

HOLE NUMBER: CS45-01

DRILL HOLE RECORD

DATE: 05/19/1996

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 39.63	{CB} Casing Overburden					
39.63 TO 50.08	{4,a,q} Felsic Volcanic fine grained quartz phytic	<p>-white to beige fine grained rock</p> <p>-sub-rounded to angular quartz eyes to 1mm, commonly subhedral, account for 3-5% of rock</p> <p>-moderately to strongly foliated, foliation expressed by sericite +/- clayminerals</p> <p>-foliation commonly anastomosing, potentially multiple foliations</p> <p>-very aphanitic groundmass</p> <p>-ghost structures potentially after spherulites but no truly discernable primary structures noted, possibly due to leaching and iron staining overprint</p> <p>-leaching and iron staining give top 20m of unit a lateritic appearance</p> <p>-probable spherulitic structures 73.8m-74.5m</p> <p>-74.52-74.62m fine grained aphanitic section with different colour, hardness, --> possibly dike or fragment, contains internal banding (flow banding?) at different orientation to foliation (opposed to foliation)</p> <p>-gradational lower contact marked by increase in kaolinitization and first appearance of chert fragments</p> <p>§44.50-44.51§={S2 49°} Foliation</p> <p>§56.57-57.17§={FAI} Fault</p> <p>-ground and broken core, RQD=J, gouge, sand, strong leaching and iron staining</p> <p>§57.51-57.56§={S2 48°} Seam Foliation</p> <p>§72.19-72.27§={FAI} Fault</p> <p>-sand, minor gouge, strong leaching and iron staining</p>		<p>-common pervasive weak to strong kaolinitization, bleaching</p> <p>-common leaching</p> <p>§40.50-56.06§={RsFS} strong, fracture/vein controlled, rust staining</p>		
30.08 TO 86.30	{4,bx,*ct,K a,*q(5,E,S)} Cataclastic	<p>-fine grained yellowish white rock with 2-3cm rounded to subrounded quartz augen and 1-2cm sulphide augen/clasts</p> <p>-core is very soft, can be broken by hand through</p>		<p>§80.08-86.80§={KaPS} strong, pervasive, kaolinitization</p>	<p>§80.08-86.90§={PyCl.0-3.0%} 1.0-3.0% clasts/fragment of pyrite</p>	

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
	Breccia kaolinitized felsic volcanic with chert and sulphide augen	most of unit -upper contact at first discernable chert clasts -80.79-81.28m gouge and remnant clasts -82.04m seam -82.51-83m excellent example of ductility contrasts between chert (brittle deformation) sulphides (brittle ductile deformation) and kaolinitized groundmass (plastic deformation) -lower contact structural.		-rock is essentially clay with clasts		
		§80.79-81.29§={FAI}w/ Gouge> Fault				
		§82.90-82.91§={S2 52°} Foliation				
55.80 TO 59.53	<2, bx, e, Bl> Mafic Volcanic breccia amygdaloidal/vesicular bleached	-fine grained grey to beige rock -quartz filled vesicules to 1mm -quartz and calcite (+/- feldspar?) filled amygdules to 4mm -strongly brecciated, some in situ, some cataclastic, possibly some primary clasts/fragments -intensely bleached -weakly to moderately foliated at 45-70° to c.a. -intense leaching of core after 57.2m to end of unit, rock is essentially quartz and kaolinite		§86.80-97.20§={BlPS}> strong, pervasive, bleaching §97.20-99.53§={BlFS}> strong, pervasive, bleaching -rock is intensely leached		-trace to 1% sulphides, mostly in amygdules
		§93.80-94.00§={FAI}Seam> Fault -leached, rust stained, sand and gouge				
		§95.00-95.01§={S2 55°} Foliation				
		§97.20-97.50§={FAI}> Fault -30cm lost core				
59.53 TO 110.00	<5, bx, s, E, F, .4, q, Bl> Sedimentary breccia sulphides, exhalites chert wacke felsic volcanic quartz	-strongly fragmented and ground core, white to black in colour -99.53-101m ground core and gouge, RQD=0, black rotten sulphides, section is effectively saprolite -101-104m 2m of core not recovered, RQD=0.5%, fragments of massive pyrite, vein or chert quartz, final 17cm fragments of quartz -kaolinite laterite type material with no remnant primary structures		-essentially saprolite, unit is intensely leached, bleached, kaolinitized §99.53-110.00§={KaPS, BlPS}> strong, pervasive, kaolinitization, strong pervasive bleaching		-unit appears to contain intensely weathered, brecciated sulphide iron formation, no base metals noted §99.53-110.00§={PyC7.0-10.0%, SulF1.0-3.0%}> 7.0-10.0% clasts/fragment of pyrite; 1.0-3.0% fracture/vein controlled Sulphides

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
	phyric bleached	-104-107m RQD=30%. fragments of brecciated wacke, some individual clasts showing graded bedding (tops would be downhole if clast orientation were in situ), 1m of quartz-kaolinite-sulphide breccia saprolite, 30cm of core not recovered -107-110m RQD=50%, quartz-kaolinite-sulphide saprolite breccia fragments, fragments of vein quartz or chert, fragments of chert and massive pyrite breccia, 20cm of core not recovered -lower contact at end of massive pyrite clasts #99.53-104.00#={FAI}> Fault				
110.00 TO 152.46	{2,e,p,B1}> Mafic Volcanic amygdaloida /vesicular pillowed bleached	-fine grained beige rock -clear quartz filled vesicules to 1mm -quartz +/- calcite filled amygdules to 6-7mm -darker grey-brown selvages commonly noted -common interpillow breccia/hyaloclastite -113-115.7m massive section -fine grained kaolinitized sections, possibly minor mafic dikes, noted at 11.30-121.33, 122.04-122.31, 146.89-147.27 -123.71-124.74m quartz vein subparallel to c.a. -weakly to moderately foliated, commonly anastomosing, variable over short distances from 45-80° -lower contact sharp, possibly structural, marked by end of amygdules and vesicules #152.45-152.46#={S0 32°}> Bedding		#110.00-159.62#={B1PS}> strong, pervasive, bleaching		-trace to 1% disseminated py
152.46 TO 158.52	{4,a,n,q}> Felsic Volcanic fine grained spherulitic quartz phyric	-fine grained white to beige rock -angular to subrounded quartz grains to 1mm -spherules to 2mm, commonly cored by quartz grains -very weakly foliated, at 45-70° to c.a.		-weakly sericitized -common fracture related silicification		-trace to 1% fracture related py
158.62 TO 163.12	{4/9,a,m}> Felsic Volcanic or Intrusive fine grained	-fine to medium grained white to beige rock -158.62-159.00m pillowed mafic volcanic, selvages visible, intrusive or structural contact at 47° to c.a. -massive, bleached unit, no visible internal structure, apparently equigranular, no discernable		-pervasive bleaching		-trace vein related py

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
	massive	quartz grains or mafic minerals -sulphide (py) bearing q.v. at low angle to core axis, 161.48-161.83m -lower contact structural, at seam #163.11-163.12#-S2 68°-Seam Foliation				
163.12 TO 193.03	*2.e.p.B1* Mafic Volcanic amygdaloidal vesicular pillowed bleached	-fine grained white to beige rock -as 110-152m -clear quartz filled subrounded to rounded vesicles to 2-3mm -quartz-carbonate filled amygdules to 7-8mm, rare py grains in amygdules -vesicles concentrated at both upper and lower pillow selvages -pipe vesicles (i.e. 168.5m) indicate tops parallel to c.a. -good interpillow breccia and debris (i.e. 173.7m) -Q.V. subparallel to c.a. 171.5-172.1m, w/ minor py -weakly to moderately foliated at 45-80°, some suggestions of multiple foliations -lower contact somewhat obscured by alteration, taken at end of quartz filled vesicles #179.37-179.42#-S2 53°-Seam Foliation		#163.12-163.03#-B1PS- strong, pervasive, bleaching		-trace to 1% q.v. related py
193.03 TO 192.16	*4.a.n.7* Felsic Volcanic fine grained spherulitic quartz phyric	-fine grained white to beige rock -as 152.4-158.6m -subrounded to angular quartz grains to 1mm -spherules to 2mm, commonly cored by quartz grains -possible perlitic fractures @ 189.5m -weakly foliated -lower contact structural, at seam #188.30-188.31#-S2 63°- Foliation #192.15-192.16#-S2 61°-Seam Foliation		-pervasive weak kaolinitization		-trace fracture related py
192.16 TO 228.02	*2.e.p.B1* Mafic Volcanic amygdaloidal vesicular pillowed	-fine grained beige to dark grey rock -as 163-163m -quartz filled subrounded to rounded vesicles to 1-2mm, quartz-carbonate filled amygdules to 6-8mm, w/ rare py grains in amygdules -bleaching seems slightly less developed than up		#192.15-228.02#-B1PM- moderate, pervasive, bleaching		-trace to 1% py as disseminations, minute grains in amygdules, and q.v. related

