Report on Diamond Drilling
Falconbridge Limited – Exploration
MF15-02

MahaffyTownship, Timmins, Ont.
Porcupine Mining Division

NTS 42A/14

October 28th, 2004

Prepared by:
Dean Rogers, P.Geo.
Senior Project Geologist
Falconbridge Limited

Diamond Drilling Assessment Report
Mahaffy Twp., Porcupine Mining Division

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Oct 25, 2004

DETAILED LOG
FALCONBRIDGE LTD.

Hole Number: **MF15-02**

Units: METRIC

Project Name:	Exploration	Location:	Mahaffy	Primary Coordinates		Destination Coordinates		Alternate Coordinates		Collar Dip:	-55.00
Project Number:	Explor	Section:		Grid:	UTM: (P)	Grid:	UTM:	Grid:	UTM:	Collar Az:	180.00
Claim Number:	P1211741	Parent (if wedge):		North:	5405125.76	North:	5405125.76	North:	960.00	Length:	200.01
Hole Type:	Diamond Drill			East:	463506.60	East:	463506.60	East:	-100.00	Start Depth:	0.00
				Elev:	300.00	Elev:	300.00	Elev:	300.00	Final Depth:	200.01

Date Started:	Dec 15, 2002	Collar Survey:	N	Pulse EM Survey:		Multishot Survey:	N	Contractor:	BRADLEY BROS.
Date Completed:	Dec 17, 2002	Making Water:	N	Plugged:	N	Is Cemented:	N	Core Storage:	Kidd Mine
Date Entered:	Mar 27, 2003	Gas Intersected:	N	Object In Hole:	N	Verified:	N	Casing:	
Logged By:	DBS							Hole Size:	BQ

Comments:testing MegaTEM target
-conductivity thickness: 4.0 seimens
-conductor possibly explained by py-rich quartz-calcite vein swarm within an amygdaloidal mafic flow from 111.20-114.73

Directional Data

Depth	Azimuth Decimal	Dip Decimal	Test Type	Flag	Comments
74.00	177.00	-55.00	UK	OK	
134.00	187.00	-53.00	UK	OK	
200.00	192.00	-49.00	UK	OK	

For Dave Stevenson

Hole Number: **MF15-02**

Units: METRIC

FROM TO	ROCK TYPE	TEXTURE	STRUCTURE	ALTERATION	MINERALIZATION
0.00 TO 64.00	**(CAS) Casing/Overburden**				
64.00 TO 73.36	**(2) Mafic Volcanic Rocks** -very fine grained massive dark green strongly magnetic moderately choritic amygdaloidal mafic flow? (diabase dyke or sill?) -amygdules? comprise <1% of the unit, are elliptical, <1mm-2mm in diameter and filled with white quartz-calcite -unit is frequently cut by thin to thick (<1mm to 5cm) medium green epidote-calcite and white *quartz-calcite veins and veinlets* trending 30-80 deg TCA -mag. suscept.: 0.17-5.6 -unit lower contact sharp at 75 deg TCA	64.00 - 73.36: (A) Fine Grained 64.00 - 73.36: (M) Massive	64.00 - 73.36: (LCTSHP) Lower Contact - Sharp, 65.00 - 66.00: (BC) Broken Core, -RQD's 10%	64.00 - 73.36: (CC) Calcite (Calcitic Alt.), (W) Weak, (P) Pervasive 64.00 - 73.36: (SI) Silicification, (W) Weak, (P) Pervasive 64.00 - 73.36: (CHL) Chloritization, (M) Moderate, (P) Pervasive 64.00 - 73.36: (EP) Epidotization, (W) Weak, (FV) Fracture/Veined controlled 64.00 - 73.36: (CC) Calcite (Calcitic Alt.), (W) Weak, (FV) Fracture/Veined controlled	64.00 - 73.36: 2% (MAG) Magnetite, (D) Disseminated/Blebby 64.00 - 73.36: 0.25% (PY) Pyrite, (D) Disseminated/Blebby 64.00 - 73.36: 0.5% (PY) Pyrite, (FV) Fracture/Veined Controlled
73.36 TO 86.38	**(2) Mafic Volcanic Rocks** -fine grained massive medium to dark green variolitic to pillowed mafic volcanic -pillow selvages are recognized by consisting of dark green chloritic mafic volcanic -varioles are always on the edges of the pillows and are elliptical, <1-2mm to 1-5mm in size and decrease rapidly in size toward the center of the pillow -varioles consist of bleached light green mafic volcanic -most pillows appear to be 10-50cm in size -most selvages and varioles are preferentailly aligned at 60-70 deg TCA -unit is rarely cut by thin (<1cm) barren white quartz-calcite veinlets -there are two highly silicified pyrite-bearing massive magnetite selvages? veins? at 73.54-73.57 and 73.84-73.89 -mag. suscept.: 0.03-0.08 and up to 36.0 in the magnetic veins -unit lower contact sharp at 60 deg TCA	73.36 - 86.38: (P) Pillowed 73.36 - 86.38: (A) Fine Grained 73.36 - 86.38: (N) Variolitic/Spherulitic 73.36 - 86.38: (M) Massive	73.36 - 86.38: (LCTSHP) Lower Contact - Sharp,	73.36 - 86.38: (CC) Calcite (Calcitic Alt.), (W) Weak, (P) Pervasive 73.36 - 86.38: (CC) Calcite (Calcitic Alt.), (W) Weak, (FV) Fracture/Veined controlled 73.36 - 86.38: (BL) Bleached/Bleaching, (W) Weak, (S) Spots/Mealy 73.36 - 86.38: (EP) Epidotization, (W) Weak, (FV) Fracture/Veined controlled	73.36 - 86.38: 0.25% (PY) Pyrite, (FV) Fracture/Veined Controlled

