HOLE NUMBER: JS12-03

FALCONBRIDGE LIMITED
DRILL HOLE RECORD

DATE: 06/17/1998
IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: KIDD/HBED/EAL JV
PROJECT NUMBER: 8036
CLAIM NUMBER: 1193143
LOCATION: Jessop twp.

PLOTTING COORDS GRID: UTM
NORTH: 5377566.00N
EAST: 468387.00E
ELEV: 290.00

ALTERNATE COORDS GRID: Jessop
NORTH: 8+90N
EAST: 9+ 0W
ELEV: 290.00

COLLAR DIP: -50° 0' 0"
LENGTH OF THE HOLE: 290.00M
START DEPTH: 0.00M
FINAL DEPTH: 290.00M

COLLAR ASTRONOMIC AZIMUTH: 155° 0' 0"

GRID ASTRONOMIC AZIMUTH: 150° 0' 0"

DATE STARTED: 05/23/1998
DATE COMPLETED: 05/25/1998
DATE LOGGED: 05/26/1998

COLLAR SURVEY: NO
RQD LOG: NO
HOLE MAKES WATER: NO

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

CONTRACTOR: NDS Drilling
CASING: 52m
CORE STORAGE: Minesite
UTM COORD.:

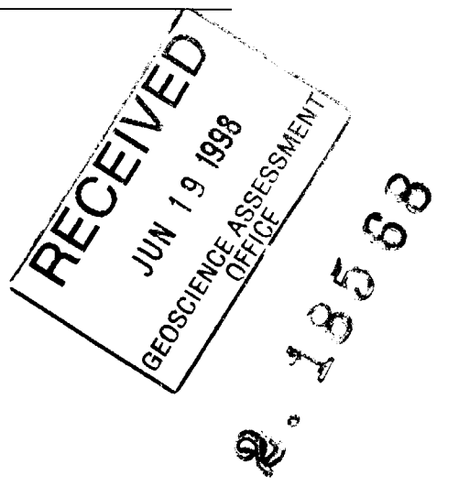
COMMENTS : Test a strong HLEM conductor; Hit graphitic argillite from 140.0 to 142.3m
WEDGES AT:

42A11SW2009 2.18568 JESSOP 010

DIRECTIONAL DATA:

Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
60.00	160° 0' 0"	-51°30' 0"	S	OK	
122.00	164° 0' 0"	-50° 0' 0"	S	OK	
182.00	160° 0' 0"	-48° 0' 0"	S	OK	
242.00	173° 0' 0"	-45° 0' 0"	S	OK	

Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	



2.18568

HOLE NUMBER: JS12-03

DRILL HOLE RECORD

LOGGED BY: P. Prince

PAGE: 1

Pascal Prince

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 51.20	«overburden»					
51.20 TO 79.00	«2,a,bx,m»	LOCALLY BRECCIATED MAFIC VOLCANICS -Fine grained, light grey-green coloured -Dominantly massive and homogeneous, with thin brecciated intervals (5-20cm wide) -Very fine white coloured leucoxenes are visible where host is slightly coarser grained -Fine (1-2mm wide) quartz filled amygdules are visible in very fine grained (chilled) portions -Fractured and veined: 0.1 to 1cm wide quartz-calcite veinlets, dominantly oriented at 45-50 deg TCA -Weak schistosity at 50 deg TCA -From 69.7 to 76.9m: basalt is increasingly brecciated. Fragments are 0.1 to 2.0cm diameter, subangular, and hosted in a slightly darker matrix (more chloritic) -From 76.9 to 79m: fine spotted texture, fine grained light green (bleached) with dark green rounded spots (1-2mm diameter). Looks like devitrification texture, fine variolites? -Lower contact is gradational at 79m, where mafic volcanic rock is massive, may be fine intrusive.		-Locally chloritic -Weak to moderate fracture controlled calcite alteration. Calcite filled micro-fractures and fine calcite blebs are evident -Minor quartz and calcite veining also present	-Trace sulphides, Fine disseminated pyrite and minor fracture controlled pyrite and pyrrhotite	
79.00 TO 108.60	«2,a,m,S»	MASSIVE MAFIC VOLCANICS -Fine grained, light grey coloured -Massive, may be very fine intrusive? -Very fine white leucoxene are locally visible. -Fractured and veined: abundant fine quartz-calcite veins -Weak schistosity at 45 deg TCA -Lower contact is sharp at 40 deg TCA, along 1cm wide quartz vein		-Weak to moderate fracture controlled and locally pervasive calcite alt. -Quartz-calcite veining	-Localized trace fracture controlled pyrite	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
108.60 TO 133.90	«2,a,bx,»	BRECCIATED MAFIC VOLCANIC -Fine grained, light green coloured -Localized brecciated intervals are 5 to 50cm wide and are slightly more chloritic, darker coloured matrix with bleached light green angular fragments -Abundant fine white coloured leucoxenes (0.5-1mm diameter) in more massive basaltic units -Fractured and veined: fine quartz-calcite veinlets and minor thin chloritic slips are evident -Weak schistosity at 50 deg TCA, parallel to which breccciated fragments are oriented (flattened). -Lower contact is poorly defined at 133.9m, looks parallel to fracture at 55 deg TCA		-Moderate chlorite alteration -Weak fracture controlled calcite -Minor quartz-calcite veining	-Trace amounts of very fine disseminated pyrite, pyrrhotite and magnetite crystals	
133.90 TO 140.00	«7,a,m»	MASSIVE MAFIC INTRUSIVE -Fine grained, may be medium to coarse grained massive mafic volcanic -Light grey coloured -Massive and homogeneous, no notable foliation -Fractured and veined: minor thin quartz-calcite veinlets are evident throughout -Lower contact is sharp at 140m @ 40 deg TCA, following 50cm of chilled margin		-Unaltered, minor thin quartz-calcite veinlets	-Trace amounts of disseminated pyrrhotite and pyrite	
140.00 TO 142.30	«5,g,*g,sul»	GRAPHITIC ARGILLITE -Fine grained sediments, black coloured -Thinly laminated at 50 to 70 deg TCA, with strongly graphitic and more argillaceous beds -Moderate schistosity parallel to laminations (50-70 deg TCA) -Fractured and veined: quartz-calcite veining -Core is broken throughout unit, graphitic slip surfaces are common. From 140.8 to 141m quartz-calcite vein at 30 deg TCA. Weak shear -Lower contact is sharp at 40 deg TCA		-Strongly graphitic with abundant veined and blebby calcite -Quartz-calcite veining	-2-3% sulphides, lanticular and subrounded patches of pyrite and pyrrhotite, with minor pyrite remobilized in thin quartz-calcite veinlets	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
142.30 TO 177.50	«4,a,q,bx»	QUARTZ PHYRIC RHYOLITE, LOCALLY BRECCIATED -Very fine grained felsic volcanic, massive with localized more tuffaceous looking textures. -Light grey coloured -1 to 3% fine (1-2mm diameter) quartz phenocrysts are visible throughout rhyolite unit. Quartz also appears to be infilling pore space (vugs) -Very fine peppery texture also characterizes the rhyolite. 0.1 to 1mm diameter black spots are visible throughout (origin?) -Porphyroblastic texture is also noted, where leucoxenes-like buff coloured blebs, which vary in diameter from 1 to 10mm. Rounded morphology but no obvious crystal form. Preferentially forming along laminations parallel to foliation at 50 deg TCA. No reaction to HCl acid and doesn't stain (carb. stain) -Weak to moderate schistosity at 50 deg TCA -«┤S0 50°├» -From 166.1 to 177.5m: brecciated rhyolite. Silicified quartz phyric rhyolite with pyrite replacing angular fragments (or zones), may be alteration controlled where rhyolite is fractured and silicified near fractures, less silicified portion may be preferentially pyritized. Gives rhyolite a brecciated texture with "stringer" pyrite mineralization -Lower contact is sharp at 50 deg TCA		-Weak to moderate pervasive sericite alteration throughout -Locally weakly silicified	-Minor fine bleby to fracture controlled pyrite and pyrrhotite throughout -From 166.1 to 177.5m: "stringer" pyrite-pyrrhotite zone, pyrite & pyrrhotite replacement of breccia fragments. Interval is moderatly magnetic and contains 1-5% py, 1-5% po throughout -Fine sphalerite dusting (micro stringer) at 153.7m -From 176.8 to 177m: trace sphalerite dusting	-From 147.2 to 147.4m: AU00559, WRA of fine grained rhyolite, with pepppered texture and buff coloured porphyroblasts. Core split -From 170.3 to 170.45m: AU00560, WRA of "stringer" py-po rhyolite. Sample is taken where sulphide content is lowest, trace py-po. Fine black peppered texture still evident. Core split.
177.50 TO 178.90	«3,a,bx,*a»	INTERMEDIATE BRECCIA, TUFF -Fine grained, strongly chloritized rock. -Strong alteration overprints much of the primary textures. Increasingly chloritic at upper contact, where ghosty brecciated texture is visible. Chloritization gradually decreases towards lower contact, where a more tuffaceous texture is evident, with fine black peppered minerals and bleby pyrrhotite mineralization similar to the uphole rhyolite. -Weak schistosity at 50 deg TCA		-Strongly chloritized, where alteration gradually decreases towards lower contact -Strong pervasive calcite alteration	-Fine bleby and thin laminations of pyrrhotite, 2-3% -Trace pyrite	-rock at upper contact is mainly chlorite and calcite, at lowre contact looks like uphole rhyolite -From 177.7 to 177.85m: AU00561, WRA of strongly chloritic and calcitic breccia, 1-2% fine bleby pyrrhotite. Core split

