Additional Information

Pilot

Dorsett State SWD#1

SWD-2600

Aug 5, 2025

PILOT WATER SOLUTIONS

ACE Energy Advisors

TECHNICAL MEMO

Date: July 31, 2025

From: Ace Energy Advisors, on behalf of Pilot Water Solutions

To: New Mexico Oil Conservation Division, OCD Engineering Group

Subject: Response to OCD Questions
Dorsett SWD State #1 (SWD-2600; pMSG2404538029)

SUMMARY

Below are responses to the Oil Conservation Division's (OCD) questions regarding the Geology, Well Design, and Drilling Details associated with the C-108 application submitted by Pilot Water Solutions (Pilot) for the Dorsett SWD State #1 (SWD-2600; pMSG2404538029), hereafter referred to as the "Subject SWD". Exhibits and reference materials that were either directly requested by OCD or used to support Pilot's responses are included as attachments.

OCD QUESTIONS AND PILOT RESPONSES

1) Section XII – Affirmative Statement (Page 8 of the application)

a) Please include the Name, Title, and signature of the person making the affirmative statement.

- **Response:** An updated Affirmative Statement including the requested information is included as ***Attachment 1***.

b) Typical wording included in the affirmative statement is as follows: "I __Name ___ have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water"

- **Response:** An updated Affirmative Statement including the suggested language is included as ***Attachment 1***.

2) Geology, Well Design & Drilling Details: Review of offset well data confirms the presence of the Salado/Salt formation(s) at depths ranging from ~ 1650 ft to ~ 2950 ft, and salt stringers down to ~ 3150 ft. Please include a narrative to document the drilling/casing/cementing philosophy to ensure protection of the USDW and applicable contingencies as listed below:

a) A listing of expected formation tops for the USDW(s), Salt sections, Red beds as applicable

- **Response:** A listing of expected formation tops is included ***Attachment 2***.

b) Details on the Mud system used to drill the surface casing down to the top of Rustler (i.e.. base of USDW).

- **Response:** The 17-1/2" wellbore for the surface casing will be drilled 25 deeper than the Top of the Rustler (i.e. base of the USDW) using freshwater mud. The types of mud systems to be used above and below the base of the lowermost USDW are depicted in the updated Wellbore Diagram included as ***Attachment 3***.

c) Details on mud system, cementing & casing program for drilling through the salt section(s).

i. Assuming a salt mud system is used to drill the salt section(s), can that same mud system be used to drill to the depth of the San Andres?

- **Response:** Yes, once the surface casing section is cased and cemented, the remainder of the wellbore (to the base of the San Andres injection interval) will be drilled using a brine-based drilling mud. A review of Drilling Plans from OCD's well records confirmed that this approach is standard practice for wells penetrating the San Andres formation on the Central Basin Platform. ***Attachment 4*** includes details (as well as a proximity map) of three reference wells drilled to or through the San Andres formation on the Central Basin Platform by three different operators. The mud program for each of the reference wells included the use of freshwater-based mud to the base of lowermost USDW and brine-based mud to total depth (which was either the San Andres formation or deeper), similar to the mud program expected to be used at the Subject SWD.

  As stated in response to Question 2)b), the types of mud systems to be used above and below the base of the lowermost USDW for the Subject SWD are depicted in the updated Wellbore Diagram that is included ***Attachment 3***.

ii. Can a contingent casing string be run if drilling issues are encountered? If so, what is the expected consequence with respect to injection tubing diameter?

- **Response:** Yes. Although experience in the area and review of nearby well histories has provided no indication that a third string is expected to be necessary, if a 3rd string were needed, a 7" 26# J-55 BTC liner could be run inside the 9-5/8" production casing with 4.5" tubing. The updated casing design for the Subject SWD mirrors the casing design of both Goodnight's Nolan Ryan SWD #1 and Hilcorp's House SWD #1 (Reference Wells A and C, respectively) as depicted by the Reference Well Wellbore Diagrams included in ***Attachment 5***.

  Note: To ensure adequate clearance for the potential contingent 3rd casing string, the proposed Subject SWD's 9-5/8" casing weight has been revised from 53.5 #/ft (as proposed in the C-108) to 40#/ft. The updated weight for the 9-5/8" casing is reflected in the WBD included in ***Attachment 3***.

A comparison of the designs and casing/tubing clearances for both the proposed 2-String Design and Contingent 3-String Design are depicted in tabular and diagram format in ***Attachment 6***. In both the 2-String and 3-String designs, the clearance (on all sides of the casing/tubing) of each casing/tubing string is greater than 0.5". Specs for each of the referenced casing strings are included in ***Attachment 7***.

iii. A narrative on the Drilling practices for offset wells would be useful to support the proposed 2-string design.

- **Response:** A Wellbore Diagram for the Subject SWD is included in ***Attachment 3*** illustrates that the surface casing will be run and cemented to isolate and protect the base of the lowermost USDW and that the production casing will be run to total depth and cemented to surface to isolate the injection interval. A review of OCD well records confirmed that the 2-string design is standard practice for San Andres SWDs on the Central Basin Platform. ***Attachment 5*** includes three examples of active San Andres SWDs drilled by three different operators on the Central Basin Platform, each of which used a similar two-string well design (minor variations in casing size and type), with the surface casing isolating and protecting the USDW and the production casing isolating the injection interval. A map showing the proximity to each of the reference wells is included in ***Attachment 5.***

d) Page 11 of the program shows a 3-string design (see snapshot below). Our current practice is to include that diagram in the SWD permit for the APD approval, and future reference. Can you please clarify the following:

i. Is the first string a conductor casing? If so, what is the planned size and depth?

