MAR 20090004: BASELINE RIDGE

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FINAL REPORT

GRAYMONT WESTERN CANADA INC.

2008 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/03, B/04 and B/05

Owner and Operator:	MAIM Permit 9301010011 Graymont Western Canada Inc. Lime Divisional Office 190, 3025 - 12 Street N.E. Calgary, Alberta T2E 7J2
Consultant:	Dahrouge Geological Consulting Ltd. 18, 10509 - 81 Avenue Edmonton, Alberta T6E 1X7
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Date Submitted:	February 18, 2009

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1. SUMMARY

During late June and early July, 2008, 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 2008 was a follow-up to previous exploration conducted at Baseline Ridge in 2001, 2002, 2004, and 2006.

A total of 31 rock samples were collected in 2008, representing approximately 80 m stratigraphic thickness. 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 has been obscured by structure, stratigraphic thicknesses were calculated using orientations from adjacent units. Where more than one bedding orientation was measured, the mean orientation is used.

During the summer of 2008, exploration expenditures for MAIM permit 9301010011 totaled $59,994.34, calculated from the spent amount of $54,540.31, plus the allowable 10 per cent for overhead management fees of $5,454.03.

Excess expenditures of $13,440 were previously credited from 'Years 5 and 6' towards the current assessment period. Hence, the combined expenditures including prior and current accumulations total $73,434.34.

Based on a reduced permit area of 2,048 hectares and assessment requirements of $15 per hectare, the required expenditures to keep the entirety of the reduced permit in good standing are $30,720. The balance of expenditures are to be assigned to future assessment periods 'Years 9 and 10' and 'Years 11 and 12'.

Expenditures are allocated to MAIM Permit 9301010011 as follows:

Permit	Assessment Period	Expiry Date	Required Expenditures	Assigned Expenditures
9301010011	Years 7 and 8	2009-01-15	$30,720	$30,720
	Years 9 and 10	2011-01-15	$30,720	$30,720
	Years 11 and 12	2013-01-15	$30,720	$11,994.34
			Total:	$73,434.34

2. INTRODUCTION

The 2008 exploration at 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 metallic and industrial minerals permit 9301010011, which encompasses the northern part of Clearwater Range of the Alberta Foothills. Bob Robison, exploration manager for Graymont Western U.S. Inc., authorized this work.

The objectives of the 2008 exploration were to expand on the previously explored areas to locate high-quality carbonate rocks throughout and within the permit area. This report includes information on the quality and location of more than five stratigraphic sections examined in the summer of 2008, as well as an interpretation of the results.

3. GEOGRAPHIC SETTING

3.1 LOCATION AND ACCESS

MAIM Permit 9301010011 encompasses the northern parts of Clearwater Range (Fig. 3.1). It includes lands to the northwest of the quarry of Prairie Creek Quarries Ltd. on Baseline Ridge to Ram River and 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 cutlines that branch from or cross the Sunpine Road provide good access to the Ram River and Tawadina Ridge areas. Unfortunately, the logging roads that previously accessed an area of interest north of Ram River have since been reclaimed and are impassable with ATV.

Currently, the most effective and efficient means of accessing the property area is by helicopter.

3.2 INFRASTRUCTURE

Accommodations, food, fuel and other necessary services are available in 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.

3.3 TOPOGRAPHY, VEGETATION AND CLIMATE

The Baseline permit area is included in the Eastern-Slope Montane Forest Ecological Region, and lies within the Rocky-Clearwater District of the Alberta Forest Reserve. The property is comprised of a series of northwest-trending ridges and valleys where elevations range from approximately 1180 m along Ram River to almost 2000 m atop Baseline Ridge. The property is cut by a number of easterly trending tributaries of the Ram River drainage basin, including, from south to north, Fall Creek, Ram River and Tawadina Creek.

In the subalpine zone, vegetation consists of stunted subalpine fir and Englemann Spruce. Above the treeline and along rocky slopes, vegetation is restricted to alpine foliage and grasses. Vegetation in areas of rugged limestone outcroppings is generally sparse, and commonly consists of junipers, other low brush, and grasses. Below 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.

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 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 Geological Consulting Ltd., based in a hotel in Rocky Mountain House.

Transportation to and from the property was by four-wheel-drive truck and helicopter. Initially,

an attempt was made with ATV's to utilize forestry roads in the permit area; roads and trails of interest were reclaimed and not accessible. Therefore, the majority of the program was conducted utilizing a helicopter for access, contracted from Kananaskis Mountain Helicopters Ltd. based out of the Cline River Heliport, about 120 km west and south from Rocky Mountain House. The crew flew out of the Rocky Mountain House airport for the Baseline Ridge fieldwork.

