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RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 08-0318719 / TRACKING NO. 49813

APPLICATION OF WASSER OPERATING, LLC (900210) PURSUANT TO STATEWIDE RULE 9 FOR A PERMIT TO DISPOSE OF OIL OR GAS WASTE BY INJECTION INTO A POROUS FORMATION NOT PRODUCTIVE OF OIL OR GAS FOR THE MABEE 4 SWD LEASE, WELL NO. 1, SPRABERRY (TREND AREA) FIELD, MARTIN COUNTY, TEXAS

PROPOSAL FOR DECISION

HEARD BY: Austin Gaskamp – Technical Examiner
Kristi M. Reeve – Administrative Law Judge

PROCEDURAL HISTORY:

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Notice of Prehearing Conference:	June 14, 2019
Prehearing Conference:	July 15, 2019
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Proposal for Decision Issued:	August 12, 2020

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I. Statement of the Case

Wasser Operating, LLC (“Wasser” or “Applicant”) submitted to the Railroad Commission of Texas (“Commission”) an application (“Application”) pursuant to Statewide Rule 9¹ for a non-commercial permit to inject fluid into a reservoir not productive of oil or gas for the Mabree 4 SWD Lease, Well No.1 (the “Proposed Well” or the “Well”) in the Spraberry (Trend Area) Field (the “Field”), in Martin County, Texas. Wasser seeks to dispose of 30,000 barrels per day (“bpd”) of saltwater and non-hazardous oil and gas waste at a subsurface depth of 12,900 feet to 15,500 feet true vertical depth (“TVD”) into the Ellenburger formation (the “Ellenburger”), stratigraphically below the productive horizons in the area. The maximum surface injection pressure, as applied, is 6,450 pounds per square inch, gauge (“psig”) with an estimated average injection pressure of 2,500 psig. The base of useable quality ground water (“BUQW”) is reported at 275 feet. The base of underground sources of drinking water (“USDW”) is reported at 1,600 feet, both provided by the Groundwater Advisory Unit (“GAU”) of the Commission by letter issued November 13, 2018.² The Proposed Well location is 19.7 miles in the NW direction from Stanton, Texas. The application lists the San Andres, Clearfork, Spraberry, Dean, Wolfcamp, Strawn, Atoka, and Mississippian as productive intervals. The productive intervals range from 4,646-11,730 feet TVD.³

Wasser asserts the proposed injection Well complies with Statewide Rule 9, as well as the requirements in the Texas Water Code, in that:

1. The Proposed Well will not endanger or injure any oil, gas, or other mineral formation;
2. Both ground and surface fresh water will be protected;
3. The Well is in the public interest; and
4. Wasser has the required financial assurance.

The Application is protested by Pioneer Natural Resources USA, Inc. (“Pioneer” or “Protestant”) who is the operator of producing wells on the tract upon which the Proposed Well is to be located. Pioneer is the primary operator of producing wells in the general vicinity.⁴ Pioneer asserts the Proposed Well does not meet all the requirements in the Texas Water Code. Pioneer contends: (1) the Proposed Well will prevent Pioneer from drilling future, stacked horizontal wells, due to wellbore anti-collision concerns, thereby reducing the ultimate recovery and causing waste of oil and gas; (2) There is no market or need for the Well and consequently, the Well is not in the public interest; (3) Pioneer additionally asserts that notice in the subject application was defective and that parts of

¹ 16 Tex. Admin. Code § 3.9.

² Wasser Ex. 12.

³ Wasser Ex. 9.

⁴ Pioneer Ex. 37.

the application were known by Wasser to be false at the time of filing which are integral to the Commission providing an administratively complete designation.

Wasser counters that the Well will not cause waste of recoverable resources because Pioneer has demonstrated that it is technically capable and frequently steers directionally drilled wells closer than the nearest distance to the Proposed Well. Wasser argues that the planned wells are hypothetical and may never be drilled because Pioneer is in a lease termination lawsuit which prevents Pioneer from drilling any new wells. Wasser further argues the Proposed Well is in the public interest because this is a non-commercial disposal well,⁵ it has assessed the market need, and is willing to invest in the project to satisfy that need with produced water from local operators other than Pioneer. Additionally, Wasser argues it is taking on significant risk and expense to complete the Proposed Well in the deeper Ellenburger formation, out of the way of future drilling and production, preserving the productivity of the Spraberry (Trend Area) Field. Wasser disputes the notice deficiencies and allegations that similar projects are injecting into off-limit formations and has republished notice and plugged back the wells to satisfy Pioneer's concerns.

Based on the evidence presented at the hearing, the Technical Examiner and Administrative Law Judge ("Examiners") recommend approval of the Application to dispose of oil and gas waste by injection for the Mabee 4 SWD Lease, Well No. 1.

II. Jurisdiction and Notice⁶

Sections 81.051 and 81.052 of the Texas Natural Resources Code provide the Commission with jurisdiction over all persons owning or engaged in drilling or operating oil or gas wells in Texas and the authority to adopt all necessary rules for governing and regulating persons and their operations under the jurisdiction of the Commission. The Commission expressly has jurisdiction over permitting injection wells for the disposal of oil and gas waste.⁷

On October 31, 2018, notice of the Application was published in the *Midland Reporter-Telegram*, a newspaper of general circulation in Martin County, Texas.⁸ Notice of the Application was again published in the *Midland Reporter-Telegram* on January 17, 2020. The second publication referenced the Proposed Well's location from both Stanton, TX and Tarzan, TX.⁹ The publications discussed the proposed disposal Well, well location, legal authority and notice of public hearing.

On November 15, 2018, Wasser mailed notice of the Application to the owner of record of the surface tract on which the well is located; each commission-designated

⁵ 16 Tex. Admin. Code § 3.9(4) defines a commercial disposal well as, "a well whose owner or operator receives compensation from others for the disposal of oil field fluids or oil and gas waste that are wholly or partially trucked or hauled to the well, and the primary purpose for the well is to provide these services for compensation."

⁶ The hearing transcript in this case is referred to as "Tr. Vol. [number] at [page(s)], [line(s)]." Wasser's exhibits are referred to as "Wasser Ex. [exhibit no(s)]." Pioneer's exhibits are referred to as "Pioneer Ex. [exhibit no(s)]."

⁷ See, e.g., Tex. Water Code §§ 27.031, 27.051(b).

⁸ Wasser Ex. 6.

⁹ Wasser Rebuttal Ex. 6.

operator of any well located within one half mile of the proposed injection well; the county clerk of the county in which the well is located; the city clerk or other appropriate city official of any city where the well is located within the municipal boundaries of the city; and owners of record of each surface tract that adjoins the proposed disposal tract. Thereafter, Pioneer filed protest ("Protest") of the Application.

On June 14, 2019, the Hearings Division of the Commission sent a Notice of Prehearing Conference ("NOPHC") on the Application setting a prehearing conference date of July 15, 2019. The NOPHC contains: (1) a statement of the time, place, and nature of the hearing; (2) a statement of the legal authority and jurisdiction under which the hearing is to be held; (3) a reference to the particular sections of the statutes and rules involved; and (4) a short and plain statement of the matters asserted.¹⁰ The NOPHC was sent to the persons entitled to be sent notice of the Application, Wasser, and Pioneer. Consequently, the parties received more than 10 days' notice. The NOPHC provided notice that failure to appear at the Prehearing Conference could result in dismissal of a party's claim or protest.

The prehearing conference was held on July 15, 2019, as noticed. Wasser and Pioneer appeared.

At the Prehearing Conference, the hearing on the merits was set for September 5, 2019, as agreed to by the parties who did appear, Wasser and Pioneer. Both Wasser and Pioneer appeared and participated at the hearing on September 5, 2019; October 21, 2019; and January 28, 2020.

