

# Mc ARTHUR RIVER MINING

## DIAMOND DRILL HOLE HEADER SUMMARY SHEET

HOLE I.D.	<u>:98/1</u>	LOCATION (eg.drive name)	<u>:2G2 CUDDY</u>
GRID AZIMUTH	<u>:162.5</u>	DESIGN DEPTH (m)	<u>:75</u>
COLLAR INCLINATION	<u>:10</u>	TOTAL DEPTH (m)	<u>:81.4</u>
<u>SURVEYED COLLAR CO-ORDINATES</u>		DATE STARTED	<u>:13/01/98</u>
EASTING	<u>:7615.881</u>	DATE FINISHED	<u>: 14/01/98</u>
NORTHING	<u>:1534.304</u>	DRILLED BY	<u>:LONGYEAR</u>
RL	<u>:9705.910</u>	<u>CORE INTERVALS ASSAYED:</u>	
HOLE/CORE SIZE(S)	<u>:PQ 0.0-3.0</u>	<u>17.7-23.35 (I1/2)</u>	
	<u>:HQ 3.0-EOH</u>	<u>23.35-33.67 (#2)</u>	
		<u>33.36-36.88 (I2/3C,D)</u>	
LOGGED BY	<u>: NS/KC</u>	<u>48.3-67.8 (3LA-3LD)</u>	
D/HOLE SURVEY METHOD	<u>:EASTMAN SS</u>	LOCAL MAG. DEV.	<u>: + 5</u>
		(add to downhole survey azim. reading)	

RAW DOWNHOLE SURVEY DATA

Depth (m)	Azimuth(Mag)	Dip	Depth (m)	Azimuth(Mag)	Dip
10	157	10			
30	106	10.5			
60	156	10.5			
81.4	157.5	10			

ASSAY SUMMARY

O/B	TT	Zn%	Pb%	Ag g/t	Fe%
3L	6.7	14.4	4.6	51	13.5
I2/3	1.0	6.8	5.1	17	14.2
<b>#2</b>	<b>4.04</b>	<b>17.6</b>	<b>6.3</b>	<b>66</b>	<b>7.0</b>
I1/2	2.2	3.6	1.2	15	6.3

Surveyed Collar & Geology Entered Into Micromine Database

: SP 03/98

Assays Entered Into Micromine Database

: SP 03/98

Surveyed Collar & Geology Transferred Into Vulcan Database

: SP 18/04/98

Assays Transferred Into Vulcan Database

:SP 18/03/98

**Comments:** UPHOLE DESIGNED TO INTERSECT #2 OB NORTH OF THE WOYZBUN FAULT  
AND TO TEST AREA FOR FAULTING PRIOR TO MINING  
SUCCESSFULLY ACHIEVED BOTH

