MAR 20140014: BASELINE RIDGE

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GRAYMONT WESTERN CANADA INC.

2014 EXPLORATION AND FIELDWORK AT THE BASELINE RIDGE METALLIC AND INDUSTRIAL MINERALS PERMIT, WEST-CENTRAL ALBERTA

PART B

Metallic and Industrial Minerals Permit
9301010011

Geographic Coordinates

52°09' N to 52°19' N
115°29' W to 115°40' W

NTS Sheets 83 B/04 and B/05

Owner and Operator:	Graymont Western Canada Inc. 260, 4311 - 12 Street NE Calgary, Alberta T2E 4P9
Consultant:	Dahrouge Geological Consulting Ltd. 18, 10509 - 81 Avenue Edmonton, Alberta T6E 1X7
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Date Submitted:	December 11, 2014

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PART C

1. SUMMARY

During August 2014, the northern part of Clearwater Range, west of Rocky Mountain House and within Metallic and Industrial Minerals (MAIM) Permit 9301010011, was explored for high-quality carbonate rocks. Exploration conducted in 2014 was a follow-up to previous exploration conducted in the area.

Outcrops were mapped and 14 rock samples were collected within the Baseline Ridge Permit, representing approximately 49.5 m of stratigraphy. Samples were sent to a laboratory for whole-rock analysis.

Throughout this report attitudes of bedding and other planar features are given as A°/B° SW, where A° is the azimuth of the strike and B° is the amount of dip in the direction indicated (right-hand rule). A magnetic declination of 16°41' east was used. Where bedding was not evident, stratigraphic thicknesses were calculated using orientations from adjacent units. Where more than one bedding orientation was measured, the mean orientation is used.

2. INTRODUCTION

The 2014 exploration within the Baseline Ridge Permit was conducted by Dahrouge Geological Consulting Ltd. (Dahrouge), on behalf of Graymont Western Canada Inc. (Graymont). This assessment report describes the exploration conducted within MAIM Permit 9301010011, which encompasses the northern part of the Clearwater Range of the Alberta Foothills. The 2014 exploration was authorized by Darren Anderson of Graymont Western Canada Inc.

The objectives of the 2014 exploration were to expand on the previously explored areas, and to locate and better define carbonate units throughout the property. This report includes information on the geology and quality of carbonates encountered while mapping and sampling outcrops within the permit area.

3. GEOGRAPHIC SETTING AND ACCESS

3.1 LOCATION AND ACCESS

MAIM Permit 9301010011 encompasses the northern parts of the Clearwater Range south of North Saskatchewan River (Fig. 3.1). It includes lands to the northwest of the quarry of Prairie Creek Quarries Ltd. on Baseline Ridge to Ram River to Tawadina Ridge, within west-central

Alberta (Fig. 3.2). The quarry of Prairie Creek Quarries Ltd. is approximately 10 km from the south end of Baseline Ridge.

The northern part of Clearwater Range lies within Prairie Creek and Ram-Clearwater Resource Management areas (Alberta Forestry and Wildlife 1986 and 1988), and is mostly within Multiple Land Use Zone 5. The northern parts of Baseline Ridge along Ram River, Fall Creek and Prairie Creek are within Critical Land Use Zone 2.

Ram River and Tawadina Ridge, within the northern parts of Clearwater Range, are accessible via Secondary Highway 752 and north on Northfork Road, an improved gravel road 25 km southwest of Rocky Mountain House. Northfork Road continues to the northwest and west for approximately 40 km to a private, all-weather logging road belonging to Sunpine Forest Products Ltd. The Sunpine Road continues to the southeast for approximately 32 km to Secondary Highway 752; both the north and south ends of the road are commonly barred by gates. A network of logging roads and cut lines that branch from or cross the Sunpine Road provide good access to the Ram River and Tawadina Ridge areas.

Access to and throughout the property are is by truck, all-terrain vehicles, helicopter, and extensive hiking. Several logging roads and cut lines spurring off the main roads provide valuable ATV access throughout the property area.

Unfortunately, the logging roads that previously accessed an area of interest north of Ram River have since been reclaimed and are currently impassable with ATV.

3.2 INFRASTRUCTURE

Accommodations, food, fuel and other necessary services are available in Caroline and Rocky Mountain House. The local economy is primarily based on agriculture, forestry, and energy-based industries.

Rocky Mountain House, with a population of about 7,000, is accessed by traveling 67 km west of Red Deer along the David Thompson Highway (Highway 11), and then 12 km north along Highway 22.

The village of Caroline is about 49 km from Rocky Mountain House, 37 km south along Highway 22 and 12 km east along Highway 54. Caroline has a population of about 550.

