

**WRITTEN CONTAMINATION INCIDENT FOLLOW-UP REPORT**

(Page 1 of 2)

RETURN COMPLETED FORM TO SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
GROUND WATER QUALITY PROGRAM  
JOE FOSS BUILDING  
523 EAST CAPITOL AVENUE  
PIERRE SD 57501-3182

SITE NAME: TransCanada Keystone Pipeline - Freeman Pump StationSPILL LOCATION: 28245 436th Ave., Freeman, SDLATITUDE: 43.29278 LONGITUDE : -97.4804LEGAL LOCATION (TOWNSHIP/RANGE): T098N R056W S020RESPONSIBLE PARTY: TransCanada Keystone Pipeline, LPMAILING ADDRESS: 13710 FNB Parkway, Suite 300CITY: Omaha STATE : NE ZIP: 68154TELEPHONE: \_\_\_\_\_ (HOME) (402) 492-7300 (WORK)DATE OF SPILL OR WHEN DETECTED: 8-10-2010 TIME: 11:30amWHAT WAS THE DURATION OF THE RELEASE? <1.5 hoursSUBSTANCE(S) RELEASED: Crude OilQUANTITY RELEASED: < 5 gallonsCHEMICAL NAME: Canadian Sour Crude CAS #: \_\_\_\_\_  
CAS # 8002.05.09

IS SUBSTANCE ON THE "SARA 302 LIST"? YES \_\_\_\_\_ NO  DON'T KNOW \_\_\_\_\_  
"CERCLA HAZARDOUS SUBSTANCE LIST"? YES \_\_\_\_\_ NO  DON'T KNOW \_\_\_\_\_  
"SOUTH DAKOTA REGULATED SUBSTANCE"? YES  NO \_\_\_\_\_ DON'T KNOW \_\_\_\_\_

CONSULTANT: NAIDENTIFY KNOWN HEALTH RISKS: None KnownWHAT PERTINENT MEDICAL ADVICE WAS ISSUED? None RequiredLAND USE (RESIDENTIAL, INDUSTRIAL, RURAL, OTHER): Rural

UTILITIES INVESTIGATED (WATER, SEWER, TELEPHONE, CATV, STORM WATER, OTHER):

Release occurred in a rural setting within the boundaries of the pump station, no utilities.
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**FOLLOW-UP REPORT CONTINUED**

(Page 2 of 2)

DENR FILE #: 2010.169

ENVIRONMENTAL MEDIA IMPACTED (SURFACE SOIL, SUBSURFACE SOIL > 3' BELOW GROUND, GROUND WATER, SURFACE WATER, INDOOR AIR, OUTDOOR AIR, ETC.):

Surface gravel / soil.

DISTANCE TO AND NAME OF CLOSEST SURFACE WATER OR DRAINAGE:

Road ditch along 436th Avenue.

DEPTH/DISTANCE TO AND NAME OF CLOSEST AQUIFER: >100' depth (SD Aquifer Map 25)

DEPTH/DISTANCE TO NEAREST DRINKING WATERWELL: 120' depth - farm 0.5 miles east

CUBIC YARDS OF SOIL EXCAVATED/TREATED: Approximately 20

WAS FREE PHASE OR POOLED PRODUCT PRESENT? Yes

DIMENSIONS OF EXCAVATION: Approximately 24 ft. by 33 ft.

