

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 5.00	«lob»					casing was extended to 15.0m because of very poor ground conditions.
5.00 TO 12.00	«SE,bx»	Chert? - very poor core recovery, core is grounded and rubbly. Most fracture surfaces have rusty Fe-oxide coating. Unit varies from mottled very siliceous chert in upper portion to poorly developed fragmental (agglomerate?) to well developed bx texture. sulfs common. Downhole contact lost in the rubble.			trace to 3% py,po and some wheathered sulfs as fine disseminations and as small 1-3mm irreg. blebs commonly along fractures.	
12.00 TO 14.90	«5g»	Graphitic Argillite - similar poor core recovery, broken, ground, rubbly core. Common wheathered out carb portions. Unit is typically very fine black massive very conductive graphitic argillite; some sulfs. 14.3-14.7: more silicious grey band (@ 30CA) with sulfs. Downhole contact broken and lost.			trace-5% py as irreg. blebs along fractures in graphite; some earthy rusty sulfs (sph?) especially in siliceous band (@ 30CA) near end of unit.	
14.90 TO 26.80	«4t,*b»	Tuff/Agglomerate - core is blocky with much better recoveries than previous sections; wheathered along some surfaces. 14.9-20.0: Upper Portion - Strong fragmental texture throughout, varies from closed packed to mostly matrix over short intervals (10-20cm). Fragments are generally fine felsic and/or cherty, some argillite, sub-angular, mm-2cm with some perfered orientation @ 45CA. Groundmass is generally fine and dark, but is locally cream coloured and siliceous. Sulfs common in groundmass.		locally weak sericite alteration associated with cream coloured matrix portions (i.e.18.8-19.3m).	1-3% po,py (sph?) throughout most of unit as massive aggregates in groundmass of fragmental; locally concentrating upto 5-8% sulf over 15-20cm. Earthy rusty sulf (sph?) common in lower half of unit.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<p>‡20.0-21.1‡«5g» Section is mostly graphitic argillite with sulfs interbedded with some felsic fragmental portions.</p> <p>21.1-26.8: Lower Portion - Flow Bx & Agglomerate: appears to be intermix of both. Upper section (to 23.8m) has bx texture of feldspar-phyric flow type; lower section is closed packed mixed, poorly sorted fragmental (debris flow?) of sub-rounded fragments upto 1.5cm of felsic, chert and quartz. Becoming some less developed towards bottom protion of section.</p> <p>Downhole contact sharp @ 40CA.</p>	40			
26.80 TO 33.00	«4l,D,bx»	<p>Felspar-phric Felsic Flow & Flow Bx - unit is mix of some narrow massive flow portions; disrupted, flow bx; some quartz-phric sections; narrow sediment bands (non-conductive argillite) and some altered bands.</p> <p>locally fine sulfs.</p> <p>Downhole contact intercalated over 10cm @ 80-90CA.</p>	80	sericite alteration as bleached bands in matrix-rich bx sections.	6-8% po,py locally as very fine sulfs over narrow intervals (10-20cm). some isolated sub-rounded po blebs, frags? in bx sections. some fracture-controlled po blebs upto 1x3cm.	
33.00 TO 37.70	«5a,si»	<p>Siliceous Sediments - very fine grained, dark green bedded @ 70CA massive sediment.</p> <p>Non-magnetic; non-conductive (except for weakly conductive argillite (20cm) argillite bed at top of unit.</p> <p>36.1-37.7:distinctly more siliceous bleached pale green/cream - volcanic?.</p> <p>Downhole contact sharp @ 70CA.</p>	70		trace-2% py,po as fine fracture controlled blebs.	
37.70 TO 91.50	«4l,m,D,E»	<p>Feldpar-phyric Felsic Flows - series of numerous fine to porphyritic dark green generally massive flows, alternating with strong, distinct creamy chert/siliceous beds.</p>		some narrow cream coloured alteration bands.	1-5% very fine disseminated sulfs over narrow intervals.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<p>flows are weakly magnetic.</p> <p>41.1-55.8: section is 60:40 mix of alternating fine massive flows with siliceous cherty flow tops? or interflow sediments. Flow are generally 1.5-2.0m thick and cherty portions are upto 1m; contacts are sharp at all CA's. some sulfs.</p> <p>59.5-63.3: thick chert (flow top?) section.</p> <p>63.3-75.6: thick porphyritic flow section, some internal flow contacts, very narrow chert bands, mottled sections, weakly altered; generally trace sulf.</p> <p>75.6-76.6 & 78.8-79.4: alternating cream/black chert bands with wispy banding @ 35CA. (structural?mylonitic?).</p> <p>79.4-84.7: generally very uniform, massive with well developed felpspar-phyric texture.</p> <p>84.7-90.6: halo to fault. gradual increase in shearing (@ 50CA) and carb veining.</p> <p>90.6-91.5: very strong cataclastic textures and veining.</p>				
91.50 TO 92.70	<FLT>	<p>Fault - core of fault/shear zone.</p> <p>90.5-90.7: Gouge - strongest portion of zone, section is pure mud,clay gouge with pebbles; @ 70CA.</p> <p>rest of section is broken, blocky core of very shear and veined flow material. many surfaces with clay gouge coatings.</p> <p>trace po,py blebs along shearing.</p> <p>gouge is weakly conductive.</p> <p>Downhole contact marked by first</p>	70			<p>1-4% po,py as very fine disseminations. No sulfs in cherty portions.</p>

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		fractured/sheared cherty section.				
92.70 TO 99.20	«5a,FLT»	<p>Fault Zone Sediments - mottled fractured, sheared; broken, blocky core; argillite interbedded with some graphitic horizons and upper chert section (to.93.8m).</p> <p>92.7-99.2: very sheared, veined broken section.</p> <p>99.1: 4cm pure black clay band @ 90CA.</p>				
99.20 TO 130.30	«5,F»	<p>Wacke - unit is predominately well sorted sandstone interbedded with finer argillaceous and cherty beds; upper portion of unit hosts several clasts of various material including argillite and feldspar-phyric felsic volcanic.</p> <p>occasional clasts upto 1cm in lower portion of unit (from 104m onward).</p> <p>Bedding @ 80-90CA. Locally disrupted, mottled.</p> <p>99.2-100.9: mixed section of alternating argillite and dark chert beds.</p> <p>100.9-102.8: wacke hosts clasts of varying size (upto 15cm) and composition; some pyrite grains.</p> <p>103.0-103.6: graphitic argillite bed with 5-8%py,po. up hole contact along carb filled shear? band @ 10CA, lower contact sharp @ 80CA.</p> <p>104.0: example of graded bed? contact - bed starting at 104.0m grades finer downhole into a series of finer partings (beds) at 104.2. Indicates an overturned sequence.</p> <p>108.6-111.6: cherty section @ 70-80CA.</p>				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<p>111.6-130.3: well developed undisrupted bedding features; contacts @ 80CA at top of section and increasing gradually to 45CA in lower part of section. some fracturing, some trace sulfs. common beds with 10-20% 2-4mm black angular argillite chards speckled throughout bed.</p> <p>Downhole contact very abrupt; core broken blocky on fault side on contact, could not get contact angle.</p>				
130.30 TO 133.30	<FLT>	<p>Fault - stronger than previous fault, much more gouge and clay through section; host is (was) a graphitic argillite; section is now 30% fine black clay gouge, remainder is fault bx with matrix of fine black clay gouge.</p> <p>Fault angle is 70-90CA.</p> <p>Fault is variably conductive over cms.</p> <p>132.8: argillite/dark fractured bx'd contact @ 80CA.</p> <p>Downhole contact is last of strong clay gouge material.</p>	70			
133.30 TO 156.00	<41,D>	<p>Feldspar-phyric Flow(?) - similar unit as previous; 10-15% 1-4mm sub-hedral feldspar grains in dark matrix.</p> <p>133.2-136.8: very sheared, altered and bleached; very gradually becoming less so toward 136.8. Quartz-phyric section over narrow interval (133.3-134.2).</p> <p>136.8-146.6: generally uniform and consistent, very few disruptions; some fracturing, some carb veining.</p> <p>146.6-150.0: disrupted, altered, fractured</p>				

HOLE NUMBER: MAN23-01

DRILL HOLE RECORD

DATE: 10/26/1998

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
156.00 TO 156.00	«EOH»	section. interflow?. 150.0-150.3: wacke - good bedding @ 60CA. 150.3-152.0: disrupted seds?				

HOLE NUMBER: MAN23-01

DRILL HOLE RECORD

LOGGED BY: R. Foy

PAGE: 7

Sample	From (M)	To (M)	Leng. (M)	Cu ppm	Zn ppm	Pb ppm	Ni ppm	Au ppb	Ag ppm	Cu/Zn	Co ppm	Pt ppb	Pd ppb	S ppm	Se ppm	As ppm	Hg ppb	Sb ppm	Est.Ni ‰	Est.Po ‰	Est.Py ‰	Est.Cp ‰	Est.Sp ‰	Est.Gn ‰	ROCK TYPE	Comments
AT08339	5.00	8.00	3.00	65	41	4	71	3	0.1					0.85												
AT08340	8.00	11.00	3.00	123	76	5	55	<2	0.3																	
AT08341	11.00	14.00	3.00	201	3020	1030	44	343	19.3																	
AT08342	14.00	14.30	0.30	526	173	536	47	113	13.2																	
AT08343	14.30	14.70	0.40	1550	2640	436	140	69	8.5																	
AT08344	14.70	15.00	0.30	2030	260	211	163	79	7.5																	
AT08345	15.00	16.00	1.00	735	3100	128	109	51	4.0																	
AT08346	16.00	17.00	1.00	610	4980	92	132	31	2.3																	
AT08347	17.00	18.00	1.00	462	3900	108	144	48	2.5																	
AT08348	18.00	19.00	1.00	556	5440	79	108	3	1.9																	
AT08349	19.00	20.00	1.00	2350	5270	113	200	27	2.4																	
AR07523	20.00	21.00	1.00	4600	6760	175	371	27	3.8					14.10												
AR07524	21.00	23.00	2.00	398	3010	12	209	3	0.4																	
AR07525	23.00	24.50	1.50	91	649	7	91	3	0.2																	
AR07526	24.50	25.00	0.50	106	284	7	78	3	0.2																	
AR07527	25.00	26.00	1.00	256	681	8	81	<2	0.3																	
AR07528	26.00	26.80	0.80	75	311	5	78	<2	0.6																	
AR07529	26.80	27.50	0.70	275	1370	19	117	27	0.8																	
AR07530	28.70	29.70	1.00	148	457	3	81	10	0.6																	
AR07531	29.70	30.50	0.80	105	530	3	61	10	0.5																	
AR07533	38.80	40.70	1.90	490	96	2	77	<2	0.5																	
AR07534	40.70	41.10	0.40	283	56	4	75	10	0.4																	
AR07532	43.70	44.70	1.00	202	58	2	69	7	0.2																	
AR07535	97.30	97.60	0.30	33	32	3	72	10	0.2																	
AR07536	99.60	100.70	1.10	73	150	5	94	14	0.3																	
AR07537	100.70	101.00	0.30	70	88	8	51	21	0.4																	
AR07538	101.00	101.40	0.40	45	195	7	48	<2	0.2																	
AR07539	103.00	103.60	0.60	125	582	9	91	14	0.5																	
AR07540	104.40	104.70	0.30	52	101	6	30	10	0.2																	
AR07541	119.10	119.40	0.30	15	38	12	21	3	0.4																	
AR07542	125.20	125.50	0.30	303	54	14	60	106	0.3					10.55												
AR07543	134.90	135.30	0.40	67	138	9	47	51	0.3																	
AR07544	146.60	147.20	0.60	190	160	27	51	31	0.5																	
AR07545	147.20	148.20	1.00	84	472	530	28	3	0.4																	
AR07546	148.20	149.20	1.00	168	68	10	54	3	0.5																	
AR07547	149.20	150.00	0.80	77	35	6	55	17	0.3																	

