

HOLE NUMBER: CAS11-01

FALCONBRIDGE LIMITED  
DRILL HOLE RECORD

DATE: 12/16/2000  
IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SAGANASH PROJECT PLOTTING COORDS GRID: UTM ALTERNATE COORDS GRID: Cas11 Grid COLLAR DIP: -45° 0' 0"  
PROJECT NUMBER: 291 NORTH: 5435617.70N NORTH: 121+ 0N LENGTH OF THE HOLE: 156.00M  
CLAIM NUMBER: P1226736 EAST: 394905.80E EAST: 96+20E START DEPTH: 0.00M  
LOCATION: Casselman Twp ELEV: 290.00 ELEV: 290.00 FINAL DEPTH: 156.00M

COLLAR ASTRONOMIC AZIMUTH: 305° 0' 0" GRID ASTRONOMIC AZIMUTH: 305° 0' 0"

DATE STARTED: 10/14/2000 COLLAR SURVEY: NO PULSE EM SURVEY: NO CONTRACTOR: Forage Benoit  
DATE COMPLETED: 10/15/2000 RQD LOG: NO PLUGGED: NO CASING: Pulled  
DATE LOGGED: 10/16/2000 HOLE MAKES WATER: NO HOLE SIZE: BQ CORE STORAGE: Kidd Creek Minesite  
UTM COORD.:

COMMENTS : Test 9mhos conductor + coincident mag high; intersected variably conductive sulphidic BIF  
WEDGES AT:

DIRECTIONAL DATA:

Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
15.00	0' "	-43° 0' 0"	A	OK	Acid Test	-	-	-	-	-	-
105.00	0' "	-40°30' 0"	A	OK		-	-	-	-	-	-
145.00	0' "	-40°30' 0"	A	OK		-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

HOLE NUMBER: CAS11-01

DRILL HOLE RECORD

LOGGED BY: G. De Schutter

PAGE: 1

2.20854

*G. De Schutter*  
Jan 19/01



42G01SW2008 2.20854 CASSELMAN

010

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 13.00	<{ob}> Overburden	13m of BW+NW casing put down in sandy/muddy overburden; both casings pulled successfully				
13.00 TO 107.06	<2,b,e,*t> Chl-Bi-Fel-Qt+/-Gt+/-H B schist	<p>FINE TO MEDIUM GRAINED CHLORITE-BIOTITE-FELDSPAR-QUARTZ +/-GARNET+/-HORNBLENDE SCHIST (locally amygdaloidal mafic metavolcanic)</p> <p>-finely to coarsely mottled deep green, black and creamy white with frequent glassy to milky white bands, stripes and cm scale zones accompanied by occasional orangy-pink spots</p> <p>-unit ranges from fine to coarse grained, varies in hardness (depending on concentrations of chlorite), non-to-weakly magnetic and displays a well developed schistosity imparted by the alignment of the platy minerals.</p> <p>-frequent banding and/or striping of the core is imparted by 1mm to 7cm wide bands of creamy coloured quartz+carbonate (veins) and lighter green zones up to 10cm wide that are composed of chlorite+biotite with subrounded to ratty porphyroblasts of orangy-pink garnets (almandine) and 1-5mm lath-shapped dark green porphyroblasts of amphibole (ferro-tchermakitic?).</p> <p>-occasional zones contain up to 10% 2mm-5mm slightly stretched to augen shaped quartz+carbonate filled amygdules (e.g. 15.50-15.50m, 20.0-23.0m, 26-27.5m); some of these cm scale bands may be relict pillow margins</p> <p>17.32-17.73m: very fine grained with small ratty looking feldspar phenocrysts, dark green to black, hard, non-magnetic, massive (non-foliated) mafic-looking dyke rock; intrusive contacts are sharp and regular with a slight chill margin at the downhole contact</p> <p>  17.32-17.73  *7,a,m&gt;</p> <p>32.91-58.0m: finer grained and less foliated version of the same rock</p>		<p>-patchy to fracture controlled (relict veining) silicification and carbonitization throughout unit</p> <p>-relatively rare chloritic zones to 30cm wide contain well developed 1-5mm sized laths of amphibole occasionally in rosettes and are commonly accompanied by subrounded to ratty orangy-pink garnets (e.g. 18.4-18.7m, 24.5-24.6m, 31.15-31.28m,90.90m)</p> <p>104.20-107.06m: Biotite content of mafic schist increases to greater than that of chlorite</p>	<p>-nil to trace pyrite+pyrrhotite finely disseminated throughout interval</p> <p>67.85-68.05m: 5-7% finely disseminated and blebby pyrrhotite in a more chloritic mafic schist</p> <p>106.70-107.06m: 7-10% finely disseminated pyrrhotite + 3-5% pyrite in altered mafic schist at lower contact; 2 large (1 X 4cm) pyrite knots at 106.78</p>	<p>-very good core recovery for this interval (RQD=85% overall)</p> <p>-WRA sample AU02459 (mafic dyke) has Icelandite-like chemistry (0.59% P2O5, 1.15% TiO2, 237ppm Zr)</p>

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<p>-some intervals take on a much coarser texture verging on gabbroic but have the same schistosity and no discernable contacts (e.g. 74.25-78.90m)</p> <p>-schistosity in the core varies slightly but averages 45° to CA throughout unit</p> <p>‡15.50-15.55‡*{S2=55°}*‡&gt;</p> <p>‡24.40-24.45‡*{S2=45°}*‡&gt;</p> <p>‡30.30-30.35‡*{S2=45°}*‡&gt;</p> <p>‡60.60-60.65‡*{S2=46°}*‡&gt;</p> <p>‡79.05-79-10‡*{S2=45°}*‡&gt;</p> <p>86-102m: core takes on a pillow breccia appearance where ghostly paler green rounded fragments of mafic schist up to 30cm in size are "rimmed" by darker green coloured chlorite+garnet bearing bands to 3cm wide</p> <p>‡105.40-105.45‡*{S2=45°}*‡&gt;</p> <p>106.57-107.06m: milky white quartz flooding prevalent; mafic schist appears brecciated and altered with elevated sulphides</p> <p>-lower contact is distinct but irregular (brecciated)</p>				
107.06 TO 123.53	<5,r,<OIF>> Oxide Facies Iron Formation	<p>WEAKLY SULPHIDIC OXIDE FACIES BANDED IRON FORMATION</p> <p>-coarsely banded and swirled milky white to medium waxy grey and steel grey-black and dark green</p> <p>-unit consists of 1-10cm thick intercalated bands of milky white to waxy grey chert (45%), steel grey-green magnetite+chlorite+chert (40%) and blebby to finely laminated pyrite +/- pyrrhotite (10%). Minor amounts of other Fe-silicates (amphibole, biotite) make up the remainder of the unit.</p> <p>-Fe-oxide bands are composed of strongly magnetic and finely recrystallized steel grey to</p>		<p>-weak disseminated carbonitization within chert beds</p> <p>minor Fe-amphibole (grunerite)</p> <p>"alteration" as fine rosettes at the interface between magnetite-rich and chert-rich beds</p>	<p>-overall, the unit contains 10-15% finely recrystallized and finely laminated pyrite +/- pyrrhotite with local concentrations up to 50% over 4-12cm intervals (e.g. 108.24-108.28m and 115.38-115.52m)</p> <p>107.06-108.60m: anomalous Zn values (1040-2940ppm Zn)</p> <p>112.84-116.51m: anomalous Zn values (1530-6120ppm Zn)</p>	<p>-the Fe-oxide bands are generally very weak to weakly conductive; sulphidized Fe-oxide bands are generally moderate to strongly conductive</p> <p>108.24-108.28m: strongly conductive sulphides in OIF</p> <p>115.38-115.52m: sulphidic OIF is strongly conductive</p> <p>-very good core recovery for unit (RQD=75%)</p>

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<p>black magnetite (60-75%), finely recrystallized waxy grey chert (20-25%) and dark to medium green and very fine grained chlorite (15-20%)</p> <p>-sulphides mainly restricted to magnetite + chert + chlorite bands</p> <p>-many of the chert bands are broken and/or brecciated</p> <p>-common fold noses at various angles to CA along with frequent brecciated sections impart a chaotic appearance to the core; bedding/banding of the BIF ranges from 45-75° to CA</p> <p>-pale pink garnets (almandine) from 1mm to 1.5cm in size are spongy to irregular in shape and occur in concentrations of up to 30% over minor intervals (e.g. 109.72-109.90m; 110.02-110.30m; 111.70-111.90m; 122.76-122.82m)</p> <p>108.24-108.28m: 45-50% combined sulphides (py+po) in OIF - strongly conductive</p> <p>111.34-111.70m: Chl-Bi-Fel-Qt schist</p> <p>115.38-115.52m: elevated concentration of finely laminated sulphides (25-30%) make for moderate to strong conductor</p> <p>-lower contact is gradational and is marked by the disappearance of magnetite and the onset of Fe-silicate phases</p>				
123.53 TO 132.77	«5, <QIF>C» Silicate Facies Iron Formation	<p>WEAKLY CARBONACEOUS SILICATE FACIES BANDED IRON FORMATION</p> <p>-coarsely banded to laminated waxy grey, olive green and charcoal grey with minor intervals hosting subrounded to irregular shaped light pink spots to 3mm</p> <p>-interval is characterized by the total lack of magnetite (compared to overlying unit) and con consists of alternating mm to 5cm scale bands of waxy grey finely recrystallized chert (20-25%),</p>		-the only "alteration" phase is the moderate to strong development of grunerite within the cherty bands	-trace fracture controlled (hairline) pyrite @ 128.74m  127.50-127.68m: trace amounts of glassy ruby red sphalerite as fine blebs and streaks within the cherty and carbonaceous bands	-good core recovery for this interval (RQD=95%)  -the carbonaceous chert bands are non-conductive

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<p>olive green to green yellow bands of Fe-silicates (grunerite, ferro-tschermakite?; 30-35%) and chlorite, and light grey to charcoal grey weakly carbonaceous chert (50-55%)</p> <p>126.47-126.52m: only garnet-bearing zone with 55% subrounded pale pink garnets (almandine) to 3mm</p> <p>-bedding/banding is chaotic with much evidence of folding/slumping features (fold noses, S-folds, Z-folds)</p> <p>127.83-128.41m: Chl-Bi-Fel-Qt dyke; medium grained with sharp but irregular contacts; weakly foliated @45° to CA</p> <p>128.82-130.54m: Bi-Fel-Qt dyke; medium grained and lacking a chlorite phase (compared to previous dyke); sharp but irregular contacts; very weakly foliated @65° to CA</p> <p>-lower contact is gradational and is marked by the disappearance of Fe-silicate phases and the onset of sulphides</p>				
132.77 TO 156.00	<S,>C,<WCK> Greywacke	<p>WEAKLY CARBONACEOUS AND VARIABLY SULPHIDIC SEDIMENT (GREYWACKE)</p> <p>-laminated, streaked and banded light grey, grey and charcoal grey to black with frequent metallic to brassy bronze streaks and laminae</p> <p>-unit composed of intercalated cm-scale bands and laminae of very fine grained and hard quartz rich (light grey) material and carbonaceous (grey to charcoal grey) material occasionally hosting sulphide stringers, laminae and zones 10's of cm wide</p> <p>-the sulphide enriched carbonaceous bands/zones vary in conductivity from very weak to moderately strong</p> <p>133.00-133.45m: 10-12% blebby sulphides in carbonaceous zone are moderately conductive</p> <p>140.10-140.30m: 35% combined sulphide-rich</p>		<p>-very weak patchy carbonitization in few of the quartz rich bands</p> <p>147.33-148.25m: weak to moderate pervasive silicification of sediment associated with elevated sulphide content</p>	<p>133.00-133.45m: sulphide enriched zone consisting of 10-12% blebby and finely laminated pyrrhotite + trace amounts of red-brown sphalerite in carbonaceous zone</p> <p>  133.00-133.45  PoD10-12%</p> <p>140.10-140.30m: pyrrhotite-rich laminae (30%) and minor blebby pyrite (5%)</p> <p>  140.10-140.30  PoB30%</p> <p>  144.14-144.46  PoB25%PyB10%</p> <p>  146.00-146.20  PyD12-15%PoB5-7%</p> <p>  146.58-146.70  PyD10-12%PoB3-5%</p> <p>147.33-148.25m: fine laminae and blebby pyrite+pyrrhotite (25-30%) with</p>	<p>good to moderate core recovery for this unit</p> <p>-broken core/rubble from 134.59 to 134.95m and 138.20 to 138.35m</p> <p>-poor RQD from 140.25-144.10 (25%)</p> <p>-moderate to strong conductors (sulphide enriched carbonaceous and silicified layers/zones):</p> <p>132.77-133.45m; 140.10-140.30m; 144.14-144.46m; 146.00-146.20m; 146.58-146.70m; 150.95-151.03m; 153.40-153.47m</p>

