

CURRAGH RESOURCES INC.

GEOLOGY DEPARTMENT

020031

MONTH END
JULY 1989

High grade ore mined this month came from the 3350 bench (17.2%), the 3330/3310 bench (13.4%) in the A phase, the 3670 bench (15.5%) and the 3650 bench (53.9%) in the S phase. The A phase was completed on July 20. Blasthole drill availability was low this month and as a result the 3330 and 3310 benches were drilled together as one 40 foot bench. Blasthole sampling involved only the ore intervals and the depths of each were logged as accurately as possible. The bench was mined to the appropriate levels. Approximately 4,000 tonnes of unbroken high grade graphitic ore remains in the ramp zone of the 3330/3310 bench. This ore could not be mined in the A phase due to access problems but will be recoverable when mining the B (bottom) phase.

Delayed assay results created a serious problem this month. Several thousand tonnes of ore were mined without assays due to problems with the lab's atomic absorption instrument and lack of manpower to prepare and assay the samples. Consequently, 4,000 tonnes of medium grade graphitic ore were lost in the A phase. Dilution by low grade massive sulfides in a high grade massive sulfide zone also resulted, as it is extremely difficult to estimate grade categories in this ore type by visual examination of blasthole cuttings. The economic implications of mining without assays are obvious and therefore the problem must be resolved. The geology department has consulted management on this matter.

Cumulative blast hole calculations of Pb+Zn are higher than predicted by the F8805 model. The F8805 diluted model shows grades of 2.52% Pb and 4.55% Zn as compared to the blasthole data of 2.84% Pb and 4.84% Zn, a variance of +12.7% for Pb and +6.4% for Zn.

Truck counts were 7% lower than the F8805 undiluted model, 18% lower than the diluted model and 2% higher than the blasthole calculations. A statistical study was made which compared truck count vs. blasthole calculations for ore designated to high grade "CR", medium grade "M", and low grade "A" stockpiles. It was found that the actual truck factor for high grade ore was 127 tonnes per truck, for medium grade ore the factor was 122 tonnes per truck, and the low grade ore 114 tonnes per truck. The truck factor study is planned to continue on a monthly basis in order to obtain data for a long term analysis.

Mill feed comprised of ore from the Coarse Ore, "B", Crusher and "M" Stockpiles. The variance between the blast hole calculated grades vs. metallurgical balance, for lead plus zinc, is 1.29%. A total of 390,920 tonnes were fed to the primary crusher with 11,724 tonnes trammed out to the coarse ore stockpile. Availability of the primary crusher resulted in 28,395 tonnes being trammed back in to the secondary circuit, therefore the sub-total mill feed was 407,591 tonnes, (by truck count). An increase of 28,410 tonnes was adjusted to the fine and coarse ore bins to reconcile to the metallurgical balance of 379,181 tonnes.

Total volume mined for the month of July was 888,760 B.C.Y., (using PCMINE with corrected survey surface).

Using module 4.11 in PCMINE the tonnage and percent of each ore type mined for the month (by F8805 model) were found and the results are displayed in Table 1 .

TABLE 1: Ore types (tonnage and percentage) mined JULY 89

ROCK CODE (Description)	TONNES	%
-----ORE-----		
21 2ACD ribbon-banded graphitic quartzite, (B.H.)	9320	29.8
23 2ACD ribbon-banded graphitic quartzite, (U.H.)	902	.3
33 2BCD pyritic quartzite/upper horizon	9604	3.1
40 2EC semi-massive quartzose pyritic sulfides	0	0
50 2EF pyritic massive sulfides	170282	54.4
60 2EFG baritic massive sulfides	27700	8.8
70 2H pyrrhotitic massive sulfides	11222	3.6
TOTAL	312930	100

Curragh Resources Inc. Geology Department
 Mill Feed By Blast Hole Assay
 JULY 1989

