

**FORM 43-101F1  
TECHNICAL REPORT**

**AN UPDATE ON THE EXPLORATION ACTIVITIES  
OF  
AURORA ENERGY RESOURCES INC.  
ON THE  
CMB URANIUM PROPERTY,  
LABRADOR, CANADA  
DURING THE PERIOD  
JANUARY 1, 2007 TO OCTOBER 31, 2007**

**Located on NTS Sheets:  
13J/11, 13J/12, 13J/13, 13J/14, 13K/03, 13K/06, 13K/09**

**Submitted on November 20<sup>th</sup>, 2007  
in fulfillment of reporting requirements under NI 43-101**

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### 3.0 SUMMARY

This technical report on the CMB Uranium Property of Aurora Energy Resources Inc. dated November 20, 2007 is an update on the ongoing 2007 drilling program, providing a summary of information collected since the filing of the previous technical report dated March 1<sup>st</sup>, 2007 (Wilton and Giroux, 2007), up to October 31<sup>st</sup>, 2007. The update has been prepared to comply with disclosure and reporting requirements set forth in National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1, at the request of management in conjunction with a proposed offering of 5,312,500 common shares and 750,000 flow through shares. A complete update on the 2007 drilling results will be filed upon completion of the program.

The CMB Uranium Property of Aurora Energy Resources Inc. is located near the northeast coast of Labrador in proximity to the town of Postville on Kaipokok Bay. The community of Happy Valley-Goose Bay, Labrador lies 180 km to the south-southwest.

The property consists of 90,275 hectares comprising 3,611 mineral claims in 32 licenses and is 100% owned by Aurora Energy Resources Inc. Most of the claims are contiguous and cover much of the historical Kitts-Michelin uranium district in the eastern part of the Central Mineral Belt. The property is bordered to the northeast by the Exempt Mineral Lands (EML) which includes the communities of Postville and Makkovik, as well as, the Kitts Uranium Deposit. Access to the property is by fixed-wing aircraft from Happy Valley-Goose Bay to Postville, and then via a 5 to 15 minute helicopter trip.

Mineralization on the CMB Uranium Property is hosted by Paleoproterozoic supracrustal sequences of the Post Hill and Aillik Groups and is represented by approximately forty uranium showings, including seven significant uranium deposits/prospects (Michelin, Kitts, Rainbow, White Bear, Inda, Gear and Nash). The uranium mineralization is typically hosted within strongly foliated, pelitic metasedimentary rocks of the Post Hill Group or fine-grained felsic to intermediate metavolcanic rocks of the Aillik Group. Uranium mineralization is associated with magnetite + actinolite + calcite +/- pyrite veining and strong to intense shearing and pervasive hematite alteration (+/- magnetite).

An updated 43-101 compliant resource estimate for the Michelin Deposit was completed in January, 2007. Concurrently with the updated Michelin resource estimate, an initial resource estimate was developed for the Jacques Lake deposit. The resource modeling was carried out with both an Open Pit and Underground component. The breakdown of the classified mineral resources is detailed in **Table 3.1** below. The resource estimates were provided by Gary Giroux, P. Eng., and consist of a total **Measured and Indicated Mineral Resource of 28.5 million tonnes at an average grade of 0.1% U<sub>3</sub>O<sub>8</sub> (approximately 58 million pounds of U<sub>3</sub>O<sub>8</sub>) and an Inferred Mineral Resource of 17.9 million tonnes at an average grade of 0.1% U<sub>3</sub>O<sub>8</sub> (approximately 38 million pounds of U<sub>3</sub>O<sub>8</sub>)**. A detailed description of the estimation and classification methodology is described in the body of this report.

**Table 3.1: 2007 CMB Resource Summary**

Deposit	Measured			Indicated			Inferred		
	Tonnes	% U3O8	lbs U3O8	Tonnes	% U3O8	lbs U3O8	Tonnes	% U3O8	lbs U3O8
Michelin Open Pit*	3,410,000	0.07	5,340,000	7,930,000	0.06	10,840,000	460,000	0.04	440,000
Michelin Underground**	-	-	-	14,310,000	0.12	36,290,000	13,950,000	0.11	32,610,000
Jacques Lake Open Pit*	-	-	-	1,150,000	0.08	2,100,000	1,520,000	0.06	1,880,000
Jacques Lake Underground**	-	-	-	1,670,000	0.09	3,310,000	1,950,000	0.07	3,100,000

\* Open pit resource reported at 0.03% U<sub>3</sub>O<sub>8</sub> cut-off

\*\* Underground resource reported at a 0.05% U<sub>3</sub>O<sub>8</sub> cut-off

As a follow-up to encouraging exploration results during the period 2003-2006, a **\$21.25 million (Can) budget** was proposed for a two-phase program of work in 2007. The 2007 Phase I Work Program was completed in Q1-2007 and included: the development of the previously above mentioned 43-101 compliant resource for the Michelin Uranium Deposit and the Jacques Lake target; the ongoing metallurgical testing of coarse core rejects from the 2006 drilling campaign from Michelin, Jacques Lake and White Bear at Lakefield Research in Ontario, continued environmental and sociological investigations, and the initiation of conceptual engineering studies. The budget for the Proposed 2007 Phase I Work Program totaled **\$0.5 million (Can)**.

Based on positive results from the 2007 Phase I Work Program, a follow-up 2007 Phase II Work Program was undertaken over Q2/3/4-2007. Included in this work were a proposed 75,000 metre diamond drill program at Michelin, Jacques Lake, Aurora River (including Burnt Brook and Gayle targets), Melody Hill, and Inda Lake Trend target areas to define and expand the known resource at Michelin and Jacques Lake uranium deposits and to develop new resources within the other targets areas; a geological mapping and geochemical sampling program throughout the CMB claim group with particular focus on the Aurora River Trend, southwest of Jacques Lake; and an ongoing environmental baseline survey and monitoring program (Q2/Q3 – 2007). The budget for the 2007 Phase II Work Program was **\$20.75 million (Can)**.

The Phase II Work Program commenced with diamond drilling on April 16<sup>th</sup>, 2007 and was ongoing as of October 31<sup>st</sup>, 2007. **134 drill holes** totaling **44,885.53 metres** have been completed to date on the Michelin Main, Jacques Lake, Melody Hill, Aurora Corridor, Burnt Brook, Gayle, Gear, Inda, and Nash targets. Results have been positive with continued intersections down-plunge from the inferred resource block at the Michelin Uranium Deposit, and also along strike and at depth at the Jacques Lake deposit. Results from the Inda Lake Trend (Gear, Inda, Nash) have also been encouraging, with mineralization being extended at all three target areas. Drilling at regional targets such as Aurora Corridor, Burnt Brook and Gayle has also been successful in intersecting new mineralization in the vicinity of known surface mineralization.

As of October 31, 2007 the Phase II program was still ongoing with four drills operating on the CMB Property on the Michelin Deposit. Progress on the Phase II program has been slowed by a number of factors, chiefly drill permit delays, poor weather conditions, labour shortages for diamond drillers, and difficult drilling conditions. As a result, it is expected that approximately **55,000 metres** of the recommended **75,000 metre** total will be completed by the end of 2007. The remaining **20,000 metres** will be completed by early Q2-2008, as part of the Phase III recommended program contained herein, and will focusing on infill drilling in the two main resource areas.

Results to date from the ongoing exploration programs on the CMB Property provide very encouraging results for the potential continued expansion of uranium resources on the Property. Continued aggressive exploration of this emerging belt is therefore recommended for a Phase III exploration program, in addition to the infill drilling in the two main resource areas recommended above, with a portion of the exploration efforts focused on expanding the existing resources at Michelin and Jacques Lake, both of which remain incompletely tested, and another substantial portion dedicated to further delineation and testing of additional deposits and prospects on the Property. The recommended budget for Phase III exploration amounts to **\$44,000,000**, which includes **\$8,000,000** to complete the **20,000 metres** of drilling recommended in the Phase II exploration program, as described above.

Pending successful completion and positive results from the Phase II component of the exploration program, it is further recommended that Aurora intensify their ongoing engineering and development investigations in 2008. The recommended budget for engineering and development studies amounts to **\$13,585,000**, and includes a component for completion of ongoing engineering studies (**\$2,155,000**) that is not contingent upon results of the Phase II exploration program, and a component for new engineering studies (**\$11,430,000**) that is contingent upon successful completion of the Phase II exploration program.

#### **4.0 INTRODUCTION AND TERMS OF REFERENCE**

This technical report (the “**Technical Report**”) on the CMB Uranium Property of Aurora Energy Resources Inc. (the “**Corporation**”), dated November 20, 2007, provides an update to the previous technical report, filed on March 1<sup>st</sup>, 2007 (Wilton and Giroux, 2007), and includes all drilling information received to date from the ongoing 2007 drilling program, up to October 31, 2007. The update has been prepared to comply with disclosure and reporting requirements set forth in National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1, at the request of management in conjunction with a proposed offering of 5,312,500 common shares and 750,000 flow through shares. A complete update on the 2007 drilling results will be filed upon completion of the program.

The Technical Report includes all information contained in the pre-existing technical report prepared by independent consultants to the Corporation, Dr. D.H.C. Wilton, P.Geo. and Mr. G.H. Giroux, P.Eng. (Wilton and Giroux, 2007), as well as, updated information on the Corporation’s ongoing drilling activities, during the period January 1<sup>st</sup> to October 31<sup>st</sup>, 2007, prepared by Mr. Ian Cunningham-Dunlop, P.Eng. Mr. Cunningham-Dunlop, P.Eng., Mr. Christopher Lee, P.Geo, Dr. Mark O’Dea, P.Geo. and Mr. Jim Lincoln, P.Geo. all collaborated on the recommendations set forth in Section 22 of the report, and are all qualified persons currently employed by the Corporation, but not independent of the Corporation.

Dr. Wilton and Mr. Giroux have conducted site visits to the CMB Uranium Property (the “**Property**”) that were current at the time of filing their initial report (Wilton and Giroux, 2007). Mr. Cunningham-Dunlop has been intimately involved with all of the Corporation’s drill programs on the Property, including multiple site visits during this program, and is on-site at the time of writing this report. Mr. Lee, Dr. O’Dea and Mr. Lincoln have all been actively involved in reviewing the results of the current drill program and have each recently been to site and inspected the current drill program, during the period of July through October, 2007.

The CMB Uranium Property is held 100% by Aurora Energy Resources Inc., a publicly traded company on the Toronto Stock Exchange (Symbol – AXU). Considerable data on the CMB Uranium Property is available in Aurora’s files in Vancouver and as readily available public documents. The public sources of relevant references are listed in Section 23.0 to this report.

The uranium concentrations for work performed by Aurora are reported as %U<sub>3</sub>O<sub>8</sub> unless otherwise indicated. Currency is reported in Canadian dollars unless otherwise noted. All map co-ordinates are given as metres in UTM projection NAD 27 (Zone 20 and 21) for Melody Hill, or NAD 83 (Zone 21) for all other project areas.

## **5.0 RELIANCE ON OTHER EXPERTS**

Some of the information presented within this report is based on the historical exploration records of Brinex (*e.g.*, Morrison, 1956; McClintock, 1978a and b; and Brinex Ltd., 1979) and others written twenty-five to fifty years ago. Although these records are an invaluable practical resource for current exploration, some geological interpretations of some prospects may not reflect best practice as viewed at the present time.

All resource estimates of this period are referred to in this (and previous reports) as historical estimates regardless of the quality of these estimates.

## 6.0 PROPERTY DESCRIPTION AND LOCATION

The CMB Uranium Property is located east of Kaipokok Bay on the north-east coast of Labrador, Canada (**Figure 6.1**). The nearest community is the town of Postville located approximately four km west of the project boundary. The community of Happy Valley-Goose Bay lies 180 km south-southwest of Postville. The project straddles two UTM zones (Zone 20, 21) and seven NTS map sheets (13J/11, 13J/12, 13J/13, 13J/14, 13K/03, 13K/06, 13K/09). The northern and southern limits of the project area are 6094000mN (Zone 21) and 6048500mN (Zone 21), respectively, and the western and eastern limits of the project area are 681000mE (Zone 20) and 345000mE (Zone 21), respectively. Most of the licenses are contiguous and are located 5 to 40 km south of Postville, though some licenses which make up the Croteau and Storm properties are located further west in the Central Mineral Belt and the interior of Labrador.

The CMB Uranium Property consists of 32 map staked licenses registered in the name of Aurora Energy Resources Inc. (TSX-AXU) totaling 3,611 units or 90,275 ha (**Figure 6.2 and Table 6.1**). The licenses were originally subject to a letter of agreement dated February 5<sup>th</sup>, 2003, between Fronteer Development Group Inc. (TSX-FRG) of Vancouver, Canada and Altius Resources Inc. (TSX-ALS) regarding an Area of Interest made up of eighteen 1:50,000 scale NTS map sheets. This agreement formed the basis for a 50:50 strategic alliance between Fronteer and Altius Resources Inc. of St. John's, Newfoundland to explore for iron oxide-copper-gold mineralization in the Central Mineral Belt of Labrador. A further agreement was signed on June 3<sup>rd</sup>, 2005 allowing for the formation of a jointly owned private company called Aurora Energy Inc. to hold the assets of the CMB Uranium Property. The name of Aurora Energy Inc. was subsequently changed to Aurora Energy Resources Inc. during an initial IPO on the Toronto Stock Exchange on March 22<sup>nd</sup>, 2006. Information on the individual mineral licenses can be found at [www.nr.gov.nl.ca/mines&en/mqrights/mineralrights](http://www.nr.gov.nl.ca/mines&en/mqrights/mineralrights).

The property is flanked to the north and west by the Exempt Mineral Lands (“EML”). These are areas exempted from staking to protect local interests during final negotiation of the Labrador Inuit Association land claim. The Labrador Inuit Land Claims Agreement was ratified by parliament in May, 2005. The Treaty was formally signed December 1<sup>st</sup>, 2005. The treaty outlines the process in which EML lands will be designated. Within 6 months of the effective date of enactment (December 1<sup>st</sup>, 2005), all EML on the Labrador Inuit Settlement Area (“LISA”) must be extinguished. However, all EML on Labrador Inuit Land (“LIL”) will remain until a Land Use Plan is completed by the new Nunatsiavut government. The Nunatsiavut government is now in the process of developing mineral and land use policies from which the Land Use Plan will be developed. This process may take up to a maximum of three years but may be addressed sooner by the Nunatsiavut government.

The distinction between LISA and LIL lands is outlined in **Figure 6.2** with Melody, Otter Lake and 50% of Jacques Lake falling in LISA while White Bear, Michelin, Rainbow, Inda Lake, Aurora River and 50% of Jacques Lake falling in LIL.

**Table 6.1: CMB Uranium Property - Mineral Tenure**

Property	License	Claims	Ha.	NTS	Issued	Work Due	Amount Due in 2007	Next Expenditures Due	
								Year	Amount
Post Hill	09410M	136	3400	13J13E	3/27/2003	3/27/2008	\$0.00	3/27/2011	\$18,400.44
Post Hill	09411M	128	3200	13J13E	3/27/2003	3/27/2007	\$74,484.22	3/27/2008	\$125,684.22
Michelin	09412M	190	4750	13J12W, 13K09E	3/27/2003	3/27/2016	\$0.00	3/27/2017	\$171,000.00
Burnt/Emben	09413M	42	1050	13J12E	3/27/2003	3/27/2008	\$0.00	3/27/2017	\$37,800.00
Burnt/Emben	09414M	63	1575	13J12E	3/27/2003	3/27/2016	\$0.00	3/27/2016	\$56,700.00
Croteau	09415M	40	1000	13K06	3/27/2003	3/27/2007	\$29,639.04	3/27/2008	\$45,639.04
Michelin North	09482M	145	3625	13J12W, 13K09E	4/28/2003	4/28/2010	\$0.00	4/28/2012	\$49,787.23
Post Hill Northeast	09718M	8	200	13J13W	10/24/2003	10/24/2007	\$849.44	10/24/2008	\$4,049.44
Post Hill Northwest	09719M	32	800	13J13E	10/24/2003	10/24/2007	\$25,417.20	10/24/2008	\$38,217.20
Post Hill West	09720M	60	1500	13J13E, 13J13W	10/24/2003	10/24/2007	\$52,780.12	10/24/2008	\$76,780.12
East Micmac Lake	09721M	36	900	13J12W, 13J13W	10/24/2003	10/24/2007	\$33,185.92	10/24/2008	\$47,585.92
Michelin Northeast	09722M	100	2500	13J12W	10/24/2003	10/24/2007	\$84,372.33	10/24/2008	\$124,372.33
Michelin Northwest	09723M	42	1050	13K09E	10/24/2003	10/24/2007	\$14,801.32	10/24/2008	\$31,601.32
Walker Lake	10022M	190	4750	13K09E	4/2/2004	4/2/2007	\$87,394.90	4/2/2008	\$153,894.90
West Micmac Lake 1	10046M	181	4525	13J12W, 13K09E	4/12/2004	4/12/2007	\$0.00	4/12/2009	\$63,759.63
West Micmac Lake 2	10047M	120	3000	13J12W	4/12/2004	4/12/2008	\$0.00	4/12/2009	\$1,188.16
West Micmac Lake 3	10048M	137	3425	13J12W	4/12/2004	4/12/2007	\$65,665.65	4/12/2008	\$113,615.65
West Micmac Lake 4	10049M	166	4150	13J12E, 13J12W	4/12/2004	4/12/2007	\$55,622.08	4/12/2008	\$113,722.08
Makkovik River 1	10050M	147	3675	13J12E	4/12/2004	4/12/2010	\$0.00	4/12/2010	\$53,313.94
Makkovik River 2	10051M	220	5500	13J13E, 13J12E	4/12/2004	4/12/2016	\$0.00	4/12/2017	\$198,000.00
Makkovik River 3	10052M	127	3175	13J11W, 12E, 13E, 14W	4/12/2004	4/12/2007	\$45,012.46	4/12/2008	\$89,462.46
Makkovik River 4	10053M	111	2775	13J13E, 13J12E	4/12/2004	4/12/2007	\$51,944.28	4/12/2008	\$90,794.28
Makkovik River 5	10054M	170	4250	13J13E	4/12/2004	4/12/2007	\$96,023.74	4/12/2008	\$155,523.74
Makkovik River 6	10055M	136	3400	13J13E, 13J14W	4/12/2004	4/12/2007	\$73,474.35	4/12/2008	\$121,074.35
Makkovik River 7	10056M	126	3150	13J13E	4/12/2004	4/12/2007	\$72,078.28	4/12/2008	\$116,178.28
Makkovik River 9	10058M	30	750	13J13E	4/12/2004	4/12/2008	\$0.00	4/12/2008	\$9,401.41
Kaipokok Bay	10059M	54	1350	13J13E, 13J13W	4/12/2004	4/12/2007	\$28,861.12	4/12/2008	\$47,761.12
Aurora River	10343M	175	4375	13J/12	10/29/2004	10/29/2007	\$0.00	4/12/2008	\$10,404.50
Melody Lake	10344M	120	3000	13K/09E, 13J12W	10/29/2004	10/29/2007	\$61,145.24	4/12/2008	\$103,145.24
Storm	10726M	16	400	13K03	3/27/2003	3/27/2007	\$5,393.81	3/27/2008	\$17,393.81
Makkovik River10	12754M	242	6050	13J/11	11/30/2006	11/30/2007	\$48,400.00	11/30/2007	\$48,400.00
Makkovik River 11	12778M	121	3025	13J/11	11/30/2006	11/30/2007	\$24,200.00	11/30/2007	\$24,200.00
<b>Total</b>		<b>3,611</b>	<b>90,275</b>				<b>\$1,030,745.50</b>		

All licenses are currently in good standing until 2008 and beyond with the exception of 012754M and 012778M which require a total of \$72,600.00 by November 30, 2007 or must have a security bond posted for said amount in lieu of work.

**Figure 6.1: Location Map – CMB Uranium Property**

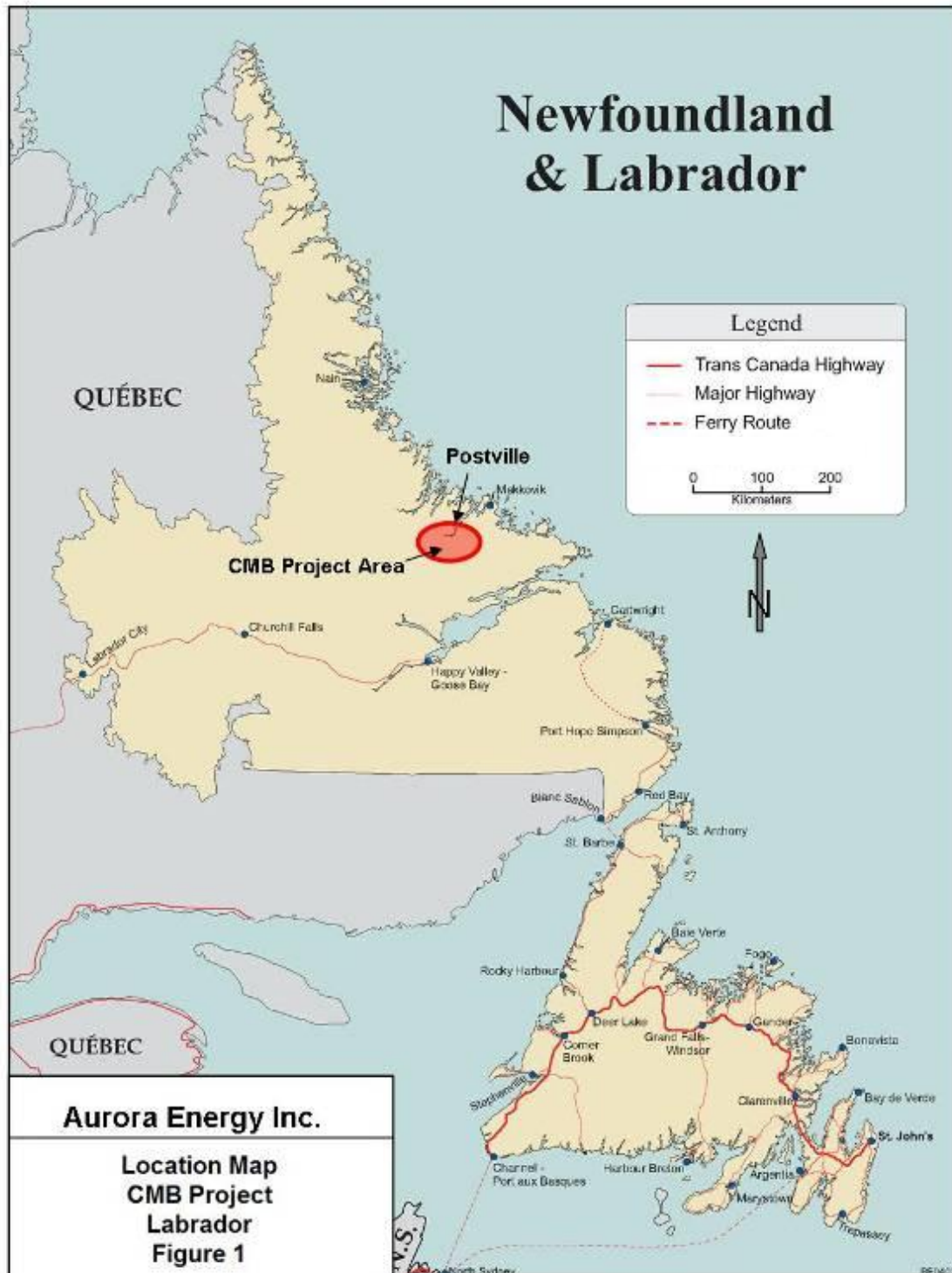
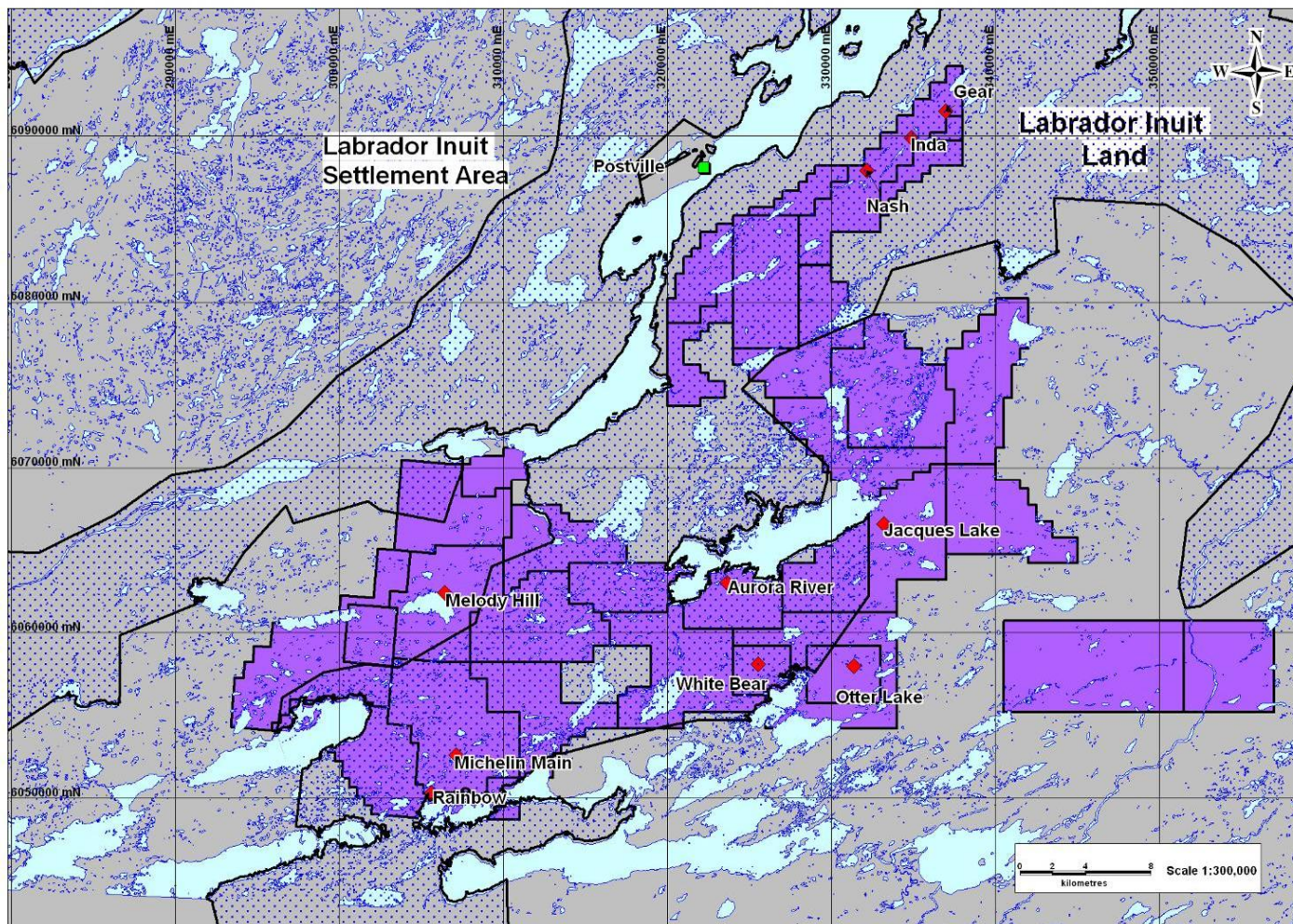




Figure 6.2: Mineral Tenure Map – CMB Uranium Property



\*Map co-ordinates are NAD 83, Zone 21

## **7.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY**

Access to the project area is best gained via the town of Postville which hosts sufficient amenities necessary to support field personnel, including a permanent fixed-wing gravel airstrip. Passenger service flights based in Happy Valley-Goose Bay offered by Air Labrador and Innu Mikun Airlines operate daily to communities along the coast. A coastal supply-ferry boat service owned by Woodward's, Happy Valley-Goose Bay, operates bi-weekly during ice-free periods (June to October) up and down the coast as far north as Nain to as far south as Lewisporte, Newfoundland. Helicopter support to ferry personnel and field gear from Postville to the field area is the preferred mode of transport. Float plane and boat access may also be suitable for certain properties where camps have been established to support major drilling programs. Various snow machines provide for efficient travel during winter. Foot traversing is best suited to access the interior of the project area.

The climate of Labrador is more Arctic than Atlantic because of its location on the eastern side of the continent and experiences strong seasonal contrasts. Winters are very cold lasting almost eight months with normal daytime temperatures for January between -10 and -15 °C and annual snowfalls to 400 mm annually. The summer season is brief and cool along the coast with July average temperatures between 8 to 10 °C (with rare hot spells bringing temperatures up to 35 °C) and average precipitation ranging to 200 mm.

Local infrastructure is limited to facilities in the coastal communities of Postville and Makkovik which include commercial airline service from Happy Valley-Goose Bay and commercial ferry service from Lewisporte, Newfoundland, and Happy Valley-Goose Bay, Labrador. Postville is a clean and progressive village with rental space suitable for the establishment of an exploration base. Prudent exploration practice in coastal Labrador includes the use of service contractors who have established partnerships with the Nunatsiavut Government. Based on experiences with the development of the Voisey's Bay project, the people of Labrador have acquired a good understanding of the exploration business.

The CMB Property is located in a rugged wilderness area of generally moderately rolling relief ranging to about 700 m above sea level (a.s.l.). Locally abundant outcrop, numerous lakes, and sparse coniferous forest cover consisting of black spruce, balsam fir and tamarack are most typical of this part of the north-eastern Canadian Shield. A large portion of the project area, immediately east of Kaipokok Bay, was devastated by a forest fire in 1966 and experienced little re-vegetation. Bedrock is exposed as north-easterly trending ridges with intervening marsh. Areas of outcrop are flanked by glacial till, and in turn by minor amounts of glacial outwash in major drainages. Most terrain is covered by sheets of glacial boulders. Extensive areas of burned forest show up as pink colored areas on Landsat images.

## **8.0 HISTORY**

British Newfoundland Exploration Limited (Brinex), a subsidiary of British Newfoundland Corporation Limited (Brinco), was granted an exploration lease in the Makkovik-Kaipokok Bay area in 1955 following the discovery of encouraging signs of copper, molybdenum and uranium mineralization by prospectors. The first significant uranium showing was discovered by Walter Kitts in 1956. A program of drilling and underground development by means of adit was started on the Kitts deposit in 1957. The project was suspended in 1958, however, as the development was too late to qualify for supply contracts with the Atomic Energy Commission of Canada.

No further exploration was carried out until 1966 when Brinex and Metallgesellschaft A.G. made a joint venture agreement on part A of the lease area containing the Kitts deposit. Metallgesellschaft A.G. subsequently transferred its interest to Urangesellschaft Canada Limited. Exploration under this agreement resulted in the discovery of the Michelin deposit by prospector Leslie Michelin in 1968 as well as the Gear, Inda and Nash prospects between 1968 and 1969. All of these resulted from ground follow-up of radioactivity detected by airborne gamma-ray spectrometer surveys flown by Barringer Research in 1967.

Additional joint venture agreements were made with Urangesellschaft Canada Limited to include part B of a Statutory Agreement obtained by Brinex in 1970. In addition to property scale exploration of the Kitts and Michelin deposits, extensive exploration of other radiometric anomalies was carried out during the 1970's.

Brinex completed a plan to develop the Michelin and Kitts uranium deposits as a combined mining operation but the project was compromised by the collapse in the price of uranium in the early 1980's. Brinex ceded the rights to area B in 1980 and to area A in 1985. Remediation of the Kitts and Michelin mine sites was subsequently completed by the Provincial Government in 1992.

The ground remained open for the next ten years until the formation of the Fronteer-Altius Alliance (the "Alliance") in 2003 and the re-evaluation of the district for Cu-Au-U targets. The Alliance acquired eight mineral licenses in the spring of 2003 followed by six in the fall of 2003, 14 in the spring of 2004, and the remaining two in the fall of 2004.

A summary of the work carried out by the Alliance in 2003 and 2004 and by its successor, Aurora Energy Resources Inc., in 2005 and 2006 will be discussed under Section 12.0.

## 9.0 GEOLOGICAL SETTING

### 9.1 REGIONAL GEOLOGY

The Central Mineral Belt (CMB) refers to an area of Archean to Mesoproterozoic crust which is located in Eastern Labrador and is part of the north-eastern Laurentian Shield. The CMB contains portions of the Nain, Makkovik and Churchill tectonic provinces and has been overprinted in the south by the Exterior Thrust Belt of the Grenville Province (**Figure 9.1**). The CMB comprises a series of six Proterozoic supracrustal sequences, intrusive suites of various ages and adjacent Archean rocks. These rocks record to varying degree events associated with Makkovikian (~ 1.8 Ga), Labradorian (~ 1.6 Ga) and Grenvillian (~ 0.1 Ga) deformation. Mineral tenure of present interest is located within the Aillik Domain of the Makkovik Province (Ryan, 1984). The Makkovikian orogen is correlated with Ketilidian, Penokean and Svecofennian orogens which formed part of a Paleoproterozoic active margin along the southern margin of Laurentia-Baltica, the so-called North Atlantic Craton (Gower *et al.*, 1990).

The constituent Proterozoic sequences of the belt range in age from *ca.* 1.22 to 2.2 Ga, and in decreasing age are the Post Hill (*ca.* 2.2 Ga), Moran Lake (*ca.* 2.0 Ga), Aillik (*ca.* 1.8-1.86 Ga), Bruce River (*ca.* 1.65 Ga), Letitia Lake (*ca.* 1.33 Ga) and Seal Lake (*ca.* 1.22-1.25 Ga) groups. The granitoids are broadly grouped into the Junior Lake Granodiorite (*ca.* 1.9 Ga), Makkovikian (*ca.* 1.8 Ga) and Trans-Labrador Batholith (*ca.* 1.65 Ga) suites (after Kerr, 1994). Sills of the *ca.* 1.43 Ga Michael Gabbro (Emslie *et al.*, 1997) intrude southeastern portions of the belt near the Grenville Front.

### 9.2 DISTRICT GEOLOGY

The Makkovik Province consists of the Kaipokok, Aillik and Cape Harrison tectonic domains. The Kaipokok shear zone which defines the boundary between the Kaipokok and Aillik domains also marks the southern limit of Archean crust in the Makkovik Province. The Cape Harrison domain has been interpreted as a magmatic arc developed near the Makkovikian continental margin (Culshaw *et al.* 2000 and Ketchum *et al.* 2002).

The Aillik domain is underlain by strata of the Paleoproterozoic Post Hill (2178-2013 Ma) and Aillik (1860-1810 Ma) groups, as well as extensive granitoid terrain comprised of several intrusive suites including 1815-1790 Ma syntectonic and post tectonic Makkovikian plutons, 1740-1700 Ma post tectonic, A-type plutons and 1650 Ma plutons of the Trans-Labrador batholith (**Figures 9.2 and 9.3**). Deformation, amphibolite facies regional metamorphism, regional metasomatism and uraniferous mineralization of the Post Hill and Aillik groups have been attributed to Makkovikian Orogeny (1.9 to 1.7 Ga (Ryan, 1984; Gower *et al.* 1990; Wilton, 1996; Culshaw *et al.* 2002). The stratigraphy of the Post Hill and Aillik groups and the distribution of intrusive suites within the Aillik domain are not well defined. A number of uranium occurrences are located along the Nakit Slide (a strand of the Kaipokok shear zone) which is a tectonic

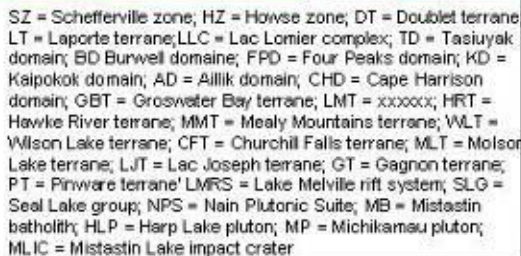
contact between lithologies of the Post Hill Group to the north-west and the Aillik Group to the south-east.

The Post Hill Group is an approximately 2700 m thick sequence of metamorphosed siliceous clastic metasedimentary strata and mafic metavolcanic rocks in tectonic contact with Archean gneiss. The Post Hill Group occurs as highly strained, amphibolite and gneiss in thrust sheets near Kaipokok Bay. A rifted, continental margin setting has been interpreted for deposition of the Post Hill Group (Ketchum *et al.* 2002).

The Aillik Group is made up of a 5000 m thick succession of metasedimentary rocks, bimodal metavolcanic rocks (dominantly felsic), subvolcanic intrusives and diabase dykes (Bailey, 1979). A lower dominantly metasedimentary section and upper dominantly fragmental, felsic volcanic section have been recognised. Deposition in back-arc basin and in shallow marine to subaerial environments has been inferred for the Aillik Group (Ketchum *et al.*, 2002). The Aillik Group is noted as a host for numerous and varied Cu, Pb, Zn, Mo, and U occurrences (Wilton, 1996). Within the project area, rocks of the Aillik Group are commonly represented by laminated magnetite-feldspar-quartz-bearing metavolcanic lithologies.

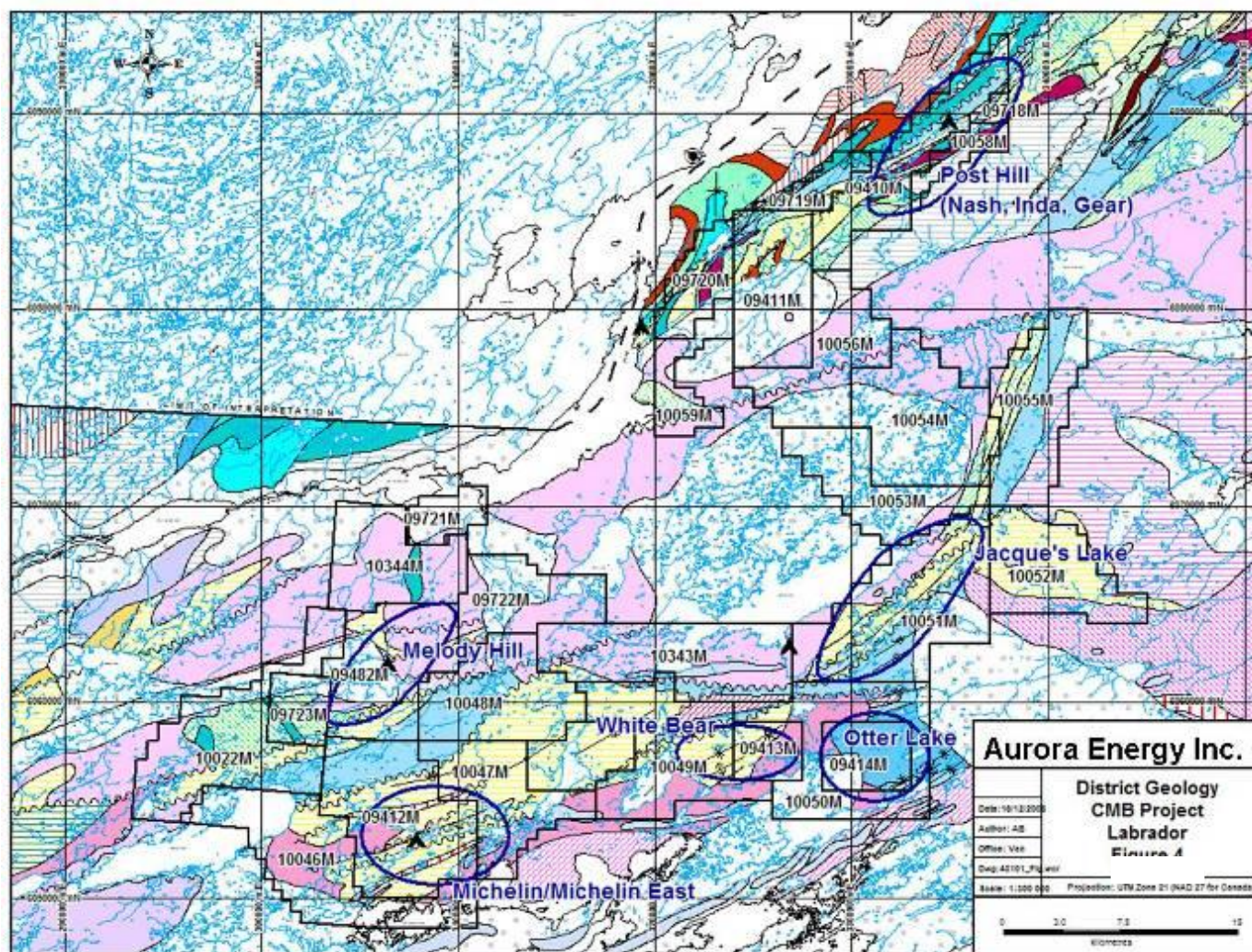


(Map from <http://www.geosurv.gov.nf.ca/ecsoot/geology.gif>)





**Figure 9.2: District Geology Map - CMB Project**  
(Geology compiled from Gower *et al*, 1982, and Ryan, 1984)



**Figure 9.3: Table of Formations**  
(Geology compiled from Gower *et al*, 1982, and Ryan, 1984)





## **10.0 DEPOSIT TYPES**

Uranium mineralization hosted by lithologies of the Post Hill Group has been referred to as syngenetic by early workers and that within the Aillik Group has been called volcanic-hosted, stratabound and possibly syngenetic in origin (Gower *et al.*, 1982; Gandhi, 1986). Pb-Pb ages in the range 1895 to 1697 Ma for uranium mineralization in the Post Hill Group (2178-2013 Ma) support an epigenetic origin for these occurrences (Wilton, 1996). An epigenetic emplacement of the uranium mineralization within the Aillik Group is also indicated by uraniferous fracture-filling and breccias.

Extensive areas of hematite + albite and quartz + epidote + actinolite + chlorite alteration in the Kitts - Michelin area are similar to alteration assemblages developed in iron-oxide-copper-gold (IOCG) districts of Paleoproterozoic age (Hitzman *et al.*, 1992; Haynes, 2000). In some of these districts, a peripheral enrichment in uranium has been exploited as an exploration tool to locate copper-gold mineralization. Consequently, fracture controlled uraninite + magnetite mineralization in the Kitts - Michelin area may represent part of a uranium-rich end member of the iron-oxide class of epigenetic deposits.

## **11.0 MINERALIZATION**

### **11.1 INTRODUCTION**

The Central Mineral Belt of Labrador is one of the most prolific areas of uranium mineralization in Eastern Canada. Approximately 100 metal occurrences are known in the map area held by the Aurora Energy Resources Inc. within 1:50,000 scale NTS map sheets 13J/11-14 and 13K/09 and 16. About 70% are called uranium occurrences and about 20% are called copper occurrences (<http://gis.geosurv.gov.nl.ca/mods/mods.asp>).

Radioactivity is associated with hydrothermal breccias marked by well oxidised wall rocks and dark hornblende-rich fracture-filling. Commonly radioactivity is proportional to the amount of dark coloured matrix component but in some cases salmon-red, crackle brecciated lithologies are also highly radioactive. The matrix of radioactive breccia includes the assemblage: hornblende + titanite (sphene) + calcite (grey or pink) + magnetite± biotite, garnet, (Fe, Cu, Pb, Zn, Mo)-sulphides, fluorite, uraninite.

Selvages and halos of iron oxide are typically developed, whereas malachite and uranophane staining occur more locally. Net-vein, folded and segmented fabrics are observed in radioactive breccias. Locally, initial fracturing preceded the formation of a late subvertical cleavage and breccias were rotated into the plane of this cleavage to produce thinly banded gneiss with discontinuous mafic layers.

Descriptions of the significant prospects within the CMB Uranium Property are listed in the following sections with any corresponding historical and current resources estimates summarized in Section 19.0 of this report.

### **11.2 URANIUM PROSPECTS OF THE POST HILL GROUP**

Gear Lake Prospect - The Gear Lake prospect lies within the northeast portion of the mineral tenure controlled by Aurora Energy Resources Inc. Uranium mineralization first discovered in 1968 is associated with a roughly circular U/Th radiometric anomaly 0.35 km in diameter. The mineralization occurs within sheared metasedimentary rocks over a strike length of 120 m. An average grade of 0.165% U<sub>3</sub>O<sub>8</sub> was obtained for one zone of mineralization 30 m long by 4.9 m wide as outlined to a depth of 70 m.

Inda Lake Prospect - The Inda Lake prospect lies within the northeast portion of the mineral tenure controlled by Aurora Energy Resources Inc. Uranium mineralization discovered at Inda Lake in 1968 is associated with a prominent circular U/Th radiometric anomaly 0.35 km in diameter. The mineralization occurs on the upper, south-eastern limb of a north-easterly trending anticline which is overturned to the north-west. The mineralization occurs as a footwall lens and three hanging wall lenses along a strike length of 1.1 km between Inda and Knife lakes.

Nash Lake Prospect - The Nash Lake prospect lies within the northeast portion of the mineral tenure controlled by Aurora Energy Resources Inc. Uranium mineralization discovered at Nash Lake in 1967 is associated with an oval-shaped U/Th radiometric

anomaly 0.7 by 0.3 km in diameter. Drilling during the late 1960's located three zones of mineralization within a shear zone called the Nakit Slide. A dip of 60° east and average width of 1.85 m were reported for the zone. Diamond drill hole NW77-6 in the west extension zone intersected 0.072% U<sub>3</sub>O<sub>8</sub> over 3.4 m from 13.4 to 16.8 m, suggesting potential for resource development to the west.

### 11.3 URANIUM PROSPECTS OF THE ALLIK GROUP

Aurora Corridor (River) Target – The Aurora River target lies within the east central portion of the mineral tenure controlled by Aurora Energy Resources Inc. near Jacques Lake, approximately 10km to the south west of the main Jacques Lake target area. The Aurora River target was originally discovered and explored by Brinex during the years spanning 1979-1981. Work completed by Brinex consisted of geological, magnetic and electromagnetic surveys, carried out on 40 km of cut grid lines. A series of 12 radioactive outcrops were trenched and sampled. Uraniferous outcrops are found within a series of metamorphosed and deformed felsic tuffs within the Aurora River Shear Zone, an east-west oriented shear zone located on the south side of Jacques Lake.

Jacques Lake (McLean) Prospect - The Jacques Lake Prospect lies within the east central portion of the mineral tenure controlled by Aurora Energy Resources Inc. near Jacques Lake and was discovered in 1956 by prospector J. McLean working on behalf of Brinex (E. R. Morrison, 1956). Mineralization occurs in felsic and intermediate metavolcanic rocks of the Aillik Group. In 1967, four trenches were dug along a strike length of 165 m on the side hill at an elevation of about 235 m. Results from the sampling of these trenches included 0.06% U<sub>3</sub>O<sub>8</sub> across 0.9 m from trench #2 and 0.04% U<sub>3</sub>O<sub>8</sub> across 2.1 m from trench #3. Prospector A. Andrews, working on behalf of the Urangesellschaft/Brinex Joint Venture in 1978, identified a dispersal train of twelve radioactive boulders with an average content of 0.32% U<sub>3</sub>O<sub>8</sub> near the base of the ridge (McClintock, 1978a and b).

Recent drilling campaigns by Aurora in 2005-2006 have met with great success and have outlined a new resource at the Jacques Lake Prospect. A new 43-101 compliant resource calculation for the zone by Gary Giroux in January 2007 is shown below in **Section 12.4 in Table 12.1**

Burnt Brook Showing - The Burnt Brook Showing lies within the central portion of the mineral tenure controlled by Aurora Energy Resources Inc., immediately southwest of Jacques Lake, and was discovered by L. Michelin in 1979. About 110 m of trenching in 14 trenches were documented. The North, South and Dianne zones are hosted by folded metasedimentary and metavolcanic rocks of the Aillik Group. Trenching on the North zone returned assays that included 0.069% U<sub>3</sub>O<sub>8</sub> over 6 m within a zone of intermittent radioactivity 125 m in length and 75 m in width, as constrained by trenching. Trenching in the South zone returned 0.155% U<sub>3</sub>O<sub>8</sub> over 4.8 m from a metapelite within an area of intermittent radioactivity along a strike length of 250 m.

Otter Lake (Emben) Showings - The Otter Lake prospects lie within the southeast portion of the mineral tenure controlled by Aurora Energy Resources Inc., immediately west of Otter Lake. Several occurrences of uranium mineralization with significant base metal and silver values have been documented within the Aillik Group on the east side of the Burnt Lake Granite since the initial discoveries in 1969; one grab sample from a radioactive boulder assayed 8.49%  $U_3O_8$ . Encouraging results by Brinex in 1981 included 0.423%  $U_3O_8$  over 3.0 m in trench #5 across a zone 100 m in strike length called the Emben (Otter) South Zone. Work by Aurora in 2004/2005 identified a broad 500m x 500m radiometric anomaly covering the old Emben Main, Central and South Showings and drilling in 2005 (10 ddh – 2,685.59m) returned a high of 1.0%  $U_3O_8$ /0.5m in DDH OL-05-04 at Emben (Otter) South.

White Bear Lake (Burnt Lake) Showings – White Bear Lake showings lie within the central portion of the mineral tenure controlled by Aurora Energy Resources Inc. They are located on the northern shore of White Bear Lake (formerly Burnt Lake) and consist of the North East Showing, the North Showing, the South Showing and the North West Showing. The project area is marked by a strong U/Th anomaly with a 3 km strike length in an east-west direction and was first explored by Brinex from 1967 through 1978. Mineralization occurs intermittently within felsic metavolcanic rocks of the Aillik Group on the north side of the Burnt Lake granite intrusive. Soil geochemical surveys indicated a large anomaly over the known mineralization and led to the targeting and drilling of 17 diamond drill holes in 1977 for a cumulative total of 564 m. The Brinex drilling returned values up to 0.256  $U_3O_8$ /16.5 m in drill hole 77-7 but these zones were not subsequently tested during follow up drilling and thus present clear targets in the White Bear area for future programs. During the course of 2005 field work, it was found that the highest scintillometer values, and therefore most intense uranium mineralization, were associated with strong to intense, pervasive hematite alteration in variably porphyritic felsic metavolcanics. The 14 samples collected during 2005 program returned a range of uranium values from 10.5 to 6680 ppm U.

Melody Hill Anomaly - A northeasterly trending zone of weak radioactivity, 8 x 1 km in size, straddles Melody Lake in the west central portion of the mineral tenure controlled by Aurora Energy Resources Inc. Within this zone, a 1.0 km dispersal train of radioactive boulders was identified on the southern slope of Melody Hill about 1.4 km northeast of Melody Lake. Historical results for these boulders include an average of 8.4%  $U_3O_8$  from 27 boulders and a high of 28.2%  $U_3O_8$  from a grab sample collected in 2004. Anomalous uranium content in excess of 100 ppm in lake sediments and an intercept of 0.14%  $U_3O_8$ /6.0m in DDH 80-44 on the shoreline suggest a possible source area below Melody Lake.

Michelin Deposit - This historic deposit, located in the southwest portion of the mineral tenure controlled by Aurora Energy Resources Inc., consists of several sub-parallel groups of mineralized zones along a strike length of 1200 metres and to local depths of 700 metres and is open in all directions. The mineralization is largely confined to 150-200 metre thick zone of visibly discernable hematite alteration within a coarse feldspar porphyritic quartz mylonite unit, the boundaries of the zone being essentially

conformable with S1 and lithologic contacts. The zones have an average grade of 0.12% U<sub>3</sub>O<sub>8</sub>, strike approximately 060°, dip about 55° southeast, and contains higher grade shoots which plunge steeply to the south-southwest, consistent with the regional plunge lineation. The most consistently mineralized material occurs within a 65-metre thick interval located near the upper part of the lower half of the alteration zone. This interval contains up to three higher-grade sub-intervals, separated by lower-grade or essentially un-mineralized material. The alteration zone is marked by a gradational replacement of biotite and chlorite by hornblende, and more proximal to mineralization, by pyroxene and actinolite. There is also an increase in calcite and gypsum, although these are still only present in very minor quantities. Hematization increases significantly proximal to mineralization, with associated disappearance of magnetite and locally pyrite. Uranium normally occurs in microscopic disseminations of uraninite associated with strong hematization.

New drilling by Aurora in 2005-2006 was successful in both confirming the known mineralization above 250 metres and also extending the zone down-plunge to a vertical depth of 700 metres. The best intersection came from DDH M05-006 which returned 0.1% U<sub>3</sub>O<sub>8</sub>/63.0m in the heart of the main plunging shoot at a vertical depth of 550 metres. A new 43-101 compliant resource calculation for the zone by Gary Giroux in January 2007 is shown below in **Section 12.4 in Table 12.1**.

Rainbow Deposit - The Rainbow Zone, located in the southwest portion of the mineral tenure controlled by Aurora Energy Resources Inc., occurs as a stratiform lens within Aillik Group feldspathic tuff and tuff breccia. Mineralization with an average grade of 0.15% U<sub>3</sub>O<sub>8</sub> occurs over a strike length of 290 m and widths up to 15 m. The main lens as inferred by drilling was 140 m long by 2 to 15 m wide by 79 m deep and is open in all directions.

Michelin East Target – This area, located in the southwest portion of the mineral tenure controlled by Aurora Energy Resources Inc., was investigated by Brinex staff during the development of the neighboring Michelin Deposit and dozens of the 300 drill holes performed at Michelin fall within the Michelin East target area. Ground work resulted in the discovery of the Chitra Zone, Mikey Lake Zone, and Running Rabbit Zones and follow-up drilling partially tested these zones as well as a number of the known radiometric anomalies. The best results were **0.11% U<sub>3</sub>O<sub>8</sub>/6.7m** in DDH CH75-2 from the Chitra Zone.

## **12.0 EXPLORATION**

### **12.1 2003 EXPLORATION WORK**

The Fronteer-Altius Alliance (the “**Alliance**”) was formed in February 2003 to evaluate the potential for iron oxide-copper-gold mineralization in the eastern part of the Central Mineral Belt. The Alliance subsequently acquired eight mineral licenses through staking in March 2003 and then carried out a limited field visit in July 2003 with Fronteer and Altius personnel to examine and sample the historical metal occurrences on, and adjacent to, the newly acquired mineral land tenure.

On the basis of the observance of widespread hematite alteration and chlorite + epidote + actinolite alteration during the July 2003 field visit, six additional mineral licenses were acquired in October 2003 to blanket the Aillik and Post Hill Groups of rocks and an airborne magnetic and radiometric survey was recommended for the 2004 to cover the entire claim group.

### **12.2 2004 EXPLORATION WORK**

A **12,800 line-km** high resolution airborne magnetometer and gamma-ray spectrometer survey was completed by Fugro Airborne Surveys Corporation on behalf of the Alliance during the summer of 2004. The block of ground surveyed was approximately 70 by 20 km in size and covered the most of the Kitts-Michelin uranium district. Fixed wing and helicopter components to the survey were flown on a line spacing of 200 m. The anomalies generated by the airborne survey were then prospected, evaluated and ranked in the field by Fronteer and Altius personnel during September 2004. By the end of 2004, approximately \$1.06 million had been invested in the project since its inception in February 2003.

The results of the 2004 airborne survey were very encouraging and showed a dozen discreet ovoid-shaped U/Th radiometric anomalies within the Kitts-Michelin uranium district of Labrador. Many of these anomalies pinpointed the location of uranium occurrences such as the Gear, Nash, Inda, Rainbow, and Michelin deposits discovered by Brinex during the late 1960's. Other anomalies of large area and amplitude comparable to that of the Michelin deposit were outlined at Jacques Lake and Otter Lake where mineralization had not been previously drilled.

Findings from the ground follow-up in September 2004 included the following:

- a) The uranium mineralization throughout the district is contained in hydrothermal breccias associated with more regionally distributed hematite-albite alteration and most frequently developed in gneiss of the Paleoproterozoic Post Hill and Aillik groups.
- b) Radioactivity found on an outcrop scale typically consists of multiple intervals with uranium content of about 0.1 weight %  $U_3O_8$  (or radioactivity of several

thousand counts per second) over widths of one to two metres but these intervals were found to be discontinuous along strike.

- c) The spherical shape of the airborne radiometric anomalies suggests local thickening of mineralization along more extensive planar zones of discontinuous radioactivity. Structural controls to account for local thickening of the zones of mineralization and for the steep southwest plunge of the mineralization are inferred.
- d) Mineralization found in dispersal trains of float commonly exceeds that located in bedrock by an order of magnitude. The exploration record for the Kitts – Michelin area has demonstrated that mineralised float is commonly locally derived. Consequently, discovery of the source of better quality mineralization found in float is the challenge for current exploration programs.
- e) Trace element geochemistry of uranium mineralization indicates a strong positive correlation with lead content presumably as the result of the accumulation of radiogenic lead. Although assemblages containing pyrrhotite, pyrite, chalcopyrite, galena, sphalerite or molybdenite have been reported in association with uranium mineralization throughout the district, the content of Cu, Zn and Mo are poorly correlated with uranium content in rock samples. Possibly, uraniferous mineralization is the product of a separate hydrothermal event.

Based on the results of the airborne radiometric survey and the subsequent ground follow-up, the Post Hill, Jacques Lake, Otter Lake–White Bear Lake, Michelin, and Melody Hill areas were identified as project areas with potential for bulk tonnage volcanic-hosted uranium mineralization. A **\$5 million (Can)** follow-up program was recommended for 2005 to include:

- a) The compilation of all historic Brinex field data in digital form.
- b) The digital modeling of the known uranium prospects with historical estimates.
- c) The continuing consultation process with local coastal communities and government.
- d) A preliminary baseline environmental study of the Michelin site and proposed drill areas.
- e) The acquisition of satellite imagery of the area for ground control.
- f) The completion of an infill airborne radiometrics and magnetic survey at 50 metre line spacing for the individual project areas
- g) The completion of geological and geochemical surveys over the project areas.
- h) 10,000 metres of diamond drilling to test targets at Michelin, Jacques Lake and Otter Lake.

## 12.3 2005 EXPLORATION WORK

As a follow-up to the positive results generated by the 2003 and 2004 field exploration programs carried out by the Fronteer-Altius Alliance, an aggressive **\$5 million** work program was carried out in 2005 under the banner of the newly formed Aurora Energy Resources Inc. This work included:

- a) **5,783 line-km** of detailed airborne magnetic and radiometric surveying on 50 metres line spacings by Fugro Airborne Survey Corporation over the Michelin, Jacques Lake, Otter Lake, Melody Hill and Inda Lake Trend target areas in July/August 2005.
- b) **IKONOS air photo imagery capture and geological mapping/geochemical sampling/scintillometer surveys (grid and boulder)/track etch surveying** by Aurora personnel at the Michelin, Michelin East, Otter Lake, Jacques Lake, White Bear Lake, Melody Hill and Inda Lake Trend target areas in July/August/September 2005.
- c) **A 9,402 m 27-hole diamond drill program** carried out by Falcon Drilling using two helicopter-supported fly drills from late August to early November 2005 with focus on the Michelin, Otter and Jacques Lake target areas.

The 2005 Field Program was highly successful in extending both the known zone of mineralization at the historic Michelin Uranium Deposit and also discovering new zones in the CMB District through the application of modern ideas and exploration technologies. A brief summary of these findings is given below. The complete results from the 2005 Work Program can be found in the 43-101 report submitted to SEDAR in January 2006 on behalf of Aurora Energy Resources Inc. (Wilton and Cunningham-Dunlop, 2006).

### a) Michelin Uranium Deposit

The 2005 drill campaign successfully confirmed the presence of uranium mineralization in the upper portion the historic Michelin A Zone as documented in the previous work by Brinex. The lithologies and assay intercepts in the two new twin holes, TWM05-092 and TWM05-0174, showed an excellent correlation to those reported in the original holes, M-70-92 and M-76-174, providing Aurora staff with a high level of confidence in the caliber of the work carried out by Brinex.

Of the seven holes drilled on the down-plunge extension of the Michelin A Zone, all seven intersected the Michelin mineralization where projected, with comparable and/or higher grades and/or widths to those holes that pierced the upper portion of the zone (*i.e.* **0.11% U<sub>3</sub>O<sub>8</sub>/63.45 m** in DDH M05-006). As a result of this work, the Michelin A Zone was extended from a vertical depth of 250 m to almost 700 m, translating into a new dip length of almost 1000 m. Further work was recommended to test the vertical and strike extent of the zone.



## b) Otter Lake Target

The Otter Lake Target Area was drill tested for the first time in the fall of 2005 as a follow-up to an aggressive summer field program. The Otter Lake target was characterized by a broad 3 km<sup>2</sup> radiometric anomaly with over 700 widespread radioactive boulders and less than 5% bedrock exposure.

Aurora intersected anomalous levels of uranium in four of ten drill holes completed during the drill program in three distinct areas within the main radiometric anomaly. The most encouraging results came from Otter South, where DDH OL-05-04 intersected **1.0% U<sub>3</sub>O<sub>8</sub>/0.50 m** as well as a separate interval assaying **0.14% U<sub>3</sub>O<sub>8</sub> over 1.0 m**. The mineralization within this high grade interval was hosted within a deep red, very intensely hematite-altered, strongly foliated, fine-grained, weakly feldspar porphyritic, felsic metavolcanic unit with abundant fine magnetite, pyrite and chlorite as veinlets. Further work was recommended to test the strike and depth potential of this zone as well as remaining targets within the anomaly.

