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BC Geological Survey
Coal Assessment Report
995

COAL ASSESSMENT REPORT ROMAN PROPERTY

PEACE RIVER DISTRICT

LOCATED AT UTM: 6,083,500 N, 630,000 E

LEASE: 417059.

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

Author: David Lortie P.Geo.
September 12, 2015

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COAL ASSESSMENT REPORT TITLE PAGE AND SUMMARY

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

TOTAL COST: $2,342,122

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

SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): ***Peace River Coal Mine Permit C-224***

YEAR OF WORK: ***2014***
PROPERTY NAME: ***Roman Property***
COAL LICENSE(S) AND/OR LEASES ON WHICH PHYSICAL WORK WAS DONE: ***417059.***

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: ***Liard***
NTS / BCGS: ***093I 15***
LATITUDE:
LONGITUDE: (at centre of work)
UTM Zone: ***10*** EASTING: ***630,000*** NORTHING: ***6,083,000***

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. ***Denison Mines Limited. 1976. Quintette Coal: Limited 1975 Exploration and Development Report, January 1976. Report 607***

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***
4. ***McIntyre, R.F. 2005. 2005 Assessment Report – Roman Mountain Drilling Program, June 2006. Report 905***
5. ***Peace River Coal Inc. 2014, Coal Assessment Report Roman Project Peace River District, September 2014. Report 954.***

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COAL ASSESSMENT REPORT
ROMAN MOUNTAIN

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1 SUMMARY

The Roman property consists of a coal lease on Roman Mountain in an area that Peace River Coal Inc. acquired in 2006 as part of the formation of the company. 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.

The property is located in the Peace River Regional District of Northeast British Columbia, Canada. The property is in the Inner Foothills of the Canadian Rocky Mountains near the town of Tumbler Ridge, British Columbia and about 725 km northeast of Vancouver, British Columbia. The property is readily accessible by provincial highway and an all-weather forestry service road. See Attachment 1 and Attachment 2.

The coal resources in the Roman Mountain area are part of the Peace River Coalfield. The coal seams are contained in the Lower Cretaceous Gates Formation and were deposited in an alluvial-deltaic environment 145 million years ago. Gates Formation coals have been mined extensively in the region, and the seams at the Roman Mountain area may be correlated with the seams mined previously in the region.

Regional tectonism from post-depositional mountain building has folded the geological structures regionally and locally. In this area, significant reverse and thrust faulting are interpreted in parts of the resource area. The local structures are of moderate geology, as defined by GSC paper 88-21,

In the Roman area, the D2, E1, F, G J, and K1 Seams of the Gates Formation and The Bird , GT1 and GT2 seams of the Gething Formation are considered to have economic potential for development.

Denison carried out drilling exploration on Roman Mountain between 1975 and 1976. The work included a fifteen borehole drilling program in 1975 consisting of twelve rotary percussion boreholes and three HQ diamond core boreholes, further, four trenches were excavated. In 1976, twelve HQ diamond core holes were completed; nine of these boreholes are located within the area of the 2005 to 2006 programs carried out by NEMI and the 2007 to 2009 programs carried out by PRC

NEMI completed an exploration program in 2005 consisting of twenty-four rotary percussion boreholes, nineteen of which were geophysically logged, and the reopening and re-logging of fourteen of the 1975 to 1976 boreholes; spot coring was completed on the D2 Seam in one borehole. Additionally, nineteen trenches were excavated to supplement borehole data. In 2006, twenty-eight rotary percussion boreholes, two HQ core holes, nineteen large diameter core holes and thirty-one trenches were completed by NEMI. In addition, seven existing boreholes were deepened.

Drilling activities carried out on Roman Mountain by PRC from 2007 to 2009 included 143 rotary percussion boreholes, twenty-nine diamond core holes and nineteen large diameter boreholes. These gave an aggregate drilled length of 34,679 m with 28,907 m of rotary percussion drilling, 4,481 m of diamond core drilling and 1,291 m of large diameter core drilling. In addition, ten trenches were excavated during the 2007 to 2009 drilling programs.

In 2011 and 2012 additional work was carried out on Roman Mountain. For 2011, 22 trenches, 6 LDC boreholes and 23 rotary percussion boreholes were completed. In 2012 an additional 14 rotary percussion boreholes and 6 PQ core boreholes were drilled.

In 2013 a drill program was carried out on Roman Mountain. This work included a winter program on the lower area near Babcock Creek. This area had not been extensively drilled due to wet ground conditions. The winter program was designed to access this area when the ground was frozen. The work consisted of 13 rotary percussion boreholes and 19 PQ core boreholes. A summer program targeted area where additional structure and quality data points were required. The program consisted of 12 rotary percussion boreholes and 47 near surface rotary boreholes drilled to test the oxidation depth of the coal. These boreholes were designated as LOX holes.

In the summer of 2014 a pre-production drill program was undertaken in the Phase 1 area of the Roman deposit. The Phase 1 area is the first area that will be mined on Roman Mountain. The programed was design to infill the drill information on 50 metre spaced lines. A total of 46 rotary percussion boreholes were drilled.

The structural information from the 2013 drilling was used in the updated resource geological model for Roman Mountain. The quality data will be used as part of a quality update to the resource model in Q2 of 2014.

A series of Geological Resource models have been developed to over the past few years and the coal resources of the property have been estimated using the guidelines set forth under GSC paper 88-21.

Trend-Roman is an open cut operation situated in the Rocky Mountain Foothills of northeastern British Columbia, Canada, approximately 20km south of the town of Tumbler Ridge. Mining currently occurs within two blocks (in Trend South since 2005 and Trend Extension since 2012), with future mining planned in the Roman block. The Roman block consists of a syncline that is located directly

The nearest railhead is the CN Rail Tumbler Subdivision, which terminates 12km south of Tumbler Ridge at the Quintette rail loadout. Peace River Coal (now a wholly owned subsidiary of AAMC) constructed a rail loadout facility in 2005 located approximately 4km north of the Quintette rail loadout which also connects with the CN Rail Tumbler Subdivision railhead. Clean coal is trucked approximately 20 km from the Trend CHPP to the rail loadout. From the rail loadout, coal is carried by CN trains approximately 1,000km to the Ridley Terminal in Prince Rupert, British Columbia. From here, coal is loaded to vessels and shipped to customers worldwide.

The Trend – Roman Mine was put into Care and Maintenance in January 2015 due to the current drop in world coal prices. The mine will reopen once the world price has returned to a value that makes the mining of the Roman deposit economic.

2 INTRODUCTION

2.1 Purpose of Report

This report has been prepared to report on the exploration activities undertaken in 2014 on Roman Mountain as part of the requirements for holding coal tenure under the British Columbia Coal Act. The drilling program was undertaken under Peace River Coal Mine Permit C-224

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 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 Metallurgical Coal business unit based in Brisbane Australia.

2.3 Property Description & Location

The Roman Mountain Project is located on Roman Mountain which is situated in the Rocky Mountain Foothills of north-eastern British Columbia adjacent to the current Trend Mine (see Attachment 1). Access to the project is gained by paved and gravel roads from Tumbler Ridge, located 20 km to the north. The project is located within an area that extends northwest from Gordon Creek to Babcock Creek. It is centered in UTM Zone 10 (NAD 83) at coordinates 6,083,500 N, 630,000 E and is located on NTS Map Sheet 93-I/15

2.4 Mineral Rights & Surface Title

The Roman Project and associated infrastructure occur on several Crown Coal Licences and one Coal Lease (see Attachment 2). Table 1.1 shows the licences and their present status and includes data concerning the coal lease. The Roman Project is located within Coal Lease 417059 which expires on September 14, 2030 and is owned by PRC. The lease covers a total area of 3,201 ha of which approximately 500 ha make up the Roman Project area. The remainder of the lease includes the Trend Mine as well as areas that surround the mine and various infrastructure features. The company advises that the property has not been legally surveyed.

Table 2.4.1: Summary of Mineral Rights

Attribute	
Tenure Type	Coal Lease
Tenure Number	417059
Site	Roman
Name	Trend Roman
Holder 1	PRC
Holder 1%	100
Holder2	
Holder2%	
Area	3201
Units	Ha
Application Date	
Grant Date	
Expiry Date	2030.09.14
Renew By	
Renewal Lodged	

2.5 Accessibility, Climate, Infrastructure & Physiography

The Roman Mountain Project is accessed from Tumbler Ridge via the paved Heritage Highway and an all-weather gravel road named Petroleum Development Road 46 (PDR 46), or the Core Lodge Road. PDR 46 is owned and maintained by Canadian Natural Resources Limited (CNRL) and PRC has entered into a Road Use Agreement for mine access and coal haul. A seasonal trail extends approximately 2 km from Trend Mine and provides primary access to Roman Mountain from June to October. The existing Babcock Creek Road and Roman Mountain South side road provide alternative access to Roman Mountain. The Heritage Highway and PDR 46 road are maintained year-round in good, drivable condition in support of all resource development in the area. Babcock Creek Road and Roman Mountain South side road are not maintained year-round. See Attachment 2.

All weather data was obtained from the Trend Mine weather station between 2006 and 2009. 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 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 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 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 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 Project area varies from gentle slopes to rugged cliffs and steep valleys. The total elevation change across the project area is approximately 800 m, from 1,400 m above mean sea level at Babcock Creek, to 2,200 m above mean sea level at the peak of Roman Mountain.

Water drainage from the project area is collected into two systems; Gordon Creek to the southeast of Roman Mountain and Babcock Creek to the northwest of Roman Mountain. Johnson Creek is a large tributary draining into Babcock creek and is located northwest of Trend Mine and north-northeast of Roman Northwest portion of the project. Babcock Creek and Gordon Creek drain into the Murray River.

2.6 Adjacent Properties

The Roman Project is located within an area that contains a number of both closed and currently producing 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 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.

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 the 752 km of 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.

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 has produced both PCI and metallurgical coal.

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.

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 licenses reverted to the crown in 1999 to 2000.

Ownership of the Roman Mountain coal license was obtained by NEMI in early 2000. When NEMI joined the PRC partnership in 2006 control of the Roman Mountain coal license was transferred to PRC.

2.8 Exploration By Other Parties

Denison Mines Limited carried out extensive exploration work on Roman Mountain between 1975 and 1976. 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. In addition trenches were excavated. In 1976 more core drilling was completed.

3 DRILL HOLE DATA

3.1 Historical Drilling

Denison carried out drilling exploration on Roman Mountain between 1975 and 1976. The work included a fifteen borehole drilling program in 1975 consisting of twelve rotary percussion boreholes and three HQ diamond core boreholes, further, four trenches were excavated. In 1976, twelve HQ diamond core holes were completed; nine of these boreholes are located within the area of the 2005 to 2006 programs carried out by NEMI and the 2007 to 2009 programs carried out by PRC.

