

84-995-13111

ASSESSMENT REPORT
DIAMOND DRILL PROJECT
BEAR GROUP
BEARSKIN LAKE, B.C.

ATLIN MINING DIVISION
N.T.S. 104K/1

58°13'N

132°17'W

FILMED

OWNER: CHEVRON CANADA LIMITED
OPERATOR: CHEVRON CANADA RESOURCES LIMITED

Authors: K. R. Shannon
S. G. McAllister

November, 1984

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,111

a2/15.

FILMED

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INTRODUCTION

Mineralization on the BEAR claim group was discovered in 1981 during reconnaissance prospecting in the Tatsamenie Lake area. Follow-up work in 1982 was mainly comprised of grid soil sampling (Shannon, 1982) and trenching. Based on favourable results from the 1982 program, diamond drilling was started on the claims in summer 1983. Further drilling was carried out during summer 1984.

LOCATION AND ACCESS

The BEAR group of claims is situated at approximately 58°13'N and 132°17'W (Fig. 1). The claims are 170 km southeast of Atlin, B. C. and 75 km northwest of Telegraph Creek, B. C. The base camp is situated on the northeast corner of Bearskin Lake and access to the claims is by trail or helicopter. During 1984, supplies were flown in by charter aircraft from Dease Lake, B.C. approximately 137 km to the east. Fuel was mobilized during the winter on the ice at Bearskin Lake.

CLAIMS

The BEAR group of claims was staked as follows (Fig. 2):

<u>Claim</u>	<u>Record No.</u>	<u>Record Date</u>	<u>No. of Units</u>
BEAR	1489	August 21, 1981	20
BEAR 1	1547	August 31, 1981	20
BEAR 2	1548	August 31, 1981	10
BEAR 3	1724	August 26, 1982	10
BEAR 4	1725	August 26, 1982	20
TOTEM 2	1726	August 26, 1982	20

These claims cover previously unstaked ground.

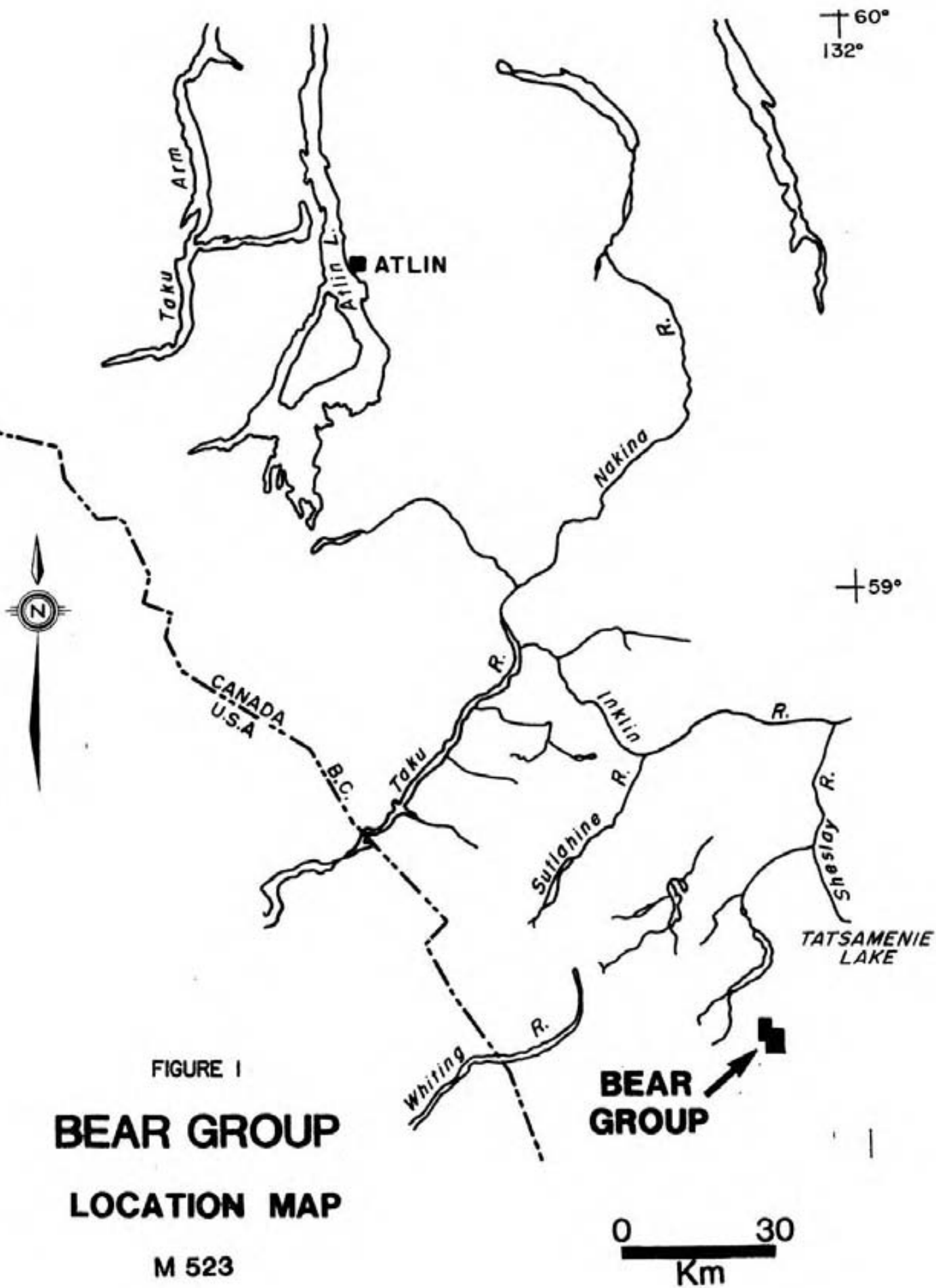


FIGURE 1
BEAR GROUP
LOCATION MAP
 M 523

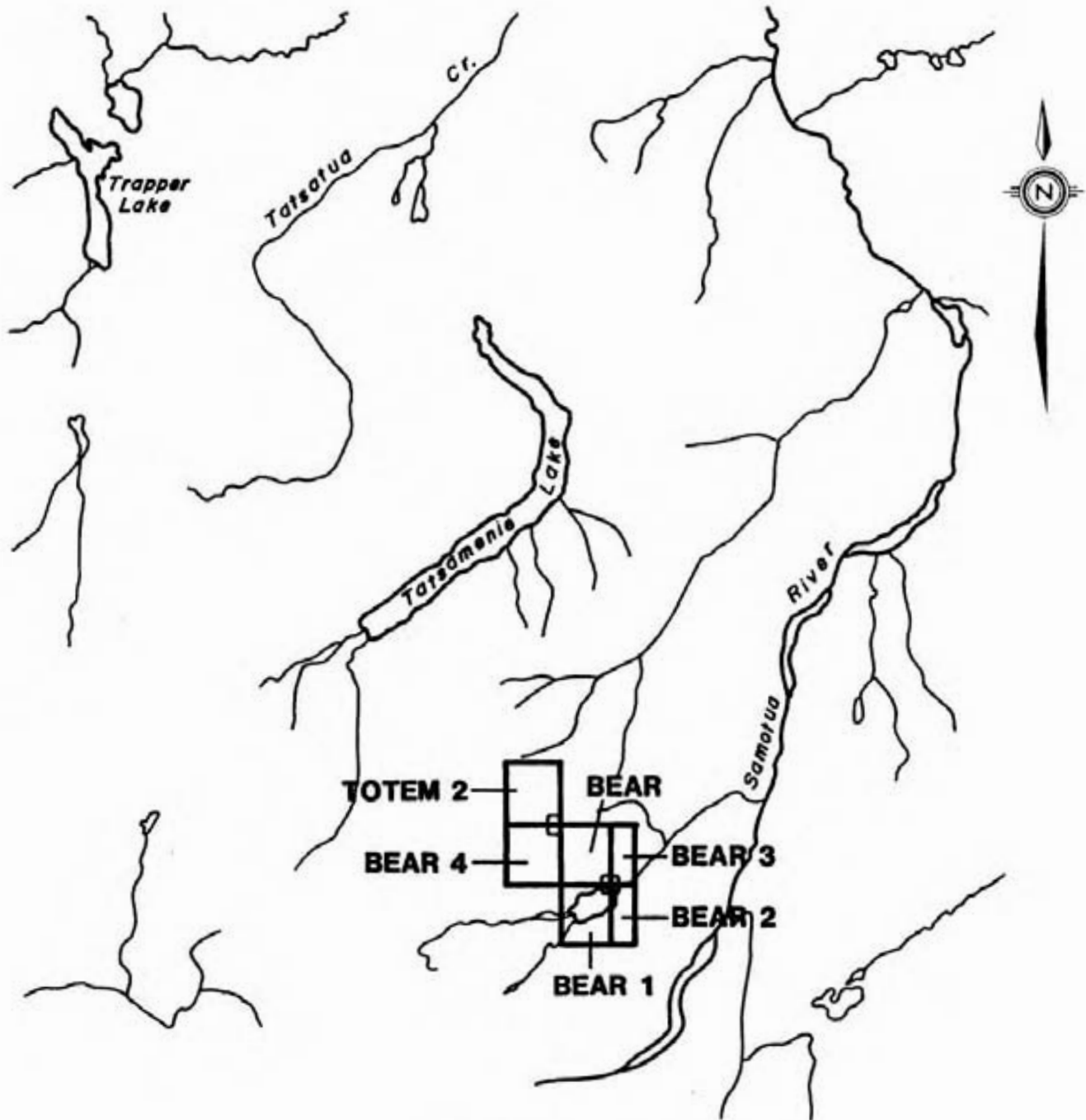


FIGURE 2

BEAR GROUP CLAIM LOCATIONS



M 523

GEOLOGY

The BEAR group of claims is underlain by rocks of Permian and Pre-Upper Triassic age. The Pre-Upper Triassic mafic pyroclastic rocks consisting of tuffs, lapilli tuffs, banded tuffs and crystal tuffs outcrop mainly in the southern and western part of the claims. These rocks have been extensively chloritized by regional greenschist metamorphism. In the northeastern region of the claims gabbro of uncertain age outcrops. The gabbro is thought to occur as sills within the volcanic rocks. Permian marine carbonates, consisting of fossiliferous limestones and dolomites, are found in the central and western regions of the claim.

The Permian limestones and dolomites often occur as fault bounded lenses and pods within the Pre-Upper Triassic volcanic rocks. In places the original limestone has undergone dolomitization and silicification. Fe-carbonate alteration is common in the tuffs, especially along structures. Fuchsite and pyrite blebs also occur locally within the tuffs.

The claim area is cut by abundant faults. The predominant fault orientations are northwest-southeast, north-south and northeast-southwest.

PURPOSE AND INTERPRETATION OF DRILL PROGRAM

The purpose of the drill program was to evaluate mineralization contained in a north-south fault zone on the central portion of the BEAR claim. This fault zone (called the Bear fault) lies within the Pre-Upper Triassic tuff assemblage and contains a fault-bounded pod of limestone. Precious metal mineralization occurs erratically along the fault zone especially in areas where the fault cuts through the limestone

pod. Sulphides present include pyrite and arsenopyrite occurring as veins, patches and disseminations in both the limestone and tuff hosts. There seems to be little correlation between presence of sulphide and precious metals values. Assay results from the six holes show sub-economic but anomalous gold and silver grades.

SUMMARY

Assay results from the drilling show a concentration of gold and silver along the Bear fault. Pyrite and arsenopyrite occur along the fault but are not directly associated with the precious metal mineralization. More work is needed to determine the nature of the gold and silver mineralization and ore controls.

1984 DRILLING
BEAR GROUP CLAIMS

COST STATEMENT

PERIOD: April 1, 1984 to August 16, 1984

DRILLING

<u>Hole No.</u>	Footage Cost \$23/ft. Core \$18/ft. Casing	Helicopter \$420/hr.incl. Fuel	Field Cost Man Hours \$30/Man Hours	Camp Man Days \$50/Man Day	Rig Hours \$15/Rig Hour	
B-84-31 (Apr.11-15)	\$9,808.00	\$ 2,520.00	\$ 4,920.00	\$ 1,200.00	\$ 135.00	
B-84-32a (Apr.19-28)	10,747.00	4,620.00	5,610.00	2,200.00	1,380.00	
B-84-34 (Apr.29-May 21)	15,700.00	10,080.00	14,340.00	4,800.00	3,120.00	
B-84-35 (May 7-16)	9,878.00	4,620.00	3,420.00	2,200.00	855.00	
B-84-42 (June 3-11)	14,616.00	3,780.00	3,720.00	1,800.00	930.00	
	<u>\$60,749.00</u>	<u>\$25,620.00</u>	<u>\$32,010.00</u>	<u>\$12,200.00</u>	<u>\$6,420.00</u>	<u>Total Cost</u>
						<u>\$137,929.00</u>

STATEMENT OF QUALIFICATIONS

I, Ken Shannon, graduated from the University of British Columbia with a B.Sc. (Hons. Geology) in 1975. An M.Sc. degree was awarded from the Department of Geology at U.B.C. in May 1982.

I have worked as an exploration geologist with Chevron Canada Resources Limited of Vancouver, B. C. since May, 1981. I am a member in good standing of the C.I.M.M., G.A.C. and S.E.G.

Work on the BEAR group of claims was done under my supervision.



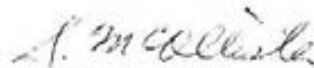
KEN SHANNON

November 1984

STATEMENT OF QUALIFICATIONS

I, Sandra G. McAllister, am a professional geologist with office presently at 1900 - 1055 West Hastings Street, Vancouver, B. C.

I am a graduate of Queen's University with a B.Sc. (Hons., Geological Sciences) 1981, have worked in mineral exploration, mainly seasonally, since 1978 and am a member in good standing of the Geological Association of Canada.



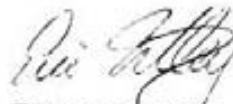
Sandra G. McAllister

November 1984

STATEMENT OF QUALIFICATIONS

I, Eric Titley, graduated from the University of Waterloo with a B.Sc. (Hons. Earth Sciences) in 1980.

I have worked as an exploration geologist with Chevron Canada Resources Limited of Vancouver, B. C. since April 1984. I am an associate member of the G.A.C.



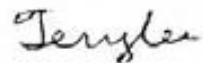
ERIC TITLEY

November 1984

STATEMENT OF QUALIFICATIONS

I, Terry Lee, graduated from the University of Toronto in 1980 with a B.A.Sc. in Geological Engineering, mineral exploration option.

I have worked in the mineral exploration field for over four years.



TERRY LEE

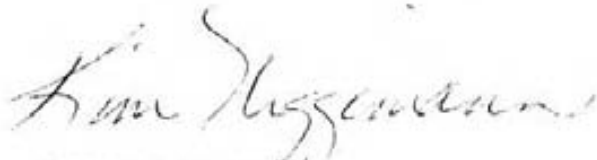
November 1984

STATEMENT OF QUALIFICATIONS

I, Kim Niggemann, graduated from the University of New Brunswick with B.Sc. Geology in 1980.

I have worked as an exploration geologist with Chevron Canada Resources Limited of Vancouver, B. C. since April, 1981.

I am a member in good standing of the G.A.C.



KIM NIGGEMANN

November 1984

CORE LOGGING SYSTEM

All core logging is done on 80 column forms using two tiers of information (effectively giving 160 columns). The tier being used is marked in the first column (KEY column) with either a "/" to represent entries in the upper tier or an "L" to represent entries in the lower tier. An "R" in the first column is used to preface any remarks. All codes used in the various columns (both upper (/) and lower (L) tier) are explained in the edit listing in the appendix under hole number B83 DH000.

Geological intervals in the core are marked in column 47. A "P" is used for principal geological intervals which are consecutive down the hole. Intervals of interest within principal geological intervals are logged as "R" intervals (repeats).

Further information on the logging system is available from International Geosystems Corporation, 304 - 1200 W. Pender St., Vancouver, B. C.; Ph. 669-5626.

APPENDIX

G E O L O G E D I T L I S T I N G

SYSTEMS ENGINEERING BY
INTERNATIONAL GEOSYSTEMS CORP.