Sample	From (M)	To (M)	Leng. (M)	SI02 %	AL203 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	TIO2 %	P2O5 %	MNO %	CR2O3 %	LOI %	SUM %	Y PPM	ZR PPM	BA PPM	CU PPM	ZN PPM	NI PPM	CR PPM	FIELD NAME	CHEM ID	ALUM
AU00360	5.00	8.00	3.00	76.03	12.19	1.67	0.94	3.99	1.18	1.89	0.34	0.06	0.02		0.97	99.28	10	80		15	30	50	1205	4,9jA	178	
AU00361	24.00	27.00	3.00	59.12	13.54	4.71	4.55	3.45	0.83	6.96	0.46	0.20	0.13		5.59	99.54	10	110		85	480	70	615	4,9jA	151	
AU00362	36.10	37.70	1.60	70.02	15.77	1.56	0.67	4.79	2.81	1.35	0.29	0.14	0.02		1.97	99.39	5	120		25	15	15	390	4,9jA	172	
AU00363	51.00	53.00	2.00	54.50	19.48	6.06	3.27	4.84	1.91	6.58	0.51	0.27	0.11		2.05	99.58	15	120		115	70	75	410	3,8j	152	
AU00364	54.00	55.50	1.50	72.90	13.18	2.55	1.45	4.80	0.72	2.39	0.26	0.08	0.04		1.12	99.49	5	100		<5	5	30	805	4,9jA	163	
AU00365	81.50	84.00	2.50	58.72	16.28	6.27	3.84	4.69	1.88	5.61	0.41	0.20	0.10		1.58	99.58	10	100		10	60	50	420	4,9jA	127	
AU00366	122.00	124.00	2.00	64.30	14.74	4.29	2.82	4.02	2.48	3.56	0.36	0.09	0.08		2.62	99.36	5	100		<5	70	20	360	4,9jA	137	
AU00367	133.30	134.20	0.90	69.58	15.24	1.31	0.70	4.78	1.81	3.19	0.32	0.06	0.01		2.46	99.46	5	110		45	295	30	415	4,9jA	193	
AU00368	147.00	149.00	2.00	68.89	15.29	1.35	1.18	3.36	2.57	3.78	0.34	0.08	0.03		2.59	99.46	5	100		70	30	15	300	4,9jA	210	

Sample	From (M)	To (M)	Leng. (M)	RB PPM	SR PPM	CO2 %	AG PPM	AU PPB	CO PPM	PB PPM	S PPM	V PPM	AS PPM	SN PPM	CD PPM	SB PPM	BI PPM	SE PPM	HF PPM	TA PPM	W PPM	MO PPM	TH PPM	U PPM	B PPM	CS PPM	LA PPM	CE PPM	ND PPM		
AU00360	5.00	8.00	3.00						15		0.34	75																			
AU00361	24.00	27.00	3.00						20		2.83	115																			
AU00362	36.10	37.70	1.60						5		0.25	35																			
AU00363	51.00	53.00	2.00						20		0.89	125																			
AU00364	54.00	55.50	1.50						10		0.02	60																			
AU00365	81.50	84.00	2.50						15		0.18	100																			
AU00366	122.00	124.00	2.00						5		0.19	65																			
AU00367	133.30	134.20	0.90						10		1.33	40																			
AU00368	147.00	149.00	2.00						5		1.09	50																			

Sample	From (M)	To (M)	Leng. (M)	SM PPM	EU PPM	GD PPM	DY PPM	ER PPM	LU PPM	OS PPE	IR PFB	RU PFB	RH PFB	PT PFB	PD PFB	LI PPM	BE PPM	MN PPM	GA PPM	GE PPM	IN PPM	TL PPM	SC PPM	BR PPM	MGO#	CA/AL	NI/MGO	ISHIKW	ZN/NA2
AU00360	5.00	8.00	3.00														<5						5		0.54	0.14	53	27	8
AU00361	24.00	27.00	3.00														<5						10		0.61	0.35	15	40	139
AU00362	36.10	37.70	1.60														<5						5		0.54	0.10	22	35	3
AU00363	51.00	53.00	2.00														<5						10		0.54	0.31	23	32	14
AU00364	54.00	55.50	1.50														<5						5		0.59	0.19	21	23	1
AU00365	81.50	84.00	2.50														<5						10		0.62	0.39	13	34	13
AU00366	122.00	124.00	2.00														<5						5		0.65	0.29	7	39	17
AU00367	133.30	134.20	0.90														<5						<5		0.34	0.09	43	29	62
AU00368	147.00	149.00	2.00														<5						5		0.42	0.09	13	44	9

Sample	From (M)	To (M)	Leng. (M)	YB PPM	NB PPM
AU00360	5.00	8.00	3.00		30
AU00361	24.00	27.00	3.00		20
AU00362	36.10	37.70	1.60		20
AU00363	51.00	53.00	2.00		20
AU00364	54.00	55.50	1.50		10
AU00365	81.50	84.00	2.50		10
AU00366	122.00	124.00	2.00		10
AU00367	133.30	134.20	0.90		10
AU00368	147.00	149.00	2.00		10

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 7.80	< ob >					
7.80 TO 24.50	<6>	Ultramafic -- fine grained, dark to locally pale, highly fractured, veined and disrupted increasing significantly at 16.7m to end of unit. Magnetitic - Magnetite common with serpentinite throughout unit. Downhole contact sharp @ 45CA.	45	common strong serpentinite with magnetite developed along fracture/slip surfaces, one particularly strong set @ 20-30 CA. Increase in carbonate veining at 16.7m, commonly develop as 5-15cm wide semi-massive bands @ 70-80 CA, bx'd.	nil.	
24.50 TO 31.40	<7>	Gabbro - medium to fine grained, light green, salt 'n pepper textured gabbro. Massive fine and medium grained sections are separated by disrupted carb-mag ultramafic bands @ 80-90CA in up hole portion of unit (i.e.25.2-25.3m) and siliceous felsic volcanic ? sections (xenos?) in lower portion of unit. Downhole contact very sharp @ 50CA.	50	common fine carb veinlets @ 20-30CA and carb veins (upto 1cm) @ 60-90CA.	nil	
31.40 TO 34.00	<4,a,bx,?>	Felsic Volcanic? - fine grained, pale/light green, fracture, bx'd disrupted. Texture of unit varies from fine massive to odd bx? section of 70% 0.5cm sub-rounded quartz-sericite fragments in a fine siliceous matrix. Downhole contact distinct @ 40CA.	40	some fine carb veinlets throughout. Local chlorite and/or sericite along fractures and bands.	nil.	
34.00 TO 48.40	<5,a,Si>	Siliceous Sediment - Unit is mix of 75% fine,dark variablely siliceous sediment locally bx'd and disrupted, and 25% pale cherty sediment, locally finely laminated but generally bx'd/fractured. 45.8-46.0: 5g bed - broken blocky core of conductive bx'd graphitic arg. bed with carb. 46.3: 7cm fault zone with clay gouge margins @	40	some fine carb veinlets. some to minor amounts of chloritic alteration.	34.3-34.8: 3-4% po as irreg. 2-4mm blebs in bx'd cherty portion. 41.4-42.2: 4-5% po as round 2cm blebs (frags?) and as 2-3mm fracture controlled stringer in dark, massive, fine siliceous argillite/chert? 46.5: isolated 3cm round po bleb.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		60CA. Downhole contact is very sharp @ 40CA				
48.40 TO 55.20	<5g>	Graphitic Argillite - very fine, jet black, massive with some narrow bedding sections @ 45CA. Unit is blocky, broken with strongly developed graphite on fracture surfaces. Some 2-3cm whitish beds are sometimes disrupted. very conductive throughout. Downhole contact sharp @ 10CA.	10	some 2-4mm carb veins though upper portion of unit @50-70CA.	47.3-47.8: 1% po as fracture controlled blebs up to 3mm. some isolated py blebs up to 2x2cm; some fracture controlled py in blocky section at 48.4-48.8m.	
55.20 TO 61.40	<5,a>	Sediment - mixed unit of 50% wacke? and 50% argillite (non--conductive) in sections of 30cm to >1.0m. Typically disrupted, not bedded, fractured with locally narrow 6-8cm bx bands with carb matrix. porportion of wacke increasing in bottom of unit where it is more massive. Downhole contact blocky,broken.			56.3-57.0: 3-5% po as irreg. blebs (2-4mm) in wacke portion.	
61.40 TO 63.90	<5g>	Graphitic Argillite - very fine, paler (ash?) in upper portion gradually becoming jet black in bottom 50cm. Downhole contact very sharp @ 70CA.	70		63.5-63.9: 5% py as wispy blebs along bedding partings.	
63.90 TO 71.40	<3,*a>	Siliceous Tuff - Unit is very massive, uniform, very fine pale to darkish grey with 20-30% 1-2mm tuffaceous frags? speckled throughout at a perferred orientation of about 70CA. minor sulphides. Downhole contact sharp @ 50CA	50		69.4-70.0: 1-2% po,py as fine grains and aggregates up to 4m.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
71.40 TO 79.60	<5,a,F>	Wacke, Argillite - mixed unit of 65% massive fine siliceous wacke interbedded with fine dark non-conductive argillite portions. Wacke is slightly magnetic. Some sulphides. Downhole contact ghostly @ 10?CA.				2-4% po, py throughout most of unit as small 2-4mm irreg. blebs along fractures and as 1cm vuggy veinlets, and as specks throughout wacke portions.
79.60 TO 108.30	<5,*a>	Tuffaceous Sediment - unit is mix of poorly bedded (reworked?) very fine black somewhat siliceous to locally graphitic tuffaceous argillite material and some massive tan wacke beds and some more ash-looking portions. 1-2mm whitish tuff frags speckled irregularly throughout, as are fine white carb veinlets and hairline fractures. Sulphides common. Some obvious bedding contacts generally @ 50-60CA. Graphitic beds occur over narrow intervals - i.e. 81.8-82.1m, 96.1-96.4m, 100.5-100.8, 106.4-106.7m. One wacke bed of note: 84.8-86.3m is massive, slightly magnetic, speckled with fine sulphide blebs and has sharp contacts @ 20-30CA both upper and lower. 97.7-100.3: thick tuffaceous bed, massive. 100.3-108.3: unit is less tuffaceous and more clastic; alternating 0.5-1.5m beds of wacke and argillite; faint bedding in wacke @ 60-70CA; bedding in argillite @ 70-80CA. Downhole contact arbitrary at end of predominately very fine black portion and start of lighter more felsic looking section.		some portions have 10-20% irreg. .5-2cm patches of epidote? hosting some fine po - 80.0-81.5m. some fine and narrow (5mm) carb vein(lets) through most of unit.	po is speckled throughout most of unit comprising up to 5% over 20cm as roundish 1cm blebs "floating" in black matrix (frags?) some with wispy shape oriented along general bedding direction @ 50-60CA. Sulfs often associated with 1-2mm acute whitish crystal (tuff frags??). Also in fractures with carb. 81.4: small bleb of cpy.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
108.30 TO 116.20	<4,D>	Feldspar-phyric Felsic Flow - mottled siliceous mixed unit of 3-15% 2-3mm feldspar? crystals speckled irregularly throughout; mottled portions of fine black mixed with bleached altered yellow/green portions. core is ground, broken, blocky. Downhole contact distinct and sharp @ 60CA.	60	mottled bleached yellow-green sericite? alteration throughout. minor fine carb hairline fract.	trace. 115.9-116.2: 1x3cm massive po bleb associated with disrupted carb fractures.	
116.20 TO 125.10	<5,E,F>	Sediments - distinct change in texture and appearance; unit is altering generally undisrupted beds of wacke and chert and some narrow argillite sections; unit is predominately siliceous with locally faint mottled texture over narrow intervals. Bedding contacts distinct @ 60-70CA. Wacke beds are weakly magnetic. Downhole contact at argillite/felsic volcanic contact; angular argillite "rip-ups" in volcanic.	70	some carb vein(lets).	irreg. 5-8mm sulf blebs associated with some carb veins; interesting 3cm graded sulf bed of about 60% sulf in wacke.	
125.10 TO 127.10	<4a>	Felsic Volcanic? - fine, yellow-green, mottled fractured, veined volcanic. distinct unit from overlying sediments. Downhole contact @ 70CA.	70	sericite veinlets throughout as fine cob-web textured alteration.	nil.	
127.10 TO 152.00	<4,d>	Feldspar-pyric Volcanic Flow - unit could be crystal tuff?? looks like sub-volcanic feldspar porphyry sill that was disrupted or extruded before completely solidified but is likely flow with flow bx sections. Unit is predominately porphyritic textured throughout, disrupted locally by narrow bleached bands; common bx texture with frags and matrix		local bleaching; common mottled appearance throughout.	nil-trace.	