3.2 Drilling 2005 - 2012

NEMI completed an exploration program in 2005 consisting of twenty-four rotary percussion boreholes, nineteen of which were geophysically logged, and the reopening and re-logging of fourteen of the 1975 to 1976 boreholes; spot coring was completed on the D2 Seam in one borehole. Additionally, nineteen trenches were excavated to supplement borehole data. In 2006, twenty-eight rotary percussion boreholes, two HQ core holes, nineteen large diameter core holes and thirty-one trenches were completed by NEMI. In addition, seven existing boreholes were deepened.

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In 2011 and 2012 additional work was carried out on Roman Mountain. For 2011, 22 trenches, 6 LDC boreholes and 23 rotary percussion boreholes were completed. In 2012 an additional 14 rotary percussion boreholes and 6 PQ core boreholes were drilled.

3.3 2013 Drilling

In 2013 a drill program was carried out on Roman Mountain. This work included a winter program on the lower area near Babcock Creek. This area had not been extensively drilled due to wet ground conditions. The winter program was designed to access this area when the ground was frozen. The work consisted of 13 rotary percussion boreholes and 19 PQ core boreholes. A summer program targeted area where additional structure and quality data points were required. The program consisted of 12 rotary percussion boreholes and 47 near surface rotary boreholes drilled to test the oxidation depth of the coal. These boreholes were designated as LOX holes.

The structural information from the 2013 drilling was used in the updated resource geological model for Roman Mountain.

3.4 2014 Drilling

In the summer of 2014 a pre-production drill program was undertaken in the Phase 1 area of the Roman deposit. The Phase 1 area is the first area that will be mined on Roman Mountain. The programed was design to infill the drill information on 50 metre spaced lines. A total of 46 rotary percussion boreholes were drilled. The borehole data was incorporated into a new resource model interpretation but work was not completed on the model due to the placing of the mine into Care and Maintenance.

3.5 Geological & Geophysical Logging

All the NEMI and PRC rotary and core boreholes, including large diameter 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-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 NEMI 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.

Coal seams intersected in trench excavations were logged and described as per the standards for a borehole.

3.6 Data Density

The borehole data for Roman Mountain 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. See Attachment 3.

3.7 Data Location / Topographical Data

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

3.8 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 trend to turn into the bedding.

3.9 Reporting Archives / Database

The geological data for Roman Mountain is in electronic format with the exception of early historic borehole data from the 1970's and 1980's. New field information is collected digitally and then transferred directly into acQuire.

Before the implementation of the acQuire database, Lithological, thickness and depth information was captured in a standardized code format and entered into the GDB database (a Mincom software product). While the PRC data was acquired and entered during the core logging activity, the NEMI information was validated, standardized and entered into GDB during 2009. This data is now been transferred to acQuire which began to be implemented in 2012.

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

The current MineSight model was externally audited by Moose Mountain Technical Service and the data used to construct the model was reviewed to confirm completeness and accuracy.

4 COAL ANALYSIS

In 2014 the pre-production drill program consisted of air rotary drilling only, there were no quality samples taken.

5 DATA COLLATION

5.1 Geology General

The Roman 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. The Murray Syncline is the main structural feature at Roman Mountain and the one that is the host for the surface mineable coal deposits. This structure is a tight, symmetrical fold with an axial trend of 130°. The northeast limb dips fairly uniformly at 50° to 60° to the southwest. The southwest limb dips at up to 80° to the northeast and includes several thrust faults. Refer to Attachment 5 for an overview of the regional geology and Attachment 6 for general stratigraphic columns and representative cross sections. Coal measures are found in the Bullhead and Fort St. John Groups which consist mainly of alternating sequences of marine and non-marine clastic rocks. The oldest strata to crop out in the project area belong to the Minnes Group. These sequences are located on the northeast and southwest limits of the Murray Syncline. The youngest strata belong to the Gates Formation and this subcrop along the axis of the syncline. The coal seams of economic importance occur in the Lower Cretaceous Gates and Gething Formations. These two sequences are separated by marine argillite of the Moosebar Formation.

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 Project area. These are named A, at the top of the sequence then B, C, D, E, F, G, I, J, K and L Seams. 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, F, G, J, 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 Roman Project is regarded as consisting of three portions of different degrees of deformation, each of which is considered separately in the model to account for variations in thickness that may be due to structural thickening. These sections are the Northeast Limb, Syncline Hinge and Southwest Limb.

The D Seam Zone, which is the youngest of commercial significance in the project area, includes the D1 and the D2 Seams. Only the D2 Seam is of economic importance. The D2 Seam is persistent throughout the Roman Project area and occurs 3.0 m to 5.0 m below the D1 Seam; the D1 Seam occurs immediately below the Babcock Member Conglomerate. The D2 Seam is from 1.0 to 9.9 m thick and has a sharp roof contact and gradational floor with carbonaceous claystone at the top and bottom of the seam. The D2 Seam has little variation of thickness and quality throughout the Roman Project area. The average ash content (adb), FSI and sulphur content values for the seam are 17.4%, 4.9 and 0.5%, respectively.

Table 5.2.1: True Thicknesses of Seams of Economic Interest

Seam	Average (m)	Minimum (m)	Maximum (m)
D2	3.2	1.0	9.9
E1	1.7	1.0	6.7
F	2.2	1.0	7.1
G	3.2	1.0	10.9
J	5.2	1.1	13.8
K1	1.1	1.0	2.3
K2	1.1	1.0	1.4
Total	17.7	-	-

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. The E1 Seam is persistent throughout the Roman 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 ash content (adb), FSI and sulphur values are 23.4%, 5.6 and 0.5% 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. Ash content (adb), FSI and sulphur content values for the seam are 12.5%, 7.7 and 0.5% respectively.

The G Seam is located 30 m and 40 m below the F Seam. The G Seam is developed over the entire Roman Project area. The G Seam tends to thicken to the northwest. The roof contact is generally sharp and the upper 1.5 m of the seam contains thin claystone laminae. Normally, the bottom of the seam grades into a carbonaceous siltstone, but there are instances where sharp contacts have been recorded. The seam average ash content (adb), FSI and sulphur content values are 16.1%, 6.1 and 0.3%, 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 a consistent thickness of about 5.2 m and tends to thicken to the northwest where it reaches a maximum thickness of 13.8 m. 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 an ash content (adb), FSI and sulphur content of 16.0%, 5.3 and 0.2% respectively.

The K Seam Zone comprises up to three seams named K1, K2 and K3, in descending stratigraphic order. Each seam is separated by 1.0 m to 4.0 m of siltstone. The K3 is not economically significant. Ash content (adb), FSI and sulphur for the K1 and K2 Seams are 10.1%, 4.5 and 0.5% for the K1 Seam and 16.0%, 4.9 and 0.6% 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.

5.2.2 Gething Formation

Four coal seams are present in the upper Gething Formation. The uppermost and generally thickest, the Bird Seam, varies from 4.0 m to 5.0 m thick and contains rare thin, shaley partings. The Bird Seam occurs very close to the top of the Gething Formation.

The Bird Seam ash content (adb) and FSI of the seam are 10.8% and 8.5 respectively. The Bird Seam has an average sulphur content of 4.3% over the project area. The sulphur in the Bird Seam occurs as disseminated flecks of pyrite and less frequently as pyrite nodules. Although the sulphur distribution is variable throughout, the top of the seam often displays significantly higher sulphur content than the remainder.

The GT Coal Zone consists of up to three coal seams referred to, from the top, as the GT1, GT2 and GT3 Seams. Each seam may be well-defined but they often coalesce to form one or two primary seams. The zone varies in thickness between 10 m and 15 m with individual seam thicknesses ranging between 1.0 m and 2.0 m. Coal accounts for approximately 65% of the zone. GT1 and GT2 seams are the most laterally persistent ones. Only the GT1 and GT2 seams are considered to be of potential economic interest.

The GT Coal Zone coal seams have ash content (adb), FSI and sulphur content values from 5.9% to 13.7%, 3.5 to 5.0 and 0.4% to 0.6% respectively.

5.3 Structural Setting

The Murray Syncline is the predominant structural feature on Roman Mountain and is a tight fold typical of the area. The syncline is roughly symmetrical with the northeast limb dipping fairly uniformly at 50-60° to the southwest. The southwest limb dips generally steeper, up to 80°. The fold axial trend is 130º, with the hinge plunging at an average of 7.5º to the northwest.

Structural complexity varies on the property, with the northeast limb displaying moderate complexity in comparison to the more complex structure of the southwest limb. Overall, stress from the southwest caused the strata to fold and as a mechanism for space accommodation, in-situ thrust faulting led to thickening of the coal seams in the hinge, with general thinning on the limbs. Some of the strata exhibits ductility which allowed folding, while more competent, brittle units have been faulted, leading to seam displacement, repetition and localised truncation. Thrust faulting has also resulted in minor drag folding along the thrust planes. This may explain some of the thickening of the seams in the fault zones.

One change to the previous structural interpretation occurs in the centre of the syncline. A near-vertical thrust fault of length 175m and a 30m throw was modelled where previously the D2, E1 seams were modelled vertically/slightly overturned and the F, G and J seams had significantly less interburden between them. Historical reports confirm that there previously was a fault modelled in that location, however over the years it had been removed. Extra drilling is required to further confirm this structure and its extents.

The second change relating to the structural interpretation is the inclusion of a large-scale thrust fault that appears to post-date the two major thrusts that run parallel to the southwest limb; affecting only the Gates Formation. This structure truncates the two thrust faults and trends north into the anticline in Roman Northwest. The recent 2013 drilling program had multiple drillholes that were barren where previously the model indicated coal should be present. Inspection of the first 50 m of the geophysical logs of 2013 drillholes, show similar geophysical signatures, to that of the strata around the ‘L’ seam in the adjacent drillholes that intersected the entire coal sequence exhibit.

5.4 Stratigraphy & Structure

In Roman Mountain the current structure used geological model is derived from borehole information and from surface mapping. A large portion of the resource area is above tree line with an abundance of exposed outcrop. Geological mapping has been carried out since the early 1970’s by Dennison Mines, NEMI and PRC.

In 2013 there was a near surface seismic program was carried out on one seismic line that intersected the property. The final evaluation of the results has not been received and the information was not included in this model build.

5.5 Geophysical Data

Geophysical data on the property has been restricted to down-hole geophysics. In 2013 there was a near surface seismic program was carried out on one seismic line that intersected the property. The final evaluation of the results has not been received and the information was not included in this model build.

