

Santa Fe Main Office  
Phone: (505) 476-3441  
General Information  
Phone: (505) 629-6116

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised July 18, 2013

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

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO.	30-025-53387
5. Indicate Type of Lease	BLM/Federal STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name	Federal Lease: NMNM 118722
8. Well Number	1
9. OGRID Number	4323
10. Pool name or Wildcat	SWD, Delaware

<p><b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)</p>	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Salt water disposal	
2. Name of Operator Chevron U.S.A. Inc.	
3. Address of Operator 6301 Deauville Blvd, Midland, TX 79706	
4. Well Location Unit Letter <u>L</u> : <u>1928</u> feet from the <u>south</u> line and <u>870</u> feet from the <u>west</u> line Section <u>13</u> Township <u>26</u> south Range <u>32</u> east NMPM <u>Lea</u> County	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3204' NAVD 88 (ground elevation)	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: <input type="checkbox"/>	See below <input checked="" type="checkbox"/>	OTHER: <input type="checkbox"/>	

1. Conduct 3 diagnostic fracture injection tests (DFITs) on the Brushy Canyon Formation.
2. Conduct 3 DFITs on both the Cherry Canyon and Bell Canyon Formations. The permit approval does not specifically require a C-103 to be submitted for these DFITs. Chevron is including them in this C-103 so that the OCD staff understands the complete sequence and geometry of the operations when integrated with Item #3 next.
3. Conduct a step rate test (SRT) on the isolated Cherry Canyon Formation and then a SRT on the isolated Bell Canyon Formation.

See attached PDF for the sequential steps and description of DFITs and SRTs on the Papa Squirrel SWD 1.

Spud Date:

4/21/25 (currently expected)

Rig Release Date:

5/6/2025 (currently expected)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Tom Merrifield TITLE Senior Earth Scientist DATE March 19, 2025  
Type or print name G.T. (Tom) Merrifield PG (CA/TX) E-mail address: TomMerrifield@chevron.com PHONE: 661-448-7489  
**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
Conditions of Approval (if any): \_\_\_\_\_

