

# DIAMONDS 2010



## Diamonds in Ontario — 2009

- The Victor Mine (**De Beers Canada Inc.**) was named “Mine of the Year” by the readers of Mining Magazine in October 2009. During their first year of production, the mine produced 713,992 carats of diamonds from 1,787,046 tonnes, for an average grade of 40 carats per hundred tonnes. ([www.debeerscanada.com](http://www.debeerscanada.com))
- In 2009, **DeBeers Canada Ltd.** continued their ongoing assessment of the Attawapiskat kimberlite cluster by focussing exploration on the Delta-1 kimberlite. Two trenches were excavated into bedrock and two samples were collected. The samples weighed 2641 tonnes and 31.3 tonnes. A program of delineation drilling also was completed. ([www.debeerscanada.com](http://www.debeerscanada.com))
- The Diamond Bourse of Canada was launched in March 2009. The bourse is a wholesale, rough and polished diamond exchange that provides a safe and secure meeting place for buyers and sellers of diamonds. The Toronto-based bourse will involve trading of diamonds from all over the world, including Ontario. ([www.diamondbourse.ca](http://www.diamondbourse.ca))
- Ontario’s first diamond cutting and polishing facility, opened in Sudbury in the fall of 2009. Crossworks Manufacturing Ltd. will cut and polish an estimated \$25 million worth of rough stones a year, including 10% of the round diamonds produced annually from the Victor Mine.
- Two diamonds from the first run of mine at the Victor Mine were installed in the Legislative Mace this year. The stones were a gift to the province from De Beers Canada Inc. A third stone will become part of a display at Queens Park. These are the first certified diamonds in the province of Ontario.
- **Metalex Ventures Ltd.** announced results from a single 134.6 kg sample of drill core from drill hole P07-02. This drill hole was completed in 2007 on the T1 kimberlite project. The company reported 102 (+106 mm) diamonds weighing 0.233564 carats. A five-hole reverse circulation drilling program is planned for 2009-10. ([www.metalexventures.com](http://www.metalexventures.com))
- Tuffaceous kimberlite breccia was intersected in drill core on the Metalex-Arctic Star Diamond Corp.-Big Red Diamond Corp. claims located 7 km south of the Victor kimberlite. **Metalex Ventures Ltd.** announced that diamonds were recovered from two drill holes. Two clear white microdiamonds were recovered from an 8.64 kg sample and one clear white microdiamond was recovered from a 6.18 kg sample from the second drill hole ([www.metalexventures.com](http://www.metalexventures.com)) ([www.arcticstardiamond.com](http://www.arcticstardiamond.com))
- **Dianor Resources Inc.** released a final compilation of diamond results from 24 NQ drill holes completed on the Leadbetter Diamond Project north of Wawa. The main conglomerate unit returned diamond grades ranging from 11.4 to 214.4 cphr for diamonds >0.85 mm in size. Dianor plans an advanced exploration on the project ([www.dianor.com](http://www.dianor.com))

- **Spider Resources Inc. and KWG Resources Inc.** announced additional diamond results from their 2008 diamond drilling program on their Lalibert Township property. A total of 1095 diamonds were recovered from 336 kg of xenolith-bearing lamprophyre dyke core ([www.spiderresources.com](http://www.spiderresources.com))

