

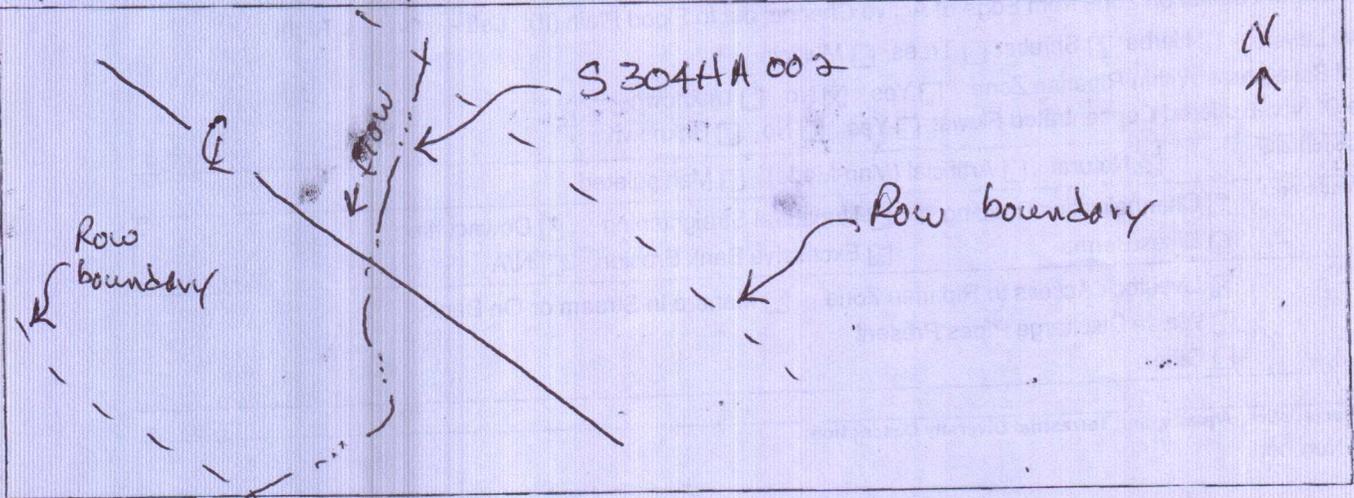
Waterbody Data Form

S304HA002

Centerline Re-Route Access Road Ancillary Facility Transmission Line Other

| | | | |
|----------------|---|---------------------------------|--|
| Centerline ID: | | Project Designated Name: | |
| Date: 10/23/12 | Client/Project Name: Keystone XL Pipeline | Milepost Enter/Exit: 339.2 | |
| Team: 304 | State/County: SD/Harding | Quad Name: | |
| Logbook No.: 1 | Logbook Page No.: 12 | Tract No.: ML-SD-HA-00 @ 62.000 | |

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 type="checkbox"/> Moderate <input type="checkbox"/> Slow <input type="checkbox"/> Very Slow <input checked="" type="checkbox"/> None |
| Flow Type: | <input type="checkbox"/> Perennial (Flows year round) <input type="checkbox"/> Intermittent (Flows <3 month) <input type="checkbox"/> None <input type="checkbox"/> Seasonal (Continuous flow ≥ 3 months) <input checked="" type="checkbox"/> Ephemeral (Flows only in response to rainfall) |
| Direction of Flow: | <input type="checkbox"/> N <input type="checkbox"/> NE <input type="checkbox"/> E <input type="checkbox"/> SE <input checked="" type="checkbox"/> S <input type="checkbox"/> SW <input type="checkbox"/> W <input type="checkbox"/> NW <input type="checkbox"/> No Flow |
| OHWM Width (ft.): | 10' |
| Sinuosity: | <input type="checkbox"/> Braided <input checked="" type="checkbox"/> Meandering <input type="checkbox"/> Straight <input type="checkbox"/> N/A |
| Stream Width (ft.): | 10' Water Surface (At Crossing Location) N/A |
| Stream Depth (ft.): | <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1-3 <input type="checkbox"/> 3-6 <input 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: | Vegetation line |
| 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 type="checkbox"/> 4:1 <input type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input checked="" type="checkbox"/> Vertical Right: <input type="checkbox"/> 4:1 <input type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input checked="" type="checkbox"/> Vertical |

Photos: S304HA002-001 N
 S304HA002-002 E
 S304HA002-003 S
 S304HA002-004 W

Qualitative Attributes

Water Appearance:

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

Stream Substrate %:

Aquatic Habitats:

- Sand Bar Gravel Riffle In-stream Emergent Plant 20% Cover:
 Gravel Bar Deep Pools In-stream Submerged Plant % Cover:
 Mud Bar Bank Root Systems Fringing Wetlands Characteristics:
 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 - 0' Right - 0'

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

Disturbances:

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

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Habitat ID Number:

Comments:

Stream Quality:

- High Moderate Low