Garmin GPSmap 60Cx 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 MAIM PERMIT 9301010011

In early 2001, Graymont Western Canada Inc. 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).

The original area of the permit totalled 5,888 hectares. Based upon the 2001 and 2002 exploration, the permit was reduced to 2,832 hectares.

Based on exploration programs conducted in 2004, 2006, and 2008, the permit will be reduced (Fig. 4.1, Section 4.3).

4.2 2008 EXPLORATION SUMMARY

From June 25 to July 3, 2008, Dahrouge Geological Consulting Ltd., on behalf of Graymont Western Canada Inc., conducted exploration for carbonate lithotypes within west-central Alberta. The work was undertaken to determine and identify the location and extent of carbonate outcrops in difficult-to-access areas of the property.

Field maps were completed on 1:10,000 and 1:20,000 scale map sheets and concentrated on areas north of Ram River. Carbonate outcrops were examined at more than 5 locations (Fig. 4.2) and a total of 31 samples were collected (Appendix 2). A solution of 6% 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). Geological observations were recorded, including lithologic information, measurements of structural elements, and other pertinent details. In some instances, interval thicknesses were determined by measuring outcrops perpendicular to bedding, where it could be identified.

4.3 EXPLORATION EXPENDITURES

During 2008, exploration expenditures totaled $59,994.34.

MAIM Permit 93001010011 will be amended (Fig. 4.1). The retained area (2,048 hectares) will include:

Land Description (Tp-RW5)	Reduced Size (Ha)
37-11W5 (Sections: 19L16; 20E, NW, L6; 21SW, L12; 29SW, L2, L12; 30E, NW, L3, L5, L6; 31SW, L2, L11, L12)	2,048
37-12W5 (Sections: 25NE, L7, L8, L11, L14; 35L16; 36E, NW, L3, L6)	
38-12W5 (Sections: 1L3, L4, L5, L12, L13; 2E, NW; 3L15, L16; 9L9, L16; 10SE, NW, L5, L6, L10; 11L1, L2, L3, L4, L5; 13L9, L10, L14, L15; 23NE, L8, L14; 24L3, L4, L5; 26SW, L2, L7, L11, L12)	

Expenditures are allocated to MAIM permit 9301010011as follows:

MAIM Permit	Assessment Period	Expiry Date	Required Expenditures*	Assigned Expenditures*
9301010011	Years 7 and 8	2009-01-15	$17,280	$17,280
	Years 9 and 10	2011-01-15	$30,720	$30,720
	Years 11 and 12	2013-01-15	$30,720	$11,994.34
				$59,994.34

*Based on reduced area & previous credit of $13,440

5. GEOLOGY

Areas of MAIM Permit 9301010011 were previously mapped according to NTS map sheet by the following officers of the Geological Survey of Canada:

NTS Map Sheet	Reference
83 B/3 W½	Henderson (1945)
83 B/4 E½	Henderson (1946)
83 B/5 E½	Erdman (1945, 1950)
83 B/5 W½	Erdman (1950)

At Clearwater Range, carbonate lithologies are known to occur within both Paleozoic and Mesozoic sequences. Paleozoic limestones are described in the Upper Devonian Palliser Formation, Upper Devonian to Lower Carboniferous Banff Formation and the Lower Carboniferous Rundle Assemblage. Mesozoic carbonate rocks are known to occur in the Nordegg Member of the Fernie Group.

Detailed accounts of regional stratigraphy are available in Stott and Aitken (1993), Mossop and Shetsen (1994), Halbertsma (1994), and Richards et al. (1994), and will not be repeated herein.

The 2008 exploration focussed on mapping and sampling carbonate rocks of the Rundle Assemblage and Fernie Group (Fig. 5.1).

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

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

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

5.1 STRATIGRAPHY

The Lower Carboniferous Rundle Assemblage extends from the MacKenzie Mountains in the Arctic south through the Peace River Embayment to southeastern British Columbia.

In west-central Alberta, the Rundle Assemblage 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.

5.2 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).

5. RESULTS

Approximately one week was spent checking property access and outlining carbonate outcrops in detail.

Potential access was explored with truck and ATV's; however, many of the valuable forestry roads were reclaimed and travel times proved excessive. Three days were spent exploring the permit area with the use of a helicopter. The work focused on obtaining samples and constraining geological contacts along Baseline Ridge, north of Ram River.

Carbonate lithologies of the Rundle Assemblage and the Fernie Group were examined and measured (Fig. 4.2, Appendix 2). A total of 31 intervals were examined at more than 5 locations, representing a stratigraphic thickness of about 80 m. Where bedding could not be identified, stratigraphic measurements were taken based on the previously determined regional trend or deduced from surrounding measurements where possible.