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	bleached	hole -well defined pillow selvages, interpillow breccia and hyaloclastite -selvages appear microvariolitic in areas (i.e. 201.55m) -topping directions from pipe vesicles vary, possibly indicate folding (i.e. 207m tops up hole, 212.28, 212.55 up hole, 224.4-224.6 subparallel c.a.) -222.6-228.02 appears dike like, fine grained contact at shear, no vesicles or amygdules, no selvages -lower contact somewhat irregular, at approximately 40° to c.a.				
228.02 TO 235.92	*4/3.a.q* Felsic Volcanic or Intrusive fine grained quartz phytic	-fine grained beige to white rock -clear subrounded to subangular quartz grains to 1-2mm, up to 3% of unit -minute (<1mm) kaolinite pseudomorphs (?) of crystals noted throughout -possible ghost spherulites, but none well defined -weakly foliated at 50-80° to c.a. -sharp lower contact §235.91-235.92§-§S2 53°§Contact> Foliation		-pervasive, weak kaolinitization -greyish bands, probably less altered sections -common quartz chlorite fracture/vein related alteration	-trace py	
235.92 TO 245.34	*2.e.p.B1* Mafic Volcanic amygdaloidal/vesicular pillowed bleached	-fine grained beige rock -as 192-228m -first 40cm of unit is identical to base of previous pillowed mafic unit, fine grained unit which is potentially a dike -clear quartz filled vesicles to 2-3mm, quartz and calcite filled amygdules to 8-9mm -common interpillow breccia and hyaloclastite sections -weakly to moderately foliated at 50-80° to c.a. -lower contact probably structural, in brecciated quartz rich section bounded by seam §245.33-245.34§-§S2 90°§Seam> Foliation		§235.92-245.34§-§B1PS .S:PM> strong, pervasive, bleaching; moderate, fracture/vein controlled, silicification	-trace to 1% fracture related py	
245.34 TO 290.90	*4.n.q* Felsic Volcanic spherulitic	-fine grained yellow beige rock with quartz eyes -subrounded to subangular quartz eyes to 2mm, 5-7% of unit -smaller angular ones obviously quartz phenos,		§245.34-290.00§-§SePM> moderate, pervasive, sericitization	-trace disseminated and fracture related py	

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
290.00 TC 290.00	quartz phyric *ECH* End-Of-Hole	larger ones commonly cored by minute opaque to translucent grains, sometimes py grains, may actually be spherulites -sericitic groundmass, gives moderate to strong foliation to unit, anastomosing -280.66-281.57m q.v. subparallel to c.a. #245.65-245.67# S2 90° Seam Foliation #251.03-251.01# S2 57° Foliation #273.50-273.51# S2 54° Foliation				

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HOLE NUMBER : CS45-01

ASSAYS SHEET

DATE: 19/05/1996

Sample	From (M)	To (M)	Leng. (M)	Cu ppm	Zn ppm	Au ppb	Ag ppm	Pb ppm	Co ppm	Cu/Zn	Ni ppm	Est. Ni %	Est. Po %	Est. Py %	Est. Cp %	Est. Sp %	Est. Gn %	ROCK TYPE	Comments
AT04011	99.53	101.00	1.47	60	194	58	1.3	29			71	0.0	0.0	8.0	0.0	0.0	0.0	5, s, F, Ka	1m missing
AT04012	101.00	104.00	3.00	283	171	741	15.0	237			68	0.0	0.0	60.0	0.0	0.0	0.0	5, s	2m missing
AT04013	104.00	105.50	1.50	41	250	31	0.7	19			43	0.0	0.0	0.0	0.0	0.0	0.0	5, E, F, s	
AT04014	105.50	107.00	1.50	32	630	<2	0.2	5			13	0.0	0.0	3.0	0.0	0.0	0.0	5, P, 4, q, Ka	0.2m gone
AT04015	107.00	108.50	1.50	48	191	<2	0.1	1			10	0.0	0.0	2.0	0.0	0.0	0.0	4, q, Ka	
AT04016	108.50	110.00	1.50	54	742	34	0.8	16			38	0.0	0.0	10.0	0.0	0.0	0.0	4, a, Ka, S, E, s	0.2m gone
AT04017	122.71	123.74	1.03	21	160	<2	0.2	1			31	0.0	0.0	4.0	0.0	0.0	0.0	2, e, p, QV	
AT04018	161.48	161.83	0.35	15	109	<2	0.1	1			7	0.0	0.0	3.0	0.0	0.0	0.0	4/9, a, e, QV	
AT04019	171.46	172.10	0.64	67	141	<2	0.1	11			62	0.0	0.0	3.0	0.0	0.0	0.0	2, e, p, B1, QV	
AT04020	193.25	193.60	0.35	35	222	<2	0.1	1			53	0.0	0.0	3.0	0.0	0.0	0.0	2, a, e, p, B1, QV	

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ASSAYS SHEET

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GEOCHEMICAL ASSAY

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Sample	From (M)	To (M)	Leng. (M)	SiO2 %	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
AT04301	41.00	44.00	3.00	63.95	15.12	3.46	0.92	3.63	1.76	3.38	0.54	0.16	0.08	0.03	6.30	39.33	15	142		110	15	30		4,a,q,Se,Rs	3j	171
AT04302	71.00	74.00	3.00	71.96	11.39	2.14	1.59	0.63	2.72	3.60	0.42	0.12	0.07	0.00	6.16	100.80	46	254		10	65	30		4,a,q,Se	4(j)B	207
AT04303	80.00	83.00	3.00	72.55	12.28	1.56	0.98	0.47	3.18	2.83	0.38	0.12	0.05	0.00	4.83	35.23	40	234		5	45	<5		4,bx,*ct,Ka	4(j)B	236
AT04304	89.00	92.00	3.00	47.74	13.23	6.96	3.46	1.54	2.72	8.63	1.22	0.22	0.15	0.03	14.19	100.09	26	158		20	105	75		2,bx,e,B1	2(j)w!	118
AT04305	116.00	119.00	3.00	48.70	13.32	6.67	3.56	1.88	2.32	8.80	1.38	0.26	0.13	0.02	13.84	100.88	30	190		35	120	55		2,e,p,B1	2(j)yB	123
AT04306	146.00	149.00	3.00	49.18	12.30	6.94	3.69	2.16	1.82	8.99	1.31	0.26	0.14	0.02	14.13	100.94	30	186		40	55	45		2,e,p,B1	2(j)yB	113
AT04307	155.00	158.00	3.00	70.32	11.42	2.60	0.96	2.86	1.76	4.31	0.51	0.12	0.06	0.03	5.40	100.35	60	300		10	35	5		4,a,n,q	3(j)z	158
AT04308	159.50	162.50	3.00	57.85	11.33	2.75	1.15	1.51	2.16	4.28	0.47	0.14	0.06	0.01	6.42	99.13	48	284		<5	45	10		4/9,a,n	3(j)z	176
AT04309	167.00	170.00	3.00	46.71	13.20	6.02	3.42	1.14	2.46	6.57	1.20	0.18	0.11	0.04	14.59	96.04	20	122		50	65	80		2,e,p,B1	2(j)w!	114
AT04310	185.00	188.00	3.00	49.48	13.95	3.05	1.04	2.26	2.04	4.72	0.51	0.12	0.07	0.03	5.12	100.39	58	274		10	50	10		4,a,n,q	3(h)z	149
AT04311	194.00	197.00	3.00	49.34	13.93	7.93	3.07	2.63	2.30	6.81	1.30	0.16	0.11	0.03	12.38	101.01	24	136		70	60	85		2,a,e,p,B1	2(j)w!	108
AT04312	224.00	227.00	3.00	49.53	13.82	7.18	3.90	2.55	1.48	7.68	1.30	0.20	0.12	0.03	12.59	100.30	24	134		35	85	105		2,a,e,p,B1	2(j)w!	123
AT04313	230.00	233.00	3.00	70.54	11.18	2.18	0.91	3.12	1.40	3.98	0.49	0.12	0.06	0.03	4.75	98.76	62	298		5	70	25		4/9,a,q	3(h)z	167
AT04314	239.00	242.00	3.00	48.15	13.05	6.93	3.40	1.34	1.84	7.63	1.22	0.22	0.12	0.03	13.77	98.31	24	142		30	75	60		2,a,e,p,B1	2(j)w!	122
AT04315	245.00	251.00	3.00	70.51	12.28	2.23	1.32	2.78	2.22	3.48	0.24	0.06	0.06	0.03	5.36	100.57	76	354		<5	75	25		4,n,q	4(h)z	170
AT04316	278.00	281.00	3.00	71.77	11.81	2.05	0.61	3.87	1.76	3.58	0.21	0.06	0.07	0.03	4.47	100.29	70	348		<6	35	30		4,a,n,q	4(h)z	154