HOLE NUMBER: MAN24-05

DRILL HOLE RECORD

DATE: 10/26/1998

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
152.00 TO 152.00	«EOH»	of same composition and texture, just frags have darker matrix to feldspars whereas matrix has more bleached matrix to feldspars; unit is commonly mottled appearance.				

HOLE NUMBER: MAN24-05

DRILL HOLE RECORD

LOGGED BY: R. Foy

PAGE: 6

Sample	From (M)	To (M)	Leng. (M)	Cu ppm	Zn ppm	Pb ppm	Ni ppm	Au ppb	Ag ppm	Cu/Zn	Co ppm	Pt ppb	Pd ppb	S ppm	Se ppm	As ppm	Hg ppb	Sb ppm	Est.Ni ‡	Est.Po ‡	Est.Py ‡	Est.Cp ‡	Est.Sp ‡	Est.Gn ‡	ROCK TYPE	Comments
AT06705	34.40	34.80	0.40	551	37	1	123	<2	0.5					0.87												
AT06706	41.40	41.80	0.40	495	43	1	76	<2	0.3																	
AT06707	41.80	42.20	0.40	102	31	1	54	7	0.2																	
AT06708	47.30	47.80	0.50	126	465	1	29	14	0.2					1.28												
AT06709	48.80	49.30	0.50	572	125	2	172	10	0.8					3.89												
AT06710	51.20	51.50	0.30	230	102	5	275	17	0.6					1.08												
AT06711	52.40	52.70	0.30	242	311	1	72	10	0.5					1.48												
AT06712	53.70	54.10	0.40	580	91	21	158	10	0.7					4.06												
AT06713	54.10	54.80	0.70	212	69	10	145	7	0.7					1.63												
AT06714	54.80	55.20	0.40	199	993	10	126	3	0.8					2.77												
AT06715	56.30	57.00	0.70	96	106	9	81	3	0.2					1.85												
AT06716	60.00	60.30	0.30	75	274	8	43	7	0.2					1.35												
AT06717	63.50	63.90	0.40	149	826	6	95	7	0.4					2.41												
AT06718	69.40	69.70	0.30	35	113	3	43	<2	0.2					1.29												
AT06719	69.70	70.00	0.30	60	101	5	38	7	0.2					2.02												
AT06720	73.50	74.00	0.50	62	197	4	45	7	0.2					1.61												
AT06721	74.00	74.50	0.50	49	169	5	44	3	0.2					1.15												
AT06722	74.50	75.00	0.50	67	181	8	65	7	0.3					1.60												
AT06723	75.00	75.50	0.50	151	567	24	89	7	0.5					3.28												
AT06724	75.50	76.00	0.50	193	476	7	122	7	0.6					6.04												
AT06725	76.00	76.50	0.50	142	460	7	103	14	0.6					4.73												
AT06726	76.50	77.00	0.50	116	947	3	98	14	0.5					3.06												
AT06727	77.00	77.50	0.50	94	197	4	84	10	0.4					2.22												
AT06728	77.50	78.00	0.50	161	49	11	104	27	0.7					4.41												
AT06729	80.80	81.30	0.50	104	160	47	56	7	0.4					1.08												
AT06730	81.30	81.80	0.50	370	2090	9	176	<2	1.0					4.89												
AT06731	81.80	82.30	0.50	211	1340	8	118	3	0.6					3.19												
AT06732	82.30	82.80	0.50	100	179	5	67	7	0.3					0.89												
AT06733	82.80	83.30	0.50	106	154	11	67	3	0.3					1.05												
AT06734	83.30	83.80	0.50	128	315	31	73	7	0.3					1.16												
AT06735	83.80	84.80	1.00	71	177	7	53	3	0.4					0.99												
AT06736	84.80	85.60	0.80	137	54	5	102	14	0.7					3.81												
AT06737	85.60	86.40	0.80	135	63	11	96	14	0.6					3.07												
AT06738	86.40	88.00	1.60	52	48	4	44	3	0.2					0.96												
AT06739	88.00	89.00	1.00	97	174	3	62	7	0.4					1.31												
AT06740	89.00	90.00	1.00	87	199	3	64	7	0.4					1.06												
AT06741	90.00	91.00	1.00	102	1380	197	57	<2	0.4					1.86												
AT06742	91.00	92.00	1.00	103	425	7	68	7	0.3					1.28												
AT06743	92.00	93.00	1.00	163	549	4	81	<2	0.4					2.73												
AT06744	93.00	94.00	1.00	30	218	11	42	51	0.1					0.63												
AT06745	104.00	105.00	1.00	216	209	15	61	17	0.3					2.38												
AT06905	109.20	109.50	0.30	129	102	3	162	17	0.6					7.56												
AT06746	115.90	116.20	0.30	230	109	3	69	17	0.2					2.77												
AT06747	116.20	117.20	1.00	43	24	1	50	21	0.1					0.59												
AT06748	117.20	117.80	0.60	122	42	1	66	38	0.2					1.66												
AT06749	120.90	122.00	1.10	103	48	2	115	7	0.1					1.78												
AT06750	123.70	124.00	0.30	373	23	1	59	31	0.1					4.31												

Sample	From (M)	To (M)	Leng. (M)	SI02 %	AL2O3 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	TIO2 %	P2O5 %	MNO %	CR2O3 %	LOI %	SUM %	Y PPM	ZR PPM	BA PPM	CU PPM	ZN PPM	NI PPM	CR PPM	FIELD NAME	CHEM ID	ALUM
AU00280	10.00	13.00	3.00	42.10	4.97	4.27	30.22	0.17	0.27	9.80	0.23	0.04	0.14		7.26	99.47	5	10		20	85	1230	2135		1,6L	106
AU00281	26.00	31.00	5.00	53.92	14.58	12.56	5.48	2.22	0.65	7.62	0.54	0.08	0.15		1.77	99.57	15	70		<5	15	140	805		2,7(h)	94
AU00282	31.50	33.50	2.00	62.24	15.17	9.31	2.51	4.55	0.57	3.58	0.53	0.11	0.11		0.97	99.65	15	110		<5	<5	85	1235		3,8j	105
AU00283	36.00	38.00	2.00	56.70	12.57	13.51	5.26	2.86	1.39	5.48	0.49	0.12	0.21		0.88	99.47	15	100		<5	10	70	645		4,9(j)	71
AU00284	57.50	59.00	1.50	63.07	13.52	5.04	2.63	0.52	7.92	4.43	0.45	0.11	0.18		1.47	99.34	10	100		20	105	35	700		4,9i	100
AU00285	67.00	70.00	3.00	68.57	15.60	3.50	0.50	3.52	2.84	2.58	0.51	0.13	0.06		1.68	99.49	15	120		5	60	25	1110		3,8j	158
AU00286	76.00	77.00	1.00	48.77	14.55	10.55	7.63	0.98	1.85	9.57	0.73	0.52	0.20		3.97	99.32	20	130		105	255	80	550		2,7(j)	109
AU00287	88.50	90.50	2.00	74.75	12.08	0.94	0.55	0.44	6.40	1.92	0.40	0.08	0.02		1.99	99.57	10	100		55	125	35	1385		4,9jA	155
AU00288	98.00	100.00	2.00	69.06	15.41	1.20	0.96	4.72	2.69	3.21	0.53	0.13	0.06		1.72	99.69	15	120		10	90	25	875		3,8j	179
AU00289	110.00	112.00	2.00	69.81	13.72	2.47	0.99	3.27	4.99	2.99	0.30	0.07	0.04		0.96	99.61	5	100		5	15	45	1430		4,9jA	128
AU00290	124.00	125.00	1.00	75.28	11.94	3.37	0.86	3.07	1.04	2.61	0.39	0.05	0.03		1.06	99.70	5	60		<5	<5	30	1120		4,9jA	160
AU00291	125.00	127.00	2.00	76.16	12.44	1.99	0.25	4.57	1.71	1.40	0.26	0.07	0.02		0.92	99.79	5	80		<5	<5	35	1315		4,9jA	150
AU00292	134.00	136.00	2.00	70.50	14.41	3.77	0.73	4.08	1.07	3.50	0.30	0.08	0.07		1.04	99.55	5	110		25	45	50	1030		4,9jA	162