- **Response:** Yes, the first string on the C-108's wellbore diagram was showing the conductor casing. As it is not standard to include the conductor casing on wellbore diagrams for permitting purposes, to reduce confusion and comply with the current industry standard, an updated wellbore diagram with the conductor casing removed has been prepared and provided in ***Attachment 3.***

ii. If possible, an updated wellbore diagram would be useful to include with the permit.

- **Response:** Agreed. As mentioned above, an updated wellbore diagram is included in ***Attachment 3***.

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Attachment 1

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GEOLOGIC AFFIRMATION

I have examined available geologic and engineering data and have found no evidence of open faults or other hydrologic connection between the disposal interval and underground sources of drinking water.

Zachary Kaler
Geologist

Project: Pilot Water Solutions, LLC
Dorsett SWD State #1

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Attachment 2

Listing of Expected Formation Tops

Dorsett SWD State #1

Well Name	Depth (ft TVD)
FIRST OCCURANCE OF RED BEDS	227
TOP RUSTLER/BASE RED BEDS	1,593
FIRST OCCURANCE OF SALT	1,700
BASE OF SALT	2,800
YATES	2,869
SEVEN RIVERS	3,141
QUEEN	3,724
GRAYBURG	4,081
SAN ANDRES	4,312
BASE SAN ANDRES/TOP GLORIETA	5,479

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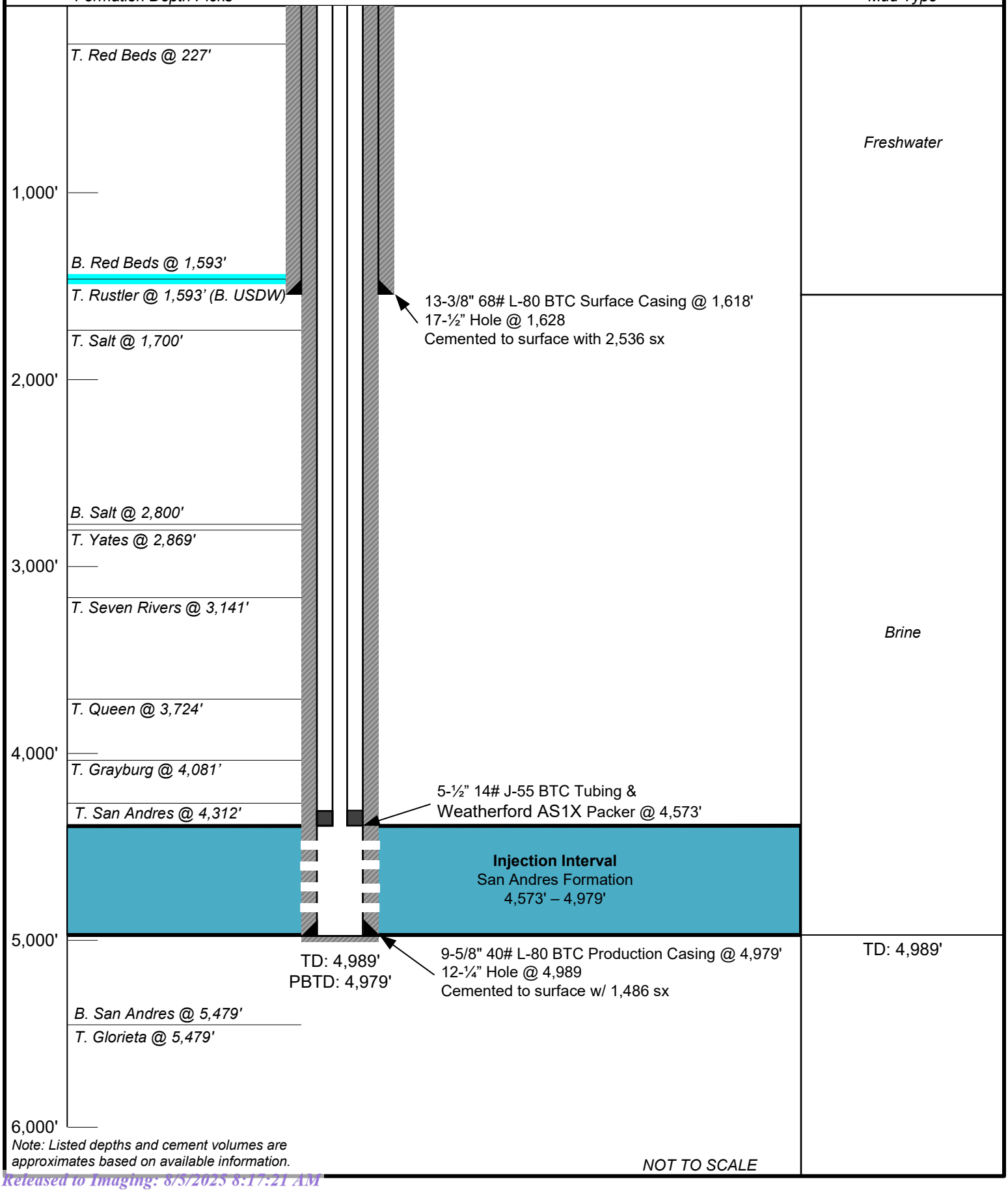
Attachment 3

Prepared By: ACE Energy Advisors

Dorsett SWD State #1
Proposed Wellbore Diagram

Injection Interval: San Andres @ 4,573' – 4,979'

Prepared For: PILOT WATER SOLUTIONS



Note: Listed depths and cement volumes are approximates based on available information.

