adb), raw FSI and raw sulphur content of 13.1%, 6 and 0.26% respectively.

The K Seam Zone comprises up to three seams: K1, K2 and K3 in descending stratigraphic order. Each seam is separated by 1.0 to 4.0 metres of siltstone. The K1 and K2 Seams range in thickness from 0.7m – 1.0m and 0.8m – 1.0m respectively. K1 is considered economic over the property, K2 has been identified to be economic in areas where the seam thickness is greater than the minimum mining thickness of 0.8m. K3 is not economically significant. Raw ash content (adb), raw FSI and raw sulphur for the K1 and K2 Seams are 21.8%, 6 and 0.5% for the K1 Seam and 20.4%, 6 and 0.81% for the K2 Seam.

The sequence below the K Seam Zone is a 20 m thick siltstone unit overlying a persistent, approximately 1.0 m thick, clay unit. This clay bed is composed of unconsolidated ash fall tuff and has significant implications with respect to geotechnical design due to its mineralogical properties.

Table 5.2.1: Drilled Thicknesses of Seams of Economic Interest

SEAM	MIN	MAX	MEAN
D2	0.07	6.07	2.55
E1	0.23	10.93	1.90
E2	0.05	6.98	0.90
F	0.03	8.35	2.23
G	0.33	15.90	3.61
J	0.10	31.63	4.50
K1	0.06	3.71	0.88
K2	0.07	3.02	0.86
Bird	0.05	5.25	2.31
GT1	0.05	6.43	2.93
GT2	0.05	2.46	0.86

5.2.2 Gething Formation

The hanging wall of the Bird Seam is defined by a glauconitic sandstone unit. There has been much debate on whether this glauconitic unit is the base of the Moosebar Formation or the top of the Gething Formation. The Bird Seam varies in thickness from 4.0 to 5.0 metres. It is a relatively clean seam with only minor clastic partings on the north limb of the syncline. Larger clastic partings become more apparent on the northwest portion of the south limb and can complicate correlation of the Gething Seams.

The parting between the Bird Seam and the GT Coal Zone comprises a 1.0 to 3.0 metre thick claystone.

The GT Coal Zone is comprised of the GT1, GT2 and GT3 Seams. The zone varies in thickness between 10 and 15 metres with individual seam thicknesses ranging between 1.0 and 2.0 metres. Coal accounts for approximately 65% of the coal zone. Seams GT1 and GT2 are the most laterally consistent seams within Roman Northwest with GT3 generally occurring as a carbonaceous zone. Only the GT1 and GT2 Seams are of economic interest.

5.3 Structural Setting

The Roman Northwest regional structure is characterised by thrust faulting and associated folding along a northwest – southeast axis, which forms part of the larger Rocky Mountain and Cordilleran deformation. The primary compressional stress direction was from the southwest. The region is dominated by sequences of syncline / anticline pairs with southwest dipping axial planes, often truncated by high angle thrust faults. This has led to the repetition of coal-bearing sections. The structure within the syncline / anticline pairs can vary from simple with gentle dips, to complex with steeply dipping strata. The fold axes display gentle plunges to the northwest.

Roman Northwest is a continuation of the Roman Mountain deposit and is located on the western side of Babcock Creek. The Murray Syncline is the predominant feature at Roman Mountain and is a moderate to tight fold structure typical of the area. In Roman Northwest the Murray Syncline becomes part of a double syncline and pinches out to the Northeast. The second syncline is the main structure in Roman Northwest and runs parallel to the Murray Syncline and continues to the northwest. The southern extent of this syncline is thought to go southeast under Babcock Creek and continue on the Roman Mountain side of the creek. Drilling in 2014 on Roman Mountain near the creek intersect coal by due to deep overburden no geophysical logs were obtained. Additional work will be required to verify the extent of the second syncline. Previous interpretations completed on Roman Northwest suggested a fault that paralleled Babcock Creek to explained the offset of the Murray syncline. Drilling from 2012 – 2014 have shown that this fault does not exist. This syncline has not yet been named but lines up with what has been identified in historical assessment reports as the Murray Syncline.

The major fault modelled across the Roman Northwest deposit is a northwest trending thrust fault primarily resulting in a repeated G, J and K sequence along the western limb of the Gates Formation. This thrust fault is a continuation of the fault in Roman Mountain Phase 1 that cuts across the deposit removing the eastern limb of the syncline.

Borehole data indicates that there are numerous unmodeled splays coming off from the major fault in the south near Babcock Creek underneath the anticline. This area falls outside the current resource shell due to its proximity to Babcock Creek, however if a creek diversion is ever considered there is potential for a slight increase in coal resources. However, seam identification and continuation significantly hinders the interpretation process with the current dataset.

The development of the structure can be seen in the sections found in Appendix 3.

5.4 Further Work

Additional drilling and trenching will continue to be carried out on the property. The drilling will include LDC and PQ coring to obtain additional samples to better define the quality of the area. Structural drilling using percussion air rotary drilling will continue to define the structural location of the faults defined in the resource area and better define the location of the Gething seams on the flanks of the second syncline. This work has been put on hold until the world price of metallurgical coal rebounds, the PRC exploration team has been put on hiatus until that time.

7 OTHERS

7.1 Interpretation & Conclusions

The resource model used to produce the 2014 resources is an update from the previous version released late 2013. It contains an additional 20 drillholes and 1 trench from the 2014 exploration program. The coal quality and simulations are update to date with no outstanding data.

The model also now contains simulated product data and geochemistry where available for the individual seams.

The structural interpretation although largely unchanged, has areas where footwall reinterpretation has occurred; namely in the northwest of the deposit where it is still open and no drillholes were previously present.

The current interpretation suggests that the main Roman Northwest syncline extends southeast under Babcock Creek and into the Roman Mountain deposit between the Gething limb and the modelled Gates seams. There are at present no drillholes in the area that indicate that the seams are in fact present, however drillholes from the 2013 Roman campaign drilled near the area do show in the geophysical logs repeated stratigraphical sections.

Within the Roman Northwest deposit, the 'G' seam along various limbs thins down to <0.5m and in places is missing all together. It is currently unknown whether this is a depositional or structural feature.