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GEOCHEMICAL ASSAYS

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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	SH 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	MD PPM		
AT04301	41.00	44.00	3.00						15		<100	75																			
AT04302	71.00	74.00	3.00						<5		<100	20																			
AT04303	80.00	83.00	3.00						<5		300	<5																			
AT04304	89.00	92.00	3.00						35		<100	170																			
AT04305	116.00	119.00	3.00						30		<100	170																			
AT04306	146.00	149.00	3.00						30		100	145																			
AT04307	155.00	158.00	3.00						5		100	70																			
AT04308	159.50	162.50	3.00						10		200	25																			
AT04309	167.00	170.00	3.00						35		100	190																			
AT04310	185.00	188.00	3.00						5		100	25																			
AT04311	194.00	197.00	3.00						35		100	210																			
AT04312	224.00	227.00	3.00						40		100	195																			
AT04313	230.00	233.00	3.00						<5		100	10																			
AT04314	239.00	242.00	3.00						30		100	100																			
AT04315	248.00	251.00	3.00						<5		<100	<5																			
AT04316	278.00	281.00	3.00						<5		100	<5																			

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Sample	From (M)	To (M)	Length (M)	SM PPM	SU 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	YB PPM	MOB	CA/AL	NI/MGO	ISHIOM	ZN	
AT04301	41.00	44.00	3.00																												
AT04302	71.00	74.00	3.00														<1						13			0.39	0.23	33	27		
AT04303	80.00	83.00	3.00														2						11			0.51	0.19	19	61		
AT04304	89.00	92.00	3.00														2						8			0.45	0.13	5	67		
AT04305	116.00	119.00	3.00														2						22			0.49	0.53	22	42		
AT04306	146.00	149.00	3.00														2						19			0.49	0.50	15	41		
AT04307	155.00	158.00	3.00														1						18			0.49	0.56	12	38		
AT04308	159.50	162.50	3.00														1						10			0.34	0.23	5	33		
AT04309	167.00	170.00	3.00														1						10			0.39	0.24	9	44		
AT04310	185.00	188.00	3.00														1						25			0.54	0.61	23	39		
AT04311	194.00	197.00	3.00														1						11			0.34	0.28	10	37		
AT04312	224.00	227.00	3.00														1						25			0.52	0.57	28	34		
AT04313	230.00	233.00	3.00														1						26			0.55	0.52	27	36		
AT04314	239.00	242.00	3.00														<1						11			0.35	0.19	27	30		
AT04315	248.00	251.00	3.00														1						23			0.51	0.53	18	37		
AT04315	278.00	291.00	3.00														2						5			0.47	0.18	19	41		
																	2						4			0.29	0.17	49	29		

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 51.00	<{CB}> Casing Overburden					
51.00 TO 59.00	<5.g.s.F> Sedimentary graphitic/a rgillaceous sulphides, exhalites wacke	-fine grained thinly laminated black to grey rock with massive to semimassive py beds -strongly conductive -convolute laminations common, possibly soft sediment deformation -51-53m RQD=40 -1-20cm beds of siliceous granular material, wacke or dirty chert, commonly with 1-5% disseminated py -2-5cm bands of py common -53-55m "a" or "w" fold, fold axis at approximately 50° to c.a. -55.5m seam at low angle to c.a. --55.5-57m semi massive to massive py (iron formation?) -56-59m RQD=40 §53.10-53.01§<{SC 66°}> Bedding -wacke-argillite contact		-common fracture controlled rust staining and hematite/limonite alteration	§51.00-59.00§<{PyC1.0-3.0%, PyB3.0-5.0%}> 1.0-3.0% clasts/fragment of pyrite; 3.0-5.0% bedded/banded pyrite -fronboidal pyrite in graphitic argillite, disseminated and thin bands of pyrite associated with chert/wacke, massive to semimassive apparently bedded py 56.5-57m	
59.00 TO 63.40	<5.c.c.*i,*> Sedimentary coarse grained heterolithi c matrix supported pebble	-light grey to black heterolithic coarse grained sandstone/wacke to pebble conglomerate -RQD=60 -dominantly matrix supported -common clasts of graphitic argillite -contacts are both in areas of broken core, potentially structural §60.70-60.71§<{SC 45°}> Bedding		§59.00-63.40§<{RsFS}> strong, fracture/vein controlled, rust staining	-minor sulphide clasts to 2-3mm and rare disseminated py	
63.40 TO 69.45	<5.g.s.F,*c t,bx> Sedimentary graphitic/a rgillaceous sulphides, exhalites wacke cataclastic breccia	-black to light grey fine grained rock -first 0.75m is interbedded graphitic argillite and wacke with thin pyritic beds -weakly to moderately conductive over first 0.75m -becomes more cataclastic towards seam with gouge at approximately 64.15m -rock is cataclastic breccia to end of unit, heterolithic -RQD=5%, majority of unit is 1-5cm angular fragments of core, rust stained, kaolinitized and leached -lower contact at seam, marks start of cohesive		§64.15-69.45§<{RsFS ,BlPS,KaPS}> strong, fracture/vein controlled, rust staining; strong, pervasive, bleaching; strong, pervasive, kaolinitization	-minor thin beds of py and weathered pyritic sections	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		core				
		¶64.15-69.45¶={FAI}» Fault				
69.45 TO 72.66	«5.bx.*ct.*K a» Sedimentary breccia cataclastic kaolinitize	-coarse grained clast supported light grey to white breccia -RQD=85% -soft core, generally can be broken by hand, kaolinitized -protolith was probably wacke -lower 0.5m of unit is more visibly heterolithic -lower contact lost in broken core		¶69.45-72.66¶=«KAPS» strong, pervasive. Kaolinitization	¶69.45-72.66¶=«PyD1.0-3.0%» 1.0-3.0% disseminated/blebby pyrite	
		¶69.45-69.46¶={S2 60°}Seam» Foliation				
72.66 TO 82.73	«5.g.s.*g» Sedimentary graphitic/a rgillaceous sulphides, exhalites thinly laminated	-fine grained grey to black laminated rock -alternating layers of more quartz rich wacke or chert (?) and graphitic argillite -thinly laminated, mm scale quartz rich bands with mm to cm scale graphitic argillite bands -from basal py to 5-6cm, act as augen, rimmed with quartz +/- carbonate pressure shadows -also py in quartz rich bands and as apparent py beds to 1cm (may be flattened clasts) -weak tops indicators (graded bedding) suggest tops uphole -73.25-73.45m cataclastic breccia with graphitic matrix -78.8-79.2m cataclastic breccia, dominantly graphitic fragments in graphitic matrix -apparent fold nose at 81.25m, causes rotation of dip direction of bedding planes approximately 90° clockwise as viewed downhole --> appears to be upper end of "s" or "z" fold, other nose probably at 81.85m -lower contact folded		¶81.43-81.90¶=«SiFS .RsFS» strong, fracture/vein controlled, silicification; strong, fracture/vein controlled, rust staining -forms net textures of resistive veining	¶74.90-82.35¶=«PyC3.0-5.0%, PyB1.0-3.0%» 3.0-5.0% clasts/fragment of pyrite; 1.0-3.0% bedded/banded pyrite	
		¶73.75-73.76¶={S0 50°}» Bedding				
		¶77.02-77.03¶={S0 20°}» Bedding				
		¶79.40-80.10¶={FA: }w/ Gouge» Fault -fault with gouge, up to 0.5m core not recovered				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		¶81.03-81.01¶={S0 57°} Bedding				
		¶92.72-82.73¶={S0 36°} Bedding				
82.73 TO 109.13	«2.a.e.p.31» Mafic Volcanic fine grained amygdaloidal /vesicular pillowed bleached	-fine grained grey rock -quartz calcite amygdules to 7-8mm -very common in situ brecciation -92.73-83.1m amygduloidal -83.1-87.1m siliceous, bleached, sulphidized section, massive, no discernable contacts -87.1m becomes amygduloidal again, anastomosing solution textures +/- foliation at 45-90° to c.a. -88.35-88.7m leached core, vuggy holes where amygdules used to be -88.7-88m core not recovered -90.63 seam, first possible selvage, interpillow breccia -selvages at 84.48m, 96.2, 98.4. -possible pillow breccia and hyaloclastite @ 103.9-104m -105.65-105.77 quartz carbonate veining -lower contact at seam and quartz vein, marked by colour change and start of quartz eyes		¶92.73-109.13¶={BIFM} moderate, pervasive, bleaching	¶82.73-89.00¶={PyD3.0-5.0%} 3.0-5.0% disseminated/blebby pyrite -appears sulphidized	
		¶105.31-108.32¶={S2 66°}Seam» Foliation -seam with gouge				
109.13 TO 130.51	«4.a.n.q» Felsic Volcanic fine grained spherulitic quartz pyritic	-fine grained grey to beige rock -minute (<1mm) angular to subrounded quartz grains -spherulites weakly discernable at top of unit, to 2-3mm -common in situ brecciation and quartz iron carbonate veining throughout unit -more discernable spherules 111.63m, may be due to alteration/leaching -more coarsely spherulitic, almost appears medium grained @ 115m --> cores of spherules commonly visible as minute quartz grains -115.3-116.72m internal unit with different (darker) colour, bounded by sericite, possibly seams -118-9-120.5m interspherule matrix is darker, demonstrates percentage of spherules 50-90%		¶109.13-130.51¶={SeFM .SiFM} moderate, pervasive, sericitization; moderate, fracture/vein controlled, silicification	¶128.50-130.51¶={PyD1.0-3.0%, PyF1.0-2.0%} 1.0-3.0% disseminated/blebby pyrite; 1.0-2.0% fracture/vein controlled pyrite	-1-3% vein related py