5.6 Geotechnical Data

Geotechnical information for Roman is taken from a report - Roman Mountain Pit Wall Data Compilation – (Norwest, 2009). Sources of information include the following:

- Outcrop mapping (2008),
- Point load test (PLT) data from exploration borehole core samples (2007/2008),
- Laboratory test data from exploration borehole core samples (2007), and

Geotechnical core logs from select exploration boreholes (2007/2008) which include rock mass characterization using the 1989 version of the Rock Mass Rating classification system (Bieniawski, 1989)

The bedded strata which form the rock mass in this area consist of alternating layers of sandstone, mudstone, siltstone and coal. Given the typical thickness of these layers and frequency of which they alternate, it is not practical to apply strength properties to each rock type for stability analysis. In order to simplify the model, geotechnical domains or zones are selected which are composed of rock units with similar strength characteristics. Although there is some variation in the strength properties, the zones selected and strength parameters applied are deemed representative of the rock mass. The zones created for Roman follow those used at Trend Mine and are as follows:

- J Footwall Zone (rock mass between J and K seams),
- Gates Footwall (rock mass stratigraphically below K seam plies),
- Gates Highwall (rock mass stratigraphically above J seam),
- Gething Footwall (rock mass below the Bird and GT coal package), and
- Gething Highwall (rock mass above Bird seam).

Data from core logs and laboratory testing was sorted into these zones and design values chosen. The criterion for design parameters was the 30th percentile value for RMR89 and the mean value for the other strength parameters.

This data was used to estimate shear/normal functions within the limit equilibrium software SLOPE/W (Version 7.17). A Mohr-Coulomb strength model was used for the coal seam, clay layer and fault zones. Properties used were based on laboratory testing and back analyses of instabilities at Trend Mine.

5.7 Further Work

Additional drilling and trenching will continue to be carried out on the property. The drilling will include additional 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 syncline.

The Roman Mine was put into care and maintenance in January 2015, at that time all pre-production drill programs were cancelled.

The focus once mining commences again will be to drill pre-production rotary boreholes at 50 metre spacing in the Phase 2 area of the Roman Pit. Additional work will focus on drilling pre-production rotary boreholes at 50 metre spacing Phase 3 of the Roman Pit.

6 RESOURCES

The new information from the 2014 drill program was include in a new updated resource model but with the decision to put the Roman Mine into care and maintenance no new resource evaluation was completed. Once the decision is made to reopen the Roman Mine a new resource evaluation will be completed and the resource updated. For information on the most up to date Roman resources, refer to Coal Assessment Report 954.

7 OTHERS

7.1 Discussion of Relative Accuracy / Confidence

The resource figures given here are estimates only, and subject to variation depending on additional exploration data and revised interpretation.

7.2 Reliance on Other Experts

This report has been compiled from reports written by the following experts:

- Ted Hannah, Norwest Corporation, Calgary, Alberta (APEGBC member 22009).
- Sean Ennis, Norwest Corporation, Calgary, Alberta (APEGAB member M52576; APEGBC member 24279).

7.3 Other Relevant Information

No other relevant information.

7.4 Interpretation & Conclusions

The Peace River Coal Roman Mountain Project encompasses coal seams that demonstrate lateral stratigraphic continuity with thickness variations that are caused mainly by structural disturbance. The structural geology is affected by folding and faulting typical of the Rocky Mountains.

The verification of the local geology and the calculation of reserves were accomplished through review of current practices and procedures, inspection of a sampling of raw geological and coal analytical data, and verification of volume calculations. The density of drilling on this project is adequate for the delineation of resources amenable to surface mining.

The structural interpretation has been expanded from just the two main thrust to now address a majority of seam repeats with the addition of numerous localised faulting. It has not varied significantly compared to the previous model.

7.5 Recommendations

It is recommended that PRC continue to review coal seam data and update the geological database and model as required.

- Additional drilling in some areas of the deposit would be valuable, especially at depth for better definition of mineralization continuity in the deposit.
- The GT seam in the Gething area is quite thin in places; there are only a few composites to support the thinning of the seam. Additional drilling would be useful.
- incorporate the results from LOX program to better define the weathering profile and outcrop location
- confirm the structural interpretation with extra exploration drilling
    - further drilling to better delineate the thrust structure along the northwest limb of the Gates seams trending into Roman Northwest

- run scenarios against the inclusion- and/or exclusion- of the GT3 when modelling the GT seams as a package – does the extra parting being mined offset any gain from including the GT3 coal seam

7.6 References

- Hannah, T, and Ennis S. May 19th 2010. Technical Report: Roman Project Tumbler Ridge, British Colombia. Norwest Corporation, Calgary, Alberta.
- Canadian Institute of Mining, Metallurgy, and Petroleum (CIM). 2005. CIM Definition of Standards - For Mineral Resources and Mineral Reserves, 10 p.
- 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).
- 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.
- Norwest Corporation. 2005. Trend Full Mine Feasibility Study for Northern Energy and Mining Inc.; October 2005.
- Denison Mines Limited. 1976. Quintette Coal: Limited 1975 Exploration and Development Report, January 1976.

6. Denison Mines Limited. 1976. Quintette Coal Limited: Information Summary, August 1976.
7. Denison Mines Limited. 1976. Quintette Coal Limited: 1976 Geological Assessment Report, December 1976.
8. McIntyre, R.F. 2005. 2005 Assessment Report – Roman Mountain Drilling Program, June 2006.

7.7 Competent Person, Date & Signature Page

Details of the Competent Person, together with signatory pages, are found in Attachment 7

7.8 Illustrations & Diagrams

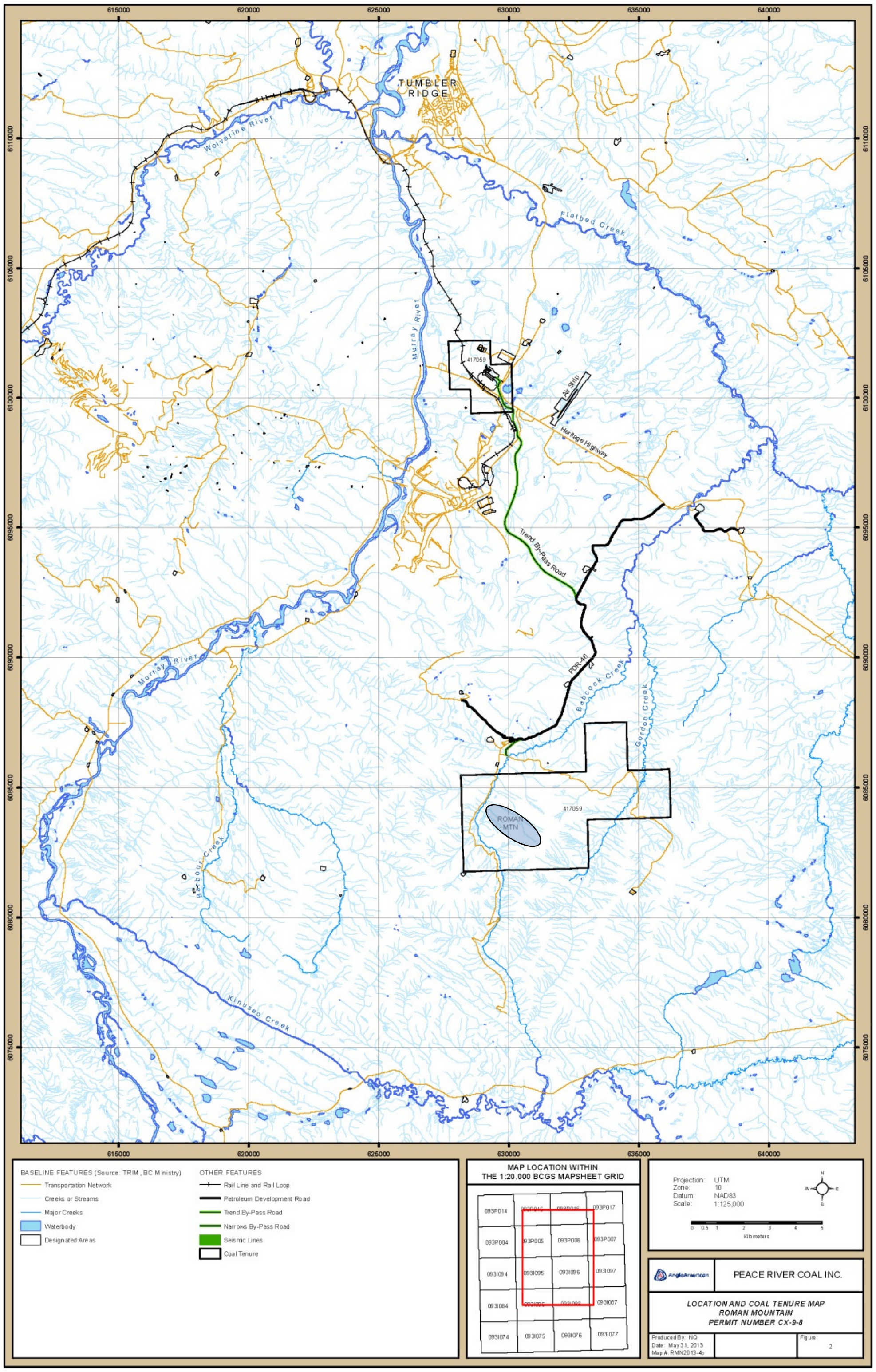
See Attachments below and text for references.

