

## STATE OF COLORADO

Bill Ritter, Jr., Governor  
James B. Martin, Executive Director

*Dedicated to protecting and improving the health and environment of the people of Colorado*

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Denver, Colorado 80246-1530  
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Located in Glendale, Colorado  
<http://www.cdphe.state.co.us>

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8100 Lowry Blvd.  
Denver, Colorado 80230-6928  
(303) 692-3090



Colorado Department  
of Public Health  
and Environment



## FAX COVERSHEET

Water Quality Control Division, Engineering Section  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530  
Phone: 303-692-3500  
Fax: 303-782-0390



PLEASE DELIVER TO: Roger Freeman (Davis, Graham, & Stubbs) FAX#: 303-893-1379

COMPANY/AGENCY: Petro Canada Resources USA Inc

SPILL #: 2007-0962 RE: release unknown qty/unknown material/underdrain clog/sheep/pond

FROM: Ellen Levine-Jones EMAIL: -ellen.levine@state.co.us PHONE #: 303-692-3528

TOTAL PAGES (INCLUDING COVER SHEET): one DATE: 12/7/07

In regard to the report of a release of material from your facility, please submit a written report to the Water Quality Control Division within five (5) working days of the date of the event or receipt of this fax sheet. Please include the following information:

- 1) Estimated quantity of material and type released, description of the event and its cause.
- 2) Exact dates and times of the event, including duration? If release still occurring, the date and time the release is expected to be stopped.
- 3) Exact location of release (i.e. address, lat/long, road name and mile marker.), were other entities affected, if so, who, where located, how were they affected?
- 4) Did materials reach surface waters of the state? If yes, what water body and estimated volume? Did it soak into soil, was groundwater impacted, yes/no, why? Estimated volume?
- 5) Measures taken or planned to clean up spill or release. If not going to do clean up, why not?
- 6) Results (attach reports) of any samples taken, describe impacts to surface water (i.e. fish kill).
- 7) Describe notification if surface water impacted (i.e. signs posted, list downstream users, etc.).
- 8) Steps taken or planned to prevent reoccurrence of the event.
- 9) Attach MSDS's for any and all chemicals involved in the spill or release.

Please submit the report to my attention at the above address. Prior to the 5-working day deadline, you may request an extension to submit the report if sample analyses are justifiably going to require more time to analyze than the reporting time allows. Please send me an email with the extension request.

Should you have any questions please feel free to contact me at your earliest convenience via the email, fax number or phone number listed above. Thank you.

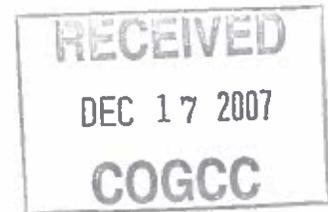
**EMERGENCY MANAGEMENT PROGRAM 24-HOUR SPILL REPORTING HOTLINE**  
**1-877-518-5608**



**PETRO-CANADA** Petro-Canada Resources (USA) Inc.

December 13, 2007

Mrs. Ellen Levine-Jones  
Colorado Department of Public Health and Environment  
Water Quality Control Division, Engineering section  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530



RE: Spill# 2007-0962  
Schroeder 23-33  
Sec. 23 T6N, R64W  
Weld County, Colorado

## **Response to CDPHE Questionnaire**

### ***1) Estimated quantity of material and type released, description of the event and its cause.***

Less than 5 gallons of material is estimated to be involved in the event. Sample data indicates the material contains small amounts of hydrocarbons. On 12/5/07 a PCR operational crew was performing an investigation at the Schroeder 23-23 lease. The investigation was undertaken at the request of the tenant farmer due to a complaint that his field did not properly drain after Petro-Canada Resources (USA) Inc. (PCR) well drilling operations were completed at the site. PCR suspected that the ground water drain tile system may have been adversely affected by PCR operations. During this investigation PCR identified that a portion of the drainage system had been damaged during excavation of the reserve pit. This damage caused a build up of dirt and silt in a portion of the system. PCR proceeded to clear the drain tile by means of water jetting the affected portion of the system. Once the system was cleared and water began flowing, a PCR employee went to confirm that the system was draining to the irrigation outfall. The employee confirmed the water was discharging into the irrigation ditch; however, there was a sheen on the surface of the discharged water.

### ***2) Exact dates and times of the event, including duration? If release still occurring, the date and time the release is expected to be stopped.***

The sheen was noted at approximately 3PM on 12/5/07. Immediate actions were taken to contain the suspect water upstream of the outfall. See response Number 8 for further details.

