

OIL AND GAS DOCKET NO. 06-0260343

THE APPLICATION OF GILLIS, JESSIE FOR A COMMERCIAL PERMIT TO DISPOSE OF OIL AND GAS WASTE BY INJECTION INTO A POROUS FORMATION NOT PRODUCTIVE OF OIL OR GAS, HUDSPETH LEASE WELL NO. 1S, CONEY (RODESSA) FIELD, SHELBY COUNTY, TEXAS

HEARD BY: Andres J. Trevino P.E., Technical Examiner
James M. Doherty, Hearings Examiner

APPEARANCES:

APPLICANT:

Jessie Gillis
Robert Ungerecht
Joe Gonzalez

REPRESENTING:

Jessie Gillis

PROTESTANTS:

Regina Eldridge

Eldridge Family

PROCEDURAL HISTORY

Application Filed:	October 8, 2008
Request for Hearing:	November 5, 2008
Notice of Hearing:	December 18, 2008
Date of Hearing:	March 23, 2009
Proposal For Decision Issued:	February 16, 2010

EXAMINERS' REPORT AND PROPOSAL FOR DECISION

STATEMENT OF THE CASE

Jessie Gillis requests authority pursuant to Statewide Rule 9 to operate Well No. 1S on its Hudspeth Lease in Shelby County as a commercial disposal well. This application is protested by Regina Eldridge representing her family. The Eldridge Family owns property adjacent to the tract on which the proposed disposal well is located.

DISCUSSION OF THE EVIDENCE

Applicant's Evidence

The subject well has not yet been drilled but a permit to drill was issued by the Commission on March 13, 2009. It is proposed that the well be drilled through the Rodessa to a maximum depth of 7,000 feet. It is proposed that the well have 1,900 feet of 10¾" surface casing with cement circulated from the casing shoe to the ground surface, and 7" casing set through the Rodessa, estimated to occur no deeper than 7,000 feet. The 7" casing will be cemented with 1,200 sacks of cement with the top of cement behind the longstring casing estimated to be at 1,500 feet. (See Wellbore Diagram attachment). The Texas Commission on Environmental Quality recommends that usable-quality ground water be protected to a depth below the base of the Wilcox Sands, which are expected to occur at 1,850 feet. TCEQ further recommends that fresh water contained in the interval from the land surface to a depth of 400 feet be isolated from water in the underlying beds.

The proposed injection will be through 3½" tubing set on a packer at approximately 6,300 feet, but no higher than 100 feet above the top of the injection interval. The proposed injection interval is the Rodessa formation, the top of which is expected to occur at about 6,300 feet. The proposed injection interval is between 6,300 and 6,900 feet. This estimated depth of the Rodessa is based on the log of the Marathon Oil - Crenshaw "A" No. 1. This well is approximately 1.4 miles to the southwest of the proposed well and is the closest well which penetrated the Rodessa and for which an electric log is available. The proposed maximum injection volume is 15,000 BWPD, with an estimated average of 13,000 BWPD. The proposed maximum injection pressure is 3,150 psig.

There are no oil or gas wellbores within a 1/2 mile radius of the proposed disposal well. A study was made of water wells within a two mile radius of the proposed disposal well. Within a 1/2 mile radius of the proposed disposal well there are three domestic wells drilled to a maximum depth of 180 feet. Within a two mile radius of the proposed disposal well there are 26 domestic, industrial, irrigation and rig supply water wells. Additionally there are surface water intake wells at the Pearl Lake operated by the city of Center for their public water supply. The city of Center and any residences outside the city of Center generally rely on domestic water wells. The surface casing recommended by the TCEQ will protect any water wells in the area. There are three approved commercial disposal wells within a 10 mile radius of the Hudspeth 1S. Each well is either a private disposal well or is operating at near capacity. For the most part, disposal at a "private" well is not open to "public" trucks, but is limited to each well's owners' own trucks carrying water they picked up. The Double O Operating Mathews Unit well is located 8.1 miles to the northwest and is permitted for disposal into the Huxley formation from 5,270 feet to 6,210 feet. The Complete Vacuum and Rental, Dillard "A" well is located 3.57 miles to the southwest and is permitted to inject into the Travis Peak and Rodessa formations from 4,270 feet to 6,900 feet. The Salty's, Shelby Salty SWD well is located 3.34 miles to the southwest and is permitted for disposal into the Rodessa formation from 6,520 feet to 6,900 feet.