III. Applicable Law

Section 27.031 of the Texas Water Code states that no person may continue using a disposal well or begin drilling a disposal well or converting an existing well into a disposal well to dispose of oil and gas waste without first obtaining a permit from the Commission.

The Commission may grant an application for a disposal well permit under Texas Water Code § 27.051(b) and may issue a permit if it finds:

1. The use or installation of the injection well will not endanger or injure any oil, gas, or other mineral formation;
2. With proper safeguards, both ground and surface fresh water can be adequately protected from pollution;
3. The use or installation of the injection well is in the public interest; and
4. The applicant has made a satisfactory showing of financial responsibility as required by section 27.073.

¹⁰ See Tex. Gov't Code §§ 2001.051, 052; 16 Tex. Admin. Code §§ 1.42, 1.45.

Additionally, the applicant must comply with the Commission's Statewide Rule 9, which governs applications for injection wells into non-productive reservoirs.¹¹ Statewide Rule 9 states the following:

Any person who disposes of saltwater or other oil and gas waste by injection into a porous formation not productive of oil, gas, or geothermal resources shall be responsible for complying with 16 Tex. Admin. Code § 3.9, Texas Water Code, Chapter 27, and Title 3 of the Natural Resources Code.

IV. Discussion of the Evidence

Wasser asserts the Proposed Well complies with Statewide Rule 9, as well as the requirements of the Texas Water Code. Pioneer claims the Proposed Well does not meet all the requirements in the Water Code. Pioneer maintains: (1) the Proposed Well will cause waste by preventing future horizontal well development due to anti-collision concerns leaving hydrocarbons unrecovered; (2) there is no market or need for the Proposed Well due to unused permitted capacity in the area and consequently, the Proposed Well is not in the public interest; and (3) that notice of the subject application was defective.

At the hearing, Wasser appeared and presented evidence by and through its witnesses: Jim Clark, Petroleum Engineer; and Jay Mayo, company representative. Wasser provided 26 exhibits at the hearing. Pioneer appeared and presented evidence by and through its witnesses: Justin Anderson, Staff Geologist; David Clothier, Directional Drilling Engineer; and John Miller, Petroleum Engineer. Pioneer provided 48 exhibits at the hearing.

A. Summary of Wasser's Evidence and Argument

1. Application

Wasser submitted a Commission Form W-14, *Application to Dispose of Oil and Gas Waste by Injection into a Formation Not Productive of Oil and Gas*, for the Proposed Well on November 15, 2018, seeking to dispose of oil and gas waste by injection into a formation not productive of oil or gas under Statewide Rule 9. The Application indicated a proposed injection interval of 12,900 to 15,500 feet TVD, with the Ellenburger formation noted as the disposal formation.¹² The proposed deep disposal interval is an exception to the majority of disposal in the basin targeting the shallower San Andres Formation (the "San Andres"). The San Andres overlays most of the modern productive intervals and takes most of the disposed water providing an obstacle to development.¹³

¹¹ 16 Tex. Admin. Code § 3.9.

¹² Wasser Ex. 9.

¹³ Tr. Vol. 3 at 35-36.

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Wasser's consulting petroleum engineer, Jim Clark, filed the Application. Mr. Clark testified, "It is Wasser's intent to confine this disposal solely to the -- what is commonly recognized as the Ellenburger formation."¹⁴ Although Wasser's applied for injection interval is substantially larger than the probable thickness of the Ellenburger in the area, Wasser acknowledged this and insisted that it has applied for only the Ellenburger formation as possible injection interval.¹⁵ Wasser will file an annotated log with the Commission identifying the actual top and base of the Ellenburger. Wasser will not inject within 100 feet of the base of the Ellenburger as a permit condition.¹⁶ Mr. Clark stated that it is common practice, in compliance with Commission Underground Injection Control ("UIC") guidelines, to apply for a depth range and specific formation and update the Commission's records on the exact depths encountered after the well is drilled. Wasser contends that applying for an interval to cover the possible extent of the proposed formation is normal practice in compliance with the Commission's guidelines.¹⁷

To address any pressure or volumetric permitting concerns, Wasser intends to run a step-rate test to determine the injectivity capabilities.¹⁸ Mr. Clark furthered this, "if you run your step-rate test and it shows that it can only inject at, say, 15,000 barrels a day at your maximum permitted pressure, then that's the maximum rate you get as a practical matter and the permit can even be amended to make that your maximum rate."¹⁹ Per a voluntary permit condition, Wasser will document the results of the step-rate test, including injection volumes, pressures and fracture gradient, if reached, for the Proposed Well.²⁰ Wasser maintains that UIC guidelines allow for modifications of the applied-for disposal interval after the well is drilled, so long as the injection interval does not penetrate more than 100 feet above the base of the requested interval. By its expert's testimony, Wasser is committed to injecting into the Ellenburger formation only. Mr. Clark stated, "not knowing where the base of the Ellenburger is going to be at this particular location it allows us to actually encounter the base of the Ellenburger which is the top of the Cambrian and plug back; so plug back no deeper than 100 feet above the top of the Cambrian, and that's a condition that they're willing to accept."²¹ Wasser demonstrated that nearby injection wells operated by Wasser were plugged-back in accordance to UIC guidelines to satisfy the concerns expressed by Pioneer that the wells had penetrated Cambrian basement rock and that the Proposed Well completion was meant to be identical to those.²²

Wasser provided Notice of the Application to parties entitled to notice. This included operators Pioneer and COG Operating LLC ("COG"), as well as owners of the surface tract, the Mabee Ranch.²³

¹⁴ Tr. Vol. 1 at 47, 10-12.

¹⁵ Tr. Vol. 1 at 49, 13-21.

¹⁶ Tr. Vol. 3 at 42, 23-25.

¹⁷ Tr. Vol. 3 at 43, 1-25.

¹⁸ Tr. Vol. 1 at 52, 9-13.

¹⁹ Tr. Vol. 1 at 65, 10-15.

²⁰ Tr. Vol. 3 at 42, 1-25.

²¹ Tr. Vol. 1 at 64, 15-21.

²² Tr. Vol. 3 at 34.

²³ Wasser Ex. 5.

There are no seismic events registered with the USGS database for a 100 sq. mile area centered on the proposed disposal Well's surface location.²⁴

2. Geology and Resource Development

The Proposed Well will be completed in the Ellenburger formation. In the area of the Proposed Well; all of the production comes from the shallower Wolfcamp, Spraberry and Atoka formations.²⁵ Within one-quarter of a mile there are two (2) wells which have been plugged and abandoned.²⁶ These wells were completed in shallower horizons than the Ellenburger. Also, within one-quarter mile, COG and Pioneer are the operators of 10 producing completions, including many modern horizontal wellbores targeting several benches of production in the Spraberry (Trend Area) Field.²⁷ Mr. Clark testified, "None of these wells come anywhere close to penetrating the Ellenburger formation which Wasser will target for disposal. They're all much shallower completions."²⁸ The production from the Wolfcamp and Atoka formations are approximately 1,500 feet above the top of the proposed injection interval.²⁹ Mr. Clark furthered this, "In fact, there's no Ellenburger penetrations within two miles with one exception."³⁰ The only Ellenburger penetration, within two miles, the Scharbauer C-1, was plugged back so it produced specifically from the Wolfcamp formation. An offset well log, from 8/10ths of a mile away, presented by Applicant provided an estimated Ellenburger Formation top at 13,060 feet.³¹ The Ellenburger is not productive in this area and disposal into it will not endanger or displace recoverable oil and gas contained within.³²

3. Public Interest

One-hundred percent of the injected fluid will be piped to the proposed location, categorizing it as a non-commercial disposal well application.³³ Mr. Mayo, company representative for Wasser, sponsored Wasser's Exhibit No. 21 ("Mabee Ranch Total Produced Water Projections") and Exhibit No. 22 ("2020-2021 Flow Back Forecast") showing anticipated disposal water from numerous wells being fracked and flowed-back, as demonstration of the Wasser's internally forecasted disposal needs.³⁴

Wasser maintains that the Ellenburger is an ideal place to dispose of oil and gas waste because once the Proposed Well is completed it will prevent the disposed fluids from interfering with completions in the Wolfcamp and Atoka, as a shallower San Andres disposal well would.³⁵ Mr. Clark stated, "It's an ideal disposal zone. It's below everything

²⁴ Wasser Ex. 15.