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7.2 Recommendations

It is recommended that:

- To undertake a LOX program to better understand the Base of Weathering
- confirm the structural interpretation with extra exploration drilling
  - to confirm the syncline extension into the Roman deposit
  - to further drilling to locate and follow the base of the syncline toward the north of the deposit
  - to understanding the Gething formation location along the Western limb
- Complete spatial studies of the coal quality information currently available and fit for purpose
- Extend model further northwest so that it extends beyond the end wall (will subsequently enlarge 20:1)

7.3 References

1. Canadian Institute of Mining, Metallurgy, and Petroleum (CIM). 2005. CIM Definition of Standards - For Mineral Resources and Mineral Reserves, 10 p.
2. Canadian Securities Administrators. 2005. National Instrument 43-101 - Standards of Disclosure for Mineral Projects, Form 43-101 and Companion Policy 43-101CP. Ontario Securities Commission Bulletin, Volume 28, Issue 51, p 10355-10367 (Rules and Policies) p 10368-10374 (Form 43-101F1 Technical Report, Table of Contents) and p 10375-10383 (Companion Policy 43-101CP to National Instrument 43-101 Standards of Disclosure for Mineral Projects).
3. Hughes, J.D., Klatzel-Maudry, L. and Nikols, D.J. 1989. A Standardized Coal Resource/Reserve Reporting System for Canada. Geological Survey of Canada Paper 88-21, 17 p.
4. Denison Mines Limited. 1976. Quintette Coal: Limited 1975 Exploration and Development Report, January 1976.
5. Denison Mines Limited. 1976. Quintette Coal Limited: Information Summary, August 1976.
6. Denison Mines Limited. 1976. Quintette Coal Limited: 1976 Geological Assessment Report, December 1976.
7. Schalekemp, B., 2010: Roman Northwest Technical Report, Peace River Coal Inc., Internal Report.

7.4 Competent Person, Date & Signature Page

Details of the Competent Person, together with a signatory page, are given at the back of this report Attachment 10.

7.5 Illustrations & Diagrams

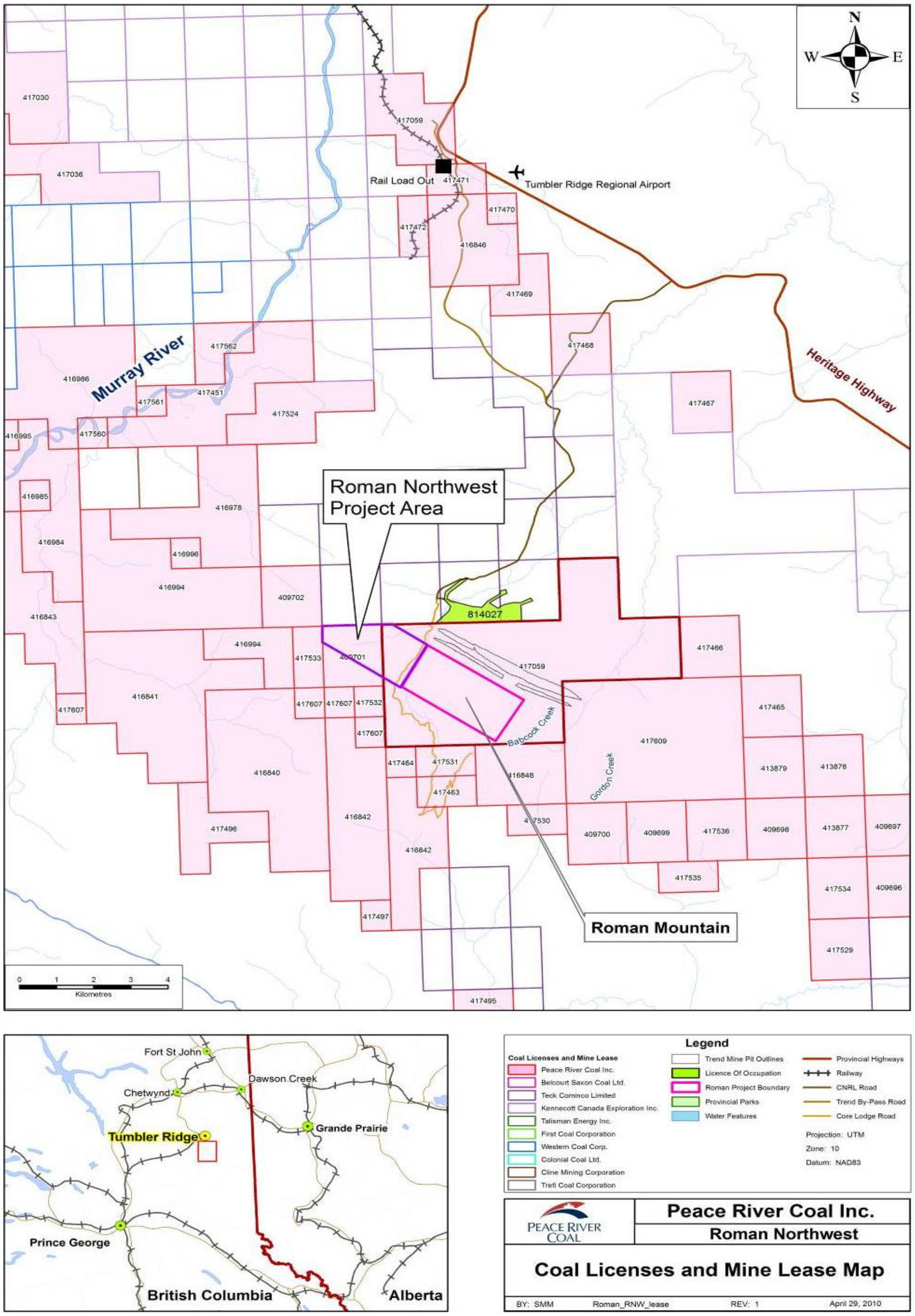
See Attachments below and text for references.