CHEVRON CANADA RESOURCES
BEAR TOTEM GOLD PROPERTY, NORTHERN BC

FORMAT VERSION : 6802

DRILLHOLE/TRaverse : B83DH000	COLLAR ELEVATION: 0.00	AZIMUTH(DEG) : 0.00	GEOLOGGED BY : KVN + KRS
TOTAL DEPTH/LENGTH : 0.00	NORTHING(- IF S): 0.00	VERTICAL ANGLE : -90.00	DATE (YY/MM/DD): 830926
CORE/HOLE DIAMETER : HB80	EASTING (- IF W): 0.00	CO-ORD SYSTEM : GRD	PROJECT NUMBER : M523

F - I N T E R V A L -		CORE	T- %	TYPI-	QAL	TEX-	GRAIN	PGI	STRUCTUR-1	ALTERATION	MINS	DRE-TYPE	MINS	SUMMARY
K L (UNITS = MT.2 DEC.PLACE)		RECOV-	M M	ROCK	FYING	MIN	TURES	CHARACS		H H H H H	H ANY	H H ANY	STR	
E A (METRIC)		ERY	D I		TM TM	MAT	TX TX	F C % M	VNTK	/KI	T ID	STK	DIP	A A A A A
Y G F R O M - T O - I N T (PC.1)		D X	TYPE	1 2	QM1	1 2	F F C A	NNCM		1	AZM	RT	QZ	CA AK CL GY XX PY CP LI YY S I
K F		ROCK	VUG	QT	DO	CR	GM2	TX TX	S R S O	VNDF	T ID	STK	DIP	MU DO CY FU HE HA JA SC FS HA ALT
E L		QUAL	GMM	GG	GG	LC-H		3 4	U N H /	PI	2	AZM	RT	H H H H H H H H H H H H F I
Y G		DESIG				COL	A		R D P C	SMLF				STRUCTUR-2 A A A A A A A A A A

R SUM

R SUM BEAR TOTEM GOLD PROPERTY IS NEAR ATLIN, NORTHERN B.C.

R SUM

R SUM DRILLING COMPANY: CONNORS DRILLING

R SUM HEAD OFFICE IS IN KAMPLOOPS, B.C.

R SUM

R SUM SURVEYED BY: AAD = ANDREW DEROWSKI

R SUM

R SUM GEOLOGGED BY: KRS = KEM SHANNON

R SUM KVN = KIM NIGGEMANN

R SUM MJT = MIKE THICKE

R SUM AAL = ANDY LAIRD

R SUM EDT = ERIC TITLEY

R SUM TRL = TERRY LEE

R SUM SGM = SANDY McALLISTER

R SUM

G E O L O G

R SUM CO-ORDINATE SYSTEM IS TRUE NORTH

R SUM

R SUM RECOVERY (/17-20) MEASURED AS PERCENT RECOVERY (PC.1)

R SUM OVER THE FROM-TO INTERVAL

R SUM

R SUM RQD = ROCK QUALITY DESIGNATION (L17-20) MEASURED AS PERCENT

R SUM (PC.1) OVER THE FROM-TO INTERVAL

R SUM RQD IS THE TOTAL LENGTH (BETWEEN INTERVAL) OF PIECES

R SUM OF CORE AT LEAST 2-1/2 TIMES DIAMETER OF CORE, DIVIDED

R SUM BY LENGTH OF INTERVAL (TO MINUS FROM) TIMES 100

R SUM

R SUM GEOLOGICAL ROCK CODES AND LEGENDS (/24-27)

R SUM

R SUM TRIC TRICONED INTERVAL, NO CORE RECOVERED

R SUM CASN CASING TO BEDROCK

R SUM QVER OVERBURDEN

R SUM LOST LOST CORE (NOT RECOVERED IN DRILLING)

R SUM MISM MISSING-CORE (NOT AVAILABLE FOR LOGGING)

R SUM CAVY NATURAL UNDERGROUND CAVITY, CAVERN

R SUM CAVD CAVED MATERIAL

R SUM FAUL FAULT

R SUM GOUG GOUGE (> 50%)

R SUM

R SUM VEIN VEIN, UNDIFFERENTIATED

R SUM VNXX VEIN, AS MODIFIED BELOW:

R SUM Q, QZ QUARTZ

R SUM D, DD DOLomite

G E O L O G Y

R SUM	C, CA	CALCITE
R SUM	P, PY	PYRITE
R SUM		
R SUM	D/BS	BASALT DYKE
R SUM	D/F1	FELSIC DYKE - 1
R SUM	D/F2	FELSIC DYKE - 2
R SUM	BXTA	TALC BRECCIA
R SUM	BXGB	GAHBRG BRECCIA
R SUM	BXTF	TUFF BRECCIA
R SUM	BXTQ	TUFF QUARTZ BRECCIA
R SUM	BXTD	TUFF DOLOMITE BRECCIA
R SUM	BXUT	DOLOMITE TUFF BRECCIA
R SUM	BXGT	QUARTZ TUFF BRECCIA
R SUM	BXTP	TUFF PYRITE BRECCIA
R SUM	BXPT	PYRITE TUFF BRECCIA
R SUM	BXGP	QUARTZ PYRITE BRECCIA
R SUM	BXPG	PYRITE QUARTZ BRECCIA
R SUM	BXDD	DOLOMITE BRECCIA
R SUM	BXSD	SILICIFIED DOLOMITE BRECCIA
R SUM	BXSL	SILICIFIED LIMESTONE BRECCIA
R SUM	BXGZ	QUARTZ BRECCIA
R SUM	BXSD	QUARTZ-DOLOMITE BRECCIA
R SUM	BXDG	DOLOMITE-QUARTZ BRECCIA
R SUM	BXLI	LIMESTONE BRECCIA
R SUM	JASP	JASPEROID
R SUM	DOLA	DOLOMITE
R SUM	LI-ST	LIMESTONE

R SUM	MUDS	MUDSTONE
R SUM	SILT	SILTSTONE
R SUM	TUFF	TUFF, UNDIFFERENTIATED, MAFIC
R SUM	TFLM	TUFF, LAMINATED, MAFIC
R SUM	TFBN	TUFF, BANDED
R SUM	TFLP	TUFF, LAPILLI, MAFIC (> 20% LAPILLI)
R SUM	TFBX	TUFF, BRECCIA, MAFIC (WITH VOLCANIC CLASTS)
R SUM	TFXL	TUFF, CRYSTAL, MAFIC
R SUM	TFIV	TUFF, INTERMEDIATE
R SUM	TFPV	TUFF, FELSIC
R SUM	GSTN	GREENSTONE
R SUM	GABR	GABBRO
R SUM	DIAB	DIABASE DYKE

R SUM TYPE MODIFIER (1-21-22), MATRIX OF BRECCIA ROCK TYPE

R SUM	SI	SILICA
R SUM	DD	DOLomite
R SUM	PY	PYRITE
R SUM	CA	CALCITE
R SUM	CY	CLAY (25% - 50% CLAY GOUGE)
R SUM	LI	LIMONITE
R SUM	HE	HEMATITE

R SUM VUGS (L21-24)

R SUM COLUMN 21 G-SCALE

G E O L O G

R SUM

R SUM

COLUMN 22-23 MINERALS LINING CAVITY

R SUM

R SUM

QZ, Q QUARTZ QD QUARTZ-DOLOMITE

R SUM

CA, C CALCITE DR DOLOMITE-QUARTZ

R SUM

DD, D DOLOMITE GC QUARTZ-CALCITE

R SUM

GY, G GYPSUM CG CALCITE-QUARTZ

R SUM

LI LIMONITE DC DOLOMITE-CALCITE

R SUM

GD GOETHITE CD CALCITE-DOLOMITE

R SUM

AR ARAGONITE

R SUM

R SUM

AMOUNT OF SILICIFIED FRAGMENTS IN BRECCIA (L24)

R SUM

R SUM

G-SCALE (AS PERCENTAGE OF TOTAL ROCK FRAGMENTS)

R SUM

R SUM

AMOUNT OF TUFF OR GREENSTONE FRAGMENTS IN BRECCIA (L25)

R SUM

R SUM

G-SCALE (AS PERCENTAGE OF TOTAL ROCK FRAGMENTS)

R SUM

R SUM

AMOUNT OF DOLOMITE FRAGMENTS IN BRECCIA (L26)

R SUM

R SUM

G-SCALE (AS PERCENTAGE OF TOTAL ROCK FRAGMENTS)

R SUM

R SUM

AMOUNT OF OTHER FRAGMENTS IN BRECCIA (L27), AS SPECIFIED IN

R SUM

REMARKS

R SUM

R SUM

G-SCALE (AS PERCENTAGE OF TOTAL ROCK FRAGMENTS)

R SUM

R SUM

KEY FLAGS (/L, 1-4) AND GENERAL FLAGS (/L, 2-4)

R SUM

R SUM

KHAP HANGINGWALL PYRITE

R SUM

KHXL HANGINGWALL LIMESTONE

R SUM

KFAL FOOTWALL LIMESTONE

R SUM

KTCP CHALCOPYRITE MARKER, TOP

R SUM

KBCP CHALCOPYRITE MARKER, BOTTOM

R SUM

KHAT HANGINGWALL TUFF

R SUM

KFAT FOOTWALL TUFF

R SUM

KTBA TOP BANDED TUFF MARKER "A"

R SUM

KTBB BOTTOM BANDED TUFF MARKER "A"

R SUM

KXAF WESTWALL FAULT

R SUM

KWBH WOBBER OR BLACK FAULT

R SUM

KC/G GRADATIONAL CONTACT

R SUM

KUC UPPER CONTACT

R SUM

KUC LOWER CONTACT

R SUM

KQHE ORE HORIZON

R SUM

RHED REMARK, HEADER; PRINTED AT TOP OF GEOLIST

R SUM

RSUM REMARK, SUMMARY; PRINTED AT BOTTOM OF GEOLIST

R SUM

RASY REMARK, ASSAY FILE REMARKS

R SUM

R SUM

TYPIFYING MINERALS TM1 (/PB-29) TM2 (/30-31)

R SUM

R SUM

CL CHLORITE

R SUM

HE HEMATITE

R SUM	CY	CLAY
R SUM	CR	CARBONACEOUS MATERIAL ???
R SUM	SI	SILICA
R SUM	PY	PYRITE
R SUM		
R SUM		QUALIFYING MATERIALS QM1 (/32-34)
R SUM		
R SUM	CA	CALCAREOUS
R SUM	BL	BLEACHED
R SUM	RB	REBRECCIATED
R SUM		
R SUM		QUALIFYING MATERIALS QM2 (L32-34)
R SUM		
R SUM	LP	LAPILLI (< 20%)
R SUM		
R SUM		TEXTURES TX1 (/35-36), TX2 (/37-38), TX3 (L35-36), TX4 (L37-38)
R SUM		
R SUM	BD	BEDDED
R SUM	BN	BANDED
R SUM	LM	LAMINATED
R SUM	GF	GRADED
R SUM	FL	FLAME STRUCTURE
R SUM	FD	FOLIATION
R SUM	SC	SCHISTOSE
R SUM	SS	SLICKENSIDES
R SUM	SH	SHEARED
R SUM	GG	GOUGE

R SUM	ML	MILLED
R SUM	BP	BRECCIATED, PRIMARY
R SUM	BX	BRECCIATED
R SUM	VN	VEINED
R SUM	CM	CHILLED MARGIN
R SUM	KR	KRACKLE
R SUM	SS	SHEETING
R SUM	SK	STOCKWORK
R SUM	BW	BOXWORK
R SUM	VG	VUGGY
R SUM	VS	VESICULAR
R SUM	MX	MASSIVE
R SUM	PH	PHYLLITIC
R SUM	DI	DIABASIC
R SUM	GN	GNEISSIC
R SUM	PL	PLUTONIC
R SUM		
R SUM	VEINS	VEIN COUNT OF ACTUAL NUMBER INTERSECTED OVER 1 METRE
R SUM		INTERVAL, (743-44)
R SUM		
R SUM		VEIN THICKNESS IN. CL., CUMULATIVE THICKNESS OF VEINS
R SUM		OVER 1 METRE INTERVAL, (745-46)
R SUM		
R SUM		VEIN ANGLE TO LONG AXIS OF CORE
R SUM		
R SUM		(L43) STEEP = 0-30 DEGREES, G-SCALE
R SUM		

G E O L O G

R SUM (L44) MODERATE = 30-60 DEGREES, G-SCALE

R SUM

R SUM (L45) LOW = 50-90 DEGREES, G-SCALE

R SUM

R SUM (L46) TOTAL FRACTURE INTENSITY, F-SCALE

R SUM

R SUM F-SCALE FOR FRACTURE INTENSITY

R SUM

R SUM X SHATTERED

R SUM 9 EXTREMELY WELL FRACTURED

R SUM 8 VERY WELL FRACTURED

R SUM 7 WELL FRACTURED

R SUM 6 FAIRLY WELL FRACTURED

R SUM 5 MODERATELY FRACTURED

R SUM 4 FAIRLY LIGHTLY FRACTURED

R SUM 3 LIGHTLY FRACTURED

R SUM 2 VERY LIGHTLY FRACTURED

R SUM 1 SLIGHTLY FRACTURED

R SUM 0 UNFRACTURED

R SUM

R SUM VEIN THICKNESS AVERAGE (/48)

R SUM

R SUM T-SCALE

R SUM

R SUM 9 EXTREMELY THICK >20 M

R SUM 8 VERY THICK <20 M

R SUM 7 THICK BEDDED < 6 M

R SUM	6	MEDIUM-THICK	< 2 M
R SUM	5	MEDIUM BEDDED	<60 CM
R SUM	4	MEDIUM-THIN	<20 CM
R SUM	3	THIN BEDDED	< 6 CM
R SUM	2	VERY THIN	< 2 CM
R SUM	1	LAMINATED	<.6 CM
R SUM	0	THINLY LAMINAR	<.2 CM

R SUM

R SUM STRUCTURE IDENTITY (L49-50), (L49-50)

R SUM

R SUM	FZ	FAULT-FRACTURE ZONE
R SUM	FC	FAULT CONTACT
R SUM	F/	FRACTURE
R SUM	BD	BEDDING
R SUM	BN	BANDED
R SUM	LM	LAMINATION
R SUM	FD	FOLIATION
R SUM	SH	SHEAR
R SUM	SS	SLICKENSIDES
R SUM	VN	VEIN, UNDIFFERENTIATED
R SUM	QV	QUARTZ VEIN
R SUM	CV	CALCITE VEIN
R SUM	DV	DOLOMITE VEIN
R SUM	QA	QUARTZ - FE - CARBONATE
R SUM	QC	QUARTZ - CALCITE VEIN
R SUM	CQ	CALCITE - QUARTZ VEIN
R SUM	QD	QUARTZ - DOLOMITE VEIN

R SUM	DQ	DOLOMITE - QUARTZ VEIN
R SUM	CD	CALCITE - DOLOMITE VEIN
R SUM	DC	DOLOMITE - CALCITE VEIN
R SUM	SV	SULPHIDE VEIN
R SUM	C/	CONTACT
R SUM	UC	UPPER CONTACT
R SUM	LC	LOWER CONTACT
R SUM	D/	DYKE CONTACT
R SUM	CM	CHILLED MARGIN

ALTERATION AND ORE MINERALS (/57-76), (L57-76)

R SUM		
R SUM		
R SUM	GZ	QUARTZ
R SUM	CA	CALCITE
R SUM	AK	ANKERITE, FE - CARBONATE, OR FERROAN DOLOMITE
R SUM	CL	CHLORITE
R SUM	GY	GYPSON
R SUM	MH	SERICITE/MUSCOVITE
R SUM	DO	DOLOMITE
R SUM	CY	CLAY
R SUM	TA	TALC
R SUM	KA	KAOLINITE
R SUM	PP	PYROPHYLLITE
R SUM	FU	FUCHSITE
R SUM	HE	HEMATITE
R SUM	AR	ARAGONITE
R SUM	GF	GRAPHITE

R SUM	PY	PYRITE
R SUM	CP	CHALCOPYRITE
R SUM	LI	LIMONITE
R SUM	JA	JAROSITE
R SUM	SC	SCORODITE
R SUM	FS	FINE SULPHIDES
R SUM	AS	ARSENOPYRITE
R SUM	GO	GOETHITE
R SUM	PL	PYROLUSITE
R SUM	MA	MALACHITE
R SUM	PD	PYRRHOTITE
R SUM	IL	ILMENITE
R SUM		
R SUM	X3	PALE PINK MINERAL
R SUM		
R SUM	X5	BRIGHT BLUE MINERAL, PHOSPHATE-OXIDE, VIVIANITE ?
R SUM		
R SUM	X6	BLACK, FINE MATERIAL, PROBABLY CHLORITE
R SUM		
R SUM		HOW OF ALTERATION AND ORE MINERALS (FIRST COL. UNDER DEFAULT)
R SUM		
R SUM		H-SCALE, DOMINANT SINGLE MODE
R SUM		
R SUM	A	AMYGDULES, CAVITY FILLINGS
R SUM	B	BLEBS
R SUM	#	BRECCIA/MATRIX FILLINGS
R SUM	C	COATINGS