²⁵ Tr. Vol. 1 at 34-35.

²⁶ Wasser Ex. 2.

²⁷ Wasser Ex. 3.

²⁸ Tr. Vol. 1 at 34, 4-7.

²⁹ Tr. Vol. 1 at 35, 9-10.

³⁰ Tr. Vol. 1 at 35, 13-15.

³¹ Wasser Ex. 16.

³² Tr. Vol. 1 at 86, 18-23.

³³ Tr. Vol. 1 at 39, 23-25.

³⁴ Tr. Vol. 1 at 117, 16-20.

³⁵ Tr. Vol. 3 at 35-36.

that's being developed in the area.”³⁶ Wasser will rely on the Proposed Well not only for new contracts but redundancy for their other disposal assets. Mr. Mayo testified that Wasser's interest in the Proposed Well is, “not just for the current producers but for the future, and then secondly for well redundancy.”³⁷

Wasser argued it need not show industry need as part of public interest. Citing to the Commission's Discussion of Law, Practice and Procedure, last updated in 1991 and no longer available, on public interest, Wasser quoted, “Extra disposal capacity is needed in the area of the proposed wells is one of the factors.”³⁸ Additionally, Wasser cited to two prior PFDs, one issued 2004, the other issued 2013, on whether need is a factor for a noncommercial well, “It should be noted that proof that extra capacity is not needed is not proof that the proposed well is not in the public interest.”³⁹

4. Protection of Usable Quality Water Aquifers

Wasser intends to set 13 7/8” surface casing at 1,800 feet to be protective of the base of usable quality groundwater at 275 feet and the underground source of drinking water at 1,600 feet. Wasser obtained a Groundwater Protection Determination Letter and “no-harm” letter from the Commission's Groundwater Advisory Unit outlining the groundwater protection depths and requirements.⁴⁰ Wasser proposes to drill a 12 1/4” hole to approximately 9,500 feet and run 9 5/8” casing. Wasser proposes to drill an 8 3/4” hole to approximately 13,500 feet and set 7 5/8” casing. Most of the disposal interval in the Ellenburger will be an open-hole completion. Wasser proposes 5 1/2” tubing to be run and set on a packer at 12,800 feet⁴¹. The offset well log, from the Scharbauer C-1, also identified confining beds to upward migration of injected fluids. Wasser contends the log shows the Simpson Shale, the Woodford Shale and the Barnett Shale for evidence of a competent confining interval.⁴² These shales provide more than 250 feet of cumulative strata and 100 feet in one continuous interval between the top of injection zone and the base of usable quality groundwater.⁴³

Wasser contends that the well design is protective of the USDW and BQGW. Commission staff issued Wasser an administratively complete letter dated February 7,

³⁶ Tr. Vol. 1 at 68, 21-23.

³⁷ Tr. Vol. 1 at 108, 2-6.

³⁸ Tr. Vol. 2 at 51, 10-11. Wasser Ex. 25.

³⁹ Tr. Vol. 2 at 49-51. Wasser Ex. 25. Oil and Gas Docket No. 7B-0236231: *The Application of Richman Petroleum Corporation to Inject Fluid into a Reservoir Productive of Oil or Gas, Wallace Dove Lease Well No. 1, McIntosh (Strawn) Field, Hood County, Texas* (PFD Issued April 1, 2004, Order Signed May 11, 2004) recommending approval of the application and stating the well is in the public interest as it will provide for proper, safe and economical disposal of Richman's produced water from its other leases which in turn will allow for Richman's wells to recover additional reserves because of lower economic limits. Oil and Gas Docket No. 7C-0280432: *The Application of ACME Energy Services Inc., Pursuant to Statewide Rule 9 for a Permit to Dispose of Oil and Gas Waste by Injection into a Porous Formation Not Productive of Oil or Gas for its University Unit 5-20-21 SWD Lease, Well No. 1, Lin (Wolfcamp) Field, Irion County, Texas*, (PFD Issued November 1, 2013, Order Signed December 18, 2013) recommending approval of the application and stating the noncommercial well would only be used for waste generated on the acreage of the lease.

⁴⁰ Wasser Ex. 12.

⁴¹ Wasser Ex. 10.

⁴² Wasser Ex. 16.

⁴³ Tr. Vol. 1 at 77, 2-5.

2019.⁴⁴ Mr. Clark opined that Wasser's Application would have been approved but for the protest by Pioneer.⁴⁵

5. Notice

Wasser maintains that notice was sufficient in this matter. Wasser published notice in the *Midland Reporter-Telegram* on two occasions. In the first publication, Wasser referenced the Proposed Well's location as 19.7 miles northwest of the town of Stanton, TX. Mr. Clark reasoned, being the county seat, Stanton, Texas, would be a safe bet to orient the public's understanding of the Proposed Well's location. Mr. Clark had thought to include reference to a closer community of Tarzan, TX, but chose not to, as it is considered to be an unincorporated community and might not be considered by all to be a "town."⁴⁶

At the beginning of the hearing on the merits and in Pioneer's direct case, Pioneer alleged Wasser's notice of its Application was deficient due to the fact that Wasser stated distance to the Proposed Well from Stanton and not Tarzan. Wasser argued Pioneer has wells in the vicinity of the Proposed Well that referenced Stanton, TX in its notice and even wells nearer to Tarzan, which referenced Stanton.⁴⁷ Wasser pointed out that Pioneer published noticed for an application, in the immediate vicinity of the Proposed Well, for its production well, Lottie Guy 9E No. 5H, that references its location as 18.9 miles from Stanton, TX.⁴⁸ Mr. Clark republished notice referencing both Tarzan and Stanton, TX to meet these concerns of Pioneer and potentially the Commission.⁴⁹

In its closing, Wasser argued that Pioneer does not have "standing to bring an argument on behalf of another, unrelated, party (if such an 'affected party' were to exist here, which it does not.)"⁵⁰ Wasser concluded by stating the notice issue is a "red herring."⁵¹

6. Financial Assurance

At the time of the hearing, Wasser had an active P-5 *Organization Report* and a \$25,000 letter of credit as financial assurance.⁵²

⁴⁴ Wasser Ex. 14.

⁴⁵ *Id.*

⁴⁶ Tr. Vol. 1, at 3. See also, Commission Oil and Gas Form W-14 *Application of Dispose Oil & Gas Waste by Injection into a Porous Formation Not Productive of Oil or Gas*; Box 10 states the well is to be identified in miles and direction from the nearest town. No definition is included with the instructions to the form or in SWR 9.

⁴⁷ Tr. Vol. 1 at 42, 3-23.

⁴⁸ Wasser Ex. 8.

⁴⁹ Tr. Vol. 3 at 66-67.

⁵⁰ Wasser Closing Statement.

⁵¹ *Id.*

⁵² Wasser Ex. 18.