Attachment 1

Location Map

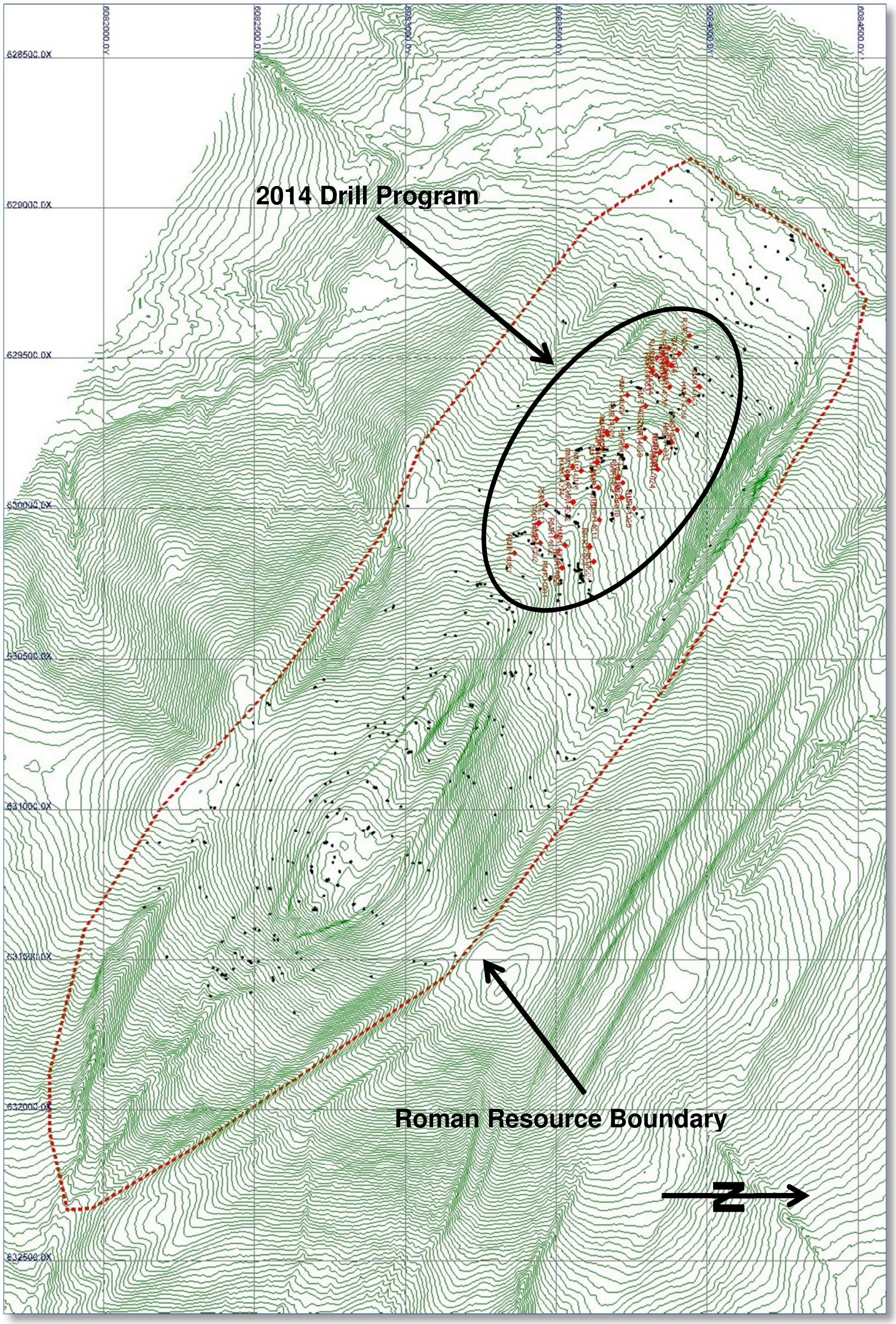
Attachment 2

General Property Map



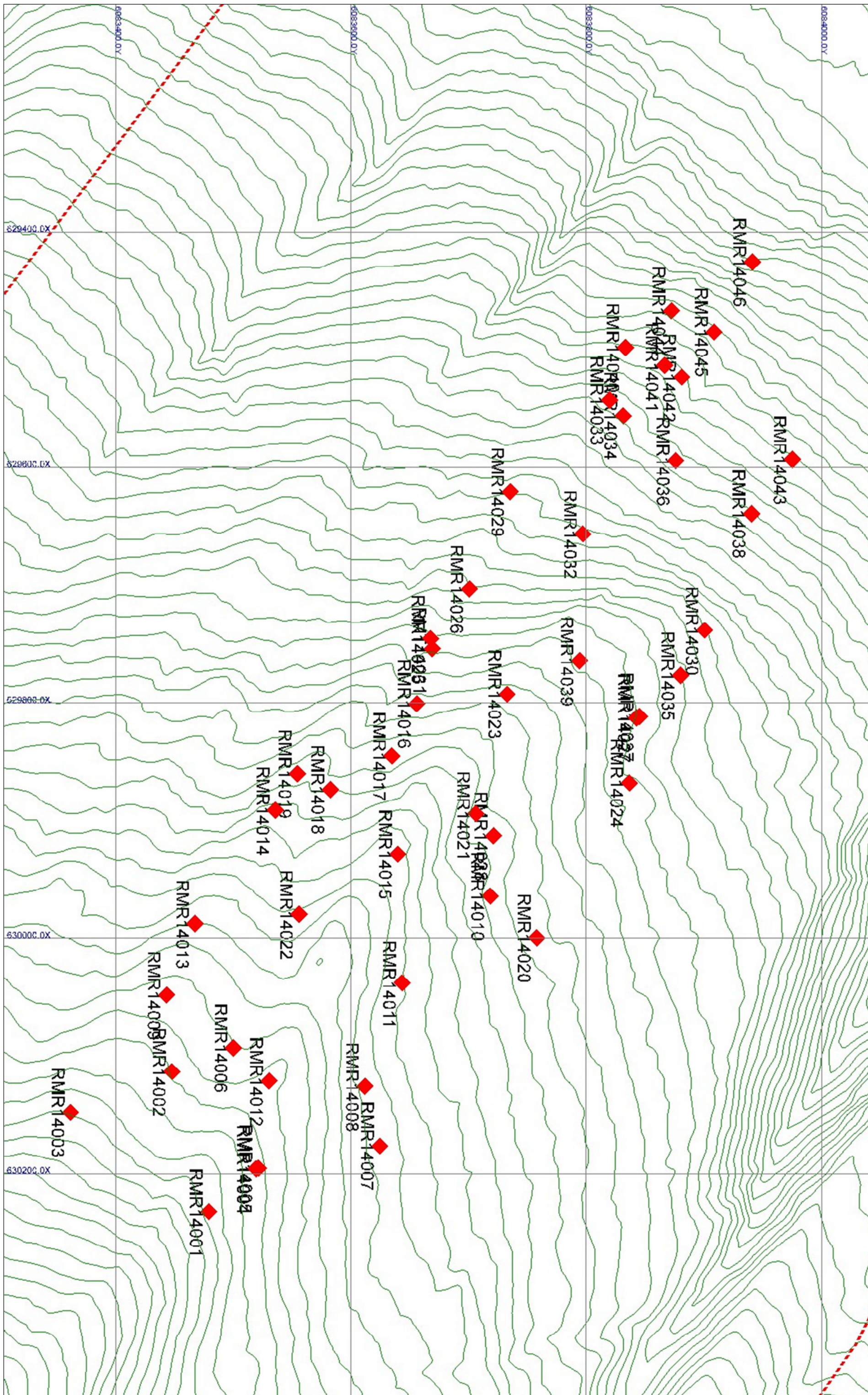
Attachment 3

2014 Borehole Plan Overall



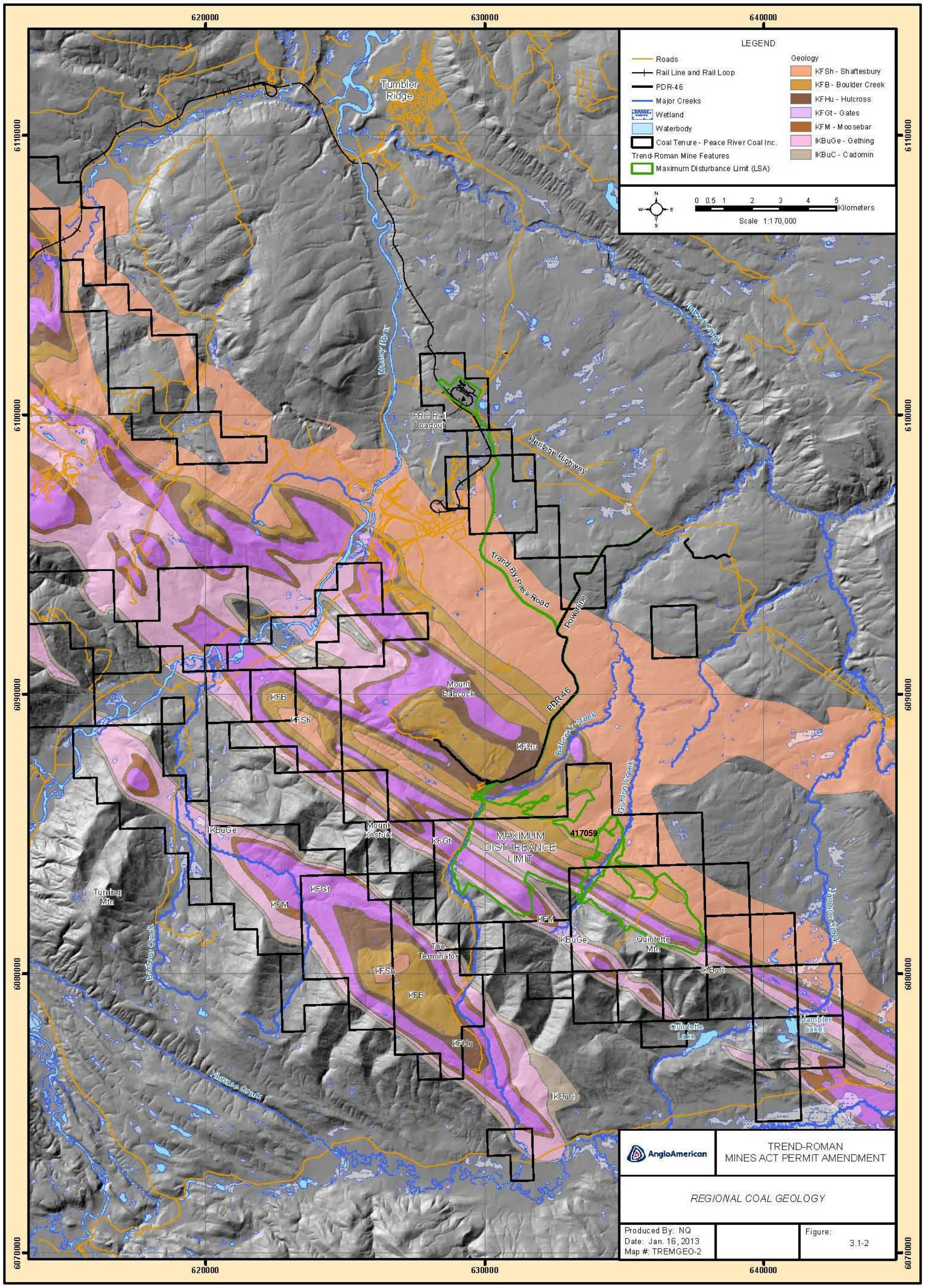
- **Pre 2014 Drilling**
- **2014 Drilling**

