



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 02-0277964

**THE APPLICATION OF STALLION SWD, LP FOR COMMERCIAL DISPOSAL
AUTHORITY PURSUANT TO STATEWIDE RULE 9 FOR THE STALLION LEASE, WELL
NO. 1, KENEDY, SW. (WILCOX, MID) FIELD, KARNES COUNTY, TEXAS**

HEARD BY: Brian Fancher - Technical Examiner
Terry Johnson - Legal Examiner

PFD PREPARED BY: Richard D. Atkins, P.E. - Technical Examiner

APPEARANCES:

REPRESENTING:

APPLICANT:

Mickey Olmstead
Frank J. Muser
Richard R. Longquist
Stephen Pattee

Stallion SWD, LP

PROTESTANTS:

John Soule
Nolan Jonas
Robert Sinclair
Roland Baker

Nolan Jonas and Robert Sinclair

PROCEDURAL HISTORY

Application Filed:	May 14, 2012
Protest Received:	May 29, 2012
Request for Hearing:	July 10, 2012
Notice of Hearing:	September 7, 2012
Hearing Held:	November 9, 2012
Transcript Received:	November 27, 2012
Proposal for Decision Issued:	May 3, 2013



EXAMINERS' REPORT AND PROPOSAL FOR DECISION**STATEMENT OF THE CASE**

Stallion SWD, LP ("Stallion") requests commercial disposal authority pursuant to Statewide Rule 9 for the Stallion Lease, Well No. 1, Kenedy, SW. (Wilcox, Mid) Field, Karnes County, Texas.

Notice of the application was published in *The Karnes Countywide*, a newspaper of general circulation in Karnes County, on June 13, 2012. Notice of the application was sent to the Karnes County Clerk, offset operators within ½ mile and to the surface owners of each tract which adjoins the disposal tract on June 4, 2012.

The application was administratively approved by Commission staff, but is protested by surface owners adjacent to the tract on which the proposed disposal well is located.

DISCUSSION OF THE EVIDENCE**Applicant's Evidence**

The proposed disposal well is located on a 50 acre tract adjacent to and north of FM 2102 and the western edge of the tract is adjacent to County Road 1125. The tract is located in a rural area approximately four miles west of the town of Kenedy, Texas. Stallion plans to drill a new injection well down to 7,500 feet. The well will have 13 3/8" surface casing set at 1,000 feet that will be cemented to the surface with 706 sacks of cement. Stallion proposes to run 9 5/8" production casing to 7,500 feet that will be cemented to the surface with 2,438 sacks of cement. The well will be equipped with 7" tubing and packer set no higher than 100 feet above the proposed disposal interval (See attached Stallion Exhibit No. 10 - Wellbore Diagram).

The proposed disposal interval is located in the Wilcox formation between 6,028 feet and 7,340 feet. The disposal interval is continuous and has over 1,300 feet of sand development. The interval is suitable for disposal and is used for disposal in other area wells. Stallion requests authority to dispose of a maximum of 20,000 barrels of salt water and RCRA¹ exempt waste per day with a maximum surface injection pressure of 3,014 psig.

The Commission Groundwater Advisory Unit ("GAU") recommends that usable-quality groundwater be protected down to a depth of 700 feet below the land surface. The base of the USDW is 6,000 feet. Stallion submitted a GAU letter dated November 29,

¹ Resource Conservation and Recovery Act: Examples of RCRA exempt oil and gas waste includes produced water, drilling fluids, frac flowback fluids, rigwash and workover wastes.

2012, which stated that injection into the proposed disposal interval will not endanger the freshwater strata in the area. At the hearing, to mitigate concerns of the possible contamination of the USDW, Stallion revised the top of its proposed disposal interval from 6,028 feet down to 6,150 feet. The revised top will result in approximately 100 feet of impervious shale between the proposed disposal interval and the base of the USDW.

There is one Eagle Ford horizontal well surface location within the 1/4 mile radius of review and one Eagle Ford horizontal well surface location and one Eagle Ford horizontal well terminus within the 1/2 mile radius of review. All of the wells are operated by Marathon Oil EF LLC ("Marathon") and are cased and cemented to protect usable-quality groundwater and are cemented across the proposed Wilcox disposal interval. The nearest Wilcox production is updip and located over three miles to the southeast from the proposed disposal well.

