



# RAILROAD COMMISSION OF TEXAS

## HEARINGS DIVISION

OIL AND GAS DOCKET NO. 02-0285578

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THE APPLICATION OF SUPREME VACUUM SERVICES, LLC PURSUANT TO  
STATEWIDE RULE 9 FOR THE SWD LEASE, WELL NO. 1, EAGLEVILLE (EAGLE  
FORD-2) FIELD, KARNES COUNTY, TEXAS

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**HEARD BY:** Richard D. Atkins, P.E. - Technical Examiner  
Laura Miles-Valdez - Legal Examiner

**PFD PREPARED BY:** Karl Caldwell - Technical Examiner

### PROCEDURAL HISTORY

Application Filed:	June 5, 2013
Protest Received:	June 14, 2013
Request for Hearing:	October 29, 2013
Notice of Hearing:	December 4, 2013
Hearing Held:	January 17, 2014
Transcript Received:	March 12, 2014
Proposal for Decision Issued:	May 20, 2014

### **APPEARANCES:**

#### **APPLICANT:**

Stephen Fenoglio (Attorney)  
Kerry Pollard (P.E., Petroleum)  
Krystal Eversdyk (Consultant)  
Brookes Holzhausen (Consultant)  
Lucas Leavitt (Consultant)  
Wendell Mullins (General Manager)

### **REPRESENTING:**

Supreme Vacuum Services, LLC

#### **PROTESTANTS:**

Don Tymrak (City Manager)  
David Lee (CEO)  
Richard Robinson (Trustee)  
Shelby Dupnik  
Cheryl Moy

City of Karnes City  
Karnes County Hospital District  
Karnes County Hospital District  
Self  
Self

#### **OBSERVER:**

Rachel McClure (Committee Director)    Senator Judith Zaffirini

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

Supreme Vacuum Services, LLC ("Supreme Vacuum") requests commercial disposal authority pursuant to Statewide Rule 9 for the SWD Lease, Well No. 1, in the Eagleville (Eagle Ford-2) Field, Karnes County, Texas. Notice of the application was published in the *Karnes Countywide*, a newspaper of general circulation in Karnes County, on June 5, 2013. Notice of the application was sent to the Karnes County Clerk, offset operators within one-half mile, and to the surface owners of the disposal tract as well as surface owners of each tract adjacent to the disposal tract.

The application was protested by the City of Karnes City, the Karnes City Hospital District, as well as Shelby Dupnik and Cheryl Moy, two local residents. Texas State Senator of District 21, Judith Zaffirini, submitted a letter in opposition of the application. Burlington Resources Oil & Gas Company, LLC, a nearby operator, originally protested but withdrew their protest on January 21, 2014.

**DISCUSSION OF THE EVIDENCE****Supreme Vacuum's Evidence**

The proposed location of the subject well is a ten acre tract of land off Highway 181, south of Karnes City. Supreme Vacuum has operated a business at this location since 2011. Existing operations at the proposed disposal well location include a washout pit facility (Permit No. P011715), a sizeable truck yard with approximately 25 to 35 saltwater tank trucks, a five bay repair and maintenance facility, a drilling mud plant, a wash rack, gun barrel tanks, and a tire bay area. In all, over two-thirds of the required surface facilities are in place to operate the proposed commercial disposal well. A lightning protection system has been installed at the location to protect tanks from lightning strikes.

In the nearby area surrounding the proposed disposal well site is a fiberglass tank manufacturer (Red Ewald), which is located in a southeasterly direction along Highway 181. Further along Highway 181 in a southeasterly direction is the Otto Kaiser Hospital. Almost directly across from the proposed disposal well location is Southwind Ranch, a property owned by a local church. There is a clear line-of-sight down Highway 181 from the Supreme Vacuum location in both directions of at least four-tenths of a mile. A Valero/Stripes truck stop is located to the northwest on Highway 181 between the proposed disposal well location and Karnes City. The truck stop has approximately 30 to 35 commercial-style diesel pumps as well as an area for overnight truck parking.