NOT TO SCALE

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Attachment 4

Standard CBP Mud Program Through San Andres

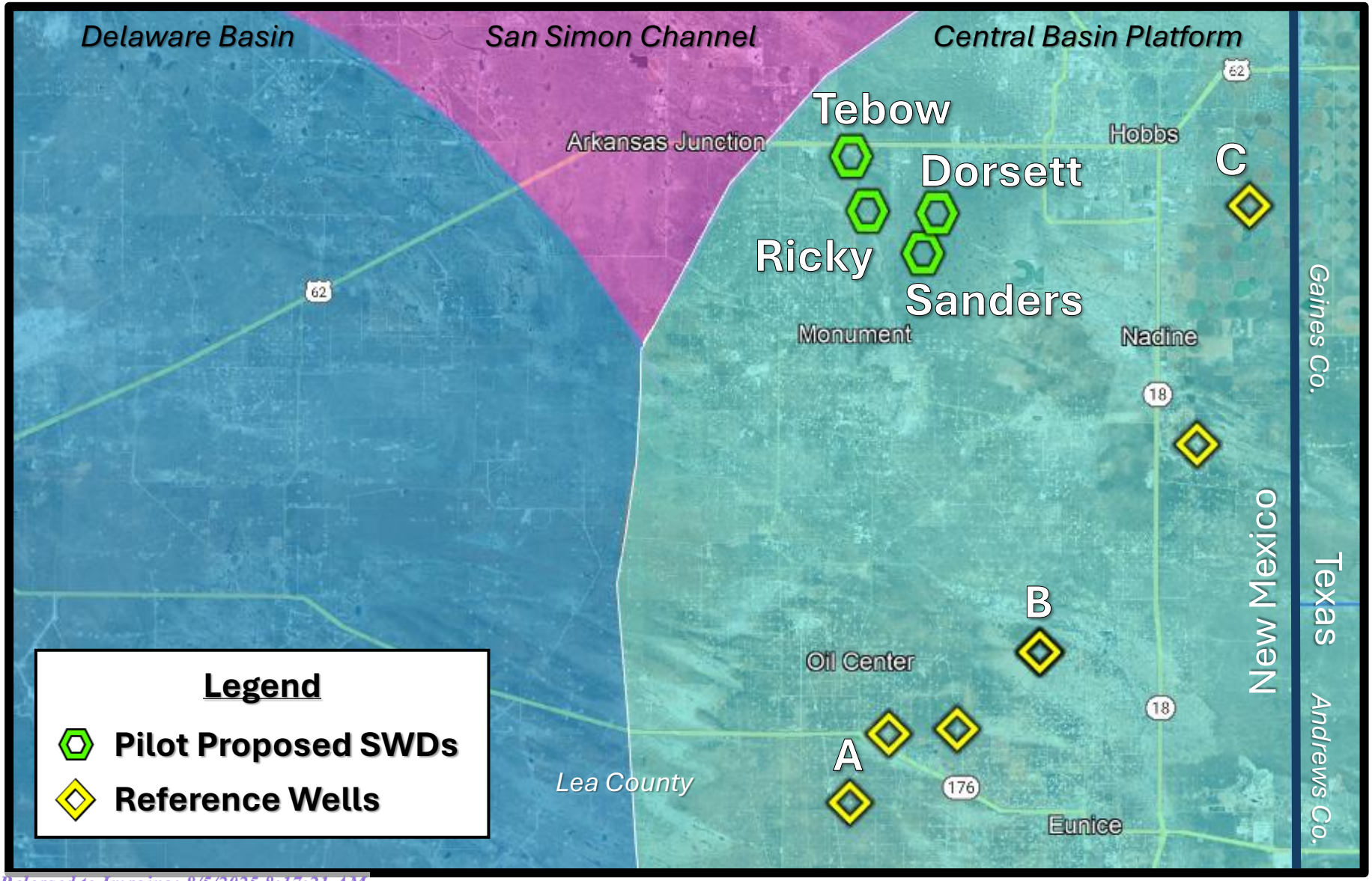
	Map ID A	Map ID B	Map ID C
Well Info	**Goodnight – Pedro SWD #1** 30-025-50079 Spud: 10/01/2019 Active SWD	**Apache - Hawk Federal A-5 #9** 30-025-40459 Spud Date: 6/8/2012 Active Producer	**Trilogy - Natalie Federal #1** 30-025-37736 Spud Date: 04/18/2006 Active SWD
Casing	• Surface Casing: 13-3/8" • Production Casing: 9-5/8"	• Surface Casing: 8-5/8" • Production Casing: 5-1/2"	• Surface Casing: 8-5/8" • Production Casing: 5-1/2"
Geology Depths	Rustler - Base 1,470' Salado 1,495' Grayburg 4,000' San Andres 4,360' Glorieta 5,695 Total Depth 6,480'	FORMATION / WELL DEPTH Eolian/Alluvial Surf Rustler 1300' Salt Top 1406' Salt Bottom 2546' Queen 3497' Grayburg 3800' San Andres 4109' Glorieta 5254'	Salt 400' Anhydrite 1500' Seven Rivers 3050' San Andres 4200'
Mud Program	Depth / Mud Type 0-1,500' FW Spud Mud 1,500'-6,480' Brine Mud	INTERVAL / MUD TYPE 0' –1350 Fresh Water 1350 – 7100' Brine 7100' – TD Cut Brine	Depth / Type 0-~~1500~~ 1790' Fresh Water ~~1500~~ 1790'-4800' Brine