Sample	From (M)	To (M)	Leng. (M)	RB PPM	SR PPM	CO2 %	AG PPM	AU PPB	CO PPM	PB PPM	S PPM	V PPM	AS PPM	SN PPM	CD PPM	SB PPM	BI PPM	SE PPM	HF PPM	TA PPM	W PPM	MO PPM	TH PPM	U PPM	B PPM	CS PPM	LA PPM	CE PPM	ND PPM	
AU00280	10.00	13.00	3.00						60		0.13	105																		
AU00281	26.00	31.00	5.00						30		0.01	160																		
AU00282	31.50	33.50	2.00						15		0.02	120																		
AU00283	36.00	38.00	2.00						15		<0.01	100																		
AU00284	57.50	59.00	1.50						15		0.89	80																		
AU00285	67.00	70.00	3.00						15		1.15	85																		
AU00286	76.00	77.00	1.00						30		4.19	190																		
AU00287	88.50	90.50	2.00						20		0.48	80																		
AU00288	98.00	100.00	2.00						15		0.84	85																		
AU00289	110.00	112.00	2.00						15		0.21	75																		
AU00290	124.00	125.00	1.00						15		0.51	80																		
AU00291	125.00	127.00	2.00						10		0.14	50																		
AU00292	134.00	136.00	2.00						15		0.52	55																		

Sample	From (M)	To (M)	Leng. (M)	SM PPM	EU PPM	GD PPM	DY PPM	ER PPM	LU PPM	OS PPB	IR PPB	RU PPB	RH PPB	PT PPB	PD PPB	LI PPM	BE PPM	MN PPM	GA PPM	GE PPM	IN PPM	TL PPM	SC PPM	BR PPM	MGO#	CA/AL	NI/MGO	ISHIKW	ZN/NA2
AU00280	10.00	13.00	3.00														<5						15		0.89	0.86	41	87	500
AU00281	26.00	31.00	5.00														<5						20		0.63	0.86	26	29	7
AU00282	31.50	33.50	2.00														5						15		0.63	0.61	34	18	1
AU00283	36.00	38.00	2.00														<5						15		0.70	1.07	13	29	3
AU00284	57.50	59.00	1.50														<5						5		0.59	0.37	13	65	202
AU00285	67.00	70.00	3.00														5						5		0.31	0.22	50	32	17
AU00286	76.00	77.00	1.00														5						20		0.66	0.73	10	45	260
AU00287	88.50	90.50	2.00														<5						5		0.40	0.08	64	83	284
AU00288	98.00	100.00	2.00														5						5		0.41	0.08	26	38	19
AU00289	110.00	112.00	2.00														<5						5		0.44	0.18	45	51	5
AU00290	124.00	125.00	1.00														<5						5		0.44	0.28	35	23	2
AU00291	125.00	127.00	2.00														<5						<5		0.30	0.16	140	23	1
AU00292	134.00	136.00	2.00														<5						5		0.33	0.26	68	19	11

Sample	From (M)	To (M)	Leng. (M)	YB PPM	NB PPM
AU00280	10.00	13.00	3.00		<10
AU00281	26.00	31.00	5.00		10
AU00282	31.50	33.50	2.00		10
AU00283	36.00	38.00	2.00		<10
AU00284	57.50	59.00	1.50		<10
AU00285	67.00	70.00	3.00		<10
AU00286	76.00	77.00	1.00		<10
AU00287	88.50	90.50	2.00		<10
AU00288	98.00	100.00	2.00		<10
AU00289	110.00	112.00	2.00		<10
AU00290	124.00	125.00	1.00		<10
AU00291	125.00	127.00	2.00		<10
AU00292	134.00	136.00	2.00		<10

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 20.00	< ob >					
20.00 TO 26.40	<7>	<p>Gabbro - medium to coarse grained, pale to medium green-grey, massive, uniform gabbro. Well developed acicular feldspar give good salt 'n pepper texture.</p> <p>23.4: becoming mottled and finer grained, with some carb veins (lets) and 1cm amphibole needles randomly oriented throughout. Core becoming more blocky, broken toward contact.</p> <p>Downhole contact broken.</p>				
26.40 TO 38.50	<5>	<p>Argillite, Tuff - very fine, black, massive, non-conductive argillite with 10% to locally 20% 1-4mm whitish laths/frags oriented @ 80-90CA.</p> <p>Some very narrow conductive beds, generally weakly to non-conductive.</p> <p>Some narrow disrupted, bx'd portions; also some well developed bedding @ 80-90CA (i.e. 30m). Also some 10-20cm lighter wacke? beds.</p> <p>Core is blocky throughout most of unit; and strongly disced from 33.5-35.0m.</p> <p>Downhole contact ground, broken but appears to be @ 90 (argillite piece) or 30 (wacke piece)??</p>			nil to trace py.	
38.50 TO 40.50	<5F>	<p>Wacke? - Unit is fine to medium grained, beige-green generally massive uniform with 5-8% roundish pink feldspar grains throughout; altered flow? or sediment?.</p> <p>Downhole contact sharp @ 40CA.</p>				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
40.50 TO 42.20	<5>	Argillite - very fine dark massive uniform somewhat siliceous, non-conductive; has mottled texture caused by mix? with underlying mafic, locally has indistinct patches of similar material as underlying mafic. Downhole contact blocky broken.				
42.20 TO 44.30	<10?2?>	Dykes? Mafic Volcanic? - fine to medium grained, medium to dark green, uniform throughout most of unit. Has 35% 1-2mm roundish dark (amphibole?) grains speckled throughout in a very uniform manner, groundmass is fine. Unit(s) has several argillite sections, most non-conductive, one graphitic. Some variations in proportions of dark grains, and some subtle flow features, but not very pronounced, typically consistent, uniform. Downhole contact very sharp @ 60CA. Does not appear hornfelsed.				
44.30 TO 46.50	<5g>	Graphitic Argillite - very fine, black, very massive and very concutive. Downhole contact very sharp @ 70CA.		some qtz-carb veins near bottom of unit.	nil.	
46.50 TO 97.50	<10?,2?>	Dyke? Mafic Volcanic? - similar to above. Massive uniform consistent fine grained, green with 10-20% dark grains speckled throughout. Some subtle features, internal flow banding?; some serpentinite developed on some slip surfaces particularly in upper part of unit (to 52m), and strong chlorite thereafter. 52.7-53.7: massive non- to weakly conductive argillite bed.				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		56.9-57.2: argillite bed non-weakly conductive; some partings with graphitic coatings but no graphitic beds.				
		65.9-68.4: odd looking non-magnetic, non-conductive sed?? fine grained beige matrix hosts 10-20% 8-10mm roundish irredescent green amphiboles?.				
		68.4-71.0: non to weakly conductive argillite bed; similar some graphitic slip coatings but no beds.				
		71.0-75.3: same unit as 65.9-68.4.				
		93.0-97.0: blocky broken section.				
		94.5-95.3: conductive argillite.				
		Downhole contact distinct.				
97.50 TO 108.70	<5>	Argillite - very fine, black argillite, no bedding or other features, generally very massive and non-conductive except for two very conductive sections (99.9-100.8m, and 103.2-105.7m). Unit is blocky and fractured, and is very blocky, broken from 104.0-105.7m (fault?). 97.5-99.9: massive black non-con. argillite. 99.9-100.8: similar to above in appearance but very conductive. 100.8-102.9: faintly bedded? section @ 70CA with some carb-sulf veinlets @ 10CA. 103.2-104.0: similar massive moderately to strongly conductive section. 104.0-105.7 <FLT> - ground, broken core of graphitic argillite, some sulfs, fractures			some isolated py blebs in argillite, some 2-3cm 20% py bands @ 90CA. some fracture controlled py blebs in quartz veins (101.4-102.4m). 106.3-106.5: earthy rusty sulf? sph?. 107.3-107.9: 5% very fine po speckled over 20cm; and some 1-3mm massive irreg. veins at @ 20CA.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		generally @ 10-20CA. 105.7-106.3: felsic volcanic section, very fine, blocky, some sulfs. 106.3-106.5: grungy section with 2*3cm quartz veins @ 70CA. 106.5-108.7: generally massive non-con. argillite. Downhole contact @ 30CA, some pieces of underlying felsic are hosted in argillite.				
108.70 TO 112.00	«41,D,bx»	Feldspar-phyric Felsic Volcanic - 15-20% 2-5mm sub-hedral whitish feldspar grains speckled throughout alternating banded mottled dark and light groundmass. Mottled 2-6cm wide bx bands randomly oriented throughout unit. 111.1-111.4: massive, non-con. argillite bed @ 70CA. 1.5cm lower chill margin in felsic. Downhole contact sharp but wavy @ 80-90CA.			nil.	
112.00 TO 116.90	«10»	Mafic Dyke - fine grained, rusty brown-green, massive with some subtle mottled and bx'd portions. some felsic volcanic sections (113.8-114.8m). Downhole contact digested and mixed @ 70CA?.		some fine chlorite veinlets.		
116.90 TO 152.00	«41,D,bx»	Feldspar-phyric Felsic Volcanic - similar to above. strong feldspar-phyric texture with strong shear/flow banding orientation @ 45CA. Typically alternating mottled dark and light bands through unit. some more laminated sections (i.e. 132.6-135.0m).			trace py 118.8-119.1. rare isolate 0.5x1.5cm py bleb. 151.7: 4cm sulf band of 40% py @ 70CA.	

HOLE NUMBER: MAN24-07

DRILL HOLE RECORD

DATE: 10/26/1998

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
152.00 TO 152.00	«EOH»	148.7-152.0: last section appears to be fractured, bx'd mafic?, has strong chloritic slip surfaces; white clay gouge on a few surfaces.				

HOLE NUMBER: MAN24-07

DRILL HOLE RECORD

LOGGED BY: R. Foy

PAGE: 6

Sample	From (M)	To (M)	Leng. (M)	Cu ppm	Zn ppm	Pb ppm	Ni ppm	Au ppb	Ag ppm	Cu/Zn	Co ppm	Pt ppb	Pd ppb	S ppm	Se ppm	As ppm	Hg ppb	Sb ppm	Est.Ni %	Est.Po %	Est.Py %	Est.Cp %	Est.Sp %	Est.Gn %	ROCK TYPE	Comments	
AR07548	35.70	36.00	0.30	161	138	1	42	<2	0.1					0.12													
AR07549	100.70	101.30	0.60	125	395	1	34	7	0.1					0.13													
AT08363	101.30	101.60	0.30	365	475	1	31	31	0.1					0.51													
AT08364	101.60	102.20	0.60	614	486	1	33	72	0.3					0.49													
AT08365	102.20	103.00	0.80	127	374	1	31	3	0.1					0.49													
AT08366	103.00	104.00	1.00	94	251	1	51	3	0.1					0.03													
AT08367	104.00	105.00	1.00	2110	394	6	51	<2	0.5					1.52													
AT08368	105.00	106.00	1.00	293	529	1	54	<2	0.1					0.56													
AT08369	106.00	106.50	0.50	382	230	1	36	<2	0.2					0.44													
AT08370	106.50	107.20	0.70	118	102	1	35	<2	0.2					1.14													
AT08371	107.20	107.50	0.30	274	1200	2	34	3	0.2					2.70													
AT08372	107.50	107.90	0.40	148	105	4	46	3	0.2					1.31													
AT08373	117.00	118.00	1.00	75	43	1	84	3	0.1					0.68													
AT08374	118.00	118.80	0.80	81	61	1	122	<2	0.1					0.46													
AT08375	118.80	119.10	0.30	50	46	1	72	3	0.2					0.93													
AT08376	119.10	119.60	0.50	34	37	2	78	3	0.3					0.61													
AT08377	151.60	152.00	0.40	350	27	15	110	10	0.3					3.07													