Where examined, the Fernie Group consisted of light- to medium-brown and medium- to very-dark-grey calcareous mudstones. The outcrops were generally weakly fractured and well-bedded with occasionally visible laminations or thin shaley horizons. As expected, the assays were consistently siliceous, ranging from 18.40% to 29.51% SiO_2.

Rundle Assemblage outcrops included limey and dolomitic rocks of the Pekisko Formation and dominantly strongly dolomitic rocks of the Turner Valley Formation. No Shunda Formation was noted in the explored areas of 2008.

The Pekisko carbonates consisted of generally high-quality, medium- to coarse-grained, fossiliferous, lime packstones and grainstones. Color varied with shades of brown and grey. The rocks were consistently rich in crinoids and often contained other visible bioclasts, such as solitary rugose corals, brachiopods, gastropods, ooids/pellets, colonial corals, and bryozoans. Some of the Pekisko samples were weakly to moderately dolomitic; however, the silica content was consistently low with all samples returning less than 1% SiO_2.

The Turner Valley rocks consisted of well-bedded, tan and brownish-grey, dolomitic lime mudstones. Half of the Turner Valley samples were strongly dolomitic, ranging from 24.78% to 43.13% $MgCO_3$. The other samples were moderately dolomitic, ranging from 2.01% to 6.28% $MgCO_3$.

Geological contacts along Baseline Ridge have been redefined as a result of the 2008 work and a compilation of past exploration programs (Fig. 5.1). Further work is still required in the area to confirm or challenge past geological interpretations.

6. CONCLUSIONS

Paleozoic carbonate units of the Fernie Group and Rundle Assemblage were examined and measured along the northern part of Clearwater Range at Baseline Ridge, within MAIM Permit 9301010011. A total of 31 discrete intervals were measured and described in detail, representing approximately 80 m stratigraphy.

Based on a compilation of past exploration data and the field program conducted in 2008, the permit will be reduced.

Within MAIM Permit 93901010011, carbonate exposures remain unexamined in detail. Future exploration will expand on work already conducted in the area, confirming or redefining past geological interpretations. Currently, access to the property is fairly difficult and a helicopter is required. For future programs, a compilation of roads and trails in the area just prior to the field program is highly recommended, as road status in the area changes frequently due to forestry and hydrocarbon exploration activities.

7. REFERENCES

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9. STATEMENT OF QUALIFICATIONS

I, Jocelyn Klarenbach, residing at 130 Rue Marquet, Beaumont, Alberta, 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 2003 graduate of the University of Alberta, Edmonton, Alberta with a B.Sc. in Geology.
- I have practiced my profession as a geologist continuously since 2003.
- I am a registered professional geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta, member M67719.
- 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 "2008 Exploration and Fieldwork within the Baseline Ridge Metallic and Industrial Minerals Permit, West-Central Alberta" and accept responsibility for the veracity of technical data and results.

Dated this 18th day of February, 2009.

[redacted]

Jocelyn Klarenbach, B.Sc., P.Geol.
APEGGA M67719

APPENDIX 1: COST STATEMENT FOR THE 2008 BASELINE RIDGE EXPLORATION

a) Personnel		$ 20,322.23
b) Food and Accommodation		$ 5,338.40
c) Transportation		$ 27,209.64
d) Instrument Rental	n/a	
e) Drilling	n/a	
f) Analyses		$ 914.50
h) Other		$ 755.55
Total		$ 54,540.32
Administration (10%)		$ 5,454.03
Total + Administration		**$ 59,994.34**

APPENDIX 2: 2008 SAMPLE DESCRIPTIONS AND ASSAY RESULTS FROM THE BASELINE RIDGE AREA

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 from north to south; samples are listed in order from stratigraphic top to bottom within each section. Most samples consist of chips at 30 cm intervals. UTM coordinates are NAD83. Section locations are shown in Figure 4.2.
Stratigraphy Abbreviations: F - Fernie Group, TV - Turner Valley Formation, Pek - Pekisko Formation