Source: OCD Drill Permit Approved 4/15/2022

Source: BLM Drill Permit Approved 2/21/2012

Source: BLM Drill Permit Approved 02/17/2006

Proximity Map: Pilot's Proposed SWDs & Reference Wells



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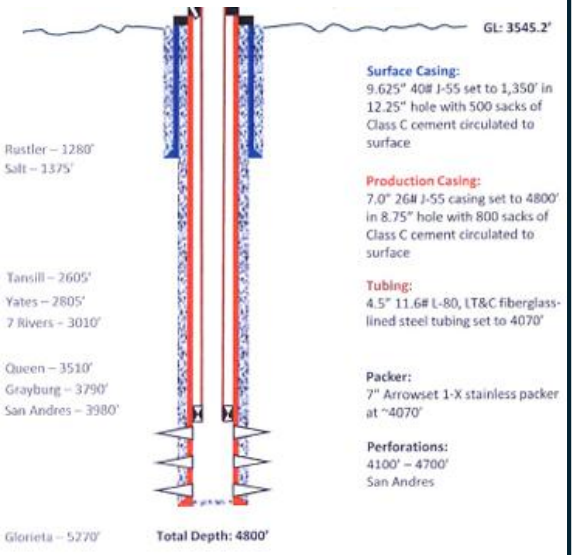
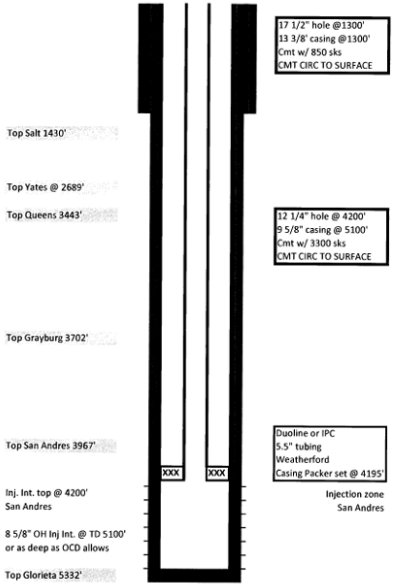
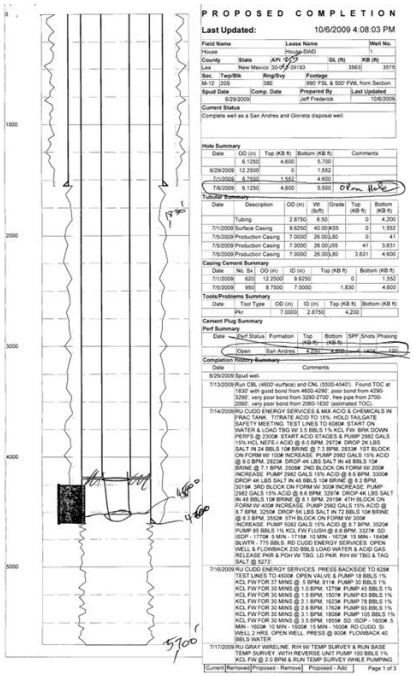
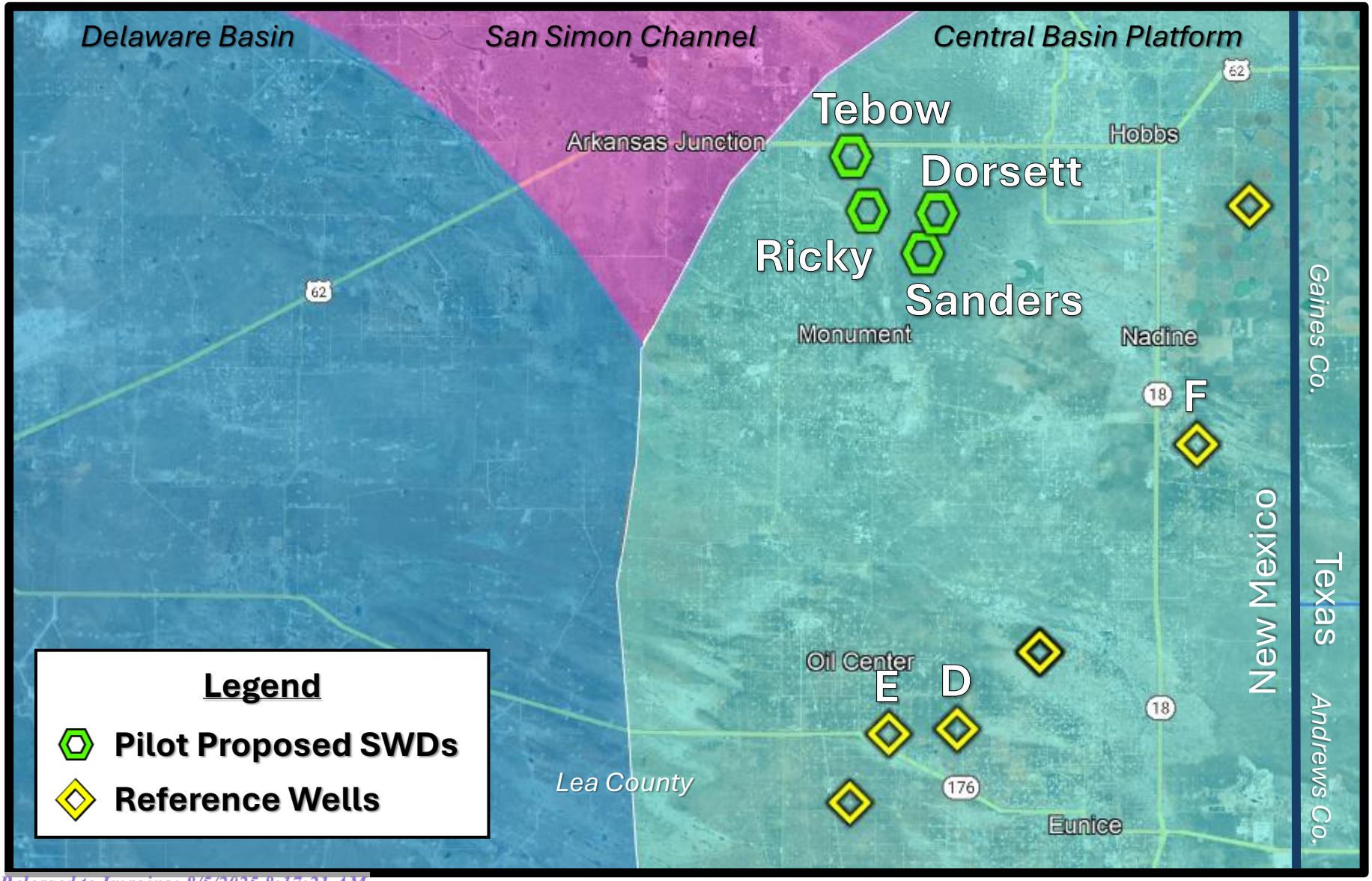
Attachment 5