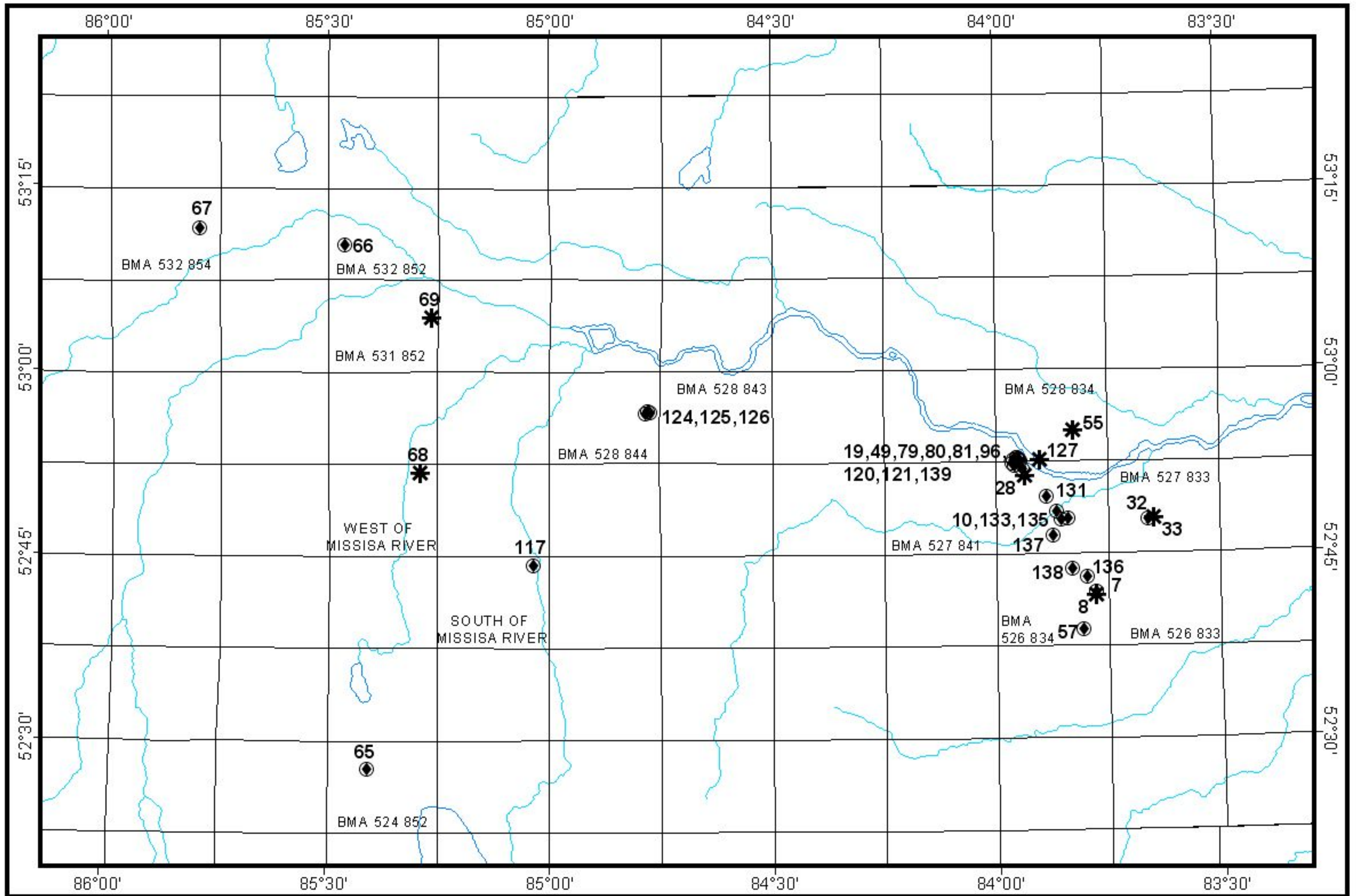
**On the cover:** Clockwise from the top left: (1) Restored mace from the Legislative Assembly of Ontario (photo courtesy of MNDMF) (2) Diamondiferous boulders, Marathon area (photo courtesy of MNDMF) (3) Assortment of diamonds from the Victor Diamond Project (photo courtesy of MNDM) (4) Attawapiskat River near Victor Mine (photo courtesy of MNDMF) (5) Diamond drill core from 95-1 kimberlite pipe, Lundy Township (photo courtesy of MNDMF)

Prepared by staff of the Ministry of Northern Development, Mines and Forestry, Ontario Geological Survey, Resident Geologist Program

# DIAMOND OCCURRENCES OF THE JAMES BAY LOWLANDS

◆ Diamond-bearing

\* Kimberlite



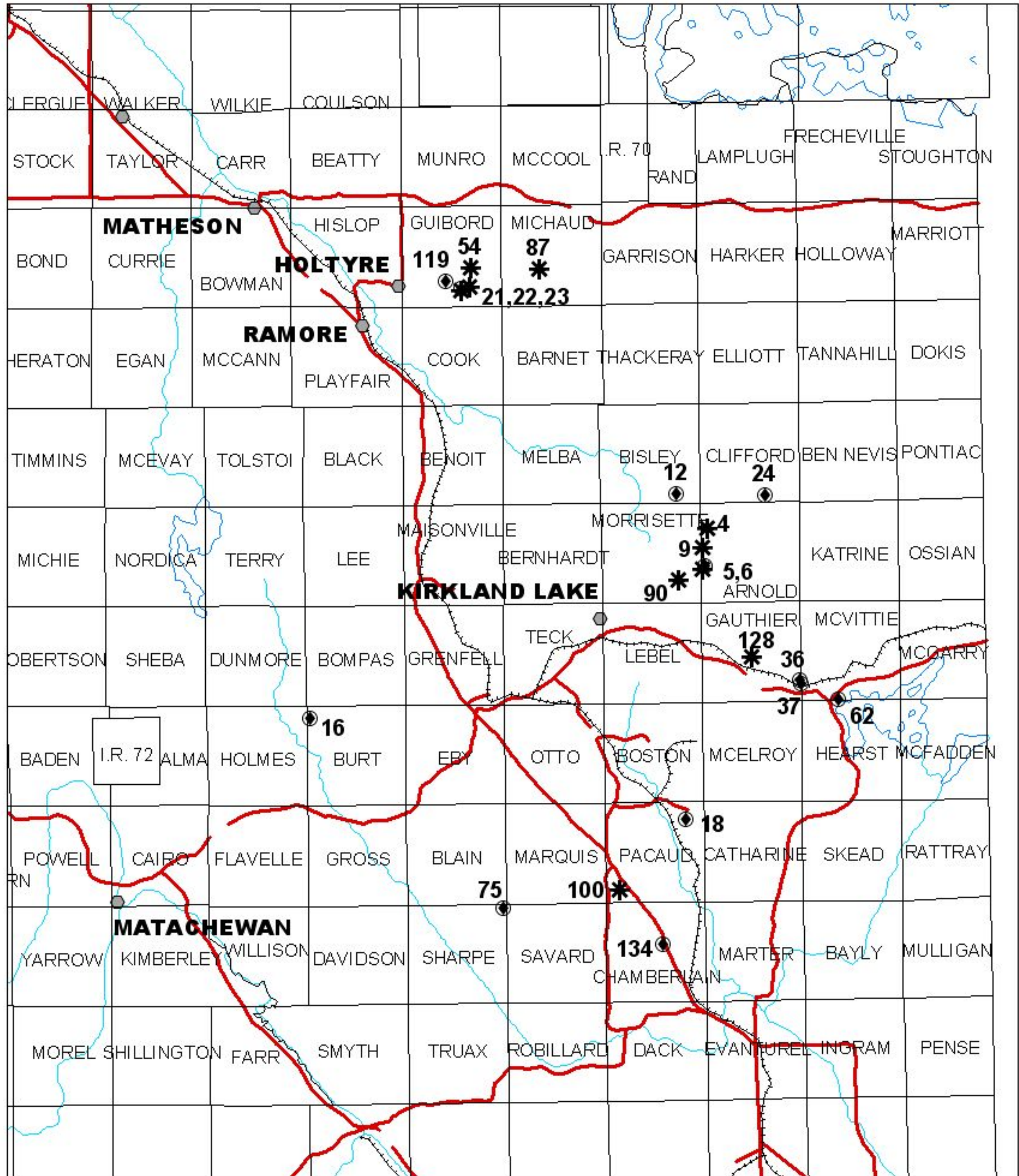
**KIMBERLITES OF THE JAMES BAY LOWLANDS**

