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Con McFeely
Mosquito Creek
Wells, B.C.

Formerly AURUM - ISLAND MOUNTAIN GOLD MINE - closed 1968 - reserves 70,000 of 0.7/ton approximately 800 feet below present shaft. — Baker limestones (+ light colored argillites & siliceous quartzites) and Rainbow dark argillites (+ dark quartzites) — North-east 22° plunging anticlinorium — Quartz veins in fissile argillites & replacement pyrite lenses in plastic limestones - Reserves of above contained in flooded workings of Island Mountain — exploration mainly confined to contacts of limestone for replacements - Contact of Baker-Rainbow trends NW & dips 40° NE with Baker on the Hanging wall (older beds because fold) Three main systems: transverse N30-50 E, dip 70°-90 SE; diagonal

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N 70-90 E, dip 70-90 S; strike N 40-60 W, dips steeply NE. Replacement orebodies in the 339 limestone the hw adjacent to the Baker-Rainbow contact — control is drag folds crests or troughs — An anomalous zinc ferric & calcic pyrite -

BOB YARGAU - Mine Mgr.
LARRY CARLISLE - Geologist.

Underground drilling - '80 - 17 to 92
'79 - 1 to 16
'78 - 11 to 57
'75 - 1 to 44
'77 - 1 to 90
Surface drilling '77 - 1 to 7

= 165 + 160 + 150 + 150 + 134 + 173 + 200

Underground drilling - 81 - 1 to 122
82 - 1 to 51

34 x 10 = 340
27 x 14 = 378

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Haulage — $3/ton from shaft to mill regardless of time of year

In '74 Hanna went in 100' on adit for $2M —

Jaw Crusher — 3"
2nd Crusher — 3/4" (Cone)
Mill started in Jan. '80.

Tabulae — 2C & 2A.

Drilling — 72 — 4" DDH on
1 Pannel — empty
(Cochrane) plus additional holes
23 — PH — 1-38
(10,000) Δ 300 ft

2200' for 4 level to break out

Battle Creek — Bulletin #38

	C G 33-59	J. M 34-54	Aurum 54-67
Gold	626,755 (.393)	522,465 (.452)	237,063 (.317)
Silver	56,092	47,225	34433
Tons	1,681,950	771,109	474,186

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Prod. 1981 — 7,947.82 Au
2,079.13 Ag / 21,121 tons

Op. 1981 — $52,364 spent on drilling prog.

Net value of bullion '81 = $1,060,294.
($519.72 C)

DD Footage in '81 = 15,131 feet

Total Operating Costs (less Mill) = $4,212,413
Cost per ton = $199.44 or $527.08 per oz.
Exploration cost = $52.33/ton
= $138.28/oz.

Total Costs	Cost/ton	Cost/oz
Mine	124.46	328.91
Mill	54.73	144.64
Assay & Analysis	3.35	8.85
Capital Expenses	2.54	6.71
Maintenance	7.71	20.38
Office	5.08	13.43
Safety	3.73	9.85
	$201.59	$532.76

Mill Open '81	239 days
Av. daily tonnage	88.37 tpd
Av. heads	0.435
% Total Recovery	87.11%
% ounces of total available	91.91%

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Mosquito Creek Min.

Elev. @ mill = 4475'
@ shaft = 5010' (4573.22)
@ office = 4370

RAINBOW → old MIDAS (BLACK) FRM
BAKER → old Snowshoe (light grey) FRM.

CARIBOO GRP:
Snowshoe – Yanks Pk
Midas –
Yanks Peak
Yankee Belle
Cunningham Lms.

Caved Old Portal – Tr. 4399.46'

Level plans @ 1" = 40 — not at 1" = 20 — no pantograph for enlarging — geology still on underground work sheets & not transferred as yet — Kump is spare time project, has 1st level complete 2nd level approx ½ ; if difference present then present day mapping is accepted —

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MYLARS

1st level – geology but not coloured
2nd " – no geology
3rd level – geology, partially col
4th level – very little geology.

X Sections –
up to Jan. '82 – only sections of X Cuts showing drilling. (Submitted)
A'-A' Base Line N51W.
Strike of Contact – N60W
" " Ore Bodies – N45W.

Sampling Procedure
By duckman of ore hauled Handful from each car up to 10 cars (1 sample)
(1 car = 1.7 tons)
No set procedure re chips Geologist discretion. Waste not sampled.
Test hole drilling – 28' extension steel – supplements DD – done mostly in stopes & drifts where XC not available – sludge

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collected when dark return from pyrite once rock - widest sample encountered would be 5' more likely 1' or 2'.

(2) # Stopes in Operation - (5)
1E, 2G, #2 RSE (part of 2G), 3H
(temporarily halted due to low grade)
3 - #1E after rain, 3I,
3 G (mined out)

Stopes in future - Reserves
June 1982

Replacement Ore

(32 stopes) Probable	8881	@	.54
(19 stopes) Possible	3343	@	.47
Total	12224	@	.52

Quartz Ore.