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Units: METRIC

FROM TO	ROCK TYPE	TEXTURE	STRUCTURE	ALTERATION	MINERALIZATION
86.38 TO 88.85	**(10) Diabase** -very fine grained massive dark green moderate to strongly silicified diabase dyke? (mafic dyke?) -unit is very massive and darkger green than mafic volcanic unit -unit is only periodically cut by thin (<1-2mm) quartz-calcite-epidote-hematite veinlets trending 30-80 deg TCA -mag. suscept.: 0.04-0.08 -unit lower contact sharp at 60 deg TCA	86.38 - 88.85: (M) Massive 86.38 - 88.85: (A) Fine Grained	86.38 - 88.85: (LCTSHP) Lower Contact - Sharp,	86.38 - 88.85: (CHL) Chloritization, (M) Moderate, (P) Pervasive 86.38 - 88.85: (EP) Epidotization, (W) Weak, (FV) Fracture/Veined controlled 86.38 - 88.85: (CC) Calcite (Calcitic Alt.), (W) Weak, (FV) Fracture/Veined controlled 86.38 - 88.85: (SI) Silicification, (S) Strong, (P) Pervasive	86.38 - 88.85: 1% (PY) Pyrite, (D) Disseminated/Blebby
88.85 TO 111.20	**(2) Mafic Volcanic Rocks** -fine grained massive medium to dark green variolitic to pillowed mafic volcanic -identical to the unit from 73.36-86.38 -pillow selvages are recognized by consisting of dark green chloritic mafic volcanic -varioles are always on the edges of the pillows and are elliptical, <1-2mm to 1-5mm in size and decrease rapidly in size toward the center of the pillow -varioles consist of bleached light green mafic volcanic -most pillows appear to be 10-50cm in size -most selvages and varioles are preferentailly aligned at 60-70 deg TCA -unit is rarely cut by thin (<1cm) barren white quartz-calcite veinlets -mag. suscept.: 0.04-2.7, generally increasing toward the bottom of the uni -unit lower contact sharp at 60 deg TCA	88.85 - 111.20: (M) Massive 88.85 - 111.20: (P) Pillowed 88.85 - 111.20: (A) Fine Grained 88.85 - 111.20: (N) Variolitic/Spherulitic	88.85 - 111.20: (LCTSHP) Lower Contact - Sharp,	88.85 - 111.20: (EP) Epidotization, (W) Weak, (P) Pervasive 88.85 - 111.20: (BL) Bleached/Bleaching, (W) Weak, (P) Pervasive 88.85 - 111.20: (CC) Calcite (Calcitic Alt.), (S) Strong, (FV) Fracture/Veined controlled 88.85 - 111.20: (CHL) Chloritization, (W) Weak, (P) Pervasive 88.85 - 111.20: (CC) Calcite (Calcitic Alt.), (M) Moderate, (P) Pervasive	88.85 - 111.20: 0.5% (PY) Pyrite, (FV) Fracture/Veined Controlled

Hole Number: **MF15-02**

Units: METRIC

FROM TO	ROCK TYPE	TEXTURE	STRUCTURE	ALTERATION	MINERALIZATION
111.20 TO 142.90	**(2) Mafic Volcanic Rocks** -fine grained massive dark green weakly sericitic, moderately chloritic and moderately calcitic amygdaloidal mafic flow -amygdules comprise <5% of the unit, are elliptical (sheared), filled with white quartz-calcite and <1-2mm in diameter -unit has a banded texture which is the result of thin layers (<1cm) of dark green mafic volcanic and weakly sericitic mafic volcanic trending 55-65 deg TCA -these individual layers are also paralleled by abundant thin (<1cm) barren white quartz-calcite-chlorite veins and veinlets -*the amygdules are stretched in the* same 55-65 deg TCA schistosity trend -shearing and sericite content increases to moderate levels adjacent to bottom contact -mag. suscept.: 0.01-3.0, varies considerably throughout the unit -unit lower contact broken 111.20 - 114.73 **(2) Mafic Volcanic Rocks** -fine grained massive dark green moderately chloritic and moderately calcitic amygdaloidal mafic flow -unit host 20-30 narrow (<1cm-10cm) pyrite-rich white quartz-calcite veins and veinlets trending 50-60 deg TCA -possible source of the MegaTEM anomaly?? -mag. suscept.: 0.07-11.0 -unit lower contact sharp at 60 deg TCA	111.20 - 142.90: (A) Fine Grained 111.20 - 142.90: (M) Massive 111.20 - 142.90: (E) Amygdaloidal/Vesicular 111.20 - 114.73: (A) Fine Grained 111.20 - 114.73: (M) Massive 111.20 - 114.73: (E) Amygdaloidal/Vesicular	111.20 - 142.90: (MSF) Moderately Schistose/Foliated, 111.20 - 142.90: (LCTBRK) Lower Contact - Broken, 111.20 - 114.73: (WSF) Weakly Schistose/Foliated, 111.20 - 114.73: (LCTSHP) Lower Contact - Sharp,	111.20 - 142.90: (CHL) Chloritization, (M) Moderate, (P) Pervasive 111.20 - 142.90: (SE) Sericitization, (M) Moderate, (FV) Fracture/Veined controlled 111.20 - 142.90: (CC) Calcite (Calcitic Alt.), (M) Moderate, (P) Pervasive 111.20 - 142.90: (CC) Calcite (Calcitic Alt.), (M) Moderate, (FV) Fracture/Veined controlled 111.20 - 114.73: (CC) Calcite (Calcitic Alt.), (M) Moderate, (FV) Fracture/Veined controlled 111.20 - 114.73: (CC) Calcite (Calcitic Alt.), (M) Moderate, (P) Pervasive 111.20 - 114.73: (CHL) Chloritization, (M) Moderate, (P) Pervasive	111.20 - 142.90: 2% (MAG) Magnetite, (D) Disseminated/Blebby 111.20 - 142.90: 1% (PY) Pyrite, (FV) Fracture/Veined Controlled 111.20 - 114.73: 55% (PY) Pyrite, (FV) Fracture/Veined Controlled -20-30 thin (<1cm-10cm) semi-massive pyrite veins and veinlets trending 50-60 deg TCA

