

MEMORANDUM

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Date..... MARCH 24, 1976

From..... C.Q.O.

Ref.....

Subject..... ARSENIC SUPPRESSION

Abstract

The use of Na_2S as arsenic suppressant.

Procedure

Combined samples of #6, #11 and #13 thickeners were obtained and treated with varying amounts of Na_2S .

Data	pH	ppm Cu	ppm Fe	ppm As
#6 thickener	6.6	ND	10.1	30.0
#11 thickener	5.4	ND	144	136
#13 thickener	6.1	ND	24.0	600
Combination	5.3	2	19.5	134
Combination (theo)	?	ND	50.0	151

Note Combination Ratio's

#6 = 70/125 #11 = 35/125 #13 = 20/125

Amount Na_2S (g)	pH	ppm Cu	ppm Fe	ppm As
.7	7.0	ND	3.0	108
1.5	8.3	ND	1.9	113
2.7	9.0	ND	2.0	136
4.4	9.4	ND	.9	160

Conclusions

the above results show that the use of Na_2S as a suppressant of arsenic is not too good (under statement); but, maybe with the use of lime it might work as shown by the Denver Research Institute.