<b>NUMBER</b>	<b>NAME</b>	<b>PROPERTY OWNERSHIP/PARTNERSHIP</b>	<b>BULK SAMPLED</b>	<b>ROCK TYPE</b>	<b>D=diamoniferous K=kimberlite</b>
7	Alpha North	DeBeers Canada Inc.	2001	hypabyssal macrocrystic kimberlite	D
8	Alpha-1	DeBeers Canada Inc.	2001	hypabyssal macrocrystic kimberlite	D
10	AT-56 Kimberlite	Superior Diamonds Inc.		macrocrystic kimberlite	D
19	Bravo 1	DeBeers Canada Inc.	1997	hypabyssal macrocrystic kimberlite	D
28	Charlie 1	DeBeers Canada Inc.		globular segregational kimberlite and hypabyssal macrocrystic kimberlite	K
32	Delta 1	DeBeers Canada Inc.	2009	hypabyssal macrocrystic kimberlite	D
33	Delta North	De Beers Canada Inc.		hypabyssal macrocrystic kimberlite	K
49	Good Friday Kimberlite	Spider Resources Inc. & KWG Resources Inc.	2007		D
57	India 1	DeBeers Canada Inc.		hypabyssal macrocrystic kimberlite	K
65	Kyle Lake 1	Spider Resources Inc. & KWG Resources Inc.		hypabyssal kimberlite with subordinate diatreme facies	D
66	Kyle No. 2	Spider Resources Inc. & KWG Resources Inc.		hypabyssal kimberlite	D
67	Kyle No. 3	Spider Resources Inc. & KWG Resources Inc.	1995	hypabyssal kimberlite with subordinate diatreme facies	D
68	Kyle No. 4	Spider Resources Inc. & KWG Resources Inc.		hypabyssal kimberlite with subordinate diatreme facies	K
69	Kyle Lake No. 5	Spider Resources Inc. & KWG Resources Inc.		lamproite	K
80	MacFayden 1	Spider Resources Inc. & KWG Resources Inc.	1994	tuffaceous kimberlite breccia and hypabyssal kimberlite	D
139	MacFayden 1b	Spider Resources Inc. & KWG Resources Inc.	2007		D
79	MacFayden #2 South	Spider Resources Inc. & KWG Resources Inc.	2007		D
81	MacFayden 2	Spider Resources Inc. & KWG Resources Inc.	2007		D
96	"New Kimberlite"	Spider Resources Inc. & KWG Resources Inc.			D
117	T1 kimberlite	Metalex Ventures Ltd.	2005-06	kimberlite	D
120	Tango 1	DeBeers Canada Inc.	2001	hypabyssal kimberlite and kimberlitic breccia	K
121	Tango Extension	DeBeers Canada Inc.	2001	hypabyssal kimberlite	D
124	U1 Kimberlite	Metalex Ventures Ltd.	2006	kimberlite	D
125	U2 Kimberlite	Metalex Ventures Ltd.	2007	kimberlite	D
126	U2NW Kimberlite	Metalex Ventures Ltd.	2007	kimberlite	D
127	Uniform 1	DeBeers Canada Inc.		hypabyssal kimberlite	K
131	Victor Mine	DeBeers Canada Inc.	1997-2002	hypabyssal macrocrystic to hypabyssal segregational kimberlite	D
133	Whiskey 1	DeBeers Canada Inc.	2001	hypabyssal kimberlite	D
135	X-Ray	DeBeers Canada Inc.	1998	hypabyssal macrocrystic to hypabyssal segregational kimberlite	D
136	X-Ray 1	DeBeers Canada Inc.		hypabyssal macrocrystic kimberlite	K
137	Yankee 1	DeBeers Canada Inc.		hypabyssal macrocrystic kimberlite	K

NUMBER	NAME	PROPERTY OWNERSHIP/PARTNERSHIP	BULK SAMPLED	ROCK TYPE	D=diamondiferous K=kimberlite
138	Zulu 1	DeBeers Canada Inc.	1997	hypabyssal macrocrystic kimberlite and kimberlitic breccia	D