2014 Borehole Plan Detail



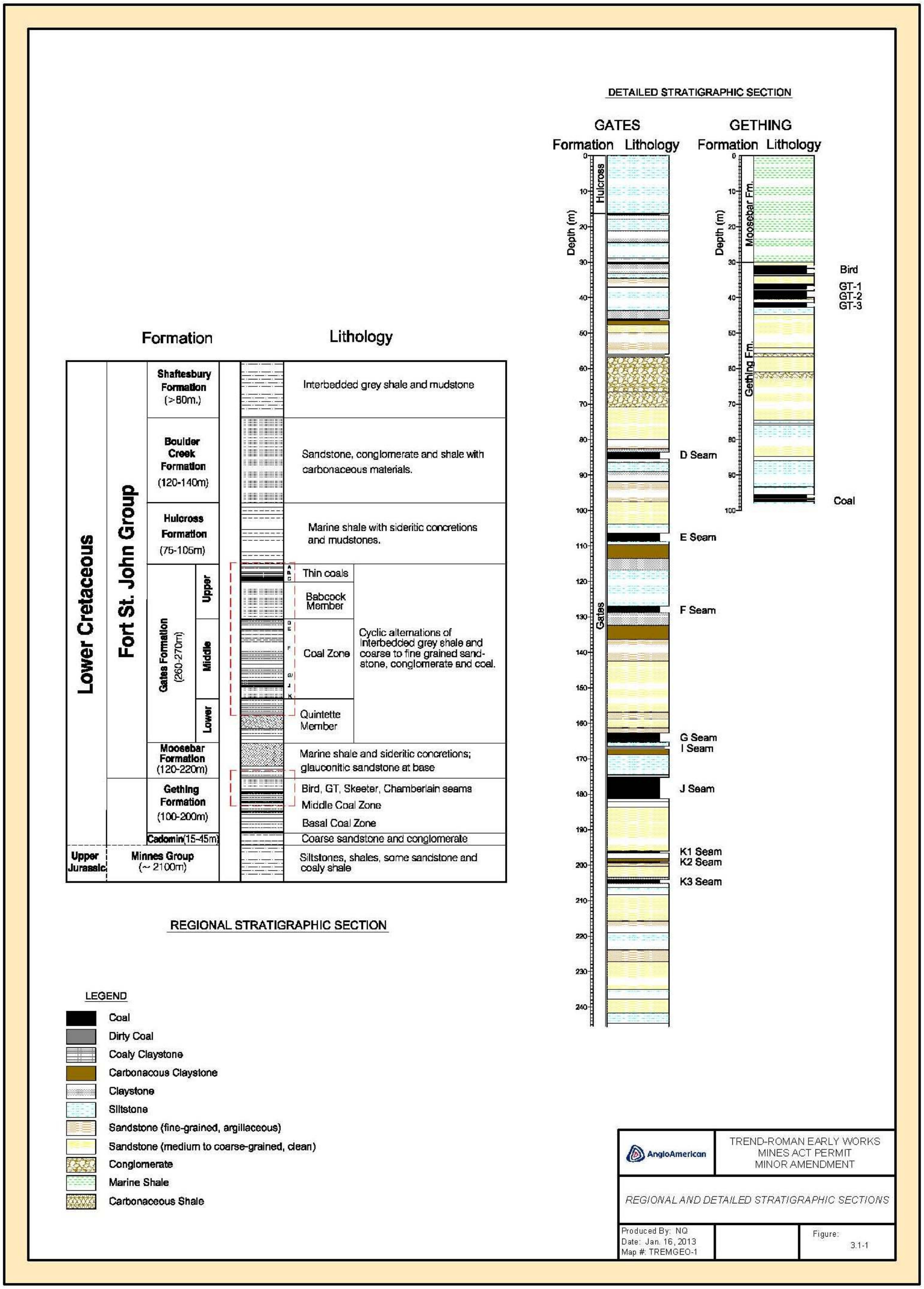
Attachment 4

General Geological Map



Attachment 5

Stratigraphic Column



Attachment 6

2014 Borehole Collar Information

Hole ID	Easting	Northing	Elevation	Max Depth	Type
RMR14001	630232.25	6083479.12	1728.13	276.04	Rotary
RMR14002	630113.37	6083447.59	1714.05	138.34	Rotary
RMR14003	630147.81	6083361.52	1729.54	105	Rotary
RMR14004	630196.08	6083519.23	1716.58	300.35	Rotary
RMR14005	630195.25	6083521.24	1716.26	211.78	Rotary
RMR14006	630093.09	6083500.12	1706.03	225.52	Rotary
RMR14007	630176.36	6083624.61	1687.84	150.52	Rotary
RMR14008	630126.02	6083611.86	1688.73	155	Rotary
RMR14009	630048.18	6083443.18	1707.08	154.06	Rotary
RMR14010	629964.12	6083718.41	1657.68	171.07	Rotary
RMR14011	630037.78	6083643.36	1680.55	176.1	Rotary
RMR14012	630121.49	6083530.29	1711.28	304.63	Rotary
RMR14013	629987.64	6083467.45	1695.60	96.3	Rotary
RMR14014	629891.40	6083535.80	1671.88	106.06	Rotary
RMR14015	629928.60	6083639.91	1680.98	232	Rotary
RMR14016	629800.66	6083655.97	1646.80	163.02	Rotary
RMR14017	629845.28	6083634.86	1658.71	149.08	Rotary
RMR14018	629873.69	6083582.54	1665.16	138.78	Rotary
RMR14019	629860.20	6083554.52	1662.95	96	Rotary
RMR14020	629999.54	6083757.98	1651.79	92.26	Rotary
RMR14021	629894.54	6083706.31	1657.86	248.3	Rotary
RMR14022	629979.69	6083555.83	1686.87	148.46	Rotary
RMR14023	629792.60	6083732.90	1647.88	122.18	Rotary
RMR14024	629868.05	6083836.65	1631.02	106.2	Rotary
RMR14025	629745.48	6083667.76	1631.40	88.1	Rotary
RMR14026	629703.30	6083700.59	1616.90	123.52	Rotary
RMR14027	629812.74	6083842.95	1628.66	169.48	Rotary
RMR14028	629913.04	6083721.24	1657.83	187.46	Rotary
RMR14029	629620.56	6083735.39	1595.00	100	Rotary
RMR14030	629738.51	6083900.75	1610.84	272.68	Rotary
RMR14032	629656.55	6083797.20	1597.04	126.32	Rotary
RMR14033	629542.68	6083819.85	1569.04	99.62	Rotary
RMR14034	629556.04	6083831.47	1569.16	129.18	Rotary
RMR14035	629776.80	6083880.32	1620.33	187.28	Rotary
RMR14036	629594.44	6083876.13	1567.70	224.34	Rotary
RMR14037	629811.65	6083845.41	1628.59	276	Rotary
RMR14038	629639.15	6083940.55	1571.24	138.6	Rotary
RMR14039	629764.47	6083794.38	1634.29	242.4	Rotary
RMR14040	629498.01	6083833.42	1551.25	99.6	Rotary
RMR14041	629513.38	6083866.66	1551.83	150.66	Rotary
RMR14042	629523.34	6083881.33	1551.62	190	Rotary
RMR14043	629593.44	6083975.48	1550.84	225.8	Rotary
RMR14044	629467.02	6083872.49	1538.17	130.05	Rotary
RMR14045	629484.83	6083908.75	1536.53	162.04	Rotary
RMR14046	629425.46	6083941.23	1502.99	130.03	Rotary
RMR14047	629050.95	6084107.90	1438.84	140	Rotary

Attachment 7

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 Property Peace River Coal District", dated September 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 day of September, 2015

D.P. Lortie P. Geo.

Attachment 8

Exploration Cost 2014

Exploration Cost		
Type of Work		2014
Total for Geophysics	$	243,050
Total for Sample Analysis	$	-
Total for Site/Pit Preparation	$	156,688
Total for FIRE SAFETY FIRST AID	$	30,975
Total for Drilling (including Fuel)	$	926,057
Total for Project Roman Exploration	$	1,356,770
Coal Lease	$	32,010
Staffing	$	953,342
Total Roman Exploration cost	$	2,342,122

Appendix 1

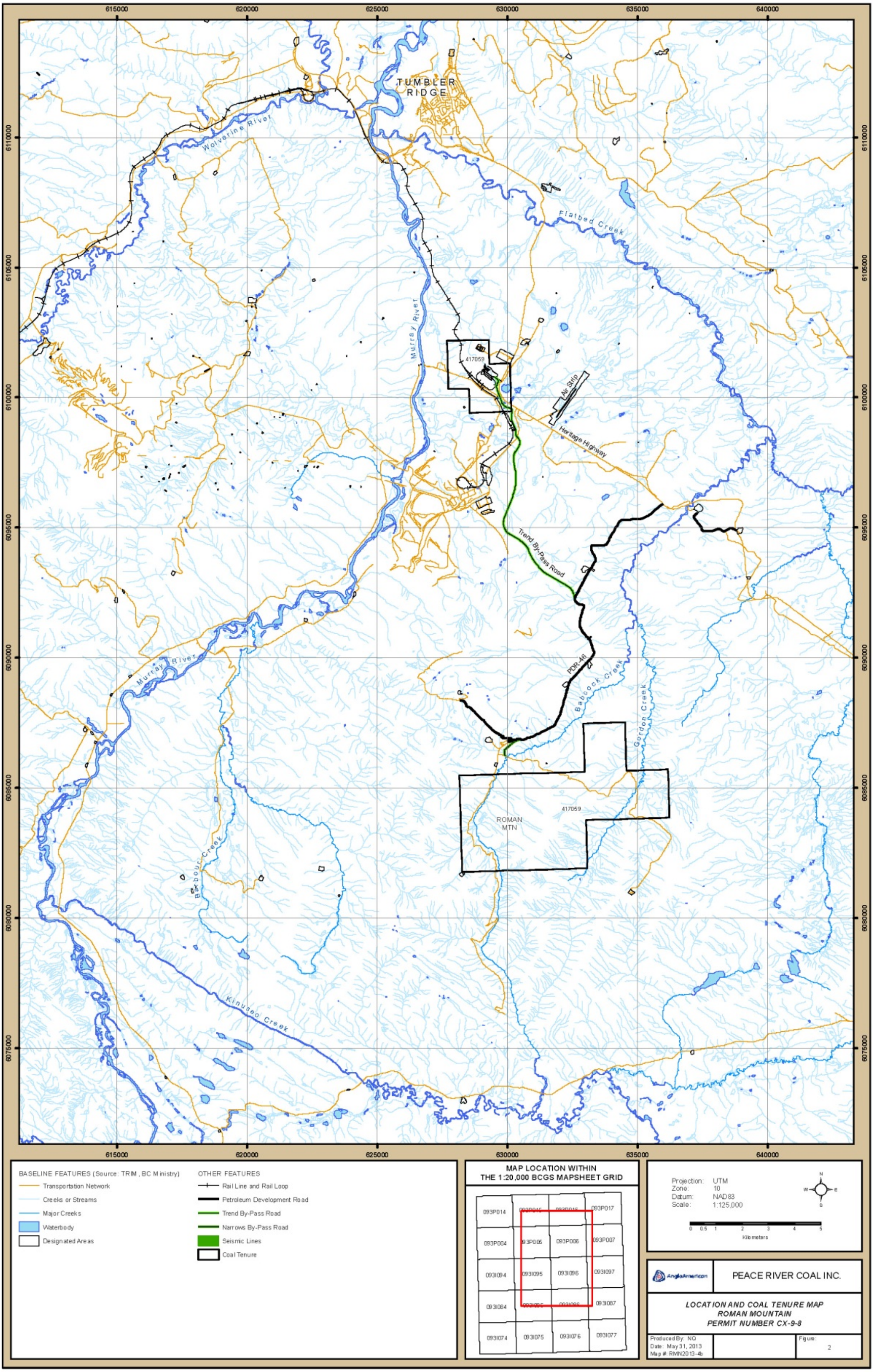
2014 Geophysical Logs
(Attached as separate folder on DVD)