3.3 TOPOGRAPHY, VEGETATION AND CLIMATE

The Baseline Ridge permit area is included in the Eastern-Slope Montane Forest Ecological Region, and lies within the Rocky-Clearwater District of the Alberta Forest Reserve. In the

subalpine zone, vegetation consists of stunted subalpine fir and Englemann Spruce, and alpine foliage above the treeline. Vegetation in areas of rugged limestone outcroppings is generally sparse, and commonly consists of junipers, other low brush, and grasses. Below the treeline, vegetation consists of dense stands of Aspen, Lodgepole Pine, White Spruce, and less frequent stands of Douglas Fir. Areas of lowest relief, particularly along Fall Creek, have extensive meadows and are covered with sparse stands of Black spruce and thick undergrowth, with local muskegs and swamps.

The property is comprised of a series of northwest-trending ridges and valleys where elevations range from approximately 1,180 m along Ram River to almost 2,000 m atop Baseline Ridge. The Property is cut by a number of east-trending tributaries of the Ram River drainage basin, including, from south to north, Fall Creek, Ram River and Tawadina Creek.

Climate is sub-alpine with average summer temperatures of 20° to 25°C and winter temperatures of -15° to -20°C, with extremes of 35°C and -40°C. Rainfall averages about 35 cm per year; snowfall averages about 35 to 45 cm with the majority falling in December and January.

3.4 FIELD OPERATIONS

Field operations were conducted by a four-person geological crew from Dahrouge, based in a hotel in Rocky Mountain House.

Transportation to and from the property was by helicopter, based out of the Rocky Mountain House Airport.

Garmin GPSmap 60CSx instruments were used to mark outcrop locations and record access information. Compasses were set at a magnetic declination of 16°41' east.

4. PROPERTY, EXPLORATION AND EXPENDITURES

4.1 PROPERTY SUMMARY

In early 2001, Graymont acquired MAIM Permit 9301010011, west of Rocky Mountain House, Alberta. This permit covers Paleozoic limestones along the northern part of Clearwater Range at Baseline Ridge and Tawadina Ridge (Fig.'s 3.2 and 4.1).

In 2002, the permit was reduced from an original size of 5,888 hectares to 2,832 hectares, based on the 2001 and 2002 exploration. Exploration programs conducted in 2004, 2006 and 2008 resulted in a further reduction of the permit to its current size of 2,048 hectares.

4.2 2014 EXPLORATION SUMMARY

From August 6-7, 2014, Dahrouge, on behalf of Graymont, conducted exploration for carbonate lithotypes within west-central Alberta. The work was undertaken to determine the location, quality and extent of carbonate units in the permit area.

Carbonate outcrops were examined and a total of 14 samples were collected (Fig. 4.2). Geological observations were recorded, including lithologic information, measurements of structural elements, and other pertinent details (Appendix 2). A solution of 10% HCl was used to assess carbonate quality in the field, and rock samples were shipped to Central Lab of Graymont Western U.S. Inc. in Utah for analyses (Appendix 3). In some instances, interval thicknesses were determined by measuring outcrops perpendicular to bedding, where it could be identified. Field maps were completed on 1:10,000 and 1:20,000 scale map sheets and concentrated on areas north and south of Fall Creek, along Baseline Ridge.

4.3 EXPLORATION EXPENDITURES

Expenditures for 2014 totaled $15,269.77 (Appendix 1). The Baseline Ridge Property (MAIM Permit 9301010011) will reach its term expiry date on January 15, 2015, and hence a decision on which portions will be converted to lease is pending.

Expenditures are allocated to MAIM permit 9301010011 as follows:

Assessment Period MAIM Permit 9301010011	Required Expenditures	Assigned Expenditures	Expiry Date
Years 13 & 14	$14,524.63[1]	$14,524.63	Jan. 15, 2015

[1] Calculated from $30,720-16,195.37 excess expenditures from previous term

5. REGIONAL GEOLOGY

5.1 STRATIGRAPHY

At Clearwater Range, carbonate lithologies are known to occur within both Paleozoic and Mesozoic sequences (Table 5.1, Fig. 4.2). Paleozoic limestones are described in the Upper Devonian Palliser Formation, Upper Devonian to Lower Carboniferous Banff Formation and the Lower Carboniferous Rundle Assemblage. The Paleozoic limestones encountered within the Baseline Ridge Permit were from the Turner Valley and Pekisko formations of the Rundle Assemblage, and the Banff Formation of the Banff Assemblage. Mesozoic rocks of the Fernie Group have been noted within the permit group area.

