STH Crush Size
COLUMNS

DATE: JANUARY 3, 1993
TO: JIM THOMPSON
FROM: LAURA DAMON
SUBJECT: SULFIDE TEST HEAP CRUSH SIZE COLUMNS

SULFIDE TEST HEAP CRUSH SIZE COLUMN COMPARISON GOLD EXTRACTION PERCENT BROHM MINING CORPORATION					
Column ID	-1/4" *	-3/8" +	-1/2" #	-1/2" +	-1" +
24 Hr	13.68	0.71	0.48	0.82	1.65
120 Hr	26.50	15.26	13.89	13.44	13.07
240 Hr	32.70	20.39	18.22	17.91	17.01
360 Hr	36.68	24.71	21.91	21.68	20.52
480 Hr	39.82	27.66	25.12	24.61	23.18
600 Hr	43.03	29.53	27.34	26.65	25.15
720 Hr	44.78	30.99	28.48	28.02	26.25
840 Hr	45.86	31.65	29.36	28.88	26.86
960 Hr	47.97	32.23	29.94	29.55	27.39
1080 Hr	49.46	32.58	30.35	29.85	27.82

* = Average of Two Column Tests; Agglomerated with Barren Solution - 2 lb/T CaO & 152 lb/T Limestone

= No Agglomeration - 2 lb/T CaO & 150 lb/T Limestone

+ = No Agglomeration - 4 lb/T CaO & 150 lb/T Limestone

Note: The -1/4" column material was obtained from Sulfide Test Heap ore splits during agglomeration. It is assumed that the higher rate of recovery is due to the fact that it was agglomerated with barren solution containing sodium cyanide and allowed to react with the cyanide for about two months before it was put on leach. Therefore the -1/4" columns are not a good comparison to the other crush size columns.

c: Rod MacLeod
colcomp.sth

#2

SP1 Screen

-1" #1

total wt. 7688g

1"	116g
3/4"	631
1/2"	1450g
3/8"	806g
1/4"	1064g
-1/4"	3610g
	7677

-1" #2

total wt = 8108g

1"	20g
3/4"	625g
1/2"	1568g
3/8"	835g
1/4"	1098
-1/4"	4158g

-3/8" #1

wt = 7586

1/2"	50g
3/8"	209g
1/4"	885
-1/4"	6420

-3/8" #2

wt = 7650

1/2"	91g
3/8	244g
1/4	894
-1/4	6414

-1/2" #1

wt = 7808

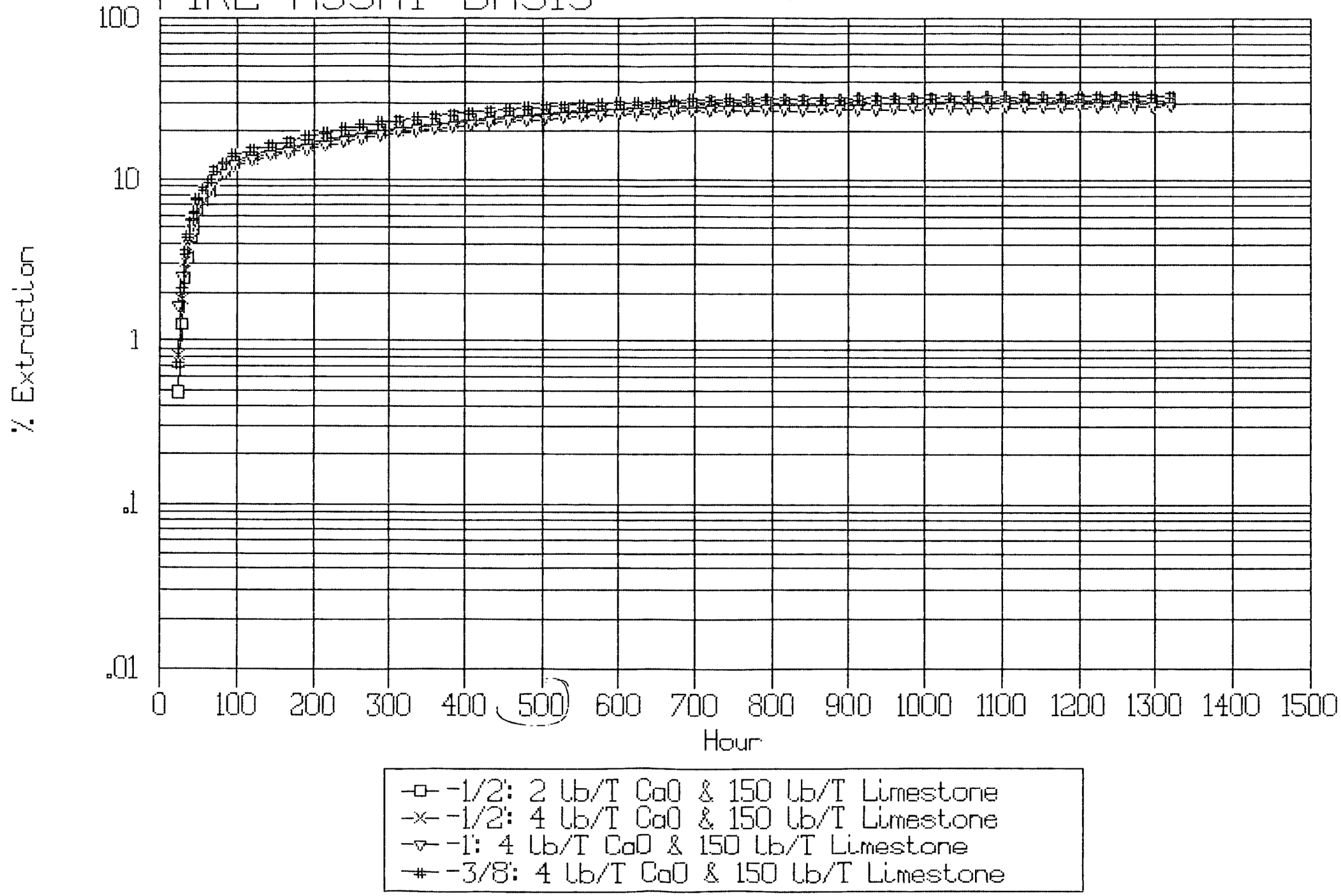
3/4"	7g
1/2	186
3/8	659
1/4	1746
-1/4	5179

-1/2" #2

wt = 7804

1/2	142
3/8	586
1/4	1635
-1/4	5438

STH - CRUSH SIZE COLUMNS
PERCENT AU EXTRACTION
FIRE ASSAY BASIS



(01/10/94)

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IMMMMMMMMMMMKMMMMMMMMMMMMMMMQMMMMMQMMMMMMMQMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMKMMMMMMMMMM;
: CURVEFIT   : PREDICTIONS 3 EQ# 3 17    3 Y=A+B*lnX                    :VER 2.10L:
LMMMMMMMQMMMJMMMMMMMMMMMMMMXMMMMMOQMMMMMOMMMMMMMMMMMMQMMMMMMQMMMMMMMMMMJMMMMMMMMMM9
: START 3 1000              3 STOP 3 100000            3 STEP 3 10000              :
GDDDDDDDADDDDBDDDDDDDDDDDDEDDDDDDADDDDDBDDDDDDDDDDDDABDDDDDADDDDDDDBDDDDDDDDDDDDD6
:X-DATA ENTRY3PREDICTED Y 3X-DATA ENTRY3PREDICTED Y 3X-DATA ENTRY3PREDICTED Y :
GDDDDDDDDDDDDEDDDDDDDDDDDDEDDDDDDDDDDDDEDDDDDDDDDDDDEDDDDDDDDDDDDEDDDDDDDDDDDD6
:    1000.00003     27.28943            3            3            3            :
:   11000.00003     42.62713            3            3            3            :
:   21000.00003     46.76323            3            3            3            :
:   31000.00003     49.25433            3            3            3            :
:   41000.00003     51.04263            3            3            3            :
:   51000.00003     52.43873            3            3            3            :
:   61000.00003     53.58393            3            3            3            :
:   71000.00003     54.55493            3            3            3            :
:   81000.00003     55.39783            3            3            3            :
:   91000.00003     56.14243            3            3            3            :
:             3            3            3            3            3            :
:             3            3            3            3            3            :
:             3            3            3            3            3            :
:             3            3            3            3            3            :
GDDDDDDDDDDDDADDDBDDDDDDDDADDDDDDDBDDDDADDDDDDDDDDDBADDDDDDDDDDDDADDBDDDDDDDDD6
: Coefficients    3A=      -16.8949 3B=        6.3963 3C=        0.0000 3R}=0.9782:
HMMMMMMMMMMMMMMMMOMMMMMMMMMMMMMMMMMOMMMMMMMMMMMMMMMMMOMMMMMMMMMMMMMMMMOMMMMMMMMMM(
Quit and return to main menu or Predict (Q or P)?