The proposed Stallion disposal facility is located in the southern portion of Karnes County. The Eagle Ford formation development core area encompasses Karnes County and the two adjoining counties of De Witt and Gonzales. Stallion submitted an area map depicting over two hundred permitted or drilled Eagle Ford formation horizontal drainhole wells within five square miles of the proposed disposal well. Stallion opined that the Eagle Ford formation trend wells will produce significant volumes of frac and produced water.

Stallion believes that additional disposal facilities are necessary to accommodate the Eagle Ford formation development that is ongoing in Karnes County. Stallion currently operates a vacuum truck facility on the 50 acre tract that is proposed for the disposal facility. There are five other active disposal wells within a ten mile radius of the proposed facility. Stallion stated that their trucks are experiencing wait times at the other disposal facilities in the area and contends that the use of the proposed disposal well will reduce travel time and miles traveled by its waste hauling trucks, resulting in reduced costs to operators.

The Facility

The area surrounding the proposed injection facility is rural farm and ranch land. Access to the disposal facility will be off of FM 2102, which is a paved two lane public highway. The highway is currently under a repaving and expansion project to add a shoulder on both sides. At an average injection rate of 10,000 BWPD, there will be approximately 75 trucks per day accessing the facility.

The facility will have a circular driveway and will be of sufficient size to allow trucks access without having to wait on the highway. The surface facility will be manned 24 hours per day. A firewall will be constructed around the entire facility to contain any spilled fluids and the tanks will be equipped with high water level switches to prevent overflows. Additionally, the facility will comply with all of the permit conditions required by Commission staff.

Stallion submits that it has the expertise to build and manage the proposed facility, as it currently operates four other disposal facilities in Texas. Stallion has a current approved Form P-5 (Organization Report), a \$25,000 financial assurance bond and no pending Commission enforcement actions.

Protestants' Evidence

The protestants are surface owners adjacent to the tract on which the proposed disposal well is located. They believe that the application for the proposed commercial disposal well and facility should be denied. The protestants' evidence fell into several general categories: 1) potential of pollution of surface or subsurface waters; 2) noise, dust and odor nuisances which would result from the operation of the facility; 3) induced seismic activity; and 4) increased heavy truck traffic on FM 2102 near the intersection of County Road 1125, causing road deterioration and public safety issues.

One of the protestants submitted several exhibits showing: 1) there are 22 commercial disposal wells in Karnes County, which is double the amount of disposal wells in any other county in RRC District 2; 2) the Texas Department of Public Safety website indicates that commercial motor vehicle accidents have increased 500 percent in Karnes County from 2009 through 2011; 3) over the last four years Stallion has had 30 violations, six severances, filed for bankruptcy in 2008 and only has a \$25,000 bond to cover any environmental disaster and; 4) an article by a noted geologist at the University of Texas Geology School that was published in a local paper and the proceedings of the National Academy of Science that concluded there is a correlation between induced seismic events and underground disposal wells.

Collectively, the testimony and statements in opposition to the facility assert that the proposed commercial disposal facility will have adverse effects on traffic safety, property values and the quality of life in and around the area of the intersection of FM 2102 and County Road 1125. The protestants have leased their minerals to Marathon for oil and gas drilling and feel it is only a matter of time before drilling operations commence on their properties for Eagle Ford formation development.