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		-Lower contact is sharp at 45 deg TCA				
178.90 TO 241.20	«2,a,bx»	BRECCIATED MAFIC VOLCANIC -Fine grained, grey-green coloured -Strongly chloritic and calcitic rock, with ghostly breccia texture which is locally visible. Alteration/metamorphism dominantly overprints primary textures -Rock between brecciated intervals appears massive -Fractured and veined: abundant fine quartz-calcite veinlets throughout -From 217.4 to 218.3m: wide quartz-calcite vein with strongly chloritized irregular (bulbous) contacts -Weak to moderate schistosity at 40 deg TCA, parallel to which thin quartz-calcite veinlets and fine pyrite-pyrrhotite fractures are evident -From 235.2 to 240.4m: mafic breccia, chloritic, weakly calcitic -Lower contact is sharp at 50 deg TCA		-Strong pervasive chlorite and calcite alteration throughout -Gradually becomes less calcitic towards lower contact -Abundant fine calcite veinlets	-Minor fracture controlled pyrite and pyrrhotite mineralization, trace to 2%	
241.20 TO 252.20	«4,a,q,e»	QUARTZ PHYRIC RHYOLITE -Fine grained, light green-grey coloured -Similar to uphole rhyolite, buff coloured leucoxene-looking porphyroblasts are still present -Up to 3% quartz phenocrysts, 1-2mm diameter -Rare slightly darker rhyolitic fragments are evident, subrounded, 0.5 to 2.0cm diameter. Host rock is weakly silicified and locally tuffaceous. -Locally vesicular, where minor (<1%) rounded quartz filled, calcite rimed amygdules are weakly flatten -Weak schistosity at 50 deg TCA -Fractured and veined: quartz and quartz-calcite veining -Lower contact is sharp at 30 deg TCA		-Weak to moderate pervasive sericite alteration throughout -From 246.1 to 246.5m: thin chloritic interval -Minor quartz and calcite veining throughout	-Minor pyrite and pyrrhotite (tr to 3%) as thin stringers, 1-10mm wide lenses, and fine disseminated blebs. May be some flattened pyrrhotite fragments. Trace amounts of sphalerite are locally associated with the pyrrhotite	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
252.20 TO 262.70	«2,a,S»	FINE GRAINED MAFIC VOLCANIC -Massive looking mafics, extensively fractured, with quartz-calcite veining throughout, thin chloritic veinlets, minor bleaching at vein contacts -Abundant fine grained disseminated carbonate crystals (cubic) evident throughout -Weak schistosity at 45-50 deg TCA -Lower contact is sharp 50 deg TCA, from 262.6 to 262.7m mafics are brecciated at contact		-Fracture controlled chloritic alt. (veinlets) -Fine carbonate crystals disseminated throughout -Minor quartz-calcite veining	-Locally very fine disseminated pyrite and pyrrhotite is evident (tr-1%)	
262.70 TO 275.90	«4,a,q,e,n»	QUARTZ PHYRIC RHYOLITE -Fine grained, light green-grey coloured, very similar to uphole rhyolites -1-2% quartz phenocrysts throughout, 1 to 2 mm diameter -Buff coloured porphyroblasts still present throughout rhyolite -Rare isolated quartz filled, calcite rimed amygdules are evident -From 267.3 to 267.7m: interval rich in rounded quartz amygdules/spherulites? Slightly flattened, 0.1 to 1.5cm diameter, closely packed, quartz nucleus with bleached rim. Logger leans towards spherulites. -From 267.7 to 275.9m: occasional slightly darker felsic fragments are visible, flattened parallel to schistosity, 0.5 to 2.0cm diameter -Weak schistosity at 50-60 deg TCA -Fractured and veined: quartz veining, 1mm to 10cm wide veins are dominantly at 30-40 deg TCA -Lower contact is sharp at 50 deg TCA		-Weak to moderate pervasive sericite alteration -Quartz veining throughout	-Minor (tr-1%) fracture controllled pyrite and pyrrhotite -Pyrrhotite mineralized lower contact, from 275.6 to 275.9m: 5% po, 2% py, tr cpy (isolated speck)	
275.90 TO 290.00	«2,a,m»	MASSIVE MAFIC VOLCANIC -Fine grained, dark green coloured -Very fine white coloured leucoxenes are locally visible where rock is slightly coarser grained -Fractured and veined: abundant quartz-calcite veining		-Chloritic -Fracture controlled and pervasive calcite alteration -Quartz-calcite veining	-Fracture controlled (stringers) pyrite mineralization with minor associated fine elongated tourmaline crystals -Disseminated magnetite crystals, 1 to 3mm diameter, increasingly abundant down hole, from 287-290m: 2-3%	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
290.00 TO 290.00	«EOH»					

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
AU00514	140.00	141.00	1.00	249	3140	27	286	27	0.7																	
AU00515	141.00	142.30	1.30	224	2510	26	194	24	0.6																	
AU00516	153.50	154.00	0.50	29	306	2	133	14	0.1																	
AU00517	165.50	167.00	1.50	22	63	4	252	7	0.1																	
AU00518	167.00	168.50	1.50	20	70	3	231	21	0.1																	
AU00519	168.50	170.00	1.50	24	119	4	174	14	0.1																	
AU00520	170.00	171.50	1.50	22	71	5	247	<2	0.1																	
AU00521	171.50	173.00	1.50	24	107	3	162	14	0.1																	
AU00522	173.00	174.50	1.50	23	90	5	200	3	0.1																	
AU00523	174.50	176.00	1.50	26	101	4	192	14	0.1																	
AU00524	176.00	177.50	1.50	35	348	4	232	<2	0.1																	
AU00526	177.50	179.00	1.50	90	205	2	88	7	0.1																	
AU00527	179.00	180.50	1.50	66	196	1	51	<2	0.1																	
AU00528	180.50	182.00	1.50	69	151	1	53	<2	0.1																	
AU00529	241.20	242.70	1.50	119	1010	1	108	<2	0.3																	
AU00530	245.00	246.50	1.50	37	351	2	111	3	0.1																	
AU00531	275.40	275.90	0.50	68	676	1	97	<2	0.2																	

HOLE NUMBER: JS12-04

FALCONBRIDGE LIMITED
DRILL HOLE RECORD

DATE: 06/17/1998
IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: KIDD/HBED/EAL JV
PROJECT NUMBER: 8036
CLAIM NUMBER: 1193143
LOCATION: Jessop twp.

PLOTTING COORDS GRID: UTM
NORTH: 5377564.00N
EAST: 468831.00E
ELEV: 290.00

ALTERNATE COORDS GRID: Jessop
NORTH: 6+80N
EAST: 5+ 0W
ELEV: 290.00

COLLAR DIP: -50° 0' 0"
LENGTH OF THE HOLE: 185.00M
START DEPTH: 0.00M
FINAL DEPTH: 185.00M

COLLAR ASTRONOMIC AZIMUTH: 150° 0' 0"

GRID ASTRONOMIC AZIMUTH: 150° 0' 0"

DATE STARTED: 05/25/1998
DATE COMPLETED: 05/27/1998
DATE LOGGED: 05/28/1998

COLLAR SURVEY: NO
RQD LOG: NO
HOLE MAKES WATER: NO

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

CONTRACTOR: NDS Drilling
CASING: 48m
CORE STORAGE: Minesite
UTM COORD.:

COMMENTS : Test HLEM anomaly at 100m vertical depth; Hit graphitic argillite from 167.0 to 172.1m
WEDGES AT:

42A11SW2009 2.18568 JESSOP 020

DIRECTIONAL DATA:

Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
55.00	160° 0' 0"	-50° 0' 0"	S	OK	
122.00	157° 0' 0"	-47° 0' 0"	S	OK	
182.00	167° 0' 0"	-46° 0' 0"	S	OK	

Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	

Pascal Prince

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 48.00	«┤ob├»					
48.00 TO 99.70	«5,GWK,*n»	GREYWACKE -Fine to coarse grained, light grey to black coloured -Graded beds, where fine grained siltstone beds grades to coaser sandstones -Bedding is at 45 deg TCA -Core preferentially breaks parallel to bedding -Fine quartz-calcite veinlets are also parallel to bedding at 45 -Occasional argillite fragment is hosted in coarser grained matrix -On small (individual beds) and large scale (whole sequence) grain size is fining uphole, tops up. -From 82 to 99.7m: fine dark argillite beds are absent, coarser light grey sandstone hosting occasional argillite fragments is evident. -Lower contact is brecciated along thin quartz vein (3cm wide)		-Unaltered -Minor chlorite and fine calcitic veinlets	-Trace fine grained disseminated pyrite -Trace remobilized sphalerite at lower contact with volcanics	
99.70 TO 103.00	«4,*a,q,RWV»	QUARTZ PHYRIC RHYOLITE TUFF -Reworked felsic volcanics, some of the quartz phenocrysts are more rounded than others, and may be quartz grains. -Rare felsic fragments are evident, silicified, subrounded, 0.5 to 2.0cm diameter. Minor buff coloured fragments are also evident, may be sericitized felsic or bleached mafic? -Fractured and veined: minor quartz-calcite veining -Weak schistosity at 45 deg TCA along which rare fragments are flattened to ratios of 2:1 -Lower contact is sharp at 40 deg TCA		-Moderate pervasive sericite alteration throughout -Very fine chlorite spotting, 1-2mm diameter spots, weak alteration	-Fine blebby disseminated pyrite and pyrrhotite (<1%) -Minor remobilized sphalerite at upper contact with sediments	
103.00 TO 167.00	«2,a,bx,m»	BRECCIATED MAFIC VOLCANIC -Fine grained, light greyish-green coloured -Brecciated fragments are flattened along		-Strong pervasive and fracture controlled calcite alteration -Quartz-calcite veining throughout -Weakly graphitic towards lower	-Minor fracture controlled pyrite and pyrrhotite mineralization, locally within quartz-calcite veins (tr-2%) and brecciated intervals	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		schistosity at 40 deg TCA, giving them a more rounded appearance. -Mafic volcanics are massive between brecciated intervals -Very fine white coloured leucoxenes are locally visible in slightly more foliated intervals -Moderate schistosity at 35-45 deg TCA -Fractured and veined: abundant quartz-calcite veining -Approaching lower contact, interbreccia material is graphitic and weakly conductive -Lower contact is sharp at 50 deg TCA		contact		
167.00 TO 172.10	«5,g,sul»	GRAPHITIC ARGILLITE -Fine grained, black coloured -Finely laminated, bedding at 45-55 deg TCA, with thin 10-20cm wide mafic interbeds -Schistose parallel to bedding traces, core is broken along foliation, mildly sheared -Fractured and veined: fine quartz and calcite fractures parallel to foliation -Lower contact is sharp at 45 deg TCA, sulphide content and quartz-calcite veining increases at lower contact		-Strongly graphitic -Fine calcitic fractured througout	-Minor pyrite and pyrrhotite mineralization, fracture controlled and preferentially replacing thin beds (zones) -Lower contact is slightly more mineralized, approx. 5% py-po over 30cm	
172.10 TO 185.00	«2,a,bx»	BRECCIATED MAFIC VOLCANIC -Fine grained, green coloured -Thin brecciated intervals, with more fractured massive intervals (autobrecciated?) -Fractured and veined: abundant quartz-calcite veining throughout, basalt is locally bleached at contact with veins -Weak schistosity at 50-60 deg TCA, fractures and veins are dominantly parallel to foliation -From 183.7 to 184.2m: wide quartz-calcite vein at 30 deg TCA, with tr py-po within -Hole ends in brecciated mafics at 185m		-Chloritic -Fracture controlled and locally pervasive calcite alteration -Quartz-calcite veining throughout, minor chlorite associated with veins	-Trace to 1% pyrrhotite and pyrrhotite, fracture controlled	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
185.00 TO 185.00	«EOH»					

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
AU00532	99.40	99.90	0.50	18	924	1	74	3	0.2																	
AU00533	166.70	168.00	1.30	104	574	10	185	10	0.3																	
AU00534	168.00	169.50	1.50	45	457	17	124	3	0.1																	
AU00535	169.50	171.00	1.50	56	390	5	150	3	0.1																	
AU00536	171.00	172.20	1.20	152	221	10	152	3	0.3																	
AU00537	172.20	173.00	0.80	56	172	3	73	<2	0.2																	

HOLE NUMBER: JS23-01

FALCONBRIDGE LIMITED
DRILL HOLE RECORD

DATE: 06/17/1998
IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: KIDD/HBED/EAL JV
PROJECT NUMBER: 8036
CLAIM NUMBER: 1190593
LOCATION: Jessop Twp

PLOTTING COORDS GRID: UTM
NORTH: 5378000.00N
EAST: 470346.00E
ELEV: 290.00

ALTERNATE COORDS GRID: Jessop
NORTH: 3+75N
EAST: 10+40E
ELEV: 290.00

COLLAR DIP: -45° 0' 0"
LENGTH OF THE HOLE: 302.00M
START DEPTH: 0.00M
FINAL DEPTH: 302.00M

COLLAR ASTRONOMIC AZIMUTH: 150° 0' 0"

GRID ASTRONOMIC AZIMUTH: 150° 0' 0"

DATE STARTED: 05/27/1998
DATE COMPLETED: 05/30/1998
DATE LOGGED: 05/31/1998

COLLAR SURVEY: NO
RQD LOG: NO
HOLE MAKES WATER: NO

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

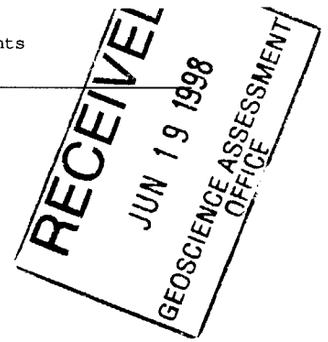
CONTRACTOR: NDS Drilling
CASING: 74m
CORE STORAGE: Minesite
UTM COORD.:

COMMENTS : Test a strong and wide HLEM conductor; Hit several units of graphitic argillite
WEDGES AT:

42A11SW2009 2.18568 JESSOP 030

DIRECTIONAL DATA:

Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
80.00	154° 0' 0"	-42°30' 0"	S	OK	
140.00	158° 0' 0"	-39° 0' 0"	S	OK	
200.00	166° 0' 0"	-38°30' 0"	S	OK	
260.00	169° 0' 0"	-37° 0' 0"	S	OK	
302.00	166° 0' 0"	-34°30' 0"	S	OK	



FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 74.00	«┤ob├»					
74.00 TO 111.50	«5,a,g,sul»	GRAPHITIC ARGILLITE -Fine grained, dark grey to black coloured sediments -Locally graphitic, overall moderately conductive -Rare lighter grey coloured argillitic fragments, rounded, 1-3cm diameter, flattened along foliation at 60-80 deg TCA -Fine laminations at 80 deg TCA -Core is locally vuggy, where fine (1-3mm wide) euhedral void are evident (dissolved carb?) -Fractured and veined: abundant fine carbonate veinlets parallel to foliation at 60-80 deg TCA -Also present are fine rusty fractures -From 99.5 to 104.5m: broken core, weak graphitic shear zone -╢99.5-104.5╟«┤FAI├» -Lower contact is sharp at 70 deg TCA, where sedimentary rock becomes coarser grained		-Graphitic and carbonaceous -Fracture controlled carbonate, Fe-carb. veinlets -Minor locallized quartz veining	-Medium grained disseminated euhedral pyrite crystals throughout -Minor fracture controlled pyrite mineralization -Minor pyrite also appears to be preferentially replacing rare rounded clasts, doesn't look like primary sulphide fragments	
111.50 TO 116.40	«5,b,GWK»	GREYWACKE / SILTSTONE -Medium grained, light to medium grey coloured sediments -Fine and faint laminations at 30-40 deg TCA -Graded bed indicates an uphole fining, tops uphole. -Fractured and veined: quartz-calcite veining is evident throughout -Lower contact is sharp at at 80 deg TCA along a fine (1cm wide) calcite vein, down hole of vein sedimentary rock has fragmental texture		-Fracture controlled calcite alteration -Quartz-calcite veining evident	-Trace to 2% fine to medium euhedral pyrite crystals, disseminated and along fine fractures	
116.40 TO 126.40	«5,f,g,*i, ARG,CGL»	MATRIX SUPPORTED MIXED FRAGMENTAL -Interbedded thin graphitic argillite beds with debris flow mixed fragmental. All clasts are flattened (approx. 4:1 ratio) parallel to weak		-Matrix is weakly silicified and calcitic and very weakly chloritic -quartz-calcite veining evident	-Mineralization is dominantly pyrite replacement of agillitic clasts. Trace pyrrhotite and isolated sphalerite clast are also evident -Minor fracture controlled pyrite	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		foliation/bedding at 70 deg TCA. Black argillite clasts, pyrite replacing argillite (partly to completly), and lighter grey more silicified clasts are also evident. -Matrix of mixed fragmental is weakly silicified, locally calcitic and very weakly chloritic. Contrasts with argillitic interbeds due to much lighter colour (light grey). No evidence of quartz phenocrysts -Fractured and veined: quartz-calcite veining throughout -Weak schistosity at 70 deg TCA -At 116.8m fine streak of sphalerite is visible, elongated/flattened clasts (primary?) -From 125.6 to 126.4m: rock is more massive, looks like fine sandstone/greywacke, no fragment visible. -Lower contact is sharp at 40 deg TCA			-Trace to 3% pyrite	
126.40 TO 143.30	«5,a,g,Py»	GRAPHITIC ARGILLITE -Fine grained, dark grey to black coloured -Bedded / finely laminated at 45 deg TCA -Locally graphitic, moderately conductive -Fractured and veined: fine calcite veinlets parallel to weak foliation at 45 deg TCA -From 141.5 to 143m: bedding / lamination meanders about the core axis, folding -Lower contact is sharp 70 deg TCA following a thin zone of quartz-calcite vening		-Locally graphitic -Fracture controlled calcite alteration -Quartz-calcite veining	-Fracture controlled pyrite mineralization, forming fine to medium grained euhedral crystals -Pyrite also replacing argillitic fragments and/or thin beds	
143.30 TO 187.20	«4,q,*a,RWV»	QUARTZ PHYRIC REWORKED FELSIC TUFF -Fine to medium grained, light grey coloured -Minor locallized grading with wide units, sedimentary rock? -Dominantly massive and homogeneous throughout, other than the presence of one isolated fragment which looks like felsic volcanic, light grey siliceous, 1-2cm diameter -Possibility of sandstone, although many of the		-Weak pervasive silica and sericite alteration -Quartz-calcite veining throughout	-Fine disseminated blebs of pyrite and pyrrhotite	-Sedimentary rock (sandstone) or reworked quartz phyric felsic tuff??

