Copper Flat Monitoring Wells Anticipated for Plugging and Abandonment Based on MW Plan Revised 19 Nov 2018

Costs per JSAI

mob to site \$3,000 per campaign

Labor \$4,500 ea, factor >6" d using 6/10ths rule
Grout Pump \$1,000 ea, factor >6" d using 6/10ths rule
Grout Supply \$40 per cu ft total casing volume + 10%

Excess Grout Factor +10%

	plan year								
	1	4	7	13	19	30	114		
closure year (1 = 1st year after EOM)									

			total depth (ft						w/o Mob					_		
Wells to Plug/Abandon	Year Closed	casing dia (in)	bgl)	Reason to Close	cu ft	Grout	Labor	Equip	Tot	-13	-10	-7	-1	5	16	100
GWQ-10	1	3	125	TSF expansion	7	\$280	\$4,500	\$1,000	\$5,780	х						
NP-1	1	2	110	TSF expansion	3	\$120	\$4,500	\$1,000	\$5,620	Х						
NP-2	1	2	110	TSF expansion	3	\$120	\$4,500	\$1,000	\$5,620	х						1
NP-3	1	2	90	TSF expansion	3	\$120	\$4,500	\$1,000	\$5,620	Х						†
NP-4	1	2	100	TSF expansion	3	\$120	\$4,500	\$1,000	\$5,620	Х						
NP-5	1	2	90	TSF expansion	3	\$120	\$4,500	\$1,000	\$5,620	х						1
GWQ94-13	1	5	106	TSF expansion	16	\$640	\$4,500	\$1,000	\$6,140	Х						
GWQ94-14	3	5	159	TSF expansion	24	\$960	\$4,500	\$1,000	\$6,460	Х						
GWQ94-15	3	4	142	TSF expansion	14	\$560	\$4,500	\$1,000	\$6,060	Х						
GWQ94-16	1	5	46	TSF expansion	7	\$280	\$4,500	\$1,000	\$5,780	Х						
GWQ94-17	1	4	150	TSF expansion	15	\$600	\$4,500	\$1,000	\$6,100	х						
GWQ94-18	1	4	51	TSF expansion	5	\$200	\$4,500	\$1,000	\$5,700	Х						†
GWQ94-19	1	4	53	TSF expansion	6	\$240	\$4,500	\$1,000	\$5,740	х						1
GWQ94-20	1	4	338	TSF expansion	33	\$1,320	\$4,500	\$1,000	\$6,820	х						1
GWQ94-21A	3	2	263	TSF expansion	7	\$280	\$4,500	\$1,000	\$5,780	х						
GWQ94-21B	3	2	315	TSF expansion	8	\$320	\$4,500	\$1,000	\$5,820	х						
GWQ96-22A	1	2	244	redundant	6	\$240	\$4,500	\$1,000	\$5,740	х						
GWQ96-22B	17	2	380	anticipate not needed	10	\$400	\$4,500	\$1,000	\$5,900					х		
GWQ11-26	12	4	43	eventually dry	5	\$200	\$4,500	\$1,000	\$5,700				х	1		
GWQ11-24A	6	2	90	eventually dry	3	\$120	\$4,500	\$1,000	\$5,620			х				
GWQ11-24B	7	2	250	eventually dry	6	\$240	\$4,500	\$1,000	\$5,740			х				
GWQ-1	4	14	391	redundant	460	\$18,400	\$7,482	\$1,663	\$27,544		х					
GWQ-8	10	8	148	redundant	57	\$2,280	\$5,348	\$1,188	\$8,816				х			
PGWQ-16	19	4	180	anticipate not needed	18	\$720	\$4,500	\$1,000	\$6,220					х		
PGWQ-19	19	4	75	anticipate not needed	8	\$320	\$4,500	\$1,000	\$5,820					х		
GWQ-5R	13	4	120	eventually dry	12	\$480	\$4,500	\$1,000	\$5,980				х			
PGWQ-9	30	4	100	anticipate not needed	10	\$400	\$4,500	\$1,000	\$5,900						х	
PGWQ-3	30	4	150	anticipate not needed	15	\$600	\$4,500	\$1,000	\$6,100						х	
PGWQ-20	19	4	30	anticipate not needed	3	\$120	\$4,500	\$1,000	\$5,620					х		
PGWQ-6	19	4	55	anticipate not needed	6	\$240	\$4,500	\$1,000	\$5,740					х		†
GWQ-11	1	3	70	TSF expansion	4	\$160	\$4,500	\$1,000	\$5,660	х					1	
IW-1	1	4	49	TSF expansion	5	\$200	\$4,500	\$1,000	\$5,700	X					1	
IW-2	1	4	46	TSF expansion	5	\$200	\$4,500	\$1,000	\$5,700	x					1	
IW-3	1	4	45	TSF expansion	5	\$200	\$4,500	\$1,000	\$5,700	х					1	1
MW-9	40	4	252.5	End of 100 year monitoring	25	\$1,000	\$4,500	\$1,000	\$6,500						1	х
MW-10	40	4		End of 100 year monitoring	13	\$520	\$4,500	\$1,000	\$6,020	İ					1	х
MW-11	40	4		End of 100 year monitoring	7	\$280	\$4,500	\$1,000	\$5,780	İ					1	Х
BOR_MW-1	40	2	33	End of 100 year monitoring	1	\$40	\$4,500	\$1,000	\$5,540	İ					1	х
BOR_MW-2	40	2		End of 100 year monitoring	1	\$40	\$4,500	\$1,000	\$5,540	İ					1	х
BOR_MW-3	40	2	25	End of 100 year monitoring	1	\$40	\$4,500	\$1,000	\$5,540	İ					1	х
BOR_MW-4	40	2	29	End of 100 year monitoring	1	\$40	\$4,500	\$1,000	\$5,540						1	Х
_	•	•				\$33,760	\$188,329		\$263,940			•		*	•	4

monitor wells closed	21	1	2	3	5	2	7	sum
closure	\$122,780	\$27,544	\$11,360	\$20,496	\$29,300	\$12,000	\$40,460	\$263,940
mob	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$21,000
Total w/ mob	\$125,780	\$30,544	\$14,360	\$23,496	\$32,300	\$15,000	\$43,460	\$284,940

Filiz Toprak

From: Jeffrey Smith < jsmith@themacresourcesgroup.com>

Sent: Monday, December 10, 2018 4:56 PM

To: Filiz Toprak

Subject: copper flat maintenance

Includes mob/demob, labor, equipment, materials

Follow Up Flag: Follow up Flag Status: Completed

Filiz,

Ongoing maintenance as discussed. I recalled needing something for erosion repair, disregard if activity already accounted for. Send over SRCE when available, then start thinking about any files needed to complete attachments. Goal remains to send SRCE, report, and attachments to agency as soon as possible tomorrow morning, fingers crossed nothing major discovered. Call with questions or discussion. Thanks.

	Closure year						
	15	50	80	sum			
Monitor Well Repairs	\$8,000	\$8,000	\$8,000	\$24,000			
Basis = JSAI estimate Includes mob/demob, workove	er rig, labor, materia	ls					

	Closure year							
	6	9	11	sum				
Earthworks Erosion Repairs	\$40,000	\$40,000	\$40,000	\$120,000				
Basis = NMCC estimate								

Best Regards, Jeff