Additional Information

Updated Casing design on 1/17/2020

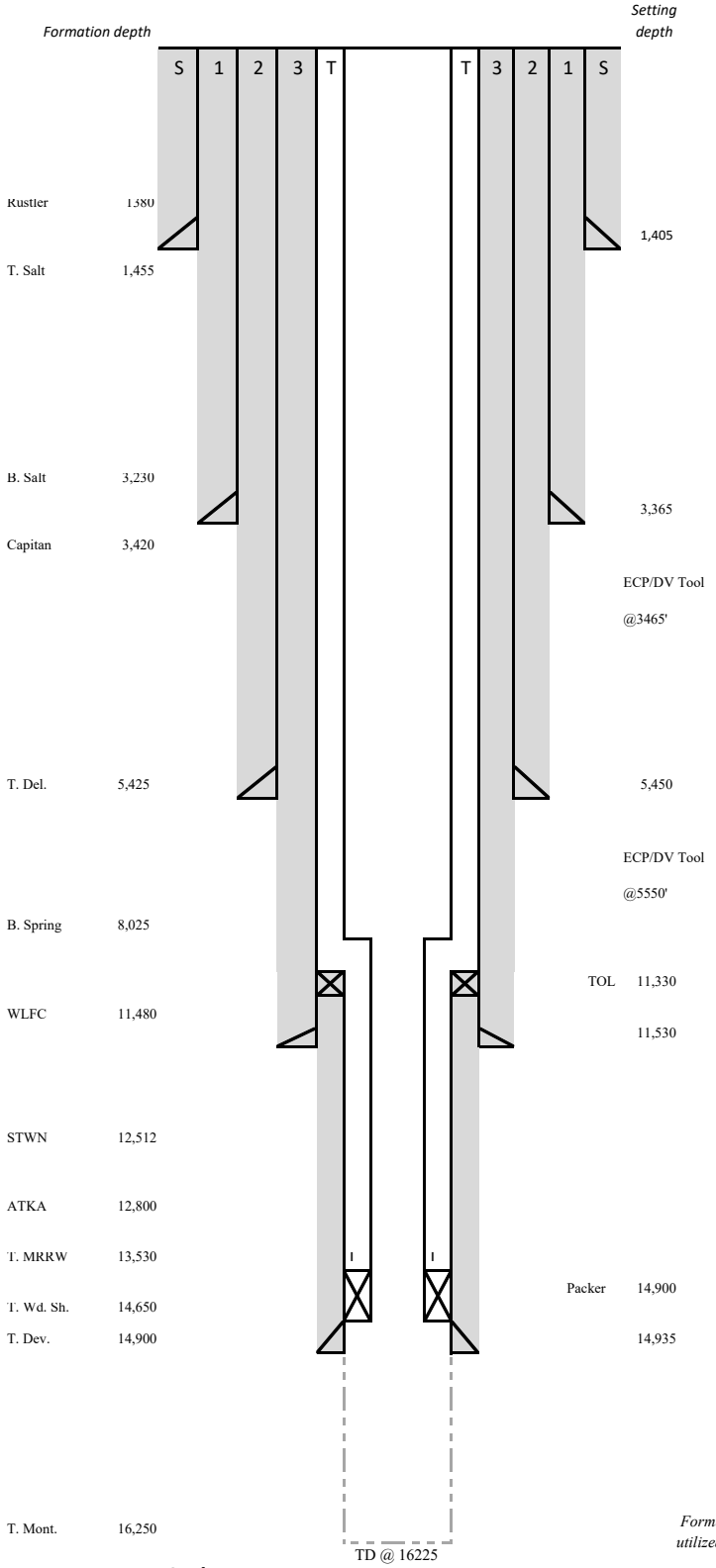
INJECTION WELL DATA SHEET

OPERATOR: **LilyStream Water Solutions, LLC**

WELL NAME & NUMBER: **Coombes SWD #1**

WELL LOCATION					
1630' FSL	**& 200' FEL**	**I**	**22**	**20S**	**33E**
FOOTAGE LOCATION		UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



Not to Scale

WELL CONSTRUCTION DATA

Surface Casing

Hole Size **26** in. Casing Size: **20** in.
Setting Depth: **Surface** ft. to **1405** ft.
Cemented with: **961** sx. or _____ ft³
Top of Cement: **Surface** Method Determined **Circulation**

1st Intermediate Casing

Hole Size **18.5** in. Casing Size: **16** in.
Setting Depth: **Surface** ft. to **3,365** ft.
Cemented with: **809** sx. or _____ ft³
Top of Cement: **Surface** Method Determined **Circulation**