R SUM	*	CLASTS
R SUM	D	DISSEMINATIONS AND SCATTERED CRYSTALS
R SUM	E	ENVELOPES
R SUM	F	FRAMEWORK CRYSTALS
R SUM	G	GROUSE
R SUM	H	REPLACED PHENOCRYSTS
R SUM	I	EYES, AUGEN
R SUM	J	INTERSTITIAL
R SUM	K	STOCKWORK
R SUM	L	LAMINATIONS/REDDED
R SUM	M	MASSIVE
R SUM	N	NODULES
R SUM	O	SPOTS
R SUM	P	PERVASIVE
R SUM	Q	PATCHES (AS IN QUILTS)
R SUM	R	ROSETTES AND CRYSTAL CLUSTERS
R SUM	S	SELVAGES
R SUM	S	SHEETING
R SUM	T	STAININGS (AS IN TARNISH)
R SUM	U	EUHEDRAL CRYSTALS
R SUM	V	VEINS
R SUM	>	MACRO-VEINS
R SUM	<	MICRO-VEINS, FRACTURES
R SUM	W	BOXWORK
R SUM		R-SCALE, COMBINATION MODE
R SUM		

R SUM	0	FRESH ROCK
R SUM	1	A, MINOR >, AND/OR D
R SUM	2	> AND V
R SUM	3	V AND D OR Q
R SUM	4	V, OCCASIONALLY WITH E
R SUM	5	V, OFTEN WITH ABUNDANT E
R SUM	6	P OR D LESS THAN V, <, S AND E
R SUM	7	P OR D EQUAL TO V; <, S AND E
R SUM	8	P OR D GREATER THAN V, <, S AND E
R SUM	9	P OR D, < AND V, S AND E WITH #, K AND/OR S
R SUM	X	M AND/OR L
R SUM		
R SUM		AMOUNT OF ALTERATION AND ORE MINERAL (SECOND COL. UNDER DEFAULT)
R SUM		
R SUM		G-SCALE (GRADE IN PERCENT)
R SUM		
R SUM	?	POSSIBLY PRESENT
R SUM	/	PROBABLY PRESENT
R SUM	0	0.00% - 0.01%
R SUM	.	0.01% - 0.03%
R SUM	-	0.03% - 0.1%
R SUM	(	0.1% - 0.3%
R SUM	*	0.3% - 1.0%
R SUM	)	1.0% - 2.5%
R SUM	+	2.5% - 5.0%
R SUM	=	5.0% - 10%
R SUM	1	10% - 20%

R SUM	2	20%	-	30%
R SUM	3	30%	-	40%
R SUM	4	40%	-	50%
R SUM	5	50%	-	60%
R SUM	6	60%	-	70%
R SUM	7	70%	-	80%
R SUM	8	80%	-	90%
R SUM	9	90%	-	99%
R SUM	X	100%		

R SUM

R SUM A-SCALE FOR SILICATE ALTERATION FACIES (/77)

R SUM (USED ONLY FOR HOLES 1 TO 30 INCLUSIVE)

R SUM

R SUM 0 UNALTERED

R SUM 1 CHLORITE, DOLOMITE, QUARTZ VEINS

R SUM 2 SILICIFICATION, BRECCIATION, STOCKWORK, BLEACHED

R SUM 3 SILICA CAP

R SUM 4 MONTMORILLONITE, QUARTZ

R SUM 5 SERICITE, GYPSUM, DOLOMITE, SILICIFICATION

R SUM BRECCIATION AND STOCKWORK

R SUM 6 FELDSPAR, CHLORITE, QUARTZ

R SUM

R SUM M2-SCALE FOR STRUCTURAL SUMMARY (/77)

R SUM (USED FOR HOLES 31 TO 86 INCLUSIVE)

R SUM

R SUM 0 BRECCIATION, SHEARING, AND GOUGE NOT PRESENT,

R SUM MINOR FRACTURES

G E O L O G Y

R SUM 1 FRACTURING, MINOR GOUGE, MINOR BRECCIATION

R SUM 2 BRECCIATION, GOUGE PRESENT

R SUM

R SUM M3-SCALE FOR ALTERATION FACIES (L77)

R SUM (USED FOR HOLES 31 TO 86 INCLUSIVE)

R SUM

R SUM 0 UNALTERED TUFF PACKAGE OR LMST

R SUM 1 TUFF PACKAGE - < 1% CARBONATE VEINS, NO BLEACHING
 LMST - DOLOMITIZED

R SUM 2 TUFF PACKAGE - > 1% CARBONATE VEINS, BLEACHED
 LMST - SILICIFIED

R SUM

R SUM M-SCALE FOR METALLIC MINERAL FACIES (/79)

R SUM (USED ONLY FOR HOLES 1 TO 30 INCLUSIVE)

R SUM

R SUM 0 UNMINERALIZED

R SUM 1 HEMATITE, PYRITE, DISSEMINATED

R SUM 2 PYRITE, IN VEINS, PATCHES, AND DISSEMINATIONS

R SUM 3 BARREN

R SUM 4 FLUORITE, REALGAR, ORPIMENT, TETRAHEDRITE,
 STIBNITE

R SUM 5 DISSEMINATED PYRITE, FINE GRAIN SULPHIDES,
 GOLD SILVER

R SUM 6 PYRITE, GALENA, SPHALERITE

R SUM 7 PYRITE, CHALCOPYRITE, PYRRHOTITE

R SUM

R SUM N-SCALE FOR INTENSITY OF FACIES (/78, /80, L78)

R SUM		
R SUM	0	ABSENT
R SUM	1	TRACE
R SUM	2	VERY LOW
R SUM	3	LOW
R SUM	4	FAIRLY LOW
R SUM	5	MODERATE
R SUM	6	FAIRLY HIGH
R SUM	7	HIGH
R SUM	8	VERY HIGH
R SUM	9	EXTREMELY HIGH
R SUM	X	EXCEPTIONALLY HIGH

K F F R O M - T O - I N T R E C V MD % ROCK TM TM QM1 TX TX F C % M VNTK RI 1 ID AZM DIP QZ CA AK CL GY XX PY CP LI YY S I
 E -L-
 Y G R Q D VUG QT DD LC CR QM2 TX TX S R S O SMLF 2 ID AZM DIP MU DD CY FU HE HA JA SC FS HA F I

R 88.46 132.89 MILKY WHITE QUARTZ WITH PYRITE AT 111.25 TO 111.64M.
 R 88.46 132.89 OCCASIONAL CALCAREOUS LAMINATIONS.
 R 88.46 132.89 CHALCOPYRITE OCCURS IN LARGER CARBONATE VEINS.
 R 88.46 132.89 INTERVALS WITH CALCAREOUS LAMINATIONS AND PYRITIC-SILICEOUS
 R 88.46 132.89 ROCK INDICATE POSSIBLY A SEDIMENTARY ENVIRONMENT.

/ 88.46 96.90 8.44 X TFLM 1 2 3 20 1 R LM 45 V+ <) P+ D. B. <- 1 8
 L 21.0 5G 4516 D <*> P) 1 0
 R 88.46 96.90 DISRUPTED LAMINATIONS. FRAGMENTED QUARTZ VEINS.

/ 111.64 118.18 6.54 X TFLM CA/ 1 2 3 20 1 R LM 45 2- <) D. B. <- 1 8
 L 21.0 GA 4516 D LM 65 <*> G) 1 0
 R 111.64 118.18 GREYISH-WHITE CALCAREOUS LAMINATIONS, LOCALLY PERSVASIVE.
 R 111.64 118.18 POSSIBLE SEDIMENT. 20% CALCAREOUS. LAMINATED FROM 45 TO 65 DEG.

/ 119.85 123.35 3.50 X TFLM SI PY 1 2 3 20 1 R LM 55 2- <) D. B. <- 1 8
 L 21.0 1A CR 4516 D FO 15 <*> G) 1 2
 R 119.85 123.35 LOCAL CARBONACEOUS SHEAR ZONES. LOCALLY SILICEOUS, UP TO 25%.
 R 119.85 123.35 PYRITE 0-5% EHDHEDRAL CUBES AS DISSEMINATIONS AND LAMINATIONS.
 R 119.85 123.35 CHALCOPYRITE OCCURS IN DOLOMITE VEINS, A TRIANGULAR CRYSTAL
 R 119.85 123.35 OCCURS. LAMINATIONS AT 55 DEG ? DISRUPTED BY 15 DEG FOLIATION.

/ 125.58 127.60 2.02 X FAUL SH BX 2 3 3 20 1 R <- X3 <(2 6
 L GA 4519 R <*> P+ D* 1 2

/ 130.42 131.37 0.95 X FAUL 2 3 3 5.2 R 4(P+ B(2 6
 L 6G 7 R <(G= 1 2

R SUM B 31 WAS DRILLED TO A TOTAL DEPTH OF 132.89 METRES. TRICONED
 R SUM TO 13.09 METRES. TUFF WITH SHORT SECTIONS OF LAPILLI TUFF AND
 R SUM SHORT FAULT ZONES OCCURS DOWN TO THE HANGING-WALL PYRITE
 R SUM CONTACT AT 45.03 METRES. WITHIN THIS INTERVAL THE VEINING AND
 R SUM BLEACHING ARE MOST ABUNDANT FROM ABOUT 33.60 TO 45.03M. FROM
 R SUM THE HWP AT 45.03M TO THE HANGING-WALL LIMESTONE AT 47.55 METRES
 R SUM IS FAULTED TUFF ZONE, THE PYRITE CONTENT IS LOW. FROM 47.55 TO
 R SUM 48.26M. IS BRECCIATED AND SHEARED SILICIFIED DOLOMITE WITH A
 R SUM LITTLE INCLUDED TUFF. THIS INTERVAL IS WELL MINERALIZED WITH
 R SUM PYRITE AND FINE SULPHIDES. THE REST OF THE SILICIFIED DOLOMITE
 R SUM TO THE FOOT-WALL LIMESTONE AT 51.22 METRES IS POORLY

R SUM MINERALIZED AND BRECCIATED. AT THE FWL IS 2 CM OF GOUGE WITH
R SUM FINE SULPHIDES AND PYRITE. FROM THE FWL TO 69.19 METRES IS A
R SUM BLEACHED AND VEINED TUFF WITH A LITTLE PYRITE. FROM 69.19 TO
R SUM 88.46M THE TUFFS ARE VEINED AND CONTAIN PYRITE AND THERE ARE TWO
R SUM SECTIONS WHICH ARE CARBONACEOUS. FROM 88.46 TO THE END OF THE
R SUM HOLE AT 132.69M ARE LAMINATED TUFFS WITH OCCASIONAL CALCAREOUS
R SUM LAMINATIONS OR SECTIONS.

Jerry Lee

A UMM	FROM	TO	RECDV	G/T AG	G/T AU
A 001	33.13	33.60	80.00	601	.3
A 001	34.79	35.06	80.00	602	.3
A 001	38.36	39.62	75.00	603	.3
A 001	39.62	40.55	95.00	604	.3
A 001	40.55	41.55	95.00	605	.3
A 001	41.55	42.79	100.00	606	.7
A 001	42.79	44.03	100.00	607	.7
A 001	44.03	45.03	95.00	608	.3
A 001	45.03	46.33	95.00	609	.3
A 001	46.33	47.55	95.00	610	.7
A 001	47.55	48.26	95.00	611	.3
A 001	48.26	48.89	95.00	612	.3
A 001	48.89	49.70	95.00	613	.7
A 001	49.70	50.50	100.00	614	.3
A 001	50.50	51.22	100.00	615	.7
A 001	51.22	52.22	95.00	616	1.4
A 001	52.22	53.22	100.00	617	.3
A 001	53.22	54.22	95.00	618	.3
A 001	54.22	55.22	100.00	619	.3
A 001	55.22	56.22	100.00	620	.3
A 001	56.22	57.45	100.00	621	.3
A 001	57.45	58.69	100.00	622	.3
A 001	58.69	59.69	100.00	623	.7
A 001	59.69	60.69	100.00	624	.7
A 001	60.69	61.69	100.00	625	.3
A 001	61.69	62.69	100.00	626	.8
A 001	62.69	63.69	95.00	627	.3
A 001	66.72	67.72	95.00	628	.3
A 001	67.72	69.19	100.00	629	.7
A 001	69.19	70.19	90.00	630	.3
A 001	70.19	71.43	95.00	631	.7
A 001	71.43	72.31	100.00	632	.3
A 001	72.31	72.85	100.00	633	.3
A 001	76.40	77.31	90.00	634	.3
A 001	79.30	79.86	95.00	635	.3
A 001	79.86	81.38	60.00	636	.3
A 001	81.38	82.50	100.00	637	.7
A 001	82.50	83.50	100.00	638	.3
A 001	83.50	84.50	100.00	639	.3
A 001	84.50	85.95	80.00	640	.3
A 001	85.95	86.55	95.00	641	.3
A 001	86.55	87.55	95.00	642	.4
A 001	87.55	88.46	100.00	643	.3
A 001	131.89	132.89	95.00	644	.3

R ASY 0.00 0.01 THE SAMPLES FROM A002 ARE BLOCK TO BLOCK RECOVERY

A UMM	FROM	TO	RECOV	RECOV
A 002	0.00	13.09	0.00	0.0
A 002	13.09	14.33	0.00	100.0
A 002	14.33	15.85	0.00	80.0
A 002	15.85	17.37	0.00	100.0
A 002	17.37	18.90	0.00	95.0
A 002	18.90	20.42	0.00	55.0
A 002	20.42	21.95	0.00	40.0
A 002	21.95	22.86	0.00	95.0
A 002	22.86	23.77	0.00	100.0
A 002	23.77	24.69	0.00	95.0
A 002	24.69	24.99	0.00	95.0
A 002	24.99	26.52	0.00	90.0
A 002	26.52	27.74	0.00	80.0
A 002	27.74	29.26	0.00	100.0
A 002	29.26	31.09	0.00	90.0
A 002	31.09	32.61	0.00	95.0
A 002	32.61	34.14	0.00	90.0
A 002	34.14	35.66	0.00	90.0
A 002	35.66	37.19	0.00	100.0
A 002	37.19	38.71	0.00	100.0
A 002	38.71	39.62	0.00	75.0
A 002	39.62	41.15	0.00	95.0
A 002	41.15	42.67	0.00	100.0
A 002	42.67	43.28	0.00	100.0
A 002	43.28	44.81	0.00	100.0
A 002	44.81	46.33	0.00	95.0
A 002	46.33	47.55	0.00	95.0
A 002	47.55	49.38	0.00	95.0
A 002	49.38	50.90	0.00	100.0
A 002	50.90	52.43	0.00	95.0
A 002	52.43	53.95	0.00	100.0
A 002	53.95	55.47	0.00	100.0
A 002	55.47	57.00	0.00	100.0
A 002	57.00	58.52	0.00	100.0
A 002	58.52	60.05	0.00	100.0
A 002	60.05	61.57	0.00	100.0
A 002	61.57	63.09	0.00	100.0
A 002	63.09	64.62	0.00	95.0
A 002	64.62	66.14	0.00	100.0
A 002	66.14	67.67	0.00	95.0
A 002	67.67	69.19	0.00	100.0
A 002	69.19	70.71	0.00	90.0
A 002	70.71	72.24	0.00	100.0
A 002	72.24	73.76	0.00	100.0
A 002	73.76	75.29	0.00	100.0
A 002	75.29	76.81	0.00	95.0
A 002	76.81	78.33	0.00	90.0

A UMM	FROM	TO	RECOV	RECOV
A 002	78.33	79.86	0.00	95.0
A 002	79.86	81.36	0.00	60.0
A 002	81.36	82.91	0.00	100.0
A 002	82.91	84.12	0.00	100.0
A 002	84.12	85.95	0.00	80.0
A 002	85.95	87.48	0.00	95.0
A 002	87.48	89.00	0.00	100.0
A 002	89.00	90.53	0.00	100.0
A 002	90.53	92.05	0.00	90.0
A 002	92.05	93.57	0.00	100.0
A 002	93.57	95.10	0.00	100.0
A 002	95.10	96.62	0.00	90.0
A 002	96.62	98.15	0.00	95.0
A 002	98.15	99.67	0.00	100.0
A 002	99.67	101.19	0.00	95.0
A 002	101.19	102.72	0.00	95.0
A 002	102.72	104.24	0.00	75.0
A 002	104.24	105.77	0.00	100.0
A 002	105.77	107.29	0.00	100.0
A 002	107.29	108.81	0.00	100.0
A 002	108.81	109.42	0.00	55.0
A 002	109.42	110.34	0.00	100.0
A 002	110.34	111.86	0.00	85.0
A 002	111.86	113.39	0.00	100.0
A 002	113.39	114.91	0.00	100.0
A 002	114.91	115.52	0.00	55.0
A 002	115.52	116.43	0.00	100.0
A 002	116.43	117.96	0.00	100.0
A 002	117.96	119.48	0.00	95.0
A 002	119.48	121.01	0.00	100.0
A 002	121.01	122.53	0.00	95.0
A 002	122.53	124.05	0.00	95.0
A 002	124.05	125.58	0.00	100.0
A 002	125.58	127.10	0.00	95.0
A 002	127.10	128.63	0.00	100.0
A 002	128.63	130.15	0.00	100.0
A 002	130.15	131.37	0.00	100.0
A 002	131.37	132.89	0.00	95.0

G E O L O G E D I T L I S T I N G

SYSTEMS ENGINEERING BY
INTERNATIONAL GEOSYSTEMS CORP.