At the proposed Supreme Vacuum disposal well location, the Commission Groundwater Advisory Unit ("GAU") determined usable-quality groundwater must be isolated to a depth of 1,000 feet below the land surface. The GAU also determined that the base of the underground sources of drinking water (USDW) occur at a depth of

approximately 5,800 feet. Supreme Vacuum submitted a GAU letter dated May 28, 2013, which stated injection into the proposed disposal interval identified at the time (5,900 to 8,000 feet) will not endanger the freshwater strata in the area.

If a permit is granted, Supreme Vacuum will drill a new injection well to a total depth (TD) of approximately 8,150 feet. The well will have 9 5/8" surface casing set at 1,100 feet that will be cemented to surface with 285 sacks of cement and be set 100 feet below the usable-quality water depth of 1,000 feet. Supreme Vacuum intends to run a 7" long string of casing to 5,300 feet that will be cemented to surface with 445 sacks of cement. The well will be equipped with 4 1/2" tubing and a packer. (See attached Supreme Vacuum Exhibit No. 11 - Wellbore Diagram). Originally, the top of the proposed injection interval was 5,900 feet, but during the hearing in an effort to alleviate some concerns of the Protestants, the injection interval was moved from 5,900 to 6,900 feet from surface. This change was made to ensure injection is in the Lower Wilcox formation, below the overlying shale. Therefore, the proposed injection interval has been amended to extend from 6,900 to 8,050 feet. Statewide Rule 9, Section 9(A) states that packers shall be set no greater than 100 feet above the top of the permitted interval. The upper interval has been amended to 6,900 feet, and to be in compliance with Statewide Rule No. 9. the packer is required to be set no higher than 6,800 feet.

The proposed disposal interval of 6,900 to 8,050 feet is into the Lower Wilcox formation. This formation is suitable for disposal and is used as a disposal interval for other area wells, including the Highroller Karnes SWD A#1 (API 42-255-32286). Supreme Vacuum provided a well log of the Karnes SWD A#1 that was used to correlate the permitted interval in that well to the proposed disposal interval in Supreme Vacuum's disposal well permit application. Based on offset well logs, there is between 150 and 250 feet of shale above the top of the Lower Wilcox formation which will serve to prevent the upward migration of injected fluids out of the disposal interval. There is no production from the Lower Wilcox formation within a two mile radius of the proposed well location. There is production within a two mile radius from the proposed well location from the Eagle Ford formation, which occurs at a depth of approximately 12,540 feet in this area, which is 4,500 feet below the injection interval. In addition, the Midway shale formation is located below the Lower Wilcox and acts as an impervious boundary between the proposed injection interval and the Eagle Ford formation.

There is one producing well located within the one-quarter mile radius of review and one other well has been permitted but not yet drilled within this radius. The producing well is a horizontal well in which the surface location is located outside of the one-quarter mile radius, approximately three-quarters of a mile from the proposed disposal well location, but the lateral enters the one-quarter mile radius. The lateral section of the well was drilled in the Eagle Ford formation, which is situated approximately 4,500 feet below the proposed injection interval of the disposal well. There are no existing wellbores which have penetrated the Lower Wilcox injection interval of 6,900 to 8,050 feet within a one-quarter mile radius. The well producing from 4,500 feet below the proposed disposal interval is operated by Burlington Resources Oil & Gas Company, LLC, who originally protested the application, but withdrew their protest prior to the hearing date.

In noticing offset operators within a half-mile radius of the proposed well location, Supreme Vacuum determined that there are currently four producing wells and one dry hole. The dry hole was drilled to a true vertical depth (TVD) of 3,004 feet, which is 3,896 feet above the top of the proposed injection interval. The TVD of the four producing wells are between 12,670 feet and 12,940 feet, all targeting the Eagle Ford formation.

In an effort to mitigate some concerns of the Protestants, Supreme Vacuum amended the disposal well application at the hearing by decreasing the maximum daily injection volume requested. The original application requested a maximum daily limit of up to 25,000 barrels per day (bpd), but during the hearing, Supreme Vacuum proposed to lower the maximum daily limit to 20,000 bpd. As a result, Supreme Vacuum is now requesting authority to dispose of a maximum of 20,000 barrels of saltwater and RCRA<sup>1</sup> exempt waste per day, with a maximum surface injection pressure of 2,950 psig.

