

# MAR 20060008: FOLDING MOUNTAIN

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<b>PERMIT TO PRACTICE</b> Dahrouge Geological Consulting Ltd. Signature _____ Date <u>June 13, 2006</u> <b>PERMIT NUMBER: P 6793</b> The Association of Professional Engineers, Geologists and Geophysicists of Alberta
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**GRAYMONT WESTERN CANADA INC.**  
**2005 EXPLORATION AND DIAMOND DRILLING**  
**ON THE FOLDING MOUNTAIN PERMIT**

**PART B**

Metallic and Industrial Mineral Permit  
9304050869

Geographic Coordinates

53° 15' N  
117° 47' W

NTS Sheets 83 F/4 and F/5

Owner of MAIM Permit    9304050869  
                                  Graymont Western Canada Inc.  
                                  190, 3025 - 12 Street N.E.  
                                  Calgary, AB, T2E 7J2

Operator:                    Graymont Western Canada Inc.  
                                  190, 3025 - 12 Street N.E.  
                                  Calgary, AB, T2E 7J2

Consultant:                Dahrouge Geological Consulting Ltd.  
                                  18, 10509 - 81 Avenue  
                                  Edmonton, Alberta T6E 1X7

Authors:                    J. Dahrouge, B.Sc., P.Geol.

Date Submitted:            June 13, 2006

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**DETAILED EXPENDITURE STATEMENT FOR 2005 EXPLORATION  
CONDUCTED ON THE FOLDING MOUNTAIN PERMIT**

**a) Personnel**

M. Gidluck, geologist

2.00 days field work and travel October 4, 5

2.00 days @ \$ [REDACTED]

\$ [REDACTED]

S. Fraser, geologist

21.00 days field work and travel August 28, 29; September 25-30; and  
October 1-16

8.80 days preparations for field, logging drill core, reporting

29.80 days @ \$ [REDACTED]

\$ [REDACTED]

J. Dahrouge, geologist

3.10 days field work and travel August 10; October 4, 5

9.20 days supervising and report preparation

12.30 days @ \$ [REDACTED]

\$ [REDACTED]

J. Tanton, geologist

1.20 days assist with permitting

1.20 days @ \$ [REDACTED]

\$ [REDACTED]

N. McCallum, geologist

9.60 days field work and travel September 13, 16; October 7-14

0.50 days assist with permitting

10.10 days @ \$ [REDACTED]

\$ [REDACTED]

A. Wennekamp, geologist

3.70 days field work and travel June 12-15

0.60 days preparations

4.30 days @ \$ [REDACTED]

\$ [REDACTED]

W. McGuire, draftsman

4.00 days field work and travel June 12-15

7.10 days drafting, preparing and plotting figures and maps, other

11.10 days @ \$ [REDACTED]

\$ [REDACTED]

G. Sauer, assistant

14.50 days field work and travel September 13, 16, 25-30; and  
October 1-7

0.20 days preparations for field

14.70 days @ \$ [REDACTED]

\$ [REDACTED]

L. Halverson, assistant

14.50 days field work and travel October 4-16

14.50 days @ \$ [REDACTED]

\$ [REDACTED]

D. Wilson, assistant

49.50 hours data entry, binding reports, photocopying, other

49.50 hours @ \$ [REDACTED]

\$ [REDACTED]

\$ 42,838.73

**EXPENDITURE STATEMENT (continued)**

**b) Food and Accommodation**

70 man-days @ \$ 55.47 accommodations	\$ 3,904.76
70 man-days @ \$ 26.33 meals	\$ 1,853.66
70 man-days @ \$ 15.26 groceries and other	\$ 1,074.40

\$ 6,832.82

**c) Transportation**

Vehicles: Rental(s) for 4x4 Vehicle(s) (June 12-15, September 13, 16; September 15-30; and October 1-16)	\$ 6,431.18
ATV Rentals (September 13 and 16)	\$ 588.50
Fuel	\$ 1,746.96
Mileage	\$ 668.25

\$ 9,434.89

*Field  
16267.71*

**d) Instrument Rental n/a**

**e) Drilling**

Target Drilling (493 m, NQ Core)	\$ 86,090.44
Water tanks, truck and delivery	\$ 14,383.44
Core Splitter	\$ 88.28
Other Equipment	\$ 176.55

\$ 100,738.70

**f) Analyses n/a**

**g) Report Reproductions and assembly**

\$ 46.75

\$ 46.75

**h) Other**

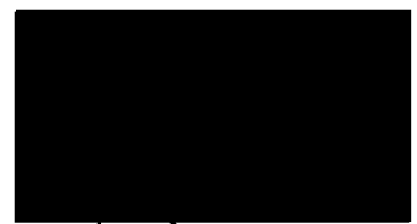
Airphotos	\$ 205.98
Courier and Shipping	\$ 610.41
Digital Data	\$ -
Disposable Supplies	\$ 2,655.66
Long distance telephone	\$ 148.04
Permits	\$ 110.00
Photocopying	\$ -
Plots	\$ 529.65
Storage	\$ 1,100.00

\$ 5,359.74

*5,406.49*

**Total**

\$ 165,251.64



*Jody Dahrouge*

## **1. SUMMARY**

During 2005, exploration of Metallic and Industrial Minerals (MAIM) Permit 9304050869 of Graymont Western Canada Inc. near Folding Mountain, included the examination of 12 discrete stratigraphic intervals exceeding 31½ m thickness, and the completion of four NQ diamond-drill holes totalling 493.39 m.

Results of the exploration showed low-quality, variably dolomitic or argillaceous limestone, dolomitic grainstone, and shales of the Banff Formation and Rundle Assemblage in outcrop, and Banff Formation in drill holes.

The 2005 exploration expenditures for MAIM Permit 9304050869 totaled \$165,251.64 (Appendix 1). The expenditures are to be applied towards work period years 1 and 2, 3 and 4, 5 and 6, 7 and 8, 9 and 10; with excess expenditures carried over to work period years 11 and 12.

## **2. INTRODUCTION**

The “exploration objectives” or “scope” of the 2004 and 2005 exploration were to locate high-quality carbonate rocks. To achieve the “exploration objectives”, outcrops were located and mapped, and diamond drilling was completed.

## **3. LOCATION AND ACCESS**

MAIM Permit 9304050869 (Fig's. 3.1 and 3.2) is located within National Topographic System Map Sheets 83 F/4 and F/5, and is centered upon approximately 53°15' N latitude 117°47' W longitude.