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		quartz grains have angular cross sections, suggesting that they are phenocrysts -Up to 5% quartz phenocrysts, hosted in finer grained, weakly silicified and sericitic matrix -Fine blebby calcite with rough crystal shape, possibly replacing feldspar phenocrysts -Fractured and veined: quartz-calcite veining present throughout, 1 to 20cm wide veins at 50 to 80 deg TCA -Lower contact is sharp where a rounded fragment of quartz phyric tuff is incorporated in downhole (underlying) argillite unit, evidence for tops uphole				
187.20 TO 197.50	«5,g,sul»	GRAPHITIC ARGILLITE -Fine grained, dark grey to black coloured -Finely laminated / bedded at 70 deg TCA, with thin pyritic beds -Strongly conductive throughout -Locally pyrite appears to be replacing argillitic fragments -Fractured and veined: thin quartz-calcite-pyrite veinlets parallel to bedding -Weak schistosity at 70 deg TCA -Lower contact is sharp at 80 deg TCA		-Graphitic alteration -Minor calcitic veinlets	-Fracture controlled euhedral pyrite -Zone or fragment replacement, where fine euhedral pyrite crystals partly replace argillite clasts / beds -1-10% pyrite	
197.50 TO 260.00	«4,q,*a,RWV ,SST»	QUARTZ PHYRIC FELSIC TUFF -Fine to medium grained, light grey coloured rock, volcanic or sedimentary origin? -Same as up hole unit from 143.3 to 187.2m -Rare light grey fine grained fragments are visible. subrounded, 1-2cm diameter -Locally subtle graded beds can be identified showing uphole fining -Interbedded with thin argillite bed, from 208.3 to 209 and from 209.4 to 209.0m -Fractured and veined: quartz-calcite veining with minor associated chlorite and epidote -From 222.7 to 224m: Zone of veining, with quartz-calcite-chlorite vein meandering about the		-Weak pervasive sericite alteration -Quartz-calcite veining with minor associated chlorite and epidote	-Trace disseminated euhedral pyrite crystals	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		core axis -Lower contact is sharp at 70 deg TCA				
260.00 TO 302.00	«5,a,b»	FINE TO MEDIUM GRAINED SEDIMENTS -Series of fining uphole partial turbidite sequences FIRST SEQUENCE -From 260 to 275m: fine grained, dark grey coloured argillite, bedded / laminated at 80 deg TCA, with minor disseminated pyrite -From 275 to 281m: grain size gradually increases downhole to a sandstone -From 281 to 281.8m: coarse grained light grey coloured matrix, supporting angular argillite fragments which increase in size downhole. Last fragment at base of turbidite is texturally identical to underlying argillite. -This is the most complete sequence and suggests tops uphole -Subsequent turbidites are only partly represented -From 281.8 to 296.2m: fine grained argillite, with locallized fining uphole sequences -From 296.2 to 300m: Coarser grained, light grey coloured "sandstone" -From 300 to 302m: Fine black argillite, with minor euhedral pyrite, bedded / laminated at 60 to 70 deg TCA -Hole ends in argillite		-Fine grained argillite units are locally graphitic, with fine calcite veinlets throughout -Coarser grained "sandstone" intervals are weakly sericitic and locally chloritic -Minor quartz-calcite viening throughout	-Minor fracture controlled and disseminated euhedral pyrite crystals -Rare argillite fragment being replaced by pyrite, in argillite units	
302.00 TO 302.00	«EOH»					

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
AU00538	87.50	89.00	1.50	77	223	11	54	<2	0.2																	
AU00539	89.00	90.50	1.50	69	237	8	81	<2	0.2																	
AU00540	90.50	92.00	1.50	58	175	7	57	7	0.2																	
AU00541	116.20	117.50	1.30	36	128	6	116	<2	0.2																	
AU00542	117.50	119.00	1.50	66	343	5	119	<2	0.2																	
AU00543	119.00	120.50	1.50	58	274	5	112	<2	0.2																	
AU00544	120.50	122.00	1.50	53	311	4	100	7	0.2																	
AU00545	122.00	123.50	1.50	47	256	4	118	10	0.2																	
AU00546	123.50	125.00	1.50	38	146	5	103	7	0.2																	
AU00547	125.00	126.50	1.50	33	229	4	115	<2	0.2																	
AU00548	142.00	143.30	1.30	172	1300	10	113	<2	0.5																	
AU00549	178.50	179.50	1.00	17	44	6	106	<2	0.1																	
AU01501	187.00	187.50	0.50	112	586	5	180	10	0.3																	
AU01502	194.00	195.50	1.50	245	1140	27	183	10	0.4																	
AU01503	195.50	197.00	1.50	223	1480	36	176	14	0.5																	
AU01504	197.00	198.00	1.00	117	759	9	145	<2	0.3																	

Ontario Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

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

Transaction Number (office use)
W9860.00679
Assessment Files Research Imaging

42A11SW2009 2.18568 JESSOP 900

...sections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, this ...nt work and correspond with the mining land holder. Questions about this collection ...ent and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

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

2.18568

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

Name	John Huot	Client Number	146892
Address	36 Maple St. South	Telephone Number	(705) 264-6464
	Timmins ON	Fax Number	(705) 264-3260
Name	Falconbridge LTD.	Client Number	130679
Address	571 Manetta Ave, Timmins	Telephone Number	(705) 267-1199
	ONT, P4N 7H9	Fax Number	(705) 264-6080

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

☐ Geotechnical: prospecting, surveys, assays and work under section 18 (regs)

☑ Physical: drilling stripping, trenching and associated assays

☐ Rehabilitation

Work Type	Office Use
Diamond Drilling	Commodity
	Total $ Value of Work Claimed $44,345
Dates Work Performed From Day 22 Month 05 Year 98 To Day 02 Month 06 Year 98	NTS Reference
Global Positioning System Data (If available)	Township/Area ESSOP TWP
	M or G-Plan Number G-3954
	Mining Division Porcupine
	Resident Geologist District 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)

Name	Greg Collins	Telephone Number	(705) -267-2369
Address	571 Manetta Ave, Timmins	Fax Number	(705) -264-6080
Name		Telephone Number	
Address		Fax Number	
Name		Telephone Number	
Address		Fax Number	

4. Certification by Recorded Holder or Agent

I, Greg Collins (Print Name), 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	Greg Collins	Date	June 18, 1998
Agent's Address	8 Cedar Ave Schumacher, ON	Telephone Number	(705) 264-2369
		Fax Number	(705) 264-6080

0241 (03/98)

RECEIVED
JUN 18 1998
1:30pm
PORCUPINE MINING DIVISION

RECEIVED
JUN 19 1998
10:03GB
GEOSCIENCE ASSESSMENT OFFICE

Deemed : September 16/98.

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.

W9860.00679

	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
eg	TB 7827	16 ha	$26,825	N/A	$24,000	$2,825
eg	1234567	12	0	$24,000	0	0
eg	1234568	2	$ 8,892	$ 4,000	0	$4,892
1	1193143	15	$ 27,198	$ 6,000	$ 8,533	$12,665
2	1190593	15	$17,147	$ 6,000	$ 4,267	6,890
3	1193668	3	¢	$ 1,200		
4	1193670	3	¢	$ 1,200		
5	1193671	10	¢	$ 4,000		
6	1193872	2	¢	$ 800		
7	1193873	12	¢	$ 4,800		
8	1193874	2	¢	$ 800		
9						
10						
11						
12						
13						
14						
15						
	Column Totals	62	$44,345	$24,800	$12,800	$19,545

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

Signature of Recorded Holder or Agent Authorized in Writing	Date
Grey Collins	June 18, 1998

6. Instructions 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):

2.18568

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
JUN 18 1998
1:30 PM
PORCUPINE MINING DIVISION

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

RECEIVED
JUN 19 1998
10:03 AM
GEOSCIENCE ASSESSMENT OFFICE

0241 (03/97)

Ontario Ministry of Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use): W9860.00679

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.

Work Type	Units of work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
Diamond Drilling	777 meters	$55/m	$42,735
Associated Costs (e.g. supplies, mobilization and demobilization).			
Geological Services → Internal		$200/day	$1,400
Transportation Costs			
7 days truck rental & fuel.		$30/day	$210
Food and Lodging Costs			
		Total Value of Assessment Work	$44,345

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, Greg Collins (please print full name), 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 (recorded holder, agent, or state company position with signing authority). I am authorized to make this certification.

Signature: [signature] Date: June 15, 1998

0212 (03/97)

RECEIVED
JUN 18 1998
PORCUPINE MINING DIVISION

RECEIVED
JUN 19 1998
10:03 GEOSCIENCE ASSESSMENT OFFICE

2.18568

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Ontario

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

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

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

September 10, 1998

JOHN PETER HUOT
36 MAPLE STREET, SOUTH
TIMMINS, ONTARIO
P4N-7H9

Dear Sir or Madam:

Submission Number: 2.18568

Subject: Transaction Number(s):		**Status**
	W9860.00679	Deemed Approval

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

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

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

If you have any questions regarding this correspondence, please contact Steve Beneteau by e-mail at benetest@epo.gov.on.ca or by telephone at (705) 670-5855.