There are eleven permitted, active commercial disposal wells located within a ten mile radius of the proposed disposal well. Of the eleven commercial disposal wells in the ten mile area of review, Supreme Vacuum has encountered either cost-prohibitive pricing, prolonged wait and off-load times, or both, at all but two of the facilities. No data was provided regarding actual cost or wait times at these two facilities. Supreme Vacuum's definition of a prolonged wait time is anywhere from forty minutes to two hours, and Supreme Vacuum estimates a combined wait and disposal time of eight to ten minutes at its proposed disposal well site. In addition, one of the commercial disposal wells within the ten mile radius has a relatively low maximum daily permitted disposal volume (10,000 bpd), and Supreme Vacuum is of the opinion that this well can not handle the upper limit of the daily permitted volume.

The proposed location of the disposal well is in the heart of the Eagle Ford play. Supporting evidence included a map showing the location of drilling permits issued and wells completed between 2011 and 2013 within a ten mile radius of the Supreme Vacuum location.

Supreme Vacuum is currently hauling water for various exploration and production (E&P) companies. Many of these E&P companies have contractual obligations to use certain disposal well facilities. In these instances, Supreme Vacuum must use these facilities or incur a third party disposal charge. Supreme Vacuum also stated that some E&P companies provide a preferred list of disposal facilities to use, which may be due to a variety of criteria, including safety records.

Supreme Vacuum has existing business relationships with several E&P companies in the area. According to Supreme Vacuum, the ability to dispose of waste on-site at its

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<sup>1</sup> 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.

own facility is more efficient and cost-effective than current disposal options available at this time. The Supreme Vacuum disposal well would be used to dispose of produced water and frac water generated from oil and gas activity in the Eagle Ford shale play. A permit would also afford Supreme Vacuum the ability to dispose of the wash-out pit water that is currently generated on-site.

No financial assurance is on file with the Railroad Commission at the present time according to Supreme Vacuum. The appropriate bond will be filed with the Commission to establish that the company is in good financial standing should the application for a commercial disposal well be approved. Supreme Vacuum does have a \$25 million umbrella insurance policy.

### **Protestants' Evidence**

The application is protested by the City of Karnes City, the Karnes City Hospital District, as well as Shelby Dupnik and Cheryl Moy, two local residents. State Senator Judith Zaffirini submitted a letter to be included in the administrative record, opposing this application for a commercial salt water disposal well.

The Karnes City City Council ("City Council") authorized City Manager Don Tymrak ("Tymrak") to speak on their behalf at the hearing. Tymrak submitted Resolution No. 2014-118 on behalf of the City Council. The January 9, 2014 resolution opposes the application for a commercial disposal well, which will be located in close proximity to Karnes City's municipal boundaries, and is located within the extraterritorial jurisdiction (ETJ) of Karnes City. The City Council contends that the proposed disposal well poses a health, safety, and public welfare risk to nearby residents, including a church and a hospital. The City Council is also concerned that the location's ingress and egress point on Highway 181 is located outside the city limits and therefore has limited safety controls and the anticipated increase in truck traffic would only add to the safety risks of the Karnes City residents. Tymrak also stated that he had reached out to representatives from Supreme Vacuum to address the City Council regarding concerns and issues with the application. Supreme Vacuum was placed on an agenda at a meeting, but the company was either unable or chose not to attend.

The City Council voted to actively protest the application as the proposed location is within the ETJ of Karnes City. The city limits were identified as being the northwest boundary next to the ten acre tract where Supreme Vacuum's current wash-out pit facility is located, which is also the location of the proposed disposal well.. The city limits of Karnes City were extended to this current boundary by an annexation that occurred in 2013. Tymrak pointed out that the ETJ of Karnes City is one-half mile from any point along the corporate city limit boundary and the proposed disposal well location would therefore be within the ETJ of Karnes City. Tymrak stated that he is charged with the responsibility of ensuring a safe and secure environment for the citizens and stakeholders of Karnes City and placing a disposal well within the ETJ is counterproductive and inhibits his efforts as City Manager.