Access to the property is via Highway 16 from Edmonton to just opposite Folding Mountain. Gravel roads, trails and cut lines that cross the property provide additional access.

A total of 12 stratigraphic sections and 4 drill sites were completed within the permit. These locations are shown in Fig. 3.3.

#### 4. WORK PERFORMED

From June 12 to 15, and on August 10, 2005 Dahrouge Geological Consulting Ltd. (Dahrouge) on behalf of Graymont Western Canada Inc. (Graymont), measured 12 stratigraphic intervals totaling 31½ m. Individual stratigraphic units were described, and quality assessed in the field using a solution of 5% HCL. Stratigraphic thicknesses were determined by measuring outcrops perpendicular to bedding.

From September 13 to October 16, 2005 Dahrouge flagged access to, located water for, and supervised the completion of 493.39 m of NQ drilling in four holes. Target Diamond Drilling of Calgary Alberta performed the diamond drilling using a Longyear 38 diamond drill rig. Due to environmental concerns, water was trucked to the nearest access point, stored in tanks and pumped to the drill.

#### 5. RESULTS

Between June 12 to 15, and on August 10, 2005, 12 discrete stratigraphic intervals were examined (Table 5.1). The measured intervals varied from less than ¼ m to about 7¾ m thickness. They consisted primarily of variably dolomitic or argillaceous limestone, attributed to the Banff Formation or Rundle Assemblage. Prior exploration had indicated potential for good quality limestone within the Palliser Formation (Holter, 1976). Descriptions of the stratigraphic intervals are in Part C, Appendix 1; and summarized in Table 5.1.

**TABLE 5.1: LOCATIONS EXAMINED WITHIN MAIM PERMIT 9304050869**

Location	Formation	Measured Strat. Thick. (m)	Measured Intervals
<u>2005</u> (Part C, Appendix 2)			
Along Access Road - West Flank of Folding Mtn Anticline*	Rundle Assemblage	>12¼	5
Along Powerline Corridor - Core Folding Mtn Anticline	Banff (?)	2¾	1
Along Road to Dump- East Flank of Folding Mtn Anticline*	Banff (?)	N/A	1
Along Highway 16 - West Flank of Folding Mtn Anticline	Rundle Assemblage	<u>16½</u>	<u>5</u>
	<b>Totals:</b>	>31½	12

\* Isolated section(s)

From September 13 to October 16, 2005, four drill holes were completed. They generally intersected low-quality, variably dolomitic or argillaceous limestone, dolomitic grainstone, and shale



attributed to the Banff Formation. Drill logs are in Part C, Appendix 2; and summarized in Table 5.2.

**TABLE 5.2** **SUMMARY OF THE 2005 DRILL HOLES**  
**WITHIN MAIM PERMIT 9304050869**

Hole ID	Location	Formation	Depth (m)
F05-01	Along Northeast Trending Cutline, near Radio Tower (NAD 83: 446398E, 5901228N)	Palliser(?)	171.52
F05-02	Along Northeast Trending Cutline, near Radio Tower (NAD 83: 446605.5E, 5901452.5N)	Palliser(?)	137.77
F05-03	Along Northeast Trending Cutline, near Radio Tower (NAD 83: 446755E, 5901654N)	Banff	61.57
F05-04	Along Powerline Corridor - Core Folding Mtn Anticline (NAD 83: 447059.7E, 5900751.6N)	Palliser(?)	<u>122.53</u>
<b>Totals:</b>			493.39

Drillhole F05-01 intersected 9.75 m of unconsolidated overburden and 161.77 m of dolomitic limestone, limestone, shaly limestone and calcareous shale. Bedding structures were generally at 60° to 75° to CA, and rarely at 80° to CA; indicating approximate dips from 10° to 30°.

Drillhole F05-02 intersected 6.10 m of unconsolidated overburden and 131.67 m of shaly dolomitized limestone, cherty dolomitic limestone, shaly limestone, calcareous shale and some thin interbeds of dolomitic grainstone. Bedding structures were generally at 60° to 80° to CA; indicating an approximate average dip of 20°.

Drillhole F05-03 intersected about 19.81 m of unconsolidated overburden and about 41.76 m of grey to greyish black shale, with some thin interbeds of dolomite.

Drillhole F05-04 intersected about 6.05 m of unconsolidated overburden and about 116.48 m of dolomitic limestone, limestone, shaly limestone and calcareous shale.

## 6. CONCLUSIONS

The area examined and drilled is within the core of Folding Mountain Anticline and is underlain by the Banff Formation. No significant intervals of high-quality carbonates were intersected within the drill holes.

Given the poor results and environmental sensitivity of the area, no future exploration is recommended.

7.

**REFERENCES**

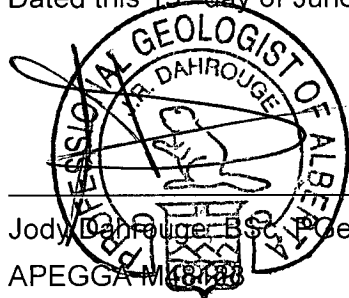
Holter, M.E. (1976) Limestone Resources of Alberta; Alta. Res. Coun. Econ. Geol. Rept. 4., 91p.

## STATEMENT OF AUTHOR

I, Jody Dahrouge, residing at 11 Country Lane, Stony Plain, 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 graduate of the University of Alberta, Edmonton, Alberta with a B.Sc. in Geology, 1988 and a Special Certificate (Sp.C.) in Computing Science in 1994.
- I have practised my profession as a geologist intermittently from 1998 to 1994, and continuously since 1994.
- I am a registered professional geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta, member M48123.
- I hereby consent to the copying or reproduction of this Technical Report after the end of the one-year confidentiality period.
- I am the author of the report entitled "2005 Exploration and Diamond Drilling on the Folding Mountain Permit" and accept responsibility for the veracity of technical data and results.

Dated this 13<sup>th</sup> day of June, 2006.