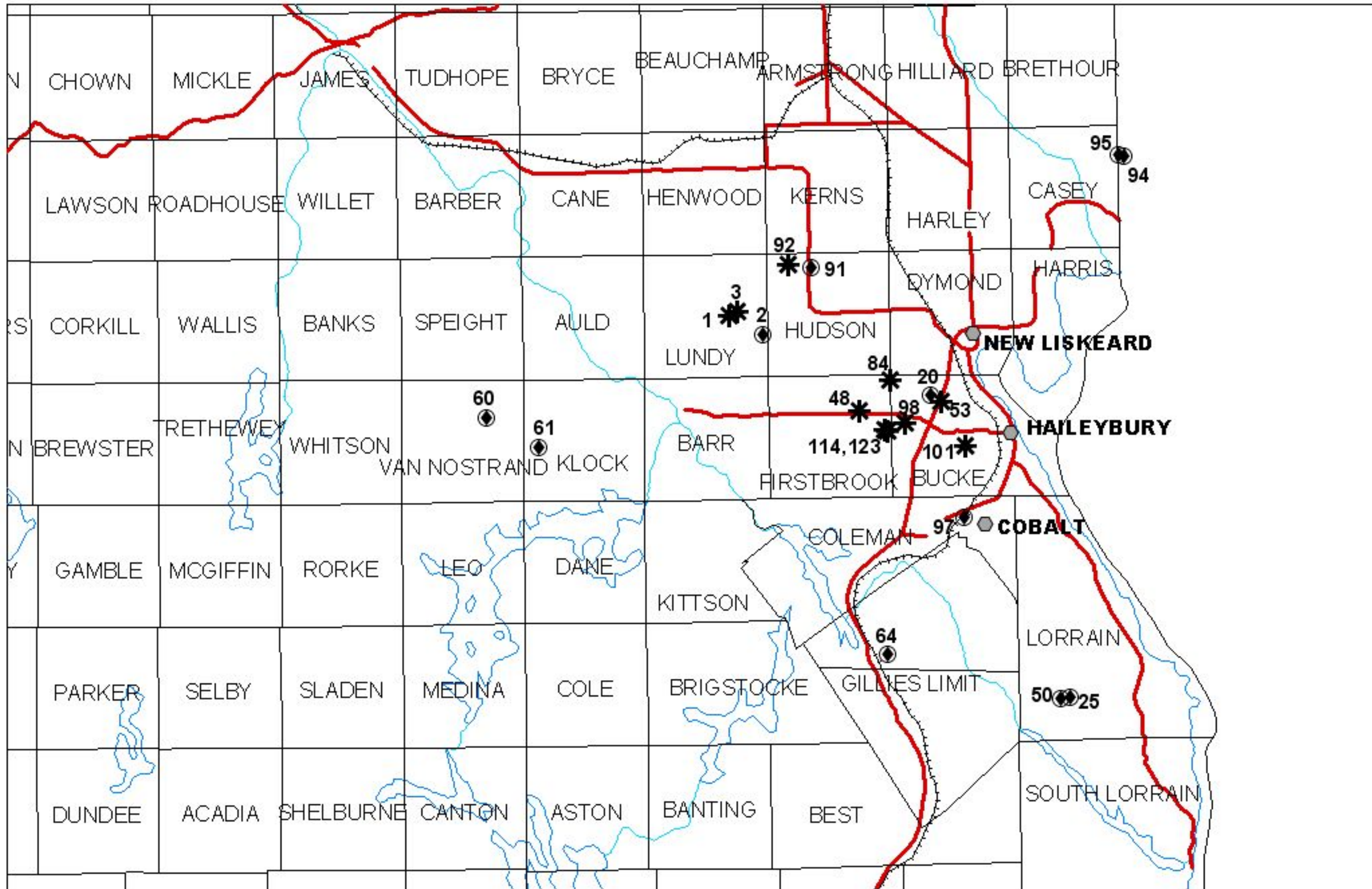
# DIAMOND OCCURRENCES OF THE KIRKLAND LAKE AREA