The Otto Kaiser Memorial Hospital is located south of the proposed disposal well location on Highway 181. David Lee, the administrator for Otto Kaiser Memorial Hospital stated that the hospital receives approximately 40 emergency room patients and another 40 out-patient visits per day. The main concern for the hospital is in the event of an accident at the disposal well whereby traffic flow on Highway 181 is restricted, which has the potential to limit or prevent access to the hospital.

Richard Robinson ("Robinson"), a trustee from the Karnes County Hospital District re-iterated the same concerns regarding the increased risk of Highway 181 traffic disruption restricting access to the hospital in the event of an accident at the Supreme Vacuum location. Robinson stated that TxDOT data from late 2012 showed 18,000 vehicles per day traveled the section of Highway 181 where the hospital is located. There was an event in Karnes County in October 2013 that was related to truck traffic and an injection well that resulted in two highways being closed and the flow of traffic restricted.

Robinson acknowledged that the incident was the result of human error, but increasing traffic on Highway 181 increases the risk of a similar occurrence, restricting access to the hospital. There are also three family practice doctors in Karnes City with offices in the Professional Building that would be affected if the flow of traffic on Highway 181 were restricted.

Shelby Dupnik ("Dupnik"), a resident of the nearby city of Kennedy, Karnes County stated that he had previously held the position of Emergency Operation Manager for Karnes County. Highway 181 is an evacuation route for Karnes City and the city of Kennedy. In the event of a hurricane, Highway 181 becomes part of the contraflow from Corpus Christi and every resident of a community located south of Karnes City traveling northerly on Highway 181 could be impacted by anything that would restrict traffic flow on Highway 181. Another concern is the proposed disposal well location is within the Karnes City ETJ. Karnes City and Kennedy are starting to expand and grow towards each other. Dupnik is opposed to a saltwater disposal well site in between the two cities that has the potential to affect the growth of the two cities.

Cheryl Moy, ("Moy") a resident of Karnes City, was a protestant in the hearing on the application by Karnes County Properties, LLC for a commercial disposal well permit for the KC SWD Lease Well No. 1 (Oil and Gas Docket No. 02-0278322) in 2013 in which she was an adjacent landowner to the proposed well site. In that case, the Commission found disposal authority for the KC SWD Lease Well No. 1 was not in the public interest because there was not an industry need in the area at the time. Moy believes that the situation is unchanged. Moy approached the City Council on behalf of the residents of Karnes City to actively protest Supreme Vacuum's commercial disposal well application as well as any other applications for disposal wells that will be located within the ETJ of Karnes City. Moy also expressed a concern for the drinking water, the potential for fumes emitting from the disposal facility, and a concern for the environment in general. Moy has ranches next to disposal wells and did not protest those applications as she stated that those disposal wells were in more suitable locations and disposal wells should not be located in cities.

**EXAMINERS' OPINION**

The examiners recommend that the application for commercial disposal authority pursuant to Statewide Rule 9 for the Supreme Vacuum Services, LLC, SWD Lease, Well No. 1, in the Eagleville (Eagle Ford-2) Field, Karnes County, Texas be denied.

Supreme Vacuum 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. A satisfactory showing of financial responsibility is required under Texas Statutes and Commission Rules. They do not have a bond on file yet, as they are not required to at the time of the hearing. Supreme Vacuum stated that they would file the appropriate bond to establish that the company is in good financial standing should the application be approved and the permit granted. Supreme Vacuum does have a \$25 million umbrella insurance policy.

Supreme Vacuum has not established:

4. The proposed injection well is in the public interest.

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 surface casing set at 1,100 feet that will be cemented to surface with 285 sacks of cement. This would be 100 feet below the usable-quality water depth of 1,000 feet. There is a minimum of 150 to 200 feet of shale directly overlying the Lower Wilcox disposal interval that separates it from the Upper Wilcox. The Midway formation is a shale interval located below the injection interval and is several hundred feet in thickness, protecting the productive Eagle Ford formation that is approximately 4,500 feet below the proposed injection interval. Injection will be through tubing set on a packer to confine injected fluids to the Lower Wilcox interval between 6,900 feet and 8,050 feet. There is one producing well located within the one-quarter mile radius of review and one other well has been permitted, but not drilled, within this radius. The producing well is a horizontal well in which the surface location is located outside of the one-quarter mile radius, being approximately three-quarters of a mile from the proposed well location. The lateral section enters the one-quarter mile radius in the Eagle Ford formation, which is approximately 4,500 feet below the proposed injection interval of the disposal well.

