G E O L O G

F O R M A T -- I

E D I T L I S T I N G

ARCHER CATHRO AND ASSOCIATES LTD.

WERNECKE JOINT VENTURE IGOR PROP

FORMAT VERSION : 6B02

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DRILLHOLE/TRAVERSE 80CH016          COLLAR ELEVATION    1124.00          AZIMUTH(LEG 1)  180.00          GEOLOGGED BY : WDE +
TOTAL DEPTH/LENGTH   91.14          NORTHING(- IF S)    3713.00          VERTICAL ANGLE  -50.00          DATE DY/MON/YR 14/JUL/80
CORE/HOLE DIAMETER       B          EASTING (- IF W)     -52.00          CO-ORD SYSTEM      GRD          PROJECT NUMBER     WJV

    F  . . I N T E R V A L . . CORE   MF %     TYPI-     TEX-  GRAIN  FRACS ..STRUCTURES...  ALT/N ASSEM.+ MINERALIZATION. AI  OI
K   L         ( M T . 2 )      RECOV  OI M ROCK  MINS QAL TURES -+ M          S       T D  B  HA HA HA HA HA HA HA HA HA    LN  RN
E   A                          -MISS  DE I     TH TM MIN MAJOR FC CA   DEN M ID T AZM O I  D                                TT  ET
Y   G  F.R.O.M : T..O   I.N.T  +PC.I  IR X TYPE  I  2  1  TX TX     X       I    K     P P. 1  QZ CL CB C2 AB XX HX PY UR YY BM ZONE
- --- ----.-- ----.-- ----.--  --.--  -- - ---- -- -- --- -- -- -- --  --- - -- / --- / // -  -- -- -- -- -- -- -- -- -- -- --  --
                                      ROC DE P       QAL TX TX SR SO  SML X     P     B .P B  FL BA C1 C3 MU HA H: CP    HA HW  HOW
                               R.Q.D. U-  EN R COLOR MIN MINOR ON H/  TOO M ID L AZM O  L D                                 1   1
                                      NIT PV OV        2       RD PC  PDW 2     G     T  G 2                                  2   2

/        0.00    5.18    5.18             OVER                        XX                      P2    P2          P4       MA 13

/        5.18   10.82    5.64             BRPQ CB    8A6 BR FL 08 38  24     FL         75    P2 <* P3 P1       D) 8)       74
L                                     HB2      8T    8T2       13 FC  31                         V. V* P2 P4       MG

R        5.18   20.97                          MG CRYSTALS DISSEMINATED IN CB MATRIX 1MM IN DIAMETER

/       10.82   11.13     .31           X BRPQ CB    8A6 BR FL 06 76  22     CN       T 70    P2 P1 P2 P2       D) 8)       54
L                                     HB2      8T    8T2       43 CC  11     CN       B 70       V. V* P2 P4       MG

R       10.82   11.13                          PROBABLY A WELL-HEALED FAULT.

/       11.13   14.63    3.50             BRPQ CB    8A6 BR FL 08 38  24     FL         75    P2 <* P3 P1       D) 8)       74
L                                     HB2      8T    8T2       13 FC  31                         V. V* P2 P4       MG

/       14.63   20.97    6.34           X BRPQ CB    8A6 BR FL 07 37  12     FL         65    P3 <* P3 P1       D+ 8)       74
L                                     HB2      8T    8T2       13 FC  21                         V. V* P2 P3       MG

/       20.97   21.09     .12         HB    BRPQ CB CL 8T4 BR    06 67  23                      P2 <1 P4 P2       D+ D)       44
L                                              4G    7A2       23 CC  2                          7( V+ P2 P3       H<

R       20.97   26.03                          CL AND CB ALTERATION ADJACENT TO A NARROW BROX DYKE.

/       21.09   22.37    1.28         HB    BRPQ CB CL 8T4 BR    06 67  23                      P2 <1 P4 P2       D+ D)       44
L                                              4G    7A2       23 CC  2                          7( V+ P2 P3       H<

/       21.09   22.37    1.28         HB 1 BRPQ CB CL 8T4 BR    06 67  25                      P2 <1 P4 P2 P2    00 61       44
L                                              4G    7A2       23 CC  4                          7( V+ P2 P1       H< 6*

R       21.09   22.37                          LOCALLY MASSIVE PY IN MATRIX OR LATE FRACTURES.