Sample	Stratigraphic Unit	Strat. Thick. (m)	Description	$CaCO_3$ (%)	$MgCO_3$ (%)	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	$SrCO_3$ (ppm)	MnO (ppm)	P_2O_5 (ppm)
Section 2008-01: (UTM 592426E, 5790747N)											
49751	F	3	**Limey Mudstone**, tan weathered, very-dark-grey fresh, micritic, homogeneous, indescript, well-bedded, some shaley intervals, moderate to good reaction with HCl, bedding 118°/24° SW	63.08	1.39	22.57	0.55	0.73	723	607	3269
49750	F	0.5	**Shaley Calcareous Mudstone**, tan weathered, very-dark-grey fresh, silty, well-bedded, homogeneous, indescript, reaction with HCl, bedding 127°/26° SW	53.10	1.25	22.36	1.71	0.86	684	521	10463
49749	F	1.5	**Calcareous Mudstone**, tan and medium-grey weathered, very-dark-grey fresh, silty to very-fine-grained, indescript, large rounded features on surface of bench, reaction with HCl, bedding 132°/27° SW	48.65	2.82	21.45	0.55	0.76	618	853	21098
49748	F	3.5	**Calcareous Mudstone**, same as 49745, majority light-brown fresh, reaction with HCl, bedding 122°/26° SW	40.14	4.19	21.55	0.54	0.58	582	546	21769
49747	F	3	**Calcareous Mudstone**, same as 49745, weak reaction with HCl, bedding 148°/22° SW	48.03	1.78	22.39	0.33	0.60	459	600	3868
49746	F	3.5	**Calcareous Mudstone**, same as 49745, orange weathered, majority dark- to very-dark-grey fresh, some light-brownish-grey fresh, reaction with HCl, bedding 122°/28° SW	25.03	1.86	20.54	0.30	1.02	338	1189	7832
49745	F	3.25	**Calcareous Mudstone**, tan weathered, some medium-grey weathered, light- to dark-brownish-grey fresh, silty, indescript, well-bedded, minor calcite veining, weakly fractured, sulphur smell, bedding 123°/26° SW	22.47	2.56	23.88	0.20	0.85	257	1127	2076
49744	F	3	**Calcareous Mudstone**, same as 49741, light-brown and dark- to very-dark-grey fresh, crumbly, reaction with HCl, bedding 220°/22° NW	42.92	2.42	18.40	0.32	0.59	476	711	2932
49743	F	3.25	**Calcareous Mudstone**, same as 49741, tan weathered, minor very-fine-grained, dark sparkles (biotite?), reaction with HCl, bedding 187°/22° W	46.66	2.91	23.44	0.35	0.62	584	742	2682
49742	F	3	**Calcareous Mudstone**, medium-grey and tan weathered, mottled light-brown and dark-grey fresh, silty, well-bedded (3 cm - ¾ m), indescript, minor calcite veining and fracture fill, weakly fractured, moderately jointed, reaction with HCl, bedding 191°/18° W	62.17	3.53	23.13	0.57	0.50	623	454	6691
49741	F	4	**Calcareous Mudstone**, medium-grey and tan weathered, light-brown and dark- to very-dark-grey fresh, silty, well-bedded (3 cm - ¾ m), indescript, minor calcite veining and fracture fill, 5 cm shaley section ~mid-way, weakly fractured, moderately jointed, reaction with HCl, bedding 203°/19° NW	46.57	4.22	26.14	0.45	0.67	494	743	2807

Section 2008-02: (UTM 592481E, 5790741N)

49740	F	1.5	**Calcareous Mudstone**, same as 49736, matte/dusty look to fresh rock, reaction with HCl	13.26	2.38	20.12	0.35	1.01	176	1330	3609
49739	F	2	**Calcareous Mudstone**, same as 49738, reaction with HCl, bedding 118°/26° SW (may be slumped)	47.77	1.98	26.68	0.22	0.55	457	732	1785
49738	F	3.5	**Calcareous Mudstone**, same as 49736, medium-grey weathered, light- to medium-brown fresh, variable colour, noticeably lighter sections than below, well-bedded, visible laminations, reaction with HCl, bedding 112°/38° SW	37.46	2.57	26.35	0.25	0.76	362	1018	2002
49737	F	3	**Calcareous Mudstone**, same as 49736, medium-grey and tan weathered, minor very-dark-grey, reaction with HCl, bedding 123°/24° SW & 134°/24° SW	48.13	3.39	29.51	0.37	0.59	431	678	1567
49736	F	3.25	**Dolomitic Calcareous Mudstone**, light-yellow-orange weathered, medium- to dark-grey fresh, minor light-brown, well-bedded (1 cm - ¼ m), indescript, jointed (variable), minor veining (less than expected), sulphur smell, reaction with HCl, well-bedded, bedding 120°/27° SW	38.11	5.74	29.00	0.54	0.73	414	793	3719

Section 2008-03: (UTM 592935E, 5790062N)