IMMMMMMMMMMMKMMMMMMMMMMMMMMMQMMMMMQMMMMMMMQMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMKMMMMMMMMMM;
: CURVEFIT   : PREDICTIONS 3 EQ# 3 17    3 Y=A+B*lnX                    :VER 2.10L:
LMMMMMMMQMMMJMMMMMMMMMMMMMMXMMMMMOQMMMMMOMMMMMMMMMMMMQMMMMMMQMMMMMMMMMMJMMMMMMMMMM9
: START 3 1000              3 STOP 3 100000            3 STEP 3 10000              :
GDDDDDDDADDDDBDDDDDDDDDDDDEDDDDDDADDDDDBDDDDDDDDDDDDABDDDDDADDDDDDDBDDDDDDDDDDDDD6
:X-DATA ENTRY3PREDICTED Y 3X-DATA ENTRY3PREDICTED Y 3X-DATA ENTRY3PREDICTED Y :
GDDDDDDDDDDDDEDDDDDDDDDDDDEDDDDDDDDDDDDEDDDDDDDDDDDDEDDDDDDDDDDDDEDDDDDDDDDDDD6
:    1000.00003     32.14453            3            3            3            :
:   11000.00003     50.33543            3            3            3            :
:   21000.00003     55.24083            3            3            3            :
:   31000.00003     58.19533            3            3            3            :
:   41000.00003     60.31633            3            3            3            :
:   51000.00003     61.97203            3            3            3            :
:   61000.00003     63.33033            3            3            3            :
:   71000.00003     64.48193            3            3            3            :
:   81000.00003     65.48163            3            3            3            :
:   91000.00003     66.36473            3            3            3            :
:             3            3            3            3            3            :
:             3            3            3            3            3            :
:             3            3            3            3            3            :
:             3            3            3            3            3            :
GDDDDDDDDDDDDADDDBDDDDDDDDADDDDDDDBDDDDADDDDDDDDDDDBADDDDDDDDDDDDADDBDDDDDDDDD6
: Coefficients    3A=      -20.2589 3B=        7.5862 3C=        0.0000 3R}=0.9748:
HMMMMMMMMMMMMMMMMOMMMMMMMMMMMMMMMMMOMMMMMMMMMMMMMMMMMOMMMMMMMMMMMMMMMMOMMMMMMMMMM(
Quit and return to main menu or Predict (Q or P)?
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5THCRC

5THCR D

```
    3   M   33   N   33   O   33   P   33   Q   33   R   33   S   33   T   3
 1
 2                    Regression Output:
 3             Constant                        1.431697b   109
 4             Std Err of Y Est                .0008046    A
 5             R Squared(Adj,Raw) .9839347 .9848272
 6             No. of Observations               19        912-1344
 7             Degrees of Freedom                17
 8
 9             Coefficient(s)      .0000466 m
10             Std Err of Coef.    .0000014
11
12                                                         Y=mx+b
13
14
15
16
17
18
19
20
 STHCRB!T1
Width:  9  Memory:  339  Last Col/Row:Q91
  1>
READY F1:Help  F3:Names  Ctrl-Backspace:Undo  Ctrl-Break:Cancel        NUM
PREDICTIONS FOR EQUATION Y=A+B*lnX

If X=  1000   Then Y=  29.19636350181444
If X=  11000  Then Y=  45.96376953446029
If X=  21000  Then Y=  50.48534324496849
If X=  31000  Then Y=  53.2086956589722
If X=  41000  Then Y=  55.16370718870393
If X=  51000  Then Y=  56.68985647514036
If X=  61000  Then Y=  57.94186044303205
If X=  71000  Then Y=  59.00337179627159
If X=  81000  Then Y=  59.92477524776222
If X=  91000  Then Y=  60.738780620691

IMMMMMMMMMMMKMMMMMMMMMMMMMMMQMMMMMQMMMMMMMQMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMKMMMMMMMMMM;
: CURVEFIT   : PREDICTIONS 3 EQ# 3 17   3 Y=A+B*lnX                    :VER 2.10L:
LMMMMMMMQMMMJMMMMMMMMMMMMMMMXMMMMMMOQMMMMMMOMMMMMMMMMMMMMQMMMMMMMQMMMMMMMMMMJMMMMMMMMMM9
: START 3 1000              3 STOP 3 100000            3 STEP 3 10000              :
GDDDDDDDADDDDBDDDDDDDDDDDDEDDDDDDADDDDDBDDDDDDDDDDDDABDDDDDADDDDDDDBDDDDDDDDDDDDD6
:X-DATA ENTRY3PREDICTED Y 3X-DATA ENTRY3PREDICTED Y 3X-DATA ENTRY3PREDICTED Y :
GDDDDDDDDDDDDEDDDDDDDDDDDDEDDDDDDDDDDDDEDDDDDDDDDDDDEDDDDDDDDDDDDEDDDDDDDDDDDD6
:    1000.00003      29.19643            3            3            3            :
:   11000.00003      45.96383            3            3            3            :
:   21000.00003      50.48533            3            3            3            :
:   31000.00003      53.20873            3            3            3            :
:   41000.00003      55.16373            3            3            3            :
:   51000.00003      56.68993            3            3            3            :
:   61000.00003      57.94193            3            3            3            :
:   71000.00003      59.00343            3            3            3            :
:   81000.00003      59.92483            3            3            3            :
:   91000.00003      60.73883            3            3            3            :
:             3             3            3            3            3            :
:             3             3            3            3            3            :
:             3             3            3            3            3            :
:             3             3            3            3            3            :
GDDDDDDDDDDDDADDDBDDDDDDDDADDDDDDDBDDDDADDDDDDDDDDDBADDDDDDDDDDDDADDBDDDDDDDDDD6
: Coefficients   3A=      -19.1065 3B=        6.9926 3C=        0.0000 3R²=0.9744:
HMMMMMMMMMMMMMMMMMOMMMMMMMMMMMMMMMMMMOMMMMMMMMMMMMMMMMMMOMMMMMMMMMMMMMMMMMOMMMMMMMMMM(
Quit and return to main menu or Predict (Q or P)?
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STHCRB 69 data pts

PREDICTIONS FOR EQUATION Y=A+B*lnX

If X=	1000	Then Y=	29.75568749642628
If X=	2000	Then Y=	34.71320611991672
If X=	3000	Then Y=	37.6131686112854
If X=	4000	Then Y=	39.67072474340716
If X=	5000	Then Y=	41.26668926923606
If X=	6000	Then Y=	42.57068723477583
If X=	7000	Then Y=	43.67320180527441
If X=	8000	Then Y=	44.6282433668976
If X=	9000	Then Y=	45.47064972614451
If X=	10000	Then Y=	46.2242078927265
If X=	11000	Then Y=	46.90588417251236
If X=	12000	Then Y=	47.52820585826628
If X=	13000	Then Y=	48.10068631421446
If X=	14000	Then Y=	48.63072042876485
If X=	15000	Then Y=	49.12417038409517
If X=	16000	Then Y=	49.58576199038804
If X=	17000	Then Y=	50.01936065474999
If X=	18000	Then Y=	50.42816834963495
If X=	19000	Then Y=	50.81486725556029
If X=	20000	Then Y=	51.18172651621694
If X=	21000	Then Y=	51.53068292013352
If X=	22000	Then Y=	51.8634027960028
If X=	23000	Then Y=	52.18133013809177
If X=	24000	Then Y=	52.48572448175671
If X=	25000	Then Y=	52.77769104204584
If X=	26000	Then Y=	53.0582049377049
If X=	27000	Then Y=	53.32813084100362
If X=	28000	Then Y=	53.58823905225529
If X=	29000	Then Y=	53.83921875233384
If X=	30000	Then Y=	54.08168900758561
If X=	31000	Then Y=	54.31620796959684
If X=	32000	Then Y=	54.54328061387848
If X=	33000	Then Y=	54.76336528737147
If X=	34000	Then Y=	54.97687927824043
If X=	35000	Then Y=	55.18420357808419
If X=	36000	Then Y=	55.38568697312538
If X=	37000	Then Y=	55.58164957473675
If X=	38000	Then Y=	55.77238587905073
If X=	39000	Then Y=	55.95816742907357
If X=	40000	Then Y=	56.13924513970738
If X=	41000	Then Y=	56.31585133563897
If X=	42000	Then Y=	56.48820154362396
If X=	43000	Then Y=	56.65649607385172
If X=	44000	Then Y=	56.82092141949324
If X=	45000	Then Y=	56.98165149895428
If X=	46000	Then Y=	57.13884876158221
If X=	47000	Then Y=	57.29266517445055
If X=	48000	Then Y=	57.44324310524715
If X=	49000	Then Y=	57.59071611412253
If X=	50000	Then Y=	57.73520966553627
If X=	51000	Then Y=	57.8768417696091
If X=	52000	Then Y=	58.01572356119534
If X=	53000	Then Y=	58.15195982379517
If X=	54000	Then Y=	58.28564946449406
If X=	55000	Then Y=	58.41688594532214
If X=	56000	Then Y=	58.54575767574573
If X=	57000	Then Y=	58.67234837041941
If X=	58000	Then Y=	58.79673737582428
If X=	59000	Then Y=	58.9189999689842

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If X=  60000  Then Y=  59.03920763107605
If X=  61000  Then Y=  59.1574282984244
If X=  62000  Then Y=  59.27372659308728
If X=  63000  Then Y=  59.38816403499263
If X=  64000  Then Y=  59.50079923736892
If X=  65000  Then Y=  59.61168808702424
If X=  66000  Then Y=  59.72088391086191
If X=  67000  Then Y=  59.82843762987474
If X=  68000  Then Y=  59.93439790173087
If X=  69000  Then Y=  60.03881125295088
If X=  70000  Then Y=  60.14172220157462
If X=  71000  Then Y=  60.24317337112743
If X=  72000  Then Y=  60.34320559661583
If X=  73000  Then Y=  60.44185802321246
If X=  74000  Then Y=  60.53916819822719
If X=  75000  Then Y=  60.63517215690495
If X=  76000  Then Y=  60.72990450254117
If X=  77000  Then Y=  60.82339848136049
If X=  78000  Then Y=  60.91568605256401
If X=  79000  Then Y=  61.00679795391477
If X=  80000  Then Y=  61.09676376319782
If X=  81000  Then Y=  61.18561195586273
If X=  82000  Then Y=  61.27336995912941
If X=  83000  Then Y=  61.36006420281457
If X=  84000  Then Y=  61.4457201671144
If X=  85000  Then Y=  61.53036242755976
If X=  86000  Then Y=  61.61401469734216
If X=  87000  Then Y=  61.69669986719295
If X=  88000  Then Y=  61.77844004298368
If X=  89000  Then Y=  61.85925658120184
If X=  90000  Then Y=  61.93917012244472
If X=  91000  Then Y=  62.01820062306258
If X=  92000  Then Y=  62.09636738507265
If X=  93000  Then Y=  62.17368908445595
If X=  94000  Then Y=  62.25018379794099
If X=  95000  Then Y=  62.32586902837007
If X=  96000  Then Y=  62.40076172873759
If X=  97000  Then Y=  62.47487832498269
If X=  98000  Then Y=  62.54823473761297
If X=  99000  Then Y=  62.62084640223059
If X=  100000 Then Y=  62.69272828902671
```