Jody Dahrouge, B.Sc., P. Geol.  
APEGGA M48123

## APPENDIX 1: COST STATEMENT FOR THE 2005 EXPLORATION

a) Personnel	\$ 42,838.73
b) Food and Accommodation	\$ 6,832.82
c) Transportation	\$ 9,434.89
d) Drilling	\$ 100,738.70
e) Report	\$ 46.75
f) Other	\$ 5,359.74
Total	<u>\$ 165,251.64</u>

PART  
C

## APPENDIX 2: MEASURED STRATIGRAPHIC SECTIONS

Note: Stratigraphic thicknesses are based on measured attitudes of bedding as listed below with appropriate interpolations. Section intervals are listed in order from stratigraphic top to bottom.  
 Abbreviations are: Banff - Banff Formation; RA - Rundle Assemblage (includes: Pek - Pekisko, Sh - Shunda, and TV - Turner Valley Formations)

Sections	Formation Member	Strat. Thick. (m)	Description
<b>Isolated Sections</b>			
14701	RA	7¼	<b>Limestone</b> , light-brownish-grey weathered, light tan-grey fresh, micritic to fine-grained, poor to very poor reaction with HCl, beds 3 to 30cm, attitude of beds 221°/41°
14702	RA	3¾	<b>Limestone</b> , medium-dark-brown/grey weathered, brown/grey fresh, micritic to cryptocrystalline, beds up to 30cm, attitude of beds 224°/41°, 225°/26°
14703	RA	½	<b>Dolomitic Limestone</b> , medium- to dark-brown/grey weathered, brown/grey fresh, massive, micritic to cryptocrystalline, poor HCl reaction on fresh surface, no reaction on weathered surface
14704	RA	¼	<b>Dolomitic Siliceous Limestone</b> , dark-brown/grey weathered, brown/grey fresh, gritty texture, poor HCl reaction on fresh surface, no reaction on weathered surface, attitude of beds 221°/39°
14705	RA	N/A	<b>Dolomitic Siliceous Limestone</b> , dark-brown/grey weathered and fresh, gritty texture, some white calcite veins up to 2mm thick, poor to moderate HCl reaction on fresh surface, no reaction on weathered surface
14706	Banff	2¾	<b>Dolomitic Limestone</b> , grey weathered, dark-grey fresh, micritic, some white calcite veins, good HCl reaction
14707	RA	N/A	<b>Dolomitic Limestone</b> , dark-grey-brown and tan weathered, dark-grey fresh, micritic, abundant calcite veins, good HCl reaction
<b>Section FM05-01: North side of Yellowhead Highway (UTM 447412E, 5899337N)</b>			
14708	TV	3	<b>Dolomitic Limestone</b> , very light grey to white weathered, very light grey fresh, cryptocrystalline, beds 4 to 20cm, attitude of beds 231°/41°
14709	TV	3	<b>Dolomitic Limestone</b> , as above for top metre, then 1½ m of laminated white/grey dolomite with abundant chert lenses/layers to 2cm thick throughout, beds 8-50 cm, attitude of beds 220°/34°
14710	TV	3¾	<b>Dolomitic Limestone</b> , tan/grey weathered, grey fresh, fine-grained, fine-vugs throughout, large-calcite filled vugs 5cm diameter, beds 30cm to 1m, attitude of beds 220°/43°
14711	TV	2¾	<b>Dolomitic Limestone</b> , as above, except a bit lighter weathered, fine-grained to micritic, well jointed, calcite along joints and in vugs, beds 10 to 40cm, attitude of beds 213°/50°
-	-	1	<u>covered</u>
14712	TV	3¾	<b>Dolomitic Limestone</b> , (1m covered below 14711), dirty brown-grey weathered, dark-grey fresh, cryptocrystalline, crumbly, abundant chert lenses to 4cm, vuggy, abundant calcite in vugs to 2cm, beds 10 to 50cm, attitude of beds 213°/47°

## APPENDIX 3 - DRILL LOGS

DIAMOND DRILL LOG

Company: **GRAYMONT WESTERN CANADA INC.**  
 Project: **Folding Mountain**

Hole No: **F05-01**  
 Core Size: **NQ**  
 Total Depth: **171.52 m**

Dip Tests

Depth	Angle
Collar	90°
171.5	89°

Claim: **Folding Mtn.**  
 Bearing: **0°**  
 Inclination: **-90°**

Co-ordinates (NAD83)  
 Easting (m): **446398.0**  
 Northing (m): **5901228.0**  
 Elevation (m): **1170.7**

Date Started: **Sept. 28, 2005**  
 Date Finished: **Oct. 4, 2005**  
 Date Logged: **Oct. 12, 2005**

Logged By: **S. Fraser**

From m	To m	Interval m	RQD %	Description
0.00	9.75	9.75		Casing
9.75	25.00	15.25	40	<p><b><u>DOLOMITIZED LIMESTONE :</u></b>            massive to thin-bedded, dark-grey to tan, fine-grained to cryptocrystalline;            few vuggy sections; beds 80° to CA (16.2m)            9.60-9.65 m - bioturbated and alligned 75° to CA            9.75-9.85 m - carbonaceous band 10° to CA            12.60m - fracture subparallel to CA            11.90m - mottling and fracture 65° to CA            13.25m - fracture with oxidation and minor gouge 45° to CA            13.40-13.6m - light-grey to brown mottling (dolomitic)            13.65-13.75m - calcite spar as blebs            13.90-14.05, and 15.05m vuggy and very porous, oxidized            14.25m fracture 60° to CA            15.65-15.7m - fracture 65° to CA with oxidation            16.20m - beds 80° to CA            16.35-16.7m - broken core; fractures 15° to CA, minor gouge            18.55-18.75m - minor solution breccia            19.15m - fracture 70° to CA            19.25m - fracture 30° to CA            19.75m - fracture 40° to CA            19.75-21.55m - abundant calcite veining as irregular suture            20.15-21.5m - broken core with gouge/clay 75-80° to CA            21.50m - fracture 15° to CA            21.85m - beds 60° to CA            22.70m - fracture 25° to CA</p>
25.00	51.80	26.80	49	<p><b><u>MASSIVE LIMESTONE :</u></b>            medium to dark-grey, cryptocrystalline matrix, sparry calcite to 29.5 m,            reacts well with 6% HCL            25.90-31.80m abundant calcite spar as 2-3mm blebs            26.05m - fracture 45° to CA            28.10m - fracture 45° to CA; minor clay gouge            29.6-29.65m - vuggy with calcite spar            29.40m - fracture 45° to CA with minor gouge.            30.00m - fracture 45° to CA            31.45m - fracture 40° to CA with clay/gouge            34.30m - fracture sub parallel to CA</p>