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
156.00 TO 156.00	<EOH> End of Hole	<p>laminae are strongly conductive over the width of the core; many more conductive sulphide enriched zones (see comments field)</p> <p>-fining of individual beds suggests tops is downhole (tentative)</p> <p>-bedding is chaotic in places but averages 60° to CA</p> <p>  135.90-135.95  &lt;S2=57°&gt; &gt;   140.40-140.45  &lt;S2=60°&gt; &gt;   147.50-147.55  &lt;S2=61°&gt; &gt;</p> <p>149.40-149.76m: milky white massive quartz feldspar vein with sharp contacts @ 90° to CA</p> <p>  155.20-155.25  &lt;S2=60°&gt; &gt;</p>			<p>trace red-brown sphalerite</p> <p>  147.33-148.25  &lt;PyB15-17%PoD5-7%SpD1%&gt;   150.95-151.03  &lt;PoF2-25%&gt;   153.40-153.47  &lt;PyF10-12%PoD5-7%&gt;</p>	25 boxes of BQ core; 13m of casing pulled, hole not making water

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		
U06277	67.50	67.80	0.30	154	41	1	117	3	0.1				17	48												2, a, *t	bracket	
AU06278	67.80	68.10	0.30	90	50	1	33	3	0.1				14	10							5-7					2, a, *t		
AU06279	68.10	68.40	0.30	77	33	1	65	3	0.1				17	41												2, a, *t	bracket	
AU06280	106.24	106.55	0.31	148	70	13	78	<2	0.2				<5	<5												2, a, *t	bracket	
AU06281	106.55	107.06	0.51	313	632	18	58	10	0.3				<5	<5							7	3				2, a, *t	Qt vn + Py	
AU06282	107.06	107.70	0.64	799	2940	65	62	14	1.2				<5	<5							10	6		1		OIF		
AU06283	107.70	108.24	0.54	228	1140	19	21	<2	0.2				<5	<5							1					OIF		
AU06284	108.24	108.60	0.36	335	1040	27	33	10	0.8				<5	<5							20					OIF	conductive	
AU06285	108.60	109.16	0.56	122	91	12	13	<2	0.2				<5	<5												OIF	bracket	
AU06286	112.84	114.34	1.50	315	1880	38	32	7	0.6				<5	<5							1	2				OIF		
AU06287	114.34	115.06	0.72	182	1530	25	20	14	0.3				<5	<5												OIF		
AU06288	115.06	115.54	0.48	686	6120	119	69	14	1.2				<5	<5							6	20				OIF	conductive	
AU06289	115.54	116.51	0.97	240	1610	43	31	7	0.7				<5	<5												OIF		
AU06290	116.51	117.26	0.75	200	832	23	23	<2	0.4				<5	<5												OIF		
AU06291	117.26	118.22	0.96	103	330	13	13	41	0.2				<5	<5												OIF		
AU06292	118.22	119.36	1.14	132	309	17	19	3	0.3				<5	<5												OIF		
AU06293	119.36	120.00	0.64	89	205	13	14	3	0.2				<5	<5												OIF		
AU06294	120.00	121.50	1.50	88	292	21	23	<2	0.2				<5	<5												OIF		
AU06295	121.50	123.00	1.50	178	696	19	28	3	0.4				<5	<5												OIF	Py knot	
AU06296	126.89	127.30	0.41	143	185	11	14	10	0.3				<5	<5												OIF	bracket	
AU06297	127.30	127.61	0.31	138	1590	17	31	24	0.6				<5	<5												OIF		
AU06298	127.61	128.15	0.54	47	47	10	27	3	0.1				<5	<5										1		OIF	+7, a, m, *t	
AU06299	132.55	132.77	0.22	197	1220	12	238	7	0.3				<5	<5												OIF	bracket	
AU06300	132.77	133.45	0.68	328	1440	22	65	17	1.0				<5	<5							11	5		1		5, a, >C, <WCK>		
AU06451	133.45	134.00	0.55	137	219	6	61	3	0.4				<5	<5												5, a, >C, <WCK>	bracket	
AU06452	143.70	144.10	0.40	159	1340	7	86	10	0.4				<5	<5												5, a, <WCK>	bracket	
AU06453	144.10	144.60	0.50	270	1060	13	87	21	0.8				<5	<5							20	7				5, a, <WCK>		
AU06454	144.60	145.52	0.92	120	544	19	47	21	0.2				<5	<5												5, a, <WCK>		
AU06455	145.52	147.00	1.48	83	952	34	53	34	0.3				<5	<5							5	8				5, a, <WCK>		
AU06456	147.00	147.33	0.33	67	252	11	22	7	0.1				<5	<5												5, a, <WCK>	bracket	
AU06457	147.33	148.47	1.14	190	1860	46	98	21	0.5				<5	<5												5, a, <WCK>		
AU06458	148.47	149.40	0.93	124	920	52	91	10	0.4				<5	<5							11	11		1		5, a, <WCK>		
																					3	7					5, a, <WCK>	

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	RB PPM	SR PPM	CO2 %	CU PPM	ZN PPM	NI PPM	CR PPM	FIELD NAME	CHEM ID	ALUM
AU02459	17.32	17.73	0.41	60.130	17.050	4.2200	1.8000	5.8300	1.6300	6.0200	1.1500	0.5900	0.0700		1.5200	100.01	26.000	237.00	866.00		413.00		51.000	85.000	10.000	102.00	7,a,m,P7jyB		146
AU02460	21.00	24.00	3.00	47.000	13.810	11.720	5.9000	2.3800	0.1400	13.190	0.8800	0.0800	0.2400		4.5900	99.93	25.000	27.000	45.000		99.000		91.000	32.000	17.000	154.00	2,a,*t,2hv		97
AU02461	45.00	48.00	3.00	48.050	15.810	12.550	6.6100	1.4400	0.1300	11.820	0.8400	0.0300	0.2000		2.7100	100.19	22.000	34.000	103.00		146.00		74.000	26.000	54.000	244.00	2,a,*t 2hu		112
AU02462	75.00	78.00	3.00	49.700	16.700	11.360	5.4200	2.5900	0.0250	9.6500	0.7600	0.0400	0.1800		3.2300	99.66	21.000	49.000	63.000		114.00		113.00	27.000	41.000	375.00	2,b,*t 3h		119
AU02463	99.00	102.00	3.00	52.350	13.900	10.040	6.0600	2.3300	0.1500	12.130	1.0600	0.0600	0.1600		1.7300	99.97	27.000	39.000	44.000		218.00		123.00	38.000	30.000	197.00	2,a,p,*2hv		111



Sample	From (M)	To (M)	Leng. (M)	AG PPM	AU PPB	CO PPM	PB PPM	S PPM	V PPM	AS PPM	SN PPM	CD PPM	SB PPM	BI PPM	SE PPM	HP PPM	TA PPM	W PPM	MO PPM	TH PPM	U PPM	B PPM	CS PPM	LA PPM	CE PPM	ND PPM	SM PPM	EU PPM	GD PPM	
AU02459	17.32	17.73	0.41	0.1000		11.000	1.0000	0.1300	61.000	2.5000	10.000	0.1000	2.5000	2.5000			10.000	10.000	3.0000					53.000						
AU02460	21.00	24.00	3.00	0.4000		14.000	1.0000	0.0400	63.000	2.5000	10.000	0.3000	2.5000	2.5000			5.0000	10.000	2.0000					2.0000						
AU02461	45.00	48.00	3.00	0.3000		17.000	1.0000	0.0300	63.000	2.5000	10.000	0.2000	2.5000	2.5000			5.0000	10.000	2.0000					2.0000						
AU02462	75.00	78.00	3.00	0.1000		16.000	1.0000	0.0300	65.000	2.5000	10.000	0.1000	2.5000	2.5000			5.0000	10.000	2.0000					1.0000						
AU02463	99.00	102.00	3.00	0.3000		15.000	1.0000	0.0700	95.000	2.5000	10.000	0.2000	2.5000	2.5000			5.0000	10.000	2.0000					2.0000						

Sample	From (M)	To (M)	Leng. (M)	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	NB PPM	HG PPB	MGO#	CA/AL	NI/MGO	ISHIKW	ZN/NA2
AU02459	17.32	17.73	0.41										22.000	371.00	5.0000					2.5000		0.5000			0.41	0.25	6	25	15
AU02460	21.00	24.00	3.00										5.0000	909.00	1.0000					9.0000		0.5000			0.52	0.85	3	30	13
AU02461	45.00	48.00	3.00										7.0000	536.00	2.0000					9.0000		0.5000			0.57	0.79	8	33	18
AU02462	75.00	78.00	3.00										8.0000	587.00	1.0000					10.000		0.5000			0.57	0.68	8	28	10
AU02463	99.00	102.00	3.00										5.0000	427.00	1.0000					13.000		4.0000			0.54	0.72	5	33	16

HOLE NUMBER: CAS11-02

FALCONBRIDGE LIMITED  
DRILL HOLE RECORD

DATE: 12/16/2000  
IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: SAGANASH PROJECT  
PROJECT NUMBER: 291  
CLAIM NUMBER: 1226736  
LOCATION: Casselman Twp

PLOTTING COORDS GRID: UTM  
NORTH: 5435606.60N  
EAST: 394807.80E  
ELEV: 290.00

ALTERNATE COORDS GRID: Cas11 Grid  
NORTH: 120+ 0N  
EAST: 95+20E  
ELEV: 290.00

COLLAR DIP: -45° 0' 0"  
LENGTH OF THE HOLE: 147.00M  
START DEPTH: 0.00M  
FINAL DEPTH: 147.00M

COLLAR ASTRONOMIC AZIMUTH: 305° 0' 0"

GRID ASTRONOMIC AZIMUTH: 305° 0' 0"

DATE STARTED: 10/15/2000  
DATE COMPLETED: 10/16/2000  
DATE LOGGED: 10/17/2000  
COLLAR SURVEY: NO  
ROD LOG: NO  
HOLE MAKES WATER: NO

PULSE EM SURVEY: NO  
PLUGGED: NO  
HOLE SIZE: BQ

CONTRACTOR: Forage Benoit  
CASING: 13m pulled  
CORE STORAGE: Kidd Creek Minesite  
UTM COORD.:

COMMENTS : Tested a 16mhos conductor + weak coincident mag high; intersected weakly sulphidic OIF + 5ag  
WEDGES AT:

DIRECTIONAL DATA:

Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
45.00	° ' " -43° 0' 0"	-43° 0' 0"	A	OK	Acid Tests	-	-	-	-	-	-
105.00	° ' " -40°30' 0"	-40°30' 0"	A	OK		-	-	-	-	-	-
145.00	° ' " -40°30' 0"	-40°30' 0"	A	OK		-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

