

Appendix E – Water Quality Guideline Exceedances

Table E-1: Exceedances to Alberta Surface Water Quality Guidelines for the Protection of Aquatic Life. The total cobalt guideline was calculated based on the lowest hardness value observed of 70 mg/L. Samples were taken as per Section 5.1.

Station	Month of sampling	Water Quality Parameters						
		Dissolved Oxygen	pH	Chloride	Dissolved Aluminum	Dissolved Iron	Total Arsenic	Total Cobalt
		Guidelines (Protection of Freshwater Aquatic Life)						
		<6.5 mg/L *<5.0 mg/L	6.5-9	>120 mg/L	>0.05 mg/L *>0.1 mg/L	>300 mg/L	>0.005 mg/L	>0.00088 mg/L
M1	April					>		
	June					>		>
	July	<						
	August	*<				>		
M2	December (2016)	*<						
	January	*<						
	February	<						
	April					>		>
	June					>		>
	June (QC)					>		
	July	<						
	August					>		
M3	February	<						
	June	<						
	July	*<						
	August	*<						
M4	December (2016)	*<						
	January	*<						
	February	*<						
	April					>		
	August	<						
	September	<						
M5	January	*<						
	April					>		
M6	February	<						
	April					>		
	May							
	June	<						
	July							
	August							
	September							
	October						>	
M7	December (2016)	*<	<					
	January	*<						
	February	*<						
	April					>		
M8	December (2016)		<					
	April				*>	>		
M9	December (2016)		<					

Station	Month of sampling	Water Quality Parameters						
		Dissolved Oxygen	pH	Chloride	Dissolved Aluminum	Dissolved Iron	Total Arsenic	Total Cobalt
		Guidelines (Protection of Freshwater Aquatic Life)						
		<6.5 mg/L *<5.0 mg/L	6.5-9	>120 mg/L	>0.05 mg/L *>0.1 mg/L	>300 mg/L	>0.005 mg/L	>0.00088 mg/L
	January	*<						
	February	*<						
	April	<			*>	>		
	May	<						
	August	<						
	September	<						
M10	February	<						
	April				*>	>		
	August	<						
	September							
M11	December (2016)		<					
	January					>		
	February					>		
	April					>		>
M12	December (2016)	<	<					
	January	<						
	February	*<						
	February	<						
	April					>		>
T1	April					>		
	May							
	May (QC)	<						
	June							
	July	<						
	April					>		
T2	July	*<						
	August	<						
	April				*>	>		>
T3	June	<				>		
	July	*<						
	July	*<						
T4	August							
	September							
	April				>	>		
T5	May	*<						
	June	*<		>				
	August	*<		>			>	>
	September	<						
	April					>		
T6	June					>		