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Units: METRIC

FROM TO	ROCK TYPE	TEXTURE	STRUCTURE	ALTERATION	MINERALIZATION
142.90 TO 152.87	**(2) Mafic Volcanic Rocks** -fine grained intensely sheared and contorted, densely quartz veined moderately siliceous, weakly sericitic, moderately calcitic pyrite-bearing mafic volcanic -white quartz veins and veinlets occur at mm to cm intervals, very dense -shearing and veins trend 50-60 deg TCA -at least two generations of white pyrite-bearing quartz veins -very poor RQD's (10%) thoughout the unit with occassional areas of 10-20cm wide fault gouge -mag. suscept.: 0.02-0.05 -unit lower contact broken	142.90 - 152.87: (A) Fine Grained	142.90 - 152.87: (LCTBRK) Lower Contact - Broken, 142.90 - 152.87: (BC) Broken Core, -highly broken core, RQD's 10% 143.80 - 146.70: (FZ) Fault (Fault Zone), -2.9m of lost core, fault gouge-rubble 148.10 - 148.45: (FZ) Fault (Fault Zone), -35cm of lost core, fault rubble 150.90 - 151.00: (FZG) Fault Zone - Gouge, 152.20 - 152.30: (FZG) Fault Zone - Gouge,	142.90 - 152.87: (SI) Silicification, (M) Moderate, (P) Pervasive 142.90 - 152.87: (CC) Calcite (Calcitic Alt.), (M) Moderate, (P) Pervasive 142.90 - 152.87: (CC) Calcite (Calcitic Alt.), (S) Strong, (FV) Fracture/Veined controlled 142.90 - 152.87: (SE) Sericitization, (W) Weak, (FV) Fracture/Veined controlled	142.90 - 152.87: 2% (PY) Pyrite, (FV) Fracture/Veined Controlled 142.90 - 152.87: 1% (PY) Pyrite, (D) Disseminated/Blebby
152.87 TO 167.85	**(4) Felsic Volcanic Rocks** -fine grained intensely sheared and contorted, densely quartz veined moderately siliceous, weak to moderately sericitic, moderately calcitic pyrite-bearing rhyolite? volcanic -white quartz veins and veinlets occur at mm to cm intervals, very dense -shearing and veins trend 45-50 deg TCA -very poor RQD's (10%) thoughout the unit with occassional areas of 10-20cm wide fault gouge -mag. suscept.: 0.00-0.02 -unit lower contact broken	152.87 - 167.85: (A) Fine Grained	152.87 - 167.85: (BC) Broken Core, -RQD's 0% 152.87 - 167.85: (LCTBRK) Lower Contact - Broken, 153.00 - 153.15: (FZG) Fault Zone - Gouge, 153.00 - 154.60: (FZ) Fault (Fault Zone), -70cm of lost core	152.87 - 167.85: (SE) Sericitization, (W) Weak, (FV) Fracture/Veined controlled 152.87 - 167.85: (SI) Silicification, (M) Moderate, (FV) Fracture/Veined controlled 152.87 - 167.85: (CC) Calcite (Calcitic Alt.), (M) Moderate, (P) Pervasive 152.87 - 167.85: (CC) Calcite (Calcitic Alt.), (M) Moderate, (FV) Fracture/Veined controlled	152.87 - 167.85: 1% (PY) Pyrite, (F) Fragmental

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Units: METRIC

FROM TO	ROCK TYPE	TEXTURE	STRUCTURE	ALTERATION	MINERALIZATION
167.85 TO 200.00	**(2) Mafic Volcanic Rocks** -fine grained massive to moderately fractured and moderately calcitic and moderately silicified dark green amygdaloidal mafic volcanic -amygdule comprise <5% of the unit, are irregular to elliptical, filled with white quartz-calcite and vary from <1 to 3mm in diameter -moderate irregular fracturing is healed with white quartz-calcite -poor RQD's throughout unit with local areas of fault gouge -mag. suscept.: 0.01-0.04 186.00 - 192.20 **(2) Mafic Volcanic Rocks** -fine grained massive to moderately fractured and moderately calcitic and moderately sillcified dark green amygdaloidal mafic volcanic -this interval hosts eleven 2cm to 50cm pyrite-bearing white *quartz-calcite veins trending* 10-80 deg TCA -mag. suscept.: 0.01-0.02 196.32 - 199.44 **(2) Mafic Volcanic Rocks** -fine grained massive to moderately fractured and moderately calcitic and moderately silicified dark green amygdaloidal mafic volcanic -this interval hosts three 10cm to 30cm pyrite-bearing white quartz-calcite veins trending 45-60 deg TCA -mag. suscept.: 0.01	167.85 - 200.00: (A) Fine Grained 167.85 - 200.00: (M) Massive 167.85 - 200.00: (IBX) Insitu Breccia 186.00 - 192.20: (IBX) Insitu Breccia 186.00 - 192.20: (M) Massive 186.00 - 192.20: (A) Fine Grained 196.32 - 199.44: (A) Fine Grained 196.32 - 199.44: (IBX) Insitu Breccia 196.32 - 199.44: (M) Massive	167.85 - 200.00: (FZ) Fault (Fault Zone), -RQD's 10% 177.90 - 178.10: (FZG) Fault Zone - Gouge, 179.35 - 179.40: (FZG) Fault Zone - Gouge, 186.00 - 192.20: (FV) Fractured and Veined, 196.32 - 199.44: (FV) Fractured and Veined,	167.85 - 200.00: (CC) Calcite (Calcitic Alt.), (M) Moderate, (FV) Fracture/Veined controlled 167.85 - 200.00: (CC) Calcite (Calcitic Alt.), (M) Moderate, (P) Pervasive 167.85 - 200.00: (SI) Silicification, (S) Strong, (P) Pervasive 186.00 - 192.20: (CC) Calcite (Calcitic Alt.), (M) Moderate, (FV) Fracture/Veined controlled 186.00 - 192.20: (SI) Silicification, (M) Moderate, (P) Pervasive 186.00 - 192.20: (CC) Calcite (Calcitic Alt.), (M) Moderate, (P) Pervasive 196.32 - 199.44: (CC) Calcite (Calcitic Alt.), (M) Moderate, (FV) Fracture/Veined controlled 196.32 - 199.44: (SI) Silicification, (M) Moderate, (P) Pervasive 196.32 - 199.44: (CC) Calcite (Calcitic Alt.), (M) Moderate, (P) Pervasive	167.85 - 200.00: 0.25% (PY) Pyrite, (FV) Fracture/Veined Controlled 186.00 - 192.20: 1% (PY) Pyrite, (FV) Fracture/Veined Controlled 196.32 - 199.44: 0.5% (PY) Pyrite, (FV) Fracture/Veined Controlled
200.00 TO 200.01	**(EOH) End of Hole** -24 BQ core boxes				

Hole Number: **MF15-02**

Units: METRIC

Assay Information - Kidd Mine

Sample Number	Type	From	To	Length	S.G.	Ag gpt	Cu %	Zn %	Pb %	S %	Fe %	Se gpt	Sn %	Ni %	Au ppb	Mineralization	Alteration	Rock	Comments
AV02646	ASSAY	111.20	112.70	1.50											-2				-moderately sheared amygdaloid
AV02647	ASSAY	112.70	114.20	1.50											7				-moderately sheared amygdaloid
AV02648	ASSAY	114.20	114.73	0.53											514				-moderately sheared amygdaloid
AV02635	ASSAY	142.90	143.80	0.90											69				-intensely sheared and contorted,
AV02636	ASSAY	146.00	146.90	0.90											14				-intensely sheared and contorted,
AV02637	ASSAY	146.90	148.45	1.55											24				-intensely sheared and contorted,
AV02638	ASSAY	148.45	149.95	1.50											-2				-intensely sheared and contorted,
AV02639	ASSAY	149.95	151.45	1.50											31				-intensely sheared and contorted,
AV02640	ASSAY	151.45	152.87	1.42											-2				-intensely sheared and contorted,
AV02641	ASSAY	152.87	154.60	1.73											3				-intensely sheared and contorted,
AV02642	ASSAY	154.60	156.10	1.50											7				-intensely sheared and contorted,
AV02643	ASSAY	156.10	157.55	1.45											-2				-intensely sheared and contorted,
AV02644	ASSAY	162.50	164.00	1.50											-2				-moderately sheared, densely qu
AV02645	ASSAY	166.35	167.85	1.50											-2				-moderately sheared, densely qu
AV02649	ASSAY	188.73	189.50	0.77											-2				-quartz-calcite-chlorite breccia ve
AV02650	ASSAY	191.00	192.20	1.20											7				-quartz-calcite-chlorite breccia ve