San Andres SWD CBP Standard 2-String Well Design

	Map ID D	Map ID E	Map ID F
Well Info	**Goodnight- Nolan Ryan SWD #1** 30-025-45349 / R-20855 Spud: 10/01/2019 Active SWD	**Rice/OWL - SWD P-15** 30-025-46579 / SWD-1750 Spud Date: 7/12/2020 Active SWD	**Hilcorp - House SWD #1** 30-025-39193 / SWD-1169 Spud Date: 6/29/2009 Active SWD
Casing	• Surface Casing: 9-5/8" • Production Casing: 7"	• Surface Casing: 13-3/8" • Production Casing: 9-5/8"	• Surface Casing: 9-5/8" • Production Casing: 7"
Wellbore Diagram			
	Source: C-108 WBD	Source: C-108 WBD	Source: C-108 WBD

Proximity Map: Pilot's Proposed SWDs & Reference Wells



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Attachment 6

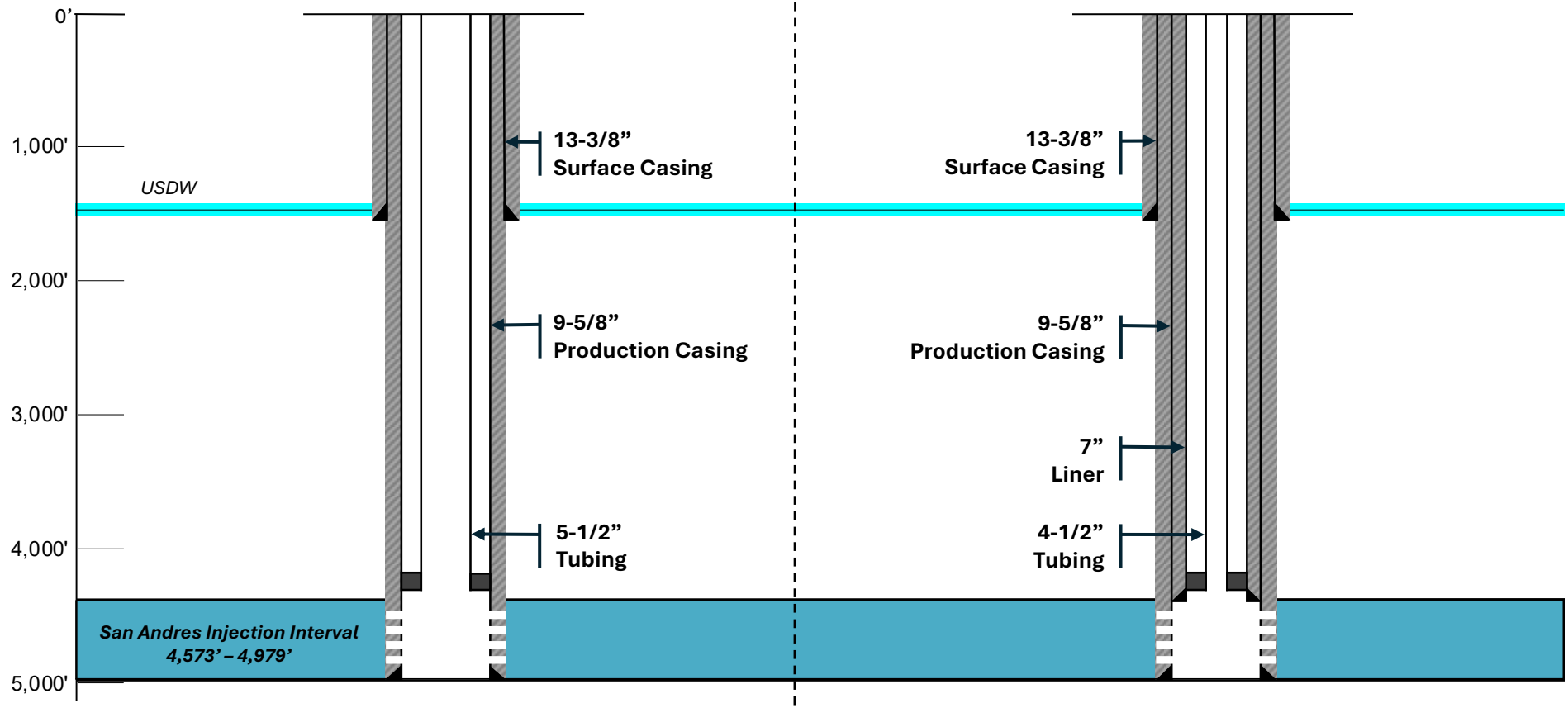
Casing Clearance Calculations (2 & 3 String)

Standard 2-String Design

Casing String	Hole Size (in)	Casing Size (in) OD	Casing Size (in) ID	Weight (#/ft)	Casing Type	Collar Type	Collar OD (in)	Clearance (in) Casing-Casing	Clearance (in) Casing-Wellbore
Surface	17.500	**13.375**	12.415	**68.00**	L-80	BTC	14.375	n/a	1.563
Production	12.250	**9.625**	8.835	**40.00**	L-80	BTC	10.625	0.895	0.813
Tubing	N/A	**5.500**	5.012	**14.00**	J-55	BTC	6.050	1.393	N/A