# Mc ARTHUR RIVER MINING

## DIAMOND DRILL HOLE PROPOSAL FORM

HOLE I.D. : 98/1

LOCATION (eg.drive name) : \_\_\_\_\_

PROPOSED START DATE : \_\_\_\_\_

DESIGN AZIMUTH : \_\_\_\_\_

DESIGN DEPTH : \_\_\_\_\_

DESIGN INCLINATION : \_\_\_\_\_

### ESTIMATE COLLAR CO-ORDINATES

### SURVEYED COLLAR CO-ORDINATES

NORTHING : \_\_\_\_\_

NORTHING : 1534.304

EASTING : \_\_\_\_\_

EASTING : 7615.881

RL : \_\_\_\_\_

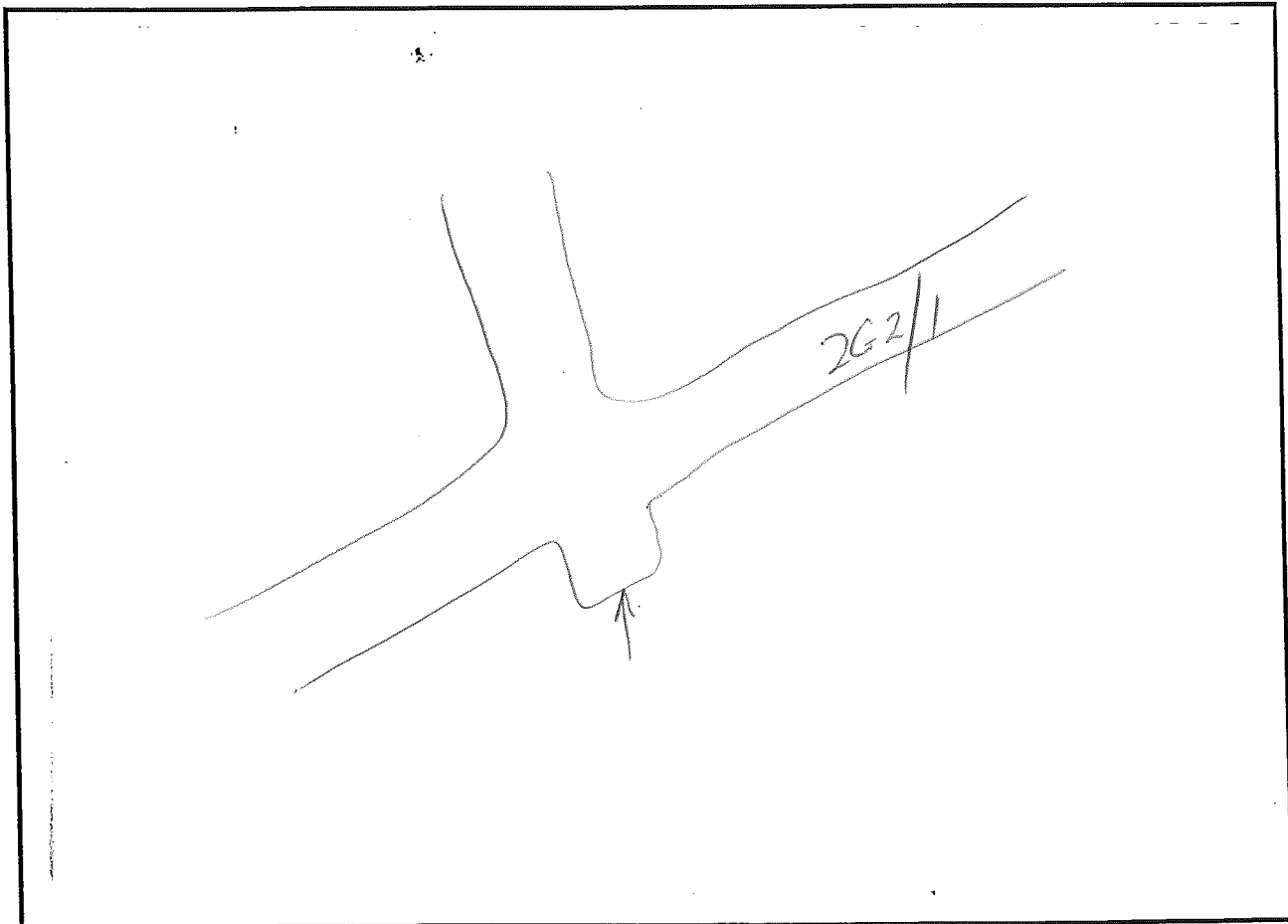
RL : 9705.910

GEOLOGIST : \_\_\_\_\_

SURVEYOR : ACC

### LOCATION SKETCH

2d/08



Comments:

---

---

---

---

---

McARTHUR RIVER MINING

GEOLOGICAL LOG SHEET

GEO No. 9811 of 15/01/95

VERSION 9811

DATE 20/1/98

LITHOLOGY			ALTERATION					SULPHIDES			FAULTING			GEOTECHNICAL				STRUCTURE			COMMENTS											
TO	COL	WTH	CODE	G	LITH	TEX	DOL	VEIN	NO	CR	CO	PY	MIN	TYP	NAME	Q	OXJ	REC	CORE	CUT		BEPT	H	BCA	A1	OTH	D	A2				
7	3	3	110	FR	H	L										1	3	5	4	3	37							30				
2	1	67			TP	L																										
3	0	34			SH	M																										
3	7	67			SL	L																										
4	1	67			TH	M																										
6	8	67			SA	L																										
6	8	67			TP	L																										
9	3	67			SH	L																										
9	35	67			SAG	M																										
10	7	67			SH	M																										
15	9	67			SH	L																										
17	3	67			SH	L																										
17	7	67			SAG	B																										
18	3	67			SH	L																										
19	2	67			SH	L																										
5	5	67			SH	L																										
3	67				SH	L																										
21	15	67			SH	L																										
21	34	67			S1/SX	L																										
24	50	67			SH	B																										
23	95	67			S1	B																										
23	95	67			M	L																										
24	82	67			M	L																										
25	167				SH/SA	B																										
25	12	67			M	L																										
25	27	67			SH/SA	B																										
27	18	67			H	L																										
27	25	67			TP	M																										
29	8	67			H	L																										
29	8	67			TP	M																										
29	25	67			TP	M																										
32	7	67			M	L																										
33	67	67			S1/SX	L																										
34	7	67			M	L																										
35	27	67			M	L																										
35	27	67			M	L																										
36	38	67			M	L																										
36	52	67			TP	M																										
39	1	67			M	L																										
39	2	67			TP	M																										
39	71	67			M	L																										
40	5	67			M	L																										
41	3	67			M	L																										
41	35	67			TP	M																										
42	34	67			M	L																										
42	36	67			TP	M																										
48	3	67			H	L																										

Breccia rounded clasts up to 15cm  
fossiliferous. matrix of mudstone  
interbedded with silty shale  
Nodular silt/shale  
chert nodules at 24-6 units is nodular  
Gardiner bed having spherulites  
Manganese staining nodular pyrite  
fossiliferous  
Remaining less nodular & pyritic chert @ 25-28  
Ground beds (2.5cm) @ 28.2, 29.1, 29.3  
Less nodular towards the top  
Less nodular in  
Ground beds up to 15cm @ 35.4, 34.9 - some cracks  
Relatively intact / harder TP get still  
No apparent cracks or nodules  
Fracturing upwards  
Fracture upwards  
Fracture up to 50cm @ 46.5





# Mc ARTHUR RIVER MINING

## DIAMOND DRILL CORE SAMPLING SHEET

DATE: 7/02/92  
 SAMPLER: [Signature]  
 Sample Type: CORES

HOLE No.	FROM (m)	TO (m)	INTERVAL	SAMPLE No.	LITHCODE	ASSAYS					COMMENTS
						Zn(%)	Pb(%)	Ag(g/t)	Fe(%)	Cu(ppm)	
9811	48.3	50.0	1.7	24069	3L10						
	50.0	51.0	1.0	70	3L10						
	51.0	52.0	1.0	71	77						
	52.0	53.0	1.0	72							
	53.0	54.0	1.0	73							
	54.0	55.0	1.0	74							
	55.0	56.2	1.2	75	V						
	56.2	57.2	1.0	76	3L10						
	57.2	58.2	1.0	77	77						
	58.2	59.7	1.5	78							
	59.7	60.2	0.5	79							
	60.2	61.2	1.0	24080							
	61.2	62.2	1.0	81							
	62.2	63.2	1.0	82	V						
	63.2	64.2	1.0	83	3L10						
	64.2	65.2	1.0	84							
	65.2	66.2	1.0	85							
	66.2	67.2	1.0	86							
	67.2	67.8	0.6	24087	V						

Assays in Micromine + Vulcan, 30/11/04/92

M . R . M . CORE # 23913 23923#

CREATED AT :- 8:14 AM WED., 18 FEB., 1998  
PRINTED AT :- 8:47 AM WED., 18 FEB., 1998  
CHEM LAB\XRF\REPORT.XRF MISC  
ALL RESULTS ARE REPORTED IN PERCENT