Hole Number: **MF15-02**

Units: METRIC

Assay Information - Exploration

Sample Number	Type	From	To	Length	Ag ppm	Cu gpt	Zn gpt	Pb gpt	Au ppb	Ni gpt	Co gpt	S gpt	S %	Cd gpt	Pd ppb	Pt ppb	Os ppb	Sn gpt	Se gpt	In gpt	Bi gpt	Mineralization	Alteration	Rock	Comments
AV02646	ASSAY	111.20	112.70	1.50	0	94	152	1	-2	129	56														-moderately sheared amygdalo
AV02647	ASSAY	112.70	114.20	1.50	0	75	165	1	7	111	53														-moderately sheared amygdalo
AV02648	ASSAY	114.20	114.73	0.53	0	81	195	1	514	90	42														-moderately sheared amygdalo
AV02635	ASSAY	142.90	143.80	0.90	0	64	61	1	69	63	35														-intensely sheared and contorte
AV02636	ASSAY	146.00	146.90	0.90	0	40	53	1	14	42	23														-intensely sheared and contorte
AV02637	ASSAY	146.90	148.45	1.55	0	51	81	1	24	66	34														-intensely sheared and contorte
AV02638	ASSAY	148.45	149.95	1.50	0	50	73	1	-2	57	34														-intensely sheared and contorte
AV02639	ASSAY	149.95	151.45	1.50	0	49	81	1	31	70	38														-intensely sheared and contorte
AV02640	ASSAY	151.45	152.87	1.42	0	58	63	12	-2	57	33														-intensely sheared and contorte
AV02641	ASSAY	152.87	154.60	1.73	0	23	34	1	3	11	7														-intensely sheared and contorte
AV02642	ASSAY	154.60	156.10	1.50	0	9	51	4	7	7	5														-intensely sheared and contorte
AV02643	ASSAY	156.10	157.55	1.45	0	9	33	1	-2	5	5														-intensely sheared and contorte
AV02644	ASSAY	162.50	164.00	1.50	0	5	40	1	-2	3	3														-moderately sheared, densely c
AV02645	ASSAY	166.35	167.85	1.50	0	8	42	1	-2	6	5														-moderately sheared, densely c
AV02649	ASSAY	188.73	189.50	0.77	0	217	57	1	-2	47	26														-quartz-calcite-chlorite breccia
AV02650	ASSAY	191.00	192.20	1.20	0	255	56	1	7	41	21														-quartz-calcite-chlorite breccia

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Assay Information - Visual Estimates + Calculated Grades

					Estimates								Calculations					
Sample Number	Type	From	To	Length	Cp %	Sph %	Gn %	Py %	Po %	Bo %	Au gpt	Ni %	Cu %	Zn %	Pb %	Ni %	Mineralization Alteration	Rock	Comments
AV02646	ASSAY	111.20	112.70	1.50									0.00		0.00				-moderately sheared amygdaloid
AV02647	ASSAY	112.70	114.20	1.50									0.00		0.00				-moderately sheared amygdaloid
AV02648	ASSAY	114.20	114.73	0.53									0.00		0.00				-moderately sheared amygdaloid
AV02635	ASSAY	142.90	143.80	0.90									0.00		0.00				-intensely sheared and contorted,
AV02636	ASSAY	146.00	146.90	0.90									0.00		0.00				-intensely sheared and contorted,
AV02637	ASSAY	146.90	148.45	1.55									0.00		0.00				-intensely sheared and contorted,
AV02638	ASSAY	148.45	149.95	1.50									0.00		0.00				-intensely sheared and contorted,
AV02639	ASSAY	149.95	151.45	1.50									0.00		0.00				-intensely sheared and contorted,
AV02640	ASSAY	151.45	152.87	1.42									0.00		0.00				-intensely sheared and contorted,
AV02641	ASSAY	152.87	154.60	1.73									0.00		0.00				-intensely sheared and contorted,
AV02642	ASSAY	154.60	156.10	1.50									0.00		0.00				-intensely sheared and contorted,
AV02643	ASSAY	156.10	157.55	1.45									0.00		0.00				-intensely sheared and contorted,
AV02644	ASSAY	162.50	164.00	1.50									0.00		0.00				-moderately sheared, densely qu
AV02645	ASSAY	166.35	167.85	1.50									0.00		0.00				-moderately sheared, densely qu
AV02649	ASSAY	188.73	189.50	0.77									0.00		0.00				-quartz-calcite-chlorite breccia ve
AV02650	ASSAY	191.00	192.20	1.20									0.00		0.00				-quartz-calcite-chlorite breccia ve

Hole Number: **MF15-02**

Units: METRIC

WRA Information - Oxides

Sample Number	From	To	Length	Rock	CHEMID	SiO2 %	TiO2 %	Al2O3 %	Fe2O3 %	MnO %	MgO %	CaO %	Na2O %	K2O %	P2O5 %	Cr2O3 %	LOI %	SUM %	Cr ppm	Y ppm	Zr ppm	Cu ppm	Zn ppm	Mineralization	Alteration	Comments
AV02574	68.00	71.00	3.00			52.92	1.86	13.11	15.73	0.26	2.69	6.32	2.95	0.39	0.48		2.99	99.77	55	50	180	40	145			-fine grained amygdaloidal? mafic v
AV02575	77.00	80.00	3.00			47.87	2.00	14.05	15.06	0.21	6.12	6.36	2.72	0.17	0.16		4.70	99.57	555	30	80	95	205			-fine grained variolitic-pillowed mafic
AV02576	86.38	88.85	2.47			55.18	1.49	12.61	14.58	0.24	1.93	5.77	3.36	0.62	0.59		3.16	99.59	30	55	210	40	150			-fine grained massive diabase? dyke
AV02577	107.00	110.00	3.00			45.75	1.86	13.11	15.34	0.23	5.82	8.49	2.03	0.13	0.15		6.51	99.57	460	25	70	100	160			-fine grained variolitic-pillowed mafic
AV02578	137.00	140.00	3.00			43.23	2.78	13.55	16.12	0.24	3.33	8.07	2.71	0.43	0.27		8.92	99.77	140	35	130	105	195			-fine grained moderately sheared an
AV02579	149.00	152.00	3.00			47.22	1.01	13.30	9.92	0.19	4.18	8.00	0.70	2.73	0.20		12.09	99.64	155	25	120	70	95			-fine grained intensely sheared-conto
AV02580	155.00	158.00	3.00			66.29	0.37	12.16	4.05	0.12	1.23	5.49	0.88	3.02	0.09		6.04	99.82	155	40	210	15	60			-fine grained intensely sheared-conto
AV02581	173.00	176.00	3.00			55.23	1.06	14.38	9.00	0.23	1.64	6.18	4.43	0.90	0.49		6.11	99.67	20	45	160	10	65			-fine grained moderately siliceous, m

