

To H.E.P., R.J.T.

Date July 30, 1976

From C.O.O.

Ref.

Subject Arsenic Suppression.

Abstract:- the use of different arsenic suppression methods for Giant Mines waste streams.

Procedure:- samples from #11 thickener were treated with a combined solution of KOH + KCL and some other samples we treated with a solution of KOH +  $\text{KNO}_3$ . All samples were a volume size of 150 ml.

DATA: A/	p.p.m. As.
Thickener #11	120
10 ml of KOH + KCL sol,n	50
15 ml of KOH + KCL sol,n	47
25 ml of KOH + KCL sol,n	62
B/	
Thickener #11	120
10 ml of KOH + $\text{KNO}_3$	42
15 ml of KOH + $\text{KNO}_3$	40
25 ml of KOH + $\text{KNO}_3$	46

Reagents:

KOH + KCL sol,n- 20g KOH + 200 ml  $\text{H}_2\text{O}$  + 2 ml KCL(sat)

KOH +  $\text{KNO}_3$  sol,n- 20g KOH + 200 ml  $\text{H}_2\text{O}$  + 2g  $\text{KNO}_3$

Conclusions:- further tests will be carried out on the use of these reagents as arsenic suppressants. Even though they showed a 50-60% arsenic removal.