

Waterbody Data Form

S302HA 001

*Mile posts
not on maps/GPS;
approx. fr. old line*

Centerline Re-Route Access Road Ancillary Facility Transmission Line Other

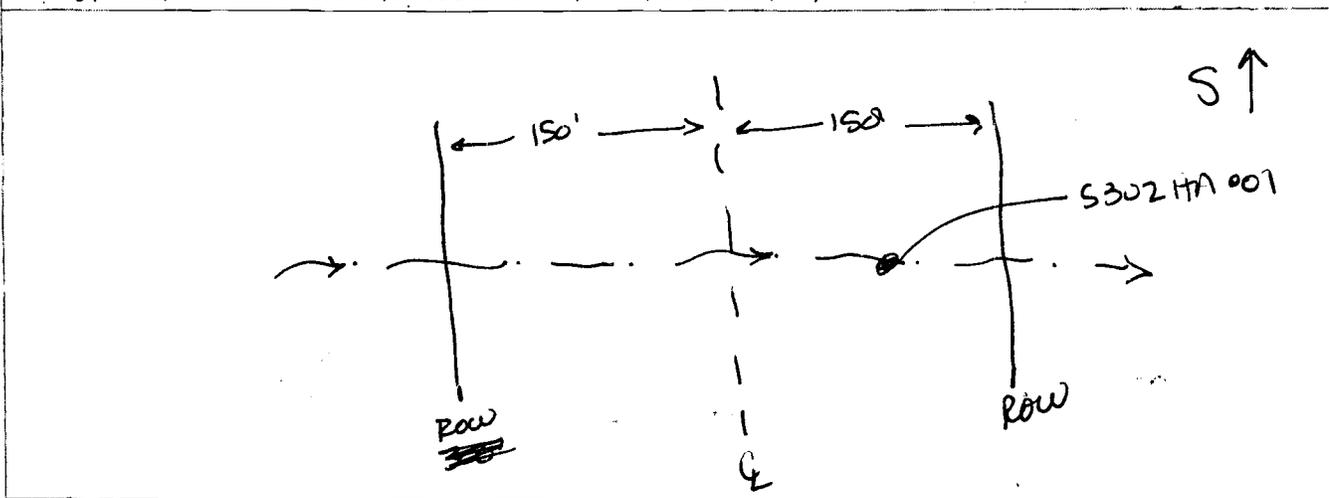
Centerline ID: **07-02-2012 Prelim Q** Project Designated Name: **Keystone XL pipeline**

Date: **7.12.12** Client/Project Name: Milepost Enter/Exit: **296.8**

Team: **Bio 302** State/County: **SD/HA** Quad Name:

Logbook No.: **302-4** Logbook Page No.: **3** Tract No.: **ML-SD-HA-00510.000**

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



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.): **2'**

Sinuosity: Braided Meandering Straight N/A

Stream Width (ft.): **TOB → TOB = 5'** Water Surface (At Crossing Location) **2'**

Stream Depth (ft.): 0 1-3 3-6 6-12" 12-18 18-24 24-36 36-48 48-60 60+

OHWM Indicators: **clear natural line, lead + banks**

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

*1' deep
2' wide
1:1 banks*

*photos: S302HA001-001 SE
-002 NE (up gradient)
-003 SW (down road)*

S302HA001
(Cont.)

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 %:

Small pools of standing water - erosional
Muck / sand

Aquatic Habitats:

- Sand Bar Gravel Riffle In-stream Emergent Plant % 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 - 75' 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 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:

- road crossing close

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Habitat ID Number:

Very low species / structural diversity.
observed N. leopard frog in pool.

Comments:

steep / narrow ephemeral drainage

Stream Quality:

- High Moderate Low