

MEMORANDUM

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

Date APRIL 6, 1976

From C.O.O.

Ref.

Subject ARSENIC SUPPRESSION

Abstract to determine the use of FeCl_3 and NH_4OH as an arsenic suppressant for the D.T.B.

Procedure D.T.B. was collected and subjected to various amounts of FeCl_3 and a constant amount of NH_4OH .

Data

SD	Amount FeCl_3 (g)	Amount NH_4OH (ml)	pH	ppm Fe	ppm As	Avail Fe/ As Removed
DTB	0	0	7.9	57	1540	
1	5	0	7.7	6.1	480	= 0.1:1
2	10	0	7.6	3.6	180	= 1.5:1
3	15	0	7.5	3.7	160	= 2.2:1
1A	5	10	8.9	67.0	128	= .7:1
2A	10	10	8.1	4.5	58.5	= 1.4:1
3A	15	10	7.3	.35	40	= 2.1:1

N.B. all test sample sizes 1000 ml

5 g FeCl_3 = 1033 ppm Fe

10 g FeCl_3 = 2066 ppm Fe

15 g FeCl_3 = 3099 ppm Fe

Conclusions by approaching the 5:1 Fe/As ratio it would seem evident that the suppression of arsenic to low levels is possible in the D.T.B. which is shown in the above data at a 2:1 ratio. Therefore more tests will be run to substantiate the above data.