Sample	From (M)	To (M)	Leng. (M)	SI02 %	AL2O3 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	TIO2 %	P2O5 %	MNO %	CR2O3 %	LOI %	SUM %	Y PPM	ZR PPM	BA PPM	CU PPM	ZN PPM	NI PPM	CR PPM	FIELD NAME	CHEM ID	ALUM
AU00369	20.00	23.00	3.00	48.04	15.00	12.78	7.46	1.35	0.48	11.89	0.65	0.07	0.26		1.69	99.67	15	50		<5	50	85	420		2,7(h)	103
AU00370	28.00	30.00	2.00	64.46	13.66	0.61	6.96	0.95	1.14	6.87	0.46	0.10	0.05		4.59	99.85	15	120		<5	25	40	135		4,9jA	506
AU00371	42.50	44.50	2.00	61.66	14.63	0.29	5.78	0.81	1.46	10.01	0.59	0.13	0.07		4.40	99.83	15	130		20	230	40	185		2,7jw	571
AU00372	67.00	68.50	1.50	50.42	11.65	10.34	12.26	1.11	0.10	10.73	0.64	0.15	0.18		2.22	99.80	15	60		60	65	265	935		1,6H	101
AU00373	89.00	92.00	3.00	63.78	15.09	0.60	6.02	0.65	1.16	7.12	0.56	0.15	0.07		4.38	99.58	10	130		<5	30	25	185		2,7jw	626
AU00374	112.00	113.50	1.50	60.85	13.00	6.25	3.75	2.30	0.87	9.61	0.71	0.06	0.18		1.72	99.30	20	50		125	110	125	2860		2,7h	138
AU00376	122.00	125.00	3.00	68.58	14.95	4.83	1.51	4.40	1.46	2.17	0.32	0.05	0.05		1.12	99.44	5	100		15	65	50	950		4,9jA	140
AU00377	149.00	152.00	3.00	63.68	16.33	3.44	2.20	5.24	1.74	2.77	0.36	0.05	0.05		3.89	99.75	5	100		5	40	55	625		4,9jA	157

Sample	From (M)	To (M)	Leng. (M)	RB PPM	SR PPM	CO2 %	AG PPM	AU PPB	CO PPM	PB PPM	S PPM	V PPM	AS PPM	SN PPM	CD PPM	SB PPM	BI PPM	SE PPM	HF PPM	TA PPM	W PPM	MO PPM	TH PPM	U PPM	B PPM	CS PPM	LA PPM	CE PPM	ND PPM		
AU00369	20.00	23.00	3.00						30		0.04	240																			
AU00370	28.00	30.00	2.00						15		<0.01	65																			
AU00371	42.50	44.50	2.00						20		0.02	90																			
AU00372	67.00	68.50	1.50						35		0.06	160																			
AU00373	89.00	92.00	3.00						15		<0.01	80																			
AU00374	112.00	113.50	1.50						45		0.90	325																			
AU00376	122.00	125.00	3.00						10		0.16	55																			
AU00377	149.00	152.00	3.00						15		0.03	80																			

Sample	From (M)	To (M)	Leng. (M)	SM PPM	EU PPM	GD PPM	DY PPM	ER PPM	LU PPM	OS PPB	IR PPB	RU PPB	RH PPB	PT PPB	PD PPB	LI PPM	BE PPM	MN PPM	GA PPM	GE PPM	IN PPM	TL PPM	SC PPM	BR PPM	MGO#	CA/AL	NI/MGO	ISHIKW	ZN/NA2
AU00369	20.00	23.00	3.00														<5						30		0.60	0.85	11	36	37
AU00370	28.00	30.00	2.00														<5						5		0.71	0.04	6	84	26
AU00371	42.50	44.50	2.00														<5						10		0.58	0.02	7	87	284
AU00372	67.00	68.50	1.50														<5						25		0.73	0.89	22	52	59
AU00373	89.00	92.00	3.00														<5						10		0.67	0.04	4	85	46
AU00374	112.00	113.50	1.50														<5						70		0.48	0.48	33	35	48
AU00376	122.00	125.00	3.00														<5						5		0.62	0.32	33	24	15
AU00377	149.00	152.00	3.00														<5						10		0.66	0.21	25	31	8

Sample	From (M)	To (M)	Leng. (M)	YB PPM	NB PPM
AU00369	20.00	23.00	3.00		10
AU00370	28.00	30.00	2.00		10
AU00371	42.50	44.50	2.00		10
AU00372	67.00	68.50	1.50		10
AU00373	89.00	92.00	3.00		10
AU00374	112.00	113.50	1.50		20
AU00376	122.00	125.00	3.00		10
AU00377	149.00	152.00	3.00		10

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 69.00	«{ob}»					
69.00 TO 81.90	«41,D»	Feldspar-phyric Flow - 5-10% whitish sub-hedral feldspar grains in a alternating dark and cream mottled groundmass; 5-10% altered yellow sericite alteration bands, stringers and veinlets. Downhole contact along broken core @ 80CA.		5-10% yellow sericite bands, stringers, and veinlets. Locally becoming very massive bands.	nil to trace py.	
81.90 TO 84.60	«5bx»	Bx'd Sediment - unit is mix of fragments and dark siliceous sediments. Perfered orientation of frags @ 70CA. some dirty carb bands/veins with minor sulfs. Downhole contact distinct @ 80CA.	80	some carb veins/bands up to 2cm at various CA's.	trace-1% py, (apy?) as fine grains in fractures and as very fine disseminations in felsic portions of bx matrix.	
84.60 TO 101.00	«3bx»	Intermediate Brecciated Volcanic - unit has high density of fracturing, veining and bx'n throughout. Typically fine grained, pale green, chloritic, mottled volcanic with abundant fine hairline fractures and common carb veins, bands, and matrix fills. 92.2-95.7: bx section - 75% of section is bx with angular to sub-angular volcanic frags in carb groundmass. 102.6-103.0: bleached altered band, felsic? Downhole contact broken and rubbly @ 50CA?.		Carb - unit is 10-15% white carbonate filling fractures and bx matrix, veins and veinlets and locally forming broad 20-30cm carb bands hosting 20% volcanic frags. strong chlorite developed along most fracture and slip surfaces.	trace py as fine disseminations and grains and rare 1x3cm irreg. py slugs, blebs. 86.6-86.9: dirty quartz vein with 5%po as irreg. 1cm band @ 80CA and as fine disseminations/grains.	
101.00 TO 155.00	«5,g,F»	Graphitic Argillite & Wacke - unit is alternating argillite beds of varying thickness, generally 0.5-2.9m. Well developed bedding @ 40CA, but can vary to 20CA & 50CA.	40	common low density of carb veins through much of unit.	trace to locally 5% py over 20cm as large massive colliform blebs in black argillite and as euhedral py grains speckled throughout wacke portions.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<p>Argillite is moderately to strongly conductive, bedded to massive, black.</p> <p>Wacke is fine tan, grain equigranular clastic.</p> <p>Locally bedding is alternating to form 'zebra' rock.</p> <p>some narrow (10-20cm) shear band sections, i.e. 121.7, 123.0m; these sections have 5-8% py.</p> <p>103.1-109.3: graphitic argillite, blocky, broken to 104.0m</p> <p>109.3-114.9: section is mostly bedded (@40CA) wacke.</p> <p>114.9-123.7: 5g; some interbedded wacke at bottom of section, includes 15cm fragmental bed.</p> <p>123.7-134.7: well bedded wacke; locally interbedded argillite to form zebra rock; shear band @ 50CA over 30cm with sulfs at 130.0m</p> <p>134.7-140.7: 5g, includes 35cm graded (fining downhole) closed packed fragmental bed (debris flow?) at 137.1m.</p> <p>140.7-141.7: bedded wacke @ 45CA.</p> <p>141.7-143.1: 5g.</p> <p>143.1-143.7: closed packed fragmental bed of sub-angular 1cm argillite and wacke frags with 5% massive po frags?/replacement.</p> <p>143.7-147.1: 5g.</p> <p>147.1-147.5: disrupted chert bed with 5% fine sulfs in upper more disrupted portion.</p> <p>147.5-148.6: massive, fractured wacke.</p> <p>148.6-155.0: foliated (@ 40CA), fractured, broken</p>			locally some 4-8mm fine disseminated py beds in argillite, i.e. 120.2m, 125.2m.	

HOLE NUMBER: MAN24-09

DRILL HOLE RECORD

DATE: 10/20/1998

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
155.00 TO 155.00	«EOH»	blocky rubbly dirty graphitic argillite. becoming moreso toward bottom of section. Common contorted carb veins throughout. Some discing @ 20CA. approaching a fault??.				

HOLE NUMBER: MAN24-09

DRILL HOLE RECORD

LOGGED BY: R. Poy

PAGE: 4

Sample	From (M)	To (M)	Leng. (M)	Cu ppm	Zn ppm	Pb ppm	Ni ppm	Au ppb	Ag ppm	Cu/Zn	Co ppm	Pt ppb	Pd ppb	S ppm	Se ppm	As ppm	Hg ppb	Sb ppm	Est.Ni ‰	Est.Po ‰	Est.Py ‰	Est.Cp ‰	Est.Sp ‰	Est.Gn ‰	ROCK TYPE	Comments
AT08378	79.00	79.50	0.50	30	70	4	44	3	0.2					0.90												
AT08379	79.50	80.00	0.50	15	46	3	30	<2	0.2					0.12												
AT08380	80.00	80.50	0.50	15	84	3	34	<2	0.2					0.18												
AT08381	80.50	81.40	0.90	16	45	2	42	<2	0.1					0.16												
AT08382	81.40	81.90	0.50	21	60	4	49	<2	0.2					0.53												
AT08383	81.90	82.90	1.00	43	76	1	69	<2	0.1					0.44												
AT08384	82.90	83.40	0.50	30	110	2	108	<2	0.2					0.74												
AT08385	83.40	84.60	1.20	62	94	6	75	21	0.3					0.86												
AT08386	84.60	85.30	0.70	348	140	10	55	<2	0.3					0.13												
AT08387	85.30	86.00	0.70	131	63	1	47	3	0.3					0.72												
AT08388	86.00	86.50	0.50	54	55	1	40	<2	0.2					0.22												
AT08389	86.50	87.10	0.60	195	118	11	86	<2	0.4					1.68												
AT08390	117.00	118.00	1.00	47	192	8	33	<2	0.1					1.54												
AT08391	118.00	119.00	1.00	49	205	13	53	3	0.2					1.65												
AT08392	119.00	120.00	1.00	54	333	14	90	3	0.3					2.04												
AT08393	120.00	121.00	1.00	113	866	10	74	<2	0.2					3.05												
AT08394	121.00	122.00	1.00	82	256	12	71	<2	0.2					1.90												
AT08395	122.00	123.00	1.00	61	272	11	72	<2	0.2					1.74												
AT08396	123.00	124.00	1.00	51	234	15	50	10	0.3					1.69												
AT08397	124.00	124.50	0.50	56	145	8	33	2	0.2					1.52												
AT08398	126.50	127.40	0.90	53	168	9	42	14	0.2					2.70												
AT08399	130.00	130.60	0.60	79	145	4	79	7	0.1					3.74												
AT08401	137.10	137.50	0.40	126	456	17	138	24	0.3					2.18												
AT08402	143.10	143.60	0.50	203	400	14	245	10	0.3					2.95												
AT08403	147.00	147.50	0.50	42	60	4	48	10	0.1					1.00												
AT08404	147.50	148.10	0.60	54	120	3	49	3	0.1					1.63												
AT08405	148.10	148.90	0.80	126	258	12	128	7	0.3					2.89												
AT08406	148.90	150.00	1.10	256	600	46	170	31	0.9					3.64												
AT08407	150.00	151.00	1.00	246	634	40	151	27	0.9					3.13												
AT08408	151.00	152.00	1.00	227	878	61	228	45	1.2					7.46												
AT08409	152.00	153.00	1.00	304	646	55	188	41	1.2					3.99												