ATTN - : MRM QED'S

M.R.M. Mine Sample

MR 023913 <SR1>

PB..... 0.40  
ZN..... 0.41  
CU..... 0.024  
FE..... 3.76  
CAO..... 17.1  
S..... 0.78  
SIO2... 30.7  
AL2O3.. 4.10  
MGO.... 9.83  
AS..... 0.008  
SB..... 0.029

Ag = 10

98/1

M.R.M. Mine Sample

MR 023914 <SR1>

PB..... 0.36  
ZN..... 1.03  
CU..... 0.028  
FE..... 7.95  
CAO..... 4.49  
S..... 7.63  
SIO2... 45.3  
AL2O3.. 10.7  
MGO.... 3.75  
AS..... 0.036  
SB..... 0.061

Ag = 10

M.R.M. Mine Sample

MR 023915 <SR1>

PB..... 0.84  
ZN..... 0.62  
CU..... 0.159  
FE..... 4.89  
CAO..... 14.8  
S..... 2.30  
SIO2... 30.7  
AL2O3.. 5.44  
MGO.... 8.68  
AS..... 0.026  
SB..... 0.040

Ag = 14

M.R.M. Mine Sample

MR 023916 <SR1>

PB..... 2.50  
ZN..... 8.88  
CU..... 0.036  
FE..... 5.92  
CAO..... 13.9  
S..... 7.64  
SIO2... 20.4  
AL2O3.. 4.56  
MGO.... 8.09  
AS..... 0.023  
SB..... 0.033

Ag = 20

## M.R.M. Mine Sample

MR 023917 &lt;SR1&gt;

PB.....	7.16
ZN.....	18.3
CU.....	0.20
FE.....	5.00
CAO.....	2.71
S.....	13.3
SiO2...	30.7
AL2O3..	6.84
MGO.....	2.14
AS.....	0.161
CO.....	0.001
SB.....	0.048

*Ag = 76*

## M.R.M. Mine Sample

MR 023918 &lt;SR1&gt;

PB.....	6.49
ZN ...	18.9
CU.....	0.67
FE.....	5.65
CAO.....	2.06
S.....	14.0
SiO2...	31.2
AL2O3..	6.99
MGO.....	2.01
AS.....	0.173
CO.....	0.003
SB.....	0.045

*Ag = 66*

## M.R.M. Mine Sample

MR 023919 &lt;SR1&gt;

PB.....	6.17
ZN.....	17.5
CU.....	0.42
FE.....	8.61
CAO ..	1.73
S.....	16.4
SiO2...	29.9
AL2O3..	6.80
MGO.....	1.80
AS.....	0.21
CO.....	0.003
SB.....	0.048

*Ag = 60*

## M.R.M. Mine Sample

MR 023920 &lt;SR1&gt;

PB.....	3.36
ZN.....	11.8
CU.....	0.176
FE.....	12.4
CAO.....	4.90
S.....	14.1
SiO2...	26.9
AL2O3..	6.88
MGO.....	3.56
AS.....	0.128
CO.....	0.003
SB.....	0.031

*Ag =*

## M.R.M. Mine Sample

MR 023921 &lt;SR1&gt;

PB.....	1.91
ZN.....	8.25



ZN.....	8.36
CU.....	0.70
FE.....	14.2
CAO.....	7.43
S.....	16.6
SiO2...	22.8
AL2O3..	4.91
MGO.....	4.61
AS.....	0.125
CO.....	0.001
SB.....	0.025

*Ag = 20*

M.R.M. Mine Sample

MR 023922 <SR1>

PB.....	1.10
ZN.....	5.18
CU.....	0.159
FE.....	14.1
CAO.....	9.56
S.....	15.4
SiO2...	21.9
AL2O3..	5.05
MGO.....	6.03
AS.....	0.109
CO.....	0.001
SB.....	0.027