CHEVRON CANADA RESOURCES LTD.
BEAR TOTEM GOLD PROPERTY NORTHERN BC

FORMAT VERSION : 6802

DRILLHOLE/TRVERSE :8840H034 COLLAR ELEVATION: 1465.02 AZIMUTH(DEG) : 268.64 GEOLOGGED BY : TRL +
TOTAL DEPTH/LENGTH : 209.02 NORTHING(- IF S): 24015.19 VERTICAL ANGLE : -60.50 DATE (YY/MM/DD): 840429
CORE/HOLE DIAMETER : 60 EASTING (- IF W): 24959.95 CO-ORD SYSTEM : GRD PROJECT NUMBER : M523

SEQ. NO OF SURVEY DATA	FLAGS	LENGTH FROM COLLAR TO SURVEY POINT	AZIMUTH (DEG)	VERT. ANGLE (DEG)
1	001	60.96	268.64	-62.00
2	002	121.92	268.64	-61.50
3	003	182.88	268.64	-60.50

F - I N T E R V A L -		CORE	T- %	TYPI-	GAL	TEX-	GRAIN	PGI	STRUCTUR-1	ALTERATION	MINS	ORE-TYPE	MINS	SUMMARY														
K L	(UNITS = MT.2 DEC.PLACE)	RECOV-	M M	ROCK	FYING	MIN	TURES	CHARACS		H H H H	H ANY	H H H ANY	STR															
E A	(METRIC)	ERY	O I	LN	TM	MAT	TX TX	F C % M	VNTK	/RI	T ID	STK	DIP	A A A A A A MIN A A A MIN - -														
Y G	F R O M - T O - I N T (PC.1)	D X	TYPE	1 2	GM1	1 2	F F C A	NNCM	1	AZM	RT	QZ	CA	AK	CL	GY	XX	PY	CP	LI	YY	S I						
-----		-----		-----		-----		-----		-----		-----		-----		-----		-----		-----		-----						
K F		ROCK	VUG	QT	DO	CR	QM2	TX	TX	S	S	O	VNDF	T	ID	STK	DIP	MU	DO	CY	FU	HE	HA	JA	SC	FS	HA	ALT
E L		QUAL	GMM	GG	GG	LC-H		3	4	O	N	H	/	PI	2	AZM	RT	H	H	H	H	H	H	H	H	H	H	F I
Y G		DESIG				COL	A			R	D	P	C	SMLF	STRUCTUR-2	A	A	A	A	A	A	A	A	A	A	A	A	A

/ 0.00 6.71 6.71 0.0 TRIC P
R 0.00 6.71 TRICONED INTERVAL. NO CORE RECOVERY. CASING DOWN TO 6.71.

/ 6.71 11.50 4.79 70.0 GABR 4 5 5 20 2 P V* <* B) V. P- 1 6
L 13.0 GA 3436 P G+ <) 0 6
R 6.71 11.50 PERVASIVE LIMONITE OCCURS IN THE LAST METRE OF THE INTERVAL.
R 6.71 11.50 CHLORITE PARTIALLY REPLACES MAFIC MINERALS.
R 6.71 11.50 MEDIUM GRAINED, MEDIUM DARK GREEN-GRAY.

/ 11.50 15.54 4.04 55.0 TUFF SH 2 3 4 30 2 P <) PP P+ 2 2
L 11.0 RU 2358 P G= P* <. 1 6
R 11.50 15.54 ABUNDANT PERVASIVE LIMONITE AND LESSER HEMATITE GIVES THIS
R 11.50 15.54 INTERVAL A REDDISH-BROWN COLOR.
R 11.50 15.54 GOUGE OCCURS OVER 0.5 METRE SECTIONS AT THE BEGINNING AND END
R 11.50 15.54 OF THIS INTERVAL.
R 11.50 15.54 DUE TO THE ALTERATION THE ORIGINAL ROCK TYPE IS IN QUESTION.

/ 15.54 48.68 33.14 90.0 TUFF 2 4 7 10.4 P <(<) 1 6
L 14.0 SA LP 4337 P G) <. 0 4
R 15.54 48.68 OCCASIONAL LAPILLI.
R 15.54 48.68 SOME OF THE CALCITE IS PERVASIVE AND SOME OCCURS AS AMYGDALOID
R 15.54 48.68 IN POSSIBLE LAPILLI.
R 15.54 48.68 SHORT HIGHLY FRACTURED SECTIONS ARE COMMON. SOME OF THESE

K F F R O M - T O - I N T	RECOV	MD %	ROCK	TM	TM	GM1	TX	TX	F	C	%	M	VNTK	RI	1	ID	AZM	DIP	QZ	CA	AK	CL	GY	XX	PY	CP	LI	YY	S	I						
E - L -	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---						
Y G	R G D	VUG	QT	DU	LC	CR	GM2	TX	TX	S	R	S	O	SMLF	2	ID	AZM	DIP	MU	DO	CY	FU	HE	HA	JA	SC	FS	HA	F	I						
R	73.86	79.96	COARSE TUFF WITH 5-10% LAPILLI.																																	
/	82.73	84.04	1.31	X TUFF		BN		2	3	5	10.5	R	BN	70	<<	<*	<)	TA	D.	A.	<.												0	2		
L				41.0	GA							5323	D				<.	G-	<.	<-												0	2			
R	82.73	84.04	COARSE TO FINE TUFF WITH BANDING.																																	
R	82.73	84.04	SOME GRADED BEDDING FINING UPWARDS.																																	
/	99.08	101.58	2.50	X TFLP		BL		3	6	7	20	2	R	<<	<<	<*	AR	<.	A.	E*												0	2			
L				GA								6312	R	<*	B*	<-												2	2							
R	99.08	101.58	ABOUT ONE-THIRD OF INTERVAL IS BLEACHED.																																	
R	99.08	101.58	VEINING IS INCREASING.																																	
R	99.08	101.58	ABUNDANT BASALT LAPILLI.																																	
K BCP	100.25	100.25																																		
K HWP	101.58	101.58																																		
/	101.58	103.86	2.28	100.0	TUFF	BL VN BX		2	4	5	60	3	P	<<	<<			<+	<-												2	4				
L				33.0	7G							6136	P	V=	B)			D*												2	6					
R	101.58	103.86	BLEACHED TUFF WELL VEINED BY DOLOMITE AND WITH ABUNDANT PYRITE																																	
R	101.58	103.86	AND FINE SULPHIDES AS VEINLETS, DISSEMINATIONS, PATCHES AND																																	
R	101.58	103.86	BRECCIA MATRIX.																																	
R	101.58	103.86	PARTS OF INTERVAL ARE BRECCIATED.																																	
/	103.13	103.45	0.32	X D/B5		CM		2	3	4	5.2	R	HC	55	A*																					
L				NN								5500	R	LC	50																					
R	103.13	103.45	BLACK FINE GRAINED BASALT DYKE.																																	
R	103.13	103.45	MICROPORPHYRITIC WITH 0.25-2 MM MAFIC PHENOCRYSTS.																																	
R	103.13	103.45	VERY SMALL CALCITE FILLED AMYGDULES.																																	
R	103.13	103.45	MODERATLY MAGNETIC.																																	
R	103.13	103.45	BOTH CONTACTS HAVE A 1.5 CM VERY FINE CHILLED MARGIN.																																	
R	103.13	103.45	CONTACTS ARE SHARP.																																	
R	103.13	103.45	INTERNAL LAYERING AT SAME ANGLE AS CONTACTS.																																	
/	103.86	118.85	14.99	100.0	TUFF			3	4	6	50	3	P	<<	<(	<(	<-	E(												0	4					
L				6.3	GA							4422	P	V+	B*	<(												2	2							
R	103.86	118.85	TUFF WITH FAIRLY ABUNDANT DOLOMITE VEINING AND A FEW BLEACHED																																	
R	103.86	118.85	SECTIONS. THE BLEACHING IS MORE COMMON NEARER THE END OF THE																																	
R	103.86	118.85	INTERVAL.																																	
/	103.86	106.68	2.82	X TFRN				2	3	4	50	3	P	BN	70	<<	<(	<(	<-	E(												0	4			
L				6.3	GA							4422	D	V+	R*	<(												2	2							
R	103.86	106.68	BANDED TUFF WITH OCCASIONAL LAPILLI.																																	
R	103.86	106.68	FINE AND COARSE TUFF BEDS																																	
R	103.86	106.68	BANDING AT 65-75 DEG.																																	
/	106.68	113.35	6.87	B TFLP				3	5	6	50	3	R	<<	<(	<(	<-	E(												0	4					
L				6.3	GA							4422	D	V+	B*	<(												2	2							
R	106.68	113.35	LAPILLI TUFF WITH 30-40% LAPILLI.																																	
R	106.68	113.35	MOST OF THE LAPILLI ARE SMALL.																																	

G E U L O L

CHEVRON CANADA / SOURCES LTD.
 BEAR TUTEK GOLD PROPERTY NORTHERN BC
 DRILLHOLE/TRAVERSE --- 8840H034 --- (CONTINUED)

K F F R Q M - T O - I N T RECOV MD % ROCK TM TM G1 TX TX F C % M VNTK RI 1 ID AZM DIP QZ CA AK CL GY XX PY CP LI YY S I
 E -L- -----
 Y G R Q D VUG QT DO LC CR G2 TX TX S R S O SMLF 2 ID AZM DIP MU DO CY FU HE HA JA SC FS HA F I

R 145.82 154.53 WITHIN THIS UNIT THE COLOR GETS DARKER TOWARDS THE BOTTOM.
 K 145.82 154.53 SOME OF THE CAVITIES HAVE SMALL QUARTZ CRYSTALS.
 R 145.82 154.53 BROWN IRON STAINING ON FRACTURES - FE-DOLOMITE OR LIMONITE.

/ 152.10 152.70 0.60 X LOST R
 R 152.10 152.70 THIS INTERVAL WAS A MIXTURE OF CAVE MATERIAL (SILICIFIED
 R 152.10 152.70 DOLOMITE BRECCIA) AND BROKEN UP CORE. THESE COULD NOT BE
 R 152.10 152.70 SEPARATED.

/ 154.53 187.10 32.57 90.0 SI BXSD 2 5 6 7 15 2 P P5 <) D* << 2 6
 L 32.0 * X 2A 2 1 3 0 4245 P P4 D/ 2 8
 R 154.53 187.10 VERY DARK GRAY SILICIFIED DOLOMITE FRAGMENTS IN DARK GRAY
 R 154.53 187.10 MATRIX OF SILICA AND DOLOMITE.
 R 154.53 187.10 SILICIFICATION IS MORE INTENSE IN FIRST 4 METRES OF INTERVAL.
 R 154.53 187.10 PROBABLY SOME OF THE DARK COLORATION IS CAUSED BY FINE
 R 154.53 187.10 SULPHIDES.
 R 154.53 187.10 THE SULPHIDE ESTIMATE IS PROBABLY LOW DUE TO THE FINENESS OF THE
 R 154.53 187.10 SULPHIDES. SOME OF THE PYRITE IS IN FRACTURES.
 R 154.53 187.10 DOLOMITE VEINLETS ARE DISRUPTED AND CUT BY LATER CALCITE
 R 154.53 187.10 VEINLETS.
 R 154.53 187.10 REDUCED TO NG AT 157.70 .

/ 167.94 173.81 5.87 SI x DOLM BX 2 2 3 2.2 R Q2 0- <- << 2 2
 L) 8A 5053 R P7 <. </ 1 X
 R 167.94 173.81 PALE GRAY DOLOMITE. FINE GRAINED.
 R 167.94 173.81 PARTS HAVE A BRECCIATED TEXTURE.
 R 167.94 173.81 NUMEROUS DARK GRAY FRACTURES POSSIBLY HAVE FINE SULPHIDES.
 R 167.94 173.81 OCCASIONAL MEDIUM GRAY SILICIFIED PATCH.

/ 181.10 182.27 1.17 SI x DOLM BX 2 2 3 R Q1 <- <<
 L (UA 8 R P8
 R 181.10 182.27 LIGHT BROWNISH GRAY DOLOMITE . FINE GRAINED.
 R 181.10 182.27 PARTS HAVE A BRECCIATED TEXTURE.
 R 181.10 182.27 GREY SILICIFIED PATCHES - 10%.
 R 181.10 182.27 NUMEROUS DARK MICROFRACTURES.

/ 185.65 187.10 1.45 SI x BXSD 2 5 6 7 15 2 R P9 <) D* << 2 6
 L 32.0 (X 2A 2 1 3 0 4245 0 P P7 D/ 2 8
 R 185.65 187.10 SECTION WHICH IS TOTALLY SILICIFIED.
 K FWL 187.10 187.10

/ 187.10 209.02 21.92 75.0 TUFF SH KR 1 1 2 99 3 P V) V* << <- 2 6
 L 20.0 NN CR 3348 P G+ 2 2
 R 187.10 209.02 BLACK FINE TUFF (PROBABLY A FINE SILTSTONE).
 R 187.10 209.02 CRACKLE BRECCIATION PRODUCED MAINLY BY QUARTZ VEINING.
 R 187.10 209.02 PYRITE OCCURS IN FRACTURES AND AS DISSEMINATED CUBES.
 R 187.10 209.02 OTHER ROCK TYPES IN THIS INTERVAL DO NOT HAVE CRACKLE
 R 187.10 209.02 BRECCIATION.

R SUM OCCURRED AT 101.58 WHERE A BLEACHED TUFF OCCURS DOWN TO 103.86 .
R SUM A BASALT DYKE CUTS THIS BLEACHED TUFF. UNALTERED TUFF OCCURS
R SUM AGAIN FROM 103.86 TO 118.85 . AT 118.85 BLEACHING BEGINS AGAIN
R SUM AND AT 122.12 ABUNDANT PYRITE STARTS . AT 126.80 THE HANGING
R SUM WALL LIMESTONE IS MARKED BY A FAULT BRECCIA WITH MAINLY
R SUM SILICIFIED DOLOMITE FRAGMENTS.
R SUM FROM 129.00 TO 167.10 IS MAINLY A SILICIFIED DOLOMITE BRECCIA.
R SUM THE FOOTWALL OF THE LIMESTONE IS AT 167.10 AND MARKED BY A
R SUM FAULT ZONE BRECCIA. FROM 168.70 TO THE END OF THE HOLE WAS
R SUM SHEARED AND BLEACHED TUFF AND BLACK SILTSTONE (?) WITH CRACKLE
R SUM BRECCIATION AND A FEW PYRITE FRACTURES.