Hole Number: **MF15-02**

Units: METRIC

WRA Information - Pathfinders

Sample Number	From	To	Length	Rock	CHEMID	CO2 %	S %	S ppm	Cu ppm	Zn ppm	Pb ppm	Ni ppm	Co ppm	Ag gpt	Au ppb	Mn ppm	As ppm	Sb ppm	Hg ppb	W ppm	Mo ppm	Tl ppm	Ba ppm	Bi ppm	Sn ppm	Se ppm	F ppm
AV02574	68.00	71.00	3.00				0.07		40	145		15	50														
AV02575	77.00	80.00	3.00				0.03		95	205		170	70														
AV02576	86.38	88.85	2.47				0.13		40	150		5	40														
AV02577	107.00	110.00	3.00				0.09		100	160		175	65														
AV02578	137.00	140.00	3.00				0.48		105	195		140	85														
AV02579	149.00	152.00	3.00				0.31		70	95		80	45														
AV02580	155.00	158.00	3.00				0.12		15	60		30	10														
AV02581	173.00	176.00	3.00				0.02		10	65		15	20														

Hole Number:**MF15-02**

Units: METRIC

WRA Information - Mixed

Sample Number	From	To	Length	Rock	CHEMID	Cd ppm	V ppm	B ppm	Be ppm	Br ppm	Ga ppm	Ge ppm	In ppm	Ir ppb	Li ppm	Rb ppm	Sr ppm	Cs ppm	Sc ppm	Hf ppm	Pt ppb	Pd ppb	Re ppb	Rh ppb	Ru ppb
AV02574	68.00	71.00	3.00				170		5										35						
AV02575	77.00	80.00	3.00				335		5										35						
AV02576	86.38	88.85	2.47				45		5										30						
AV02577	107.00	110.00	3.00				300		-5										40						
AV02578	137.00	140.00	3.00				360		5										35						
AV02579	149.00	152.00	3.00				230		-5										30						
AV02580	155.00	158.00	3.00				20		-5										10						
AV02581	173.00	176.00	3.00				25		-5										25						

Hole Number: **MF15-02**

Units: METRIC

WRA Information - Traces/REE

Sample Number	From	To	Length	Rock	CHEMID	Ta ppm	Th ppm	U ppm	Nb ppm	Y ppm	Zr ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	34S pmil	18O pmil
AV02574	68.00	71.00	3.00						-10	50	180																
AV02575	77.00	80.00	3.00						-10	30	80																
AV02576	86.38	88.85	2.47						-10	55	210																
AV02577	107.00	110.00	3.00						-10	25	70																
AV02578	137.00	140.00	3.00						10	35	130																
AV02579	149.00	152.00	3.00						-10	25	120																
AV02580	155.00	158.00	3.00						-10	40	210																
AV02581	173.00	176.00	3.00						-10	45	160																

Hole Number:**MF15-02**

Units: METRIC

WRA Alteration Indices

Sample Number	From	To	Length	Rock	CHEMID	Al2O3/TiO2	Zr/Y	ALUM	ISHIKW	ACNK	SERICIT	Ca/Al	Zn/Na2O	MgO NUM	Ni/MgO	CuZn	Co/Ni	MineralizationAlterationComments
AV02574	68.00	71.00	3.00			7.05	3.60	135.71	24.94	0.60	0.06	0.48	49	0.28	5.58	21.62	3.33	-fine grained amygdaloidal? mafic v
AV02575	77.00	80.00	3.00			7.03	2.67	151.89	40.92	0.66	0.03	0.45	75	0.49	27.78	31.67	0.41	-fine grained variolitic-pillowed mafic
AV02576	86.38	88.85	2.47			8.46	3.82	129.33	21.83	0.59	0.10	0.46	45	0.24	2.59	21.05	8.00	-fine grained massive diabase? dyke
AV02577	107.00	110.00	3.00			7.05	2.80	123.10	36.13	0.50	0.02	0.65	79	0.47	30.07	38.46	0.37	-fine grained variolitic-pillowed mafic
AV02578	137.00	140.00	3.00			4.87	3.71	120.87	25.86	0.52	0.05	0.60	72	0.32	42.04	35.00	0.61	-fine grained moderately sheared ar
AV02579	149.00	152.00	3.00			13.17	4.80	116.36	44.27	0.49	0.25	0.60	136	0.50	19.14	42.42	0.56	-fine grained intensely sheared-contc
AV02580	155.00	158.00	3.00			32.86	5.25	129.50	40.02	0.58	0.35	0.45	68	0.41	24.39	20.00	0.33	-fine grained intensely sheared-contc
AV02581	173.00	176.00	3.00			13.57	3.56	124.93	19.32	0.59	0.13	0.43	15	0.30	9.15	13.33	1.33	-fine grained moderately siliceous, m

FL TIMMINS GEOLOGY - ROCK LEGEND - 2001A

1a. MAIN ROCK DIVISIONS - REGIONAL	
15	Phanerozoic Sediments
14	Huronian Supergroup
13	Metamorphic (Unknown)
12	Gneiss
11	Schist
10	Diabase
9	Felsic Intrusive Rocks
8	Intermediate Intrusive Rocks
7	Mafic Intrusive Rocks
6	Ultramafic Intrusive Rocks
5	Sedimentary Rocks
5S	Sulphide (>40%)
4	Felsic Volcanic Rocks
3	Intermediate Volcanic Rocks
3HT	Heterolithic Volcanic Rocks
2	Mafic Volcanic Rocks
1	Ultramafic Volcanic Rocks