Attachment 1

Location Map

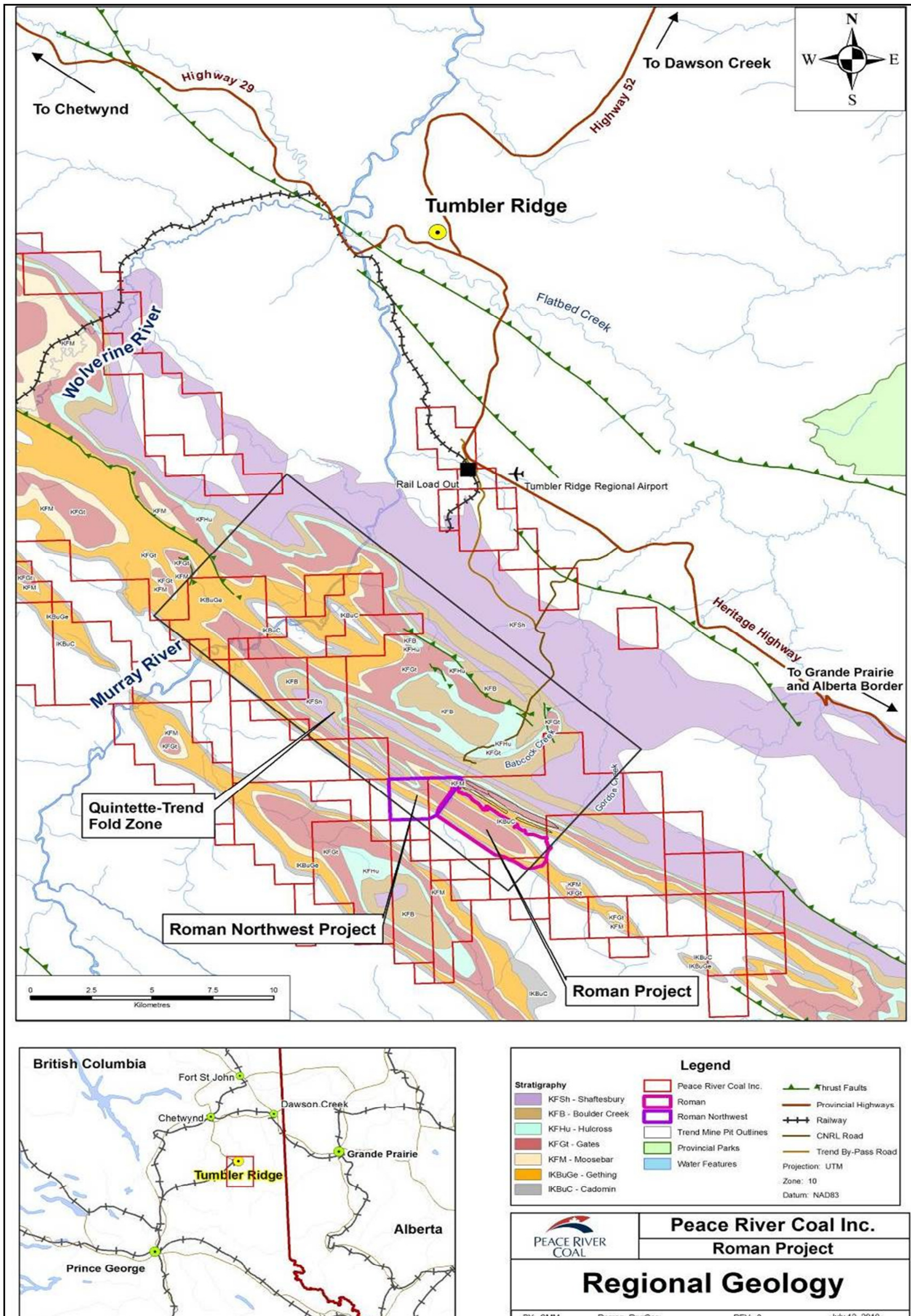
Attachment 2

General Property Map



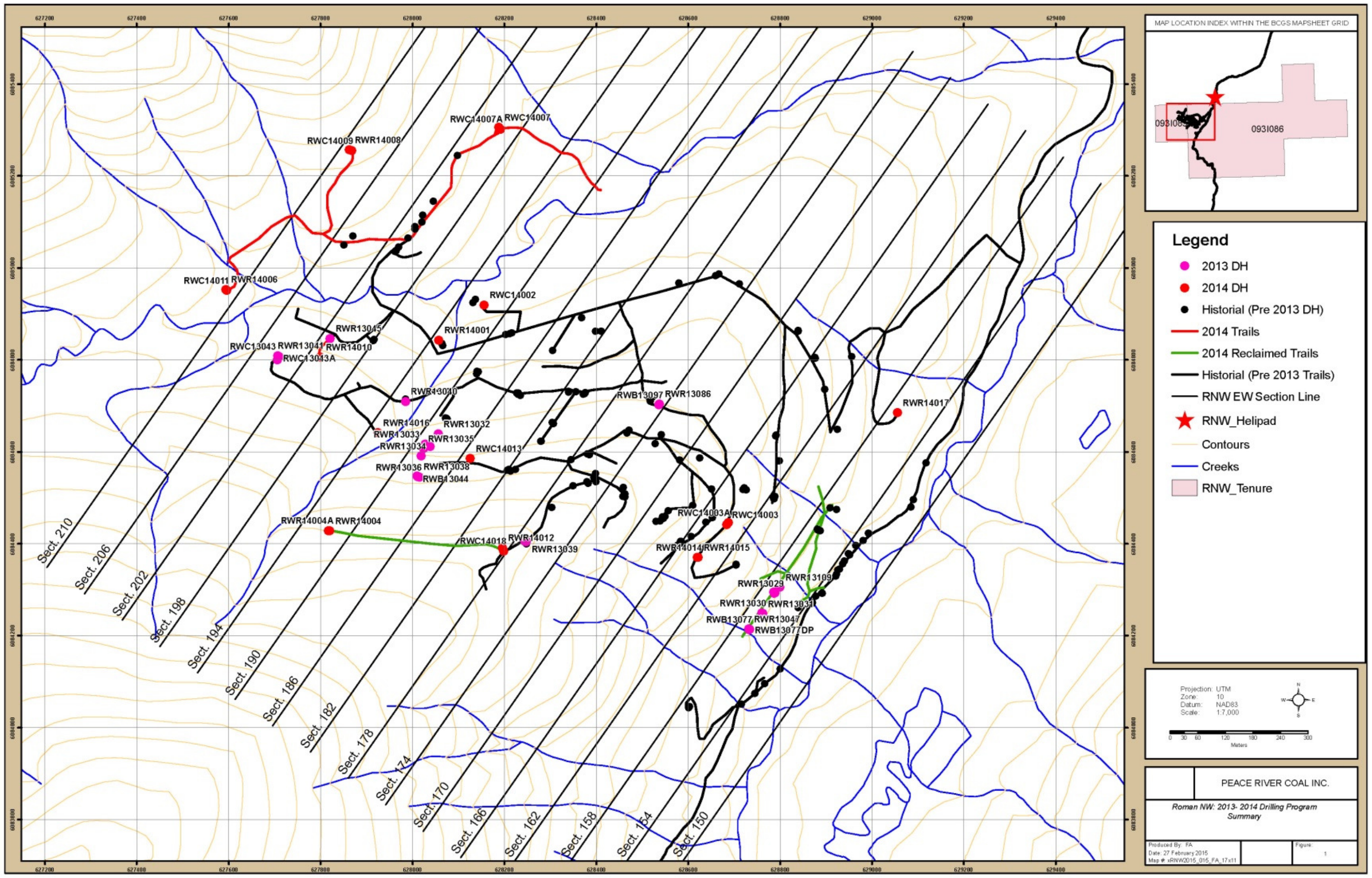
Attachment 3

Regional Geology Plan



Attachment 4

Borehole Plan with Sections



Attachment 5

Borehole Collar Information 2013 – 2014

HOLE ID	EASTING	NORTHING	COLLAR	DEPTH	YEAR	AZIMUTH	DIP
RWB13037	628055.6	6084638.4	1534.8	71.78	2013	0	-90
RWB13042	628038.1	6084611.7	1539.5	47.7	2013	0	-90
RWB13044	628010.4	6084547.7	1558.4	102.7	2013	0	-90
RWB13046	628244.5	6084406.0	1606.0	120.7	2013	0	-90
RWB13051	628785.8	6084296.0	1441.1	87.0	2013	0	-90
RWB13063	628759.8	6084250.3	1441.7	38.8	2013	0	-90
RWB13077	628733.0	6084214.3	1446.4	126.8	2013	0	-90
RWB13097	628535.8	6084702.5	1516.5	131.6	2013	0	-90
RWC13043	627709.9	6084807.7	1536.8	76.6	2013	215	-60
RWC13043A	627705.9	6084800.5	1536.9	122.5	2013	215	-60
RWR13028	628788.4	6084294.0	1441.1	102.4	2013	0	-90
RWR13029	628786.6	6084292.8	1441.1	194.7	2013	215	-60
RWR13030	628761.7	6084249.4	1442.0	152.3	2013	215	-60
RWR13031	628761.2	6084248.0	1441.8	47.2	2013	0	-90
RWR13032	628055.7	6084639.4	1534.9	81.6	2013	0	-90
RWR13033	628028.1	6084617.2	1540.1	61.5	2013	0	-90
RWR13034	628019.3	6084591.4	1544.3	108.7	2013	0	-90
RWR13035	628023.8	6084607.7	1540.5	140.6	2013	0	-90
RWR13036	628014.9	6084545.0	1558.3	75.1	2013	250	-70
RWR13038	628011.8	6084546.6	1558.4	107.0	2013	0	-90
RWR13039	628247.3	6084404.8	1605.9	152.8	2013	0	-90
RWR13040	627984.8	6084710.2	1523.6	204.6	2013	215	-60
RWR13041	627707.0	6084809.8	1537.0	138.0	2013	215	-60
RWR13045	627820.7	6084847.0	1517.6	159.8	2013	215	-60
RWR13047	628731.2	6084215.3	1446.1	118.9	2013	0	-90
RWR13086	628537.2	6084705.0	1516.6	154.1	2013	0	-90
RWR13109	628799.4	6084305.6	1441.2	210.2	2013	35	-60
RWC14002	628155.7	6084919.7	1487.3	166.0	2014	35	-70
RWC14003	628683.7	6084442.0	1520.7	145.7	2014	35	-70
