



# RAILROAD COMMISSION OF TEXAS

## HEARINGS DIVISION

**OIL AND GAS DOCKET NO. 09-0294043**

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**THE APPLICATION OF SILVER SPIKE ENERGY OPERATING, LLC TO ADOPT  
FIELD RULES FOR THE SHERMAN, SOUTH (DAVIS SAND) FIELD, GRAYSON  
COUNTY, TEXAS**

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**HEARD BY:** Paul Dubois – Technical Examiner  
Laura Miles-Valdez – Hearings Examiner

**HEARING DATE:** December 16, 2014

**CONFERENCE DATE:** March 24, 2015

**APPEARANCES:**

Bill Spencer  
Frank Muser, P.E.

**REPRESENTING:**

Silver Spike Energy Operating LLC

### EXAMINER'S REPORT AND RECOMMENDATION

#### STATEMENT OF THE CASE

Silver Spike Energy Operating, LLC (Silver Spike) seeks to adopt field rules for the Sherman, South (Davis Sand) Field in Grayson County, Texas. The field is currently on county regular rules. Silver Spike is the only operator in the subject field. Silver Spike seeks the following field rules:

- A correlative interval from 7,752 feet to 8,112 feet;
- 80 acre standard proration units with 40 acre tolerance provisions;
- 330-foot lease line spacing and 660-foot between well spacing; and,
- A two-factor allocation formula based on 95 percent acreage and 5 percent per well.

Silver Spike also seeks to have any overproduction cancelled. The application is not protested.

The Examiners recommend Silver Spike's application be approved, with a modification to the requested spacing and density provisions. The Examiners recommend 80 acre base units with 40 acre optional units, and spacing based on standard distances for a 40 acre unit of 467 feet to the nearest lease line and 933 feet between wells. Silver Spike did not present evidence to demonstrate that non-standard spacing was warranted. Silver Spike does not consider the recommended provisions to be adverse.

### **DISCUSSION OF EVIDENCE**

The Sherman, South (Davis Sand) Field was discovered March 15, 1955, at a depth of 8,018 feet. There are currently no wells carried on the December 1, 2014, proration schedule. The county regular rules for fields deeper than 5,000 feet include 40-acre standard proration units with 20-acre tolerance provisions, lease line spacing of 467 feet, and between well spacing of 1,200 feet. The 1947 yardstick allowable is 133 barrels of oil (BO) per day (BOPD). Cumulative production from the field is 36,068 BO. Silver Spike has recently completed a well in this field.

On November 6, 2013, Silver Spike completed its Bois D'arc Fencepost Lease, Well No. 1, in the Davis Sand, a member of the Pennsylvanian-age Atokan Series. The producing interval for the well is from 7,798 feet to 7,854 feet. On initial potential testing the well produced by flowing 55 BO, and 2,050 thousand cubic feet (MCF) of gas. The oil gravity was 40.5° API. The gas to oil ratio was 37,272:1 and the flowing tubing pressure was 200 pounds per square inch (psi).

Silver Spike proposes a correlative interval of the field from 7,752'-8,112' as shown on the Gamma Ray-Neutron Log and Electric Log of the Silver Spike Energy Operating, LLC - Bois D'Arc Fencepost #1 (API No. 42-181-31538), Thomas Jones Survey A-635; Grayson County, Texas. The correlative interval includes portions of the Baker Sand, Atoka, and Davis Sand Formations. The Baker Sand and Davis Sand Formations have been successfully commingled in the past. Silver Spike intends to produce multiple intervals in the field.

Silver Spike estimates the reservoir pressure to be 3,050 psi, porosity is 10.9 percent, and the water saturation is 40.4 percent. There is 20 feet of net pay in the proposed field interval. Assuming an 80-acre drainage area, Silver Spike estimates a well in the field will recover an estimated 34,720 BO at 6.25 percent recovery.

A two-factor allocation formula is necessary because the proposed correlative interval may include more than one accumulation of oil or gas (see Tex. Nat. Res. Code §85.053(b)(ii)).

**FINDINGS OF FACT**

1. Notice of this application and hearing was provided to all persons entitled to notice at least ten (10) days prior to the date of the hearing.
2. The Sherman, South (Davis Sand) Field was discovered March 15, 1955, at a depth of 8,018 feet. Cumulative production from the field is 36,068 BO.
3. There are currently no wells carried on the December 1, 2014, proration schedule. Silver Spike has recently completed a well in this field.
4. Silver Spike's Bois D'arc Fencepost Lease, Well No. 1, produced by flowing 55 BO, and 2,050 thousand cubic feet (MCF) of gas on initial potential testing. The oil gravity was 40.5° API. The gas to oil ratio was 37,272:1 and the flowing tubing pressure was 200 pounds per square inch (psi).
5. The correlative interval from 7,752 feet to 8,112 feet, as shown on the Gamma Ray-Neutron Log and Electric Log of the Silver Spike Energy Operating, LLC - Bois D'Arc Fencepost #1 (API No. 42-181-31538), Thomas Jones Survey A-635; Grayson County, Texas, is appropriate for the field.
6. The reservoir pressure is 3,050 psi, porosity is 10.9 percent, and the water saturation is 40.4 percent. There is 20 feet of net pay in the proposed field interval.
7. Assuming an 80-acre drainage area, Silver Spike estimates a well in the field will recover an estimated 34,720 BO at 6.25 percent recovery.
8. A two-factor allocation formula is necessary because the proposed correlative interval may include more than one accumulation of oil or gas.

**CONCLUSIONS OF LAW**

1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas. Tex. Nat. Res. Code § 81.051
2. All notice requirements have been satisfied. 16 Tex. Admin. Code § 1.45
3. The proposed field rules are necessary to prevent waste, protect correlative rights, and promote the orderly development of the field.

**RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiners recommend field rules be adopted for the Sherman, South (Davis Sand) Field as requested by Silver Spike Energy Operating, LLC.

Respectfully submitted,



Paul Dubois  
Technical Examiner



Laura Miles-Valdez  
Hearings Examiner