## c) Jacques Lake Target

As with Otter Lake, the 2005 drilling program at Jacques Lake was also the first drilling campaign completed in this area. The Jacques Lake Target was defined by a 4 km long x 400 m wide airborne radiometric anomaly, underlain by a high strain zone in intermediate metamorphosed volcanics with abundant magnetite alteration. Uranium mineralization in outcrop had also been mapped at the south-western end of this anomaly over a strike length of approximately 220 m in the northeastern-southwestern direction.

The 2005 drilling targeted the main anomaly and its subsidiary branches and was successful in delineating uranium mineralization over a strike length of 180 m and at a vertical depth of 20-80 m in four of seven holes. The most significant result was returned in DDH JL05-05 with a maximum of **0.10% U<sub>3</sub>O<sub>8</sub>/9.2 m** in JL05-05 on the southern end of the western branch of the anomaly. Intercepts of **0.10% U<sub>3</sub>O<sub>8</sub>/5.0 m**, **0.10% U<sub>3</sub>O<sub>8</sub>/3.0 m**, and **0.10% U<sub>3</sub>O<sub>8</sub>/4.0 m** in holes DDH JL05-01, 02 and 03 on the eastern branch of the anomaly were also returned making this a successful first pass test on the target. Further drilling was recommended to follow up on this target

Based on the results of the 2005 Exploration Program, a further **\$14.5 million** program was recommended for 2006 to identify a single large economic deposit, or series of deposits, in the CMB.

The 2006 proposed work included:

- a) The metallurgical testing of core rejects from the 2005 drilling campaign at Lakefield Research (February-March, 2006).
- b) A 40,000 m diamond drill program at Michelin, Michelin East, Jacques Lake, White Bear Lake, Otter Lake, Rainbow, Melody Hill, and Inda Lake Trend (April-September, 2006).
- c) An ongoing geological mapping and geochemical sampling program throughout the claim group (June-October, 2006).
- d) A gravity survey at Melody Hill to identify the source of high grade boulders (April, 2006)
- e) An environmental baseline survey and ongoing monitoring program (April-October, 2006)
- f) An updated resource calculation and economic study of Michelin deposit (Jan 2007).

## 12.4 2006 EXPLORATION WORK

The recommended **\$14.5 million (Can) program** was carried out by Aurora Energy Resources Inc. in 2006 to further evaluate key targets within the CMB Uranium Property. This work included:

- a) A **46,078 m 120-hole diamond drill program** carried out by Falcon Drilling using up to six helicopter-supported fly drills from May 9<sup>th</sup>, 2006 to November 7<sup>th</sup>, 2006 with focus on the Michelin Main, Jacques Lake, White Bear, Gear, Inda, and Nash targets.
- b) Mapping and prospect sampling of the Aurora Corridor.
- c) A **1360 station gravity survey** over the Melody Lake and Jamson areas.
- d) Ongoing environmental baseline studies.
- e) **Metallurgical testing** of ore from Michelin, Jacques Lake, and White Bear targets at SGS Laboratories in Lakefield, Ontario.
- f) An **updated resource estimate** in January 2007.

Results from the 2006 Field Program were very positive with the best results to date being intersected within the inferred resource block at the Michelin Uranium Deposit, and a new deposit emerging at the Jacques Lake target area with comparable grades and widths of uranium mineralization to that of Michelin. A brief summary of the findings of the work program are given below. The complete results from the 2006 Work Program can be found in the 43-101 report submitted to SEDAR in March 2007 on behalf of Aurora Energy Resources Inc. (Wilton and Giroux, 2007).

#### a) Michelin Drilling

The delineation phase of the 2006 drilling program was successful in verifying the consistency of the area of mineralization indicated by the 2005 drilling, both in grade and thickness. The drilling showed that the separate mineralized lenses locally coalesce to form a single thicker lens, which defines a higher-grade core to the zone. Highlights included drill holes M06-013, M06-016 and M06-019 with true thicknesses of **42.0m of 0.21%  $U_3O_8$** , **49.0m of 0.18%  $U_3O_8$**  and **36.0m of 0.24%  $U_3O_8$**  respectively. Near the margins of the zone, mineralization was observed to be restricted to the upper lens, resulting in narrower intersections, but generally of better than average grade; e.g. M06-020A with **5.0m true thickness of 0.20%  $U_3O_8$** .

The deep exploration phase of the 2006 drilling campaign succeeded in extending the Main Zone mineralization an additional 250 metres down-plunge with eleven drill holes intersecting significant mineralization comparable to that found up-plunge. Drill holes M06-025, 039, 043 and 044 showed the higher-grade core extending down-plunge to the limits of drilling, although results were not quite as impressive as in drill holes M06-013, 016 and 019. Three drill holes, M06-022, 029 and 031 intersected narrow 1.0 to 1.5 metre thicknesses of mineralization defining the lower margin or “keel” of the Main Zone and suggesting a shallowing of the plunge with depth. The south-western limit of drilling showed an increase in the thickness, grade and consistency of the upper lens, while the lower lenses are very weak. This was demonstrated by drill holes M06-026, 032 and 043 with upper lens true thicknesses of **12.0m of 0.27%  $U_3O_8$** , **17.0m of 0.26%  $U_3O_8$**  and **19.5m of 0.20%  $U_3O_8$**  respectively.

Two drill holes, M06-018 and M06-033, were drilled as exploration holes east of the Main Zone. M06-018 intersected **3.5m true thickness of 0.28%  $U_3O_8$**  at 360 metres vertical depth. M06-033 intersected **8.0m true thickness of 0.08%  $U_3O_8$**  at 610 metres vertical depth. These drill holes indicated that mineralization persists east of the Main Zone but the intersections are too distant from other drill holes to determine whether they represent the upper, middle or lower lenses. Further follow-up of this new Eastern Shoot would happen in 2007

As a result of the 2006 drilling, the uranium mineralization at Michelin was extended to a strike length of 1.2 kilometres and to a vertical depth of 750 metres vertical depth with a higher-grade core starting at about 330 metres vertical depth and continuing to the lower limit of drilling.

## b) Jacques Lake Drilling

The 2006 drilling at Jacques Lake intersected anomalous zones of uranium mineralization over a strike length of approximately 500 m and to depth of 200 metres. These zones were found to be coincident with the known radiometric anomalies and then continued beyond these anomalies along a strong magnetic trend to the southwest. Uranium mineralization observed in Jacques Lake drill core was found to be associated with a fine-grained to aphanitic, highly strained to mylonitic metamorphosed intermediate volcanic unit with varying degrees of pervasive hematite with strong magnetite + actinolite + calcite +/- chlorite +/- pyrite veining. Anomalous intersections were generally broad and in excess of 10 m. DDH JL06-018, JL06-019 and JL06-020 returned the most significant results with intercepts up to **0.11 %U<sub>3</sub>O<sub>8</sub>/57.71 m**. Similarities with Michelin mineralization include variable hematite alteration within a strongly sheared host rock, however, the intensity of magnetite and calcite veining was observed to be much higher at Jacques Lake as well as an overall lower SiO<sub>2</sub> content in whole-rock geochemistry.

In light of the 2006 results from drilling at Jacques Lake, an intensive follow up drill program was recommended for 2007 to test the down-dip and down-plunge extension of existing mineralization as well as the possible strike extensions of the known mineralized zones.

## c) White Bear Drilling

The 2006 field season saw 2,985.95 m of drilling in two drill phases at White Bear Lake. This work confirmed both the presence of bedrock uranium mineralization and verified the values returned in Brinex drilling from the late 1970s.

In Phase I, drill hole WB06-001 was drilled as a direct twin of Brinex drill hole 77-7. Results from the two holes correlated very well with approximately **0.25% U<sub>3</sub>O<sub>8</sub> over 14.5m to 15m**. WB-06-002, 003 and 004 were drilled in the same vicinity but only patchy mineralization was revealed.

Phase II commenced approximately 650 m to the east towards the Burnt Lake granite intrusion. Ten drill holes were situated in this area to follow-up on Brinex drill holes and radioactive trenches. Correlation of mineralization between holes was inconsistent, possibly due to the late intrusion of the granite and the fluids associated with it. Three drill holes were also completed 1km to the west of the main drilling area but returned no significant results.

Despite the historic Brinex results being successfully confirmed, the continuity between mineralized zones was not established. Further drilling may help to better understand of the relationships between the lithologies, mineralization and the intrusion of the Burnt Lake granite.

#### **d) Rainbow Drilling**

The 2006 drill campaign was designed to confirm and expand the near surface Rainbow Zone, located 2 km to the southwest of the Michelin Deposit. Nine of fifteen drill holes intersected significant results including: **0.13% U<sub>3</sub>O<sub>8</sub>/18.80m** in RZ06-001A (confirmation hole RZ-71-6), **0.154% U<sub>3</sub>O<sub>8</sub>/9.35m** in RZ06-002, **0.15% U<sub>3</sub>O<sub>8</sub>/7.7m** in RZ06-007, **0.42% U<sub>3</sub>O<sub>8</sub>/3.00m** in RZ06-011. As a result of the 2006 drilling, the mineralization was extended over a 300 m strike length and to a depth of 115.50 m though further drilling is to from a 43-101 compliant resource.

#### **e) Inda Lake Trend**

The Inda Lake Trend is a 7 km trend of uranium showings and deposits located on the boundary between the Post Hill group and the Aillik group in the northern portion of the CMB land package. Extensive historical work has located three highly prospective areas called the Gear, Inda and Nash prospects. Diamond drilling during the 2006 field season confirmed not only the presence of bedrock uranium in the Inda Lake Trend but also the potential for significant copper concentrations at the Gear target area. Highlights included **2.2% U<sub>3</sub>O<sub>8</sub>/3.62m** in I07-001 at the Inda prospect.

#### **f) Melody Hill Gravity Survey**

Results from the Phase I and II gravity surveys at Melody Lake showed a series of subtle gravity anomalies beneath Melody and Jamson Lakes coincident with uranium in lake sediment anomalies. It was recommended that these anomalies be drill tested from the ice during the winter of 2007.

#### **g) Aurora River (now Aurora Corridor)**

Mapping along the Aurora River Shear Zone in 2006 showed uranium mineralization to be strongly controlled by the shear zone fabric and related to the brecciation along the margins of felsic and mafic lithic domains, suggesting that the mineralization is late kinematic.

High assay values were returned from the surface trenches indicating the potential for economic mineralization at Aurora River. However, the subdued radiometric responses over the target areas did not seem to reflect the assay values. The reason for the reduced radiometric anomaly is not known, but it is speculated that the low abundance of boulders and significant swamp cover in the area may have reduce the airborne radiometric signature of bedrock hosted uranium mineralization.

Based on encouraging results returned by initial field checks in the 2006 field season, an aggressive initial drill program was recommended for 2007 to test the known zones of uranium mineralization.

### g) Metallurgy

Metallurgical testing of samples from the Michelin, Jacques Lake, and White Bear targets was carried out at SGS Laboratories in Lakefield, Ontario. Testing showed uranium recoveries at Michelin to be on the order of 88% and those at Jacques Lake to be approximately 91%. Additional tests were also carried out at SGS including process mineralogy, comminution, physical concentration, and acid leaching.

### h) Resource Update

An updated NI 43-101 compliant resource estimate for the Michelin Deposit was completed over the month of January, 2007. Concurrently with the updated Michelin resource estimate, an initial resource estimate was also developed for the Jacques Lake deposit. The resource modeling was carried out with both an Open Pit and Underground component by Gary Giroux, P. Eng. The breakdown of the resource categories is detailed in **Table 12.1** below.

**Table 12.1: 2006 CMB Resource Summary**

Deposit	Measured			Indicated			Inferred		
	Tonnes	% U3O8	lbs U3O8	Tonnes	% U3O8	lbs U3O8	Tonnes	% U3O8	lbs U3O8
Michelin Open Pit*	3,410,000	0.07	5,340,000	7,930,000	0.06	10,840,000	460,000	0.04	440,000
Michelin Underground**	-	-	-	14,310,000	0.12	36,290,000	13,950,000	0.11	32,610,000
Jacques Lake Open Pit*	-	-	-	1,150,000	0.08	2,100,000	1,520,000	0.06	1,880,000
Jacques Lake Underground**	-	-	-	1,670,000	0.09	3,310,000	1,950,000	0.07	3,100,000

\* Open pit resource reported at 0.03% U<sub>3</sub>O<sub>8</sub> cut-off

\*\* Underground resource reported at a 0.05% U<sub>3</sub>O<sub>8</sub> cut-off

Based on the encouraging results from the 2006 work, a further **\$21.25 million (Can) budget** was proposed for a two-phase program of work in 2007.

The 2007 Phase I Work Program included:

- a) The development of the previously above mentioned NI 43-101 compliant resource for the Michelin Uranium Deposit and the Jacques Lake target;
- b) The ongoing metallurgical testing of coarse core rejects from the 2006 drilling campaign from Michelin, Jacques Lake and White Bear at Lakefield Research in Ontario; and
- c) Commence conceptual investigations into potential mining methods, infrastructure and environmental work.

The budget for the Proposed 2007 Phase I Work Program was **\$0.5 million (Can)**.

Assuming ongoing positive results from the 2007 Phase I Work Program, a follow-up 2007 Phase II Work Program was also recommended for Q2/3/4-2007. This included:

- a) A 75,000 metre diamond drill program at Michelin, Jacques Lake, Aurora River, Michelin East, White Bear Lake, Melody Hill, and Inda Lake Trend to define and expand the known resource at Michelin and Jacques Lake and develop new resources within the other targets areas;
- b) A geological mapping and geochemical sampling program throughout the CMB claim group with particular focus on the Aurora River Trend, southwest of Jacques Lake; and
- c) An ongoing environmental baseline survey and monitoring program (Q2/Q3 – 2007).

The budget for the Proposed 2007 Phase II Work Program was **\$20.75 million (Can)**.

## **12.5 2005-2006 ENVIRONMENTAL BASELINE WORK**

In 2005, Aurora Resources Energy Inc. contracted Earth Tech Canada to conduct an environmental assessment of the Michelin site prior to the initiation of the exploration drill program. This work included: review of background information on the study area, completion of an inspection of the Michelin area to assess current baseline conditions, completion of two sample sets (July and October 2005) of surface water and lake sediment sampling program in the area of Ranjan Lake and the adjacent lagoon; a Gamma Radiation survey of the waste rock pile, lagoon edges, roads and former building areas.

Field observations indicated that the Michelin study area was relatively clear of large amounts of waste materials.

A review of the surface water analytical data indicated that there was an increasing trend in concentrations of selected parameters between the July and October 2005 monitoring events. In July, values exceeding CCME guidelines were detected at one sample site located immediately below the waste rock pile. In October, values exceeding CCME Guidelines were observed for selected parameters at all sample sites (STN 1, STN 4, and STN 7).

A review of the sediment analytical data indicated that there was a reduction in concentrations in the 2005 data compared to the 1992 data from the same sampling locations.

Data obtained during the 2005 gamma survey generally indicated slightly higher radiation levels in the waste rock areas as compared to the previously reported 1992 decommissioning report data.

As a follow-up to the 2005 work, the 2006 environmental baseline program was designed to develop an environmental baseline report sufficient to support a pre-feasibility study for a uranium mine development at Michelin and satellite exploration sites. The program included the installation of three weather stations (Michelin, Jacques Lake and Postville) to collect temperature, precipitation, wind direction and velocity. The environmental baseline program also included a surface water quality sampling and hydrological program in the area of the Michelin and Jacques Lake watersheds, the collection of data on aquatic (fish) habitat, lake sediment samples, fish tissue and aquatic plants samples (to supplement historic data).

Aurora Energy also contracted Gerald Penney Associates Limited of St. John's Newfoundland to conduct a Historic Resources Overview Assessment (Stage 1) of the drill site locations. No archaeological sites were found in the immediate proximity of the drill locations.

The 2007 Environmental Baseline work was initiated in September 2007 with wildlife studies, traditional knowledge surveys, and hydrological work. No data has been received to date.



## **13.0 DIAMOND DRILLING**

From April 16<sup>th</sup> through October 31<sup>st</sup>, an extensive diamond drilling program was completed on the CMB Uranium Property to test the Michelin, Jacques Lake, Melody Hill, Aurora Corridor, Burnt Brook, Gayle, Gear, Inda and Nash properties. A total of **134 diamond drill holes totaling 44,885.53 metres** were completed utilizing up to 11 helicopter-supported drill rigs from Falcon Drilling, Major Drilling and Springdale Drilling over the course of the program. This falls short of the 75,000 planned metres for a variety of reasons:

- a) Delays in receiving drill permits from the Nunatsiavut Government and Provincial Governments due to the development of their new Standards for Mineral Exploration and Quarrying on Labrador Inuit Lands which was passed into law on March 30, 2007.
- b) Severe winter conditions lasting well into May which slowed the construction drill pads and hampered drilling rates.
- c) Delays in receiving new drill rigs on site from Major Drilling due to delays in manufacturing and shipping to site.
- d) Slower than expected production due to experienced drilling crews and hard ground conditions.

A breakdown of the drilling by area is given in the following sections and details of the collar locations and assay composites constitute **Appendices II and III** of this report. Assay certificates are available on file at the Aurora Energy Resources Inc. office in Vancouver, BC.

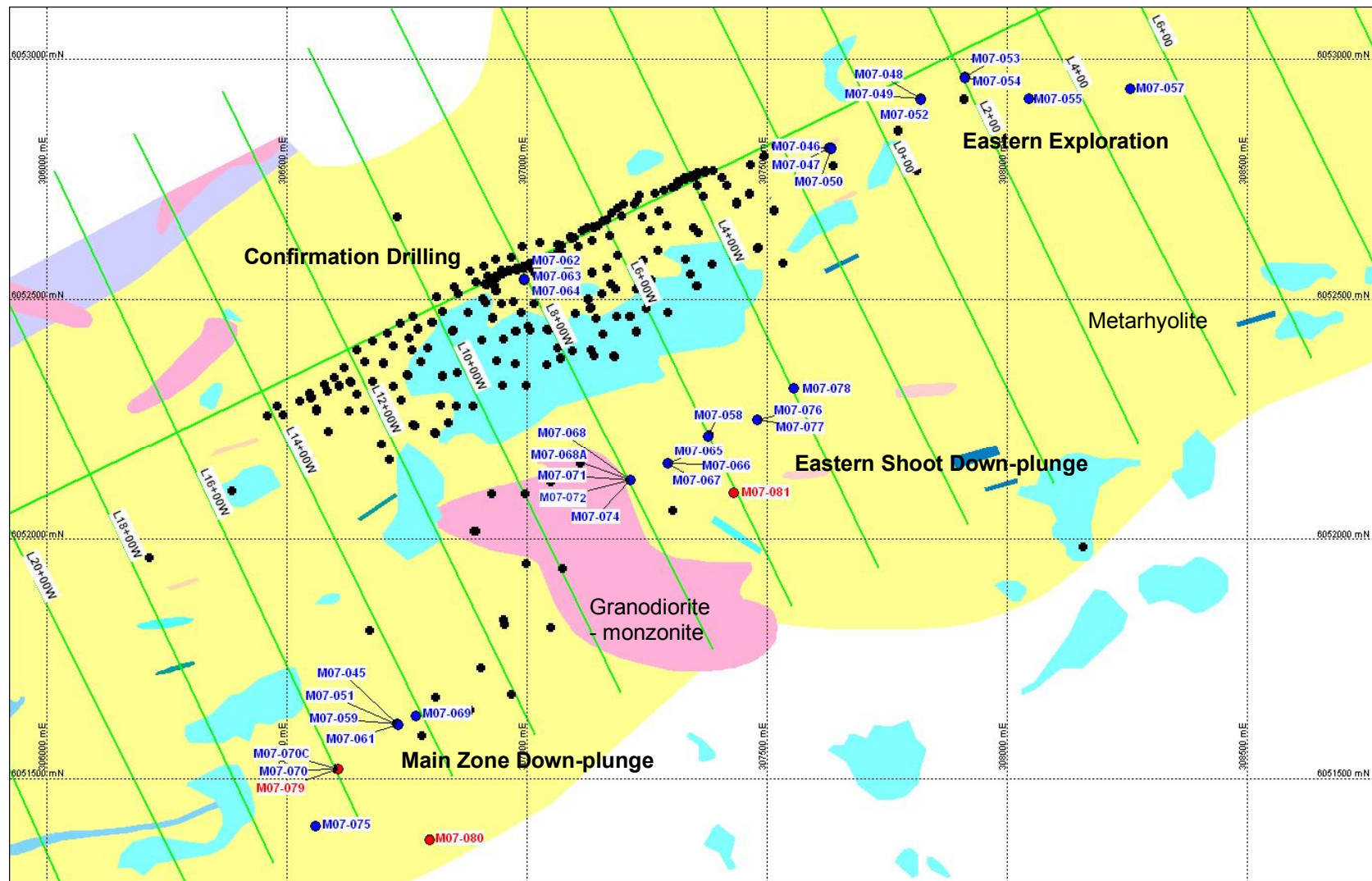
### **13.1 Michelin Target Area**

#### **13.1.1 Introduction**

The 2007 Michelin drill program started on June 10<sup>th</sup> and is still in progress at the time of writing of this report. It is expected to finish in late November. As of October 31, 2007, **43 diamond drill holes** totalling **16,707.98 m** of the budgeted **27,000 m** have been drilled in the Michelin Deposit area (**Figure 13.1**). This total includes one hole that was extended from 2006, and two holes were aborted prior to intersecting the mineralized zone. Wedges and controlled drilling techniques were used in a number of holes in an attempt to better control the positioning of pierce points within the vertical longitudinal section but this also added to slower drilling production. A combination of Falcon, Major and Springdale drill rigs were used to complete this work and three Major and one Springdale drill rigs currently remain working on site.

Four phases of drilling were carried out to date in 2007: a) the Shallow Eastern Exploration Program; b) the Main Zone - Down-plunge Extension Program; c) the Eastern Shoot Down-plunge Extension Program; and d) the Confirmation Program. Drill hole locations are detailed on **Figure 13.1** and in **Table 13.1**.

Figure 13.1: Michelin Target Area, Plan Map of 2007 DDH Locations



### 13.1.2 Eastern Exploration

**11 drill holes totaling 1,674.69m** were drilled to test the Michelin mineralized horizon to the east of the known deposit. These drill holes tested the horizon to a distance of 700 metres east of previous coverage and to shallow depths of a maximum of 150 metres vertically below surface.

Results of the drilling indicate that the Michelin horizon persists eastward with significant alteration but generally only weak radioactivity. Results were typically 20 to 30 metres of mineralized material assaying around 0.01%  $U_3O_8$ , with highs of **0.12%  $U_3O_8$ /1.60m** in DDH M07-047 and **0.10%  $U_3O_8$ /3.49m** in DDH M07-049.

Recommendations for this area are for a series of 200-metre spaced drill holes to continue testing the Michelin horizon to the east and at depth.

### 13.1.3 Main Zone Down-Plunge

**13 drill holes totaling 7,222.84m** were drilled to target the down-plunge of the Michelin Main Zone mineralization, including three drill holes that did not reach the target. The drill holes were widely spaced, and did not include any of the planned delineation drill holes.

The Main Zone Down-plunge Extension Program was still ongoing as of October 31<sup>st</sup>, and the drilling to date has succeeded in extending the Main Zone mineralization an additional 185 metres west of previous intercepts and to 900 metres vertical depth below surface. The deepest part of the resource now comprises an area 450 metres by 500 metres in size which is defined only by widely spaced drill holes. The zone remains open at depth.

Highlights from the drilling include: **0.11%  $U_3O_8$ /15.0m** in M07-059 and **0.12%  $U_3O_8$ /7.53m** in M07-051, extending the zone to a vertical depth of almost 800 metres. Other highlights include: **0.25%  $U_3O_8$ /9.5m** including **0.31%  $U_3O_8$ /7.5m** in M07-069 and **0.13%  $U_3O_8$ /5.61m** in M07-045A.

Drilling will continue on this zone for the remainder of November with one rig testing the deposit to a depth of approximately 1000 m.

### 13.1.4 Eastern Shoot Down-Plunge

**16 drill holes totaling 7,480.97m** were drilled to test the down-plunge of the Eastern Shoot, discovered in late 2006. The Eastern Shoot mineralization occurs 250 metres east of the Main Zone along the main mineralized horizon but is separated from the Main Zone by a narrow interval of un-mineralized material. The drill holes targeting the Eastern Shoot also cut the South Zone mineralization, as well as other smaller zones

**Table 13.1: Summary of 2007 Michelin Drilling**

**Michelin Deposit**

# Holes	Hole_ID	UTM_East	UTM_North	Grid_East	Grid_North	Elev. (m)	Azimuth	Dip	TD (m)
Michelin Data = NAD 83, zone 21									
Shallow Eastern Exploration									
1	M07-046	307634	6052819	-112	-60	338	329	-45	123.75
2	M07-047	307634	6052819	-112	-60	338	329	-75	154.23
3	M07-048	307820	6052920	100	-50	339	332	-45	137.77
4	M07-049	307820	6052920	100	-50	339	332	-75	182.88
5	M07-050	307634	6052819	-112	-60	338	329	-90	185.32
6	M07-052	307.82	6052920	100	-50	339	332	-90	93.57
7	M07-053	307910	6052963	200	-50	340	332	-45	93.27
8	M07-054	307910	6052963	200	-50	340	332	-85	108.81
9	M07-055	308045	6052920	300	-150	341	330	-45	214.88
10	M07-056	308045	6052920	300	-150	341	330	-80	165.33
11	M07-057	308259	6052942	501	-224	340	328	-62	214.88
Subtotal									1,674.69
Main Zone - Down-plunge Extension									
1	M07-045	306731	6051613	-1446	-752	342	316	-79	183.49
2	M07-051	306731	6051613	-1446	-752	342	311	-72	831.40
3	M07-059	306731	6051613	-1446	-752	342	311	-66	776.33
4	M07-061	306731	6051613	-1446	-752	342	316	-62	707.29
5	M07-069	306768	6051631	-1405	-753	342	318	-80	833.09
6	M07-070	306607	6051519	-1598	-782	341	326	-78	867.02
7	M07-070A	306607	6051519	-1598	-782	341	326	-78	308.54
8	M07-070B	306607	6051519	-1598	-782	341	326	-78	15.00
9	M07-070C	306607	6051519	-1598	-782	341	326	-78	266.00
10	M07-075	306559	6051401	-1693	-866	343	322	-85	776.18
11	M07-075A	306559	6051401	-1693	-866	343	322	-85	560.50
12	M07-079*	306607	6051519	-1598	-782	341	326	-71	553.00
13	M07-080*	306798	6051373	-1489	-997	349.6	322	-79	545.00
Subtotal									7,222.84
Eastern Shoot - Down-plunge Extension									
1	M07-058	307379	6052218	-601	-491	352	332	-50	504.14
2	M07-060	307379	6052218	-601	-491	352	332	-65	98.76
3	M07-060A	307379	6052218	-601	-491	352	332	-68	537.67
4	M07-065	307294	6052158	-704	-508	348	332	-53	549.55
5	M07-066	307294	6052158	-704	-508	348	332	-59	556.26
6	M07-067	307294	6052158	-704	-508	348	332	-65	559.56
7	M07-068	307215	6052122	-791	-506	346	328	-55	175.26
8	M07-068A	307215	6052122	-791	-506	346	328	-55	508.41
9	M07-071	307215	6052122	-791	-506	346	328	-63	276.76
10	M07-072	307215	6052122	-791	-506	346	328	-73	612.04
11	M07-073	307479	6052250	-498	-506	354	330	-54	539.84
12	M07-074	307215	6052122	-791	-506	346	328	-66	569.72
13	M07-076	307479	6052250	-498	-506	354	328	-65	601.00
14	M07-077	307479	6052250	-498	-506	354	330	-76	691.00
15	M07-078	307556	6052316	-401	-481	348	330	-56	568.00
16	M07-081*	307431	6052096	-609	-624	359	326	-64	133.00
Subtotal	* denotes hole in progress at time of writing of report								7,480.97
Confirmation Drilling									
1	M07-062	306993	6052545	-806	-27	334	332	-90	148.74
2	M07-063	306993	6052545	-806	-27	334	332	-65	99.97
3	M07-064	306993	6052545	-806	-27	334	332	-45	80.77
Subtotal									329.48
Total Michelin Drilling									
Total									16,707.98

of hanging wall mineralization. Three of the 16 drill holes were lost before reaching the mineralized zone.

The Eastern Shoot Down-plunge Extension Program was still ongoing as of October 31<sup>st</sup>, and the drilling to date has now traced the Eastern Shoot over a horizontal distance of 300 metres and to a vertical depth of 600 metres. The mineralization is generally six to sixteen metres thick with typical Michelin grades, characteristics, and geometry. The mineralization remains open down plunge where it may merge with the Main Zone.

Highlights from the 2007 drilling include: **0.09% U<sub>3</sub>O<sub>8</sub>/11.69m** including **0.17% U<sub>3</sub>O<sub>8</sub>/5.01m** in M07-058; **0.16% U<sub>3</sub>O<sub>8</sub>/6.8m** in M0-60A; **0.16% U<sub>3</sub>O<sub>8</sub>/6.53m** in M07-065; **0.15% U<sub>3</sub>O<sub>8</sub>/8.91m** in M07-066; and **0.24% U<sub>3</sub>O<sub>8</sub>/10.1m** in M07-072.

### **13.1.5 Confirmation Drilling**

**Three drill holes totaling 329.48m** were drilled to validate the near-surface diamond drill results reported by Brinex from their 1970's exploration. This is part of an ongoing program designed to validate approximately 10% of the historic resource defined by the Brinex drilling; fourteen drill holes remain to be completed on this program. The area of confirmation all falls within the scope of the proposed open pit resource.

The Confirmation Drill Program was also ongoing as of October 31<sup>st</sup>, but results to date indicate the mineralization cored in the three 2007 holes compares favourably with adjacent Brinex intercepts. Highlights include: **0.06% U<sub>3</sub>O<sub>8</sub>/44.92m** including **0.11% U<sub>3</sub>O<sub>8</sub>/17.69m** in M07-062; **0.06% U<sub>3</sub>O<sub>8</sub>/39.31m** including **0.10% U<sub>3</sub>O<sub>8</sub>/15.14m** in M07-063; and **0.06% U<sub>3</sub>O<sub>8</sub>/33.42m** including **0.11% U<sub>3</sub>O<sub>8</sub>/8.22m** in M07-064.

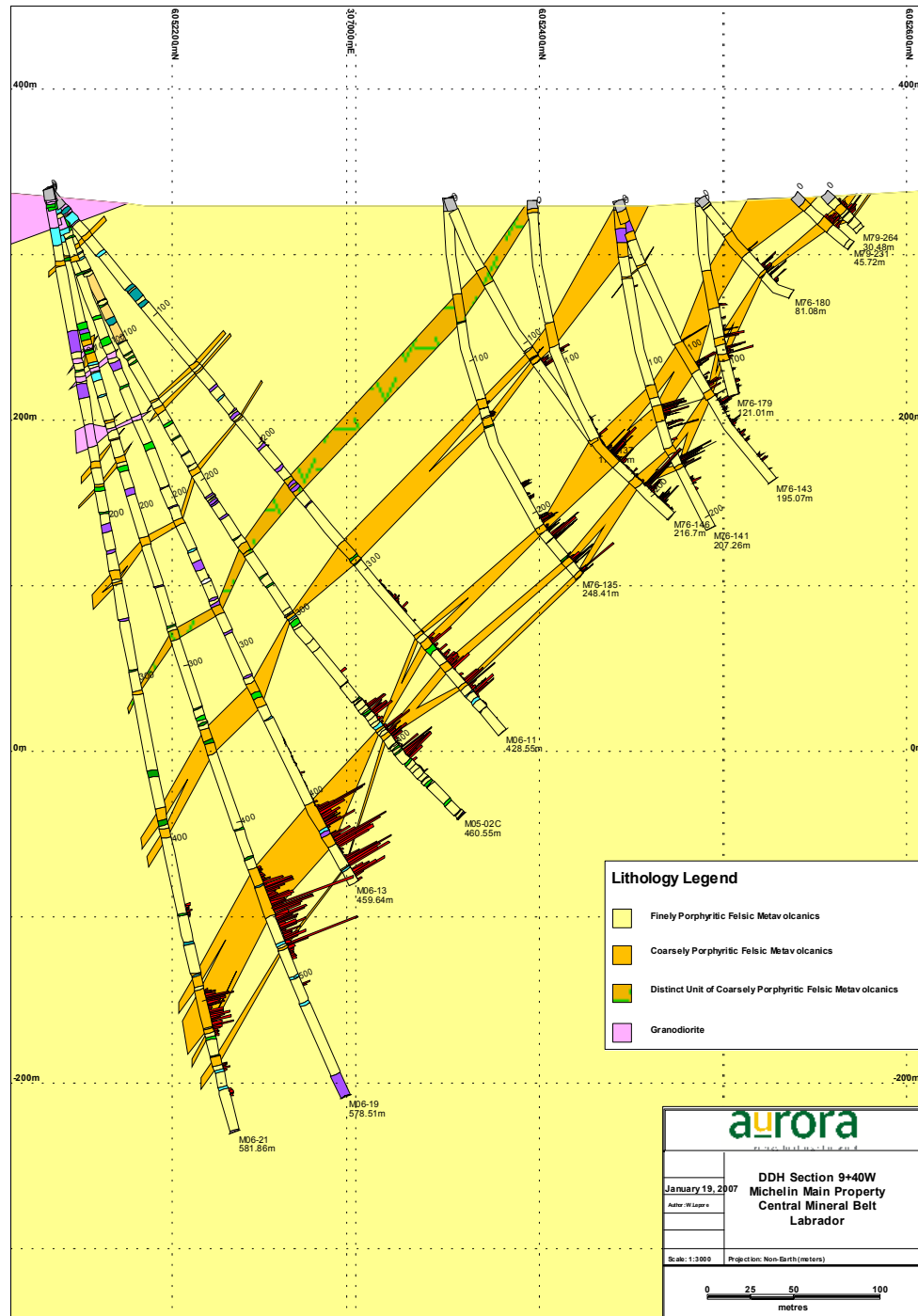
Drilling will continue on this program for the remainder of November with one rig drilling off a small portion of the historic resource on 30 to 50 metre centres.

### **13.1.6 Discussion**

Drilling to date in 2007 has been very successful in extending both the Main Zone and the Eastern Shoot to vertical depths of 900 metres and 600 metres respectively and both zones remain open down-plunge to the southwest. Drilling will continue to focus on these two zones for the remainder of November with two core rigs, while the other two rigs will focus on testing potential for a possible Western Shoot, and the aforementioned confirmation drilling of the historic resource.

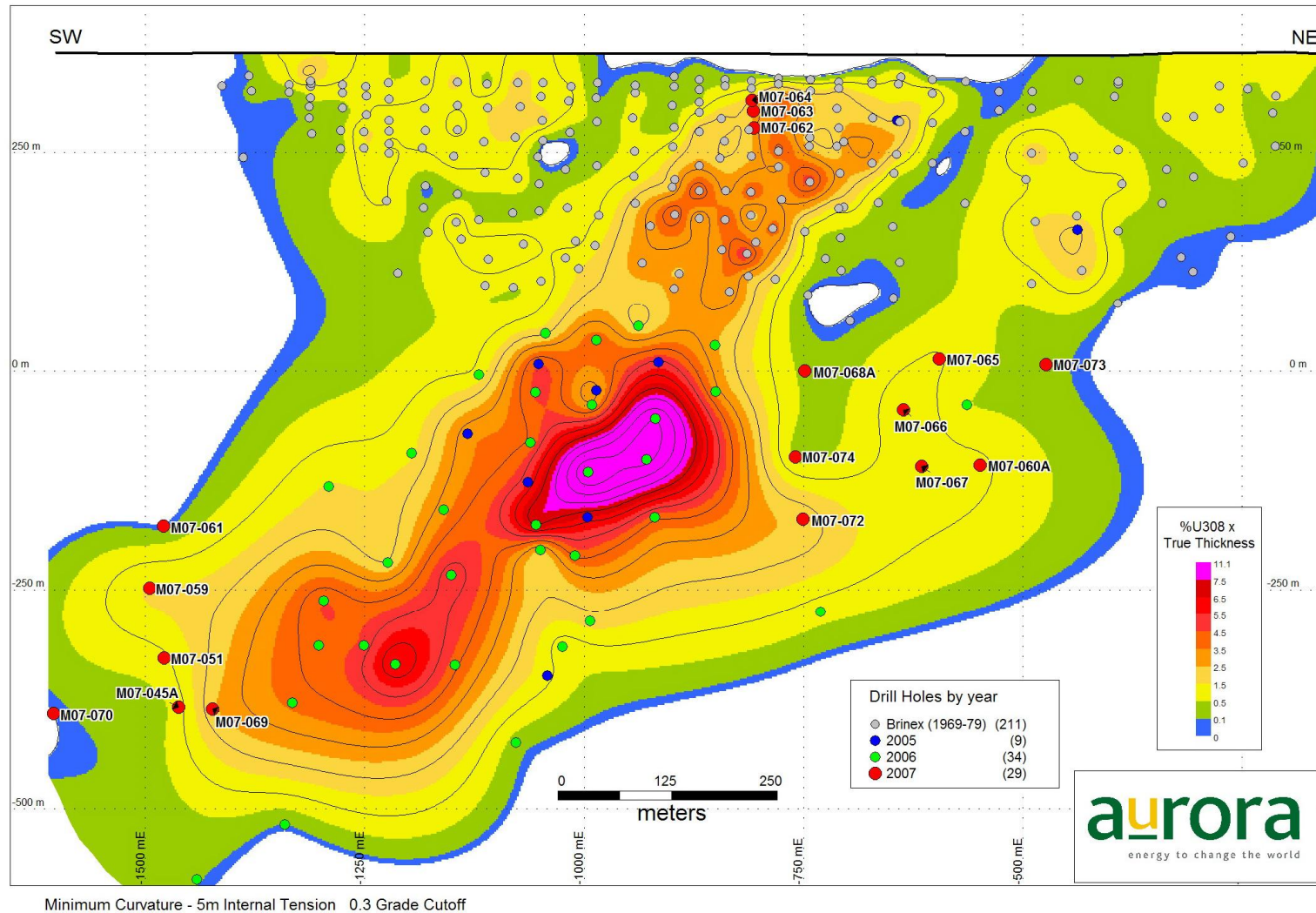
Ongoing work in 2008 should concentrate on tightening the drill spacing throughout the resource to move the inferred portions of the resource to the indicated category in advance of any pre-feasibility work. Exploration should also continue chasing the down plunge extensions of both zones, as well as searching for similarly plunging shoots in the immediate area.

**Figure13.2: Michelin Main Property DDH Section 9+40W**  
(with major lithological units and assay histograms)





**Figure 13.3: Michelin Target Area, DDH Vertical Section**



**Table 13.2: Summary of 2007 Michelin Assay Composites**

Hole ID	From (m)	To (m)	Length (m)	% U3O8
<b>M07-045A</b>	761.09	766.70	5.61	0.13
Incl	762.09	763.01	0.92	0.22
<b>M07-046</b>	69.40	70.40	1.00	0.03
<b>M07-047</b>	103.76	105.36	1.60	0.12
<b>M07-048</b>	40.33	42.33	2.00	0.04
<b>M07-049</b>	51.04	54.53	3.49	0.10
Incl	53.78	54.53	0.75	0.16
<b>M07-050</b>	NSV			
<b>M07-051</b>	722.24	729.77	7.53	0.12
Incl	722.24	723.38	1.14	0.34
Incl	725.38	726.77	1.39	0.17
<b>M07-052</b>	NSV			
<b>M07-053</b>	NSV			
<b>M07-054</b>	NSV			
<b>M07-055</b>	NSV			
<b>M07-056</b>	159.95	160.85	0.90	0.03
<b>M07-057</b>	NSV			
<b>M07-058</b>	437.24	448.93	11.69	0.09
Incl	439.12	444.13	5.01	0.17
Incl	440.12	443.12	3.00	0.20
<b>M07-059</b>	654.92	669.92	15.00	0.11
Incl	654.92	659.92	5.00	0.14
Incl	654.92	655.92	1.00	0.21
Incl	662.76	664.76	2.00	0.16
<b>M07-060A</b>	501.00	507.80	6.80	0.16
Incl	504.00	506.00	2.00	0.24
<b>M07-061</b>	NSV			
<b>M07-062</b>	31.01	75.93	44.92	0.06
Incl	32.51	50.20	17.69	0.11
Incl	43.84	49.18	5.34	0.23
Incl	54.92	56.42	1.50	0.10
And	88.83	92.34	3.51	0.20
<b>M07-063</b>	24.26	63.57	39.31	0.06
Incl	25.76	40.90	15.14	0.10
Incl	31.29	34.89	3.60	0.25
Incl	50.69	52.76	2.07	0.11
Incl	62.51	63.57	1.06	0.19
<b>M07-064*</b>	20.98	54.40	33.42	0.06
	*5 feet missing - drilled through Brinex adit			
Incl	22.83	33.81	10.98	0.09
Incl	24.04	28.96	4.92	0.14
Incl	27.70	28.96	1.26	0.24
Incl	46.18	54.40	8.22	0.11
Incl	48.68	51.18	2.50	0.20
<b>M07-065</b>	374.18	378.22	4.04	0.08
Incl	374.18	376.72	2.54	0.11



Incl	374.18	375.12	0.94	0.20
And	452.90	459.43	6.53	0.16
Incl	453.77	455.47	1.70	0.30
And	473.13	478.37	5.24	0.06
Incl	473.13	474.63	1.50	0.10
Incl	477.37	478.37	1.00	0.10
<b>M07-066</b>	476.31	485.22	8.91	0.15
Incl	479.31	485.22	5.91	0.20
Incl	480.22	481.22	1.00	0.38
Incl	483.22	484.22	1.00	0.31
<b>M07-067</b>	509.41	509.91	0.50	0.16
And	515.19	532.88	17.69	0.06
Incl	515.19	520.50	5.31	0.11
And Incl	517.65	519.07	1.42	0.16
<b>M07-068A</b>	444.54	445.54	1.00	0.04
and	446.54	447.60	1.06	0.03
<b>M07-069</b>	757.90	767.40	9.50	0.25
Incl	758.90	766.40	7.50	0.31
Incl	758.90	759.40	0.50	1.80
<b>M07-070</b>	NSV			
<b>M07-072</b>	423.80	429.88	6.08	0.06
And	547.40	557.50	10.10	0.24
Incl	550.50	553.50	3.00	0.25
Incl	554.50	557.50	3.00	0.39
<b>M07-073</b>	283.00	284.00	1.00	0.13
And	326.00	329.00	3.00	0.07
And	455.00	457.00	2.00	0.09
<b>M07-074</b>	495.07	499.30	4.23	0.08
Incl	498.71	499.30	0.59	0.16
And	511.80	512.80	1.00	0.09
<b>M07-075</b>	Assays pending at time of writing of report			
<b>M07-076</b>	Assays pending at time of writing of report			
<b>M07-077</b>	Assays pending at time of writing of report			
<b>M07-078</b>	Assays pending at time of writing of report			
<b>M07-079</b>	Drill hole in progress at time of writing of report			
<b>M07-080</b>	Drill hole in progress at time of writing of report			
<b>M07-081</b>	Drill hole in progress at time of writing of report			

## 13.2 JACQUES LAKE TARGET AREA

### 13.2.1 Introduction

A diamond drilling program consisting of 22,000 metres was proposed for the Jacques Lake deposit in 2007. The focus of the proposed program was to test for additional mineralization down-dip and down-plunge to the south west of the existing resource area at the deposit.

A total of **29 drill holes** with a cumulative length of **14,209.00 m** were completed on the Jacques Lake target (**Figure 13.4 and Table 13.3**) between April 27<sup>th</sup> 2007 and October 31<sup>st</sup> 2007 using up to four helicopter-supported drill rigs from Falcon Drilling. Drilling was focused on exploring for down-dip and down-plunge extensions to the deposit. Drill holes were oriented at 315° azimuth to intercept mineralization a roughly perpendicular orientation.

The shortcomings of the actual drilling meterage versus the proposed drill meterage were due to early season weather delays, mechanical breakdown delays, and chronic drill crew shortages.

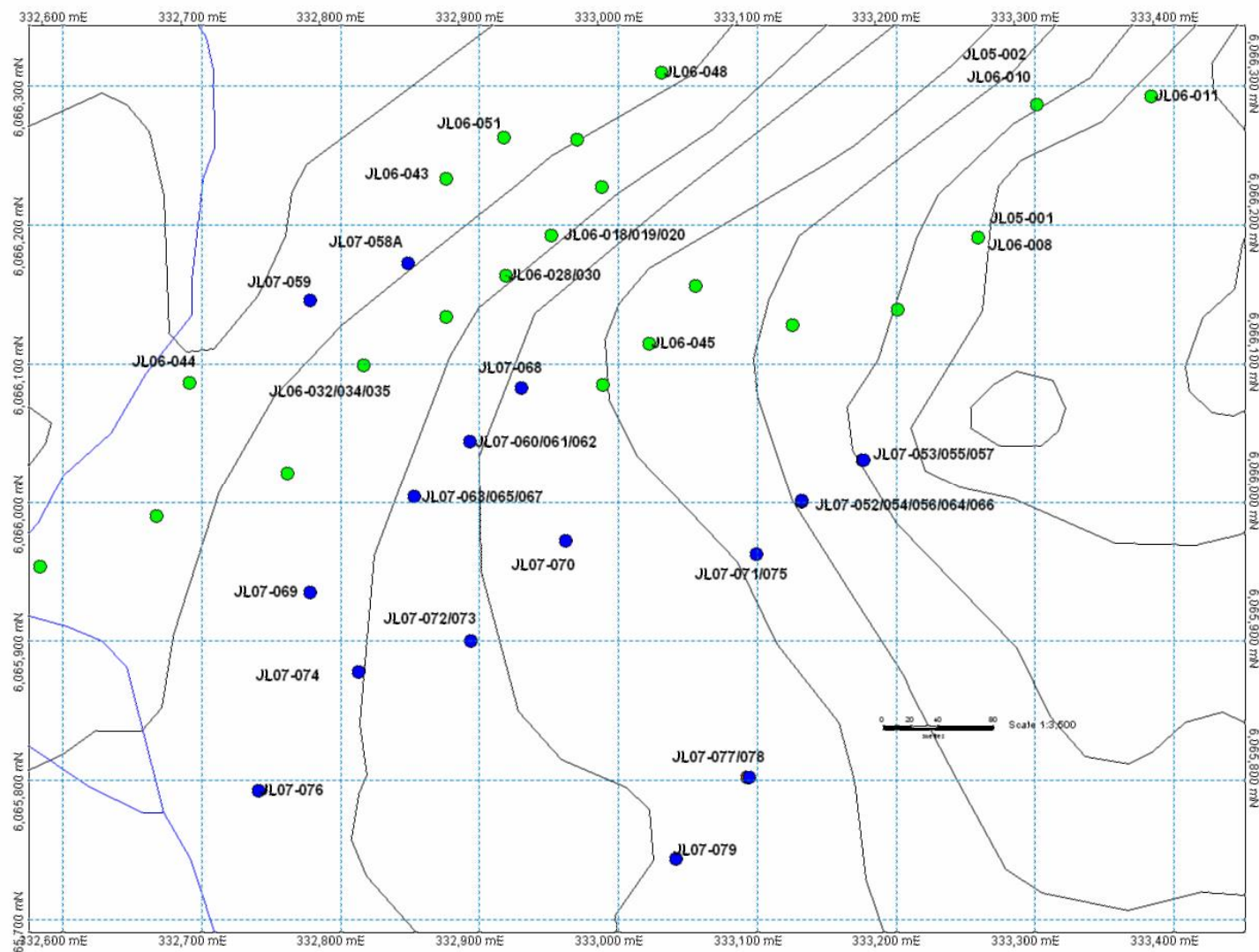
### 13.2.2 Discussion

The 2007 drill program was successful in expanding the Jacques Lake deposit further to the west and down-dip (**Figure 13.5 and 13.6 and Table 13.4**). The 2007 drill program also added confidence to the understanding of the fold interference causing thickening of the mineralized zone. Intervals of uranium mineralization intersected to date in 2007 continue to be of comparable width and grade to those cut in 2006.

Highlights from 2007 drilling include: DDH **JL07-070** which intersected **0.12%U<sub>3</sub>O<sub>8</sub>/17.0m** approximately 100m down plunge from the existing resource block. Other results include: **0.15% U<sub>3</sub>O<sub>8</sub>/15.02m** including **0.21% U<sub>3</sub>O<sub>8</sub>/7.00m** in JL07-061; **0.11% U<sub>3</sub>O<sub>8</sub>/26.00m** in JL07-062; and **0.12% U<sub>3</sub>O<sub>8</sub>/42.50m** in JL07-066.

Work in 2008 should continue to focus on following the down-plunge extension of the zone to the southwest and also adding additional infill holes in the inferred resource.

Figure 13.4: Jacques Lake Target Area, Plan Map of 2007 DDH Locations



**Table 13.3: Summary of 2007 Jacques Lake Drilling**

# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
<b>Jacques Lake Data = NAD 83, zone 21</b>							
1	JL07-052	333132	6066001	270	315	-55	550.16
2	JL07-053	333176	6066031	283	315	-55	541.02
3	JL07-054	333132	6066001	270	315	-68	799.19
4	JL07-055	333176	6066031	283	315	-68	736.09
5	JL07-056	333132	6066001	270	315	-80	1,061.62
6	JL07-057	333176	6066031	283	315	-80	1,075.25
7	JL07-058	332848	6066173	191	315	-45	104.90
8	JL07-058A	332848	6066173	191	315	-45	257.56
9	JL07-059	332778	6066146	189	315	-45	226.47
10	JL07-060	332893	6066044	223	315	-50	339.84
11	JL07-061	332893	6066044	223	315	-60	373.68
12	JL07-062	332893	6066044	223	315	-75	380.09
13	JL07-063	332853	6066004	223	315	-50	355.40
14	JL07-064*	333132	6066001	270	315	-45	183.48
15	JL07-065	332853	6066004	223	315	-60	372.16
16	JL07-066	333132	6066001	270	300	-50	557.78
17	JL07-067	332853	6066004	223	315	-75	395.63
18	JL07-068	332931	6066083	235	315	-50	349.61
19	JL07-069	332778	6065935	209	315	-45	377.04
20	JL07-070	332962	6065972	235	315	-75	477.93
21	JL07-071	333104	6065963	258	300	-50	504.75
22	JL07-072	332900	6065894	229	315	-60	593.01
23	JL07-073	332900	6065894	229	315	-50	439.83
24	JL07-074	332813	6065878	211	310	-60	440.44
25	JL07-075	333104	6065963	258	300	-68	610.82
26	JL07-076	332749	6065799	207	325	-57	465.73
27	JL07-077*	333094	6065803	230	315	-48	215.49
28	JL07-078	333094	6065803	230	315	-56	691.29
29	JL07-079	333041	6065743	233	315	-56	732.74
<b>Total</b>							<b>14,209.00</b>

\* denotes abandoned drill hole

**Figure 13.5: Jacques Lake Target Area, DDH Cross-Section JL06-018, 019, 020**

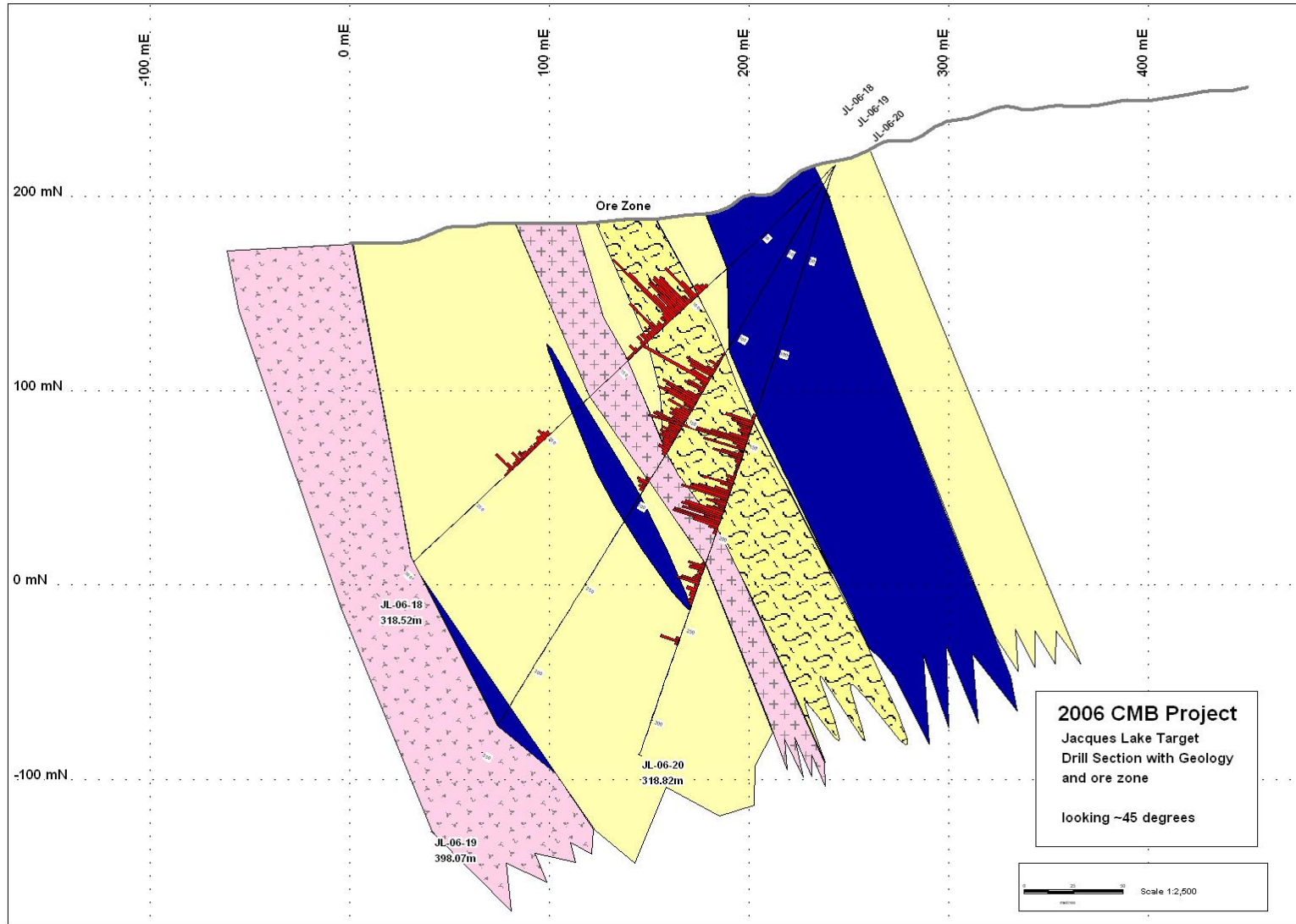
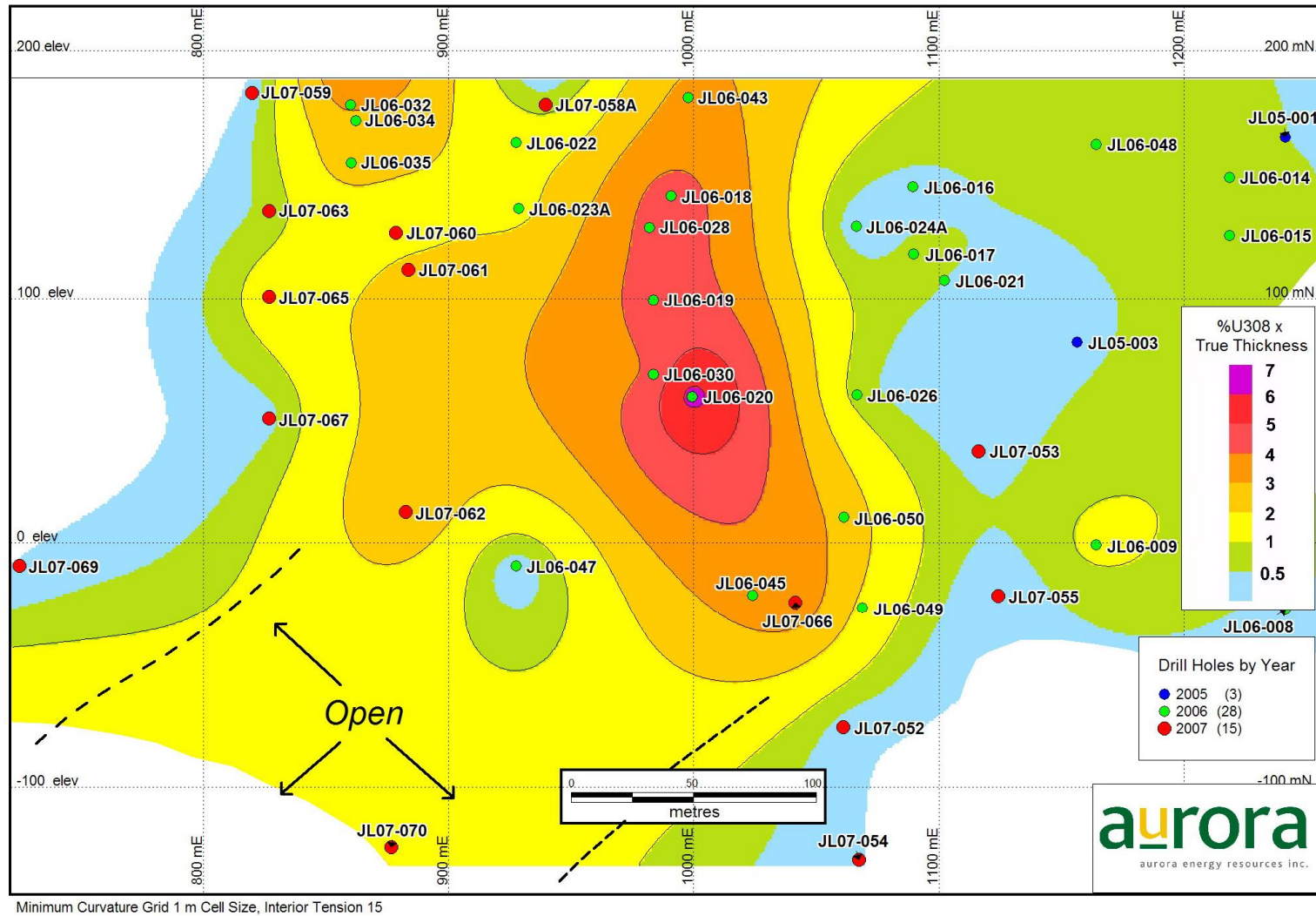


Figure 13.6: Jacques Lake Target Area, DDH Vertical Section



**Table13.4: Summary of 2007 Jacques Lake Assay Composites**

Hole ID	From	To	Interval	%U3O8
<b>JL07-052</b>	295.96	296.96	1.00	0.08
and	408.50	413.50	5.00	0.06
<b>JL07-053</b>	306.50	312.50	6.00	0.06
incl.	309.43	310.00	0.57	0.14
and	397.00	398.00	1.00	0.04
and	444.47	445.50	1.03	0.06
and	448.50	448.95	0.45	0.06
<b>JL07-054</b>	310.00	311.00	1.00	0.03
<b>JL07-055</b>	362.11	363.11	1.00	0.06
and	378.72	379.72	1.00	0.07
and	499.75	500.75	1.00	0.05
<b>JL07-057</b>	895.50	897.50	2.00	0.07
<b>JL07-058</b>	17.00	24.00	7.00	0.09
incl.	19.00	20.00	1.00	0.20
and	30.00	33.50	3.50	0.05
incl.	32.50	33.50	1.00	0.10
and	95.00	97.00	2.00	0.05
<b>JL07-058A</b>	16.24	23.24	7.00	0.09
incl.	17.24	20.24	3.00	0.15
and	25.24	26.24	1.00	0.08
and	32.25	34.64	2.39	0.09
and	125.50	126.50	1.00	0.03
and	191.00	192.00	1.00	0.05
<b>JL07-059</b>	90.50	92.50	2.00	0.08
<b>JL07-060</b>	120.28	133.50	13.22	0.09
incl.	120.28	124.50	4.00	0.15
and incl	126.50	127.50	1.00	0.22
and	158.88	159.88	1.00	0.04
and	190.50	192.50	2.00	0.04
and	195.50	195.60	0.10	0.04
and	215.25	225.60	10.35	0.05
incl.	220.60	221.60	1.00	0.12
and	242.00	253.00	11.00	0.12
incl.	243.00	244.00	1.00	0.25
incl.	246.00	251.00	5.00	0.15
and	270.95	273.95	3.00	0.07
and	296.75	304.50	7.75	0.03
<b>JL07-061</b>	126.37	141.39	15.02	0.15
incl.	126.37	133.37	7.00	0.21
and	172.04	172.52	0.48	0.08
and	224.11	229.96	5.85	0.06
incl.	228.96	229.96	1.00	0.17
and	233.96	234.96	1.00	0.56
and	237.96	238.96	1.00	0.04
and	256.36	257.11	0.75	0.15
and	288.95	293.20	4.25	0.18
<b>JL07-062</b>	164.00	190.00	26.00	0.11

incl.	166.00	168.00	2.00	0.14
incl.	174.00	177.00	3.00	0.21
incl.	180.00	181.00	1.00	0.20
incl.	188.00	189.00	1.00	0.19
and	230.00	233.00	3.00	0.11
incl.	232.00	233.00	1.00	0.19
<b>JL07-065</b>	119.00	135.50	16.50	0.09
incl.	119.00	121.00	2.00	0.20
incl.	124.00	127.47	3.47	0.19
and	263.00	264.00	1.00	0.04
and	269.00	270.00	1.00	0.04
and	274.50	284.31	9.81	0.07
incl.	281.00	284.31	3.31	0.12
<b>JL07-066</b>	370.00	412.50	42.50	0.12
incl.	370.00	373.00	3.00	0.23
incl.	374.40	375.00	0.60	0.19
incl.	384.00	385.00	1.00	0.17
incl.	387.50	390.85	3.35	0.37
incl.	392.50	397.50	5.00	0.27
incl.	400.50	401.50	1.00	0.15
incl.	404.50	406.50	2.00	0.20
<b>JL07-067</b>	155.81	158.00	2.19	0.05
and	169.75	173.50	3.75	0.03
and	199.50	206.00	6.50	0.05
and	387.53	388.03	0.50	0.04
<b>JL07-069</b>	279.35	280.35	1.00	0.04
and	306.50	307.50	1.00	0.05
<b>JL07-070</b>	401.00	418.00	17.00	0.12
incl.	408.00	412.00	4.00	0.27
<b>JL07-071</b>	Assays pending at time of writing of report			
<b>JL07-072</b>	Assays pending at time of writing of report			
<b>JL07-073</b>	Assays pending at time of writing of report			
<b>JL07-073</b>	Assays pending at time of writing of report			
<b>JL07-074</b>	Assays pending at time of writing of report			
<b>JL07-075</b>	Assays pending at time of writing of report			
<b>JL07-076</b>	Assays pending at time of writing of report			
<b>JL07-077</b>	Assays pending at time of writing of report			
<b>JL07-078</b>	Assays pending at time of writing of report			
<b>JL07-079</b>	Assays pending at time of writing of report			



### 13.3 MELODY LAKE TARGET AREA

#### 13.3.1 Introduction

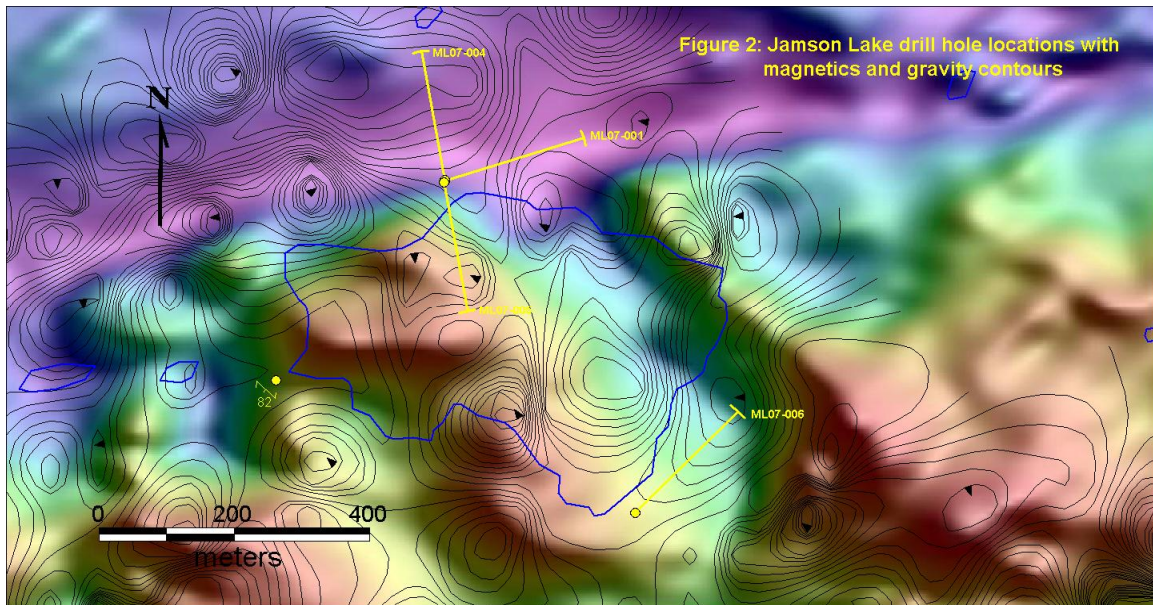
At total of 4,000 metres were originally budgeted to test the Melody Hill target during the 2007 field season. The focus of the planned program was to test coincident gravity and uranium-in-lake-sediment anomalies beneath Melody and Jamson Lakes via drill setups on the ice, and to also follow up encouraging drill results from Brinex drilling in the late 1970's near the eastern shore of Melody Lake.