Appendix 2

Maps
(Attached as separate folder on DVD)

Name

- Roman Location Map.jpg
- Roman 2014 detail.jpg
- Roman 2014 overall.jpg



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TUMBLER RIDGE
Wolverine River
Flatbed Creek
Murray River
417059
Air Strip
Heritage Highway
Trend By-Pass Road
PDR-46
Babcock Creek
Gordon Creek
ROMAN MTN
Barbour Creek
Kinuseo Creek
BASELINE FEATURES (Source: TRIM, BC Ministry)
Transportation Network
Creeks or Streams
Major Creeks
Waterbody
Designated Areas
OTHER FEATURES
Rail Line and Rail Loop
Petroleum Development Road
Trend By-Pass Road
Narrows By-Pass Road
Seismic Lines
Coal Tenure
MAP LOCATION WITHIN
THE 1:20,000 BCGS MAPSHEET GRID
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093P017
093P004
093P006
093P007
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093I095
093I096
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Kilometers
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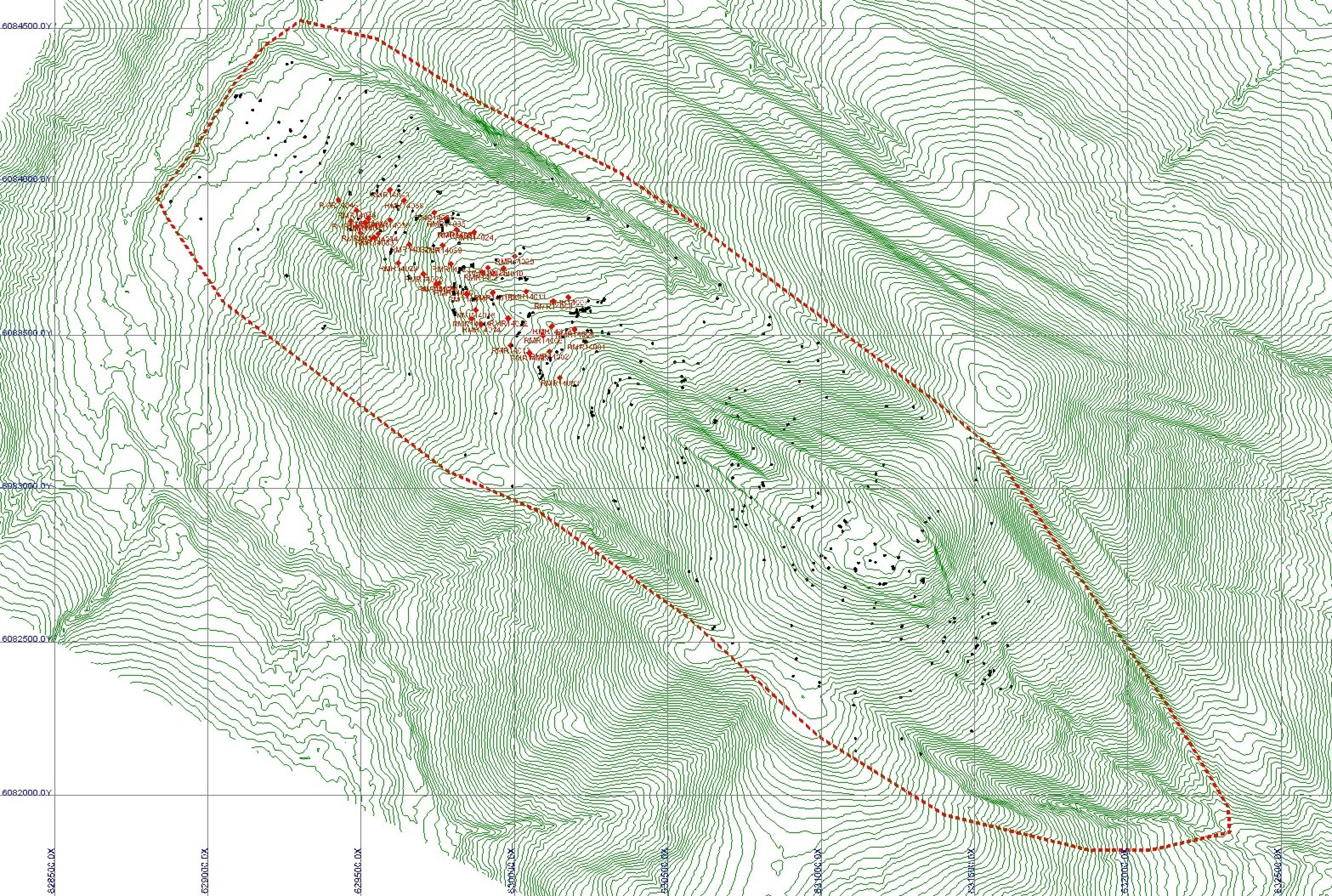
Figure:
2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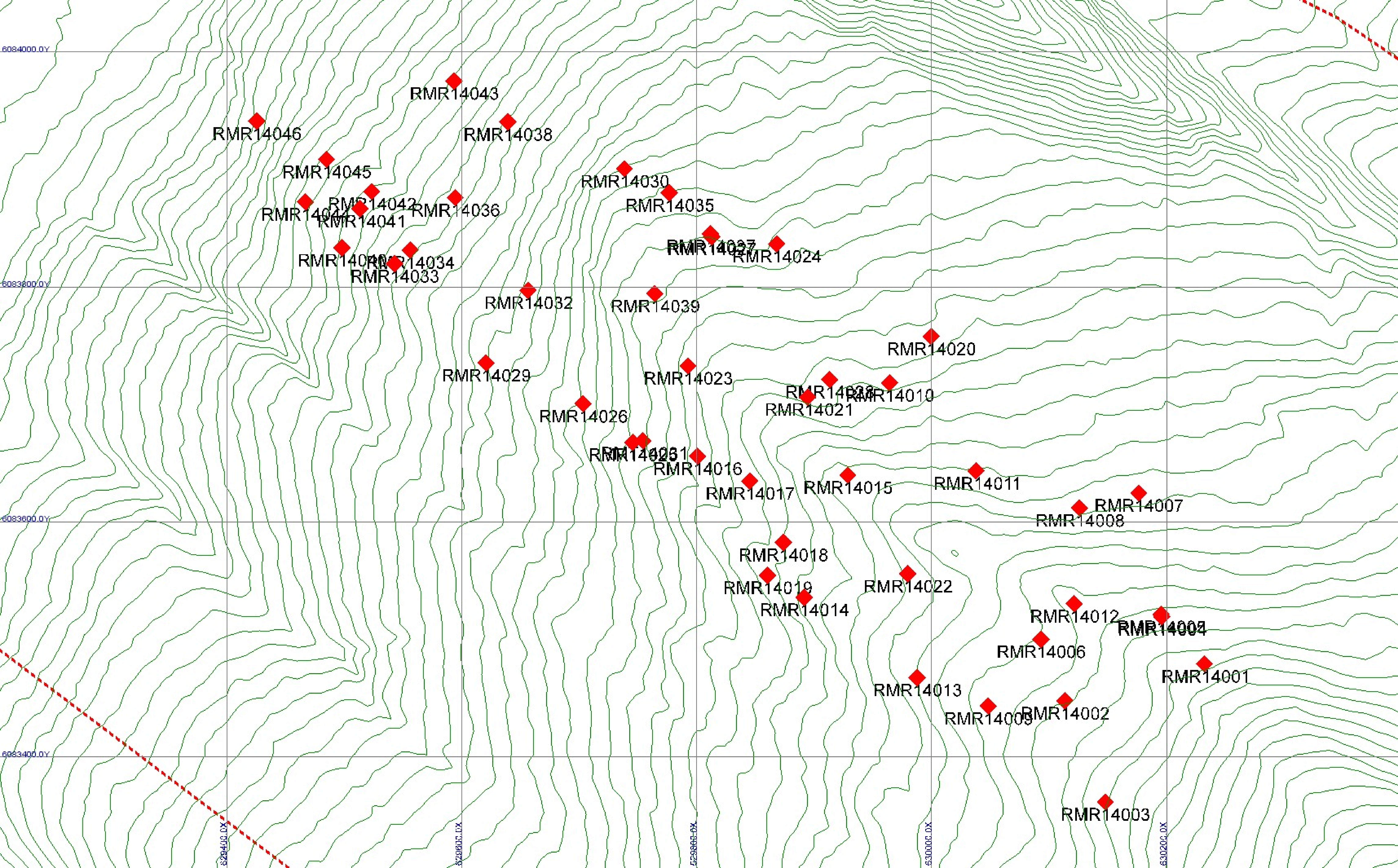

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RMR14019
RMR14014
RMR14012
RMR14006
RMR14001
RMR14013
RMR14002
RMR14003

Appendix 3

2014 Borehole Seam Intervals

Hole ID	Seam	From	To	A Thick
RMR14001	SD1	37.12	38.08	0.96
RMR14001	SD2	43.8	47.74	3.94
RMR14001	SE1	86.15	89.43	3.28
RMR14001	SE2	93.35	93.85	0.5
RMR14001	SF	117.2	120.08	2.88
RMR14001	SG	223.87	230.5	6.63
RMR14001	SG	236.95	247.15	10.2
RMR14001	SJ	247.63	253.78	6.15
RMR14001	SJ	257.07	261.87	4.8
RMR14002	SF	15.33	17.57	2.24
RMR14002	SG	66.82	73.5	6.68
RMR14002	SI	74.17	75.08	0.91
RMR14002	SJ	79.2	85.65	6.45
RMR14002	SK1	105.95	107.55	1.6
RMR14002	SK2	109.15	110.27	1.12
RMR14003	SG	32.05	33.6	1.55
RMR14003	SG	34.43	35.45	1.02
RMR14003	SJ	37.4	45.9	8.5
RMR14003	SK1	68.67	70.58	1.91
RMR14003	SK2	72.05	72.95	0.9
RMR14003	SK3	78.83	79.25	0.42
RMR14004	OV	0	10.89	10.89
RMR14004	SD1	36.63	37.5	0.87
RMR14004	SD2	42.55	45.77	3.22
RMR14004	SE1	68.92	71.3	2.38
RMR14004	SE2	71.86	76.06	4.2
RMR14004	SF	104.05	106.27	2.22
RMR14004	SG	193.25	197.43	4.18
RMR14004	SI	198.32	199.35	1.03
RMR14004	SJ	201.95	207.03	5.08
RMR14004	SK1	243.52	245.41	1.89
RMR14004	SK2	246.38	247.43	1.05
RMR14005	SD1	49.65	50.8	1.15
RMR14005	SD2	59.3	63.33	4.03
RMR14005	SE1	88.89	90.52	1.63
RMR14005	SE2	91.1	91.55	0.45
RMR14005	SE3	93.03	93.2	0.17
RMR14005	SF	107.5	109.95	2.45
RMR14005	SG	163.68	168.03	4.35
RMR14005	SJ	172.21	176.87	4.66
RMR14005	SK1	189.39	190.43	1.04
RMR14005	SK2	191.85	192.63	0.78
RMR14005	SK3	199.13	199.5	0.37
RMR14006	OV	0	2.15	2.15
RMR14006	SE1	15.7	17.65	1.95
RMR14006	SE2	18.28	18.93	0.65