## APPENDIX 3 - CONTINUED

DIAMOND DRILL LOG

Company: GRAYMONT WESTERN CANADA INC.  
Project: Folding Mountain

Hole No: F05-01  
Core Size: NQ

From m	To m	Interval m	RQD %	Description
				35.32m - graphitic slip 70° to CA 36.30m - bedding 70° to CA 38.10m - silty section parallel to beds 65° to CA 38.90m - fracture 75° to CA 39.00-39.50m - thin bedded, beds 72° to CA; partly silty 39.20-49.00m - <u>packstone</u> , grains to 1 mm 40.23-41.40m - light-grey, massive (etching at 41.8m suggests silt) 39.20-49.00m - <u>packstone</u> , grains to 1 mm 40.23-41.40m - light-grey, massive (etching at 41.8m suggests silt) 43.45m - fracture 70° to CA, in part oxidized 43.90m - fracture 70° to CA; minor gouge/clay 44.0m - strongly oxidized fracture, 75° to CA 44.40-51.80m - partly silty, mottled; bioturbated(?); corals at 50.10 and 50.65m 49.00-51.80m - <u>grainstone</u> , grains to 3 mm
51.80	96.10	44.30	74	<u>SHALY DOLOMITIZED LIMESTONE :</u> dark-grey, generally massive, cryptocrystalline to fine-grained, locally well bedded 51.80-57.38m - predominantly calcareous <u>shale</u> with beds at 60° to CA, thin laminae, partly dolomitized 54.55m - fracture 10° to CA 57.38-59.35m - light-grey, massive, 10cm calcite filled cavity at 58.05m 62.00m - beds 68° to CA 66.17-69.65m - dark- to light-grey limestone, abundant fossils, minor bioturbation 69.65-74.80m - light- to dark-grey, massive to weakly bedded 71.00m - beds 65° CA 74.80-76.5m - calcareous <u>shale</u> , dark-grey, massive 78.40m - fracture 45° to CA 76.50-86.30m - dark-grey to greyish-black, massive <u>limestone</u> , reacts well in 6% 86.30-93.10m - light- to dark-grey to grey-black, vague bedding to massive, partly fossiliferous 88.35m - beds 75° to CA
96.10	98.15	2.05	33	<u>WEAKLY CALCAREOUS SHALE :</u> dark-grey to grey-black, shaly, well bedded, beds 70° to CA 96.13m - fracture with gouge 75° to CA
98.15	113.39	15.75	77	<u>INTERBEDDED FOSSILIFEROUS LIMESTONE AND DOLOMITIZED</u> light- to dark-grey, mottled, cryptocrystalline to fine-grained 100.60-102.20m - calcareous <u>shale</u> as per 96.10 to 98.15m 102.4-103.55m - predominantly bioclastic <u>grainstone</u> , coarse-grained, crinoid rich 103.55-113.39m - light-grey to greyish-black, mottled, reacts well in 6% HCl; fossiliferous 111.65m - beds 75° to CA
113.39	119.35	5.96	75	<u>INTERBEDDED GRAINSTONE WITH CALCAREOUS SHALE</u> bioclastic, grains to 5mm, partly vuggy, sharp upper contact 65° to CA, lower

## APPENDIX 3 - CONTINUED

DIAMOND DRILL LOG

Company: **GRAYMONT WESTERN CANADA INC.**  
 Project: **Folding Mountain**

Hole No: **F05-01**  
 Core Size: **NQ**

From m	To m	Interval m	RQD %	Description
				75° to CA
119.35	128.00	8.65	46	<b>GRAINSTONE :</b> bioclastic, grainstone with abundant crinoid ossicles; partly vuggy 119.35m - 5cm cavity
128.00	148.00	20.00	76	<b>INTERBEDDED DOLOMITIC LIMESTONE WITH CALCAREOUS SHALE :</b> rhythmic intercalations of coarse-grained, light-grey, fossiliferous packstone with less calcareous mudstone and bioclast particles 140.80-143.86m - interbedded carbonaceous mudstones and medium- to coarse-bioclastic fragments 141.20-141.70m - mudstone with soft sediment deformation 143.50-146.15m - predominantly finely laminated calcareous <u>shale</u> , beds at 68° to 147.85-148.00m - fault slickensides with gouge and graphite; lower contact 65° to
148.00	171.51	23.51	73	<b>CHERT BEARING DOLOMITIC LIMESTONE :</b> medium- to dark-grey, well bedded, mottled, slightly argillaceous, abundant sub-chert nodules, local soft sediment deformation 163.80-165.00 m - abundant stylolites with graphitic slips, subparallel and at irregular angles to CA, abundant calcite veins 167.85m - beds 75° to CA 169.65-169.70m - graphitic fault, 65° to CA
				EOH



## APPENDIX 3 - CONTINUED

DIAMOND DRILL LOG

Company: GRAYMONT WESTERN CANADA INC.  
 Project: Folding Mountain

Hole No: F05-02  
 Core Size: NQ  
 Total Depth: 137.77

Dip Tests	
Depth collar	Angle
	90°

Claim: *Folding Mtn.*  
 Bearing: 0°  
 Inclination: -90°

Co-ordinates (NAD83)  
 Easting (m): 446605.5  
 Northing (m): 5901452.5  
 Elevation (m): 1191.8

Date Started: Oct. 5, 2005  
 Date Finished: Oct. 8, 2005  
 Date Logged: Oct. 10, 2005

