Appendix T MARSLAND WATER BALANCE (PRODUCTION, RESTORATION AND STABILIZATION SAMPLING)

	2015				2016				2017				2018				2019				2020				2021				2022				2023				2024				2025				2026			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
MINE UNIT 1	1100	1700	1700	1600	1500	1500	1400	1400	1300	1200	1100	1100	1000	900	800	700	600	500	400	400																												
IX Treatment/Reinjection																						800	800	800	200																							
RO Treatment																									500	500	500	500	500	500	500	500	500																
Recirculation																																		800	800													
STABILIZATION SAMPLING																																				1	1	1	1									
MINE UNIT 2			400	500	600	1200	1600	1700	1600	1500	1400	1400	1300	1200	1100	1100	1000	900	800	700	600	500	400	300																								
IX Treatment/Reinjection																										800	800	800	400																			
RO Treatment																													250	250	250	250	250	500	500	500	500	500	500	500								
Recirculation																																									800	800						
STABILIZATION SAMPLING																																											1	1	1	1		
MINE UNIT 3							400	500	600	1200	1600	1700	1600	1500	1400	1400	1300	1200	1100	1100	1000	900	800	700	600	500	400	300																				
IX Treatment/Reinjection																														800	800	800	800															
RO Treatment																																		250	250	250	250	250	250	250	500	500	500	500	500	500		
Recirculation																																															800	800
STABILIZATION SAMPLING																																																
MINE UNIT 4											400	500	600	1200	1600	1700	1600	1500	1400	1400	1300	1200	1100	1100	1000	900	800	700	600	500	400	300																	
IX Treatment/Reinjection																																		400	400	400	400	400	400	400								
RO Treatment																																									250	250	250	250	250	250	500	500
Recirculation																																																
STABILIZATION SAMPLING																																																
MINE UNIT 5															400	500	600	1200	1600	1700	1600	1500	1400	1400	1300	1200	1100	1100	1000	900	800	700	600	500	400	300													
IX Treatment/Reinjection																																						400	400	400	400	400	400	400	400	400		
RO Treatment																																															250	250
Recirculation																																																
STABILIZATION SAMPLING																																																
MINE UNIT A																						400	500	600	1200	1600	1700	1600	1500	1400	1400	1300	1200	1100	1100	1000	900	800	700	600	500	400	300	200	200			
IX Treatment/Reinjection																																															400	400
RO Treatment																																																
Recirculation																																																
STABILIZATION SAMPLING																																																
MINE UNIT B																										400	500	600	1200	1600	1700	1600	1500	1400	1400	1300	1200	1100	1100	1000	900	800	700	600	500	400	300	200
IX Treatment/Reinjection																																																
RO Treatment																																																
Recirculation																																																
STABILIZATION SAMPLING																																																
MINE UNIT C																														400	500	600	1200	1600	1700	1600	1500	1400	1400	1300	1200	1100	1100	1000	900	800	700	600
IX Treatment/Reinjection																																																
RO Treatment																																																
Recirculation																																																
STABILIZATION SAMPLING																																																
MINE UNIT D																																		400	500	600	1200	1600	1700	1600	1500	1400	1400	1300	1200	1100	1100	1000
IX Treatment/Reinjection																																																
RO Treatment																																																
Recirculation																																																
STABILIZATION SAMPLING																																																
MINE UNIT E																																						400	500	600	1200	1600	1700	1600	1500	1400	1400	1300
IX Treatment/Reinjection																																																
RO Treatment																																																