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DRILL HOLE RECORD

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<p>-120.61-121.18m possible dike (?) -becomes moderately foliated after 122m -disseminated coarse py appears after 120m -lower contact sharp</p> <p>§111.41-111.46§={S2 59°}Seam» Foliation</p> <p>§111.90-112.00§={FAl}w/ Gouge» Fault</p> <p>§122.40-122.41§={S2 65°}» Foliation</p> <p>§130.50-131.51§={S0 55°}» Bedding</p>				
130.51 TO 145.12	<5.g.F.»g» Sedimentary graphitic/argillaceous wacke thinly laminated	<p>-fine grained thinly laminated grey and black rock</p> <p>-130.51-130.95m strongly conductive graphite with boudinaged/en echelon faulted wacke interbeds</p> <p>-130.95-131.57 dominantly wacke, fold nose at 131.20m, non conductive</p> <p>-131.57-132.07m interbedded wacke and graphite, weakly to moderately conductive</p> <p>-series of microfaults w/ up to 1-5cm offsets, 131.2-132m</p> <p>-132.7m sheath fold nose with rotation of bedding approximately 90° clockwise</p> <p>-137-141.56m dominantly graphite, strongly conductive, series of fold noses and sheath folds, minor wacke interbeds, possibly flaser bedding, common movement along microfaults (<2cm)</p> <p>-framboidal py nodules to 2-3cm, act as augens with quartz carbonate filled pressure shadows</p> <p>-141.56-141.9m dominantly wacke interbeds, non conductive</p> <p>-141.9-146.13m dominantly graphite, strongly conductive, strong evidence of tectonism in sheath folds, microfaults, boudinaged wacke beds, disrupted beds</p> <p>-lower contact sharp, weakly folded w/ fold axis approximately parallel to c.a.</p>		-common fracture related and pressure shadow filling quartz and carbonate	<p>§130.51-146.12§=PyC3.0-5.0%» 3.0-5.0% clasts/fragment of pyrite -framboidal pyrite nodules to 5cm, some large elongate clasts, possibly boudins</p>	

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DRILL HOLE RECORD

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		132.82-132.90 {FAI} w/ Gouge Fault				
		133.40-133.41 {S0 55°} Bedding				
		134.20-134.31 {S0 5°} Bedding				
		142.00-142.01 {S0 49°} Bedding				
		146.11-146.12 {S0 53°} Bedding				
146.12 TO 159.57	{S, bx, ct} Sedimentary breccia cataclastic	<p>-white to black rock composed of fragments of from ~1mm to >20cm (?)</p> <p>-mixed rock type, strong suggestions of tectonic mechanism</p> <p>-146.12-150.40m mixed fragments of amygduloidal bleached mafic volcanic (70%) and graphitic argillite fragments and fracture filling, including an apparent bleached mafic dike at 147.54-147.62m, fragment size decreases towards fault</p> <p>-150.52-152.59 fragments and strongly foliated spherulitic quartz phyric felsic volcanics and interspersed graphitic argillite, excellent kink bands noted at 150.61-150.74m, axis at 31° to c.a.</p> <p>-152.59-153.69m graphitic argillite w/ numerous shear textures and microfaults and folds, strongly conductive</p> <p>-153.81-154.95 45% graphitic argillite, 45% felsic volcanic fragments, up to 10% py clasts</p> <p>-154.95-155.75m (fragments of felsic volcanic and siliceous rock (chert?) with up to 15% py fragments, section from 155.36-155.46m is possibly (probably?) iron formation</p> <p>-seam at 155.76m</p> <p>-155.76-156.5m conductive tectonized graphitic argillite</p> <p>-seam at 156.5m</p> <p>-156.5-159.57m subequal amounts of fragmented spherulitic quartz phyric felsic volcanic and tectonized conductive laminated graphitic</p>		<p>-pervasive fracture related silicification, minor carbonatization</p> <p>-pervasive fracture controlled locally strong fluid related alteration</p>	<p>-pyrite nodules, clasts and one laminated section associated with graphitic argillite intervals/fragments, locally semi-massive pyrite associated with siliceous sediments and felsic volcanic</p> <p>-no noted base metal sulphides</p>	

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		argillite, with small sections of bleached mafic and laminated pyrite. fault at 158.21. seam at 159.58 -lower contact slightly irregular at 85° to c.a. §159.40-150.52§*{FAI}w/ Gouge» Fault §153.59-153.80§*{FAI}w/ Gouge» Fault §158.21-158.23§*{FAI}w/ Gouge» Fault §159.56-159.57§*{S0 85°}Intrusive» Bedding				
159.57 TO 200.00	«S.b.q.D.P.» Felsic Intrusive medium grained quartz phyric feldspar phyric porphyritic	-fine to medium grained dark to light grey porphyritic rock -subrounded to angular quartz eyes to 3-4mm in size, account for 10-15% of unit but locally approach 30% (i.e. 180-183m) -subhedral to euhedral feldspar phenos to 3mm, up to 35% of unit, but locally may not be discernable -bleached mafic volcanic xenoliths or tectonically juxtaposed fragments @ 164.88-166.26m and 166.62-167.25m		-pervasive weak sericitization	-trace disseminated py	
200.00 TO 200.00	«EOH» End-Of-Hole					