A total of **14 drills holes totaling 3,376.17 metres** were drilled on the Melody and Jamson Lake targets between April 16, 2007 and June 9<sup>th</sup>, 2007 using two helicopter-supported drill rigs from Falcon Drilling. Details concerning the individual holes are listed below in **Table 13.5** and also shown in **Figures 13.7 and 13.8**.

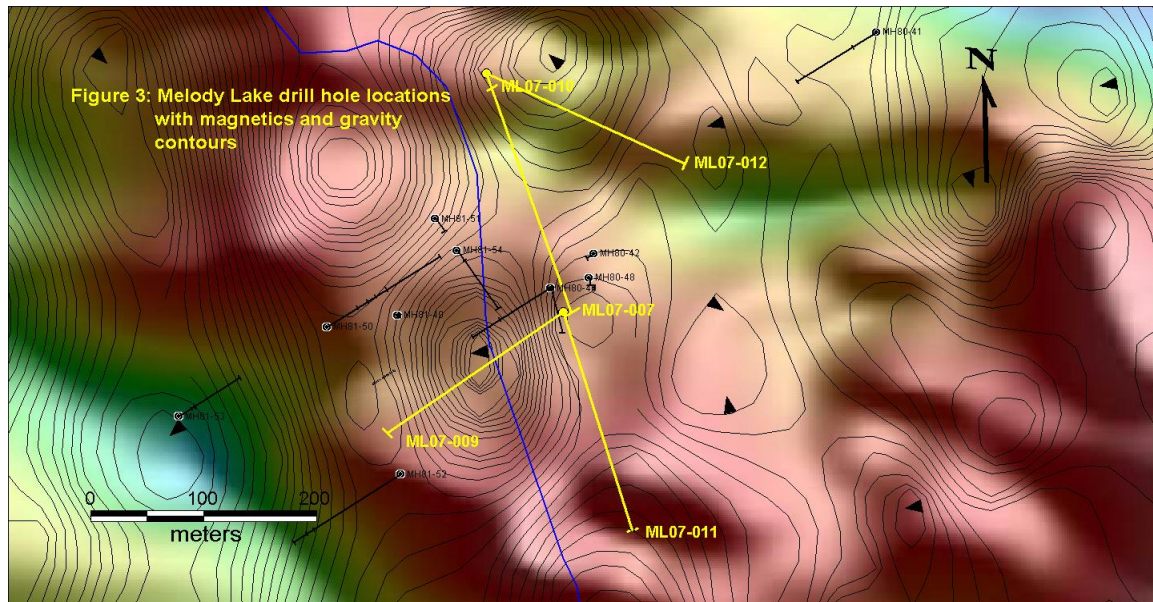
**Table 13.5: Summary of 2007 Melody Hill Drilling**

# Holes	Hole_ID	UTM_East	UTM_North	Zone	Elev. (m)	Azimuth	Dip	TD (m)
<b>ML Data = NAD 83, zone 20 &amp; 21</b>								
1	<b>ML07-001</b>	692069	6063574	20	~270	72.5	-45.5	304.80
2	<b>ML07-002</b>	692068	6063575	20	~270	350	-45	18.90
3	<b>ML07-003</b>	692068	6063575	20	~270	350	-55	16.80
4	<b>ML07-004</b>	692068	6063575	20	~270	350	-60	365.85
5	<b>ML07-005</b>	698068	6063572	20	~270	170	-55	342.60
6	<b>ML07-006</b>	692393	6063096	20	~265	45	-45	305.71
7	<b>ML07-007</b>	693436	6062169	20	~265	161	-45	306.93
8	<b>ML07-008</b>	306605	6061953	21	~200	235	-45	21.34
9	<b>ML07-009</b>	306605	6061953	21	~200	235	-50	301.14
10	<b>ML07-010</b>	693436	6062169	20	~200	161	-85	163.37
11	<b>ML07-011</b>	306605	6061953	21	~200	163	-45	285.60
12	<b>ML07-012</b>	693436	6062169	20	~200	115	-45	272.49
13	<b>ML07-013</b>	693436	6062169	20	~200	330	-45	304.88
14	<b>ML07-014</b>	306605	6061953	21	~200	163	-60	365.76
<b>Total</b>								<b>3,376.17</b>

**Figure 13.7: Melody Lake Target Area, Plan Map of 2007 DDH Locations – Jamson Lake**



**Figure 13.8: Melody Lake Target Area, Plan Map of 2007 DDH Location – Melody Lake**



### 13.3.2 Discussion

Drilling was originally to have been carried out from the ice of Melody and Jamson Lakes but delays in receiving drill permits and the subsequent rapidly deterioration of the ice conditions, resulted in a relocation to less desirable land based sites, much further from the planned targets. A total of 7 land based sites were selected on the northern and southern shores Jamson Lake and eastern shore of Melody Lake in order to test the chosen targets.

Drilling returned generally disappointing results, with only spot highs being intersected in holes M07-007 and M07-011. Mineralization intersected was hosted in fractured granitoid rocks, with no discernable deformation or alteration associated with the mineralized zones. It is believed that due to the inability to drill from the ideal locations on the ice, the targets were not adequately tested.

**Table 13.6: Summary of 2006 Melody Hill Assay Composites**

Hole ID	From	To	%U3O8	Interval
ML07-001	NSV			
ML07-002	NSV			
ML07-003	NSV			
ML07-004	NSV			
ML07-005	NSV			
ML07-006	NSV			
ML07-007	41.35	42.05	0.073	0.70
ML07-008	NSV			
ML07-009	NSV			
ML07-010	NSV			
ML07-011	52.29	53.29	0.054	1.00
and	60.41	61.41	0.105	1.00
and	108.81	109.44	0.089	0.63
ML07-012	NSV			
ML07-013	NSV			
ML07-014	NSV			

**(NSV = no significant results)**

The drilling of these anomalies may be revisited in 2008 but the given the nature of the mineralization observed in the 2007 drill holes and its location beneath Melody and Jamson Lakes, this remains a challenging target.

## 13.4 AURORA CORRIDOR TARGET AREA

### 13.4.1 Introduction

The Aurora Corridor target area is located approximately 10km to the West of the Jacques Lake deposit, on the south western shore of Jacques Lake. Drill holes totaling 2,250 metres were originally proposed at the start of the exploration program to test the Aurora Corridor target. The target consisted of an east-west striking shear zone with a coincident magnetic anomaly with numerous occurrences of uranium mineralization along its length.

A total of **12 drill holes totaling 2,047.32 metres** were drilled between June 17, 2007 and August 1, 2007 and between October 22, 2007 and October 27, 2007 using up to helicopter-supported drill rigs from Falcon Drilling. Details concerning the individual holes are listed below in **Table 13.7** and also shown in **Figure 13.9**.

**Table 13.7: Summary of 2007 Aurora Corridor Drilling**

# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
<b>AC Data = NAD 83, zone 21</b>							
1	<b>AR07-001</b>	321142	6060904	259	355	-45	99.36
2	<b>AR07-002</b>	321142	6060904	259	355	-75	319.74
3	<b>AR07-003</b>	321324	6060931	280	355	-45	373.67
4	<b>AR07-004</b>	321324	6060931	280	355	-75	93.27
5	<b>AR07-005</b>	321351	6060920	280	22	-45	104.24
6	<b>AR07-006</b>	321351	6060920	280	22	-51	96.62
7	<b>AR07-007</b>	321351	6060920	280	8	-45	102.72
8	<b>AR07-008</b>	322555	6060992	314	332	-45	255.12
9	<b>AR07-009</b>	322555	6060992	314	332	-75	93.57
10	<b>AR07-010</b>	322678	6061009	312	332	-45	163.07
11	<b>AR07-011</b>	322678	6061009	312	332	-75	146.91
12	<b>AR07-012</b>	321202	6060755	317	355	-45	199.03
<b>Total</b>							<b>2,047.32</b>

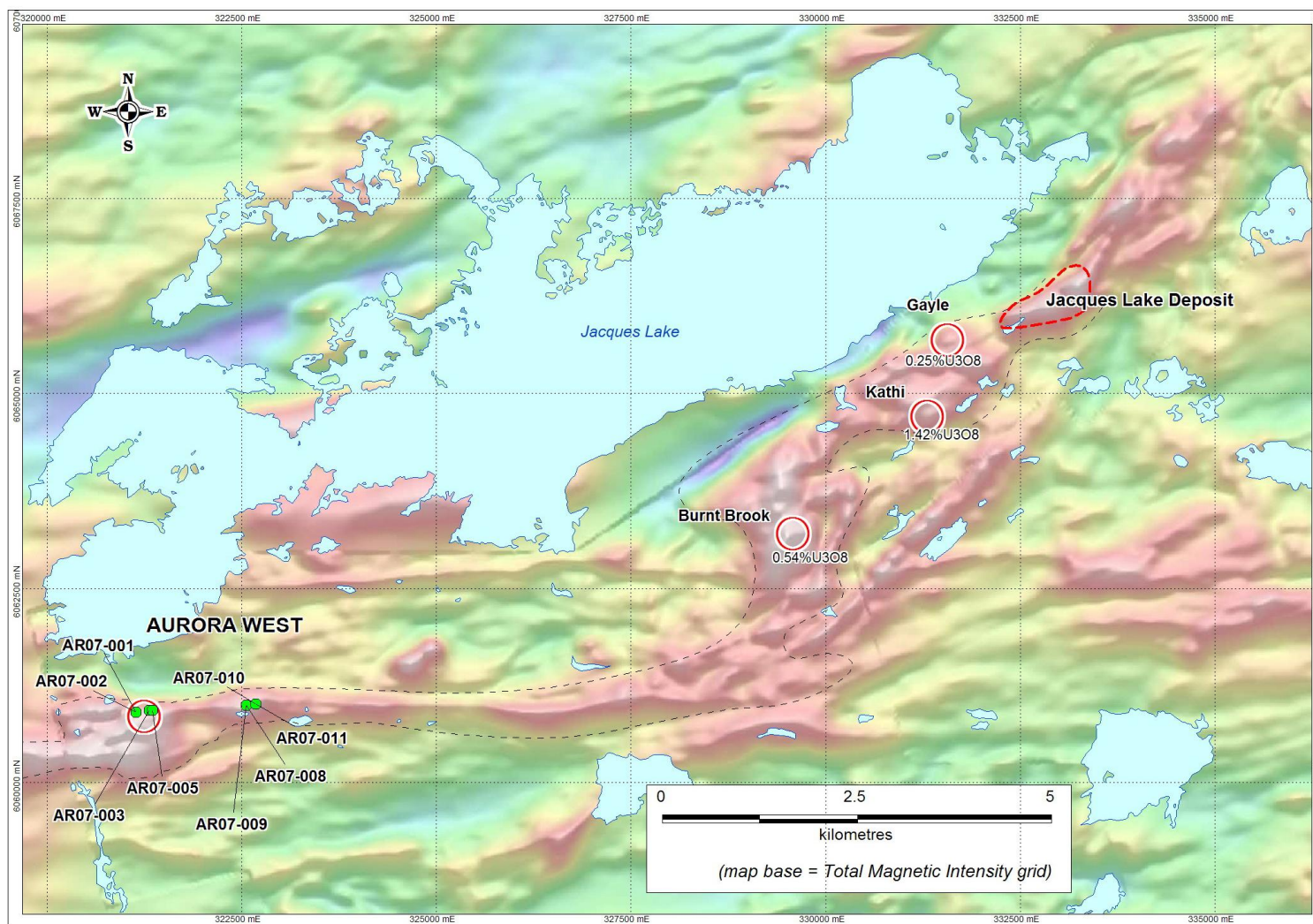
### 13.4.2 Discussion

Elevated to significant levels of uranium mineralization were intersected in 8 of the 12 holes drilled (**Table 13.8**). Mineralization is typically hosted within strongly sheared, interlayered or transposed felsic and mafic metavolcanics. As at other target areas within the Central Mineral Belt property, significant levels of hematite + magnetite + albite alteration are observed in association with mineralized intervals.

Highlights from the drilling include: **0.11% U<sub>3</sub>O<sub>8</sub>/2.0m** and **0.19% U<sub>3</sub>O<sub>8</sub>/1.5m** including **0.48% U<sub>3</sub>O<sub>8</sub>/0.5m** in AR07-002; and **0.16% U<sub>3</sub>O<sub>8</sub>/1.5m** and **0.14% U<sub>3</sub>O<sub>8</sub>/2.0m** in AR07-011. These values are comparable to the initial shallow drill results from both the Michelin and Jacques Lake Deposits, and as a result, the entire Aurora Corridor warrants considerably more drilling in 2008.



**Figure 13.9: Aurora Corridor Target Area, Plan Map of 2007 DDH Locations**



**Table 13.8: Summary of 2007 Aurora Corridor Assay Composites**

Hole ID	From	To	%U3O8	Interval
<b>AR07-001</b>	30.07	30.82	0.08	0.75
<b>AR07-002</b>	37.00	39.00	0.11	2.00
incl.	37.00	38.00	0.15	1.00
and	49.00	50.50	0.19	1.50
incl.	50.00	50.50	0.48	0.50
<b>AR07-003</b>	34.80	35.30	0.03	0.50
<b>AR07-005</b>	44.80	45.15	0.10	0.35
<b>AR07-008</b>	35.66	40.53	0.08	4.87
incl.	39.66	40.53	0.15	0.87
<b>AR07-009</b>	49.95	50.95	0.19	1.00
<b>AR07-010</b>	17.05	21.55	0.06	4.50
incl.	20.05	21.55	0.11	1.50
<b>AR07-011</b>	23.05	30.05	0.07	7.00
incl.	23.05	24.55	0.16	1.50
And incl.	28.05	30.05	0.14	2.00
<b>AR07-012</b>	Results Pending			

(NSV = no significant results)

## 13.5 BURNT BROOK TARGET AREA

### 13.5.1 Introduction

A total of 12 drill holes totaling 3,000 m were planned for the 2007 field season on the Burnt Brook Property, located 4.0 km southwest of the Jacques Lake Deposit. The goal of the 2007 drill program was to test known occurrences of outcropping uranium mineralization identified in the late 1970s through trenching and surface mapping within the same stratigraphic package as Jacques Lake. Particular attention was paid to targeting mapped folds in the area.

At total of **10 drill holes totaling 1,828.42 metres** were completed in the Burnt Brook area between September 21<sup>st</sup> through October 27<sup>th</sup>, 2007 using one helicopter-supported drill rig from Falcon Drilling. The drilling focused on undercutting a series of old trenches, as well as, testing a possible fold closure to the northeast.

Details of the 2007 drill holes are listed in **Table 13.3** and shown in **Figure 13.10**.

**Table 13.9: Summary of 2007 Burnt Brook Drilling**

# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
BB Data = NAD 83, zone 21							
1	BB07-001	329741	6063335	257.8	310	-45	300.23
2	BB07-002	329776	6063300	244.8	310	-45	168.86
3	BB07-003	329776	6063300	244.8	310	-75	174.96
4	BB07-004	329684	6063249	255.6	310	-45	157.89
5	BB07-005	329727	6063215	250.8	310	-45	243.54
6	BB07-006	329900	6063290	240	290	-45	224.64
7	BB07-007	329938	6063328	245	310	-45	145.39
8	BB07-008	329938	6063328	245	310	-70	70.32
9	BB07-009	329906	6063202	233	310	-45	218.54
10	BB07-010	329848	6063373	245	310	-45	124.05
Total							1,828.42

### 13.5.2 Discussion

Assays for all 10 drill holes were still pending as of October 31, 2007 and as a result, no description of observed lithologies or mineralization intersected in those holes will be discussed in this report.

Recommendations for 2008 will be developed once the final assays are received.





## 13.6 GAYLE TARGET AREA

### 13.6.1 Introduction

The Gayle target area is located approximately 1.5 kilometres to the west of the Jacques Lake deposit, and marks the eastern limits of what is referred to as the Aurora Corridor. A proposed diamond drilling program of 900 metres in 8 holes was recommended to test the Gayle target for subsurface extension to outcropping uranium mineralization identified by Brinex within hematized and albitized intermediate volcanic rocks.

A total of **8 drill holes totaling 961.33 metres** were completed in the Gayle Target between September 28, 2007 and October 22, 2007 using one helicopter-supported drill rig from Falcon Drilling. The drilling was focused in an area of historic trenching with step outs to the southwest along strike.

Details of the 2007 drill holes are listed in **Table 13.10** and shown in **Figure 13.11**

**Table 13.10 Summary of 2007 Gayle Drilling**

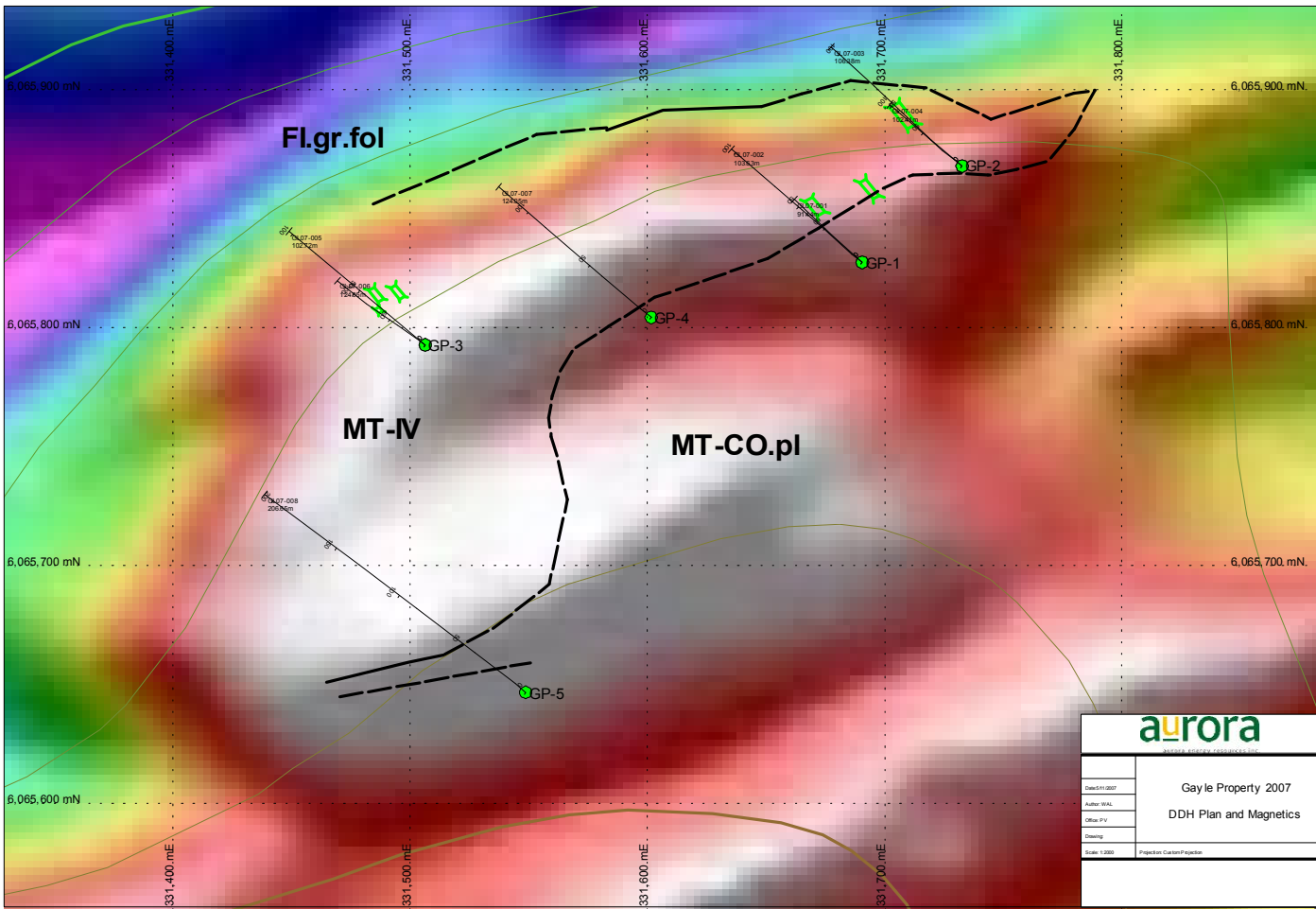
# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
Gayle Data = NAD 83, zone 21							
1	GL07-001	331690	6065827	237.3	310	-65	91.44
2	GL07-002	331690	6065827	237.3	310	-45	103.63
3	GL07-003	331733	6065868	235.6	310	-45	106.38
4	GL07-004	331733	6065868	235.6	310	-70	102.41
5	GL07-005	331506	6065793	233.5	310	-45	102.72
6	GL07-006	331506	6065793	233.5	310	70	124.05
7	GL07-007	331602	6065804	232	310	-50	124.05
8	GL07-008	331549	6065647	244	310	-50	206.65
Total							961.33

### 13.6.2 Discussion

As with the Burnt Brook Target, assay results for all 8 drill holes were still pending as of October 31, 2007 and as a result, no description of observed lithologies or mineralization intersected in those holes will be discussed in this report.

Recommendations for 2008 will be developed once the final assays are received.

**Figure 13.11 Gayle Target Area, Plan Map of 2007 DDH Locations**



## 13.7 GEAR TARGET AREA

### 13.7.1 Introduction

As a follow-up to the two confirmation holes drilled in 2006 on the historic Gear Prospect, a additional 2,000 m were planned for 2007 to assess the down-dip and down-plunge potential of the zone.

A total of **6 drill holes totaling 1,933.35 metres** were drilled between August 1, 2007 and September 4, 2007 using one helicopter-supported drill rig from Falcon Drilling. Drilling was focused on confirming and extending previously known mineralization to depth and to test possible fold offsets.

Details of the 2007 drill holes are listed in **Table 13.11** and shown in **Figure 13.12**. A typical cross-section is shown in **Figure 13.13**.

**Table 13.11 Summary of 2007 Gear Drilling**

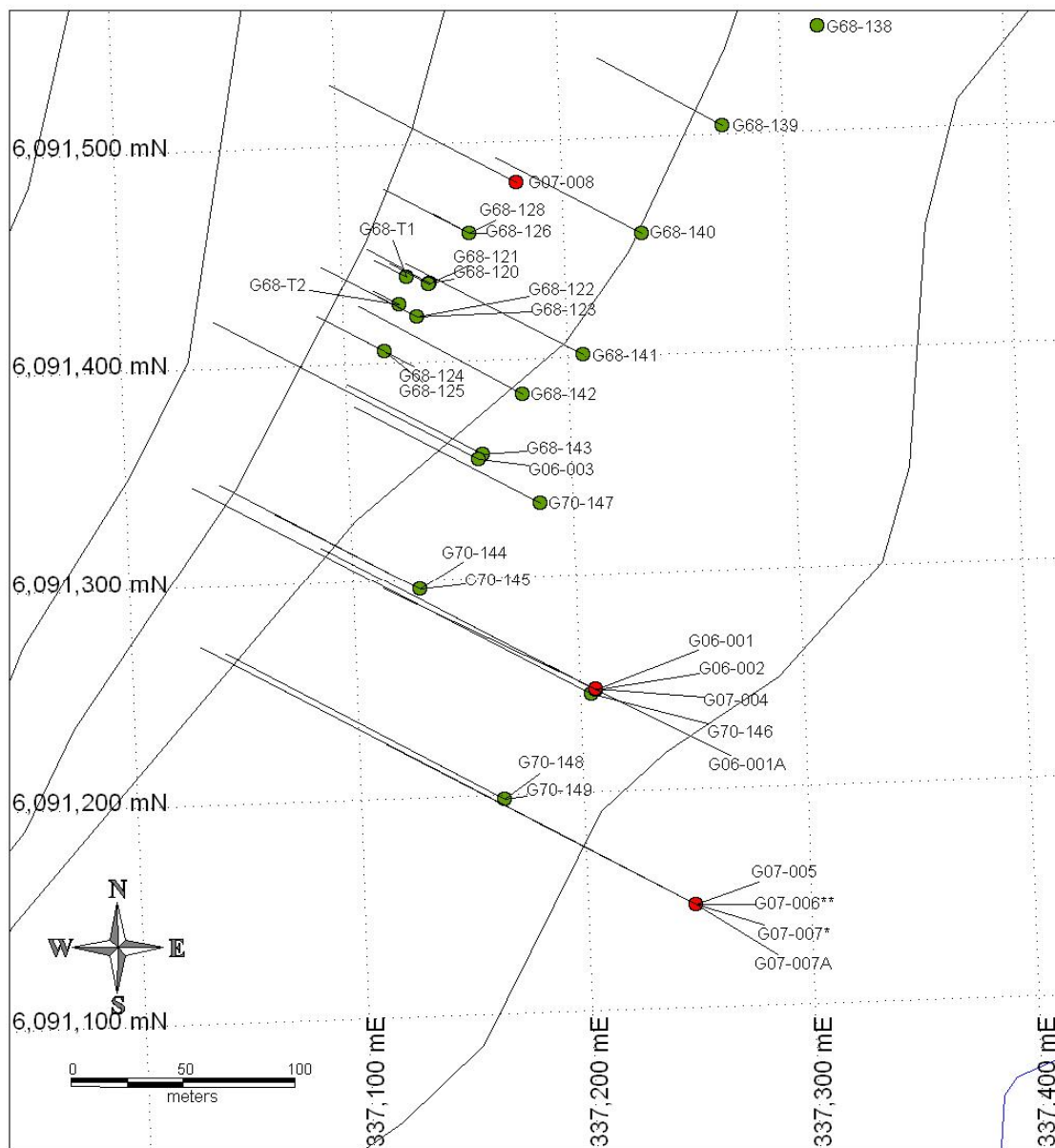
# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
Gear Data = NAD 83, zone 21							
1	<b>G07-004</b>	337207	6091247	145	298	-75	411.18
2	<b>G07-005</b>	337248	6091147	143	300	-55	438.00
3	<b>G07-006**</b>	337248	6091147	143	300	-70	459.64
4	<b>G07-007*</b>	337248	6091147	143	300	-45	111.86
5	<b>G07-007A</b>	337248	6091147	143	300	-50	377.34
6	<b>G07-008</b>	337180	6091481	162	300	-45	135.33
Total	* denotes abandoned drill hole, **denotes drill not reaching target depth						<b>1,933.35</b>

### 13.7.2 Discussion

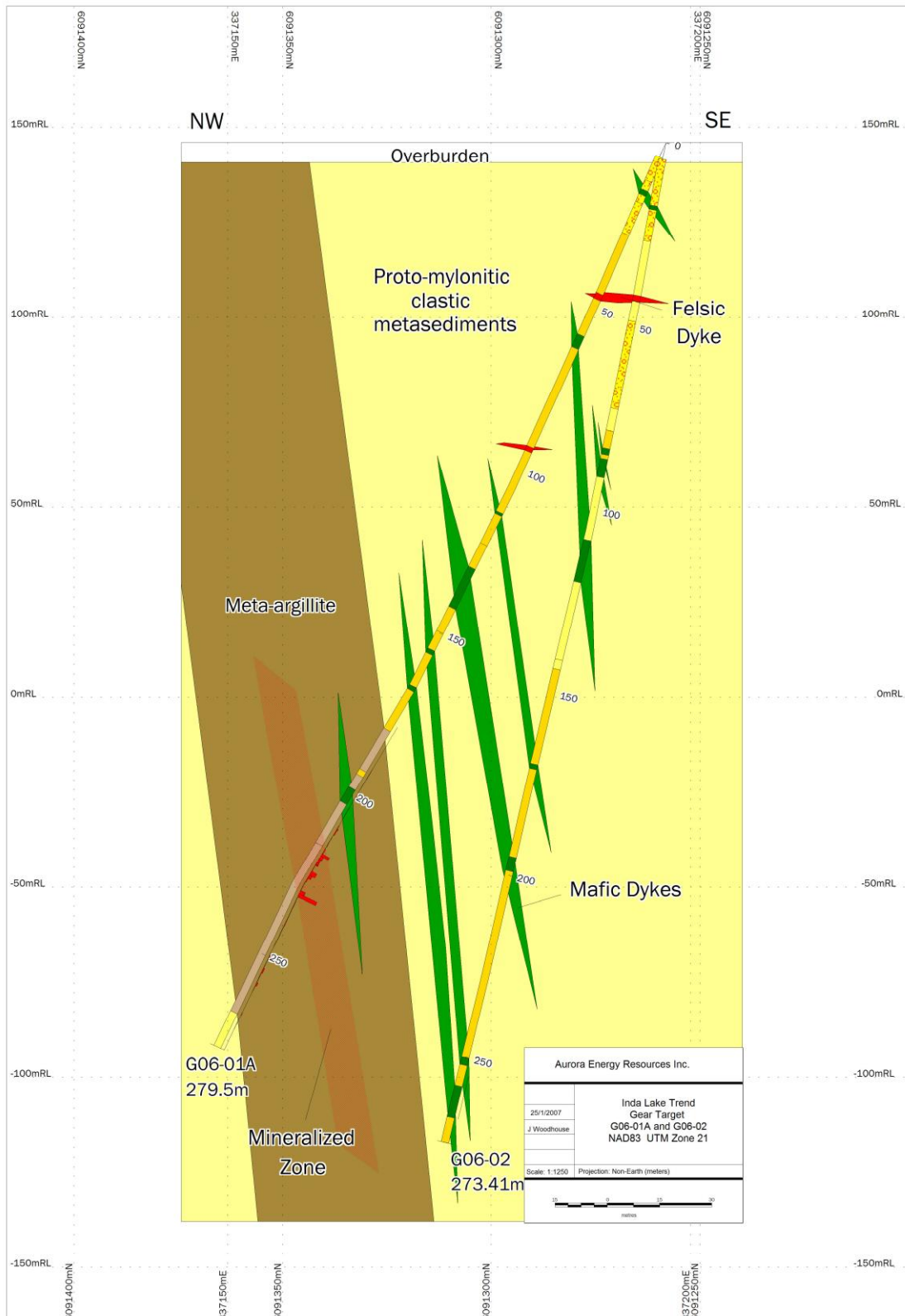
The drilling program at Gear successfully extended the mineralized zone over a strike length of 200 metres and a further 100 metres down-plunge. The zone of U mineralization intersected in G07-005 has rough dimensions of 150m down dip by 50 m across and remains open at depth. The strongest mineralization within the zone measures up to 20 m in width. A few observations have been made about mineralization at Gear:

1. Elevated radioactivity can occur within the argillite, dirty quartzite or sheared amphibolite (all within the Post Hill group)
2. The primary host “argillite” changes in composition along its strike indicating facies changes
3. Mineralization appears to be folded
4. The Post Hill group features an earlier deformation event which is not evident in the Aillik Group

**Figure 13.12: Gear Target Area, Plan Map of 2007 DDH Locations**



**Figure 13.13: Cross Section of DDH G06-001A and G06-002**  
(with interpreted geology and %  $U_3O_8$  assay histograms)



Highlights the 2007 drilling to date include: **0.17% U<sub>3</sub>O<sub>8</sub>/10.0m** including **0.21% U<sub>3</sub>O<sub>8</sub>/5.0m** in G07-005 and **0.16% U<sub>3</sub>O<sub>8</sub>/7.0m** in G07-007A.

Further work is warranted to continue chasing the down-plunge extension of this zone in 2008.

**Table 13.12: Summary of 2007 Gear Assay Composites**

Hole ID	From_m	To_m	Length	U3O8_%
<b>G07-004</b>	Assays pending			
<b>G07-005</b>	346.00	369.00	23.00	0.09
incl.	358.00	368.00	10.00	0.17
and incl.	361.00	366.00	5.00	0.21
and incl.	363.00	364.00	1.00	0.38
<b>G07-006</b>	Assays pending			
<b>G07-007A</b>	323.00	330.00	7.00	0.16
<b>G07-008</b>	Assays pending			

## 13.8 INDA TARGET AREA

### 13.8.1 Introduction

A program of 19 holes totaling approximately 5,000m was initially proposed. This program was designed to confirm earlier Brinex drill hole results, infill gaps in the shallow drilling, and extend the current resource down-dip. Of particular focus, was the follow-up to the **2.12% U3O8/3.62m** intercept returned in the lone confirmation drill hole completed in 2006, I06-001.

A total of **8 drill holes totaling 2,523.96 metres** were completed between September 5, 2007 and October 23, 2007 using a combination of one helicopter-supported rig from Falcon Drilling followed by one helicopter-supported drill rig from Springdale Drilling. The holes mainly targeted the down-dip portion of the known resource.

Details of the 2007 drill holes are listed in **Table 13.13** and shown in **Figure 13.14**. A typical cross-section is shown in **Figure 13.15**.

**Table 13.13: Summary of 2007 Inda Drilling**

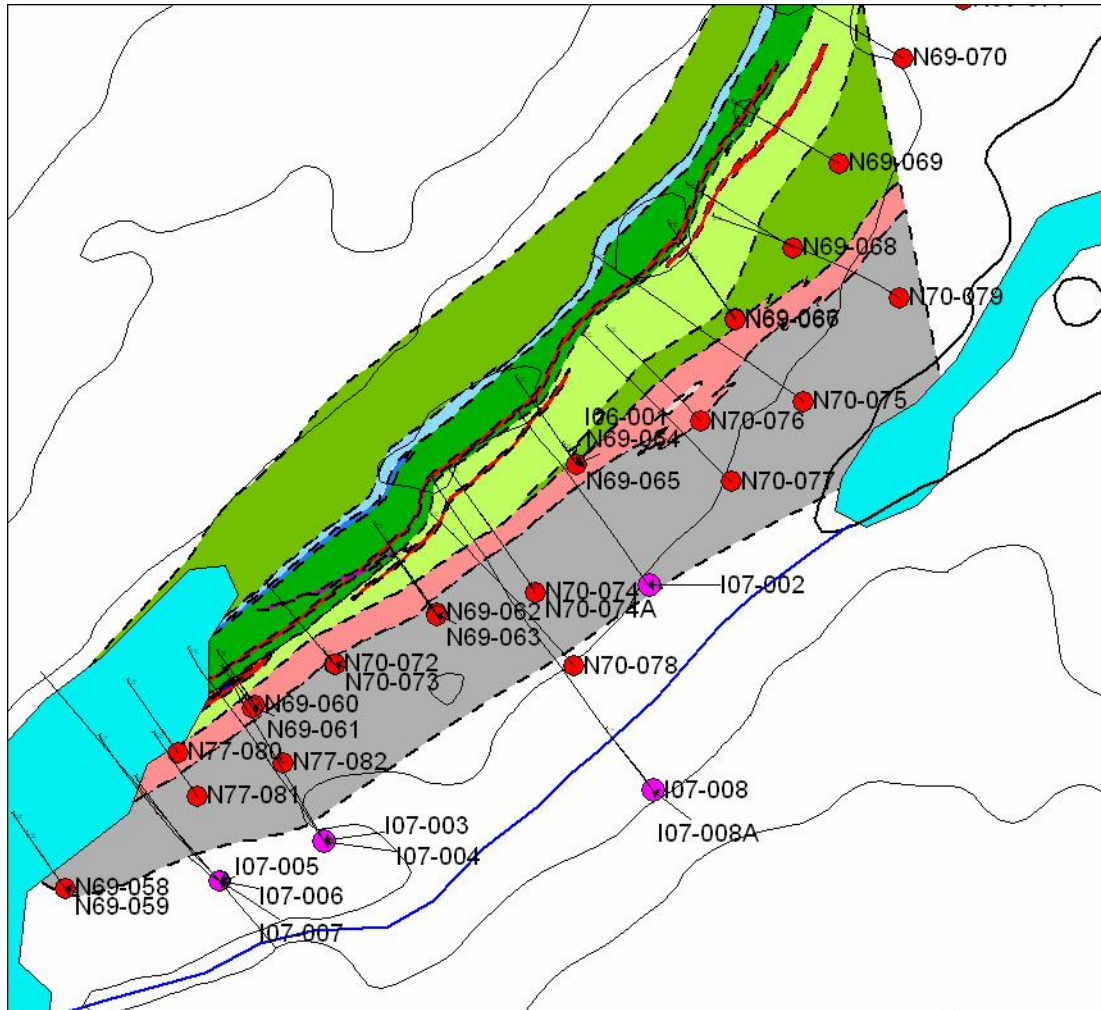
# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
Inda Data = NAD 83, zone 21							
1	<b>I07-002</b>	334790	6089401	108	325	-68	432.21
2	<b>I07-008*</b>	334794	6089245	112	320	-50	89.00
3	<b>I07-008A</b>	334794	6089245	112	320	-58	482.00
4	<b>I07-003</b>	334543	6089207	113	330	-50	235.00
5	<b>I07-004</b>	334543	6089207	113	330	-65	358.75
6	<b>I07-005</b>	334464	6089176	112	320	-50	215.00
7	<b>I07-006</b>	334464	6089176	112	320	-72	320.00
8	<b>I07-007</b>	334464	6089176	112	320	-85	392.00
<b>Total</b>	<b>* denotes abandoned drill hole</b>						<b>2,523.96</b>

### 13.8.2 Discussion

Mineralized intervals in the historic Inda Lake core are characterized by a highly strained, aphanitic, felsic metavolcanic unit (possibly metasedimentary) which contains abundant actinolite + calcite + chlorite +/- pyrite veining to stock working. The unit is strongly and pervasively hematized as well as strongly magnetic. Additionally, mineralized intervals host a significant concentration of sulphide minerals, notably chalcopyrite and pyrite. Mineralized zones at Inda are generally narrow, ~ 1m, however numerous zones are seen in close proximity to one another.

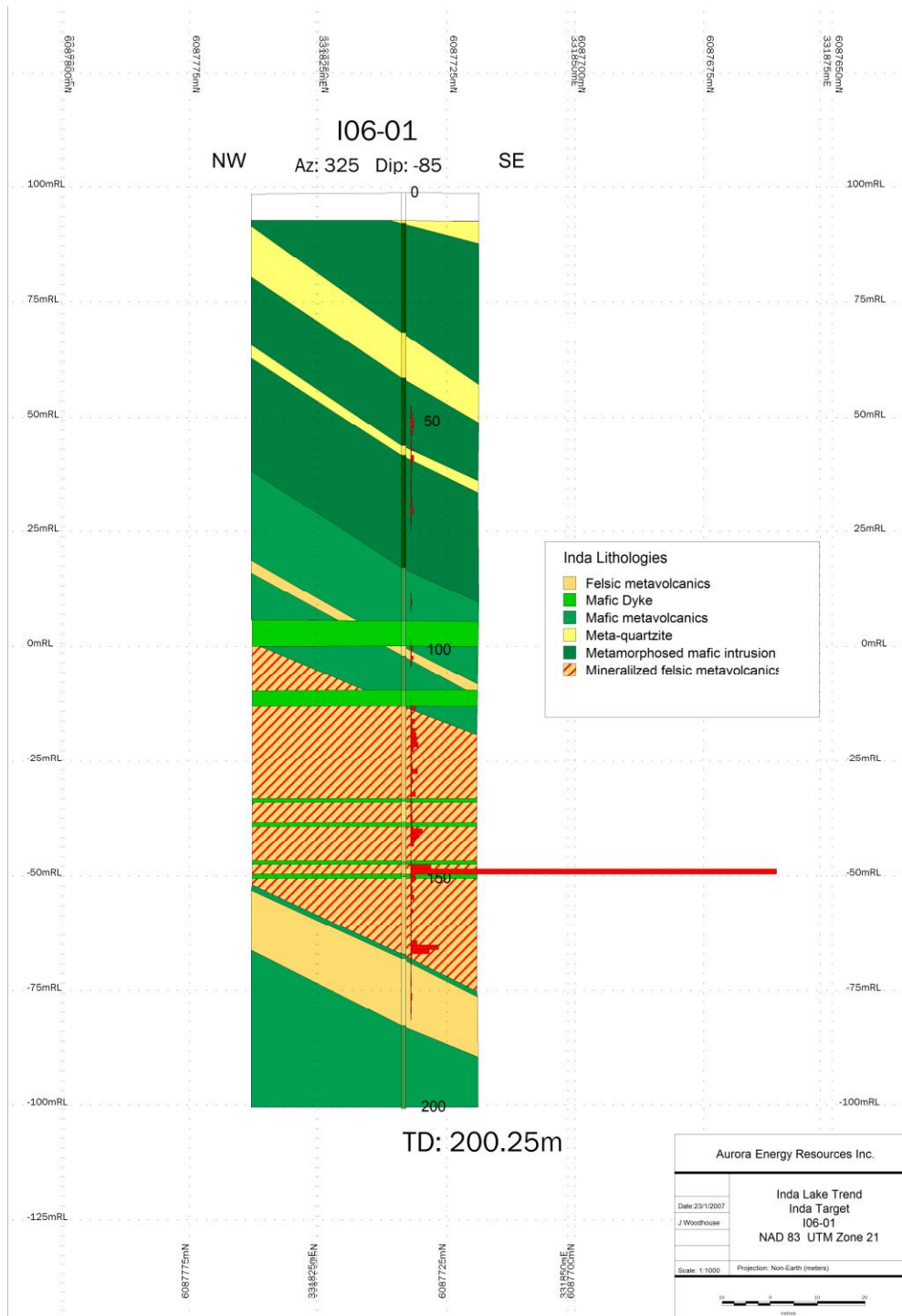
Assays for all 8 drill holes were still pending as of October 31, 2007 and as a result, no description of observed lithologies or mineralization intersected in those holes will be discussed in this report. Recommendations for 2008 will be developed once the final assays are received.

**Figure 13.14: Inda Target Area, Plan Map of 2007 DDH locations**  
(2007 ddh in purple and pre-2007 DDH (including historical Brinex DDH) in red)





**Figure 13.15: Cross Section of DDH I06-001**  
(showing interpreted geology and % U<sub>3</sub>O<sub>8</sub> assay histograms)



## 13.9 NASH TARGET AREA

### 13.9.1 Introduction

A program of 4 holes totaling 1,000 metres was recommended for the Nash Prospect to follow on the heels of the two confirmation holes completed in 2006. As with the Gear and Inda strategies, the program was designed test for down-dip extensions to the known mineralization

A total of **four drill holes** totaling **1,298.00 m** were completed at the Nash prospect between September 18, 2007 and October 17, 2007 using one helicopter-supported drill rig from Springdale Drilling. These holes targeted down-plunge mineralization below the historical Brinex drilling assuming a S or SW control on the mineralized shoot geometry.

Details of the drilling can be found in **Table 13.14** and shown in **Figure 13.16**. A typical cross-section is shown in **Figure 13.17**.

**Table 13.14: Summary of 2007 Nash Drilling**

Nash Target							
# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
Nash Data = NAD 83, zone 21							
1	N07-003	331834	6087373	169	315	-50	272.00
2	N07-004	331834	6087373	169	315	-75	344.00
3	N07-005	331916	6087417	177	315	-55	263.00
4	N07-006	331964	6087343	156	315	-72	419.00
Total							1,298.00

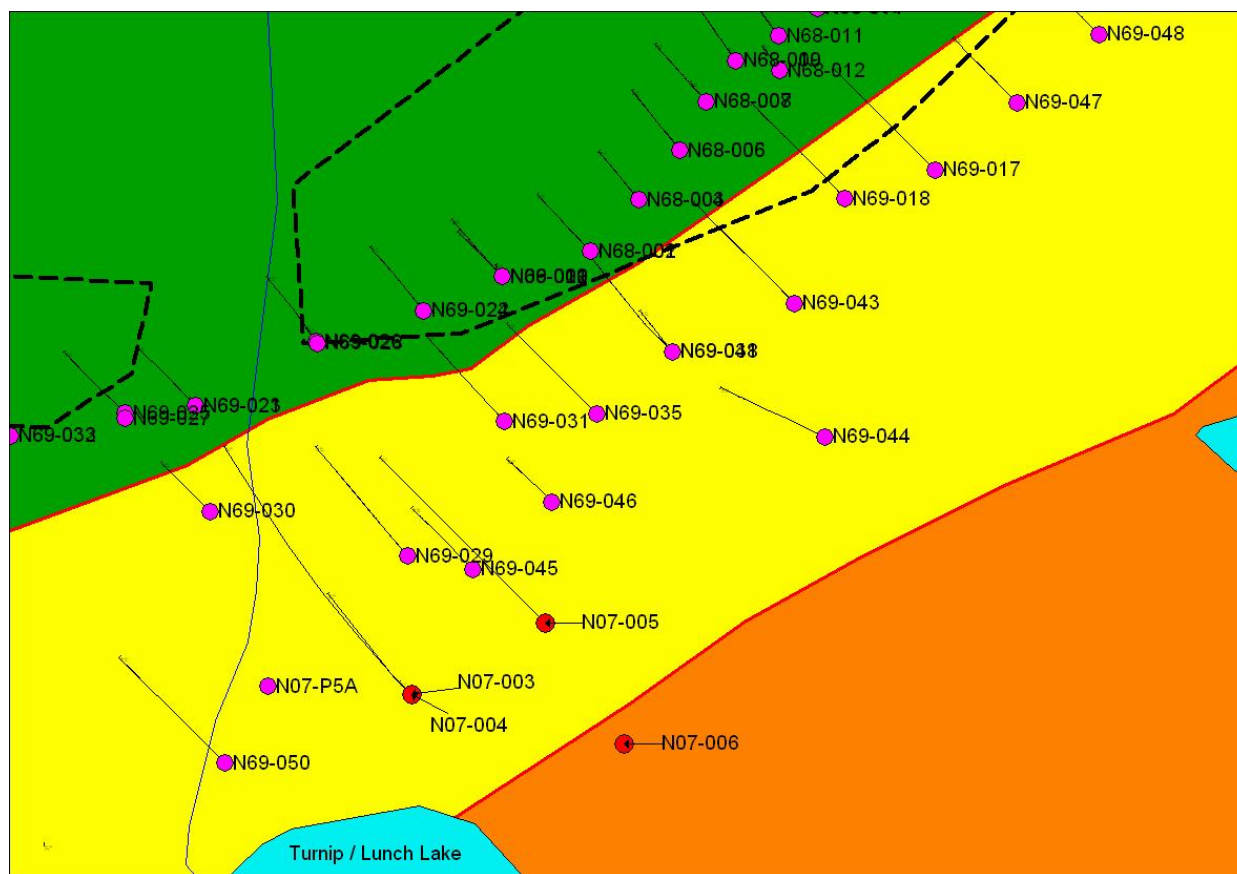
### 13.9.2 Discussion

As with Inda, the mineralized intervals in the historic Nash Inda Lake core are generally narrow (<2 m) and hosted within a highly strained, aphanitic, hematized, magnetite-rich, felsic metavolcanic unit which contains abundant actinolite + calcite + chlorite +/- pyrite veining to stock working.

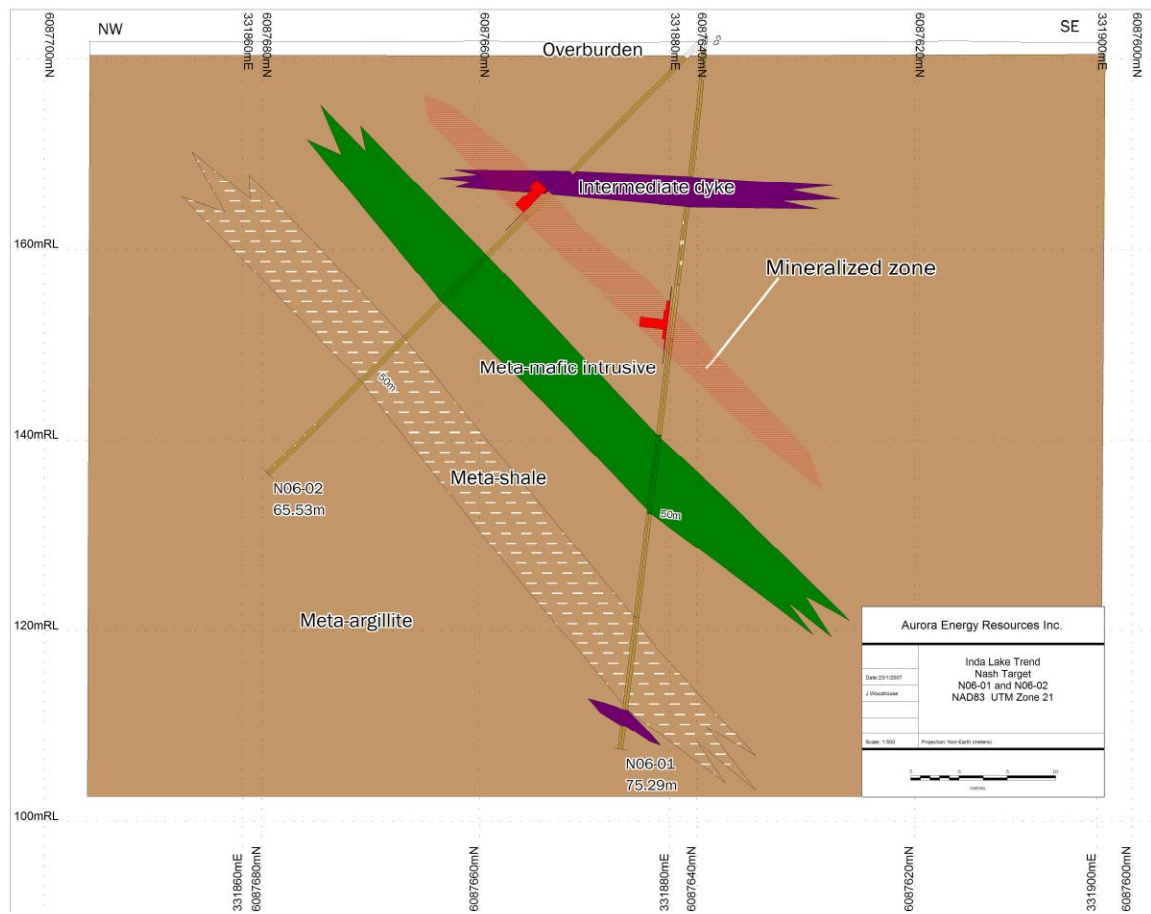
Assays for all 4 drill holes were still pending as of October 31, 2007 and as a result, no description of observed lithologies or mineralization intersected in those holes will be discussed in this report.

Recommendations for 2008 will be developed once the final assays are received.

**Figure 13.16: Nash Target Area, Plan Map of 2007 DDH locations**  
(2007 DDH in red and pre-2007 DDH (including historical Brinex DDH) in purple)



**Figure 13.17: Cross Section of DDH N06-001 and N06-002**  
(showing interpreted geology and %  $U_3O_8$  assay histograms)



## **14.0 SAMPLING METHOD AND APPROACH**

### **14.1 CORE DRILLING AND LOGGING**

Diamond drilling was completed by three different contractors in 2007 using a variety of helicopter-supported drill rigs: Falcon Drilling of Prince George, B.C. supplied three F-1000 and three F-2000 portable fly rigs; Major Drilling of Winnipeg, Manitoba supplied three Duralite 1000 drill rigs; and Springdale Drilling of Springdale, Newfoundland supplied two Duralite 500 drill rigs. A Devico directional tool supplied by Major Drilling's Directional Services Group was also utilized on the deeper Michelin holes.

Drilling commenced on April 16<sup>th</sup>, 2007 and was still ongoing at the time of writing of this report. Four drill rigs remain working on the Michelin Deposit with an anticipated shutdown of late November.. All drilling was supervised by Aurora Energy Resources technical staff and general industry standards were followed in all matters.

Helicopter support for the drilling were two Bell 407's, one A-Star and one Bell 206LR provided by Universal Helicopters of Happy Valley-Goose Bay, Labrador.

All proposed drill collars were surveyed with hand-held GPS units by Aurora geologists. All final drill collars at the Michelin, Gear, Inda, Nash and Jacques Lake target areas were surveyed either using the real-time, satellite and base station corrected TOPCON HYPER GPS system by N.E. Parrott C.L.S. from Happy Valley-Goose Bay, Labrador, or later in the season, by a real-time, satellite and base station corrected TRIMBLE 5700RTK/GPS system manned by Aurora staff.. Control is relative to two local survey monuments located at Michelin and Jacques Lake.

A combination of NQ and BTW diameter core was drilled and the core was placed in wooden core trays with depth markers every drill run (up to 3 m). Core recovery during these programs was excellent. The boxes were securely sealed and delivered once a day by helicopter to the temporary core logging facilities that were set up in each of the respective drilling areas (Michelin (also for Melody), Jacques Lake, Aurora Corridor, Inda Lake (also for Gear and Nash), and Burnt Brook/Gayle. Flex-It survey tests were taken generally at 75-100 m intervals down-hole to provide down-hole survey control. All holes were cemented following completion and casing was left in the hole. Core logging procedures followed industry standards and a defined sample protocol.

### **14.2 DRILL CORE SAMPLING**

All samples collected by Aurora staff during 2007 drill programs on the CMB Project were subjected to a quality control procedure that ensured best practices in the handling, sampling, analysis, and storage of the drill core.

Drill core sampling was done based on visual indications of mineralization and zones of anomalous radioactivity based on scintillometer readings. All drill core with a

scintillometer reading greater than 300 cps was removed from the core box and tested without the interference of background radioactivity. Sampling intervals were predominantly in the 0.5 to 1.0 m range; though in areas of homogenous lithology, samples were collected in 1.5 m intervals. Narrow zones of mineralization were broken out as well.

### **14.3 HEALTH AND SAFETY PROTOCOLS FOR PERSONNEL**

The company developed *Uranium Exploration Health and Safety and Environmental Protection Guidelines* specific to the CMB project (Buchnea 2005, revised August 2006). The level of radiation exposure resulting from exploration activities is generally minimal, but proper precautions must be followed when handling radioactive material.

The purpose of these guidelines is to minimize personal and environmental exposures to levels that are as low as reasonably achievable (ALARA). The most effective way to reduce potential exposure to radiation is accomplished by minimal handling of radioactive samples, maximizing the distance from mineralized core or rocks, sufficient ventilation and personal hygiene. In the field, workers wore gloves when handling rock samples. When returning to town or camp, all field gear was stored in the dry away from kitchen and sleeping facilities. During the drill program workers handling mineralized core were required to wear coveralls, safety glasses, gloves and dust mask when splitting core. Core was split using a core splitter rather than a rock saw to reduce dust in the core splitting facility. The core shack and dry facilities were monitored on a regular basis to ensure radioactive levels were kept to a minimum.

Scintillometers were used to monitor daily external dosages. To measure the cumulative external dosages, all field workers were supplied with thermo luminescent radiation dosimeters (TLDs). The TLD's were supplied by Health Canada's National Dosimetry Service and were submitted every 3 months to Health Canada, which reports the results and maintains a central registry. The Health Canada TLD dosimetry program indicated that no worker received a measurable dose during the 2005 exploration program or during the 2006 exploration program. Data is still pending for the 2007 program.

## **15.0 SAMPLE PREPARATION, ANALYSES AND SECURITY**

### **15.1 DRILL CORE SAMPLES**

Core samples were split using a manual core splitter; with one-half of the core selected for analysis and the remaining half returned to the core box for reference. The samples were placed in a polyvinyl sample bag with the reference sample tag, and then sealed with a plastic zip tie. Every 25 samples a duplicate of one-quarter of the sample interval, as well as a geochemical blank, and a geochemical standard were inserted into the shipments at pre-designated locations in the sample series. The pails were then delivered by helicopter to the main Aurora storage facility in Postville, Labrador to await processing for shipment.

### **15.2 SHIPPING**

Once in Postville, Labrador, drill core sample buckets were double checked to ensure all samples were present and in the appropriate shipping containers (lidded plastic pails). In addition, drill core samples were individually scanned with Exploranium GR-110 G Portable Gamma Ray scintillometer for data correlation purposes.