Logged By: N. McCallum

From m	To m	Interval m	RQD %	Description
0.00	6.10	6.10		Casing
6.10	16.45	10.35	45	<b>LIMESTONE:</b> light-grey, fine-grained to cryprocrySTALLINE, massive, few calcite veins that are generally sub-parallel to CA, local vugs rugose corals 6.10-11.70m - generally cryprocrySTALLINE 11.70-16.40m - packstone 15.60-16.30m - beds 70° to CA 16.40-16.50m - grainstone
16.45	52.30	35.85	74.4	<b>SHALY DOLOMITIZED LIMESTONE:</b> shaly, dark-grey, generally massive 22.71-24.59m - <u>dolomitic limestone</u> , grey-brown, massive, some vugs to 2mm 23.00-28.00m - well developed bedding 24.59-27.14m - dark-grey, thin laminated shale 80° to CA 26.40-26.80m - local slump structure 27.14-31.03m - <u>limestone</u> , dark-grey, fine-grained, crinoids and brachiopods 31.03-31.80m - <u>shale</u> , dark-grey, massive 31.80-34.92m - <u>limestone</u> , dark-grey, fine-grained, massive 33.66-34.25m - vugs 34.92-36.25m - <u>wackestone</u> , dark-grey, beds to 10 cm, fossiliferous; fine-grained matrix, beds 80° to CA, good reaction to HCL 36.25-37.13m - <u>lime mustone</u> , dark-grey, poor reaction to 6% HCl 37.13-37.66m - <u>shale</u> , dark-grey, massive 31.80-37.13m - <u>lime mudstone</u> , dark-grey, massive, with wackestone from 34.92-36.25m, beds 80° to CA 37.66-44.63m - <u>lime mudstone</u> , medium- to dark-grey 43.28m - calcite vein 10° to CA 44.63-46.20m - <u>calcareous mudstone</u> , medium-grey 46.20-48.72m - <u>packstone</u> , dark-grey, abundant crinoid fragments, good reaction 48.72-50.54m - <u>mudstone</u> , dark-grey, laminated, beds 62° to CA, moderate reaction to HCl 50.54-52.72m <u>wackestone</u> , dark-grey, interbeds of light-grey, fossiliferous, <u>grainsto</u>
52.30	58.10	5.38	74.4	<b>WEAKLY CALCAREOUS SHALE</b> dark-grey, well bedded, fractures along cleavages, local interbeds of <u>packstone</u> to <u>grainstone</u>

## APPENDIX 3 - CONTINUED

**DIAMOND DRILL LOG**

Company: **GRAYMONT WESTERN CANADA INC.**  
 Project: **Folding Mountain**

Hole No: **F05-02**  
 Core Size: **NQ**

From m	To m	Interval m	RQD %	Description
				54.01-56.51m - <u>mudstone</u> , dark-grey
58.10	64.20	6.10	74.5	<b><u>INTERBEDDED FOSSILIFEROUS LIMESTONE AND DOLOMITIZED LIMESTONE</u></b> light- to dark-grey, mottled, matrix is cryptocrystalline, locally fossiliferous with coarse-grained crinoid and brachiopod fragments 58.06-59.55m - <u>wackestone</u> , light- to dark-grey, mottled 59.55-61.38m - <u>grainstone</u> , light-grey, coarse-grained, interbeds of <u>calcareous shale</u> 61.38-64.15m - predominately <u>grainstone</u>
64.20	71.29	7.09	80	<b><u>INTERBEDDED GRAINSTONE WITH CALCAREOUS SHALE</u></b> fine-grained, well bedded 64.15-67.01m - <u>packstone to wackestone</u> , light-grey, with interbeds of shale, fossiliferous beds 70° to CA 67.01-68.23m - <u>wackestone</u> , light-grey, coarse-grained, fossiliferous 68.23-71.29m - <u>grainstone</u> , minor interbeds of <u>shale</u>
71.29	80.65	9.36	51.7	<b><u>GRAINSTONE</u></b> predominantly light-grey, coarse-grained, fossiliferous, <u>grainstone</u> with lesser calcareous <u>shale</u> 76.81-79.36m - calcareous <u>shale</u>
80.65	101.1	20.45	84.1	<b><u>INTERBEDDED DOLOMITIC LIMESTONE WITH CALCAREOUS SHALE:</u></b> interbedded, light-grey, <u>packstone</u> and dark-grey, mottled <u>shale</u> ; local soft sediment deformation 85.82-87.92m - <u>wackestone to packstone</u> 87.92-97.62m - alternating limy <u>mudstone to packstone</u> , and grey to black calcareous shale, beds 60° to 70° to CA 97.62-102.7m - interbedded dark- and light-grey calcareous <u>mudstone</u> with graphitic fault 101.00-101.10m - fault contact (lower) 63° to CA
101.1	137.77	36.57	82.9	<b><u>CHERT BEARING DOLOMITIC LIMESTONE</u></b> medium- to dark-grey, well bedded, sub-rounded chert nodules 102.70-104.20m - <u>wackestone/packstone</u> , coarse fossil fragments within fine-grained shaly matrix 104.20-107.30m - interbedded light- to dark-grey <u>mudstone</u> ; crinoid and brachiopod fragments 107.10-109.40m - <u>packstone</u> , light-grey, coarse-grained, fossiliferous 109.40-121.50m - interbedded light- to dark-grey <u>mudstone</u> , some mottles 121.50-137.77m - <u>mudstone</u> , micritic, dark-grey, massive, locally abundant calcite calcite veins, some fossiliferous intervals
				EOH

## APPENDIX 3 - CONTINUED

DIAMOND DRILL LOG

Company: **GRAYMONT WESTERN CANADA INC.**  
 Project: **Folding Mountain**

Hole No: **F05-03**  
 Core Size: **NQ**  
 Total Depth: **61.57**

Dip Tests	
Depth collar	Angle 90°

Claim: **Folding Mtn.**  
 Bearing: **0°**  
 Inclination: **-90°**

Co-ordinates (NAD83)  
 Easting (m): **446755.0**  
 Northing (m): **5901654.0**  
 Elevation (m): **1202.0**

Date Started: **Oct 10, 2005**  
 Date Finished: **Oct. 11, 2005**  
 Date Logged: **Oct. 12, 2005**

Logged By: **S. Fraser**

From m	To m	Interval m	RQD %	Description
0.00	19.81	19.81		<b>NW Casing</b>
19.81	61.57	41.76		<p><b>SHALE:</b>            shale, grey to greyish black            19.81m - local tan color            20.10-20.95m - light- to dark-grey, fine-grained, calcareous shale, bedded            29.55 m @ 20° to CA            20.35-20.90m - vuggy            25.30m - fracture 25° to CA            27.60m - shear 25° to CA            28.04m - shear ° to CA            28.04-34.14m - well developed bedding            32.70m - beds 25° to CA            33.90m - fault zone 75° to CA            34.14m - greyish-brown, massive, local sparry calcite            39.20, 39.50, 40.55, 41.00m - broken core            44.20 m - shear 25° to CA            44.90m - shear subparallel to CA            47.80m - shear with 1½ cm gouge, 25° to CA (photo taken)            49.90m - abundant stylolites (carbaraceous)            50.80-51.00m - vugs            53.80-57.00m - greyish-black, fine-grained, <u>shale</u>, vague bedding @ 25° to CA            57.12m - fault/shear with gouge @ 20° to CA            57.00-61.57m - <u>shale</u>, light-grey to grey-brown, massive, minor stylolites</p>
				<b>EOH</b>