B. Summary of Pioneer's Evidence and Argument

1. Geology and Resource Development

Pioneer argues it is the mineral lessee of minerals the Proposed Well will have to penetrate to reach its injection interval. Pioneer is in an ongoing lease termination lawsuit with the surface and mineral owners, the Mabree family, which has put Pioneer's development of the area on hold.⁵³ Wasser is a Mabree entity.⁵⁴

Justin Anderson, a geologist employed by Pioneer, supervises the area. Mr. Anderson testified that interference with the Proposed Well will impede Pioneer's future operations. He used the type log for the Field, the Pioneer Houpt No. 1 well, and demonstrated that Pioneer's productive interval spans from the top of the Clearfork to the base of the Strawn.⁵⁵ Mr. Anderson furthered this by demonstrating that Pioneer subdivided the individual formations into as many as six zones (Wolfcamp A, Wolfcamp Upper B, Wolfcamp Lower B, Wolfcamp C1, Wolfcamp C2, and Wolfcamp D.)⁵⁶ Pioneer has 21 drilled wells on the section for the Proposed Well in 4 zones including the Clearfork, Middle Spraberry, Jo Mill, and Wolfcamp.⁵⁷ Pioneer has 20 wells planned in the same section as the Proposed Well and the same zones as its drilled wells.⁵⁸

2. Anti-collision Modeling

Pioneer maintains the Well will cause waste by providing a geospatial drilling hazard when trying to place its future wells as currently planned. Wasser will have to drill vertically through Pioneer's zones of interest and past two existing wells, the Lottie Guy 9E 2H and Lottie Guy 9E 5H.⁵⁹ Conversely, if the Proposed Well is drilled, Pioneer will have to drill horizontally past the Proposed Well to complete its horizontal development of several benches of the Spraberry (Trend Area) Field, presenting risk of wellbore collision.⁶⁰

Mr. Clothier, Directional Drilling Engineer for Pioneer, considers drilling near a high-pressure disposal well to be a health and safety concern.⁶¹ Through peer reviewed articles published in *Society of Petroleum Engineering Journals* ("SPE Journal Article"), the industry has determined a mathematical model to analyze wellbore collision risk. Mr. Clothier, sponsored an SPE Journal Article describing the industry-recognized concepts of cone of uncertainty and oriented separation factor ("OSF") as a standard analysis of acceptable risk, when drilling near other wellbores.⁶² The industry considers a separation

⁵³ Tr. Vol. 1 at 133, 13-18.

⁵⁴ Tr. Vol. 1 at 131-134.

⁵⁵ Pioneer Ex. 5.

⁵⁶ Pioneer Ex. 6.

⁵⁷ Pioneer Ex. 10.

⁵⁸ Pioneer Ex. 11.

⁵⁹ Pioneer Ex. 10.

⁶⁰ Pioneer Ex. 11.

⁶¹ Tr. Vol. 2 at 91, 6-7.

⁶² Pioneer Ex. 12.

factor below one to be unacceptable risk.⁶³ Mr. Clothier explained, “This represents the point at which the probability of collision is high and drilling cannot proceed until the risk has been reduced and requires a written exemption.”⁶⁴ Mr. Clothier maintains Pioneer, internally, uses an OSF of 1.25 to determine an unacceptable risk, an even more cautious risk tolerance than industry standards.⁶⁵ Due to “positional uncertainty”⁶⁶ and compounding tool measurement errors inherent to measurement while drilling (“MWD”) tools, a cone of expanding ellipses form the cone of positional uncertainty as the new hole is made.⁶⁷ The surfaces of the cone represent the extent where the wellbore may potentially exist in the worst-case scenario. According to Mr. Clothier, the nearest drilled well, the Lottie-Guy 9E 2H, shows a 0.979 OSF to the Proposed Well, and the other impacted planned future developments range from 0.757 to 1.062 OSF.⁶⁸ Pioneer’s planned wells fall below industry and Pioneer’s risk tolerances and might not be drilled due to unacceptable wellbore collision risk.⁶⁹ In this scenario, two of the undrilled wells targeting the Clearfork and Wolfcamp are modeled to lose 9,000 feet of horizontal wellbore each, making the wells uneconomic to drill. One planned well in the Middle Spraberry stands to be shortened by 2,000 feet.⁷⁰ Mr. Clothier opined that the Lottie Guy 9E 2H would be a total loss if a collision occurred.⁷¹

Mr. Miller, Consulting Petroleum Engineer, testified that the Lottie Guy 9E 2H is the closest well to the Proposed Well’s well plan. Mr. Miller sponsored a production forecast of the Lottie Guy 9E 2H. If collided with, and a total loss occurs, Pioneer stands to lose 512,000 barrels of oil and 411 million cubic feet (“MMcf”) of gas remaining to be recovered from the Lottie Guy 9E 2H.⁷² Mr. Miller used Pioneer’s 2019 second quarter earnings report to obtain an average lateral length of 9,800 feet and expected ultimate recovery (“EUR”) of 1.6 million barrels of oil equivalent (“BOE”) per well. The Wolfcamp A, Wolfcamp B, and Spraberry, make up 95% of the sample group and other formations contribute 5% of the sample group making it applicable to wells in the vicinity of the Proposed Well.⁷³ Mr. Miller created a ratio using these values to conclude that Pioneer recovers about 163 BOE per lateral foot on a basin-wide analyses.⁷⁴ Mr. Miller demonstrated potential lost recovery from its planned lateral developments will result in an ultimate loss of recovery of 3.8 million barrels of oil if all three planned, but undrilled, impacted wells are a total loss.⁷⁵

3. Application

⁶³ Tr. Vol. 2 at 92, 18-19.

⁶⁴ Pioneer Ex. 12, Pg. 11.

⁶⁵ Tr. Vol. 2 at 92, 20-22.

⁶⁶ Tr. Vol. 2 at 77, 19.

⁶⁷ Tr. Vol. 2 at 77, 4-9.

⁶⁸ Pioneer Ex. 13, Pg. 2.

⁶⁹ Tr. Vol. 2 at 95, 15-18.

⁷⁰ Tr. Vol. 2 at 98, 15-18.

⁷¹ Tr. Vol. 2 at 98, 20-23.

⁷² Pioneer Ex. 15.

⁷³ Pioneer Ex. 16.

⁷⁴ Tr. Vol. 2 at 107, 6-11.

⁷⁵ Pioneer Ex. 17.

Pioneer argues that the Proposed Well was applied for as a well “identical” to the already-permitted Mabee 3 SWD Lease, Well No. 1 (“Mabee 3”), based on Wasser’s communications with the UIC Department. Pioneer believes this reference created numerous deficiencies with the Application due to the issues Pioneer takes to the installation of Wasser’s Mabee 3.⁷⁶ Pioneer further showed that the Mabee 3 and the Mabee 5 SWD Lease, Well No. 1 (“Mabee 5”) were inadvertently, or incorrectly, disposing in the Cambrian formation.⁷⁷ Injection into the Cambrian formation is forbidden by Commission guidelines to curb seismic activity by injection.⁷⁸ Pioneer also contends that because the Application was meant to be identical to the Mabee 3, the Proposed Well would also be disposing into, at least in part, forbidden basement rock.⁷⁹ Basing the permitted rate on an offset well injecting “out of zone” would be a problem, and would confuse any calculations the UIC may have made in assessing the volumetric and pressure capability of the Proposed Well to take injectate.⁸⁰ Pioneer argues no spinner survey or calculations were made to obtain the percentage of the Mabee 3 and 5’s injection was being disposed of into the Cambrian formation. According to Pioneer, the Application’s daily volume should have been adjusted down by this proportion.⁸¹ Mr. Miller opined that the proposed disposal interval as requested from 12,900 to 15,500 feet would include sections of the off-limits Cambrian formation.⁸² Mr. Miller also reasoned that public information is available that would have allowed Wasser to request a more reasonable injection interval. In his interpretation, the base of the Ellenburger occurs at around 13,700 feet. Mr. Miller agreed with Wasser’s interpretation that the top of the Ellenburger in the area will likely occur at around 12,900, “an estimated top from the [kelly bushing (“KB”)] KB of about 12,960 feet, and that’s fairly consistent with the formation top that Wasser picked for this area.”⁸³ Mr. Miller continued, “we cross-referenced that versus the logs in the area, and I think our thickness was close to 730 feet.”⁸⁴

Pioneer argues that applying for an unrealistically large disposal interval and relying on a “drill and see” method of determining the formation thickness would prevent Commission staff from running valid pressure and volumetric calculations necessary to issue an administratively complete designation.