TABLE 5.1 GENERALIZED PALEOZOIC STRATIGRAPHY OF FOOTHILLS AND FRONT RANGES, WEST-CENTRAL ALBERTA*

System or Subsystem	Stratigraphic Unit		
	Assemblage / Group	Formation	
		S	N
Lower Carboniferous	Rundle Assemblage	Mount Head	
		[1] Livingstone	Turner Valley
			Shunda
			Pekisko
	Banff Assemblage	Banff	
		Exshaw	
		[1] Palliser	
Upper Devonian	Fairholme Group°	Alexo	
		Southesk	Mount Hawk
		Cairn	
Cambrian		Pika	
		Eldon	
		Stephen	
		Cathedral	

*Compiled from MacKenzie (1969), Richards et al. (1994), Switzer et al. (1994), and Holter (1994).
° Fairholme Group of MacKenzie (1969) is partly equivalent to the Woodbend Group (Switzer et al., 1994).
[1] Current limestone production (*from* Holter, 1994)

5.1.1 Banff Assemblage

In west-central Alberta, the Exshaw, Banff and Yohin formations comprise the Banff Assemblage (Richards et al. 1994). Only exposures of the Banff Formation appear within the Baseline Ridge Permit. The Banff Formation is a heterogeneous association of carbonates and fine-grained siliciclastics deposited on poorly differentiated carbonate platforms. Westward, the uppermost Banff Formation grades laterally into the Rundle Assemblage.

5.1.2 Rundle Assemblage

The Lower Carboniferous Rundle Assemblage extends from MacKenzie Mountains in the Arctic south through the Peace River Embayment to southeastern British Columbia. In west-central Alberta, it comprises shallow-marine platform and ramp carbonates which prograded westward over deeper water shales and carbonates of the Banff Assemblage. The lower Rundle Assemblage is subdivided into the transgressive carbonate Pekisko Formation, and two regressive successions of restricted-marine carbonates and subordinate anhydrite assigned to the Shunda and Turner Valley formations (Richards et al. 1994). In southern Alberta the Pekisko grades laterally into the uppermost Banff Formation. The Turner Valley Formation extends from east-central British Columbia to southwest Alberta. According to Richards et al. (1994), the Turner Valley Formation thickens to the southwest and for most of its length is 50 m to 120 m thick. The type section near Turner Valley is 152 m thick and divisible into four beds.

Earlier work by Douglas (1958), and MacQueen and Bamber (1968) indicate that the eastern peritidal sequences of the uppermost Pekisko, Shunda and lower Turner Valley grade south and southwestward into the more open-marine sequence of the Livingstone Formation (Table 5.1).

The upper Rundle Assemblage includes the transgressive Mount Head Formation.

5.1.3 Fernie Group

The Fernie Group includes all but the uppermost Jurassic strata of western Alberta and eastern British Columbia. Although treated as a Group, the Fernie is divided into a number of members and informal units with uncertain relations and continuity. The Fernie Group thickens gently and irregularly west and southwest.

Outcrops of the Fernie Group, noted within the Baseline Ridge Permit, consist of large thicknesses of shale and calcareous sandstones with minor conglomerate.

5.2 STRUCTURE

The northern portions of Clearwater Range, including Baseline Ridge, are along the leading edge of the Seven Mile Creek Thrust plate, the northwest continuation of the Fallentimber Thrust Sheet (Dahrouge and Smith, 2003). Seven Mile Creek Thrust plate, bordered to the east by the Baseline Thrust, is an assemblage of folded and faulted Paleozoic and Jurassic strata (Dahrouge and Halferdahl, 1995). North of Prairie Creek, along Clearwater Range, the relevant structural elements, from west to east include the northwesterly trending Prairie Creek Anticline with its axis along Baseline Ridge, the northerly trending Baseline Syncline, the northerly trending Baseline Anticline with its axis along the east flank of Baseline Ridge and Tawadina Ridge, and Baseline Thrust, which marks the eastern boundary of Clearwater Range.

In general, Prairie Creek Anticline is nearly symmetrical and upright with fairly steeply dipping limbs that has undergone no major tilting. In the Fall Creek area, the Prairie Creek Anticline plunges very slightly to the northwest (Dahrouge and Smith, 2003). Baseline Anticline, to the east, is asymmetrical with the east limb nearly vertical and the west limb dipping at a more shallow angle (Dahrouge and Smith, 2003, after Erdman, 1950).

6. RESULTS

Two days were spent mapping and sampling carbonate outcrops in detail. The 2014 exploration concentrated on defining stratigraphic unit locations and contacts within previously under-explored areas of the property.