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DRILL HOLE RECORD

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ASSAYS SHEET

DATE: 19/05/1996

Sample	From (M)	To (M)	Length (M)	Cu ppm	Zn ppm	Au ppb	Ag ppm	Pb ppm	Co ppm	Cu/Zn	Ni ppm	Est. Ni %	Est. Po %	Est. Py %	Est. Cp %	Est. Sp %	Est. Gn %	ROCK TYPE	Comments
AT04021	51.50	53.00	1.50	145	35	10	0.2	25			44								
AT04022	53.00	54.50	1.50	24	88	45	0.2	12			26	0.0	0.0	5.0	0.0	0.0	0.0	5.g.F.s	
AT04023	54.50	55.00	1.50	57	106	10	0.2	12			67	0.0	0.0	3.0	0.0	0.0	0.0	5.g.F.s	
AT04024	56.00	57.50	1.50	63	87	<2	0.1	10			56	0.0	0.0	15.0	0.0	0.0	0.0	5.g.F.s	
AT04025	57.50	59.00	1.50	81	79	38	1.9	56			64	0.0	0.0	15.0	0.0	0.0	0.0	5.g.F.s	
AT04026	66.50	68.00	1.50	29	34	<2	0.1	6			11	0.0	0.0	3.0	0.0	0.0	0.0	5.g.F.s	
AT04027	68.00	69.50	1.50	51	62	<2	0.1	1			18	0.0	0.0	3.0	0.0	0.0	0.0	5.F.s	
AT04028	69.50	71.00	1.50	20	206	<2	0.1	1			30	0.0	0.0	2.0	0.0	0.0	0.0	5.F.g.s	
AT04029	71.00	72.50	1.50	41	155	<2	0.1	3			27	0.0	0.0	1.0	0.0	0.0	0.0	5.F.bx,*ct	
AT04030	72.50	74.00	1.50	42	111	<2	0.2	10			44	0.0	0.0	3.0	0.0	0.0	0.0	5.g.bx,*ct	
AT04031	74.00	75.50	1.50	82	27	17	0.4	19			34	0.0	0.0	1.0	0.0	0.0	0.0	5.g.bx,*ct	
AT04032	75.50	77.00	1.50	64	74	27	0.6	38			83	0.0	0.0	4.0	0.0	0.0	0.0	5.g.F	
AT04033	77.00	78.50	1.50	152	79	120	2.5	102			133	0.0	0.0	5.0	0.0	0.0	0.0	5.g	
AT04034	78.50	80.00	1.50	111	131	<2	1.2	44			169	0.0	0.0	10.0	0.0	0.0	0.0	5.g	
AT04035	80.00	81.50	1.50	633	814	55	1.1	37			319	0.0	0.0	5.0	0.0	0.0	0.0	5.g.s	
AT04036	81.50	83.00	1.50	366	1050	52	1.2	41			143	0.0	0.0	10.0	0.0	0.0	0.0	5.g	
AT04037	83.00	84.50	1.50	47	394	<2	0.3	3			54	0.0	0.0	5.0	0.0	0.0	0.0	5.g	
AT04038	84.50	86.00	1.50	35	211	3	0.2	1			36	0.0	0.0	3.0	0.0	0.0	0.0	2.a.e.Bl	
AT04039	86.00	87.50	1.50	34	136	10	0.2	1			41	0.0	0.0	3.0	0.0	0.0	0.0	2.a.e.Bl	
AT04040	87.50	89.00	1.50	39	137	3	0.2	2			36	0.0	0.0	2.0	0.0	0.0	0.0	2.a.e.Bl	
AT04042	129.50	131.00	1.50	25	98	<2	0.2	1			24	0.0	0.0	1.0	0.0	0.0	0.0	2.a.e.Bl	
AT04043	131.00	132.50	1.50	36	49	3	0.1	2			27	0.0	0.0	2.0	0.0	0.0	0.0	4.q/5.g	
AT04044	132.50	134.00	1.50	46	101	3	0.3	4			40	0.0	0.0	5.0	0.0	0.0	0.0	5.g	
AT04045	134.00	135.50	1.50	77	121	59	1.3	59			67	0.0	0.0	5.0	0.0	0.0	0.0	5.g.F	
AT04046	135.50	137.00	1.50	52	87	<2	0.5	46			59	0.0	0.0	5.0	0.0	0.0	0.0	5.g.F	
AT04047	137.00	138.50	1.50	59	189	10	0.7	53			98	0.0	0.0	5.0	0.0	0.0	0.0	5.g.F	
AT04048	138.50	140.00	1.50	75	175	45	1.0	69			97	0.0	0.0	5.0	0.0	0.0	0.0	5.g.F	
AT04049	140.00	141.50	1.50	87	240	58	1.1	70			147	0.0	0.0	5.0	0.0	0.0	0.0	5.g.F	
AT04050	141.50	143.00	1.50	102	294	48	1.1	65			145	0.0	0.0	5.0	0.0	0.0	0.0	5.g.F	
AT04051	143.00	144.50	1.50	72	245	10	0.7	51			107	0.0	0.0	3.0	0.0	0.0	0.0	5.g.F	
AT04052	144.50	146.00	1.50	398	1050	62	1.5	78			225	0.0	0.0	5.0	0.0	0.0	0.0	5.g.F	
AT04053	146.00	147.50	1.50	53	144	<2	0.2	5			84	0.0	0.0	5.0	0.0	0.0	0.0	5.g.F	
AT04054	152.00	153.50	1.50	42	57	<2	0.4	20			36	0.0	0.0	2.0	0.0	0.0	0.0	5.bx,*ct	
AT04055	153.50	155.00	1.50	37	71	<2	0.4	22			39	0.0	0.0	4.0	0.0	0.0	0.0	5.bx,*ct	
AT04056	155.00	156.50	1.50	43	79	14	0.7	27			33	0.0	0.0	5.0	0.0	0.0	0.0	5.bx,*ct	
AT04057	156.50	158.00	1.50	35	106	<2	0.1	1			33	0.0	0.0	15.0	0.0	0.0	0.0	5.bx,*ct	
AT04058	158.00	159.50	1.50	466	293	34	1.4	38			367	0.0	0.0	5.0	0.0	0.0	0.0	5.bx,*ct	
AT04059	159.50	161.00	1.50	36	126	<2	0.2	3			21	0.0	0.0	3.0	0.0	0.0	0.0	5.bx,*ct	
												0.0	0.0	1.0	0.0	0.0	0.0	5.bx,*ct/9.b.g	

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ASSAYS SHEET

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GEOCHEMICAL ASSAY

DATE: 19/05/1996

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
ATD4318	91.00	93.00	2.00	49.57	12.34	6.36	3.46	2.25	1.78	8.19	1.33	0.28	0.14	0.01	13.21	98.92	32	212		25	155	45		2,a,e,p,B1	2(j)yB	119
ATD4319	110.00	113.00	3.00	69.25	10.73	1.71	1.15	3.12	1.56	4.63	0.49	0.12	0.07	0.04	5.19	98.06	62	304		5	60	15		4,a,n,q	3(h)z	168
ATD4320	161.00	164.00	3.00	68.94	11.92	2.03	1.25	2.86	1.88	3.79	0.22	0.06	0.06	0.03	5.60	98.64	78	394		10	75	15		9,b,q,D	9(j)z	176
AT94321	191.00	194.00	3.00	70.64	11.72	2.55	0.83	3.20	2.10	3.68	0.22	0.06	0.05	0.03	5.31	100.39	76	376		10	110	25		9,b,q,D	9(h)z	149

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GEOCHEMICAL ASSAY

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GEOCHEMICAL ASSAYS

DATE: 19/05/2019

Sample	From (M)	To (M)	Length (M)	RB PPM	SR PPM	CO2 %	AG PPM	AU PPB	CO PPM	PB PPM	S PPM	V PPM	AS PPM	SI 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	
AT04318	91.00	93.00	2.00						25		100	155																		
AT04319	110.00	113.00	3.00						<5		190	20																		
AT04320	161.00	164.00	3.00						<5		100	<5																		
AT04321	191.00	194.00	3.00						<5		100	15																		

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GEOCHEMICAL ASSAYS

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GEOCHEMICAL ASSAYS

DATE: 19/05/19

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	MM PPM	GA PPM	GE PPM	IN PPM	TL PPM	SC PPM	BR PPM	YB PPM	MOB	CA/AL	NI/MO	ISHIEM	ZN
AT04318	91.00	93.00	2.00														2						19			0.50	0.52	13	38	
AT04319	110.00	113.00	3.00														1						9			0.37	0.16	13	36	
AT04320	151.00	154.00	3.00														2						5			0.44	0.17	12	39	
AT04321	191.00	194.00	3.00														2						4			0.35	0.22	30	34	

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GEOCHEMICAL ASSAYS

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Geochemical Analysis Certificate

6W-1300-RG1

Company: **FALCONBRIDGE LTD (EXPLORATION)**

Date: APR-10-96

Project: 8254 EXPL

Attn: J. Pattison

We hereby certify the following Geochemical Analysis of 10 Core samples submitted APR-01-96 by .