4. Notice

Pioneer contends the Application is defective and the notice was deficient and therefore any act taken would be void ab initio.⁸⁵ Pioneer expressed its belief that the Application should be dismissed outright, or, should be referred back to UIC “once it has property filed with the correction formations and the correct interval.”⁸⁶

⁷⁶ Pioneer Cross Ex. 1.

⁷⁷ Tr. Vol. 2 at 139, 1-20. Pioneer Ex. 30.

⁷⁸ Tr. Vol.1 at 19,16-18.

⁷⁹ Pioneer Ex. 7

⁸⁰ Tr. Vol. 2 at 158, 11-22.

⁸¹ Tr. Vol. 3 at 70-71.

⁸² Tr. Vol. 2 at 132, 4-8. Pioneer Ex. 26.

⁸³ Tr. Vol. 2 at 155, 12-14.

⁸⁴ Tr. Vol. 2 at 155-156, 17-25. Pioneer Ex. 35.

⁸⁵ Tr. Vol. 1 at 9-12. Pioneer Ex. 19.

⁸⁶ Tr. Vol. 1 at 11, 17:25.

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First, Pioneer argues the incorrect formation was listed given the injection interval of 12,900 feet to 15,500 feet. Pioneer stated this interval would be in both the Ellenburger and Cambrian formations and the notice and Application only listed the Ellenburger formation.⁸⁷ Pioneer concluded that due to this error, Commission staff would have been unable to analyze the actual interval, thus “UIC didn’t perform any of its due diligence on the zone to be injected into [...] didn’t run any of their pressure profiles.”⁸⁸

Second, Pioneer argues the Application and notice incorrectly referenced the Proposed Well’s location as 19.7 miles northwest of the town of Stanton, TX. Pioneer maintains that 9.6 miles to the unincorporated community of Tarzan, TX would be more appropriate.⁸⁹ Mr. Miller provided Commission publication guidelines which state the application should contain the direction and miles to nearest town and also injection/disposal interval.⁹⁰ Mr. Miller presented a letter from the UIC department in a case with similar circumstances (Oil and Gas Docket No. 01-0278850), where Commission staff asked the applicant to republish notice to a closer town, Pioneer stating the reason was “potentially affected persons were not provided reasonably accurate description of the proposed location upon which to consider how the proposed disposal well may affect them.”⁹¹ Mr. Miller stated, “in this particular case the Commission required us to reissue notice in the newspaper and to the parties.”⁹²

On January 17, 2020, Wasser republished notice, which included the location to the Proposed Well from both Stanton and Tarzan.⁹³

In its closing, Pioneer argued this republication was insufficient to cure the defect, as it was untimely and improper.⁹⁴ Pioneer reasons by the time the notice was republished, the 15 day protest period would end 4 days after the conclusion of the hearing, thus “foreclosing participation of affected persons who would oppose the Subject Application based on the new information found in the corrected notice.”⁹⁵ Pioneer takes issue with Wasser’s argument that the original mailed notice was sufficient because it was sent to those who are explicitly included in the definition of “affected person.” Pioneer believes this to be insufficient, as it ignores the purpose of publication and precedent.⁹⁶

⁸⁷ *Id.*

⁸⁸ Tr. Vol. 1 at 10, 10:23.

⁸⁹ Pioneer Ex. 18.

⁹⁰ Pioneer Ex. 21.

⁹¹ Pioneer Ex. 23.

⁹² Tr. Vol. 2 at 123, 4-6.

⁹³ Tr. Vol. 3 at 85-87.

⁹⁴ Pioneer Closing Statement.

⁹⁵ *Id.*

⁹⁶ *Id.*

5. Public Interest

Pioneer asserts it is the main operator in the area and does not currently use Wasser's other disposal assets. Pioneer will not use the Proposed Well for disposal, pointing out that the Proposed Well is directly within the heart of Pioneer's leased acreage.⁹⁷

Additionally, Pioneer argues there is no market or need for the Well and consequently, the Well is not in the public interest.⁹⁸ Mr. Miller stated, "there are numerous disposal wells in the area and that there is available capacity out in this area for disposal of fluids."⁹⁹ Mr. Miller summed the permitted volume within a 10-mile radius for commercial disposal permits, based upon the last H-10 cycle, to determine an overall utilization at about 17%. Mr. Miller averaged the individual well utilizations to approximately 26%.¹⁰⁰ Mr. Miller did a similar analysis on non-commercial wells. His analysis demonstrated the average daily injection, based on the last H-10 cycle, was approximately 14% utilization. Investigating on an individual well basis resulted to about 26% utilization.¹⁰¹

Pioneer operates 1,200 oil and gas wells in the 10-mile radius, the most of any operator. Pioneer has the highest utilization of its own permitted disposal capacity of 29%.¹⁰² Pioneer demonstrated Wasser to be injecting at around 6% of its permitted capacity, in the same radius, while operating zero producing wells.¹⁰³ Pioneer argues that the low utilization in permitted injection volume within 10 miles shows a lack of additional need for injection capacity.¹⁰⁴

C. Railroad Commission Staff Testimony

The Examiners requested the appearance of Commission staff to answer some questions that arose the first day of the merits hearing, including "Would a nonspecific range of disposal interval, or if the interval were modified after drilling, logging and completing the well, materially affect staff's determination?" Pioneer produced an email correspondence from the UIC staff, which showed staff's use of the steady-state deliverability equation, in certain cases, to substantiate Pioneer's argument that an unknown formation thickness during permitting could possibly lead to administrative denial of the Application. Paul Dubois, Assistant Director of Technical Permitting in the Oil and Gas Division, provided testimony regarding the UIC Department's use of the injection interval thickness and other applicant provided parameters.

⁹⁷ Tr. Vol. 2 at 56, 9-17.

⁹⁸ Tr. Vol. 2 at 168-169, 24-25, 1.

⁹⁹ Tr. Vol. 2 at 168, 19-21.

¹⁰⁰ Tr. Vol. 2 at 167, 6-17. Pioneer Ex. 39.

¹⁰¹ Tr. Vol. 2 at 168, 5-16. Pioneer Ex. 39.

¹⁰² Tr. Vol. 2 at 171, 17-21.

¹⁰³ Pioneer Ex. 40.

¹⁰⁴ Tr. Vol. 2 at 173, 15-17.

Mr. Dubois explained the use of variable h (thickness, feet), in the context of the steady state deliverability equation, on UIC's determination of a completed application, "The maximum surface injection pressure will be determined by the 0.5 psi/foot guideline." Mr. Dubois stated, "we don't really look at that interval in terms of normal permitting questions."¹⁰⁵ Mr. Dubois additionally testified, "With regard to the thickness of a formation, say a formation turns out to be – was thought to be 200 feet thick but it's 100 feet thick, that really doesn't matter to us because you're still going to be limited by pressure and rate. So as long as you don't exceed the pressure and rate, the actual thickness doesn't play."¹⁰⁶

Regarding injectivity concerns, Mr. Dubois testified:

For high volume wells, typically over 20,000 - 25,000, we started asking operators to demonstrate to us through some engineering calculations the pressure needed to put that much fluid into the reservoir and whether the well tubing can provide that pressure to the bottom hole, and the tubing can be a limiting factor.¹⁰⁷

Concerning an administratively complete application, with a step-rate test condition after drilling, versus, calculated volumetric capabilities, Mr. Dubois testified, "Such conditions requiring those tests would meet our data objectives."¹⁰⁸

In respect to amending an injection interval after drilling and submitting and annotated well or mud log, Mr. Dubois testified, "we would simply issue an in-house amendment correcting those, making that clear for the record,"¹⁰⁹ as long as additional notice was not required.