The proposed facility will consist of a 300 foot by 250 foot location pad, eight water tanks, two gun barrels, two oil tanks and two injection pumps. All tanks will sit inside a

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concrete secondary containment basin. All surface areas which are expected to handle fluids will be constructed of concrete. Fluids will be unloaded in the concrete unloading station which will accommodate up to four vacuum trucks at a time. The fluids will then flow to an in ground concrete pit. The fluids will be pumped to the gun barrel tanks to settle and separate any solids or oil from the injection water. The entire 300 foot by 250 foot location pad will be surrounded by a earthen retention berm. Inside the retention berm area there will be clay-rich soil surrounded by a runoff collection ditch that will collect any water runoff from the site into a retention pool in the southwest corner of the pad. Mr Gillis designed the surface facilities to prevent the possibly that contaminated water will leave the surface facility and contaminate any areas outside the facility. Jessie Gillis amended his drilling permit for the proposed disposal well by moving the surface location from 279 feet from State Highway 7 to a location that is 713 feet from State Highway 7. The relocation of the well is part of a settlement agreement reached between Jessie Gillis and some of the Protestants prior to the hearing. A permit to construct the access driveway to the facility was issued by the Texas Department of Transportation on November 7, 2008.

Jessie Gillis plans to use the proposed well to dispose of produced water and frac water generated as a result of the active and ongoing development of the Cotton Valley, James Lime, Travis Peak and Haynesville Shale in this area. Jessie Gillis believes that additional disposal facilities are necessary to accommodate the active drilling as current commercial wells in the area are either private (not open to the public) or are at near operating capacity. Mr. Gillis presented a map showing over 250 new drilling permits issued in the last two years within a twenty mile radius of the proposed disposal well. Mr. Gillis conducted traffic count surveys in front of public use commercial wells in the Joaquin area (26 miles to the northeast near the Texas/Louisiana border) and on State Highway 7 where the Hudspeth No. 1S is proposed to be located. He found traffic counts as high as 30,000 vehicle counts per day in the Joaquin area and has witnessed trucks waiting to unload in the Joaquin area. Traffic counts were only 3,900 vehicle counts per day on State Highway 7 where the proposed disposal well will be located. Mr. Gillis believes his facility will redirect truck traffic from the congested Joaquin area to his facility with a low traffic count. This redirection will improve public safety overall. State Highway 7 is a lightly traveled four lane highway.

Jessie Gillis has an active P-5 on file with the Commission, with \$25,000 financial assurance. There are no past or pending enforcement actions against Jessie Gillis.

Notice of the subject application was published in *The Light and Champion*, a newspaper of general circulation in Shelby County, on September 12, 2008. A copy of the application was mailed on September 24, 2008 to the Shelby County Clerk's Office and the offsetting surface owners and operators within ½ mile of the proposed well. Yancy Hedspeth owns the surface of the 50 acre tract on which the well is proposed and is a partner in the well.

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Protestant's Evidence

Regina Eldridge was present to represent her family and other protestants' concerns. Mrs. Eldridge's family own land across State Highway 7 from the proposed disposal well's location. The Eldridge family plans to build a home in the future on their property. Mrs. Eldridge stated she is not opposed to increased economic development in Shelby County, but had concerns about the potential for surface and groundwater contamination. Mrs. Eldridge raised concerns of truck traffic, truck ingress and egress to the property, impacted property values and a general concern over facility operations if the disposal facility is approved. Mrs. Eldridge stated she is most concerned that water runoff from the facility might contaminate a nearby spring. The land surrounding the proposed disposal well is a rural area, with timber lands, cattle and poultry farms.

EXAMINERS' OPINION

The examiners believe that this application should be approved. The Hudspeth No. 1S will be completed in a manner which will confine disposal fluids to the proposed disposal interval in the Rodessa. Surface casing will be set and cemented through the base of usable quality water. The longstring production casing will also be cemented up to a depth of 1,500 feet to prevent migration from the injection interval. There are no oil or gas wells within the one-half mile radius of review and the water wells in the area will be protected by surface casing as recommended by the TCEQ.