- ◆ Diamond-bearing
- \* Kimberlite



# DIAMOND OCCURRENCES OF THE COBALT AREA

- ◆ Diamond-bearing
- \* Kimberlite



**KIMBERLITE AND DIAMOND BEARING ROCKS IN THE KIRKLAND LAKE – NEW LISKEARD AREA**

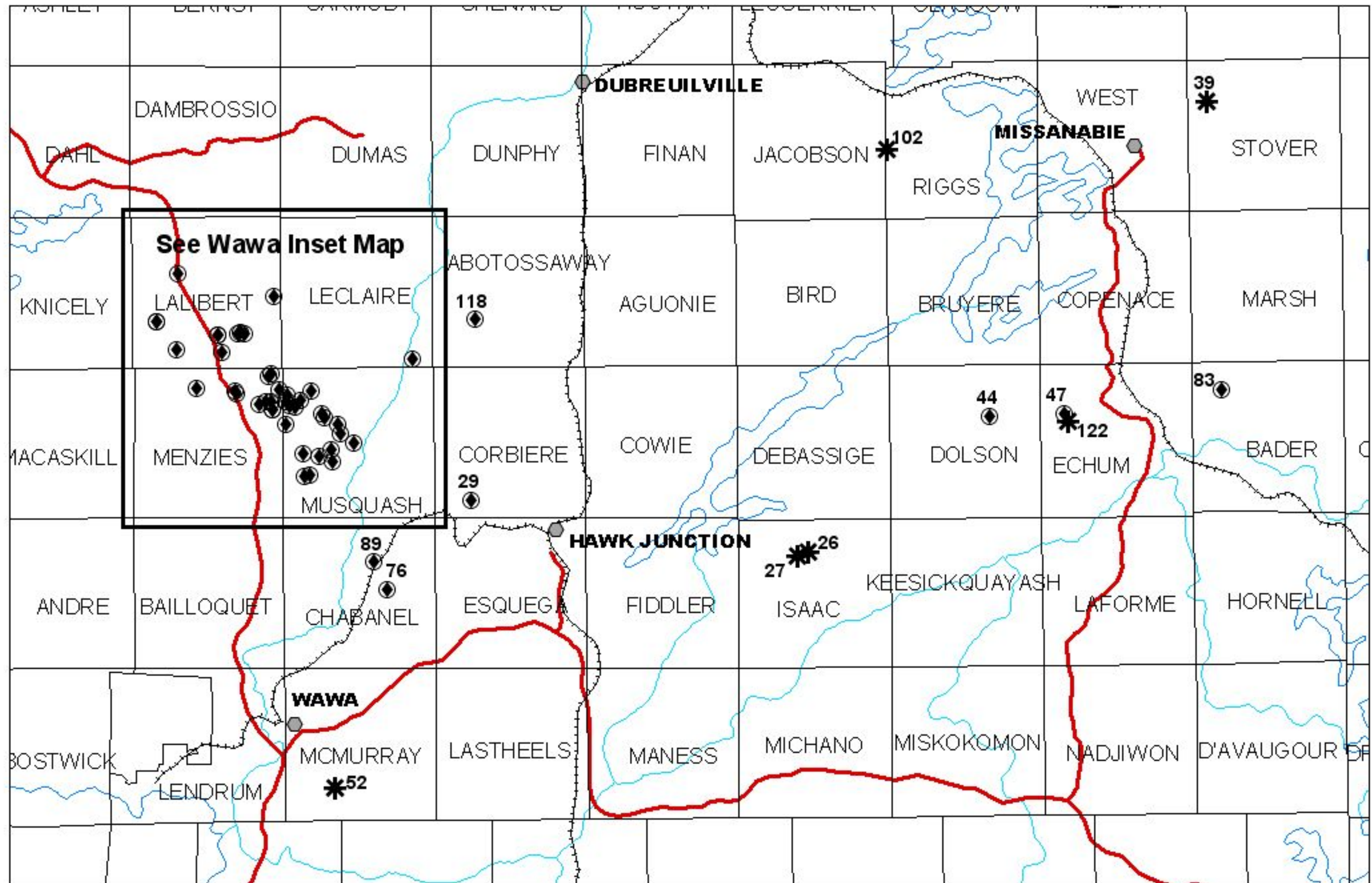
No.	PIPE NAME	TOWNSHIP	YEAR FOUND	DISCOVERED BY	ROCKTYPE	DIAMONDS RECOVERED			
						Macros	micros	total	sample size
1	95-1	Lundy	1995	Sudbury Contact Mines Ltd.	Heterolithic volcanoclastic diatreme breccia				
2	95-2 (95-3)	Lundy	1995	Sudbury Contact Mines Ltd.	Pelletal-textured volcanoclastic diatreme breccia	19 3	33 6	52 9 44 67.35 carats	1104 kg 77.92 kg 1026.3 kg 652 tonne
3	96-1	Lundy	1996	Sudbury Contact Mines Ltd.					
4	A-1	Arnold	1987	LAC Minerals Ltd.	Lithic tuffaceous breccia with minor pelletal tuffisitic breccia				
5	A-4 (Alfie Creek 1) (North)	Arnold	1983	Monopros Ltd.	Lithic tuffisitic breccia	2	5	2 5	47 t 103.8
6	A-4 (Alfie Creek 2) (South)	Arnold	1983	Monopros Ltd.	Lithic tuffisitic breccia	0	0	0	52.3 kg
9	AM-47 (Nelson Lake)	Arnold, Morrisette	1983	Monopros Ltd.	Hypabyssal kimberlite breccia				
12	B-30 (Nickila Lake)	Bisley	1983	Monopros Ltd.	Lithic tuffisitic breccia with minor pelletal tuffisitic breccia			3	?
16	Bastarache	Burt	2005	Discover Abitibi Project	Lamprophyre		3	3	24 kg
18	Boston Creek	Pacaud	2005	Discover Abitibi Project	Lamprophyre		1 5	1 5	24 kg 24 kg
20	Bucke	Bucke	1983	Monopros Ltd.	Lithic tuffisitic breccia			3	?
21	Buzz #1	Guibord	1987	Homestake Mineral Dev.	Fine to coarse breccia with pelletal-textured matrix				
22	Buzz #2	Guibord	1989	Homestake Mineral Dev.	Fine to coarse breccia			1	7.5 lb
23	Buzz #3	Guibord	1989	Homestake Mineral Dev.	Fine to coarse breccia with pelletal-textured matrix				
24	C-14	Clifford	1987	LAC Minerals Ltd.	Tuffaceous kimberlite breccia, coarse tuffaceous breccia, hypabyssal kimberlite and tuffaceous kimberlite			8 7	15.04 T 135 t
25	Cabo	Lorrain	2002	Cabo Mining Corp.	Heterolithic breccia and lamprophyre dikes	4	91	95	9.3 kg
36	Diamond Lake 1 (North)	McVittie	1990	Sudbury Contact Mines Ltd.	Fine to coarse breccia with pelletal-textured matrix		14	14	0.5 T
37	Diamond Lake 2 (South)	McVittie	1992	Sudbury Contact Mines Ltd.	Fine to coarse breccia with pelletal-textured matrix				
48	Glinkers	Firstbrook	1996	Consolidated Pine Channel Gold Corp.	Hypabyssal kimberlite with crustal xenoliths				
50	Gossan	Lorrain	2000	Simon Waring & Murray Simpson	Lamprophyre dike		3	3	22.2 kg
53	Gravel	Bucke	199?	Falconbridge Ltd.	Fine to medium breccia with pelletal-textured matrix			4	