Carbonate lithologies of the Banff and Rundle assemblages were examined and sampled within MAIM Permit 9301010011, on Baseline Ridge along Fall Creek (Fig. 4.2). A total of 14 intervals were examined and sampled, representing approximately 49.5 m of stratigraphy (Appendix 2). Where bedding could not be identified, stratigraphic measurements were based on the previously determined regional trend or deduced from surrounding measurements where possible.

The majority of the outcrops visited in 2014 were within the Pekisko Formation. Analytical results were somewhat variable, presumably due to the fact that different members within the formation were sampled. The highest-quality sample section was 2014-02, which averaged 98.36% $CaCO_3$, 1.14% $MgCO_3$ and 0.23% SiO_2 over approximately 21.5 m. The section was located along the NW flank of Baseline Ridge, approximately 50 m north of Fall Creek (Fig. 4.2). The high-quality Pekisko intervals generally consist of resistant and massive, light- to

medium-brownish-grey, fine- to coarse-grained crinoidal lime wackestone to packstone. The silica content is consistently low, with all but two samples returning less than 0.63% SiO_2. Lower quality intervals generally consist of less resistant, medium- to dark-brownish-grey, micritic to fine-grained lime mudstone to packstone. Overall, the Pekisko Formation has the greatest high-calcium limestone potential in the area.

A single outcrop the Banff Formation was examined and sampled in 2014. The Banff Formation consists of tan weathered, medium-brownish-grey fresh, micritic to fine-grained (with minor coarse-grained bioclasts) lime mudstone to wackestone. The sample returned values of 88.40% $CaCO_3$, 7.53% $MgCO_3$ and 2.83% SiO_2 over 2 m. The Banff Formation is not considered a unit of interest due to its low $CaCO_3$ values and high SiO_2 content.

No Fernie Group outcrops were noted during the 2014 exploration.

7. CONCLUSIONS

Carbonate units of the Pekisko and Banff formations were examined and sampled along Baseline Ridge north and south of Fall Creek, within MAIM Permit 9301010011. A total of 14 discrete intervals were sampled and described in detail.

Currently, access to the property is limited. Extensive hiking and/or helicopter support are required to reach much of the property.

As MAIM Permit 9301010011 has reached its term expiry, a decision is pending on which portions will be converted to lease.

8. REFERENCES

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9. STATEMENT OF QUALIFICATIONS

I, Patrick Kluczny, [redacted] do hereby certify that:

- I am a geologist of Dahrouge Geological Consulting Ltd., Suite 18, 10509 - 81 Ave., Edmonton, Alberta, T6E 1X7.
- I am a 2006 graduate of the University of Alberta, Edmonton, Alberta with a B.Sc. in Geology.
- I have practiced my profession as a geologist continuously since 2006.
- I am a registered Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta, member M81985.
- I hereby consent to the copying or reproduction of this Assessment Report following the one-year confidentiality period.
- I am the author of the report entitled "2014 Exploration and Fieldwork at the Baseline Ridge Metallic and Industrial Minerals Permit, West-Central Alberta" and accept responsibility for the veracity of technical data and results.

Dated this 11th day of December, 2014.

PROFESSIONAL GEOLOGIST ALBERTA PATRICK KLUCZNY

Patrick Kluczny, B.Sc., P.Geol.

APEGA M81985

APPENDIX 1: COST STATEMENT

a) **Personnel**		$ 4,780.57
b) **Food and Accommodation**		$ 1,679.06
c) **Transportation**		$ 6,780.99
d) **Instrument Rental**		$ 103.26
e) **Drilling**	n/a	
f) **Analyses**		$ 413.00
h) **Other** (Misc. supplies, Software rental, Field maps)		$ 124.72
Total		$ 13,881.61
Administration (10%)		$ 1,388.16
Total + Administration		**$ 15,269.77**

[redacted]

P. Kluczny, B.Sc., P.Geol.

Edmonton, Alberta
December 11, 2014

C

APPENDIX 2: SAMPLE DESCRIPTIONS AND ASSAY RESULTS FROM THE BASELINE RIDGE PROPERTY

Notes: Stratigraphic thicknesses are based on measured attitudes of bedding listed below, with appropriate interpolations. Attitudes are strike and dip (right-hand rule). Sections are listed in numerical order of samples, which does not necessarily represent stratigraphic order. Most samples consist of chips at 30 cm intervals. UTM coordinates are NAD83, Zone 11N. Section locations are shown in Figure 4.2. Stratigraphy Abbreviations: Dpa - Devonian Palliser Formation; Mbf - Mississippian Banff Formation; Mpk - Mississippian Pekisko Formation; Msh - Mississippian Shunda Formation; Mtv - Mississippian Turner Valley Formation

