

**3R – 467**

**2003 NOTICE**

## **Burlington Resources soil and groundwater contamination Marcotte #1**

**Marcotte #1 1540' FSL 935' FEL ,Unit G Sec 8, T31N, R10W, NMPM**

**Lease Number: NMSF 078604**

**San Juan County, NM**

The soil and ground water contamination was discovered 9/15/03 on the Marcotte #1 while replacing the fiberglass water tank with a new metal free standing water tank. BR notified OCD (verbal, Denny Foust, Aztec Office) of the soil impacts and excavation 9/17/03. Groundwater impacts were discovered 9/17/03 and BR notified OCD regarding ground water contamination on 9/18/03 (verbal Bill Olson Santa Fe and Denny Foust).

This information is a technical follow up to these notifications and will be included in the annual groundwater report submitted by BR.

### **Discovery**

Petroleum impacted soils were observed in the bottom of the tank excavation on 9/15/03. The fiberglass tank was inspected and determined to be in good condition with no visible leaks. Further excavation of impacted soils has revealed more extensive soil impacts both vertically and horizontally.

### **Soil Excavation**

Approximately 2000 cu. yds. of soil has been removed to date and land farmed on an adjacent location (Marcotte #2). More soil excavation is planned but the extent of impacted soils has not been defined horizontally. The vertical extent of the excavation beneath the water tank location is groundwater, at approximately 28 feet.

Impacted soils will be excavated to a maximum depth of approximately 28 feet. A soil-boring program will be completed to define the horizontal and vertical extent outside the water tank excavation location.

### **Ground Water**

Ground water was detected at a depth of approximately 28 feet below the tank location. Product was detected on the groundwater in the excavation. Ground water wells will be installed parallel to the adjacent wash, at the source, and downgradient.

### **Site Background**

Well History: 52 yr old well

Land Status: Fee, landowner has been notified

Earth Pit was registered with OCD in 1985. OCD Aztec, NM and BLM Farmington, NM have been notified.

Hydrology: Approximately, 28 feet to groundwater. Groundwater gradient approximately towards Animas River in a west - southwest direction. Location is 50 feet from ephemeral wash and approx. 3000 ft from Animas River.

Contamination: Contamination is very localized under old fiberglass water tank area vertically and slowly disperses with depth until ground water table is reached. At groundwater table the contamination appears to spread laterally on top of groundwater.

Location: South of Dutchman Hill. Within Animas river flood plane at mouth of dry wash adjacent to east hill slope of valley.

**Current Activities**

Major extent of contamination under fiberglass tank location within production location has been excavated. The remaining contamination is approximately 3-12 inches above the ground water table and the lateral extent is not determined.

**Planned activities:**

Lateral extent of contamination at ground water table depth will be delineated using auger drill rig this week. A series of soil borings will be drilled to determine the horizontal extent and magnitude of spill. Concurrently, more excavation of material in main pit will occur down to the groundwater table. Ground water well installations downgradient will occur in borings determined to be free of contamination.

## **Marcotte #1 Soil Remediation**

**Well History:** 52 yr old well, separator, dehy. and storage tank all drained to earthen pit until 1994 when fiberglass pit was installed.

**Production History:** 1 MMcf/d gas and 30 bbls of condensate per day for approx. 40 yrs. Currently makes 200 Mcfd and 2 bbls per day. Storage tank was gun shot damaged at least once in its history.

**Land Status:** Fee land owner is located in Garden City, KS. Landowner notification pending, Dean Price.

**Ownership:** El Paso drilled the well and was original operator. Currently, Burlington 32 % , BP 52 % , Conoco Phillips 3%, and Energen 9% . Dean Price is in process of contacting partners.

**Earth Pit** was registered with OCD in 1985. OCD and BLM have been notified.

**Hydrology:** Approximately, 28 feet to groundwater. Groundwater gradient approximately towards Animas River in a west - southwest direction. Location is 50 feet from ephemeral wash and approx. 3000 ft from Animas River. Area is within alluvial aquifer of the Animas river valley.

**Contamination:** Typical condensate release from earth pit. Contamination is very localized under old pit area vertically and slowly disperses with depth until ground water table is reached. At groundwater table the contamination spreads laterally on top of groundwater. Groundwater and fee product observed in the excavation at 28 feet.