Sample Number	Au PPB	Cu PPM	Zn PPM	Pb PPM	Ag PPM	Ni PPM
AT04011	58	60	194	29	1.3	71
AT04012	741	283	171	237	15.0	68
AT04013	31	41	250	19	0.7	43
AT04014	∠	32	630	5	0.2	13
AT04015	∠	48	191	1	0.1	10
AT04016	34	54	742	16	0.8	38
AT04017	∠	21	160	1	0.2	31
AT04018	∠	16	108	1	0.1	7
AT04019	∠	67	141	11	0.1	82
AT04020	∠	38	222	1	0.1	53

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Page 1 of 2

Geochemical Analysis Certificate

6W-1362-RG1

Company: **FALCONBRIDGE LTD (EXPLORATION)**

Date: APR-16-96

Project: 8254 EXPL

Attn: J. Pattison

We hereby certify the following Geochemical Analysis of 39 Core samples submitted APR-08-96 by .

Sample Number	Au PPB	Cu PPM	Zn PPM	Pb PPM	Ag PPM	Ni PPM
AT04021	10	146	35	25	0.2	44
AT04022	45	24	88	12	0.2	26
AT04023	10	57	106	12	0.2	67
AT04024	<2	63	87	10	0.1	56
AT04025	38	81	79	56	1.0	64
AT04026	<2	29	34	6	0.1	11
AT04027	<2	51	62	1	0.1	18
AT04028	<2	20	206	1	0.1	30
AT04029	<2	41	155	3	0.1	27
AT04030	<2	62	111	10	0.2	44
AT04031	17	82	27	19	0.4	34
AT04032	27	64	74	38	0.6	83
AT04033	120	152	79	102	2.5	133
AT04034	<2	111	131	44	1.2	168
AT04035	65	633	814	37	1.1	319
AT04036	62	366	1350	41	1.2	143
AT04037	<2	47	394	3	0.3	54
AT04038	3	35	211	1	0.2	38
AT04039	10	34	136	1	0.2	41
AT04040	3	39	137	2	0.2	36
AT04041 Control	<2	12	116	12	0.3	7
AT04042	<2	25	98	1	0.2	24
AT04043	3	36	49	2	0.1	27
AT04044	3	46	101	4	0.3	40
AT04045	58	77	121	59	1.3	67
AT04046	<2	52	87	46	0.5	58
AT04047	10	59	189	53	0.7	88
AT04048	45	75	175	69	1.0	97
AT04049	58	87	240	70	1.1	147
AT04050	48	102	294	65	1.1	145

Certified by



Swastika Laboratories

A Division of TSL/Assayers Inc.

Established 1928

Assaying - Consulting - Representation

Page 2 of 2

Geochemical Analysis Certificate

6W-1362-RG1

Company: **FALCONBRIDGE LTD (EXPLORATION)**
Project: 8254 EXPL
Attn: J. Pattison

Date: APR-16-96

We hereby certify the following Geochemical Analysis of 39 Core samples submitted APR-08-96 by .

Sample Number	Au PPB	Cu PPM	Zn PPM	Pb PPM	Ag PPM	Ni PPM
AT04351	10	72	245	51	0.7	107
AT04352	62	398	1050	78	1.5	225
AT04353	<	83	144	5	0.2	84
AT04354	<	42	57	20	0.4	36
AT04355	<	37	71	22	0.4	39
AT04356	14	43	78	27	0.7	33
AT04357	<	35	106	1	0.1	33
AT04358	34	466	293	38	1.4	367
AT04359	<	38	126	3	0.2	21

Certified by

FALCONBR. JE EXPLORATION LTD.