Sample	Strat Unit	Strat Tkns (m)	Description	$CaCO_3$ (%)	$MgCO_3$ (%)	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	SrO (ppm)	MnO (ppm)	P_2O_5 (ppm)
Isolated Samples											
120421	Mbf	2	**Dolomitic Lime Mudstone to Dolomitic Lime Packstone**, medium grey weathered, medium grey to dark brown fresh, micritic to medium-grained, fossils: crinoid ossicle;, thickly-bedded to massively-bedded, resistant, strong HCl reaction, structure(s): bedding (definite) 113/32 SW	88.40	7.53	2.83	0.454	0.242	332	106	50
Section 2014-01 (UTM 597782E, 5786985N)											
120410	Mpk	3.25	**Lime Packstone to Lime Grainstone**, light grey weathered, very-light grey fresh, medium-grained to coarse-grained, fossils: crinoid stem, abundant; crinoid ossicle, abundant;, resistant, homogeneous, strong HCl reaction	98.32	1.05	0.37	0.068	0.074	298	31	50
120411	Mpk	3.5	**Slightly Dolomitic Lime Packstone to Slightly Dolomitic Lime Grainstone**, light grey weathered, very-light grey fresh, medium-grained to coarse-grained, fossils: crinoid stem, abundant; crinoid ossicle, abundant;, resistant, homogeneous, strong HCl reaction, structure(s): bedding (definite) 340/30 NE	91.81	7.20	0.56	0.084	0.078	207	34	50
120412	Mpk	3	**Siliceous Lime Wackestone to Siliceous Lime Packstone**, very-light grey weathered, light grey to tan fresh, fine-grained to coarse-grained, fossils: crinoid stem, abundant; crinoid ossicle, abundant; abundant, resistant, homogeneous, strong HCl reaction	91.86	1.36	6.56	0.064	0.059	213	23	50
120413	Mpk	5	**Lime Wackestone to Lime Packstone**, very-light grey weathered, light grey to tan fresh, fine-grained to coarse-grained, fossils: crinoid stem, abundant; crinoid ossicle, abundant; abundant, resistant, homogeneous, strong HCl reaction	95.09	1.17	3.30	0.061	0.080	237	32	50
120414	Mpk	4.5	**Lime Wackestone to Lime Packstone**, very-light grey weathered, light grey to tan fresh, fine-grained to coarse-grained, fossils: crinoid stem, abundant; crinoid ossicle, abundant; abundant, resistant, homogeneous, strong HCl reaction	98.00	1.03	0.55	0.055	0.033	236	23	50
Section 2014-02 (UTM 596801E, 5785922N)											
120415	Mpk	3.5	**Lime Grainstone**, light grey to medium grey weathered, light grey to tan fresh, medium-grained to coarse-grained, fossils: crinoid stem, abundant; crinoid ossicle, abundant, thickly-bedded, resistant, strong fetid odour, strong HCl reaction, structure(s): calcite veinlet weak; bedding (definite) 128/38 SW	98.41	0.86	0.19	0.055	0.071	222	37	50
120416	Mpk	5	**Lime Grainstone**, light grey to medium grey weathered, light grey to tan fresh, medium-grained to coarse-grained, fossils: crinoid stem, abundant; crinoid ossicle, abundant, thickly-bedded, resistant, strong fetid odour, strong HCl reaction, structure(s): calcite veinlet weak; bedding (definite) 142/44 SW	98.07	1.51	0.20	0.056	0.040	234	26	50
120417	Mpk	6.5	**Lime Grainstone**, light grey to medium grey weathered, light grey to tan fresh, medium-grained to coarse-grained, fossils: crinoid stem, abundant; crinoid ossicle, abundant, thickly-bedded, resistant, strong fetid odour, strong HCl reaction, structure(s): calcite veinlet weak; bedding (definite) 128/38 SW	98.49	1.05	0.15	0.067	0.163	252	40	50