2.20854

HOLE NUMBER: CAS11-02

DRILL HOLE RECORD

LOGGED BY: G. De Schutter

PAGE: 1

*G. De Schutter*  
Jan 19/01



42G01SW2008 2.20854 CASSELMAN 020

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 13.00	<{job}> Overburden	Overburden 13m of BW+NW casing put down in muskeg + sandy soil; both casings pulled successfully				
13.00 TO 33.89	<2,a,*t> Fel-Chl-Bi-Qt schist	FINE GRAINED FELDSPAR-CHLORITE-BIOTITE-QUARTZ SCHIST (mafic metavolcanic)  -unit is finely mottled light to medium grey, deep green-black and black with frequent mm to cm scale milky white to sugary white fracture fills and bands  -rock is fine to rarely medium grained, relatively hard, non-to-weakly magnetic and well foliated  -primary foliation (mineral schistosity) is well developed and is imparted by the alignment of platy minerals (chlorite and biotite)  -relict quartz and quartz+carbonate veins range in size from hairline (<1mm) to 2 cm wide, usually follow the main schistosity but may cross cut the foliation at various angles and impart a striped look to the core  -minor intervals appear brecciated with 0.5-2cm sized jigsaw shaped pieces of mafic schist cemented together by sugary quartz +/- carbonate material over 10-20cm  -schistosity varies between 55 and 75° to CA  #19.90-20.00#<{S2=65°}> #31.50-31.55#<{S2=55°}> #33.65-33.70#<{S2=75°}>  -lower contact is sharp but irregular (approx 80° to CA)		-weak pervasive and fracture controlled carbonitization throughout unit  -weak to moderate fracture controlled silicification throughout  -weak fracture controlled k-spar, hematite and quartz veinlettes between 23-24m	-very trace blebby pyrrhotite throughout unit; few euhedral Py cubes to 2mm in size noted	-fairly good core recovery (RQD=80%)
33.89 TO 50.13	<5,r,<OIF>> Oxide facies iron formation	OXIDE FACIES BANDED IRON FORMATION  -interval is banded to striped waxy medium grey, creamy green-beige with few cm sized dark green bands that may contain irregularly shaped pink		-very weak disseminated carbonitization of the chert layers  -all other "alteration" is a product of lower amphibolite grade metamorphism (grunerite, chlorite,	41.24-41.40m: 10% stringer and banded pyrrhotite with minor blebby pyrite at the brecciated (with OIF) uphole contact	good core recovery for this interval (RQD=80%)  moderately strong sulphide conductor from 41.24-41.40m

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		<p>knots to 1cm in size</p> <p>-the waxy medium grey bands (50% of unit) are composed almost entirely of finely recrystallized chert with minor amounts of Fe-silicates (amphiboles, chlorite) and trace dots of magnetite and range in thickness from &lt;1cm to 30cm; the creamy green-beige bands (40% of unit) and laminae are composed primarily of fibrous to radiating mats of Fe-rich amphibole (probably grunerite) that contain up to 30% finely disseminated magnetite and range in thickness from &lt;0.5cm to 7cm; the remainder of the unit (10%) comprises dark green bands and zones of chlorite to 5cm in thickness that may contain up to 40% irregularly shaped pale pink garnets (almandine); occasionally the garnets are spatially associated with the grunerite-magnetite layers</p> <p>-banding (bedding) is mostly chaotic and ranges from 45 to 75° to CA but averages approximately 55° to CA</p> <p>36.72-37.72m: finely mottled black and dark grey, fine grained, moderately soft (biotite rich), non-magnetic and weakly foliated mafic dyke (flow?) with a sharp uphole contact @ 90° to CA and brecciated lower contact (if it is a flow, the contact relationships with the hosting OIF suggest "tops" is uphole); dyke contains very trace sulphides #36.72-37.72#7,a,m#</p> <p>38.00-38.40m: excellent evidence for deformation of the BIP with "M" folds and isoclinal fold noses</p> <p>41.24-41.82m: same dyke (flow?) rock as 36.72-37.72m except this interval contains 7% irregular garnet porphyroblasts to 1.5cm in size and has a brecciated pyrrhotite-rich uphole contact that is moderately conductive</p> <p>#38.90-38.95#S2=55°# #40.35-40.40#S2=70°#</p>			<p>garnet)</p> <p>#41.24-41.40#PoF10#PyD3#</p>	<p>36.72-37.72m: mafic dyke has icelandite-like chemistry (1.11% TiO2, 0.61% P2O5, 159ppm Zr).</p>

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		46.82-48.20m: mixed zone of QIF (silicate facies iron formation) and a sediment with a more detrital component (wacke)				
		48.20-49.43m: garnetiferous silicate facies banded iron formation; non-magnetic, garnet makes up 35-40% of the unit with the remainder being composed of finely recrystallized chert, chlorite and grunerite				
		49.43-50.13m: dark green, fine grained, weakly magnetic, weakly foliated, garnet bearing mafic rock (dyke) with sharp and irregular contacts				
		-lower contact is intruded by the mafic dyke; on the downhole side of the mafic intrusive, the sediment has a much larger clastic component (wacke)				
50.13 TO 66.31	<5,a,>C,<WC K> Greywacke	WEAKLY CARBONACEOUS AND SULPHIDIC GREYWACKE  -banded to striped charcoal grey and waxy medium grey  -carbonaceous zones themselves are non-conductive, but sulphide enriched carbonaceous zones are moderately to strongly conductive (e.g. 52.16-52.19m; 52.80-52.90m; 53.25-53.28m; 61.50-61.60m; 62.90-63.00m; 64.72-64.80m)  56.18-57.16m: sub interval of what appears to be moderately sulphidized QIF (silicate facies iron formation); finely disseminated recrystallized pyrite locally to 35% within the Fe-silicate bands  #51.45-51.50#<S2=50°> #57.35-57.40#<S2=65°> #66.20-66.25#<S2=63°>  59.23-60.30m: sulphidic diorite dyke with a chilled upper contact and a broken lower contact  -lower contact is gradational and is marked by		-no appreciable alteration seen		
					-overall, the sedimentary unit has approximately 5-7% sulphides (pyrrhotite +/- pyrite) as fine disseminations and laminae, but has local concentrations up to 20% over small intervals (5cm)	broken core/rubble from 60-61m (lost core?)  poor RQD from 60-65m  multiple narrow sulphidic conductors within the carbonaceous sediment.
					56.18-57.16m: finely disseminated and recrystallized pyrite locally to 35% over 10cm within the Fe-silicate bands of a QIF  #56.18-57.16#<PyD20-35%>	
					59.23-60.30m: 5-7% finely disseminated pyrrhotite within a diorite dyke	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
66.31 TO 71.85	<S,<QIF>> Chl-Gt-Qt-B i iron formation	<p>the appearance of garnet porphyroblasts and the disappearance of carbonaceous clastic material</p> <p>POORLY DEVELOPED SILICATE FACIES BANDED IRON FORMATION</p> <p>-unit is coarsely banded to striped dark green-black, green-grey and milky to creamy white with frequent irregular to subrounded orangy-pink knots</p> <p>-relatively hard, medium to coarse grained, weakly magnetic (relict magnetite?)</p> <p>-poorly developed banding is imparted by intercalated layers of chlorite+biotite+garnet and waxy grey recrystallized chert layers; wider zone of biotite rich material may indicate a more clastic component to the sediment (e.g. 69.50-69.90m)</p> <p>-garnet porphyroblasts (almandine) are irregular in shape, range in size from 3mm to 1.5cm and generally overprint the foliation developed within the Fe-silicate rich layers</p> <p>-relict quartz and quartz+feldspar veins are rotated into the bedding fabric (=S2).</p> <p>bedding/layering (S2) is relative steep</p> <p>  69.30-69.35  &lt;S2=70°&gt;</p> <p>lower contact is slightly irregular and sharp but faint @60° to CA and is marked by the disappearance of garnet</p>		<p>no evidence of VMS style alteration throughout unit</p>	<p>  59.23-60.30  &lt;PoD5-7%&gt;</p> <p>-nil</p>	<p>excellent core recovery for this interval (RQD=95%)</p>
71.85 TO 147.00	<2,a,*t> Chl-Bi-Fel- (Gt) schist	<p>CHLORITE-BIOTITE-FELDSPAR-(GARNET) SCHIST (mafic metavolcanic)</p> <p>-unit is finely mottled to spotted dark green, black and medium grey-green</p> <p>-fine grained to spotted, relatively hard, non-magnetic and moderately well foliated</p> <p>-between 83 and 91.50m, the core loses its well</p>		<p>-weak patchy silicification + carbonitization throughout unit</p> <p>110.36-110.84m: zone of milky white quartz+carbonate veining with moderate garnet development</p>	<p>Geochem sample AU06479 (74.00-74.37m) ran anomalous Cu (5670ppm) and Au (269ppb)</p> <p>74.37-75.05m: 2-3% finely disseminated pyrrhotite within a diorite dyke</p> <p>  74.37-75.05  &lt;PoD2-3%&gt;</p> <p>76.90-77.42m: 5% finely disseminated</p>	<p>very good core recovery for this unit</p>

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		developed schistosity and takes on a more spotted texture (primary igneous?)			pyrrhotite within mafic schist   76.90-77.42  *PoD5*	
		74.37-75.05m: fine grained, very weakly foliated weakly sulphidic diorite (?) dyke with sharp but irregular contacts (chilled margins over 5cm)			86.06-87.00  *PoD2-3%PyD2-3*	
		93.70-94.86m: glassy white quartz vein (barren)			126.39-128.58m: fine to medium grained diorite dyke that contains a hard, blebby to dendritic metallic silver mineral (arsenopyrite?) to 2% and trace amounts of blebby pyrrhotite	
		schistosity fluctuates mildly but averages approximately 55° to CA				
		119.60-138.50m: occurrence of 1mm to 2cm irregularly shaped (ratty) orangy-pink garnet porphyroblasts				
		126.39-128.58m: mottled creamy grey and dark grey, fine to medium grained, massive (very weakly foliated), non-to-very weakly magnetic, relatively hard diorite dyke with sharp and irregular contacts (chilled margins over 5cm)				(mafic) dyke @ 26.39-128.58m has felsic WR chemistry (sample AU02469), maybe albitized too.
		126.39-128.58  *7,a,m*				
		99.30-99.35  *S2=57°*				
		110.80-110.85  *S2=45°*				
		132.45-132.50  *S2=55°*				
		146.60-146.65  *S2=60°*				
147.00 TO 147.00	*EOH* End of Hole	24 boxes of BQ core casing pulled				



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
AU06460	36.40	36.70	0.30	175	1200	15	30	17	0.4			<5	<5												OIF	bracket
AU06461	36.70	37.72	1.02	126	176	45	44	21	0.6			<5	<5								1	1			7, a, m	
AU06462	37.72	38.39	0.67	141	222	116	21	24	0.3			<5	<5												OIF	bracket
AU06463	40.97	41.24	0.27	598	216	62	27	7	1.3			<5	<5												OIF	Bracket
AU06464	41.24	41.40	0.16	225	315	9	31	14	1.2			<5	<5								10	3			7, OIF, Bx	
AU06465	41.40	41.86	0.46	46	448	24	11	10	0.3			<5	<5												7am	bracket
AU06466	41.86	42.26	0.40	72	124	4	9	17	0.2			<5	<5												OIF	bracket
AU06467	49.43	50.13	0.70	255	320	24	36	3	0.5			<5	<5												7, a, m	bracket
AU06468	50.13	50.88	0.75	321	408	6	30	14	0.7			<5	<5								6	3			5, a, <WCK>	
AU06469	50.88	51.37	0.49	269	596	11	38	21	0.8			<5	<5								3	2			5, a, <WCK>	
AU06470	51.37	52.31	0.94	314	1610	20	43	10	0.9			<5	<5								4	3			5, a, <WCK>	
AU06471	52.31	53.49	1.18	362	1480	25	51	27	0.9			<5	<5								8	4			5, a, <WCK>	
AU06472	53.49	53.85	0.36	230	736	21	22	14	0.6			<5	<5								1				5, a, <WCK>	bracket
AU06473	55.75	56.18	0.43	240	1030	10	21	10	0.4			<5	<5												5, a, >C, <WCK>	bracket
AU06474	56.18	57.16	0.98	132	488	19	15	3	0.5			<5	<5										35		OIF	sulphidic
AU06475	57.16	57.46	0.30	159	1120	20	39	7	0.6			<5	<5								5				5, a, <WCK>	
AU06476	57.46	57.90	0.44	111	102	16	139	<2	0.4			<5	<5								7				7, a, m	
AU06477	57.90	59.23	1.33	164	1760	14	35	10	0.6			<5	<5												5, a, <WCK>	
AU06478	59.23	60.30	1.07	60	83	3	11	10	0.2			<5	<5								8				7, a, m	
AU06479	74.00	74.37	0.37	5670	193	23	3	269	1.0			<5	<5												2, a, *t	bracket
AU06480	74.37	75.05	0.68	213	35	1	49	7	0.2			<5	<5								3				7, a, m	
AU06481	75.05	75.42	0.37	129	29	1	47	3	0.1			<5	7												2, a, *t	bracket
AU06482	75.60	76.90	1.30	112	28	1	36	7	0.2			<5	7												2, a, *t	bracket
AU06483	76.90	77.42	0.52	109	30	1	37	14	0.1			<5	10								5				2, a, *t	
AU06487	77.42	77.91	0.49	143	17	1	40	7	0.1			7	15												2, a, *t	bracket
AU06484	85.60	86.06	0.46	127	25	1	63	<2	0.2			9	9												2, a, *t	bracket
AU06485	86.06	87.00	0.94	160	39	1	62	7	0.1			<5	10								3				2, a, *t	
AU06486	87.00	87.30	0.30	205	16	1	29	10	0.1			<5	7												2, a, *t	bracket
AU06488	126.00	126.38	0.38	89	83	1	51	3	0.1			<5	<5												2, a, *t	bracket
AU06489	126.38	127.42	1.04	32	76	5	8	<2	0.1			<5	<5								1				7, a, m	Tr Asp?
AU06490	127.42	128.62	1.20	8	45	7	2	<2	0.1			<5	<5								1				7, a, m	
AU06491	128.62	128.90	0.28	69	121	2	56	<2	0.2			<5	<5												2, a, *t	bracket
AU06492	128.90	129.63	0.73	26	75	1	7	<2	0.1			<5	<5								1				7, a, m	
AU06493	129.63	129.93	0.30	67	74	1	46	<2	0.1			<5	<5												2, a, *t	bracket