EXAMINERS' OPINION

The examiners recommend that the application for commercial disposal authority be approved. Stallion has established:

1. The water resources (surface and sub-surface) are adequately protected from pollution;
2. The proposed injection well will not endanger or injure any oil, gas, or mineral formations;
3. The proposed injection well is in the public interest;

4. A satisfactory showing of financial responsibility, as required under Texas Statutes and Commission Rules.

The well will be completed in a manner which will protect usable-quality groundwater resources and injected fluids will be confined to the injection interval. The proposed disposal well will have cement behind the production casing to surface and there is more than 2,100 feet of shale above the base of the USDW and useable-quality groundwater. Injection will be through tubing set on a packer to confine injected fluids to the Wilcox formation between 6,150 feet and 7,340 feet. Finally, there is one Eagle Ford horizontal well surface location within the 1/4 mile radius of review and one Eagle Ford horizontal well surface location and one Eagle Ford horizontal well terminus within the 1/2 mile radius of review. All of the wells are operated by Marathon Oil EF LLC and are cased and cemented to protect usable-quality groundwater and are cemented across the proposed Wilcox disposal interval. The nearest Wilcox production is updip and located over three miles to the southeast from the proposed disposal well.

One of the protestants expressed concern that the disposal well could lead to induced seismic activity in the area. He asserted, without specific examples, that induced seismic activity had occurred in relation to other disposal wells. He noted that some scientists have theorized that injection by disposal wells across faults could "lubricate" the faults and thereby release stored energy in the form of minor seismic activity below a magnitude of 3.0 on the Richter scale. However, there was no evidence presented at the hearing identifying any faults in the area. Further, even if this theory is valid, several factors reduce the possibility of induced seismic activity in this area. The injection interval is relatively shallow at 6,150 feet and the geologic deposits are relatively young and loosely consolidated. Less stored energy is present in shallow, loosely consolidated deposits. Seismic activity of any kind is less likely to occur in this environment than in an area that is highly faulted with older, more consolidated deposits. Most importantly there was no expert testimony in support of this theory and, as already noted, there was no evidence of any significant faulting in this area.

Approval of the application is in the public interest. The proposed Stallion disposal facility is located in the southern portion of Karnes County. The Eagle Ford development core area encompasses Karnes County and the two adjoining counties of De Witt and Gonzales. There are over two hundred permitted or drilled Eagle Ford formation horizontal drainhole wells within five square miles of the proposed disposal well. The Eagle Ford formation trend wells will produce significant volumes of frac and produced water and additional disposal facilities are necessary to accommodate the Eagle Ford formation development that is ongoing in Karnes County.

Stallion currently operates a vacuum truck facility on the 50 acre tract that is proposed for the disposal facility. There are five other active disposal wells within a ten mile radius of the proposed facility. Stallion's trucks are experiencing wait times at the other disposal facilities in the area and contends that the use of the proposed disposal well will reduce travel time and miles traveled by its waste hauling trucks, resulting in reduced costs to operators.

The surface facility will be newly constructed and is of sufficient size to accommodate trucks hauling water to the facility without creating a traffic hazard on the highway that provides access to the facility. The protestants' traffic safety, property value and nuisance concerns are not within the Commission's jurisdiction to address. Compliance with permit conditions will minimize the risk of spills at the facility and will prevent the migration of any spills that occur, thereby protecting both ground and surface water.

Stallion acknowledged that it had purchased Salty's Disposal Wells, LP ("Salty's"), which culminated in a bankruptcy filing. As a result, Stallion and Salty's had incurred Commission violations and severances. However, Stallion opined that it re-organized and is no longer in bankruptcy and all of the previous Commission violations and severances have been resolved. The examiners believe that Stallion has made a satisfactory showing of financial responsibility, as required under Texas Statutes and Commission Rules.

FINDINGS OF FACT

1. Notice of the application and hearing was provided to all persons entitled to notice. Notice of the application was published in *The Karnes Countywide*, a newspaper of general circulation in Karnes County, on June 13, 2012.
2. Notice of the application was sent to the Karnes County Clerk, offset operators within ½ mile and to the surface owners of each tract which adjoins the disposal tract on June 4, 2012.
3. The proposed injection into the Stallion Lease, Well No. 1, will not endanger useable quality water.
 - a. The Commission Groundwater Advisory Unit ("GAU") recommends that usable-quality groundwater be protected down to a depth of 700 feet below the land surface.
 - b. The well will have 13 3/8" surface casing set at 1,000 feet that will be cemented to the surface with 706 sacks of cement.
 - c. There is more than 2,100 feet of shale above the base of the USDW and useable-quality groundwater.
4. The proposed injection into the Stallion Lease, Well No. 1, will not endanger production from other oil, gas or mineral bearing formations.
 - a. Stallion SWD, LP ("Stallion") plans to drill a new injection well down to 7,500 feet.