As per regulations for the Transportation of Dangerous Goods Act, all containers were labeled “UN2910” on the outside, with signage indicating “Excepted Package: Radioactive Material” placed within each container. The individual containers were then scanned with a S.E. International Inc. “Inspector” contamination meter to ensure compliance with the maximum allowable limit of 5  $\mu\text{Sv/hr}$  measured at a distance of one m from the package.

Analytical request forms from Activation Laboratories Ltd. were completed, copied, and placed in the designated container. Pails were then sealed with numbered security “zip-tie” tags, which were previously recorded on the laboratory forms. The containers were shipped from Postville to Activation Laboratories sample prep facility in Happy Valley-Goose Bay, who arranged shipment of the pulps via truck to the main Activation Laboratories facility in Ancaster, Ontario.

### **15.3 ASSAY LABORATORY**

The processing and analysis of samples was conducted by Activation Laboratories (“Actlabs”) in Ancaster, Ontario and check samples have been sent to ALS Chemex Laboratories in North Vancouver, BC. Both Actlabs and ALS Chemex operate according to the guidelines set out in ISO/IEC Guide 25 – “General requirements for the competence of calibration and testing laboratories”.

## 15.4 SAMPLE PREPARATION

Using preparation method RX-1, drill core samples were crushed up to 75% passing 2 mm, mechanically split (riffle) to obtain a representative sample and then pulverized using hardened steel to 85% passing 75mesh. Remaining pulps and coarse reject were bagged and stored.

For check assay analysis, sample pulps were shipped from Actlabs to ALS Chemex in North Vancouver, BC. As the sample pulps are already in powder form, no additional prep should be required.

## 15.5 ASSAY PROCEDURES

For drill core samples at Actlabs, uranium was determined by delayed neutron counting (DNC) of a 30 g sub-sample. The samples are placed in a neutron flux produced by a nuclear reactor where the  $U^{235}$  within the sample absorbs neutrons which indicate some of the fission products of  $U^{235}$ , including neutrons. The sample is rapidly removed from the reactor; the neutrons are thermalized, and measured by an array of  $BF_3$  neutron detectors. Total uranium from 0.1 ppm up to 2%  $U_3O_8$  can be measured using this method. For drill core, samples, the ICP/OES aqua regia multi-element package provides analytical results for a suite of thirty-five elements. Samples were prepped and pulped, with 0.5 g of sample undergoing digestion with aqua regia (0.5 mL  $H_2O$  + 0.6 mL concentrated  $HNO_3$ , and 1.8 mL concentrated  $HCl$ ) for two hours at  $95^\circ C$ , then cooled and diluted to 10 mL with de-ionized water and homogenized. This solution was then analyzed with a Perkin-Elmer OPTIMA 3000 Radical ion-coupled plasma (ICP) spectrometer for the 35 element suite, with a matrix standard and blank inserted every thirteen samples.

Assays results from Actlabs forwarded electronically and by regular mail to Aurora's office in Vancouver where the final assay certificates are presently on file and catalogued.

For check assay analysis, samples were shipped to ALS Chemex Laboratories in North Vancouver, BC for analysis by U-XRF10 for samples in the range of 0.01% to 15% uranium and U-XRF05 for samples in the range of 4 ppm to 10000 ppm uranium.

## 15.6 STORAGE OF DRILL CORE PULPS AND REJECTS

All drill core has been left on site at the Michelin, Jacques Lake, Aurora Corridor, Inda Lake and the Burnt Brook/Gayle camps in stacked piles. All 2007 pulps and coarse rejects are currently stored at the Actlabs facility in Ancaster, Ontario and will remain there until Actlabs is otherwise advised. 2005 and 2006 pulps and coarse rejects have been transported to an Aurora Energy Resources storage facility in Happy-Valley Goose Bay, NL.



## 16.0 DATA VERIFICATION

Aurora currently submits a blank, standard and quarter-split duplicate approximately every 25 samples to ensure at least one set of QA-QC samples is in every batch. Care was taken to ensure that the portion of the core being sent to the lab was representative and the same half of the interval was always being sampled.

Upon receipt of analytical batches, blanks, standards and quarter-split duplicates are examined for evidence of laboratory contamination, analytical error, calibration errors, assay reproducibly and any other signs of unusual processing. The results were reviewed and plotted on graphs to clearly display the acceptable limits and show those samples that are outside of that range. Failed batches were investigated and often resulted in the samples being re-run at the lab until the control material passed. A table was made to record all of the batches that failed and the resulting action that was taken (**Table 16.2**).

### 16.1 STANDARDS

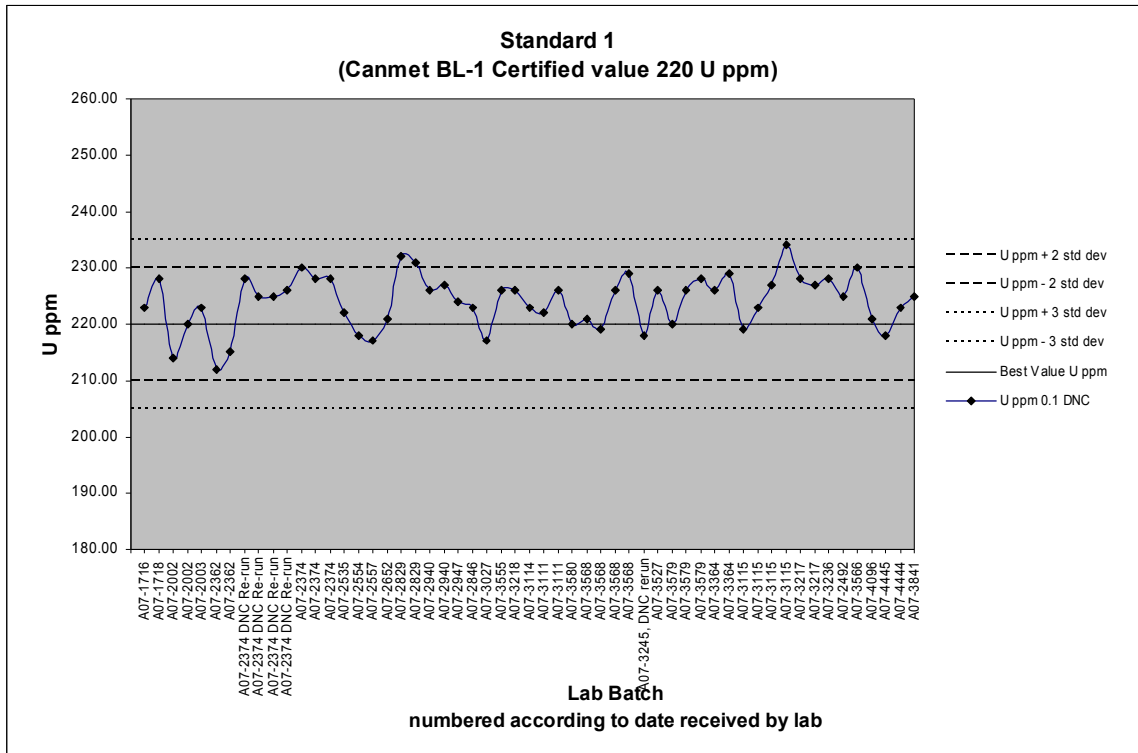
Standards were used to test the accuracy of the assays and to monitor the consistency of the laboratory. A total of six different standards were purchased from the Canadian Certified Reference Materials Project, Natural Resources Canada, for use during the 2007 CMB Exploration Program. The standards were chosen to test the accuracy of the assays from a low of 220 ppm uranium, through to high grade at 10,200 ppm uranium. Part way through the program STD 1 was replaced by STD 1A because STD 1 was no longer available from CANMET. In-house standards are currently being prepared and should be ready for the 2008 program.

Published standard information is summarized in **Table 16.1**.

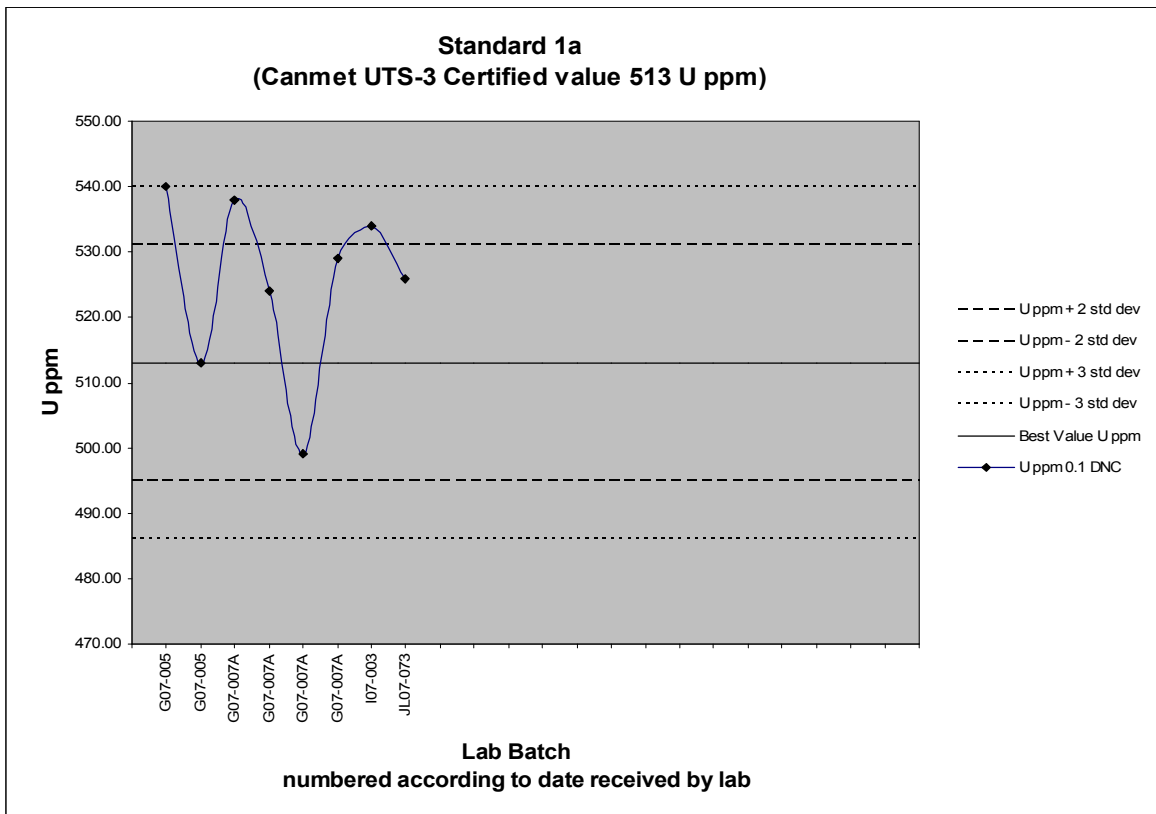
Table 16.1: CMB 2007 Exploration Program Geochem Standards					
Standard	Field ID	U ppm	% U <sub>3</sub> O <sub>8</sub>	Th	Ni
BL-1	STD-1	220	0.0260	15 ppm	
UTS-3	STD-1A	513	0.0605		
UTS-4	STD-2	1010	0.119		
RL-1	STD-3	2010	0.2372	19.6 micro g/g	185 micro g/g
BL-2	STD-4	4530	0.5345	16 ppm	
BL-3	STD-5	10,200	1.2036	15 ppm	

Standards were generally inserted into the sample sequence every 25 samples. The majority of standards submitted were STD-1/STD 1A, and STD-2, due to the generally low grade nature of mineralization in the CMB. BL-3 was not used in 2007. With few exceptions, the standards were chosen to match the anticipated grade of the core (based primarily on scintillometer values).

The performance of the standards is shown in **Charts 16.1 to 16.5**. A list of failed control samples is provided in **Table 16.2**.

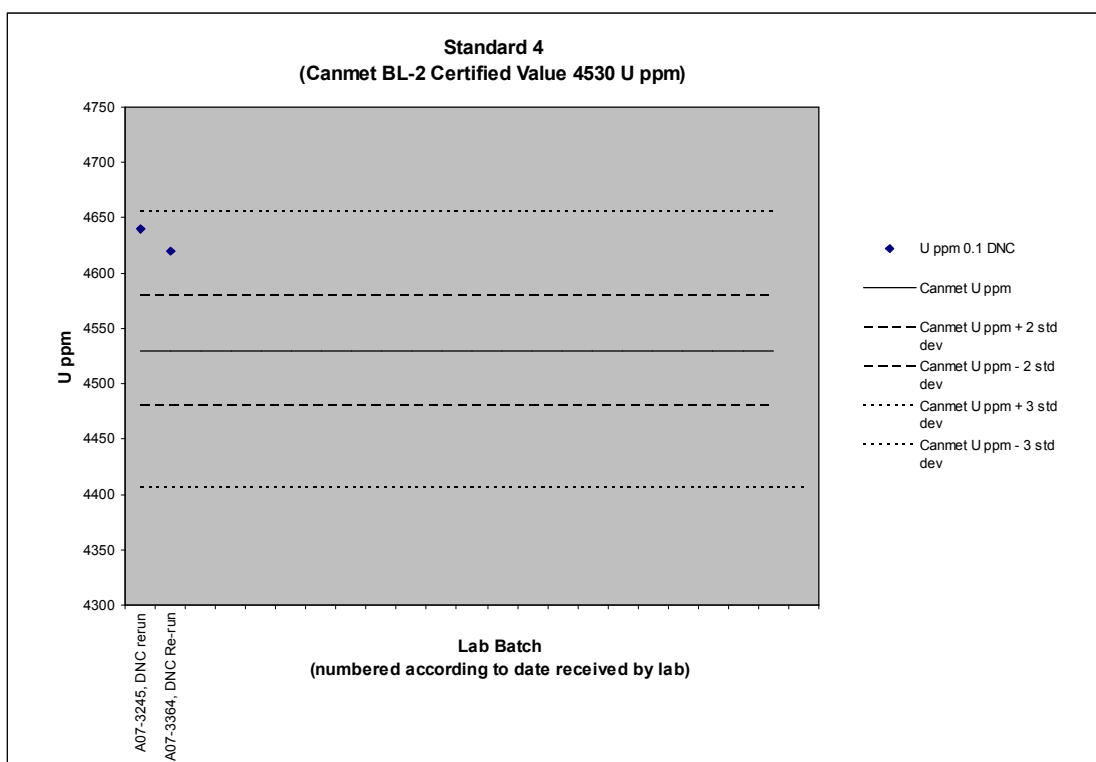


**Chart 16.1**



**Chart 16.2**





**Chart 16.5**

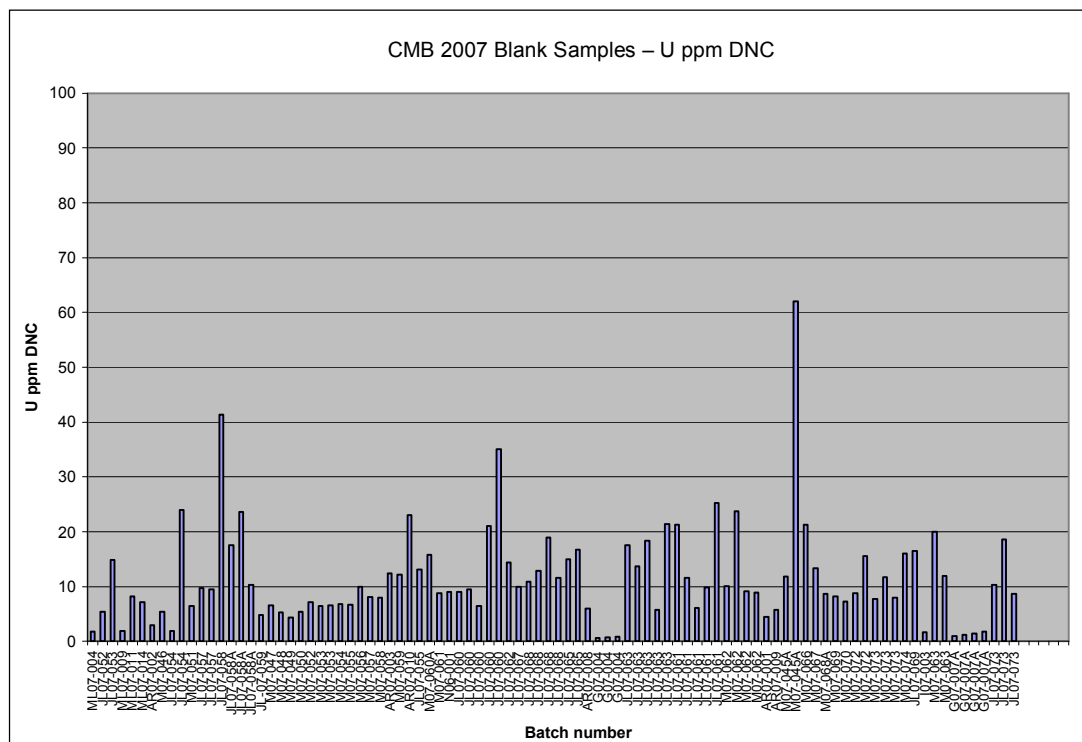
Batch	Hole ID	Sample ID	Type	Problem	Action Taken
A07-2374	Melody holes		stds	Failed standard	Re-run DNC. Passed.
A07-3212	AR07-05	19956	std 1	Returned 61 ppm U	Mislabelled standard? Check with lab for which is pulp.
A07-3212	AR07-05	19957	core	Returned 226 ppm U	Mislabelled standard? Check with lab for which is pulp.
A07-3364	JL07-063		std	Standard fail	Re-run DNC. Passed
A07-3604	M07-061	CMB06721	blank	Returned 223 ppm U	Sample tag mix up in field. Lab confirmed 6721 is a pulp.
A07-3604	M07-061	CMB06722	std 1	Returned 8.8 ppm U	Sample tag mix up in field. Info from the lab: Sample 6722 weight 1967g.
A07-3764	M07-067	CMB07799	std 3	ICP 2030 ppm U/DNC 110	Sample mix up at lab for DNC samples 7799-7800 and 7951-7966. Re-run passed.
A07-4473	JL07-073	CMB18750	std 1a	Failed standard	Re-run DNC on batch. Passed
A07-4604	I07-002			1 fail std, 2 > 2 std dev	Re-run DNC requested. Passed.
A07-4804	I07-004	20525	std 1a	Sample not reported	Batch waiting re-run with standard included. Pending
A07-4809	I07-005	20550	std 1a	Failed standard	Re-run DNC requested. Re-run failed. Third analysis requested. Pending.
A07-5209	I07-007	20625, 20650, 20675		Failed standards	Re-run requested.
A07-3214	M07-063	CMB07601	core	Sample missing from results	Lab found sample, included in final batch - 61 ppm U.

**Table 16.2: Listing of Quality Control Failures for 2007 samples received to date.**

## 16.2 BLANKS

Blanks are generally used to check the cleanliness of the laboratory and should produce negligible uranium results on a consistent basis. Blank material was sourced from a large gabbroic boulder on the southern shore of Kaipokok Bay and from unmineralized hanging wall core. Assays returned from this material were generally less than 25 ppm uranium. This would indicate low to negligible levels of contamination at the laboratory.

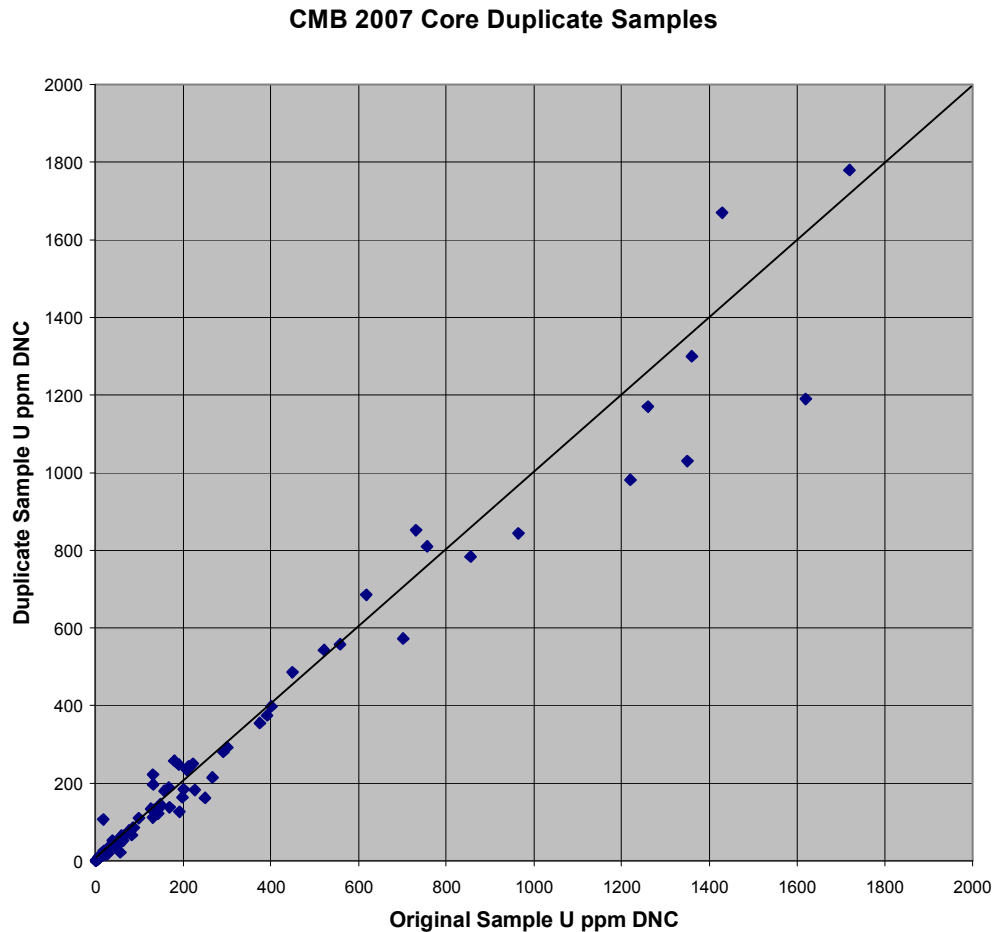
Blank standard results are summarized in **Chart 16.6** below.



**Chart 16.6**

### 16.3 CORE DUPLICATES

Duplicates are sampled by quarter-splitting the remaining half of the core. A review of the values indicates duplicate pairs returned similar values suggesting homogeneous distribution of uranium mineralization in the rocks.



**Chart 16.7**

### 16.4 CHECK ASSAYS

The check assays have not been completed yet this year as they are typically organized at the end of the drilling program.

### 16.5 CONCLUSIONS

Continual monitoring of the 2007 control samples has maintained thorough assurances of the quality of the data received to date. No data are added to the CMB drilling database, or released to the public, until they have passed all quality assurance checks and balances. All data presented in this report are considered to be adequate for future analyses and resource estimation purposes.

## **17.0 ADJACENT PROPERTIES**

No information on adjacent properties has been collected as part of this current report.

## **18.0 MINERAL PROCESSING AND METALLURGICAL TESTING**

### **18.1 PROCESS MINERALOGY**

SGS Lakefield has examined the process mineralogy of a composite of Michelin mineralization. Additionally, the trace element content of core samples has been correlated to better understand inter-element relationships.

The analytical evidence shows a strong correlation between the uranium and lead content of samples from Michelin, Jacques Lake deposits and the Otter Lake occurrence. The mineralogical examination of a composite of Michelin mineralization indicated that most of the uranium is present as a uranium-lead-calcium mineral – possibly Wolsendorfite  $[(\text{Pb},\text{Ba},\text{Ca})\text{U}_2\text{O}_7 \cdot 2\text{H}_2\text{O}]$  or Fourmarierite  $[\text{Pb}(\text{UO}_2)_4\text{O}_3(\text{OH})_4 \cdot 4\text{H}_2\text{O}]$ . The mineralogical work also showed that the Michelin composite contained 9% of the uranium in titanite and 3% in zircon – two refractory silicate minerals. The mineralogical data suggest that uranium extraction greater than about 88% will be difficult since it will require extraction of some of the uranium contained in the zircon and titanite. Subsequent leach tests (see below) have confirmed this finding.

Analytical and mineralogical work shows that Michelin and Jacques Lake mineralization contain calcite which is an acid consumer. Whilst Michelin mineralization generally contains less than 1%  $\text{CO}_3$ , Jacques Lake mineralization typically contains about 2.2%  $\text{CO}_3$ . The same work shows that sulphide sulphur levels in both Michelin and Jacques Lake are low – typically  $<0.01\% \text{S}^-$ .

### **18.2 COMMINUTION**

SGS Lakefield has recently completed several Bond ball mill work index (BWi), rod mill work index (RWi), and abrasion index (Ai) tests on samples of mineralized and waste material from Michelin, Jacques Lake, and White Bear. Samples were prepared from quarter core and were selected to represent different depths within each deposit as defined in late 2006. The results are summarized below in **Table 18.1**.

Of the three RWi measurements on Michelin samples, the values for the mineralized zone and hanging wall composites are substantially lower than the corresponding BWi values. This generally indicates that a semi-autogenous (SAG) mill will not generate critical sized material requiring a pebble crusher. The RWi for the foot wall is slightly higher than the BWi suggesting that foot wall rock might accumulate in the SAG circuit but the amount of foot wall material expected in the mineralization is low.

Five of the tabulated tests examine the variability of the BWi with grind size and indicated a rapid change as the mineralized material is ground finer. For a composite of Michelin mineralization, the metric BWi at a closing screen size of 100 mesh (80% past 122  $\mu\text{m}$ ) was 5.6 whereas at a closing screen of 200 mesh (80% passing 64  $\mu\text{m}$ ) the BWi was 14.1.



**Table 18.1: Comminution Data**

Deposit	Sample	RWi	BW <sub>i</sub>		AI, g
			80% past, µm	Value	
<b>Michelin</b>	Overall Aurora Comp	-	122	5.6	-
	Overall Aurora Comp	-	92	9.0	-
	Overall Aurora Comp	-	64	14.1	-
	Hanging wall composite	5.2	93	7.1	0.098
	Ore zone composite	4.2	100	9.9	0.085
	0 to 250 m ore zone	-	99	10.0	-
	250 to 500 m ore zone	-	98	10.7	-
	500 to 750 m ore zone	-	96	10.3	-
	250 to 500 m ore zone	-	127	6.4	-
	Foot wall composite	6.1	91	5.4	0.230
	Mafic intrusive comp.	-	86	9.6	-
<b>Jacques Lake</b>	0 to 100 m foot wall	-	90	7.7	-
	0 to 100 m hanging wall	-	84	8.5	-
	0 to 50 m mafic intrusive	-	81	10.8	-
	0 to 50 m ore zone	-	92	7.7	-
	50 to 100 m ore zone	-	92	6.8	-
<b>White Bear</b>	0 to 100 m foot wall	-	80	6.9	-
	0 to 50 m hanging wall	-	85	7.7	-
	0 to 50 m ore zone	-	90	7.6	-
	50 to 100 m ore zone	-	86	6.9	-

The BW<sub>i</sub> values at 80% passing 100 µm for the three depth samples prepared from Michelin mineralization returned essentially identical values of ~10.3 (metric). These measurements, coupled with geological observations, suggest that there is no difference in the comminution parameters of Michelin mineralization with depth. This means that the extensive comminution data generated in the 1960s and 1970s can be used, with caution, in the present process design calculations.

The abrasion index measurements all indicate a very soft mineralized material so the consumption of grinding media and mill liners is expected to be low.

### 18.3 PHYSICAL CONCENTRATION

Composites of Michelin mineralized material were subjected to various forms of pre-concentration during the 2006-2007 program of testwork at SGS Lakefield.

Gravity concentration of the uranium minerals in the mineralized material was attempted using a centrifugal concentrator. The test was unsuccessful in that just 3.5% of the uranium in the feed was concentrated to a grade of 2.4%  $U_3O_8$ .

The reported association of uranium and magnetite prompted a test in which a whole sample of Michelin mineralization was subjected to magnetic concentration. The concentrate amounted to 5% mass and contained 12% of the uranium in the feed to the test at a grade of 0.64%  $U_3O_8$  – substantially higher than the 0.26%  $U_3O_8$  feed grade. The concentrate was finely ground, combined with the tailings and leached under standard conditions. The resulting leach tailings had the same assay as a parallel, standard leach. The data indicate that the magnetite-uranium association is real but not exploitable.

In a further investigation of the leach system in general and the possibility of magnetic separation, two leach tailings samples were processed for magnetite recovery. The concentrates were combined, assayed, reground and re-leached. The magnetic concentration step recovered 12% of the uranium in the tailings in a 4% mass at a grade of 0.12%  $U_3O_8$  – substantially higher than the 0.03%  $U_3O_8$  grade of the tailings. The re-leach step extracted 28% of the uranium in the concentrate which equates to a 3% improvement in overall uranium recovery. Although this was of interest, further magnetic separation work has been deferred.

The occurrence of some uranium in refractory titanite and sphene suggests the possibility of their recovery by mineral processing methods followed by an intensive treatment to extract the contained uranium. This could be done on leach plant feed or tailings. In the latter case, the titanite/sphene concentrate would contain a substantial part of the 12% uranium that occurs in these minerals.

A first attempt to concentrate zircon and sphene from leach tailings was preceded by magnetic removal of the heavy magnetite fraction. The tailings were then concentrated on a Wilfley table and a Mozley table was used to further concentrate the heavy minerals. The high grade gravity concentrate (1.2% mass) obtained from the Mozley table was found to be enriched in titanite and zircon. The feed to the test contained 0.25% Ti and 0.09% Zr while the gravity concentrate contained 1.34% Ti and 0.88% Zr. However, recovery of these elements to the high grade concentrate was very low at 7 and 13% respectively. The gravity concentrate assayed 0.034% U which can be compared with the feed grade of 0.014% U. Recovery of U to the gravity concentrate was just 3% from the tailings which represents about 0.3% of the U in the mineralized material. These results offer limited encouragement for a viable method of enhancing uranium extraction. Some low-priority work is continuing.

## 18.4 ACID LEACHING

SGS Lakefield completed ten acid leach tests on a composite of Michelin mineralization in early 2006. The tests studied the effect of pH, oxidant, grind size, and temperature on uranium extraction and reagent consumption.

The tests data show that a 24 hour leach at 25<sup>0</sup> C, a pH of 1.4 with 1 kg/t of sodium chlorate yielded 88% uranium extraction from mineralized material ground to 80% passing 72 µm. The uranium extraction dropped to 87% at a slightly coarser grind of 80% passing 90 µm. Acid consumption in both tests was about 36 kg/t.

Other tests showed that increasing the leach temperature to 50<sup>0</sup> C increased the extraction to 89% albeit the acid consumption increased slightly to 38 kg/t.

The above data can be compared with data from the December 1979 Kitts-Michelin Project Report (Brinex, 1979) prepared for Brinco which proposed the following for a plant processing a mixture of Kitts and Michelin mineralization:

Grind – 80% passing 90 µm  
Acid leach time – 48 h  
Leach temperature – 50<sup>0</sup> C  
pH control point – 1.6  
Acid consumption by Michelin mineralization – 43.7 kg/t  
Sodium chlorate addition – 1.25 kg/t  
Uranium dissolution from Michelin mineralization – 87.5%

It can be seen that the data generated in the early-2006 test work was in general agreement with the data generated from the extensive test work of the 1960s and 1970s carried out by Brinex. (Lakefield, 1976).

More recently, about thirty additional leach tests have been performed on Michelin mineralization samples. These generally confirm that uranium extractions of about 88% are attainable from Michelin mineralized material ground to 80% passing about 90 µm and leached for 36 h at pH 1.6 with chlorate addition.

One series of tests examined the variability of leach extraction with depth in the Michelin deposit. Samples were made from drill intercepts to represent different depths from surface. They were then ground to 80% passing 85 µm and leached for 48 h at a pH of 1.8 and with the addition of 1 kg/t of sodium chlorate as an oxidant. The acid consumption, relative residue filtration rates, and uranium extraction levels were monitored and are summarized in **Table 18.2**.

**Table 18.2: Results of leaching Michelin depth samples**

Test No.	Sample	Depth, m	H2SO4 added, kg/t	Filtration time, min	Uranium extraction, %
6-23	M (0-250) OZ	0 to 250	26.0	1.5	88.2
6-24	M (250-500) OZ	250 to 500	26.1	1.5	89.2
6-25	M (500-750) OZ	500 to 750	25.7	1.0	88.2

The tabulated data show that there is little or no change in the leach or filtration characteristics of the Michelin mineralized material with depth. This is an important finding since, coupled with the similarities in comminution parameters, it means that near-surface mineralized material and deep mineralized material have similar processing parameters. This has positive implications concerning the use of data obtained from the shallow samples tested in the 1960s and 1970s and for future sample acquisition.

Several leach optimization tests were performed by SGS on an overall composite of Michelin mineralized material which included mineralized material, hanging and foot wall rock and mafic intrusive. This sample contained 0.15%  $U_3O_8$ , 0.75%  $CO_3$ , and <0.01% S.

Numerous tests under a wide range of leach conditions demonstrated that ultimate leach extraction is reached at 36 h and that very little additional extraction is realized at longer retention times. However, acid consumption continues beyond 36 h so this leach time is proposed for the process plant.

SGS completed a series of leach tests on Michelin mineralized material at pH 1.8 covering grinds ranging from 80% passing 73 to 80% passing 117  $\mu m$ . The uranium extraction dropped from 87.7% at 76  $\mu m$  to 84% at 117  $\mu m$ . At the same time, the acid consumption dropped from 27.6 kg/t to 23.5 kg/t. An initial optimization based on unit process for acid, power, and uranium indicated that coarser grinds (80% passing >90  $\mu m$ ) are preferred. This initial assessment will be re-evaluated as more cost and extraction data are generated for Michelin and other ores.

Other tests on Michelin mineralized material have investigated the effect of temperature (25 and 50<sup>0</sup> C), oxidant type (chlorate and  $SO_2$ /Air) and dosage, and percentage solids (50 and 60%). Data indicate that 25<sup>0</sup> C, 1 kg/t chlorate, and 60% solids are reasonable design parameters for the proposed process plant. Additional work is planned on the use of  $SO_2$ /Air as an oxidant or as a replacement for the use of oxidants and sulphuric acid.

A limited number of leach tests have been performed on Jacques Lake samples. These tests have shown that uranium extractions of 91% are possible but acid consumptions at such extraction levels have been high at >110 kg/t of acid. Additional samples and tests are planned and improvements in the overall leach system are expected.

Two leach tests have been performed on above cut-off grade material from the White Bear deposit. These tests (test 6-1 and 6-29) gave very high uranium extraction levels of 94.1 and 96.4% respectively and low acid consumptions (32 and 18 kg/t respectively).

A composite sample of Michelin mineralization was subjected to a carbonate leach using a sodium carbonate/bicarbonate solution, a temperature of 120<sup>0</sup> C, and an oxygen partial pressure of 500 kPa. Samples were taken periodically during the 8 h leach time and assayed to determine the kinetics of uranium extraction. The ultimate extraction was found to be 64% and kinetics showed that far longer times or more aggressive conditions would be needed for reasonable extraction levels – if indeed they could be achieved. These findings parallel those observed during work done in the 1970s. Additional carbonate leaching tests are not planned.

## **18.5 LIQUID-SOLID SEPARATION**

During the recent program, a composite sample of Michelin mineralization was ground and subjected to thickening tests. The sample was then acid leached and the leach residue subjected to both thickening and filtration tests.

Flocculant screening tests showed that a non-ionic flocculant (Magnaflow 351) was suitable for both ground mineralization and leach residue and that a low dosage (<20 g/t) was effective.

In standard Kynch thickening tests using rakes, the ground mineralization sample settled to 70% solids given a thickener area of 0.03 to 0.04 m<sup>2</sup>/t/d (based on underflow and without scale-up factor applied) and a 10% feed solids through dilution with overflow.

The leached mineralization sample was only tested at 32% solids in the feed. The underflow reached 69% solids and a thickener unit area of 0.09 m<sup>2</sup>/t/d was indicated (based on underflow and without scale-up factor applied). More dilution would probably indicate higher percentage solids and a lower thickener area requirement – a trend evident in the detailed data for the ground mineralization.

The thickening rates for both samples are satisfactory and normal process equipment will be employed in the process plant.

SGS determined the rheological properties of the ground mineralization and leached residue slurries. The results can be summarized in the Critical Solids Density (CSD) which is defined as the percentage solids above which a small increase in solids percentage causes a very large increase in slurry yield stress. The CSD was found to be about 70% solids for both the ground mineralization and the leach residue.

The CSD is also a general indicator of the maximum attainable solids percentage that can be expected from gravity thickening operation. It will be noted that actual percentage solids experienced in the thickening tests were similar to the values suggested by the rheology work.

Standard vacuum filtration rates were applied to a ~64% solids slurry feed. Residual cake moisture values below 20% were obtained at throughputs of 2.7 t/m<sup>2</sup>/h (form and dry times only and without scale-up factor). This rate will be reduced as wash time and scale-up factors are applied but remain as very viable filtration rates. Belt filters are a viable option for the Michelin process plant.

## **18.6 URANIUM EXTRACTION**

Solvent extraction and ion exchange testwork have been performed but a complete analysis of the data has yet to be completed. Satisfactory extraction of uranium has been achieved with both the solvent extraction and ion exchange route.

Additional tests will be performed and both a liquid-solid separation route followed by solvent extraction and a resin-in-pulp (RIP) are being examined.

## **18.7 NEUTRALIZATION AND EFFLUENT CONTROL**

Leached slurry has been processed through uranium recovery, radium control, and neutralization tests. Reagent consumption data have been generated but full assays are awaited.

## **18.8 MINERALIZED MATERIAL, WASTE ROCK, AND TAILINGS ENVIRONMENTAL STABILITY**

Samples of mineralized material, waste rock, and neutralized tailings have been subjected to Acid Base Accounting (ABA) analysis and environmental stability testing using the British Columbia leach procedure using agitation for 24 h with distilled water at 25% solids. Partial data have been received and a full analysis will be completed in the near future.

## **19.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES**

An initial 43-101 compliant resource calculation for the Michelin Uranium Deposit was prepared by Roscoe Postle Associates (“RPA”) of Toronto, Ontario for Aurora Energy Resources Inc. in January 2006 based on the historical Brinex drilling and new drilling completed by Aurora in 2005. RPA estimated the Mineral Resource of the Michelin Uranium Deposit to consist of 22,225,000 lbs  $U_3O_8$  Measured and Indicated and 13,360,000 Inferred lbs  $U_3O_8$ . The details of this resource estimate are available in Agnerian, 2006.

An updated resource estimate for Michelin and a preliminary resource estimate for Jacques Lake were completed by Mr. Gary Giroux in January, 2007. These resource estimates remain current as of October 31<sup>st</sup>, 2007, and the details and methodology of each estimate are included here verbatim from the previous technical report (Wilton and Giroux, 2007). A new updated resource estimate for each deposit will be prepared upon receipt of all results from the 2007 drilling program.

### **19.1 DATA ANALYSIS**

#### **19.1.1 Michelin**

The Michelin data base is made up of a combination of historic diamond drill holes both surface (221 holes) and underground (50 holes), 9 diamond drill holes drilled in 2005, 35 holes drilled in 2006 for which assays were available when this study was completed and 597 historic underground samples (see **Appendix XII** for listing of data used in study).

Two of the 2005 drill holes were drilled to twin historic holes TWM-05-174 twined M-76-174 while TWM-05-92 twined M-70-92. A comparison of these holes is presented in Section 16.0 Data Validation. In general, the twins matched the original holes in average grade and in the location of the mineralized zones.

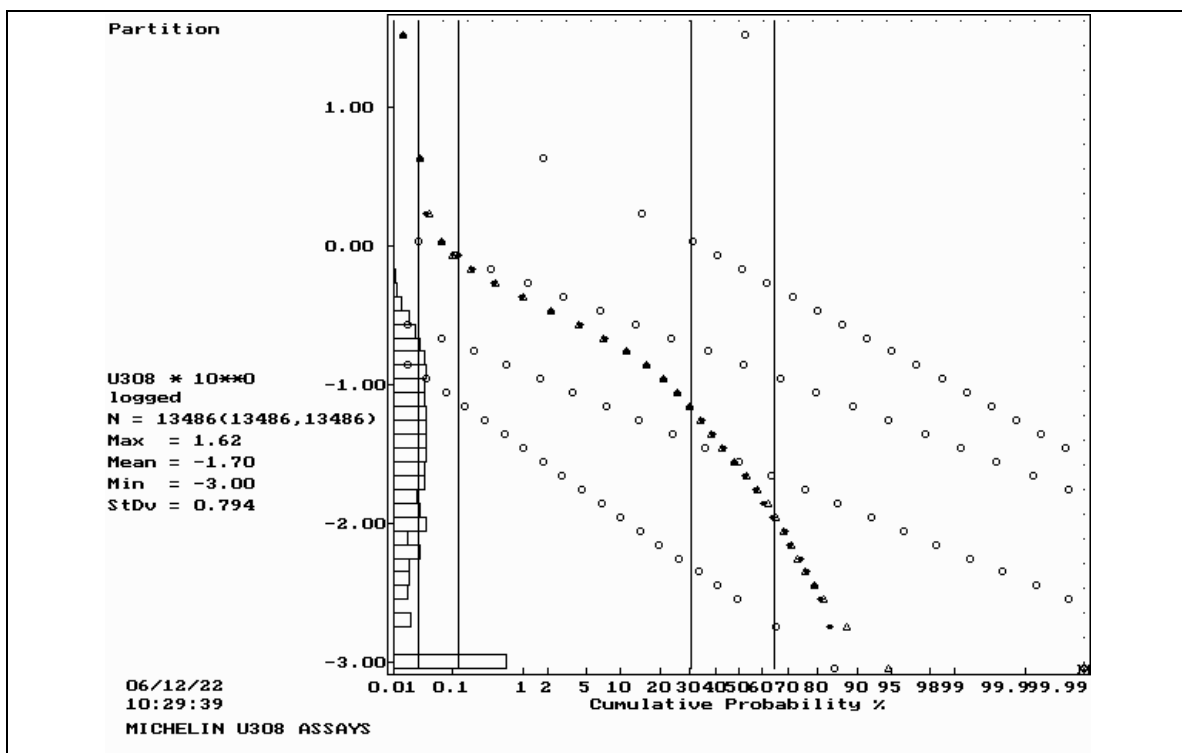
The grade distribution for uranium was examined with cumulative probability plots to determine if capping was necessary and if so at what level (**Table 19.1**). The distribution was positively skewed and a lognormal transformation was made. The lognormal cumulative probability plot is shown below as **Figure 19.1**. The grade distribution is shown by open triangles and is made up of multiple overlapping populations. In this graphical format a single lognormal distribution will plot as a straight line. By a method called partitioning the inflection points in the curved line (shown as vertical lines) are selected and the individual populations shown as open circles are broken out. The interpreted populations are then re-plotted as solid circles and can then be compared against the original distribution. This procedure is explained in detail in a paper by A. J. Sinclair on the Application of probability graphs in mineral exploration (Sinclair, 1976).

Uranium showed 5 overlapping lognormal populations as shown in **Figure 19.1**. The top population with a mean of 33.86 %  $U_3O_8$  representing 0.03 % of the data or 4 samples can be considered erratic. A threshold to separate out this population would be

3.9 %  $U_3O_8$ . Using this cap level, a total of 4 assays were capped at 3.9 %  $U_3O_8$ . The effects of capping 4 assays are shown in **Table 19.2** by the reduction in both average grade (reduced by 8%) and coefficient of variation (reduced from 6.94 to 1.76).

**Table 19.1: Summary of Lognormal  $U_3O_8$  Populations at Michelin**

Population	Mean $U_3O_8$ (%)	Proportion Of Total	Number of Assays
1	33.86	0.03 %	4
2	0.71	0.10 %	13
3	0.14	30.21 %	4,074
4	0.03	34.53 %	4,657
5	0.003	35.13 %	4,738



**Figure 19.1: Lognormal Cumulative Probability Plot for  $U_3O_8$  at Michelin**



**Table 19.2: Summary of Statistics for Assays and Capped Assays at Michelin**

	U <sub>3</sub> O <sub>8</sub> (%)	Capped U <sub>3</sub> O <sub>8</sub> (%)
Number of Samples	13,512	13,512
Mean Grade	0.072	0.067
Standard Deviation	0.505	0.120
Minimum Value	0.001	0.001
Maximum Value	42.00	3.90
Coefficient of Variation	6.98	1.80

### 19.1.2 Jacques Lake

Jacques Lake represents a new discovery in the Labrador Central Mineral Belt drilled first in 2005 with 7 diamond drill holes and a further 44 holes in 2006. At the time of this study 45 drill holes had assays completed (See Appendix 1 for listing of holes used). In addition holes JI-06-31, 33, 36A, 38 and 40 are outside the resource estimate area. Assays reported as 0.00 (123 samples) were assigned a nominal 0.001% U<sub>3</sub>O<sub>8</sub>. Gaps in the drill holes where samples were not taken were also assigned a value of 0.001% U<sub>3</sub>O<sub>8</sub>. A total of 2,546 U<sub>3</sub>O<sub>8</sub> assays were available for analysis.

A lognormal cumulative frequency plot showed 5 overlapping lognormal populations (see **Figure 19.2**). The populations are summarized in **Table 19.3**. An effective capping level would be at 2 standard deviations above the mean of population 2 a level of 0.45 % U<sub>3</sub>O<sub>8</sub>. A total of 8 assays were capped at 0.45 % U<sub>3</sub>O<sub>8</sub>. The effects of capping on the overall statistics were minimal as shown in **Table 19.4**.

**Table 19.3: Summary of Lognormal U<sub>3</sub>O<sub>8</sub> Populations at Jacques Lake**

Population	Mean U <sub>3</sub> O <sub>8</sub> (%)	Proportion Of Total	Number of Assays
1	0.567	0.21 %	5
2	0.321	2.14 %	54
3	0.142	7.39 %	188
4	0.040	42.47 %	1,081
5	0.002	47.80 %	1,218

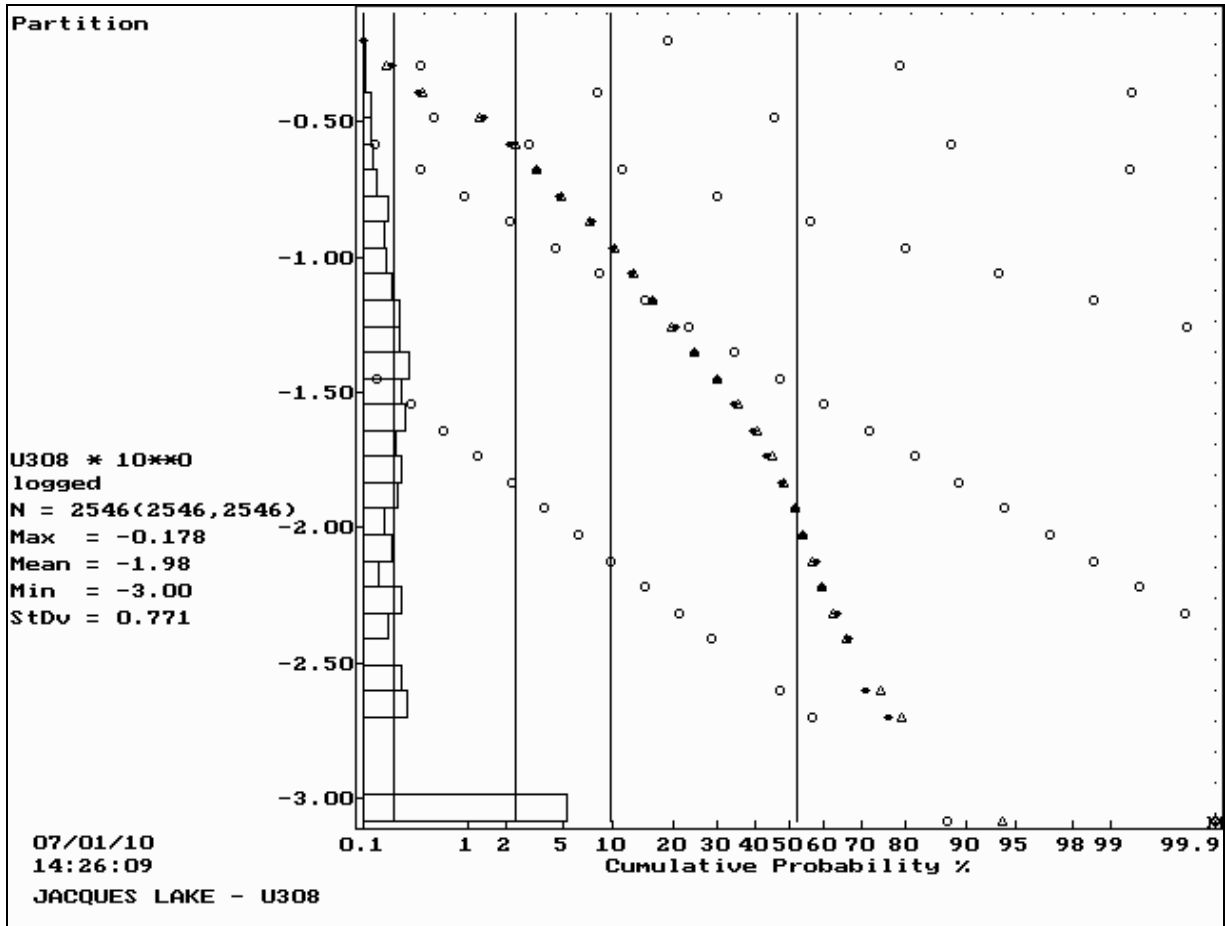


Figure 19.2: Lognormal Cumulative Probability Plot for  $U_3O_8$  at Jacques

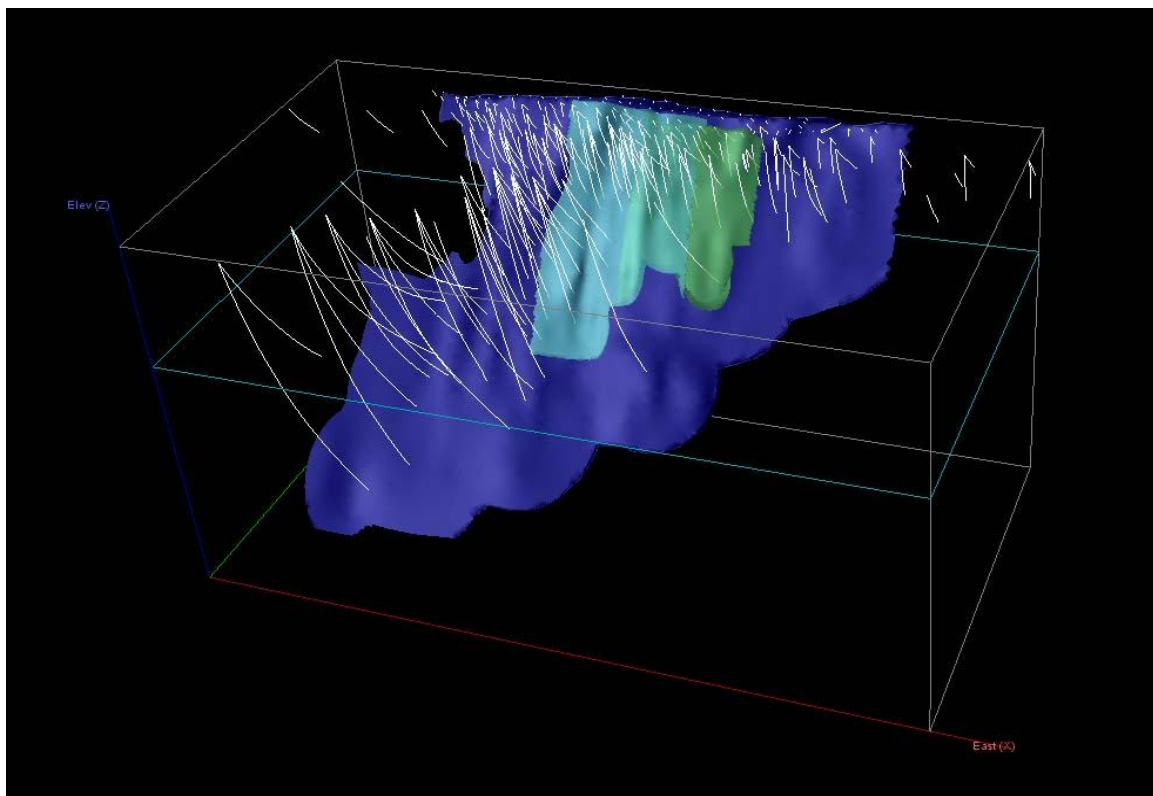
Table 19.4: Summary of Statistics for Assays and Capped Assays at Jacques Lake

Population	Mean $U_3O_8$ (%)	Proportion Of Total	Number of Assays
1	0.567	0.21 %	5
2	0.321	2.14 %	54
3	0.142	7.39 %	188
4	0.040	42.47 %	1,081
5	0.002	47.80 %	1,218

## 19.2 GEOLOGIC MODEL

### 19.2.1 Michelin

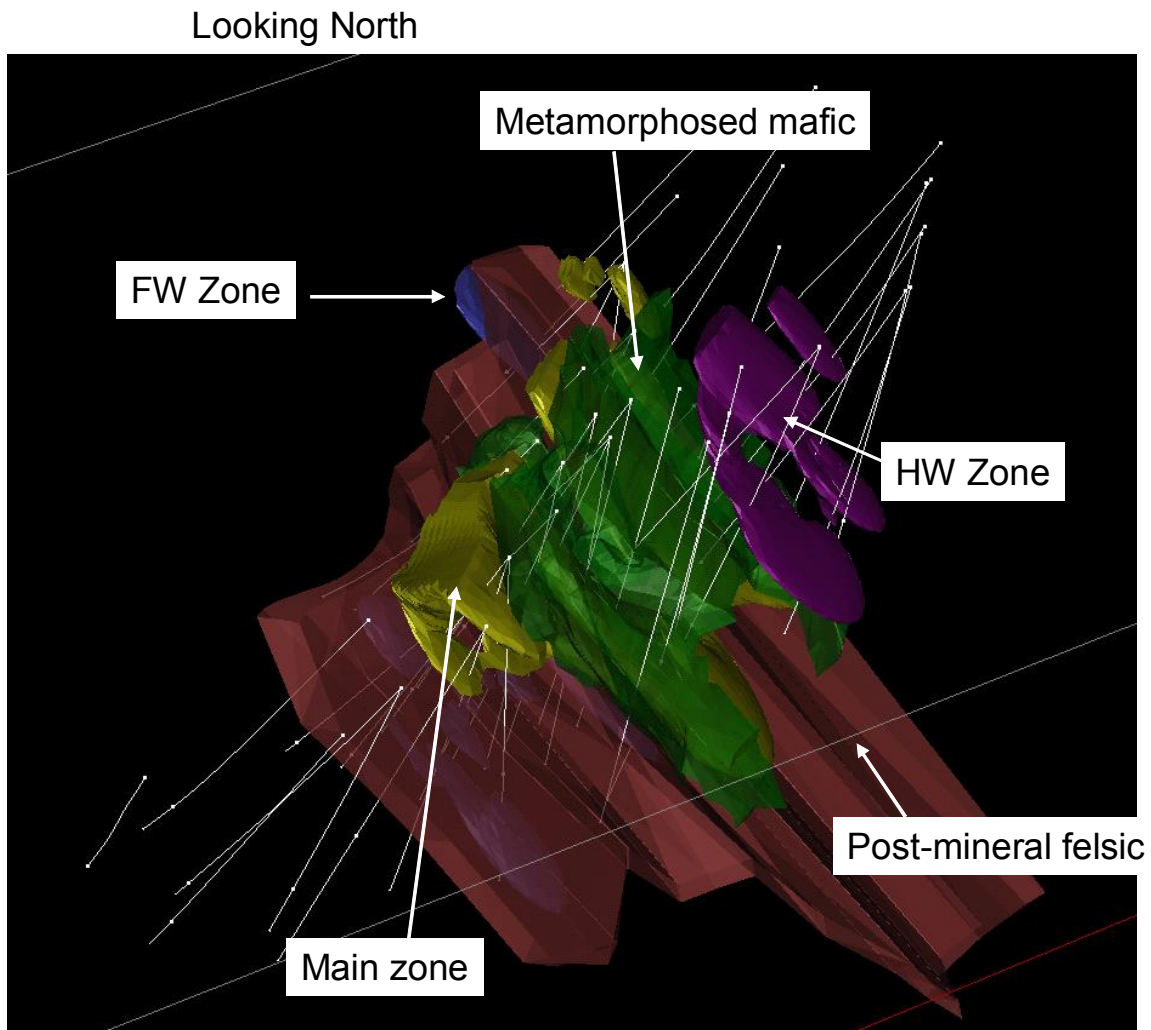
A different approach for modeling the Michelin deposit was employed for the 2006 resource estimate. Whereas past resource estimates tried to estimate many different mineralized lenses within the overall mineralized zone, this estimate has attempted to model the footwall and hanging wall of the mineralization and include all material including internal waste within a main mineralized solid. Two smaller zones that could not be included were modeled separately as Z2 and Z3 zones (**Figure 19.3**). This approach lets the data determine where the mineralized patches within the overall structure are located instead of joining up intervals from drill hole to drill hole.



**Figure 19.3: Geologic Model for Michelin looking north showing Main Zone Solid in dark blue, Z2 solid in light blue and the Z3 Solid in green.**

### 19.2.2 Jacques Lake

For Jacques lake cross sections were used to delineate the mineralized zones and three dimensional solids were drawn around these zones. **Figure 19.4** shows a view of the models with a Main zone, Hanging wall zone and Foot wall zone separated by a post mineralized felsic body and a metamorphosed mafic body.



**Figure 19.4: Geologic Model for Jacques Lake looking north showing mineralized and waste zones.**

## 19.3 COMPOSITES

### 19.3.1 Michelin

Drill holes were “passed through” the mineralized solids with the points the hole’s entered and left each solid recorded. Uniform down hole 2.5 m composites were formed to honor the boundaries of the solids. Composites were produced for the Main mineralized zone, the hanging wall zones labeled Z2 and Z3 and all material outside these zones classed as waste. Composites less than ½ the composite length at solid boundaries were combined with adjacent composites to produce a uniform support of  $2.5 \pm 1.25$  m. A summary of the statistics for 2.5 m composites is presented in **Table 19.5**.

**Table 19.5: Summary of Statistics for 2.5 m Composites Michelin**

ZONE	Main Zone U <sub>3</sub> O <sub>8</sub> (%)	Z2 Zone U <sub>3</sub> O <sub>8</sub> (%)	Z3 Zone U <sub>3</sub> O <sub>8</sub> (%)	Waste U <sub>3</sub> O <sub>8</sub> (%)
Number of Samples	3,167	213	180	19,394
Mean Grade	0.067	0.041	0.020	0.003
Standard Deviation	0.082	0.045	0.021	0.014
Minimum Value	0.001	0.001	0.001	0.001
Maximum Value	0.829	0.277	0.093	1.00
Coefficient of Variation	1.22	1.09	1.04	4.51

### 19.3.2 Jacques Lake

Drill holes at Jacques Lake were passed through the various geologic solids and uniform 2.5 m down hole composites were formed that honored the various lithologic solids. Composites were prepared for the three mineralized zones, HW, FW and Main. Composites were also formed in waste units labeled metamorphosed mafic (MT-MI), post mineralized felsic (FI.POR), overburden (OVBD) and all other areas un-modeled (WASTE). The statistics for these composites are shown below in **Table 19.6** with all unmineralized units combined as waste.

**Table 19.6: Summary of Statistics for 2.5 m Composites Jacques Lake**

ZONE	Main Zone U <sub>3</sub> O <sub>8</sub> (%)	Z2 Zone U <sub>3</sub> O <sub>8</sub> (%)	Z3 Zone U <sub>3</sub> O <sub>8</sub> (%)	Waste U <sub>3</sub> O <sub>8</sub> (%)
Number of Samples	3,167	213	180	19,394
Mean Grade	0.067	0.041	0.020	0.003
Standard Deviation	0.082	0.045	0.021	0.014
Minimum Value	0.001	0.001	0.001	0.001
Maximum Value	0.829	0.277	0.093	1.00
Coefficient of Variation	1.22	1.09	1.04	4.51

## 19.4 VARIOGRAPHY

### 19.4.1 Michelin

Pairwise relative semivariograms were produced for  $U_3O_8$  in each of the Main, Z2, Z3 and Waste zones. There was insufficient data within the Z2 and Z3 zones to determine a model so the Main zone model was applied to these domains. Due to the linear style of mineralization within the Main zone semivariograms were produced along strike (Grid E-W Dip 0), down dip (Grid S Dip -55) and across dip (Grid N Dip -35). Nested spherical models were fit to each direction. The models are shown in Appendix XIII and the parameters summarized in Table 19.7. The nugget to sill ratio was 42% indicating reasonable sampling variability. These models were also used for the Z2 and Z3 parallel mineralized zones. For the waste zone an omni directional spherical model was applied.