	Phase/S.P.	Tonnes	%Pb	%Zn	%Comb	Aq g/t
>5%	A 3350/3330/10	93,224	2.53	4.92	7.45	23
>5%	S3670/3650	211,622	3.46	5.36	8.82	42
		<u>304,846</u>				
4-5%	A 3350/3330/10	69,577	1.46	3.31	4.77	20
4-5%	S 3650	5,775	1.80	2.62	4.42	31
		=====	=====	=====	=====	=====
	Pit Total	380,198	2.84	4.84	7.68	33
	To Lg Stpl	75,352	1.49	3.27	4.76	20
	To Cr Stpl	189,574	3.70	5.92	9.62	42
	To B Stpl	0	0.00	0.00	0.00	0
	To M Stpl	115,272	2.31	4.07	6.38	24

TOTAL:	To Stockpiles	380,198	2.84	4.83	7.67	32
	Pit To Mill	0	0.00	0.00	0.00	0
	From Cr Sp	221,503	3.60	5.81	9.41	40
	From B Sp	0	0.00	0.00	0.00	0
	From M Sp	169,417	2.31	3.98	6.29	26
	From Lg"A"	0	0.00	0.00	0.00	0

TOTAL PRIMARY FEED		390,920	3.04	5.02	8.06	34
To	Coarse Ore S.P.	(11,724)	2.98	5.05	8.03	44
From	Coarse Ore S.P.	28,395	2.83	4.93	7.76	34
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SUB-TOTAL MILL FEED		407,591	3.03	5.01	8.04	34
DELTA FOB & COB		(28,395)	6.5	2.9	9.40	10
=====						
TOTAL MILL FEED		379,196	2.77	5.17	7.94	35

Reconciliation

BZ & Stpl	407,591	3.03	5.01	8.04	34
Met. Bal.	379,181	2.77	5.17	7.94	36
Forecast	403,000	3.03	5.14	8.17	29

% Variance

Blast Hole Calc. vs.					
Met. Bal.	7.49%	9.31%	-3.10%	1.23%	-6.53%
Forecast	1.14%	-0.07%	-2.53%	-1.62%	16.03%

CURRAGH RESOURCES INC.
GEOLOGY DEPARTMENT SUMMARY REPORT
JULY 1989 MONTH END
(HIGH GRADE)

AY/BZ Phase	<u>OreTns</u>	<u>%Pb</u>	<u>%Zn</u>	<u>Aq g/t</u>	<u>PbTns</u>	<u>ZnTns</u>	<u>Aq kg</u>
F8805 Model	312,930	3.11	5.57	32	9,725	17,423	10,144
F8805 Diluted	344,223	2.83	5.06	29	9,725	17,423	10,144
Blast Holes	304,846	3.18	5.22	35	9,683	15,923	10,721
Truck Count	305,566						

<u>Blast Hole</u>	<u>OreTns</u>	<u>%Pb</u>	<u>%Zn</u>	<u>Aq g/t</u>	<u>PbTns</u>	<u>ZnTns</u>	<u>Aq k</u>
<u>vs:</u>							
F8805 Model	-2.6%	2.2%	-6.2%	8.5%	-0.4%	-8.6%	5.7%
F8805 Diluted	-11.4%	12.4%	3.2%	19.3%	-0.4%	-8.6%	5.7%

<u>Truck Count</u>	
<u>vs:</u>	
F8805	-2.4%
F8805 Diluted	-11.2%
Blast Holes	0.2%

INVENTORY

	<u>TONNES</u>	<u>%Pb</u>	<u>%Zn</u>	<u>Aq g/t</u>
BROKEN IN PIT:				
S 3630 C	25,667	3.30	4.13	43

Change

HIGH GRADE STOCKPILES:

<u>Coarse Ore</u>	<u>2,025</u>	<u>3.16</u>	<u>4.71</u>	<u>35</u>	<u>(34,588)</u>
<u>Crusher</u>	<u>7,446</u>	<u>3.11</u>	<u>5.25</u>	<u>30</u>	<u>80,097</u>
<u>B</u>	<u>0</u>	<u>0.00</u>	<u>0.00</u>	<u>0</u>	
<u>M</u>	<u>404,010</u>	<u>2.29</u>	<u>3.8</u>	<u>31</u>	<u>205,700</u>
	<u>=====</u>	<u>=====</u>	<u>=====</u>	<u>=====</u>	
<u>Total Inventory:</u>					
<u>Broken</u>	<u>25,667</u>	<u>3.30</u>	<u>4.13</u>	<u>43</u>	
<u>Stockpile</u>	<u>413,481</u>	<u>2.31</u>	<u>3.83</u>	<u>31</u>	
	<u>=====</u>	<u>=====</u>	<u>=====</u>	<u>=====</u>	
<u>TOTAL</u>	<u>439,148</u>	<u>2.37</u>	<u>3.85</u>	<u>32</u>	