STHCRA.CSV (0)

PREDICTIONS FOR EQUATION Y=A+B*lnX

If X=	1000	Then Y=	29.75568749642628
If X=	11000	Then Y=	46.90588417251236
If X=	21000	Then Y=	51.53068292013352
If X=	31000	Then Y=	54.31620796959684
If X=	41000	Then Y=	56.31585133563897
If X=	51000	Then Y=	57.8768417696091
If X=	61000	Then Y=	59.1574282984244
If X=	71000	Then Y=	60.24317337112743
If X=	81000	Then Y=	61.18561195586273
If X=	91000	Then Y=	62.01820062306258

36000

A

Curve Fit (entire curve)

68 data pts

#17 - Y = A + B x ln X

A = -19.6499

B = 7.1522

C = 0

R^2 = 0.9733

R^2_{COR} = 0.9729

B

69 data pts

#17

A = -19.1065

B = 6.9926

C = 0

R^2 = 0.9748

R^2_{COR} = 0.9744

PREDICTIONS FOR EQUATION Y=A*e^((lnX-B)^2/C)

```
If X=  1000   Then Y=  30.19698158686798
If X=  11000  Then Y=  17.08755808375173
If X=  21000  Then Y=  10.78091044204929
If X=  31000  Then Y=  7.670950334377538
If X=  41000  Then Y=  5.835444954574638
If X=  51000  Then Y=  4.634411659434558
If X=  61000  Then Y=  3.793800964440582
If X=  71000  Then Y=  3.1767096439826 3
If X=  81000  Then Y=  2.707232630539037
If X=  91000  Then Y=  2.339979688753837
```

STACRA 2

PREDICTIONS FOR EQUATION Y=A+B/X+C/X*X

```
If X=  1000   Then Y=  30.10382404595889
If X=  11000  Then Y=  33.59702495081985
If X=  21000  Then Y=  33.75528239812638
If X=  31000  Then Y=  33.81126158128985
If X=  41000  Then Y=  33.83989800427522
If X=  51000  Then Y=  33.85729259295465
If X=  61000  Then Y=  33.86897899674408
If X=  71000  Then Y=  33.87737095477399
If X=  81000  Then Y=  33.883689444089
If X=  91000  Then Y=  33.88861843084669
```

STACRA 6

Curve Fit

STHCRA.CSV (entire curve)

68 data pts.

Best fit #17 $Y = A + B * \ln X$

$A = -19.6499$

$B = 7.1522$

$C = 0$

$R^2 = 0.9733$

$R^2 COR = 0.9729$

STHCRA2.CSV (Start day 216)

47 data pts

Best Fit # 22 Y = A * e^(C In X - B)^2/C)

$A = 31.1127$

$B = 7.3454$

$C = -6.4120$

$R^2 \quad 0.9979$

$R^2 cor = 0.9978$

Bogus prediction

STHCRA6.CSV (Start day 600)