**Table 19.7: Summary of semivariogram Parameters for  $U_3O_8$  at Michelin**

Variable	Zone	Direction	$C_0$	$C_1$	$C_2$	$a_1$ (m)	$a_2$ (m)
$U_3O_8$ (%)	Main, Z2, Z3	Grid E-W Dip 0	0.30	0.30	0.35	25	90
		Grid S Dip -55	0.30	0.30	0.35	20	100
		Grid N Dip -35	0.30	0.30	0.35	8	22
	Waste	Omni Directional	0.11	0.06	0.09	50	120

### 19.4.2 Jacques Lake

Pairwise relative semivariograms were produced for  $U_3O_8$  in each of the Main, and Waste zones. The hanging wall and foot wall zones did not have enough data to generate a model. The non mineralized units were all combined as waste and modeled.

Within the Main zone the directions modeled were dictated by the strike and dip of the mineralized zones namely: Strike 036° dip -60°. Spherical nested models were fit to both the Main zone and Waste data. The results are summarized below in **Table 19.8** with semivariograms shown in **Appendix XIII**.

**Table 19.8: Summary of semivariogram Parameters for  $U_3O_8$  at Jacques Lake**

Variable	Zone	Direction	$C_0$	$C_1$	$C_2$	$a_1$ (m)	$a_2$ (m)
$U_3O_8$ (%)	Main, Z2, Z3	Grid E-W Dip 0	0.30	0.30	0.35	25	90
		Grid S Dip -55	0.30	0.30	0.35	20	100
		Grid N Dip -35	0.30	0.30	0.35	8	22
	Waste	Omni Directional	0.11	0.06	0.09	50	120

## 19.5 BLOCK MODEL

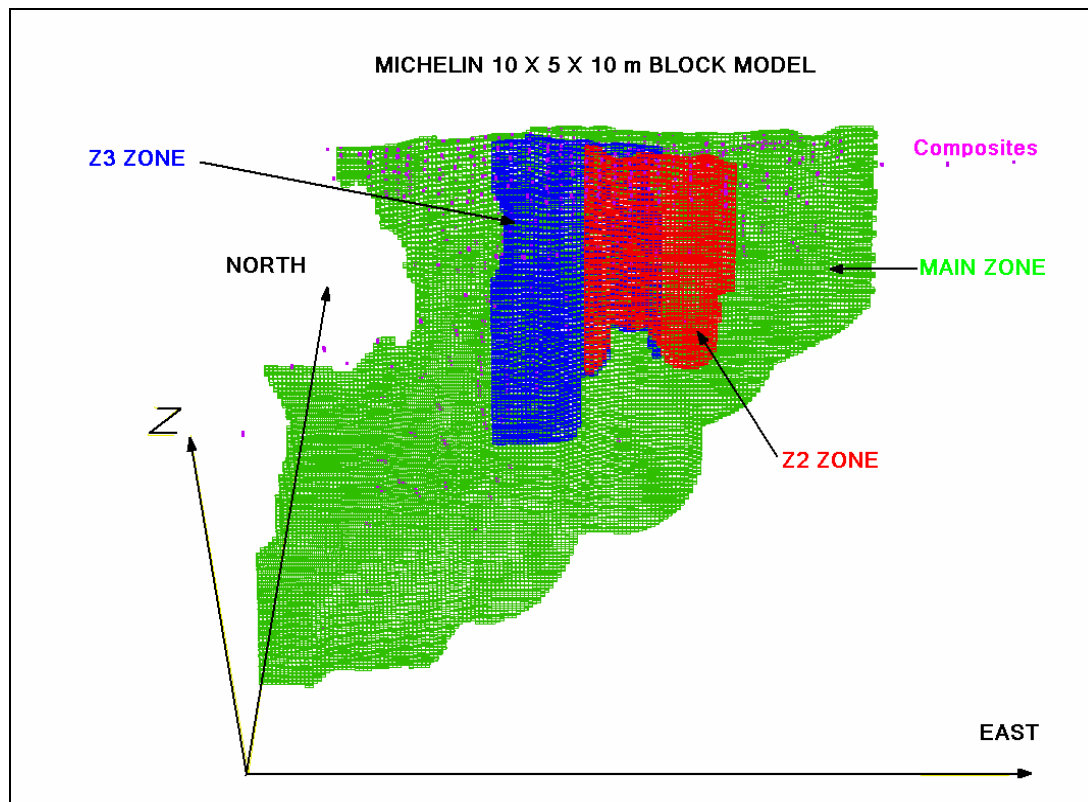
### 19.5.1 Michelin

A block model with individual blocks 10 x 5 x 10 m in dimension in the directions E-W, N-S and vertical was superimposed on the various mineralized solids. The proportion of each block below surface topography, below the overburden surface, within the Main zone, within the Z2 zone, within the Z3 zone and within Waste was measured and tagged to the block. The block model parameters are as follows:

Lower left origin	Easting-1600 E	10 m wide	156 columns
	Northing -800 N	5 m long	181 rows
Top of Model	Elevation 400	10 m high	110 levels
No Rotation			

A second block model with similar origin but blocks 5 x 5 x 5 m was provided for possible underground extraction:

Lower left origin	Easting-1600 E	5 m wide	312 columns
	Northing -800 N	5 m long	181 rows
Top of Model	Elevation 400	5 m high	220 levels
No Rotation			

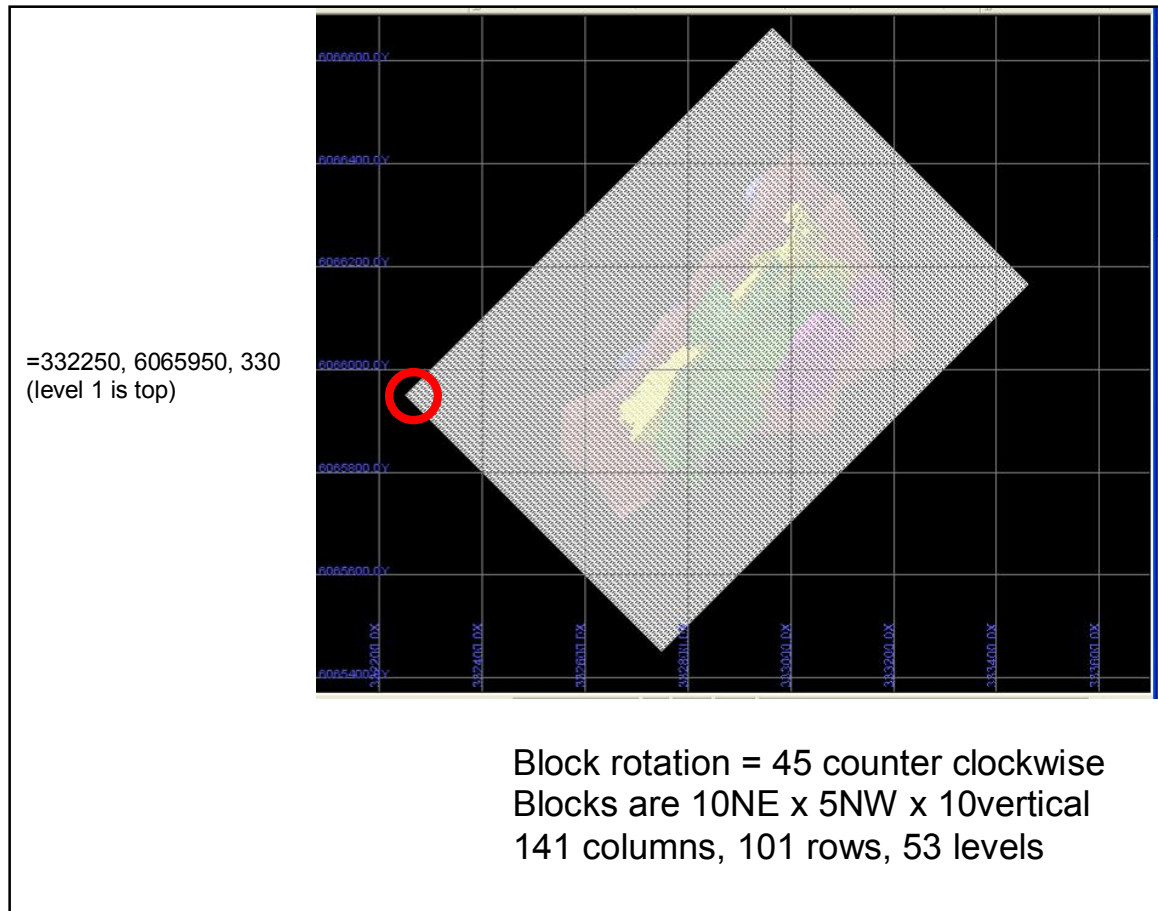


**Figure 19.5: Michelin Block Model Isometric drawing showing Main Zone in Green, Z2 zone in Red and Z3 zone in Blue**

### 19.5.2 Jacques Lake

A block model consisting of blocks 10 m NE x 5 m NW x 10 m Vertical was superimposed over the geologic solids. The model was rotated 45° more or less parallel to the mineralized zones. Figure 19.6 shows the model and describes the origin, block sizes and numbers of columns, rows and levels in the model.

Blocks were coded with the percentage of block below surface topography, and the percentage of block within each geologic domain.



**Figure 19.6: Showing Jacques Lake block model orientation**

## 19.6 GRADE INTERPOLATION

### 19.6.1 Michelin

The grades for  $U_3O_8$  in each block were interpolated by ordinary kriging. Blocks with some percentage of volume within the Main Zone solid were estimated using the composites from within the Main zone. Blocks with some percentage of volume within the Z2 and Z3 solid were estimated using Z2 and Z3 composites respectively. Blocks on the edges of the solids with some percentage of volume in waste were estimated using the



waste composites. A weighted average grade for U<sub>3</sub>O<sub>8</sub> in each block was then calculated as follows.

$$\text{Grade U}_3\text{O}_8 \text{ in Block} = (\% \text{Main zone} * \text{U}_3\text{O}_8 \text{ in Main zone} + \% \text{Z2} * \text{U}_3\text{O}_8 \text{ in Z2} + \% \text{Z3} * \text{U}_3\text{O}_8 \text{ in Z3} + \% \text{Waste} * \text{U}_3\text{O}_8 \text{ in Waste} + \% \text{OB} * 0.001) / \% \text{ below Topo}$$

All grades were estimated in a series of passes with expanding search ellipse dimensions. The search ellipse for each pass was oriented along strike (Grid E-W) and down Dip (Grid S dipping -54). The first pass for each variable used dimensions for the search ellipse equal to ¼ the semivariogram range in each direction. If a minimum 4 composites were not found the block was not estimated. A second pass was completed for un-estimated blocks using search ellipse dimensions equal to ½ the semivariogram range. A third pass was completed on blocks still not estimated using a search ellipse with dimensions equal to the full range of the semivariogram and in some cases a fourth pass using 2 times the range was used to fill in the solids. In all cases if more than 12 composites were found the closest 12 were used. As mentioned earlier the semivariogram model from the Main zone was used to estimate zones Z2 and Z3.

A second estimate was tabulated looking only at the proportion of mineralized blocks as determined by the combined total of:

$$\% \text{ Min} = \% \text{ Main Zone} + \% \text{ Z2} + \% \text{ Z3}.$$

This estimate assumes one could mine to the limits of the mineralized solids and includes no edge dilution. In this case the grade of the block is the weighted average of:

$$\text{Grade U}_3\text{O}_8 \text{ in Block} = (\% \text{Main zone} * \text{U}_3\text{O}_8 \text{ in Main zone} + \% \text{Z2} * \text{U}_3\text{O}_8 \text{ in Z2} + \% \text{Z3} * \text{U}_3\text{O}_8 \text{ in Z3}) / \% \text{Min}$$

The tonnage for this block would be:

$$\text{Tonnes} = \text{Block volume} * \text{SG} * \% \text{ Min} / 100 \%$$

To allow for the possibility of several mining methods the resource was calculated twice; once using 10 x 5 x 10 m blocks (for possible open pit methods) and once using 5 x 5 x 5 m blocks (for possible underground extraction).

**Table 19.9** summarizes the search parameters for 10 x 5 x 10 m blocks and shows the number of blocks estimated during each pass.

**Table 19.10** summarizes the same information for 5 x 5 x 5 m blocks.

**Table 19.9: Summary of Kriging search parameters for Michelin 10 x 5 x 10 m Blocks**

Zone	Pass	Number of Blocks	Search Ellipse Dimension (m)		
			Grid E-W Dip 0	Grid N Dip -36	Grid S Dip -54
<b>Main</b>	1	8,505	22.5	5.5	25.0
	2	25,642	45.0	11.0	50.0
	3	15,779	90.0	22.0	100.0
	4*	17,805	180.0	44.0	200.0
<b>Z2</b>	1	527	22.5	5.5	25.0
	2	2,693	45.0	11.0	50.0
	3	2,243	90.0	22.0	100.0
	4	771	180.0	44.0	200.0
<b>Z3</b>	1	269	22.5	5.5	25.0
	2	2,429	45.0	11.0	50.0
	3	2,453	90.0	22.0	100.0
	4	1,027	180.0	44.0	200.0
<b>Waste</b>	1	20,376	30.0	30.0	30.0
	2	13,095	60.0	60.0	60.0
	3	10,901	120.0	120.0	120.0
	4	4,999	240.0	240.0	240.0

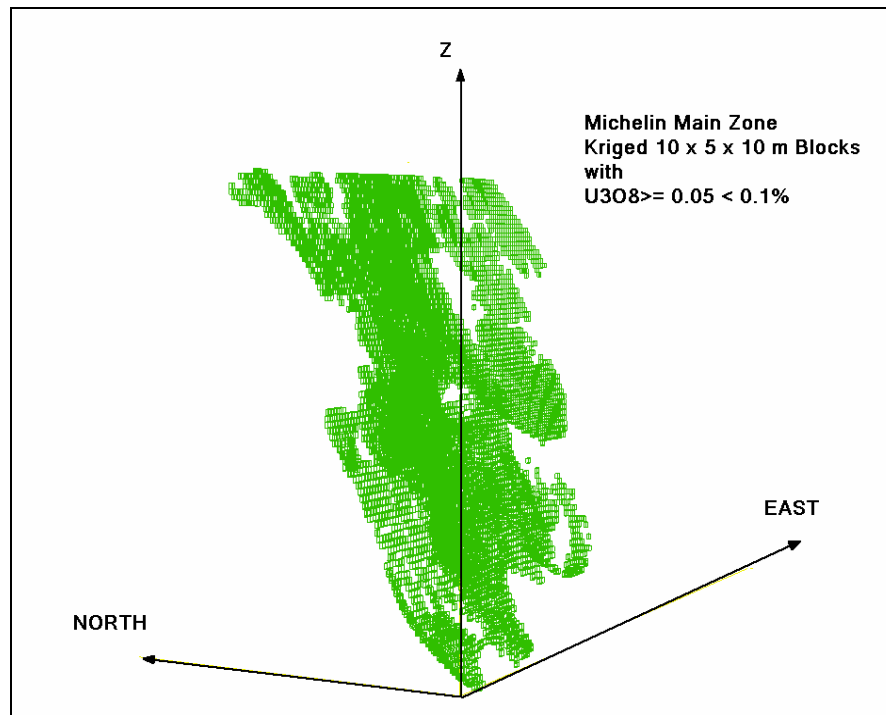
\*Note for main zone a fourth pass was made using a minimum of 2 composites

**Table 19.10: Summary of Kriging search parameters for Michelin 5 x 5 x 5 m Blocks**

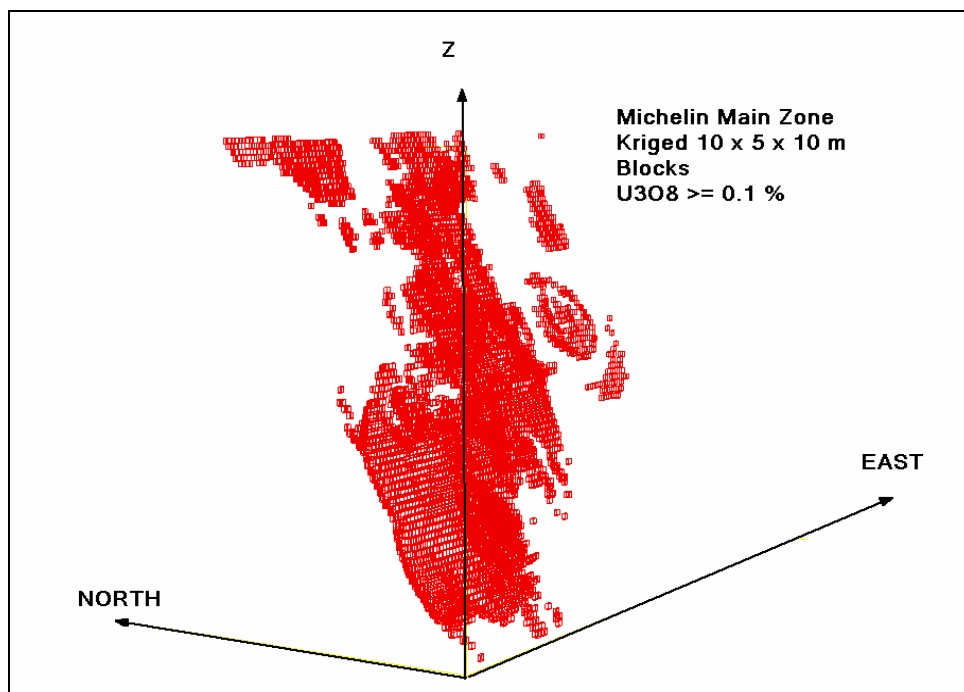
Zone	Pass	Number of Blocks	Search Ellipse Dimension (m)		
			Grid E-W Dip 0	Grid N Dip -36	Grid S Dip -54
<b>Main</b>	1	33,974	22.5	5.5	25.0
	2	96,244	45.0	11.0	50.0
	3	56,413	90.0	22.0	100.0
	4*	64,972	180.0	44.0	200.0
<b>Z2</b>	1	2,084	22.5	5.5	25.0
	2	9,697	45.0	11.0	50.0
	3	7,793	90.0	22.0	100.0
	4	2,526	180.0	44.0	200.0
<b>Z3</b>	1	1,085	22.5	5.5	25.0
	2	8,188	45.0	11.0	50.0
	3	7,742	90.0	22.0	100.0
	4	3,300	180.0	44.0	200.0
<b>Waste</b>	1	63,844	30.0	30.0	30.0
	2	40,477	60.0	60.0	60.0
	3	34,517	120.0	120.0	120.0
	4	15,891	240.0	240.0	240.0

\*Note for main zone a fourth pass was made using a minimum of 2 composites

As an example of the kriged grade distribution for 10 x 5 x 10 m blocks, **Figures 19.7 and 19.8** show isometric views of the Main Zone with blocks from 0.05 – 0.1% shown in green and blocks greater than 0.10%  $\text{U}_3\text{O}_8$  in red.



**Figure 19.7: Michelin Main Zone  $\text{U}_3\text{O}_8$  Blocks  $> 0.05\%$  and  $< 0.10\%$**



**Figure 19.8: Michelin Main Zone  $\text{U}_3\text{O}_8$  Blocks  $> 0.10\%$**

## 19.6.2 Jacques Lake

A similar kriging strategy was used for Jacques Lake on blocks 10 x 5 x 10 m in size. Again ordinary kriging was completed in a number of passes with the search ellipse oriented and scaled by the semivariogram for the Main Zone. Pass one used ¼ the range, pass 2 used ½ the range, pass 3 used the full range and pass 4 used double the range. Blocks required a minimum 4 composites to be found to be estimated during each pass. If more than 12 composites were found the closest 12 were used. The Main Zone at Jacques Lake was estimated using only composites within the Main Zone. The HW zone and FW zone were estimated using only composites from the HW and FW respectively. Waste or areas outside these three mineralized zones were estimated from all composites outside the mineralized solids.

The whole block or diluted grade of a block was calculated as a weighted average as follows:

$$\text{Grade } \text{U}_3\text{O}_8 \text{ in Block} = (\% \text{Main zone} * \text{U}_3\text{O}_8 \text{ in Main zone} + \% \text{HW} * \text{U}_3\text{O}_8 \text{ in HW} + \% \text{FW} * \text{U}_3\text{O}_8 \text{ in FW} + \% \text{Waste} * \text{U}_3\text{O}_8 \text{ in Waste} + \% \text{OB} * 0.001) / \% \text{below Topo}$$

As was done at Michelin, a second grade was calculated as the grade within the mineralized solids, a grade attainable if one could mine to the solid boundaries. The weighted average of mineralized zones was calculated as follows:

$$\% \text{Min in Block} = \% \text{Main Zone} + \% \text{HW} + \% \text{FW}$$

$$\text{Grade } \text{U}_3\text{O}_8 \text{ in Mineralized Part of Block} = (\% \text{Main zone} * \text{U}_3\text{O}_8 \text{ in Main zone} + \% \text{HW} * \text{U}_3\text{O}_8 \text{ in HW} + \% \text{FW} * \text{U}_3\text{O}_8 \text{ in FW}) / \% \text{Min}$$

**Table 19.11** summarizes the search parameters for 10 x 5 x 10 m blocks and shows the number of blocks estimated during each pass.

**Table 19.11: Summary of Kriging search parameters for Jacques Lake 10x5x10 m Blocks**

Zone	Pass	Number of Blocks	Search Ellipse Dimension (m)		
			AZ. 36 Dip 0	AZ 306 Dip -30	AZ 126 Dip -60
Main	1	393	11.25	5.0	25.0
	2	2,481	22.5	10.0	50.0
	3	3,513	45.0	20.0	100.0
	4	2,280	90.0	40.0	200.0
HW	1	32	11.25	5.0	25.0
	2	403	22.5	10.0	50.0
	3	1,465	45.0	20.0	100.0
	4	669	90.0	40.0	200.0
FW	1	82	11.25	5.0	25.0
	2	541	22.5	10.0	50.0
	3	913	45.0	20.0	100.0
	4	260	90.0	40.0	200.0
Waste	1	414	7.5	17.5	7.5
	2	1,636	15.0	35.0	15.0
	3	3,903	30.0	70.0	30.0
	4	3,306	60.0	140.0	60.0
	5	428	120.0	280.0	120.0

## 19.7 BULK DENSITY

### 19.7.1 Michelin

Historically a bulk density of 2.72 g/cc was used in Brinex estimates (Agnerian, 2006). For the 2006 43-101 report Roscoe Postle had 18 independent measurements of specific gravity completed on crushed samples at SGS Laboratories. RPA came up with an average specific gravity of 2.83 g/cc which was used in the 2005 resource estimate (Agnerian, 2006).

During the 2005 drill campaign Aurora had 60 specific gravity determinations taken from course rejects at CMB Laboratories. During the 2006 drill program an additional 118 specific gravity measurements were made from core samples. The results of these 2005-06 determinations are shown below in **Table 19.12** sorted by grade and all determinations are listed in **Appendix IV**.

**Table 19.12: Summary of Specific Gravity measurements sorted by U<sub>3</sub>O<sub>8</sub> Grade**

Zone	Pass	Number of Blocks	Search Ellipse Dimension (m)		
			AZ. 36 Dip 0	AZ 306 Dip -30	AZ 126 Dip -60
Main	1	393	11.25	5.0	25.0
	2	2,481	22.5	10.0	50.0
	3	3,513	45.0	20.0	100.0
	4	2,280	90.0	40.0	200.0
HW	1	32	11.25	5.0	25.0
	2	403	22.5	10.0	50.0
	3	1,465	45.0	20.0	100.0
	4	669	90.0	40.0	200.0
FW	1	82	11.25	5.0	25.0
	2	541	22.5	10.0	50.0
	3	913	45.0	20.0	100.0
	4	260	90.0	40.0	200.0
Waste	1	414	7.5	17.5	7.5
	2	1,636	15.0	35.0	15.0
	3	3,903	30.0	70.0	30.0
	4	3,306	60.0	140.0	60.0
	5	428	120.0	280.0	120.0

Clearly there is no correlation between specific gravity and uranium grade (correlation coefficient= -0.006). Based on the current measurements, the density used in the 2005 estimate seems high with the average of 178 determinations in 2005 -2006 being very close at 2.71 to the Brinex 2.72 used in historic estimates. For this resource estimate, an average specific gravity of 2.71 g/cc was used.

### 19.7.2 Jacques Lake

For Jacques Lake, 173 specific gravity determinations were made in the area of mineralization during the 2006 drill program. These density values ranged from a low of 2.5 to a high of 3.3 with a mean value of 2.81. The distribution of measurements was fairly uniform through the mineralized zones so a value for specific gravity was interpolated into all estimated blocks using inverse distance squared and a similar search strategy as used for U<sub>3</sub>O<sub>8</sub>.

## 19.8 CLASSIFICATION

Based on the study herein reported, delineated mineralization of the Michelin and Jacques Lake Project is classified as a resource according to the following definition from National Instrument 43-101:

*“In this Instrument, the terms "mineral resource", "inferred mineral resource", "indicated mineral resource" and "measured mineral resource" have the meanings ascribed to those terms by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Standards on Mineral Resources and Reserves Definitions and Guidelines adopted by CIM Council on August 20, 2000, as those definitions may be amended from time to time by the Canadian Institute of Mining, Metallurgy, and Petroleum.”*

*“A **Mineral Resource** is a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.”*

The terms Measured, Indicated and Inferred are defined in NI 43-101 as follows:

*“A '**Measured Mineral Resource**' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.”*

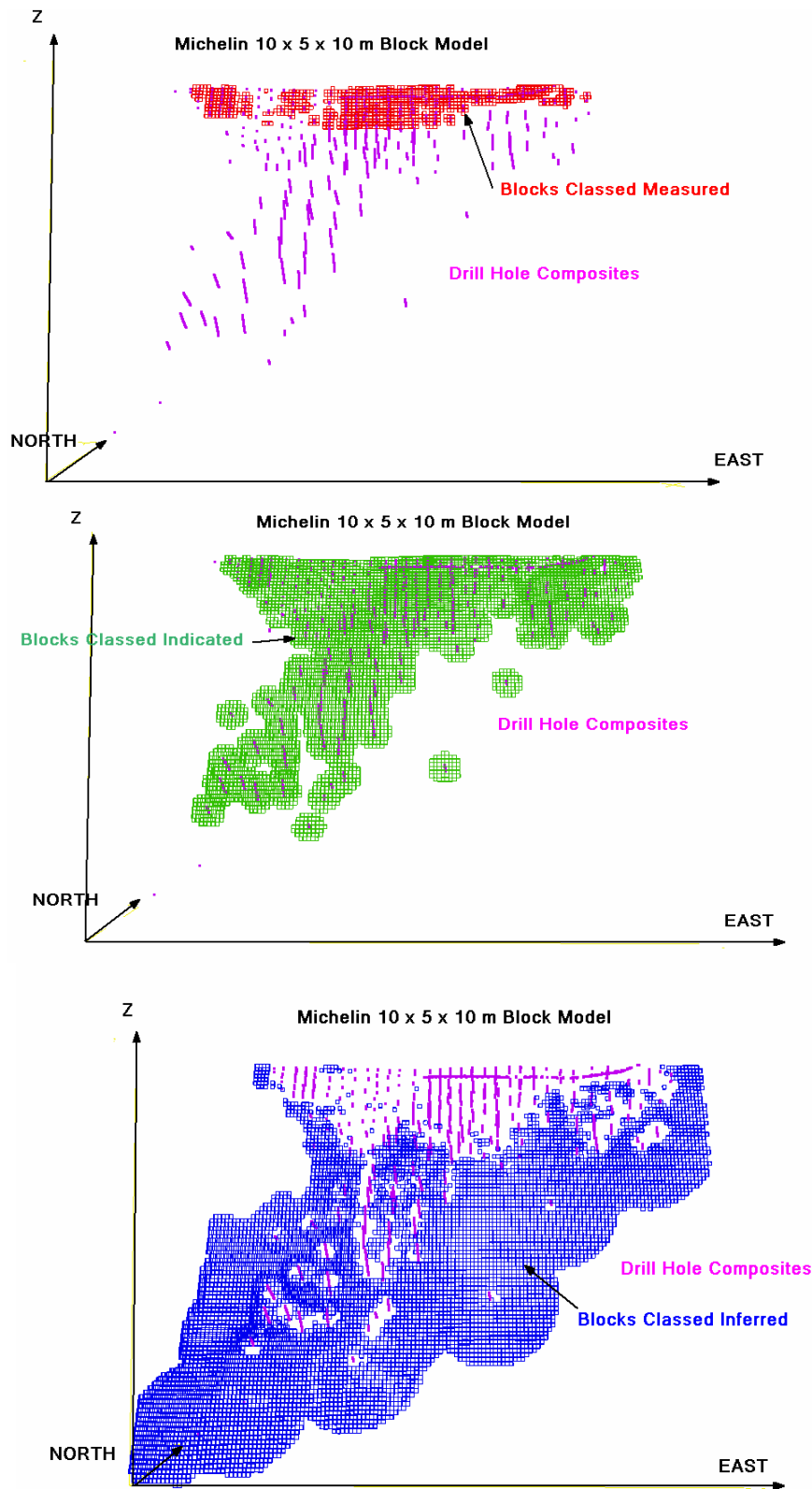
*“An '**Indicated Mineral Resource**' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.”*

*“An '**Inferred Mineral Resource**' is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.”*

### **19.8.1 Michelin**

The geologic continuity of the Michelin mineralized zones is well established through surface mapping, drill hole information and underground mapping and sampling. Grade continuity can be quantified by variography. For the Michelin Deposit blocks near surface and the underground sampling that were estimated in Pass 1 (using  $\frac{1}{4}$  the semivariogram ranges for a search ellipse) were classed as measured. Indicated blocks were those estimated in Pass 2 (using search ellipses with  $\frac{1}{2}$  the semivariogram range). Blocks in the lower portions of the mineralized zones and near the edges estimated in Pass 3 and 4 (using the full range and double the range of the semivariogram) were classed inferred. The distribution of measured, indicated and inferred blocks is shown in **Figure 19.9**.

**Table 19.13** shows the total resource from 10 x 5 x 10 m blocks with edge dilution applied. That is to say all blocks with some proportion within the mineralized solid are included. The block grades are a weighted average of mineralization within the mineralized solid and outside the solid. This approach is valid for an open pit mining scenario where the large equipment used could not mine to the three dimensional shapes of the mineralized model.



**Figure 19.9: Isometric plots showing distribution of Classified Blocks at Michelin**



**Table 19.13: Summary of the Michelin Resource (10 X 5 X 10 m Block Model)  
Using Whole Blocks with edge Dilution**

U <sub>3</sub> O <sub>8</sub> Cutoff (%)	MEASURED			INDICATED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
0.03	3,410,000	0.071	5,340,000	26,520,000	0.085	49,710,000
0.05	2,190,000	0.089	4,300,000	18,690,000	0.105	43,270,000
0.06	1,760,000	0.098	3,800,000	15,750,000	0.114	39,590,000
0.07	1,420,000	0.106	3,320,000	13,340,000	0.123	36,180,000
0.08	1,140,000	0.114	2,870,000	11,220,000	0.132	32,660,000
0.09	860,000	0.124	2,350,000	9,350,000	0.142	29,280,000
0.10	670,000	0.132	1,950,000	7,790,000	0.151	25,940,000
0.11	510,000	0.141	1,590,000	6,540,000	0.160	23,070,000
0.12	360,000	0.152	1,210,000	5,410,000	0.170	20,280,000
0.13	260,000	0.161	920,000	4,530,000	0.179	17,880,000
0.14	190,000	0.171	720,000	3,740,000	0.188	15,500,000
0.15	150,000	0.180	600,000	3,110,000	0.197	13,510,000
0.16	100,000	0.191	420,000	2,520,000	0.207	11,500,000
0.17	80,000	0.198	350,000	2,090,000	0.216	9,950,000
0.18	58,000	0.208	270,000	1,720,000	0.225	8,530,000
0.19	38,000	0.220	180,000	1,410,000	0.234	7,280,000
U <sub>3</sub> O <sub>8</sub> Cutoff (%)	MEASURED PLUS INDICATED			INFERRED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
0.03	29,930,000	0.084	55,440,000	21,680,000	0.078	37,290,000
0.05	20,880,000	0.103	47,420,000	13,160,000	0.103	29,890,000
0.06	17,510,000	0.113	43,630,000	10,930,000	0.113	27,230,000
0.07	14,760,000	0.122	39,710,000	9,420,000	0.120	24,930,000
0.08	12,350,000	0.131	35,670,000	7,220,000	0.134	21,330,000
0.09	10,210,000	0.140	31,520,000	5,940,000	0.145	18,990,000
0.10	8,450,000	0.150	27,950,000	4,780,000	0.157	16,550,000
0.11	7,040,000	0.159	24,680,000	4,110,000	0.166	15,040,000
0.12	5,770,000	0.169	21,500,000	3,460,000	0.176	13,430,000
0.13	4,790,000	0.178	18,800,000	3,010,000	0.183	12,150,000
0.14	3,930,000	0.187	16,200,000	2,670,000	0.189	11,130,000
0.15	3,260,000	0.196	14,090,000	2,350,000	0.195	10,100,000
0.16	2,620,000	0.207	11,960,000	1,840,000	0.207	8,400,000
0.17	2,170,000	0.215	10,290,000	1,510,000	0.216	7,190,000
0.18	1,780,000	0.225	8,830,000	1,300,000	0.223	6,390,000
0.19	1,450,000	0.234	7,480,000	1,040,000	0.232	5,320,000

To aid the underground mine planning a second block model was estimated, using the same geologic model, composites, variogram models and kriging strategy but reducing the size of the blocks to 5 x 5 x 5 m (**Table 19.14**). This block reduction does not increase the confidence in block grades but does reduce the effects of edge dilution as with smaller blocks a smaller volume would be affected.

**Table 19.14: Summary of the Michelin Resource (5 X 5 X 5 m Block Model) Using Whole Blocks with edge Dilution**

U <sub>3</sub> O <sub>8</sub> Cutoff (%)	MEASURED			INDICATED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
0.03	3,410,000	0.073	5,490,000	26,120,000	0.087	50,110,000
0.05	2,270,000	0.091	4,550,000	18,720,000	0.106	43,750,000
0.06	1,850,000	0.099	4,040,000	15,930,000	0.115	40,390,000
0.07	1,480,000	0.108	3,520,000	13,590,000	0.124	37,160,000
0.08	1,170,000	0.117	3,020,000	11,510,000	0.133	33,750,000
0.09	910,000	0.126	2,530,000	9,650,000	0.142	30,220,000
0.10	720,000	0.134	2,130,000	8,030,000	0.152	26,910,000
0.11	560,000	0.143	1,770,000	6,720,000	0.161	23,860,000
0.12	420,000	0.152	1,410,000	5,630,000	0.170	21,100,000
0.13	310,000	0.162	1,110,000	4,680,000	0.179	18,470,000
0.14	230,000	0.171	870,000	3,880,000	0.189	16,170,000
0.15	170,000	0.181	680,000	3,220,000	0.198	14,060,000
0.16	120,000	0.191	510,000	2,640,000	0.207	12,050,000
0.17	90,000	0.200	400,000	2,180,000	0.216	10,380,000
0.18	66,000	0.210	310,000	1,790,000	0.226	8,920,000
0.19	46,000	0.221	220,000	1,480,000	0.234	7,640,000
U <sub>3</sub> O <sub>8</sub> Cutoff (%)	MEASURED PLUS INDICATED			INFERRED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
0.03	29,530,000	0.085	55,350,000	21,930,000	0.078	37,720,000
0.05	20,990,000	0.104	48,130,000	13,490,000	0.103	30,640,000
0.06	17,770,000	0.113	44,280,000	11,250,000	0.113	28,030,000
0.07	15,080,000	0.122	40,570,000	9,750,000	0.120	25,800,000
0.08	12,690,000	0.131	36,660,000	7,470,000	0.134	22,070,000
0.09	10,560,000	0.141	32,830,000	6,100,000	0.145	19,500,000
0.10	8,750,000	0.150	28,940,000	4,920,000	0.157	17,030,000
0.11	7,280,000	0.160	25,680,000	4,140,000	0.167	15,240,000
0.12	6,050,000	0.169	22,550,000	3,510,000	0.177	13,700,000
0.13	4,990,000	0.178	19,590,000	3,070,000	0.184	12,460,000
0.14	4,110,000	0.188	17,040,000	2,760,000	0.190	11,560,000
0.15	3,390,000	0.197	14,730,000	2,440,000	0.196	10,550,000
0.16	2,760,000	0.207	12,600,000	1,940,000	0.207	8,850,000
0.17	2,270,000	0.216	10,810,000	1,600,000	0.215	7,590,000
0.18	1,860,000	0.225	9,230,000	1,380,000	0.222	6,760,000
0.19	1,530,000	0.234	7,890,000	1,080,000	0.232	5,520,000

These same two sets of tables can be produced for only material within the mineralized solids. These resources are valid if you could mine to the solid boundaries as drawn. These resources have no edge dilution applied (Table 19.15 & 19.16).

**Table 19.15: Summary of the Michelin Resource (10 X 5 X 10 m Block Model) with no edge dilution**

U <sub>3</sub> O <sub>8</sub> Cutoff (%)	MEASURED			INDICATED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
0.03	2,920,000	0.076	4,890,000	23,220,000	0.094	48,130,000
0.05	2,000,000	0.094	4,150,000	17,960,000	0.111	43,960,000
0.06	1,640,000	0.102	3,690,000	15,650,000	0.119	41,060,000
0.07	1,370,000	0.110	3,320,000	13,680,000	0.127	38,310,000
0.08	1,130,000	0.118	2,940,000	11,890,000	0.135	35,390,000
0.09	870,000	0.128	2,460,000	10,140,000	0.143	31,970,000
0.10	680,000	0.137	2,050,000	8,590,000	0.152	28,790,000
0.11	530,000	0.146	1,710,000	7,220,000	0.161	25,630,000
0.12	410,000	0.156	1,410,000	5,970,000	0.171	22,510,000
0.13	320,000	0.164	1,160,000	5,060,000	0.179	19,970,000
0.14	240,000	0.174	920,000	4,210,000	0.188	17,450,000
0.15	180,000	0.184	730,000	3,480,000	0.198	15,190,000
0.16	140,000	0.193	600,000	2,850,000	0.207	13,010,000
0.17	110,000	0.201	490,000	2,370,000	0.216	11,290,000
0.18	83,000	0.209	380,000	1,920,000	0.226	9,570,000
0.19	58,000	0.221	280,000	1,560,000	0.235	8,080,000
U <sub>3</sub> O <sub>8</sub> Cutoff (%)	MEASURED PLUS INDICATED			INFERRED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
0.03	26,140,000	0.092	53,030,000	20,440,000	0.085	38,310,000
0.05	19,960,000	0.109	47,970,000	13,700,000	0.107	32,320,000
0.06	17,290,000	0.117	44,610,000	11,680,000	0.116	29,880,000
0.07	15,050,000	0.125	41,480,000	10,490,000	0.121	27,990,000
0.08	13,020,000	0.133	38,180,000	7,920,000	0.136	23,750,000
0.09	11,010,000	0.142	34,470,000	6,480,000	0.148	21,150,000
0.10	9,260,000	0.151	30,830,000	5,180,000	0.161	18,390,000
0.11	7,750,000	0.160	27,340,000	4,470,000	0.170	16,760,000
0.12	6,370,000	0.170	23,880,000	3,780,000	0.181	15,090,000
0.13	5,370,000	0.179	21,200,000	3,330,000	0.188	13,800,000
0.14	4,450,000	0.188	18,450,000	2,930,000	0.195	12,600,000
0.15	3,660,000	0.197	15,900,000	2,640,000	0.201	11,700,000
0.16	2,990,000	0.207	13,650,000	2,110,000	0.213	9,910,000
0.17	2,480,000	0.215	11,760,000	1,790,000	0.221	8,720,000
0.18	2,010,000	0.225	9,970,000	1,590,000	0.227	7,960,000
0.19	1,620,000	0.235	8,390,000	1,250,000	0.238	6,560,000

**Table 19.16: Summary of the Michelin Resource (5 X 5 X 5 m Block Model) with no edge dilution**

U <sub>3</sub> O <sub>8</sub> Cutoff (%)	MEASURED			INDICATED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
0.03	3,230,000	0.077	5,480,000	24,810,000	0.092	50,330,000
0.05	2,230,000	0.094	4,620,000	18,870,000	0.109	45,350,000
0.06	1,840,000	0.102	4,140,000	16,310,000	0.117	42,080,000
0.07	1,520,000	0.110	3,690,000	14,090,000	0.126	39,150,000
0.08	1,230,000	0.118	3,200,000	12,080,000	0.134	35,690,000
0.09	960,000	0.127	2,690,000	10,280,000	0.143	32,410,000
0.10	750,000	0.136	2,250,000	8,620,000	0.152	28,890,000
0.11	600,000	0.145	1,920,000	7,220,000	0.162	25,790,000
0.12	450,000	0.155	1,540,000	6,060,000	0.171	22,850,000
0.13	340,000	0.165	1,240,000	5,070,000	0.180	20,120,000
0.14	270,000	0.173	1,030,000	4,220,000	0.189	17,590,000
0.15	200,000	0.182	800,000	3,500,000	0.198	15,280,000
0.16	150,000	0.192	640,000	2,870,000	0.208	13,160,000
0.17	110,000	0.202	490,000	2,370,000	0.217	11,340,000
0.18	83,000	0.211	390,000	1,940,000	0.226	9,670,000
0.19	61,000	0.220	300,000	1,590,000	0.235	8,240,000
U <sub>3</sub> O <sub>8</sub> Cutoff (%)	MEASURED PLUS INDICATED			INFERRED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
0.03	28,030,000	0.090	55,630,000	21,660,000	0.083	39,640,000
0.05	21,090,000	0.107	49,760,000	14,250,000	0.105	32,990,000
0.06	18,150,000	0.116	46,420,000	12,020,000	0.114	30,210,000
0.07	15,610,000	0.124	42,680,000	10,720,000	0.120	28,370,000
0.08	13,310,000	0.133	39,030,000	8,090,000	0.135	24,080,000
0.09	11,240,000	0.142	35,190,000	6,550,000	0.147	21,230,000
0.10	9,380,000	0.151	31,230,000	5,200,000	0.161	18,460,000
0.11	7,820,000	0.160	27,590,000	4,410,000	0.171	16,630,000
0.12	6,510,000	0.170	24,400,000	3,750,000	0.180	14,880,000
0.13	5,410,000	0.179	21,350,000	3,290,000	0.188	13,640,000
0.14	4,480,000	0.188	18,570,000	2,970,000	0.194	12,700,000
0.15	3,700,000	0.197	16,070,000	2,650,000	0.200	11,690,000
0.16	3,020,000	0.207	13,780,000	2,130,000	0.211	9,910,000
0.17	2,480,000	0.216	11,810,000	1,810,000	0.220	8,780,000
0.18	2,020,000	0.225	10,020,000	1,610,000	0.225	7,990,000
0.19	1,650,000	0.235	8,550,000	1,240,000	0.237	6,480,000

Finally, a set of combined Tables that would reflect the style of mining and the levels that might separate a surface open pit from an underground mine scenario. **Table 19.17** shows the grades and tonnages for blocks 10 x 5 x 10 m with edge dilution above the 150 m elevation level that might represent the bottom of an open pit. The edge dilution would represent mining 10 x 5 x 10 m blocks with large equipment.

**Table 19.17: Summary of the Michelin Resource (10 X 5 X 10 m Block Model)  
Using Whole Blocks with edge Dilution, Above the 150 m Elevation**

U <sub>3</sub> O <sub>8</sub> Cutoff (%)	MEASURED			INDICATED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
<b>0.03</b>	<b>3,410,000</b>	<b>0.071</b>	<b>5,340,000</b>	<b>7,930,000</b>	<b>0.062</b>	<b>10,840,000</b>
0.05	2,190,000	0.089	4,300,000	4,280,000	0.082	7,740,000
0.06	1,760,000	0.098	3,800,000	3,140,000	0.092	6,370,000
0.07	1,420,000	0.106	3,320,000	2,340,000	0.102	5,260,000
0.08	1,140,000	0.114	2,870,000	1,690,000	0.113	4,210,000
0.09	860,000	0.124	2,350,000	1,260,000	0.122	3,390,000
0.10	670,000	0.132	1,950,000	950,000	0.131	2,740,000
0.11	510,000	0.141	1,590,000	720,000	0.140	2,220,000
0.12	360,000	0.152	1,210,000	530,000	0.149	1,740,000
0.13	260,000	0.161	920,000	390,000	0.157	1,350,000
0.14	190,000	0.171	720,000	290,000	0.166	1,060,000
0.15	150,000	0.180	600,000	230,000	0.172	870,000
0.16	100,000	0.191	420,000	150,000	0.180	600,000
0.17	80,000	0.198	350,000	100,000	0.188	410,000
0.18	58,000	0.208	270,000	60,000	0.196	260,000
0.19	38,000	0.220	180,000	30,000	0.207	140,000
U <sub>3</sub> O <sub>8</sub> Cutoff (%)	MEASURED PLUS INDICATED			INFERRED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
<b>0.03</b>	<b>11,340,000</b>	<b>0.065</b>	<b>16,250,000</b>	<b>460,000</b>	<b>0.043</b>	<b>440,000</b>
0.05	6,480,000	0.085	12,150,000	110,000	0.061	150,000
0.06	4,900,000	0.094	10,160,000	50,000	0.072	80,000
0.07	3,770,000	0.104	8,650,000	30,000	0.077	50,000
0.08	2,830,000	0.113	7,050,000	7,000	0.085	10,000
0.09	2,120,000	0.123	5,750,000	3,000	0.093	6,000
0.10	1,620,000	0.132	4,720,000			
0.11	1,230,000	0.140	3,800,000			
0.12	890,000	0.150	2,940,000			
0.13	660,000	0.159	2,310,000			
0.14	480,000	0.168	1,780,000			
0.15	370,000	0.175	1,430,000			
0.16	260,000	0.184	1,050,000			
0.17	180,000	0.193	770,000			
0.18	120,000	0.202	530,000			
0.19	70,000	0.214	330,000			

Table 19.18 shows the resource below the 150 m elevation that might be extractable by underground methods and as a result it is reported from 5 x 5 x 5 m blocks with no edge dilution. This assumes more selectivity underground but of course some mining dilution will ultimately be applied. There is no measured resource below the 150 m elevation.

**Table 19.18: Summary of the Michelin Resource (5 X 5 X 5 m Block Model) with no edge dilution below the 150 m Elevation reflecting a possible Underground Resource**

U3O8 Cutoff (%)	INDICATED			INFERRED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U3O8 (%)	Pounds of U3O8		U3O8 (%)	Pounds of U3O8
0.03	17,690,000	0.101	39,400,000	21,160,000	0.083	38,730,000
<b>0.05</b>	<b>14,310,000</b>	<b>0.115</b>	<b>36,290,000</b>	<b>13,950,000</b>	<b>0.106</b>	<b>32,610,000</b>
0.06	12,730,000	0.123	34,530,000	11,870,000	0.115	30,100,000
0.07	11,340,000	0.130	32,510,000	10,650,000	0.121	28,410,000
0.08	9,930,000	0.138	30,220,000	8,070,000	0.135	24,020,000
0.09	8,610,000	0.146	27,720,000	6,540,000	0.147	21,200,000
0.10	7,330,000	0.155	25,050,000	5,200,000	0.161	18,460,000
0.11	6,220,000	0.164	22,490,000	4,400,000	0.171	16,590,000
0.12	5,290,000	0.173	20,180,000	3,750,000	0.180	14,880,000
0.13	4,450,000	0.182	17,860,000	3,290,000	0.188	13,640,000
0.14	3,750,000	0.191	15,790,000	2,960,000	0.194	12,660,000
0.15	3,150,000	0.200	13,890,000	2,650,000	0.200	11,690,000
0.16	2,600,000	0.210	12,040,000	2,130,000	0.211	9,910,000
0.17	2,170,000	0.219	10,480,000	1,810,000	0.220	8,780,000
0.18	1,800,000	0.228	9,050,000	1,610,000	0.225	7,990,000
0.19	1,500,000	0.237	7,840,000	1,240,000	0.237	6,480,000

### 19.8.2 Jacques Lake

At this point in time the drill spacing at Jacques Lake is too wide spaced to calculate a measured resource. The blocks estimated in pass 1 and 2 were classed indicated and those estimate in pass 3 and 4 were classed inferred.

As in Michelin the resource has been presented as two sets of Tables. **Table 19.19** shows the resource with edge dilution applied to 10 x 5 x 10 m blocks while **Table 19.20** shows the resource if you could mine to the geological solid boundaries.

**Table 19.19: Summary of the Jacques Lake Resource (10 X 5 X 10 m Block Model) Using Whole Blocks with edge Dilution**

U <sub>3</sub> O <sub>8</sub> Cutoff (%)	INDICATED			INFERRED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
0.03	3,660,000	0.073	5,890,000	5,680,000	0.051	6,390,000
0.05	2,410,000	0.091	4,840,000	2,070,000	0.073	3,330,000
0.06	1,980,000	0.099	4,320,000	1,260,000	0.085	2,360,000
0.07	1,640,000	0.107	3,870,000	960,000	0.091	1,930,000
0.08	1,330,000	0.114	3,340,000	630,000	0.100	1,390,000
0.09	1,090,000	0.121	2,910,000	380,000	0.110	920,000
0.10	830,000	0.129	2,360,000	250,000	0.118	650,000
0.11	590,000	0.139	1,810,000	138,000	0.130	396,000
0.12	410,000	0.150	1,360,000	69,000	0.145	221,000
0.13	290,000	0.160	1,020,000	50,000	0.154	170,000
0.14	210,000	0.169	780,000	33,000	0.164	119,000
0.15	143,000	0.182	570,000	24,000	0.171	90,000
0.16	105,000	0.192	440,000	16,000	0.180	64,000
0.17	78,000	0.201	350,000	13,000	0.184	53,000
0.18	55,000	0.212	257,000	4,000	0.198	17,000
0.19	39,000	0.223	192,000	4,000	0.198	17,000

**Table 19.20: Summary of the Jacques Lake Resource (10 X 5 X 10 m Block Model) with no edge Dilution**

U <sub>3</sub> O <sub>8</sub> Cutoff (%)	INDICATED			INFERRED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
0.03	3,550,000	0.079	6,180,000	6,130,000	0.055	7,430,000
0.05	2,500,000	0.095	5,240,000	2,700,000	0.075	4,470,000
0.06	2,120,000	0.102	4,770,000	1,660,000	0.088	3,220,000
0.07	1,810,000	0.109	4,350,000	1,300,000	0.095	2,720,000
0.08	1,470,000	0.116	3,760,000	1,030,000	0.100	2,270,000
0.09	1,220,000	0.123	3,310,000	600,000	0.111	1,470,000
0.10	950,000	0.131	2,740,000	400,000	0.120	1,060,000
0.11	700,000	0.140	2,160,000	235,000	0.131	679,000
0.12	500,000	0.151	1,660,000	124,000	0.146	399,000
0.13	360,000	0.161	1,280,000	95,000	0.153	320,000
0.14	270,000	0.170	1,010,000	64,000	0.162	229,000
0.15	194,000	0.180	770,000	46,000	0.169	171,000
0.16	144,000	0.188	600,000	28,000	0.179	111,000
0.17	95,000	0.201	420,000	18,000	0.187	74,000
0.18	65,000	0.212	304,000	6,000	0.206	27,000
0.19	51,000	0.220	247,000	4,000	0.223	20,000

When mining method is considered the resource could be subdivided into an open pit possible extraction above the 130 m elevation. This resource is reported using the whole block results (edge dilution applied) in **Table 19.21**. The part of the resource below the 130 elevation that might be extracted by underground methods is reported as the mineralized part of the blocks (no edge dilution applied) in **Table 19.22**.

**Table 19.21: Summary of the Jacques Lake Resource (10 X 5 X 10 m Block Model)  
Using Whole Blocks with edge Dilution above 130 m Elevation**

U <sub>3</sub> O <sub>8</sub> Cutoff (%)	INDICATED			INFERRED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
<b>0.03</b>	<b>1,150,000</b>	<b>0.083</b>	<b>2,100,000</b>	<b>1,520,000</b>	<b>0.056</b>	<b>1,880,000</b>
0.05	810,000	0.101	1,800,000	630,000	0.080	1,110,000
0.06	690,000	0.109	1,660,000	430,000	0.093	880,000
0.07	580,000	0.117	1,500,000	350,000	0.100	770,000
0.08	500,000	0.124	1,370,000	270,000	0.107	640,000
0.09	440,000	0.130	1,260,000	210,000	0.114	530,000
0.10	350,000	0.138	1,070,000	150,000	0.122	400,000
0.11	260,000	0.149	850,000	81,000	0.138	246,000
0.12	200,000	0.162	710,000	53,000	0.150	175,000
0.13	150,000	0.173	570,000	45,000	0.154	153,000
0.14	130,000	0.180	520,000	30,000	0.165	109,000
0.15	102,000	0.189	430,000	23,000	0.171	87,000

**Table 19.22: Summary of the Jacques Lake Resource (10 X 5 X 10 m Block Model)  
With no edge Dilution below 130 m Elevation**

U <sub>3</sub> O <sub>8</sub> Cutoff (%)	INDICATED			INFERRED		
	Tonnes> Cutoff (tonnes)	Grade>Cutoff		Tonnes> Cutoff (tonnes)	Grade>Cutoff	
		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> (%)	Pounds of U <sub>3</sub> O <sub>8</sub>
0.03	2,440,000	0.074	3,980,000	4,460,000	0.054	5,310,000
<b>0.05</b>	<b>1,670,000</b>	<b>0.090</b>	<b>3,310,000</b>	<b>1,950,000</b>	<b>0.072</b>	<b>3,100,000</b>
0.06	1,410,000	0.097	3,020,000	1,160,000	0.084	2,150,000
0.07	1,200,000	0.103	2,730,000	880,000	0.090	1,750,000
0.08	930,000	0.111	2,280,000	680,000	0.095	1,420,000
0.09	740,000	0.117	1,910,000	320,000	0.106	750,000
0.10	550,000	0.125	1,520,000	190,000	0.114	480,000
0.11	400,000	0.133	1,170,000	106,000	0.121	283,000
0.12	280,000	0.141	870,000	43,000	0.132	125,000
0.13	200,000	0.148	650,000	21,000	0.141	65,000
0.14	120,000	0.157	420,000	7,000	0.151	23,000
0.15	75,000	0.165	270,000	3,000	0.164	11,000



These resource tables can be summarized as follows:

**Table 19.23: Summary of the CMB Classified Resources**

Deposit	Measured			Indicated			Inferred		
	Tonnes (x 1000)	% U <sub>3</sub> O <sub>8</sub>	lbs U <sub>3</sub> O <sub>8</sub> (x 1000)	Tonnes (x1000)	% U <sub>3</sub> O <sub>8</sub>	lbs U <sub>3</sub> O <sub>8</sub> (x1000)	Tonnes (x1000)	% U <sub>3</sub> O <sub>8</sub>	lbs U <sub>3</sub> O <sub>8</sub> (x1000)
Michelin Open Pit*	3,410	0.07	5,340	7,930	0.06	10,840	460	0.04	440
Michelin Underground**				14,310	0.12	36,290	13,950	0.11	32,610
Jacques Lake Open Pit*				1,150	0.08	2,100	1,520	0.06	1,880
Jacques Lake Underground**				1,670	0.09	3,310	1,950	0.07	3,100
<b>Totals</b>	<b>3,410</b>	<b>0.07</b>	<b>5,340</b>	<b>25,060</b>	<b>0.10</b>	<b>52,540</b>	<b>17,880</b>	<b>0.10</b>	<b>38,030</b>

\* Open pit resource reported at 0.03% U<sub>3</sub>O<sub>8</sub> cut-off

\*\* Underground resource reported at a 0.05% U<sub>3</sub>O<sub>8</sub> cut-off

## 19.9 OTHER RESOURCES

In addition to the Michelin Uranium Deposit, the portfolio of Aurora Energy Resources Inc. also contains four other occurrences known as Gear, Nash, Inda and Rainbow. The historical estimates for these occurrences are documented in the Mineral Occurrence Data System (**MODS**), a website sponsored by the Geological Survey of Newfoundland and Labrador, and are stated to be based upon reports and references dated between 1967 and 1984 (none of which are available to the Corporation). Accordingly, these estimates are historical in nature and do not meet the definition of Mineral Resources as contained in National Instrument 43-101 of the Canadian Securities Administrators. Furthermore, neither the Corporation nor the authors of any the CMB Technical Report, the Michelin Technical Report or the 2006 Technical Report have reviewed any of the reports or exploration results underlying such estimates and accordingly, such estimates (and any assumptions underlying such estimates) have not been independently verified. **As a result, there can be no assurance that such historic estimates are reliable, or that such estimates are indicative of any mineralization which would meet the criteria of Mineral Resources as defined in accordance with National Instrument 43-101. Consequently, no reliance should not be placed upon these historical estimates.**

However, management believes that these historical estimates may be indicative of the potential for mineralization on these properties. These historical estimates include:

1. The Rainbow Deposit with 272,232 tonnes @ 0.100% U<sub>3</sub>O<sub>8</sub> (600,159 lbs U<sub>3</sub>O<sub>8</sub>). Note - The 1975 historical estimate for the Rainbow Deposit by Brinex was based on data from 19 surface drill holes which defined a zone 140 m long by 2 to 15 m wide by 79 m deep. The historical estimate is based on limited surface drilling and is not compatible with current CIM standards.
2. The Gear Lake Deposit with 76,860 tonnes @ 0.145% U<sub>3</sub>O<sub>8</sub> (245,695 lbs U<sub>3</sub>O<sub>8</sub>) Note - The historical estimate for the Gear Lake Prospect (year unknown) by Brinex was based on data from an unknown number of surface holes which defined the zone over a length of 30 m and to a depth of 70 m. The historical estimate is based on limited surface drilling and is not compatible with current CIM standards. The drill hole and assay data are deemed to be inadequate for an accurate estimation of tonnage and grade and the calculations assume a continuity of the mineralized zone which is not completely tested by drilling.
3. The Inda Lake Deposit with 514,519 tonnes @ 0.155% U<sub>3</sub>O<sub>8</sub> (1,758,167 lbs U<sub>3</sub>O<sub>8</sub>) Note - The 1976 historical estimate for the Inda Lake Prospect by Brinex was based on data from 23 surface drill holes. 75% percent of the tonnage was in the main or footwall wall lens as defined over an average width of 2.44 m and strike length of 640 m. The grade of mineralization attributable to tonnage in the hanging wall lenses was 0.19% U<sub>3</sub>O<sub>8</sub>. The historical estimate is based on limited surface drilling and is not compatible with current CIM standards.
4. The Nash Lake Deposit with 215,971 tonnes @ 0.224% U<sub>3</sub>O<sub>8</sub> (1,066,523 lbs U<sub>3</sub>O<sub>8</sub>) Note - The 1970 historical estimate for the Nash Lake Prospect (Main Zone) by Brinex was based on data from unknown number of surface drill holes which defined the zone over a strike length of 365 m and a depth of 140 m. The historical estimate is based on limited surface drilling and is not compatible with current CIM standards.

A “qualified person” as defined in National Instrument 43-101 has not completed sufficient work on these properties to classify these historical estimates as current Mineral Resources or Mineral Reserves in accordance with the requirements of National Instrument 43-101, the Corporation is not treating these historical estimates as current Mineral Resources or Mineral Reserves as defined under National Instrument 43-101, and accordingly these historical estimates should not be relied upon. Potential quantity and grade is conceptual in nature, there has been insufficient exploration to define a Mineral Resource to date on any of the Rainbow, Gear Lake, Inda Lake or Nash Lake properties, and it is uncertain if further exploration will result in any of these properties being delineated as Mineral Resources in accordance with National Instrument 43-101.

## **20.0 OTHER RELEVANT DATA AND INFORMATION**

The Nunatsiavut Government came into effect December 1<sup>st</sup>, 2005. The current Board of the Labrador Inuit Association became the transitional government which will be in place until an election is held. The Nunatsiavut Government will operate on a consensus basis rather than an adversarial party system. The Nunatsiavut Government will observe federal and provincial laws and, in time, take greater control over policy.

The effective date marks the transition of the Labrador Inuit Lands Claims Agreement into a legal and constitutional reality.