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	RB PPM	SR PPM	CO2 %	CU PPM	ZN PPM	NI PPM	CR PPM	FIELD NAME	CHEM ID	ALUM
AU02464	18.00	21.00	3.00	48.610	13.790	12.690	5.8300	1.4700	0.1700	12.810	1.0600	0.0150	0.2100		3.8100	100.47	32.000	40.000	56.000		78.000		121.00	33.000	25.000	147.00	2,a,*t	2hv	96
AU02465	36.70	37.72	1.02	45.400	11.250	10.470	7.2400	0.5300	4.2000	12.100	1.1100	0.6100	0.1800		7.0200	100.11	33.000	159.00	1102.0		525.00		55.000	107.00	50.000	468.00	7,a,m	7(h)yB	74
AU02466	75.00	78.00	3.00	50.870	14.680	9.4600	5.4400	1.8300	0.4900	13.620	0.8400	0.0150	0.2700		2.4700	99.99	19.000	39.000	743.00		159.00		98.000	33.000	40.000	337.00	2,a,*t	2hv	125
AU02467	84.00	87.00	3.00	48.140	17.360	10.830	7.2800	2.7500	0.4200	10.390	0.7300	0.1200	0.1600		1.8700	100.05	20.000	57.000	309.00		198.00		181.00	29.000	43.000	371.00	2,b,*t	2hw	124
AU02468	111.00	114.00	3.00	51.030	14.300	8.7200	5.3100	2.7700	0.1000	15.000	1.4500	0.1000	0.1600		1.4100	100.35	42.000	53.000	32.000		114.00		89.000	40.000	36.000	156.00	2,a,*t	2hv	123
AU02469	126.39	128.58	2.19	70.940	15.350	1.4800	0.3500	4.8500	3.0300	2.0300	0.2600	0.0800	0.0400		1.8100	100.22	10.000	178.00	1053.0		461.00		10.000	48.000	8.0000	164.00	7,a,m	9jA	164
AU02470	144.00	147.00	3.00	47.670	10.670	8.8200	6.8600	1.6200	1.3800	15.840	1.6000	0.1200	0.1800		5.2900	100.05	22.000	70.000	535.00		245.00		143.00	62.000	142.00	510.00	2,a,*t	2(h)v	90

Sample	From (M)	To (M)	Leng. (M)	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	SM PPM	EU PPM	GD PPM	
AU02464	18.00	21.00	3.00	0.4000		17.000	1.0000	0.0400	88.000	2.5000	10.000	0.1000	2.5000	2.5000			5.0000	10.000	2.0000					2.0000						
AU02465	36.70	37.72	1.02	0.4000		29.000	28.000	0.0300	161.00	2.5000	10.000	0.4000	2.5000	2.5000			5.0000	10.000	2.0000					34.000						
AU02466	75.00	78.00	3.00	0.1000		23.000	1.0000	0.1000	79.000	2.5000	10.000	0.3000	2.5000	2.5000			5.0000	10.000	2.0000					2.0000						
AU02467	84.00	87.00	3.00	0.1000		16.000	1.0000	0.1700	61.000	2.5000	10.000	0.3000	2.5000	2.5000			5.0000	10.000	1.0000					9.0000						
AU02468	111.00	114.00	3.00	0.1000		20.000	1.0000	0.1700	105.00	2.5000	10.000	0.4000	2.5000	2.5000			5.0000	10.000	2.0000					3.0000						
AU02469	126.39	128.58	2.19	0.1000		2.0000	14.000	0.0900	9.0000	2.5000	10.000	0.1000	2.5000	2.5000			5.0000	10.000	2.0000					41.000						
AU02470	144.00	147.00	3.00	0.4000		37.000	1.0000	0.1800	108.00	2.5000	10.000	0.3000	2.5000	2.5000			5.0000	10.000	4.0000					4.0000						

Sample	From (M)	To (M)	Leng. (M)	DY PPM	BR 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	NB PPM	HG PPB	MGO#	CA/AL	NI/MGO	ISHIKW	ZN/NA2
AU02464	18.00	21.00	3.00										10.000		686.00	1.0000				12.000			4.0000		0.52	0.92	4	30	22
AU02465	36.70	37.72	1.02										39.000		1087.0	7.0000				10.000			11.000		0.59	0.93	7	51	202
AU02466	75.00	78.00	3.00										12.000		903.00	1.0000				11.000			2.0000		0.49	0.64	7	34	18
AU02467	84.00	87.00	3.00										13.000		400.00	1.0000				9.0000			2.0000		0.63	0.62	6	36	11
AU02468	111.00	114.00	3.00										7.0000		427.00	1.0000				12.000			5.0000		0.46	0.61	7	32	14
AU02469	126.39	128.58	2.19										4.0000		322.00	1.0000				2.5000			0.5000		0.29	0.10	23	35	10
AU02470	144.00	147.00	3.00										22.000		699.00	2.0000				8.0000			5.0000		0.51	0.83	21	44	38



Declaration of Assessment Work Performed on Mining Land

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

Transaction Number (office use)

W0160.00016

Assessment Files Research Imaging



42G01SW2008 2.20854 CASSELMAN 900

ubsection 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, the assessment work and correspond with the mining land holder. Questions about this Declaration should be directed to the Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario N2T 8S1.

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: Field Name, Value. Includes Name (FALCONBRIDGE LIMITED), Address (Suite 1200 - 95 Wellington Street West, Toronto, Ontario, M5H 2V4), Client Number (130679), Telephone Number ((416) 956-5700), Fax Number ((416) 956-5757).

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

Form with checkboxes for Geotechnical, Physical, and Rehabilitation work. Includes Work Type (Diamond Drilling 2 holes (303m total)), Dates Work Performed (Day 17, Month 10, Year 2000 to Day 18, Month 10, Year 2000), Township/Area (Casselman Township), 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.

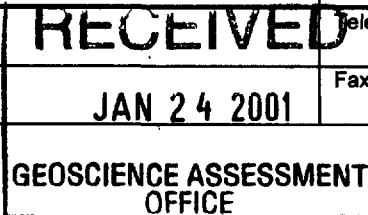
3. Person or companies who prepared the technical report (Attach a list if necessary)

Table with 2 columns: Field Name, Value. Includes Name (Gary De Schutter - Falconbridge Limited), Address (PO Box 1140, Kidd Creek Minesite, Timmins, Ontario, P4N 7H9), Telephone Number ((705) 264 - 5200 ext. 8231), Fax Number ((705) 267 - 8874).

4. Certification by Recorded Holder or Agent

I, Gary De schutter, 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 (Gary De Schutter), Date (Jan 19/01), Agent's Address (PO Box 1140, Timmins, Ontario, P4N 7H9), Telephone Number ((705) 264 - 5200 ext. 8231), Fax Number ((705) 267 - 8874).



#3154

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

W0160.00016

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	
1	P1226736	12	\$13,203	\$4,800	\$7,131	\$1,272
2	P1232223	16	\$0	\$5,285	\$0	\$0
3	P1226741	16	\$0	\$1,846	\$0	\$0
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
<b>Column Totals</b>		<b>44</b>	<b>\$13,203</b>	<b>\$11,931</b>	<b>\$7,131</b>	<b>\$1,272</b>

I, GARY DE SCHUTTER, 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

Date

Jan 19/01

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.
- 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):

20854

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

**RECEIVED**  
JAN 24 2001  
GEOSCIENCE ASSESSMENT  
OFFICE

0241 (03/97)

Deemed Approved Date

Date Notification Sent

Date Approved

Total Value of Credit Approved

Approved for Recording by Mining Recorder (Signature)

#3154



Statement of Costs for Assessment Credit

Transaction Number (office use) WU60. 00016

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, Geologist supervision, Assay samples, Associated Costs (e.g. supplies, mobilization and demobilization), Core box lids, Transportation Costs, Truck/ATV fuel, Food and Lodging Costs, Room and Board, and Total Value of Assessment Work \$13,203.

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. If this situation applies to your claims, use the calculation below:

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

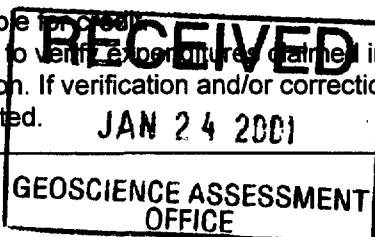
Note:

- 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. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, GARY DE SCHUTTER, 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 SENIOR FIELD GEOLOGIST I am authorized to make this certification. (recorded holder, agent, or state company position with signing authority)



Signature [Handwritten Signature] Date Jan 19/01

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

February 8, 2001

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

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

Visit our website at:  
[www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm](http://www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm)

Dear Sir or Madam:

**Submission Number:** 2.20854

**Status**

**Subject: Transaction Number(s):** W0160.00016 Approval

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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 **JIM MCAULEY** by e-mail at [james.mcauley@ndm.gov.on.ca](mailto:james.mcauley@ndm.gov.on.ca) or by telephone at (705) 670-5858.