999 18<sup>th</sup> Street, Suite 600  
Denver, CO 80202  
Phone: 303.297.2100  
Fax: 303.297.7708



**PETRO-CANADA** Petro-Canada Resources (USA) Inc.

**3) Exact location of release (i.e. address, lat/long, road name and mile marker.), were other entities affected, if so, who, where located, how were they affected?**

The location is near the intersection of Weld County roads 57 and 66.  
Latitude 40.46583 / Longitude -104.525. See attached map.

**4) Did materials reach surface waters of the state? If yes, what water body and estimated volume? Did it soak into soil, was groundwater impacted, yes/no, why? Estimated volume?**

The subject water reached a nearby irrigation ditch that was essentially dry at the time; however, it was contained as described below well before it reached the closest surface stream, known as Crow Creek. The volume of material that actually reached the ditch is estimated at less than 1 gallon (sheen on surface of water). Water in the immediate area soaked into the soil, but groundwater was not impacted based on sampling results.

**5) Measures taken or planned to clean up spill or release. If not going to do clean up, why not?**

The suspect water was contained so that samples could be collected to determine appropriate actions. Sample results of the suspect water and soil in the irrigation ditch were analyzed for TRPH (Total Recoverable Petroleum Hydrocarbons) and BTEX (benzene, toluene, ethyl benzene, and xylene). Based on these results, soil remediation is not necessary and the water will be used at another drilling site.

**6) Results (attach reports) of any samples taken, describe impacts to surface water (i.e. fish kill).**

The results of the sampling noted in item 5 above were as follows:

- Irrigation ditch (water and soil) no BTEX or TRPH detected in the water. TRPH was detected in the soil at the outfall but at levels below regulatory limits
- Direct samples of water and soil clogging the drainage system indicated the presence of hydrocarbons but at levels below regulatory limits
- Suspect water that was contained upstream of the irrigation ditch had a low detection for TRPH and trace levels of certain BTEX constituents (no benzene). Again, all detected levels were below regulatory limits.
- No direct or lingering impacts to ditch surface water were noted. All affected landowners were apprised of the situation and cooperated in the response.

See attached reports.

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**PETRO-CANADA** Petro-Canada Resources (USA) Inc.

**7) Describe notification if surface water impacted (i.e. signs posted, list downstream users, etc.).**

Not Applicable

**8) Steps taken or planned to prevent reoccurrence of the event.**

PCR operations crew responded quickly and appropriately by containing the suspect water until appropriate evaluations could be completed. The root cause of the event, the damage to the ground water tile drainage system, was caused during excavation of the reserve pit to support drilling operations. The exact source of the sheen on the water is unknown. The source of the sheen could have been due to the natural degradation of organic materials that were held up in the drainage system since initial PCR drilling operations in March of 2007. This is the first incident of this nature involving PCR operations in the DJ Basin. PCR operational staff responded immediately and conscientiously. Lessons learned from this event will be integrated into PCR activities. Operators will be provided guidance on how to identify and avoid damaging this type of tile drainage system. If damage does occur, operators will notify PCR management upon discovery.

**9) Attach MSDSs for any and all chemicals involved in the spill or release.**

The exact material remains unidentified, therefore no MSDSs are attached.

Please contact me at (303) 350-1180 if you have any questions or require additional information

Sincerely,

Richard Eggleston  
Senior Advisor, TLM

**Attachments:**

Petro-Canada Site Location map (1 page)  
Western Environmental Technologies, Inc Report (23 pages)

CC: Randall Ferguson –COGCC  
Laurie Exby-WCDPHE  
Gary Dounay-EPA Region 8

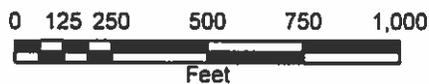
999 18<sup>th</sup> Street, Suite 600  
Denver, CO 80202  
Phone: 303.297.2100  
Fax: 303.297.7708



**Legend**

- Schroeder 23-33 Well Location
- County Road

1 inch equals 500 feet



Petro-Canada Resources (USA) Inc.  
 888 18th Street, Suite 800  
 Denver, Colorado 80202  
 (303) 297-2300

**Schroeder 23-33 Well Location**  
 Township 6 North, Range 64 West  
 Section 23: SWSW  
 Weld County, Colorado

Create Date  
13/12/2007