CURRAGH RESOURCES INC.
GEOLOGY DEPARTMENT SUMMARY REPORT
JULY 1989 MONTH END
(LOW GRADE)

AY/BZ Phase	<u>OreTns</u>	<u>%Pb</u>	<u>%Zn</u>	<u>Aq q/t</u>	<u>PbTns</u>	<u>ZnTns</u>	<u>Aq kg</u>
F8805 Model	102,430	1.44	3.06	26	1,473	3,138	2,699
F8805 Diluted	112,673	1.31	2.79	24	1,473	3,138	2,699
Blast Holes	75,352	1.49	3.26	20	1,123	2,457	1,537
Truck Count	81,750						

<u>Blast Hole</u> <u>vs:</u>	<u>OreTns</u>	<u>%Pb</u>	<u>%Zn</u>	<u>Aq q/t</u>	<u>PbTns</u>	<u>ZnTns</u>	<u>Aq kg</u>
F8805 Model	<u>-26.4%</u>	<u>3.6%</u>	<u>6.4%</u>	<u>-22.6%</u>	<u>-23.8%</u>	<u>-21.7%</u>	<u>-43.0%</u>
F8805 Diluted	<u>-33.1%</u>	<u>14.0%</u>	<u>17.1%</u>	<u>-14.8%</u>	<u>-23.8%</u>	<u>-21.7%</u>	<u>-43.0%</u>

<u>Truck Count</u> <u>vs:</u>	
F8805 Diluted	-27.4%
Blast Holes	8.5%

INVENTORY

BROKEN IN PIT:	<u>TONNES</u>	<u>%Pb</u>	<u>%Zn</u>	<u>Aq q/t</u>
	1,166	1.90	2.50	15

Change

<u>LOW GRADE STOCKPILES:</u>					
Lg "A" Stockpile	<u>807,876</u>	<u>1.97</u>	<u>2.72</u>	<u>29</u>	<u>430</u>
Lg "C" Stockpile	<u>379,125</u>	<u>1.62</u>	<u>3.04</u>	<u>24</u>	<u>74,185</u>

<u>Total Inventory:</u>	<u>=====</u>	<u>=====</u>	<u>=====</u>	<u>=====</u>	
<u>Broken</u>	<u>1,166</u>	<u>1.90</u>	<u>2.50</u>	<u>15</u>	
<u>Stockpile</u>	<u>1,187,001</u>	<u>1.86</u>	<u>2.82</u>	<u>27</u>	
<u>TOTAL</u>	<u>=====</u>	<u>=====</u>	<u>=====</u>	<u>=====</u>	
	<u>1,188,167</u>	<u>1.86</u>	<u>2.82</u>	<u>27</u>	