## APPENDIX 3 - CONTINUED

DIAMOND DRILL LOG

Company: **GRAYMONT WESTERN CANADA INC.**  
 Project: **Folding Mountain**

Hole No: **F05-04**  
 Core Size: **NQ**  
 Total Depth: **122.53**

Dip Tests	
Depth	Angle
collar	90°

Claim: **Folding Mtn.**  
 Bearing: **0°**  
 Inclination: **-90°**

Co-ordinates (NAD83)  
 Easting (m): **447059.7**  
 Northing (m): **5900751.6**  
 Elevation (m): **1208.0**

Date Started: **Oct.11, 2005**  
 Date Finished: **Oct 13, 2005**  
 Date Logged: **Oct. 16, 2005**

Logged By: **S. Fraser**

From m	To m	Interval m	RQD %	Description
0.00	6.05	6.05		<b>NW CASING</b>
6.05	122.53	116.48		<b><u>PALLISER FORMATION (?)</u></b> light- to dark-grey, massive limestone, with local interbeds of calcareous shale, sections well-bedded, some beds contorted, some sections consist of bioclastic grainstone, beds are generally at steep angles to CA
6.05	21.05	15.00	55.9	<b><u>SHALY DOLOMITIZED LIMESTONE:</u></b> calcareous shale with minor interbeds of limestone; shaly intervals are generally light-grey, thin-bedded, locally contorted with slump structures; limestone intervals light-grey, massive, fossiliferous, react well in 6% HCL 6.05-8.05m - light-grey, <u>limestone</u> 8.80m - graphitic shear 70° to CA 14.30m - beds 70° to CA 8.05-16.90m - thin-bedded, calcareous <u>shale</u> 14.30m - beds 70° to CA 16.90-17.75m - massive, fossiliferous, <u>limestone</u> 17.75-20.50m - <u>shale</u> 20.50-21.10m - conglomeratic bed with rounded calcareous pebbles
21.05	49.38	28.33	65.9	<b><u>LIMESTONE WITH SHALE INTERBEDS</u></b> light-grey to dark-grey, to greyish-black, generally massive limestone, few sections well bedded, local mottles, some interbeds of crinoidal grainstone, and rare of olive-green shale 21.05-36.05m - <u>limestone</u> , massive, locally fossiliferous, good reaction to 6% 33.26-33.60m - <u>shale</u> , olive-green 36.05-40.20m - <u>limestone</u> , alternating light-grey and greyish-black, interbeds to 5 thick of crinoidal <u>grainstone</u> 40.20-41.20m - <u>shale</u> , greyish-black, reacts slowly with 6% HCL 40.80m - beds 70° to CA 36.05-40.20m - <u>limestone</u> , alternating light-grey and greyish-black, interbeds to 5 41.40-49.38m - alternating light-grey, dark-grey, greyish-black, bands of 45.00 -45.70m - <u>shaly</u> 47.03 - 47.70m - mainly crinoidal <u>grainstone</u> , abundant brachiopods

## APPENDIX 3 - CONTINUED

DIAMOND DRILL LOG

Company: GRAYMONT WESTERN CANADA INC.  
 Project: Folding Mountain

Hole No: F05-04  
 Core Size: NQ

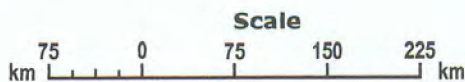
From m	To m	Interval m	RQD %	Description
49.38	71.80	22.42	66.9	<p><b><u>LIMESTONE WITH GRAINSTONE LENSES AND INTERBEDS</u></b>            greyish-black limestone (wackestone) with thin interbeds and lenses of light-grey grainstone, mottled, crinoidal, grains 1-2 mm, some thin secondary calcite veins            49.38-50.40m - <u>grainstone</u>, beds 73° to CA            57.25-59.20m - crinoidal <u>grainstone</u>, partly vuggy, beds 70° to CA            60.17-60.83m - crinoidal <u>grainstone</u>            61.35-61.84m - crinoidal <u>grainstone</u>            61.35-61.84m - crinoidal <u>grainstone</u>            61.84-65.53m - light-grey to dark-grey to black mottled, <u>limestone</u>, with occasional lenses of <u>grainstone</u>            65.53-70.10m - mottled with alternating bands of light-grey to dark-grey <u>limestone</u> minor calcite stringers and veins at steep angles to CA            70.10-71.80m - crinoidal <u>grainstone</u>, grains 1-2 mm, lower contact 80° to CA</p>
71.80	87.67	15.87	69.9	<p><b><u>LIMESTONE WITH INTERBEDS OF CALCAREOUS SHALE :</u></b>            dark-grey to greyish black limestone, with interbeds of calcareous shale, well bedded            74.00m - beds 58° to CA            77.15m - beds 72° to CA</p>
87.67	122.53	34.86	71.9	<p><b><u>SILTY DOLOMITIC LIMESTONE:</u></b>            light to dark-grey, to greyish-black limestone, irregular silty clots and lenses, local vugs, occasionally well-bedded, partly fossiliferous            88.50m - minor shear 70° to CA            90.25m - vug 3 cm across            97.50-101.50m - mottled, bioturbated(?)            116.80m - beds 80° to CA            117.40-117.70m - tan dolomite (photograph)            122.25m - beds 80° to CA</p> <p>EOH</p>



Location of  
MAIM Permit  
9304050869

**LEGEND**

- Provincial capital
- Other populated places
- Trans-Canada Highway
- Major road
- International boundary
- Provincial boundary