RWC14003A	628687.1	6084446.5	1520.7	170.7	2014	35	-70
RWC14007	628187.8	6085306.1	1494.5	134.0	2014	45	-40
RWC14007A	628190.8	6085302.2	1494.3	132.1	2014	40	-60
RWC14009	627868.0	6085255.4	1554.2	153.2	2014	35	-70
RWC14011	627595.5	6084951.6	1523.4	222.3	2014	230	-70
RWC14013	628125.7	6084586.0	1549.1	225.6	2014	225	-70
RWC14018	628198.4	6084384.9	1612.1	160.6	2014	215	-60
RWR14001	628057.3	6084843.3	1499.4	332.2	2014	215	-75
RWR14004	627820.0	6084428.7	1605.5	83.8	2014	215	-60
RWR14004A	627817.0	6084429.4	1605.5	274.2	2014	225	-60
RWR14006	627593.7	6084953.6	1523.5	191.5	2014	225	-50
RWR14008	627862.7	6085257.2	1554.2	163.6	2014	45	-55
RWR14010	627799.1	6084806.7	1524.7	187.7	2014	225	-60
RWR14012	628195.9	6084391.9	1612.0	246.8	2014	225	-60
RWR14014	628619.4	6084371.0	1514.7	216.8	2014	35	-55
RWR14015	628621.9	6084371.4	1514.5	211.8	2014	215	-60
RWR14016	627924.6	6084641.6	1543.8	110.6	2014	215	-60
RWR14017	629055.2	6084685.7	1428.3	90.1	2014	35	-55

Attachment 6

Trench Location 2013 – 2014

Trench	EASTING	NORTHING	ELEVATION	LENGTH	YEAR
RNT13001	628775.7	6084286.9	1442.0	1.6	2013
RNT13002	628768.2	6084266.3	1441.6	6.2	2013
RNT13003	628755.1	6084250.9	1441.6	8.1	2013
RNT13005	628729.0	6084223.5	1447.0	1.8	2013
RNT13005B	628728.1	6084221.7	1446.3	6.9	2013
RNT13005C	628723.9	6084214.9	1446.1	6.7	2013
RNT13006	628127.6	6084567.5	1552.5	17.5	2013
RNT13007	628052.1	6084555.7	1551.8	3.7	2013
RNT13008	627988.3	6084540.2	1558.7	12.7	2013
RNT13009	628006.5	6084543.8	1557.9	14.3	2013
RNT13010	628074.6	6084570.1	1550.3	9.5	2013
RNT13011	628312.7	6084490.6	1587.2	1.9	2013
RNT13012	628282.5	6084452.1	1597.0	8.4	2013
RNT13013	628274.2	6084439.2	1599.9	3.5	2013
RNT13014	628258.9	6084421.9	1603.7	2.0	2013
RNT13015	628255.1	6084416.4	1604.4	0.7	2013
RNT13016	628340.6	6084726.3	1516.5	5.1	2013
RWT14005	627981.3	6085061.7	1501.5	4.5	2014