Contingent 3-String Design

Casing String	Hole Size (in)	Casing Size (in) OD	Casing Size (in) ID	Weight (#/ft)	Casing Type	Collar Type	Collar OD (in)	Clearance (in) Casing-Casing	Clearance (in) Casing-Wellbore
Surface	17.500	**13.375**	12.415	**68.0**	L-80	BTC	14.375	n/a	1.563
Production	12.250	**9.625**	8.835	**40.0**	L-80	BTC	10.625	0.895	0.813
Liner	N/A	**7.0**	6.276	**26.0**	J-55	BTC	7.656	0.590	N/A
Tubing	N/A	**4.5**	4.0	**11.6**	J-55	BTC	5.0	0.638	N/A



Notes:

- *The clearance values in the tables above is the clearance on all sides of the casing (i.e. radius clearance).*
- *The casing spec sheets for the casing strings listed above are included in the following pages.*

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Attachment 7

U. S. Steel Tubular Products

13.375" 68.00lb/ft (0.480" Wall) L80 USS-CDC®

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MECHANICAL PROPERTIES	Pipe	USS-CDC®		--
Minimum Yield Strength	80,000	--	psi	--
Maximum Yield Strength	95,000	--	psi	--
Minimum Tensile Strength	95,000	--	psi	--
DIMENSIONS	**Pipe**	**USS-CDC®**		**--**
Outside Diameter	13.375	14.375	in.	--
Wall Thickness	0.480	--	in.	--
Inside Diameter	12.415	12.415	in.	--
Standard Drift	12.259	12.259	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	68.00	--	lb/ft	--
Plain End Weight	66.17	--	lb/ft	--
SECTION AREA	**Pipe**	**USS-CDC®**		**--**
Critical Area	19.445	19.445	sq. in.	--
Joint Efficiency	--	100.0	%	--
PERFORMANCE	**Pipe**	**USS-CDC®**		**--**
Minimum Collapse Pressure	2,260	2,260	psi	--
External Pressure Leak Resistance	--	1,810	psi	--
Minimum Internal Yield Pressure	5,020	5,020	psi	--
Minimum Pipe Body Yield Strength	1,556,000	--	lb	--
Joint Strength	--	1,545,000	lb	--
Compression Rating	--	927,000	lb	--
Reference Length	--	15,147	ft	--
Maximum Uniaxial Bend Rating	--	16.3	deg/100 ft	--
MAKE-UP DATA	**Pipe**	**USS-CDC®**		**--**
Make-Up Loss	--	5.31	in.	--
Minimum Make-Up Torque	--	17,000	ft-lb	--
Maximum Make-Up Torque	--	21,000	ft-lb	--
Connection Yield Torque	--	73,900	ft-lb	--

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).
2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.
3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
4. Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.
5. Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Call II.

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460 Wildwood Forest Drive, Suite 300S
Spring, Texas 77380

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connections@uss.com
www.usstubular.com

U. S. Steel Tubular Products

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9.625" 40.00lb/ft (0.395" Wall) L80 USS-CDC®

MECHANICAL PROPERTIES	Pipe	USS-CDC®		--
Minimum Yield Strength	80,000	--	psi	--
Maximum Yield Strength	95,000	--	psi	--
Minimum Tensile Strength	95,000	--	psi	--
DIMENSIONS	**Pipe**	**USS-CDC®**		**--**
Outside Diameter	9.625	10.625	in.	--
Wall Thickness	0.395	--	in.	--
Inside Diameter	8.835	8.835	in.	--
Standard Drift	8.679	8.679	in.	--
Alternate Drift	8.750	8.750	in.	--
Nominal Linear Weight, T&C	40.00	--	lb/ft	--
Plain End Weight	38.97	--	lb/ft	--
SECTION AREA	**Pipe**	**USS-CDC®**		**--**
Critical Area	11.454	11.454	sq. in.	--
Joint Efficiency	--	100.0	%	--
PERFORMANCE	**Pipe**	**USS-CDC®**		**--**
Minimum Collapse Pressure	3,090	3,090	psi	--
External Pressure Leak Resistance	--	2,470	psi	--
Minimum Internal Yield Pressure	5,750	5,750	psi	--
Minimum Pipe Body Yield Strength	916,000	--	lb	--
Joint Strength	--	947,000	lb	--
Compression Rating	--	568,000	lb	--
Reference Length	--	15,783	ft	--
Maximum Uniaxial Bend Rating	--	23.6	deg/100 ft	--
MAKE-UP DATA	**Pipe**	**USS-CDC®**		**--**
Make-Up Loss	--	5.31	in.	--
Minimum Make-Up Torque	--	17,000	ft-lb	--
Maximum Make-Up Torque	--	21,000	ft-lb	--
Connection Yield Torque	--	30,900	ft-lb	--

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).
2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.
3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
4. Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.
5. Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Call II.

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7.000" 26.00lb/ft (0.362" Wall) J55 USS-CDC®

