

GIANT

Yellowknife Mines Limited

MEMO TO: D. W. Cooper

FROM: D.R. Bartlett *DM*

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SUBJECT: Processability of Polishing Pond Material
Giant Versus Lakefield Reports

Both Lakefield Research and GYML Mill Lab have conducted cyanidation test programs on drill core from the Polishing Pond. Table 1 and 2 contain the respective head assay and gold extraction data.

There is a major discrepancy in results. Lakefield shows consistent lower head assays and higher gold extractions. Following is the overall comparison.

Overall Polishing Pond Composite Cyanidation Performance

| | <u>Lakefield</u> | <u>Giant</u> |
|----------------------------|------------------|--------------|
| Assayed Head, oz/ton Au | 0.086 | 0.103 |
| Calculated Head, oz/ton Au | 0.096 | 0.105 |
| % Gold Extraction | 34.2 | 28.9 |
| % Mass Balance | 112% | 102% |

The points in GYML's favour are:

- o A better mass balance accuracy (ratio of calculated test/ assayed heads).
- o Good assay comparison with the original drill program log. (Table 3)

CONCLUSION

I recommend acceptance of the Giant data unless the TRP gold reconciliation can indicate a deviation. The expected recovery of gold from the Polishing Pond will vary from 24.5 to 33.4% and average 28.9%. These expectations are consistent with the October, 1988 decrease in TRP gold extraction associated with higher mine production from the Polishing Pond.

TABLE 1

Polishing Pond Cyanidation Results
Lakefield Research *Program

| Drill Hole | Depth | Gold Head, oz/ton | | Gold Extraction % |
|--------------|-------------|-------------------|--------------|-------------------|
| | | Assay | Calculated | |
| 88-1, 2, 3 | Total Cores | 0.088 | 0.095 | 35.0 |
| 88-4, 5 | " " | 0.076 | 0.079 | 30.5 |
| 88-6, 7 | " " | 0.094 | 0.119 | 39.0 |
| 88-8, 12 | " " | 0.088 | 0.098 | 37.0 |
| 88-9 10 | " " | <u>0.083</u> | <u>0.085</u> | <u>31.1</u> |
| Average 1-12 | | 0.086 | 0.096 | 34.2 |

NOTE:

* Project L.R. 3515, Progress Report No. 1, August 24, 1988

TABLE 2

POLISHING POND CYANIDATION RESULTS
GIANT MILL LAB *PROGRAM

| Drill Hole | Depth | Gold Head, oz/ton | | Gold Extraction % |
|------------|---------------|-------------------|--------------|----------------------|
| | | Assay | Calculated | |
| 88-1 | Total Core | 0.103 | 0.114 | 30.0 |
| 88-2 | " " | 0.107 | 0.113 | 26.5 |
| 88-3 | " " | 0.106 | 0.106 | 29.8 |
| 88-4 | " " | 0.103 | 0.098 | 29.9 |
| 88-5 | " " | 0.100 | 0.104 | 28.6 |
| 88-6 | " " | 0.103 | 0.100 | 27.0 |
| 88-7 | " " | 0.102 | 0.102 | 30.6 |
| 88-8 | " " | 0.105 | 0.105 | 33.4 |
| 88-9 | " " | 0.103 | 0.104 | 27.5 |
| 88-10 | " " | 0.102 | 0.104 | 24.5 |
| 88-12 | " " | <u>0.099</u> | <u>0.102</u> | <u>30.1</u> |
| Avg. | | 0.103 | 0.105 | 28.91 |
| | | | | |
| 88-12 | 0-10 | 0.101 | 0.124 | 49.6 |
| | 10-20 | 0.138 | 0.152 | 24.1 |
| | | | | |
| 88-1 | 0-10 | 0.101 | 0.125 | 49.6 |
| | 10-20 | 0.138 | 0.151 | 24.1 |
| | 20-30 | 0.104 | 0.119 | 26.1 |
| | | | | |
| 88-10 | Total, CIL | 0.095 | 0.106 | 30.7 |
| | Total, repulp | 0.095 | 0.101 | 30.8 |