In the examiners' opinion, Supreme Vacuum has not established that the use or installation of the proposed injection well is in the public interest. Under the provisions of the Texas Water Code, the Commission cannot approve an injection well unless it finds "that the use or installation of the injection well is in the public interest" [Texas Water Code § 27.051(b)(1)]. This is a separate and independent prerequisite from the required findings that the injection well will not endanger or injure oil or gas formations, that both ground and surface fresh water will be adequately protected, and that the applicant has shown financial responsibility.

City Manager of Karnes City Don Tymrak, appeared at the hearing as an elected representative acting in their official capacity on behalf of the residents and the city of Karnes City. Resolution No. 2014-118 was submitted on behalf of the City Council of Karnes City, Texas. The January 9, 2014, resolution opposed Supreme Vacuum's application for a commercial disposal well to be located within the ETJ of Karnes City. Generalized concerns about increased traffic, noise, potential devaluation of nearby property, and similar assertions, equally applicable to any disposal well at any location, are not sufficient to refute that the well is in the public interest. Furthermore, the Railroad Commission does not have jurisdiction over road safety or road construction, and specific traffic safety concerns should be properly addressed by the Texas Department of Transportation and/or local government entities that do have jurisdiction with regards to these issues.

During this hearing, the Protestants brought to light many similarities between this commercial disposal well application by Supreme Vacuum and that of Karnes County Properties, LLC (O&G Docket No. 02-0278322) in which both Tymrak and Moy were also Protestants. In a Final Order of O&G Docket No. 02-0278322 dated May 7, 2013, the Commission determined that a commercial disposal well within the ETJ of Karnes City was not in the public interest, as an industry need was not established at that time. In the examiner's opinion, the evidence admitted into the record by Supreme Vacuum was insufficient to demonstrate that the industry need has changed since the Final Order of O&G Docket No. 02-0278322.

Supreme Vacuum addressed the Final Order of O&G Docket No. 02-0278322, and stated that in their opinion, there are three significant differences between their application and that described in O&G No. 02-0278322. Firstly, the well location described in O&G No. 02-0278322 was in a different part of town, located more to the northwest, and closer to some other disposal wells. The proposed location for Supreme Vacuum's SWD Lease, Well No. 1 commercial disposal well is approximately 2 miles southeast of the location that was the subject of O&G No. 02-0278322. In addition, Supreme Vacuum stated that Karnes County Properties, LLC did not have an existing truck yard, was not already hauling water, and had not established that they had an existing need for disposal at their facility prior to the application. Lastly, Supreme Vacuum felt that the numbers used to demonstrate the available disposal capacity, calculated as a percentage of the maximum permitted volume of all the commercial disposal wells in Karnes County was misleading. Supreme Vacuum stated that the total maximum permitted volume of all commercial



disposal facilities is not representative of the actual usable disposal capacity. In Supreme Vacuum's opinion, many facilities can not handle the maximum permitted volume, so the actual available disposal volume, or usable capacity, is much lower than the maximum permitted disposal volume. On cross-examination, Supreme Vacuum stated that its trucks have not been rejected at any of the eleven currently available commercial disposal wells within a ten mile radius of the proposed disposal well location due to a lack of capacity.

Supreme Vacuum did not demonstrate that the proposed disposal well is in the public interest. Supreme Vacuum has not been turned away at any of the presently available commercial disposal facilities within a ten mile radius of the proposed disposal well location due to a lack of disposal capacity. Supreme Vacuum's evidence to illustrate the need for the commercial disposal well was based on either excessive wait times, or cost-prohibitive pricing, or both at nine of the eleven commercial disposal wells located within a ten mile radius of the proposed disposal well location. No data regarding actual wait time and pricing at the other two commercial disposal well facilities, permitted for a combined maximum capacity of 35,000 barrels per day was provided. In the examiner's opinion, Supreme Vacuum did not establish that there is an industry need for a commercial disposal well at this location at this time.