C1

Sample	Strat Unit	Strat Tkns (m)	Description	$CaCO_3$ (%)	$MgCO_3$ (%)	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	SrO (ppm)	MnO (ppm)	P_2O_5 (ppm)
120418	Mpk	1.5	**Lime Grainstone**, light grey to medium grey weathered, light grey to tan fresh, medium-grained to coarse-grained, fossils: crinoid stem, abundant; crinoid ossicle, abundant, thickly-bedded, resistant, strong fetid odour, strong HCl reaction, structure(s): calcite veinlet weak; bedding (definite) 128/38 SW	98.74	0.94	0.13	0.056	0.060	258	29	50
120419	Mpk	1.5	**Lime Grainstone**, light grey to medium grey weathered, light grey to tan fresh, medium-grained to coarse-grained, fossils: crinoid stem, abundant; crinoid ossicle, abundant, thickly-bedded, resistant, strong fetid odour, strong HCl reaction, structure(s): calcite veinlet weak; bedding (definite) 128/38 SW	98.11	1.19	0.59	0.070	0.033	321	22	50
120420	Mpk	3.5	**Lime Grainstone**, light grey to medium grey weathered, light grey to tan fresh, medium-grained to coarse-grained, fossils: crinoid stem, abundant; crinoid ossicle, abundant, thickly-bedded, resistant, strong fetid odour, strong HCl reaction, structure(s): calcite veinlet weak; bedding (definite) 144/37 SW	98.41	1.15	0.36	0.079	0.041	318	23	50
Section 2014-03 (UTM 596748E, 5785940N)											
120422	Mpk	4.25	**Lime Mudstone to Lime Packstone**, light grey to medium grey weathered, medium grey fresh, micritic to medium-grained, fossils: crinoid ossicle;, thickly-bedded to massively-bedded, resistant, weak fetid odour, strong HCl reaction, structure(s): calcite veinlet weak; bedding (definite) 152/40 SW	97.82	1.38	0.39	0.085	0.081	260	32	50
120423	Mpk	2.5	**Dolomitic Lime Wackestone to Dolomitic Lime Packstone**, light grey to medium grey weathered, medium grey fresh, micritic to medium-grained, fossils: crinoid ossicle;, thickly-bedded to massively-bedded, resistant, weak fetid odour, strong HCl reaction, structure(s): calcite veinlet weak; bedding (definite) 152/40 SW	94.56	4.52	0.63	0.088	0.122	246	34	50

APPENDIX 3: ANALYTICAL LABORATORY INFORMATION AND TECHNIQUES

Name and Address of the Lab:

Graymont Western US Inc., Central Laboratory.
670 East 3900 South, Suite 200
Salt Lake City, Utah, 84107

Statement of Qualifications:

Jared Leikam obtained a B.S. in Chemistry from the University of Utah in the class of 2003. Jared started working for Graymont in February of 2004 and has been working with the ICP Spectrometer for two and a half years, under the direct supervision of Carl Paystrup (Lab Supervisor).

Vonda Stuart obtained a B.S. in Chemistry from Weber State University in 2004. Vonda started with Graymont in August of 2007 and started working in the ICP Lab the following September.

Sample Preparation, Procedures, Reagents, Equipment, etc.:

For the ICP sample preparation, 0.5 grams of the sample is mixed with 3 g of lithium carbonate. The sample and the lithium carbonate are then fused together in a muffle furnace at 850°C. Following the fusion process, the samples are dissolved in 1:1 HCl; a total of 40 mL 1:1 HCl is used in the dissolving process. The samples are then diluted to 200 mL and spiked with 10 ppm Co. Cobalt is used as an internal standard. At this point the samples are ready for analysis on the Perkin Elmer, Optima 7300V.

Mesh Size Fraction, Split and Weight of Sample:

Upon receiving the samples, the prep room technician riffles and then splits the stone down to a manageable size (roughly 200 g). The stone is then dried in an oven at 120ºC. Once the samples have been dried they get pulverized to a -200 mesh size. A split of this pulverized material is then sent for testing in the main part of the lab.

Quality Control Procedures:

The ICP spectrometer is calibrated with two certified reference materials prior to analyzing a batch of samples. A batch typically contains 96 samples. Every 12th sample in a batch is a certified limestone reference sample. In addition to the 8 reference samples imbedded in the batch, there are 2 limestone reference samples analyzed at the beginning and at the end of the batch to ensure the accuracy of our Na and P numbers. Every element being analyzed in a sample is backed up by data from the certified reference materials. We also use an internal standard (10 ppm Co) to further ensure the quality and accuracy of the analysis.