V. Examiners' Analysis

The Examiners find that there is sufficient evidence that Wasser met its burden to show that the Application for the proposed disposal well is in accordance with Chapter 27 of the Texas Water Code and Statewide Rule 9. The Examiners recommend that the Commission grant the Application based on the evidence presented.

A. Protection of Mineral Formations and Prevention of Waste

The Examiners find there is sufficient evidence that the Proposed Well will not endanger or injure any oil, gas, or other mineral formation. The issue does not revolve around injected fluids displacing, over-pressurizing, or watering out hydrocarbons in a productive zone. Wasser found no recent production from the Ellenburger formation. The Well design and confining strata will prevent injected fluids from migrating to a productive zone. Pioneer claims that it will be harmed by a reduction in future Wolfcamp production

¹⁰⁵ Tr. Vol. 2 at 12-13, 24-25, 1-8.

¹⁰⁶ Tr. Vol. 2 at 30-31, 23-25, 1-4.

¹⁰⁷ Tr. Vol. 2 at 14, 6-12.

¹⁰⁸ Tr. Vol. 2 at 35, 2-3.

¹⁰⁹ Tr. Vol. 2 at 37, 2-3.

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by shortening the length of laterals or preventing the wells from being drilled all together due to unacceptable wellbore collision risk in relation to the Proposed Well. The Examiners note the surveys used by Pioneer to create the anti-collision report and calculate OSF's were "inclination only" surveys. Modeling the Proposed Well's future location on "inclination only" surveys was an assumption taken from "inclination only" surveys on the Mabee No. 3 SWD.¹¹⁰ While drilling the Proposed Well, Wasser will use directional surveys including inclination and azimuth.¹¹¹ This will provide a higher degree of specificity of the location of the Well, reduce the cone of uncertainty, and raise the OSF. Mr. Clark stated that directional surveys will be run and provided to the Commission and will be available to Pioneer.¹¹²

The Examiners conclude Pioneer is capable of directionally drilling planned wells with the precision required in this case. Pioneer was the applicant in the field rules application of the Spraberry (Trend Area) Field, addressing a properly permitted horizontal well as being anywhere with a 50-foot box from the planned center of the well's trajectory ("50-foot Box Rule"):

A properly permitted horizontal drain hole will be considered to be in compliance with the spacing rules set forth herein if the as-drilled location falls within a rectangle established as follows: Two sides of the rectangle are parallel to the permitted drain hole and 50 feet on either side of the drain hole.¹¹³

This is consistent with Pioneer's internal policy of allowing directional drillers a 50-foot window (Left/Right) to deviate without changes to the well plan as a course of normal drilling operation.¹¹⁴ Pioneer's closest existing well is the Lottie Guy 9E 2H. The closest distance the Lottie Guy 9E 2H and the Proposed Well's path will be 337-feet on center.¹¹⁵ With the Proposed Well surveyed for inclination and azimuthal data, and the Proposed Well's as-drilled location made available to Pioneer, the OSF should rise to at least industry standards and well within Pioneer's ability to safely drill, not stranding reserves. In support of this fact, on questioning, Mr. Clark stated:

Q: [O]nce it is drilled, if Wasser were to provide the directional survey to operators of – who have leases in Section 8 showing the precise location of the Mabee 4, SWD No. 1, do you have any concerns that an operator will not be able to avoid wellbore collision in drilling their new wells on this property?

A: No. They can avoid the well.¹¹⁶

¹¹⁰ Tr. Vol. 2 at 98, 1-3.

¹¹¹ Tr. Vol. 3 at 38, 7-9.

¹¹² Tr. Vol. 3 at 40-41.

¹¹³ Tr. Vol. 2 at 206, 19-25.

¹¹⁴ Tr. Vol. 3 at 89-90.

¹¹⁵ Tr. Vol. 2 at 218, 8-10.

¹¹⁶ Tr. Vol. 1 at 190-191, 23-25, 1-4. Ms. Kobzar questioning of Wasser witness Mr. Clark.

On cross-examination, Mr. Clothier testified that Pioneer does not have the same concern regarding directionally drilling near its own vertical wells, (Lottie-Guy Nos. 2H and 5H) due to accurately depicting its location.¹¹⁷ Additionally, Pioneer has avoided collision with a pre-existing Atoka well operated by COG with several of its Wolfcamp horizontal wells.¹¹⁸ With the proper input data to anti-collision modeling, Pioneer is capable of drilling with the required precision.

Regarding waste via Pioneer's potential lost reserves, the Examiners do not give this argument much weight. If Pioneer's wells can be directionally drilled with the Proposed Well in place, no reserves will be lost. Directional drilling includes the use of inclination and azimuth survey data which will provide a higher degree of positional certainty. Wasser is not stranding or displacing Pioneer's production with its injection. Wasser is requesting a vertical penetration to reach a lower, undisputedly, nonproductive zone. The Commission has long-standing precedent that operators of deeper correlative intervals and depth-severed leases be allowed to access those zones. Denying this application on this basis would prevent the surface owners' access to pore space they have a right to use. Additionally, the foundational analysis of the quantification of lost reserves was built on Pioneer's high-level earnings report to investors to produce a field wide BOE per lateral foot, using the average lateral length and BOE recovery for the entire Permian Basin.

For these reasons, the Examiners find the Proposed Well will not endanger or injure any oil, gas, or other mineral formation.

B. Public Interest

Section 27.051 of the Texas Water Code requires that the use or installation of a proposed injection well or facility be in the "public interest."¹¹⁹ Prior examiners have noted that "public interest" is a "separate and independent prerequisite" from the other required findings outlined in Chapter 27 of the Texas Water Code.¹²⁰ The burden of proof to establish that a proposed commercial disposal facility is in the public interest as required by Chapter 27 of the Texas Water Code is placed upon the applicant for the permit.¹²¹ Neither Chapter 27 of the Water Code nor Statewide Rule 9 defines the term, "public interest," however.

It is generally understood that safe and efficient disposal of produced water is necessary to the proper maintenance of oil and gas development and production. The Commission has traditionally considered the following as evidence that the installation of a disposal well is in the public interest:

¹¹⁷ Tr. Vol. 2 at 82, 22-24.

¹¹⁸ Tr. Vol. 1 at 194-195, 1-25.

¹¹⁹ Tex. Water Code § 27.051(b)(1).

¹²⁰ Oil and Gas Docket No. 02-0285578, *Application of Supreme Vacuum Services, LLC*, Examiners' Proposal for Decision (5-20-2014), pg. 8.

¹²¹ See e.g. Oil and Gas Docket No. 09-0262947, *Application of IWOC, Inc.*, Examiners' Proposal for Decision (1-1-2010), pg. 11.