31 data pts

Best Fit # 7 $Y = A + B/X + C/X * X$

$A = 33.9285$

$B = -3628.5799$

$C = -196112.6607$

$R^2 \quad 0.9986$

$R^2 cor = 0.9985$

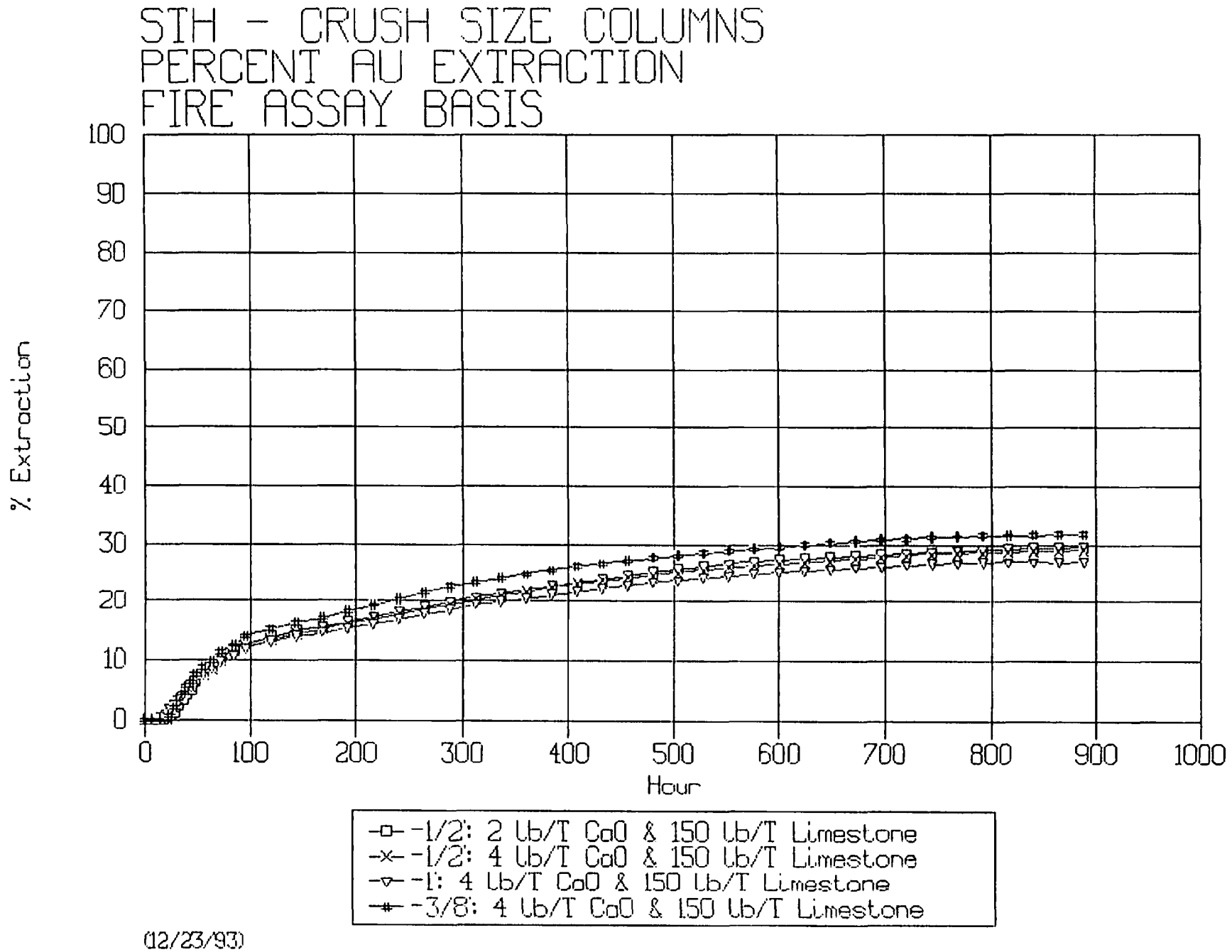
Bogus prediction

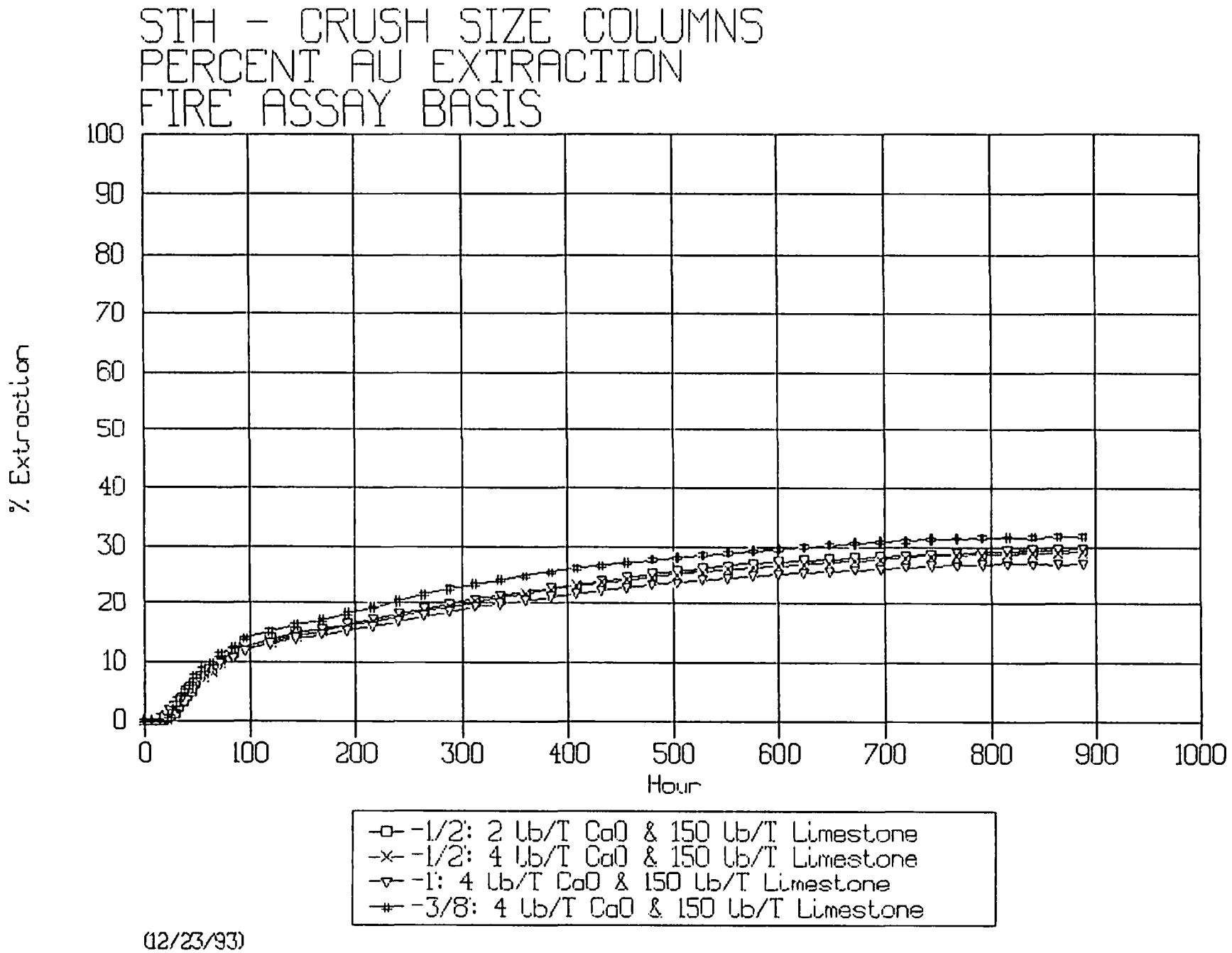
Cum % Au Extraction

log x	x Hour	A	log A	B	log B	C	log C	D	log D
.6021	4	.00		.00		.00		.00	
.9031	8	.00		.00		.00		.00	
1.0792	12	.00		.00		.00		.00	
1.2041	16	.00		.00		.21	(.6737)	.00	
1.3010	20	.01	(1.8579)	.01	(2.0925)	.83	(.0796)	.00	
1.3802	24	.48	(.3156)	.82	(.0858)	1.65	.2175	.71	(.1476)
1.4472	28	1.28	.1066	1.84	.2640	2.49	.3958	2.07	.3154
1.5051	32	2.48	.3937	3.10	.4915	3.48	.5413	3.57	.5529
1.5563	36	3.25	.5117	3.80	.5797	4.10	.6130	4.48	.6511
1.6021	40	4.37	.6406	4.70	.6719	5.01	.7001	5.59	.7477
1.6435	44	4.96	.6956	5.20	.7157	5.54	.7438	6.22	.7941
1.6812	48	6.48	.8113	6.45	.8098	6.69	.8254	7.58	.8798
1.7482	56	7.82	.8934	7.52	.8763	7.69	.8856	8.79	.9440
1.8062	64	8.94	.9513	8.44	.9261	8.52	.9303	9.81	.9916
1.8573	72	10.44	1.0188	9.81	.9917	9.72	.9879	11.40	1.0567
1.9243	84	11.35	1.0549	10.86	1.0359	10.66	1.0280	12.49	1.0965
1.9823	96	12.71	1.1042	12.31	1.0902	11.99	1.0788	14.10	1.1491
2.0792	120	13.89	1.1428	13.44	1.1285	13.07	1.1164	15.26	1.1837
2.1584	144	15.01	1.1763	14.48	1.1608	14.01	1.1465	16.34	1.2132
2.2253	168	15.71	1.1962	15.26	1.1835	14.67	1.1663	17.23	1.2363
2.2833	192	16.51	1.2178	16.22	1.2101	15.40	1.1875	18.25	1.2613
2.3345	216	17.30	1.2379	16.99	1.2301	16.15	1.2083	19.33	1.2863
2.3802	240	18.22	1.2607	17.91	1.2532	17.01	1.2307	20.39	1.3094
2.4216	264	19.09	1.2809	18.75	1.2731	17.92	1.2532	21.60	1.3344
2.4594	288	19.96	1.3002	19.51	1.2902	18.64	1.2705	22.56	1.3533
2.4942	312	20.70	1.3160	20.34	1.3083	19.40	1.2878	23.36	1.3685
2.5263	336	21.37	1.3298	21.06	1.3236	19.92	1.2994	24.07	1.3814
2.5563	360	21.91	1.3406	21.68	1.3360	20.52	1.3121	24.71	1.3929
2.5843	384	22.63	1.3547	22.38	1.3499	21.09	1.3241	25.44	1.4056
2.6107	408	23.26	1.3667	22.98	1.3613	21.71	1.3366	26.10	1.4167
2.6355	432	23.86	1.3776	23.64	1.3737	22.25	1.3474	26.62	1.4252
2.6590	456	24.52	1.3895	24.11	1.3822	22.73	1.3566	27.14	1.4337
2.6812	480	25.12	1.4000	24.61	1.3912	23.18	1.3651	27.66	1.4418
2.7024	504	25.69	1.4098	25.13	1.4001	23.54	1.3718	28.10	1.4488
2.7226	528	26.21	1.4184	25.60	1.4083	24.09	1.3818	28.48	1.4546
2.7419	552	26.62	1.4252	26.00	1.4150	24.42	1.3877	28.82	1.4596
2.7604	576	27.04	1.4320	26.36	1.4210	24.75	1.3935	29.28	1.4666
2.7782	600	27.34	1.4368	26.65	1.4258	25.15	1.4006	29.53	1.4703
2.7952	624	27.61	1.4410	26.92	1.4300	25.36	1.4041	29.88	1.4754
2.8116	648	27.87	1.4451	27.20	1.4346	25.62	1.4086	30.26	1.4808
2.8274	672	28.08	1.4483	27.54	1.4400	25.87	1.4128	30.53	1.4848
2.8426	696	28.28	1.4516	27.78	1.4437	26.09	1.4164	30.77	1.4881
2.8573	720	28.48	1.4545	28.02	1.4475	26.25	1.4191	30.99	1.4912
2.8716	744	28.71	1.4580	28.26	1.4511	26.53	1.4237	31.25	1.4948
2.8854	768	28.84	1.4600	28.41	1.4535	26.60	1.4249	31.36	1.4964
2.8987	792	29.09	1.4638	28.68	1.4577	26.77	1.4277	31.55	1.4990
2.9117	816	29.24	1.4660	28.80	1.4593	26.86	1.4292	31.61	1.4998
2.9243	840	29.36	1.4677	28.88	1.4606	26.86	1.4292	31.65	1.5004
2.9365	864	29.49	1.4696	29.01	1.4625	26.92	1.4301	31.78	1.5021
2.9484	888	29.58	1.4710	29.12	1.4642	26.97	1.4308	31.78	1.5021
2.9600	912	29.79	1.4740	29.31	1.4671	27.09	1.4329	31.96	1.5046
2.9713	936	29.83	1.4746	29.42	1.4687	27.14	1.4336	32.12	1.5067
2.9823	960	29.94	1.4763	29.55	1.4705	27.39	1.4376	32.23	1.5082
2.9930	984	29.99	1.4769	29.62	1.4716	27.50	1.4394	32.24	1.5084
3.0035	1008	30.11	1.4788	29.66	1.4722	27.57	1.4405	32.39	1.5105
3.0137	1032	30.14	1.4791	29.66	1.4722	27.63	1.4414	32.45	1.5113
3.0237	1056	30.27	1.4810	29.77	1.4738	27.74	1.4431	32.50	1.5118
3.0334	1080	30.35	1.4822	29.85	1.4749	27.82	1.4444	32.58	1.5129

1) Curve Fit
   a) A
   b) B
   c) C
   d) D
2) Y est. w/ equation
3) Graph predicted
4) Finish COLCOMP. STH
5) Finish Monthly Report
6) STHMET. RPT Section 2.0

3.0430	1104	30.44	1.4835	29.95	1.4764	27.94	1.4462	32.63	1.5137
3.0523	1128	30.61	1.4859	30.04	1.4777	27.98	1.4469	32.71	1.5146
3.0615	1152	30.68	1.4869	30.13	1.4790	28.01	1.4473	32.72	1.5148
3.0704	1176	30.74	1.4878	30.18	1.4798	28.05	1.4479	32.73	1.5150
3.0792	1200	30.79	1.4885	30.23	1.4805	28.12	1.4490	32.76	1.5153
3.0878	1224	30.81	1.4886	30.24	1.4806	28.16	1.4496	32.76	1.5153
3.0962	1248	30.83	1.4890	30.29	1.4813	28.23	1.4507	32.76	1.5153
3.1045	1272	30.96	1.4908	30.33	1.4818	28.27	1.4513	32.81	1.5160
3.1126	1296	31.01	1.4915	30.42	1.4831	28.33	1.4522	32.91	1.5173
3.1206	1320	31.13	1.4932	30.52	1.4846	28.47	1.4545	33.02	1.5188


STH - CRUSH SIZE COLUMNS
PERCENT AU EXTRACTION
FIRE ASSAY BASIS
% Extraction
100
90
80
70
60
50
40
30
20
10
0
0
100
200
300
400
500
600
700
800
900
1000
Hour
-1/2": 2 Lb/T CaO & 150 Lb/T Limestone
-1/2": 4 Lb/T CaO & 150 Lb/T Limestone
-1": 4 Lb/T CaO & 150 Lb/T Limestone
-3/8": 4 Lb/T CaO & 150 Lb/T Limestone
(12/23/93)