NOTE:

* Data from References 10 to 14

TABLE 3

1988 POLISHING POND DRILL PROGRAM RESULTS

GRADE (oz./TON)

| ELEVATION | HOLE 88-1 | HOLE 88-2 | HOLE 88-3 | HOLE 88-4 | HOLE 88-5 | HOLE 88-6 | HOLE 88-7 | HOLE 88-8 | HOLE 88-9 | HOLE 88-10 | HOLE 88-12 | AVE. |
|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|-------|
| 6036- 6034 | | | | | 0.022 | | | | | 0.033 | | 0.028 |
| 6034- 6032 | | | 0.058 | 0.047 | 0.054 | | | | | 0.03 | | 0.047 |
| 6032- 6030 | 0.087 | | 0.061 | 0.051 | 0.045 | | 0.035 | | 0.047 | 0.048 | | 0.053 |
| 6030- 6028 | 0.047 | 0.062 | 0.067 | 0.047 | 0.061 | | 0.041 | | 0.053 | 0.08 | | 0.057 |
| 6028- 6026 | 0.055 | 0.072 | 0.064 | 0.047 | 0.059 | | 0.056 | | 0.076 | 0.082 | | 0.064 |
| 6026- 6024 | 0.132 | 0.08 | 0.099 | 0.067 | 0.109 | | 0.076 | | 0.063 | 0.075 | | 0.088 |
| 6024- 6022 | 0.148 | 0.101 | 0.162 | 0.067 | 0.126 | | 0.087 | | 0.101 | 0.115 | | 0.113 |
| 6022- 6020 | 0.102 | 0.094 | 0.115 | 0.093 | 0.095 | | 0.127 | | 0.112 | 0.09 | | 0.104 |
| 6020- 6018 | 0.134 | 0.106 | 0.123 | 0.077 | 0.154 | | 0.11 | | 0.131 | 0.139 | | 0.122 |
| 6018- 6016 | 0.085 | 0.103 | 0.117 | 0.13 | 0.146 | | 0.127 | | 0.126 | 0.119 | | 0.119 |
| 6016- 6014 | 0.107 | 0.113 | 0.203 | 0.105 | 0.101 | | 0.205 | | 0.099 | 0.116 | | 0.131 |
| 6014- 6012 | 0.215 | 0.224 | 0.074 | 0.072 | 0.08 | | 0.188 | | 0.099 | 0.118 | | 0.134 |
| 6012- 6010 | 0.069 | 0.115 | 0.123 | 0.119 | 0.099 | | 0.074 | | 0.125 | 0.074 | | 0.100 |
| 6010- 6008 | 0.096 | 0.101 | 0.102 | 0.168 | 0.107 | | 0.111 | | 0.079 | | | 0.109 |
| 6008- 6006 | 0.109 | 0.112 | 0.119 | 0.082 | 0.088 | | 0.108 | | 0.117 | | | 0.105 |
| 6006- 6004 | 0.062 | 0.154 | 0.134 | 0.119 | | | 0.103 | | 0.088 | | | 0.110 |
| 6004- 6002 | | 0.161 | 0.105 | 0.122 | | | 0.111 | | 0.094 | | | 0.119 |
| 6002- 6000 | | 0.134 | 0.099 | 0.128 | | | 0.103 | | 0.089 | | | 0.111 |
| 6000- 5998 | | 0.07 | | 0.094 | | | 0.096 | | 0.117 | | | 0.094 |
| 5998- 5996 | | | | | | | 0.118 | | 0.132 | | | 0.125 |
| 5996- 5994 | | | | | | | 0.129 | | 0.099 | | | 0.114 |
| 5994- 5992 | | | | | | | 0.108 | | 0.104 | | | 0.106 |
| 5992- 5990 | | | | | | | 0.121 | | | | | 0.121 |
| AVE. | 0.103 | 0.113 | 0.107 | 0.091 | 0.090 | | 0.106 | | 0.098 | 0.086 | | 0.099 |