# the human energy company™

## Papa Squirrel MITs, DFITs, and SRTs Proposed Program

February 27, 2025

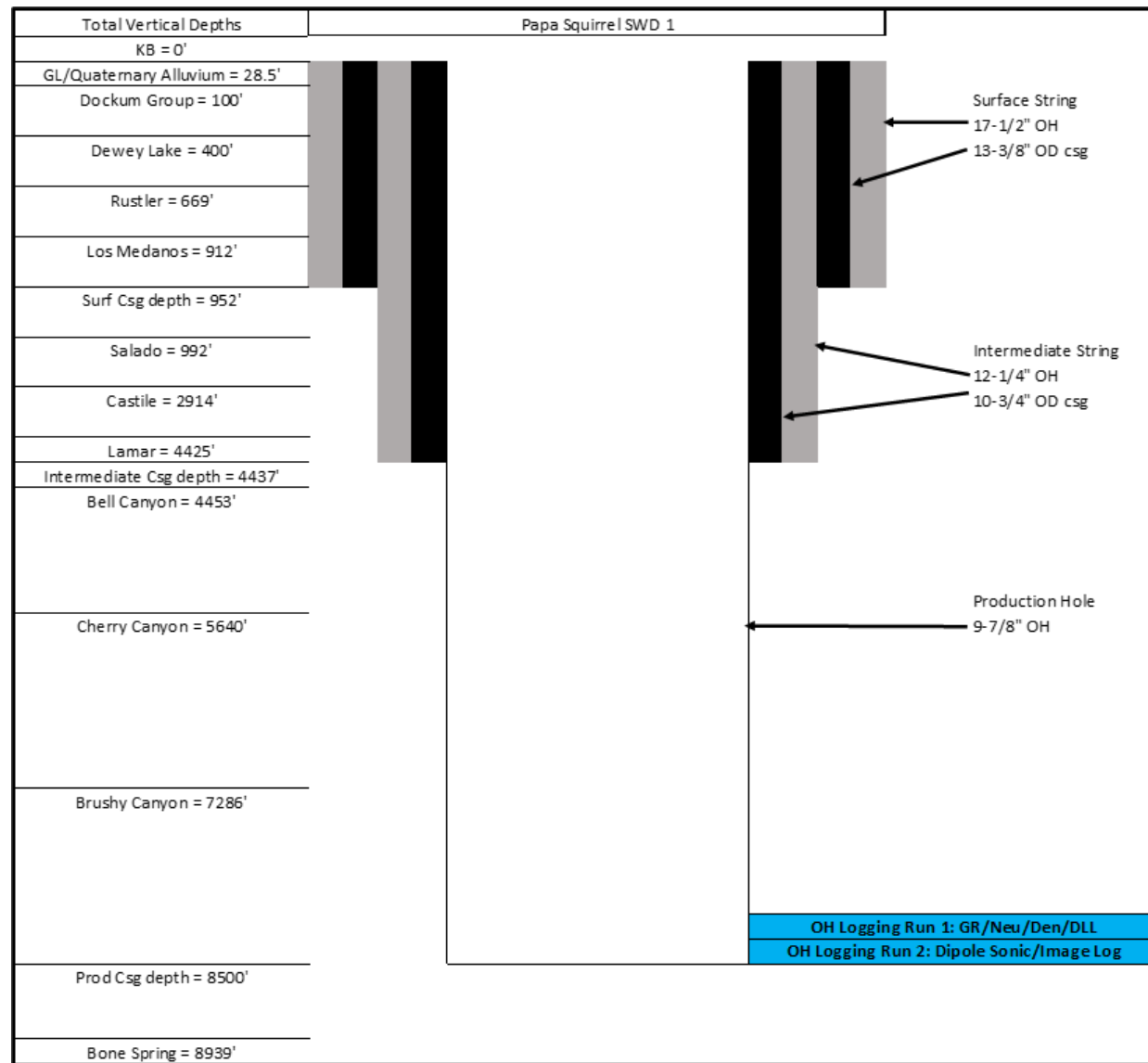


# Purpose

- Walk through Chevron's planned Geomechanical data acquisition program for the Papa Squirrel SWD.
- Goals are to understand formation stress information and overall injectivity within the Bell and Cherry CYN FMs.
- Well design, casing point and overall casing program overview
- Proposed SRT and DFIT program.
  - Data to be collected
    - Step 1: DFIT data within the Brushy CYN FM to understand fracture pressure stress limits (non-injection target)
    - Step 2: SRT and DFIT within the Cherry CYN FM (lower injection interval)
    - Step3: SRT and DFIT within the Bell CYN FM ( upper injection interval)
    - Step 4: Submit SRT & MIT and secure approval before start of injection