Yours sincerely,

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

Correspondence ID: 12765

Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.18568

Date Correspondence Sent: September 10, 1998 **Assessor:** Steve Beneteau

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9860.00679	1193143	JESSOP	Deemed Approval	September 08, 1998

Section:
16 Drilling PDRILL

Correspondence to:

Resident Geologist
South Porcupine, ON

Assessment Files Library
Sudbury, ON

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

JOHN PETER HUOT
TIMMINS, ONTARIO

Greg Collins
FALCONBRIDGE LIMITED
Timmins, Ontario

MAP SYMBOLOGY

Aerial Cableway
Boundary
International
Interprovincial
District, Township Indian Reserve
Abandonments
Lot, Concession
Approximate
Park Boundary
Bridge
Road, Railroad
Building
Chimney
Cliff, Pit, Pile
Contours
Interpolated
Approximate
Depression
Control Points
Horizontal
Vertical
Culvert
Falls
Double line river
Fence, Hedge, Wall
Feature Outline (Construction features, etc.)
Flooded Land
Lock
Marsh or Swamp
Mast
Mine Head Frame
Outcrop

Pipeline (above ground)
Railroad
Single Track
Double Track
Abandoned
Turntable
Road
Highway, County Township
Access (road of doughtful maintenance or significant driveway)
Trail, Bush Road (portage, otley)
Rapids
Double line river with multiple rapids
Double line river with multiple rapids
Reservoir
River, Stream, Canal
Approximate Seasonal Direction of flow
Rock
Significant
Shoal
Spot Elevation (lake elevations)
Tower
Transmission Line
Poles
Pylons
Tunnel
Utility Poles
Wharf, Dock, Pier
Wooded Area

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
R_1	WITHDRAWN FROM STAKING N.R.W 10/82			
R_2	WITHDRAWN FROM STAKING N.R.W 69/83			
DT 105	WITHDRAWN FROM STAKING W78/81			

SAND AND GRAVEL

(G) APPLICATION PENDING UNDER THE AGGREGATE RESOURCES ACT. NOTICE RECEIVED 91-FEB-7.

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.

42A11SW2009 2.18568 JESSOP 200

KIDD TWP.

JAMIESON TWP.

MURPHY TWP.

MOUNTJOY TWP.

TIMMINS AIRFIELD

2.18568 PDRILL 1223831

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 MUSKEG
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	■
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	(R)
CANCELLED	⊗
SAND & GRAVEL	(G)

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

500 Metres 0 1000 Metres
10 0 10 20 30 40 50 60 70 Chains
500 0 1000 2000 3000 4000 5000 Feet

SCALE 1:20 000
GRID ZONE 17

TOWNSHIP
JESSOP

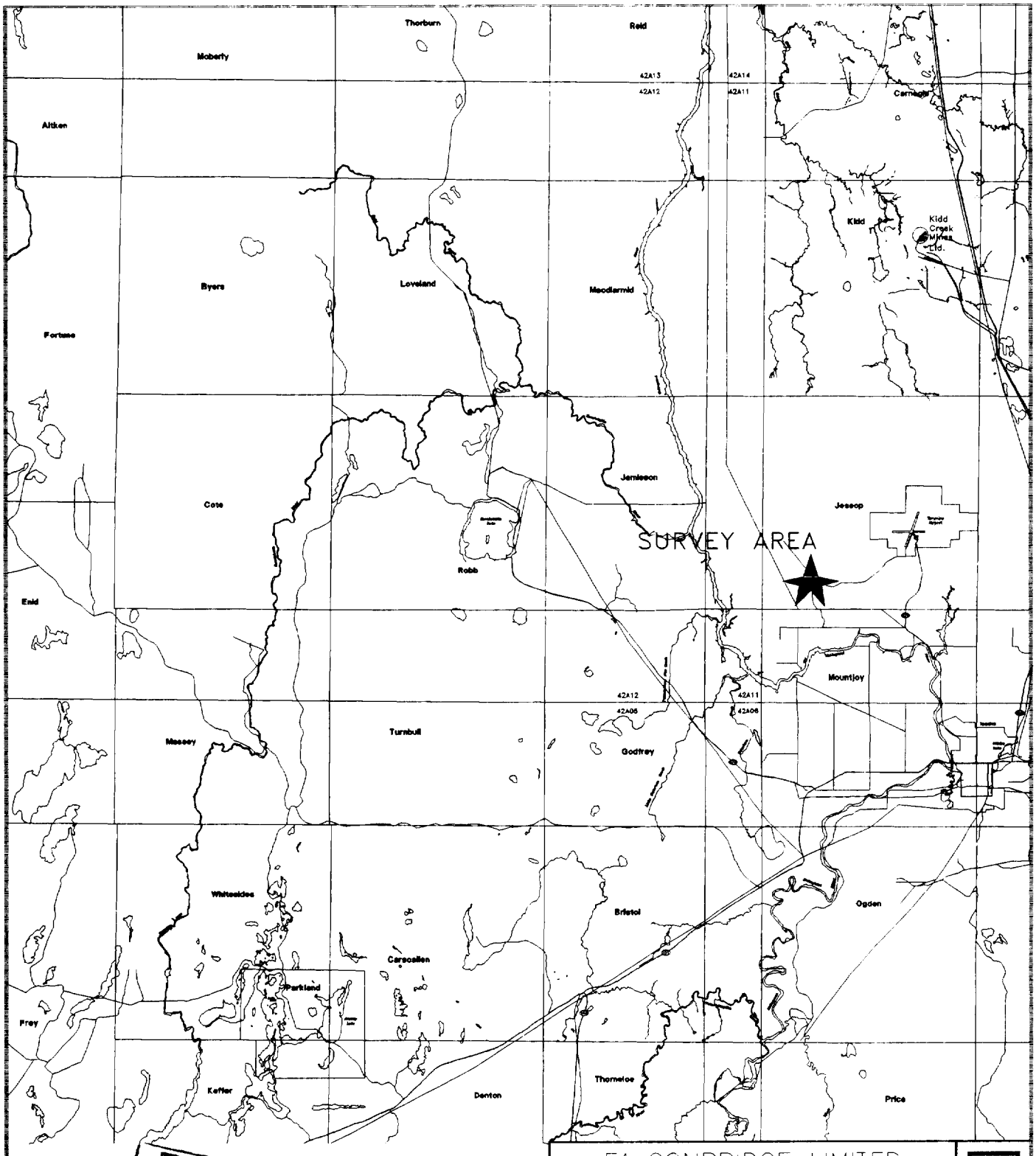
M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE

RECEIVED
JUL 15 1998
GEOSCIENCE ASSESSMENT OFFICE

Ontario Ministry of Natural Resources — Land Management Branch

ORIGINAL COMPILATION JULY 1984
REVISED ACTIVATED JAN. 28, 1997.

Number G-3984



FALCONBRIDGE LIMITED

Exploration Division — Timmins ONTARIO

FL / HBED / EAL JOINT VENTURE

JESSOP TOWNSHIP, ONTARIO

LOCATION MAP

TRACED:	DATE:	NTS: 42-A/11	PROJECT: 8036
DRAWN: d e l	DATE: 15/06/98	MAP No:	FILE: 8036 E
SUPERVISED: J G Collins	DATE: 15/06/98	SCALE 1:250000 (metres)	
REVISED:	DATE:	0 2000 4000 6000 8000	

FALCONBRIDGE LIMITED

Exploration Division — Timmins ONTARIO

FL - HBED / EAL JOINT VENTURE

JESSOP TOWNSHIP

DIAMOND DRILL PLAN

JS12-03 & 04 ; JS23-01

TRACED: PRODES	DATE: 12/06/98	NTS: 42-A/11	PROJECT: B036
DRAWN: d e l	DATE: 13/06/98	MAP No:	FILE: 8036 A
SUPERVISED: J G Collins	DATE: 12/06/98	SCALE 1:5 000 (metres) 0 40 80 120 160	
REVISED:	DATE:		

ASTRONOMIC

N

SHEET ORIENTED UTM NORTH AZIMUTH 0° 0'

P 1193144

P 1190593

P 1193143

P 1212882

P 1204199

P 1190019

P 1190020

P 1190022

TL 600 N

BL 000 (Az. N 65°)

JS23-01
470346mE , 5378000mN
L 1040 E , 375mN
Az. 150° , Dip -50°

JS12-03
468387mE , 5377566mN
L 900 W , 890mN
Az. 155° , Dip -50°

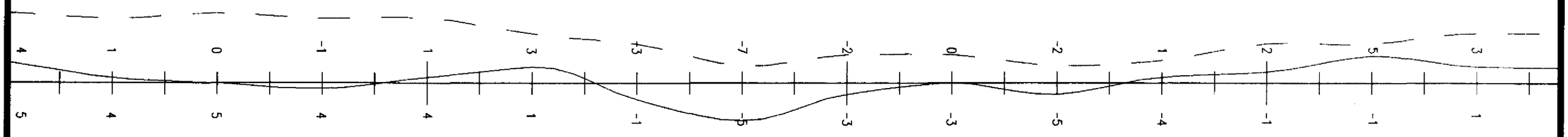
JS12-04
468831mE , 5377564mN
L 500 W , 680mN
Az. 150° , Dip -50°