Sample	From (M)	To (M)	Leng. (M)	SI02 %	AL2O3 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	TIO2 %	P2O5 %	MNO %	CR2O3 %	LOI %	SUM %	Y PPM	ZR PPM	BA PPM	CU PPM	ZN PPM	NI PPM	CR PPM	FIELD NAME	CHEM ID	ALUM
AU00378	74.00	77.00	3.00	72.28	15.49	2.93	0.32	4.72	1.51	0.83	0.36	0.08	0.01		1.06	99.59	5	90		<5	85	15	225		4,9jA	169
AU00379	82.00	84.50	2.50	71.26	14.12	2.79	0.70	3.87	1.94	1.70	0.30	0.06	0.06		2.96	99.76	5	110		<5	70	25	220		4,9jA	164
AU00380	90.00	92.00	2.00	72.94	13.28	2.05	0.98	4.69	1.38	1.73	0.31	0.08	0.03		2.17	99.64	5	110		10	145	15	220		4,9jA	164
AU00381	102.50	103.00	0.50	71.25	14.15	2.86	0.85	3.99	2.19	0.82	0.33	0.06	0.03		3.00	99.53	5	100		5	165	30	330		4,9jA	157
AU00382	130.00	132.00	2.00	69.16	15.77	2.39	0.79	4.03	2.67	1.35	0.51	0.22	0.04		2.87	99.80	10	170		<5	130	20	150		3,8j	173

Sample	From (M)	To (M)	Leng. (M)	RB PPM	SR PPM	CO2 %	AG PPM	AU PPB	CO PPM	PB PPM	S PPM	V PPM	AS PPM	SN PPM	CD PPM	SB PPM	BI PPM	SE PPM	HF PPM	TA PPM	W PPM	MO PPM	TH PPM	U PPM	B PPM	CS PPM	LA PPM	CE PPM	ND PPM		
AU00378	74.00	77.00	3.00						5		0.13	35																			
AU00379	82.00	84.50	2.50						5		0.10	25																			
AU00380	90.00	92.00	2.00						5		0.17	30																			
AU00381	102.50	103.00	0.50						5		0.12	35																			
AU00382	130.00	132.00	2.00						5		0.54	55																			

Sample	From (M)	To (M)	Leng. (M)	SM PPM	EU PPM	GD PPM	DY PPM	ER PPM	LU PPM	OS PPB	IR PPB	RU PPB	RH PPB	PT PPB	PD PPB	LI PPM	BE PPM	MN PPM	GA PPM	GE PPM	IN PPM	TL PPM	SC PPM	BR PPM	MGO#	CA/AL	NI/MGO	ISHIKW	ZN/NA2
AU00378	74.00	77.00	3.00														<5							5	0.48	0.19	47	19	18
AU00379	82.00	84.50	2.50														<5							5	0.49	0.20	36	28	18
AU00380	90.00	92.00	2.00														<5							5	0.57	0.15	15	26	31
AU00381	102.50	103.00	0.50														<5							5	0.71	0.20	35	31	41
AU00382	130.00	132.00	2.00														5							<5	0.58	0.15	25	35	32

Sample	From (M)	To (M)	Leng. (M)	YB PPM	NB PPM
AU00378	74.00	77.00	3.00		<10
AU00379	82.00	84.50	2.50		<10
AU00380	90.00	92.00	2.00		<10
AU00381	102.50	103.00	0.50		<10
AU00382	130.00	132.00	2.00		<10



Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use) WAD 00839 Assessment Files Research Imaging



42A15SW2006 2.18970 MANN

900

subsection 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, assessment work and correspond with the mining land holder. Questions about Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury,

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240. - Please type or print in ink.

1. Recorded holder(s) (Attach a list if necessary)

Table with 2 columns: Name, Address, Client Number, Telephone Number, Fax Number. Entry for FALCONBRIDGE LIMITED.

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

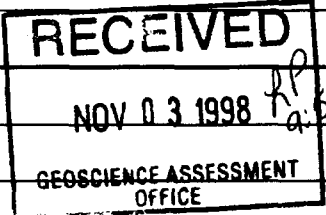
Geotechnical: prospecting, surveys, assays and work under section 18 (regs) [X] Physical: drilling stripping, trenching and associated assays [] Rehabilitation []

Work Type: Four Diamond Drill Holes -- MAN24-05, -07, -09, MAN23-01 621m. Office Use. Commodity. Total \$ Value of Work Claimed: 43,750. Dates Work Performed: 10/09/1998 to 22/09/1998. Mining Division: Porcupine. Resident Geologist: Timmins.

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required; - provide proper notice to surface rights holders before starting work; - complete and attach a Statement of Costs, form 0212; - provide a map showing contiguous mining lands that are linked for assigning work; - include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Table with 2 columns: Name, Address, Telephone Number, Fax Number. Entry for Robert Foy.



4. Certification by recorded holder or Agent

I, Robert Foy, do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent: R. Foy. Date: November 2, 1998. Agent's Address: PO Box 1140, Timmins, Ontario, P4N 7H9. Telephone Number: (705) 267 - 1188 ext. 243. Fax Number: (705) 267 - 6080.

Deemed Feb. 01/1999

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

W9860.00839

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date	
600276 543 NEC	64 ha	\$10937	\$0	\$10937	\$0	
600275 485 NEC	64 ha	\$32813	\$0	\$32813	\$0	
3	1201905	8	\$1015			
4	1200909	8	\$3200			
5	1200910	8	\$3200			
6	1200916	16	\$6400			
7	1200908	16	\$6400			
8	1201944	4	\$1600			
9	1201945	2	\$800			
10	1190189	16	\$6400			
11	1201901	16	\$4601			
12	1201908	2	\$800			
13	1201907	12	\$4800			
14	1201906	8	\$3200			
15	1201902	4	\$1334			
16						
17						
18						
Column Totals		124	\$43,750	\$43,750	\$43,750	\$0

I, Robert Foy (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing: [Signature] Date: November 2, 1998

6. Instruction for cutting back credits that are not approved.

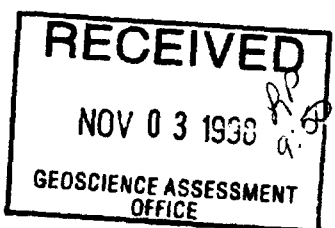
Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- 1st 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- 3. Credits are to be cut back equally over all claims listed in this declaration; or
- 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	





Statement of Costs for Assessment Credit

Transaction Number (office use) W860 00839

Personal information collected on this form is obtained under the authority of subsection 6 (1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, this information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to a Provincial Mining Recorder, Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Table with 4 columns: Work Type, Units of work, Cost Per Unit of work, Total Cost. Rows include Diamond Drilling, Core Samples, Geologist, Technician, sub-total, Associated Costs, Transportation Costs, Food and Lodging Costs, Field Expenses, and Total Value of Assessment Work.

RECEIVED NOV 03 1998 GEOSCIENCE ASSESSMENT OFFICE

Calculations of Filing Discounts:

- 1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work.

TOTAL VALUE OF ASSESSMENT WORK x 0.50 = Total \$ value of worked claimed.

Note:

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification.

Certification verifying costs:

I, Robert Foy, do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying

Declaration of Work form as Agent (Project Geologist, Falconbridge Limited) I am authorized to make this certification.

(recorded holder, agent, or state company position with signing authority)

Signature [Handwritten Signature] Date November 2, 1998

December 30, 1998

FALCONBRIDGE LIMITED
SUITE 1200, 95 WELLINGTON STREET WEST
TORONTO, ONTARIO
M5J-2V4

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9846
Fax: (877) 670-1555

Dear Sir or Madam:

Submission Number: 2.18970

Status

Subject: Transaction Number(s): W9860.00839 Deemed Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. **WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.**

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in **DUPLICATE** to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Lucille Jerome by e-mail at lucille.jerome@ndm.gov.on.ca or by telephone at (705) 670-5858.

Yours sincerely,



ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Work Report Assessment Results

Submission Number: 2.18970

Date Correspondence Sent: December 30, 1998

Assessor: Lucille Jerome

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9860.00839	6000246	MANN	Deemed Approval	December 30, 1998

Section:
16 Drilling PDRILL

Correspondence to:
Resident Geologist
South Porcupine, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):
Robert Foy
TIMMINS, ONTARIO, CANADA

FALCONBRIDGE LIMITED
TORONTO, ONTARIO

C-3531

AREAS WITHDRAWN FROM DISPOSITION:

M.R.O. - MINING RIGHTS ONLY
 S.R.O. - SURFACE RIGHTS ONLY
 M.F.S. - MINING AND SURFACE RIGHTS

Description Order No. Date of Disposition File

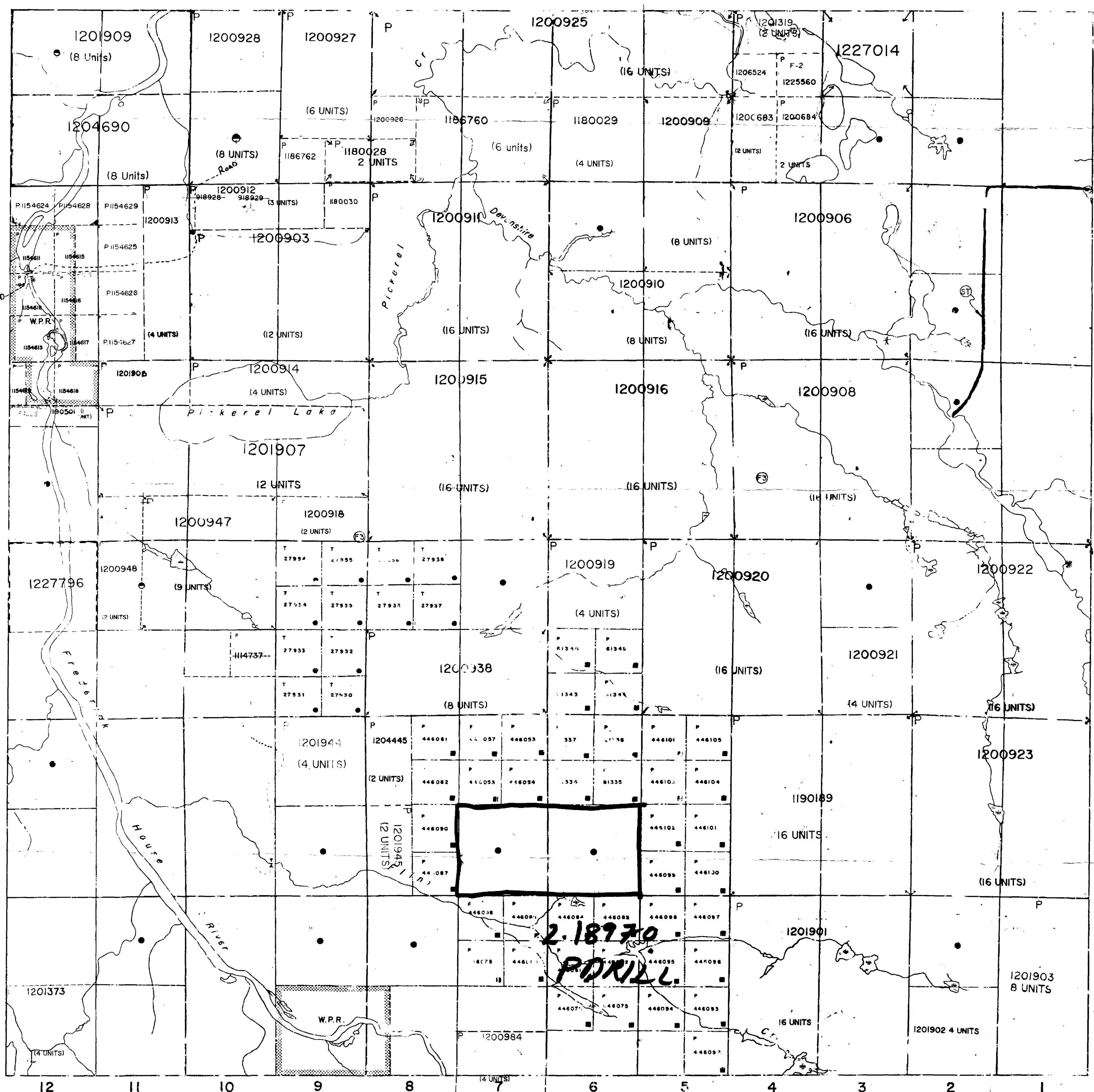
WATER POWER RESERVE

W.O. 87 / 87

SURFACE AND MINING RIGHTS RE-OPENED TO PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 36 OF THE MINING ACT, R.S.O. 1990 EFFECTIVE 90-SEP-05 AT 7AM E.S.T. ORDER NO. O.P. 4/90 MR DATED 90-AUG-22.

NOTE: P1125837 PLOTTED IN ERROR. S/B P1114737.

DUFF TOWNSHIP



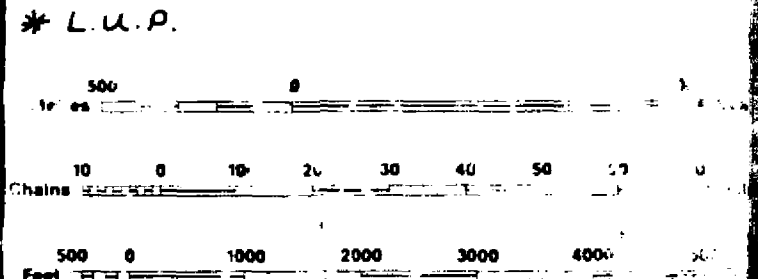
LITTLE TOWNSHIP

LEGEND

- HIGHWAY ROUTE No.
- TRAIL
- BOUNDARY LINES: TOWNSHIP, RANGE, SECTION, LOT, MINING CLAIM, ETC.
- RAILWAY RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMP. SITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- RAVERSE MONUMENT

DISPOSITION OF CROWN LAND

- TYPE OF DOCUMENT**
- PATENT, SURFACE & MINING RIGHTS
 - SURFACE RIGHTS ONLY
 - MINING RIGHTS ONLY
 - LEASE, SURFACE & MINING RIGHTS
 - SURFACE RIGHTS ONLY
 - MINING RIGHTS ONLY
 - LICENCE OF OCCUPATION
 - ORDER-IN-COUNCIL
 - RESERVATION
 - CANCELLED
 - SAND & GRAVEL
 - LAND USE PERMIT
- NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO 1913, VESTED IN ORIGINAL PATENTEE BY LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 62. (19)



SCALE 1:20 000

SHOWMOBILE TRAIL (LAND USE PERMIT) NOTICE RECEIVED 92-DEC-09

DATE OF ISSUE

OCT 01 1998
 PROVINCIAL RECORDING OFFICE-SUDBURY

Received Sept 22/86

TOWNSHIP

MANN

M.N.R. ADMINISTRATIVE DISTRICT

COCHRANE

MINING DIVISION

PORCUPINE

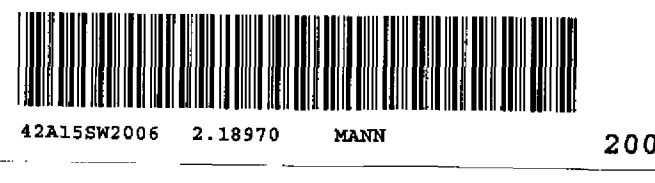
LAND TITLES / REGISTRY DIVISION

COCHRANE

Ministry of Natural Resources Ontario
 Ministry of Northern Development and Mines

DATE: SEPTEMBER 1998
 No. **G-3537**

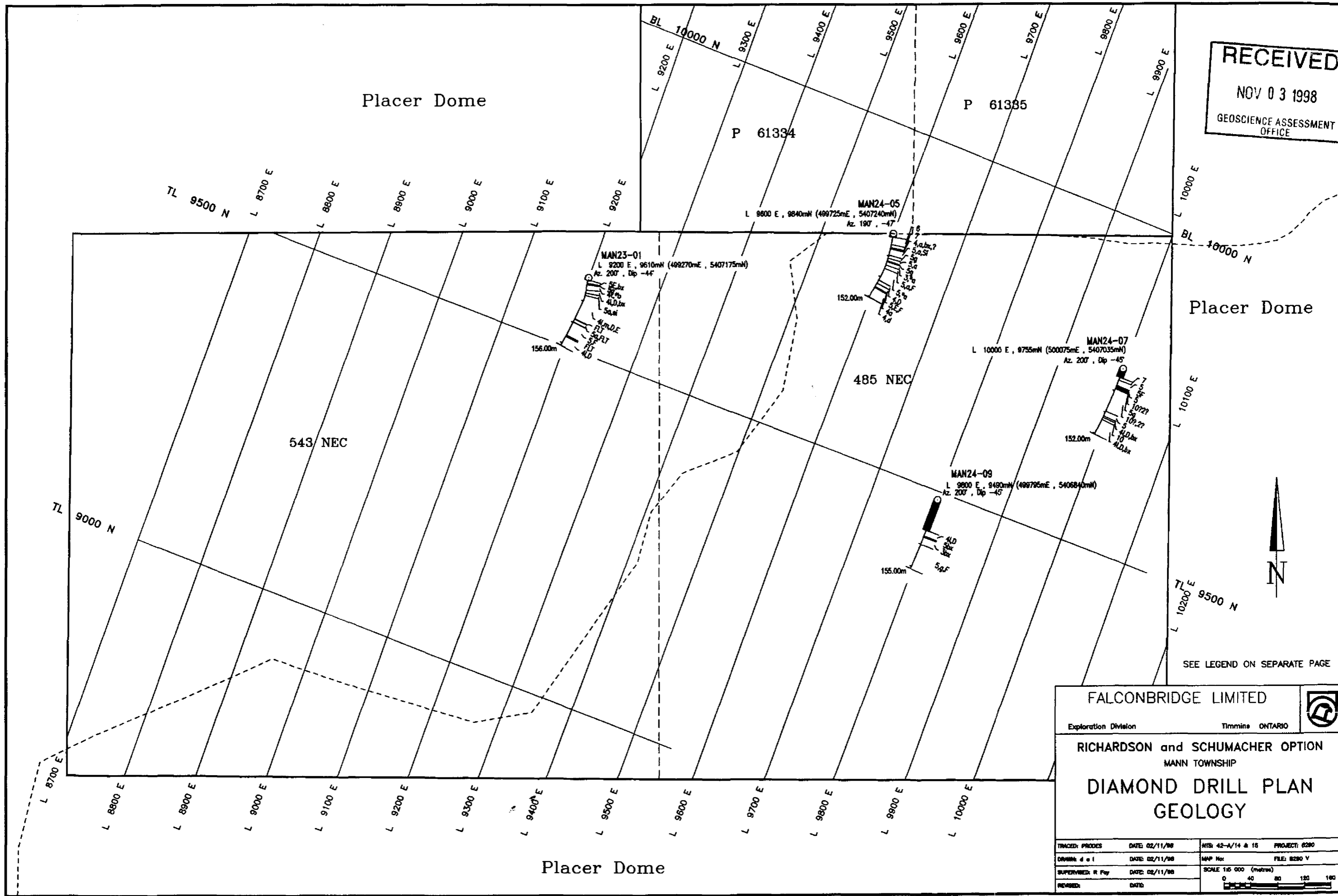
THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.