1. Injection of water into a disposal well is a preferred method of disposal in terms of overall environmental protection.
2. The economic life of a producing well will be extended and more oil produced if an operator has a means of disposing of his produced water.
3. Extra disposal capacity is needed in the area of the proposed well.¹²²

These generally accepted proofs of public interest have often been expressed in terms of “industry need.” If an applicant submits evidence that a lack of nearby disposal facilities or lack of capacity at existing facilities is shortening the economic life of oil and gas wells, this has customarily been considered proof of industry need for additional disposal capacity and thus proof of public interest. For example, industry need has been shown for past disposal applications where truck wait times at area facilities were so excessive as to compel traveling greater distances at greater expense to dispose of produced water.¹²³ Evidence in the form of disposal contracts or letters of support from nearby operators has also been accepted by the Commission to demonstrate industry need if coupled with some evidence of a lack of capacity.¹²⁴

More recently, the Commission has been willing to consider an applicant’s readiness to incur the expense of drilling and operating a disposal well based upon a factually supported market assessment of area need as evidence of public interest.¹²⁵ In addition, past examiners have noted the utility of redundancy in disposal operations; it can reasonably be inferred that backup capacity to prevent system upsets and avoid the shutting-in of producing wells is also in the public interest.¹²⁶

Wasser is applying for a non-commercial disposal well. A non-commercial disposal well is defined by the Statewide Rule 9 as a well that does not receive trucked or hauled water for disposal. Wasser is piping water to the Proposed Well.¹²⁷ Wasser contends that it has assessed the contractual disposal obligations and they exceed Wasser’s current capacity.¹²⁸ The Examiners find more compelling Wasser’s proposal to incur the extra expense in completing and disposing of water in the Ellenburger formation. The Ellenburger demonstrates good confining abilities and is deeper than the productive horizons, providing an optimal disposal interval, at this time, as opposed to the shallower San Andres, which is commonly disputed due to its close proximity to shallower modern

¹²² See *Discussions of Law Practice and Procedure* (1992) pg. 67. Evidence that extra capacity is not needed, standing alone, has not customarily been considered by the Commission as proof that the proposed well is not in the public interest. See *id.*

¹²³ See, e.g., Oil and Gas Docket No. 06-0273122, *Application of Chireno Disposal, LLC*, Examiners’ Proposal for Decision (10-10-2012), pg. 6.

¹²⁴ See *id.*

¹²⁵ Oil and Gas Docket No. 08-0289657, *Application of Lotus LLC*, Examiners’ Proposal for Decision (1-27-2015), pg. 12.

¹²⁶ See, e.g., Oil and Gas Docket No. 06-0273122, *Application of Chireno Disposal, LLC*, Examiners’ Proposal for Decision (10-10-2012), pg. 6.

¹²⁷ Tr. Vol. 3 at 31-32.

¹²⁸ Tr. Vol. 1 at 113, 12-19.

productive intervals. In addition, this well will be used for redundancy for Wasser's disposal infrastructure in the southeast part of the Mabee Ranch area.¹²⁹

Although Pioneer demonstrated a low utilization of disposal wells in the area, capacity utilization is only one way the Commission has looked at public interest. The Examiners find the use of the deep, non-productive Ellenburger formation is a strong argument that the Well is in the public interest.

For these reasons, the Examiners find the Proposed Well is in the public interest.

C. Protection of Ground and Surface Water

Wasser provided testimony and exhibits to meet its burden of proof that the injection will not endanger underground sources of water. This is not a disputed issue. The Proposed Well will be drilled and completed in a manner to protect groundwater according to the Commission's Groundwater Advisory Unit. Mr. Clark testified that there is adequate separation between the BUQW and the top of the disposal interval and competent confining intervals.

For these reasons, the Examiners find the Well is designed to adequately protect ground and surface water.

D. Financial Security

Statewide Rule 78 states that any person, including any firm, partnership, joint stock association, corporation, or other organization, is required to file an organization report and financial security with the Commission.¹³⁰ Wasser meets this requirement in the form of a \$25,000 letter of credit and its active P-5 status.

E. Application and Notice Deficiencies

1. Disposal Interval and Formation

The Examiners find the disposal interval and formation listed in the Application and Notice to be sufficient.

Pioneer argued Wasser should and could have been more exact in its estimation of the thickness of its injection interval. The Examiners do not disagree. However, the Examiners do not find this lack of exactness rises to the level of the Application being void ab initio as argued by Pioneer. It is understood that an injection interval may be amended following drilling based what is often discovered, as opposed to what was known previously, about formation depth when drilling. So long as the interval is less than what was notice, the notice is sufficient. Additionally, Wasser has stated it does not intent to nor would Wasser be permitted to dispose into the Cambrian formation. The draft

¹²⁹ Tr. Vol. 1 at 108-109.

¹³⁰ See, e.g., Tex. Water Code §§ 27.051(b)(4), 27.073; Tex. Nat. Res. Code § 91.104; 16 Tex. Admin. Code § 3.78.

permit created by UIC Staff includes a permit condition that the well must end at least 100 feet above the Cambrian. The Examiners find the inclusion of this permit condition to be a necessity.

Pioneer also argued that based on the lack of exactness of the disposal interval, UIC Staff would have been precluded from performing an accurate evaluation of the Application. As testified to by Mr. Dubois, the difference here would not have changed the evaluation performed by UIC Staff.¹³¹ Additionally, an application is reviewed de novo when it is referred to the Hearings Division, and while the Examiners do consider and appreciate Staff's evaluation, the Examiners do not recommend approval or denial without a thorough review of the Application.

2. Stanton v. Tarzan

There was a great deal of argument and testimony at the hearing regarding the correct location to use as the town reference when filling out the Form W-14 and publishing notice; and if the plat submitted with the Form W-14 was correct when it identified the nearest post office as being in Stanton, when in fact, Tarzan has a post office.¹³² The Form W-14 simply says, "center of nearest town." Wasser used Stanton, as it believes Tarzan to be an unincorporated community and therefore, not a town.¹³³ Pioneer believes Tarzan is a town for the purposes of notice.¹³⁴ Pioneer offered a February 2019 presentation by UIC Staff which contained a slide regarding publication guidelines which stated to match the application in the notice for the direction and miles to the nearest town.¹³⁵ Additionally, Pioneer offered correspondence with Commission Staff in a 2012 application where the applicant was asked to republish notice to correct the location of the nearest town, as Staff believed the town used was insufficient and therefore did not adequately inform affected parties of the proposed location, as there was a closer town.¹³⁶

As evidenced by Mr. Miller's testimony on cross, Pioneer did not dispute the distance listed was correct, just that the reference to Stanton was improper.

Q: And a person like you, a consulting petroleum engineer, using those directions northwest -- 19.7 miles northwest of Stanton wouldn't be confused as to where approximately this well is located.

A: No. I think the distances that you identified were accurate.¹³⁷

¹³¹ Tr. Vol. 2 at 12-37.

¹³² Tr. Vol. 2 at 118-120. Pioneer Ex. 22.

¹³³ Tr. Vol. 1 at 3.

¹³⁴ Tr. Vol. 2 at 112-118.

¹³⁵ Tr. Vol. 2 at 116-117. Pioneer Ex. 21.

¹³⁶ Tr. Vol. 2 at 121-123. Pioneer Ex. 23, 24, and 25.

¹³⁷ Tr. Vol. 3 at 17, 12-17.

The Examiners decline to enter the argument of what is a town and what is not. For purposes of notice, Tarzan may be the better point of reference, as it is closer, and in general, the closer something is, the better the ability to orient to it. However, the point of reference needs to be well known enough that anyone who may be affected would know where it is so as to be able to orient oneself. Those facts are not in record. The fact that Pioneer has also referenced Stanton in its applications for wells in the vicinity of the Proposed Well and not Tarzan, leads the Examiners to conclude the use of Tarzan as a point of reference may be a common issue for operators in this area. However, without more knowledge of Tarzan, other than the fact that it has a post office, the Examiners are unable to conclude if only using Stanton as a reference point creates a defect in the notice, nor is it necessary for the Examiners to do so given the republication.

At the hearing on October 21, 2019, Wasser offered to republish notice and the Administrative Law Judge concurred.¹³⁸ On January 17, 2020, Wasser republished notice listing both Stanton and Tarzan.¹³⁹

Pioneer believes the republished notice to be insufficient, as it was published so late as to cause the period to protest to extend past the last day of the hearing.¹⁴⁰ While it would have been better if the notice had been republished sooner, the Examiners find this does not rise to the level of declaring the notice void. Even though the hearing had concluded, the final transcript had not been issued and written closings had not been filed—the record was still open when the period to protest elapsed. Had an affected person protested, accommodations would have been made to ensure an equal opportunity to protest.