Approval of the requested permit is in the public interest given it is in the public interest to promote the development of the Cotton Valley, James Lime, Travis Peak and Haynesville Shale in Shelby County. The Hudspeth disposal well will reduce truck traffic and congestion at other disposal facilities in the area. Horizontal drilling is increasing in the Cotton Valley, James Lime, Travis Peak and Haynesville Shale. Having a disposal facility close to the horizontal wells will reduce disposal cost. Mr. Gillis has made several changes to his initial plans to accommodate protestants. These changes include moving the proposed well's location further away from the highway, adding extra precautions to prevent runoff from the site and redirecting directional lights away from the highway and residences.

The Commission does not have direct jurisdiction over issues regarding site selection, traffic patterns and property values. The examiners have considered the public's interest in regards to the disposal well application's effect on traffic patterns, public safety and property values and believe that any adverse effect will be negligible. The area currently supports cattle and poultry operations, timber harvesting operations, disposal well operations and other oil and gas activity. The evidence indicates that the operation of the subject disposal well and facility will not adversely impact any surface or subsurface useable quality water.

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FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice at least ten (10) days prior to the hearing. Notice of the application was published in *The Light and Champion*, a newspaper of general circulation in Shelby County, on September 12, 2008
2. The Hudspeth No. 1S has not been drilled. Jessie Gillis plans to drill the well to a maximum depth of approximately 7,000 feet. The top of the Rodessa is expected to occur at approximately 6,300 feet.
3. The maximum requested injection volume is 15,000 barrels of water per day and the maximum requested surface injection pressure is 3,150 psi. The requested disposal interval is the Rodessa formation between approximately 6,300 and 6,900 feet.
4. The Hudspeth No. 1S will be cased and cemented in a manner to protect usable quality water and injection will be confined to the injection interval.
 - a. The subject well will have 1,900 feet of 10³/₄" surface casing cemented to surface.
 - b. The subject well will have approximately 7,000 feet of 7" casing, cemented with 1,200 sacks of cement with a top of cement at approximately 1,500 feet.
 - c. Injection will be through tubing set on a packer no higher than 100 feet above the top of the injection interval.
 - d. The Texas Commission on Environmental Quality recommends that usable-quality water be protected to 1,850 feet in the area of the proposed well.
5. There are no wellbores within one-half mile of the proposed disposal well.
6. Commercial disposal wells in the Joaquin area (26 miles to the northeast near the Texas/Louisiana border) are congested and trucks unloading experience frequent waiting times.
7. The three commercial disposal wells located within 10 miles of the Hudspeth No. 1S are either private (not open to the public) or are operating near capacity.
8. Due to increasing development of the Cotton Valley, James Lime, Travis Peak and Haynesville Shale with horizontal drilling in this area, large quantities of produced water must be disposed of. Use of the Hudspeth No. 1S Well as a commercial disposal well is in the public interest to promote this development by providing a safe and economic means of disposal of the fluids associated with production. Currently, most commercial disposal facilities operating in Shelby County are either private or

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operating near capacity.

9. Redirecting truck traffic from a 30,000 vehicle count per day area to a 3,900 vehicle count per day area is in the public interest as it will increase public safety overall. State Highway 7 is a relatively lightly traveled four lane highway and the evidence does not show that approval of the proposed facility will adversely impact road safety in the area.
10. Gillis, Jessie has an active P-5 on file with the Commission, with \$25,000 financial assurance.

CONCLUSIONS OF LAW

1. Proper notice was issued in accordance with the applicable statutory and regulatory requirements.
2. All things have occurred to give the Railroad Commission jurisdiction to consider this matter.
3. The use or installation of the proposed injection well is in the public interest.
4. The use or installation of the proposed injection well will not endanger or injure any oil, gas, or other mineral formation.
5. With proper safeguards, as provided by terms and conditions in the attached final order which are incorporated herein by reference, both ground and surface fresh water can be adequately protected from pollution.
6. Gillis, Jessie has made a satisfactory showing of financial responsibility to the extent required by Section 27.073 of the Texas Water Code.
7. Gillis, Jessie has met its burden of proof and satisfied the requirements of Chapter 27 of the Texas Water Code and the Railroad Commission's Statewide Rule 9.

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EXAMINERS' RECOMMENDATION

Based on the above findings and conclusions, the examiners recommend that the application be approved as set out in the attached Final Order.

Respectfully submitted,

Andres J. Trevino
Technical Examiner

James M. Doherty
Hearings Examiner