Attachment 7

Borehole Collar Information Historical

HOLE ID	EASTING	NORTHING	COLLAR	DEPTH	YEAR	AZIMUTH	DIP
QBR7570	628925.1	6084343.6	1411.3	95.6	1975	0	-90
RTR20061	628964.2	6084396.5	1409.0	91.5	2006	35	-70
RTR200626	628948.7	6084378.8	1410.3	90.8	2006	215	-60
RTR200627	628991.8	6084423.0	1408.5	55.2	2006	35	-60
TRR07054	629117.5	6084576.3	1401.4	126.7	2007	35	-60
TRR07058	629089.7	6084496.9	1404.4	201.3	2007	35	-60
TRR07060	628928.7	6084344.7	1412.8	140.5	2007	215	-60
TRB08001	628980.5	6084407.8	1408.8	88.0	2008	0	-90
TRC08015	628954.0	6084378.4	1410.1	170.7	2008	215	-60
TRR08001	628939.6	6084362.7	1411.8	170.4	2008	0	-90
TRR08002	628935.7	6084356.7	1411.8	169.0	2008	215	-60
TRR08003	628877.2	6084286.7	1413.5	138.7	2008	215	-60
TRR08004	628799.9	6084128.5	1416.3	284.0	2008	215	-60
TRR08019	628715.6	6084051.8	1421.7	98.0	2008	230	-50
TRR08020	628951.2	6084376.4	1410.4	175.0	2008	0	-90
TRR08021	628744.7	6084074.8	1419.8	235.8	2008	230	-65
TRR08061	628211.3	6084857.6	1492.1	176.0	2008	50	-75
TRR08062	628471.2	6084647.5	1538.8	250.5	2008	0	-90
TRR08063	628216.1	6084858.8	1491.8	166.8	2008	35	-50
TRR08064	628466.7	6084641.4	1539.2	192.8	2008	230	-60
TRR08065	628202.5	6084855.7	1492.5	65.4	2008	230	-60
TRR08066	628472.8	6084649.7	1537.7	247.8	2008	45	-60
TRR08067	628373.9	6084726.8	1520.4	224.8	2008	0	-90
TRR08068	628375.9	6084729.9	1519.7	274.1	2008	35	-60
TRR08069	628371.2	6084725.2	1519.4	244.1	2008	230	-60
TRB09146	628410.0	6084863.0	1496.0	49.1	2009	0	-90
TRB09148	628790.0	6084635.0	1490.0	68.2	2009	0	-90
TRC09085	628457.7	6084503.1	1570.3	382.0	2009	0	-90
TRR09070	628891.2	6084292.8	1412.8	168.5	2009	45	-50
TRR09071	628657.6	6084469.0	1531.0	248.5	2009	45	-50
TRR09072	628653.3	6084463.7	1531.5	296.1	2009	45	-50
TRR09073	628586.2	6084402.0	1524.1	308.0	2009	45	-70
TRR09074	628584.8	6084405.4	1524.8	310.5	2009	230	-60
TRR09075	628248.0	6084400.8	1604.8	284.8	2009	80	-65
TRR09076	628583.5	6084405.9	1524.8	345.5	2009	0	-90
TRR09077	628398.7	6084535.9	1567.2	343.2	2009	0	-90
TRR09078	628394.4	6084544.7	1565.6	334.2	2009	220	-65
TRR09081	628248.0	6084403.4	1604.9	369.2	2009	215	-60
TRR09082	628886.8	6084428.8	1437.3	199.9	2009	0	-90
TRR09083	628881.9	6084430.4	1437.5	227.0	2009	45	-60
TRR09084	628880.6	6084432.1	1437.4	166.0	2009	220	-60
TRR09086	628223.5	6084561.9	1559.1	223.0	2009	45	-60
TRR09087	628785.8	6084499.2	1493.0	307.2	2009	45	-60
TRR09088	628786.7	6084498.7	1493.1	155.0	2009	0	-90
TRR09089	628786.4	6084497.9	1493.1	199.0	2009	215	-60
TRR09090	628581.6	6084581.6	1538.5	297.0	2009	45	-70

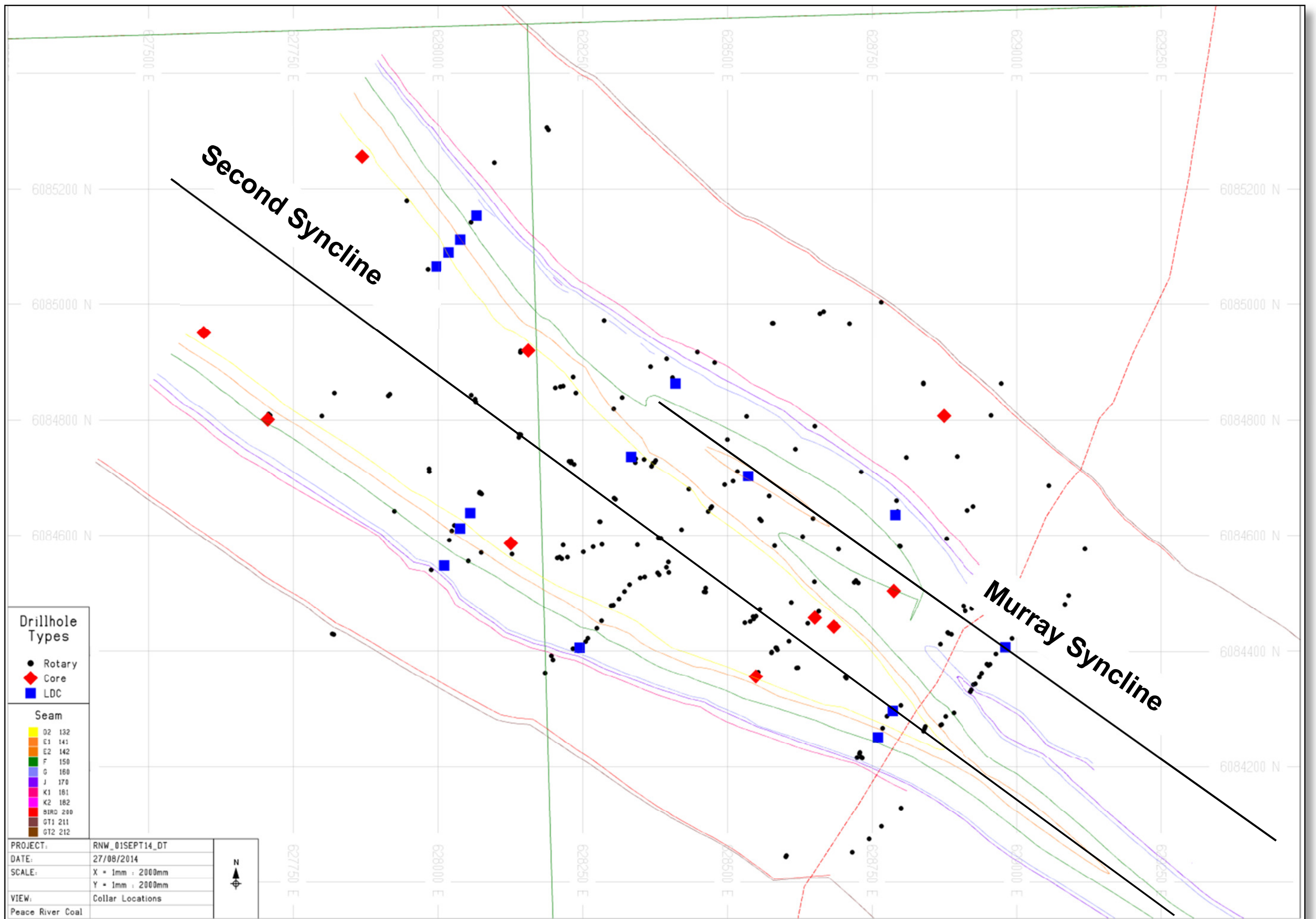
HOLE ID	EASTING	NORTHING	COLLAR	DEPTH	YEAR	AZIMUTH	DIP
TRR09091	628659.7	6084983.6	1491.4	95.8	2009	35	-45
TRR09109	628726.0	6084518.0	1517.0	265.0	2009	0	-90
TRR09110	628718.9	6084518.9	1518.8	331.5	2009	225	-60
TRR09111	628722.0	6084522.0	1515.0	231.1	2009	40	-60
TRR09113	628303.6	6084818.9	1502.0	150.5	2009	40	-60
TRR09145	628405.0	6084873.3	1493.5	166.8	2009	0	-90
TRR09147	628791.0	6084637.0	1490.0	90.4	2009	0	-90
TRR09161	628302.7	6084479.7	1588.6	351.9	2009	220	-70
TRR09162	628235.0	6084723.1	1512.4	265.5	2009	0	-90
TRR09163	628226.4	6084728.7	1512.3	236.6	2009	215	-55
TRR09164	628209.8	6084561.9	1559.1	263.3	2009	0	-90
TRR09165	628213.6	6084559.2	1559.3	260.9	2009	215	-70
TRB10378	628333.6	6084736.0	1516.3	29.6	2010	0	-90
TRB10380	627996.3	6085066.8	1501.7	32.3	2010	0	-90
TRB10381	628017.9	6085090.2	1502.9	39.6	2010	0	-90
TRB10382	628066.4	6085153.4	1505.3	46.0	2010	0	-90
TRB10383	628038.3	6085112.2	1503.5	35.5	2010	0	-90
TRC10384	628233.4	6084874.4	1489.3	310.3	2010	0	-90
TRR10301	628097.3	6085245.1	1509.7	226.3	2010	25	-60
TRR10302	628629.9	6084597.9	1524.6	178.5	2010	45	-60
TRR10303	628558.4	6084625.4	1533.5	228.3	2010	60	-60
TRR10304	628555.9	6084628.2	1533.5	229.8	2010	0	-90
TRR10308	628459.6	6084502.6	1570.3	285.5	2010	35	-60
TRR10312	628142.6	6084919.0	1487.4	174.5	2010	45	-55
TRR10313	628142.3	6084916.3	1487.3	219.5	2010	0	-90
TRR10316	627966.2	6085038.5	1498.0	212.1	2010	35	-60
TRR10317	627965.3	6085038.8	1498.1	202.4	2010	0	-90
TRR10373	627858.5	6085052.0	1512.6	291.1	2010	0	-90
TRR10374	627868.8	6085067.5	1517.6	242.0	2010	35	-60
TRR10378	628341.3	6084733.1	1516.3	67.5	2010	0	-90
TRR10380	627995.5	6085064.3	1501.8	73.6	2010	0	-90
TRR10381	628021.2	6085094.0	1503.0	64.2	2010	0	-90
TRR10382	628064.1	6085157.1	1505.5	119.5	2010	0	-90
TRR10383	628035.9	6085113.8	1503.5	40.7	2010	0	-90
TRC11627	628876.3	6084804.3	1467.6	130.7	2011	30	-75
TRC11630	628579.2	6084967.0	1488.9	163.8	2011	35	-60
TRR11305	628530.0	6084449.0	1547.0	330.5	2011	45	-55
TRR11669	627916.7	6084844.8	1509.9	252.4	2011	45	-60
TRR11670	627914.1	6084842.0	1507.8	280.0	2011	45	-80
TRR11675	628065.2	6084831.8	1498.7	322.0	2011	25	-65
TRR11676	627984.6	6084715.3	1523.8	322.0	2011	0	-90
TRR11679	628142.9	6084774.5	1504.7	288.0	2011	25	-55
TRR11680	628140.1	6084775.1	1504.7	285.5	2011	25	-60
TRR11681	628139.5	6084769.7	1504.7	279.0	2011	45	-75
TRR11682	628073.8	6084673.3	1526.5	370.6	2011	25	-75
TRR11683	628075.3	6084671.4	1526.8	205.2	2011	0	-90