R TGG   21.09   22.37                               54669
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DRILLHOLE/TRAVERSE --- 80CH016 --- (CONTINUED)

K	FLG	F.R.O.M	T..O	I.N.T	RECOV	MF	%	ROCK	TM	TM	QM1	TX	TX	-+	%M	FRX	1	ID	S	AZM	T	DP	B	QZ	CL	CB	C2	AB	XX	HX	PY	UR	YY	BM	ZI
					R.Q.D	R.U	DE	PV	COLOR		QM2	TX	TX	SR	SO	SML	2	ID	P	AZM	B	PL	2	FL	BA	C1	C3	MU	HA	H:	CP		HA	12	12
/		22.37	23.96	1.59		HB		BRPQ	CB	CL	8T4	BR		06	67	23								P2	<1	P4	P2			D+	D)			44	
L									4G		7A2			23	CC	2									7(	V+	P2	P3			H<					
/		23.96	24.51	.55		HB	X	BROX	CB	HX	8T4	BR		06	67	21		CN			30			V+	<+	P6	P2			D3	D+			54	
L						HB4			8T		7A2			23	CC	1		CN			30				7(	V=	P5	P3			H<					
R		23.96	24.51						2 PHASES: A NARROW, FINE-GRAINED ZONE ON TOP WITH A THICKER,																													
R		23.96	24.51						COARSER PHASE BELOW. MINERALOGICALLY SIMILAR. HX IN 1-2MM MG																													
R		23.96	24.51						CRYSTALS.																												
/		24.51	26.03	1.52		HB		BRPQ	CB	CL	8T4	BR		06	67	23								P2	<1	P4	P2			D+	D)			44	
L									4G		7A2			23	CC	2									7(	V+	P2	P3			H<					
/		26.03	32.31	6.28				BRPQ	CB		8A4	BR	FL	07	27	23								P3	<+	P2	P=			D=				44	
L						HB1			8T		7A3			22	FC	2									V)	P+	P1	P4			MG	V.				
R		26.03	33.22						MG OCCURS AS EUHEDRAL CRYSTALS IN 0.5 TO 10CM WIDE PODS, SHEETS																													
R		26.03	33.22						AND VEINS WHICH BOTH PARALLEL AND CUT FOLIATION. SOME MG ALTERED																													
R		26.03	33.22						TO CL. FOLIATION WEAK AND ERRATIC. CB CRYSTALS RIMMED WITH CL																													
R		26.03	33.22						COMMON.																												
/	FLT	32.31	33.22	.91			X	BRPQ	CL		8A4	BR	F/	07	27	2X		F/			20			P3	<+	P2	P=			D=				13	
L						HB1			2G		7A3			22	FC	37									V)	P+	P1	P4			MG	V.				
R		32.31	33.22						SOME GOUGE																												
/		33.22	39.32	6.10				BRPQ	HX	CB			FL			12		FL			30				<1	P5				D3				24	
L									9TBA							2		CN		B	40				61	V=	P4			H>					
R		33.22	39.62						PROBABLY A DYKE. FRAGMENTS VERY RARE GRADES LOCALLY TO BRCL,																													
R		33.22	39.62						BRCB, AND BRBA.																												
/		39.32	39.62	.30			X	BRSU	PY	CP			RP			1									71	P5					72		CC	64	
L						HB4			8TCB							1									7=		P5				71				
R		39.32	39.62						MINOR VERY SOFT BLACK MINERAL CC?																													
/		39.62	46.09	6.47				BRPQ	CB	BA	8A5	BR		07	27	12		FL			30			P2	<=	P3	P+			D=	D.			34	
L						HB1			8T		7G2			23	FC	1									<.	V1	P2	P4			HE	V(				
R		39.62	46.09						FOLIATION WEAK. MG DISSEMINATED BUT PATCHY. LOCALLY BROX																													
/		46.09	55.78	9.69				BRPQ	CB		9A6	BR		07	47	2								P3	7)	P3	P1			D+				84	
L						HB1			9T		8A3			22	FC	21										V+	P2	P4			HE	V(				

