

**Table 2 Approximate Travel Times to the Sheyenne River and Lake Ashtabula for Water Flow in Well-Defined Channels**

Stream Crossing	MP	Approx. Stream Distance (miles) to the Sheyenne River/ Lake Ashtabula	Approximate Travel Time (hours) to the Margin of the Aquifer		Contributory Pipeline Segment (miles)	Maximum Occurrence Interval (years; any size spill) <sup>1</sup>
			Dry Stream Channel	Flowing Channel		
Intermittent Stream	104.9	5.6	Would not reach river	3.0 ± 0.5 hrs	0.2	90,900
Intermittent Stream	111.0	7.1	Would not reach river	3.5 ± 0.5 hrs	0.2	90,900
Intermittent Stream	112.8	6.6	Would not reach river	3.5 ± 0.5 hrs	0.2	90,900
Intermittent Stream	113.2	6.4	Would not reach river	3.0 ± 0.5 hrs	0.2	90,900
Intermittent Stream	126.8	2.1	Would not reach river	1.0 ± 0.25 hrs	0.2	90,900
Intermittent Stream	127.5	2.0	Would not reach river	1.0 ± 0.25 hrs	0.2	90,900
Intermittent Stream	128.0	1.6	Would not reach river	1.0 ± 0.25 hrs	0.2	90,900
Sheyenne River (perennial)	169.1	0.0	NA	0.25 ± 0.25 hrs	0.3	30,300
Intermittent Stream	169.3	0.5	NA <sup>2</sup>	0.5 ± 0.25 hrs	0.3	30,300
Intermittent Stream	172.3	3.2	Would not reach river	1.5 ± 0.25 hrs	0.2	90,900
Intermittent Stream	173.1	2.3	Would not reach river	1.0 ± 0.25 hrs	0.2	90,900
Intermittent Stream	173.8	2.1	Would not reach river	1.0 ± 0.25 hrs	0.2	90,900
Intermittent Stream	173.9	2.2	Would not reach river	1.0 ± 0.25 hrs	0.2	90,900
<b>TOTAL</b>					<b>2.8</b>	<b>5,400</b>

<sup>1</sup>Assumes that intermittent streams flow 50 percent of the time.

<sup>2</sup>For this analysis, it is conservatively assumed that a spill capable of reaching this particular channel could potentially reach the Sheyenne River due to the steep terrain. However, oil flow may be completely contained on the Sheyenne River floodplain prior to reaching the river, but would depend on site-specific conditions at the time of a spill.