(2 stopes) Probable	2195	@	.18
(4 stopes) Possible	621	@	.61
Total	2816	@	.27

Total All Ore	15,040	@	.48

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2 G — grade 7 .67.
partial evidence to date
of extension 2-4 is .42

On 2nd level much juggling from 2G + 2' - #2 West raise coming out.

2-7 & 2-24 are thought to be same match a round of founders on back on 2-7 + vein tilt forward. To be tested by 2 ways of extension ste

3-3 block mined out.
2-14 (pillar) 2-15 (reserve from surface) — taken out of re
3-5 slashed out.
3-6 uneconomic.

Production

Stope	Aug T	Aug G	July T	July G
1E	210	.19	7	.20
1MDW	67	.56		
1 [illegible]				

	Apr.	May	June	July	Aug	Sept
#7 XCS (MDE 2nd)				145 .115		
#1 Q4U. S				71 .067		
#1 MDE 2nd			35 .326			
3-4 W Raise (3I)			27 .20	—	59 .86	
3-#1 Raise Sub Dr.				22 .04		
3MDE #4 XC N			19 .20			
4A	181 .89	126 .61	66 .77	74 1.13		

# of Stopes in operation Since Jan 1982:

1st level ~~||||~~ || (7)
3rd level ||||. (5)
2nd level ~~||||~~ ~~||||~~ (10)
4th level .. (1)

23 Operation Points

Blow-up is 1" = 330'.

From Shaft to mill = 9.7"
= 3200 ft
N35°E.

Mosquito Creek Program in '72 & '73 consisted of drill holes on IP anomalies + some trenching.

Burnett Fault dips 52°SE
+ strikes N30°E

Period.

Stope	May T	May G	June T	June G	July T	July G	Aug T	Aug G	Sept T	Sept G
1E		—		—						
1MDW		—			7	.20	210	.19		
1MDS #2XC	70	.21	15	.34			63	.06		
1MC			107	.111						
1A	43	.36		—						
1B			321	.30						
2G	943	.65	1014	.44	616	.50	1003	.40		
3G (2A #1XC N)	220	.41	80	.37	133	.52	363	.41		
2A	588	.63	209	.658		—		—		
2MDE		—		—	59	.14				
2-#1W Rse					19	1.09				
2-#1A Rse W			15	.26						
2I	96	.20	187	.25						
2E North	107	.64		—		—		—		
2H										
2MDE			33	.822						
2C					34	.085	160	.121		
2D Sub A.							41	.333	24	.278
#1 Q5U. North			60	.071 →	142	.117				

Prod.

Stope	May T	May G	June T	June G	July T	July G	Aug T	Aug G	Sept T	Sept G
1E	–		–							
1MDW	–		–		7	.20	210	.19		
1MDS #2XC	70	.21	15	.34			63	.06		
1MC			107	.111						
1A	43	.36	–							
1B			321	.30						
2G	943	.65	1014	.44	616	.50	1003	.40		
3G (2A #1XC)	220	.41	80	.37	133	.52	363	.41		
2A	588	.63	209	.658	–		–			
2MDE	–		–		59	.14				
2-#1W Rse					19	1.09				
2-#1A Rse W			15	.26						
2I	96	.20	187	.25						
2E North	107	.64	–		–		–			
2H										
2MDE			33	.822						
2C					34	.085	160	.121		
2D Sub A.							41	.333	24	.278
#1 QGU. North	→		60	.071 →	142	.117				
#1MDE	120	.219	329	.567						
#6 XC S.	91	.227								
#6 XC N.	89	.102								
#1 RSE MDW land					123	.266				
#6 XC N									24	.024
#1 QGU. S							71	.067		
#1MDE 2nd					35	.326				
3-4W Rse (2I)					27	.20	–		59	.86
3-#1 Rse Sub Dr.							22	.04		
3MDE #4 XC N					19	.20				
4A	181	.89	126	.61	66	.77	74	1.13		

# of stopes in operation since Jan 1982:

1st level ~~ℍℍ~~ ll (7)
3rd level ~~ℍℍ~~ (5)
2nd level ~~ℍℍ~~ ~~ℍℍ~~ (10)
4th level. (1)

23 Operating Points

Blow-up is 1" = 330'.

From Shaft to mill = 9.7"
= 3200 ft
N35°E.

Mosquito Creek Program in '72 & '73 consisted? 4 diamond holes on IP anomalies + some trenching.

Burnett Fault dips 52°SE
+ strikes N30°E

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Early Drilling — SE of shaft drilling only to 1050' (P28)
NW of shaft drilling only to 950' (IP No. 2 DDH).

Present drill recovery = 65%.
2 machines – Vane
– JV
Had cut down from 1200' to 800'/month

Qtz vein sampled if mineralized.

EM 16 —
Outlined broad band of limestone trending across area with a definitive contact and sharp areas of high conductivity lying to SW of contact.

Geochem.

12 anomalies of which 4 are dual or more elements – other 8 are single elements.