ATTN: M. COLLISON

PROJ: 8254

6W-1321-R01

TSL/ASSAYERS Laboratories

1270 FEWSTER DRIVE, UNIT: MISSISSAUGA, ONTARIO L4W-1A4

PHONE #: (905)602-8236 FAX #: (905)206-0513

REPORT No. : M73

Page No. : 1 of 1

File No. : AP16RA

Date : APR-17-1996

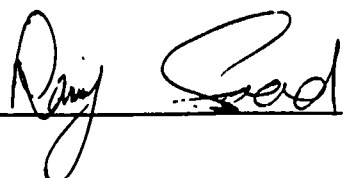
Oxides in % - Minors ppm

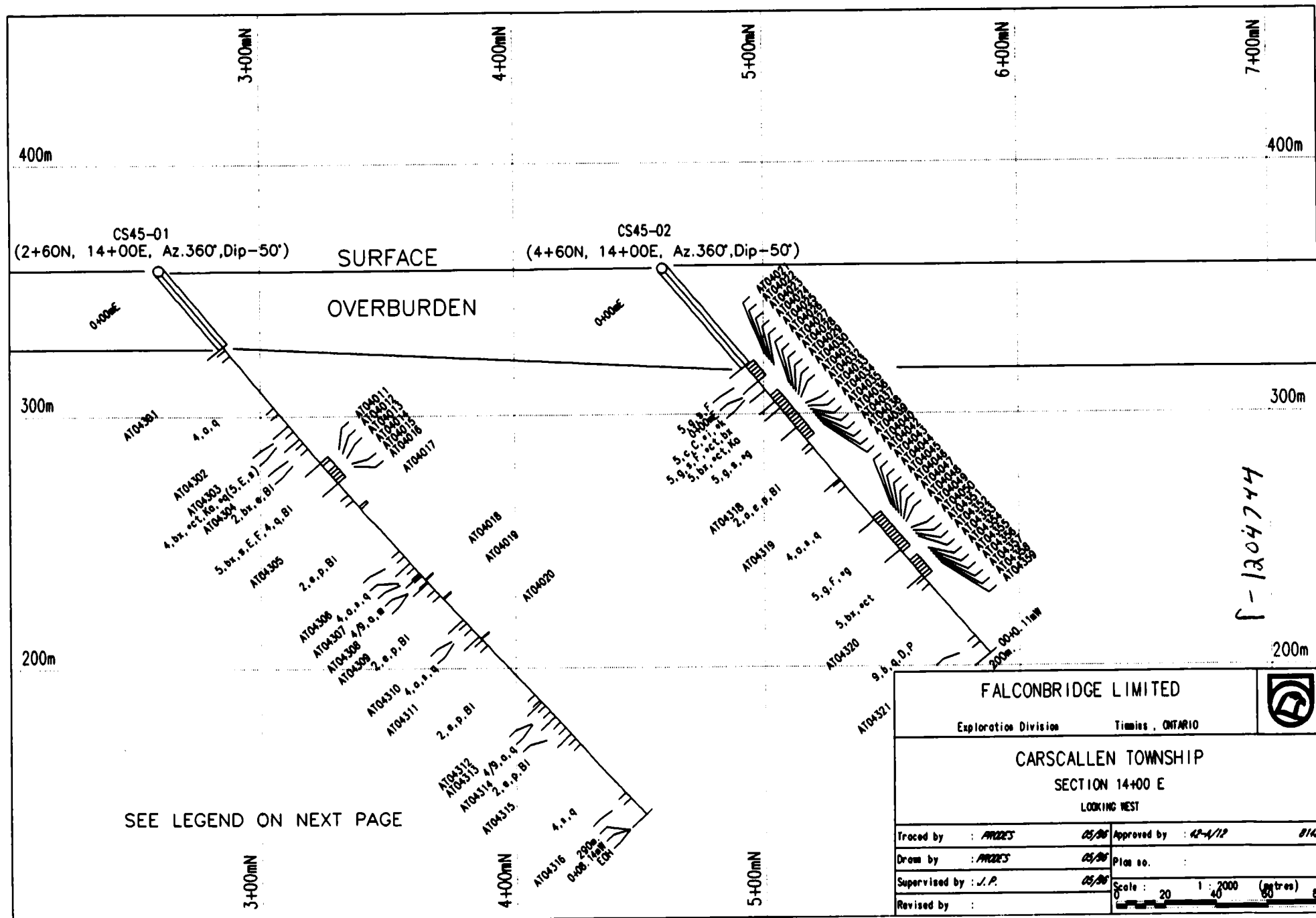
I.C.A.P. WHOLE ROCK ANALYSIS

Lithium MetaBorate Fusion

SAMPLE #	SiO2	Al2O3	Fe2O3	CaO	MgO	Na2O	K2O	TiO2	MnO	P2O5	Cr2O3	Zr	Y	Cu	Zn	Ni	Co	Nb	V	Sc	Be	LOI	TOTAL	S
	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
AT04301	63.95	15.12	3.38	3.46	0.92	3.63	1.76	0.54	0.08	0.16	0.025	142	16	110	15	30	15	10	75	13	< 1	6.30	99.29	< 100
AT04302	71.96	11.39	3.60	2.14	1.59	0.63	2.72	0.42	0.07	0.12	0.005	254	46	10	65	30	< 5	< 5	20	11	2	6.16	100.79	< 100
AT04303	72.55	12.28	2.83	1.56	0.98	0.47	3.18	0.38	0.05	0.12	0.005	234	40	5	45	< 5	< 5	< 5	< 5	8	2	4.83	99.24	300
AT04304	47.74	13.23	8.63	6.96	3.46	1.54	2.72	1.22	0.15	0.22	0.025	158	26	20	105	75	35	< 5	170	22	2	14.19	100.07	< 100
AT04305	48.70	13.32	8.80	6.67	3.56	1.88	2.32	1.38	0.13	0.26	0.020	190	30	35	120	55	30	15	170	19	2	13.84	100.87	< 100
AT04306	49.18	12.30	8.99	6.94	3.69	2.16	1.82	1.31	0.14	0.26	0.020	186	30	40	55	45	30	< 5	145	18	1	14.13	100.92	100
AT04307	70.32	11.42	4.31	2.60	0.96	2.86	1.76	0.51	0.06	0.12	0.030	300	60	10	35	5	5	10	70	10	1	5.40	100.33	100
AT04308	67.85	11.33	4.28	2.75	1.15	1.51	2.16	0.47	0.06	0.14	0.015	284	48	< 5	45	10	10	10	25	10	1	6.42	98.10	200
AT04309	46.71	13.20	6.97	8.02	3.42	1.14	2.46	1.20	0.11	0.18	0.035	122	20	50	65	80	35	< 5	190	25	1	14.59	98.00	100
AT04310	69.48	10.95	4.72	3.05	1.04	2.26	2.04	0.51	0.07	0.12	0.025	274	58	10	50	10	5	15	25	11	1	6.12	100.35	100
AT04311	49.34	13.93	6.81	7.93	3.07	2.63	2.30	1.30	0.11	0.18	0.030	136	24	70	60	85	35	< 5	210	25	1	13.38	100.97	100
AT04312	49.53	13.82	7.68	7.18	3.90	2.56	1.48	1.30	0.12	0.20	0.025	134	24	35	85	105	40	< 5	195	26	1	12.50	100.28	100
AT04313	70.54	11.18	3.98	2.18	0.91	3.12	1.40	0.49	0.06	0.12	0.030	298	62	5	70	25	< 5	10	10	11	< 1	4.75	98.74	100
AT04314	48.16	13.05	7.63	6.93	3.40	1.94	1.84	1.22	0.12	0.22	0.030	142	24	30	75	60	30	< 5	180	23	1	13.77	98.27	100
AT04315	70.51	12.28	3.48	2.23	1.32	2.78	2.22	0.24	0.06	0.06	0.025	354	76	< 5	75	25	< 5	25	< 5	5	2	5.36	100.54	< 100
AT04316	71.77	11.81	3.58	2.05	0.61	3.87	1.76	0.21	0.07	0.06	0.025	348	70	10	35	30	< 5	20	< 5	4	2	4.47	100.27	100
AT04317 STANDARD	75.01	11.08	2.45	0.51	0.49	1.08	7.40	0.25	0.03	0.06	0.005	294	120	5	130	10	< 5	30	25	4	< 1	0.75	99.10	100
AT04318	49.57	12.34	8.19	6.36	3.46	2.25	1.78	1.33	0.14	0.28	0.015	212	32	25	155	45	25	< 5	155	18	2	13.21	98.91	100
AT04319	69.25	10.73	4.63	1.71	1.15	3.12	1.56	0.49	0.07	0.12	0.035	304	62	5	60	15	< 5	15	20	9	1	5.19	98.03	100
AT04320	68.94	11.92	3.79	2.03	1.25	2.86	1.88	0.22	0.06	0.06	0.025	394	78	10	75	15	< 5	25	< 5	5	2	5.60	98.62	100
AT04321	70.64	11.72	3.68	2.55	0.83	3.20	2.10	0.22	0.05	0.06	0.030	376	76	10	110	25	< 5	15	15	4	2	5.31	100.35	100

SIGNED :







Report of Work Conducted After Recording Claim

Transaction Number
W9660 00361

Mining Act

Personal information collected on this form is obtained under the authority of the Mining Act. This collection should be directed to the Provincial Manager, Mining Lands, Mining Division, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.



42A05NE0088 W9660-00361 CARSCALLEN

900

- Instructions:**
- Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations for requirements of mining assessment work or consult the Mining Recorder.
 - A separate copy of this form must be completed for each Work Group.
 - Technical reports and maps must accompany this form in duplicate.
 - A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s) FALCONBRIDGE LIMITED		Client No. 130679
Address P.O. Box 1140, 571 Main St. Timmins Ont. P4N 7H9		Telephone No. (705) 267-1188
Mining Division Porcupine	Township/Area Carscallen Township	M or G Plan No. 6-3040
Dates Work Performed From: March 20, 1996		To: March 28, 1996

Work Performed (Check One Work Group Only)

Work Group	Type
<input type="checkbox"/> Geotechnical Survey	
<input checked="" type="checkbox"/> Physical Work, Including Drilling	Diamond drilling two holes (CS45-01 + CS45-02) totaling 490m plus geochemistry + trace rock analysis of core samples
<input type="checkbox"/> Rehabilitation	
<input type="checkbox"/> Other Authorized Work	
<input type="checkbox"/> Assays	
<input type="checkbox"/> Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs \$ **33,585**

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
Dominik Drilling	409 King St., Porcupine, Ontario
Swastika Laboratories	P.O. Box 10, Swastika, Ontario P0K 1T0
TSL Assayers	1270 Fewster Dr. Unit 3, Mississauga Ont. L4W 1A9
Michael Collison	P.O. Box 1140 Timmins, Ontario P4N 7H9

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date May 21, 1996	Recorded Holder or Agent (Signature) John Pattison
--	-----------------------------	--

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.		
Name and Address of Person Certifying John Pattison P.O. Box 1140, Timmins, Ontario P4N 7H9		
Telephone No. (705) 267-1188	Date May 21, 1996	Certified By (Signature) John Pattison

For Office Use Only

Total Value Cr. Recorded 33,585	Date Recorded	Mining Recorder	
	Deemed Approval Date Aug. 19/96	Date Approved Aug 19/96	
Date Notice for Amendments Sent			

Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units
	F-1204744	16
	F-1204743	16
Total Number of Claims		2

Value of Assessment Work Done on this Claim	Value Applied to this Claim
33,585	6400
6400	
Total Value Done	33,585
Total Value Work Applied	12,800

Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
6400	20,785
Total Assigned From	6400
Total Reserve	20,785

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

- Credits are to be cut back starting with the claim listed last, working backwards.
- Credits are to be cut back equally over all claims contained in this report of work.
- Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date
---	-----------	------

Statement of Costs for Assessment Credit
 État des coûts aux fins du crédit d'évaluation