- b. Stallion proposes to run 9 5/8" production casing to 7,500 feet that will be cemented to the surface with 2,438 sacks of cement.
 - c. The well will be equipped with 7" tubing and packer set no higher than 100 feet above the proposed disposal interval.
 - d. There is one Eagle Ford horizontal well surface location within the 1/4 mile radius of review and one Eagle Ford horizontal well surface location and one Eagle Ford horizontal well terminus within the 1/2 mile radius of review. All of the wells are operated by Marathon Oil EF LLC and are cased and cemented to protect usable-quality groundwater and are cemented across the proposed Wilcox disposal interval.
 - e. The nearest Wilcox production is updip and located over three miles to the southeast from the proposed disposal well.
5. Use of the Stallion Lease, Well No. 1, as a commercial disposal well is in the public interest because it will reduce hauling distances and will provide needed commercial disposal capacity for wells to be drilled, completed and produced in the area of the proposed facility.
- a. The Eagle Ford formation development core area encompasses Karnes County and the two adjoining counties of De Witt and Gonzales.
 - b. There are over two hundred permitted or drilled Eagle Ford formation horizontal drainhole wells within five square miles of the proposed disposal well.
 - c. The Eagle Ford formation trend wells will produce significant volumes of frac and produced water.
 - d. Stallion currently operates a vacuum truck facility on the 50 acre tract that is proposed for the disposal facility. There are five other active disposal wells within a ten mile radius of the proposed facility.
 - e. Stallion's trucks are experiencing wait times at the other disposal facilities in the area and contends that the use of the proposed disposal well will reduce travel time and miles traveled by its waste hauling trucks, resulting in reduced costs to operators.
 - f. Additional disposal facilities are necessary to accommodate the Eagle Ford formation development that is ongoing in Karnes County.

6. Stallion has a current approved Form P-5 (Organization Report), a \$25,000 financial assurance bond and no pending Commission enforcement actions.

CONCLUSIONS OF LAW

1. Proper notice was issued in accordance with the applicable statutory and regulatory requirements.
2. All things necessary to give the Railroad Commission jurisdiction to consider this matter have occurred.
3. Approval of the application will not harm useable-quality water resources, will not endanger oil, gas, or geothermal resources, will promote further development in this area of Karnes County and is in the public interest pursuant to Sec. 27.051 of the Texas Water Code.
4. Stallion SWD, LP has met its burden of proof and its application satisfies the requirements of Chapter 27 of the Texas Water Code and the Railroad Commission's Statewide Rule 9.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission approve the application of Stallion SWD, LP for commercial disposal authority pursuant to Statewide Rule 9 for the Stallion Lease, Well No. 1, as set out in the attached Final Order.