HOLE ID	EASTING	NORTHING	COLLAR	DEPTH	YEAR	AZIMUTH	DIP
TRR11684	628073.0	6084672.4	1526.6	273.7	2011	215	-75
TRR11685	628071.6	6084673.3	1526.7	230.0	2011	205	-60
TRR11689	628367.3	6084891.8	1494.2	70.3	2011	25	-80
TRR11694	628230.1	6084728.7	1512.5	177.5	2011	35	-60
TRR11695	628229.4	6084726.0	1512.5	163.4	2011	50	-75
TRR11696	628230.1	6084728.6	1512.5	333.6	2011	215	-70
TRR11700	628306.6	6084662.2	1531.1	295.0	2011	0	-90
TRR11701	628279.0	6084623.7	1538.9	307.3	2011	215	-50
TRR11702	628206.0	6084560.7	1559.6	285.2	2011	220	-70
TRR11703	628666.3	6084987.3	1488.0	188.8	2011	25	-70
TRR11705	628380.7	6084595.8	1551.7	181.8	2011	40	-70
TRR11706	628384.9	6084594.8	1551.8	370.0	2011	0	-90
TRR11707	628398.1	6084553.8	1565.0	400.0	2011	225	-80
TRR11708	628379.3	6084535.1	1569.9	260.7	2011	215	-80
TRR11709	628381.9	6084531.7	1569.7	292.0	2011	205	-60
TRR11710	628349.1	6084526.3	1575.0	142.7	2011	225	-60
TRR11714	628556.1	6084472.7	1544.4	229.5	2011	35	-70
TRR11715	628462.2	6084509.0	1570.3	291.5	2011	35	-75
TRR11716	628460.9	6084503.2	1570.4	325.5	2011	0	-90
TRR11717	628462.3	6084502.4	1570.4	211.5	2011	35	-60
TRR11719	628650.4	6084520.0	1531.7	214.7	2011	45	-65
TRR11720	628897.0	6084736.7	1461.9	161.5	2011	35	-60
TRR11721	628610.2	6084484.4	1545.3	279.5	2011	35	-60
TRR11722	628798.5	6084580.6	1492.2	146.4	2011	35	-60
TRR11723	628797.2	6084581.0	1492.2	164.6	2011	35	-65
TRR11724	628545.3	6084455.2	1544.2	300.6	2011	0	-90
TRR11725	628539.1	6084450.8	1544.4	338.5	2011	45	-75
TRR11726	628549.2	6084459.9	1543.8	350.2	2011	200	-75
TRR11727	628544.3	6084459.4	1544.0	237.1	2011	215	-55
TRR11729	628838.7	6084864.0	1472.3	106.8	2011	25	-50
TRR11733	628786.5	6084503.2	1493.1	192.0	2011	25	-75
TRR11762	628710.8	6084966.3	1486.0	86.9	2011	50	-50
TRR11766	628955.5	6084807.6	1443.5	69.6	2011	50	-50
TRR11767	628838.6	6084862.4	1472.4	137.0	2011	0	-90
TRR11779	628924.1	6084649.7	1450.7	191.5	2011	35	-50
TRR11783	628638.7	6084447.8	1532.0	273.5	2011	35	-60
TRR11784	628606.2	6084417.0	1525.9	307.7	2011	40	-75
TRR11785	628576.1	6084396.9	1524.9	352.6	2011	205	-55
TRR11787	628517.0	6084710.6	1514.4	219.6	2011	50	-60
TRR11790	628304.3	6084664.2	1530.9	328.2	2011	45	-65
TRR11792	628305.1	6084663.3	1530.8	293.2	2011	20	-75
TRR11794	628356.0	6084731.6	1517.4	242.5	2011	30	-60
TRR11809	628280.0	6084623.5	1539.0	232.8	2011	215	-70
TRR11810	628064.0	6084836.4	1500.3	307.9	2011	25	-85
TRR11815	628344.6	6084583.4	1555.8	334.0	2011	0	-90
TRR11912	628071.8	6084674.5	1526.7	260.0	2011	0	-90

