



Table 13
Clay Settling Area Filling Schedule (Page 1 of 2)

Clay Production		FM-1 In Service Pre 2008			FM-2 In Service 1		
		Total Area (acres) = 352 Effective Area (acres) = 275 Ft above NG 40 Ft below NG 29.8 Feet to Fill = 64.8 Available Volume (ac-ft) = 17,750			Total Area (acres) = 514 Effective Area (acres) = 400 Ft above NG 40 Ft below NG 25 Feet to Fill = 60 Available Volume (ac-ft) = 23,974		
Sequential Year	Dry Tons/Year	Loading Rate (Tons/Ac-ft)	Years of Filling	Dry Tons Stored	Loading Rate (Tons/Ac-ft)	Years of Filling	Dry Tons Stored
-2	2,673,000	151	1.00	2,673,000			
-1	877,000	49	1.00	877,000			
0	1,290,000	73	1.00	1,290,000			
1	1,223,253	57	1.00	1,015,300	9	1.00	207,953
2	1,322,848	29	1.00	515,911	34	1.00	806,937
3	1,359,526	21	1.00	380,667	41	1.00	978,859
4	907,124				38	1.00	907,124
5	922,552				38	1.00	922,552
6	677,004	21	1.00	365,582	13	1.00	311,422
7	754,790	6	1.00	105,671	27	1.00	649,120
8	1,010,561	10	1.00	171,795	35	1.00	838,766
9	816,316				34	1.00	816,316
10	795,001				33	1.00	795,001
11	1,113,278	31	1.00	556,639	23	1.00	556,639
12	793,351	5	1.00	87,269	29	1.00	706,083
13	644,844				27	1.00	644,844
14	848,455				35	1.00	848,455
15	1,166,968				49	1.00	1,166,968
16	1,344,381						
17	1,606,394						
18	3,279,469						
19	3,196,353						
20	2,977,389						
21	2,693,744						
22	2,525,824						
23	1,108,440						
24	1,086,742						
25	1,957,582						
26	2,074,950						
27	1,692,636						
28	1,703,169						
29	1,057,318						
30	1,442,486						
31	1,133,459						
32	917,845						
33	1,400,459						
34	1,377,622						
35	1,124,712						
36	1,276,216						
38	1,617,225						
39	406,113						
TOTALS	59,747,595			8,038,834			11,157,039
		Total Column Height		64.6	Total Column Height		60.0
		Tons/ac-ft		453	Tons/ac-ft		465
		Available Volume (ac-ft) =		0	Available Volume (ac-ft) =		0

Year 1 thru Year 39 clay tons based on 2011 Mine Planning modeling
Except Where Noted

Pre-2011 clay inventory obtained from 2009 Mine Planning modeling

Clay Split %s calculated from Ardaman Associates 2010

Ona Clay Tons Included in Total Clay Tons:

- Year 17 - 200,000
- Year 18 - 1,750,000
- Year 19 - 1,750,000
- Year 20 - 1,750,000
- Year 21 - 1,750,000
- Year 22 - 1,493,000
- Year 23 - 191,000

These tons obtained from Mine Planning modeling 2010

Years 25 and 26 each include 1,200,000 Clay Tons dredged from initial Wingate Mine CSA



Table 13
Clay Settling Area Filling Schedule (Page 2 of 2)

Clay Production Sequential Year Dry Tons/Year		WE-1 In Service 16 Total Area (acres) = 596 Effective Area (acres) = 464 Ft above NG 50 Ft below NG 43.6 Feet to Fill = 88.6 Available Volume (ac-ft) = 41,154			WE-2 In Service 17 Total Area (acres) = 652 Effective Area (acres) = 509 Ft above NG 50 Ft below NG 36 Feet to Fill = 81 Available Volume (ac-ft) = 41,212			Total Area Effective Area 2,114 1,648 Total 124,090
		Loading Rate (Tons/Ac-ft)	Years of Filling	Dry Tons Stored	Loading Rate (Tons/Ac-ft)	Years of Filling	Dry Tons Stored	
-2	2,673,000						2,673,000	
-1	877,000						877,000	
0	1,290,000						1,290,000	
1	1,223,253						1,223,253	
2	1,322,848						1,322,848	
3	1,359,526						1,359,526	
4	907,124						907,124	
5	922,552						922,552	
6	677,004						677,004	
7	754,790						754,790	
8	1,010,561						1,010,561	
9	816,316						816,316	
10	795,001						795,001	
11	1,113,278						1,113,278	
12	793,351						793,351	
13	644,844						644,844	
14	848,455						848,455	
15	1,166,968						1,166,968	
16	1,344,381	33	1.00	1,344,381			1,344,381	
17	1,606,394	34	1.00	1,406,394	5	1.00	200,000	1,606,394
18	3,279,469	37	1.00	1,529,469	42	1.00	1,750,000	3,279,469
19	3,196,353	35	1.00	1,446,353	42	1.00	1,750,000	3,196,353
20	2,977,389	30	1.00	1,227,389	42	1.00	1,750,000	2,977,389
21	2,693,744	23	1.00	943,744	42	1.00	1,750,000	2,693,744
22	2,525,824	25	1.00	1,032,824	36	1.00	1,493,000	2,525,824
23	1,108,440	22	1.00	917,440	5	1.00	191,000	1,108,440
24	1,086,742	13	1.00	543,371	13	1.00	543,371	1,086,742
25	1,957,582	24	1.00	978,791	24	1.00	978,791	1,957,582
26	2,074,950	25	1.00	1,037,475	25	1.00	1,037,475	2,074,950
27	1,692,636	21	1.00	846,318	21	1.00	846,318	1,692,636
28	1,703,169	21	1.00	851,585	21	1.00	851,585	1,703,169
29	1,057,318	13	1.00	528,659	13	1.00	528,659	1,057,318
30	1,442,486	18	1.00	721,243	18	1.00	721,243	1,442,486
31	1,133,459	14	1.00	566,730	14	1.00	566,730	1,133,459
32	917,845	11	1.00	458,923	11	1.00	458,923	917,845
33	1,400,459	17	1.00	700,230	17	1.00	700,230	1,400,459
34	1,377,622	17	1.00	688,811	17	1.00	688,811	1,377,622
35	1,124,712	14	1.00	562,356	14	1.00	562,356	1,124,712
36	1,276,216	16	1.00	638,108	15	1.00	638,108	1,276,216
38	1,617,225	10	1.00	404,306	29	1.00	1,212,919	1,617,225
39	406,113	2	1.00	101,528	7	1.00	304,585	406,113
TOTALS	59,747,595			20,252,023			20,299,699	59,747,595
		Total Column Height	88.6		Total Column Height	81.0		
		Tons/ac-ft	492		Tons/ac-ft	493		
		Available Volume (ac-ft) =	0		Available Volume (ac-ft) =	0		

Year 1 thru Year 39 clay tons based on 2
Except Where Noted

Pre-2011 clay inventory obtained from :

Clay Split %s calculated from Ardaman /

Ona Clay Tons Included in Total Clay Ton

- Year 17 - 200,000
- Year 18 - 1,750,000
- Year 19 - 1,750,000
- Year 20 - 1,750,000
- Year 21 - 1,750,000
- Year 22 - 1,493,000
- Year 23 - 191,000

These tons obtained from Mine Plannin

Years 25 and 26 each include 1.200,000