CONTAMINATED MATERIALS DISPOSAL SITE: Waste Management - Spruce Ridge LF

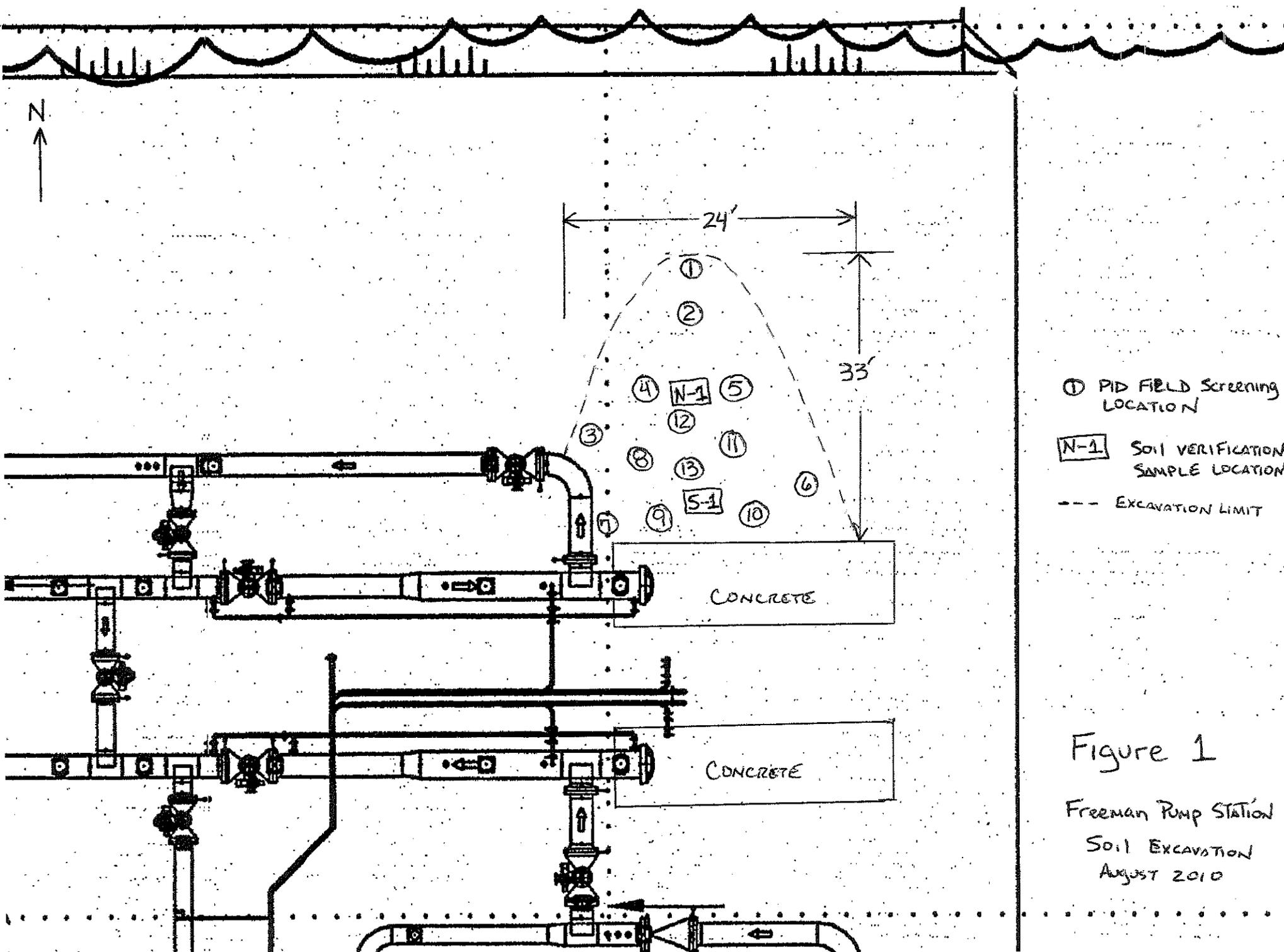
DATE MATERIAL WAS DISPOSED OF: To be determined. Planned for early September, 2010.

IMMEDIATE CORRECTIVE ACTION TAKEN AND ADDITIONAL WORK PLANNED:

At approximately 11:30 am CST on August 10th, 2010, contractor construction staff who were on site noticed a fine mist/spray of oil coming from the pig trap receiver fitting in the station yard. They immediately called local Operations' staff that were dispatched to site. The operations personnel arrived within one hour and immediately isolated the leak and began cleaning up the oil which had sprayed onto the gravel within the pump station. A skid-steer loader and other equipment were mobilized to the site along with qualified spill response personnel. Visually stained gravel/soils were scraped/excavated from the surface around the pig trap structures using the skid-steer loader and hand tools. Impacted gravel/soil was placed in roll-off containers for later transfer to an approved landfill facility. All excavations were less than two feet in depth and groundwater was not encountered. Following gravel/rock removal, the excavated area was screened using a photoionization detector (PID) with 10.6 eV lamp. Confirmation soil samples were collected at two locations after excavation was completed. Soil sample and PID screening locations are shown in Figure 1. The field PID screening and laboratory analytical results for benzene, toluene, ethylbenzene and xylenes (BTEX), naphthalene, and Total Petroleum Hydrocarbons as Diesel (TPH-Diesel) are summarized on Table 1 and Table 2. In addition, one composite waste soil sample was collected from the roll-offs and laboratory analysis results are shown in Table 2. Based on field observations, measurements, and analytical data, the response excavation efforts have mitigated impacts to the surface and shallow subsurface soils to below SD DENR Tier 1 action levels. The excavated area has been backfilled with clean material and no additional work is planned.