Hole ID	Seam	From	To	A Thick
RMR14006	SE3	20.67	20.92	0.25
RMR14006	SF	39.4	42.57	3.17
RMR14006	SG	100.83	110.07	9.24
RMR14006	SJ	115.21	126.13	10.92
RMR14006	SJ	128.88	141.93	13.05
RMR14006	SK1	159.21	160.89	1.68
RMR14006	SK3	169.21	169.42	0.21
RMR14006	CSKL	198.9	199.1	0.2
RMR14007	OV	0	6.1	6.1
RMR14007	SF	15.25	16.95	1.7
RMR14007	SG	63.15	67.42	4.27
RMR14007	SG	67.92	68.63	0.71
RMR14007	SJ	71.37	77.75	6.38
RMR14007	SK1	88.87	89.86	0.99
RMR14007	SK2	91.37	92.03	0.66
RMR14007	SK3	97.52	97.9	0.38
RMR14007	CSKL	118.86	118.97	0.11
RMR14007	SL1	141.09	141.37	0.28
RMR14008	OV	0	11.57	11.57
RMR14008	SD2	11.57	14.2	2.63
RMR14008	OV	14.2	17.31	3.11
RMR14008	SE1	37	38.55	1.55
RMR14008	SE1	38.73	39.35	0.62
RMR14008	SE2	40.06	40.95	0.89
RMR14008	SE3	42.63	42.95	0.32
RMR14008	SF	60.48	62.98	2.5
RMR14008	SG	107.35	111.74	4.39
RMR14008	SJ	113.28	119.48	6.2
RMR14008	SK1	132.68	133.7	1.02
RMR14008	SK2	135.3	136.28	0.98
RMR14008	SK3	142.82	143.2	0.38
RMR14009	OV	0	6.12	6.12
RMR14009	SG	40.17	43.15	2.98
RMR14009	SI	43.95	44.87	0.92
RMR14009	SJ	49.23	56.43	7.2
RMR14009	SJ	62.03	63.25	1.22
RMR14009	SK1	80.47	81.75	1.28
RMR14009	SK2	83.35	84.25	0.9
RMR14009	SK3	91.71	92.2	0.49
RMR14009	CSKL	114.23	114.63	0.4
RMR14009	SL1	137.56	138.17	0.61
RMR14009	SL2	141.87	142.39	0.52
RMR14010	SD2	17.75	22.72	4.97
RMR14010	SE1	44.4	46.15	1.75
RMR14010	SE2	46.63	47.35	0.72
RMR14010	SE3	48.72	49.03	0.31

Hole ID	Seam	From	To	A Thick
RMR14010	SF	64.76	66.68	1.92
RMR14010	SG	105.62	107.93	2.31
RMR14010	SI1	108.42	108.8	0.38
RMR14010	SI2	109.07	109.41	0.34
RMR14010	SJ	111.52	116.45	4.93
RMR14010	SK1	131.57	132.45	0.88
RMR14010	SK2	133.7	134.5	0.8
RMR14010	SK3	137.69	137.94	0.25
RMR14010	CSKL	155.93	156.2	0.27
RMR14011	OV	0	5	5
RMR14011	SD1	7.9	9.94	2.04
RMR14011	SD1	55.78	56.92	1.14
RMR14011	SD2	64	67.56	3.56
RMR14011	SE1	91.67	93.75	2.08
RMR14011	SE2	94.15	95	0.85
RMR14011	SE3	96.6	96.94	0.34
RMR14011	SF	116.4	118.55	2.15
RMR14011	SG	169	173.43	4.43
RMR14011	SJ	195.5	199	3.5
RMR14011	SK1	212.5	214	1.5
RMR14011	SK2	214.5	215	0.5
RMR14011	SK3	219	220	1
RMR14012	SD1	12.8	13.16	0.36
RMR14012	SD2	15.77	21.8	6.03
RMR14012	SE1	56.45	59.91	3.46
RMR14012	SE2	60.19	60.95	0.76
RMR14012	SE3	62.2	63.43	1.23
RMR14012	SF	103.57	107.55	3.98
RMR14012	SG	226.65	233.92	7.27
RMR14012	SJ	238.16	250.15	11.99
RMR14012	SK1	278.85	280.86	2.01
RMR14012	SK2	283.1	284.28	1.18
RMR14012	SK3	293.7	294.12	0.42
RMR14013	SG	29.18	33.15	3.97
RMR14013	SJ	35.15	39.96	4.81
RMR14013	SJ	43.76	50.45	6.69
RMR14013	SK1	70.11	71.36	1.25
RMR14013	SK2	72.51	73.67	1.16
RMR14013	SK3	78.98	79.38	0.4
RMR14014	SG	24.61	26.11	1.5
RMR14014	SI1	28.35	29.2	0.85
RMR14014	SI2	30.47	30.85	0.38
RMR14014	SG	34.32	36.8	2.48
RMR14014	SJ	37.77	43.76	5.99
RMR14014	SK1	55.85	56.95	1.1
RMR14014	SK2	60.67	62.19	1.52

Hole ID	Seam	From	To	A Thick
RMR14014	SK3	63.55	64.55	1
RMR14014	CSKL	91.91	92.18	0.27
RMR14015	OV	0	3.96	3.96
RMR14015	SD1	18.4	19.85	1.45
RMR14015	SD2	29.95	33.55	3.6
RMR14015	SE1	67.12	69.55	2.43
RMR14015	SE2	70.1	71.05	0.95
RMR14015	SE3	72.8	73.3	0.5
RMR14015	SF	95.31	97.66	2.35
RMR14015	SG	139.98	146.37	6.39
RMR14015	SJ	149.22	156.28	7.06
RMR14015	SG	167.78	173.19	5.41
RMR14016	OV	0	3	3
RMR14016	SF	20.08	22.23	2.15
RMR14016	SG	64.98	70.3	5.32
RMR14016	SJ	72.85	80.65	7.8
RMR14016	SK2	94.58	95.8	1.22
RMR14016	SK3	103.35	103.83	0.48
RMR14016	CSKL	124.6	125	0.4
RMR14017	OV	0	2.8	2.8
RMR14017	SE1	5.3	7.5	2.2
RMR14017	SE2	8.1	9.25	1.15
RMR14017	SE3	10.78	11.54	0.76
RMR14017	SF	31.48	33.55	2.07
RMR14017	SG	75.4	81.3	5.9
RMR14017	SJ	83.38	90.8	7.42
RMR14017	SK1	104.5	106.45	1.95
RMR14017	SK2	107	108.3	1.3
RMR14017	SK3	113.54	114.01	0.47
RMR14017	CSKL	134.74	135	0.26
RMR14018	OV	0	3.32	3.32
RMR14018	SG	54.68	58.68	4
RMR14018	SJ	61.15	66.52	5.37
RMR14018	SJ	82.47	87.52	5.05
RMR14018	SK1	88.4	88.75	0.35
RMR14018	SK2	89.83	90.53	0.7
RMR14018	SK3	95.46	95.85	0.39
RMR14018	CSKL	117.4	117.84	0.44
RMR14019	OV	0	1	1
RMR14019	SG	21.8	26.1	4.3
RMR14019	SJ	30.1	32.17	2.07
RMR14019	SG	33.28	36.17	2.89
RMR14019	SJ	38.5	39.79	1.29
RMR14019	SK1	53.68	54.42	0.74
RMR14019	SK2	57.56	58.71	1.15
RMR14019	SK3	64.12	64.68	0.56

Hole ID	Seam	From	To	A Thick
RMR14019	CSKL	87.6	87.9	0.3
RMR14020	OV	0	4	4
RMR14020	SF	5.63	7.55	1.92
RMR14020	SG	49.79	53.84	4.05
RMR14020	SJ	56.08	59.54	3.46
RMR14020	SK1	71.91	72.74	0.83
RMR14020	SK2	73.36	73.96	0.6
RMR14020	SK3	77.24	77.52	0.28
RMR14021	OV	0	6	6
RMR14021	SD1	37	38.41	1.41
RMR14021	SD2	45.92	50.05	4.13
RMR14021	SE1	71.25	74.1	2.85
RMR14021	SE2	74.67	76.02	1.35
RMR14021	SE3	78.8	80.02	1.22
RMR14021	SF	103.66	106.12	2.46
RMR14021	SG	146.61	151.87	5.26
RMR14021	SJ	155.7	164.6	8.9
RMR14021	SK1	181.49	183	1.51
RMR14021	SJ	184.38	194.12	9.74
RMR14021	SK1	218.58	220.18	1.6
RMR14021	SK2	221.5	225.02	3.52
RMR14021	SK3	230.98	231.7	0.72
RMR14022	OV	0	3.05	3.05
RMR14022	SE1	11.45	14.14	2.69
RMR14022	SE2	14.75	15.6	0.85
RMR14022	SE3	17.3	17.67	0.37
RMR14022	SF	37.51	39.8	2.29
RMR14022	SG	88.61	97.56	8.95
RMR14022	SJ	101.38	103.45	2.07
RMR14022	SJ	106.96	113.28	6.32
RMR14022	SK1	126.59	128.22	1.63
RMR14022	SK2	129.67	133.29	3.62
RMR14022	SK3	138.24	138.49	0.25
RMR14023	SD1	10.38	11.62	1.24
RMR14023	SD2	17.64	20.68	3.04
RMR14023	SE1	45.06	46.88	1.82
RMR14023	SE2	47.34	48.2	0.86
RMR14023	SE3	49.57	49.84	0.27
RMR14023	SF	67.84	70.12	2.28
RMR14023	SG	110.65	116.58	5.93
RMR14023	SJ	118.93	146.3	27.37
RMR14024	OV	0	3	3
RMR14024	SF	22.88	25.17	2.29
RMR14024	SG	58.6	59.69	1.09
RMR14024	SJ	62.25	68.85	6.6
RMR14024	SK1	82.66	83.72	1.06

