

To H.E.P. ; D.E.D. ; J.A.L. : File

Date January 24th, 1963

From C.O.F.

Ref.

Subject Waste Solution from Various Mill Circuits

The following data refers to daily samples of the various products
sampled over a 24-hour period, and composited on a weekly basis -

| <u>Period</u> | <u>Product</u> | <u>Estimated Tonnage</u> | <u>pH</u> | <u>Assay As ppm</u> | <u>Soluble As Discarded lb. per day</u> |
|----------------|----------------|------------------------------|-----------|-------------------------|---|
| Jan. 1st - 7th | Calcine | 191 | 5.6 | 192.0 | 73.2 |
| " 8th - 14th | W.T.O. | 191 | 5.0 | 121.5 | 46.4 |
| " 15th - 21st | (Dorrco) | 193 | 5.6 | 114.9 | 44.3 |
| Jan. 1st - 7th | Calcine | 509 | 5.8 | 4.24 | 4.3 |
| " 8th - 14th | W.T.O. | 572 | 5.9 | 7.06 | 8.0 |
| " 15th - 21st | (Mill) | 557 | 5.8 | 8.01 | 8.9 |
| Jan. 1st - 7th | H.C.D. | 219 | 5.6 | 119.0 | 52.0 |
| " 8th - 14th | W.T.O. | 195 | 5.5 | 98.4 | 38.4 |
| " 15th - 21st | | 187 | 5.2 | 118.2 | 44.3 |

ENY.

Soluble Arsenic in Wash Thickerer O'Flows.

| | CALCINE W.T.O. DORRICO | CALCINE W.T.O. MILL | H.C.D - W.T.O. |
|--|---------------------------|------------------------|-------------------|
| Period | Tons Assay lb. | Tons Assay lb. | Tons Assay lb. |
| Apr. 1 st - 7 th | - | - | - |
| " 8 th - 15 th | 189 108.9 41.1 | 590 4.97 5.86 | 198 90.4 35.79 |
| " 16 - 23 rd | 191 121.7 46.5 | 584 10.90 12.73 | 185 86.5 32.00 |
| " 24 - 30 th | 189 121.8 46.0 | 574 9.35 10.73 | 190 82.5 31.35 |
| May 1 st - 7 th | 195 98.4 38.4 | 599 3.38 4.05 | 183 74.9 27.41 |
| " 8 th - 14 th | 188 97.9 36.8 | 595 7.46 8.90 | 190 88.0 33.44 |
| " 15 th - 23 rd | 180 107.9 38.8 | 550 21.10 23.20 | 320 106.9 68.42 ← |
| " 24 - 31 st | 172 122.5 42.1 | 567 14.44 15.90 | 306 148.6 90.94 |
| June 1 st - 7 th | 178.1 117.5 41.8 | 540.1 6.42 6.90 | 332 120.5 80.01 |
| " 8 th - 15 th | 183.4 111.5 40.9 | 601.1 8.49 10.21 | 366 137.3 100.50 |
| " 16 - 23 rd | 111.0 117.0 | 4.03 | 123.5 |
| " 24 th - 30 th | | | |

SOLUBLE ARSENIC IN THICKENER O'FLOW SOLUTIONS

Period: 1st Quarter 1963 - Jan.1st to Mar 31st, 1963

| | CALCINE W.T.O. (DORRCO) | | | CALCINE W.T.O. (MILL) | | | H.C.D. - W.T.O. | | |
|------------|----------------------------|--------------|------------|--------------------------|--------------|------------|-----------------|--------------|------------|
| | <u>Tons</u> | <u>Assay</u> | <u>Lb.</u> | <u>Tons</u> | <u>Assay</u> | <u>Lb.</u> | <u>Tons</u> | <u>Assay</u> | <u>Lb.</u> |
| Jan. 1 - 7 | 191 | 192.0 | 73.2 | 509 | 4.24 | 4.3 | 219 | 119.0 | 52.0 |
| 8 - 15 | 191 | 121.5 | 46.4 | 572 | 7.06 | 8.0 | 195 | 98.4 | 38.4 |
| 16 - 23 | 193 | 114.9 | 44.3 | 517 | 2.82 | 2.9 | 180 | 95.6 | 35.4 |
| 24 -31 | 189 | 113.3 | 44.7 | 557 | 8.01 | 8.9 | 187 | 118.2 | 44.3 |
| Feb. 1 - 7 | 177 | 101.4 | 35.9 | 569 | 10.32 | 11.5 | 215 | 89.9 | 38.6 |
| 8 - 14 | 158 | 91.24 | 28.8 | 510 | 5.50 | 5.6 | 195 | 76.9 | 30.0 |
| 15 - 22 | 180 | 97.5 | 35.1 | 612 | 12.24 | 14.9 | 187 | 89.9 | 33.6 |
| 23 - 28 | 184 | 56.62 | 20.8 | 598 | 2.86 | 3.4 | 210 | 101.9 | 42.8 |
| Mar. 1 -7 | 185 | 106.0 | 39.2 | 614 | 21.4 | 26.3 | 190 | 89.2 | 33.9 |
| 8 - 15 | 190 | 131.6 | 50.0 | 658 | 19.71 | 25.9 | 210 | 106.4 | 44.7 |
| 16-23 | 187 | 116.0 | 43.3 | 620 | 22.60 | 28.0 | 196 | 143.9 | 56.1 |
| 24 - 31 | 189 | 107.0 | 40.4 | 644 | 13.79 | 17.7 | 185 | 134.2 | 49.6 |

1963 Samples - Mill Sol'n to Bow Lake

5.45
2.73
5.65
1.88
2.69
4.34
2.06
2.52
3.45
2.52
6.16

Average 3.59 p.p.m.