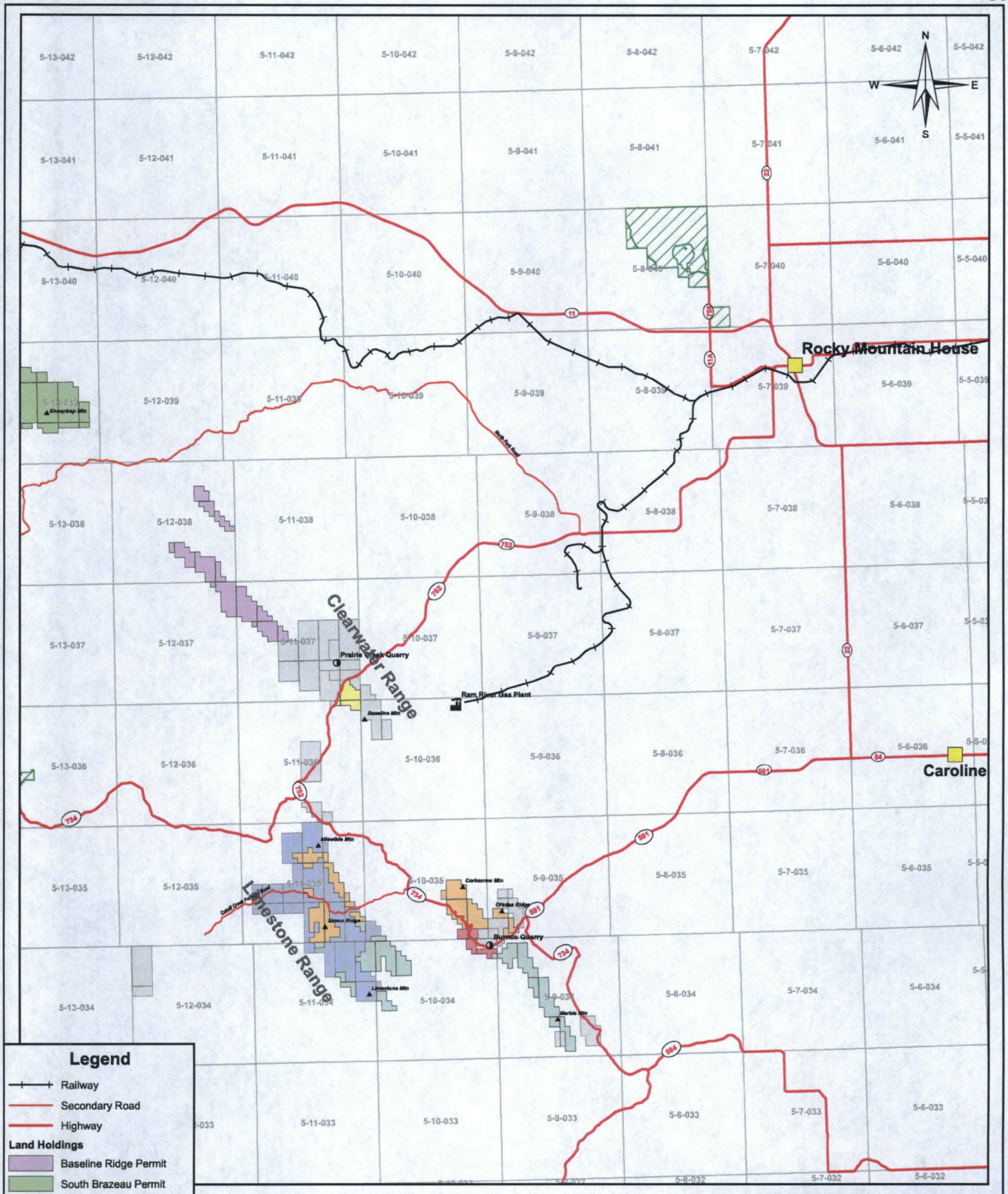
GRAYMONT WESTERN CANADA INC.

