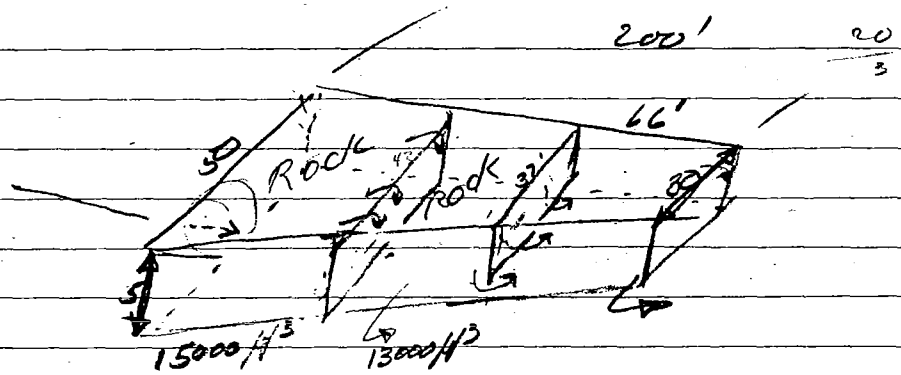
1-15-71



ft³ in 3rd Basin.

(30×37)×5×66

330
33.5

11000 ft³
×7.48

82000 gal

SETTLING

Data on this. 500 gpm / 82000 gal = 164 Min = 2.72 hrs.

at 900 gpm ~ 1.5 hrs retention.

CONTACTING

assume 20% voids

28000
12
5600 × 7.48 = 42000 gal.

Contacts for 1.4 hrs. @ 500 gpm

" " .78 hrs @ 900 gpm

→ During test.

aur. 23.3 M gal/day. ≈ 1.2 hr of one pit.

2.4 hr if two pits in parallel.

But we have some stirring.

• bubbles ? float the PCB to contact with dry
more clay - silica - insolubles

DSW 297269

STLCOPCB4067179

Vince Haupt.

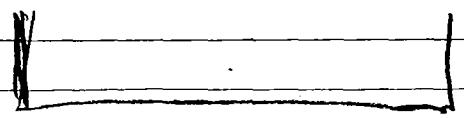
Wright.

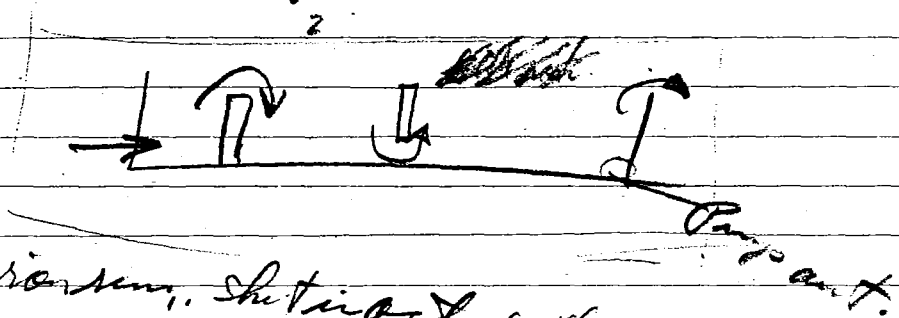
old. New

200' long.

50' to 30' at low -

5' deep behind baffles.





.72 M gal/day. Data at

500 GPM Now.

up to 900 GPM. 1.3 M gal/day. when Nerion rem., Shut in out, will start abt 1/20/71

1/10 % HCl

30000 #/day HCl

Pit rock on top.

Hi ca or normal.

92-93% $CaCO_3$ + Mag carb both.

90% cal. 55% ca

inerts 6-7% inerts 6-7%

2" 2"

No real difference noted

Perhaps High Calcium

reacts a bit faster.

Get it washed.

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156 000 x 7.48 = 1166000 gal ~ 1.2 hrs retention per pit.

2.4 hrs retention both pits.

975

23.3

our Pits 160' long x 75' W x 13' Deep. 26 M gal / day

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1-14-71

London. 95% CaO 2½ $CaCO_3$ typical.

Purch. 95% CaO min
2% $CaCO_3$ max
SiO_2 0.3%
Al_2O_3 1% max
MgO 0.2 max
S 0.3 max

MnO 65 PPM
Ba 1 PPM
As 2 "
F_2 90 "
Pb 3 "

React 2 min or less.

Anniston 30000# HCl/day. $\times \frac{100}{73}$ = 41000# $CaCO_3$/day

$\frac{73}{36.5}$ 100

$2HCl + CaCO_3 \rightarrow CaCl_2 + CO_2 + H_2O$

$41000 \times \frac{.03.3}{.967}$ = 1400# inerts/day. $\frac{1400}{720000}$ = 1.945#/Mgal

30000
24
720000 gal/day

WGK used 395000#/3 days

7900# inerts

$\frac{395000 \times .02}{23.3 \times 3 \times 10^6 \times \frac{1}{10^3}}$ = 0.11#/M.gal

$SiO_2 + R_2O_3$ etc

69.9×10^3

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$CaCO_3$ 48 / 12 / .40 / 100

40 16
CaO
56

Anniston Limestone

$CaCO_3$	93.5
$MgCO_3$	3.1
SiO_2	2.5
R_2O_3	.8

Ours

MgO	2%		3	
CaO	95% Min	→ $CaCO_3$	170	
$CaCO_3$	2	max	2#	
SiO_2	.3%		.3	.17%
Al_2O_3	1% Max		1	.6%
			176.3	

100
13
5200

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