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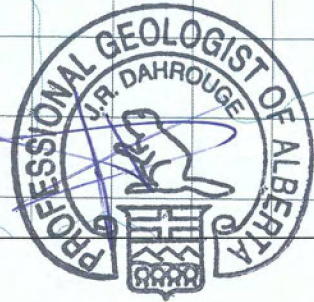
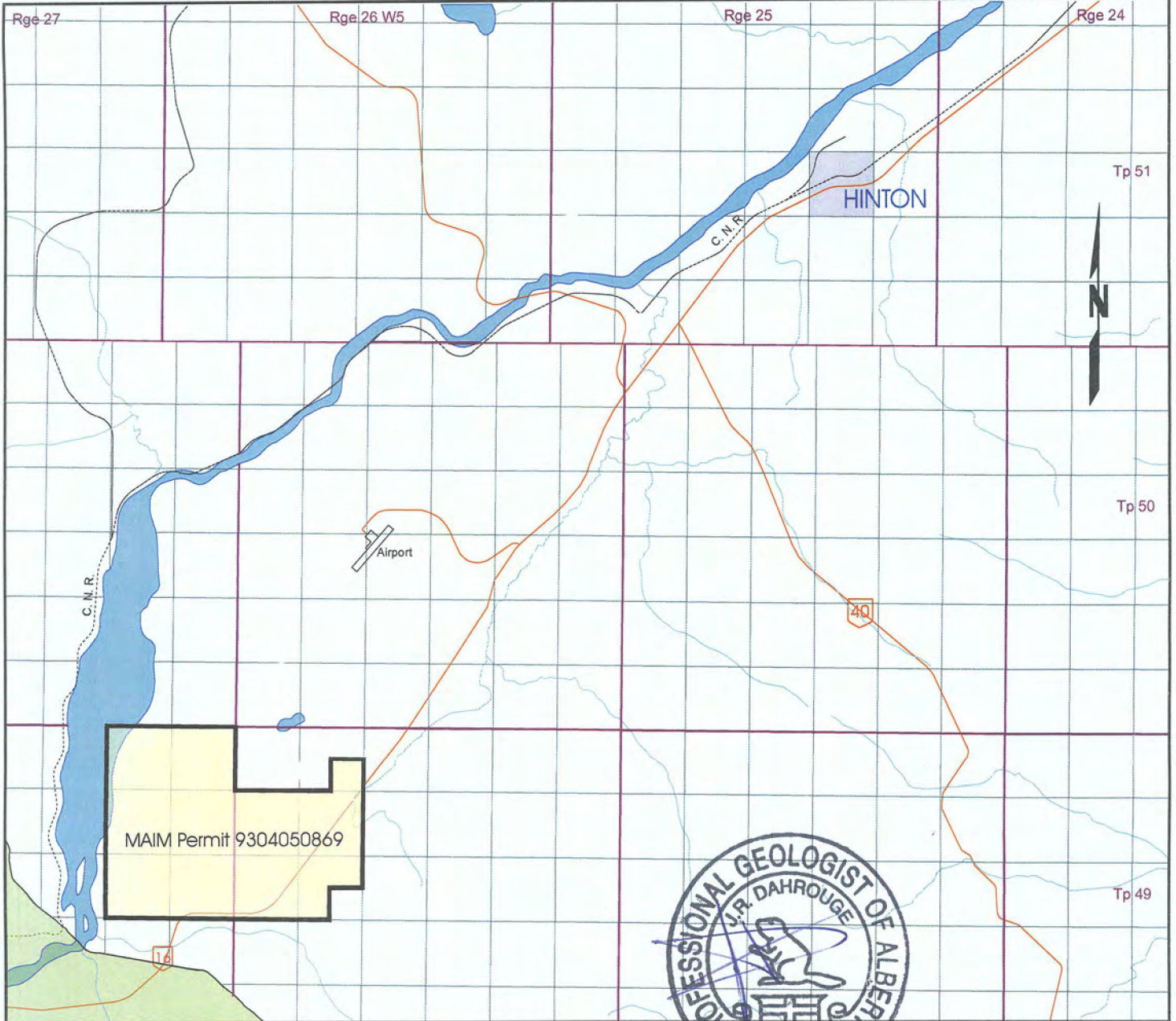
GRAYMONT WESTERN CANADA INC.