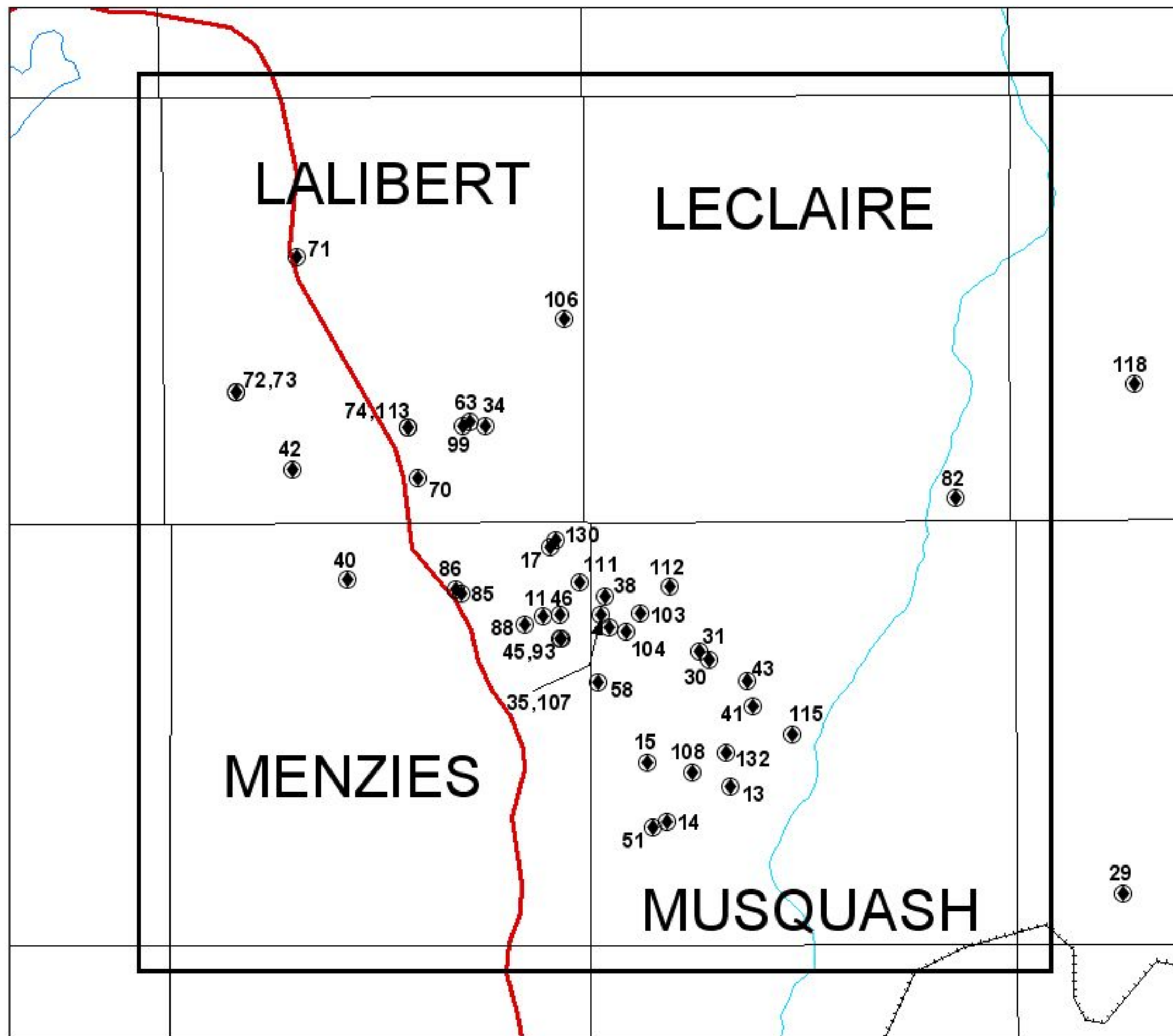
**KIMBERLITE AND DIAMOND BEARING ROCKS IN THE KIRKLAND LAKE – NEW LISKEARD AREA**