C-3531




42A15SW2006 2.18970 MANN 210



RECEIVED
NOV 03 1998
GEOSCIENCE ASSESSMENT
OFFICE



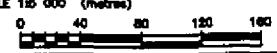
SEE LEGEND ON SEPARATE PAGE

FALCONBRIDGE LIMITED 

Exploration Division Timmins ONTARIO

RICHARDSON and SCHUMACHER OPTION
MANN TOWNSHIP

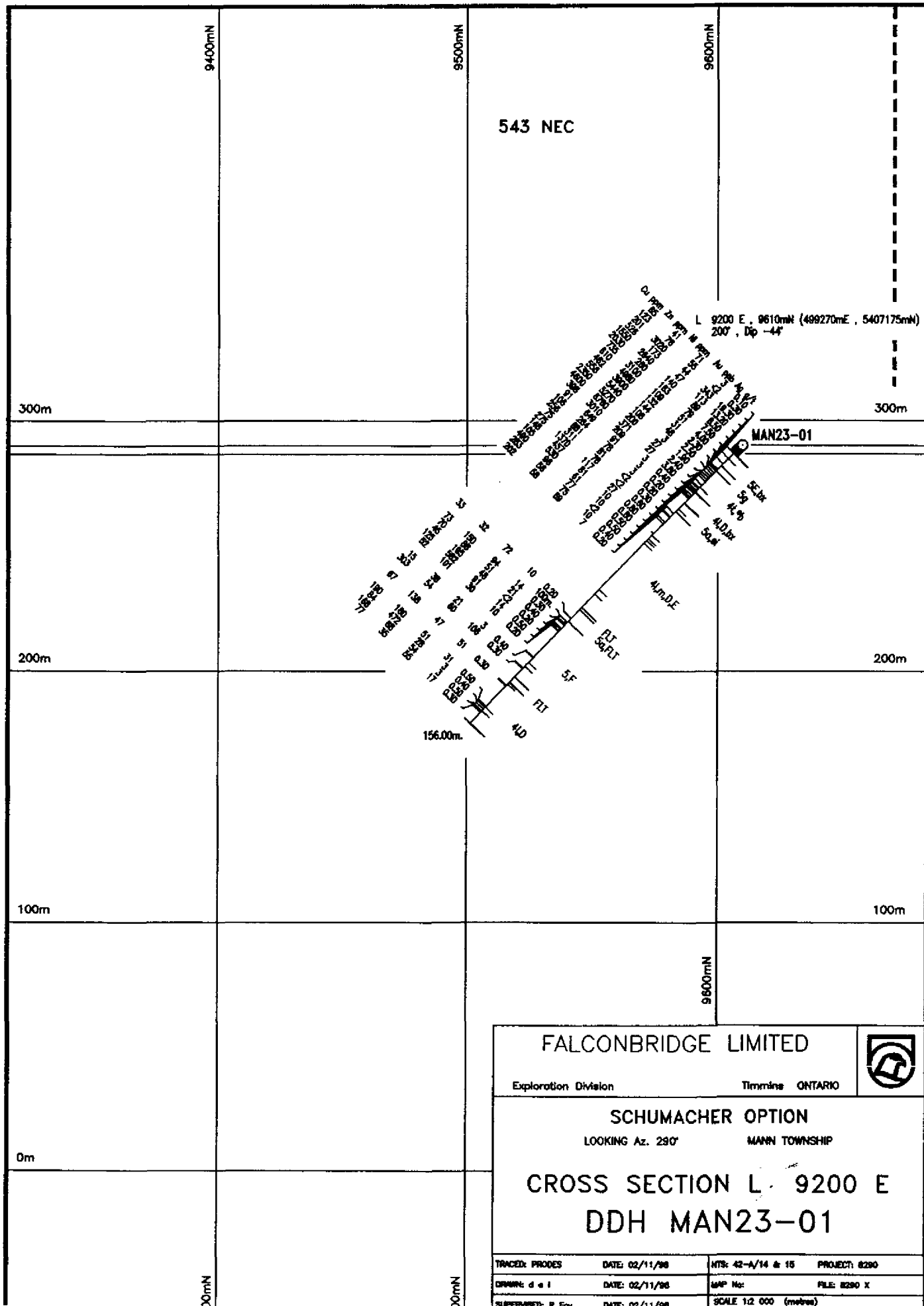
**DIAMOND DRILL PLAN
GEOLOGY**

TRACER PRODS	DATE: 02/11/98	NTS: 42-A/14 & 15	PROJECT: 6280
DRINK: d = 1	DATE: 02/11/98	MAP No:	FILE: 6280 V
SUPERVISED: R Fay	DATE: 02/11/98	SCALE 1:5 000 (metres)	
REVISED:	DATE:		



220

42A15SW2006 2.18970 MANN



FALCONBRIDGE LIMITED		
Exploration Division	Timmins ONTARIO	
SCHUMACHER OPTION		
LOOKING Az. 290°		MANN TOWNSHIP
CROSS SECTION L 9200 E		
DDH MAN23-01		
TRACED: PRODES	DATE: 02/11/98	NTS: 42-4/14 & 15 PROJECT: 8290
DRAWN: d e l	DATE: 02/11/98	MAP No: FILE: 8290 X
SUPERVISOR: R Fow	DATE: 02/11/98	SCALE: 1:2 000 (metres)

9700mN

9800mN

9900mN

485 NEC

P 61334

300m

300m

200m

200m

100m

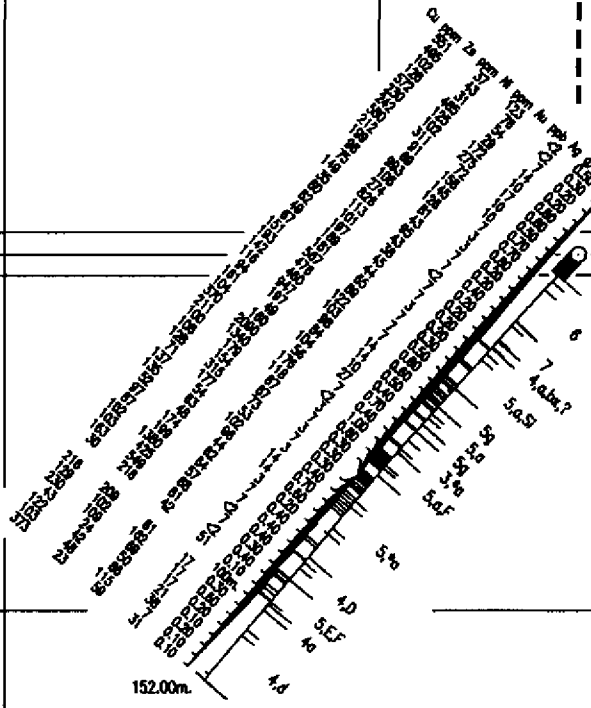
100m

0m

9700mN

9800mN

9900mN



MAN24-05
 L 9600 E, 9840mN (498725mE, 5407240mN)
 Az. 190°, Dip -47°

152.00m

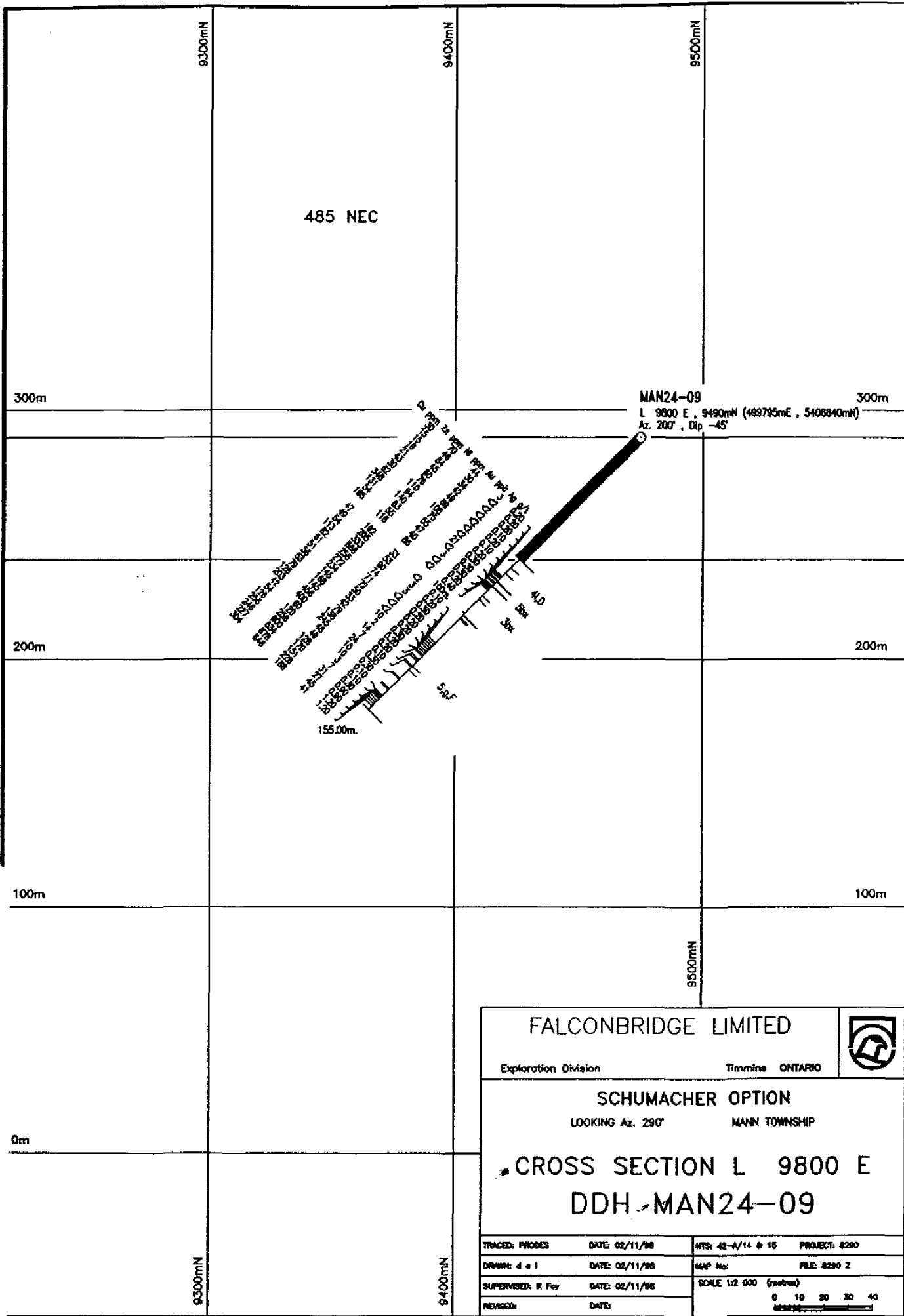
FALCONBRIDGE LIMITED		
Exploration Division	Timmins ONTARIO	
SCHUMACHER OPTION		
LOOKING Az. 280°		MANN TOWNSHIP
CROSS SECTION L 9600 E		
DDH MAN24-05		
TRACED: PRODES	DATE: 02/11/98	NTS: 42-4/14 & 15 PROJECT: 8290
DRAWN: d e l	DATE: 02/11/98	SMP No: FILE: 8290 Y
SUPERVISED: R Poy	DATE: 02/11/98	SCALE 1:2 000 (metres)
REVISED:	DATE:	0 10 20 30 40 METRES

230

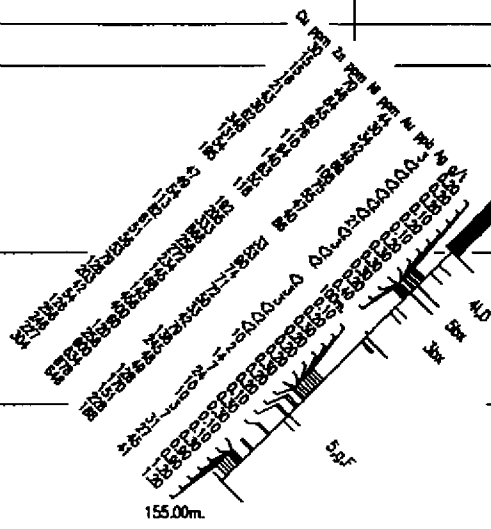
MANN

42A15SW2006 2-18970





MAN24-09
 L 9800 E, 9490mN (499795mE, 5408840mN)
 Az. 200°, Dip -45°



250

MANN

42A15SW2006 2.18970



FALCONBRIDGE LIMITED		
Exploration Division	Timmins ONTARIO	
SCHUMACHER OPTION		
LOOKING Az. 290°		MANN TOWNSHIP
CROSS SECTION L 9800 E		
DDH - MAN24-09		
TRACED: PRODES	DATE: 02/11/98	MTS: 42-A/14 & 15 PROJECT: 8290
DRAWN: d e l	DATE: 02/11/98	MAP No: FILE: 8290 Z
SUPERVISED: R Foy	DATE: 02/11/98	SCALE 1:2 000 (metres)
REVISED:	DATE:	0 10 20 30 40