

SGS MUSCOWPETUNG

ABORIGINAL CONSTRUCTION MONITORING

WEEKLY REPORT

SPREAD # 3

NOVEMBER 6TH TO NOVEMBER 12TH, 2017



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)	1	Ditching mainline through a known traditional area. We have checked for any artifacts or bones throughout the process	Completed	No
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	0			
Aquatic Life	0			
Animal Observations or Burrows	0			
Bird Nests	0			
Trees (Red Willow)	0			
Wetlands	1	Open cut wet land crossing packed the soil on top of the pipe burying it.	Completed	No
Watercourse Crossing	2	South Saskatchewan River Crossing. Horizontal directional drilling and testing the water turbidity.	South Saskatchewan Crossing ongoing.	Ongoing

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Additional Observations and Summary of Activities or Concerns

The horizontal directional drilling at the South Saskatchewan River is still ongoing. They are currently at 672 metres as of Friday with a 24-inch reamer that is at point of the main current of the river. Everything is going well at this point.

The testing of the water turbidity by Golder Associates remained consistent throughout the week. It is closely being monitored as they are underneath the river now. Testing of the turbidity of the water is performed every two hours throughout the day and there is constant communication between the Golder Associates and the drilling team.

Myself and my colleagues have been observing the back-filing crew and ditching crew for any potential of artifacts or bones and there hasn't been any at this point. There has been no evidence of any findings of artifacts or bones this week.

They are completing the spreading and crimping of the straw over the right of way. This method will deter top soil erosion. To my observation they have performed a great job at doing the clean up.

They have started the process of hydro testing the mainline. The first step is to get water into the pipeline; they need approx. 7000 cubic metres of water which they are pumping from the river. This is ongoing now and I will update next week on the progress.

The ditching and backfill crew are at the end of spread three and moving on into spread four of the pipeline project. There are tie ins, backfill of tie ins, the horizontal drilling, hydro testing, and clean up left on completing spread three.



Photos of Sites Visited & Topics Discussed This Week

North West Elevation

CRIMPING OF STRAW. PROCESS TO DETER SOIL EROSION



North Elevation



BACK END OF BACKFILL CREW



South East Elevation



HORIZONTAL DIRECTIONAL DRILLING AT SOUTH SASKATCHEWAN RIVER





36-INCH RIPPER



North Elevation



COLLECTING WATER SAMPLES AT THE RIVER



South East Elevation



PUMPING WATER FROM THE RIVER INTO THE MAINLINE

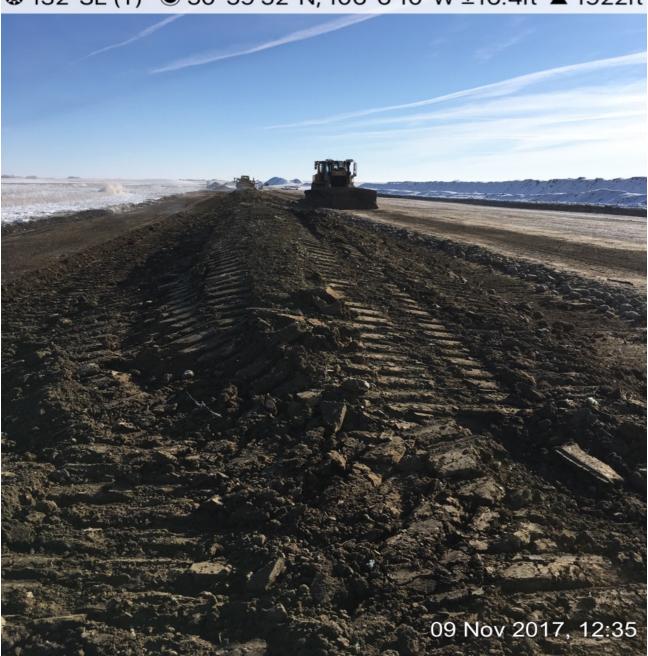




BACKFILL CREW



North West Elevation



LAST STEP OF THE BACKFILL PROCESS







PUMPING WATER FROM THE RIVER INTO THE MAINLINE



Approvals

Prepared by

1 20/10	
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Project Manager	November 12, 2017

Approved by

Emmanuel Olotu, P.Eng.

Technical Manager, Geotechnical

November 12, 2017

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