STH - CRUSH SIZE COLUMNS
PERCENT AU EXTRACTION
FIRE ASSAY BASIS
% Extraction
100
90
80
70
60
50
40
30
20
10
0
0
100
200
300
400
500
600
700
800
900
1000
Hour
-1/2: 2 Lb/T CaO & 150 Lb/T Limestone
-1/2: 4 Lb/T CaO & 150 Lb/T Limestone
-1: 4 Lb/T CaO & 150 Lb/T Limestone
-3/8: 4 Lb/T CaO & 150 Lb/T Limestone
(12/23/93)

SULFIDE TEST HEAP CRUSH SIZE COLUMN COMPARISON
GOLD EXTRACTION PERCENT
BROHM MINING CORPORATION
DECEMBER 7, 1993

41.00 44.43
38.64 41.63

Column ID	24 Hour	120 Hour	240 Hour	360 Hour	480 Hr	600 Hr
-1/4" *	13.68	26.50	32.70	36.68	39.82	43.03
-3/8" +	0.71	15.26	20.39	24.71	27.66	29.53
-1/2" #	0.48	13.89	18.22	21.91	25.12	27.34
-1/2" +	0.82	13.44	17.91	21.68	~~25.12~~ 24.61	26.65
-1" +	1.65	13.07	17.01	20.52	23.18	25.15

* = Average of Two Column Tests; Agglomerated with Barren Solution - 2 lb/T CaO & 152 lb/T Limestone

\# = No Agglomeration - 2 lb/T CaO & 150 lb/T Limestone

\+ = No Agglomeration - 4 lb/T CaO & 159 lb/T Limestone

STH ore from spite

The -1/4" ~~the~~ column material was obtained during crushing. ~~the recovery~~ It is assumed ~~the time of the STH~~ that the higher rate of recovery is due to ~~come from~~ the fact that ~~as higher since~~ it was agglomerated with ~~NaCN~~ Barren solution containing NaCN and allowed to react with the cyanide for about 2 mos before it was put on leach.

Therefore the -1/4" Column leaching are not a good comparison to the other crush size ~~material~~ columns.

SULFIDE TEST HEAP CRUSH SIZE COLUMN COMPARISON
GOLD EXTRACTION PERCENT
BROHM MINING CORPORATION
DECEMBER 7, 1993

Column ID	24 Hour	120 Hour	240 Hour	360 Hour
-1/4" *	13.68	26.50	32.70	36.68
-3/8" +	0.71	15.26	20.39	24.71
-1/2" #	0.48	13.89	18.22	21.91
-1/2" +	0.82	13.44	17.91	21.68
-1" +	1.65	13.07	17.01	20.52

* = Average of Two Column Tests; Agglomerated with Barren Solution - 2 lb/T CaO & 152 lb/T Limestone

= No Agglomeration - 2 lb/T CaO & 150 lb/T Limestone

+ = No Agglomeration - 4 lb/T CaO & 159 lb/T Limestone

Col Test #2 Crush Size

SP1 + LS + CaO

Col #1

71
72
71
37

251
-11 (Buckets)

240

Col #2

47
70
70
72

259
-11

248.

Col #3

38
70
70
71

249
-11
~~238~~

238

Col #4

39
67
69
71

246
-11

235

STH - Crush Size Columns

SP1 Heads

BROOM MINING CORPORATION
GILT EDGE MINE
ASSAY REPORT

SHEET NO.: 1

DATE: 11/23/93

	SAMPLE #	INCREMENT	PULP WT.	BOMB WT. (kg)	AU WT. (kg)	AU OZ/TON	AG OZ/TON	REMARKS
1	AB 1	2.5	29.17	2.70	.090			
2	2			2.66	.075			hi and low out
3	3			2.65	.106	.0844		.0807
4	4			2.61	.074			
5	5			2.65	.077			
6	CD 1			2.67	.128			
7	2			2.65	.083			
8	3			2.64	.069	.0984		.0983
9	4			2.69	.111			
10	5			2.68	.101			
11	Blank		—	2.33	—			
12	EF 1		29.17	2.62	.082			
13	2			2.67	.078			.0840
14	3			2.66	.092	.1006		
15	4			2.67	.077		.0822	
16	5			2.82	.174			
17	GH 1			2.68	.084			
18	2			2.63	.091			
19	3			—	—	.0885	—	lost bead .0885
20	4			2.69	.086			
21	5			2.72	.093			
22								
23								
24								

all .0932 | hi out .0887 | hi & low out .0899 | 2 hi & 2 low out .0884

0.0930 | .0884 | .0879

	Au	Ag
Fire	.0884	.250 .2496
N.A.N	.0538	.1652

BROWN MINING CORPORATION
Gilt Edge Project

Pit-Bench-Pattern #
SP1 Column Heads

Submittal Date
11/22/93

BLAST HOLE

Hot NaCN Shake
and
FIRE DETERMINATIONS

DATE:

NAME: JS

	SAMPLE	~~FIRE~~ ~~Au.~~ Ag	NaCN Au.		SAMPLE	FIRE Au.	NaCN Au.
1.	AB	.1631	.0635	25.	Standard ✓		
2.	AB	.1613	.0512	26.		Ag	Au
3.	AB	.1625	.0520	27.	AB	.1623	.0556
4.	CD	.1645	.0541	28.	CD	.1644	.0524
5.	CD	.1641	.0485	29.	EF	.1659	.0513
6.	CD	.1647	.0546	30.	GH	.1680	.0561
7.	EF	.1657	.0456	31.		.1652	.0538
8.	Standard ✓		.0147	32.			
9.	EF	.1653	.0519	33.			
10.	EF	.1666	.0563	34.			
11.	GH	.1681	.0540	35.			
12.	GH	.1681	.0574	36.			
13.	GH	.1679	.0568	37.			
14.	✓7	.0646	.0241	38.			
15.				39.			
16.				40.			
17.				41.			
18.				42.	Standard ✓		
19.				43.			
20.				44.			
21.				45.			
22.				46.			
23.				47.			
24.				48.			

Avg
.0516
.0544
.0541
.0561
.0540

SULFIDE CRUSH SIZE COLUMN TEST - LEACH CYCLE

Sample Collection Date: _____ Day _____

Column I.D.	COLUMN A - BLUE	Column I.D.	COLUMN B - RED
Time	7AM	Time	7AM
Au oz/ton	_____	Au oz/ton	_____
Ag oz/ton	_____	Ag oz/ton	_____
pH	_____	pH	_____
NaCN lb/ton	_____	NaCN lb/ton	_____
Effluent + Tare (grams)	_____	Effluent + Tare (grams)	_____
Tare Weight (grams)	_____	Tare Weight (grams)	_____
Effluent Weight (grams)	_____	Effluent Weight (grams)	_____
Cu (ppm)	_____	Cu (ppm)	_____

Column I.D.	COLUMN C - GRAY	Column I.D.	COLUMN D - BLACK
Time	7AM	Time	7AM
Au oz/ton	_____	Au oz/ton	_____
Ag oz/ton	_____	Ag oz/ton	_____
pH	_____	pH	_____
NaCN lb/ton	_____	NaCN lb/ton	_____
Effluent + Tare (grams)	_____	Effluent + Tare (grams)	_____
Tare Weight (grams)	_____	Tare Weight (grams)	_____
Effluent Weight (grams)	_____	Effluent Weight (grams)	_____
Cu (ppm)	_____	Cu (ppm)	_____

SULFIDE CRUSH SIZE COLUMN TEST - LEACH CYCLE

Sample Collection Date: _____ Day _____

Column I.D. COLUMN A - BLUE

Time	7AM	11AM	3PM	7PM	11PM -	3AM
Au oz/ton	_____	_____	_____	_____	_____	_____
Ag oz/ton	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
NaCN lb/ton	_____	_____	_____	_____	_____	_____
Effluent + Tare (grams)	_____	_____	_____	_____	_____	_____
Tare Weight (grams)	_____	_____	_____	_____	_____	_____
Effluent Weight (grams)	_____	_____	_____	_____	_____	_____
Cu (ppm)	_____	_____	_____	_____	_____	_____

DO _____

Column I.D. COLUMN B - RED

Time	7AM	11AM	3PM	7PM	11PM -	3AM
Au oz/ton	_____	_____	_____	_____	_____	_____
Ag oz/ton	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
NaCN lb/ton	_____	_____	_____	_____	_____	_____
Effluent + Tare (grams)	_____	_____	_____	_____	_____	_____
Tare Weight (grams)	_____	_____	_____	_____	_____	_____
Effluent Weight (grams)	_____	_____	_____	_____	_____	_____
Cu (ppm)	_____	_____	_____	_____	_____	_____

DO _____

SULFIDE CRUSH SIZE COLUMN TEST - LEACH CYCLE

Sample Collection Date: _____ Day _____

Column I.D. COLUMN C - GRAY

Time	7AM	11AM	3PM	7PM	11PM	- 3AM
Au oz/ton	_____	_____	_____	_____	_____	_____
Ag oz/ton	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
NaCN lb/ton	_____	_____	_____	_____	_____	_____
Effluent + Tare (grams)	_____	_____	_____	_____	_____	_____
Tare Weight (grams)	_____	_____	_____	_____	_____	_____
Effluent Weight (grams)	_____	_____	_____	_____	_____	_____
Cu (ppm)	_____	_____	_____	_____	_____	_____

