

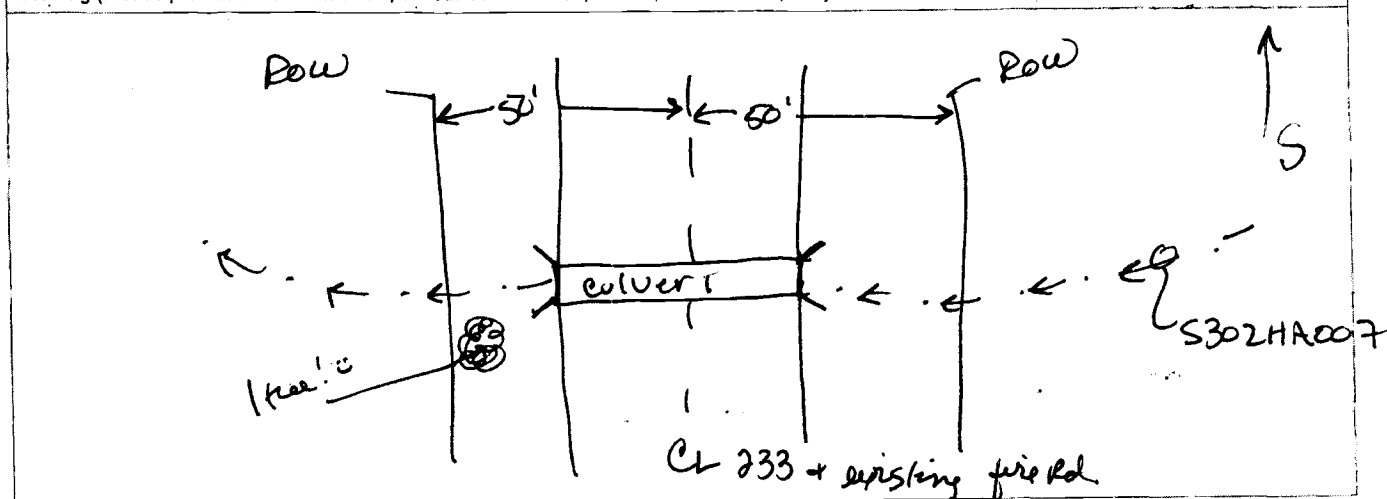
Waterbody Data Form

S302 HA007
CAR 233

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

Centerline ID: issued 2012-07-02		Project Designated Name: KXL pipeline	
Date: 7.18.12	Client/Project Name:		Milepost Enter/Exit: CAR 233 MP 1.2
Team: Bio 302	State/County: SD/HA		Quad Name:
Logbook No.: 302-	Logbook Page No.:	Tract No.: AR-SD-HA-13150.000	

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.):		avg. 3'					
Sinuosity:		☐ Braided	☒ Meandering	☐ Straight	☐ N/A		
Stream Width (ft.):		avg. 3' DB-DB 10'		Water Surface (At Crossing Location) 3' avg			
Stream Depth (ft.):		☐ 0	☐ 1-3	☒ 3-6	☐ 6-12	☐ 12-18	☐ 18-24
		☐ 24-36	☐ 36-48	☐ 48-60	☐ 60+		
OHWM Indicators:		bed-banks, bent/matted veg.					
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	

photos: -001 S across

-002 W (up)

-003 E (down)

004

S302 HA007
(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 %: <u>ea Sand / silt / clay</u>			
Aquatic Habitats:			
☐ Sand Bar	☐ Gravel Riffle	☐ In-stream Emergent Plant	% Cover: <u>not in ROW -</u>
☐ Gravel Bar	☐ Deep Pools	☐ In-stream Submerged Plant	% Cover: <u>outside ROW</u>
☐ Mud Bar	☒ Bank Root Systems	☐ Fringing Wetlands	Characteristics: <u>= pools of standing water</u>
☐ Undercut Banks	☐ Overhanging Trees/Shrubs	☐ None	
Aquatic Organisms Observed: <u>2 → ① dragon / damselflies</u>			
Riparian Zone:			
Width of Natural Vegetation Zone from Edge of Active Channel out to Flood Plain (ft): Left - <u>100+</u> Right - <u>100+</u>			
Vegetative Layers: ☒ Herbs ☐ Shrubs ☐ Trees ☐ Multiple - <u>1 tree down gradient</u>			
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 - <u>fire Rd. & culvert</u>			
Channel Condition:			
☐ Channelization/Braiding	☒ Unnatural Straightening	☐ Downcutting	
☐ Dikes/Berms	☒ Excessive Bank Erosion	☐ N/A	<u>@ Road Xing</u>
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:	<u>1 clump of balsam poplar - otherwise very low spp. & structural diversity.</u>

Comments:

Stream Quality:	☐ High ☐ Moderate ☒ Low
<u>- disturbed w/in ROW due to existing fire road & culvert pools of standing water outside of ROW.</u>	