Recirculation																																																
STABILIZATION SAMPLING																																																
MINE UNIT F																																															400	500
IX Treatment/Reinjection																																																
RO Treatment																																																
Recirculation																																																
STABILIZATION SAMPLING																																																
Prod Flow	1100	1700	2100	2100	2100	2700	3400	3600	3500	3900	4500	4700	4500	4800	5300	5400	5100	5300	5300	5300	4500	4500	4200	4100	4100	4600	4500	4300	4300	4800	4800	4500	4500	5000	5100	4800	4800	5300	5400	5100	5300	5300	5200	4700	4300	3700	3900	3600
Prod Bleed 1.2%	13	20	25	25	25	32	41	43	42	47	54	56	54	58	64	65	61	64	64	64	54	54	50	49	49	55	54	52	52	58	58	54	54	60	61	58	58	64	65	61	64	64	62	56	52	44	47	43
IX Bleed 2.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	16	4	16	16	16	8	16	16	16	16	8	8	8	8	16	16	16	8	8	8	8	8	8	8	8
Mine Unit 1 RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150	150	150	150	150	150	150	150	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit 2 RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	75	75	75	75	150	150	150	150	150	150	150	0	0	0	0	0	0	0	0
Mine Unit 3 RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	75	75	75	75	75	75	150	150	150	150	150	150	0	0
Mine Unit 4 RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	75	75	75	75	75	150	150
Mine Unit 5 RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	75
Mine Unit A RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit B RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit C RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit D RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit E RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit F RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IX Flow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	800	800	800	200	800	800	800	400	800	800	800	800	400	400	400	400	800	800	800	400	400	400	400	400	400	400	400
RO Flow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	500	500	500	500	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750
Recirculation Flow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	800	800	0	0	0	0	0	800	800	0	0	0	0	800	800
IX & RO Bleed TO DDW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	16	154	166	166	166	233	241	241	241	241	233	233	233	233	241	241	241	233	233	233	233	233	233	233	233
Total DW needed capacity	13	20	25	25	25	32	41	43	42	47	54	56	54	58	64	65	61	64	64	64	54	70	66	65	203	221	220	218	285	299	299	295	295	293	294	291	291	305	306	302	297	297	295	289	285	277	280	276

Appendix T MARSLAND WATER BALANCE (PRODUCTION, RESTORATION AND STABILIZATION SAMPLING)

	2027				2028				2029				2030				2031				2032				2033				2034				2035				2036				2037				2038				2039	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
MINE UNIT 1																																																		
IX Treatment/Reinjection																																																		
RO Treatment																																																		
Recirculation																																																		
STABILIZATION SAMPLING																																																		
MINE UNIT 2																																																		
IX Treatment/Reinjection																																																		
RO Treatment																																																		
Recirculation																																																		
STABILIZATION SAMPLING																																																		
MINE UNIT 3																																																		
IX Treatment/Reinjection																																																		
RO Treatment																																																		
Recirculation																																																		
STABILIZATION SAMPLING	1	1	1	1																																														
MINE UNIT 4																																																		
IX Treatment/Reinjection																																																		
RO Treatment	500	500	500	500																																														
Recirculation					800	800																																												
STABILIZATION SAMPLING							1	1	1	1																																								
MINE UNIT 5																																																		