DO _____

Column I.D. COLUMN D - BLACK

Time	7AM	11AM	3PM	7PM	11PM	- 3AM
Au oz/ton	_____	_____	_____	_____	_____	_____
Ag oz/ton	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
NaCN lb/ton	_____	_____	_____	_____	_____	_____
Effluent + Tare (grams)	_____	_____	_____	_____	_____	_____
Tare Weight (grams)	_____	_____	_____	_____	_____	_____
Effluent Weight (grams)	_____	_____	_____	_____	_____	_____
Cu (ppm)	_____	_____	_____	_____	_____	_____

DO _____

SULFIDE CRUSH SIZE COLUMN TEST - LEACH CYCLE

Sample Collection Date: _____ Day _____

BARREN SOLN Au _____ Ag _____ pH/emf _____

Cu _____ NaCN _____ DO _____ ml/min A _____

ml/min B _____

REMARKS

ml/min C _____

ml/min D _____

#2

SP1 Columns

Col #1

66
64
67
68

265 lb ore
- 11

+ ~~1920~~ lb Limestone
= ~~9050~~ 8649 g LS

+ 0.~~27~~ 23 lb CaO
= ~~120~~ 115 grams CaO

254 lb/ore

150 lb/T LS

2 lb/T CaO

Col #2

65
67
70
69

271 lb ore
- 11

260

19.5 lb or 8853 g LS

0.52 lb or 236 g CaO

150 lb/T LS

4 #/T CaO

214
36
250

Col #3

69
66
64
64

263
- 11

252 lb ore

19 lb or 8581 g LS

0.50 lb or 229 g CaO

Col #4

72
60
68
56

256
- 11

245 lb ore

18 lb or 8342 g LS

0.5 lb or 222 g CaO

SULFIDE TEST HEAP PARALLEL COLUMN TEST - LEACH CYCLE

Sample Collection Date: _____

Column I.D. LAB COLUMN A

Time	7AM	11AM	3PM	7PM	11PM	-	3AM
Au oz/ton	_____	_____	_____	_____	_____		_____
Ag oz/ton	_____	_____	_____	_____	_____		_____
pH/emf	X _____	X _____	X _____	X _____	X _____		/ _____
NaCN lb/ton	X _____	X _____	X _____	X _____	X _____		_____
Effluent + Tare (grams)	_____	_____	_____	_____	_____		_____
Tare Weight (grams)	_____	_____	_____	_____	_____		_____
Effluent Weight (grams)	_____	_____	_____	_____	_____		_____
	DO =	_____			Cu (ppm)		_____

Column I.D. LAB COLUMN B

Time	7AM	11AM	3PM	7PM	11PM	-	3AM
Au oz/ton	_____	_____	_____	_____	_____		_____
Ag oz/ton	_____	_____	_____	_____	_____		_____
pH/emf	X _____	X _____	X _____	X _____	X _____		/ _____
NaCN lb/ton	X _____	X _____	X _____	X _____	X _____		_____
Effluent + Tare (grams)	_____	_____	_____	_____	_____		_____
Tare Weight (grams)	_____	_____	_____	_____	_____		_____
Effluent Weight (grams)	_____	_____	_____	_____	_____		_____
	DO =	_____			Cu (ppm)		_____

BARREN SOLN Au _____ Ag _____ pH/emf _____ / _____

Cu _____ NaCN _____ DO _____ ml/min _____

INTERIM NEUTRALIZATION STUDY DAILY WORKSHEET - NEUTRALIZATION PERIOD

Sample Collection

Date _____ Time _____

Column I.D.	A-Blue	B-Red	C-Gray	D-Black	Neut Solution	Cell #5
Au (oz/ton)	_____	_____	_____	_____	_____	_____
Ag (oz/ton)	_____	_____	_____	_____	_____	_____
pH	_____	_____	_____	_____	_____	_____
Cu (ppm)	_____	_____	_____	_____	_____	_____
WAD CN (ppm)	_____	_____	_____	_____	_____	_____
Effluent Weight with Tare (kg)	_____	_____	_____	_____		
Tare Weight (kg)	_____	_____	_____	_____		
Effluent Weight (kg)	_____	_____	_____	_____		

Tare Weight (kg)

Collection Vessel Apparatus I.D.

AX-1= 3.0165	BX-1= 3.0305	CX-1= 2.9545	DX-1= 2.9530
AY-1= 3.0450	BY-1= 2.8820	CY-1= 2.9930	DY-1= 2.8660
AX-2= 3.1085	BX-2= 3.1180	CX-2= 3.0380	DX-2= 3.0445
AY-2= 3.1370	BY-2= 2.9680	CY-2= 3.0795	DY-2= 2.9585

Assayer(s)_____

Assay Date_____

No Agglomeration
No Limestone Addition

(STH) Sulfide Crush Size Columns

	#1 (A)	#2 (B)	#3 (C)	#4 (D)
~~lbs~~	-1/2"	-1/2" (+2 lb/T Lime)	1"	-3/8"
~~lbs~~	~~232 231.5~~	~~233.0~~	~~243~~	
lbs	232	233 (+106g Lime)	243	225
ht	56"	55"	56"	53"
dia	10"			

$ft^2 = \pi r^2$ 10" diameter

$= 5"$ radius $= 0.41\overline{66}$ ft

$\pi (.1736) = 0.545\ ft^2$

$$\frac{.005\ gal}{min \cdot ft^2} \Big| \frac{.545\ ft^2}{} \Big| \frac{3875\ ml}{gal} = 10.6\ ml/min$$

$$\frac{10.6\ ml}{min} \Big| \frac{60\ min}{hr} = 636\ ml/hr \times 12 =$$

7632 ml/12 hr

15.26 l

Day 1	6 x	4 hr	T
Day 2	3 x	8 hr	W
Day 3	2 x	12 hr	Th
Day 4	~~2 x 12 hr~~ 1 x	24 hr	F
Day 5	~~4 x 24 hr~~	"	S
		"	S

2.5 gal Bucket

Weigh + Record Apparatus + Sol'n w/lid

Dip Sample - Fridge

Clean out Apparatus

SP1 -½" #1

wt. 6451g

		% Passing
+½	94g	98.6
+⅜	380g	92.7
+¼	1279g	73.1
-¼	4768g	
	6521	

SP1 -½" #2

wt. 6466g

+½	125g	98.1
+⅜	437g	91.3
+¼	1401g	69.6
-¼	4487	
	6450	

	% Passing -¼"
1"	53
-½"	71
-⅜"	82
-¼"	98

SP1 -1" #1

wt 8560

+1"	298g	96.5
+¾	419g	91.6
+½	1226g	77.2
+⅜	779	68.0
+¼"	1170g	54.3
-¼	4627g	
	8519	

SP1 -1" #2

wt 8212g

+1"	209g	97.5
+¾	523	91.1
+½	1336	74.8
+⅜	762	65.4
+¼	1143	51.5
-¼	4218	
	8191	

SP1 -⅜" #1

wt. 7673

+½	106g	98.6
+⅜	266	95.1
+¼	1086	80.8
-¼	6149	
	7607	

SP1 -⅜" #2

wt. 7611

+½	78	99.0
+⅜	224	96.0
+¼	1039	82.3
-¼	6234	
	7575	

	-1/2" AS IS	-1/2" + 2#/T Lime	1" AS IS	-3/8" AS IS
	Col #1	Col #2	Col #3	COL #4
	58.25	61.25	58.0	63.50
	58.50	61.50	65.0	52.75
	63.50	62.5	64.0	64.25
	62.50	59.0	67.0	55.75
Gross Wt.	242.75	244.25	254.0	236.25
	5'0"	-11.25	5'0"	5'0"
	~~+1.25~~ 5"	233.0 lb ore	-84.25	-6.75
	-4.0	+ 106 grams Lime		
		5'0"		
		-5.0"		

$\frac{2\,lb}{T} = .001$

233 lb	T	2 lb	454 g	=
~~x .001~~	2000 lb	T	lb	
0.233 lb	454 g / lb	= 106 g. Lime		

DATE: DECEMBER 14, 1993
TO: JIM THOMPSON
FROM: LAURA DAMON
SUBJECT: SULFIDE TEST HEAP CRUSH SIZE COLUMNS

SULFIDE TEST HEAP CRUSH SIZE COLUMN COMPARISON GOLD EXTRACTION PERCENT BROHM MINING CORPORATION					
Column ID	-1/4" *	-3/8" +	-1/2" #	-1/2" +	-1" +
24 Hour	13.68	0.71	0.48	0.82	1.65
120 Hr	26.50	15.26	13.89	13.44	13.07
240 Hr	32.70	20.39	18.22	17.91	17.01
360 Hr	36.68	24.71	21.91	21.68	20.52
480 Hr	39.82	27.66	25.12	24.61	23.18
600 Hr	43.03	29.53	27.34	26.65	25.15

