



	2015				2016				2017				2018				2019				2020				2021				2022				2023				2024				2025				2026				2027				2028																																							
	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	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					800	800	800	200					500	500	500	500	500	500	500	500					800	800			1	1	1	1																																								
IX Treatment/Reinjection																																																																																												
Perm																																																																																												
Recirculation																																																																																												
STABILIZATION SAMPLING																																																																																												
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					800	800	800	400					250	250	250	250	250	250	500	500	500	500	500	500					800	800			1	1	1	1																														
IX Treatment/Reinjection																																																																																												
Perm																																																																																												
Recirculation																																																																																												
STABILIZATION SAMPLING																																																																																												
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					800	800	800	800					250	250	250	250	250	250	250	250	500	500	500	500	500	500			800	800			1	1	1	1																										
IX Treatment/Reinjection																																																																																												
Perm																																																																																												
Recirculation																																																																																												
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					400	400	400	400	400	400	400	400	400	400	400	400	250	250	250	250	250	250	250	250	500	500	500	500	500	500			800	800			1	1	1	1																		
IX Treatment/Reinjection																																																																																												
Perm																																																																																												
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					400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	250	250	250	250	250	250	250	250	500	500	500	500	500	500			800	800			1	1	1	1										
IX Treatment/Reinjection																																																																																												
Perm																																																																																												
Recirculation																																																																																												
STABILIZATION SAMPLING																																																																																												
MINE UNIT 6																					400	500	600	1200	1600	1700	1600	1500	1400	1400	1300	1200	1100	1100	1000	900	800	700	600	500	400	300	200	200					400	400	400	400	400	400	400	400	400	400	400	400	250	250	250	250	250	250	250	250	500	500	500	500	500	500			800	800			1	1	1	1								
IX Treatment/Reinjection																																																																																												
Perm																																																																																												
Recirculation																																																																																												
STABILIZATION SAMPLING																																																																																												
MINE UNIT 7																									400	500	600	1200	1600	1700	1600	1500	1400	1400	1300	1200	1100	1100	1000	900	800	700	600	500	400	300	200	200					400	400	400	400	400	400	400	400	400	400	400	400	250	250	250	250	250	250	250	250	500	500	500	500	500	500			800	800			1	1	1	1				
IX Treatment/Reinjection																																																																																												
Perm																																																																																												
Recirculation																																																																																												
STABILIZATION SAMPLING																																																																																												
MINE UNIT 8																													400	500	600	1200	1600	1700	1600	1500	1400	1400	1300	12																																																				

