

SGS MUSCOWPETUNG

ABORIGINAL CONSTRUCTION MONITORING

WEEKLY REPORT

SPREAD 5

OCTOBER 28TH TO NOVEMBER 4TH, 2018



Social and Cultural Features

Field Observation	# of occurrences	Description and Mitigation Measures	Mitigation Status	Further Action Required (Yes/No)
Traditional Use Area (hunting, fishing, gathering, trapping)	6	HER132 (SSKP623.23-623.47)/177 (SSKP623.69-623.98), HER133 (SSKP623.87-624.12)/178 (SSKP623.69-623.98) &179 (SSKP623.69-623.98) HER 134 (SSKP624.50-624.71) HER135 (SSKP624.66-624.86)	Ongoing	Y
Rock Formations (rocks of significance, tipi rings, etc.)	0			
Artifacts	0			
Bones	0			
Potential Gravesites	0			

Environmental Features

Field Observation	# of occurrences	Description and Mitigation Measures	Mitigation Status	Further Action Required (Yes/No)
Medicinal or Cultural Plants	6	SSKP624.02 VG-57, SSKP622.28-SSKP625.75	Ongoing	Υ
Aquatic Life	0			
Animal Observations or Burrows	0			
Bird Nests	0			
Trees (Red Willow)	0			
Wetlands	6	SK-504, SK-505 & SK-489	Ongoing	Υ
Watercourse Crossing	6	SK-WC68 SSKP624.3	Ongoing	Υ

SGS Canada Inc.

#1450 - 407 2nd Street SW (14th Floor), Calgary Alberta T2P2Y3 t: (403) 278-9730

www. sgs.com

ISO 9001: 2008 Registered OHSAS 18001:2007 Registered



Additional Observations and Summary of Activities or Concerns

Throughout the week ACM's monitored the Chapleau Lake area located within a stretch of native prairie zone starting at SSKP622.28 all the way to SSKP625.75 including many Heritage Resource and TLU areas, all signs are visible stating no ground disturbance without any archaeologist or representative on site. Beginning of the week continued to monitor on the west side of Chapleau Lake SK WC68 SSKP624.03, banister crews continued to excavate the remaining mainline ditch from SSKP623+900 to SSKP624+000 utilizing excavators for this task due to the amount of rock in the area once the excavation was complete, side booms ready to lower in the remaining bend pipe sections near the rare plant area VG57 SSKP624.02. Welding crews were also on site welding the joint sections in place and Applus RTD had come in to test the welds by UT scan ensuring the integrity of the welding process. near the rare plant area VG57 SSKP624.02. Welding crews were also on site welding the joint sections in place and Applus RTD had come in to test the welds by UT scan ensuring the integrity of the welding process.

Midweek moved over to the east side of Chapleau Lake SK WC68 SSKP624.03 where Heritage Resource areas HER134 SSKP624.50-SSKP624.71, HER135 SSKP624.66-SSKP624.86 and end of the native prairie zone SSK625.75 are located throughout this area. Banister crews started to clear topsoil on the east side of the lake - Jacobs Archaeologist on site during the process, geo-tech fabric was laid down and excavated soil was placed onto the mat and crews continued to clear around the bell hole area at SSKP624+700. Crews continued to excavate the mainline ditch, from SSKP624+900 to the remaining bell hole area SSKP624+700 Met up with Archaeologist Steve Kasston, Golders Archaeologist including monitors, 2 Jacobs archaeologists/and monitors were already on site. Monitored the excavation process an oiler was on hand for measurement and excavator/ dozer crews moved the ditch soil off to another area on the ROW. Crews lowered in a joint section into the trench once lowered in, welders were in the trench area while side booms held the sections together, workers in the trench area had coil locked around the section during weld at SSKP625+000 - the area was roped off once crews were done in that area equipment operators moved down to SSKP624+800 to lower in another section connecting the bell hole to that section but due to a bend section being wrong slope they cut it out and used an excavator to lift out of the trench area. During that time crews were excavating the ditch side soil and removing and placing on the ROW, a pump was required due to the amount of water in the trench area- waiting on permits.

Ending the week at Chapleau Lake area, once crews were done ditching on the east side of the lake equipment moved over to the end of the Native prairie zone SSKP625.75 and did a cut out of the road which is SF53, road access was limited and closed to public – signs were used. Welding crews did tie ins of the joint sections and Applus RTD was on site to test the welds once crews moved out of the trench area. Also monitoring in native prairie zone SSKP622.28 coating crews were working in the trench area at SSKP622+310 coating a weld section which was applied to the external of the pipeline - these coatings offer a corrosion barrier as well as abrasion protection for the pipeline, most often due to land movement, rock and other abrasive forces, every surface coated is inspected multiple times. A picker truck with a coil was lowered into the trench during the coating process, a spotter was used to assist the operator. Coating is a tool used to maintain the integrity of the pipeline.



Photos of Sites Visited & Topics Discussed This Week



Bellhole excavation HDD exit SSKP624+100



Topsoil excavation HDD entry point SSKP624+700





Mainline ditch at SSKP624+700



Welding a joint section main line





Lowered in sections at Chapleau Lake



Pump out east side of Chapleau Lake





Main line ditch at SF53



Tie in at SF53 east side



Approvals	
Prepared by	
Jennífer Wolfe	
Jennifer Wolfe	
Senior Construction Monitor	November 5, 2018
Reviewed by	
J Rock	
Joseph Roach	November 6th, 2018
Project Manager	11010111001 0111, 2010
Approved by	
The .	
Emmanuel Olotu, P.Eng.	November 6th, 2018
Technical Manager, Geotechnical	



This document is issued by the Company under its General Conditions of Service available on request and accessible at http://www.sgs.com/terms and conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any other holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alternation, forgery or falsification of the content of appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.