

Laboratory Results Summary Table
Logan J Sand Unit (OWP) #4-24
Soil Samples

ECMC Soil Analytical Table - Logan J Sand Unit (OWP) #4-24			Organic Compounds in Soil (mg/kg)																								PAHs in Soil (mg/kg)											
ECMC Allowable Concentration (Soil) -->			500			500			500			500			1.2			490			5.8			58			30			27			1800			360		
Site Specific Background Concentration -->																																						
Location	Sample Date	Sample ID	TPH (sum of volatile, extractable, and recoverable hydrocarbons)			TPH (Total volatile [C6-C10] hydrocarbons)			TPH (total extractable [C10-C28] hydrocarbons)			TPH (total recoverable [C28-C36] hydrocarbons)			Benzene			Toluene			Ethylbenzene			Total Xylenes (sum of o-, m-, and p- isomers)			1,2,4-Trimethylbenzene			1,3,5-Trimethylbenzene			Anthracene			Acenaphthene		
			[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC			
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_WH01_B01@5'	94.7			<0.500	U		23.5			71.2			NA			NA			NA			NA			NA			NA			NA					
Logan J Sand Unit (OWP) #4-24	4/18/2023	312345_WH01_B02@10'	599			<0.500	U		196			403			<0.00100	U		<0.00500	U		<0.00100	U		<0.00300	U		<0.00100	U		<0.00100	U		NA					
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_PH01_E01@5'	0	U		<0.500	U		<4.00	U		<4.00	U		<0.00100	U		<0.00500	U		<0.00100	U		<0.00300	U		<0.00100	U		<0.00100	U		<0.00600	UJ	H			
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_PH01_N01@5'	5.55			<0.500	U		<4.00	U		5.55			<0.00100	U		<0.00500	U		<0.00100	U		<0.00300	U		<0.00100	U		<0.00100	U		<0.00600	UJ	H			
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_PH01_S01@5'	0			<0.500	U		<4.00	U		<4.00	U		<0.00100	U		<0.00500	U		<0.00100	U		<0.00300	U		<0.00100	U		<0.00100	U		<0.00600	UJ	H			
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_FL01@5'	0			<0.500	U		<4.00	U		<4.00	U		<0.00100	U		<0.00500	U		<0.00100	U		<0.00300	U		<0.00100	U		<0.00100	U		<0.00600	UJ	H			
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_BK01@3'	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA			NA					
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_BK02@3'	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA			NA					

Legend:
ECMC - Energy and Carbon Management Commission
Orange Highlight - ECMC Table 915-1 TPH, BTEX, PAH, metal exceedance
Yellow Highlight - ECMC Table 915-1 soil suitability exceedance
Grey Highlight - below laboratory detection limit
NA - not analyzed
mg/kg - milligrams per kilogram
mmhos/com - millimhos per centimeter
[Conc] - reported concentration
Q - qualifier (reported by laboratory or data validation)
RC - reason code (reported by data validation)
*Per the Directors approval, the laboratory practical quantitation limit ("PQL") for Chromium VI has been substituted for the Residential Soil Screening Level Concentration listed in Table 915-1.
Note - Refer to Data Validation Report for Q and RC definitions

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Soil Samples

ECMC Soil Analytical Table - Logan J Sand Unit (OWP) #4-24			PAHs in Soil (mg/kg)																													
ECMC Allowable Concentration (Soil) -->			1.1			0.11			1.1			11			110			0.11			240			240			1.1			2		
Site Specific Background Concentration -->																																
Location	Sample Date	Sample ID	Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(k)fluoranthene			Chrysene			Dibenzo(a,h)anthracene			Fluoranthene			Fluorene			Indeno(1,2,3-cd)pyrene			Naphthalene		
			[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_WH01_B01@5'	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Logan J Sand Unit (OWP) #4-24	4/18/2023	312345_WH01_B02@10'	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_PH01_E01@5'	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.0200	UJ	H
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_PH01_N01@5'	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.0200	UJ	H
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_PH01_S01@5'	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.0200	UJ	H
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_FL01@5'	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.00600	UJ	H	<0.0200	UJ	H
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_BK01@3'	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_BK02@3'	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		

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ECMC Soil Analytical Table - Logan J Sand Unit (OWP) #4-24			PAHs in Soil (mg/kg)									Soil Suitability for Reclamation Parameters												Metals (mg/kg)								
ECMC Allowable Concentration (Soil) -->			180			18			24			<4			<6			(6-8.3)			2			0.68			15000			71		
Site Specific Background Concentration -->																								3.14								
Location	Sample Date	Sample ID	Pyrene			1-Methylnapthalene			2-Methylnapthalene			Specific Conductance (SC) (mmhos/cm)			Sodium Adsorption Ratio (Calculation)			pH (pH units)			Boron (mg/L)			Arsenic			Barium			Cadmium		
			[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC	[Conc]	Q	RC
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_WH01_B01@5'	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Logan J Sand Unit (OWP) #4-24	4/18/2023	312345_WH01_B02@10'	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_PH01_E01@5'	<0.00600	UJ	H	<0.0200	U		<0.0200	U		0.106			0.734			8.52	J	H	0.374			2.75			153			<1.00	U	
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_PH01_N01@5'	<0.00600	UJ	H	<0.0200	U		<0.0200	U		0.16			2.32			8.71	J	H	0.485			3.42			207			<1.00	U	
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_PH01_S01@5'	<0.00600	UJ	H	<0.0200	U		<0.0200	U		0.159			0.94			8.35	J	H	0.313			2.73			166			<1.00	U	
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_FL01@5'	<0.00600	UJ	H	<0.0200	U		<0.0200	U		0.297			5.96			8.41	J	H	0.687			3.17			200			<1.00	U	
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_BK01@3'	NA			NA			NA			0.365			0.156			6.77	T8		0.572			1.98			147			<1.00	U	
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_BK02@3'	NA			NA			NA			0.288			0.164			8.03	T8		0.311			3.05			210			<1.00	U	

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ECMC Soil Analytical Table - Logan J Sand Unit (OWP) #4-24			Metals (mg/kg)																				
ECMC Allowable Concentration (Soil) -->			0.3*			3100			400			1500			390			390			23000		
Site Specific Background Concentration -->																							
Location	Sample Date	Sample ID	Chromium (VI)			Copper			Lead			Nickel			Selenium			Silver			Zinc		
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_WH01_B01@5'	NA			NA			NA			NA			NA			NA			NA		
Logan J Sand Unit (OWP) #4-24	4/18/2023	312345_WH01_B02@10'	NA			NA			NA			NA			NA			NA			NA		
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_PH01_E01@5'	<1.00	U		7.51			7.5			6.9			<2.50	U		<0.500	U		28.7		
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_PH01_N01@5'	<1.00	U		9.9			9.44			8.2			<2.50	U		<0.500	U		37.6		
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_PH01_S01@5'	<1.00	U		8.18			8.53			7.32			<2.50	U		<0.500	U		29.2		
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_FL01@5'	<1.00	U		10.3			9.82			9.31			<2.50	U		<0.500	U		36.7		
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_BK01@3'	<1.00	U		7.59			8.22			6.56			<2.50	U		<0.500	U		34.6		
Logan J Sand Unit (OWP) #4-24	2/13/2023	312345_BK02@3'	<1.00	U		10.4			11			9.23			<2.50	U		<0.500	U		43.8		

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