**Location:** South of Dutchman Hill. Within Animas river flood plane at mouth of dry wash adjacent to east hill slope of valley.

**Exposure:** Two residents within 1000 feet unknown if they have or use wells. Wells in area are completed at approx. 40 feet in alluvium. Irrigation ditch approx. 300 feet west of location.

## **Current Activities**

Excavated to date approximately 2000 cu yd of soil material with Track hoe ( M&M trucking)

Landfarm material at the Matrcotte #2 1/4 mile away. Capacity of landfarm at 80 %. Some soil will have to be land farmed of site at commercial facility.

Multiple sources suspected based on excavation observations and types of contamination. Possible old spills, drill pit, and earth pit. Earth pit is major source.

Major extent of contamination under earth pit and other areas excavated. Remaining contamination is 3-4 feet above groundwater and lateral extent not determined.

## **Planned activities:**

Lateral extent of contamination at groundwater table depth will be delineated using auger drill rig this week. A series of soil borings will be drilled to determine the horizontal extent and magnitude of spill. Dean Price will contact landowners.

Concurrently, more excavation of material in main pit.

Groundwater investigation, Next week

**Cost**

Cost to date: Aprox. 30,000

Cost to complete: 150,000-200,000

2003

New Mexico Oil Conservation Division  
Attn: Bill Olson  
Email

**Re: Burlington Resources Marcotte #1**  
**1540' FSL 935' FEL ,Unit G Sec 8, T31N, R10W, NMPM**  
**Lease Number: NMSF 078604**  
**San Juan County, NM**

Mr. Olson:

The following is notification of soil and ground water impacts discovered at the Marcotte #1. In addition, a summary of the remediation progress to date. The soil and ground water contamination was discovered December 10, 2015 while replacing the fiberglass water tank with a new metal freestanding water tank. Petroleum impacted soils were observed in the bottom of the tank excavation. The fiberglass tank was inspected and determined to be in good condition with no visible leaks. Further excavation of impacted soils has revealed more extensive soil impacts both vertically and horizontally.

Approximately 1000 cu. yds. of soil has been removed to date and land farmed on an adjacent location (Marcotte #2). More soil excavation is planned but the extent of impacted soils has not been defined horizontally. The vertical extent of the excavation at the water tank location is groundwater, at approximately 28 feet.

Impacted soils will be excavated to a maximum depth of approximately 28 feet. A soil-boring program will be completed to define the horizontal and vertical extent outside the water tank excavation location.

Ground water was detected at a depth of approximately 28 feet below the tank location. Product was observed on the groundwater in the excavation. Ground water wells will be installed upgradient, at the source, and down gradient and then sampled.

**Well History:** 52 yr old well

**Land Status:** Fee, landowner has been notified

**Earth Pit** was registered with OCD in 1985. OCD Aztec, NM and BLM Farmington, NM have been notified.

**Hydrology:** Approximately, 28 feet to groundwater. Groundwater gradient approximately towards Animas River in a west - southwest direction. Location is 50 feet from ephemeral wash and approx. 3000 ft from Animas River.

**Contamination:** Contamination is localized under old fiberglass water tank area vertically and slowly disperses with depth until the ground water table is reached. The contamination appears to spread laterally on top of ground water.

**Location:** South of Dutchman Hill. Within Animas river flood plane at mouth of sand bed wash adjacent to east hill slope of valley.

**Current Activities**

Major extent of contamination under fiberglass tank and adjacent areas excavated within production location. Remaining contamination is approximately 3 feet above ground water and lateral extent has not been determined.

**Planned activities:**

Lateral extent of contamination at ground water table depth will be delineated using auger drill rig this week. A series of soil borings will be drilled to determine the horizontal extent and magnitude of spill. Concurrently, more excavation of material in main pit will occur. Ground water well installations down gradient will occur in borings determined to be free of contamination.

If you have any questions concerning this notification, please contact me at 326-9537.

Sincerely,

Gregg Wurtz  
Environmental Specialist

Attachment:

cc: Denny Foust, OCD Aztec Office  
Correspondence