IX Treatment/Reinjection																																																		
RO Treatment	250	250	250	250	500	500	500	500	500	500																																								
Recirculation											800	800																																						
STABILIZATION SAMPLING													1	1	1	1																																		
MINE UNIT A																																																		
IX Treatment/Reinjection	400	400	400	400																																														
RO Treatment					250	250	250	250	250	250	500	500	500	500	500	500																																		
Recirculation																	800	800																																
STABILIZATION SAMPLING																			1	1	1	1																												
MINE UNIT B	200	200	200																																															
IX Treatment/Reinjection					400	400	400	400	400	400																																								
RO Treatment											250	250	250	250	250	250	500	500	500	500	500	500																												
Recirculation																							800	800																										
STABILIZATION SAMPLING																									1	1	1	1																						
MINE UNIT C	500	400	300	200	200	200	200	200	200																																									
IX Treatment/Reinjection											400	400	400	400	400	400																																		
RO Treatment																	250	250	250	250	250	250	500	500	500	500	500	500																						
Recirculation																													800	800																				
STABILIZATION SAMPLING																															1	1	1	1																
MINE UNIT D	900	800	700	600	500	400	300	200	200	200	200	200	200	200	200																																			
IX Treatment/Reinjection																	400	400	400	400	400	400																												
RO Treatment																							250	250	250	250	250	250	500	500	500	500	500	500																
Recirculation																																			800	800														
STABILIZATION SAMPLING																																					1	1	1	1										
MINE UNIT E	1200	1100	1100	1000	900	800	700	600	500	400	300	200	200	200	200	200	200	200	200	200	200																													
IX Treatment/Reinjection																							400	400	400	400	400	400																						
RO Treatment																													250	250	250	250	250	250	500	500	500	500	500	500										
Recirculation																																									800	800								
STABILIZATION SAMPLING																																											1	1	1	1				
MINE UNIT F	600	1200	1600	1700	1600	1500	1400	1400	1300	1200	1100	1100	1000	900	800	700	600	500	400	300	200	200	200	200	200	200	200																							
IX Treatment/Reinjection																													400	400	400	400	400	400																
RO Treatment																																			250	250	250	250	250	250	750	750	750	750						
Recirculation																																													800	800				
STABILIZATION SAMPLING																																															1	1	1	1
Prod Flow	3400	3700	3900	3500	3200	2900	2600	2400	2200	1800	1600	1500	1400	1300	1200	900	800	700	600	500	400	200	200	200	200	200	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prod Bleed 1.2%	41	44	47	42	38	35	31	29	26	22	19	18	17	16	14	11	10	8	7	6	5	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IX Bleed 2.0%	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit 1 RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit 2 RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit 3 RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit 4 RO Bleed (30%)	150	150	150	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit 5 RO Bleed (30%)	75	75	75	75	150	150	150	150	150	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit A RO Bleed (30%)	0	0	0	0	75	75	75	75	75	75	150	150	150	150	150	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit B RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	75	75	75	75	75	75	150	150	150	150	150	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit C RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	75	75	75	75	75	150	150	150	150	150	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit D RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	75	75	75	75	75	150	150	150	150	150	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mine Unit E RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	75	75	75	75	75	150	150	150	150	150	150	0	0	0	0	0	0	0	0	0	0