Temple

A UMM	FROM	TO	RECOV		G/T AG	G/T AU
A 001	99.44	100.58	95.00	769	.3	.1
A 001	100.58	101.58	100.00	801	1.1	.1
A 001	101.58	102.40	100.00	802	.3	.8
A 001	102.40	103.13	100.00	803	.3	.8
A 001	103.13	103.45	100.00	804	1.7	.1
A 001	103.45	103.86	100.00	805	.3	.1
A 001	103.86	104.86	95.00	806	.3	.1
A 001	121.12	122.12	100.00	807	1.4	.1
A 001	122.12	123.75	85.00	808	1.0	.1
A 001	123.75	124.75	95.00	809	.6	.1
A 001	124.75	125.75	95.00	810	.3	.1
A 001	125.75	126.80	95.00	811	2.9	1.2
A 001	126.80	127.80	85.00	812	2.8	5.1
A 001	127.80	129.00	80.00	813	2.5	2.1
A 001	129.00	129.84	80.00	814	8.1	1.5
A 001	129.84	131.37	60.00	815	6.3	.1
A 001	133.57	134.42	100.00	816	5.2	.1
A 001	134.42	135.74	40.00	817	4.8	.1
A 001	135.74	137.16	55.00	818	3.2	.1
A 001	137.16	138.07	75.00	819	7.4	.1
A 001	138.07	138.99	35.00	820	8.5	.2
A 001	138.99	140.51	55.00	821	6.2	.1
A 001	140.51	141.82	95.00	822	1.5	.1
A 001	141.82	142.82	85.00	823	4.3	.1
A 001	142.82	143.82	85.00	824	7.4	.1
A 001	143.82	144.82	95.00	825	12.5	.4
A 001	144.82	145.82	90.00	826	33.3	1.2
A 001	145.82	146.82	95.00	827	40.6	1.0
A 001	146.82	147.82	90.00	828	2.3	1.1
A 001	147.82	148.82	90.00	829	15.2	.9
A 001	148.82	149.88	90.00	830	2.4	.1
A 001	149.88	150.88	95.00	831	39.4	2.4
A 001	150.88	152.10	25.00	832	87.6	2.8
A 001	152.70	153.53	100.00	833	4.7	.8
A 001	153.53	154.53	90.00	834	4.5	.9
A 001	154.53	155.53	100.00	835	5.0	1.2
A 001	155.53	156.53	95.00	836	2.8	.8
A 001	156.53	157.10	95.00	837	4.0	.6
A 001	157.10	157.53	60.00	842	4.3	.4
A 001	157.53	158.53	70.00	838	6.1	.8
A 001	158.53	159.53	90.00	839	6.0	.6
A 001	159.53	160.53	100.00	840	4.7	.2
A 001	160.53	161.53	90.00	841	2.2	.2
A 001	161.53	162.94	70.00	770	1.3	.4
A 001	162.94	163.94	90.00	843	1.4	.3
A 001	163.94	164.94	95.00	844	1.6	.5
A 001	164.94	165.94	90.00	845	1.9	.4

A UMM	FROM	TO	RECOV	G/T AG	G/T AU
A 001	165.94	166.94	90.00	846	2.1 .1
A 001	166.94	167.94	100.00	847	1.3 .1
A 001	167.94	168.94	90.00	848	1.4 .1
A 001	168.94	169.94	100.00	849	.6 .1
A 001	169.94	170.94	95.00	850	.3 .1
A 001	170.94	171.94	95.00	771	.4 .5
A 001	171.94	172.94	100.00	772	.8 .3
A 001	172.94	173.81	100.00	773	1.9 .6
A 001	173.81	174.81	100.00	774	2.1 .6
A 001	174.81	175.81	100.00	775	1.3 .4
A 001	175.81	176.81	100.00	776	2.0 .2
A 001	176.81	177.81	100.00	777	3.9 .8
A 001	177.81	178.81	90.00	778	.3 .5
A 001	178.81	180.14	85.00	789	5.8 1.1
A 001	180.14	181.10	50.00	780	10.4 1.8
A 001	181.10	182.27	80.00	781	.9 .1
A 001	182.27	183.27	80.00	782	2.4 .3
A 001	183.27	184.10	100.00	783	3.2 .4
A 001	184.10	185.01	55.00	784	3.9 .6
A 001	185.01	185.65	100.00	785	4.3 .4
A 001	185.65	186.23	100.00	786	5.6 .9
A 001	186.23	187.10	100.00	787	11.5 1.4
A 001	187.10	188.06	100.00	788	4.0 .1
A 001	188.06	189.28	70.00	789	2.0 .1
A 001	189.89	190.89	75.00	790	1.1 -.1
A 001	190.89	191.89	60.00	791	1.0 -.1
A 001	191.89	192.89	60.00	792	2.1 -.1
A 001	192.89	194.10	60.00	793	1.7 -.1
A 001	194.10	195.10	95.00	794	.3 -.1
A 001	195.10	196.10	95.00	795	1.9 -.1
A 001	196.10	197.10	80.00	796	1.1 .1
A 001	197.10	198.10	90.00	797	1.4 -.1
A 001	198.10	199.10	90.00	798	.5 -.1
A 001	199.10	200.10	90.00	799	1.3 -.1
A 001	200.10	201.10	95.00	800	1.6 -.1
A 001	201.10	202.46	95.00	891	1.0 -.1
A 001	202.46	203.46	95.00	892	.9 -.1
A 001	203.46	204.22	95.00	893	.3 -.1
A 001	204.22	206.35	35.00	894	.3 -.1
A 001	206.35	207.42	55.00	895	1.3 .1
A 001	207.42	208.40	95.00	896	.6 .1
A 001	208.40	209.02	75.00	897	1.3 .1

R ASY 0.00 0.01 THE SAMPLES FROM A002 ARE BLOCK TO BLOCK RECOVERY

A UMM	FROM	TO	RECOV	RECOV
A 002	0.00	6.71	0.00	0.0
A 002	6.71	7.32	0.00	55.0
A 002	7.32	7.92	0.00	65.0
A 002	7.92	8.23	0.00	70.0
A 002	8.23	9.45	0.00	80.0
A 002	9.45	10.97	0.00	70.0
A 002	10.97	12.50	0.00	55.0
A 002	12.50	14.02	0.00	85.0
A 002	14.02	15.54	0.00	35.0
A 002	15.54	16.15	0.00	70.0
A 002	16.15	17.07	0.00	35.0
A 002	17.07	17.68	0.00	65.0
A 002	17.68	18.59	0.00	90.0
A 002	18.59	20.12	0.00	90.0
A 002	20.12	21.64	0.00	100.0
A 002	21.64	23.16	0.00	95.0
A 002	23.16	24.69	0.00	95.0
A 002	24.69	25.91	0.00	100.0
A 002	25.91	27.43	0.00	100.0
A 002	27.43	28.80	0.00	60.0
A 002	28.80	29.57	0.00	75.0
A 002	29.57	30.78	0.00	100.0
A 002	30.78	32.00	0.00	100.0
A 002	32.00	32.46	0.00	100.0
A 002	32.46	33.83	0.00	90.0
A 002	33.83	34.75	0.00	100.0
A 002	34.75	35.66	0.00	85.0
A 002	35.66	36.88	0.00	90.0
A 002	36.88	38.10	0.00	70.0
A 002	38.10	38.40	0.00	100.0
A 002	38.40	39.62	0.00	85.0
A 002	39.62	41.15	0.00	90.0
A 002	41.15	42.36	0.00	100.0
A 002	42.36	43.59	0.00	95.0
A 002	43.59	44.20	0.00	100.0
A 002	44.20	44.81	0.00	100.0
A 002	44.81	45.72	0.00	100.0
A 002	45.72	46.94	0.00	100.0
A 002	46.94	47.85	0.00	75.0
A 002	47.85	49.07	0.00	75.0
A 002	49.07	50.60	0.00	100.0
A 002	50.60	51.21	0.00	100.0
A 002	51.21	51.51	0.00	85.0
A 002	51.51	53.64	0.00	100.0
A 002	53.64	55.17	0.00	95.0
A 002	55.17	56.69	0.00	100.0
A 002	56.69	58.22	0.00	100.0

A	UNM	FROM	TO	RECOV	RECOV
A	002	58.22	58.67	0.00	100.0
A	002	58.67	60.05	0.00	100.0
A	002	60.05	60.96	0.00	100.0
A	002	60.96	62.48	0.00	100.0
A	002	62.48	64.31	0.00	85.0
A	002	64.31	64.92	0.00	100.0
A	002	64.92	66.45	0.00	95.0
A	002	66.45	67.36	0.00	95.0
A	002	67.36	68.73	0.00	100.0
A	002	68.73	70.26	0.00	100.0
A	002	70.26	71.93	0.00	100.0
A	002	71.93	73.30	0.00	100.0
A	002	73.30	73.46	0.00	45.0
A	002	73.46	74.98	0.00	100.0
A	002	74.98	76.50	0.00	90.0
A	002	76.50	78.03	0.00	90.0
A	002	78.03	79.55	0.00	100.0
A	002	79.55	80.16	0.00	100.0
A	002	80.16	81.69	0.00	85.0
A	002	81.69	82.60	0.00	100.0
A	002	82.60	83.82	0.00	90.0
A	002	83.82	84.73	0.00	100.0
A	002	84.73	85.65	0.00	100.0
A	002	85.65	87.17	0.00	100.0
A	002	87.17	88.54	0.00	100.0
A	002	88.54	90.09	0.00	100.0
A	002	90.09	91.74	0.00	95.0
A	002	91.74	93.27	0.00	100.0
A	002	93.27	94.79	0.00	100.0
A	002	94.79	96.32	0.00	100.0
A	002	96.32	97.84	0.00	100.0
A	002	97.84	99.36	0.00	95.0
A	002	99.36	100.89	0.00	95.0
A	002	100.89	102.11	0.00	100.0
A	002	102.11	103.78	0.00	100.0
A	002	103.78	105.31	0.00	95.0
A	002	105.31	106.68	0.00	100.0
A	002	106.68	108.20	0.00	100.0
A	002	108.20	109.68	0.00	95.0
A	002	109.68	111.56	0.00	100.0
A	002	111.56	113.08	0.00	100.0
A	002	113.08	114.60	0.00	100.0
A	002	114.60	116.13	0.00	100.0
A	002	116.13	117.65	0.00	100.0
A	002	117.65	119.18	0.00	95.0
A	002	119.18	120.70	0.00	100.0
A	002	120.70	122.22	0.00	100.0
A	002	122.22	123.75	0.00	85.0

A	UMN	FROM	TO	RECOV	RECOV
A	002	123.75	125.27	0.00	95.0
A	002	125.27	126.80	0.00	95.0
A	002	126.80	128.32	0.00	85.0
A	002	128.32	129.84	0.00	80.0
A	002	129.84	131.37	0.00	60.0
A	002	131.37	132.59	0.00	0.0
A	002	132.59	133.50	0.00	0.0
A	002	133.50	134.42	0.00	90.0
A	002	134.42	135.74	0.00	40.0
A	002	135.74	137.16	0.00	55.0
A	002	137.16	138.07	0.00	75.0
A	002	138.07	138.99	0.00	35.0
A	002	138.99	140.51	0.00	55.0
A	002	140.51	141.73	0.00	95.0
A	002	141.73	143.26	0.00	85.0
A	002	143.26	143.41	0.00	100.0
A	002	143.41	144.73	0.00	95.0
A	002	144.73	146.30	0.00	90.0
A	002	146.30	146.61	0.00	100.0
A	002	146.61	148.13	0.00	90.0
A	002	148.13	149.66	0.00	90.0
A	002	149.66	150.88	0.00	95.0
A	002	150.88	152.10	0.00	25.0
A	002	152.10	152.40	0.00	0.0
A	002	152.40	152.70	0.00	0.0
A	002	152.70	153.31	0.00	100.0
A	002	153.31	154.53	0.00	90.0
A	002	154.53	155.75	0.00	100.0
A	002	155.75	157.28	0.00	95.0
A	002	157.28	158.80	0.00	70.0
A	002	158.80	160.32	0.00	100.0
A	002	160.32	160.93	0.00	85.0
A	002	160.93	161.85	0.00	95.0
A	002	161.85	162.46	0.00	100.0
A	002	162.46	162.76	0.00	35.0
A	002	162.76	163.50	0.00	90.0
A	002	163.50	164.90	0.00	95.0
A	002	164.90	165.35	0.00	95.0
A	002	165.35	165.66	0.00	80.0
A	002	165.66	166.12	0.00	100.0
A	002	166.12	167.34	0.00	90.0
A	002	167.34	167.94	0.00	100.0
A	002	167.94	169.16	0.00	90.0
A	002	169.16	170.69	0.00	100.0
A	002	170.69	171.60	0.00	90.0
A	002	171.60	173.13	0.00	100.0
A	002	173.13	174.04	0.00	100.0
A	002	174.04	175.56	0.00	100.0

A UMM	FROM	TO	RECOV	RECOV
A 002	175.56	176.78	0.00	100.0
A 002	176.78	178.31	0.00	100.0
A 002	178.31	179.83	0.00	80.0
A 002	179.83	180.14	0.00	100.0
A 002	180.14	180.75	0.00	65.0
A 002	180.75	181.20	0.00	25.0
A 002	181.20	181.81	0.00	80.0
A 002	181.81	182.27	0.00	75.0
A 002	182.27	182.88	0.00	65.0
A 002	182.88	183.49	0.00	100.0
A 002	183.49	184.10	0.00	100.0
A 002	184.10	185.01	0.00	55.0
A 002	185.01	186.23	0.00	100.0
A 002	186.23	186.84	0.00	100.0
A 002	186.84	188.06	0.00	100.0
A 002	188.06	189.28	0.00	70.0
A 002	189.28	189.89	0.00	0.0
A 002	189.89	190.20	0.00	80.0
A 002	190.20	191.11	0.00	75.0
A 002	191.11	192.33	0.00	60.0
A 002	192.33	194.16	0.00	60.0
A 002	194.16	195.99	0.00	95.0
A 002	195.99	197.36	0.00	80.0
A 002	197.36	200.10	0.00	90.0
A 002	200.10	202.69	0.00	95.0
A 002	202.69	203.91	0.00	95.0
A 002	203.91	204.22	0.00	100.0
A 002	204.22	206.35	0.00	35.0
A 002	206.35	206.65	0.00	100.0
A 002	206.65	207.42	0.00	40.0
A 002	207.42	208.17	0.00	100.0
A 002	208.17	209.02	0.00	75.0

G E O L O G E D I T L I S T I N G

SYSTEMS ENGINEERING BY
INTERNATIONAL GEOSYSTEMS CORP.

CHEVRON CANADA RESOURCES LTD.
BEAR TOTEM GOLD PROPERTY NORTHERN BC

FORMAT VERSION : 6802

DRILLHOLE/TRVERSE : 8840H035	COLLAR ELEVATION: 1492.11	AZIMUTH(DEG) : 268.74	GEOLOGGED BY : EDT +
TOTAL DEPTH/LENGTH : 137.46	NORTHING(- IF S): 24163.97	VERTICAL ANGLE : -60.00	DATE (YY/MM/DD): 840507
CORE/HOLE DIAMETER : NO	EASTING (- IF W): 24931.07	CD-ORD SYSTEM : GRD	PROJECT NUMBER : M523

R HED NO DOWNHOLE TESTS PERFORMED.

F - I N T E R V A L -		CORE T- %		TYPI- GAL		TEX- GRAIN		PGI		STRUCTUR-1		ALTERATION MINS				ORE-TYPE MINS				SUMMARY			
L (UNITS = MT.2 DEC.PLACE)		RECOV- M M		ROCK		FYING MIN		TURES CHARACS		/RI T ID		STK DIP		H H H H H				A A A A A				STR	
(METRIC)		ERY O I		D X TYPE		1 2 QM1		1 2 F F C A		N N C M		1		AZM RT		QZ CA AK CL GY XX PY CP LI YY				S I			
Y G F R O M - T O - I N T (PC.1)		D X TYPE		1 2 QM1		1 2 F F C A		N N C M		1		AZM RT		QZ CA AK CL GY XX PY CP LI YY				S I					
K F		ROCK		VUG QT DO		CR QM2		TX TX S R S O		V N D F		T ID		STK DIP		MU DO CY FU HE HA JA SC FS HA				ALT			
E L		QUAL		GMM GG GG		LC-H		3 4 0 N H /		P I		2		AZM RT		H H H H H				H H H H H			
Y G		DESIG		COL A		R D P C		S M L F		STRUCTUR-2		A A A A A		A A A A A				A A A A A					

/	0.00	13.11	13.11	0.0	TRIC					P										
R	0.00	13.11			NO CORE RECOVERY.															
/	13.11	33.72	20.61	46.0	TUFF		BX SK 2 3	5	30.5	P	BN	30	<*	>?	<(	Q-	E*		1 2
L				4.6		4G	LP BN		2538	P			>(	G2	<-	A-			0 6
R	13.11	33.72			EXTREMELY BROKEN, CRUMBLY CORE.															
R	13.11	33.72			SOME AMYGDULAR LAPILLI AND SOME LIMONITE STAINED GOUGE,															
R	13.11	33.72			DOLOMITE-ANKERITE(?)-CALCITE VEIN, WEAK BX. FROM 13.11 TO 16M.															
R	13.11	33.72			WEAK CALCITE STOCKWORK AT 19.8M.															
R	13.11	33.72			ABUNDANT MOSS GREEN GOUGE FROM 20.8 TO 21.8M.															
R	13.11	33.72			VERY THINLY BEDDED OR BANDED FROM 22 TO 33.72M. SOMEWHAT															
R	13.11	33.72			CALCAREOUS. 22.1 FEW CHALCOPYRITE AMYGDULES(?)AND, PATCHY															
R	13.11	33.72			PYRITE IN MEDIUM GREY BANDED MATERIAL.															
R	13.11	33.72			HEMATITE COATED 20 DEG FRACTURE AT 22.5 HAS SLICKENSIDES															
R	13.11	33.72			AT 40 DEG ON SURFACE.															
R	13.11	33.72			MINOR LIMONITE STAINING 30.48 TO 31.08.															
K TCP	22.10	22.10																		
/	33.72	42.60	8.88	75.5	FAUL		BX SH 0 5 7 7			P			*=						2 X	
L				4.5		5A	SK 2 5 3 C			P				G3 B)	<*				2 8	
R	33.72	42.60																		
/	33.72	35.58	1.86		X FAUL		BX SH 0 5 7 7			R			<+					P4	2 X	
L				4.5		OU	SK 2 5 3 C			D				G3 B)	<*				2 8	
R	33.72	35.58			MODERATE CALCITE STOCKWORK, ALSO IN A FEW BRECCIA FRAGEMNTS IN															
R	33.72	35.58			LIMONITIC GOUGE WITH MINOR BLACK CARBONACEOUS GOUGE.															
/	35.58	36.05	0.47		X FAUL		BX SH 0 5 7 7			R			<+						2 X	
L				4.5		3A	SK 2 5 3 C			D				G4 B)	<*				2 8	

K F F R O M - T O - I N T RECDV MD % ROCK TM TM QM1 TX TX F C X M VNTK RI 1 ID AZM DIP QZ CA AK CL GY XX PY CP LI YY S I
E -L-----
Y G R O D VUG QT DU LC CR QM2 TX TX S R S O SMLF 2 ID AZM DIP MU OO CY FU HE HA JA SC FS HA F I

R 136.54 137.46 SIMILAR TO 133.53 TO 134.08M.
R 136.54 137.46 HOLE ABANDONED, TRICONE LOST DURING RE-REAMING.