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Surface working on 3 soil anomalies of which 1 is coincident with EM16

Of 3 being worked:
A 1 is located behind shaft — (it is coincident) – good replacement stock piled 500 t @ .25 – possibly r[illegible] as of this surface work.
B 1 lies in fracture with silver lead in sericite phyllites – the 2 [illegible]
C 1 in limestone which is awaiting further work.

In Assay Lab.:
Mill – 3 heads & 3 tails a day
Mine – 6 or 7
In addition does # soil [illegible] from each of 3 shifts.
normally 30 samples per day
Can handle up to 40 without affecting priority ratings.

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1st Level.

Probable	5200 @ ·21	
Possible		600 @ ·21

2nd Level

Probable	2925 @ ·516	
Possible		1087 @ ·47

Total Probable 8125 @ ·320
Possible 1687 @ ·376

Grand Total 9812 @ ·330

Tabular — Actual is massive fine pyrite — as moved out the lead & zinc start appearing along with more coarse grained pyrite & arsenopyrite, or fringes the pyrite becomes more coarse & less qnty. Scheelite is no indicator

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1 MC stope — 8 (10) vein, early mined, weak faint indicator of Morgan's Creek ore, diluted badly on recovery stope.

Succession from FW of ls.
(1) Zone of sericite phyllite of ?
(2) argillite & gate
(3) dolomite (skarn)?

In HW of ls.
another zone of dolomite.
(orange weathering, f.s, light grey)

(73-20 between 2 stopes in waste
In localities, the l.s carries disseminated coarse pyrite, possibly a halo effect. Also sericite increase

1 D stope — breakthrough into one
1 E stope (DDH 82-41 - ·88/
& there is an overlying reserve block of ·76/2·1 (82-41) — onto HW of zone.
1 D & 1 E cut off by mud slope.
In 1 D in 2 ends of waste [illegible]

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~~test holed with neg. results.~~

2 E – Stoped almost to 1st
reserve block drilled off –
15' lg x 10' wide 2 lenses mined
as one .34 (attached off to
one side is 2 E North
(Oneon stope); rough
splash of replacement; or
grade .7)

2 West Raise – at lower
end of 2 E – breaks into
2 G

2-10 reserve is too close to
shaft

2-11 reserve @
intersection of
2 drifts &
might be
ackward to
mine

45

Several replacement
of phyllite

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[2 beds of lens? not enough proof]

2 A Zone – mined thru
to surface with some
reserve block 2-15 mined
out @ surface. – Tabular –
died out a short distance
(35') below 2nd level. – at
HW of lens

2 G – Major fault run thru
with ore on Nort side –
in one location mined up
dip then turned & mined up
plunge with ore in between
slope material with waste
section but good looking
mineral run: 4 whereas
massive section run .7 –
subdrift from #2 raise ran
into 2G & was on other side
of fault in waste however
10 feet away is ore on same
side of fault –

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2H - Sl. updip from 2G
several rounds into rock -
located at entrance 11
level to 2G - ±1000 t @ .3

Fault is 35-40' in advance
of present 2nd level face -
& projection down the
fault -

3I - subdrift off 3-4 Rse
heavy sulfide with qtz-
carbonate specks - .4 from
last muck - thought to be
down projection of 2G
Fault will not allow
downward proj - thought
to be same fault as in
2nd level face (40').

Don Ulrich got mapped
2nd level

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4A - parallel - then to 3rd -
A branch 4C, follows a
11 structure to just below
3rd level.

DDH

73-41	399.7-400	.380
73-4	885-885.5	.372
	890.6-891	.224
73-8	91-92	.152
73-11	605-606	.565
	639-644	1.016
	656-663	.103
	718-727	1.910
	727-736	1.140
	760-761	1.190
	763.5-764.5	.580
	766-772	.058
	772-780.1	.392
73-12	195.6-197.1	.121
-14	86-93	.186
	268.8-281.5	.130
	414-435.5	.62
-15	245.5-247	1.240
-16	35.8-36.9	.203
	36.9-37.2	3.220

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23-16	307-309		.440
	3225-3235		.112
	510.2-511.7		.420
	514.6-518.6		.224
	519.6-520.9		1.60
-17	336.5-339.2		.140
	356-366		.268
-19	196.4-197		1.38
	210-210.6		.164
	327-328		.120
-20	201.5-212.5		.765
-23	266.7-268		1.34
	274.7-275		.150
	275.2-275.9		.324
2-11	7.6-9		1.90
	88.5-90.5		.11
12	11-11.5		3.52
16	11.5-12.2		1.51
IP	had no assays.		
12	100	120	.100
13	150	170	.253
	170	200	.277

thru to 73-23

thru to 16 4 IP holes 5 D holes

3750

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P29 — Panned Concentrates

110 - 160	.511	5/2.553
160 - 170	.140	
170 - 180	.137	

thru to P37

Coordinates of Mill

N 20,320 Elev - 4040 (4073) 5'33'

E 11,870

3rd level B.O. — 1080' @ crosscut

4th " " — 1670' @ "

3rd level ± 1600' from mill @ B.O.

4th " " 1070' " " "