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
9702	101	7097										
	122	3180										
	202											
	203											
	209											
	210											
	247											
	269											
	292	9										
	403											
	411	7602										
	414	14665										
	416											
	451											
	482	1739										
	483	0										
	489	28255										
	719											
	721			158,976								
	746	51452	56400									
	763	6592	3050	2000								
	770	18374		6000	6000							
	781	13										
	Total	\$ 138,978	\$ 59,450	\$ 166,976	\$ 6,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9703	101	22311	53255									
	122	10195	26381									
	202											
	203											
	209											
	210											
	247											
	269											
	292											
	403											
	411	53099										
	414	13700										
	416											
	451	1055										
	482	3529										
	483	6936										
	489	28525										
	719											
	721				158,976							
	746	50663	56400									
	763	6592	3600	2000								
	770	15158	2500	6000	6000							
	781	10228										
	Total	\$ 221,991	\$ 142,136	\$ 8,000	\$ 164,976	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9704	101	160804	74615									
	122	74927	36496									
	202		500	1000	1000							
	203		0	1000	1000							
	206		1000									
	207		6000									
	209											
	210	0	2400	3000	3000							
	247	19925	24,000									
	269	25667	8,000									
	292	93										
	403	13	0	1000	1000							
	411	45359	6000	28000	28000							
	414	10063	6000	11000	11000							
	416	9209	1000	2000	2000							
	451	3907	500	1000	1000							
	482	6607	3000	7000	7000							
	483	8871	3000	4000	4000							
	489	48699	2000	5000	5000							
	507		8000									
	719	1320	4000	5000	5000							
	721		40,000	145,500	72,750	72,750		264,960				
	746	13159	8400	9000	9000							
	763	0	5000	6000	6000							
	770	10335	4500	0	0		6000	12000	6000			
	781	93156	60,000									
	Total	\$ 532,114	\$ 304,411	\$ 229,500	\$ 156,750	\$ 72,750	\$ 6,000	\$ 276,960	\$ 6,000	\$ -	\$ -	\$ -
9705	101	20428	84513									
	122	13481	41407									
	202		1000	2000	2000	2000	1000	1000	1000			
	203	5394	0	2000	2000	2000	1000	1000	1000			
	206	28398	1000									
	207	13564	4000									
	209											
	210	44943	1750	7000	7000	7000	3000	3000	3000			
	247	0	24,000									
	269	18267	7,200									
	292	6795										
	403	10385	0	2000	2000	2000	1000	1000	1000			
	411	98710	15000	55000	55000	55000	28000	28000	28000			
	414	40594	6000	21000	21000	21000	11000	11000	11000			
	416	15186	2000	4000	4000	4000	2000	2000	2000			
	451	14849	4000	2000	2000	2000	1000	1000	1000			
	482	60869	7000	14000	14000	14000	7000	7000	7000			
	483		6000	7000	7000	7000	4000	4000	4000			
	489	72945	6000	9000	9000	9000	5000	5000	5000			
	507	43148	7500									
	719	14714	6000	11000	11000	11000	5000	5000	5000			
	721	40,600	35,000	145,500	72,750	72,750	72,750	72,750	72,750		370,944	
	746	8517	6000	18000	18000	18000	9000	9000	9000			
	763		6000	12000	12000	12000	6000	6000	6000			
	770	1357	4500	3000	3000	3000	3000	3000	3000	6000	12000	12000
	781	90889	60,000									
	Total	\$ 664,033	\$ 335,870	\$ 314,500	\$ 241,750	\$ 241,750	\$ 159,750	\$ 159,750	\$ 159,750	\$ 6,000	\$ 382,944	\$ 12,000
9706	101	66656	122789									
	122	34687	59496									
	202		2000	2000	2000	2000	2000	1000				
	203		0	2000	2000	2000	2000	1000				
	206	7550	3750									
	207	34811	10500									
	209											
	210		0	7000	7000	7000	7000					
	247											
	269											
	292	12929										
	403		4000	2000	2000	2000	2000	1000				
	411	36120	35380	55000	55000	55000	28000	28000				
	414	46005	15000	21000	21000	21000	11000	11000				
	416		0	4000	4000	4000	4000	2000				
	451		520	2000	2000	2000	2000	1000				
	482	21062	3750	14000	14000	14000	14000	7000				
	483	16608	3500	7000	7000	7000	7000	4000				
	489	38339	12000	9000	9000	9000	9000	5000				
	507		15250									
	719		7000	11000	11000	11000	11000	5000				
	721		50,000	121,250	97,000	72,750	72,750	72,750			370,944	
	746	8586	14400	18000	18000	18000	18000	9000				
	763		7500	12000	12000	12000	6000	6000				
	770		0	0	0	3000	3000	3000	6000	12000	12000	
	781	90746	54,000									
	Total	\$ 414,099	\$ 420,835	\$ 287,250	\$ 263,000	\$ 241,750	\$ 241,750	\$ 156,750	\$ 6,000	\$ 382,944	\$ 12,000	\$ -

Marsland Estimated Restoration

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
202								1000	2000	2000	3000	3000
203								1000	2000	2000	2000	2000
209								0			0	0
210								3500	7000	7000	8000	8000
247							\$	20,000	\$	40,000	\$	40,000
269							\$	7,500	\$	15,000	\$	15,000
292								0			0	0
403								1000	2000	2000	2000	2000
411								27500	55000	55000	69000	69000
414								10500	21000	21000	27000	27000
416								2000	4000	4000	5000	5000
451								1000	2000	2000	3000	3000
482								7000	14000	14000	18000	18000
483								3500	7000	7000	9000	9000
489								4500	9000	9000	12000	12000
719								5500	11000	11000	14000	14000
721	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
746								9000	18000	18000	22000	22000
763								6000	12000	12000	14000	14000
770								6000	12000	12000	15000	15000
781							\$	60,000	\$	120,000	\$	120,000
Restoration Total without labor	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Labor	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
								256,500	\$	513,000	\$	513,000
								86,000	\$	172,000	\$	215,000
								342,500	\$	685,000	\$	728,000
									\$	558,000	\$	558,000
									\$	215,000	\$	215,000
									\$	773,000	\$	773,000

From: [John Schmuck](#)
To: [Lancaster, Thomas](#)
Subject: Exel Copy of Marsland Water Balance
Date: Wednesday, October 02, 2013 10:38:33 AM
Attachments: [Exel Marsland Water Balance 10-2.xlsx](#)

Tom - Pursuant to your request at the 9/4/2013 Public Meeting I have attached an excel version of the Marsland water balance (Appendix T). I am having the Class I UIC Permit copied and will mail that to you.

During the Public Meeting, in the context of RAI 9, we also explained that multiple pump tests will be performed prior to mining, with coverage of all areas to be mined. These pump test results are reviewed by the NDEQ prior to authorizing the startup of new Mine Units. This is the primary and most effect way to test the competency of the confining layers and demonstrate the ability to isolate production fluids. Is this commitment adequate? If not, would a license condition allow the pump tests to be performed in the future as new Mine Units are developed?

Finally, at the Public Meeting you stated that NRC would issue and amended RAI 9 for our response. When can we anticipate receiving the revised RAI 9?

Thanks very much. .john

This email and any files transmitted with it are personal and confidential, and are solely for the use of the individual or entity addressed. Therefore, if you are not the intended recipient, please delete this email and any files transmitted with it (without making any copies) and advise the author immediately.