

Table 1: Discourse illustration

Event	Time	Keystone	State government	Federal government	Local indigenous organization(s)	Local residents	Labor unions	Dakota Rural Action	Bold Nebraska	Sierra Club	350.org	Indigenous Environmental Network	TransCanada whistleblower
Canada National Energy Board–OH-1-2009 ¹	Mostly 2009	⊙	○	⊙	⊙	⊙	⊙	○	○	⊙	○	○	○
South Dakota Public Utilities Commission–HP09-001 ²	Mostly 2009	⊙	⊙	○	○	○	○	⊙	○	○	○	○	○
Montana Department of Environmental Quality–Certificate of Compliance	March 2012 ³	⊙	⊙	○	○	○	○	○	○	○	○	○	○
Senate of Canada–TransCanada whistleblower testimony	June 6, 2013	⚠	○	⊙	○	○	○	○	○	○	○	○	⊙
South Dakota Public Utilities Commission–HP14-001 ⁴	Mostly 2014	⊙	⊙	○	⊙	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙
Nebraska Public Service Commission–OP-0003 ⁵	Mostly 2017	⊙	⊙	○	⊙	⊙	○	⊙	⊙	○	○	○	○
Montana Department of Environmental Quality–401 Water Quality Certification	Mostly 2020	⊙	⊙	○	○	⊙	○	⊙	○	○	○	○	○

¹ <https://apps.cer-rec.gc.ca/REGDOCS/Item/View/550305> ² <https://puc.sd.gov/Dockets/HydrocarbonPipeline/2009/hp09-001.aspx>

³ <https://deq.mt.gov/DEQAdmin/mfs/keystonex1/keystonex1comprehensive>

⁴ <https://puc.sd.gov/Dockets/HydrocarbonPipeline/2014/hp14-001.aspx> ⁵ <https://psc.nebraska.gov/natural-gas/keystone-xl-pipeline>

Table 2: Problems

Year	Month Event	Brief description
2010	April BP Deepwater Horizon Oil Spill	
	June 1st significant Keystone oil spill	Keystone spills 400 barrels of oil in North Dakota. The spill is first discovered by an adjacent land owner after about 30 minutes. ⁶
	July Kalamazoo River oil spill	
2011	Aug Begin of anti Keystone XL protests	Protesters gather outside the white House. On August 29 James Hansen, head of NASA's Goddard Institute for Space Studies is arrested. ⁷
2016	April Begin of Dakota Access Pipeline protests	
	2nd significant Keystone oil spill	Keystone spills 400 barrels in South Dakota. ⁸
2017	Nov 3rd significant Keystone oil spill	Keystone spills 6,592 barrels in South Dakota.
2019	Oct 4th significant Keystone oil spill	Keystone spills 4,515 barrels into a wetland in North Dakota. ⁹
2020	May 5th significant Keystone oil spill	During a routine inspection, an employee discovers a 442 barrel spill in progress at the Lucas terminal in Jefferson county, Texas, caused by internal corrosion. ¹⁰

⁶ <https://www.thedickinsonpress.com/business/energy-and-mining/4004561-5-years-after-spill-rancher-and-pipeline-junkie-still-has>.

⁷ <https://www.scientificamerican.com/article/jim-hansen-risks-jail-research-clear/>.

⁸ <https://www.usnews.com/news/articles/2016-04-08/keystone-pipeline-leak-worse-than-thought>.

⁹ <https://www.nytimes.com/2019/10/31/us/keystone-pipeline-leak.html>.

¹⁰ <https://www.jbarg.net/posts/2021-04-02-keystone-spill-without-media-coverage/>.