49756	TV	1.5	**Dolomitic Lime Mudstone**, same as 49755, tan and light-beige weathered, nodular snow-white calcite crystal fill and carbon-rich siltstone-mudstone fill, moderately fractured (wavy), moderate to good reaction with HCl, bedding 107°/16° SW	71.30	24.95	1.46	0.27	0.21	373	78	<100
49755	TV	2	**Dolomitic Lime Mudstone**, tan weathered, dark-grey base due to water weathering, light-brown and medium-brownish-grey fresh, micritic, indescript, one large colonial coral noted, black carbon in veins (horizontally oriented fill), moderate reaction with HCl, bedding 122°/19° SW	72.57	24.78	1.04	0.12	0.21	227	76	<100
49754	TV	0.75	**Crinoidal Dolomitic Lime Packstone**, same as 49752, moderate to good reaction with HCl, bedding 121°/21° SW & 129°/17° SW	92.28	6.28	0.87	0.04	0.11	371	45	<100
49753	TV	0.5	**Crinoidal Lime Packstone**, same as 49752, good reaction with HCl, bedding 120°/21° SW	96.70	2.01	0.95	0.04	0.07	380	34	<100
49752	TV	1	**Crinoidal Lime Packstone**, medium-grey weathered, medium-brownish-grey fresh, very-fine-grained to coarse-grained, fossiliferous (majority crinoids, brachiopods, solitary rugose, gastropods), weakly to moderately fractured, good reaction with HCl, bedding 115°/19° SW	95.54	3.20	0.60	0.04	0.06	371	35	<100

Section 2008-04: (UTM 593681E, 5789925N)

49735	Pek	2.5	**Crinodial Lime Grainstone**, light- to medium-grey weathered, same as 49733 and 49734	96.62	2.36	0.51	0.11	0.03	346	28	<100
49734	Pek	3	**Crinodial Lime Grainstone**, same as 49733	96.46	2.73	0.30	0.08	0.16	327	47	<100

49733	Pek	4.5	**Crinodial Lime Grainstone**, medium-grey and tan weathered, tan-grey fresh, medium-grained with minor coarse-grained, well-sorted, massive, wavy bedding, abundant crinoids and ooids/pellets, other indeterminate fossils, minor fetid odor, very good reaction with HCl, bedding 140°/44° SW	97.21	1.93	0.33	0.06	0.06	321	31	122

Section 2008-05: (UTM 593731E, 5789839N)

49732	Pek	4.5	**Crinodial Lime Grainstone**, same as 49727, fine-grained, crinoids and ooids/pellets, no visible larger fossils	97.96	1.14	0.35	0.04	0.05	388	30	134
49731	Pek	3	**Crinoidal Lime Grainstone**, same as 49727	97.19	1.87	0.19	0.03	0.10	322	36	<100
49730	Pek	3	**Crinoidal Lime Grainstone**, same as 49727	96.83	2.20	0.54	0.04	0.07	320	30	<100
49729	Pek	3	**Crinoidal Lime Grainstone**, same as 49727	96.82	2.22	0.26	0.03	0.04	323	27	162
49728	Pek	3	**Crinoidal Lime Grainstone**, same as 49727	96.85	2.37	0.31	0.05	0.04	335	28	423
49727	Pek	3	**Crinoidal Lime Grainstone**, light- to medium-grey weathered, tan- to medium-brown fresh, medium- to coarse-grained, massive indeterminate bedding, fossiliferous (abundant crinoids, bryozoan, brachiopod, coral[?], fragments, ooids/pellets - <1 mm rounded balls), fetid odor, good reaction with HCl	95.94	3.64	0.24	0.05	0.05	315	30	<100

Isolated Station (UTM 604483E, 5783302N)

49726	TV	grab	**Dolostone**, tan and medium-grey weathered, tan fresh, some mottled grey and tan, cryptocrystalline to very-fine-grained, minor ooid/pellet grainstone, may contain micaceous minerals, well-bedded, fetid smell, very weak reaction with HCl but powder fizzes well, bedding 180°/23° W	52.91	43.13	3.12	0.29	0.20	122	232	229

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 3000.

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 120°C. 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 12^{th} 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.

