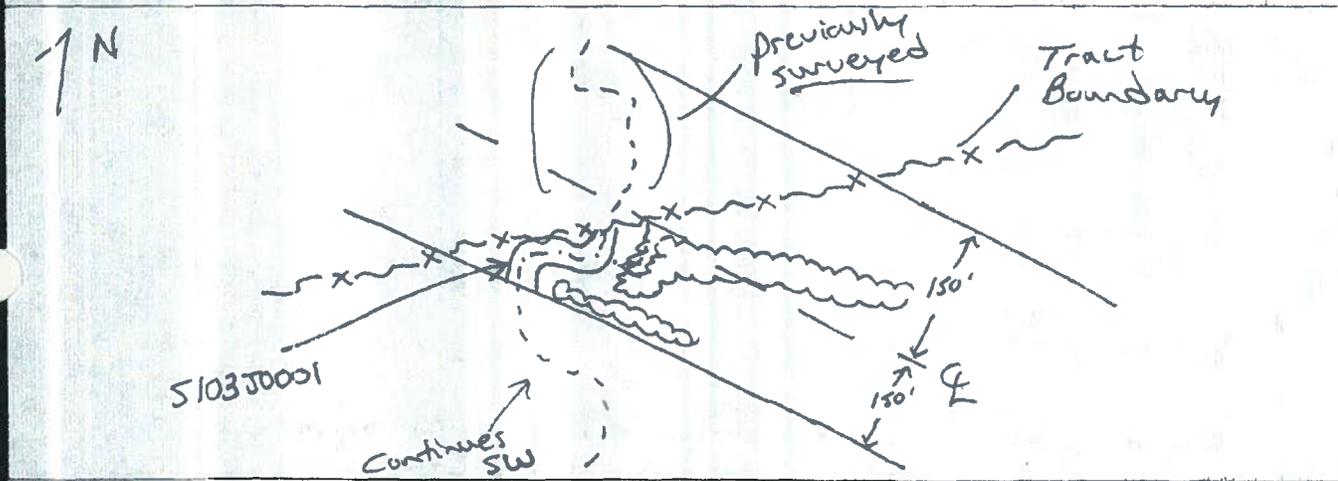


Waterbody Data Form

Centerline
 Re-Route
 Access Road
 Ancillary Facility
 Transmission Line
 Other

Centerline ID: 5103J0001		Project Designated Name:	
Date: 5-18-10	Client/Project Name: Transcanada-Trow/KXL Phase IV	Milepost Enter/Exit: 497.42	
Team: 103	State/County: SD/Jones	Quad Name: —	
Logbook No.: 1	Logbook Page No.:	Tract No.: MC-SD-Jo-10340.000	

Drawing (Please provide orientation arrow, all features identified, location to centerline, etc.)



Waterbody Type:	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> Borrow Pit <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ag. Ditch <input type="checkbox"/> Other
Stream Flow:	<input type="checkbox"/> Fast <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slow <input type="checkbox"/> Very Slow <input type="checkbox"/> None
Flow Type:	<input checked="" type="checkbox"/> Perennial (Flows year round) <input checked="" type="checkbox"/> Intermittent (Flows <3 month) <input type="checkbox"/> None <input type="checkbox"/> Seasonal (Continuous flow ≥ 3 months) <input type="checkbox"/> Ephemeral (Flows only in response to rainfall)
Direction of Flow:	<input type="checkbox"/> N <input checked="" type="checkbox"/> NE <input type="checkbox"/> E <input type="checkbox"/> SE <input type="checkbox"/> S <input type="checkbox"/> SW <input type="checkbox"/> W <input type="checkbox"/> NW <input type="checkbox"/> No Flow
OHWM Width (ft.):	6
Sinuosity:	<input type="checkbox"/> Braided <input checked="" type="checkbox"/> Meandering <input type="checkbox"/> Straight <input type="checkbox"/> N/A
Stream Width (ft.):	8 Water Surface (At Crossing Location) 6
Stream Depth (ft.):	<input type="checkbox"/> 0 <input type="checkbox"/> 1-3 <input type="checkbox"/> 3-6 <input checked="" type="checkbox"/> 6-12 <input type="checkbox"/> 12-18 <input type="checkbox"/> 18-24 <input type="checkbox"/> 24-36 <input type="checkbox"/> 36-48 <input type="checkbox"/> 48-60 <input type="checkbox"/> 60+
OHWM Indicators:	wrested Vegetation
Bank Height (ft.): (Looking Downstream)	Left: <input type="checkbox"/> 0-2 <input checked="" type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8+ Right: <input type="checkbox"/> 0-2 <input checked="" type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8+
Bank Slope: (Looking Downstream)	Left: <input checked="" type="checkbox"/> 4:1 <input type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input type="checkbox"/> Vertical Right: <input type="checkbox"/> 4:1 <input checked="" type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input type="checkbox"/> Vertical

Qualitative Attributes

Water Appearance:

- Clear
- Slightly Turbid
- No Flow
- Turbid
- Very Turbid
- Other:
- Sheen on Surface
- Greenish Color
- Floating Algal Mats
- Obvious Surface Scum

Stream Substrate %: 75% clay, 25% mud

Aquatic Habitats:

- Sand Bar
- Gravel Bar
- Mud Bar
- Undercut Banks
- Gravel Riffle
- Deep Pools
- Bank Root Systems
- Overhanging Trees/Shrubs
- In-stream Emergent Plant 5 % Cover: *Phalaris arundinacea*
- In-stream Submerged Plant % Cover:
- Fringing Wetlands Characteristics:
- None

Aquatic Organisms Observed: None

Riparian Zone:

Width of Natural Vegetation Zone from Edge of Active Channel out to Flood Plain (ft): Left - 40 Right - 75

Vegetative Layers: Herbs Shrubs Trees Multiple

Significant Bare Areas Within Riparian Zone Yes No Unknown

Evidence Of Non-Buffered Concentrated Flows: Yes No Unknown

Tributary Condition:

- Natural
- Artificial (Man-Made)
- Manipulated

Channel Condition:

- Channelization/Braiding
- Dikes/Berms
- Unnatural Straightening
- Excessive Bank Erosion
- Downcutting
- N/A

Disturbances:

- Livestock Access to Riparian Zone
- Waste Discharge Pipes Present
- Other: woody debris
- Manure In Stream or On Banks

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Habitat ID Number: Stream appears to provide adequate habitat for aquatic species. Stream contains a significant amount of woody debris.

Comments:

The tributary continues onto an adjacent property which appears to have been previously bio surveyed. Tributary situated in a deep valley.

Stream Quality:

- High
- Moderate
- Low