HOLE ID	EASTING	NORTHING	COLLAR	DEPTH	YEAR	AZIMUTH	DIP
TRC12014	628553.0	6084363.6	1524.3	38.0	2012	225	-60
TRC12015	628549.1	6084355.6	1524.0	111.9	2012	215	-70
TRC12607	628576.4	6084398.2	1522.5	85.0	2012	215	-60
TRC12621	628787.3	6084504.0	1490.2	138.8	2012	35	-65
TRC12626	628766.1	6084096.4	1420.4	265.8	2012	215	-60
TRC12627	628874.4	6084806.8	1465.0	107.3	2012	0	-90
TRC12628	628650.8	6084457.8	1528.8	288.6	2012	50	-60
TRC12630	628577.5	6084967.2	1486.4	146.1	2012	35	-60
TRR12001	628838.8	6084261.3	1421.4	189.7	2012	205	-60
TRR12002	628840.5	6084265.8	1421.3	223.0	2012	0	-90
TRR12003	628841.9	6084269.3	1421.3	210.6	2012	35	-60
TRR12007	628703.6	6084354.3	1494.9	203.7	2012	225	-60
TRR12008	628705.6	6084352.4	1494.6	299.8	2012	0	-90
TRR12009	628704.4	6084356.2	1494.8	287.4	2012	45	-60
TRR12621	628786.0	6084504.4	1490.2	129.8	2012	45	-65
TRR12737	628922.5	6084475.3	1437.7	94.2	2012	45	-60
TRR12738	628908.3	6084478.7	1437.6	100.0	2012	0	-90
TRR12770	628600.7	6084044.2	1453.4	169.3	2012	215	-55
TRR12778	628602.0	6084046.0	1453.3	212.1	2012	215	-70
TRR12780	629083.5	6084481.3	1401.3	280.0	2012	45	-55
TRR12815	628919.8	6084330.8	1409.0	128.7	2012	210	-55
TRR12816	628921.9	6084334.8	1409.1	128.7	2012	45	-55
TRR12851	628868.3	6084271.6	1411.0	119.1	2012	215	-55
TRR12852	628870.0	6084272.9	1411.0	170.0	2012	35	-55

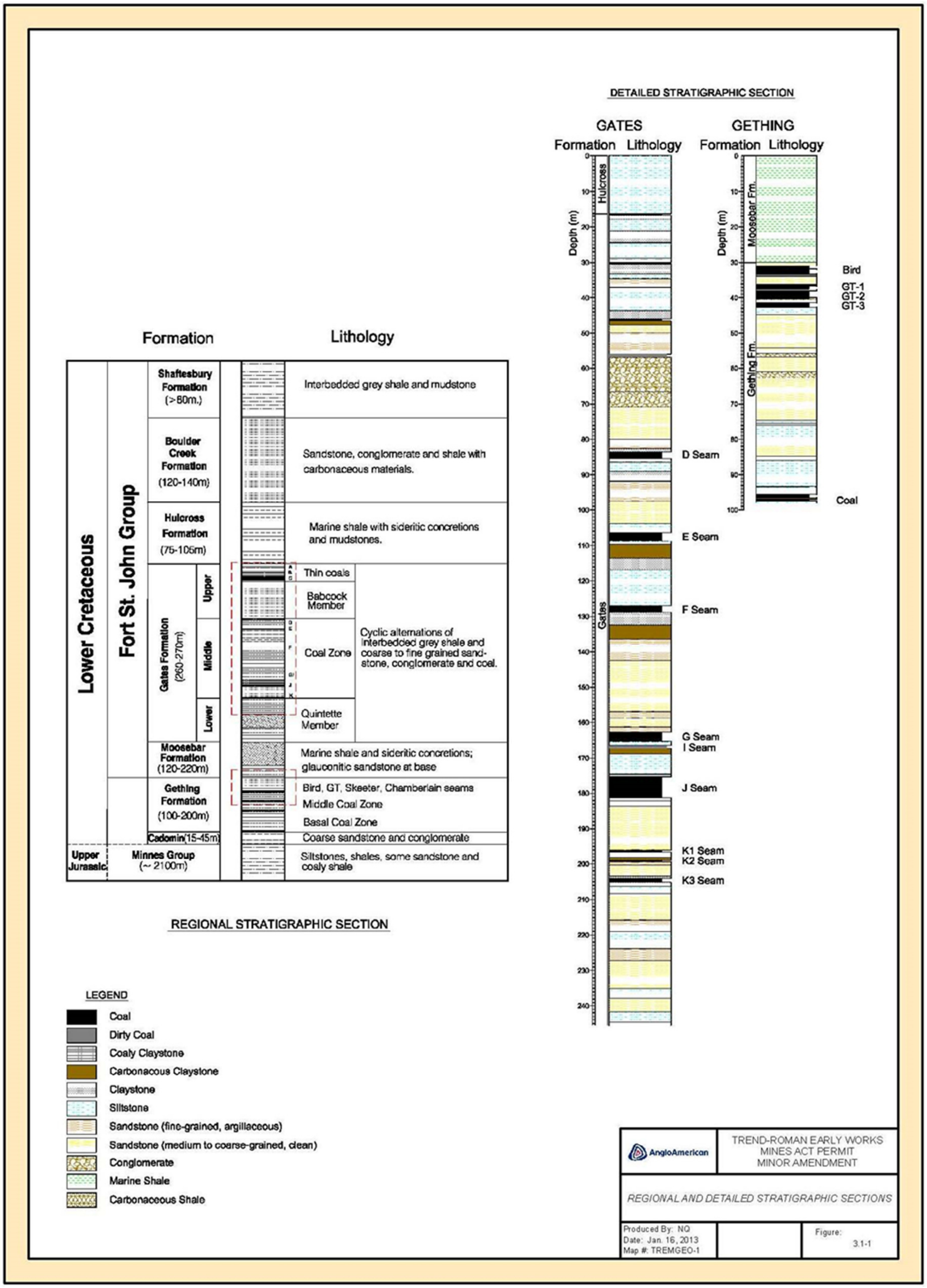
Attachment 9

Detailed Geological Map



Attachment 10

Stratigraphic Column



Attachment 11

Competent Person Signature page

I, David Phillippe Lortie, P. Geo., do hereby certify that:

a) I am currently employed as Coal Resource Manager by Peace River Coal Inc., Suite 800 - 700 West Pender Street, Vancouver, British Columbia, Canada V6C 1G8. Peace River Coal Inc. is a subsidiary of Anglo American Plc.