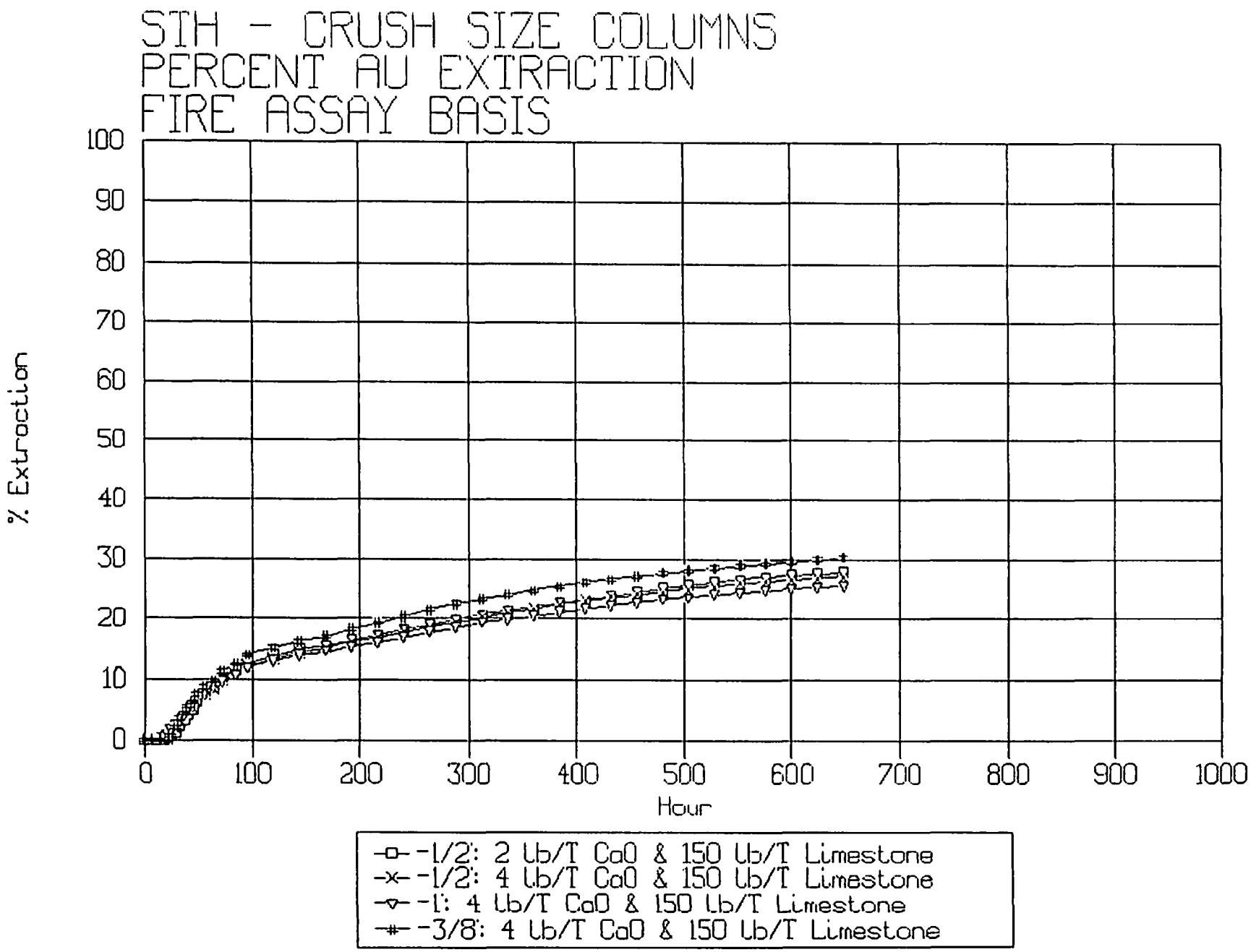
* = Average of Two Column Tests; Agglomerated with Barren Solution - 2 lb/T CaO & 152 lb/T Limestone

= No Agglomeration - 2 lb/T CaO & 150 lb/T Limestone

+ = No Agglomeration - 4 lb/T CaO & 150 lb/T Limestone

Note: The -1/4" column material was obtained from Sulfide Test Heap ore splits during agglomeration. It is assumed that the higher rate of recovery is due to the fact that it was agglomerated with barren solution containing sodium cyanide and allowed to react with the cyanide for about two months before it was put on leach. Therefore the -1/4" columns are not a good comparison to the other crush size columns.

c: Rod MacLeod


STH - CRUSH SIZE COLUMNS
PERCENT AU EXTRACTION
FIRE ASSAY BASIS
% Extraction
100
90
80
70
60
50
40
30
20
10
0
0
100
200
300
400
500
600
700
800
900
1000
Hour
-1/2": 2 Lb/T CaO & 150 Lb/T Limestone
-1/2": 4 Lb/T CaO & 150 Lb/T Limestone
-1": 4 Lb/T CaO & 150 Lb/T Limestone
-3/8": 4 Lb/T CaO & 150 Lb/T Limestone

(12/14/93)

DATE: JANUARY 11, 1994
TO: JIM THOMPSON
FROM: LAURA DAMON
SUBJECT: SULFIDE TEST HEAP CRUSH SIZE COLUMNS

SULFIDE TEST HEAP CRUSH SIZE COLUMN COMPARISON
GOLD EXTRACTION PERCENT
BROHM MINING CORPORATION

Column ID	-1/4" *	-3/8" +	-1/2" #	-1/2" +	-1" +
24 Hr	13.68	0.71	0.48	0.82	1.65
120 Hr	26.50	15.26	13.89	13.44	13.07
240 Hr	32.70	20.39	18.22	17.91	17.01
360 Hr	36.68	24.71	21.91	21.68	20.52
480 Hr	39.82	27.66	25.12	24.61	23.18
600 Hr	43.03	29.53	27.34	26.65	25.15
720 Hr	44.78	30.99	28.48	28.02	26.25
840 Hr	45.86	31.65	29.36	28.88	26.86
960 Hr	47.97	32.23	29.94	29.55	27.39
1080 Hr	49.46	32.58	30.35	29.85	27.82
1200 Hr	50.24	32.76	30.79	30.23	28.12
1320 Hr	50.74	33.02	31.13	30.52	28.47

* = Average of Two Column Tests; Agglomerated with Barren Solution - 2 lb/T CaO & 152 lb/T Limestone

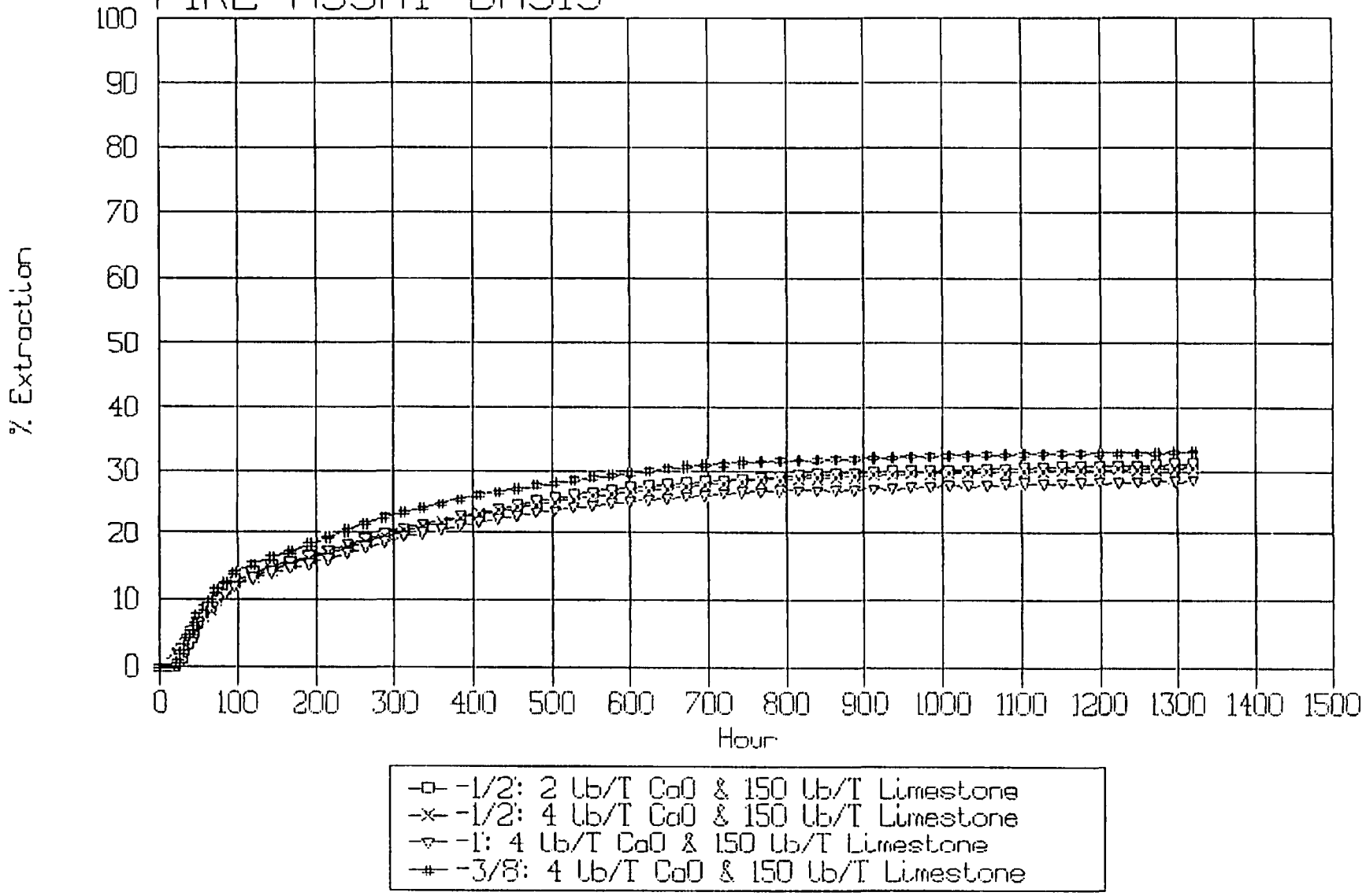
= No Agglomeration - 2 lb/T CaO & 150 lb/T Limestone

+ = No Agglomeration - 4 lb/T CaO & 150 lb/T Limestone

Note: The -1/4" column material was obtained from Sulfide Test Heap ore splits during agglomeration. It is assumed that the higher rate of recovery is due to the fact that it was agglomerated with barren solution containing sodium cyanide and allowed to react with the cyanide for about two months before it was put on leach. Therefore the -1/4" columns are not a good comparison to the other crush size columns.