1b. MAIN ROCK DIVISIONS - KIDD MINE	
A/D1	"Andesite/Diorite" - Type 1
A/D2	"Andesite/Diorite" - Type 2
A/D3	"Andesite/Diorite" - Type 3
A/D4	"Andesite/Diorite" - Type 4
AM	Amphibolite
BA	Black Argillite
BC	Black Chert
BK	Basaltic Komatiite
CB	Cherty Breccia
D	"Dacite"
G	Greywacke
MGT	Magnesium Tholeiite
MMF	Mixed Mafic Fragmental
MRF	Mixed Rhyolite Fragmental
MS	Massive Sulphides
MSC	Massive Sulphides - Mainly CP
MSCS	Massive Sulphides - Mainly CP + SPH
MSP	Massive Sulphides - Mainly PY
MSPO	Massive Sulphides - Mainly PO
MSS	Massive Sulphides - Mainly SPH
MV	Mafic Volcanic
PCR	Pyrite - Carbonate Rock
PK	Pyroxenite Komatiite
QFP	Quartz Feldspar Porphyry
QP	Quartz Porphyry
QV	Quartz Vein
R	Rhyolite
S	Serpentinite
SM	Semi-Massive Sulphides
TC	Talc-Carbonate

1c. OTHER "ROCK" DIVISIONS	
CAS	Casing/Overburden
BF	Backfill
BT	Break Through
EOH	End Of Hole
LC	Lost Core
NAVI	Navigational Drilling - No Core
UNK	Unknown

5. MINERALIZATION STYLE	
B	Bedded
D	Disseminated/Blebs
F	Fragmental/Clasts
FV	Fracture/vein controlled
M	Massive
S	Stringer
SM	Semi-massive
STN	Stain

MINERALIZATION TYPES	
CP	Chalcopyrite
GN	Galena
PN	Pentlandite
PO	Pyrrhotite
PY	Pyrite
Q	Quartz
SPH	Sphalerite

2. TEXTURE & GEOCHEMICAL MODIFIERS			
A	Fine Grained	N	Variolitic/Spherulitic
ADC	Adcumulate	NN	Graded Bedding
B	Medium Grained	NT	Net Textured
BD	Bedded	OO	Cross bedding
BK	Basaltic Komatiite	OP	Ophitic
BX	Breccia	ORC	Orthocumulate
C	Coarse Grained	OSX	Olivine Spinifex
CH	Chert	P	Pillowed
DD	Block (>64mm)/Xenolith	PBX	Pillow Breccia
DN	Dunite	PE	Peridotite
E	Amygdaloidal/Vesicular	PH	Porphyritic
EE	Autoclastic/Hyaloclastic	PR	Primitive (Y<20)
EV	Evolved (Y>20<60)	PS	Polysutured
F	Fragmental	PSX	Pyroxene Spinifex
FB	Flow Banded	PX	Pyroxenite
FBX	Flow Breccia	QFP	Quartz-Feldspar Phyric/Porphyry
FF	Feldspar (Albite) Flowers	QP	Quartz Phyric/Porphyry
FP	Feldspar Phyric	QT	Quench Textured/Chilled
GB	Gabbroic Textured	RR	Porphyroblastic
GPH	Graphitic/Argillaceous	RWV	Reworked Volcanic
H	Tholeiitic	S	Sulphides, Exhallites
HEV	Highly Evolved (Y>60)	SKC	Skeletal/Crescumulate
HH	Clast Supported	SS	Hornfels
HT	Heterolithic	SX	Spinifex
I	Alkalic	T	Pyroclastic
IF	Oxide Iron Formation	TKL	Thickly Laminated
II	Matrix Supported	TNL	Thinly Laminated
IBX	Insitu Breccia	TUF	Tuff
J	Calc-Alkalic	TW	Tuffwacke
JJ	Granule (grit 2-4mm)	U	High Mg
K	Komatiitic	V	High Fe
KK	Pebble (4-64mm)	VBX	Volcanic Breccia
LL	Cobble (64-256mm)	W	High Al
LST	Lapillistone	WK	Wacke
LTF	Lapilli Tuff	WW	fragmental (felsic>mafic)
LX	Leucoxene Bearing	X	Andesite
LXP	Leucoxene Bearing -Pink	XX	fragmental (mafic>felsic)
LXW	Leucoxene Bearing -White	Y	Icelandite
M	Massive	YY	Crystal Tuff (>50% of frags)
MM	Boulder (>256)	ZZ	Lithic Tuff (>50% of frags)
MSC	Mesocumulate		

3. STRUCTURAL TYPES			
AUG	Augen	GG	Gouge
BC	Broken Core	JTQC	Joint - Quartz Carbonate
BD	Bedding	JTR	Joint - Regular
BDN	Boudinage	LCTBR	Lower Contact - Broken
BND	Banding	LCTF	Lower Contact - Faulted
DSK	Discing	LCTGR	Lower Contact - Gradational
FLD	Fold	LCTSH	Lower Contact - Sharp
FLDB	Fold - Broad	MSF	Moderately Schistose/Foliated
FLDT	Fold - Tight	MZ	Milled Zone
FV	Fractured and Veined	SF	Schistose/Foliated
FZ	Fault (Fault Zone)	SHZ	Shear (Shear Zone)
FZBX	Fault Zone - Breccia	SSF	Strongly Schistose/Foliated
FZG	Fault Zone - Gouge	VSSF	Very Strongly Schistose/Foliated
FZS	Fault Zone - Very Strong Schisosi	WSF	Weakly Schistose/Foliated

4. ALTERATION TYPES			
AB	Albitization	HE	Hematization
B	Biotite	K	Potassic Alteration
BL	Bleached/Bleaching	KA	Kaolinitization
CA	Carbonatization	RS	Rust Staining
CC	Calcite (Calcitic Alt)	SE	Sericitization
CHL	Chloritization	SER	Serpentinization
EP	Epidotization	SI	Silicification
F	Fuchsite	SID	Siderite (Fe-Carbonate)
GPH	Carbonaceous	T	Talcose (+/- Carbonate)

ALTERATION STYLE		ALTERATION INTENSITY	
S	Spots	S	Strong
FV	Fracture/vein controlled	M	Moderate
P	Pervasive	W	Weak

Example: EpPW = Epidote,Pervasive,Weak

Work Report Summary

Transaction No: W0460.01696 **Status:** APPROVED
Recording Date: 2004-NOV-01 **Work Done from:** 2002-DEC-15
Approval Date: 2004-NOV-10 **to:** 2002-DEC-17

Client(s):

130679 FALCONBRIDGE LIMITED

Survey Type(s):

PDRILL

Work Report Details:

Claim#	Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve	Due Date
P 1201323	$0	$0	$1,356	$1,356	$0	0	$0	$0	2004-NOV-03
P 1211741	$15,490	$15,490	$0	$0	$15,490	15,490	$0	$0	2005-JUL-23
P 1227611	$0	$0	$3,200	$3,200	$0	0	$0	$0	2005-NOV-25
P 1227613	$0	$0	$1,718	$1,718	$0	0	$0	$0	2004-NOV-25
P 1243601	$0	$0	$1,200	$1,200	$0	0	$0	$0	2005-NOV-16
P 1244053	$0	$0	$4,800	$4,800	$0	0	$0	$0	2005-DEC-20
P 1244054	$0	$0	$3,216	$3,216	$0	0	$0	$0	2004-DEC-20
	$15,490	$15,490	$15,490	$15,490	$15,490	$15,490	$0	$0	

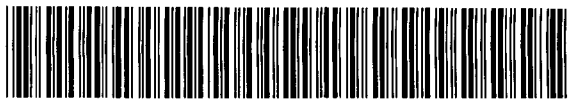
External Credits: $0

Reserve:

$0 Reserve of Work Report#: W0460.01696

$0 Total Remaining

Status of claim is based on information currently on record.



42A14SE2018 2.28692 LUCAS

900

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Ontario

GEOSCIENCE ASSESSMENT OFFICE
933 RAMSEY LAKE ROAD, 6th FLOOR
SUDBURY, ONTARIO
P3E 6B5

Tel: (888) 415-9845
Fax:(877) 670-1555

Date: 2004-NOV-12

FALCONBRIDGE LIMITED
800-207 QUEEN'S QUAY WEST
TORONTO, ONTARIO
M5J 1A7 CANADA

Submission Number: 2.28692
Transaction Number(s): W0460.01696

Dear Sir or Madam

Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact LUCILLE JEROME by email at lucille.jerome@ndm.gov.on.ca or by phone at (705) 670-5858.

Yours Sincerely,

Ron C Gashinski.

Ron C. Gashinski
Senior Manager, Mining Lands Section

Cc: Resident Geologist

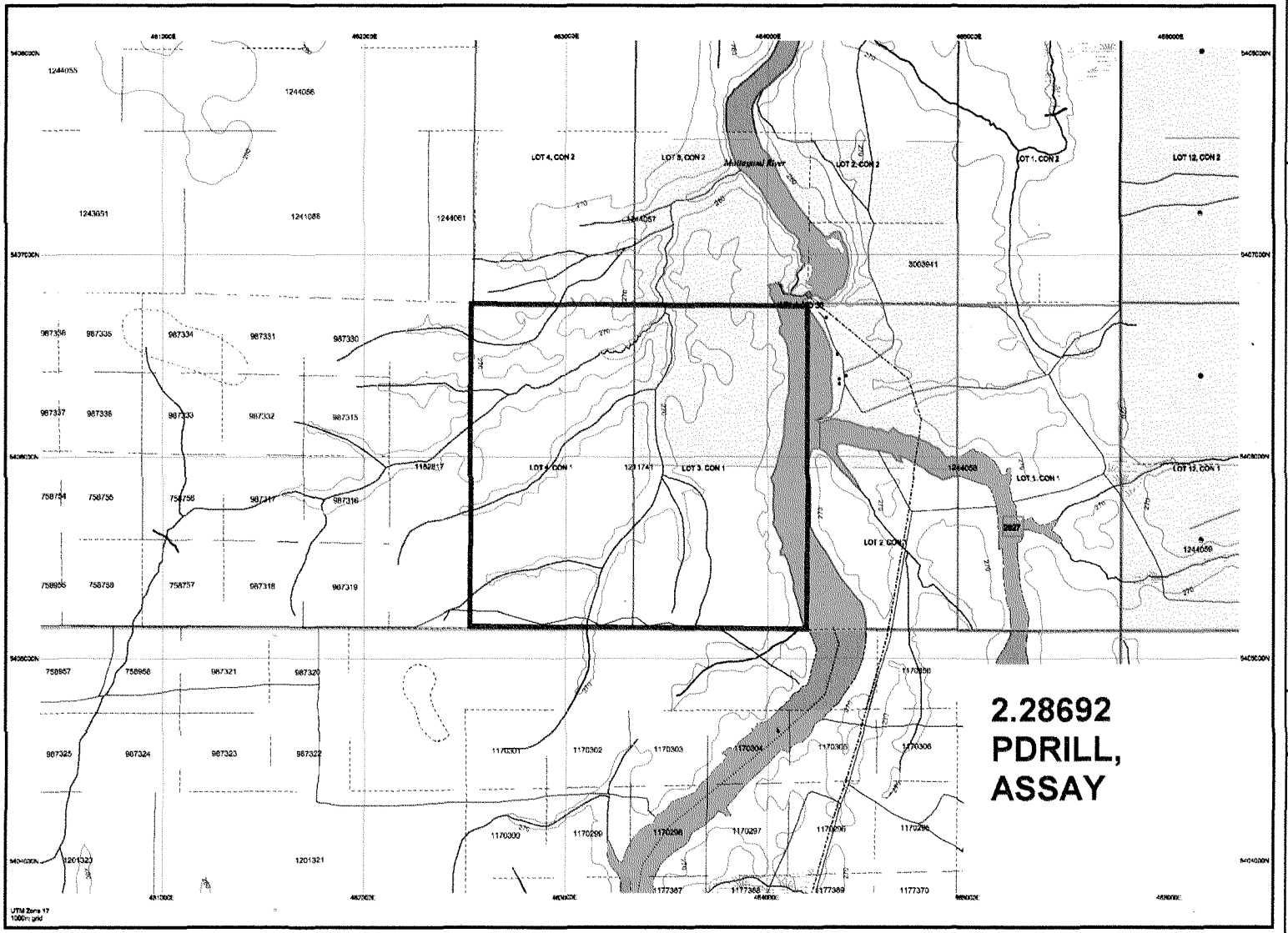
Falconbridge Limited
(Claim Holder)

Dean Rogers
(Agent)

Assessment File Library

Falconbridge Limited
(Assessment Office)

MAHAFFY T.P.