Sections of the Agreement which deal specifically with exploration interests in Labrador are Part 4.11 Subsurface Interests and Part 4.12 Subsurface Resource Development in Labrador Inuit Lands. For the purposes of this report, the following paraphrased parts are of note:

- Administration of subsurface resources in the Labrador Inuit Settlement Area rest with the Province (4.11.1). The Province is obliged to consult with the Nunatsiavut Government about conditions to be attached to a subsurface interest in Labrador Inuit Lands (4.12.4).
- Exploration of Labrador Inuit Lands requires approval of an application in the form of a work plan made to the Nunatsiavut Government and the Province (4.11.13(b)). Fifteen days is indicated as the time frame for processing applications. Approval from both the Provincial and Nunatsiavut governments is required before work can proceed.
- Exploration companies must obtain consent from the Nunatsiavut Government for access to Labrador Inuit Lands (4.11.13(a)).
- Development of a subsurface resource in Labrador Inuit Lands requires an Inuit Impacts and Benefits Agreement with the Nunatsiavut Government (4.12.1).

The *Standards for Mineral Exploration and Quarrying for Labrador Inuit Lands* were ratified in to law in April 2007 by the Government of Newfoundland and Labrador and the Nunatsiavut Government. This act facilitates the issuing of exploration approvals for Labrador Inuit Lands and sets out clear guidelines for exploration practices in Labrador.

## **21.0 INTERPRETATION AND CONCLUSIONS**

The program carried out over the period from April 2007 to the end of October has been successful in identifying additional mineralization at Michelin and Jacques Lake, and in confirming mineralization at the Aurora Corridor, Gayle and Burnt Brook. Additionally, the extent of uranium mineralization at the Gear, Inda, and Nash targets has been both confirmed and expanded through ongoing drilling.

### **21.1 MICHELIN TARGET AREA**

The 2007 drilling program completed to date has extended the Main Zone down plunge and to the west, along strike, with 13 new holes (7,223 metres). The zone appears to be narrowing in width, although it continues to return comparable grades over significant widths (e.g. 0.25% U<sub>3</sub>O<sub>8</sub> over 9.5 metres in hole M07-069, and 0.11% U<sub>3</sub>O<sub>8</sub> over 15.0 metres in hole M07-059), out to 185 metres beyond the western limits of the previous 2006 drilling.

In addition to extending the Main Zone, the 2007 drill program has begun to define a new shoot to the east of the Main Zone referred to as the “Eastern Shoot”, with 16 holes (7,481 metres). Building on widely-spaced holes from the 2006 drill program, this new zone is now better defined within a region measuring approximately 600 metres down-plunge and 300 metres across, with comparable grades and widths to the Main Zone (e.g. 0.25% U<sub>3</sub>O<sub>8</sub> over 10.1 metres in hole M07-072, and 0.15% U<sub>3</sub>O<sub>8</sub> over 8.9 metres in hole M07-066).

The eastern limits of alteration and relatively weak mineralization associated with the Michelin deposit have been extended approximately 700 metres to the east of previous drilling. While this region is unlikely to contribute to the Michelin resource there is still a great deal of remaining potential along this trend for the discovery of additional resources.

Results to date from the confirmation drilling program in the shallower portion of the deposit have shown that the U<sub>3</sub>O<sub>8</sub> mineralization in this area is at least as good as suggested by the historical drilling by Brinex (1969-79), and locally better.

### **21.2 BURNT BROOK TARGET AREA**

Drilling at Burnt Brook was carried out from September 21<sup>st</sup> through October 25<sup>th</sup>, 2007. A total of 10 drill holes totaling 1828.42 metres were completed at Burnt Brook. Mineralized intervals cut during the drilling were generally narrow and were hosted in a variety of lithologies, ranging from fine grained clastic metasediments, to hematized and albitized intermediate volcanics similar to the host rocks at the Jacques Lake deposit. Alteration packages associated with mineralization at Burnt Brook were similar to those seen at the Jacques Lake and Michelin deposits, with strong hematite + magnetite + albite alteration.

While mineralized zones were generally narrow, i.e. 1-5 metres, sufficiently elevated levels of radioactivity have been intersected to warrant follow up surface work and diamond drilling in 2008.

### 21.3 JACQUES LAKE TARGET AREA

During the 2007 field season, a total of **30 diamond drill holes** with a cumulative length of **14,649 m** were completed on the Jacques Lake target (**Figure 13.5**). Drilling commenced on April 27<sup>th</sup> 2007 and was completed on November 1<sup>st</sup> 2007. Drilling was focused on exploring for down-dip and down plunge extensions to the deposit. Drill holes were oriented at 315° azimuth to intercept mineralization a roughly perpendicular orientation.

The 2007 drill program was successful in expanding the Jacques Lake deposit further to the west and down-dip. The 2007 drill program also added confidence to the understanding of the fold interference causing thickening of the mineralized zone. In 2006 the recommended budget for 2007 was set at 22,000 m. The shortcomings of the drilling meterage were due to early season weather delays, mechanical breakdown delays and drill crew shortages. Intervals of uranium mineralization intersected to date in 2007 are of comparable width and grade to those cut in 2006. Of particular note, drill hole **JL07-070** intersected **0.12%U<sub>3</sub>O<sub>8</sub> over 16m** approximately 100m down plunge from the existing resource block. Additional results from drilling to the south west are still pending.

### 21.4 GEAR TARGET AREA

The drilling program at Gear successfully extended the ore zone 100-110 m down plunge. The zone of U mineralization intersected in G07-005 has rough dimensions of 150m down dip by 50 m across. The strongest mineralization within it measures 20 m in width. A few observations have been made about mineralization at Gear:

5. Elevated radioactivity can occur within the argillite, dirty quartzite or sheared amphibolite (all within the Posthill group)
6. The primary host “argillite” changes in composition along its strike indicating facies changes
7. Mineralization appears to be folded
8. The Posthill group features an earlier deformation event which is not evident in the Aillik Group

### 21.5 INDA TARGET AREA

Mineralized intervals in the Inda Lake core were characterized by a highly strained, aphanitic, felsic metavolcanic (possibly metasedimentary) which contained abundant actinolite + calcite + chlorite +/- pyrite veining to stockworking. The unit was strongly and pervasively hematized as well as strongly magnetic. Additionally, mineralized intervals hosted a significant concentration of sulphide minerals, notably

chalcopyrite and pyrite. Drilling served to extend mineralization at Inda to the south west (along strike) and to date has returned values comparable to those seen in historic Brinex drilling. Mineralized zones at Inda are generally narrow, ~ 1m, however numerous zones are seen in close proximity to one another. Further work is recommended for the Inda target, this work is still in the planning stages.

## **21.6 NASH TARGET AREA**

Of the proposed program at Nash, a total of 1149m metres were completed in 6 drill holes. To date, assay results have been received for 3 of these holes, showing narrow mineralized zones, 1 to 4m, ranging from 0.03 % U<sub>3</sub>O<sub>8</sub> to 0.1 % U<sub>3</sub>O<sub>8</sub>. Assays are currently pending for the remainder of 2007 work at Nash. Further work is recommended to further expand and delineate the mineralized zones at Nash.

## **21.7 MELODY HILL TARGET AREA**

2007 Drilling at Melody Hill returned generally disappointing results, with only spot highs being intersected in holes M07-007 and M07-011. Mineralization intersected at Melody was hosted in granitoid rocks, with no discernable deformation or alteration associated with the mineralized zones. It is believed that due to the inability to drill from the ideal locations on the ice, the targets were not adequately tested.

## **21.8 AURORA CORRIDOR TARGET AREA**

Elevated to significant levels of uranium mineralization were intersected in 8 of the 12 holes drilled. Mineralization is typically hosted within strongly sheared, interlayered or transposed felsic and mafic metavolcanics. As at other target areas within the Central Mineral Belt property, significant levels of hematite + magnetite + albite alteration are observed in association with mineralized intervals.

## **21.9 GAYLE TARGET AREA**

Anomalous radioactivity was intersected in 2 of the 8 holes drilled, with scintillometer readings being very low in both drill holes. Little continuity was seen between outcropping uranium mineralization and subsurface testing of those zones. At this juncture, no further work is recommended on the Gayle target. Assays for all Gayle drilling completed in 2007 are currently pending.

## **22.0 RECOMMENDATIONS**

### **22.1 DISCUSSION**

As of October 31, 2007, the Corporation has completed approximately 45,000 metres of the recommended 75,000 metre Phase II diamond drilling program recommended in the previous technical report (Wilton and Giroux, 2007). The program remains in progress with results still pending, and is anticipated to have completed 55,000 by year end. The majority of the 2007 drilling to date has been focused at the Michelin (~25,000 metres) and Jacques Lake (~20,000 metres) deposits, with the remainder dedicated to testing regional targets within the CMB Property.

The 2007 drilling has continued to intersect significant widths of mineralized material, extending the previously-defined limits of both the Michelin and Jacques Lake deposits. At Michelin, the deposit has been expanded approximately 250 metres down dip on the Eastern chute, and approximately 185 metres west and down plunge of the Main Zone, with new intercepts showing comparable continuity, widths, grade and style of mineralization to the existing resource.

Drilling at Jacques Lake has increased the drilled strike length of the deposit to 900 metres, and has extended known mineralization to a vertical depth of approximately 400 metres from 275 metres. Newly intersected mineralization at Jacques Lake shows excellent continuity with the existing resource in terms of width, grade and style of mineralization.

Regional exploration drilling has successfully tested the Melody Hill, Aurora Corridor, Burnt Brook, Gayle and Inda Lake Trend targets.

In summary, to date, Phase II drilling appears to have expanded the known deposits of Jacques Lake and Michelin; extended the mineralization in the Gear occurrence by 100 metres vertical compared with the shallow historical drilling; and identified a new occurrence 15 kilometres west of Jacques Lake, called "Aurora West". Ongoing drill results have returned encouraging grades with reasonable probability for further expansion.

### **22.2 ANALYSIS**

Results to date demonstrate that both the Michelin and Jacques Lake deposits have significant potential to expand beyond their current resource boundaries. The current resource for each deposit comprises significant amounts of inferred resources (~40% at Michelin and ~50% at Jacques Lake), and the 2007 drilling to date is likely to increase this proportion at each deposit. The remaining 30,000 metres of the recommended 2007 drilling program is planned to focus on infill drilling of the resource areas to convert as much of the inferred resources to the measured and indicated mineral resource categories as possible, in preparation for pre-feasibility studies.

## 22.3 RECOMMENDATIONS

### 22.3.1 Phase III Exploration Program

Results to date from the ongoing exploration programs on the CMB Property provide encouraging results for the potential continued expansion of uranium resources on the Property. Existing resources are limited to the Michelin and Jacques Lake deposits; however, positive results from the Inda, Gear and Nash deposits, as well as, promising targets along the Aurora Corridor, including the Gayle, Burnt Brook, and Kathi deposits, and the presence of further historical resources at Rainbow, all demonstrate the excellent prospectivity of the district. Continued aggressive exploration of this emerging belt is therefore recommended for a Phase III exploration program (Table 22.1), with a portion of the exploration efforts focused on expanding the existing resources at Michelin and Jacques Lake, both of which remain incompletely tested, and another substantial portion dedicated to further delineation and testing of the additional deposits and prospects listed above.

The Phase II drilling program currently underway will be completed as recommended in the previous CMB technical report (Wilton and Giroux, 2007). This program is ongoing and includes infill drilling in the two main resource areas, comprising 8,000 metres of drilling at Jacques Lake and 22,000 metres at Michelin, 10,000 metres of which is expected to be completed by year end. The projected cost of the remaining 20,000 metres of drilling is estimated at \$8,000,000, and is anticipated to be completed by the end of the first quarter or early in the second quarter of 2008.

**Table 22.1: Recommended budget for Phase III exploration program**

Description	Cost (\$Can)
Labour*	\$4,750,000
General and Administration*	\$600,000
Capital Purchases*	\$479,762
Drilling and Assays (110,000m @ \$185/m)*	\$20,350,000
Field Geochemistry	\$100,000
Field Geophysics	\$250,000
Field Support (Heli/Plane/Fuel/etc)*	\$13,150,000
Travel and Lodging*	\$625,000
Land/Legal*	\$1,600,000
<b>Subtotal</b>	<b>\$41,904,762</b>
Contingency (5%)	2,095,238
<b>Total*</b>	<b>\$44,000,000</b>

\*Includes an aggregate of \$8,000,000 (comprised of: labour - \$750,000, general and administrative - \$100,000, capital purchases - \$44,048, drilling and assays (20,000 metres @ \$185/m) - \$3,700,000, field support - \$2,400,000, travel and lodging - \$125,000, land and legal - \$500,000, and contingency of 5% - \$380,952) to complete the Phase II exploration program currently underway, as recommended in the Corporation's technical report dated February 19th, 2007 as amended March 1st, 2007 entitled "The Exploration Activities of Aurora Energy Resources Inc. on the CMB Uranium Property, Labrador, Canada During the Period January, 2006 to January, 2007".



### 22.3.2 Engineering and Development Studies

Following completion of the current resource estimate (Wilton and Giroux, 2007), and consequent recognition of the significance of the Michelin and Jacques Lake deposits, Aurora began efforts to augment their ongoing engineering and environmental studies to meet the needs of anticipated future prefeasibility and feasibility level studies. To date, these studies are primarily conceptual and inconclusive in nature, and are laying out the framework for more detailed engineering and development studies as the project advances. It is recommended that, pending successful completion and positive results of the Phase II component of the exploration program (comprising expenditures of \$8,000,000, see Table 22.1), Aurora should further intensify their engineering and development investigations in 2008.

The recommended budget for engineering and development studies for Q4-2007 and 2008 amounts to \$13,585,000 (Table 22.2), and includes a component for completion of ongoing engineering studies (\$2,155,000) that is not contingent upon results of the Phase II exploration program, and a component for new engineering studies (\$11,430,000) that is contingent upon successful completion of the Phase II exploration program.

**Table 22.2: Recommended budget for engineering and development studies**

<b>Description</b>	<b>Cost (\$Can)</b>
Mine Engineering*	\$840,000
Process Engineering*	\$365,000
Infrastructure*	\$525,000
Geotech and Hydrogeology*	\$1,235,000
Metallurgy*	\$1,900,000
Environmental*	\$3,200,000
Equipment/Other*	\$1,480,000
Socio-economic	\$240,000
<b>Subtotal</b>	<b>\$9,785,000</b>
General and Administration*	\$3,800,000
<b>Total</b>	<b>\$13,585,000</b>

\*Includes non-contingent ongoing engineering studies to be completed in Q4-2007 (aggregating \$2,155,000; comprised of: mine engineering - \$30,000, process engineering - \$15,000, infrastructure - \$45,000, geotech and hydrogeology - \$235,000, metallurgy - \$330,000, environmental - \$320,000, equipment and other - \$480,000, and general and administration - \$700,000). The balance of each item (aggregating \$11,430,000) is contingent upon positive results of the \$8,000,000 remaining expenditures under the Phase II exploration program currently underway, as recommended in the Corporation's technical report dated February 19th, 2007 as amended March 1st, 2007 entitled "The Exploration Activities of Aurora Energy Resources Inc. on the CMB Uranium Property, Labrador, Canada During the Period January, 2006 to January, 2007".

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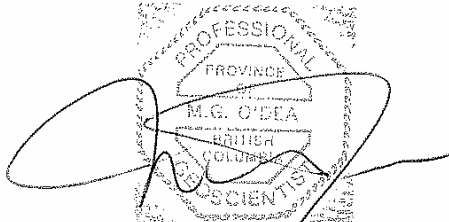
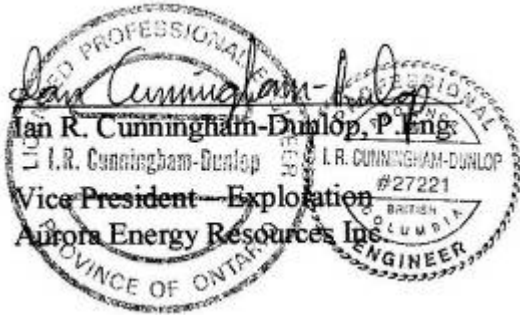
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## 24.0 DATE

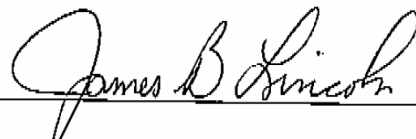
Respectfully Submitted at Vancouver, Canada, this 20<sup>th</sup> day of November, 2007 by



Mark O'Dea, Ph.D., P. Geo  
President & CEO  
Aurora Energy Resources Inc.

The image shows a handwritten signature of Mark O'Dea over a circular professional seal. The seal is for the Province of British Columbia, Professional Geoscientists, and contains the text: "PROFESSIONAL", "PROVINCE OF BRITISH COLUMBIA", "M.G. O'DEA", and "PROFESSIONAL GEOSCIENTIST".

Christopher Lee, M.Sc., P. Geo.  
Chief Geoscientist  
Aurora Energy Resources Inc.

The image shows a handwritten signature of Christopher Lee over a circular professional seal. The seal is for the Province of British Columbia, Professional Geoscientists, and contains the text: "PROFESSIONAL", "PROVINCE OF BRITISH COLUMBIA", "C.B. LEE", "#29019", and "PROFESSIONAL GEOSCIENTIST".

James B. Lincoln

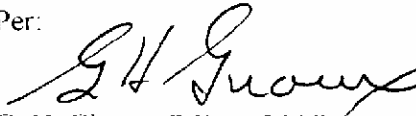
James B. Lincoln; Wyoming Professional Geologist #1087 and Registered Professional Geologist with the American Institute of Professional Geologists (P.G. 07958)

Chief Operating Officer

Aurora Energy Resources Inc.

GIROUX CONSULTANTS LTD.

Per:



G. H. Giroux, P. Eng., MASC.



## **Appendix I – Author’s Certificates and Consents**

### **Certificate of Co-Author – Derek H. C. Wilton**

7 Yellowknife St.  
St. John’s NL  
A1A 2Z7  
Tel: 709-754-6624

**I, Derek H. C. Wilton, P.Geo., do hereby certify that:**

- I am currently Professor in the Department of Earth Sciences, Memorial University of Newfoundland, Prince Phillip Parkway, St. John’s, NL, A1B 3X5
- I graduated with the degree of BSc. (Geology) from Memorial University of Newfoundland, St. John’s NL, in 1976, MSc. (Geological Sciences) from the University of British Columbia, Vancouver, BC, in 1978, and PhD. (Earth Sciences) from Memorial University of Newfoundland, St. John’s, NL, in 1984, and have worked continuously as an academic researcher and industry consultant since 1984.
- I am a Professional Geoscientist duly registered with the Professional Engineers and Geoscientists of Newfoundland and Labrador (PEG-NL – Reg. No. 02840) and am a Fellow of the Canadian Institute of Mining and Metallurgy (CIM), Geological Association of Canada, and the Society of Economic Geologists.
- I have worked as a geologist for a total of 23 years since my graduation. My relevant experience for the purpose of the Technical Report is:
  - I have conducted research and mineral exploration work in this region of Labrador since 1984.
  - I have been involved with Aurora Energy Inc. each year 2006 and with the predecessor Fronteer-Altius Joint Venture from initiation of work in 2003.
- I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI432-101”) and certify that by reason of my education, affiliation with professional associations (as deemed in NI43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
- I am responsible for the preparation of the sections from the report entitled “An Update on the Exploration Activities of Aurora Energy Resources Inc. on the CMB Uranium Property, Labrador, Canada During the Period January 1, 2007 to October 31, 2007”, dated November 20, 2007, that were derived from an earlier technical report entitled “The Exploration Activities of Aurora Energy Inc. on the CMB Uranium Property” that I co-authored with Mr. Gary Giroux. I have worked on the property in a consulting capacity since July, 2003. I was last on site at the CMB Uranium Property from July 3-7, 2007.
- As of November 20<sup>th</sup>, 2007 and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading and I have



the disclosure being filed and it fairly and accurately represents the information in the Technical Report and supports that disclosure.

- I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which make the Technical Report misleading.
- I am independent of the issuer applying all the tests in Section 1.5 of National Instrument 43-101 and I hold no securities of the Aurora Energy Inc. and do not expect to receive same.
- I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 20<sup>th</sup> day of November, 2007 in St. John's, NL, Canada



Derek H. C. Wilton, P.Geol.

## Certificate of Co-Author - G. H. Giroux


I, **G.H. Giroux**, of 982 Broadview Drive, North Vancouver, British Columbia, do hereby certify that:

- 1) I am a consulting geological engineer with an office at #1215 - 675 West Hastings Street, Vancouver, British Columbia.
- 2) I am a graduate of the University of British Columbia in 1970 with a B.A.Sc. and in 1984 with a M.A.Sc. both in Geological Engineering.
- 3) I have practiced my profession continuously since 1970. I have completed resource estimation studies for over 30 years on a wide variety of base and precious metal deposits, many with similar characteristics to Michelin.
- 4) I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
- 5) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of an Independent Qualified Person as defined in National Policy 43-101.5
- 6) This report titled "An Update on the exploration activities of Aurora Energy Resources Inc. on the CMB Uranium Property, Labrador Canada during the period January 1, 2007 to October 31, 2007" and dated November 20<sup>th</sup>, 2007 ("Technical Report") is based on a study of the available data and literature for the Michelin and Jacques Lake Uranium Deposits. I am responsible for the resource estimation section of this report. The work was completed in Vancouver during September 2006 to February 2007. I have visited the property from August 29 to 30, 2006.
- 7) I have not previously worked on this property.
- 8) As of the date of this certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
- 9) I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.
- 10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated this 20<sup>th</sup> day of November, 2007

GIROUX CONSULTANTS LTD.

Per:

  
G. H. Giroux, P.Eng., M.A.Sc.



## CERTIFICATE AND CONSENT

To accompany the Technical Report on the CMB Property, Labrador, Canada, dated November 20<sup>th</sup>, 2007

I, **Ian R. Cunningham-Dunlop, P. Eng.**, do hereby certify that:

- 1) I am a geological engineer residing at 2519 Swinburne Avenue, North Vancouver, B.C., and employed by Aurora Energy Resources Inc. as Vice President – Exploration.
- 2) I am a graduate of Queen’s University in Kingston, Ontario, Canada with a Bachelor of Applied Science (Geological Engineering) in 1984.
- 3) I have worked continuously in the industry since 1984 and my relevant experience for the purpose of the Technical Report is:
  - Supervision of numerous mineral exploration programs on properties in Canada, Argentina, and Turkey for Gold Fields Canadian Mining Ltd., Santa Fe Canadian Mining Ltd., Homestake Canada Limited, Barrick Gold Corp., Rubicon Minerals Corp., and Fronteer Development Group Inc..
  - Currently employed by Aurora Energy Resources Inc. since January 1<sup>st</sup>, 2006 as Vice President – Exploration and personally oversaw the field work carried out on the property in the years 2005 and 2006 and, in particular, the period January 1, 2007 and October 31, 2007.
- 4) I am a member of the Association of Professional Engineers of Ontario (PEO – Reg. No. 10161503), the Association of Professional Engineers and Geoscientists of B.C (APEGBC – Reg. No. 27221), the Association of Professional Engineers and Geoscientists of Newfoundland and Labrador (PEG – Reg. No. 04385), the Prospectors and Developers Association of Canada, and the Canadian Institute of Mining and Metallurgy,
- 5) I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with professional associations (as deemed in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” (QP) for the purposes of NI 43-101.
- 6) I am responsible for the updated exploration information collected during the 2007 CMB exploration program described in this report, the revised disclosure of information relating to the 2006 CMB exploration program in Section 12.4, and share responsibility, along with the three other Company Qualified Persons (Christopher Lee, Mark O’Dea and Jim Lincoln), for the preparation of Section 22.0 Recommendations, of the report entitled **“An Update on the Exploration Activities of Aurora Energy Resources Inc. on the CMB Uranium Property, Labrador, Canada, during the period January 1, 2007 to October 31, 2007”**, dated November 20<sup>th</sup>, 2007, relating to the CMB Property. I have worked on the property in a technical capacity since 2004 and personally overseen all the field work carried out on the property between January 2004 and October 2007.

- 7) As of November 20<sup>th</sup>, 2007, and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading and I have read the disclosure being filed and it fairly and accurately represents the information in the Technical Report that supports the disclosure.
- 8) I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which make the Technical Report misleading.
- 9) I am not independent of the issuer applying all the tests in Section 1.5 of National Instrument 43-101 and acknowledge that I hold securities of Aurora Energy Resources in the form of stock option.
- 10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 11) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 20<sup>st</sup> day of November, 2007 in Vancouver, B.C.



## **CERTIFICATE AND CONSENT**

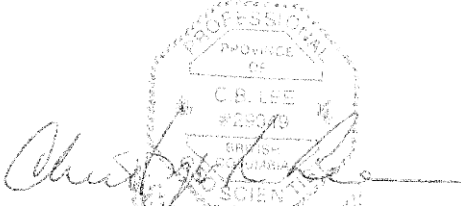
**To accompany the Technical Report on the CMB Property, Labrador, Canada, dated  
November 20<sup>th</sup>, 2007**

I, **Christopher Lee**, P. Geo., do hereby certify that:

- 1) I am a geologist residing at 303-141 Water Street, Vancouver, BC, V6B 1A7, and employed by Aurora Energy Resources Inc., as Chief Geoscientist.
- 2) I am a graduate of the University of Waterloo, with an Honours B.Sc. Co-op in Geology, 1991, and I obtained a M.Sc. in Geology from the Memorial University of Newfoundland in 1994. I have practiced my profession continuously since 1991;
- 3) I am a Professional Geoscientist registered in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (#29049);
- 4) I have worked on the property continuously since January 15<sup>th</sup>, 2007 and have relevant experience having led or participated in geological studies supporting more than 60 advanced exploration and development projects and/or operations, in 15 different countries.
- 5) I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with professional associations (as deemed in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” (QP) for the purposes of NI 43-101.
- 6) I share responsibility, along with the three other Company QP’s (Mark O’Dea, Ian Cunningham-Dunlop and Jim Lincoln), for the preparation of Section 22.0 Recommendations, of the report entitled “An Update on the exploration activities of Aurora Energy Resources Inc. on the CMB Uranium Property, Labrador, Canada, during the period January 1, 2007 to October 31, 2007”, dated November 20<sup>th</sup>, 2007, relating to the CMB Property. I have worked on the property in a technical capacity since January 15, 2007 and personally visited the site most recently in August 2007.
- 7) As of November 20, 2007, and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading and I have read the disclosure being filed and it fairly and accurately represents the information in the Technical Report that supports the disclosure.

- 8) I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which make the Technical Report misleading.
- 9) I am not independent of the issuer applying all the tests in Section 1.5 of National Instrument 43-101 and acknowledge that I hold securities of the Aurora Energy Resources Inc. in the form of stock option.
- 10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 11) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 20<sup>st</sup> day of November, 2007 in Vancouver, B.C.



---

Christopher Lee, M.Sc., P.Geo.  
Chief Geoscientist  
Aurora Energy Resources Inc.

## **CERTIFICATE AND CONSENT**

**To accompany the Technical Report on the CMB Property, Labrador, Canada, dated  
November 20<sup>th</sup>, 2007**

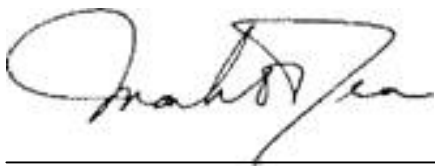
I, **Mark O'Dea**, Ph.D., P. Geo., do hereby certify that:

- 1) I am a geologist residing at 1671 Coldwell Road, North Vancouver, BC, and employed by Aurora Resources Energy Inc. as President and CEO.
- 2) I am a graduate of Carleton University of Ottawa, with an Honours B.Sc. in Geology, 1989, and I obtained a Ph.D in Geology from Monash University, Australia in 1996.
- 3) I have practiced my profession continuously since 1989, and my relevant experience for the purposes of this report is;
  - I have been technically involved in all programs related to the CMB Property since 2003,
  - I have been involved in a wide variety of advanced base and precious metals exploration and development projects many of them of similar scale and scope as the CMB project.
- 4) I am a Professional Geoscientist registered in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (#24220);
- 5) I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with professional associations (as deemed in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” (QP) for the purposes of NI 43-101.
- 6) I share responsibility, along with the three other Company QP’s (Christopher Lee, Ian Cunningham-Dunlop and Jim Lincoln), for the preparation of Section 22.0 Recommendations, of the report entitled “An Update on the exploration activities of Aurora Energy Resources Inc. on the CMB Uranium Property, Labrador, Canada, during the period January 1, 2007 to October 31, 2007”, dated November 20<sup>th</sup>, 2007, relating to the CMB Property. I have worked on the property in a technical capacity since 2004 and personally visited the site most recently in July 2007.
- 7) As of November 20, 2007, and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading and I have

read the disclosure being filed and it fairly and accurately represents the information in the Technical Report that supports the disclosure.

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- 10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 11) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 20<sup>th</sup> day of November, 2007 in Vancouver, B.C.

A handwritten signature in black ink, appearing to read 'Mark O'Dea', is written over a horizontal line.

Mark O'Dea, *Ph.D, P.Geo*  
President & CEO  
Aurora Energy Resources Inc.



## **CERTIFICATE AND CONSENT**

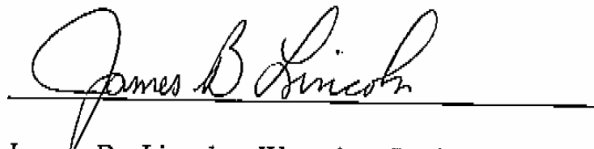
**To accompany the Technical Report on the CMB Property, Labrador, Canada, dated November 20<sup>th</sup>, 2007**

I, **James B. Lincoln**, P. Geo., do hereby certify that:

- 1) I am a geologist residing at 3790 US Hwy 89 South, Livingston, Montana, 59047 United States of America, and I am employed by Aurora Resources Energy Inc. as Chief Operating Officer.
- 2) I am a graduate of Eastern Michigan University with a B.Sc. Degree in Geology with a Chemistry minor in 1967; and also a graduate of the Ohio State University in 1969 with a M.Sc. Degree in Mineralogy from the College of Materials Engineering. I have practiced geology since 1971 to the present time.
- 3) My relevant experience includes technical and management positions with the following mining companies: Boliden Canada, Cominco, Pegasus Gold Corp., Dayton Mining Corp., Mount Isa Mines, North Star Exploration, Jinshan Gold Mines, Inc., Fronteer Development Group Inc. and Aurora Energy Resources Inc. I have also consulted in the mineral resource industry internationally and domestically. I have worked or conducted consulting in the mining industry in 31 countries.
- 4) I am a Professional Geologist registered in good standing with the State of Wyoming Board of Professional Geologists (PG-1087); and also, a registered Professional Geologist with American Institute of Professional Geologists ( P.G. 07958).
- 5) I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with professional associations (as deemed in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” (QP) for the purposes of NI 43-101.
- 6) I share responsibility, along with the three other Company QP’s (Mark O’Dea, Ian Cunningham-Dunlop and Chris Lee), for the preparation of Section 22.0 Recommendations, of the report entitled “An Update on the exploration activities of Aurora Energy Resources Inc. on the CMB Uranium Property, Labrador, Canada, during the period January 1, 2007 to October 31, 2007”, dated November 20<sup>th</sup>, 2007, relating to the CMB Property. I have worked on the property in a technical capacity since March 2006 and personally visited the site most recently in October 2007. I have been on site in a technical and professional capacity over 15 times during the course of my tenure with Aurora Energy Resources Inc.

- 7) As of November 20, 2007, and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading and I have read the disclosure being filed and it fairly and accurately represents the information in the Technical Report that supports the disclosure.
- 8) I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which make the Technical Report misleading.
- 9) I am not independent of the issuer applying all the tests in Section 1.5 of National Instrument 43-101 and acknowledge that I hold securities of both Aurora Energy Resources Inc. and the Fronteer Development Group Inc. in the form shares of stock and stock option agreements.
- 10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 11) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 20th day of November, 2007 in Denver, Colorado, United States of America

A handwritten signature in black ink, reading "James B. Lincoln", is written over a horizontal line.

James B. Lincoln; Wyoming Professional Geologist #1087 and Registered Professional Geologist with the American Institute of Professional Geologists (P.G. 07958)

Chief Operating Officer

Aurora Energy Resources Inc.

## Appendix II – 2007 DDH Program – Summary of Holes by Area

### Aurora Corridor Target

# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
<b>AC Data = NAD 83, zone 21</b>							
1	AR07-001	321142	6060904	259	355	-45	99.36
2	AR07-002	321142	6060904	259	355	-75	319.74
3	AR07-003	321324	6060931	280	355	-45	373.67
4	AR07-004	321324	6060931	280	355	-75	93.27
5	AR07-005	321351	6060920	280	22	-45	104.24
6	AR07-006	321351	6060920	280	22	-51	96.62
7	AR07-007	321351	6060920	280	8	-45	102.72
8	AR07-008	322555	6060992	314	332	-45	255.12
9	AR07-009	322555	6060992	314	332	-75	93.57
10	AR07-010	322678	6061009	312	332	-45	163.07
11	AR07-011	322678	6061009	312	332	-75	146.91
12	AR07-012	321202	6060755	317	355	-45	199.03
12							<b>2,047.32</b>

### Burnt Brook Target

# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
<b>BB Data = NAD 83, zone 21</b>							
1	BB07-001	329741	6063335	257.8	310	-45	300.23
2	BB07-002	329776	6063300	244.8	310	-45	168.86
3	BB07-003	329776	6063300	244.8	310	-75	174.96
4	BB07-004	329684	6063249	255.6	310	-45	157.89
5	BB07-005	329727	6063215	250.8	310	-45	243.54
6	BB07-006	329900	6063290	240	290	-45	224.64
7	BB07-007	329938	6063328	245	310	-45	145.39
8	BB07-008	329938	6063328	245	310	-70	70.32
9	BB07-009	329906	6063202	233	310	-45	218.54
10	BB07-010	329848	6063373	245	310	-45	124.05
10	Total						<b>1,828.42</b>

### Gayle Target

# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
<b>Gayle Data = NAD 83, zone 21</b>							
1	GL07-001	331690	6065827	237.3	310	-65	91.44
2	GL07-002	331690	6065827	237.3	310	-45	103.63
3	GL07-003	331733	6065868	235.6	310	-45	106.38
4	GL07-004	331733	6065868	235.6	310	-70	102.41
5	GL07-005	331506	6065793	233.5	310	-45	102.72
6	GL07-006	331506	6065793	233.5	310	70	124.05
7	GL07-007	331602	6065804	232	310	-50	124.05
8	GL07-008	331549	6065647	244	310	-50	206.65
8	Total						<b>961.33</b>

### Gear Target

# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
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Gear Data = NAD 83, zone 21							
1	G07-004	337207	6091247	145	298	-75	411.18
2	G07-005	337248	6091147	143	300	-55	438.00
3	G07-006**	337248	6091147	143	300	-70	459.64
4	G07-007*	337248	6091147	143	300	-45	111.86
5	G07-007A	337248	6091147	143	300	-50	377.34
6	G07-008	337180	6091481	162	300	-45	135.33
6	* denotes abandoned drillhole, **denotes drill not reaching target depth						1,933.35

#### Inda Target

# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
Inda Data = NAD 83, zone 21							
1	I07-002	334790	6089401	108	325	-68	432.21
2	I07-008*	334794	6089245	112	320	-50	89.00
3	I07-008A	334794	6089245	112	320	-58	482.00
4	I07-003	334543	6089207	113	330	-50	235.00
5	I07-004	334543	6089207	113	330	-65	358.75
6	I07-005	334464	6089176	112	320	-50	215.00
7	I07-006	334464	6089176	112	320	-72	320.00
8	I07-007	334464	6089176	112	320	-85	392.00
8	* denotes abandoned drillhole						2,523.96

#### Jacques Lake Deposit

# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
Jacques Lake Data = NAD 83, zone 21							
1	JL07-052	333132	6066001	270	315	-55	550.16
2	JL07-053	333176	6066031	283	315	-55	541.02
3	JL07-054	333132	6066001	270	315	-68	799.19
4	JL07-055	333176	6066031	283	315	-68	736.09
5	JL07-056	333132	6066001	270	315	-80	1,061.62
6	JL07-057	333176	6066031	283	315	-80	1,075.25
7	JL07-058	332848	6066173	191	315	-45	104.90
8	JL07-058A	332848	6066173	191	315	-45	257.56
9	JL07-059	332778	6066146	189	315	-45	226.47
10	JL07-060	332893	6066044	223	315	-50	339.84
11	JL07-061	332893	6066044	223	315	-60	373.68
12	JL07-062	332893	6066044	223	315	-75	380.09
13	JL07-063	332853	6066004	223	315	-50	355.40
14	JL07-064*	333132	6066001	270	315	-45	183.48
15	JL07-065	332853	6066004	223	315	-60	372.16
16	JL07-066	333132	6066001	270	300	-50	557.78
17	JL07-067	332853	6066004	223	315	-75	395.63
18	JL07-068	332931	6066083	235	315	-50	349.61
19	JL07-069	332778	6065935	209	315	-45	377.04
20	JL07-070	332962	6065972	235	315	-75	477.93
21	JL07-071	333104	6065963	258	300	-50	504.75
22	JL07-072	332902	6065892	229	315	-60	593.01
23	JL07-073	332900	6065894	228	315	-50	439.83
24	JL07-074	332813	6065878	211	310	-60	440.44
25	JL07-075	333104	6065963	258	300	-68	610.82

26	JL07-076	332749	6065799	207	325	-57	465.73
27	JL07-077*	333094	6065803	230	315	-48	215.49
28	JL07-078	333094	6065803	230	315	-56	691.29
29	JL07-079	333041	6065743	233	315	-56	732.74
29	* denotes abandoned drillhole						14,209.00

#### Melody Lake Target

# Holes	Hole_ID	UTM_East	UTM_North	Zone	Elev. (m)	Azimuth	Dip	TD (m)
ML Data = NAD 83, zone 20 & 21								
1	ML07-001	692069	6063574	20	~270	72.5	-45.5	304.80
2	ML07-002	692068	6063575	20	~270	350	-45	18.90
3	ML07-003	692068	6063575	20	~270	350	-55	16.80
4	ML07-004	692068	6063575	20	~270	350	-60	365.85
5	ML07-005	698068	6063572	20	~270	170	-55	342.60
6	ML07-006	692393	6063096	20	~265	45	-45	305.71
7	ML07-007	693436	6062169	20	~265	161	-45	306.93
8	ML07-008	306605	6061953	21	~200	235	-45	21.34
9	ML07-009	306605	6061953	21	~200	235	-50	301.14
10	ML07-010	693436	6062169	20	~200	161	-85	163.37
11	ML07-011	306605	6061953	21	~200	163	-45	285.60
12	ML07-012	693436	6062169	20	~200	115	-45	272.49
13	ML07-013	693436	6062169	20	~200	330	-45	304.88
14	ML07-014	306605	6061953	21	~200	163	-60	365.76
14	Total							3,376.17

#### Michelin Deposit

# Holes	Hole_ID	UTM_East	UTM_North	Grid_East	Grid_North	Elev. (m)	Azimuth	Dip	TD (m)
Michelin Data = NAD 83, zone 21									
Shallow Eastern Exploration									
1	M07-046	307634	6052819	-112	-60	338	329	-45	123.75
2	M07-047	307634	6052819	-112	-60	338	329	-75	154.23
3	M07-048	307820	6052920	100	-50	339	332	-45	137.77
4	M07-049	307820	6052920	100	-50	339	332	-75	182.88
5	M07-050	307634	6052819	-112	-60	338	329	-90	185.32
6	M07-052	307.82	6052920	100	-50	339	332	-90	93.57
7	M07-053	307910	6052963	200	-50	340	332	-45	93.27
8	M07-054	307910	6052963	200	-50	340	332	-85	108.81
9	M07-055	308045	6052920	300	-150	341	330	-45	214.88
10	M07-056	308045	6052920	300	-150	341	330	-80	165.33
11	M07-057	308259	6052942	501	-224	340	328	-62	214.88
11									1,674.69
Main Zone - Down-plunge Extension									
1	M07-045	306731	6051613	-1446	-752	342	316	-79	183.49
2	M07-051	306731	6051613	-1446	-752	342	311	-72	831.40
3	M07-059	306731	6051613	-1446	-752	342	311	-66	776.33
4	M07-061	306731	6051613	-1446	-752	342	316	-62	707.29
5	M07-069	306768	6051631	-1405	-753	342	318	-80	833.09
6	M07-070	306607	6051519	-1598	-782	341	326	-78	867.02
7	M07-070A	306607	6051519	-1598	-782	341	326	-78	308.54
8	M07-070B	306607	6051519	-1598	-782	341	326	-78	15.00
9	M07-070C	306607	6051519	-1598	-782	341	326	-78	266.00

10	M07-075	306559	6051401	-1693	-866	343	322	-85	776.18
11	M07-075A	306559	6051401	-1693	-866	343	322	-85	560.50
12	M07-079+	306607	6051519	-1598	-782	341	326	-71	553.00
13	M07-080+	306798	6051373	-1489	-997	349.6	322	-79	545.00
<b>13</b>									<b>7,222.84</b>

#### Eastern Shoot - Down-plunge Extension

1	M07-058	307379	6052218	-601	-491	352	332	-50	504.14
2	M07-060	307379	6052218	-601	-491	352	332	-65	98.76
3	M07-060A	307379	6052218	-601	-491	352	332	-68	537.67
4	M07-065	307294	6052158	-704	-508	348	332	-53	549.55
5	M07-066	307294	6052158	-704	-508	348	332	-59	556.26
6	M07-067	307294	6052158	-704	-508	348	332	-65	559.56
7	M07-068	307215	6052122	-791	-506	346	328	-55	175.26
8	M07-068A	307215	6052122	-791	-506	346	328	-55	508.41
9	M07-071	307215	6052122	-791	-506	346	328	-63	276.76
10	M07-072	307215	6052122	-791	-506	346	328	-73	612.04
11	M07-073	307479	6052250	-498	-506	354	330	-54	539.84
12	M07-074	307215	6052122	-791	-506	346	328	-66	569.72
13	M07-076	307479	6052250	-498	-506	354	328	-65	601.00
14	M07-077	307479	6052250	-498	-506	354	330	-76	691.00
15	M07-078	307556	6052316	-401	-481	348	330	-56	568.00
16	M07-081+	307431	6052096	-609	-624	359	326	-64	133.00

**16** \* denotes hole in progress at time of writing of report

**7,480.97**

#### Confirmation Drilling

1	M07-062	306993	6052545	-806	-27	334	332	-90	148.74
2	M07-063	306993	6052545	-806	-27	334	332	-65	99.97
3	M07-064	306993	6052545	-806	-27	334	332	-45	80.77

**3** **329.48**

#### Total Michelin Drilling

<b>43</b>									<b>16,707.98</b>
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#### Nash Target

# Holes	Hole_ID	UTM_East	UTM_North	Elev. (m)	Azimuth	Dip	TD (m)
Nash Data = NAD 83, zone 21							
1	<b>N07-003</b>	331834	6087373	169	315	-50	272.00
2	<b>N07-004</b>	331834	6087373	169	315	-75	344.00
3	<b>N07-005</b>	331916	6087417	177	315	-55	263.00
4	<b>N07-006</b>	331964	6087343	156	315	-72	419.00
<b>4</b>							<b>1,298.00</b>

#### Grand Total

<b>134</b>							<b>44,885.53</b>
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### Appendix III – 2007 DDH Program – Summary of Assay Composites by Area

**Summary of 2007 Michelin Assay Composites**

Hole ID	From (m)	To (m)	Length (m)	% U3O8
<b>M07-045A</b>	761.09	766.70	5.61	0.13
Incl	762.09	763.01	0.92	0.22
<b>M07-046</b>	69.40	70.40	1.00	0.03
<b>M07-047</b>	103.76	105.36	1.60	0.12
<b>M07-048</b>	40.33	42.33	2.00	0.04
<b>M07-049</b>	51.04	54.53	3.49	0.10
Incl	53.78	54.53	0.75	0.16
<b>M07-050</b>	NSV			
<b>M07-051</b>	722.24	729.77	7.53	0.12
Incl	722.24	723.38	1.14	0.34
Incl	725.38	726.77	1.39	0.17
<b>M07-052</b>	NSV			
<b>M07-053</b>	NSV			
<b>M07-054</b>	NSV			
<b>M07-055</b>	NSV			
<b>M07-056</b>	159.95	160.85	0.90	0.03
<b>M07-057</b>	NSV			
<b>M07-058</b>	437.24	448.93	11.69	0.09
Incl	439.12	444.13	5.01	0.17
Incl	440.12	443.12	3.00	0.20
<b>M07-059</b>	654.92	669.92	15.00	0.11
Incl	654.92	659.92	5.00	0.14
Incl	654.92	655.92	1.00	0.21
Incl	662.76	664.76	2.00	0.16
<b>M07-060A</b>	501.00	507.80	6.80	0.16
Incl	504.00	506.00	2.00	0.24
<b>M07-061</b>	NSV			
<b>M07-062</b>	31.01	75.93	44.92	0.06
Incl	32.51	50.20	17.69	0.11
Incl	43.84	49.18	5.34	0.23
Incl	54.92	56.42	1.50	0.10
And	88.83	92.34	3.51	0.20
<b>M07-063</b>	24.26	63.57	39.31	0.06
Incl	25.76	40.90	15.14	0.10
Incl	31.29	34.89	3.60	0.25
Incl	50.69	52.76	2.07	0.11
Incl	62.51	63.57	1.06	0.19
<b>M07-064*</b>	20.98	54.40	33.42	0.06
*5 feet missing - drilled through Brinex adit				
Incl	22.83	33.81	10.98	0.09
Incl	24.04	28.96	4.92	0.14
Incl	27.70	28.96	1.26	0.24
Incl	46.18	54.40	8.22	0.11
Incl	48.68	51.18	2.50	0.20

<b>M07-065</b>	374.18	378.22	4.04	0.08
Incl	374.18	376.72	2.54	0.11
Incl	374.18	375.12	0.94	0.20
And	452.90	459.43	6.53	0.16
Incl	453.77	455.47	1.70	0.30
And	473.13	478.37	5.24	0.06
Incl	473.13	474.63	1.50	0.10
Incl	477.37	478.37	1.00	0.10
<b>M07-066</b>	476.31	485.22	8.91	0.15
Incl	479.31	485.22	5.91	0.20
Incl	480.22	481.22	1.00	0.38
Incl	483.22	484.22	1.00	0.31
<b>M07-067</b>	509.41	509.91	0.50	0.16
And	515.19	532.88	17.69	0.06
Incl	515.19	520.50	5.31	0.11
And Incl	517.65	519.07	1.42	0.16
<b>M07-068A</b>	444.54	445.54	1.00	0.04
and	446.54	447.60	1.06	0.03
<b>M07-069</b>	757.90	767.40	9.50	0.25
Incl	758.90	766.40	7.50	0.31
Incl	758.90	759.40	0.50	1.80
<b>M07-070</b>	NSV			
<b>M07-072</b>	423.80	429.88	6.08	0.06
And	547.40	557.50	10.10	0.24
Incl	550.50	553.50	3.00	0.25
Incl	554.50	557.50	3.00	0.39
<b>M07-073</b>	283.00	284.00	1.00	0.13
And	326.00	329.00	3.00	0.07
And	455.00	457.00	2.00	0.09
<b>M07-074</b>	495.07	499.30	4.23	0.08
Incl	498.71	499.30	0.59	0.16
And	511.80	512.80	1.00	0.09
<b>M07-075</b>	Assays pending at time of writing of report			
<b>M07-076</b>	Assays pending at time of writing of report			
<b>M07-077</b>	Assays pending at time of writing of report			
<b>M07-078</b>	Assays pending at time of writing of report			
<b>M07-079</b>	Drill hole in progress at time of writing of report			
<b>M07-080</b>	Drill hole in progress at time of writing of report			
<b>M07-081</b>	Drill hole in progress at time of writing of report			

### Summary of 2007 Jacques Lake Assay Composites

Hole ID	From	To	Interval	%U3O8
<b>JL07-052</b>	295.96	296.96	1.00	0.08
and	408.50	413.50	5.00	0.06
<b>JL07-053</b>	306.50	312.50	6.00	0.06
incl.	309.43	310.00	0.57	0.14
and	397.00	398.00	1.00	0.04
and	444.47	445.50	1.03	0.06
and	448.50	448.95	0.45	0.06



<b>JL07-054</b>	310.00	311.00	1.00	0.03
<b>JL07-055</b>	362.11	363.11	1.00	0.06
and	378.72	379.72	1.00	0.07
and	499.75	500.75	1.00	0.05
<b>JL07-057</b>	895.50	897.50	2.00	0.07
<b>JL07-058</b>	17.00	24.00	7.00	0.09
incl.	19.00	20.00	1.00	0.20
and	30.00	33.50	3.50	0.05
incl.	32.50	33.50	1.00	0.10
and	95.00	97.00	2.00	0.05
<b>JL07-058A</b>	16.24	23.24	7.00	0.09
incl.	17.24	20.24	3.00	0.15
and	25.24	26.24	1.00	0.08
and	32.25	34.64	2.39	0.09
and	125.50	126.50	1.00	0.03
and	191.00	192.00	1.00	0.05
<b>JL07-059</b>	90.50	92.50	2.00	0.08
<b>JL07-060</b>	120.28	133.50	13.22	0.09
incl.	120.28	124.50	4.00	0.15
and incl	126.50	127.50	1.00	0.22
and	158.88	159.88	1.00	0.04
and	190.50	192.50	2.00	0.04
and	195.50	195.60	0.10	0.04
and	215.25	225.60	10.35	0.05
incl.	220.60	221.60	1.00	0.12
and	242.00	253.00	11.00	0.12
incl.	243.00	244.00	1.00	0.25
incl.	246.00	251.00	5.00	0.15
and	270.95	273.95	3.00	0.07
and	296.75	304.50	7.75	0.03
<b>JL07-061</b>	126.37	141.39	15.02	0.15
incl.	126.37	133.37	7.00	0.21
and	172.04	172.52	0.48	0.08
and	224.11	229.96	5.85	0.06
incl.	228.96	229.96	1.00	0.17
and	233.96	234.96	1.00	0.56
and	237.96	238.96	1.00	0.04
and	256.36	257.11	0.75	0.15
and	288.95	293.20	4.25	0.18
<b>JL07-062</b>	164.00	190.00	26.00	0.11
incl.	166.00	168.00	2.00	0.14
incl.	174.00	177.00	3.00	0.21
incl.	180.00	181.00	1.00	0.20
incl.	188.00	189.00	1.00	0.19
and	230.00	233.00	3.00	0.11
incl.	232.00	233.00	1.00	0.19
<b>JL07-065</b>	119.00	135.50	16.50	0.09
incl.	119.00	121.00	2.00	0.20
incl.	124.00	127.47	3.47	0.19
and	263.00	264.00	1.00	0.04

and	269.00	270.00	1.00	0.04
and	274.50	284.31	9.81	0.07
incl.	281.00	284.31	3.31	0.12
<b>JL07-066</b>	370.00	412.50	42.50	0.12
incl.	370.00	373.00	3.00	0.23
incl.	374.40	375.00	0.60	0.19
incl.	384.00	385.00	1.00	0.17
incl.	387.50	390.85	3.35	0.37
incl.	392.50	397.50	5.00	0.27
incl.	400.50	401.50	1.00	0.15
incl.	404.50	406.50	2.00	0.20
<b>JL07-067</b>	155.81	158.00	2.19	0.05
and	169.75	173.50	3.75	0.03
and	199.50	206.00	6.50	0.05
and	387.53	388.03	0.50	0.04
<b>JL07-069</b>	279.35	280.35	1.00	0.04
and	306.50	307.50	1.00	0.05
<b>JL07-070</b>	401.00	418.00	17.00	0.12
incl.	408.00	412.00	4.00	0.27
<b>JL07-071</b>	Assays pending at time of writing of report			
<b>JL07-072</b>	Assays pending at time of writing of report			
<b>JL07-073</b>	Assays pending at time of writing of report			
<b>JL07-073</b>	Assays pending at time of writing of report			
<b>JL07-074</b>	Assays pending at time of writing of report			
<b>JL07-075</b>	Assays pending at time of writing of report			
<b>JL07-076</b>	Assays pending at time of writing of report			
<b>JL07-077</b>	Assays pending at time of writing of report			
<b>JL07-078</b>	Assays pending at time of writing of report			
<b>JL07-079</b>	Assays pending at time of writing of report			

### Summary of 2006 Melody Hill Assay Composites

Hole ID	From	To	%U3O8	Interval
<b>ML07-001</b>	NSV			
<b>ML07-002</b>	NSV			
<b>ML07-003</b>	NSV			
<b>ML07-004</b>	NSV			
<b>ML07-005</b>	NSV			
<b>ML07-006</b>	NSV			
<b>ML07-007</b>	41.35	42.05	0.073	0.70
<b>ML07-008</b>	NSV			
<b>ML07-009</b>	NSV			
<b>ML07-010</b>	NSV			
<b>ML07-011</b>	52.29	53.29	0.054	1.00
and	60.41	61.41	0.105	1.00
and	108.81	109.44	0.089	0.63
<b>ML07-012</b>	NSV			
<b>ML07-013</b>	NSV			
<b>ML07-014</b>	NSV			

### Summary of 2007 Aurora Corridor Assay Composites

Hole ID	From	To	%U3O8	Interval
<b>AR07-001</b>	30.07	30.82	0.08	0.75
<b>AR07-002</b>	37.00	39.00	0.11	2.00
incl.	37.00	38.00	0.15	1.00
and	49.00	50.50	0.19	1.50
incl.	50.00	50.50	0.48	0.50
<b>AR07-003</b>	34.80	35.30	0.03	0.50
<b>AR07-005</b>	44.80	45.15	0.10	0.35
<b>AR07-008</b>	35.66	40.53	0.08	4.87
incl.	39.66	40.53	0.15	0.87
<b>AR07-009</b>	49.95	50.95	0.19	1.00
<b>AR07-010</b>	17.05	21.55	0.06	4.50
incl.	20.05	21.55	0.11	1.50
<b>AR07-011</b>	23.05	30.05	0.07	7.00
incl.	23.05	24.55	0.16	1.50
And incl.	28.05	30.05	0.14	2.00
<b>AR07-012</b>	Results Pending			

### Summary of 2007 Gear Assay Composites

Hole ID	From_m	To_m	Length	U3O8_ %
<b>G07-004</b>	Assays pending			
<b>G07-005</b>	346.00	369.00	23.00	0.09
incl.	358.00	368.00	10.00	0.17
and incl.	361.00	366.00	5.00	0.21
and incl.	363.00	364.00	1.00	0.38
<b>G07-006</b>	Assays pending			
<b>G07-007A</b>	323.00	330.00	7.00	0.16
<b>G07-008</b>	Assays pending			

## Appendix IV – Actlabs Analytical Methods – Rock Sample Preparation (RX-1)

### Rock Sample Preparation Procedure ([www.actlabs.com](http://www.actlabs.com))

0 [PRINT](#) [EMAIL](#)

To obtain meaningful analytical results, it is imperative that sample collection and preparation be done properly. ACTLABS can advise on sampling protocol for your field program if requested. Once the samples arrive in the laboratory, ACTLABS will ensure that they are prepared properly. As a routine practice with rock and core, the entire sample is crushed to a nominal minus 10 mesh (1.7 mm), mechanically split (riffle) to obtain a representative sample and then pulverized to at least 95% minus 150 mesh (106 microns).

As a routine practice, we will automatically use cleaner sand between each sample at no cost to the customer. Quality of crushing and pulverization is routinely checked as part of our quality assurance program. Randomization of samples in larger orders (>100) provides an excellent means to monitor data for systematic errors. The data is resorted after analysis according to sample number. Please request **Code Random** (additional \$1.00/sample) if you prefer randomization.

Samples submitted in an unorganized fashion will be subject to a sorting surcharge and may substantially slow turnaround time. Providing an accurate detailed sample list by e-mail will also aid in improving turnaround time and for Quality Control purposes.

Additional charges may apply for poorly organized batches. **Code CP2** - Sample list not provided for orders over 25 samples (\$0.25/sample); **Code CP3** - Sorting chaotic shipments (\$0.50/sample).

Code	Description	Price (USD)
Code RX1	crush up to 75% passing 2 mm, split (250 g) and pulverize (hardened steel) to 85% passing 75m (< 5 kg)	\$6.50
Code RX1 Terminator	crush up to 90% passing 2 mm, split (250 g) and pulverize (hardened steel) to 85% passing 75m (< 5 kg)	\$7.25
Code RX2	crush, split and pulverize with mild steel (100 g) (best for low contamination)	\$6.75
Code RX3	oversize charge per kilogram (if required)	\$1.50
Code RX4	pulverization only (mild steel) (coarse pulp or crushed rock)	\$5.00
Code RX5	pulverize ceramic (100 g)	\$12.25
Code RX6	hand pulverize small samples (agate mortar and pestle)	\$12.25
Code RX7	crush only (split)	\$3.75
Code RX8	sample prep only surcharge, no analyses	\$2.00
Code RX9	compositing (per composite)	\$2.00
Code RX10	dry drill cuttings in plastic bags	\$1.75
Code RX11	checking quality of pulps or rejects prepared by other labs and issuing report	\$6.75

#### Rock, Core and Drill Cuttings

Note: Larger sample sizes than listed above can be pulverized at additional cost.

#### Pulverization Contaminants Added

(amount added depends on hardness of material and particle size required)

Mill Type	Contaminant Added
Mild Steel (best choice)	Fe (up to 0.2%)

<i>Hardened Steel</i>	<i>Fe (up to 0.2%), Cr (up to 200 ppm), trace Ni, Si, Mn and C</i>
<i>Ceramic</i>	<i>Al (up to 0.2%), Ba, trace REE</i>
<i>Tungsten Carbide</i>	<i>W (up to 0.1%), Co, C, Ta, Nb and Ti</i>
<i>Agate</i>	<i>Si (up to 0.3%), Al, Na, Fe, K, Ca, Mg, Pb</i>

## Appendix V – Actlabs Analytical Methods – Uranium Analysis (5D-U)

### Code 5D – Miscellaneous Elements Requiring Specific Methods ([www.actlabs.com](http://www.actlabs.com))

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<b>Analysis</b>	<b>Method</b>	<b>Detection Limit</b>	<b>Upper Limit</b>
<i>C-Total</i>	<i>Infrared</i>	<i>0.01%</i>	
<i>C-Graphitic</i>	<i>Infrared</i>	<i>0.05%</i>	
<i>C-Organic</i>	<i>Infrared</i>	<i>0.05%</i>	
<i>F</i>	<i>ISE</i>	<i>100 ppm</i>	<i>10,000 ppm</i>
<i>Li</i>	<i>Total Digestion ICP</i>	<i>1 ppm</i>	<i>10,000 ppm</i>
<i>Sn</i>	<i>Fusion ICP</i>	<i>1 ppm</i>	<i>10,000 ppm</i>
<b>U</b>	<b>DNC</b>	<b>0.1 ppm</b>	<b>10,000 ppm</b>
<i>B-Total</i>	<i>PGNAA</i>	<i>0.5 ppm</i>	<i>10,000 ppm</i>
<i>B-Total</i>	<i>PGNAA</i>	<i>2 ppm</i>	<i>10,000 ppm</i>
<i>Tl</i>	<i>Total Digestion ICP-MS</i>	<i>0.2 ppm</i>	<i>10,000 ppm</i>

#### Code 5D – C (Organic)

0.5 g of sample is titrated with 25% HCl to drive off the CO<sub>2</sub> (inorganic C). The sample is neutralized with ammonium hydroxide and dried on a hot plate. Sample residue is analyzed by LECO Combustion-IR technique to provide a value for total carbon, which is composed of organic C and graphitic C. The graphitic C content is subtracted to provide the organic C content.

#### Code 5D – C (Graphitic)

0.5 g of sample is ignited at 1,000°C to drive off organic and inorganic carbon (CO<sub>2</sub>). The residue is analyzed by LECO Combustion-IR to provide a graphitic carbon value.

#### Code 5D - F

0.5 g samples are fused with sodium hydroxide in an oven at 580°C for 1 hour to release the fluoride ions from the sample matrix. The fuseate is dissolved in sulphuric acid with ammonium citrate buffer. The fluoride-ion electrode is immersed in this solution to measure the fluoride-ion activity directly.

#### Code 5D - B

1 g samples are encapsulated in a polyethylene vial and placed in a thermalized beam of neutrons produced from a nuclear reactor. Samples are measured for the doppler broadened prompt gamma ray at 478 KeV using a high purity GE detector. Samples are compared to certified reference materials used to calibrate the system.

## Appendix VI – Actlabs Analytical Methods – Multi-element analysis (1E3)

### Code 1E1/1E3\*\* – Aqua Regia - ICP-OES ([www.actlabs.com](http://www.actlabs.com))

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0.5 g of sample is digested with aqua regia (0.5 ml H<sub>2</sub>O, 0.6 ml concentrated HNO<sub>3</sub> and 1.8 ml concentrated HCl) for 2 hours at 95°C. Sample is cooled then diluted to 10 ml with deionized water and homogenized. The samples are then analyzed using a Perkin Elmer OPTIMA 3000 Radial ICP for the 30 element suite. A matrix standard and blank are run every 13 samples. For vegetation a 0.25 g sample is used.

