#### OIL AND GAS DOCKET NO. 03-0240882

THE APPLICATION OF CYPRESS E & P CORPORATION TO CONSIDER ANNULAR DISPOSAL OF DRILLING FLUIDS FOR THE KASPAREK ET AL LEASE WELL NO. 1, WILDCAT FIELD, FORT BEND COUNTY, TEXAS

**Heard by:** Donna K. Chandler, Technical Examiner

Mark J. Helmueller, Hearings Examiner

Appearances: Representing:

Michael Hamric Cypress E & P Exploration

Donald Pfau

Chiu-Pin Saw Himself as Protestant

Su-Min Ruliffson Translator for Mr. Saw

**Procedural history:** 

Application received: October 22, 2004

Protest received:
Hearing held:
Transcript:
PFD Issued:
November 14, 2004
December 27, 2004
February 2, 2005
February 4, 2005

#### **EXAMINERS' REPORT AND PROPOSAL FOR DECISION**

## **STATEMENT OF THE CASE**

Cypress E & P Corporation ("Cypress") requests Commission authority for annular disposal of drilling fluids for its Kasparek et al No. 1 in Fort Bend County. This application was protested by Mr. Chiu-Pin Saw, the owner of the surface of the tract on which the well is located. Mr. Saw also owns a portion of the minerals under the subject tract. Mr. Saw is concerned that the disposal of drilling fluids will pollute the land and water.

This application was received by the Commission's District Office in Houston on October 22, 2004. Prior to this filing, on October 13, 2004, Cypress hand-delivered to Mr.

Saw a copy of the application and requested a waiver of objection from Mr. Saw. Mr. Saw did not sign the waiver, and on November 8, 2004, the District Office issued a permit to Cypress, authorizing annular disposal of drilling fluids pursuant to Rule 8. The administrative approval was granted because no written objection was filed with 15 days of the filing. Mr. Saw then filed a protest to the application with the District office on November 15, 2004, and the minor permit was suspended. Cypress then requested that a hearing be set to consider the application.

#### **DISCUSSION OF EVIDENCE**

The Kasparek et al No. 1 was drilled in October 2004 to a total depth of approximately 10,700 feet. The well has 2,805 feet of 10 ¾" surface casing cemented to surface. The well also has 7 ½" intermediate casing set at 8,483 feet, with top of cement behind the casing at approximately 4,600 feet. A 5" liner is hung inside the intermediate casing to total depth. The Texas Commission on Environmental Quality recommends that usable-quality water resources be protected to a depth of 2,000 feet in this well. The surface casing was tested to 1,500 psi on October 10, 2004, with no leak-off. The well has not yet been completed.

Cypress intends to dispose of the fresh water based drilling mud used to drill the well, by pumping the fluid down the annulus between the surface casing and intermediate casing. The fluid will enter formations between 2,805 feet (base of surface casing) and ±4,600 feet (calculated top of cement behind intermediate casing). The volume of fluid is estimated to be 30,000 barrels and the chloride content of the fluid is approximately 1,100 parts per million. Cypress requests a maximum surface injection pressure of 1,402 psig, which is 0.5 psi per foot of depth to the interval of disposal.

Cypress submitted an electric log of the subject well indicating numerous non-productive zones between 2,805 feet and 4,600 feet which Cypress believes will accept the drilling fluid.

Mr. Saw signed an oil and gas mineral lease on the subject property on March 26, 2004. However, Mr. Saw testified that he did not agree that a well could be drilled on his property. Mr. Saw alleges that Cypress altered some portions of the lease agreement pertaining to costs of gathering, marketing, etc. of any produced gas, after he had signed the lease. He won't agree to the annular disposal because Cypress can't guarantee that there won't be pollution in the future due to the disposal. Mr. Saw also alleges that Cypress knew from October 13, 2004, that he wouldn't agree to the annular disposal.

### **EXAMINER'S OPINION**

The examiners recommend that the application be approved because useable quality water will not be harmed. The surface casing integrity was proven by a pressure test on October 10, 2004. There was no pressure leak-off during the test. There are sands between 2,805 and 4,600 feet which should easily take the injected fluids. Limiting surface

injection pressure to 1,402 psi will insure that formations below the surface casing shoe do not fracture.

The concerns of Mr. Saw regarding his mineral lease with Cypress are not within Commission jurisdiction. However, the lease agreement provided by Mr. Saw specifically authorizes Cypress to dispose of drilling fluids into the annulus of the wellbore. Mr. Saw did not dispute this clause in the lease agreement.

## FINDINGS OF FACT

- 1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of hearing.
- 2. The application was protested by Mr. Chiu-Pin Saw, who owns the surface of the subject tract and a portion of the minerals under the subject tract.
- 3. The Kasparek et al No. 1 was drilled in September 2004 to a total depth of approximately 10,700 feet.
- 4. The Kasparek et al No. 1 is adequately cased and cemented to protect useable quality water.
  - a. The well has 2,805 feet of 10 3/4" surface casing cemented to surface.
  - b. The Texas Commission on Environmental Quality recommends that usable-quality water resources be protected to a depth of 2,000 feet in this well.
  - c. Cypress E & P Corporation pressure tested the surface casing to 1,500 psi with no leak-off.
  - d. The well has 7 %" casing set at 8,483 feet, with top of cement behind the casing at approximately 4,600 feet.
- 5. The injected fluid will be confined to the interval between 2,805 feet and approximately 4,600 feet. An electric log of the Kasparek et al No. 1 indicates numerous non-productive sands within this interval which should easily accept the drilling fluid.
- 6. As a result of drilling the Kasparek et al No. 1, there are approximately 30,000 barrels of fresh water based drilling fluids on site which must be disposed of. The chloride content of the fluid is about 1,100 parts per million.

### **CONCLUSIONS OF LAW**

- 1. Proper notice of this hearing was issued.
- 2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
- 3. Applicant has shown that the proposed annular disposal operations will not endanger oil, gas or geothermal resources or cause the pollution of fresh water resources, thus meeting the requirements of Statewide Rule 8.

# **RECOMMENDATION**

Based on the above findings and conclusions of law, the examiner recommends that the application be approved as set out in the attached Final Order.

Respectfully submitted,

Donna K. Chandler Technical Examiner

Mark J. Helmueller Hearings Examiner