Notice must be “reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections.”¹⁴¹ The Examiners find the republished notice to be sufficient.

VI. Recommendation, Proposed Findings of Fact and Proposed Conclusions of Law

Based on the evidence, the Examiners recommend the Commission approve the Application, and adopt the following findings of fact and conclusions of law.

Findings of Fact

1. On November 15, 2018, Wasser Operating, LLC (“Wasser” or “Applicant”) submitted to the Railroad Commission of Texas (“Commission”) an application (“Application”) pursuant to Statewide Rule 9 for a non-commercial permit to inject fluid into a reservoir not productive of oil or gas for the Mabee 4 SWD Lease, Well No. 1 (“Well”), in the Spraberry (Trend Area) Field, in Martin County, Texas.

¹³⁸ Tr. Vol. 2 at 130.

¹³⁹ Tr. Vol. 3 at 85-87.

¹⁴⁰ Pioneer Closing Statement.

¹⁴¹ See, *Mullane v. Central Hanover Bank & Trust Co.*, 339 U.S. 306 (1950).

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2. On October 31, 2018, notice of the Application was published in the *Midland Reporter-Telegram*, a newspaper of general circulation in Martin County, Texas.
3. On November 13, 2018, Applicant mailed notice of the Application to the owner of record of the surface tracts on which the wells are located; each commission-designated operator of any well located within one half mile of the proposed injection wells; the county clerk of the county in which the wells are located; the city clerk or other appropriate city official of any city where the wells are located within the municipal boundaries of the city; and owners of record of each surface tract that adjoins the proposed disposal tracts.
4. Letters dated November 13, 2018, from the Commission's Groundwater Advisory Unit, estimates the base of usable quality water (BUQW) is at 1,600 feet.
5. Pioneer Natural Resources USA, Inc. ("Pioneer" or "Protestant"), who operates wells within one half mile of the Proposed Well, protested approval of the Application, via email, on December 3, 2018 and is the only protestant.
6. On June 14, 2019, the Hearings Division of the Commission sent a Notice of Prehearing Conference ("NOPHC") on the Application setting a prehearing conference date of July 15, 2019. The NOPHC contains: (1) a statement of the time, place, and nature of the hearing; (2) a statement of the legal authority and jurisdiction under which the hearing is to be held; (3) a reference to the particular sections of the statutes and rules involved; and (4) a short and plain statement of the matters asserted.¹⁴² The NOPHC was sent to persons entitled to be sent notice of the Application. Consequently, the parties received more than 10 days' notice. The NOPHC provided notice that failure to appear at the Prehearing Conference could result in dismissal of a party's claim or protest.
7. The prehearing conference was held on July 15, 2019, as noticed. Wasser and Pioneer appeared. The parties were set.
8. At the Prehearing Conference, the hearing on the merits was set for September 5, 2019, as agreed to by the parties. Both Wasser and Pioneer appeared and participated at the hearing on September 5, 2019. The hearing did not conclude that day, and was continued to October 21, 2019, and then January 28, 2020. Wasser and Pioneer appeared and participated on all hearing dates.
9. In a letter dated February 7, 2019, Commission staff stated the Application was administratively complete but could not be approved because the Application was protested. A draft permit was enclosed with the letter.
10. Pioneer Natural Resources USA, Inc. protests the application and asserts wellbore collision risk will reduce its ultimate recovery of its Spraberry (Trend Area) current and planned developments and will cause reserves to remain unrecovered.

¹⁴² See Tex. Gov't Code §§ 2001.051, 052; 16 Tex. Admin. Code §§ 1.42, 1.45.

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11. On January 17, 2020, notice of the Application was republished in the *Midland Reporter-Telegram*, a newspaper of general circulation in Martin County, Texas, listing both Stanton and Tarzan as reference points to the Well.
12. Wasser seeks to drill and complete the proposed disposal well in the Spraberry (Trend Area) Field. The Mabee 4 SWD Lease is located 19.7 miles northwest of Stanton, TX and 9.6 miles northeast of Tarzan.
13. Wasser performed a seismic study in the one-hundred square mile area surrounding the proposed disposal well and reported no seismic events have been recorded.
14. Wasser seeks authority in the Application to inject a maximum daily volume of 30,000 barrels per day at a maximum surface injection pressure of 6,450 psig.
15. Wasser agreed to run a step-rate test prior to operating the proposed disposal wells.
16. The proposed disposal well Mabee 4 SWD Lease, Well No. 1 has the following proposed design, with proper safeguards both groundwater and surface freshwater can adequately be protected from pollution:
 - a) Wasser proposes to drill a 12 ¼" hole to approximately 9,500 feet and run 9 5/8" casing.
 - b) The planned 13 3/8-inch surface casing will be set at 1,800 feet and cement circulated to surface which is deeper than the BUQW and is protective of fresh groundwater.
 - c) Wasser proposes to drill an 8 ¾" hole to approximately 13,500 feet and set 7 5/8" inch casing.
 - d) Wasser proposes 5 1/2" tubing to be run and set on a packer at 12,800 feet.
 - e) The Ellenburger formation is the proposed disposal interval.
17. Wasser has an active Form P-5 *Organization Report* on file with \$25,000 as financial assurance.
18. Anti-collision modeling prepared by Pioneer used inclination only surveys.
19. Wasser will use inclination and azimuth surveys while drilling the proposed Well.
20. The use of inclination and azimuth survey data while drilling will reduce the wellbore collision risk.

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21. Pioneer would have access to the inclination and azimuth survey data to use for future drilling operations.
22. The injection will be confined to the non-productive Ellenburger formation.
23. The oil, gas or mineral formations in the area are not endangered and will not be endangered if the permit is approved as requested and inclination and azimuth surveys are utilized.
24. Pioneer demonstrated a low utilization of permitted disposal capacity in the area.
 - a) The average individual well utilization in a 10-mile radius of both commercial and non-commercial disposal wells is approximately 26%.
 - b) Wasser is injecting approximately 6% of its permitted capacity.
 - c) Pioneer operates most of the producing wells in the area.
 - d) Pioneer does not use Wasser for disposal.
25. Wasser demonstrated the proposed well is in the public interest due to injecting into the Ellenburger, which is below productive intervals in the area and will also serve as redundant disposal capacity.

Conclusions of Law

1. Proper notice of hearing was timely issued to persons entitled to notice. *See, e.g.*, Tex. Gov't Code § 2001.051; 16 Tex. Admin. Code §§ 1.41, 1.42, 1.45, 3.9.
2. The Commission has jurisdiction in this case. *See, e.g.*, Tex. Nat. Res. Code § 81.051; Tex. Water Code §§ 27.031, 27.051(b).
3. The proposed injection Well is in the public interest. Tex. Water Code § 27.051(b)(1).
4. The proposed injection Well will not endanger oil, gas, or geothermal resources. Tex. Water Code § 27.051(b)(2); 16 Tex. Admin. Code § 3.9(a).
5. Both ground and surface fresh water can adequately be protected from pollution, with proper safeguards. Tex. Water Code § 27.051(b)(3).
6. Wasser has made a satisfactory showing of financial responsibility. *See, e.g.*, Tex. Water Code §§ 27.051(b)(4), 27.073; Tex. Nat. Res. Code § 91.104; 16 Tex. Admin. Code § 3.78.

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7. Applicant demonstrated the proposed Well meets the requirements of chapter 27 of the Texas Water Code and the Railroad Commission's Statewide Rule 9.

Recommendation

Based on the evidence presented at the hearing, the Examiners recommend that the Commission approve Wasser's Application for the subject disposal well.

Respectfully submitted,

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Austin Gaskamp
Technical Examiner

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Kristi M. Reeve
Administrative Law Judge