MECHANICAL PROPERTIES	Pipe	USS-CDC®		--
Minimum Yield Strength	55,000	--	psi	--
Maximum Yield Strength	80,000	--	psi	--
Minimum Tensile Strength	75,000	--	psi	--
DIMENSIONS	**Pipe**	**USS-CDC®**		**--**
Outside Diameter	7.000	7.656	in.	--
Wall Thickness	0.362	--	in.	--
Inside Diameter	6.276	6.276	in.	--
Standard Drift	6.151	6.151	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	26.00	--	lb/ft	--
Plain End Weight	25.69	--	lb/ft	--
SECTION AREA	**Pipe**	**USS-CDC®**		**--**
Critical Area	7.549	7.549	sq. in.	--
Joint Efficiency	--	100.0	%	--
PERFORMANCE	**Pipe**	**USS-CDC®**		**--**
Minimum Collapse Pressure	4,320	4,320	psi	--
External Pressure Leak Resistance	--	3,460	psi	--
Minimum Internal Yield Pressure	4,980	4,980	psi	--
Minimum Pipe Body Yield Strength	415,000	--	lb	--
Joint Strength	--	490,000	lb	--
Compression Rating	--	294,000	lb	--
Reference Length	--	12,564	ft	--
Maximum Uniaxial Bend Rating	--	25.5	deg/100 ft	--
MAKE-UP DATA	**Pipe**	**USS-CDC®**		**--**
Make-Up Loss	--	5.00	in.	--
Minimum Make-Up Torque	--	9,000	ft-lb	--
Maximum Make-Up Torque	--	11,000	ft-lb	--
Connection Yield Torque	--	13,400	ft-lb	--

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).
2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.
3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
4. Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.
5. Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Call II.

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5.500" 14.00lb/ft (0.244" Wall) J55 USS-CDC®

MECHANICAL PROPERTIES	Pipe	USS-CDC®		--
Minimum Yield Strength	55,000	--	psi	--
Maximum Yield Strength	80,000	--	psi	--
Minimum Tensile Strength	75,000	--	psi	--
DIMENSIONS	**Pipe**	**USS-CDC®**		**--**
Outside Diameter	5.500	6.050	in.	--
Wall Thickness	0.244	--	in.	--
Inside Diameter	5.012	5.012	in.	--
Standard Drift	4.887	4.887	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	14.00	--	lb/ft	--
Plain End Weight	13.71	--	lb/ft	--
SECTION AREA	**Pipe**	**USS-CDC®**		**--**
Critical Area	4.029	4.029	sq. in.	--
Joint Efficiency	--	100.0	%	--
PERFORMANCE	**Pipe**	**USS-CDC®**		**--**
Minimum Collapse Pressure	3,120	3,120	psi	--
External Pressure Leak Resistance	--	2,500	psi	--
Minimum Internal Yield Pressure	4,280	4,280	psi	--
Minimum Pipe Body Yield Strength	222,000	--	lb	--
Joint Strength	--	267,000	lb	--
Compression Rating	--	160,000	lb	--
Reference Length	--	12,714	ft	--
Maximum Uniaxial Bend Rating	--	33.0	deg/100 ft	--
MAKE-UP DATA	**Pipe**	**USS-CDC®**		**--**
Make-Up Loss	--	4.63	in.	--
Minimum Make-Up Torque	--	4,500	ft-lb	--
Maximum Make-Up Torque	--	5,500	ft-lb	--
Connection Yield Torque	--	6,300	ft-lb	--

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).
2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.
3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
4. Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.
5. Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Call II.

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U. S. Steel Tubular Products

4.500" 11.60lb/ft (0.250" Wall) J55 USS-CDC®

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MECHANICAL PROPERTIES	Pipe	USS-CDC®		--
Minimum Yield Strength	55,000	--	psi	--
Maximum Yield Strength	80,000	--	psi	--
Minimum Tensile Strength	75,000	--	psi	--
DIMENSIONS	**Pipe**	**USS-CDC®**		**--**
Outside Diameter	4.500	5.000	in.	--
Wall Thickness	0.250	--	in.	--
Inside Diameter	4.000	4.000	in.	--
Standard Drift	3.875	3.875	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	11.60	--	lb/ft	--
Plain End Weight	11.36	--	lb/ft	--
SECTION AREA	**Pipe**	**USS-CDC®**		**--**
Critical Area	3.338	3.338	sq. in.	--
Joint Efficiency	--	100.0	%	--
PERFORMANCE	**Pipe**	**USS-CDC®**		**--**
Minimum Collapse Pressure	4,960	4,960	psi	--
External Pressure Leak Resistance	--	3,970	psi	--
Minimum Internal Yield Pressure	5,350	5,350	psi	--
Minimum Pipe Body Yield Strength	184,000	--	lb	--
Joint Strength	--	224,900	lb	--
Compression Rating	--	134,900	lb	--
Reference Length	--	12,925	ft	--
Maximum Uniaxial Bend Rating	--	41.1	deg/100 ft	--
MAKE-UP DATA	**Pipe**	**USS-CDC®**		**--**
Make-Up Loss	--	4.44	in.	--
Minimum Make-Up Torque	--	5,000	ft-lb	--
Maximum Make-Up Torque	--	6,000	ft-lb	--
Connection Yield Torque	--	6,900	ft-lb	--

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).
2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.
3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
4. Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.
5. Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Call II.

U. S. Steel Tubular Products
460 Wildwood Forest Drive, Suite 300S
Spring, Texas 77380

1-877-893-9461
connections@uss.com
www.usstubular.com

From: Nate Alleman
To: Harris, Anthony, EMNRD
Cc: Taylor Silva; David Grounds; Goetze, Phillip, EMNRD; Gebremichael, Million, EMNRD; Sandoval, Stacy, EMNRD
Subject: [EXTERNAL] RE: Pilot Water Soln"s - Dorsett SWD State #1 - Additional information request
Date: Sunday, August 3, 2025 6:58:16 PM
Attachments: image001.png
image002.png
Pilot - Dorsett SWD State #1 - OCD Response Package (SWD-2600).pdf

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CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Tony,

Attached is a Technical Memo with responses to each of the questions you posed below regarding the C-108 application for Pilot's Dorsett SWD #1. We tried to be very thorough in our responses by including references and examples from other wells in similar geologic settings where appropriate, and those references and examples are included as Attachments on the memo.

Please let us know if you have any questions and we'll be happy to provide additional information or clarification, if necessary.