RECEIVED
JUN 19 1998
GEOSCIENCE ASSESSMENT OFFICE

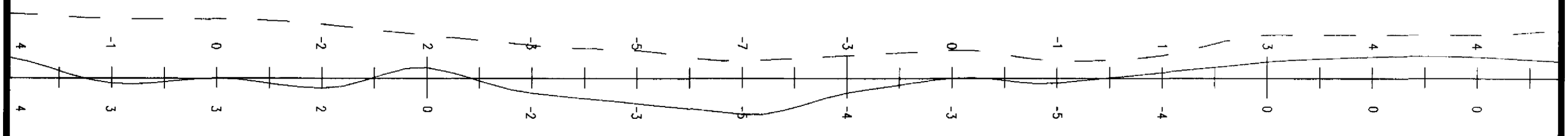
2.18568

42A11SW2009 2.18568 JESSOP 220

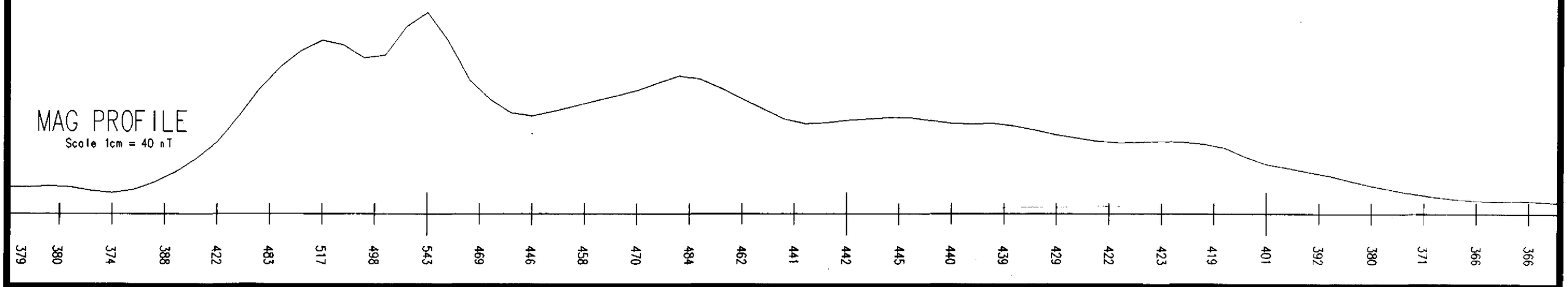
HLEM 1777Hz
Scale 1cm = +/-4%



HLEM 444Hz
Scale 1cm = +/-4%



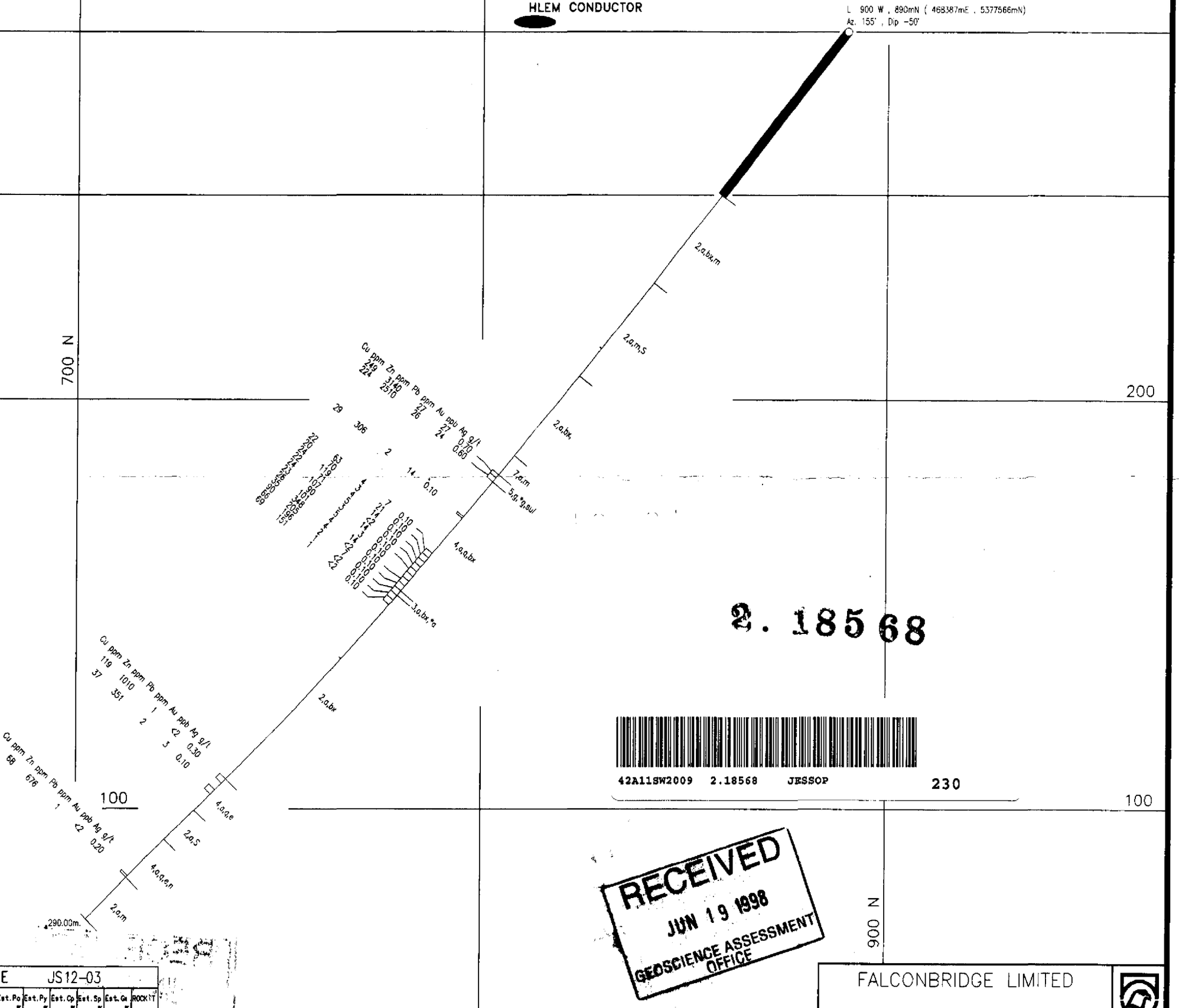
MAG PROFILE
Scale 1cm = 40 nT



P 1193143

HLEM CONDUCTOR

JS12-03
L 900 W, 890mN (468387mE , 5377566mN)
Az. 155°, Dip -50°



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	ULTRAMAMAFIC VOLCANIC ROCKS

KIDD/HBED/EAL JV ASSAYS TABLE JS12-03

SAMPL. No.	FROM (M)	TO (M)	Int (M)	Cu ppm	Zn ppm	Pb ppm	Ni ppm	Au ppb	Ag ppm	Est.Ni %	Est.Po %	Est.Py %	Est.Cp %	Est.Sp %	Est.Gn %	ROCK TT
AU00514	140.00	141.00	1.0	249	3140	27	286	27	0.7							
AU00515	141.00	142.30	1.3	224	2510	26	194	24	0.6							
AU00516	153.50	154.00	0.5	29	306	2	133	14	0.1							
AU00517	165.50	167.00	1.5	22	63	4	252	7	0.1							
AU00518	167.00	168.50	1.5	20	70	3	231	21	0.1							
AU00519	168.50	170.00	1.5	24	119	4	174	14	0.1							
AU00520	170.00	171.50	1.5	22	71	5	247	<2	0.1							
AU00521	171.50	173.00	1.5	24	107	3	162	14	0.1							
AU00522	173.00	174.50	1.5	23	90	5	200	3	0.1							
AU00523	174.50	176.00	1.5	26	101	4	192	14	0.1							
AU00524	176.00	177.50	1.5	35	348	4	232	<2	0.1							
AU00526	177.50	179.00	1.5	90	205	2	88	7	0.1							
AU00527	179.00	180.50	1.5	66	196	1	51	<2	0.1							
AU00528	180.50	182.00	1.5	69	151	1	53	<2	0.1							
AU00529	241.20	242.70	1.5	119	1010	1	108	<2	0.3							
AU00530	245.00	246.50	1.5	37	351	2	111	3	0.1							
AU00531	275.40	275.90	0.5	68	676	1	97	<2	0.2							