CURRAGH RESOURCES INC.
GEOLOGY DEPARTMENT MINED RESERVES COMPARISON
JULY 1989 MONTH END

H I G H G R A D E

	Blast Holes	Computer Model F8805
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Bench: CA-3350		
%Pb	2.46	2.83
%Zn	4.67	5.29
%Comb	7.13	8.12
Ag (g/t)	18	22
Au (g/t)	n/a	0.049
Tonnes	52,389	81,740
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Bench: CA-3330/10 *		
%Pb	2.62	2.54
%Zn	5.23	4.73
%Comb	7.85	7.27
Ag (g/t)	20	24
Au (g/t)	n/a	0.058
Tonnes	40,835	61,230
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Bench: S-3670		
%Pb	3.57	3.70
%Zn	5.88	7.00
%Comb	25.12	10.70
Ag (g/t)	68	42
Au (g/t)	n/a	0.136
Tonnes	47,111	77,050
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Bench: S-3650		
%Pb	3.43	3.13
%Zn	5.21	5.01
%Comb	8.64	8.14
Ag (g/t)	35	37
Au (g/t)	n/a	0.219
Tonnes	164,511	80,190
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Bench: A-3370 *	N/A	
%Pb	0.00	3.19
%Zn	0.00	5.40
%Comb	0.00	8.59
Ag (g/t)	0	27
Au (g/t)	n/a	0.086
Tonnes	0	9,710
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Bench: A-3590*	N/A	
%Pb	0.00	3.87
%Zn	0.00	6.34
%Comb	0.00	10.21
Ag (g/t)	0	51
Au (g/t)	n/a	0.145
Tonnes	0	17,080

HIGH GRADE
CONTINUED

Bench: *S3630*	N/A	
%Pb	0.00	3.92
%Zn	0.00	6.19
%Comb	0.00	10.11
Ag (g/t)	0	52
Au (g/t)	n/a	0.117
Tonnes	0	12,720

	N/A	
%Pb	0.00	0.00
%Zn	0.00	0.00
%Comb	0.00	0.00
Ag (g/t)	0	0
Au (g/t)	n/a	0.000
Tonnes	0	0

Month Total		
%Pb	3.18	3.11
%Zn	5.22	5.57
%Comb	8.40	8.68
Ag (g/t)	35	32
Total Tonnes	304,846	312,930

* Mined reserves calculated via PCSURVEY from benches being mined either too high (ie. Ore left on the 3530 mined on the 3510), or benches being mined too low (ie. Mining the 3490 bench too low).

CURRAGH RESOURCES INC.
GEOLOGY DEPARTMENT MINED RESERVES COMPARISON
JULY 1989 MONTH END

L O W G R A D E

	Blast Holes	Computer Model F8805
=====		
Bench: BZ 3350		
%Pb	1.34	1.45
%Zn	3.06	3.11
%Comb	4.40	4.57
Ag (g/t)	20	29
Au (g/t)	n/a	0.077
Tonnes	36,167	37,380

Bench: AS 3330/10		
%Pb	1.60	1.44
%Zn	3.59	3.04
%Comb	5.19	4.47
Ag (g/t)	19	23
Au (g/t)	n/a	0.205
Tonnes	33,410	28,670

Bench: SS 3670		
%Pb	0.00	1.33
%Zn	0.00	3.09
%Comb	0.00	4.42
Ag (g/t)	0	28
Au (g/t)	n/a	0.191
Tonnes	0	15,380

Bench: SS 3650		
%Pb	1.80	1.54
%Zn	2.62	3.01
%Comb	4.42	4.55
Ag (g/t)	31	24
Au (g/t)	n/a	0.129
Tonnes	5,775	17,950

Bench: AS 3370	N/A	
%Pb	0.00	1.80
%Zn	0.00	3.10
%Comb	0.00	4.90
Ag (g/t)	0	36
Au (g/t)	n/a	0.206
Tonnes	0	290

Bench: S 3690*	N/A	
%Pb	0.00	1.17
%Zn	0.00	2.90
%Comb	0.00	4.08
Ag (g/t)	0	29
Au (g/t)	n/a	0.282
Tonnes	0	2,760
%Pb	0.00	0.00
%Zn	0.00	0.00
%Comb	0.00	0.00
Ag (g/t)	0	0
Au (g/t)	n/a	0.000
Tonnes	0	0
%Pb	0.00	0.00
%Zn	0.00	0.00
%Comb	0.00	0.00
Ag (g/t)	0	0
Au (g/t)	n/a	n/a
Tonnes	0	0
Month Total		
%Pb	1.49	1.44
%Zn	3.26	3.06
%Comb	4.75	4.50
Ag (g/t)	20	26
Total Tonnes	75,352	102,430

LOW GRADE
CONTINUED

* Mined reserves calculated via PCSURVEY from benches being mined either too high (ie. Ore left on the 3530 mined on the 3510), or benches being mined too low (ie. Mining the 3490 bench too low).