No.	PIPE NAME	TOWNSHIP	YEAR FOUND	DISCOVERED BY	ROCKTYPE	DIAMONDS RECOVERED			
						Macros	micros	total	sample size
54	Guibord	Guibord	1984	Falconbridge Ltd.	Fine to coarse breccia with pelletal-textured matrix				
60	KL01	Van Nostrand	2004	Sudbury Contact Mines Ltd.	Kimberlite	2	25	27	88 kg
61	KL22	Klock	2004	Sudbury Contact Mines Ltd.	Kimberlite	7	12	19	85 kg
62	Knutson	McVittie	2005	Discover Abitibi Project	Lamprophyre	1		1	24 kg
64	KRVY Target (TD-06-03)	Gillies Limit	2006	Temex Resources Corp.	Kimberlite Breccia		5	5	218.95 kg
75	Lapointe	Sharpe	2005	Tres-Or Resources Ltd.	Kimberlite	1	30	31	885.5 kg
84	McLean	Bucke	1996	Consolidated Pine Channel Gold Corp.	Hypabyssal kimberlite with crustal xenoliths				
87	Michaud	Michaud	1948	Marchaud Mines Ltd.	Diatreme facies kimberlite	0	0	0	
90	Morrisette Creek	Morrisette	1984	Monopros Ltd.	?	0	0	0	81.2 kg
91	MR-6	Hudson	1996	Sudbury Contact Mines Ltd.		0	1	1	200 kg
92	MR8	Hudson	2005	Sudbury Contact Mines Ltd.	Kimberlite				
94	NDN No.1 (Troika)	Nedelec (Quebec)	1994	KWG Resources	Hypabyssal kimberlite with crustal xenoliths		22	22	22 kg
95	NDN No.2 (Border)	Nedelec (Quebec)	1994	KWG Resources	Hypabyssal kimberlite with crustal xenoliths		1	1	?
97	Nipissing Hill	Coleman	2005	Discover Abitibi Project	Lamprophyre	3	23 19	23 22	24 kg 24.8 kg
97	OPAP	Bucke	1994	John Ewanchuk	Tuffaceous kimberlite breccia				
98	Pacaud	Pacaud	1979	Lac Minerals / Dianor Resources Inc.	Kimberlite				
101	Peddie	Bucke	1996	Consolidated Pine Channel Gold Corp.	Macrocrystic, phlogopite-bearing calcite-monticellite Group 1 kimberlite of hypabyssal facies				
114	Seed	Firstbrook	1996	Consolidated Pine Channel Gold Corp.	Globular segregatory to segregatory phlogopite and monticellite-bearing Group 1 kimberlite of the hypabyssal facies				
119	Tandem-1	Guibord	1997	Tandem Resources Ltd.	Unusually fresh and unaltered with numerous mantle xenoliths. (> <b>2000 rubies recovered</b> )		3	3	87.9 kg
123	Triple B	Firstbrook	2002	GSC	Kimberlite				
128	Upper Canada	Gauthier	1968	Upper Canada Mines Ltd.	Massive micaceous kimberlite				
134	Woollings	Chamberlain	2005	Discover Abitibi Project	Lamprophyre		1	1	24 kg

# DIAMOND OCCURRENCES OF THE WAWA AREA

- ◆ Diamond-bearing
- \* Kimberlite





**DIAMOND OCCURRENCES  
OF THE WAWA AREA  
(INSET MAP)**

- ◆ Diamond-bearing
- \* Kimberlite

**DIAMOND OCCURRENCES OF THE WAWA AREA**

<b>NUMBER</b>	<b>NAME</b>	<b>TOWNSHIP</b>	<b>PROPERTY OWNERSHIP/PARTNERSHIP</b>	<b>YEAR FOUND</b>	<b>BULK SAMPLED</b>	<b>ROCK TYPE</b>
11	B-1 Occurrence	Menzies	Pele Mountain Resources Inc	2001		heterolithic breccia
13	Band-Ore Area D	Musquash	West Timmins Mining Inc.	2000		heterolithic breccia
14	Band-Ore East Occurrence	Musquash	West Timmins Mining Inc.	2000		heterolithic breccia
15	Barnett Lake Zone	Musquash	West Timmins Mining Inc.	2000		heterolithic breccia
17	Bollinger Occurrence	Menzies	Pele Mountain Resources Inc	2002		heterolithic breccia
26	Canabrava Intrusion 115	Isaac		1997		kimberlite
27	Canabrava Intrusion 121	Isaac		1997		kimberlite
29	Cliff Lake Property	Corbiere	Amador Gold Corp. & Chalice Diamond Corp.	2007		conglomerate
30	Cristal Extension	Musquash	Pele Mountain Resources Inc	2001		heterolithic breccia
31	Cristal Occurrence	Musquash	Pele Mountain Resources Inc	2001	2001	heterolithic breccia
34	Destiny Showing	Lalibert	Pele Mountain Resources Inc	2000	2001	heterolithic breccia
35	Deutz Occurrence	Musquash	Pele Mountain Resources Inc	2002	2005	heterolithic breccia
39	Dome DDH-83-2	Stover	J. Laidlaw, G. Stone, G. Hume and J. Mihelcic	1975		kimberlite
38	Dom Perignon Occurrence	Menzies	Pele Mountain Resources Inc	2001		heterolithic breccia
40	Dumont Sample 4073	Menzies	Oasis Diamond Exploration Inc. & Arctic Star Diamond Corp.	2000		heterolithic breccia
41	Engagement Zone	Musquash	West Timmins Mining Inc.	2001	2001, 2003	heterolithic breccia
42	Enigma Property	Menzies	Oasis Diamond Exploration Inc. & Arctic Star Diamond Corp.	2001	2004	metamorphosed kimberlite(?)
43	F Zone	Musquash	West Timmins Mining Inc.	2002		heterolithic breccia
44	Fletch Occurrence	Dolson	T. Nicholson	2001		kimberlite (dimondiferous)
45	Genesis	Menzies	Pele Mountain Resources Inc	2002	2002	heterolithic breccia
46	Genesis West	Menzies	Pele Mountain Resources Inc	2002		heterolithic breccia
47	Geodex No. 2 Dike	Echum	Golden Chalice Resources Inc.	2001		kimberlite (dimondiferous)
51	GQ Diamond Occurrence	Musquash	West Timmins Mining Inc.	1999		heterolithic breccia
52	Grace Kimberlite Dike	McMurray	Citadel Gold Mines Inc.	2000		kimberlite
58	JR-27	Musquash	West Timmins Mining Inc.	2002		heterolithic breccia
63	Krug Occurrence	Lalibert	Pele Mountain Resources Inc	2001		heterolithic breccia
70	LAL-103 Occurrence	Lalibert	Spider Resources Inc. & KWG Resources Inc.	1996		heterolithic breccia
71	LAL-126 Occurrence	Lalibert	Spider Resources Inc. & KWG Resources Inc.	1996		lamprophyre
72	LAL-161 Occurrence	Lalibert	Spider Resources Inc. & KWG Resources Inc.	1996		lamprophyre
73	LAL-163 Occurrence	Lalibert	Spider Resources Inc. & KWG Resources Inc.	1996		lamprophyre
74	LAL-3 Occurrence	Lalibert	Spider Resources Inc. & KWG Resources Inc.	1996		lamprophyre
76	Leadbetter Property	Chabanel	Dianor Resources Inc./3814793 Canada Ltd.	2004		mafic to ultramafic schist & conglomerate