A series of USGS-geochemical standards are used as controls. This digestion is near total for base metals however will only be partial for silicates and oxides.

#### Code 1E1 Elements and Detection Limits (ppm)

Element	Detection Limit	Upper Limit
Ag*	0.2	100
Al*	0.01%	
As*	10	
Ba*	1	
Be*	1	
Bi	10	
Ca*	0.01%	
Cd	0.5	2,000
Co*	1	
Cr*	2	
Cu	1	10,000
Fe*	0.01%	
K*	0.01%	
Mg*	0.01%	
Mn*	2	10,000
Mo*	2	10,000
Na*	0.01%	
Ni*	1	10,000
P*	0.001%	
Pb*	2	5,000
S*	100	
Sb*	10	
Sc*	1	
Sn*	10	
Ti*	0.01%	
V*	1	
W*	10	
Y*	1	
Zn*	1	10,000
Zr*	1	

Notes:

\* Element may only be partially extracted.

\*\* 1E3 includes B, Ga, Hg, La, Sb, Sr, Tl and U but includes Sn, Y, and Zr.

\*\*\* Assays are recommended for values which exceed the upper limits.

## Appendix VII – ALS Chemex Analytical Methods – Uranium Analysis (ME-XRF05)

### Pressed Pellet Geochemical Procedure – ME-XRF05

**Sample Decomposition:** Pressed Powder Pellet (XRF-PPP)  
**Analytical Method:** X-Ray Fluorescence Spectroscopy (XRF)

A finely ground sample powder (10 g minimum) is mixed with a few drops of liquid binder (Polyvinyl Alcohol) and then transferred into an aluminum cap. The sample is subsequently compressed under approximately 30 ton/in<sup>2</sup> in a pellet press. After pressing, the pellet is dried to remove the solvent and analyzed by WDXRF spectrometry for the following elements.

Element	Symbol	Units	Lower Limit	Upper Limit
Arsenic	As	ppm	5	5000
Barium	Ba	ppm	10	10000
Bismuth	Bi	ppm	4	10000
Cerium	Ce	ppm	10	10000
Chromium	Cr	ppm	5	10000
Copper	Cu	ppm	10	10000
Gallium	Ga	ppm	4	10000
Lanthanum	La	ppm	10	10000
Molybdenum	Mo	ppm	4	10000
Niobium	Nb	ppm	2	10000
Nickel	Ni	ppm	10	15000
Rubidium	Rb	ppm	2	10000
Antimony	Sb	ppm	4	10000
Selenium	Se	ppm	2	10000
Tin	Sn	ppm	5	10000
Strontium	Sr	ppm	2	10000
Tantalum	Ta	ppm	10	10000
Thorium	Th	ppm	4	10000
Titanium	Ti	ppm	5	10000
Uranium	U	ppm	4	10000
Tungsten	W	ppm	10	10000
Yttrium	Y	ppm	2	10000
Zirconium	Zr	ppm	2	10000
Zinc	Zn	ppm	10	10000



## Appendix VIII – ALS Chemex Analytical Methods – Uranium Analysis (ME-XRF05)

### Ore Grade Analysis by XRF – ME-XRF10

**Sample Decomposition:** Lithium Metaborate or Tetraborate Fusion\* (WEI-GRA06)

**Analytical Method:** X-Ray Fluorescence Spectroscopy (XRF)

A prepared sample (1.000 g) is added to lithium metaborate or tetraborate flux (9.000 g), mixed well and fused in a furnace at 1100°C. A flat glass disc is prepared from the resulting melt. This disc is then analyzed by X-ray fluorescence spectrometry.

Element	Symbol	Units	Lower Limit	Upper Limit
Barium	Ba	%	0.01	50
Tin	Sn	%	0.01	60
Tungsten	W	%	0.01	50
Zirconium	Zr	%	0.01	50
Iron**	Fe <sub>2</sub> O <sub>3</sub>	%	0.01	100
Potassium**	K <sub>2</sub> O	%	0.01	100
Magnesium**	MgO	%	0.01	100
Sodium**	Na <sub>2</sub> O	%	0.01	100

\*\* Elements reported as oxide

### Elements listed below are available upon request

Element	Symbol	Units	Lower Limit	Upper Limit
Tungsten*	WO <sub>3</sub>	%	0.01	60

\*Note: For samples that are high in sulphides, we may substitute a peroxide fusion in order to obtain better results.

## **Appendix IX - Sampling Protocol**

The following protocol outlines the procedure that will be applied to sampling drill core at the CMB Uranium Property. The geologist in charge of logging and/or geotechnical assistant will be responsible for adhering to the following protocol:

### **Pre-logging**

- Inspection of core boxes, for missing boxes and footage errors.
- Digital photographs will be taken of all core boxes and
- RQD and core loss will be noted.

### **Logging**

- Notes will be collected on rock units, alteration, structure, mineralization and recorded on paper logging forms and then transferred into Excel spread sheets

### **Sampling**

- Standardized sample booklets will be utilized at all times. All booklets will be marked up, prior to use, with the standards, blanks and duplicates clearly defined.
- Standards and blanks and duplicates (1/4 core) will be entered every 25<sup>th</sup> sample in the sample stream.
- All holes will be sampled where deemed radioactive with hand-held scintillometer or at the discretion of the geologist. Typical samples lengths will be 0.5-1.5 m.
- The beginning of a sample will be clearly marked with a black marker, by a line perpendicular to the core with the sample tag placed at the beginning of the sample.
- For each sample interval, all required parts ('From-To') of the standard sample card will be filled in and half of the sample number tag will be placed at the starting point of the sample interval in the core box.
- The second half of the tag will be put into the sample bag (labeled on both sides with the sample number) by the splitter when he is taking the sample.

### **Double-Check**

- The geologist will double-check that all of the samples collected are properly labeled with the sample tags inside of the sample bags.

### **Scintillometer Readings**

- Scintillometer measurements will be recorded by taking each piece of core from the core box and scanning the individual pieces with the scintillometer. This is done to minimize background readings generated by the mass of core present in the core box. The maximum value is measured in each 3 m "run" of core will be recorded, as will the average of values recorded.

### **Magnetic Susceptibility Readings**

- Magnetic susceptibility readings will be collected every m, roughly corresponding to the top, middle, and bottom of each 3 m "run" of core.

## **Appendix X - QA/QC Sampling**

At the CMB Uranium Property, the insertion of “blind” quality control samples takes place in the core shack before samples are shipped to the lab. These samples inserted on a routine basis and are used to check laboratory quality and cleanliness. At the beginning of sampling, sample tags are pre-marked with locations for standards, duplicates and blanks before logging.

### **Duplicate samples**

- Duplicates are taken every 25 samples within the sample series. Duplicate samples are used to monitor sample batches for potential mix-ups and monitor the data variability as a function of both laboratory error and sample homogeneity. The duplicate samples are ¼ spilt cores done on site before the sample leaves camp.

### **Blanks**

- Non-mineralized material from the Michel Gabbro was used as a blank, where material was collected from an outcrop in the project area, broken with a hammer and inserted into the sample series every 25 samples.

### **Standards**

- Standards were used to test the accuracy of the assays and to monitor the consistency of the laboratory. A total of five different standards were purchased the Canadian Certified Reference Materials Project, Natural Resources Canada, for use during the 2005 CMB Regional Program. The standards chosen were designed to test the accuracy of the assays from low, 220 ppm uranium, through to high grade, 10,200 ppm uranium. Standards were inserted into the sample series every 25 samples.

### **Check Samples:**

- 5% of all assayed sample pulps are being sent to ALS Chemex in Vancouver, B.C. for analysis. This approach identifies variations in analytical procedures between laboratories, possible sample mix-ups, and whether substantial biases have been introduced during the course of the project.

### **Analyzing Data**

- Results of the standards and the blanks are checked and reviewed quickly after results are received. Control charts are used to monitor the data and decide immediately whether the results are acceptable.

**Appendix XI**  
**LIST OF DRILL HOLES WITH ASSAYS USED IN RESOURCE ESTIMATE**  
**MICHELIN**

<b>HOLE</b>	<b>EASTING</b>	<b>NORTHING</b>	<b>ELEVATION</b>	<b>HLENGTH</b>
<b>2005 DRILL HOLES</b>				
M-05-02C	-943.00	-436.00	340.44	460.55
M-05-03	-1001.50	-434.00	341.47	480.67
M-05-04	-1064.00	-403.80	337.10	487.38
M-05-05	-1064.00	-404.50	337.15	578.51
M-05-06	-1001.50	-434.78	341.61	578.51
M-05-07	-1128.00	-459.30	335.90	549.55
M-05-08D	-1063.50	-565.00	339.60	801.01
TWM-05-174	-440.00	-101.30	336.55	203.68
TWM-05-92	-643.00	-84.30	336.13	151.79
<b>2006 DRILL HOLES</b>				
M-06-09	-867.00	-429.00	340.00	441.10
M-06-10	-867.00	-429.00	340.00	450.19
M-06-11	-940.00	-438.00	340.00	428.55
M-06-12	-1000.00	-437.00	341.00	431.90
M-06-13	-940.00	-438.00	340.00	459.64
M-06-14	-1000.00	-437.00	341.00	465.73
M-06-15	-1063.00	-407.00	337.00	419.10
M-06-16	-1000.00	-437.00	341.00	551.08
M-06-17	-1063.00	-407.00	337.00	437.69
M-06-18	-605.00	-489.00	342.00	522.00
M-06-19	-940.00	-438.00	340.00	578.51
M-06-20A	-1126.00	-461.00	336.00	456.59
M-06-21	-940.00	-438.00	340.00	581.86
M-06-22	-1204.00	-803.00	346.00	895.53
M-06-24	-1063.00	-407.00	337.00	505.05
M-06-25	-1297.00	-792.00	345.00	827.23
M-06-26	-1412.00	-797.00	343.00	883.31
M-06-27	-1061.00	-567.00	339.00	840.03
M-06-28	-1061.00	-567.00	339.00	644.96
M-06-29	-1412.00	-797.00	343.00	965.30
M-06-30A	-997.00	-608.00	343.00	650.00
M-06-31	-1489.00	-997.00	345.00	1050.00
M-06-32	-1412.00	-797.00	343.00	850.00
M-06-33	-740.00	-600.00	340.00	694.03
M-06-35	-997.00	-608.00	343.00	730.61
M-06-36A	-1072.00	-708.00	349.00	776.02
M-06-37	-1153.00	-653.00	342.00	642.21
M-06-38A	-1240.00	-720.00	345.00	663.55
M-06-39	-1153.00	-653.00	342.00	718.41
M-06-40	-1351.00	-734.00	345.00	671.78
M-06-41	-1240.00	-720.00	345.00	716.79
M-06-42	-1153.00	-653.00	342.00	767.49
M-06-43	-1351.00	-734.00	345.00	749.20
M-06-44	-1240.00	-720.00	345.00	785.47
<b>HISTORIC DRILL HOLES</b>				
<b>1969 DRILL HOLES</b>				
M-69-1	-274.32	-21.34	339.24	70.71
M-69-10	-488.40	-243.07	332.79	305.71
M-69-11	-121.65	-98.05	336.53	152.70
M-69-12	31.77	-89.79	335.98	129.24

M-69-13	-638.99	-197.80	332.92	216.71
M-69-14	31.82	-91.00	336.33	138.38
M-69-16	-639.00	-197.69	333.19	262.37
M-69-18	-777.36	-180.15	333.20	231.04
M-69-19	185.37	-91.81	340.16	135.33
M-69-2	-274.80	-21.57	339.16	81.69
M-69-21	-898.07	-125.15	332.84	201.17
M-69-23	-1066.80	-94.11	330.75	173.74
M-69-25	-1220.80	-132.93	333.70	148.44
M-69-27	-1387.17	-154.55	338.65	185.01
M-69-3	-303.73	-74.14	336.21	99.06
M-69-32	-1076.39	-231.70	332.97	321.26
M-69-35	-1310.50	-62.75	335.95	30.78
M-69-36	-1310.60	-64.34	336.05	43.28
M-69-37	-1310.15	-53.24	336.77	16.76
M-69-39	-1310.14	-53.90	336.87	15.24
M-69-4	-303.71	-75.33	336.24	144.17
M-69-40	-1310.16	-52.96	336.88	35.05
M-69-41	-1310.18	-53.19	336.88	14.33
M-69-42	-1311.73	-90.06	335.28	45.72
M-69-43	-1311.80	-90.60	335.23	57.91
M-69-46	-1335.13	-60.13	337.41	25.60
M-69-47	-1335.19	-61.11	337.44	36.88
M-69-48	-1274.05	-65.17	334.95	33.53
M-69-49	-1274.08	-66.00	335.17	65.84
M-69-5	-334.72	-77.88	336.48	89.61
M-69-50	-272.87	-128.49	335.52	185.93
M-69-51	-273.39	-129.35	335.44	214.58
M-69-52	-1246.87	-65.78	334.93	44.20
M-69-53	-1246.97	-66.81	334.80	64.62
M-69-54	-1221.14	-66.87	335.11	48.77
M-69-55	-1221.13	-67.85	335.00	67.97
M-69-56	-1221.30	-96.46	334.22	79.86
M-69-57	-1221.31	-96.77	334.18	104.49
M-69-58	-389.92	-133.28	335.21	167.03
M-69-59	-390.10	-134.09	335.07	193.55
M-69-6	-334.76	-79.06	336.21	138.38
M-69-60	-1249.92	-120.57	332.90	112.78
M-69-61	-1249.87	-121.00	332.82	120.40
M-69-62	-1275.86	-121.51	333.18	113.39
M-69-63	-1275.93	-121.92	333.16	122.53
M-69-64	-484.22	-141.36	332.93	217.02
M-69-65	-394.15	-36.37	341.82	78.94
M-69-66	-1308.94	-143.61	334.62	116.74
M-69-67	-304.39	-235.70	333.73	309.37
M-69-68	-1377.97	-68.97	340.25	91.14
M-69-69	-1071.21	-38.95	334.90	88.39
M-69-7	-488.83	-59.37	340.94	86.87
M-69-70	-1143.13	-61.23	335.89	73.15
M-69-71	-1143.13	-62.33	335.89	90.83
M-69-72	-1143.13	-147.67	335.79	176.48
M-69-73	-564.66	-102.50	336.71	162.15
M-69-74	-564.67	-103.52	336.47	161.24
M-69-75	-984.13	-64.37	333.38	109.42
M-69-76	-984.16	-65.16	333.36	121.62
M-69-77	-702.31	-125.32	333.28	179.83
M-69-78	-842.61	-63.86	335.26	154.84

M-69-79	-702.37	-126.28	333.66	203.91
M-69-8	-488.60	-60.28	340.75	124.36
M-69-9	-121.61	-97.05	336.69	136.86
<b>1970 DRILL HOLES</b>				
M-70-80	-837.43	-124.02	335.09	194.77
M-70-81	-777.35	-29.47	334.83	100.58
M-70-82	-704.57	-258.28	331.10	332.54
M-70-83	-898.11	-31.43	336.87	89.31
M-70-84	-669.40	-81.40	334.32	115.52
M-70-85	-896.11	-231.04	333.01	335.58
M-70-90	-897.77	-75.91	331.52	122.83
M-70-91	-709.90	-53.21	333.23	77.42
M-70-92	-639.13	-83.76	335.82	96.32
<b>1975 DRILL HOLES</b>				
M-75-94	-705.61	-88.39	332.85	129.54
M-75-95	-702.56	-207.26	332.79	226.47
M-75-96	-702.56	-207.26	332.79	255.12
M-75-97	-705.61	-146.30	334.01	157.58
M-75-98	-703.48	-144.17	334.07	168.10
<b>1976 DRILL HOLES</b>				
M-76-100	-1012.85	-223.11	334.13	273.71
M-76-103	-740.97	-238.96	334.55	261.82
M-76-104	-1012.85	-222.50	334.13	269.14
M-76-105	-564.49	-223.72	334.80	170.08
M-76-106	-564.49	-224.03	334.80	245.06
M-76-107	-740.97	-238.66	334.55	253.90
M-76-108	-1013.46	-145.69	334.25	228.60
M-76-109	-640.38	-231.65	334.68	264.57
M-76-110	-740.97	-238.66	334.55	233.17
M-76-111	-1013.46	-145.39	334.25	229.30
M-76-112	-640.38	-231.04	334.68	235.18
M-76-113	-1013.46	-145.08	334.25	207.26
M-76-114	-778.15	-210.31	334.77	274.32
M-76-115	-778.15	-210.01	334.77	236.22
M-76-116	-1044.85	-138.99	334.68	167.03
M-76-117	-484.63	-199.03	334.92	68.88
M-76-118	-487.38	-199.34	334.92	56.69
M-76-119	-1044.85	-138.68	334.68	152.40
M-76-120	-487.07	-171.60	335.01	63.40
M-76-121	-807.42	-212.14	334.55	273.83
M-76-122	-487.07	-171.60	335.01	190.50
M-76-123	-1044.85	-207.26	335.44	252.37
M-76-124	-807.42	-211.84	334.55	251.80
M-76-127	-1044.85	-207.26	335.44	212.45
M-76-128	-838.50	-210.92	334.55	278.89
M-76-129	-389.92	-180.15	334.92	198.12
M-76-130	-985.11	-176.48	334.68	222.81
M-76-131	-838.50	-210.62	334.55	240.27
M-76-132	-985.11	-175.87	334.68	199.16
M-76-133	-437.08	-173.43	334.92	253.59
M-76-134	-837.90	-132.89	334.55	191.72
M-76-135	-940.31	-210.31	334.62	248.41
M-76-136	-896.11	-180.75	334.52	259.08
M-76-137	-940.31	-210.31	334.62	173.43
M-76-138	-837.90	-132.89	334.55	152.10
M-76-139	-896.42	-180.44	334.52	213.36
M-76-140	-739.75	-140.82	332.92	181.36

M-76-141	-938.48	-107.29	332.57	207.26
M-76-142	-1074.12	-190.80	332.21	243.84
M-76-143	-938.48	-106.98	332.57	195.07
M-76-144	-738.84	-94.49	332.42	143.26
M-76-145	-1074.12	-190.50	332.21	213.36
M-76-146	-929.03	-159.11	333.00	216.71
M-76-147	-773.89	-136.25	332.74	204.22
M-76-148	-1110.69	-237.74	333.55	311.20
M-76-149	-1075.94	-62.48	335.07	152.40
M-76-150	-804.98	-146.91	333.27	224.94
M-76-151	-1109.47	-104.24	333.64	179.22
M-76-152	-1110.69	-237.44	333.55	270.36
M-76-153	-1109.47	-104.55	333.64	141.12
M-76-154	-804.98	-146.61	333.57	182.88
M-76-155	-1110.69	-237.13	333.27	212.14
M-76-156	-1179.88	-114.91	333.97	106.07
M-76-157	-770.23	-73.46	333.05	94.18
M-76-159	-1180.19	-36.88	338.76	63.40
M-76-160	-806.20	-85.65	334.80	109.12
M-76-161	-1142.39	-203.61	332.76	196.29
M-76-162	-806.20	-86.26	334.80	124.36
M-76-163	-1178.05	-193.24	332.60	172.52
M-76-164	-1142.39	-203.91	332.76	219.46
M-76-165	-1178.05	-193.55	332.60	219.46
M-76-166	-638.86	-106.07	336.79	121.62
M-76-167	-1145.13	-113.69	333.30	114.00
M-76-168	-565.40	-148.13	333.06	78.64
M-76-169	-1107.64	-37.49	336.20	55.17
M-76-170	-436.47	-100.58	336.41	138.38
M-76-171	-1046.07	-28.35	334.92	81.53
M-76-172	-1220.72	-212.14	333.15	235.61
M-76-173	-1046.07	-27.74	334.92	54.25
M-76-174	-436.47	-101.19	336.75	187.76
M-76-175	-1014.07	-29.87	334.34	75.59
M-76-176	-1014.07	-29.26	334.34	63.09
M-76-177	-1220.72	-211.53	333.15	176.17
M-76-178	-337.11	-183.18	334.01	204.52
M-76-179	-940.61	-39.62	334.26	121.01
M-76-180	-940.61	-39.01	334.19	81.08
M-76-181	-337.11	-183.49	334.07	237.13
M-76-182	-210.62	-48.16	338.36	91.14
M-76-183	-210.62	-48.77	338.36	95.71
M-76-99	-704.09	-169.77	334.55	226.47
<b>1979 DRILL HOLES</b>				
M-79-200	-210.31	-9.14	337.90	60.96
M-79-201	-242.32	-16.76	339.30	31.09
M-79-202	-390.14	-12.19	339.94	27.43
M-79-203	-390.14	6.10	340.95	27.43
M-79-204	-434.95	6.10	339.85	20.12
M-79-205	-487.68	-24.08	339.85	42.67
M-79-206	-525.78	-21.34	339.85	42.67
M-79-207	-525.78	-53.34	339.44	74.68
M-79-208	-525.78	-97.54	336.74	30.48
M-79-209	-563.88	0.00	339.85	30.48
M-79-211	-601.98	-27.43	339.24	70.10
M-79-213	-637.64	7.62	340.34	21.34
M-79-214	-640.08	-21.34	339.09	26.52

M-79-215	-670.56	0.00	340.58	30.48
M-79-216	-670.56	-18.29	340.80	30.48
M-79-217	-708.66	4.57	339.09	35.05
M-79-218	-708.66	-15.24	337.96	39.62
M-79-219	-740.66	21.34	339.30	25.91
M-79-220	-740.66	-15.24	336.80	38.10
M-79-222	-777.24	-7.62	337.17	24.69
M-79-223	-807.72	22.86	338.20	23.16
M-79-224	-807.72	-9.14	336.26	28.96
M-79-225	-838.20	30.48	339.09	23.47
M-79-226	-838.20	6.10	337.54	27.43
M-79-227	-867.16	30.48	340.49	27.43
M-79-228	-867.16	6.10	337.63	34.14
M-79-229	-896.11	32.00	340.95	20.42
M-79-230	-896.11	7.62	337.66	24.38
M-79-231	-940.31	0.00	336.04	45.72
M-79-232	-984.50	-18.29	335.40	51.82
M-79-233	-1013.46	6.10	335.83	44.20
M-79-234	-1045.46	6.10	336.17	24.38
M-79-235	-1074.42	-1.52	336.59	25.91
M-79-236	-1109.47	-9.14	337.51	33.53
M-79-237	-1143.00	-10.67	338.18	26.21
M-79-238	-1179.58	-12.19	338.24	29.26
M-79-239	-1221.64	-32.00	337.41	29.26
M-79-240	-1247.24	-45.72	337.23	36.58
M-79-241	-1274.06	-45.72	337.54	30.78
M-79-242	-1380.74	-45.72	341.44	27.43
M-79-243	-1411.22	-50.29	343.11	32.31
M-79-244	-601.98	-195.07	332.35	118.57
M-79-245	-670.56	-129.54	336.53	135.03
M-79-246	-740.66	-51.82	332.99	99.06
M-79-247	-777.24	-117.35	332.51	132.74
M-79-248	-805.89	-188.98	332.90	213.36
M-79-249	-838.50	-91.44	333.73	124.36
M-79-250	-867.16	-27.43	334.76	41.76
M-79-250A	-867.16	-28.04	334.98	84.73
M-79-251	-867.16	-56.39	333.54	99.97
M-79-252	-867.16	-120.09	332.81	149.35
M-79-253	-867.16	-120.40	332.81	171.30
M-79-254	-867.16	-120.70	332.81	208.79
M-79-255	-896.11	-41.15	333.88	100.58
M-79-256	-896.11	-73.15	333.09	143.87
M-79-257	-1045.46	-73.15	333.36	99.97
M-79-258	-1179.58	-85.34	335.01	82.30
M-79-259	-640.08	-132.59	337.08	67.36
M-79-260	-601.98	-82.30	336.90	105.77
M-79-261	-601.98	-150.88	333.82	164.59
M-79-263	-983.28	15.24	336.41	27.43
M-79-264	-940.31	18.29	337.08	30.48
M-79-265	-662.94	-184.40	332.66	182.88
<b>1975 UNDER GROUND DRILL HOLES</b>				
MU-75-1	-624.84	2.13	305.71	41.46
MU-75-10	-381.00	8.23	317.91	9.15
MU-75-11	-396.24	10.97	315.77	9.15
MU-75-12	-396.24	7.62	315.77	33.54
MU-75-14	-411.48	10.06	313.33	9.76
MU-75-16	-426.72	9.30	311.81	36.59



MU-75-17	-441.96	7.77	309.37	10.28
MU-75-18	-460.55	10.36	306.32	42.68
MU-75-19	-480.06	10.67	304.19	22.87
MU-75-2	-624.84	5.33	305.71	26.28
MU-75-20	-511.30	22.86	303.43	57.92
MU-75-21	-518.16	14.63	303.73	50.73
MU-75-22	-527.61	10.52	304.19	56.40
MU-75-24	-651.51	6.71	306.17	39.94
MU-75-25	-677.27	2.13	306.63	33.54
MU-75-26	-677.27	5.94	306.63	6.11
MU-75-27	-703.17	-2.13	306.78	20.43
MU-75-28	-731.52	-16.15	306.93	13.12
MU-75-29	-731.52	-12.50	306.93	33.08
MU-75-3	-594.36	5.49	304.80	46.34
MU-75-30	-762.00	-17.98	307.24	21.35
MU-75-31	-762.00	-14.63	307.24	39.94
MU-75-32	-793.55	-10.06	307.54	25.31
MU-75-33	-793.55	-6.40	307.54	32.93
MU-75-34	-822.96	-3.35	308.00	34.45
MU-75-35	-822.96	0.30	308.00	52.47
MU-75-36	-853.44	-4.11	308.31	46.64
MU-75-37	-853.44	-0.30	308.31	33.54
MU-75-39	-878.89	-4.57	308.46	42.68
MU-75-4	-338.02	-37.95	328.88	55.18
MU-75-40	-880.26	-4.72	308.46	52.74
MU-75-41	-881.18	-4.88	308.46	61.27
MU-75-42	-868.98	-6.40	308.31	36.28
MU-75-43	-868.98	-6.40	308.31	9.46
MU-75-44	-838.20	-2.13	308.15	22.87
MU-75-45	-838.20	-1.52	308.15	29.09
MU-75-46	-807.72	-6.10	307.85	24.27
MU-75-47	-807.72	-2.74	307.85	30.49
MU-75-48	-777.24	-14.94	307.54	22.87
MU-75-49	-777.24	-14.33	307.54	39.69
MU-75-5	-341.22	-18.90	325.22	45.73
MU-75-50	-746.76	-18.90	307.24	15.25
MU-75-51	-746.76	-15.54	307.24	39.94
MU-75-52	-716.28	-11.89	306.93	18.30
MU-75-53	-777.24	-8.08	306.93	27.44
MU-75-54	-616.31	1.52	305.41	39.63
MU-75-55	-579.12	12.50	304.50	54.26
MU-75-6	-350.52	0.91	321.72	30.49
MU-75-7	-365.76	8.53	319.58	12.20
MU-75-8	-365.76	4.57	319.43	28.36
MU-75-9	-381.00	11.89	317.91	12.20
<b>UNDER GROUND SAMPLES</b>				
X-100_1	-508.54	18.14	303.43	3.05
X-100_2	-508.21	19.19	303.43	3.84
X-101_1	-510.34	18.05	303.43	3.05
X-101_2	-510.08	19.15	303.43	3.66
X-102_1	-512.19	17.90	303.43	3.05
X-102_2	-511.33	19.05	303.43	5.06
X-103_1	-514.23	17.41	303.43	3.05
X-103_2	-513.29	20.00	303.43	5.24
X-104_1	-516.53	18.86	303.43	3.05
X-104_2	-518.09	23.25	303.43	6.71
X-105_1	-518.06	16.41	303.43	3.05

X-106_1	-518.20	19.78	303.43	3.05
X-106_2	-519.55	24.71	303.43	8.05
X-107_1	-519.83	15.40	303.43	3.05
X-107_2	-519.99	16.74	303.43	3.66
X-108_1	-519.98	20.01	303.43	3.05
X-108_2	-519.52	20.96	303.43	3.66
X-109_2	-522.57	20.74	303.43	3.05
X-10_1	-341.97	-28.44	324.63	3.05
X-110_1	-521.87	14.77	303.43	3.05
X-110_2	-521.78	15.86	303.43	3.96
X-111_2	-523.71	21.90	303.43	4.66
X-112_1	-523.73	13.76	303.43	3.05
X-112_2	-523.64	15.19	303.43	4.11
X-113_1	-525.76	13.05	303.43	3.05
X-113_2	-525.77	14.37	303.43	3.96
X-114_1	-526.83	20.93	303.43	3.05
X-114_2	-525.74	21.86	303.43	5.15
X-115_1	-528.00	12.01	303.43	3.05
X-115_2	-527.90	13.21	303.43	3.96
X-116_1	-529.37	21.28	303.43	3.05
X-116_2	-528.81	22.23	303.43	3.96
X-117_1	-529.46	11.16	303.43	3.96
X-118_1	-531.73	21.53	303.43	3.05
X-118_2	-531.56	22.33	303.43	3.23
X-119_1	-533.79	21.92	303.43	3.05
X-119_2	-533.52	22.73	303.43	3.51
X-11_1	-342.08	-26.26	325.22	3.05
X-120_1	-536.57	21.85	303.43	3.05
X-120_2	-536.12	22.77	303.43	3.84
X-121_1	-538.47	21.92	303.43	3.05
X-121_2	-538.26	22.78	303.43	3.41
X-122_1	-540.83	21.85	303.43	3.05
X-122_2	-540.51	22.77	303.43	3.51
X-123_1	-542.73	22.00	303.43	3.05
X-123_2	-542.55	22.79	303.43	3.51
X-124_1	-545.06	21.77	303.43	3.05
X-124_2	-544.62	22.57	303.43	3.96
X-125_1	-547.57	21.73	303.43	3.05
X-125_2	-547.26	22.55	303.43	3.69
X-126_1	-550.33	23.72	304.30	3.05
X-126_2	-550.11	22.49	304.30	3.20
X-127_1	-552.20	22.15	304.35	3.05
X-127_2	-552.37	23.34	304.35	3.20
X-128_1	-554.18	21.88	304.41	3.05
X-128_2	-554.26	23.18	304.39	3.54
X-129_1	-556.20	21.42	304.46	3.05
X-129_2	-556.18	22.99	304.43	3.54
X-12_1	-342.27	-24.02	325.81	3.05
X-130_1	-558.22	21.09	304.50	3.05
X-130_2	-558.28	22.31	304.48	3.41
X-131_1	-560.60	20.15	304.50	3.05
X-131_2	-560.66	21.55	304.50	3.51
X-132_1	-563.05	19.86	304.50	3.05
X-132_2	-563.26	21.12	304.50	3.20
X-133_1	-564.90	19.02	304.50	3.05
X-133_2	-565.17	20.38	304.50	3.20
X-134_1	-567.23	19.87	304.50	3.05

X-134_2	-566.88	18.65	304.50	3.05
X-135_1	-568.92	17.75	304.50	3.05
X-135_2	-569.19	19.35	304.50	3.51
X-136_1	-571.57	18.96	304.50	3.05
X-136_2	-571.05	17.74	304.50	3.05
X-137_1	-572.93	16.87	304.50	3.05
X-137_2	-572.92	18.38	304.50	3.90
X-138_1	-574.81	16.14	304.50	3.05
X-138_2	-575.23	17.56	304.50	3.63
X-139_1	-577.71	16.68	304.50	3.05
X-139_2	-576.75	15.43	304.50	3.05
X-13_1	-342.78	-21.95	325.22	3.05
X-140_1	-578.56	14.33	304.50	3.05
X-140_2	-579.31	15.67	304.50	3.20
X-141_1	-580.77	13.32	304.50	3.05
X-141_2	-581.28	14.93	304.50	3.51
X-142_1	-582.52	12.76	304.56	3.05
X-142_2	-582.92	13.92	304.53	3.66
X-143_1	-584.36	11.75	304.61	3.05
X-143_2	-584.75	12.90	304.58	3.75
X-144_1	-586.40	10.61	304.64	3.05
X-144_2	-586.97	12.03	304.64	3.23
X-145_1	-588.35	9.98	304.72	3.05
X-145_2	-588.76	11.08	304.69	3.35
X-146_1	-590.42	8.74	304.77	3.05
X-146_2	-590.76	10.13	304.75	3.66
X-147_1	-592.60	8.07	304.80	3.05
X-147_2	-593.07	9.30	304.80	3.66
X-148_1	-594.48	7.10	304.80	3.05
X-148_2	-594.92	8.60	304.80	3.66
X-149_1	-597.25	7.85	304.82	3.05
X-149_2	-596.63	6.77	304.84	3.05
X-14_1	-342.92	-19.85	325.22	3.05
X-150_1	-598.88	5.70	304.89	3.05
X-150_2	-599.10	6.96	304.87	3.47
X-151_1	-600.98	4.70	304.93	3.05
X-151_2	-601.11	5.71	304.91	3.63
X-152_1	-603.20	3.66	304.97	3.05
X-152_2	-603.05	5.04	304.95	3.63
X-153_1	-605.28	3.19	305.02	3.05
X-153_2	-605.21	4.47	305.00	3.41
X-154_1	-607.57	2.96	305.06	3.05
X-154_2	-607.50	4.28	305.04	3.20
X-155_1	-609.48	2.84	305.11	3.05
X-155_2	-609.41	4.12	305.08	3.35
X-156_1	-611.40	2.91	305.15	3.05
X-156_2	-611.32	4.05	305.13	3.11
X-157_1	-613.40	3.96	305.17	3.05
X-157_2	-613.39	2.65	305.19	3.05
X-158_1	-615.34	2.62	305.41	3.05
X-158_2	-615.15	3.76	305.21	3.38
X-159_1	-617.60	2.83	305.49	3.05
X-159_2	-617.48	4.01	305.45	3.38
X-15_1	-343.14	-17.69	324.83	3.05
X-160_1	-620.85	3.31	305.56	1.28
X-160_2	-620.45	4.18	305.52	2.23
X-160_3	-619.92	2.33	305.60	3.05

X-161_1	-623.55	4.50	305.63	0.70
X-161_2	-622.68	3.54	305.67	2.44
X-161_3	-622.64	2.27	305.71	3.05
X-162_1	-624.89	4.56	305.71	2.35
X-162_2	-624.93	2.79	305.73	3.05
X-163_1	-627.17	3.53	305.76	3.05
X-163_2	-626.52	5.35	305.74	3.44
X-164_1	-629.68	5.01	305.80	1.58
X-164_2	-629.39	5.87	305.78	1.86
X-164_3	-629.36	3.95	305.81	3.05
X-165_1	-632.04	5.69	305.85	0.91
X-165_2	-631.00	6.71	305.83	2.65
X-165_3	-631.28	4.25	305.86	3.05
X-166_1	-632.98	5.27	305.90	3.05
X-166_2	-632.14	7.01	305.88	3.90
X-167_1	-636.14	6.53	305.93	0.61
X-167_2	-635.16	4.97	305.95	3.05
X-167_3	-634.60	7.41	305.91	3.35
X-168_1	-637.91	7.52	305.97	2.10
X-168_2	-637.91	6.53	305.98	2.29
X-168_3	-637.80	5.49	306.00	3.05
X-16_1	-343.31	-15.54	324.44	3.05
X-170_1	-640.35	7.01	306.03	1.52
X-170_2	-640.00	7.66	306.02	2.10
X-170_3	-639.69	6.00	306.05	3.05
X-171_1	-642.28	6.34	306.08	3.05
X-171_2	-641.92	7.99	306.07	3.14
X-172_1	-644.00	6.55	306.12	3.05
X-172_2	-643.71	8.26	306.10	3.14
X-172_3	-645.72	7.48	306.14	3.63
X-173_1	-648.53	7.44	306.17	3.05
X-173_2	-648.36	9.07	306.15	3.35
X-174_1	-650.61	7.48	306.17	3.05
X-174_2	-650.29	9.17	306.17	3.75
X-175_1	-652.75	8.43	306.21	3.05
X-175_2	-652.69	9.70	306.19	3.20
X-176_1	-655.13	8.10	306.26	3.05
X-176_2	-655.00	9.78	306.24	3.08
X-177_1	-657.66	7.84	306.30	3.05
X-177_2	-657.42	9.99	306.28	3.44
X-178_1	-659.42	8.28	306.35	3.05
X-178_2	-659.26	10.37	306.32	3.35
X-179_1	-661.95	8.15	306.39	3.05
X-179_2	-661.73	10.07	306.37	3.60
X-17_1	-343.32	-13.18	324.05	3.05
X-180_1	-664.33	7.85	306.43	3.05
X-180_2	-664.29	9.61	306.41	3.57
X-181_1	-667.85	8.33	306.48	0.58
X-181_2	-667.22	9.54	306.45	2.50
X-181_3	-666.27	7.67	306.50	3.05
X-182_1	-669.48	7.65	306.54	1.46
X-182_2	-669.62	8.67	306.52	2.32
X-182_3	-668.28	6.64	306.56	3.05
X-183_1	-670.66	5.83	306.61	3.05
X-183_2	-671.31	7.90	306.59	3.51
X-184_1	-673.22	5.78	306.63	3.05
X-184_2	-673.43	6.84	306.63	3.54

X-185_1	-677.69	5.37	306.63	0.43
X-185_2	-677.50	4.70	306.63	0.43
X-185_3	-675.95	4.40	306.63	2.87
X-185_4	-675.45	3.52	306.63	3.05
X-186_1	-679.62	4.21	306.64	0.30
X-186_2	-677.95	3.70	306.64	3.26
X-187_1	-679.14	2.15	306.65	3.05
X-187_2	-679.78	3.74	306.65	3.23
X-188_1	-680.89	1.42	306.66	3.05
X-188_2	-681.41	3.21	306.67	3.26
X-189_1	-683.70	2.67	306.68	2.26
X-189_2	-682.91	1.66	306.68	3.05
X-189_3	-682.53	0.58	306.67	3.05
X-18_1	-344.14	-11.24	323.66	3.05
X-190_1	-686.84	1.83	306.69	1.22
X-190_2	-685.57	0.77	306.70	2.74
X-190_3	-684.84	-0.46	306.70	3.05
X-191_1	-686.92	-1.29	306.71	3.05
X-191_2	-689.94	0.44	306.72	3.26
X-191_3	-687.75	1.19	306.71	3.35
X-192_1	-689.11	-1.59	306.73	3.05
X-193_1	-693.73	-0.87	306.74	0.12
X-193_2	-693.07	-1.88	306.74	0.49
X-193_3	-692.33	-1.08	306.75	2.44
X-193_4	-691.32	-2.39	306.73	3.05
X-194_1	-695.28	-1.30	306.76	1.68
X-194_2	-694.42	-2.22	306.76	2.04
X-194_3	-693.60	-3.06	306.77	3.05
X-195_1	-695.42	-3.52	306.78	3.05
X-195_2	-696.03	-1.25	306.77	3.51
X-196_1	-697.75	-2.67	306.79	3.05
X-197_1	-699.85	-3.89	306.67	3.05
X-198_1	-703.43	-3.16	306.78	0.91
X-198_2	-700.98	-5.73	306.79	3.05
X-198_3	-703.23	-2.10	306.67	5.49
X-199_1	-703.78	-5.22	306.79	3.05
X-199_2	-704.00	-3.82	306.79	3.60
X-19_1	-344.81	-8.90	323.28	3.05
X-200_1	-701.03	-7.86	308.09	2.44
X-200_2	-704.47	-7.95	306.79	3.05
X-200_3	-701.77	-7.80	306.80	3.51
X-201_1	-706.03	-6.15	306.91	3.05
X-201_2	-706.49	-4.35	306.90	3.75
X-202_1	-704.08	-9.98	306.80	3.05
X-202_2	-701.75	-9.63	306.81	3.75
X-203_1	-704.62	-13.04	306.82	1.83
X-203_2	-701.21	-13.12	307.36	2.44
X-203_3	-704.16	-11.90	306.81	3.05
X-203_4	-702.44	-11.85	306.82	3.29
X-204_1	-708.17	-7.29	306.92	3.05
X-204_2	-708.49	-5.37	306.91	3.63
X-205_1	-704.07	-14.15	306.82	3.05
X-205_2	-701.91	-13.81	306.82	3.35
X-206_1	-710.16	-7.28	306.92	3.05
X-207_1	-703.57	-16.58	306.83	3.05
X-207_2	-701.68	-16.44	306.83	3.35
X-208_1	-711.84	-7.87	306.93	3.75

X-209_1	-703.82	-18.43	306.84	3.05
X-209_2	-701.83	-18.02	306.84	3.75
X-20_1	-345.82	-7.29	322.89	3.05
X-210_1	-713.78	-8.55	306.93	3.05
X-211_1	-703.70	-19.95	306.85	3.05
X-211_2	-701.88	-19.94	306.86	3.14
X-212_1	-715.51	-10.57	306.93	3.05
X-212_2	-715.96	-8.66	306.93	3.35
X-213_1	-703.61	-22.38	306.86	3.05
X-213_2	-701.82	-22.31	306.86	3.05
X-214_1	-717.86	-11.30	306.93	3.05
X-214_2	-718.34	-9.24	306.93	3.66
X-215_1	-703.52	-24.36	306.87	3.05
X-215_2	-701.93	-24.14	306.87	3.51
X-216_1	-722.40	-10.18	306.93	0.30
X-216_2	-720.49	-10.99	306.93	3.05
X-216_3	-720.04	-12.00	306.93	3.05
X-217_1	-703.67	-25.71	306.88	3.05
X-217_2	-701.72	-25.52	306.88	3.51
X-218_1	-724.10	-10.74	306.93	0.76
X-218_2	-722.76	-11.38	306.93	2.74
X-218_3	-721.90	-12.13	306.93	3.05
X-219_1	-704.76	-28.25	306.89	3.05
X-219_2	-702.88	-28.05	306.89	3.54
X-21_1	-347.44	-5.30	322.50	3.05
X-220_1	-724.35	-12.36	306.93	3.05
X-220_2	-724.79	-10.77	306.93	3.66
X-221_1	-726.57	-13.23	306.90	3.05
X-221_2	-703.39	-30.04	306.90	3.05
X-221_3	-727.21	-11.63	306.90	3.35
X-221_4	-701.97	-28.81	306.90	4.63
X-223_1	-728.83	-12.82	306.93	3.05
X-223_2	-728.89	-11.99	306.93	3.63
X-224_1	-730.39	-14.63	306.93	3.05
X-224_2	-730.96	-12.82	306.96	3.23
X-225_1	-732.77	-15.84	306.98	3.05
X-225_2	-733.08	-13.97	306.98	3.35
X-226_1	-734.85	-16.68	307.03	3.05
X-226_2	-734.78	-14.72	307.06	3.66
X-227_1	-737.21	-17.83	307.08	3.05
X-227_2	-737.18	-16.25	307.11	3.54
X-228_1	-738.89	-18.20	307.14	3.05
X-228_2	-738.80	-16.41	307.14	3.54
X-229_1	-740.94	-18.36	307.19	3.05
X-229_2	-741.09	-16.77	307.21	3.66
X-22_1	-348.75	-3.74	322.11	3.05
X-231_1	-745.43	-17.13	307.24	3.05
X-231_2	-743.07	-17.71	307.24	3.05
X-232_1	-747.58	-17.73	307.24	3.05
X-232_2	-747.16	-16.11	307.24	3.66
X-233_1	-749.54	-17.69	307.24	3.05
X-233_2	-749.25	-16.07	307.24	3.66
X-234_1	-752.00	-17.48	307.24	3.05
X-234_2	-751.51	-15.83	307.24	3.78
X-235_1	-754.05	-17.51	307.24	3.05
X-235_2	-753.58	-15.76	307.24	3.96
X-236_1	-756.11	-17.10	307.24	3.05

X-236_2	-755.77	-15.65	307.24	3.75
X-237_1	-758.90	-16.68	307.24	3.05
X-238_1	-761.15	-16.80	307.24	3.05
X-238_2	-760.81	-15.68	307.24	3.51
X-239_1	-763.11	-16.49	307.29	3.05
X-239_2	-762.64	-15.19	307.26	3.35
X-23_1	-350.23	-2.34	321.72	3.05
X-240_1	-765.37	-16.18	307.34	3.05
X-240_2	-765.07	-15.02	307.32	3.41
X-241_1	-767.50	-15.61	307.39	3.05
X-241_2	-767.01	-14.44	307.37	3.66
X-242_1	-769.83	-15.06	307.44	3.05
X-242_2	-769.32	-13.94	307.42	3.78
X-243_1	-771.82	-14.58	307.49	3.05
X-243_2	-771.48	-13.50	307.46	3.51
X-244_1	-773.74	-14.34	307.51	3.05
X-244_2	-773.20	-13.25	307.51	3.51
X-245_1	-775.81	-12.72	307.54	3.05
X-246_1	-778.47	-13.35	307.57	3.05
X-246_2	-777.60	-11.73	307.56	3.84
X-247_1	-780.63	-12.77	307.60	3.05
X-247_2	-780.04	-11.05	307.58	3.54
X-248_1	-782.56	-12.02	307.63	3.05
X-248_2	-782.09	-10.72	307.61	3.41
X-249_1	-784.79	-10.94	307.64	3.05
X-249_2	-784.10	-9.96	307.64	3.81
X-24_1	-351.77	-1.10	321.72	3.05
X-250_1	-786.85	-10.66	307.67	3.05
X-250_2	-786.18	-9.46	307.67	3.63
X-251_1	-789.28	-10.05	307.70	3.05
X-251_2	-788.78	-8.62	307.70	3.20
X-252_1	-791.18	-8.86	307.73	3.05
X-253_1	-792.95	-7.57	307.54	3.05
X-254_1	-795.59	-7.88	309.27	3.05
X-254_2	-794.98	-6.84	309.27	3.66
X-255_1	-797.96	-7.39	307.76	3.05
X-255_2	-797.48	-6.06	307.75	3.66
X-256_1	-799.55	-7.08	307.79	3.05
X-256_2	-798.87	-5.58	307.78	3.66
X-257_1	-801.68	-6.61	307.82	3.05
X-257_2	-800.91	-5.06	307.81	3.84
X-258_1	-804.14	-6.23	307.85	3.05
X-258_2	-803.56	-4.49	307.83	3.66
X-259_1	-806.51	-4.57	307.85	3.05
X-25_1	-352.59	1.11	321.02	3.05
X-260_1	-808.43	-5.07	307.88	3.05
X-260_2	-807.92	-3.51	307.86	3.44
X-261_1	-810.76	-4.37	307.90	3.05
X-261_2	-810.03	-2.73	307.89	3.66
X-262_1	-812.85	-4.00	307.93	3.05
X-262_2	-812.20	-2.36	307.91	3.72
X-263_1	-814.93	-3.79	307.94	3.05
X-263_2	-814.59	-2.11	307.95	3.66
X-264_1	-816.96	-3.41	307.98	3.05
X-264_2	-816.36	-1.57	307.96	3.63
X-265_1	-819.36	-2.80	307.99	3.05
X-265_2	-818.99	-1.17	308.00	3.35

X-266_1	-821.96	-2.49	308.00	3.05
X-267_1	-823.78	-2.45	308.01	3.05
X-267_2	-823.21	-0.66	308.02	3.96
X-268_1	-825.74	-1.80	308.05	3.05
X-268_2	-825.22	-0.19	308.04	3.66
X-269_1	-828.43	-1.79	308.06	3.05
X-269_2	-827.87	-0.52	308.07	3.66
X-26_1	-354.66	2.03	320.31	3.05
X-270_1	-830.83	-1.21	308.10	3.05
X-270_2	-830.44	0.16	308.09	3.66
X-271_1	-833.44	-1.13	308.13	3.05
X-271_2	-833.08	0.56	308.11	3.47
X-272_1	-835.23	-0.85	308.15	3.05
X-272_2	-834.83	0.70	308.14	3.60
X-273_1	-837.55	-0.64	308.15	3.05
X-273_2	-837.39	0.60	308.15	3.47
X-274_1	-839.84	-1.04	308.18	3.05
X-274_2	-839.72	0.68	308.17	3.54
X-275_1	-842.01	-1.07	308.21	3.05
X-275_2	-841.79	0.68	308.19	3.47
X-276_1	-844.10	-1.07	308.24	3.05
X-276_2	-844.13	0.37	308.22	3.63
X-277_1	-846.53	-1.23	308.27	3.05
X-277_2	-846.58	0.21	308.25	3.66
X-278_1	-848.69	-0.85	308.28	3.05
X-279_1	-850.60	-1.76	308.30	3.05
X-27_1	-356.59	2.76	319.61	3.05
X-280_1	-853.01	-3.03	308.31	3.05
X-280_2	-853.02	-1.37	308.31	3.47
X-281_1	-855.36	-3.42	308.33	3.05
X-281_2	-855.31	-1.60	308.32	3.54
X-282_1	-857.21	-3.18	308.35	3.05
X-282_2	-857.33	-2.08	308.36	3.66
X-283_1	-859.64	-3.34	308.38	3.05
X-283_2	-859.67	-2.04	308.37	3.35
X-284_1	-861.82	-3.91	308.40	3.05
X-284_2	-861.96	-2.69	308.41	3.47
X-285_1	-863.85	-2.93	308.42	3.05
X-285_2	-863.74	-4.41	308.44	3.05
X-286_1	-866.70	-2.76	308.46	0.82
X-286_2	-865.19	-4.61	308.45	3.05
X-286_3	-865.44	-3.28	308.46	3.20
X-287_1	-868.31	-4.97	308.31	3.05
X-287_2	-868.41	-3.83	308.31	3.35
X-288_1	-870.43	-5.50	308.46	3.05
X-288_2	-870.53	-4.09	308.46	3.35
X-289_1	-872.51	-5.73	308.46	3.05
X-289_2	-872.55	-4.38	308.46	3.47
X-28_1	-358.45	3.66	318.91	3.05
X-290_1	-874.54	-5.46	308.46	3.05
X-290_2	-874.00	-4.43	308.46	3.63
X-291_1	-876.55	-5.79	308.46	3.05
X-292_1	-878.53	-6.32	308.46	3.05
X-29_1	-360.54	4.47	322.86	3.05
X-30_1	-362.32	5.26	322.27	3.05
X-31_1	-364.31	6.10	319.58	3.05
X-32_1	-366.97	5.87	321.68	3.05



X-32_2	-366.14	6.74	319.58	4.18
X-33_1	-369.09	6.55	319.34	3.05
X-33_2	-368.31	7.38	319.34	3.96
X-34_1	-371.03	7.31	319.10	3.05
X-34_2	-370.27	8.28	319.10	3.96
X-35_1	-372.96	8.31	318.87	3.05
X-35_2	-372.42	9.17	318.87	3.66
X-36_1	-375.47	8.61	318.63	3.05
X-36_2	-374.99	9.65	318.63	3.66
X-37_1	-378.46	8.71	318.15	1.22
X-37_2	-377.70	11.14	318.15	2.44
X-38_1	-378.48	11.07	317.91	3.05
X-39_1	-382.58	11.03	317.68	1.83
X-39_2	-382.48	10.05	317.68	1.83
X-39_3	-381.79	9.15	317.68	3.05
X-40_1	-384.68	9.77	317.20	1.22
X-40_2	-384.62	8.64	317.20	1.22
X-40_3	-384.31	10.78	317.20	2.44
X-41_1	-387.62	10.29	316.72	1.52
X-41_2	-387.27	9.14	316.72	2.13
X-41_3	-387.02	8.13	316.72	2.13
X-42_1	-388.95	8.12	316.48	3.05
X-42_2	-388.73	9.11	316.48	3.66
X-43_1	-392.32	9.94	316.01	0.73
X-43_2	-391.22	7.75	316.01	2.93
X-43_3	-391.17	8.79	316.01	3.05
X-44_1	-394.10	10.31	315.77	0.91
X-44_2	-393.38	8.20	315.77	2.74
X-44_3	-393.16	9.18	315.77	3.05
X-45_1	-395.58	9.48	315.77	2.90
X-45_2	-395.62	8.42	315.77	3.05
X-46_1	-397.39	8.76	315.77	3.05
X-46_2	-397.15	9.82	315.77	3.66
X-48_1	-402.48	11.64	315.77	1.52
X-48_2	-402.48	9.32	315.77	2.13
X-48_3	-401.81	10.43	315.77	3.05
X-49_1	-404.74	9.84	315.77	1.98
X-49_2	-404.52	11.95	315.77	1.98
X-49_3	-404.01	10.87	315.77	3.05
X-50_1	-406.84	11.31	317.50	1.52
X-50_2	-406.39	12.20	317.50	2.13
X-50_3	-406.19	10.29	317.50	3.05
X-51_1	-409.04	12.83	313.33	1.68
X-51_2	-408.96	11.70	313.33	1.98
X-51_3	-408.58	10.75	313.33	3.05
X-52_1	-410.39	11.92	313.33	3.05
X-53_1	-412.55	11.27	313.33	3.05
X-53_2	-412.18	12.01	313.33	3.66
X-54_1	-415.44	11.20	313.08	3.05
X-54_2	-415.10	11.96	313.08	3.66
X-56_1	-420.28	12.79	312.32	1.62
X-56_2	-420.07	11.65	312.32	2.04
X-56_3	-419.53	10.30	312.57	3.05
X-57_1	-422.00	11.38	312.06	1.83
X-57_2	-421.95	12.54	312.06	1.83
X-57_3	-421.25	10.11	311.81	3.05
X-58_1	-424.45	11.31	311.81	1.52

X-58_2	-424.04	12.44	311.81	2.13
X-58_3	-423.55	10.22	311.81	3.05
X-59_1	-425.83	10.95	311.81	3.05
X-60_1	-428.91	10.91	311.81	1.07
X-60_2	-428.21	12.06	311.81	2.59
X-60_3	-427.89	9.93	311.81	3.05
X-61_1	-431.11	11.00	311.81	1.49
X-61_2	-430.81	12.22	311.52	2.10
X-61_3	-430.16	9.65	311.23	3.05
X-62_1	-433.69	10.70	311.58	1.40
X-62_2	-433.30	11.68	310.94	2.26
X-62_3	-432.66	9.60	310.64	3.05
X-63_1	-434.48	9.65	312.82	3.05
X-63_2	-434.34	10.41	310.35	3.66
X-64_1	-437.93	10.01	311.36	1.16
X-64_2	-437.27	11.01	310.06	2.74
X-64_3	-437.00	8.93	309.77	3.05
X-65_1	-439.98	8.66	309.77	1.22
X-65_2	-439.31	10.59	309.77	2.93
X-65_3	-439.21	9.57	309.77	3.05
X-66_1	-441.22	8.81	309.37	3.05
X-66_2	-440.92	9.52	309.77	3.66
X-67_1	-444.90	9.27	309.52	0.46
X-67_2	-444.42	10.45	309.52	1.37
X-67_3	-444.21	8.77	309.52	1.83
X-67_4	-443.58	8.13	309.52	3.05
X-68_1	-446.89	10.55	308.78	0.15
X-68_2	-446.60	9.77	308.78	0.76
X-68_3	-445.68	9.00	308.78	2.74
X-68_4	-445.58	8.24	308.78	3.05
X-69_1	-448.60	10.62	308.05	1.52
X-69_2	-448.18	9.46	308.05	2.13
X-69_3	-447.68	8.40	308.05	3.05
X-70_1	-450.50	9.98	307.55	0.91
X-70_2	-450.32	10.82	307.55	1.22
X-70_3	-450.08	9.18	307.55	1.83
X-70_4	-449.43	8.45	307.55	3.05
X-71_1	-453.04	11.54	306.81	0.73
X-71_2	-452.08	10.23	306.81	2.93
X-71_3	-452.02	8.96	306.81	3.05
X-72_1	-454.20	10.51	306.32	3.05
X-73_1	-457.82	12.71	306.32	0.91
X-73_2	-457.04	10.30	306.32	3.05
X-73_3	-453.83	11.20	306.32	3.66
X-74_1	-460.15	10.76	306.32	0.61
X-74_2	-458.44	13.02	306.32	3.05
X-75_1	-461.87	12.15	306.32	1.34
X-75_2	-461.05	13.48	306.32	2.32
X-75_3	-461.14	10.87	306.32	3.05
X-76_1	-462.98	12.38	306.17	3.05
X-76_2	-462.59	13.17	306.17	3.66
X-77_1	-466.44	12.57	306.02	0.61
X-77_2	-465.28	11.19	306.02	2.93
X-77_3	-465.14	13.62	306.02	3.05
X-78_1	-468.60	12.43	305.71	0.52
X-78_2	-467.25	13.38	305.71	3.02
X-78_3	-467.35	11.38	305.71	3.05

X-79_1	-470.70	12.18	304.26	0.46
X-79_2	-469.53	11.02	305.26	3.05
X-79_3	-469.40	13.27	305.41	3.20
X-80_1	-472.18	12.27	304.23	0.61
X-80_2	-471.07	11.07	304.95	3.05
X-80_3	-470.94	13.18	305.10	3.05
X-81_1	-474.96	12.15	304.80	0.91
X-81_2	-473.92	13.22	304.80	2.90
X-81_3	-473.90	10.88	304.80	3.05
X-82_1	-477.40	12.21	304.49	0.43
X-82_2	-477.34	11.74	304.49	0.61
X-82_3	-476.33	13.35	304.49	2.62
X-82_4	-476.17	11.01	304.49	3.05
X-83_1	-479.66	12.44	304.19	0.24
X-83_2	-479.45	11.78	304.19	0.61
X-83_3	-478.36	13.24	304.19	2.80
X-83_4	-478.31	11.08	304.19	3.05
X-84_1	-481.80	12.64	304.19	0.21
X-84_2	-481.48	11.95	304.19	0.64
X-84_3	-480.52	13.30	304.19	2.80
X-84_4	-480.36	10.92	304.19	3.05
X-85_1	-484.26	12.63	304.14	0.30
X-85_2	-483.86	12.05	304.14	1.13
X-85_3	-483.32	13.22	304.14	2.23
X-85_4	-482.93	11.05	304.14	3.05
X-86_1	-485.38	12.12	303.99	3.05
X-86_2	-485.10	12.88	303.99	3.66
X-87_1	-489.05	12.52	303.94	0.30
X-87_2	-488.36	13.52	303.94	1.52
X-87_3	-488.29	12.08	303.94	1.83
X-87_4	-487.70	10.67	303.94	3.05
X-88_1	-491.07	14.91	303.79	1.40
X-88_2	-491.39	13.22	303.79	2.13
X-88_3	-491.31	12.45	303.79	2.65
X-88_4	-491.49	11.77	303.79	3.05
X-89_1	-491.05	11.31	303.79	6.10
X-8_1	-341.16	-32.82	323.45	3.05
X-90_1	-493.77	10.45	303.53	2.74
X-91_2	-494.52	13.50	303.48	3.05
X-92_1	-495.58	9.79	303.58	2.74
X-93_2	-495.94	15.36	303.43	3.66
X-94_1	-497.23	9.20	303.63	2.74
X-95_1	-498.60	15.36	303.38	3.05
X-95_2	-497.84	16.37	303.38	3.66
X-96_1	-500.61	15.83	303.33	3.05
X-96_2	-499.53	16.58	303.33	4.27
X-97_1	-502.33	16.40	303.28	3.05
X-97_2	-501.83	17.38	303.28	3.96
X-98_1	-504.72	17.24	303.23	3.05
X-98_2	-504.37	18.26	303.23	3.66
X-99_1	-507.94	19.94	303.18	0.09
X-99_2	-508.05	19.05	303.18	0.21
X-99_3	-507.88	18.42	303.18	0.61
X-99_4	-506.73	17.39	303.18	3.05
X-9_1	-341.72	-30.72	324.04	3.05
X-F196_1	-701.73	-1.84	306.67	3.47
X-F197_1	-700.26	-3.93	306.67	4.39