Transaction No./N° de transaction
 0091660 00321

Mining Act/Loi sur les mines

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Geologist / Main-d'oeuvre Géologue	1000	
	Field Supervision Supervision sur le terrain		1000
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type		
	Diamond Drill	31,487	
	Geochron Analyses	998	
			32,485
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
Total Direct Costs Total des coûts directs		33,485	

2. Indirect Costs/Coûts indirects

Note: When claiming Rehabilitation work indirect costs are not allowable as assessment work.
 Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
	Truck + gas -	100	
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démoblisation			
Sub Total of Indirect Costs Total partiel des coûts indirects		100	100
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			
Total Value of Assessment Credit (Total of Direct and Allowable indirect costs) Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)			33,585

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note: Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
	x 0.50 =

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Evaluation totale demandée
	x 0,50 =

Certification Verifying Statement of Costs

I hereby certify:
 that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as Senior Project Geologist I am authorized
 (Recorded Holder, Agent, Position in Company)

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :
 que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ je suis autorisé
 (titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature	Date
	May 21, 1996

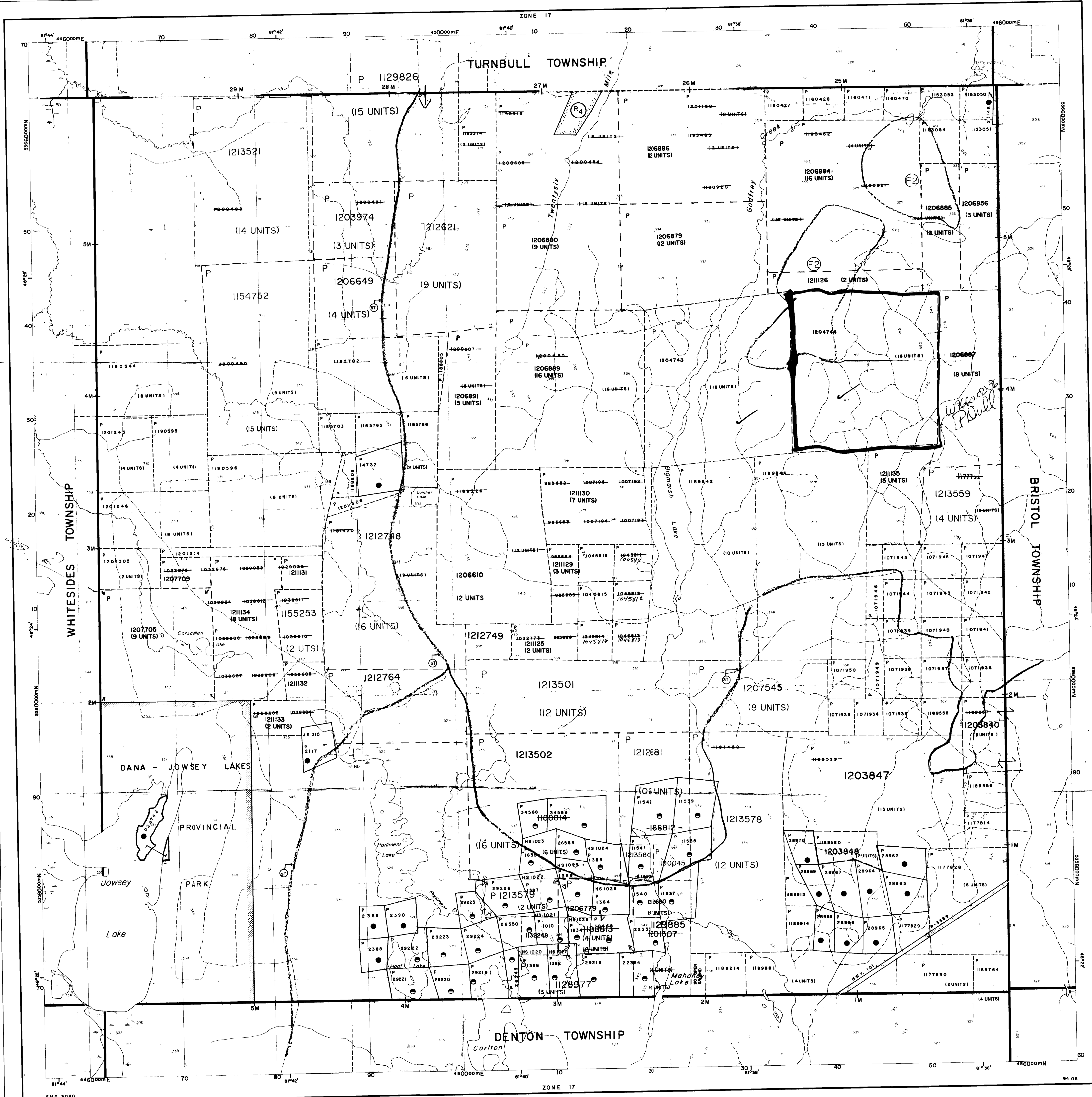
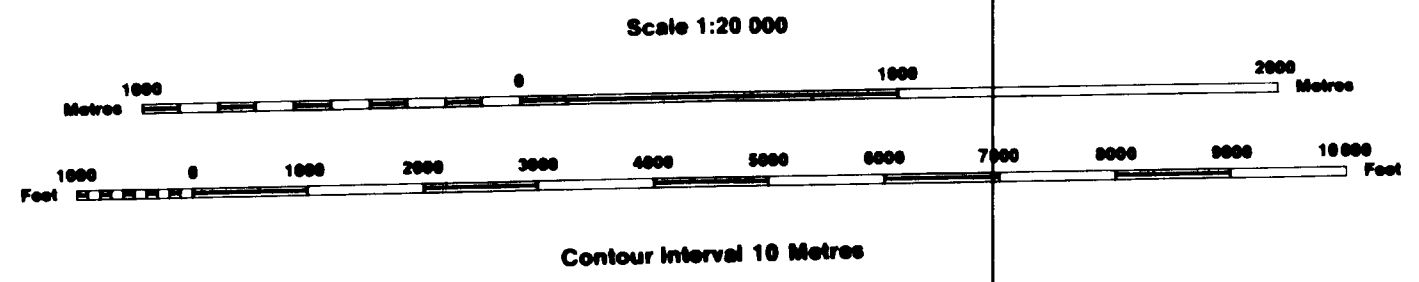
John Patterson

INDEX TO LAND DISPOSITION

PLAN
 G-3040
 TOWNSHIP

CARSCALLEN

M.N.R. ADMINISTRATIVE DISTRICT
 TIMMINS
 MINING DIVISION
 PORCUPINE
 LAND TITLES/REGISTRY DIVISION
 COCHRANE



SYMBOLS

Boundary	
Township, Meridian, Baseline	
Road allowance; surveyed	
shoreline	
Lot/Concession; surveyed	
unsurveyed	
Parcel; surveyed	
unsurveyed	
Right-of-way; road	
railway	
utility	
Reservation	
Cliff, Pit, Pile	
Contour	
Interpolated	
Approximate	
Depression	
Control point (horizontal)	
Flooded land	
Mine head frame	
Pipeline (above ground)	
Railway; single track	
double track	
abandoned	
Road; highway, county, township	
access	
trail, bush	
Shoreline (original)	
Transmission line	
Wooded area	

AREAS WITHDRAWN FROM DISPOSITION

- MRD - Mining Rights Only
- SRD - Surface Rights Only
- M + S - Mining and Surface Rights

Description	Order No.	Date	Disposition	File
AGGREGATE PERMIT - NOTICE RECEIVED JUNE 14, 1993				
THIS TWP IS SUBJECT TO FOREST ACTIVITY IN 1994-95. FURTHER INFORMATION AVAILABLE ON FILE.				
APPLICATION PENDING UNDER THE PUBLIC LANDS ACT SNOWMOBILE TRAILS - NOTICE RECEIVED 92-DEC-21				
THIS TWP SUBJECT TO FOREST ACTIVITY IN 1995-96. FURTHER INFORMATION AVAILABLE ON FILE.				

DISPOSITION OF CROWN LANDS

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	
Cancelled	
Reservation	
Sand & Gravel	

ACTIVATED AUG. 17/94, BY: D.C.
 CHECKED BY:

Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources.

The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only.