*Ag = 18*

M.R.M. Mine Sample

MR 023923 <SR1>

PB.....	0.46
ZN.....	2.55
CU.....	0.66
FE.....	4.97
CAO.....	7.87
S.....	4.44
SiO2...	39.0
AL2O3..	9.37
MGO.....	6.73
AS.....	0.023
CO.....	0.001
SB.....	0.056

*Ag = 8*

*98/4 woyz  
131.8 - 133.5*

*MRM* LEAD CORES #24073 - 24087#

CREATED AT :- 10:07 AM TUE., 17 MAR., 1998  
 PRINTED AT :- 11:40 AM TUE., 17 MAR., 1998  
 CHEM LAB\XRF\REPORT.XRF MISC  
 ALL RESULTS ARE REPORTED IN PERCENT

*ATTN - : R. DEAN / D. NIMILL*

## Core Sample

C 024073 &lt;SR1&gt;

PB.....	4.70
ZN.....	16.2
CU.....	0.137
FE.....	18.2
CAO.....	0.99
S.....	27.1
SIO2...	19.6
AL2O3..	4.17
MGO.....	1.17
AS.....	0.20
CO.....	0.002
SR.....	0.025

*Ag = 50*

## Core Sample

C 024074 &lt;SR1&gt;

PB.....	6.54
ZN.....	15.6
CU.....	0.20
FE.....	15.2
CAO.....	0.88
S.....	24.2
SIO2...	23.8
AL2O3..	5.07
MGO.....	1.09
AS.....	0.177
CO.....	0.002
SB.....	0.031

*Ag = 68*

*98/1*

## Core Sample

C 024075 &lt;SR1&gt;

Pb.....	4.67
ZN.....	14.9
CU.....	0.100
FE.....	17.9
CAO.....	0.73
S.....	26.2
SIO2...	23.7
AL2O3..	4.47
MGO.....	1.00
AS.....	0.21
CO.....	0.003
SB.....	0.035

*Ag = 50*

## Core Sample

C 024076 &lt;SR1&gt;

PB.....	2.53
ZN.....	9.39
CU.....	0.064
FE.....	17.2
CAO.....	0.65
S.....	23.5
SIO2...	27.8
AL2O3..	8.01
MGO.....	1.15

*Ag = 32*

MGO.... 1.15  
 AS..... 0.21  
 CO..... 0.001  
 SB..... 0.041

Core Sample

C 024078 <SR1>

PB..... 4.85  
 ZN..... 14.9  
 CU..... 0.143  
 FE..... 13.2  
 CAO..... 1.17  
 S..... 21.1  
 SIO2... 28.8  
 AL2O3.. 6.20  
 MGO.... 1.37  
 AS..... 0.22  
 CO..... 0.004  
 SB..... 0.039

*Ag = 60*

Core Sample

C 024079 <SR1>

PB..... 4.71  
 ZN..... 15.1  
 CU..... 0.157  
 FE..... 15.5  
 CAO..... 0.81  
 S..... 24.0  
 SIO2... 24.9  
 AL2O3.. 5.29  
 MGO.... 1.07  
 AS..... 0.21  
 CO..... 0.004  
 SB..... 0.036

*Ag = 54*

*Pb(1)*

Core Sample

C 024080 <SR1>

PB..... 4.96  
 ZN..... 15.7  
 CU..... 0.165  
 FE..... 16.1  
 CAO..... 0.79  
 S..... 24.3  
 SIO2... 24.1  
 AL2O3.. 5.20  
 MGO.... 1.05  
 AS..... 0.20  
 CO..... 0.004  
 SB..... 0.033

*Ag = 56*

Core Sample

C 024081 <SR1>

PB..... 2.40  
 ZN..... 9.39  
 CU..... 0.083  
 FE..... 12.2  
 CAO..... 1.96  
 S..... 17.1  
 SIO2... 33.7  
 AL2O3.. 7.68  
 MGO.... 1.96  
 AS..... 0.123  
 CO..... 0.001  
 SB..... 0.045

*Ag = 34*

## Core Sample

C 024082 &lt;SR1&gt;