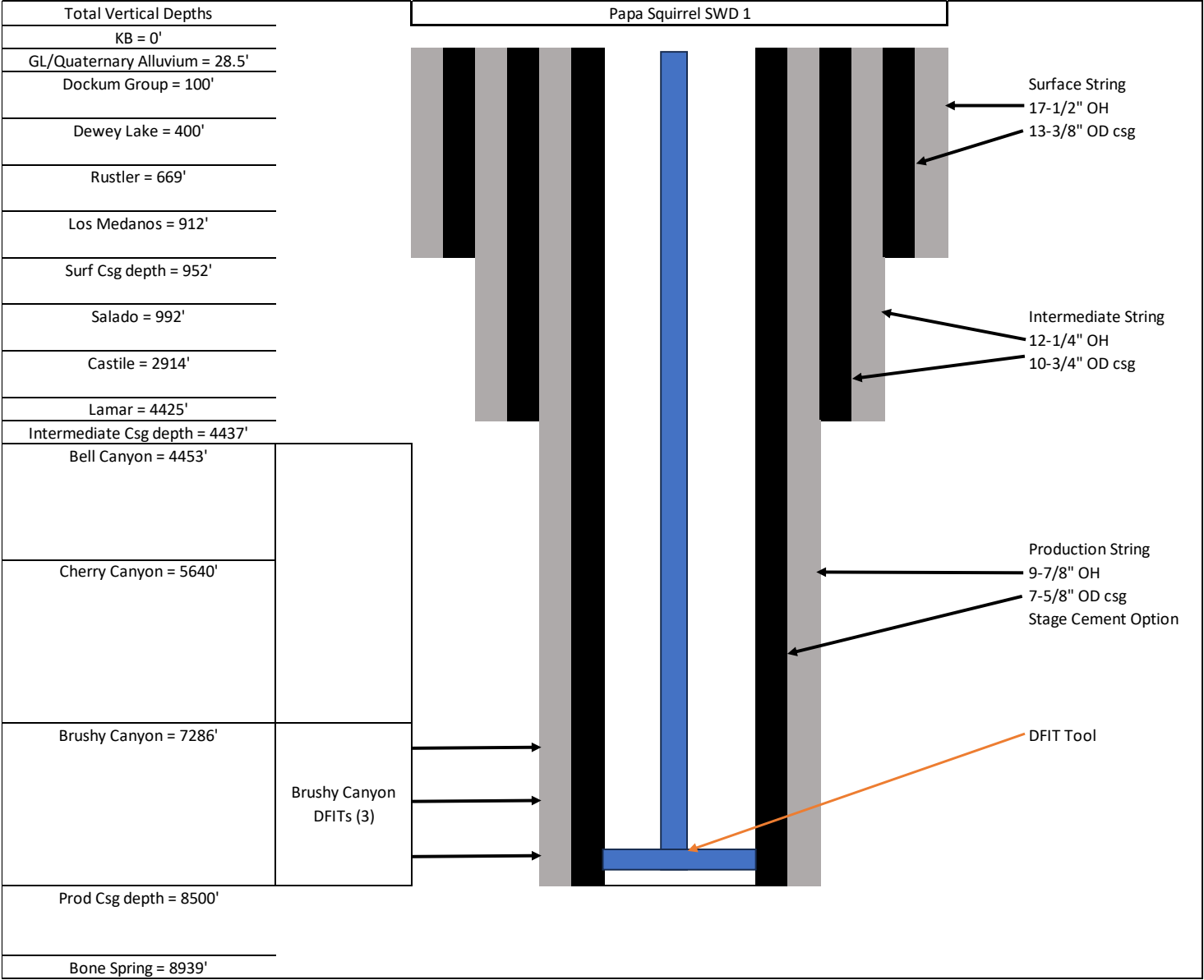
# Injection Cased Hole Logs



- Drill out intermediate shoe to TD.
- Conduct Run 1 OH logs: GR/Neu/Den/DLL
- Conduct Run 2 OH logs: Dipole Sonic/Image Log
- Data to be provided to OCD