2nd Intermediate Casing

Hole Size **14.75** in. Casing Size: **13.375** in.
Setting Depth: **Surface** ft. to **5,450** ft.
Cemented with: **884** sx. or _____ ft³
Top of Cement: **Surface** Method Determined **Circulation**

3rd Intermediate Casing

Hole Size **12.25** in. Casing Size: **9.625** in.
Setting Depth: **Surface** ft. to **11,530** ft.
Cemented with: **1990** sx. or _____ ft³
Top of Cement: **Surface** Method Determined **Circulation**

Liner

Hole Size **8.5** in. Casing Size: **7.625** in.
Setting Depth: **11,330** ft. to **14,935** ft.
Cemented with: **211** sx. or _____ ft³
Top of Cement: **11330** TOL Method Determined **Volumetric**

Open Hole Injection Interval

14,935 ft. to **16,225** ft

Formation tops have been extrapulated from control wells in the vicinity. During drilling activites, mud and other logs will be utilized to confirm depths and thicknesses of geologic formations. Should logging data indicate adjustments are required to the casing and cement program, applicable Sundry Notices will be filed with the NMOCD.

INJECTION WELL DATA SHEET

Tubing Size: **7" tapered to 5.5"** Lining Matrial: **Fiberglass**

Type of Packer: **5.5" Perma-Pak or Equivalent (Inconel)**

Packer Setting Depth: **14,900** Ft.

Other Type of Tubing/Casing Seal (if applicable): **Not Applicable**

Additional Data

1. Is this a new well drilled for injection? **XXX** Yes _____ No

   If no, for what purpose was the well oringally drilled? **N/A**

2. Name of the Injection Formation: **Devonian-Silurian**

3. Name of Field or Pool (if applicable): **SWD; Devonian-Silurian**

4. Has the well ever been perforated in any other zones (s)" List all such perforated intervals and give plugging detail, i.e. sacks of cent or plugs(s) used. **N/A**

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

name	*depth*
T. Rustler	**1,380**
T. Salt	**1,455**
B. Salt	**3,230**
T. Yates	**3,315**
T. Capitan	**3,420**
T. Delaware	**5,425**
T. Bone Spring	**8,025**
T. Wolfcamp	**11,480**
T. Strawn	**12,512**
T. Atoka	**12,800**
T. Morrow	**13,530**
T. Woodford	**14,650**
T. Devonian	**14,900**
T. Montoya	**16,250**

There are no known oil and gas zones underlying the proposed injection interval

III. Well Data

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1)

General Well Information	
Operator	Permian TDS, LLC
Lease Name & Well No.	Coombes SWD #1
Location	1630' FSL & 200' FEL, UL I, Sec. 22, T20S, R33E

(2)

Casing Information							
String	Size	Weight/Grade	Setting Depth	Sacks of Cement	Hole Size	Estimated Top of Cement	Method of Determination
Surface	20"	106.5# J-55 STC	1,405'	961	26"	Surface	Circulation
Intermediate 1	16"	75# J-55 STC	3,365'	809	18.5	Surface	Circulation
Intermediate 2	13.375"	61# J-55 FJ	5,450'	884	14.75"	Surface	Circulation
Intermediate 3	9.625"	40# HCL-80 BTC	11,530'	1,990	12.25"	Surface	Circulation
Liner	7.625"	39# P-110 FJ	11,330-14935'	211	8.5"	11,330 (TOL)	Volumetric
Open Hole	NA	NA	14,935-16,225	NA	6.5"	NA	CBL

(3)

Description of Tubing			
Size	Weight/Grade	Lining Material	Setting Depth
7"	26# HCP-110 FJ	Fiberglass Lined	11,330'
5.5"	17# HCL-80 FJ	Fiberglass Lined	14,890'

(4)

Packer Information	
Type	Setting Depth
5.5" Perma-Pak or Equivalent (Inconel)	14,900'

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

	Injection Information	
(1)	Name of Injection Formation:	Devonian -Silurian, Montoya
(2)	Injection Interval:	14,935' to 16,225'
	Perforated or Open-Hole:	Open Hole
(3)	Purpose of Well:	New Drill for Salt Water Disposal
(4)	Other Perforated Intervals:	None

(5)

Estimated Depth of Various Formations Including Oil and Gas Zones (Ft. bgs)	
T. Rustler	1,380
T. Salt	1,455
B. Salt	3,230
Yates	3,315
T. Capitan	3,420
T. Delaware	5,425
T. Bone Spring	8,025
T. Wolfcamp	11,480
T. Strawn	12,512
T. Atoka	12,800
T. Morrow	13,530
T. Woodford Shale	14,650
T. Devonian	14,900
T. Montoya	16,250

There are no known oil and gas zones beneath the proposed injection zone.