R SUM HOLE B84-35 WAS DRILLED TO INTERSECT THE SILICIFIED CARBONATE
R SUM BODY AT THE 1400 METRE ELEVATION ON THE B83-28 DRILL SECTION.
R SUM B84-35 WAS DRILLED TO A TOTAL DEPTH OF 137.46 METRES AT A DIP
R SUM OF -60 DEG WEST. A TRICONE WAS PUSHED TO 13.11M AND HQ
R SUM CORE WAS RECOVERED FROM THERE TO THE END OF THE HOLE.
R SUM THE HANGING WALL ROCKS CORRELATE VERY WELL WITH THOSE
R SUM INTERSECTED IN B83-28. IN PARTICULAR, A DISTINCTIVE BANDED TUFF
R SUM UNIT WAS INTERSECTED FROM 64.80 TO 70.51M AND CORRELATES WITH
R SUM 61.0 TO 67.9M IN HOLE 28. THIS GIVES AN APPARENT DIP FOR THE
R SUM HANGING WALL VOLCANICS OF 15.3 DEG EAST MEASURED IN THIS PLANE
R SUM OF SECTION. THE TWO FAULT ZONES IN THE UPPER PART OF BOTH HOLES
R SUM ALSO APPEAR TO CORRELATE AND WOULD INDICATE THAT THEY ARE
R SUM FLAT-LYING, HOWEVER THIS IS NOT AS DEFINITE. THE USUAL MAFIC
R SUM PYROCLASTIC ROCKS WERE NOTED ABOVE THE HANGING WALL FAULT
R SUM CONTACT AT 127.10M. A ZONE OF STRONGLY ALTERED, BRECCIATED AND
R SUM SHEARED TUFF WITH 2-5% SULPHIDES WAS INTERSECTED FROM 118.92 TO
R SUM 127.10M. THE HWP WAS NOTED AT 119.80M.
R SUM THE SILICIFIED DOLOMITE SHOWS MODERATE TO VERY STRONG
R SUM SILICIFICATION AND PERSASIVE STRONG CRACKLE BRECCIATION. FINE
R SUM DISSEMINATED AND STYLOLITIC SULPHIDES ARE PRESENT AS TRACE TO
R SUM 2.5%. UNFORTUNATELY HOLE B84-35 HAD TO BE ABANDONED AT 137.46
R SUM WHILE STILL WITHIN THE SILICIFIED DOLOMITE. THE FOOTWALL FAULT
R SUM WAS NOT INTERSECTED. A TRICONE BIT WAS LOST DURING RE-REAMING

G E O L O G

CHEVRON CANADA (SOURCES LTD.
BEAR TOTEM GOLD PROPERTY NORTHERN BC
DRILLHOLE/TRVERSE --- 884DH035 --- (CONTINUED)

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R SUM

FORCING ABANDONMENT.

EM *WJ*

A UMM	FROM	TO	RECOV		G/T AG	G/T AU
A 001	32.72	33.72	80.00	851	1.0	-.1
A 001	33.72	34.65	80.00	852	1.3	-.1
A 001	34.65	35.58	75.00	853	.3	-.1
A 001	35.58	36.05	75.00	854	.8	-.1
A 001	36.05	36.88	75.00	855	.3	-.1
A 001	36.88	37.80	65.00	856	.7	-.1
A 001	37.80	39.32	75.00	857	.3	-.1
A 001	39.32	40.23	65.00	858	2.0	.1
A 001	40.23	41.76	50.00	859	.3	.1
A 001	41.76	42.60	95.00	860	1.0	.1
A 001	42.60	43.28	20.00	861	.3	-.1
A 001	118.92	119.80	95.00	862	.3	-.1
A 001	119.80	120.94	100.00	863	.3	-.1
A 001	120.94	121.94	85.00	864	.3	.1
A 001	121.94	122.77	85.00	865	.3	-.1
A 001	122.77	124.05	95.00	866	.6	.1
A 001	124.05	125.10	85.00	867	.8	-.1
A 001	125.10	126.10	90.00	868	1.6	.1
A 001	126.10	127.10	100.00	869	2.1	5.6
A 001	127.10	127.60	95.00	870	3.3	5.4
A 001	127.60	128.63	95.00	871	3.1	3.7
A 001	128.63	129.57	105.00	872	4.1	2.8
A 001	129.57	130.53	100.00	873	7.5	1.3
A 001	130.53	131.50	100.00	874	5.5	1.2
A 001	131.50	132.68	100.00	875	8.6	1.9
A 001	132.68	133.33	95.00	876	12.2	4.6
A 001	133.33	134.08	95.00	877	1.7	1.6
A 001	134.08	135.60	85.00	878	1.7	1.5
A 001	135.60	136.54	90.00	879	.7	.1
A 001	136.54	137.46	100.00	880	4.6	.1

R ASY 0.00 0.01 THE SAMPLES FROM A002 ARE BLOCK TO BLOCK RECOVERY

A UMM	FROM	TO	RECOV	RECOV
A 002	0.00	13.11	0.00	0.0
A 002	13.11	15.85	0.00	20.0
A 002	15.85	17.37	0.00	30.0
A 002	17.37	18.90	0.00	15.0
A 002	18.90	19.81	0.00	45.0
A 002	19.81	20.73	0.00	15.0
A 002	20.73	21.95	0.00	45.0
A 002	21.95	22.86	0.00	90.0
A 002	22.86	24.08	0.00	55.0
A 002	24.08	24.99	0.00	50.0
A 002	24.99	26.21	0.00	60.0
A 002	26.21	26.82	0.00	25.0
A 002	26.82	27.43	0.00	50.0
A 002	27.43	28.04	0.00	85.0
A 002	28.04	28.65	0.00	70.0
A 002	28.65	29.87	0.00	80.0
A 002	29.87	30.48	0.00	50.0
A 002	30.48	31.08	0.00	50.0
A 002	31.08	32.61	0.00	70.0
A 002	32.61	34.14	0.00	80.0
A 002	34.14	35.36	0.00	75.0
A 002	35.36	35.76	0.00	80.0
A 002	35.76	36.88	0.00	75.0
A 002	36.88	37.19	0.00	95.0
A 002	37.19	37.80	0.00	40.0
A 002	37.80	39.01	0.00	70.0
A 002	39.01	39.32	0.00	95.0
A 002	39.32	40.23	0.00	65.0
A 002	40.23	41.15	0.00	50.0
A 002	41.15	41.76	0.00	55.0
A 002	41.76	42.37	0.00	95.0
A 002	42.37	43.28	0.00	20.0
A 002	43.28	44.04	0.00	65.0
A 002	44.04	44.57	0.00	20.0
A 002	44.57	45.11	0.00	80.0
A 002	45.11	45.72	0.00	80.0
A 002	45.72	46.33	0.00	100.0
A 002	46.33	46.94	0.00	70.0
A 002	46.94	48.16	0.00	90.0
A 002	48.16	49.07	0.00	90.0
A 002	49.07	49.99	0.00	100.0
A 002	49.99	50.90	0.00	60.0
A 002	50.90	52.42	0.00	60.0
A 002	52.42	53.49	0.00	80.0
A 002	53.49	53.95	0.00	90.0
A 002	53.95	54.86	0.00	50.0
A 002	54.86	56.08	0.00	80.0

A	GRM	FROM	TO	RECDV	RECDV
A	002	56.08	57.30	0.00	80.0
A	002	57.30	58.52	0.00	90.0
A	002	58.52	59.28	0.00	90.0
A	002	59.28	60.96	0.00	85.0
A	002	60.96	62.31	0.00	100.0
A	002	62.31	63.40	0.00	100.0
A	002	63.40	64.62	0.00	85.0
A	002	64.62	66.14	0.00	90.0
A	002	66.14	66.75	0.00	90.0
A	002	66.75	67.67	0.00	85.0
A	002	67.67	69.04	0.00	100.0
A	002	69.04	70.71	0.00	95.0
A	002	70.71	72.24	0.00	100.0
A	002	72.24	73.76	0.00	100.0
A	002	73.76	75.29	0.00	90.0
A	002	75.29	76.81	0.00	100.0
A	002	76.81	78.33	0.00	90.0
A	002	78.33	79.86	0.00	100.0
A	002	79.86	80.92	0.00	80.0
A	002	80.92	81.08	0.00	95.0
A	002	81.08	82.45	0.00	100.0
A	002	82.45	84.43	0.00	70.0
A	002	84.43	85.95	0.00	105.0
A	002	85.95	87.48	0.00	90.0
A	002	87.48	89.00	0.00	100.0
A	002	89.00	90.53	0.00	95.0
A	002	90.53	92.04	0.00	100.0
A	002	92.04	93.57	0.00	100.0
A	002	93.57	94.79	0.00	100.0
A	002	94.79	96.62	0.00	100.0
A	002	96.62	98.15	0.00	95.0
A	002	98.15	99.67	0.00	100.0
A	002	99.67	101.19	0.00	90.0
A	002	101.19	102.72	0.00	80.0
A	002	102.72	104.24	0.00	100.0
A	002	104.24	105.77	0.00	90.0
A	002	105.77	106.38	0.00	100.0
A	002	106.38	107.29	0.00	110.0
A	002	107.29	108.81	0.00	105.0
A	002	108.81	110.34	0.00	95.0
A	002	110.34	111.86	0.00	105.0
A	002	111.86	113.39	0.00	100.0
A	002	113.39	114.91	0.00	100.0
A	002	114.91	116.43	0.00	85.0
A	002	116.43	117.96	0.00	100.0
A	002	117.96	119.48	0.00	95.0
A	002	119.48	121.01	0.00	100.0
A	002	121.01	122.53	0.00	85.0

G E O L O G

CHEVRON CANADA (SURCES LTD.
BEAR TOTEM GOLD PROPERTY NORTHERN BC
DRILLHOLE/TRVERSE --- B84DH035 --- (CONTINUED)

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A UMM	FROM	TO	RECOV	RECOV
A 002	122.53	124.05	0.00	95.0
A 002	124.05	125.58	0.00	85.0
A 002	125.58	127.10	0.00	100.0
A 002	127.10	128.63	0.00	95.0
A 002	128.63	129.84	0.00	105.0
A 002	129.84	131.37	0.00	100.0
A 002	131.37	132.89	0.00	100.0
A 002	132.89	134.57	0.00	95.0
A 002	134.57	136.24	0.00	85.0
A 002	136.24	137.46	0.00	100.0

K	F	F	R	U	M	-	T	O	-	I	N	T	RECOV	MD	%	ROCK	TM	TM	Q	1	T	X	F	C	%	M	VNTK	RI	1	ID	AZM	DIP	QZ	CA	AK	CL	GY	XX	PY	CP	LI	YY	S	I						
E	-	L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Y	G												R	G	D	VUG	QT	DU	LC	CR	GM2	T	X	S	R	S	D	SMLF	2	ID	AZM	DIP	MU	DO	CY	FU	HE	HA	JA	SC	FS	HA	F	I						
R		195.59	199.16										ABRUPT, IRREGULAR LOWER CONTACT.																																					
/	L	199.16	209.40	10.24	100.0								TUFF								BL	SK	SH	2	4	4	9920	P	SH	60		>									0-									
R					44.8								5G																																					
R		199.16	209.40										STRONGLY BLEACHED, FUCHSITIC, HEMATITIC WITH DOLOMITE																																					
R		199.16	209.40										STOCKWORK. ZONES OF SHEARING, ZONES OF BRECCIATION. ZONES OF																																					
R		199.16	209.40										SERICITIZATION STRONGLY HEMATITIC FROM 206.9M TO L.C. PATCH OF																																					
R		199.16	209.40										FINE GRAINED PYRITE AT 209.15M.																																					
/	L	209.40	215.93	6.53	99.5								FAUL									SH	B	X	0	5	6	7		P	SH	45																		
R					0.0								31	=	5	3A																																		
R		209.40	215.93										50% OF FRAGMENTS ARE "BLACK TUFF" (CHERTY-MUDSTONE); 30% OF																																					
R		209.40	215.93										QUARTZ VEIN FRAGMENTS: 5% DOLOMITE AND 2.5% HEMATITE VEINLETS																																					
R		209.40	215.93										IN TUFF FRAGMENTS: 10% BLEACHED, FUCHSITIC, HEMATITIC																																					
R		209.40	215.93										DOLOMITIZED TUFF, SHEARED FROM 45 TO 75 DEG.																																					
R		209.40	215.93										BLACK CARBONACEOUS GOUGE.																																					
/	L	209.40	210.86	1.46									X	FAUL								SH	0	4	4																									
R																																																		
R		209.40	210.86										STRONGLY SHEARED "BLACK TUFF" WITH BLACK CARBONACEOUS GOUGE.																																					
/	L	215.93	223.11	7.18	100.0								TUFF									BL	SH	3	5	5	2	P	SH	55		<																		
R					53.4								AG																																					
R		215.93	223.11										STRONGLY HEMATITIC TUFF, SHEARED FROM 55 TO 75 DEG, MINOR																																					
R		215.93	223.11										BLEACHING.																																					
/	L	215.93	219.55	3.62									X	TUFF									BL	SH	3	5	5	2	R	SH	55		<																	
R					53.4																																													
R		215.93	219.55																																															
R		215.93	219.55										STRONGLY SHEARED, HEMATITIC BLACK TUFF WITH 5% DOLOMITE AUGEN																																					
R		215.93	219.55										IN SHEAR PLANES.																																					
R	SUM	HOLE 884-42 WAS DRILLED TO TEST FOR INTERESTING VALUES ALONG																																																
R	SUM	THE KNOWN STRUCTURE IN THE MOST NORTHERLY (TO DATE), OF A SERIES																																																
R	SUM	OF 50 METRE STEP-OUTS FROM THE MAIN BEAR DISCOVERY AREA.																																																
R	SUM	884-42 WAS DRILLED TO A DEPTH OF 223.11M AT A DIP OF -56.0 DEG																																																
R	SUM	WEST. A TRICUNE WAS DRIVEN TO 32.61M AND HQ CORE WAS RECOVERED																																																
R	SUM	FROM THERE TO 189.05M. HQ CORE WAS RECOVERED FROM THERE TO THE																																																
R	SUM	END OF THE HOLE.																																																
R	SUM	THE HANGING WALL ROCKS CONSIST PREDOMINANTLY OF MAFIC TUFFS AND																																																
R	SUM	POSSIBLY INTERMEDIATE TUFFS WITH VARIABLE AMOUNTS OF FINE																																																

G E O L O G

R SUM LAMINATED ASH, COARSE ASH AND LAPILLI. 10% PYRITE OCCURS FROM
R SUM THE HANGING WALL PYRITE AT 154.47 TO THE HANGING WALL FAULT
R SUM CONTACT AT 160.07M.
R SUM THE "POD" IS MODERATELY TO STRONGLY SILICEOUS WITH A PERVASIVE
R SUM BRECCIATED TEXTURE. DOLOMITE IS ABUNDANT AND MAKES UP MUCH OF
R SUM THE MATRIX MATERIAL.
R SUM FROM THE FOOTWALL CONTACT AT 184.51M TO THE END OF THE HOLE AT
R SUM 223.11M THE ROCKS CONSIST OF FAULT BRECCIAS AND STRONGLY
R SUM SHEARED SECTIONS OF "BLACK TUFFS" (CHERTY-MUDSTONE?), AND
R SUM BLEACHED, FUCHSITIC AND HEMATITIC TUFFS, WITH VARIABLE AMOUNTS
R SUM OF DOLOMITE STOCKWORK, QUARTZ VEIN MATERIAL AND BLACK
R SUM CARBONACOUS GOUGE.