c: Rod MacLeod
colcomp.sth

STH - CRUSH SIZE COLUMNS
PERCENT AU EXTRACTION
FIRE ASSAY BASIS



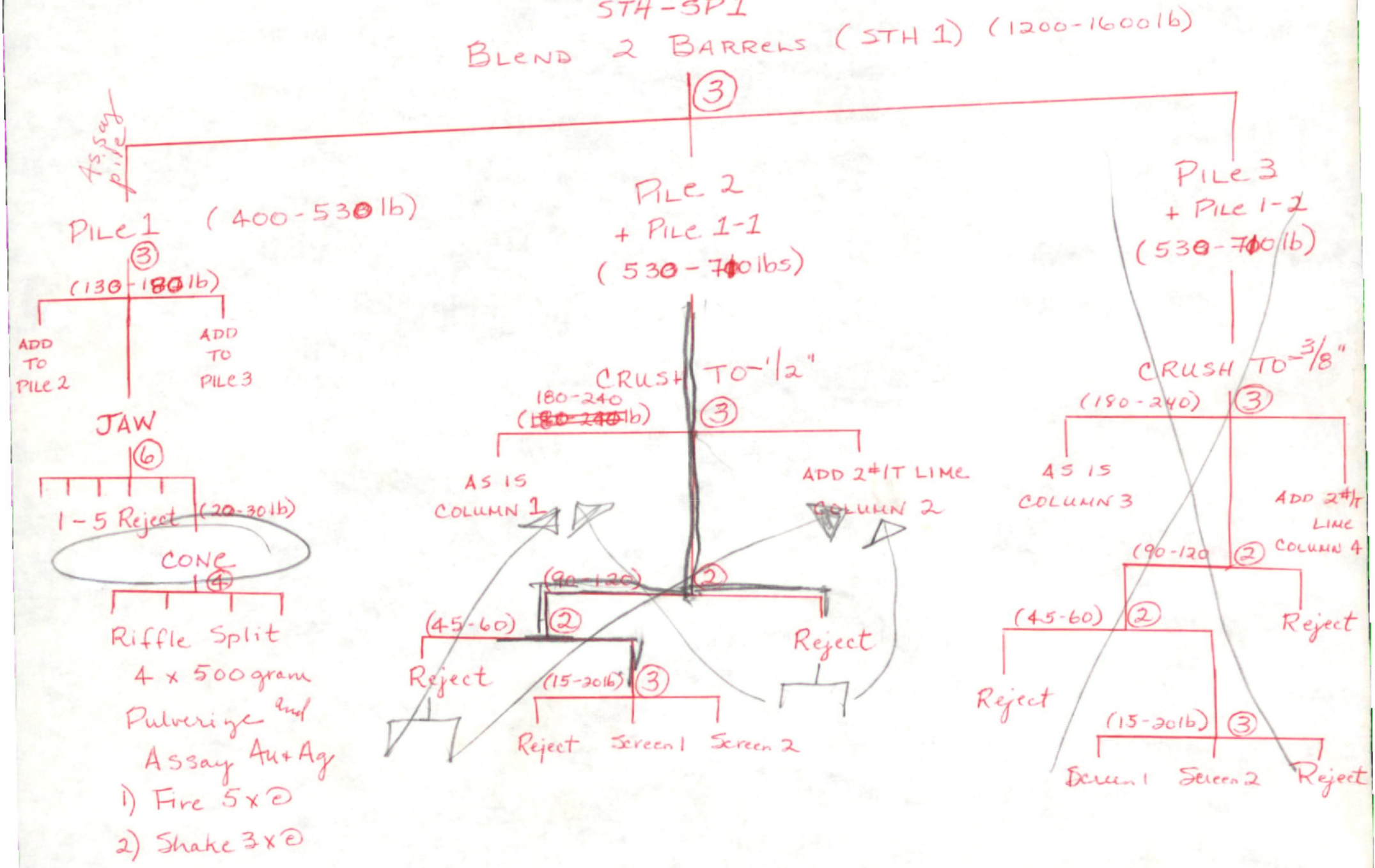
(01/10/94)

STH Crush Columns 4/5/94

	pH	NaCN	Au	Ag	Wt.
A	9.41	.38#/T	.0029	.0009	1052.3g
B	9.76	.52#/T	.0011	.0015	201.4
C	9.30	.35#/T	.0015	.0006	450.1
D	9.73	.36#/T	.0018	.0006	185.2

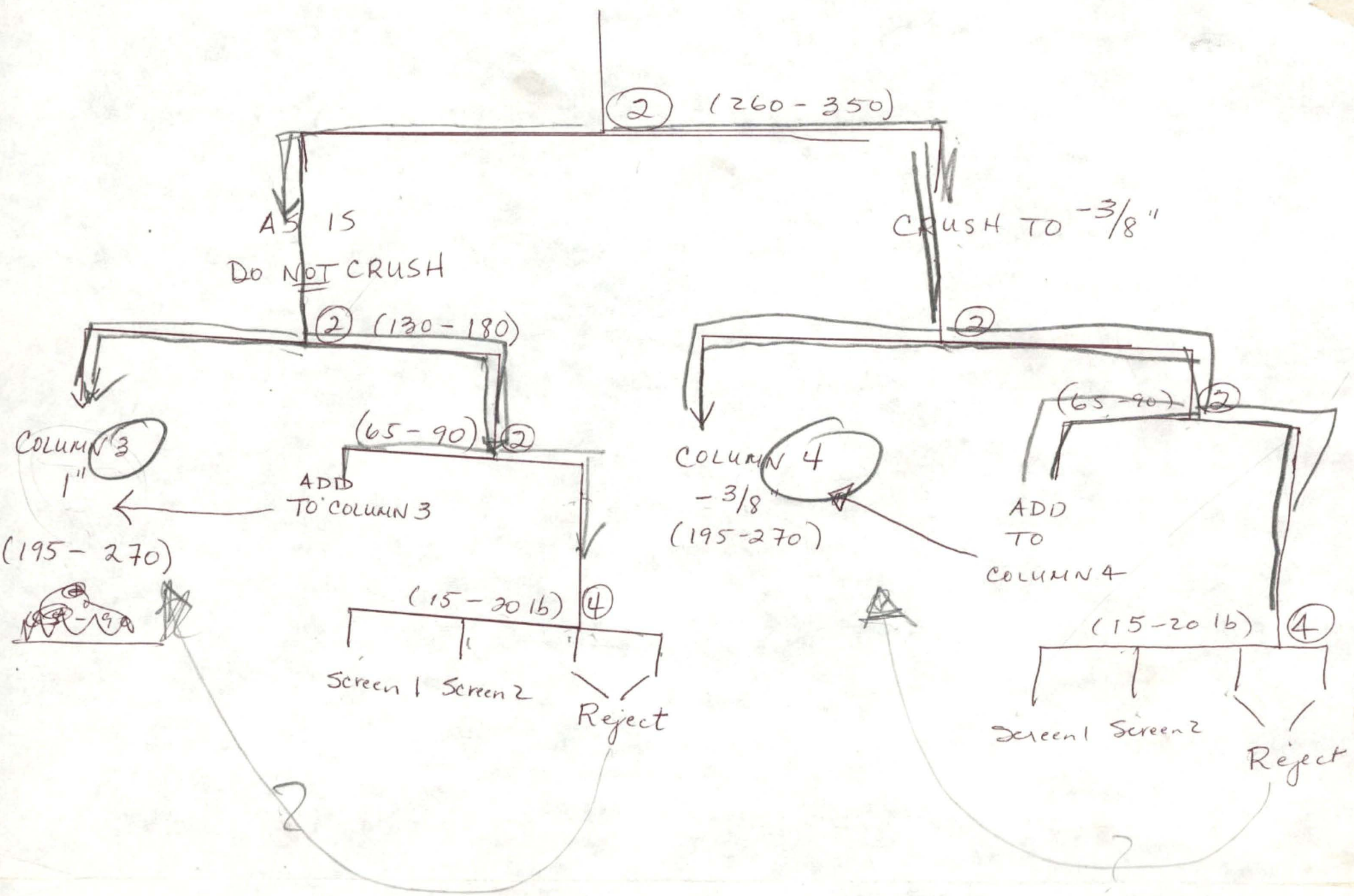
Solution collected from bottom drain when unloaded (~3/26/94)

Sulfide Test Columns 3/8" vs 1/2"



STH - SP1

PILE 3 (530-710 lb)



I. PREP

II. LOAD 5' 4 Base Sections; 4 Pumps; Geotextile
Tygon Tubing
Collection Vessels

III. LEACH

A. 0.005 gpm/ft^2

B. BARREN SOLN (125 gallon Tank)

C. ASSAY DAILY

1. Au
2. Ag
3. pH
4. NaCN
5. Cu
6. emf

IV. NEUT

V. UNLOAD

VI. PREP TAILS

A. ASSAY

Col A 3 7/8"

Col B 3 1/4

Col C 6 1/2

Col D 6 3/4

From Top

5' TALL

2 Set Up

Dailies

5/19

-0.0006 Z		0.0003 Z
0.2901 S		0.2915 S
0.0106		0.0104
0.0033		0.0030
0.0035		0.0036
0.0200		0.0198
0.0167		0.0172
0.0117		0.0115
0.0360		0.0362
0.0066		0.0062
0.0082		0.0076
0.0093		0.0088
0.1474		0.1477

Ag

Au

0.0000 Z		-0.0001 Z
0.1165 S		0.1168 S
0.2235 C		0.2237 C
0.0138		0.0138
0.0009		0.0008
0.0008		0.0008
0.0341		0.0340
0.0258		0.0256
0.0179		0.0178
0.0435		0.0435
[illegible]		0.0099

Ag