Dahrouge Geological Consulting Ltd.
Edmonton, Alberta

CLEARWATER RANGE,
WEST-CENTRAL ALBERTA

Fig. 3.1
Property Location

PK 2014.10



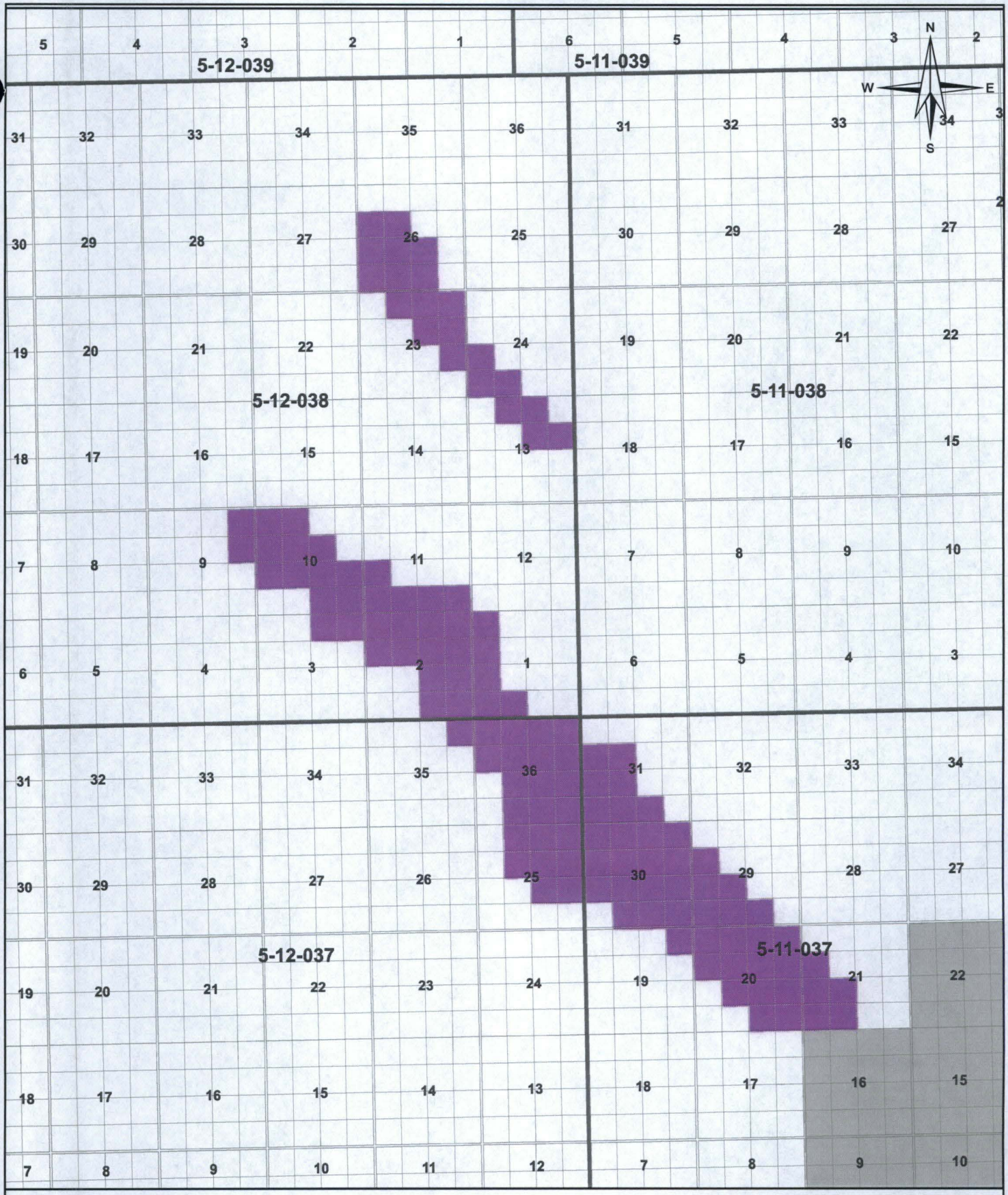
GRAYMONT WESTERN CANADA INC.

Dahrouge Geological Consulting Ltd.
Edmonton, Alberta

CLEARWATER RANGE,
WEST-CENTRAL ALBERTA

Fig. 3.2
Access Map

PK 2014.12



Legend

- MAIM # 9301010011 (2,048 ha)
- Other Claims

Kilometres

0 2 4 6

1:75,000

Coordinate System: UTM NAD83, Zone 11N

GRAYMONT WESTERN CANADA INC.

Dahrouge Geological Consulting Ltd.
Edmonton, Alberta

CLEARWATER RANGE,
WEST-CENTRAL ALBERTA

Fig. 4.1
Permit Map

KK 2014.10

595500 596000 596500 597000 597500 598000 598500 599000

5788000 5787500 5787000 5786500 5786000 5785500 5785000

N S E W

PRAIRIE CREEK ANTICLINE

2014-01
120410-14

9301010011
BASELINE RIDGE

Fall Creek

120421

2014-03
120422-3

2014-02
120415-20

Legend

2014 Samples

$CaCO_3$%

- 97-100
- 95-97
- 90-95
- <90

Roads

- Main Road
- Maintained Road
- Reclaimed Raod
- Stabilized Road
- Cutline

- Faults
- Folds
- Contours (10 m)

Land Holdings

- Baseline Ridge
- Prairie Creek Quarries

Bedrock Geology

- Upper Rundle
- Pekisko
- Banff
- Fernie

Kilometres

0 0.5 1 2

1:5,000

Coordinate System: UTM NAD83 Zone 11N

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Edmonton, Alberta

BASELINE RIDGE,
WEST-CENTRAL ALBERTA

Fig. 4.2
Geology & Sample Locations

KK 2014.11