FORM COMPLETED BY: Robert M. Baumgartner

DATE: September 9, 2010



- ① PID FIELD Screening LOCATION
- N-1 SOIL VERIFICATION SAMPLE LOCATION
- EXCAVATION LIMIT

Figure 1  
 Freeman Pump Station  
 Soil Excavation  
 August 2010

**Table 1 - PID Field Screening  
TransCanada Keystone Pipeline  
Freeman Pump Station; Freeman, South Dakota**

Location	Units	1	2	3	4	5	6	7	8	9	10	11	12	13
Sample Date		8/11/10	8/11/10	8/11/10	8/11/10	8/11/10	8/11/10	8/11/10	8/11/10	8/11/10	8/11/10	8/11/10	8/11/10	8/11/10
Lithology		Gravel												
Depth	(feet)	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<1	<1	<1
PID	(ppm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Table 2 - Laboratory Analysis Soil Verification and Waste Soil Analysis  
TransCanada Keystone Pipeline  
Freeman Pump Station; Freeman, South Dakota**

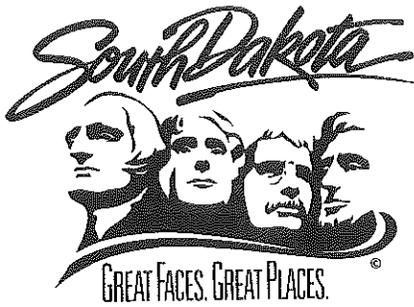
Location	Units	N-1	S-1	Disp-1 Waste	Tier 1 Action Level
Sample Date		8/12/10	8/12/10	8/12/10	
Lithology		Gravel	Gravel	Gravel	
Depth	(feet)	<2	<2	<2	
<b>Chemical of Concern</b>					
Benzene	µg/kg	<20.8	<21.8	<22.4	200
Ethylbenzene	µg/kg	<52	<54.4	<56.1	1,500
Toluene	µg/kg	<52	<54.4	<56.1	1,000
Xylene (Total)	µg/kg	<156	<163	256	300,000
Naphthalene	µg/kg	<208	<218	<224	25,000
Diesel Components	mg/kg	<10.5	<10.9	582	500**

NOTES: mg/kg = Milligrams per kilogram, equivalent to parts per million (ppm) dry weight

<x = Not detected to reporting limits of x

\*\* = Tier 1 "Trigger Level" for total petroleum hydrocarbons

< 3= less than three feet of excavation



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

PMB 2020  
JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

November 12, 2010

Robert Baumgartner  
TransCanada Keystone Pipeline, LP  
13710 FNB Parkway  
Omaha NE 68154

Subject: Department of Environment and Natural Resources File 2010.169 – TransCanada  
Keystone Pipeline – Freeman Pump Station

Dear Mr. Baumgartner,

The Department of Environment and Natural Resources reviewed all information submitted regarding the above referenced spill. The department has determined the case is closed.

On August 10, 2010, contractors working at the Freeman pump station noticed a fine mist oil spray coming from the pig trap receiver fitting. In response to the release, TransCanada operations staff isolated and stopped the leak and performed a remedial excavation. Approximately 16.67 tons of potentially contaminated soil were removed from the site and properly disposed of. All post-excavation soil samples were below the department's Tier 1 Action Levels.

The department has concluded based on the clean-up activities TransCanada conducted, this crude oil spill poses no risk at this time. Therefore, the department will not require TransCanada to take any additional action in this matter. If problems arise because of any remaining contamination, TransCanada may be responsible for conducting additional assessment and remediation.

Please contact Brian Walsh of my staff at (605) 773-3296, if you have any questions. Thank you for your efforts and cooperation regarding this spill.

Sincerely,

Bill Markley, Administrator  
Ground Water Quality Program  
(605) 773-3296

cc: Dave Hoffman, Hutchinson County Emergency Manager, Parkston, SD