DRILLHOLE/TRAVERSE --- 80CH016 --- (CONTINUED)

K	FLG	F.R.O.M	T..O	I.N.T	RECOV	MF	X	ROCK	TM	TM	QM1	TX	TX	-+	XM	FRX	1	ID	S	AZM	T	DP	B	QZ	CL	CB	C2	AB	XX	HX	PY	UR	YY	BM	ZI
					R.Q.D	R.U	DE	PV	COLOR		QM2	TX	TX	SR	SO	SML	2	ID	P	AZM	B	PL	2	FL	BA	C1	C3	MU	HA	H:	CP		HA	12	12
R		46.09	55.78						HE VERY FINE GRAINED																											
/		55.78	57.91	2.13				BRPQ	CB		8A6	BR	FL	06	66	2		FL			45		P1	<+	P4				D+	D1			54	
L						HB1			8T					43	FC	21									V=	P3	P4			HE	V.				
/	VEN	57.91	58.22	.31			X	BROS	CB	MG						3									P5					D3	61			64	
L						HB4			9TPY							3								V)	V2	P3				MG	6+				
R		57.91	58.22						VEIN. TWO CARBONATE PHASES IN VEINS: CA FIRST, THEN DO.																												
R	TGG	57.91	59.53						54669																												
/		58.22	59.34	1.12				BRPQ	CB		8A6	BR	FL	06	66	2		FL			45		P1	<+	P4				D+	D1			54	
L						HB1			8T					43	FC	21									V=	P3	P4			HE	V.				
/	VEN	59.34	62.18	2.84			X	BROS								1								<+	B7				D1	61			64	
L						HB4										1								<)	V1	P6	V+		MG	7+				
R		59.34	62.18						VEIN. CP IN CORES OF MG CRYSTALS AND IN CB VEINS.																												
R	TAG	59.53	62.18						54670 69151																												
/		62.18	64.01	1.83				BRPQ	CB		8A6	BR	FL	06	66	2		FL			45		P1	<+	P4				D+	D1			54	
L						HB1			8T					43	FC	21									V=	P3	P4			HE	V.				
/		64.01	67.67	3.66				BRPQ			8A4	BR		07	37	2		FL			35		P2	<)	P2	P1			D+				84	
L						HB1			9T		6A2			22	FC	2									<)	P1	P5			H>					
R		64.01	91.14						HE VERY FINE GRAINED. A FEW QUARTZITE FRAGS CONTAIN UPTO 10% HE.																												
/		67.67	70.71	3.04			X	BRPQ			8A4	BR		07	37	3		00			00		P2	<)	P2	P1			D+				64	
L						HB1			9T		6A2			22	FC	3									<)	P1	P5			H>					
/	VEN	70.71	71.23	.52			X	BROX	MG	CB						1		CN		T	10				P2					P8	V)			16	
L						HB4			8T							1		CN		B	20		V+	V+	P2					MG					
R		70.71	71.23						VEIN																												
/		71.23	74.83	3.60			X	BRPQ			8A4	BR		07	37	3		00			00		P2	<)	P2	P1			D+				64	
L						HB1			9T		6A2			22	FC	3									<)	P1	P5			H>					
/	VEN	74.83	75.50	.67			X	BRSO	PY	MG						2		CN		T	45			<=	P6				D=	<3			44	
L						HB4			8TCB							2		CN		B	50					P6			MG	<)				
R		74.83	75.50						ROCKS ADJACENT TO BRSO DYKE ARE MORE FRACTURED AND CONTAIN MORE																												
R		74.83	75.50						CL THAN SURROUNDING BRPQ.																												
/		75.50	77.11	1.61			X	BRPQ			8A4	BR		07	37	3		00			00		P2	<)	P2	P1			D+				64	
L						HB1			9T		6A2			22	FC	3									<)	P1	P5			H>					

DRILLHOLE/TRAVERSE --- 80CH016 --- (CONTINUED)