Yours sincerely,



ORIGINAL SIGNED BY  
Lucille Jerome  
Acting Supervisor, Geoscience Assessment Office  
Mining Lands Section



# Work Report Assessment Results

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**Submission Number:** 2.20854

**Date Correspondence Sent:** February 08, 2001

**Assessor:** JIM MCAULEY

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<b>Transaction Number</b>	<b>First Claim Number</b>	<b>Township(s) / Area(s)</b>	<b>Status</b>	<b>Approval Date</b>
W0160.00016	1226736	CASSELMAN	Approval	February 08, 2001

**Section:**  
16 Drilling PDRILL

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

**Correspondence to:**

Resident Geologist  
South Porcupine, ON

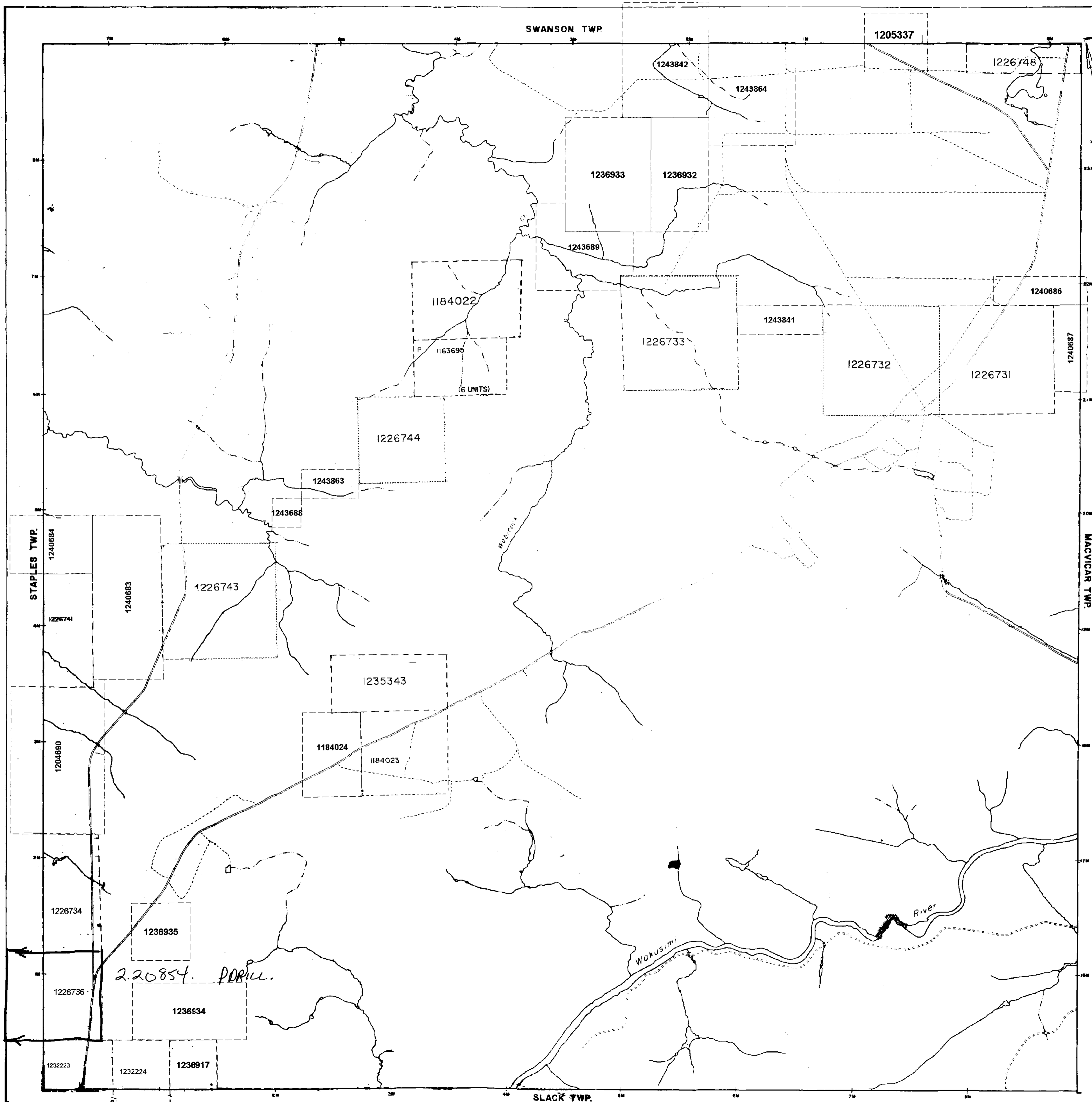
**Recorded Holder(s) and/or Agent(s):**

Gary Deschutter  
TIMMINS, ONTARIO, CANADA

Assessment Files Library  
Sudbury, ON

FALCONBRIDGE LIMITED  
TORONTO, ONTARIO

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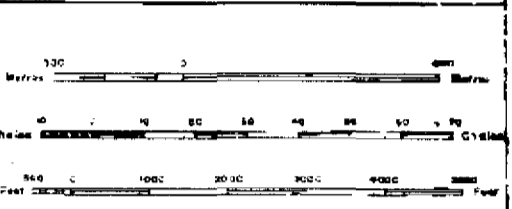
**LEGEND**

HIGHWAY AND ROUTE NO.	—
OTHER ROADS	—
TRAILS	—
SURVEYED LINES	—
TOWNSHIPS, BASE LINES, ETC.	—
LOTS, MINING CLAIMS, PARCELS, ETC.	—
UNSURVEYED LINES	—
LOT LINES	—
PARCEL BOUNDARY	—
MINING CLAIMS ETC.	—
RAILWAY AND RIGHT OF WAY	—
UTILITY LINES	—
NON-PERENNIAL STREAM	—
FLOODING OR FLOODING RIGHTS	—
SUBDIVISION OR COMPOSITE PLAN	—
RESERVATIONS	—
ORIGINAL SHORELINE	—
MARSH OR MUSKIEG	—
MINES	—
TRAVERSE MONUMENT	—

**DISPOSITION OF CROWN LANDS**

TYPE OF DOCUMENT	SYMBOL
PATENT SURFACE & MINING RIGHTS	○
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	○
LEASE, SURFACE & MINING RIGHTS	○
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	○
LICENSE OF OCCUPATION	○
ORDER-IN-COUNCIL	○
RESERVATION	○
CANCELLED	○
SAND & GRAVEL	○

LAND USE PERMITS FOR COMMERCIAL TOURISM, OUTPOST CAMPS, etc.  
 NOTE: MINING RIGHTS IN PARCELS RESERVED PRIOR TO 1847, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000.

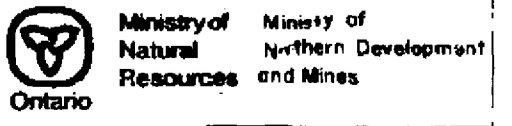


**NOTES**



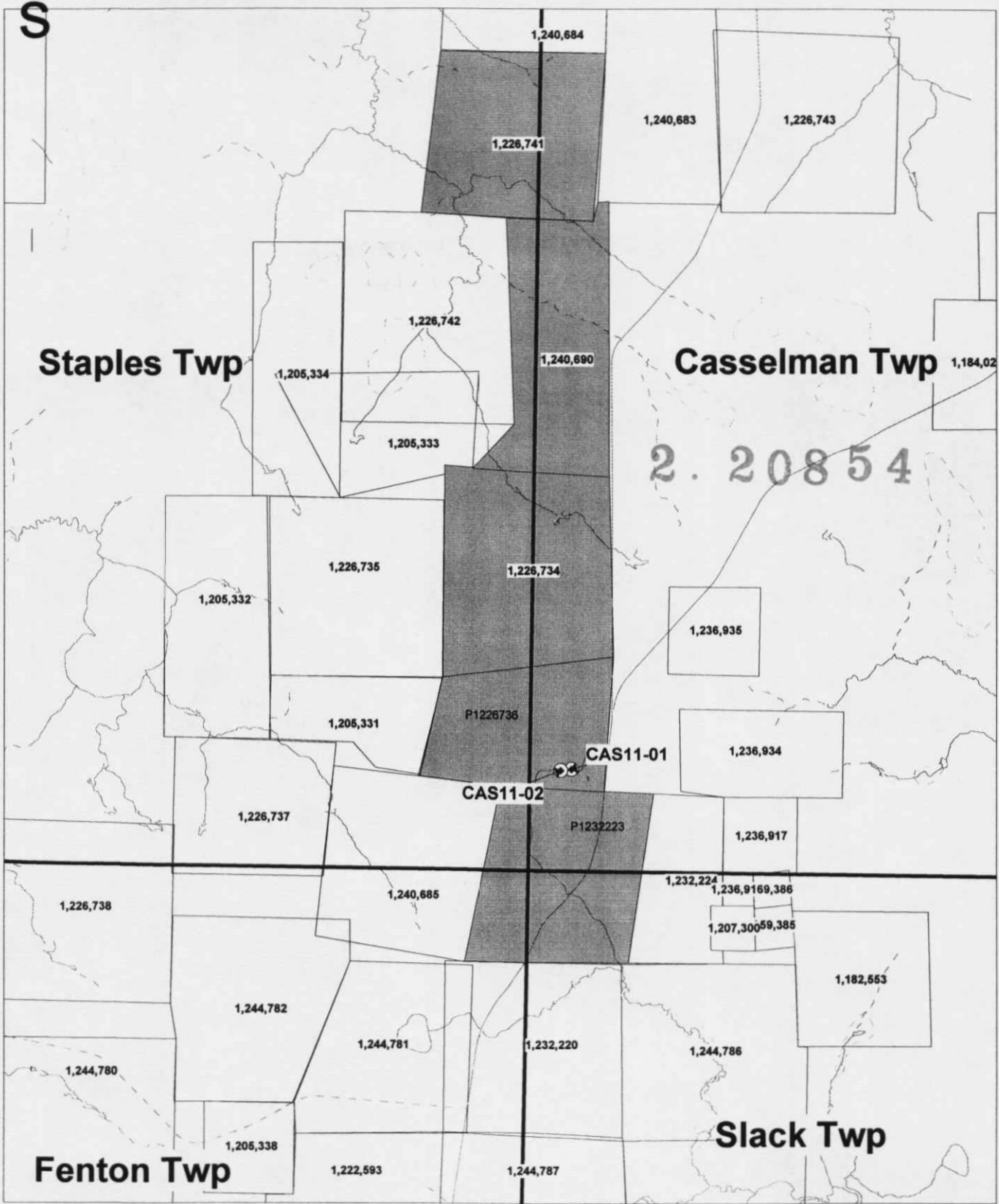
THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

**TOWNSHIP**  
**CASSELMAN**  
 H.B.S. ADMINISTRATIVE DISTRICT  
**KAPUSKASING**  
 MINING DIVISION  
**PORCUPINE**  
 LAND TITLES / REGISTRY DIVISION  
**COCHRANE**



DATE: OCTOBER 1988  
 DRAWN BY: [Signature]  
 CHECKED BY: [Signature]  
**G-862**

S



42G01SW2008 2.20854 CASSELMAN

**RECEIVED**  
 JAN 24 2001  
 GEOSCIENCE ASSESSMENT  
 OFFICE



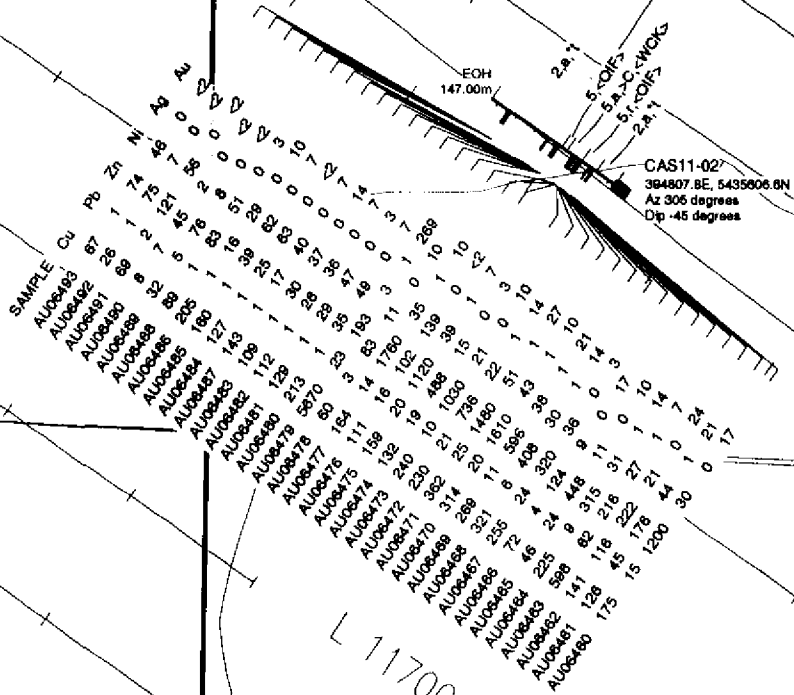
<b>FALCONBRIDGE LIMITED</b>		
Exploration Division	Timmins, ONTARIO	
Location Map for DDH CAS11-01 and Assessment Credit Distribution		
Espenak Project (PM 291)		
ISSUED: A.S.T.	DATE: 08/08	BY: [Signature]
ISSUED: A.S.T.	DATE: 08/08	BY: [Signature]
ISSUED: A.S.T.	DATE: 08/08	BY: [Signature]
ISSUED: A.S.T.	DATE: 08/08	BY: [Signature]
		<b>1:5,000</b>