J. J. [Signature]
[Signature]

A UMM	FROM	TO	RECOV		G/T AG	GT/ AU
A 001	137.77	138.77	65.00	16261	1.9	-.1
A 001	138.77	139.82	95.00	16262	.3	-.1
A 001	139.82	140.80	95.00	16263	1.0	-.1
A 001	140.80	141.35	90.00	16264	1.6	.1
A 001	141.35	142.65	85.00	16265	1.7	.1
A 001	142.65	143.80	80.00	16266	1.6	-.1
A 001	143.80	144.80	95.00	16267	1.7	.1
A 001	144.80	145.80	100.00	16268	1.1	.1
A 001	145.80	146.80	100.00	16269	1.8	.7
A 001	146.80	147.80	100.00	16270	.3	-.1
A 001	153.86	154.47	100.00	16251	1.9	-.1
A 001	154.47	155.38	95.00	16252	1.4	.1
A 001	155.38	156.38	95.00	16253	1.9	.1
A 001	156.38	157.38	95.00	16254	1.6	.1
A 001	157.38	158.38	95.00	16255	1.0	.1
A 001	158.38	159.40	100.00	16256	1.4	.1
A 001	159.40	160.07	100.00	16257	1.4	.8
A 001	160.07	160.38	100.00	16258	3.3	4.4
A 001	160.38	161.25	100.00	16259	3.2	3.2
A 001	161.25	162.25	100.00	16260	2.2	1.4
A 001	162.25	163.40	100.00	16271	2.8	.7
A 001	163.40	164.60	95.00	16272	2.4	.9
A 001	164.60	166.10	90.00	16273	2.1	.9
A 001	166.10	167.60	95.00	16274	2.0	1.0
A 001	167.60	169.10	95.00	16275	1.3	.6
A 001	169.10	170.37	95.00	16276	8.2	2.6
A 001	170.37	171.60	95.00	16277	5.5	1.3
A 001	171.60	172.93	100.00	16278	3.1	.5
A 001	172.93	174.04	95.00	16279	1.4	.1
A 001	174.04	175.50	100.00	16280	.5	.1
A 001	175.50	177.00	100.00	16281	1.9	.5
A 001	177.00	178.35	100.00	16282	3.1	.9
A 001	178.35	179.83	105.00	16283	1.6	1.3
A 001	179.83	180.75	85.00	16284	.8	1.1
A 001	180.75	181.66	85.00	16285	2.3	1.0
A 001	181.66	182.88	90.00	16286	4.7	2.3
A 001	182.88	183.79	65.00	16287	11.3	2.6
A 001	183.79	184.51	50.00	16288	13.4	5.4
A 001	184.51	185.93	65.00	16289	1.8	.6
A 001	185.93	186.54	95.00	16290	.7	.1
A 001	186.54	187.15	85.00	16291	1.5	.1
A 001	187.15	187.76	100.00	16292	2.1	.1
A 001	187.76	189.05	100.00	16293	1.4	.1
A 001	189.05	190.03	75.00	16294	.8	-.1
A 001	190.03	191.41	100.00	16295	.8	-.1
A 001	191.41	192.58	80.00	16296	.5	-.1
A 001	195.59	196.80	95.00	16297	1.8	.1

CHEVRON CANADA / SURCES LTD.
 BEAR TOTEM GOLD PROPERTY NORTHERN BC
 DRILLHOLE/TRVERSE --- B84DH042 --- (CONTINUED)

G E O L O G

A UMM	FROM	TO	RECOV		G/T AG	GT/ AU
A 001	196.80	198.00	100.00	16298	1.4	.1
A 001	198.00	199.16	100.00	16299	1.6	.1
A 001	208.40	209.40	100.00	16300	1.3	.1
A 001	209.40	210.86	100.00	16301	.3	.1
A 001	210.86	212.36	100.00	16302	.3	.1
A 001	212.36	213.86	100.00	16303	.3	-.1
A 001	213.86	214.93	100.00	16304	.6	-.1
A 001	214.93	215.93	100.00	16305	.4	.1
A 001	222.11	223.11	100.00	16306	.8	-.1

G E O L O G

 CHEVRON CANADA SOURCES LTD.
 BEAR TOTEM GOLD PROPERTY NORTHERN BC
 DRILLHOLE/TRVERSE --- 8840H042 --- (CONTINUED)

PAGE - 10

R ASY 0.00 0.01 THE SAMPLES FROM A002 ARE BLOCK TO BLOCK RECOVERY

A LMM	FROM	TO	RECOV	RECOV
A 002	0.00	32.61	0.00	0.0
A 002	32.61	34.14	0.00	30.0
A 002	34.14	35.05	0.00	10.0
A 002	35.05	37.19	0.00	25.0
A 002	37.19	38.40	0.00	100.0
A 002	38.40	39.32	0.00	100.0
A 002	39.32	40.23	0.00	90.0
A 002	40.23	41.76	0.00	100.0
A 002	41.76	43.28	0.00	80.0
A 002	43.28	44.81	0.00	100.0
A 002	44.81	46.33	0.00	100.0
A 002	46.33	47.85	0.00	100.0
A 002	47.85	49.38	0.00	90.0
A 002	49.38	50.90	0.00	85.0
A 002	50.90	52.43	0.00	95.0
A 002	52.43	53.95	0.00	100.0
A 002	53.95	55.47	0.00	90.0
A 002	55.47	56.69	0.00	85.0
A 002	56.69	58.52	0.00	100.0
A 002	58.52	59.74	0.00	100.0
A 002	59.74	60.96	0.00	100.0
A 002	60.96	62.48	0.00	100.0
A 002	62.48	64.01	0.00	100.0
A 002	64.01	65.53	0.00	100.0
A 002	65.53	67.06	0.00	100.0
A 002	67.06	68.88	0.00	95.0
A 002	68.88	70.54	0.00	100.0
A 002	70.54	72.11	0.00	100.0
A 002	72.11	73.76	0.00	100.0
A 002	73.76	75.29	0.00	100.0
A 002	75.29	76.81	0.00	100.0
A 002	76.81	78.33	0.00	105.0
A 002	78.33	79.86	0.00	100.0
A 002	79.86	81.38	0.00	100.0
A 002	81.38	82.91	0.00	100.0
A 002	82.91	84.43	0.00	100.0
A 002	84.43	85.95	0.00	100.0
A 002	85.95	87.48	0.00	100.0
A 002	87.48	87.78	0.00	100.0
A 002	87.78	89.00	0.00	90.0
A 002	89.00	90.53	0.00	100.0
A 002	90.53	91.14	0.00	60.0
A 002	91.14	92.05	0.00	90.0
A 002	92.05	93.27	0.00	60.0
A 002	93.27	94.79	0.00	100.0
A 002	94.79	96.32	0.00	100.0
A 002	96.32	97.84	0.00	100.0

A LMM	FROM	TO	RECOV	RECOV
A 002	97.84	99.36	0.00	100.0
A 002	99.36	100.89	0.00	100.0
A 002	100.89	102.72	0.00	95.0
A 002	102.72	104.24	0.00	100.0
A 002	104.24	105.46	0.00	80.0
A 002	105.46	106.98	0.00	100.0
A 002	106.98	108.51	0.00	95.0
A 002	108.51	110.03	0.00	100.0
A 002	110.03	111.56	0.00	90.0
A 002	111.56	113.08	0.00	100.0
A 002	113.08	114.12	0.00	100.0
A 002	114.12	115.52	0.00	100.0
A 002	115.52	116.74	0.00	95.0
A 002	116.74	117.96	0.00	100.0
A 002	117.96	118.26	0.00	100.0
A 002	118.26	119.48	0.00	100.0
A 002	119.48	121.01	0.00	100.0
A 002	121.01	122.53	0.00	90.0
A 002	122.53	124.05	0.00	100.0
A 002	124.05	125.58	0.00	100.0
A 002	125.58	127.10	0.00	100.0
A 002	127.10	128.63	0.00	95.0
A 002	128.63	130.15	0.00	100.0
A 002	130.15	131.67	0.00	100.0
A 002	131.67	133.20	0.00	100.0
A 002	133.20	134.72	0.00	90.0
A 002	134.72	136.24	0.00	105.0
A 002	136.24	137.77	0.00	100.0
A 002	137.77	138.99	0.00	65.0
A 002	138.99	140.51	0.00	100.0
A 002	140.51	142.04	0.00	90.0
A 002	142.04	142.65	0.00	85.0
A 002	142.65	143.87	0.00	80.0
A 002	143.87	145.39	0.00	100.0
A 002	145.39	146.91	0.00	100.0
A 002	146.91	148.44	0.00	100.0
A 002	148.44	149.96	0.00	100.0
A 002	149.96	151.49	0.00	100.0
A 002	151.49	153.01	0.00	95.0
A 002	153.01	154.53	0.00	100.0
A 002	154.53	156.06	0.00	95.0
A 002	156.06	157.58	0.00	95.0
A 002	157.58	159.11	0.00	100.0
A 002	159.11	160.63	0.00	100.0
A 002	160.63	162.15	0.00	100.0
A 002	162.15	163.68	0.00	100.0
A 002	163.68	165.20	0.00	90.0
A 002	165.20	166.73	0.00	95.0

A	UMM	FROM	TO	RECDV	RECDV
A	002	166.73	168.25	0.00	95.0
A	002	168.25	169.77	0.00	100.0
A	002	169.77	171.30	0.00	95.0
A	002	171.30	172.82	0.00	105.0
A	002	172.82	174.35	0.00	95.0
A	002	174.35	175.87	0.00	105.0
A	002	175.87	177.39	0.00	100.0
A	002	177.39	178.31	0.00	100.0
A	002	178.31	179.83	0.00	105.0
A	002	179.83	181.66	0.00	85.0
A	002	181.66	182.88	0.00	90.0
A	002	182.88	183.79	0.00	65.0
A	002	183.79	184.51	0.00	50.0
A	002	184.51	185.93	0.00	85.0
A	002	185.93	186.54	0.00	95.0
A	002	186.54	187.15	0.00	85.0
A	002	187.15	187.76	0.00	100.0
A	002	187.76	189.05	0.00	100.0
A	002	189.05	189.89	0.00	75.0
A	002	189.89	191.41	0.00	100.0
A	002	191.41	192.63	0.00	80.0
A	002	192.63	193.55	0.00	80.0
A	002	193.55	195.07	0.00	85.0
A	002	195.07	196.29	0.00	95.0
A	002	196.29	197.82	0.00	100.0
A	002	197.82	198.73	0.00	100.0
A	002	198.73	200.25	0.00	105.0
A	002	200.25	201.78	0.00	100.0
A	002	201.78	203.30	0.00	100.0
A	002	203.30	204.83	0.00	100.0
A	002	204.83	206.35	0.00	100.0
A	002	206.35	207.87	0.00	100.0
A	002	207.87	209.40	0.00	100.0
A	002	209.40	210.92	0.00	100.0
A	002	210.92	212.45	0.00	100.0
A	002	212.45	213.97	0.00	100.0
A	002	213.97	215.49	0.00	100.0
A	002	215.49	217.02	0.00	100.0
A	002	217.02	218.54	0.00	100.0
A	002	218.54	220.07	0.00	100.0
A	002	220.07	221.59	0.00	100.0
A	002	221.59	223.11	0.00	100.0

GEOLUG EDIT LISTING

SYSTEMS ENGINEERING BY
INTERNATIONAL GEOSYSTEMS CORP.

CHEVRON CANADA RESOURCES LTD.
BEAR TOTEM GOLD PROPERTY NORTHERN BC

FORMAT VERSION : 6B02

DRILLHOLE/TRVERSE : 884DH32A
TOTAL DEPTH/LENGTH : 144.48
CORE/HOLE DIAMETER : NO

COLLAR ELEVATION: 1492.09
NORTHING(- IF S): 24113.40
EASTING (- IF W): 24899.43

AZIMUTH(DEG) : 269.09
VERTICAL ANGLE : -53.50
CO-ORD SYSTEM : GRD

GEOLOGGED BY : EDT + TRL
DATE (YY/MM/DD): 840419
PROJECT NUMBER : M523

		SEQ. NO OF SURVEY DATA	FLAGS	LENGTH FROM COLLAR TO SURVEY POINT	AZIMUTH (DEG)	VERT. ANGLE (DEG)																
		1	001	60.96	269.09	-51.50																
		2	002	144.48	269.09	-52.50																
F - INTERVAL - CORE		T- %	TYPI- GAL	TEX- GRAIN	PGI	STRUCTUR-1	ALTERATION	MINS	ORE-TYPE	MINS	SUMMARY											
L (UNITS = MT.2 DEC.PLACE)		RECOV- M M	ROCK	FYNG MIN	TURES	CHARACS	H H H H H	ANY H H H ANY	A A A A A	A A A A A	MIN - -											
E A (METRIC)		ERY O I	TM TM	TX TX	F C % M	VNTK /RI	T ID STK	DIP	A A A A A	A A A A A	MIN - -											
Y G FROM - TO - INT (PC.1)		D X TYPE	1 2	OM1 1 2	F F C A	NNCM	1	AZM RT	QZ CA	AK CL	GY XX	PY CP	LI YY	S I								
K F		ROCK	VUG QT DO	CR OM2	TX TX	S R S O	VNDF	T ID STK	DIP	MU DO	CY FU	HE HA	JA SC	FS HA	ALT							
E L		QUAL	GMM GG GG	LC-H	3 4	G N H /	PI	2	AZM RT	H H H H H	H H H H H	H H H H H	A A A A A	F I								
Y G		DESIG	CUL A	R D P C	SMLF	STRUCTUR-2	A A A A A	A A A A A	A A A A A													
/	0.00	10.36	10.36	0.0	TRIC		P															
R	0.00	10.36			NO CORE RECOVERY																	
/	10.36	21.20	10.84	50.0	TUFF	2 4	5 20 1	P									<- <(<					
L				4.5		4G	LM	2634	P									<- <-				
R	10.36	21.20			BLOCKY CORE WITH MANY RE-GROUND PIECES.																	
/	21.20	29.20	8.00	30.0	CY FAUL	GG Bx 1 M 5 P	5.5	P									** <+			**	P)	
L				0.0		UA	2 3 5 0	541X	P									>* G3 **			G?	
R	21.20	29.20			NO CORE RECOVERED FROM 22.86 TO 24.99, VERY POOR RECOVERY FROM 21.34 TO 25.91.																	
R	21.20	29.20			GREEN GOUGE WITH FRESH ANGULAR TUFF FRAGMENTS FROM 26.4 TO 26.65M. LIMONITE STAINED FROM 27.0 TO LOWER CONTACT. GREY																	
R	21.20	29.20			GOUGE WITH FRAGMENTS OF TUFF WITH STOCKWORK AND PY. VEINLETS, AND FRAGMENTED QUARTZ AND DOLOMITE VEINS.																	
R	21.20	29.20			MINOR CALCITE IN GOUGE.																	
R	21.20	29.20			NOTE ON INTERVAL: 22.86 TO 24.38.																	
R	21.20	29.20			-CORE BARREL RETAINED NO MATERIAL WHEN RUN FROM 22.86 TO 24.99 WHEN ORIGINALLY DRILLED.																	
R	21.20	29.20			-DURING LATER DRILLING THE ROD STRING BROKE AND BECAME SEPARATED FROM 22.86 TO 24.38. WHEN THE RODS WERE EVENTUALLY REJOINED AND PULLED, MATERIAL WAS FOUND SITTING ON TOP OF THE CORE BARREL, WHICH WAS RECOVERED FROM THE RODS. THIS MATERIAL																	
R	21.20	29.20			COULD ONLY REPRESENT CAVE FROM THE VICINITY OF THE SEPARATED																	

K F F R O M - T O - I N T	RECOV	MD %	ROCK	TM	TM	GM1	TX	TX	F C %	M	VNTK	RI	1	ID	AZM	DIP	OZ	CA	AK	CL	GY	XX	PY	CP	LI	YY	S I
E - L -																											
Y G			R Q D	VUG	GT	DO	LC	CR	QM2	TX	TX	S	R	S	O	SMLF											
R	102.18	109.05																									
R	102.18	109.05																									
R	102.18	109.05																									
R	102.18	109.05																									

POSSIBLE WELDED TEXTURE OF ANGULAR SHARDS.
GOOD FOLIATION, PARALLEL TO CORE AXIS, OF VERY FINE,
EVENLY-SPACED HEMATITIC MICROVEINS. WELL DEVELOPED IN 3.5 CM.
LAMINATIONS AT 106.3 TO 106.4. POSSIBLE FRACTURE CLEAVAGE.

/	110.96	113.64	2.68																									PP
L				20.6																								←←
R	110.96	113.64																										

/	116.87	144.48	27.61	80.0																								PP
L				25.0																								←.
R	116.87	144.48																										

STRONGLY BLEACHED TUFF WITH DOLOMITE STOCKWORK.

TUFF BL BX SK 2 4 5 35 3 R
TA 3438 D
STRONGLY BLEACHED TUFF WITH DOLOMITE STOCKWORK.