Mine Unit F RO Bleed (30%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	75	75	75	75	75	225	225	225	225	0	0	0	0	0	0
IX Flow	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RO Flow	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	0	0	0	0	0	0
Recirculation Flow	0	0	0	0	800	800	0	0	0	0	800	800	0	0	0	0	800	800	0	0	0	0	800	800	0	0	0	0	800	800	0	0	0	0	800	800	0	0	0	0	800	800	0	0	800	800	0	0	0	0
IX & RO Bleed TO DDW	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	225	225	225	225	225	225	225	225	225	225	0	0	0	0	0	0
Total DW needed capacity	274	277	280	275	271	268	264	262	259	255	252	251	250	249	247	244	243	241	240	239	238	235	235	235	235	235	235	233	233	233	233	233	233	233	225	225	225	225	225	225	225	225	225	225	0	0	0	0	0	0

Appendix T MARSLAND WATER BALANCE (PRODUCTION, RESTORATION AND STABILIZATION SAMPLING)

			PV size	Surety PV	Flow GPM	Days	PV Needed	Total Days	Total Gal Needed
MINE UNIT 1									
IX Treatment/Reinjection	MU1	IX	95017565	95017565	800	82	3	247	285052695
RO Treatment	MU1	RO	95017565	95017565	500	132	6	792	570105390
Recirculation	MU1	RC	95017565	95017565	800	82	2	165	190035130
STABILIZATION SAMPLING									
MINE UNIT 2									
IX Treatment/Reinjection	MU2	IX	95017565	95017565	220	300	3	900	285052695
RO Treatment	MU2	RO	95017565	95017565	225	293	6	1760	570105390
Recirculation	MU2	RC	95017565	95017565	400	165	2	330	190035130
STABILIZATION SAMPLING									
MINE UNIT 3									
IX Treatment/Reinjection	MU3	IX	95017565	95017565	220	300	3	900	285052695
RO Treatment	MU3	RO	95017565	95017565	225	293	6	1760	570105390
Recirculation	MU3	RC	95017565	95017565	400	165	2	330	190035130
STABILIZATION SAMPLING									
MINE UNIT 4									
IX Treatment/Reinjection	MU4	IX	95017565	95017565	172	384	3	1151	285052695
RO Treatment	MU4	RO	95017565	95017565	250	264	6	1584	570105390
Recirculation	MU4	RC	95017565	95017565	400	165	2	330	190035130
STABILIZATION SAMPLING									
MINE UNIT 5									
IX Treatment/Reinjection	MU5	IX	95017565	95017565	350	189	3	566	285052695
RO Treatment	MU5	RO	95017565	95017565	225	293	6	1760	570105390
Recirculation	MU5	RC	95017565	95017565	400	165	2	330	190035130
STABILIZATION SAMPLING									
MINE UNIT A									
IX Treatment/Reinjection	MUA	IX	95017565	95017565	1000	66	3	198	285052695
RO Treatment	MUA	RO	95017565	95017565	800	82	6	495	570105390
Recirculation	MUA	RC	95017565	95017565	400	165	2	330	190035130
STABILIZATION SAMPLING									
MINE UNIT B									
IX Treatment/Reinjection	MUB	IX	95017565	95017565	1000	66	3	198	285052695
RO Treatment	MUB	RO	95017565	95017565	800	82	6	495	570105390
Recirculation	MUB	RC	95017565	95017565	400	165	2	330	190035130
STABILIZATION SAMPLING									
MINE UNIT C									
IX Treatment/Reinjection	MUC	IX	95017565	95017565	1000	66	3	198	285052695
RO Treatment	MUC	RO	95017565	95017565	800	82	6	495	570105390
Recirculation	MUC	RC	95017565	95017565	400	165	2	330	190035130
STABILIZATION SAMPLING									
MINE UNIT D									
IX Treatment/Reinjection	MUD	IX	95017565	95017565	1000	66	3	198	285052695
RO Treatment	MUD	RO	95017565	95017565	800	82	6	495	570105390
Recirculation	MUD	RC	95017565	95017565	400	165	2	330	190035130
STABILIZATION SAMPLING									
MINE UNIT E									
IX Treatment/Reinjection	MUE	IX	95017565	95017565	1000	66	3	198	285052695
RO Treatment	MUE	RO	95017565	95017565	800	82	6	495	570105390
Recirculation	MUE	RC	95017565	95017565	400	165	2	330	190035130
STABILIZATION SAMPLING									
MINE UNIT F									
IX Treatment/Reinjection	MUF	IX	95017565	95017565	1000	66	3	198	285052695
RO Treatment	MUF	RO	95017565	95017565	800	82	6	495	570105390
Recirculation	MUF	RC	95017565	95017565	400	165	2	330	190035130
STABILIZATION SAMPLING									
Prod Flow									
Prod Bleed 1.2%									
IX Bleed 2.0%									
Mine Unit 1 RO Bleed (30%)									
Mine Unit 2 RO Bleed (30%)									
Mine Unit 3 RO Bleed (30%)									
Mine Unit 4 RO Bleed (30%)									
Mine Unit 5 RO Bleed (30%)									
Mine Unit A RO Bleed (30%)									
Mine Unit B RO Bleed (30%)									
Mine Unit C RO Bleed (30%)									
Mine Unit D RO Bleed (30%)									
Mine Unit E RO Bleed (30%)									
Mine Unit F RO Bleed (30%)									
IX Flow									
RO Flow									
Recirculation Flow									
IX & RO Bleed TO DDW									
Total DW needed capacity									