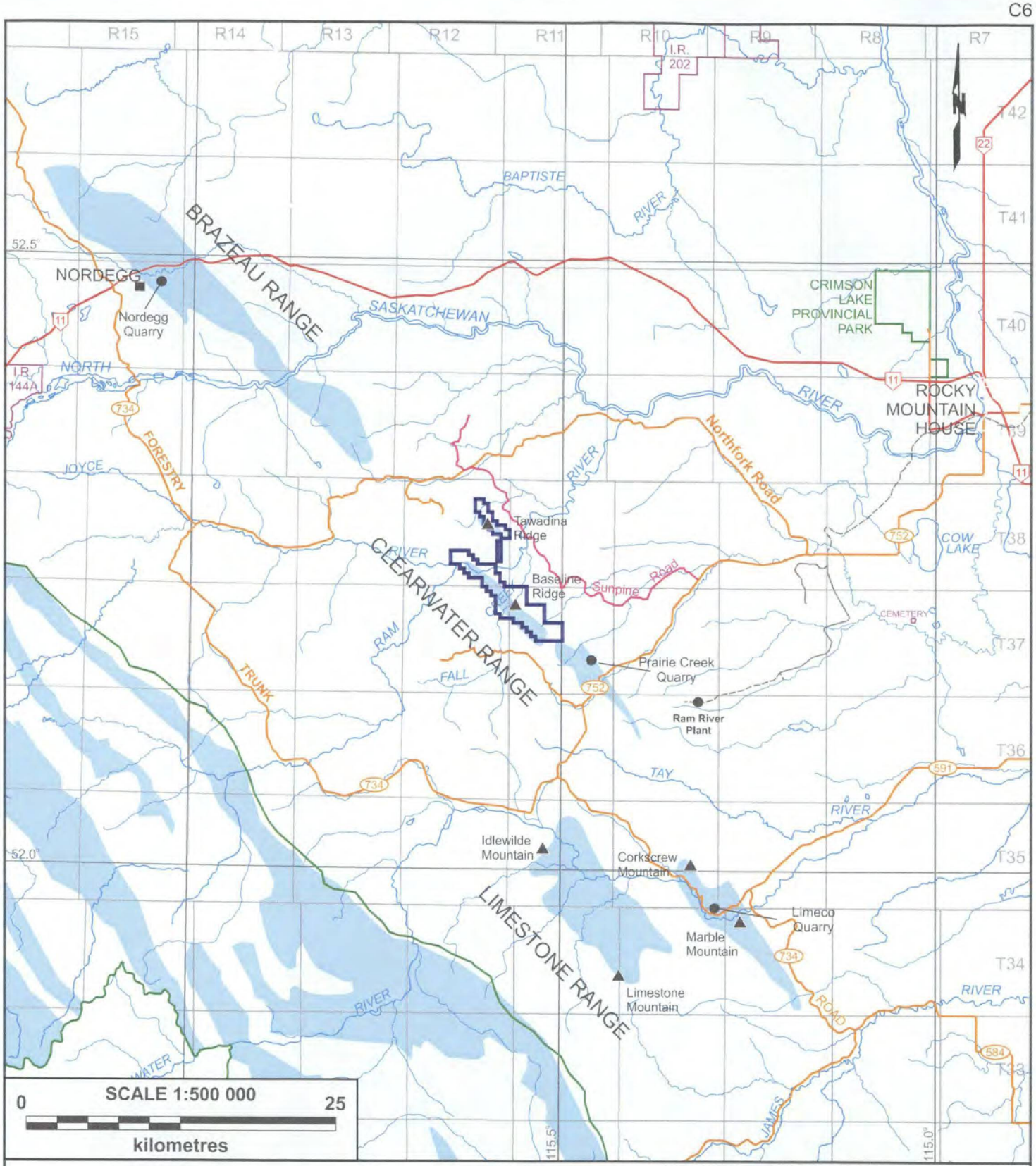
GRAYMONT WESTERN CANADA INC.

Dahrouge Geological Consulting Ltd.
Edmonton, Alberta

CLEARWATER RANGE,
WEST-CENTRAL ALBERTA

Fig. 3.1
Property Location

JT 2009.02



0 SCALE 1:500 000 25

kilometres

LEGEND

- Paleozoic limestone-bearing units (locations approximate)
- MAIM Permit 9301010011 of Graymont Western Canada Inc. (current; prior to 2008 reduction)
- Park or protected area
- Reserve or restricted zone
- Highway
- Secondary Road
- Private Road
- Railway
- Industrial Use/Quarry
- Mountain peak