ONTARIO CANADA

MINISTRY OF NORTHERN DEVELOPMENT AND MINES

PROVINCIAL MINING RECORDER'S OFFICE

Mining Land Tenure Map

Date / Time of Issue: Wed Nov 10 14:39:53 EST 2004

TOWNSHIP / AREA
MAHAFFY

PLAN
G-3024

ADMINISTRATIVE DISTRICTS / DIVISIONS

Mining Division	Porcupine
Land Titles/Registry Division	COCHRANE
Ministry of Natural Resources District	*TIMMINS*

TOPOGRAPHIC

- Administrative Boundaries
- Township
- Concession Lot
- Provincial Park
- Indian Reserve
- Cart, Pit & Pile
- Contour
- Mine Shafts
- Mine Headframe
- Railway
- River
- Trail
- Natural Gas Pipeline
- Utilities
- Tower

Land Tenure

Freehold Patent:
- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

Leasehold Patent:
- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

Licence of Occupation:
- Uses Not Specified
- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only
- Land Use Permit
- Order In Council (Not open for
- Water Power Lease Agreeme

1234567 Mining Claim

1234567 Filed Only Mining

LAND TENURE WITHDRAWAL:

1234 Areas Withdrawn from Di
Mining Acts Withdrawal T
Wsm Surface And Mining Rights
Ws Surface Rights Only Withdra
Wm Mining Rights Only Withdra
Order In Council Withdraw
W'sm Surface And Mining Rights
W's Surface Rights Only in Bun
W'm Mining Rights Only Withdra

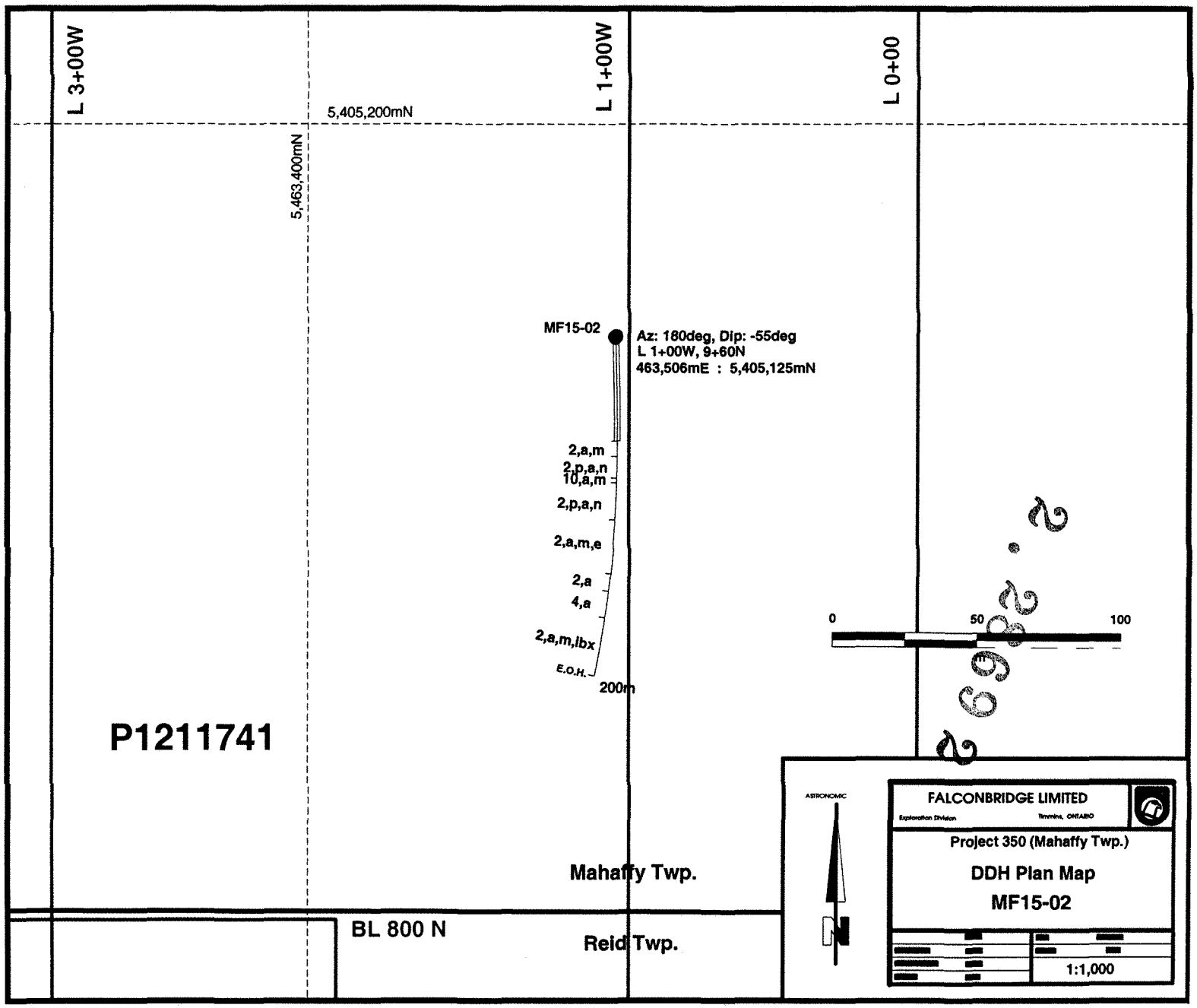
Ns IMPORTANT I

Scale 1:20017

304m 0m 608m

LAND TENURE WITHDRAWAL DESCRIPTIONS

Identifier	Type	Date	Description
2827 W-LL-C1566	Wsm Wsm	Jan 1, 2001 Feb 1, 2004	FLOODING RIGHTS IN LOTS 1,2 AND 3, CON. I TO H.E.P. <a href="http://www.mndm.gov.on.ca/mndm/mines/lands/living/bonsai/2004/orders/feb/withdrawal.asp">W-LL-C1566 ONT M&S withdrawal S.35 Mining Act RE Boundary generally depicts area withdrawn Click to view sch
W-LL-F1060	Wsm	Feb 26, 2004	W-LL-2004/04 ONT M&S withdrawal S.35 Mining Act F 26/02/04 Boundary generally depicts area withdrawn Click t



8+00mN

9+00mN

10+00mN

11+00mN

Claim P1211741

Az: 180deg. Dip: -55deg.
Grid: L1+00mW 9+60mN
UTM: 463,506mE 5,405,125mN

MF15-02

300m

Overburden

2.28692

4,a,m

2,p,a,n

10,a,m

2,p,a,n

2,a,m,e

AV02647
AV02646
AV02648

200m

2,a

AV02636
AV02637
AV02639
AV02638
AV02641
AV02640
AV02643
AV02642
AV02644
AV02645

4,a

2,a,m,ibx

E.O.H.

AV02649
AV02650

200m

50m

100m

42A14SE2018 2.28692 LUCAS

220

Falconbridge Limited Timmins Exploration Mahaffy Twp.	bF
Rotated Section 1+00mW DDH MF15-02 (viewing west - 270 deg.)	
Traced by : DMF Oct/04	Approved by :
Drawn by : DMF Oct/04	Plan no. :
Supervised by :	Scale : 1 : 1000 (metres)
Revised by :	