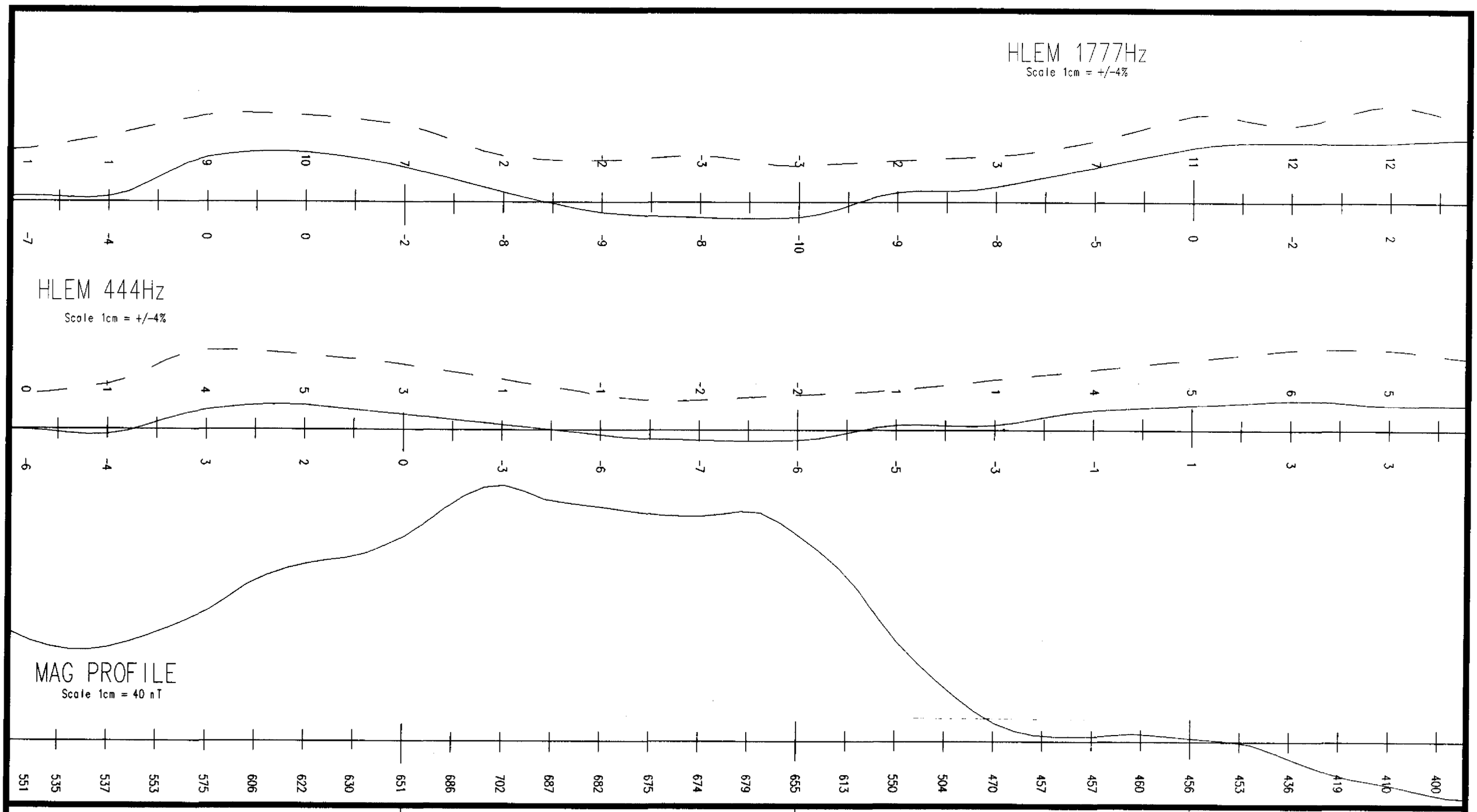
FALCONBRIDGE LIMITED
Exploration Division Timmins ONTARIO

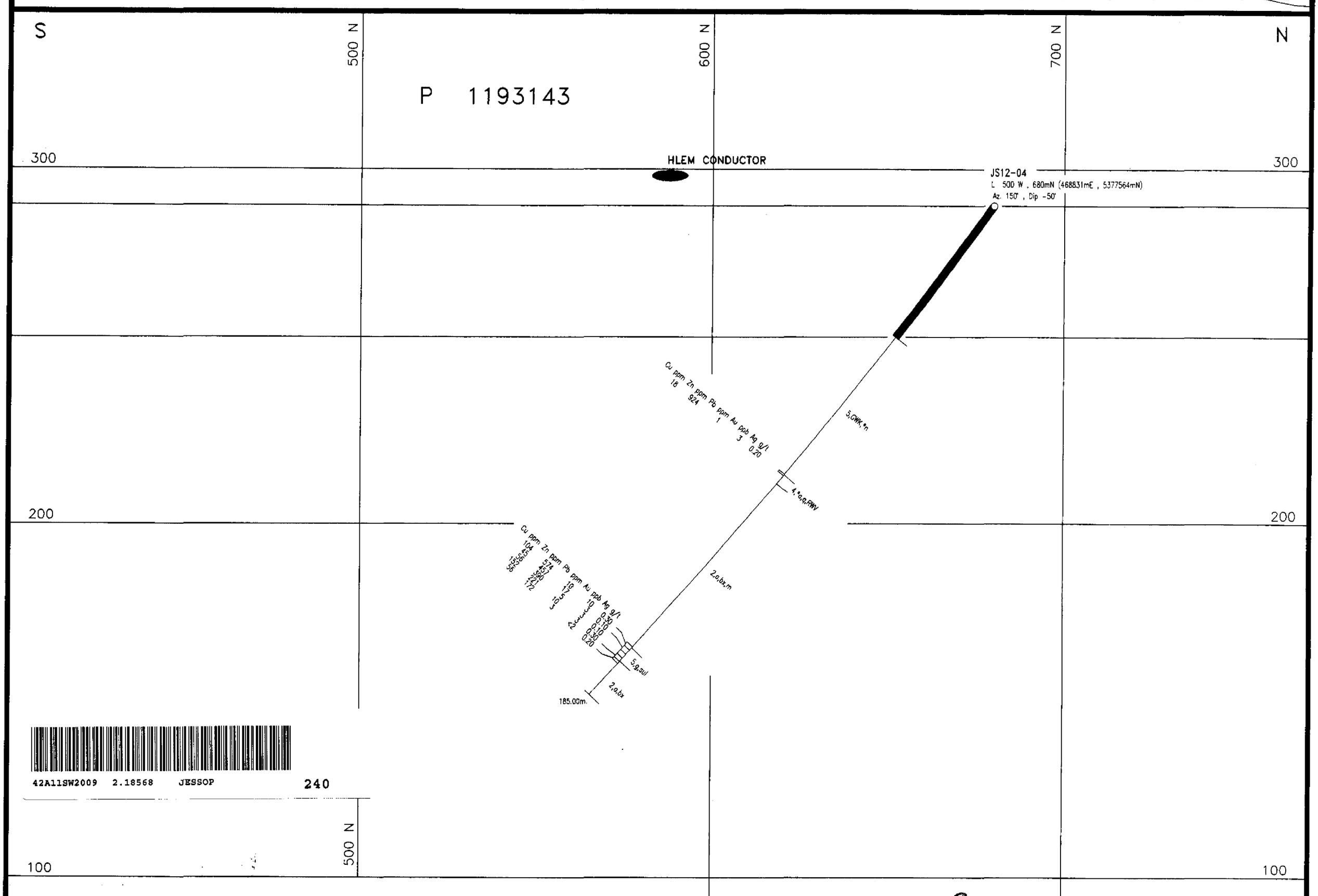
FL / HBED / EAL JOINT VENTURE
GRID JES12

LOOKING Az 245° JESSOP Twp.

DIAMOND DRILL SECTION L 900 W
DDH JES12-03

TRACED: PRODES	DATE: 17/06/98	NTS: 42-A/11	PROJECT: 8036
DRAWN: d e l	DATE: 15/06/98	MAP No:	FILE: 8036 B
SUPERVISED: J G Collins	DATE: 08/06/98	SCALE 1:1 000 (metres) 0 10 20 30 40	
REVISED: J G Collins	DATE: 17/06/98		





LEGEND

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

KIDD/HBRED/EAL JV ASSAYS TABLE JS12-04

SAMPL. No.	FROM (M)	TO (M)	Ist (M)	Cu ppm	Zn ppm	Pb ppm	Ni ppm	Au ppb	Ag ppm	Est.Ni %	Est.Po %	Est.Py %	Est.Cp %	Est.Sp %	Est.Gn %	ROCK T
AU00532	99.40	99.90	0.5	18	924	1	74	3	0.2							
AU00533	168.70	168.00	1.3	104	574	10	185	10	0.3							
AU00534	168.00	169.50	1.5	45	457	17	124	3	0.1							
AU00535	169.50	171.00	1.5	56	390	5	150	3	0.1							
AU00536	171.00	172.20	1.2	152	221	10	152	3	0.3							
AU00537	172.20	173.00	0.8	56	172	3	73	<2	0.2							