Regards,

Nate Alleman

Regulatory Advisor
Ace Energy Advisors
E. nate.alleman@aceadvisors.com
C. 918.237.0559

From: Harris, Anthony, EMNRD <Anthony.Harris@emnrd.nm.gov>
Sent: Thursday, September 26, 2024 10:53 AM
To: Nate Alleman <nate.alleman@aceadvisors.com>
Cc: Goetze, Phillip, EMNRD <phillip.goetze@emnrd.nm.gov>; Gebremichael, Million, EMNRD <Million.Gebremichael@emnrd.nm.gov>; Sandoval, Stacy, EMNRD <Stacy.Sandoval@emnrd.nm.gov>
Subject: RE: Pilot Water Soln's - Dorsett SWD State #1 - Additional information request

Good Day, Nate

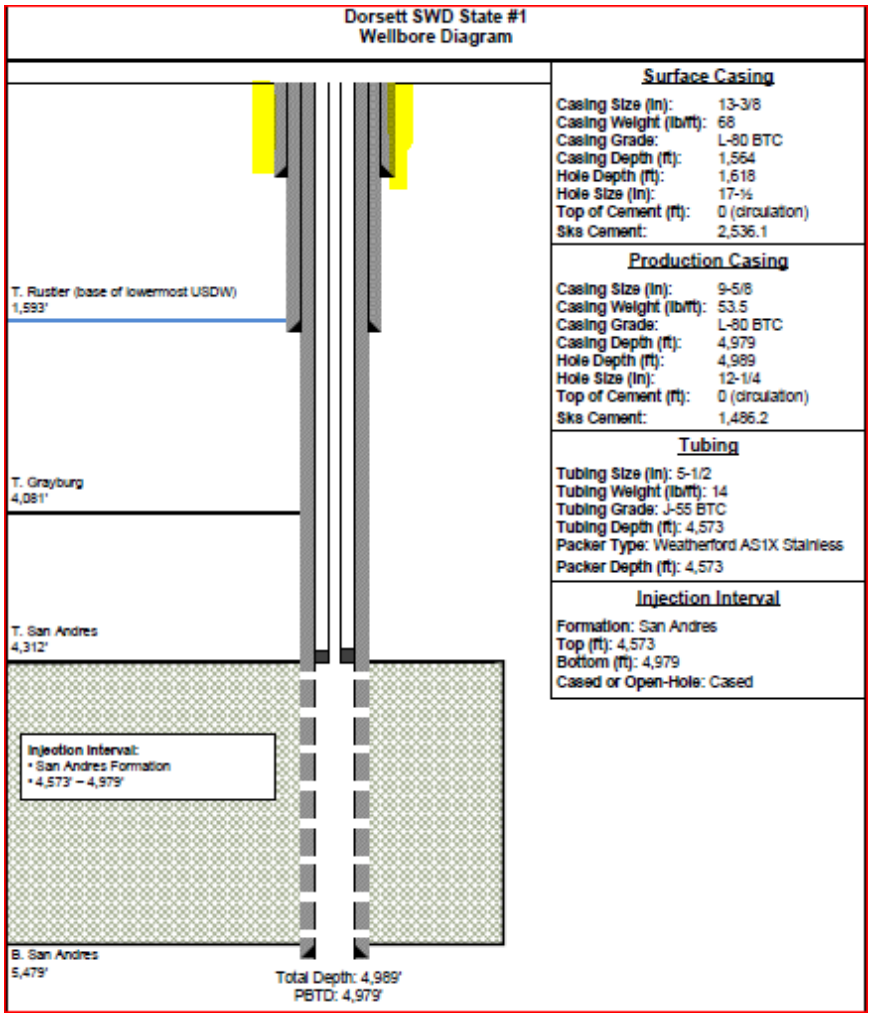
With respect to the subject application, the following information is requested as outlined below. Please note that you do not need to re-submit the entire application. Alternatively, the items can be addressed in a pdf document and sent by return e-mail.

1. **Section XII – Affirmative Statement (Page 8 of the application)**
    a. Please include the Name, Title, and signature of the person making the affirmative statement.
    b. Typical wording included in the affirmative statement is as follows: "I __Name ___

have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water"

2. Review of offset well data confirms the presence of the Salado/Salt formation(s) at depths ranging from ~ 1650 ft to ~ 2950 ft, and salt stringers down to ~ 3150 ft. Please include a narrative to document the drilling/casing/cementing philosophy to ensure protection of the USDW and applicable contingencies as listed below:
    a. A listing of expected formation tops for the USDW(s), Salt sections, Red beds as applicable
    b. Details on the Mud system used to drill the surface casing down to the top of Rustler (ie. base of USDW)
    c. Details on mud system, cementing & casing program for drilling through the salt section(s)
        i. Assuming a salt mud system is used to drill the salt section(s), can that same mud system be used to drill to the depth of the San Andres?
        ii. Can a contingent casing string be run if drilling issues are encountered? If so, what is the expected consequence with respect to injection tubing diameter?
        iii. A narrative on the Drilling practices for offset wells would be useful to support the proposed 2-string design.
    d. Page 11 of the program shows a 3-string design (see snapshot below). Our current practice is to include that diagram in the SWD permit for the APD approval, and future reference. Can you please clarify the following:
        i. Is the first string a conductor casing? If so, what is the planned size and depth?
        ii. If possible, an updated wellbore diagram would be useful to include with the permit.

General Comment: Your Application is very well prepared, easy to follow, and facilitates an efficient review process...Thank you!



Regards

Tony Harris
Petroleum Specialist
Anthony.harris@emnrd.nm.gov
505 549 8131.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 492013

CONDITIONS

Operator: Pilot Water Solutions SWD LLC 20 Greenway Plaza, Suite 500 Houston, TX 77046	OGRID: 331374
	Action Number: 492013
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
anthony.harris	None	8/5/2025