b) This certificate applies to the Coal Assessment Report entitled “Coal Assessment Report Roman Northwest Property Peace River Coal District”, dated March 15, 2015.

c) I graduated with a Bachelor of Science in Geology degree from Acadia University in 1976. I have worked as a Geologist for more than 21 years since my graduation from university. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia (License #31067) I am a “qualified person” for purposes of National Instrument 43-101 (“NI 43-101”).

d) I am responsible for the preparation of this Coal Assessment Report.

e) I have previously been involved with the Northeast British Columbia coal fields since 2004 as the Chief Geologist with Western Coal Corp. (previously Western Canadian Coal Corp.) and now with Peace River Coal Inc. planning and supervising the exploration work.

Dated this 15 March 2015

David Lortie

D.P. Lortie P. Geo.

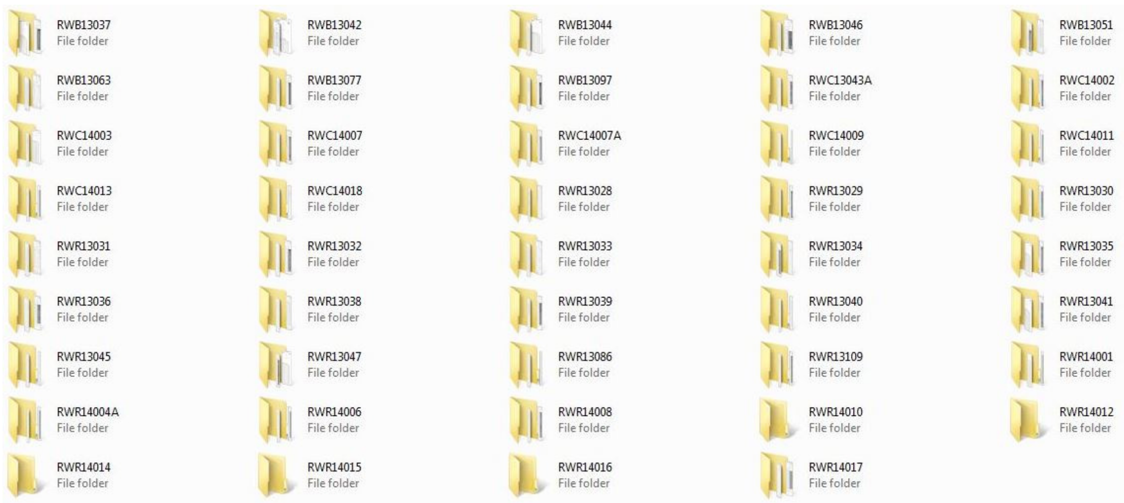
Attachment 12

Cost July 2013 – May 2014

Exploration Cost		
Type of Work	2013	2014
Total for Downhole Geophysics	$ 96,296	$ 84,040
Total for Sample Analysis	$ 351,464	$ 152,970
Total for Site/Pit Preparation	$ 188,817	$ 156,843
Total for FIRE SAFETY FIRST AID	$ 12,075	$ 13,150
Total for Drilling (including Fuel)	$ 843,159	$ 743,151
Total for Seismic Geophysics	$ 1,952,925	
Total for Project Roman Exploration	$ 3,444,736	$ 1,150,154
Coal Tenure	$ 43,190	$ 43,190
Staffing	$ 576,500	$ 281,268
Total Roman Exploration cost	$ 4,064,426	$ 1,474,612

Appendix 1

2013 – 2014 Geophysical Logs
(Attached as separate folder on DVD)



Appendix 2

2013 – 2014 Lithological Logs
(Attached as separate folder on DVD)

Name

- RWB13037
- RWB13042
- RWB13044
- RWB13046
- RWB13051
- RWB13063
- RWB13077
- RWB13077DP
- RWB13097
- RWC13043A
- RWC14002
- RWC14003
- RWC14007
- RWC14009
- RWC14011
- RWC14013
- CoalLog Lithology Dictionary .pdf
- Roman Northwest Lithology.pdf
- Roman Northwest Trench Lithology 2013_2014.pdf

Appendix 3

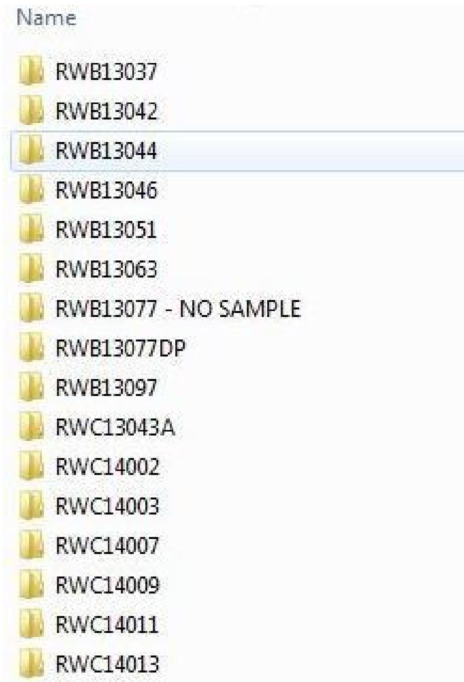
Maps and Sections from Attachments 2 – 4, 10, 12 (Attached as separate folder on DVD)

Name

- MineSight_Sect-150.pdf
- MineSight_Sect-154.pdf
- MineSight_Sect-158.pdf
- MineSight_Sect-162.pdf
- MineSight_Sect-166.pdf
- MineSight_Sect-170.pdf
- MineSight_Sect-174.pdf
- MineSight_Sect-178.pdf
- MineSight_Sect-182.pdf
- MineSight_Sect-186.pdf
- MineSight_Sect-190.pdf
- MineSight_Sect-194.pdf
- MineSight_Sect-198.pdf
- MineSight_Sect-202.pdf
- MineSight_Sect-206.pdf
- MineSight_Sect-210.pdf
- Roman Northwest Borehole location map.pdf
- Roman Northwest Trenches_2013_2014 location map.pdf

Appendix 4

Coal Quality Certificates
(Attached as separate folder on DVD)



Appendix 5

Roman Northwest and Roman Mountain 2D Seismic Report (Attached as separate folder on DVD)

Name

Roman NW and Roman Mountain 2D Seismic 2013-VGAA 030-FINAL.pdf