FALCONBRIDGE LIMITED
Exploration Division Timmins ONTARIO

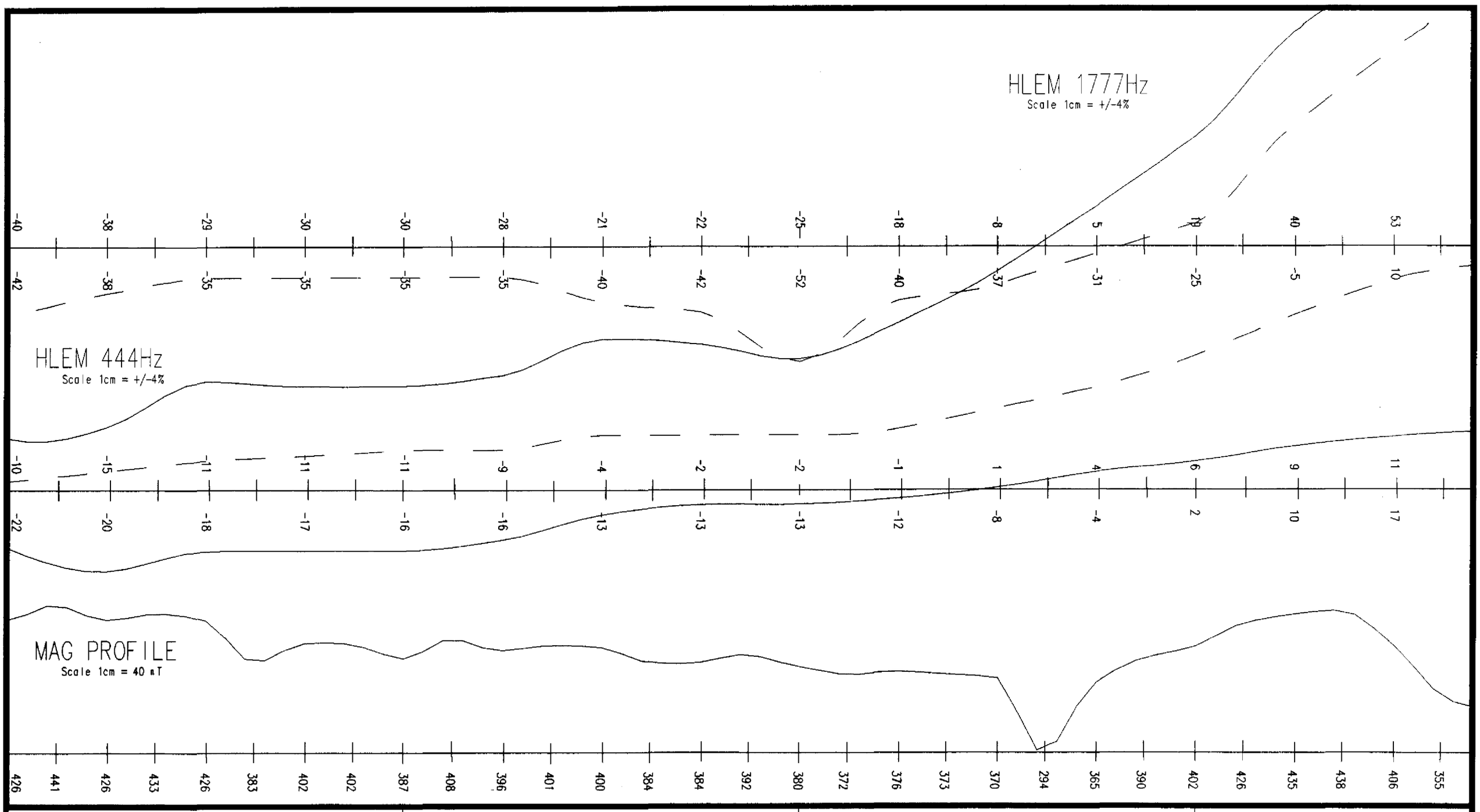
FL / HBED / EAL JOINT VENTURE
GRID JES12

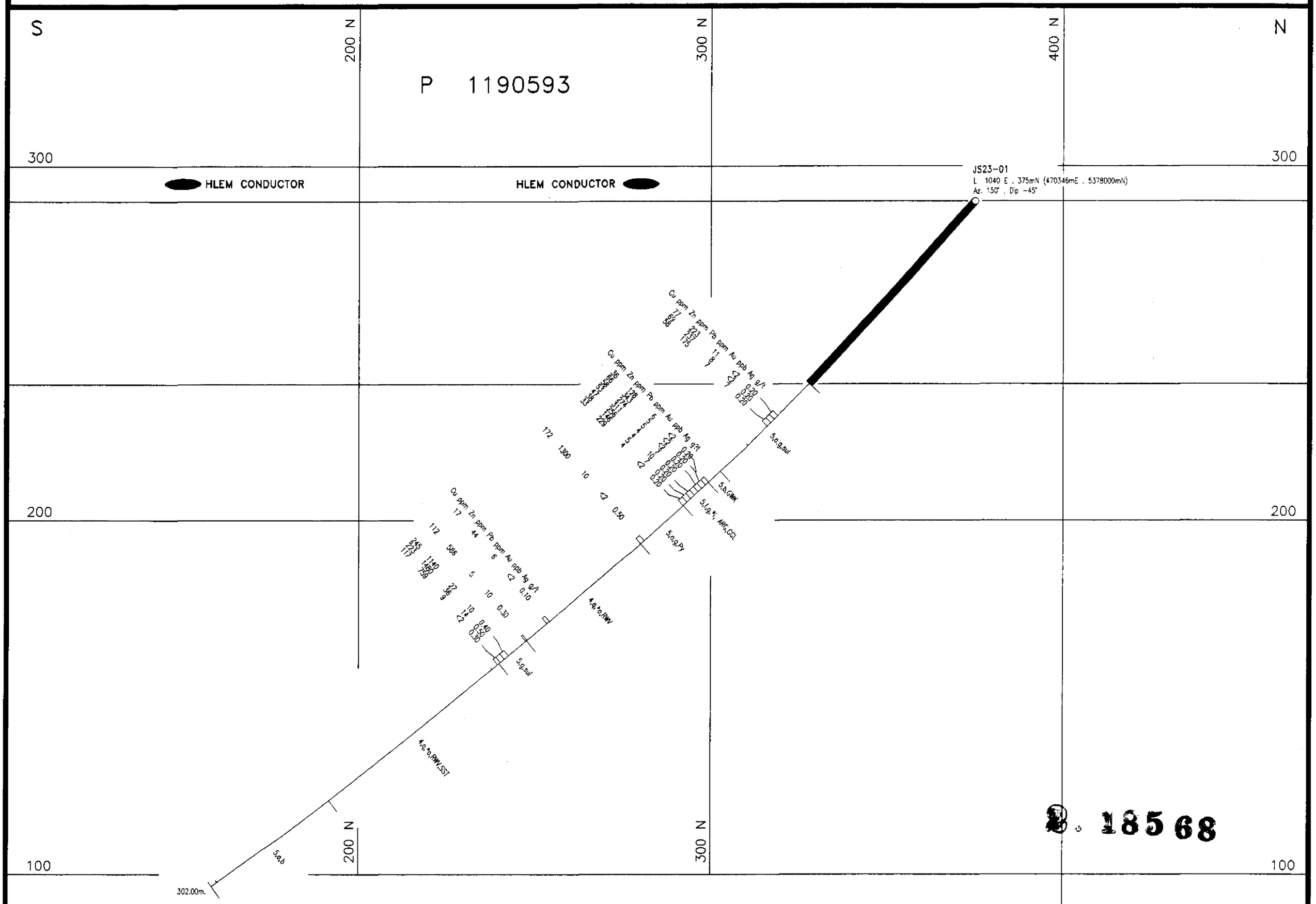
LOOKING Az 240° JESSOP Twp.

DIAMOND DRILL SECTION L 500 W

DDH JS12-04

TRACED: PRODES	DATE: 17/06/98	NTS: 42-A/11	PROJECT: 8036
DRAWN: d e l	DATE: 15/06/98	MAP No:	FILE: 8036 C
SUPERVISED: J G Collins	DATE: 08/06/98	SCALE 1:1 000 (metres) 0 10 20 30 40	
REVISED: J G Collins	DATE: 17/06/98		





42A11SW2009 2.18568 JESSOP 250

KIDD/HBED/EAL JV ASSAYS TABLE JS23-01

SAMPL. No.	FROM (M)	TO (M)	Int (M)	Cu ppm	Zn ppm	Pb ppm	Ni ppm	Au ppb	Ag ppm	Est.Ni %	Est.Po %	Est.Py %	Est.Cp %	Est.Sp %	Est.Ga %	ROCK T
AU00538	87.50	89.00	1.5	77	223	11	54	<2	0.2							
AU00539	89.00	90.50	1.5	69	237	8	81	<2	0.2							
AU00540	90.50	92.00	1.5	58	175	7	57	7	0.2							
AU00541	116.20	117.50	1.3	36	128	6	116	<2	0.2							
AU00542	117.50	119.00	1.5	66	343	5	119	<2	0.2							
AU00543	119.00	120.50	1.5	58	274	5	112	<2	0.2							
AU00544	120.50	122.00	1.5	53	311	4	100	7	0.2							
AU00545	122.00	123.50	1.5	47	256	4	118	10	0.2							
AU00546	123.50	125.00	1.5	38	146	5	103	7	0.2							
AU00547	125.00	126.50	1.5	33	229	4	115	<2	0.2							
AU00548	142.00	143.30	1.3	172	1300	10	113	<2	0.5							
AU00549	178.50	179.50	1.0	17	44	6	106	<2	0.1							
AU01501	187.00	187.50	0.5	112	586	5	180	10	0.3							
AU01502	194.00	195.50	1.5	245	1140	27	183	10	0.4							
AU01503	195.50	197.00	1.5	223	1480	36	176	14	0.5							
AU01504	197.00	198.00	1.0	117	759	9	145	<2	0.3							

LEGEND

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

FALCONBRIDGE LIMITED
Exploration Division Timmins ONTARIO

FL / HBED / EAL JOINT VENTURE
GRID JES23

LOOKING Az 240° JESSOP Twp.

DIAMOND DRILL SECTION L 1040 E
DDH JS23-01

TRACED: PRODES	DATE: 15/06/98	NTS: 42-A/11	PROJECT: 8036
DRAWN: d e l	DATE: 15/06/98	MAP No:	FILE: 8036 D
SUPERVISED: J G Collins	DATE: 08/06/98	SCALE 1:1 000 (metres) 0 10 20 30 40	
REVISED: J G Collins	DATE: 16/06/98		