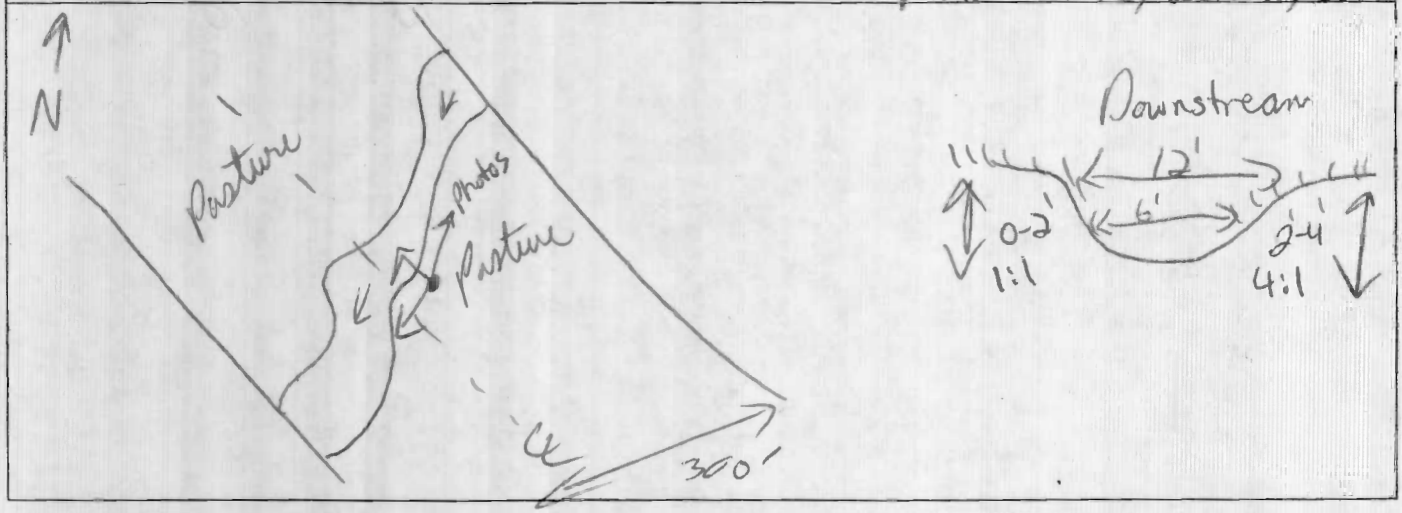
Waterbody Data Form

S500 HA007
Trib to Wolf Creek

☐ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Transmission Line ☒ Other RV179

Centerline ID: 3/26/10		Project Designated Name: Keystone XL - Phase IV	
Date: 11/2/10	Client/Project Name: TransCanada - Trow - KXL		Milepost Enter/Exit: NA RV179
Team: S500	State/County: SD - Harding		Quad Name: NA
Logbook No.: 1	Logbook Page No.: 11	Tract No.: ML-SD-HA-0666	

Drawing (Please provide orientation arrow, all features identified, location to centerline, etc.) Photos: 001 NE, 002 NW, 003 SW



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

S500HA007

Qualitative Attributes

Water Appearance:

- [ ] Clear
- [ ] Turbid
- [ ] Sheen on Surfac
- [ ] Floating Algalmats
- [x] Slightly Turbid
- [ ] Very Turbid
- [ ] Greenish Color
- [ ] Obvious Surface Scum
- [ ] No Flow
- [ ] Other:

Stream Substrate %: Silty Clay loam

Aquatic Habitats:

- [ ] Sand Bar
- [ ] Gravel Riffle
- [x] In-stream Emergent Plant % Cover: 60%
- [ ] Gravel Bar
- [ ] Deep Pools
- [ ] In-stream Submerged Plant % Cover:
- [ ] Mud Bar
- [ ] Bank Root Systems
- [x] Fringing Wetlands Characteristics: Hydrophytic veg Hydric Soils, Hydrology
- [ ] Undercut Banks
- [ ] Overhanging Trees/Shrubs
- [ ] None

Aquatic Organisms Observed: None

Riparian Zone:

Width of Natural Vegetation Zone from Edge of Active Channel out to Flood Plain (ft): Left - 10' Right - 10'

Vegetative Layers: [x] Herbs [ ] Shrubs [ ] Trees [ ] Multiple

Significant Bare Areas Within Riparian Zone [ ] Yes [x] No [ ] Unknown

Evidence Of Non-Buffered Concentrated Flows: [ ] Yes [x] No [ ] Unknown

Tributary Condition: [x] Natural [ ] Artificial (Man-Made) [ ] Manipulated

Channel Condition:

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

Disturbances:

- [x] Livestock Access to Riparian Zone
- [x] Manure In Stream or On Banks
- [ ] Waste Discharge Pipes Present
- [ ] Other:

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Habitat ID Number: NA

Comments: Fringe wetland on Left Descending Bank. Saline, Saltgrass, carex sp. -Mottled soils, Salt crust. Only ≈ 20 wide along bank.

Stream Quality: [ ] High [x] Moderate [ ] Low

Buffalo/Cattle access.