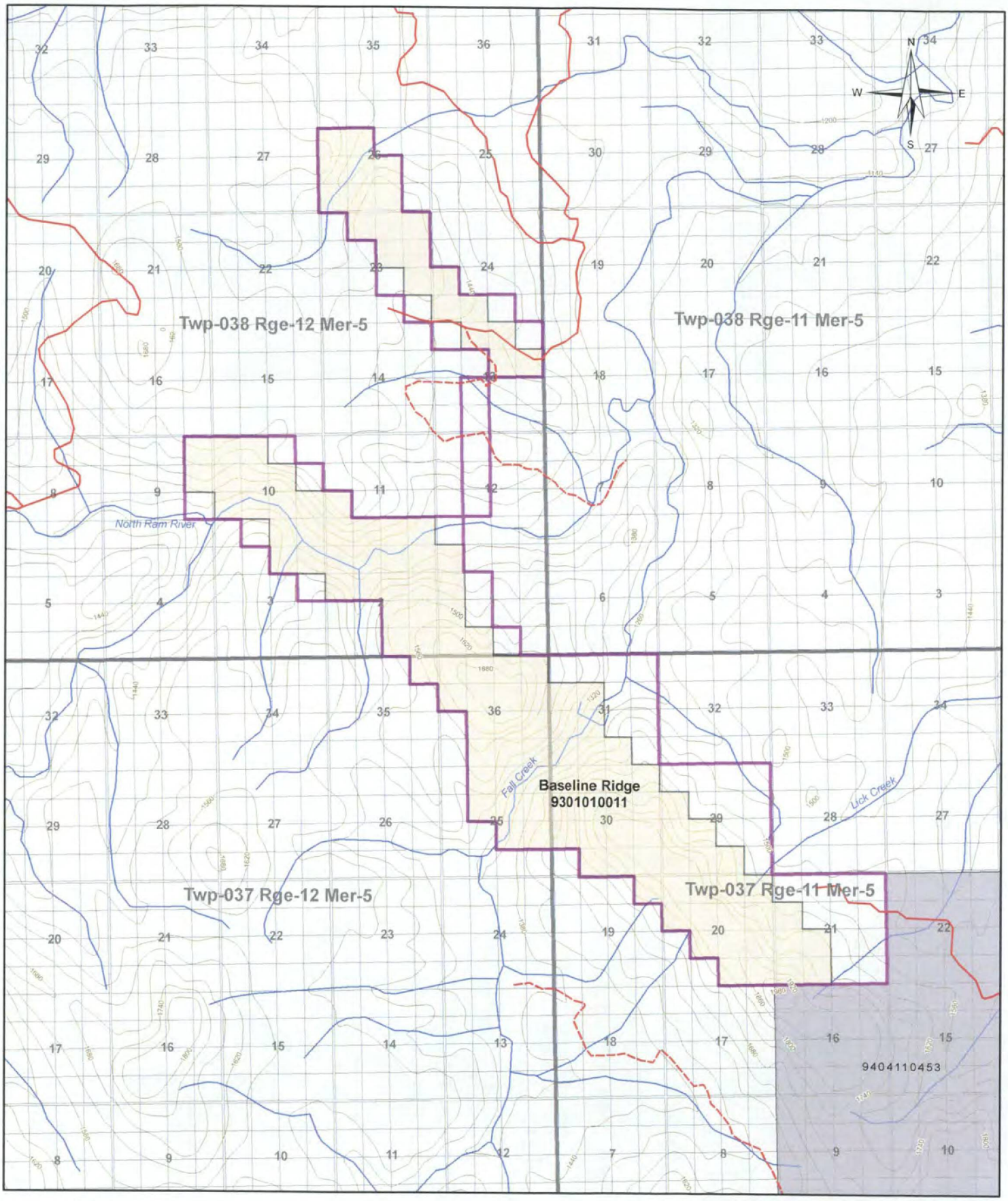
GRAYMONT WESTERN CANADA INC.

Dahrouge Geological Consulting Ltd.
Edmonton, Alberta

CLEARWATER RANGE,
WEST-CENTRAL ALBERTA

Fig. 3.2
Property Access Map

JT 2009.02



Legend

- Reduced Permit Area: 2,048 ha
- Current Permit Area: 2,832 ha
- Other Permit Owners
- Minor road
- Trail
- River/creek
- Topographic Contours (60 m)

Kilometres

0 1 2 3 4 5

1:75,000

Coordinate System: UTM NAD83, Zone 11N

GRAYMONT WESTERN CANADA INC.