P1226736

Staples Township

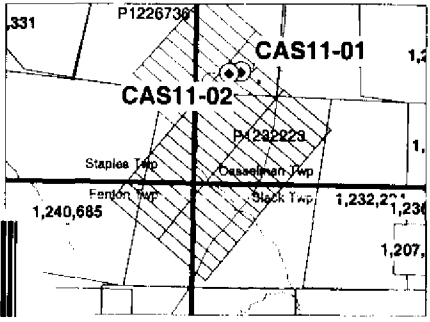
Casselman Township

TL 9500 E



P1232223

L 11700 N  
L 11600 N



**FALCONBRIDGE LIMITED**  
 Exploration Division Toronto, ONTARIO

**Location Map for DDH CAS11-02**

Segonash Project (PH 281)

Scale: 1:5,000



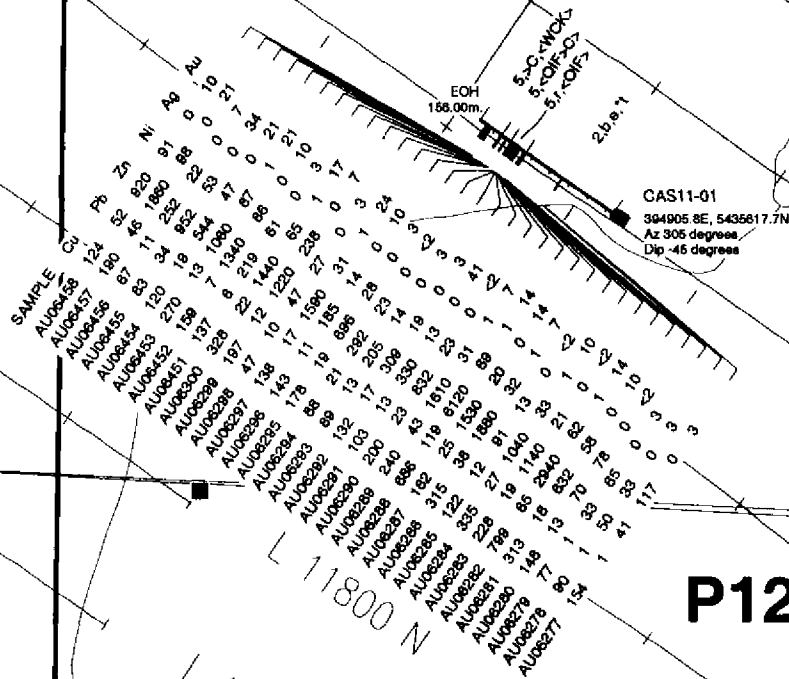
P1226736

Staples Township

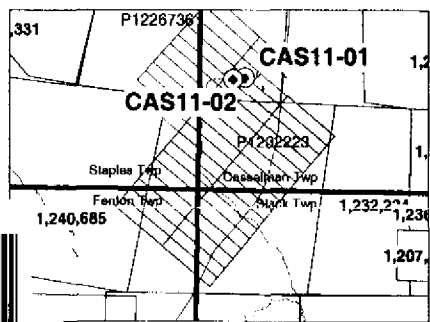
Casselman Township

TL 9500 E

L 12300 N  
12200 N  
12100 N



P1232223



**FALCONBRIDGE LIMITED**

Exploration Division Toronto, ONTARIO

**Drill Hole Location Map CAS11-01**

Sagehenah Project (PN 261)

Scale: 1:5,000



TIMMINS EXPLORATION - AMENDED ROCK LEGEND - v8.0

1. MAIN ROCK DIVISIONS

- 15 To be Announced
- 14 Huronian Supergroup
- 13 Metamorphic (Unknown)
- 12 Gneiss
- 11 Schist
- 10 Diabase
- 9 Felsic Intrusive
- 8 Intermediate Intr. Rocks
- 7 Mafic Intrusive Rocks
- 6 Ultramafic Intr. Rocks
- 5 Sedimentary Rocks
- 5.s Sulphide (>40%)
- 4 Felsic Volcanic Rocks
- 3 Intermediate Volcanic Rocks
- 3.C Heterolithic Volcanic Rocks
- 2 Mafic Volcanic rocks
- 1 Ultramafic Volcanic Rocks

2. TEXTURAL/GEOCHEMICAL MODIFIERS

a	Fine Grained	A	Primitive (Y<20)
b	Medium Grained	B	Evolved (Y>20<60)
bx	Breccia		
c	Coarse Grained	C	Heterolithic
d	Quartz-Feldspar Phyc	D	Feldspar Phyc
e	Amygdaloidal/Vesicular	E	Chert
f	Primary Fragmentals	F	Wacke
g	Graphitic/Argillaceous	G	Leucoxene Bearing
h	Tholeiitic	H	Basaltic Komatiite
i	Alkalic		
j	Calc-Alkalic	J	Pyroxenite
k	Komatiitic	K	Net Textured
l	Flows (banded)	L	Peridotite
m	Massive	M	Dunite
n	Varfolitic/Spherulitic	N	Ophitic
p	Pillowed	P	Porphyritic
q	Quartz Phyc	Q	
r	Oxide Iron Formation	R	Polysutured
s	Sulphides, Exhalites	S	Fractured
t	Pyroclastic	T	Gabbroic Textured
u	High Mg	U	Pyroxene Spinifex
v	High Fe	V	Olivine Spinifex
w	High Al	W	Skeletal/Crescumulate
x	Andesite	X	Adcumulate
y	Icelandite	Y	Mesocumulate
z	Highly Evolved (Y>60)	Z	Orthocumulate

**ROCK NAMES MUST HAVE ALL MODIFIERS  
COMMA DELIMITED AND CAN BE NO LONGER  
THAN 15 CHARACTERS, COMMAS INCLUDED.  
Example: 3,\*y,d,<DAC>,\*t**

5. MINERALOGICAL NAMES

Ak	Actinolite	Fc	Fuchsite	Pn	Pentlandite
Alb	Albite	Gn	Galena	Px	Pyrite
Al	Almandine	Gt	Garnet	Px	Pyroxene
Am	Amphibolite	VG	Gold	Po	Pyromotite
Ah	Anhydrite	Gf	Graphite	Qt	Quartz
Ad	Andalusite	GS	Gravel & sand	Rc	Rhodochrosite
Ay	Anthophyllite	Gyp	Gypsum	Ru	Rutile
Ap	Apatite	Hem	Hematite	Sr	Serpentine
Ar	Argentite	Hb	Hornblende	Sc	Sericite
Asp	Arsenopyrite	Hy	Hypersthene	Sh	Scheelite
Asb	Asbestos	Il	Ilmenite	Sid	Siderite
Aug	Augite	I-F	Iron Formation	Sil	Silica
Az	Azurite	Jr	Jarosite	Slm	Silliminite
Ba	Barite	Ky	Kyanite	Sps	Spessartite
bl	Bismuthite	Ls	Limestone	Sph	Sphalerite
Bi	Biotite	Lm	Limonite	Ti	Sphene (Titanite)
Bo	Bornite	Mag	Magnetite	Ag	Silver
Ca	Calcite	Mc	Malachite	Sp	Spinel
Cn	Chalcedony	Ma	Marcasite	Spd	Spodumene
Cc	Chalcocite	Mi	Mica	St	Staurolite
Cp	Chalcopyrite	Mk	Microcline	Sb	Stibnite
Chl	Chlorite	Ml	Millerite	Sul	Sulphides
Ch>	Chloritoid	Mo	Molybdenite	S-M	Mass.Sulphides
Cr	Chromite	Mu	Muscovite	S-D	Diss.Sulphides
Cpx	Clinoxyroxene	Ne	Nephele	Tk	Talc
Co	Cobalt Minerals	Nc	Naccolite	Te	Telluride
Cv	Covellite	Ni	Nickel minerals	Tt	Tetrahdrite
Ct	Cordierite	Ov	Olivine	Ta-Cl	Tantalite-Columbite
Dp	Diopside	Or	Orthoclase	Tl	Tourmaline
Dol	Dolomite	Opx	Orthopyroxene	Tr	Tremolite
Epi	Epidote	Pl	Phlogopite	Wo	Wollastonite
Fel	Feldspar	Pg	Plagioclase	Zr	Zircon
Fl	Fluorite				

3. ALTERATION MODIFIERS

Ab	Albitization
Bl	Bleached
C>	Carbonaceous
Cb	Carbonatization
Ch	Chloritization
Ep	Epidotization
F>	Iron Carbonatization
He	Hematization
K>	Potassic Alteration
Ka	Kaolinitization
Rs	Rust Stained
Se	Sericitization
Si	Silicification
Sr	Serpentinization
Tc	Talc-Carbonatization
Tk	Talc

4. TEXTURAL/STRUCTURAL MODIFIERS

*a	Tuff (67% <2mm)	*n	Graded Bedding
*b	Lapilli Tuff (2-64mm)	*o	Cross bedding
*c	Lapillistone (76% <264m)	*p	Fault Gouge
*ct	Cataclastic	*q	Augen
*d	Block (>64mm)/Xenolith	*r	Porphyroblastic
*e	Autoclastic/Hyaloclastic	*s	Hornfels
*f	Thickly Laminated	*l	foliated/sheared
*g	Thinly Laminated	*u	folded
*h	Clast Supported	*v	boudinage
*i	Matrix Supported	*w	fragmental (felsic>mafic)
*j	Granule (grit 2-4mm)	*x	fragmental (mafic>felsic)
*k	Pebble (4-64mm)	*y	Crystal Tuff (>50% of frags)
*l	Cobble (64-256mm)	*z	Lithic Tuff (>50% of frags)
*m	Boulder (>256)		

6. ROCK TYPE / PROTOLITH

<QFG>	Quartzfeldspathic	<PER>	Peridotite	<CHM>	Chem. Precip.
<QTZ>	Quartzite	<SER>	Serpentinite	<SLA>	Slate
<MAR>	Marble	<DUN>	Dunite	<KIM>	Kimberlite
<SKA>	Skarn(Calc-Silicate)	<PRX>	Pyroxenite	<CAR>	Carbonatite
<PHY>	Phyllite	<LMP>	Lamprophyre	<AMP>	Amphibolite
<TON>	Tonalite	<SST>	Sandstone	<MIG>	Migmatite
<SYN>	Syenite	<ARK>	Arkosic sandstone	<PEG>	Pegmatite
<GRA>	Granite	<WCK>	Graywacke	<LEU>	Leucocratic
<MON>	Monzonite	<CGL>	Conglomerate	<MEL>	Melanocratic
<GRD>	Granodiorite	<SLT>	Siltstone	<UNK>	Unknown Protolith
<APL>	Aplite	<ARG>	Mudstone-argillite	<UMF>	Ultramafic
<FEL>	Felsite	<EXH>	Chert/exhalite	<MAF>	Mafic
<QDI>	Quartz Diorite	<QIF>	Silicate IF	<AND>	Andesite
<GAB>	Gabbro	<OIF>	Oxide IF	<DAC>	Dacite
<NOR>	Norite	<SIF>	Sulphide IF	<RYD>	Rhyodacite
<ANT>	Anorthosite	<CIF>	Carbonate IF	<RHY>	Rhyolite
<DIC>	Diorite	<SHA>	Shale	<SCL>	Sulphide Clasts
		<LST>	Limestone	<RWV>	Reworked Volcanic Debris

ALTERATION CODES

FORM	
S	Spots
F	Fracture/vein controlled
P	Pervasive
STRENGTH	
S	Strong
M	Moderate
W	Weak