#### **FINDINGS OF FACT**

1. Notice of the application was published in the *Karnes Countywide*, a newspaper of general circulation in Karnes County, on June 5, 2013.
2. Notice of the application was sent to the Karnes County Clerk, offset operators within one-half mile, and to the surface owners of the disposal tract as well as each tract adjacent to the disposal tract.
3. Supreme Vacuum Services, SWD Lease, Well No. 1, in the Eagleville (Eagle Ford-2) Field, Karnes County, Texas, would not endanger useable quality water.
  - a. The Commission Groundwater Advisory Unit ("GAU") recommends that usable-quality groundwater be protected down to a depth of 1,000 feet below the land surface and the base of the USDW is 5,800 feet.
  - b. The well will have 9 5/8" surface casing set at 1,100 feet that will be cemented to surface with 285 sacks of cement. This would be 100 feet below the usable-quality water depth of 1,000 feet.
  - c. The disposal interval will be between 6,900 and 8,050 feet.
4. The proposed injection into the Supreme Vacuum Services, SWD Lease, Well No. 1, would not endanger production from other oil, gas or mineral bearing formations.

- a. Supreme Vacuum proposes to drill a new injection well to a TD of approximately 8,150 feet.
  - b. Supreme Vacuum proposes to run a 7" long string of casing to 5,300 feet that will be cemented to the surface with a calculated volume of 445 sacks of cement.
  - c. Supreme Vacuum proposes to run 4 1/2" tubing and a set a packer no greater than 100 feet above the top of the permitted injection interval.
  - d. There is one producing well located within a one-quarter mile radius and one other well has been permitted within this radius.
    - I) The producing well is a horizontal well in which the surface location is located outside of the one-quarter mile radius. The surface location is approximately three-quarters of a mile from the proposed well location, but the lateral enters the one-quarter mile radius. The lateral section was drilled in the Eagle Ford formation, which is approximately 4,500 feet below the proposed injection interval of the disposal well.
    - II) The only other well within one-quarter mile from the proposed disposal well location has been permitted but not drilled.
  - e. The disposal interval is located within the Lower Wilcox formation. This interval is suitable for disposal and is used for disposal in other area wells.
5. Supreme Vacuum Services, LLC does not have a bond on file, as a bond is not required for its permitted operations at the time of the hearing. The appropriate bond would be filed with the Commission to establish good financial standing should the application be approved and the permit granted.
  6. Supreme Vacuum Services, LLC did not establish that the proposed Supreme Vacuum Services, LLC SWD Lease, Well No. 1, commercial disposal well is in the public interest in this area at this time.
    - a) There are currently eleven permitted commercial disposal wells within a ten mile radius of the proposed disposal well;
    - b) Supreme Vacuum has not been turned away at any of the currently permitted commercial disposal facilities due to a lack of capacity volume;

- c) Supreme Vacuum cited prolonged disposal times, adverse pricing, or both, at nine of the eleven permitted commercial disposal wells within a ten mile radius of the proposed disposal well but provided no information with regards to disposal time or pricing at the two other currently available facilities.


**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. Supreme Vacuum Services, LLC has not met its burden in demonstrating that its application satisfies the requirements of Chapter 27 of the Texas Water Code and the Railroad Commission's Statewide Rule 9 and failed to establish that the proposed disposal well is in the public interest.

**EXAMINERS' RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiners recommend that the application of Supreme Vacuum Services, LLC for commercial disposal authority pursuant to Statewide Rule 9 for the SWD Lease, Well No. 1, in the Eagleville (Eagle Ford-2) Field, Karnes County, Texas, be denied, as set out in the attached Final Order.