PB.....	4.16
ZN.....	14.7
CU.....	0.139
FE.....	12.1
CAO.....	0.80
S.....	19.9
SiO2...	29.7
AL2O3..	6.49
MGO.....	1.20
AS.....	0.184
CO.....	0.003
SB.....	0.041

*Ag = 50*

## Core Sample

C 024083 &lt;SR1&gt;

PB.....	3.99
ZN.....	13.6
CU.....	0.139
FE.....	16.8
CAO.....	0.74
S.....	24.5
O2...	24.8
AL2O3..	6.47
MGO.....	1.21
AS.....	0.198
CO.....	0.005
SB.....	0.038

*Ag = 16*

98/1

## Core Sample

C 024084 &lt;SR1&gt;

PB.....	3.87
ZN.....	12.1
CU.....	0.151
FE.....	14.2
CAO.....	3.03
S.....	20.9
SiO2...	28.0
AL2O3..	5.21
MGO.....	2.40
P.....	0.20
CO.....	0.003
SB.....	0.033

*Ag = 102*

## Core Sample

C 024085 &lt;SR1&gt;

PB.....	4.17
ZN.....	14.1
CU.....	0.153
FE.....	12.0
CAO.....	1.38
S.....	18.6
SiO2...	30.3
AL2O3..	6.75
MGO.....	1.53
AS.....	0.21
CO.....	0.004
SB.....	0.044

*Ag = 52*

## Core Sample

C 024086 &lt;SR1&gt;

PB.....	4.22
ZN.....	15.4
CU.....	0.154

CU.....	0.104
FE.....	12.0
CAO.....	1.10
S.....	19.7
SiO2...	29.2
AL2O3..	6.38
MGO.....	1.32
AS.....	0.23
CO.....	0.004
SB.....	0.045

*Ag = 56*

Core Sample

C 024087 <SR1>

PB.....	2.85
ZN.....	11.5
CU.....	0.087
FE.....	7.29
CAO.....	5.01
S.....	11.8
SiO2...	33.3
AL2O3..	6.99
MGO.....	3.79
AS.....	0.138
CO.....	0.001
.....	0.038

*Ag = 32*

Core Sample

C 024077 <SR1>

*98(1)*

PB.....	4.36
ZN.....	15.4
CU.....	0.146
FE.....	13.7
CAO.....	1.76
S.....	21.8
SiO2...	26.2
AL2O3..	5.56
MGO.....	1.77
AS.....	0.24
CO.....	0.004
SB.....	0.030

*Ag = 18*

M.R.M. Mine Sample

MR 024069 &lt;SR1&gt;

PB.....	5.70
ZN.....	16.4
CU.....	0.127
FE.....	12.1
CAO.....	2.19
S.....	20.9
SiO2...	25.7
AL2O3..	5.52
MGO.....	1.89
AS.....	0.169
CO.....	0.002
SB.....	0.039

*Ag = 60*

M.R.M. Mine Sample

MR 024070 &lt;SR1&gt;

PB.....	5.76
ZN.....	15.0
CU.....	0.180
FE.....	11.1
CAO.....	2.56
S.....	19.2
SiO2...	25.7
AL2O3..	5.94
MGO.....	2.25
AS.....	0.165
CO.....	0.001
SB.....	0.043

*Ag = 56**98/1*

M.R.M. Mine Sample

MR 024071 &lt;SR1&gt;

PB.....	5.53
ZN.....	15.9
CU.....	0.20
FE.....	10.4
CAO.....	1.26
S.....	18.8
SiO2...	30.1
AL2O3..	6.40
MGO.....	1.47
CO.....	0.178
SB.....	0.047

*Ag = 60*

M.R.M. Mine Sample

MR 024072 &lt;SR1&gt;

PB.....	5.87
ZN.....	15.4
CU.....	0.182
FE.....	13.9
CAO.....	2.38
S.....	21.6
SiO2...	23.5
AL2O3..	5.11
MGO.....	2.06
AS.....	0.197
CO.....	0.001
SB.....	0.032

*Ag = 52*