K	FLG	F.R.O.M	T..O	I.N.T	RECOV	MF	%	ROCK	TM	TM	QM1	TX	TX	-+	%M	FRX	1	ID	S	AZM	T	DP	B	QZ	CL	CB	C2	AB	XX	HX	PY	UR	YY	BM	ZI
					R.Q.D	R.U	DE	PV	COLOR		QM2	TX	TX	SR	SO	SML	2	ID	P	AZM	B	PL	2	FL	BA	C1	C3	MU	HA	H:	CP		HA	12	12
/		77.11	77.18	.07			X	BROX	MG	CP															D1	P6				D3			34	
L						HB4																				P6					V=				
/		77.18	80.25	3.07			X	BRPQ			8A4	BR		07	37	3		00				00		P2	<)	P2	P1			D+			64	
L						HB1			9T		6A2			22	FC	3										<)	P1	P5		H>				
/	FLT	80.25	80.56	.31			X	BRPQ			8A4	BR	F/	07	37	3		F/				20		P2	<)	P2	P1			D+			13	
L						HB1			9T		6A2			22	FC	3										<)	P1	P5		H>				
/		80.56	82.30	1.74			X	BRPQ			8A4	BR		07	37	3		00				00		P2	<)	P2	P1			D+			64	
L						HB1			9T		6A2			22	FC	3										<)	P1	P5		H>				
/	VEN	82.30	85.40	3.10			X	BRSU	PY	CB						2		CN			T	10			<=	85				D)	V4		43	
L						HB4			8T							21										V=	P4				V*				
R		82.30	85.40								VEIN. THE VEIN IS ITSELF A BRECCIA IN PLACES WITH PY MATRIX AND																							
R		82.30	85.40								CB FRAGMENTS. THIS OCCURS ONLY WHERE FRACTURING IS VERY STRONG.																							
R	TAG	82.30	85.40								54670 69151																								
/		85.40	86.26	.86			X	BRPQ			8A4	BR		07	37	3		00				00		P2	<)	P2	P1			D+			64	
L						HB1			9T		6A2			22	FC	3										<)	P1	P5		H>				
/		86.26	86.87	.61			X	BRPQ			8A4	BR		28	98	3		00				00		P2	<)	P2	P1			D+			84	
L						HB1			9T		6A2			22	FC	3										<)	P1	P5		H>				
R		86.26	91.14								BRECCIA FRAGMENTS BECOMING MUCH MORE MASSIVE CLOSELY RESEMBLES																							
R		86.26	91.14								CRACKLE-BRECCIA ZONE IN HOLE 80I015.																							
/	FLT	86.87	90.53	3.66			X	BRPQ			8A4	BR	FZ	28	98	XX		FZ				25		P2	<)	P2	P1			D+			01	
L						HB1			2R		6A2			22	FC	XX										<)	P1	P5		H>				
R		86.87	90.53								GOUGE IS PURPLE-GREEN COLOR.																							
/		90.53	91.14	.61			X	BRPQ			8A4	BR		28	98	3		00				00		P2	<)	P2	P1			D+			84	
L						HB1			9T		6A2			22	FC	3										<)	P1	P5		H>				
A	MIN	86.87	90.53	3.66							PM U		PM CU		PM CO																CPS				
A	LAB	86.87	90.53	3.66							CHEMEX		CHEMEX		CHEMEX																SCNTRX				
A	TYP	86.87	90.53	3.66							1H-COR		1H-COR		1H-COR																IN BAG				
A	MIN	86.87	90.53	3.66							TOT	AA		AA		AA																BGSISL				
A	001	21.09	22.37	1.28	500.0	J17429					7.5		2600		400																	120				
A	001	57.91	59.53	1.62	0.0	J17430					23.0		710		330																	120				
A	001	59.53	62.18	2.65	0.0	J17431					3.5		4900		310																	120				

DRILLHOLE/TRAVERSE --- 80CH016 --- (CONTINUED)

A MIN	86.87	90.53	3.66			TOT AA	AA	AA		BGSISL
A LAB	86.87	90.53	3.66			CHEMEX	CHEMEX	CHEMEX		SCNTRX
A TYP	86.87	90.53	3.66			1H-COR	1H-COR	1H-COR		IN BAG
A 001	82.30	85.40	3.10	884.0	J17432	5.5	5800	320		120
/ END										