TUFF TFLM 2 4 5 15 3 P 1 LM 55 >) <) <* Q- PP
AG 1354 P LM 70 >(G* <.

CONTACT IS GRADUAL, MARKED BY THE APPEARANCE OF GOOD LAMINATIONS OVER ABOUT 0.1 METRE.
POSSIBLE CROSS-BEDDING AT 117.04.
A FEW SECTIONS WITH CONTORTED LAMINATIONS.
PYRITE IN PATCHES ALONG LAMINATIONS, SCATTERED PATCHES IN VEINS. SOME CALCAREOUS LAMINATIONS, ALSO CALCITE, DOLOMITE AND QUARTZ VEINS PARALLEL TO LAMINATIONS.
RHYTHMIC LAYERING BETWEEN GREEN ASH LAYERS AND DARK GREY MUD? LAYERS.
SOME NARROW BRECCIAS ADJACENT TO QUARTZ-CALCITE VEINS
A FEW ZONES OF BLEACHING, NOTABLY FROM: 121.6 TO 122.7, 134.75 TO ABOUT 142. (FEWER DARK GREY LAMINATIONS.)
FOLIATION AT 30 DEG IN ROCK LAMINATED AT 50 DEG.
POSSIBLE FRACTURE CLEAVAGE OR CRENULATION.
POSSIBLE WELDED TEXTURE IN SEVERAL LOCATIONS. (119.9 TAKEN FOR T.S.). HEMATITE-STAINED GOUGE AND FRACTURES FROM 143.1 TO END.
ONLY TRACES OF PYRITE BELOW 132.8.
SEVERAL PYROPHYLLITE(?) VEINLETS FROM 121.5 TO 123.5, 140 TO 141.

/	128.50	132.80	4.30																										
L																													
R	128.50	132.80																											

B32A WAS DRILLED TO A DEPTH OF 144.48M. TRICONED TO 10.36M.

THE HANGING WALL ROCKS CONSIST OF: TUFF TO 21.20M; A FAULT ZONE TO 29.20M; LAPILLI TUFF TO 74.50M; AND ALTERED TUFF TO THE HANGING WALL CONTACT AT 75.60M. THE MARKER CHALCOPYRITE APPEARED AT 31.96M AND THE HANGING WALL PYRITE AT 73.54M. SILICIFIED DOLOMITE WITH AN APPARENT WIDTH OF 1.74M, AND CONTAINING MINOR TUFF LAYERS, WAS INTERSECTED TO THE FOOTWALL CONTACT AT 77.24M.

R SUM SUBJACENT TO THE FOOTWALL CONTACT A MINERALIZED BLEACHED TUFF
R SUM WITH 2.5% PYRITE AND 5% PERVASIVE FINE SULPHIDES EXTENDED TO A
R SUM FAULT BRECCIA AROUND 88M. FAULT BRECCIA TO 92.89M. THEN TUFF TO
R SUM END OF HOLE. LAMINATED FROM 102.81 TO 109.05 AND 116.87M TO END.
R SUM SEVERAL QUARTZ-CALCITE VEINS FROM 110M TO END.
R SUM B32A SUPERCEDES B32 (CASING LOST DURING RE-REAMING). DIP 32A
R SUM -53.5 DEG. DRILLING PROBLEMS RESULTING IN POOR OR NO RECOVERY,
R SUM NOTABLY FROM 85.04 TO 94.49M. REDUCED TO NG AT 66.58M AND CASED
R SUM TO A DEPTH OF ABOUT 100 METRES.



CHEVRON CANADA RESOURCES LTD.
 BEAR TOTEM GOLD PROPERTY NORTHERN BC
 DRILLHOLE/TRaverse --- H84DH32A --- (CONTINUED)

G E O L O G

A	UMP	FROM	TO	RECOV		G/T AG	G/T AU
A	001	20.20	21.20	55.00	651	.3	.1
A	001	21.20	22.86	25.00	652	.3	.1
A	001	24.99	25.91	5.00	653	.3	.1
A	001	25.91	26.21	35.00	654	.3	.3
A	001	26.21	26.65	65.00	655	.3	.1
A	001	26.65	27.00	65.00	656	.3	.1
A	001	27.00	28.04	65.00	657	.3	.1
A	001	28.04	29.20	40.00	658	.3	.1
A	001	29.20	30.20	80.00	659	.3	.1
A	001	72.54	73.54	100.00	660	.3	.1
A	001	73.54	74.50	100.00	661	1.0	.1
A	001	74.50	75.60	100.00	662	.3	.1
A	001	75.60	76.42	100.00	663	.3	.1
A	001	76.42	77.24	100.00	664	.7	.1
A	001	77.24	78.33	100.00	665	2.6	5.5
A	001	78.33	79.25	55.00	666	4.0	3.6
A	001	79.25	79.86	65.00	667	9.5	4.0
A	001	79.86	80.79	80.00	668	1.0	.1
A	001	80.79	81.72	80.00	669	.3	.4
A	001	81.72	83.06	90.00	670	10.4	6.5
A	001	83.06	84.43	95.00	671	1.1	2.3
A	001	84.43	85.64	70.00	672	1.1	1.0
A	001	85.64	85.65	25.00	673	.3	2.7
A	001	85.65	87.63	25.00	674	2.7	1.3
A	001	88.85	89.80	75.00	675	.3	.1
A	001	89.80	90.67	85.00	676	2.0	.1
A	001	90.67	90.83	25.00	677	.3	.2
A	001	92.05	92.89	35.00	678	.3	.1
A	001	92.89	93.72	90.00	679	2.0	.1
A	001	127.50	128.50	85.00	680	.3	.1
A	001	128.50	129.24	60.00	681	.6	.1
A	001	129.24	130.76	20.00	682	.3	.1
A	001	130.76	131.67	40.00	683	1.0	.1
A	001	131.67	132.28	80.00	684	.3	.1
A	001	132.28	132.80	50.00	685	.6	.1
A	001	132.80	133.80	90.00	686	.3	.1
A	001	143.87	144.48	100.00	687	.6	.1

R ASY 0.00 0.01

THE SAMPLES FROM A002 ARE BLOCK TO BLOCK RECOVERY.

A LHM	FROM	TO	RECDV	RECDV
A 002	0.00	10.36	0.00	0.0
A 002	10.36	12.19	0.00	55.0
A 002	12.19	12.80	0.00	50.0
A 002	12.80	14.02	0.00	25.0
A 002	14.02	14.33	0.00	50.0
A 002	14.33	14.63	0.00	100.0
A 002	14.63	15.85	0.00	35.0
A 002	15.85	16.46	0.00	50.0
A 002	16.46	17.37	0.00	55.0
A 002	17.37	18.59	0.00	40.0
A 002	18.59	20.12	0.00	60.0
A 002	20.12	21.34	0.00	55.0
A 002	21.34	22.86	0.00	30.0
A 002	22.86	24.99	0.00	0.0
A 002	24.99	25.91	0.00	5.0
A 002	25.91	26.21	0.00	35.0
A 002	26.21	28.04	0.00	65.0
A 002	28.04	29.57	0.00	40.0
A 002	29.57	30.78	0.00	90.0
A 002	30.78	32.46	0.00	90.0
A 002	32.46	33.99	0.00	100.0
A 002	33.99	35.36	0.00	95.0
A 002	35.36	36.27	0.00	60.0
A 002	36.27	37.19	0.00	60.0
A 002	37.19	38.71	0.00	90.0
A 002	38.71	40.23	0.00	95.0
A 002	40.23	41.76	0.00	100.0
A 002	41.76	43.28	0.00	95.0
A 002	43.28	44.81	0.00	80.0
A 002	44.81	46.02	0.00	90.0
A 002	46.02	46.94	0.00	100.0
A 002	46.94	47.85	0.00	100.0
A 002	47.85	48.46	0.00	40.0
A 002	48.46	49.99	0.00	100.0
A 002	49.99	51.82	0.00	90.0
A 002	51.82	53.34	0.00	100.0
A 002	53.34	55.02	0.00	95.0
A 002	55.02	56.69	0.00	100.0
A 002	56.69	58.22	0.00	100.0
A 002	58.22	59.89	0.00	90.0
A 002	59.89	61.57	0.00	100.0
A 002	61.57	63.09	0.00	100.0
A 002	63.09	64.62	0.00	100.0
A 002	64.62	66.14	0.00	100.0
A 002	66.14	67.67	0.00	60.0
A 002	67.67	69.19	0.00	100.0
A 002	69.19	70.71	0.00	95.0

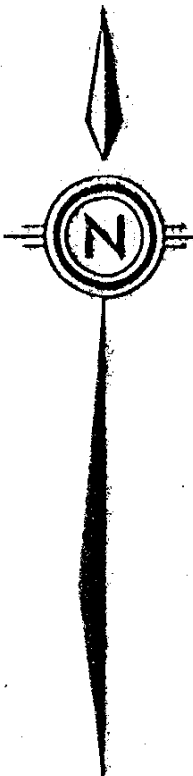
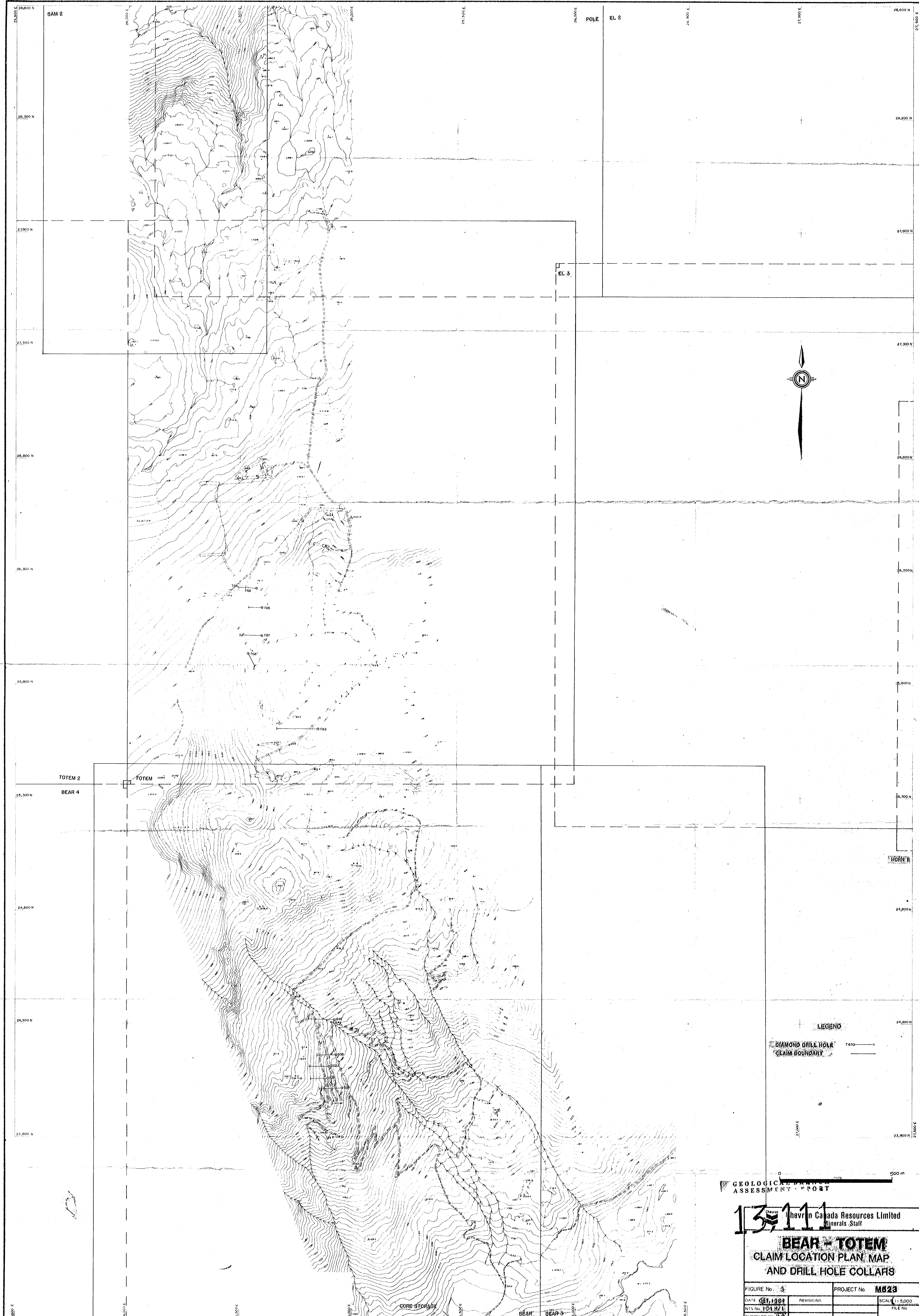
A	UMM	FROM	TO	RECOV	RECOV
A	002	70.71	72.24	0.00	100.0
A	002	72.24	73.76	0.00	100.0
A	002	73.76	75.29	0.00	100.0
A	002	75.29	76.81	0.00	100.0
A	002	76.81	78.33	0.00	100.0
A	002	78.33	79.25	0.00	55.0
A	002	79.25	79.86	0.00	65.0
A	002	79.86	81.38	0.00	80.0
A	002	81.38	83.06	0.00	90.0
A	002	83.06	84.43	0.00	95.0
A	002	84.43	85.04	0.00	70.0
A	002	85.04	85.65	0.00	25.0
A	002	85.65	86.56	0.00	0.0
A	002	86.56	87.02	0.00	15.0
A	002	87.02	87.63	0.00	30.0
A	002	87.63	88.85	0.00	0.0
A	002	88.85	89.00	0.00	25.0
A	002	89.00	90.07	0.00	85.0
A	002	90.07	90.83	0.00	25.0
A	002	90.83	92.05	0.00	0.0
A	002	92.05	92.81	0.00	35.0
A	002	92.81	93.27	0.00	100.0
A	002	93.27	93.72	0.00	85.0
A	002	93.72	94.49	0.00	10.0
A	002	94.49	95.71	0.00	75.0
A	002	95.71	97.23	0.00	95.0
A	002	97.23	98.76	0.00	85.0
A	002	98.76	99.67	0.00	90.0
A	002	99.67	101.19	0.00	90.0
A	002	101.19	102.72	0.00	85.0
A	002	102.72	103.33	0.00	80.0
A	002	103.33	104.85	0.00	90.0
A	002	104.85	106.38	0.00	100.0
A	002	106.38	107.59	0.00	90.0
A	002	107.59	108.97	0.00	85.0
A	002	108.97	110.34	0.00	100.0
A	002	110.34	111.52	0.00	65.0
A	002	111.52	112.32	0.00	90.0
A	002	112.32	113.23	0.00	75.0
A	002	113.23	114.76	0.00	95.0
A	002	114.76	115.82	0.00	90.0
A	002	115.82	116.43	0.00	80.0
A	002	116.43	117.96	0.00	95.0
A	002	117.96	119.48	0.00	95.0
A	002	119.48	121.01	0.00	95.0
A	002	121.01	122.53	0.00	100.0
A	002	122.53	123.60	0.00	90.0
A	002	123.60	124.36	0.00	55.0

G E O L O G

CHEVRON CANADA / SURCES LTD.
BEAR TOTEM GOLD PROPERTY NORTHERN BC
DRILLHOLE/TRVERSE --- 8840H32A --- (CONTINUED)

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A UMM	FROM	TO	RECOV	RECOV
A 002	124.36	125.58	0.00	90.0
A 002	125.58	127.10	0.00	75.0
A 002	127.10	128.17	0.00	95.0
A 002	128.17	129.24	0.00	50.0
A 002	129.24	130.76	0.00	20.0
A 002	130.76	131.67	0.00	40.0
A 002	131.67	132.28	0.00	60.0
A 002	132.28	133.20	0.00	50.0
A 002	133.20	134.11	0.00	100.0
A 002	134.11	135.03	0.00	70.0
A 002	135.03	136.55	0.00	100.0
A 002	136.55	138.07	0.00	100.0
A 002	138.07	139.90	0.00	85.0
A 002	139.90	141.43	0.00	100.0
A 002	141.43	142.95	0.00	100.0
A 002	142.95	143.87	0.00	65.0
A 002	143.87	144.48	0.00	100.0



LEGEND
 DIAMOND DRILL HOLE
 CLAIM BOUNDARY

GEOLOGICAL ENGINEERING
 ASSESSMENT REPORT

13111 Ivanhoe Energy Canada Resources Limited
 Minerals Staff

**BEAR - TOTEM
 CLAIM LOCATION PLAN MAP
 AND DRILL HOLE COLLARS**

FIGURE No. 3	PROJECT No. M823
DATE 08/1/88	REVISIONS
DTS No. 104 R/1	SCALE 1:5,000
COMPILED BY K.S.	FILE No.