Example: EpPW = Epidote,Pervasive,Weak

MINERALIZATION CODES

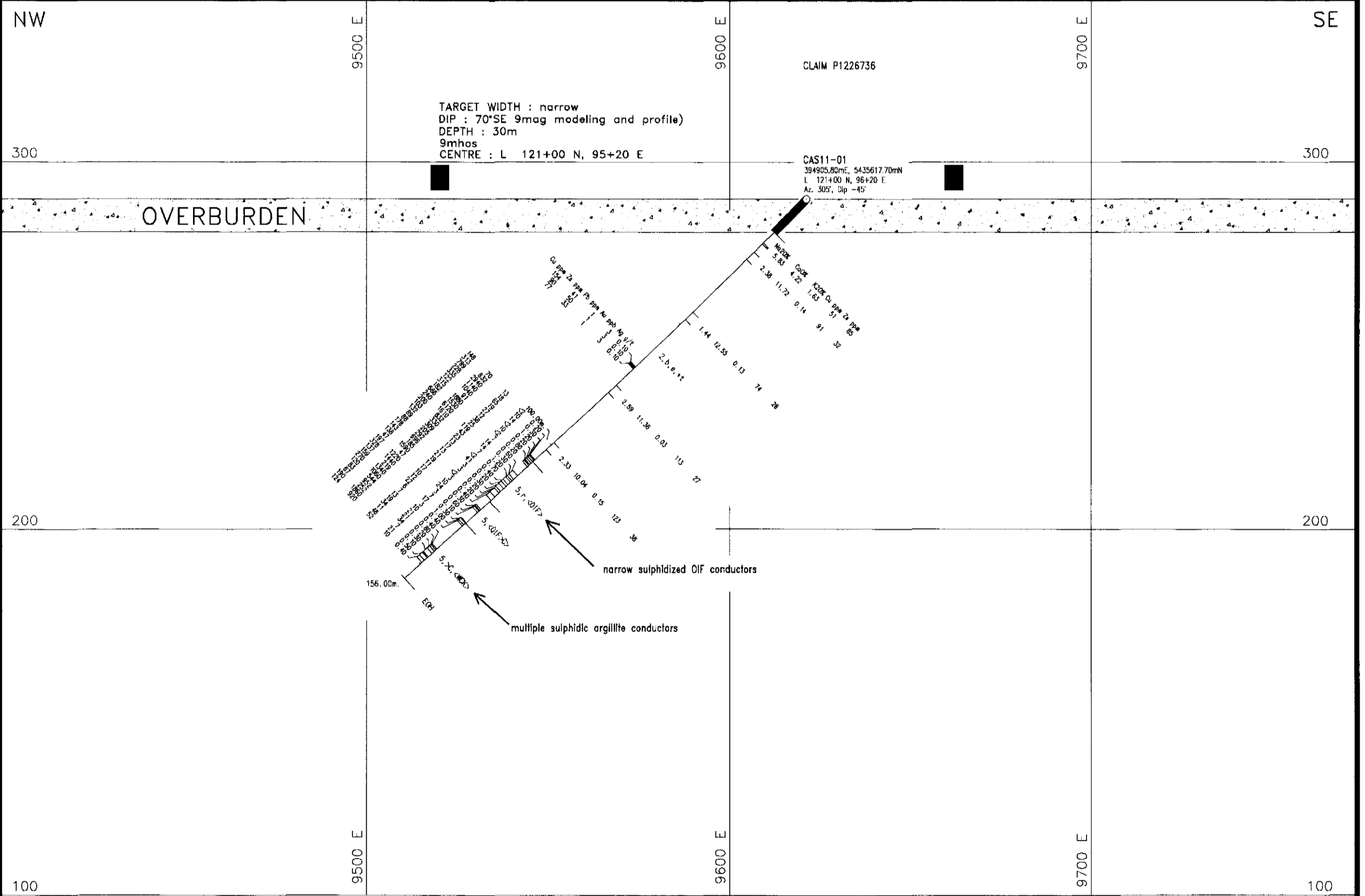
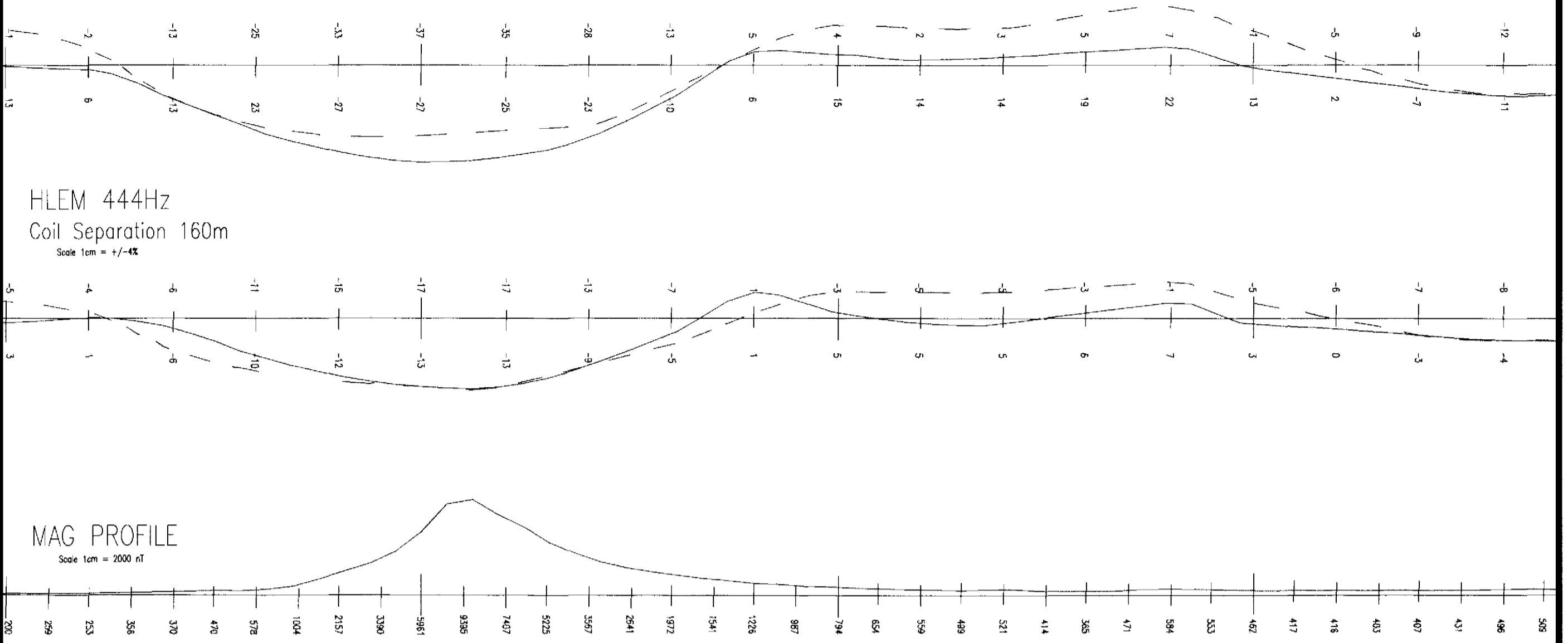
FORM		PERCENTAGE
D	Disseminated/Blobs	Numeric percentage, or percentage range (i.e. 1-3%), must always be specified
F	Fracture/vein controlled	
M	Massive	
B	Bedded	
C	Clasts/Fragments	

Example: CpB3% = Chalcopyrite, Bedded, 3%



HLEM 444Hz  
Coil Separation 160m  
Scale 1cm = +/- 4%

MAG PROFILE  
Scale 1cm = 2000 nT



42G01SW2008 2.20854 CASSELMAN 250

SAGANASH PROJECT ASSAY TABLE CAS11-01

SAMPL. No.	FROM (M)	TO (M)	In-t (M)	Cu ppp	Zn ppp	Pb ppp	Ni ppp	Au ppp	Ag ppp	Pt ppp	Pd ppp	Est. Ni %	Est. Po %	Est. Py %	Est. Cp %	Est. Sp %	Est. Gk %	ROCK T
V006277	67.50	67.80	0.3	154	41	1	117	3	0.1	17	46							2, a, vt
AJ06278	67.80	68.10	0.3	90	50	1	33	3	0.1	14	10							2, a, vt
AJ06279	68.10	68.40	0.3	77	33	1	85	3	0.1	17	41							2, a, vt
AJ06280	106.24	106.55	0.3	148	70	13	78	<2	0.2	<5	<5							2, a, vt
AJ06281	106.55	107.08	0.5	313	832	18	58	10	0.3	<5	<5							2, a, vt
AJ06282	107.08	107.70	0.6	799	2940	85	82	14	1.2	<5	<5							OIF
AJ06283	107.70	108.24	0.5	278	1140	19	21	<2	0.2	<5	<5							OIF
AJ06284	108.24	108.60	0.4	335	1040	27	33	10	0.8	<5	<5							OIF
AJ06285	108.60	109.18	0.6	122	91	12	13	<2	0.2	<5	<5							OIF
AJ06286	112.84	114.54	1.7	328	1590	17	21	24	0.6	<5	<5							OIF
AJ06287	114.54	115.08	0.5	182	1530	25	20	14	0.3	<5	<5							OIF
AJ06288	115.08	115.54	0.5	888	6120	119	68	14	1.2	<5	<5							OIF
AJ06289	115.54	116.51	1.0	240	1810	43	31	7	0.7	<5	<5							OIF
AJ06290	116.51	117.28	0.8	200	832	23	23	<2	0.4	<5	<5							OIF
AJ06291	117.28	118.22	1.0	103	330	13	13	41	0.2	<5	<5							OIF
AJ06292	118.22	119.38	1.1	132	305	17	18	3	0.3	<5	<5							OIF
AJ06293	119.38	120.00	0.6	89	205	13	14	3	0.2	<5	<5							OIF
AJ06294	120.00	121.50	1.5	88	282	21	23	<2	0.2	<5	<5							OIF
AJ06295	121.50	123.00	1.5	178	898	19	28	3	0.4	<5	<5							OIF
AJ06296	123.00	127.30	4.3	143	185	11	14	10	0.3	<5	<5							OIF
AJ06297	127.30	127.81	0.5	328	1590	17	21	24	0.6	<5	<5							OIF
AJ06298	127.81	128.15	0.3	47	47	10	27	3	0.1	<5	<5							OIF
AJ06299	132.05	132.77	0.7	197	1220	12	238	7	0.3	<5	<5							OIF
AJ06300	132.77	133.45	0.7	328	1440	22	65	17	1.0	<5	<5							OIF
AJ06451	133.45	134.00	0.6	137	219	6	61	3	0.4	<5	<5							5, a, xc
AJ06452	143.70	144.10	0.4	159	1340	7	86	10	0.4	<5	<5							5, a, xc
AJ06453	144.10	144.80	0.7	270	1680	13	87	21	0.8	<5	<5							5, a, xc
AJ06454	144.80	145.57	0.8	120	544	30	47	21	0.2	<5	<5							5, a, xc
AJ06455	145.57	147.00	1.5	85	952	34	53	34	0.3	<5	<5							5, a, xc
AJ06456	147.00	147.33	0.3	87	252	11	22	7	0.1	<5	<5							5, a, xc
AJ06457	147.33	148.47	1.1	190	1860	46	98	21	0.5	<5	<5							5, a, xc
AJ06458	148.47	149.40	0.9	124	920	52	91	10	0.4	<5	<5							5, a, xc

LEGEND

- 10 DIABASE
- 9 FELSIC INTRUSIVE ROCKS
- 8 INTERMEDIATE INTRUSIVE ROCKS
- 7 MAFIC INTRUSIVE ROCKS
- 6 ULTRAMAFIC INTRUSIVE ROCKS
- 5 SEDIMENTARY ROCKS
- 4 FELSIC VOLCANIC ROCKS
- 3 INTERMEDIATE VOLCANIC ROCKS
- 2 MAFIC VOLCANIC ROCKS
- 1 ULTRAMAFIC VOLCANIC ROCKS