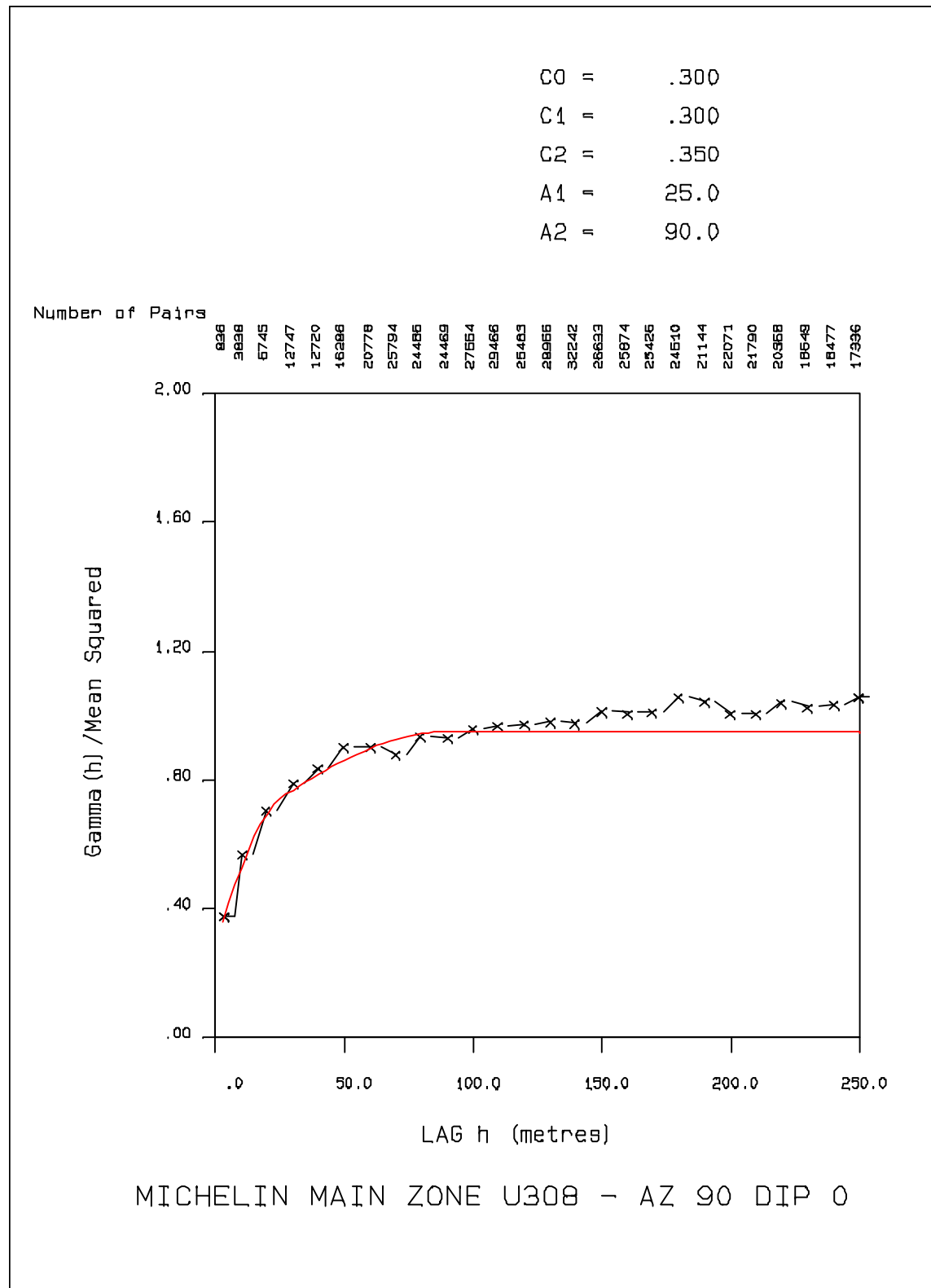
X-F206_1	-709.62	-8.38	306.67	3.66
X-F208_1	-711.49	-8.83	306.67	3.75
X-F210_1	-713.28	-9.63	306.67	3.35
X-F230_1	-743.59	-15.74	307.24	3.66
X-F231_1	-745.56	-18.76	307.24	3.35
X-F245_1	-775.93	-14.39	307.54	3.75
X-F253_1	-792.99	-8.69	307.54	3.47
X-F259_1	-806.46	-5.76	307.85	3.63
X-F266_1	-821.52	-0.84	308.00	3.57
X-F278_1	-847.77	-1.74	308.28	3.66
X-F279_1	-849.84	-2.63	308.30	3.66
X-F291_1	-876.27	-6.83	308.46	3.05
X-F292_1	-877.88	-7.33	308.46	3.57
X-F293_1	-880.30	-6.35	308.46	3.66
X-f237_1	-758.87	-17.52	307.35	3.35
X-f252_1	-791.04	-9.78	307.54	3.63

### LIST OF DRILL HOLES WITH ASSAYS USED IN RESOURCE ESTIMATE JACQUES LAKE

HOLE	EASTING	NORTHING	ELEVATION	HLENGTH	AZIMUTH	DIP
JL-05-01	333181.90	6065979.30	293.34	358.75	315.00	-55.00
JL-05-02	333233.70	6066064.70	282.62	327.66	315.00	-55.00
JL-05-03	333127.30	6065913.20	282.96	361.80	315.00	-55.00
JL-05-04	333048.50	6065915.20	261.49	303.28	315.00	-50.00
JL-05-05	333036.00	6066262.00	194.00	287.73	315.00	-45.00
JL-05-06	333121.60	6066332.50	197.42	282.55	315.00	-45.00
JL-05-07	333217.90	6066421.30	208.75	268.52	315.00	-45.00
JL-06-08	333179.00	6065981.40	287.00	385.88	315.00	-70.00
JL-06-09	333134.00	6065916.80	282.96	395.33	315.00	-70.00
JL-06-10	333229.60	6066065.80	280.00	431.60	315.00	-65.00
JL-06-11	333271.80	6066119.20	280.00	468.17	315.00	-50.00
JL-06-12	333036.00	6066262.00	194.00	306.20	315.00	-60.00
JL-06-13	333036.00	6066262.00	194.00	303.58	315.00	-75.00
JL-06-14	332992.10	6066155.20	191.00	303.97	315.00	-45.00
JL-06-15	332992.10	6066155.20	191.00	328.27	315.00	-60.00
JL-06-16	332902.00	6066039.00	199.00	350.52	315.00	-55.00
JL-06-17	332902.00	6066039.00	199.00	352.04	315.00	-70.00
JL-06-18	332884.20	6065970.70	216.00	318.52	315.00	-45.00
JL-06-19	332884.20	6065970.70	216.00	398.07	315.00	-60.00
JL-06-20	332884.00	6065971.00	216.00	318.82	315.00	-75.00
JL-06-21	333048.00	6065914.00	261.00	366.06	315.00	-65.00
JL-06-22	332807.00	6065911.00	207.00	333.76	315.00	-45.00
JL-06-23A	332807.00	6065911.00	207.00	309.68	315.00	-63.00
JL-06-24A	332921.00	6066006.00	220.00	317.29	315.00	-50.00
JL-06-25	333138.00	6066170.00	210.00	380.09	315.00	-65.00
JL-06-26	332921.00	6066006.00	220.00	333.76	315.00	-70.00
JL-06-27	333194.00	6066267.00	227.00	288.65	315.00	-55.00
JL-06-28	332837.00	6065959.00	217.00	325.23	315.00	-55.00
JL-06-29	333276.70	6066362.51	236.00	285.60	315.00	-55.00
JL-06-30	332837.00	6065959.00	217.00	316.08	315.00	-70.00
JL-06-31	333670.00	6067029.00	200.00	282.55	315.00	-45.00
JL-06-32	332749.00	6065875.00	206.00	287.73	315.00	-50.00
JL-06-33	333843.00	6067261.00	201.00	213.96	315.00	-45.00
JL-06-34	332749.00	6065875.00	206.00	368.90	315.00	-65.00
JL-06-35	332749.00	6065875.00	206.00	316.08	315.00	-80.00
JL-06-37	332694.00	6065799.00	203.00	412.20	315.00	-45.00
JL-06-36A	334222.00	6067836.00	213.00	184.10	315.00	-55.00
JL-06-38	334371.00	6068024.00	250.00	199.95	315.00	-55.00

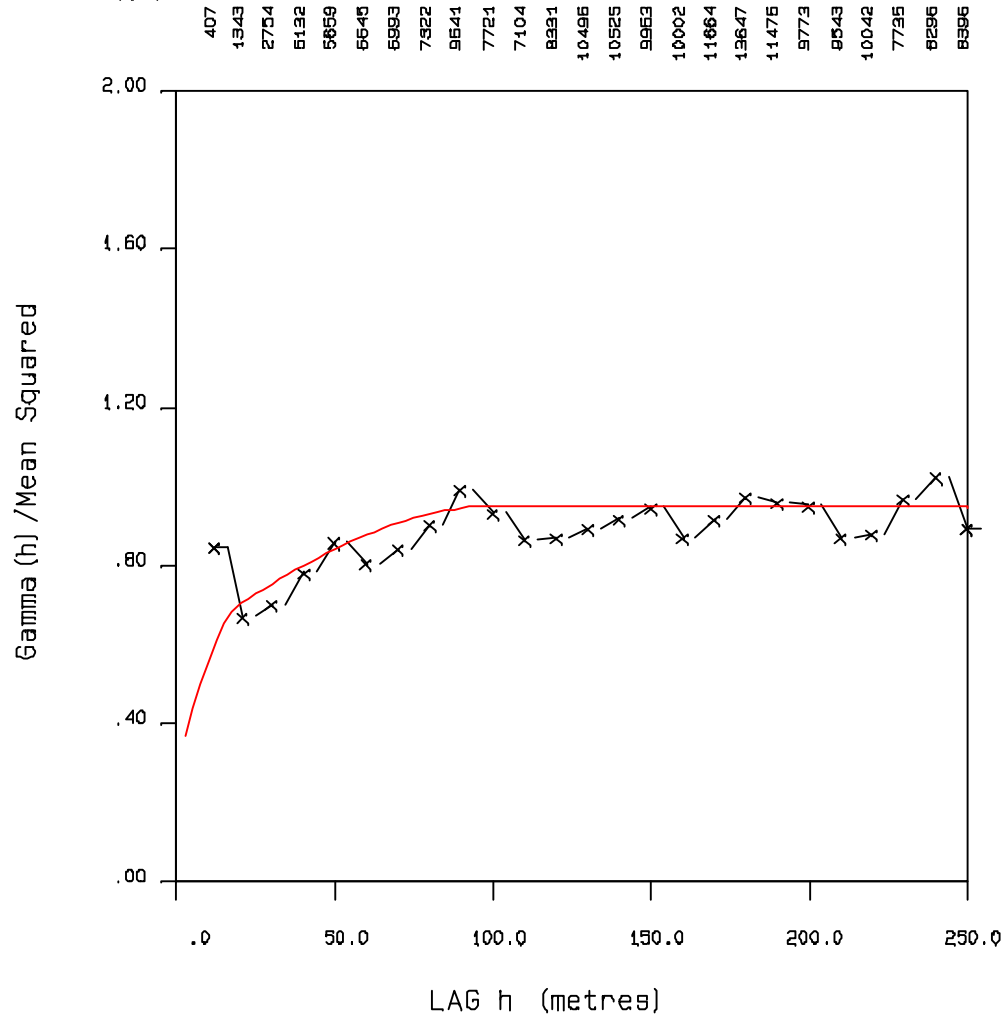
<b>JL-06-39</b>	<b>332609.00</b>	<b>6065772.00</b>	<b>196.00</b>	<b>306.63</b>	<b>315.00</b>	<b>-45.00</b>
<b>JL-06-40</b>	<b>334451.00</b>	<b>6068110.00</b>	<b>265.00</b>	<b>272.19</b>	<b>315.00</b>	<b>-55.00</b>
JL-06-41	332609.00	6065772.00	196.00	284.99	315.00	-60.00
<b>JL-06-42</b>	<b>332550.00</b>	<b>6065749.00</b>	<b>191.00</b>	<b>296.57</b>	<b>315.00</b>	<b>-45.00</b>
<b>JL-06-43</b>	<b>332809.00</b>	<b>6066011.00</b>	<b>197.00</b>	<b>243.93</b>	<b>315.00</b>	<b>-45.00</b>
JL-06-44	332624.00	6065864.00	204.00	339.85	315.00	-45.00
<b>JL-06-45</b>	<b>332955.00</b>	<b>6065893.00</b>	<b>247.00</b>	<b>443.79</b>	<b>315.00</b>	<b>-70.00</b>
JL-06-46	332402.00	6065773.00	202.00	304.19	360.00	-45.00
<b>JL-06-47</b>	<b>332921.00</b>	<b>6065862.00</b>	<b>248.00</b>	<b>398.37</b>	<b>315.00</b>	<b>-70.00</b>
<b>JL-06-48</b>	<b>332933.00</b>	<b>6066128.00</b>	<b>190.50</b>	<b>255.55</b>	<b>315.00</b>	<b>-45.00</b>
<b>JL-06-49</b>	<b>332988.00</b>	<b>6065934.00</b>	<b>257.00</b>	<b>376.73</b>	<b>315.00</b>	<b>-70.00</b>
<b>JL-06-50</b>	<b>332946.00</b>	<b>6065965.00</b>	<b>240.00</b>	<b>357.53</b>	<b>315.00</b>	<b>-70.00</b>
<b>JL-06-51</b>	<b>332850.00</b>	<b>6066041.00</b>	<b>194.00</b>	<b>256.95</b>	<b>315.00</b>	<b>-45.00</b>

## Appendix XII SEMIVARIOGRAMS



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 C1 = .300  
 C2 = .350  
 A1 = 20.0  
 A2 = 100.0

Number of Pairs

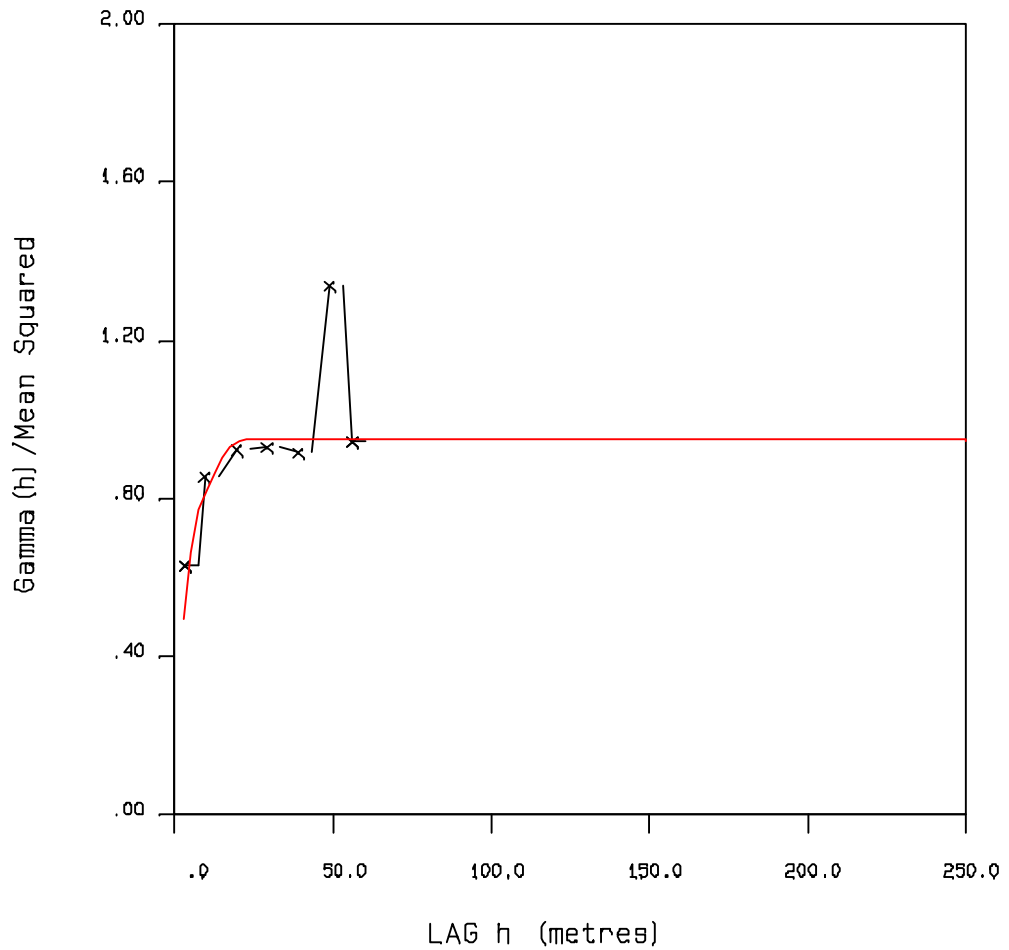


MICHELIN MAIN ZONE U308 - AZ 180 DIP -54

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 C1 = .300  
 C2 = .350  
 A1 = 8.0  
 A2 = 22.0

Number of Pairs

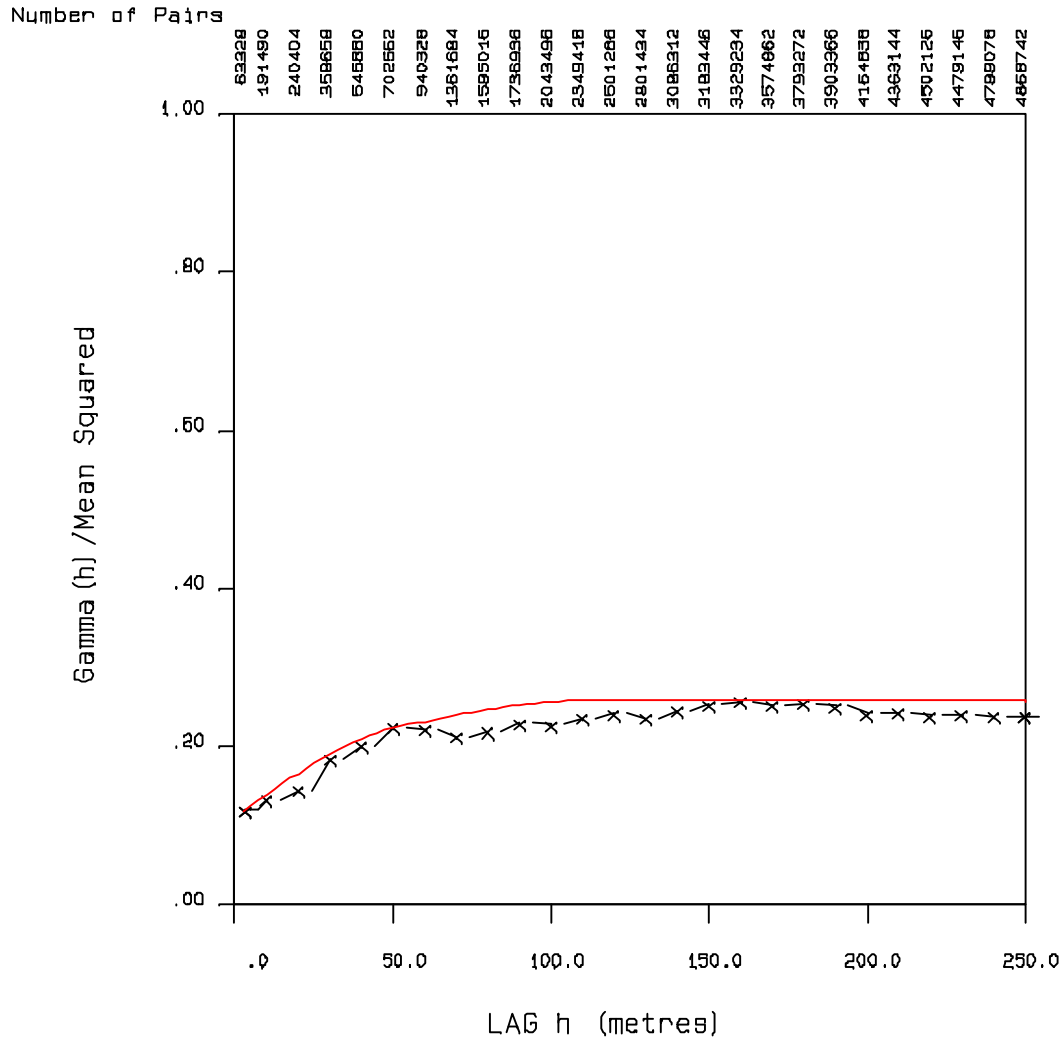
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 2033  
 948  
 248  
 60  
 4



MICHELIN MAIN ZONE U308 - AZ 0 DIP -36



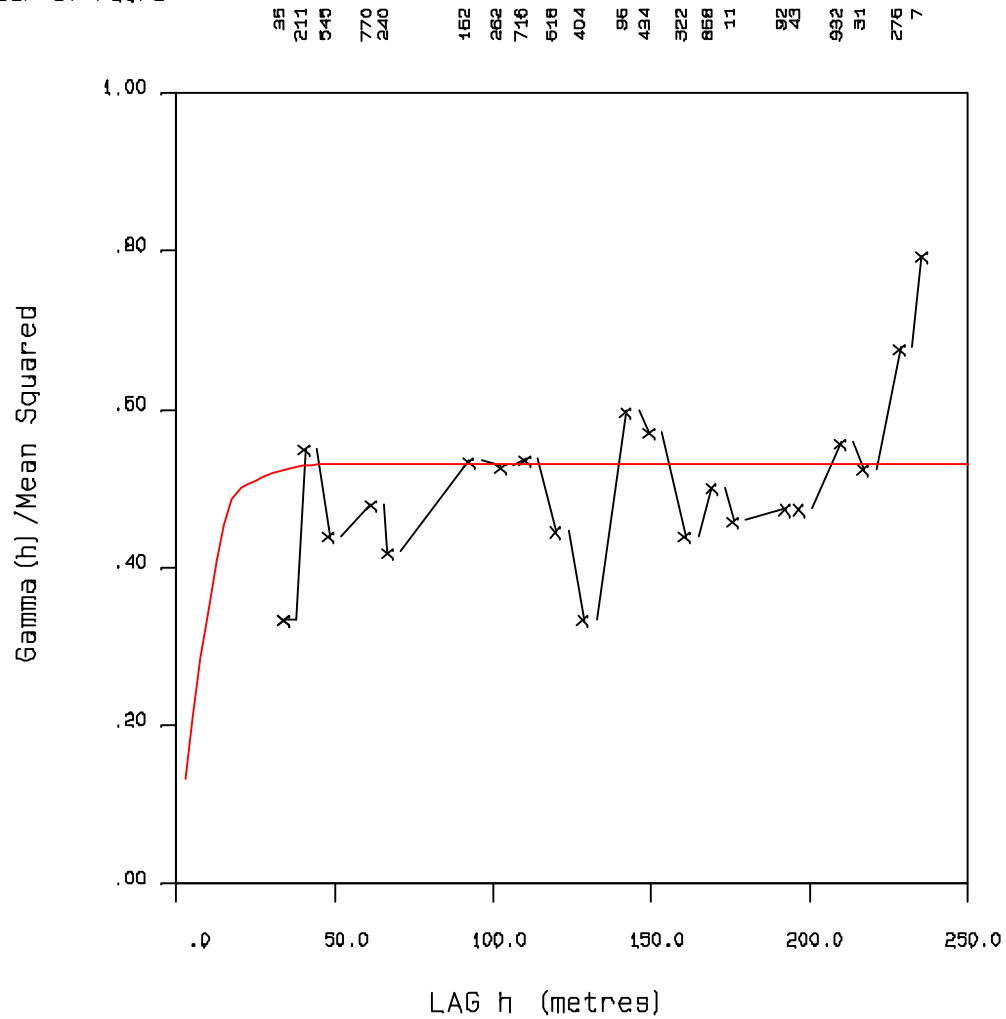
C0 = .110  
 C1 = .060  
 C2 = .090  
 A1 = 50.0  
 A2 = 120.0



MICHELIN WASTE U308 - OMNI DIRECTIONAL

C0 = .050  
 C1 = .400  
 C2 = .080  
 A1 = 20.0  
 A2 = 45.0

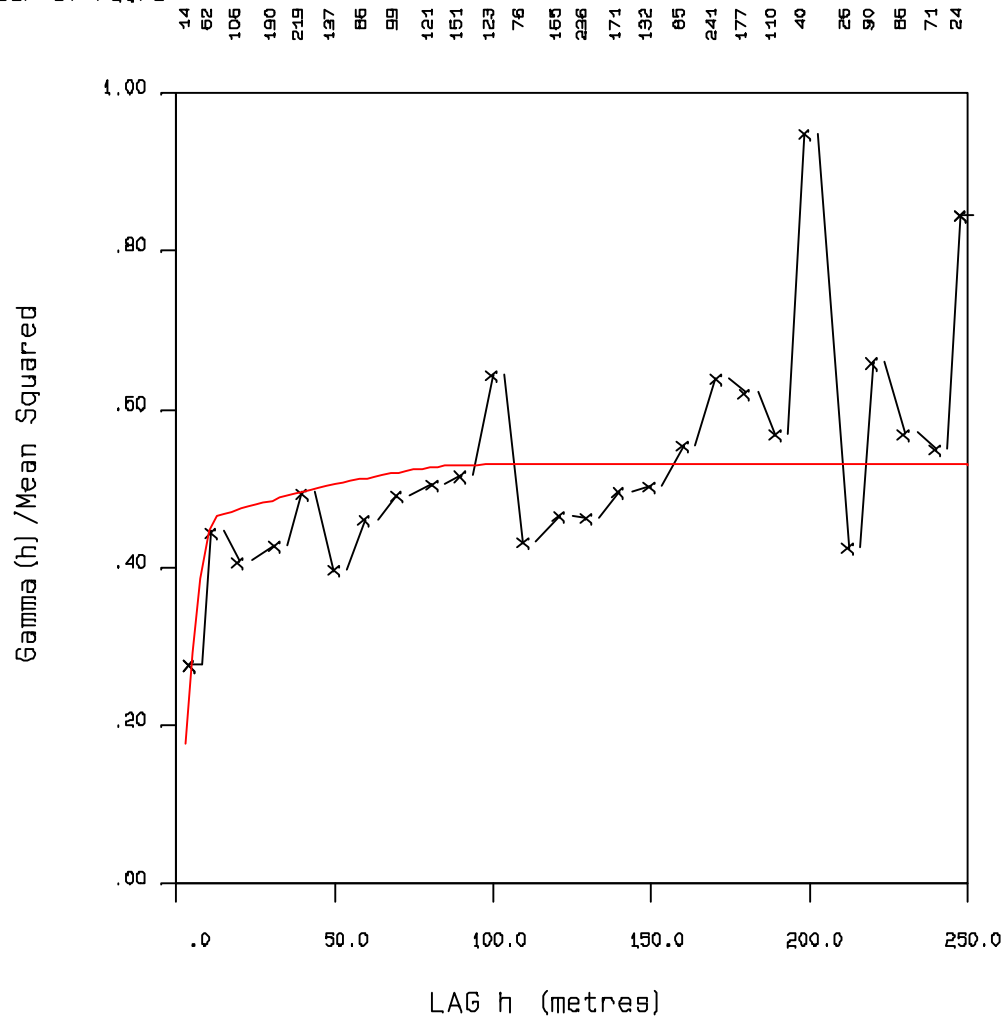
Number of Pairs



JACQUES LAKE MAIN ZONE U308 - AZ 36 DIP 0

C0 = .050  
 C1 = .400  
 C2 = .080  
 A1 = 12.0  
 A2 = 100.0

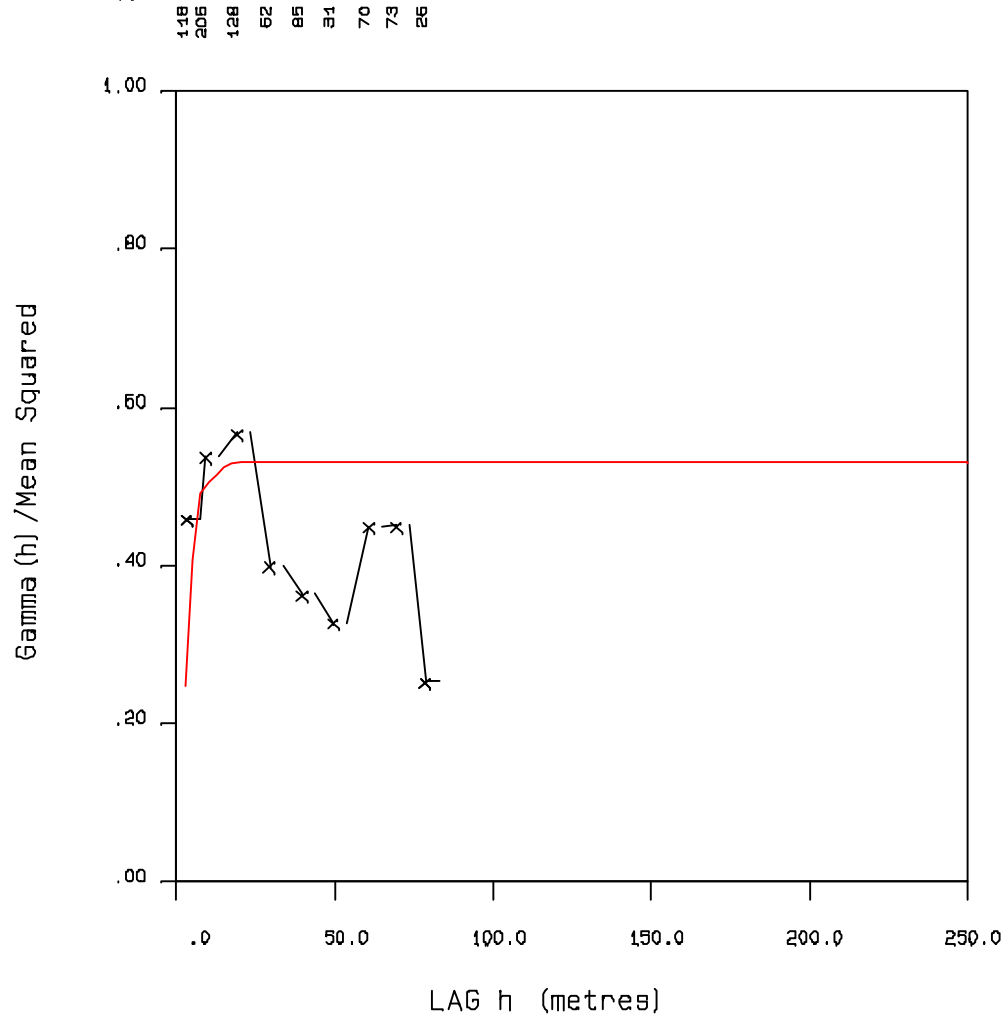
Number of Pairs



JACQUES MAIN ZONE U308 - AZ 126 DIP -60

C0 = .050  
 C1 = .400  
 C2 = .080  
 A1 = 8.0  
 A2 = 20.0

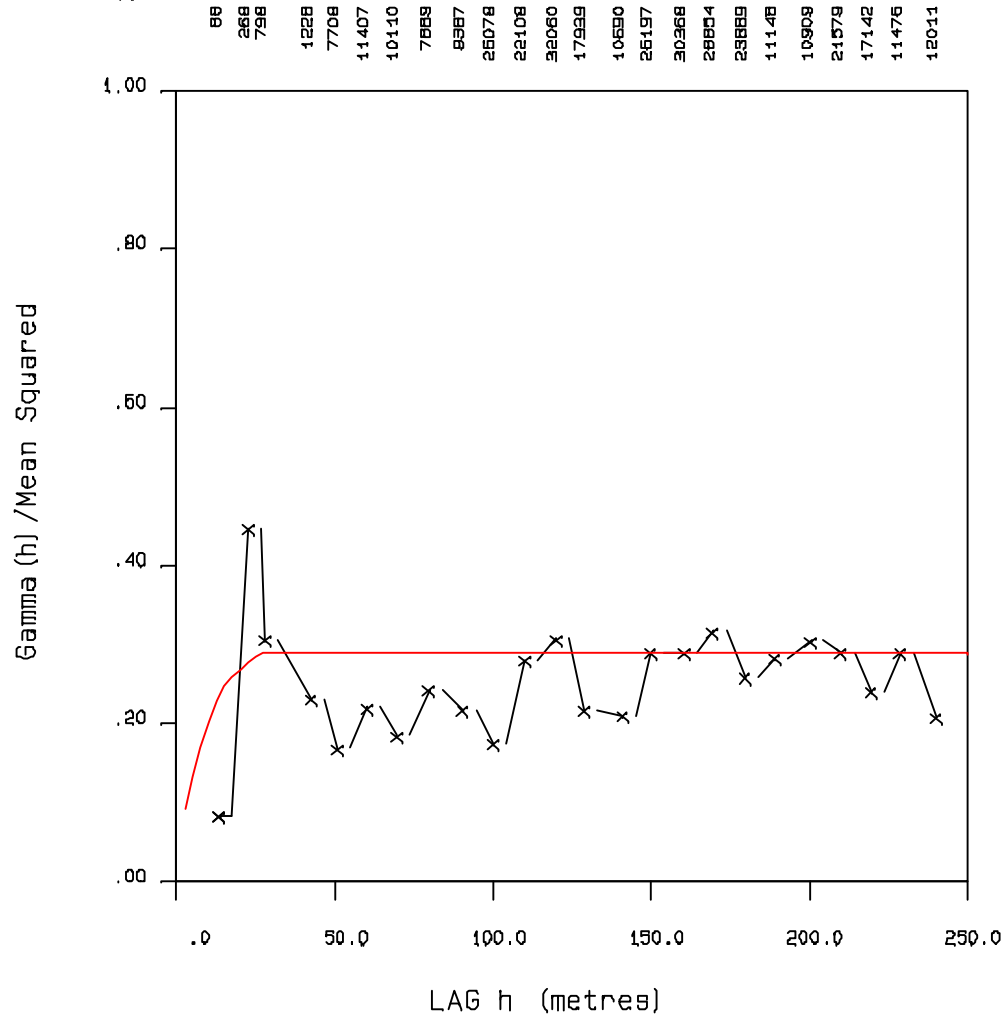
Number of Pairs



JACQUES MAIN ZONE U308 - AZ 306 DIP -30

C0 = .050  
 C1 = .100  
 C2 = .140  
 A1 = 15.0  
 A2 = 30.0

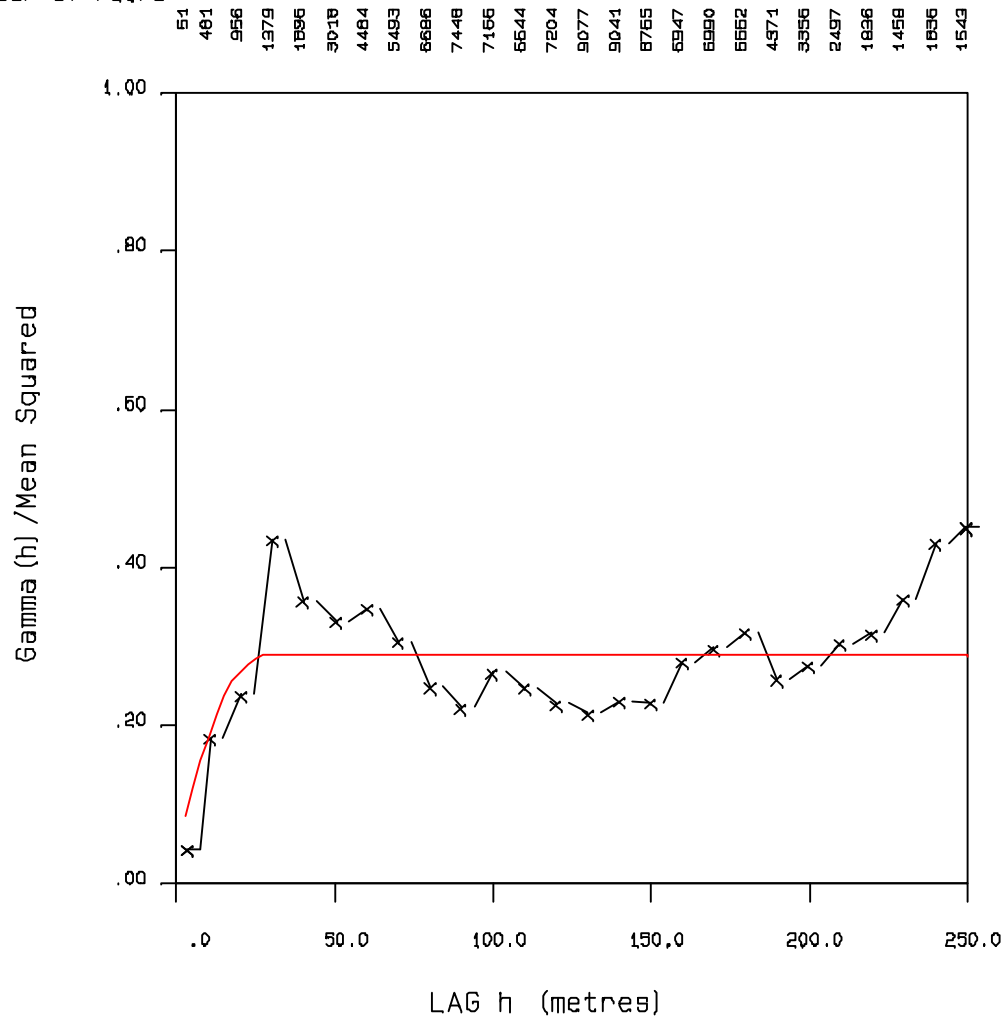
Number of Pairs



JACQUES LAKE WASTE U308 - AZ 36 DIP 0

C0 = .050  
 C1 = .100  
 C2 = .140  
 A1 = 20.0  
 A2 = 30.0

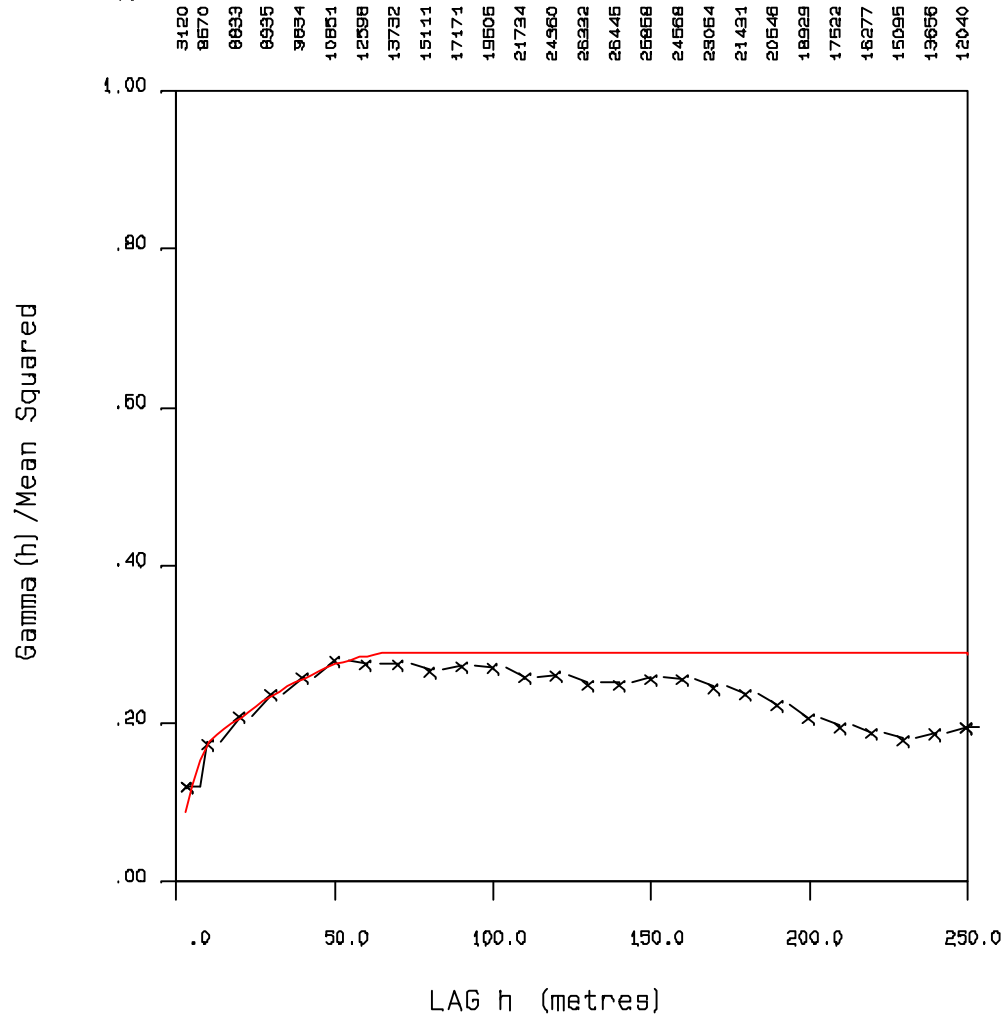
Number of Pairs



JACQUES LAKE WASTE U308 - AZ 126 DIP -60

C0 = .050  
 C1 = .100  
 C2 = .140  
 A1 = 12.0  
 A2 = 70.0

Number of Pairs



JACQUES LAKE WASTE U308 - AZ 306 DIP -30

### Appendix XIII

#### LISTING OF SPECIFIC GRAVITY DETERMINATIONS

HOLE	FROM	TO	SAMPLE	U308	SG
M-05-02C	369.53	370.53	CMB3506	0.109	2.77
M-05-02C	372.75	373.75	CMB3510	0.151	2.69
M-05-02C	376.75	377.83	CMB3514	0.217	2.74
M-05-02C	381.00	382.00	CMB3518	0.043	2.72
M-05-02C	385.12	386.12	CMB3522	0.007	2.72
M-05-02C	388.12	388.82	CMB3528	0.307	2.73
M-05-02C	391.32	392.36	CMB3532	0.078	2.77
M-05-02C	395.04	396.04	CMB3536	0.116	2.72
M-05-02C	398.79	399.12	CMB3889	0.001	2.97
M-05-02C	401.72	402.72	CMB3543	0.025	2.71
M-05-02C	405.51	406.51	CMB3547	0.267	2.72
M-05-02C	408.56	409.56	CMB3553	0.324	2.72
M-05-03	309.60	310.60	CMB2311	0.001	2.70
M-05-03	339.36	340.36	CMB2319	0.006	2.68
M-05-03	346.36	347.36	CMB2329	0.081	2.73
M-05-03	354.36	355.36	CMB2337	0.021	2.72
M-05-03	362.36	363.14	CMB2345	0.007	2.75
M-05-03	377.74	378.74	CMB3574	0.042	2.68
M-05-03	384.63	385.63	CMB3582	0.180	2.70
M-05-03	394.65	395.65	CMB3590	0.007	2.69
M-05-03	415.64	416.64	CMB3598	0.001	2.93
M-05-03	422.42	423.42	CMB3606	0.224	2.70
M-05-03	429.42	430.42	CMB3614	0.195	2.74
M-05-03	437.22	438.22	CMB3622	0.058	2.69
M-05-04	267.40	268.40	CMB3638	0.003	2.73
M-05-04	275.30	276.37	CMB3646	0.001	3.02
M-05-04	327.45	328.45	CMB3654	0.018	2.71
M-05-04	340.60	341.60	CMB3662	0.079	2.69
M-05-04	351.95	352.95	CMB3673	0.333	2.73
M-05-04	359.95	360.95	CMB3683	0.284	2.72
M-05-04	367.95	368.95	CMB3691	0.035	2.71
M-05-04	374.95	375.95	CMB3701	0.151	2.74
M-05-04	383.15	384.20	CMB3709	0.290	2.73
M-05-04	390.40	391.40	CMB3717	0.003	2.70
M-05-04	397.10	398.10	CMB3727	0.004	2.69
M-05-04	418.88	420.08	CMB3735	0.011	2.71
M-05-04	429.40	430.40	CMB3743	0.012	2.71
M-05-05	327.57	328.57	CMB3757	0.002	2.67
M-05-05	335.07	336.07	CMB3765	0.001	2.68
M-05-05	377.61	378.61	CMB3769	0.001	2.71
M-05-05	423.68	424.68	CMB3773	0.010	2.71
M-05-05	431.68	432.68	CMB3783	0.012	2.71
M-05-05	435.68	436.68	CMB3787	0.007	2.74
M-05-05	441.45	442.75	CMB3793	0.010	2.71
M-05-05	454.54	455.54	CMB3809	0.173	2.75
M-05-05	462.47	463.47	CMB3817	0.031	2.72
M-05-05	469.81	470.50	CMB3827	0.001	2.98
M-05-05	484.95	485.95	CMB3843	0.001	2.68
M-05-05	491.95	492.95	CMB3853	0.008	2.66
M-05-05	506.54	507.54	CMB3869	0.007	2.70
M-05-06	448.40	449.40	CMB3903	0.002	2.72
M-05-06	488.07	489.07	CMB3919	0.061	2.77



M-05-06	495.17	496.21	CMB3929	0.009	2.67
M-05-06	503.31	504.16	CMB3937	0.143	2.71
M-05-06	512.16	513.16	CMB3946	0.049	2.73
M-05-06	519.41	520.41	CMB3956	0.007	2.80
M-05-06	527.26	528.26	CMB3964	0.448	2.73
M-05-06	535.24	536.24	CMB3973	0.029	2.72
M-05-06	543.36	544.36	CMB3983	0.242	2.73
M-05-06	551.47	552.43	CMB3991	0.010	2.91
M-06-09	306.56	307.71	CMB5001	0.055	2.63
M-06-09	331.58	332.58	CMB5012	0.017	2.59
M-06-09	366.86	367.86	CMB5040	0.046	2.60
M-06-09	379.68	380.16	CMB5056	0.017	2.88
M-06-09	401.55	402.55	CMB5082	0.065	2.69
M-06-10	313.80	314.80	CMB8018	0.004	2.58
M-06-10	322.57	323.57	CMB8024	0.182	2.50
M-06-10	389.14	390.42	CMB8067	0.096	2.48
M-06-10	404.28	405.28	CMB8082	0.165	2.60
M-06-11	199.33	200.33	CMB8002	0.001	2.61
M-06-11	322.80	323.80	CMB8130	0.037	2.69
M-06-11	359.86	360.92	CMB8153	0.247	2.67
M-06-11	374.31	375.31	CMB8168	0.126	2.73
M-06-11	390.08	391.08	CMB8183	0.183	2.73
M-06-12	333.00	334.00	CMB5563	0.025	2.61
M-06-12	348.00	349.00	CMB5581	0.037	2.60
M-06-12	355.00	356.00	CMB5588	0.159	2.68
M-06-12	359.15	359.50	CMB5593	0.224	2.61
M-06-12	415.65	416.65	CMB5661	0.026	2.56
M-06-12	421.58	423.08	CMB5666	0.024	3.00
M-06-13	385.00	386.00	CMB8232	0.058	2.66
M-06-13	408.00	409.00	CMB8259	0.140	2.67
M-06-13	412.00	413.00	CMB8264	0.299	2.68
M-06-13	420.00	421.00	CMB8273	0.179	2.68
M-06-13	436.50	437.50	CMB8289	0.019	2.65
M-06-13	454.50	455.50	CMB8309	0.350	2.73
M-06-14	359.68	360.68	CMB5681	0.043	2.66
M-06-14	388.64	389.64	CMB5697	0.087	2.61
M-06-14	392.64	393.64	CMB5095	0.074	2.56
M-06-14	396.83	398.03	CMB5099	0.168	2.67
M-06-14	430.64	432.00	CMB5108	0.295	2.62
M-06-14	437.75	438.75	CMB5115	0.212	2.56
M-06-15	332.46	333.46	CMB8363	0.142	2.67
M-06-15	336.46	337.60	CMB8367	0.090	2.76
M-06-15	344.73	345.93	CMB8377	0.036	2.73
M-06-15	360.80	361.80	CMB8390	0.063	2.83
M-06-17	374.04	375.04	CMB5156	0.497	2.31
M-06-17	385.64	386.64	CMB5167	0.166	2.77
M-06-17	395.84	397.04	CMB5180	0.309	2.61
M-06-17	398.43	399.73	CMB5182	0.154	2.88
M-06-17	403.87	404.90	CMB5187	0.131	2.82
M-06-18	463.85	464.85	CMB5353	0.217	2.70
M-06-18	464.85	465.85	CMB5354	0.170	2.70
M-06-19	441.02	442.00	CMB5216	0.307	2.73
M-06-19	451.00	452.00	CMB5229	0.234	2.67
M-06-19	454.10	455.03	CMB5232	0.873	2.74
M-06-20A	378.63	379.63	CMB5239	0.132	2.67
M-06-20A	381.63	382.76	CMB5242	0.195	2.78
M-06-20A	391.63	392.63	CMB5255	0.074	2.66

M-06-21	495.30	496.30	CMB7113	0.114	2.62
M-06-21	499.30	500.30	CMB7117	0.195	2.72
M-06-21	507.50	508.50	CMB7128	0.148	2.71
M-06-21	511.50	512.50	CMB7132	0.106	2.66
M-06-21	518.50	519.66	CMB7139	0.046	2.76
M-06-24	400.13	401.13	CMB5404	0.132	2.78
M-06-24	403.13	404.13	CMB5407	0.290	2.69
M-06-24	408.32	409.32	CMB5413	0.359	2.81
M-06-24	410.32	411.70	CMB5415	0.360	2.70
M-06-24	419.07	420.07	CMB5422	0.062	2.83
M-06-24	430.97	431.97	CMB5437	0.217	2.75
M-06-25	733.43	734.43	CMB5716	0.131	2.79
M-06-25	736.43	737.43	CMB5719	0.315	2.82
M-06-25	739.43	740.57	CMB5722	0.184	2.84
M-06-25	743.73	744.73	CMB5729	0.325	2.79
M-06-25	748.14	749.34	CMB5734	0.225	2.78
M-06-25	761.73	762.76	CMB5747	0.153	2.74
M-06-25	771.76	772.83	CMB5454	0.103	2.78
M-06-27	524.80	525.81	CMB6555	0.009	2.72
M-06-27	534.30	535.30	CMB6565	0.028	2.70
M-06-27	544.15	544.63	CMB6575	0.297	2.73
M-06-27	548.77	549.77	CMB6585	0.321	2.81
M-06-27	576.99	578.00	CMB6620	0.004	2.71
M-06-27	581.00	582.00	CMB6624	0.002	2.73
M-06-28	568.83	569.83	CMB5469	0.107	2.68
M-06-28	570.83	571.83	CMB5471	0.084	2.92
M-06-28	575.59	576.59	CMB5478	0.188	2.82
M-06-28	577.59	578.59	CMB5480	0.340	2.75
M-06-28	588.09	589.09	CMB5490	0.247	2.77
M-06-28	591.96	592.96	CMB5495	0.113	2.80
M-06-29	888.43	889.43	CMB5517	0.097	2.72
M-06-29	897.11	898.11	CMB5526	0.023	2.63
M-06-33	667.17	668.17	CMB5875	0.148	2.81
M-06-33	668.17	668.92	CMB5876	0.221	2.78
M-06-35	659.30	660.30	CMB5903	0.113	2.71
M-06-35	662.30	663.30	CMB5906	0.152	2.70
M-06-35	664.30	665.30	CMB5908	0.096	2.61
M-06-35	667.50	668.80	CMB5911	0.099	2.65
M-06-36A	726.94	727.94	CMB5993	0.092	2.61
M-06-36A	727.94	728.94	CMB5994	0.127	2.58
M-06-36A	730.94	731.94	CMB5997	0.151	2.67
M-06-36A	732.94	733.97	CMB6052	0.145	2.83
M-06-37	582.00	583.00	CMB5955	0.379	2.66
M-06-37	584.00	585.40	CMB5957	0.257	2.73
M-06-37	587.55	588.55	CMB5962	0.099	2.76
M-06-37	589.55	590.55	CMB5964	0.385	2.66
M-06-37	602.70	604.25	CMB5979	0.146	2.80
M-06-37	607.75	608.75	CMB5983	0.119	2.72
M-06-37	615.65	616.65	CMB5991	0.171	2.68
M-06-39	623.18	624.18	CMB6062	0.341	2.56
M-06-39	627.07	628.07	CMB6066	0.201	2.56
M-06-39	632.62	633.62	CMB6071	0.314	2.66
M-06-39	634.62	635.41	CMB6076	0.668	2.75
M-06-39	639.67	640.67	CMB6082	0.059	2.76
M-06-39	643.67	644.67	CMB6086	0.137	2.74
M-06-39	648.14	649.14	CMB6090	0.257	2.86
M-06-39	655.14	656.14	CMB6097	0.090	2.73

M-06-40	616.28	617.51	CMB6129	0.009	2.65
M-06-40	618.51	619.51	CMB6131	0.105	2.68
M-06-40	620.51	621.51	CMB6133	0.235	2.71
M-06-40	623.51	624.51	CMB6136	0.222	2.64
M-06-40	625.51	626.71	CMB6138	0.144	2.70
M-06-44	723.48	724.48	CMB6327	0.144	2.67
M-06-44	725.48	727.00	CMB6329	0.217	2.66
M-06-44	730.13	731.13	CMB6333	0.190	2.66
M-06-44	733.76	734.76	CMB6336	0.166	2.69
M-06-44	749.15	750.15	CMB6348	0.131	2.42
M-06-44	755.04	756.04	CMB6356	0.297	2.70
M-06-44	760.04	761.04	CMB6361	0.394	2.64

### JACQUES LAKE SG DETERMINATIONS

Hole ID	Depth-From (m)	Depth-To (m)	SG
JL-06-08	190.50	191.50	2.79
JL-06-08	310.00	311.00	2.77
JL-06-08	326.00	327.00	2.84
JL-06-08	334.00	334.59	2.99
JL-06-08	344.00	345.50	2.64
JL-06-09	238.50	240.00	2.94
JL-06-09	244.00	245.00	2.77
JL-06-09	265.50	266.50	2.73
JL-06-09	303.35	304.47	2.65
JL-06-09	311.00	312.00	2.82
JL-06-09	312.00	313.00	2.79
JL-06-11	290.00	291.50	2.86
JL-06-11	298.00	299.00	2.78
JL-06-11	309.00	310.00	2.85
JL-06-11	415.00	416.00	2.92
JL-06-11	427.26	428.26	2.96
JL-06-12	4.43	5.43	2.77
JL-06-12	5.43	6.43	2.85
JL-06-12	19.50	21.00	2.78
JL-06-12	56.00	57.00	2.93
JL-06-12	154.50	155.50	3.30
JL-06-12	157.50	159.00	2.72
JL-06-13	6.50	8.00	2.79
JL-06-13	8.00	9.00	2.82
JL-06-13	37.50	39.00	2.85
JL-06-13	88.50	89.54	3.02
JL-06-13	114.50	115.50	2.93
JL-06-13	121.26	122.25	2.91
JL-06-15	24.00	25.00	2.75
JL-06-15	30.00	31.00	2.70
JL-06-15	71.00	72.00	2.87
JL-06-15	80.27	81.00	2.79
JL-06-15	83.00	84.52	2.74
JL-06-15	118.00	119.00	2.79
JL-06-16	72.90	74.00	2.65

JL-06-16	75.00	76.50	2.74
JL-06-16	169.50	170.50	2.78
JL-06-16	170.50	172.00	2.77
JL-06-16	180.50	182.00	2.74
JL-06-17	90.00	91.50	2.92
JL-06-17	93.50	94.50	2.91
JL-06-17	94.50	95.76	2.80
JL-06-17	97.50	98.50	2.80
JL-06-17	99.50	100.50	2.82
JL-06-18	91.00	92.00	2.80
JL-06-18	99.50	100.50	2.79
JL-06-18	103.50	104.50	2.76
JL-06-18	111.50	112.50	2.83
JL-06-18	143.50	144.50	2.69
JL-06-18	216.50	217.50	2.77
JL-06-19	114.50	116.50	2.73
JL-06-19	121.00	122.00	2.73
JL-06-19	133.00	134.00	2.81
JL-06-19	140.00	141.00	2.75
JL-06-19	150.00	151.00	2.71
JL-06-19	188.19	189.50	2.81
JL-06-20	142.00	143.00	2.90
JL-06-20	146.00	147.00	2.77
JL-06-20	178.00	179.00	2.76
JL-06-20	187.50	188.50	2.72
JL-06-20	218.50	219.50	2.83
JL-06-20	257.00	258.00	2.91
JL-06-21	161.50	163.00	2.81
JL-06-21	317.00	318.00	2.87
JL-06-21	322.50	324.00	2.68
JL-06-21	338.77	339.86	2.98
JL-06-21	348.50	350.00	2.65
JL-06-22	59.50	61.00	2.87
JL-06-22	61.00	62.50	2.82
JL-06-22	94.90	96.00	2.92
JL-06-22	96.00	97.00	2.91
JL-06-22	200.00	201.00	2.88
JL-06-22	201.00	202.50	2.90
JL-06-23	68.66	70.54	3.04
JL-06-23	70.54	71.50	2.82
JL-06-23	77.50	78.50	2.95
JL-06-23	78.50	79.50	2.97
JL-06-23	103.34	104.50	2.87
JL-06-23	108.50	109.66	2.93
JL-06-23A	72.16	73.50	2.92
JL-06-23A	73.50	75.00	3.02
JL-06-23A	85.00	86.00	2.93
JL-06-23A	86.00	87.00	2.84
JL-06-23A	88.00	89.00	2.90
JL-06-24A	3.50	4.50	2.70
JL-06-24A	6.00	7.50	2.51

JL-06-24A	116.60	117.60	2.50
JL-06-24A	129.81	130.81	2.64
JL-06-24A	135.70	137.20	2.68
JL-06-24A	268.23	269.73	2.86
JL-06-25	15.00	15.40	2.91
JL-06-25	21.40	22.45	2.86
JL-06-25	251.00	252.66	2.65
JL-06-25	255.00	256.00	2.77
JL-06-25	261.00	262.00	2.67
JL-06-25	372.00	373.00	2.85
JL-06-26	173.00	174.00	2.92
JL-06-26	182.00	183.00	2.96
JL-06-26	202.70	203.70	2.83
JL-06-26	207.70	208.70	2.92
JL-06-26	268.00	269.00	2.81
JL-06-26	283.56	284.56	2.95
JL-06-27	32.32	33.32	2.64
JL-06-27	84.50	85.50	2.56
JL-06-27	197.33	198.33	2.93
JL-06-27	234.83	235.83	2.71
JL-06-27	241.09	242.09	2.76
JL-06-27	242.09	243.09	2.89
JL-06-28	81.50	82.50	2.65
JL-06-28	96.00	96.94	2.77
JL-06-28	108.00	109.00	2.73
JL-06-28	125.00	126.00	2.81
JL-06-28	139.00	140.00	2.74
JL-06-28	224.00	225.00	2.94
JL-06-29	212.00	213.50	2.94
JL-06-29	213.50	215.00	2.73
JL-06-29	218.50	219.50	2.88
JL-06-29	219.50	221.00	2.90
JL-06-29	222.50	224.00	2.89
JL-06-29	224.00	225.50	2.87
JL-06-30	115.50	116.50	2.70
JL-06-30	134.00	135.00	2.80
JL-06-30	138.00	139.00	2.81
JL-06-30	151.00	152.00	2.83
JL-06-30	162.44	163.50	2.71
JL-06-30	221.00	222.00	2.74
JL-06-31	64.66	65.75	2.97
JL-06-31	65.75	66.50	2.86
JL-06-31	166.50	167.50	2.97
JL-06-31	194.00	195.50	2.81
JL-06-31	230.00	231.50	2.83
JL-06-31	231.50	233.00	2.76
JL-06-32	40.00	41.00	2.81
JL-06-32	44.00	45.00	2.86
JL-06-32	61.50	62.50	2.79
JL-06-32	113.00	114.00	2.85
JL-06-32	164.00	165.00	2.82

JL-06-32	203.50	204.50	2.84
JL-06-33	19.00	20.00	2.91
JL-06-33	20.00	21.50	2.86
JL-06-33	45.07	46.50	2.80
JL-06-33	46.50	47.64	2.80
JL-06-33	80.50	82.00	2.84
JL-06-33	194.50	196.00	2.91
JL-06-34	41.50	42.50	2.84
JL-06-34	52.50	53.50	2.76
JL-06-34	122.59	124.00	2.73
JL-06-34	159.03	160.00	2.75
JL-06-34	175.74	177.00	2.78
JL-06-34	300.78	302.00	2.79
JL-06-35	41.50	43.00	2.82
JL-06-35	55.00	56.21	2.88
JL-06-35	68.50	69.50	2.85
JL-06-35	69.50	70.50	2.86
JL-06-35	285.00	286.50	2.69
JL-06-35	286.50	288.00	2.75
JL-06-36A	120.50	122.00	2.79
JL-06-36A	122.00	123.50	2.72
JL-06-36A	128.00	129.50	2.87
JL-06-36A	153.50	155.00	2.65
JL-06-36A	159.50	161.00	2.65
JL-06-36A	161.00	162.50	2.64
JL-06-37	70.00	71.50	2.85
JL-06-37	71.50	73.00	2.83
JL-06-37	73.00	74.00	2.88
JL-06-37	176.81	178.00	2.82
JL-06-37	274.00	275.00	2.60
JL-06-37	275.00	276.50	2.63
JL-06-38	135.50	137.00	2.88
JL-06-38	137.00	138.50	2.79
JL-06-39	131.90	133.27	2.72
JL-06-39	136.27	137.27	2.77
JL-06-39	138.27	139.77	2.86
JL-06-40	141.50	143.00	2.79
JL-06-40	147.50	149.00	2.93
JL-06-45	277.00	278.50	2.81
JL-06-45	278.50	280.10	2.63
JL-06-45	351.20	352.00	2.81
JL-06-45	352.00	353.20	2.83