Hole ID	Seam	From	To	A Thick
RMR14024	SK2	85.12	86.38	1.26
RMR14024	SK3	89.46	89.73	0.27
RMR14025	OV	0	2	2
RMR14025	SG	38.9	45.9	7
RMR14025	SJ	47.24	51.4	4.16
RMR14025	SK1	61.49	62.48	0.99
RMR14025	SK1	63.8	67.83	4.03
RMR14025	SK2	68.85	69.65	0.8
RMR14025	SK3	73.96	74.89	0.93
RMR14026	OV	0	1	1
RMR14026	SG	38.14	43.2	5.06
RMR14026	SJ	46.55	51.25	4.7
RMR14026	SK1	62	62.95	0.95
RMR14026	SK2	64.28	65.03	0.75
RMR14026	SK1	67.67	69.94	2.27
RMR14026	SK2	70.95	72.45	1.5
RMR14026	SK3	77.65	77.99	0.34
RMR14026	CSKL	98.81	99.16	0.35
RMR14027	OV	0	3.31	3.31
RMR14027	SD2	3.31	8.91	5.6
RMR14027	SE1	36.45	38.15	1.7
RMR14027	SE2	38.45	39.95	1.5
RMR14027	SE3	41.89	42.4	0.51
RMR14027	SF	58.72	60.7	1.98
RMR14027	SG	97.95	103.4	5.45
RMR14027	SJ	105.5	108.3	2.8
RMR14027	SK1	123.85	124.65	0.8
RMR14027	SK2	125.72	126.52	0.8
RMR14027	SK3	130.5	130.86	0.36
RMR14027	CSKL	152.12	152.42	0.3
RMR14028	OV	0	6	6
RMR14028	SC2	15.52	18.18	2.66
RMR14028	SD1	68.5	69.62	1.12
RMR14028	SD2	76.9	79.47	2.57
RMR14028	SE1	105.21	106.36	1.15
RMR14028	SE1	106.64	107.84	1.2
RMR14028	SE2	110.28	110.62	0.34
RMR14028	SF	120.93	123.55	2.62
RMR14028	SG	166.5	171.58	5.08
RMR14028	SI	173.11	174.01	0.9
RMR14028	SJ	176.69	181.2	4.51
RMR14029	OV	0	3	3
RMR14029	SG	18.58	24.64	6.06
RMR14029	SJ	26.72	35.53	8.81
RMR14029	SK1	49.25	50.4	1.15
RMR14029	SK2	53.38	55.45	2.07

Hole ID	Seam	From	To	A Thick
RMR14029	SK1	60.72	62	1.28
RMR14029	SK1	63.53	64.06	0.53
RMR14029	SK2	65.1	66.3	1.2
RMR14029	SK3	72.06	72.65	0.59
RMR14030	OV	0	3	3
RMR14030	SD1	43.55	44.7	1.15
RMR14030	SD2	60.03	61.23	1.2
RMR14030	SE1	88.77	90.63	1.86
RMR14030	SE2	90.93	91.35	0.42
RMR14030	SF	121.39	124.2	2.81
RMR14030	SG	202.15	203.42	1.27
RMR14030	SJ	208.36	215.8	7.44
RMR14030	SK1	247	248.45	1.45
RMR14030	SK2	250.2	251.95	1.75
RMR14030	SK3	255.1	256.25	1.15
RMR14032	OV	0	5	5
RMR14032	SF	23.25	25.25	2
RMR14032	SG	62.27	66.12	3.85
RMR14032	SJ	71.99	77.45	5.46
RMR14032	SG	86.05	88.97	2.92
RMR14032	SJ	91.22	94.6	3.38
RMR14032	SJ	96.23	104.21	7.98
RMR14032	SK1	115.85	116.91	1.06
RMR14032	SK2	117.67	119.08	1.41
RMR14032	SK3	122.32	123.42	1.1
RMR14033	OV	0	2	2
RMR14033	SG	29.26	39.1	9.84
RMR14033	SG	39.43	42	2.57
RMR14033	SG	42.35	43.83	1.48
RMR14033	SG	44.02	44.75	0.73
RMR14033	SJ	47.11	52.5	5.39
RMR14033	SK1	62.4	63.46	1.06
RMR14033	SK2	65.04	65.95	0.91
RMR14033	SK3	76.24	76.65	0.41
RMR14034	OV	0	3	3
RMR14034	SG	36.81	40.82	4.01
RMR14034	SJ	66.72	68.18	1.46
RMR14034	SK1	79.69	80.72	1.03
RMR14034	SK2	81.35	82.35	1
RMR14034	SK3	87.16	87.49	0.33
RMR14034	SK3	93	93.54	0.54
RMR14034	CSKL	120.4	120.5	0.1
RMR14035	OV	0	3	3
RMR14035	SE1	27.18	29.47	2.29
RMR14035	SE2	30.1	30.95	0.85
RMR14035	SE3	32.31	32.55	0.24

Hole ID	Seam	From	To	A Thick
RMR14035	SF	52.82	55.29	2.47
RMR14035	SG	105.87	115.92	10.05
RMR14035	SJ	118.4	127.17	8.77
RMR14035	SK1	148	150.37	2.37
RMR14035	SK2	151.67	152.9	1.23
RMR14035	CSKL	178.89	179.12	0.23
RMR14036	OV	0	4	4
RMR14036	SF	12.71	14.8	2.09
RMR14036	SG	96.71	97.8	1.09
RMR14036	SJ	100.98	116.46	15.48
RMR14036	SK1	131.93	132.92	0.99
RMR14036	SK2	134.28	136.67	2.39
RMR14036	SK3	139.75	140.02	0.27
RMR14036	SK1	198.74	200.28	1.54
RMR14036	SK2	200.55	201.4	0.85
RMR14036	SK3	206.44	206.65	0.21
RMR14036	SK3	207.15	207.57	0.42
RMR14037	OV	0	2.26	2.26
RMR14037	SB	2.26	11.19	8.93
RMR14037	SC1	45.4	46.2	0.8
RMR14037	SC2	47.55	48.8	1.25
RMR14037	SD1	60.95	62.6	1.65
RMR14037	SD2	65.37	69.7	4.33
RMR14037	SE1	93.73	95	1.27
RMR14037	SF	119.77	120.1	0.33
RMR14037	SG	175.75	176.85	1.1
RMR14037	SJ	179.8	185.1	5.3
RMR14037	SK1	206.6	208.05	1.45
RMR14037	SK2	209.68	211.15	1.47
RMR14037	SK3	216.1	217.8	1.7
RMR14037	CSKL	256.72	257.05	0.33
RMR14038	OV	0	3	3
RMR14038	SD0	23.89	24.37	0.48
RMR14038	SD1	27.23	27.59	0.36
RMR14038	SD2	28.47	29.85	1.38
RMR14038	SE1	46.17	48.42	2.25
RMR14038	SE2	48.78	49.49	0.71
RMR14038	SF	57.92	59.54	1.62
RMR14038	SG	109.72	112.28	2.56
RMR14038	SJ	115.34	123.49	8.15
RMR14039	OV	0	1	1
RMR14039	SD1	15.85	17.04	1.19
RMR14039	SD2	23.76	26.55	2.79
RMR14039	SE1	49.37	51.45	2.08
RMR14039	SE2	51.95	52.83	0.88
RMR14039	SE3	54.4	54.58	0.18

Hole ID	Seam	From	To	A Thick
RMR14039	SF	88.53	91.5	2.97
RMR14039	SG	154.53	162.95	8.42
RMR14039	SJ	162.95	169.24	6.29
RMR14039	SJ	171.27	180.34	9.07
RMR14039	SK1	198.86	200.47	1.61
RMR14039	SK2	202.42	204.23	1.81
RMR14039	SK3	210.89	211.16	0.27
RMR14040	OV	0	1	1
RMR14040	SG	17.67	26.68	9.01
RMR14040	SG	26.98	32.68	5.7
RMR14040	SJ	37.36	46.64	9.28
RMR14040	SK1	59.19	60.4	1.21
RMR14040	SK2	61.48	62.48	1
RMR14040	SK3	68.35	68.98	0.63
RMR14041	OV	0	1	1
RMR14041	SG	37.53	42.15	4.62
RMR14041	SJ	45.94	61.72	15.78
RMR14041	SG	66.5	70.61	4.11
RMR14041	SJ	70.61	81.13	10.52
RMR14041	SJ	85	88.85	3.85
RMR14041	SK1	105.92	107.72	1.8
RMR14041	SK1	122.83	124.5	1.67
RMR14041	SK2	126.56	128.45	1.89
RMR14041	SK3	133.56	134.11	0.55
RMR14042	OV	0	2	2
RMR14042	SG	54.85	60.6	5.75
RMR14042	SJ	65.9	75.53	9.63
RMR14042	SK3	106.15	106.83	0.68
RMR14042	SJ	108.05	114.65	6.6
RMR14042	SJ	124.07	131.63	7.56
RMR14042	SJ	138.17	146.43	8.26
RMR14042	SK1	164.8	166.5	1.7
RMR14042	SK2	168.1	170.07	1.97
RMR14042	SK3	176.75	177.33	0.58
RMR14043	OV	0	2.95	2.95
RMR14043	SD2	2.95	7.2	4.25
RMR14043	SE1	34.5	36.1	1.6
RMR14043	SE2	36.72	37.67	0.95
RMR14043	SF	70.67	72.35	1.68
RMR14043	SJ	153.15	157.24	4.09
RMR14043	SK1	187.68	190.03	2.35
RMR14043	SK2	191.95	193	1.05
RMR14043	SK3	197.25	198.5	1.25
RMR14044	OV	0	8	8
RMR14044	SG	20.85	29.5	8.65
RMR14044	SJ	29.82	37.31	7.49

Hole ID	Seam	From	To	A Thick
RMR14044	SJ	37.69	43.4	5.71
RMR14044	SG	47.32	54.57	7.25
RMR14044	SJ	55.18	65.41	10.23
RMR14044	SK1	78.43	79.4	0.97
RMR14044	SK2	80.4	81.25	0.85
RMR14044	SK3	85.04	85.87	0.83
RMR14045	OV	0	6.44	6.44
RMR14045	SG	50.18	57.12	6.94
RMR14045	SJ	60.16	71.67	11.51
RMR14045	SJ	95	102.13	7.13
RMR14045	SK1	115.16	116.3	1.14
RMR14045	SK2	117.35	118.55	1.2
RMR14045	SK1	136.72	138.52	1.8
RMR14045	SK2	139.45	141.27	1.82
RMR14045	SK3	144.99	146.3	1.31
RMR14046	OV	0	5	5
RMR14046	SG	9.75	16.05	6.3
RMR14046	SJ	18.95	28.13	9.18
RMR14046	SJ	37.7	49.15	11.45
RMR14046	SG	61.42	64.25	2.83
RMR14046	SG	66.64	68.6	1.96
RMR14046	SJ	68.6	75.82	7.22
RMR14046	SK1	94.55	95.67	1.12
RMR14046	SK2	96.85	97.63	0.78
RMR14046	SK3	101.57	102.44	0.87