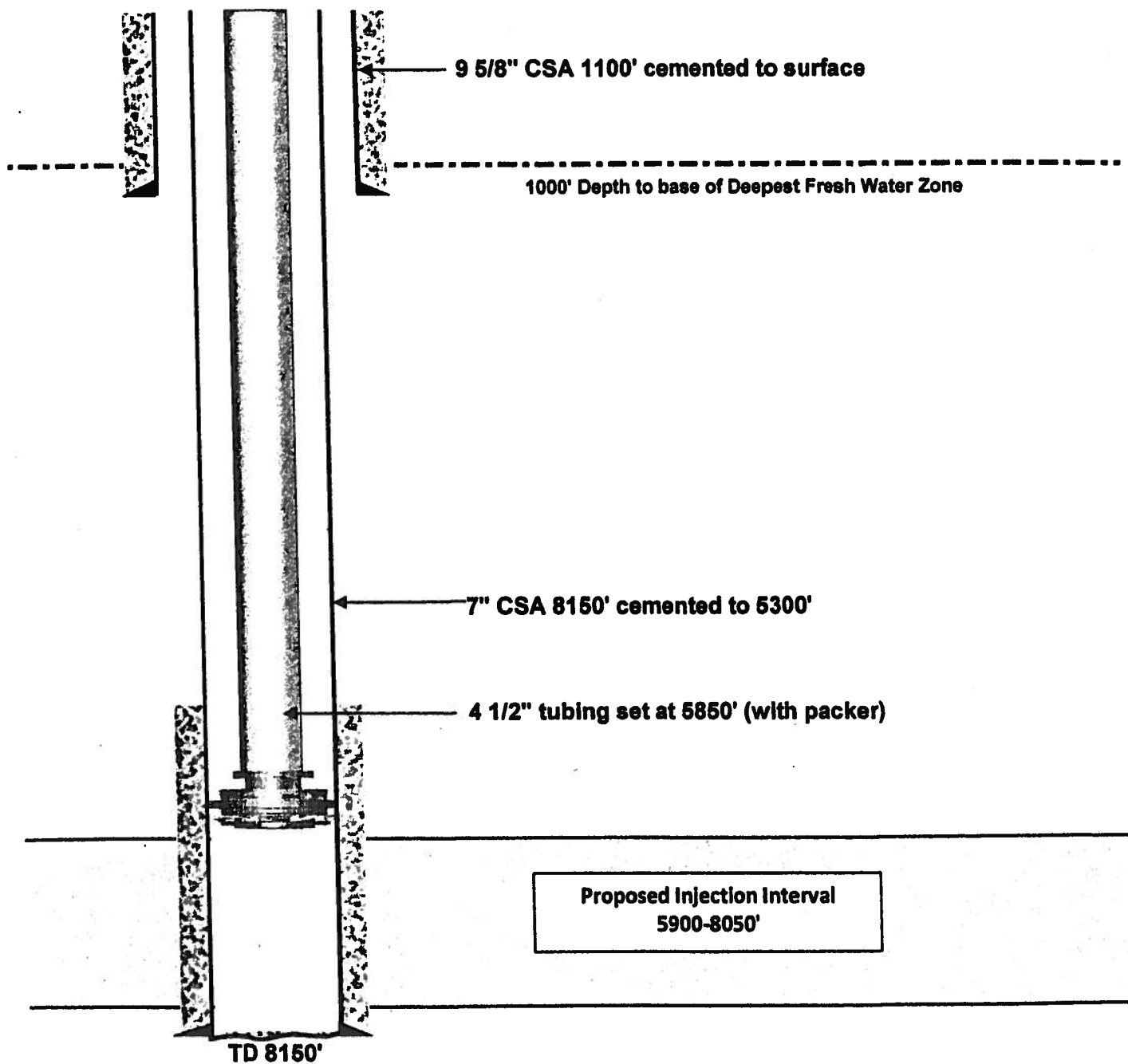
Respectfully submitted,

  
Karl Caldwell  
Technical Examiner

  
Laura Miles-Valdez  
Legal Examiner

**Wellbore Sketch**  
**Supreme Vacuum Services, LLC**  
**SWD #1**  
**Karnes County, Texas**

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**Supreme Vacuum Services, LLC**  
Exhibit No. 11  
Docket No. 02-0285578  
January 17, 2014