NUMBER	NAME	TOWNSHIP	PROPERTY OWNERSHIP/PARTNERSHIP	YEAR FOUND	BULK SAMPLED	ROCK TYPE
82	Magpie Diamond Property	Leclaire	Dianor Resources Inc.	2002		heterolithic breccia
85	MEN -106	Menzies	Spider Resources Inc. & KWG Resources Inc.	1996		heterolithic breccia
86	MEN-107	Menzies	Spider Resources Inc. & KWG Resources Inc.	1996		lamprophyre and heterolithic breccia
88	Moet Occurrence	Menzies	Pele Mountain Resources Inc	2001	2003	heterolithic breccia
89	Mori Diamond Sample 9902	Chabanel	Mori Diamonds Inc.	2005		intermediate metavolcanics
93	Mumm	Menzies	Pele Mountain Resources Inc	2002		heterolithic breccia
99	P. C. Showing	Lalibert	Pele Mountain Resources Inc	2000		heterolithic breccia
102	Pele DDH 97-34	Jacobson/Riggs	Pele Mountain Resources Inc	1997		kimberlite
103	Perch East Occurrence	Musquash	Pele Mountain Resources Inc	2001		heterolithic breccia
104	Perch West Occurrence	Musquash	Pele Mountain Resources Inc	2001		heterolithic breccia
106	Pol Roger Occurrence	Lalibert	Pele Mountain Resources Inc	2001		heterolithic breccia
107	Pommery	Musquash	Pele Mountain Resources Inc	2002		heterolithic breccia
108	Rainbow Zone	Musquash	West Timmins Mining Inc.	2002		heterolithic breccia
111	Rossignol					
112	Salon Occurrence	Musquash	Pele Mountain Resources Inc	2001		heterolithic breccia
113	Sandor Occurrence	Lalibert	Spider Resources Inc. & KWG Resources Inc.	1993	2001	diamond-bearing spessartite
115	SE-F Zone	Musquash	West Timmins Mining Inc.	2002	2003	heterolithic breccia
118	Talisker Diamond Occurrence	Abotossaway	Pele Mountain Resources Inc	2006	2006	kimberlite
122	Tremblay Sample AA-1	Echum	Golden Chalice Resources Inc.	2001		kimberlite
130	Veuve Cliquot	Menzies	Pele Mountain Resources Inc	2002		heterolithic breccia
132	Walker Lake	Musquash	West Timmins Mining Inc.	2001		heterolithic breccia

**Please direct your diamond inquiries to the following staff members:**

**Kenora Field Office**

**Suite 104, 810 Robertson Street, *Kenora*, ON P9N 4J2**

**Fax (807) 468-2930**

Craig Ravnaas ..... District Geologist .....(807) 468-2819

**Kirkland Lake Field Office**

**10 Government Road E., PO Box 100, *Kirkland Lake*, ON P2N 3M6**

**Fax (705) 568-4515**

Gary Grabowski ..... District Geologist .....(705) 568-4518

Dave Guindon ..... Regional Resident Geologist.....(705) 568-4517

**Timmins Field Office**

**OGC, Hwy 101E, PO Bag 3060, *South Porcupine*, ON P0N 1H0**

**Fax (705) 235-1620**

Brian Atkinson ..... Regional Resident Geologist.....(705) 235-1619

Ann Wilson ..... Mineral Deposits Compilation Geologist .(705) 235-1614

**Thunder Bay South Field Office**

**Suite B002, 435 James Street South, *Thunder Bay*, ON P7E 6S7**

**Fax (807) 475-1112**

John Scott ..... Regional Resident Geologist.....(807) 475-1104

Dorothy Campbell ..... District Geologist .....(807) 475-1102

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