DAHROUGE GEOLOGICAL CONSULTING LTD.  
Edmonton, Alberta

FOLDING MOUNTAIN, HINTON AREA, ALBERTA

Fig. 3.1 Location Map



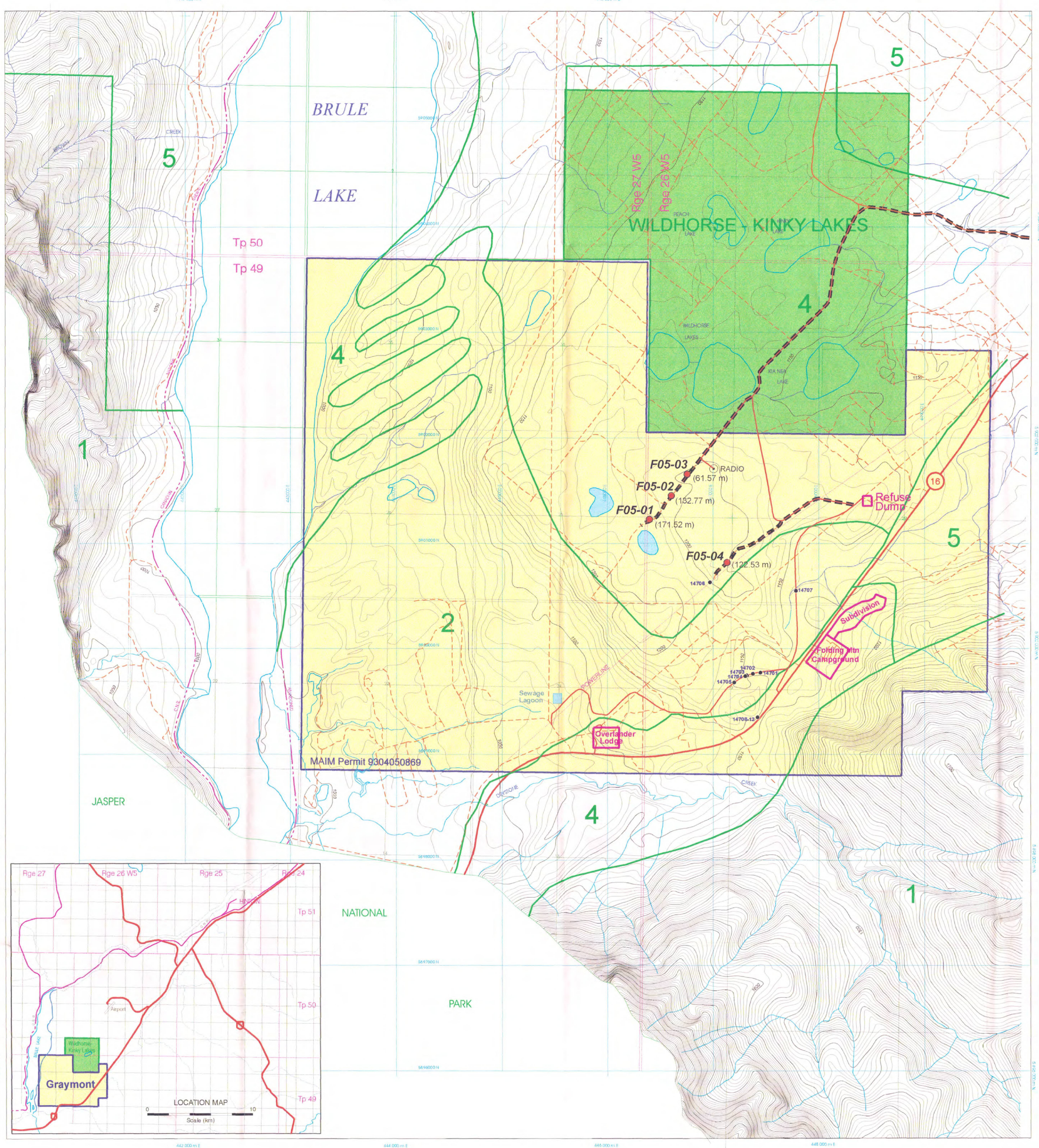


**LEGEND**

- Highway
- - - Railway
- National Park
- Folding Mountain M.A.I.M. Permit (9304050869)

<b>GRAYMONT WESTERN CANADA INC.</b>	
<b>DAHROUGE GEOLOGICAL CONSULTING LTD.</b> EDMONTON, ALBERTA	
FOLDING MOUNTAIN, HINTON AREA, ALBERTA	
Fig. 3.2 Permit Boundaries	
JT	2006.04



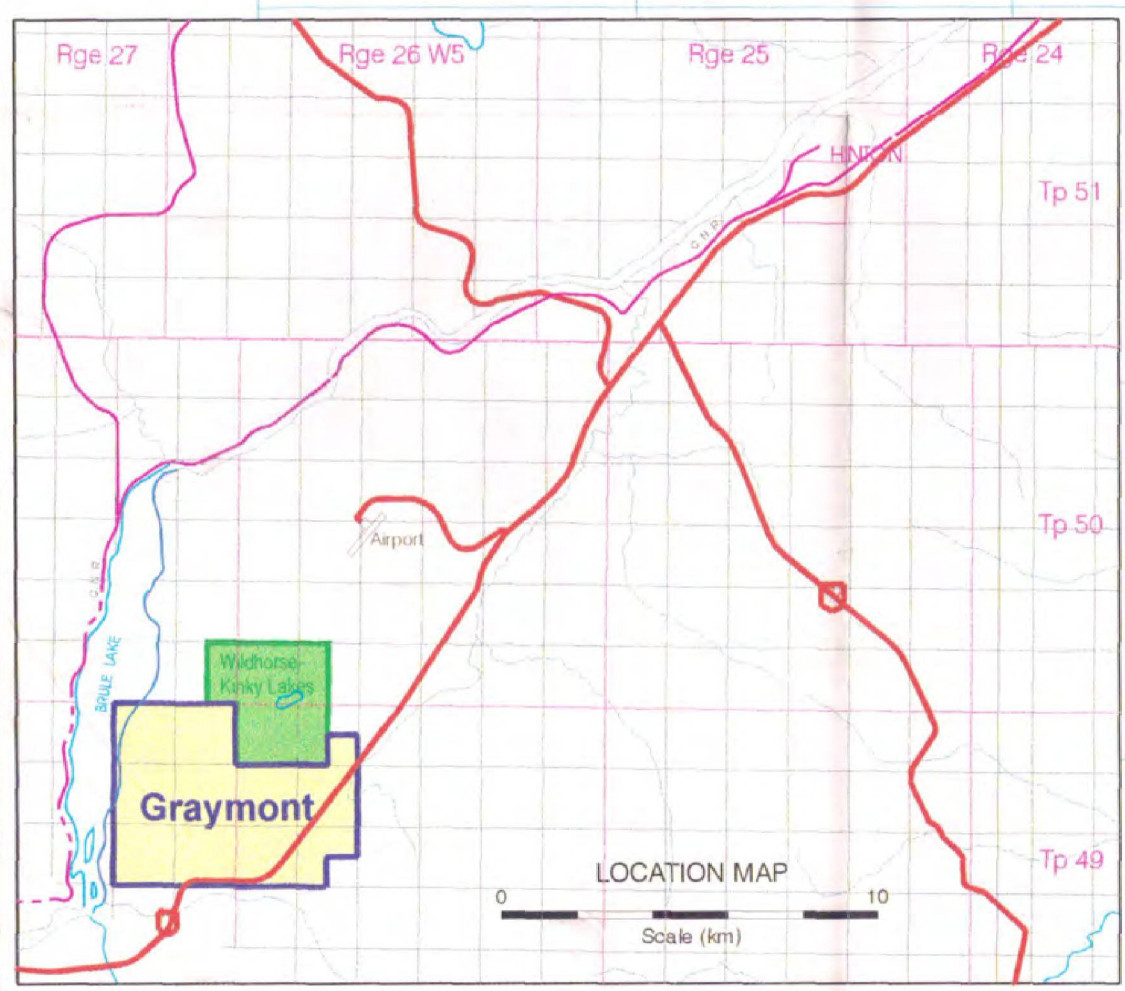


**SYMBOLS**

- Highway ..... [red line]
- Railway ..... [dashed red line]
- Trail or cut line ..... [dotted red line]
- Park or Protected Area ..... [green shaded area]
- Metallic & Industrial Minerals Permit ..... [yellow shaded area]
- Land use zone:
  - 1 - Prime Protection
  - 2 - Critical Wildlife
  - 4 - General Recreation
  - 5 - Multiple Use
- Drill access route ..... [dashed black line]
- Diamond drill hole; number (depth) ..... [red circle with black dot] **DH-2** (132.77 m)
- Rock sample; number ..... [black dot] 14706

**NOTES**

- 1) UTM base NAD 83.
- 2) Contour interval 10 m.
- 3) To accompany Graymont Western Canada Inc. assessment report entitled "2005 EXPLORATION AND DIAMOND DRILLING ON THE FOLDING MOUNTAIN PERMIT NEAR HINTON, ALBERTA".



**GRAYMONT WESTERN CANADA INC.**  
**DAHROUGE GEOLOGICAL CONSULTING LTD.**  
 EDMONTON, ALBERTA  
 FOLDING MOUNTAIN AREA, ALBERTA  
**Fig. 3.3**  
**Location of Work**

0 500 2500  
 WM Scale (m) 2006.05