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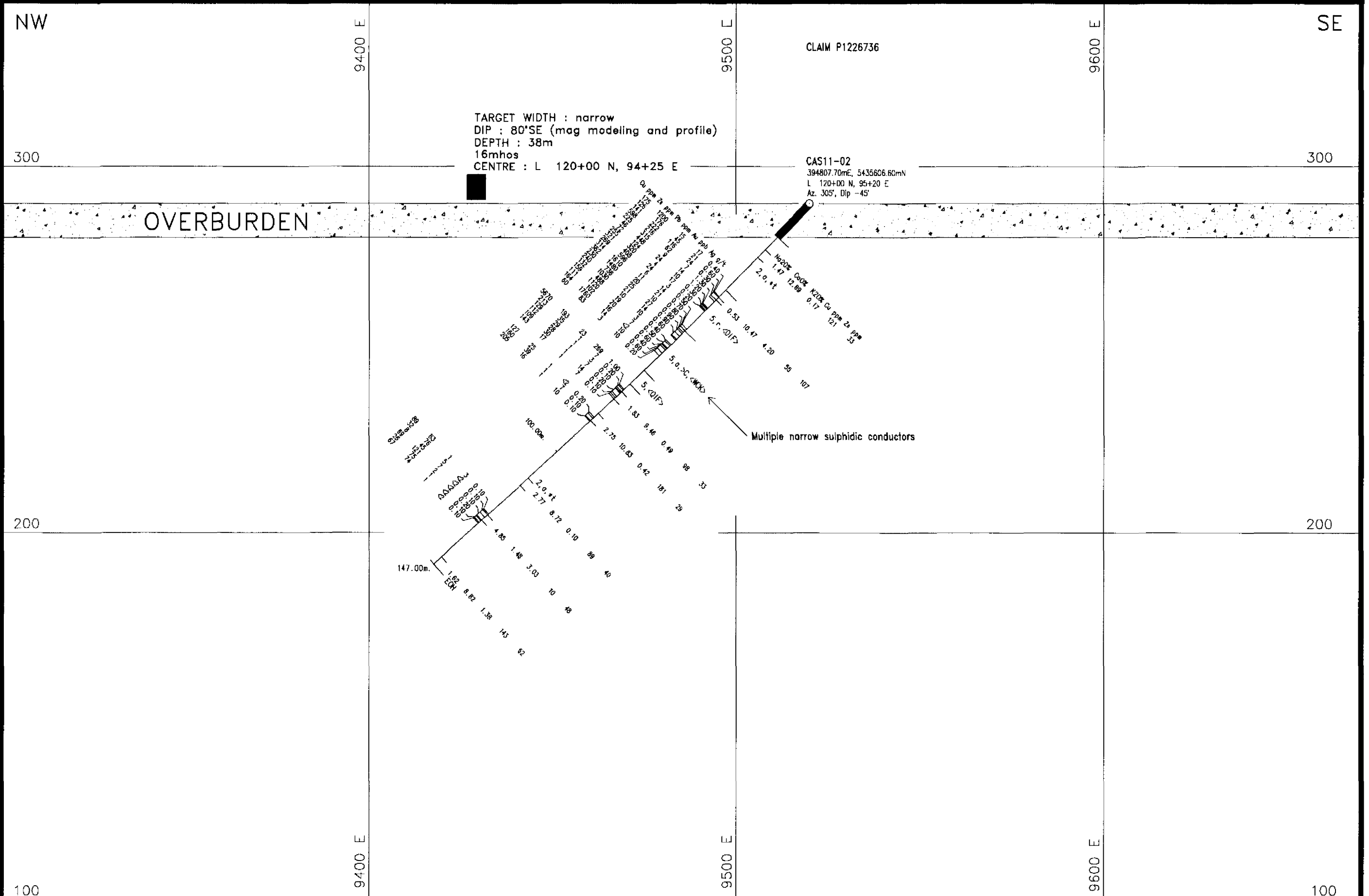
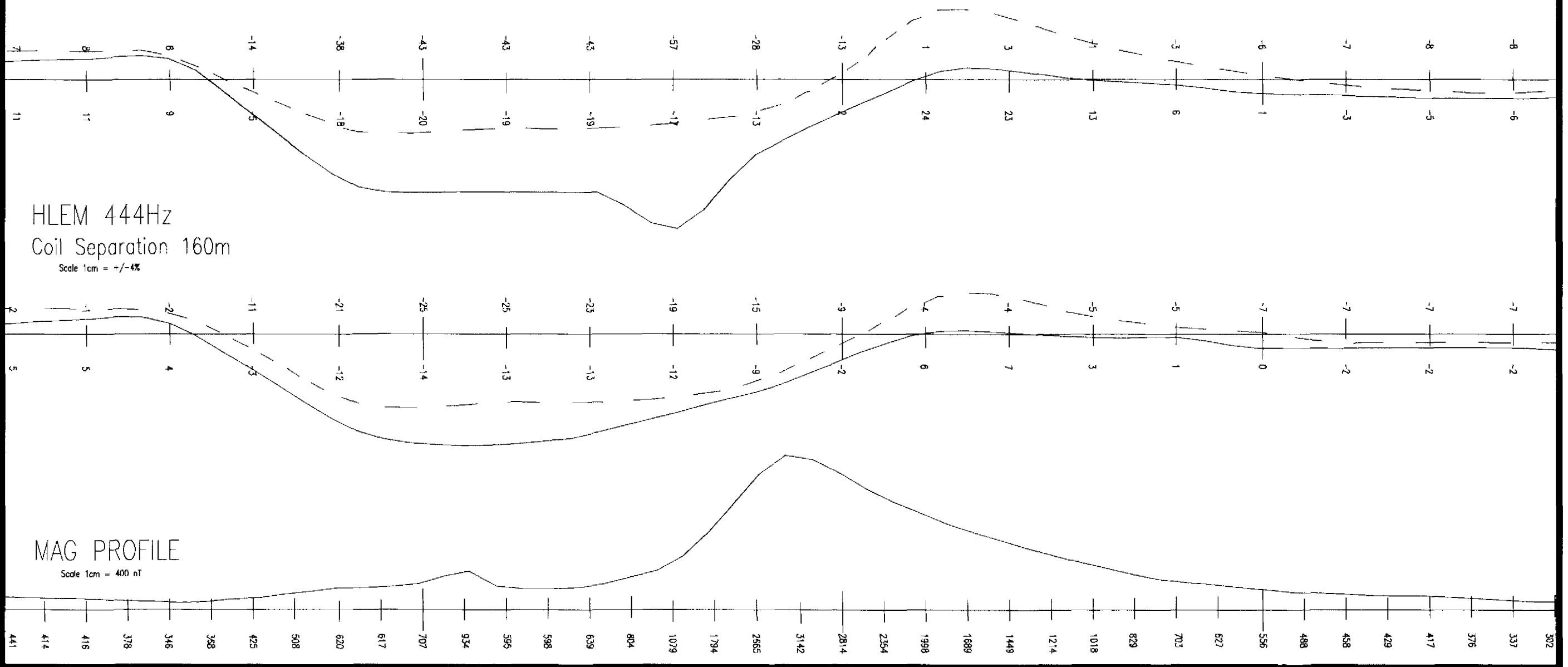
SAGANASH PROJECT  
GRID CASSALMAN 11  
LOOKING Az 035° CASSELMAN Twp.

DRILL SECTION L 12100 N  
DDH CAS11-01

TRACED: PRODES DATE: 06/12/2000 NTS: 42-G/01 PROJECT: 281  
DRAWN: del DRAFTING DATE: 06/12/2000 MAP No: FILE: CAS1101  
SUPERVISED: G Deschêtr DATE: 06/12/2000 SCALE 1:1 000 (metres)  
REVISED: DATE: SCALE 10 20 30 40

HLEM 444Hz  
Coil Separation 160m  
Scale 1cm = +/-4%

MAG PROFILE  
Scale 1cm = 400 nT



42G01SW2008 2.20854 CASSELMAN 260

SAGANASH PROJECT ASSAY TABLE CAS11-02																	
SAMPL No.	FROM (M)	TO (M)	Li (ppm)	Ca (ppm)	Zn (ppm)	Pb (ppm)	Ni (ppm)	Au (ppb)	Ag (ppb)	Pt (ppb)	Pg (ppb)	Est. Ni (%)	Est. Pb (%)	Est. Cu (%)	Est. Sp (%)	Est. Or (%)	ROCK T
AJ06460	36.40	36.70	0.3	175	1200	15	30	17	0.4	<5	<5						01F
AJ06461	36.70	37.72	1.0	126	176	45	44	21	0.6	<5	<5						7.0,m
AJ06462	37.72	38.39	0.7	141	222	116	21	24	0.3	<5	<5						01F
AJ06463	40.97	41.24	0.3	598	216	92	27	7	1.3	<5	<5						01F
AJ06464	41.24	41.40	0.2	225	515	9	31	14	1.2	<5	<5						7.0,01F,
AJ06465	41.40	41.96	0.5	46	448	24	11	10	0.3	<5	<5						7m
AJ06466	41.96	42.26	0.4	72	124	4	9	17	0.2	<5	<5						01F
AJ06467	49.43	50.13	0.7	255	320	24	36	3	0.5	<5	<5						7.0,m
AJ06468	50.13	50.88	0.8	321	408	9	30	14	0.7	<5	<5						0.0,m
AJ06469	50.88	51.37	0.5	269	596	11	38	21	0.8	<5	<5						0.0,m
AJ06470	51.37	52.31	0.9	314	1610	20	43	10	0.9	<5	<5						0.0,m
AJ06471	52.31	53.49	1.2	382	1480	25	51	27	0.9	<5	<5						0.0,m
AJ06472	53.49	53.85	0.4	230	738	21	22	14	0.6	<5	<5						0.0,m
AJ06473	55.75	56.18	0.4	240	1030	10	21	10	0.4	<5	<5						0.0,m
AJ06474	56.18	57.16	1.0	132	488	19	15	3	0.5	<5	<5						01F
AJ06475	57.16	57.46	0.3	156	1190	20	59	7	0.6	<5	<5						0.0,m
AJ06476	57.46	57.80	0.4	111	102	16	138	<2	0.4	<5	<5						7.0,m
AJ06477	57.80	58.23	1.3	164	1780	14	35	10	0.6	<5	<5						0.0,m
AJ06478	59.23	60.30	1.1	80	83	3	11	10	0.2	<5	<5						7.0,m
AJ06479	74.00	74.37	0.4	670	183	23	3	289	1.0	<5	<5						2.0,m
AJ06480	74.37	75.05	0.7	213	35	1	49	7	0.2	<5	<5						7.0,m
AJ06481	75.05	75.42	0.4	129	29	1	47	3	0.1	<5	<5						2.0,m
AJ06482	75.42	76.50	1.3	112	28	1	36	7	0.2	<5	<5						2.0,m
AJ06483	76.50	77.47	0.5	109	36	1	37	14	0.1	<5	<5						2.0,m
AJ06487	77.47	77.51	0.5	143	17	1	40	7	0.1	<5	<5						2.0,m
AJ06484	86.60	86.06	0.5	127	25	1	63	<2	0.2	<5	<5						2.0,m
AJ06485	86.06	87.00	0.9	160	39	1	62	7	0.1	<5	<5						2.0,m
AJ06486	87.00	87.30	0.3	205	16	1	29	10	0.1	<5	<5						2.0,m
AJ06488	126.00	126.36	0.4	89	53	9	51	3	0.1	<5	<5						2.0,m
AJ06489	126.36	127.42	1.0	57	78	5	9	<2	0.1	<5	<5						7.0,m
AJ06490	127.42	128.62	1.2	45	45	7	2	<2	0.1	<5	<5						7.0,m
AJ06491	128.62	128.90	0.3	89	121	2	58	<2	0.2	<5	<5						2.0,m
AJ06492	128.90	129.63	0.7	28	75	1	7	<2	0.1	<5	<5						7.0,m
AJ06493	129.63	129.83	0.3	67	24	1	46	<2	0.1	<5	<5						2.0,m

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FALCONBRIDGE LIMITED

Exploration Division Timmins ONTARIO

SAGANASH PROJECT  
GRID CASSELMAN 11

LOOKING Az 035° CASSELMAN Twp.

DRILL SECTION L 12000 N  
DDH CAS11-02

TRACED: PRODES DATE: 05/12/2000 NTS: 42-0/01 PROJECT: 291  
DRAWN: GHI DRAFTING DATE: 06/12/2000 MAP No: FILE: CAS1102  
SUPERVISED: C Denehan DATE: 05/12/2000 SCALE: 1" = 500' (1-metre)  
REVISED: DATE: 10 20 30 40