Respectfully submitted,



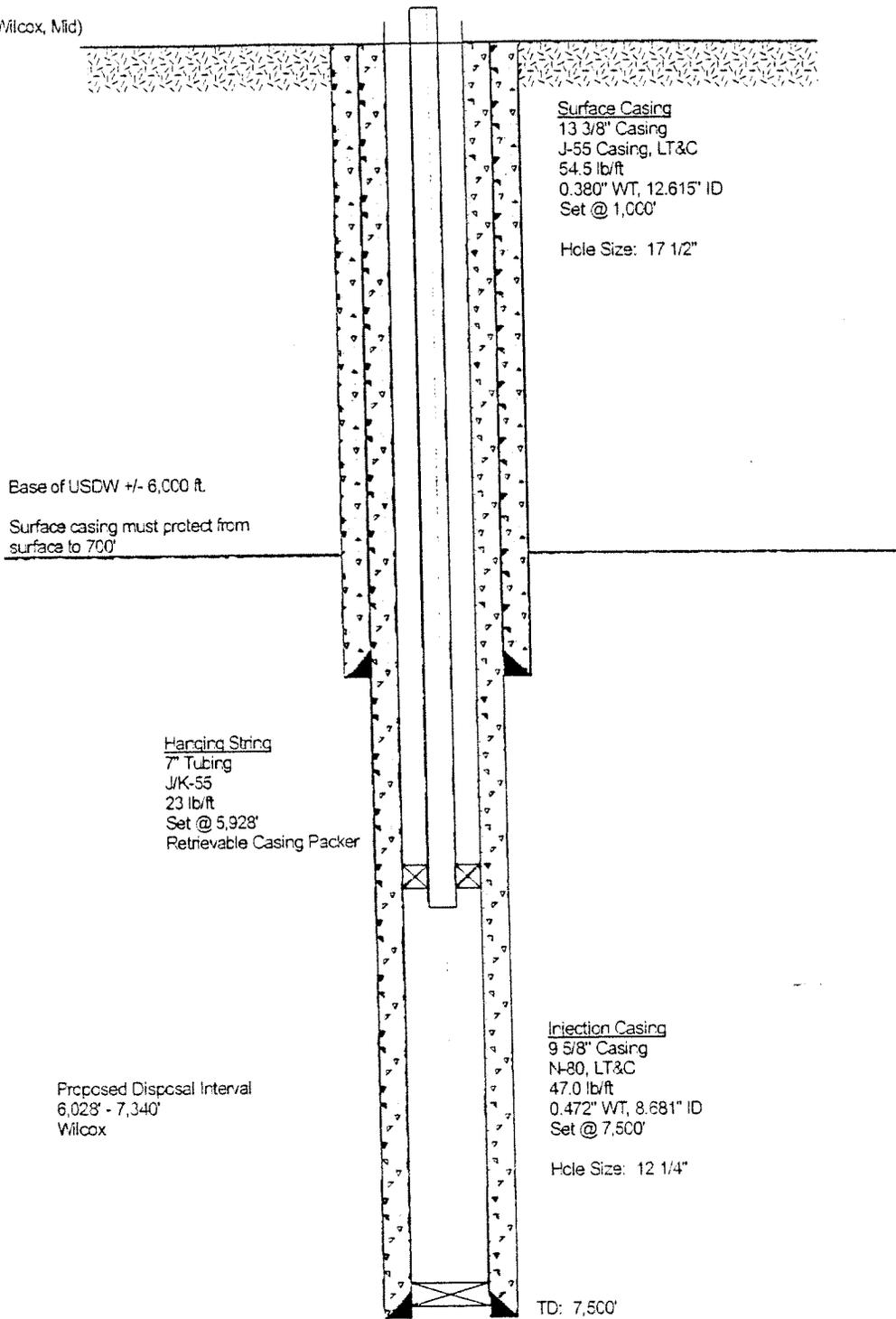
Richard D. Atkins, P.E.
Technical Examiner



Terry Johnson
Legal Examiner

Well Information:

API Number:
Well Name: Stallion
Well Number: 1
Field Name: Kenedy, SW (Wilcox, Mid)
County: Karnes, TX



Surface Casing
13 3/8" Casing
J-55 Casing, LT&C
54.5 lb/ft
0.380" WT, 12.615" ID
Set @ 1,000'

Hole Size: 17 1/2"

Base of USDW +/- 6,000 ft.
Surface casing must protect from surface to 700'

Hanging String
7" Tubing
J/K-55
23 lb/ft
Set @ 5,928'
Retrievable Casing Packer

Proposed Disposal Interval
6,028' - 7,340'
Wilcox

Injection Casing
9 5/8" Casing
N-80, LT&C
47.0 lb/ft
0.472" WT, 8.681" ID
Set @ 7,500'

Hole Size: 12 1/4"

TD: 7,500'

Stallion SWD, LP
O & G Docket No. 02-0277964
Exhibit No. 10

November 9, 2012

LONQUIST & CO. LLC

Stallion No. 1



Wellbore Schematic

PROJECT NUMBER:
F422

DRAWN:
SLP

REVIEWED:

APPROVAL:
RRL

SCALE:
NONE

DATE:
October 2012

Texas Registered Firm No. F-9147