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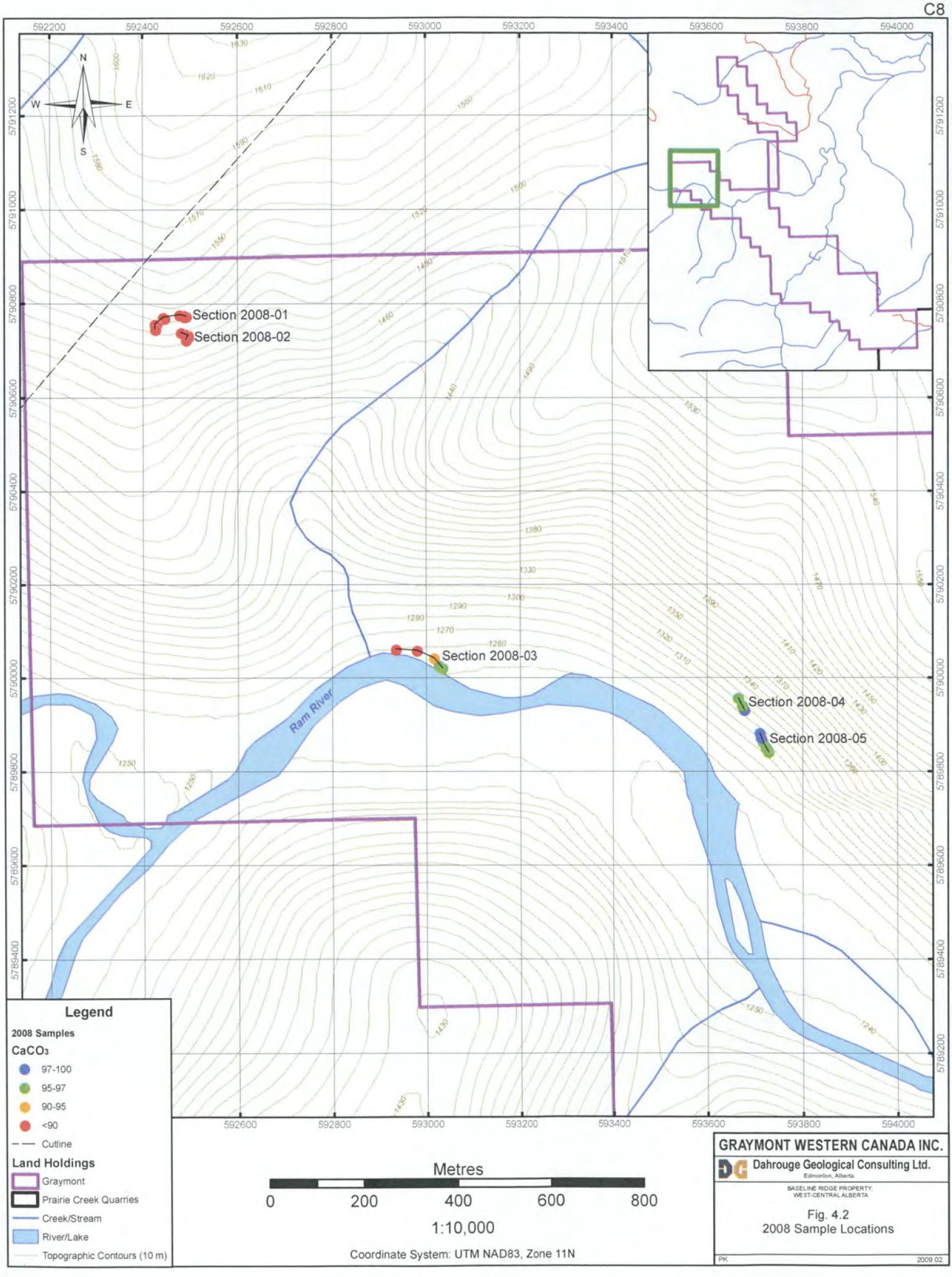
Edmonton, Alberta

BASELINE RIDGE PROPERTY,
WEST-CENTRAL ALBERTA

Fig. 4.1
Baseline Ridge Permit 9301010011

PK 2009.02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592600
592800
593000
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5791000
5790800
5790600
5790400
5790200
5790000
5789800
5789600
5789400
5789200
N
W
E
S
Section 2008-01
Section 2008-02
Section 2008-03
Section 2008-04
Section 2008-05
Ram River
Legend
2008 Samples
CaCO3
97-100
95-97
90-95
<90
Cutline
Land Holdings
Graymont
Prairie Creek Quarries
Creek/Stream
River/Lake
Topographic Contours (10 m)
Metres
0
200
400
600
800
1:10,000
Coordinate System: UTM NAD83, Zone 11N
GRAYMONT WESTERN CANADA INC.
Dahrouge Geological Consulting Ltd.
Edmonton, Alberta
BASELINE RIDGE PROPERTY,
WEST-CENTRAL ALBERTA
Fig. 4.2
2008 Sample Locations
PK
2009.02

N

W E

S

BASELINE ANTICLINE

PRAIRIE ANTICLINE

Baseline Ridge
9301010011

Metres

0 500 1,000 1,500 2,000

1:15,000

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Edmonton, Alberta

BASELINE RIDGE PROPERTY
WEST-CENTRAL ALBERTA

Fig. 5.1
Geology Map

PK 2009.01

Legend

- Topographic contours (10 m)
- Creek/stream
- River/lake

Land Holdings

- Graymont
- Prairie Creek Quarries

Property Geology

Formation/Assemblage

- Fernie
- Upper Rundle
- Pekisko
- Banff
- Faults
- Fold axes