# Brushy Canyon Fm DFITS (Non-injection target, data collection only)

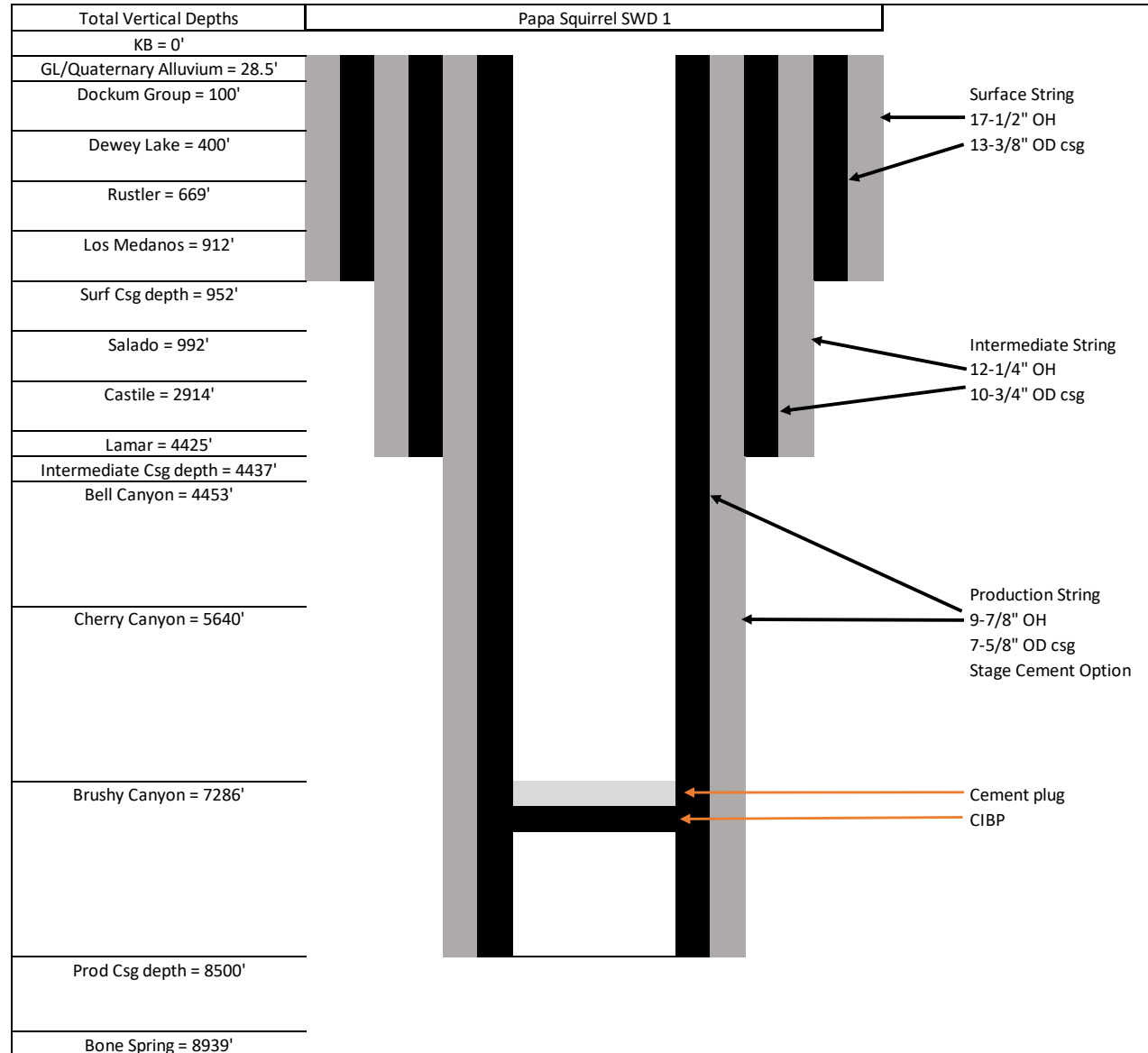


## Brushy Canyon Formation action

- Perforate holes and run 3 DFITs
- Target
  - Carbonate
  - Sand
  - Shale

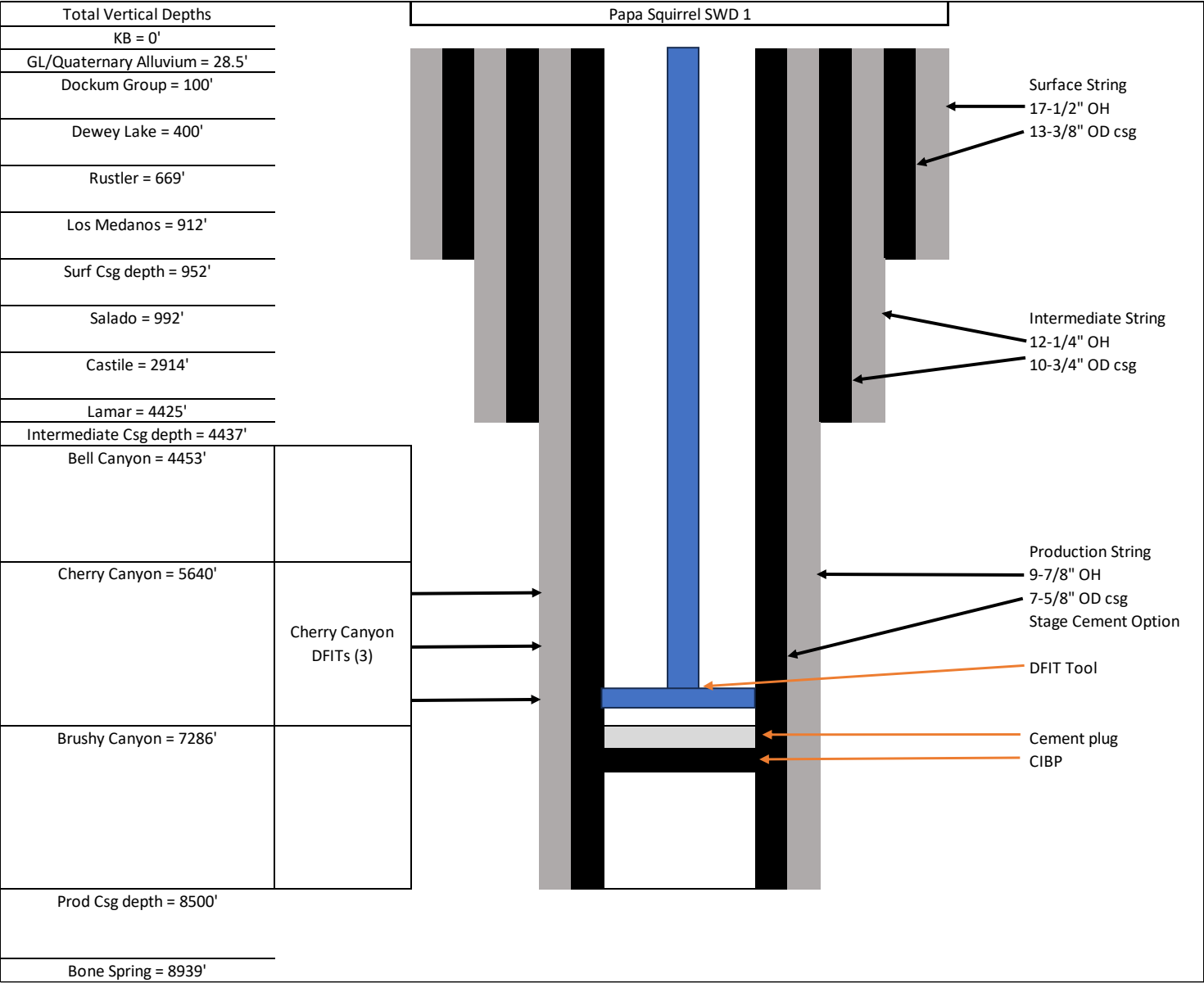


# Brushy Canyon Fm: Abandonment



- Set CIBP as close to the Brushy as possible (set depth for CIBP to be determined on formation tops) and pressure test mechanical barrier per NMOCD and Chevron standards.
- Spot 100' of cement on top of CIBP.
  - Class C or H cement depending on depth

# Cherry Canyon Fm DFITs

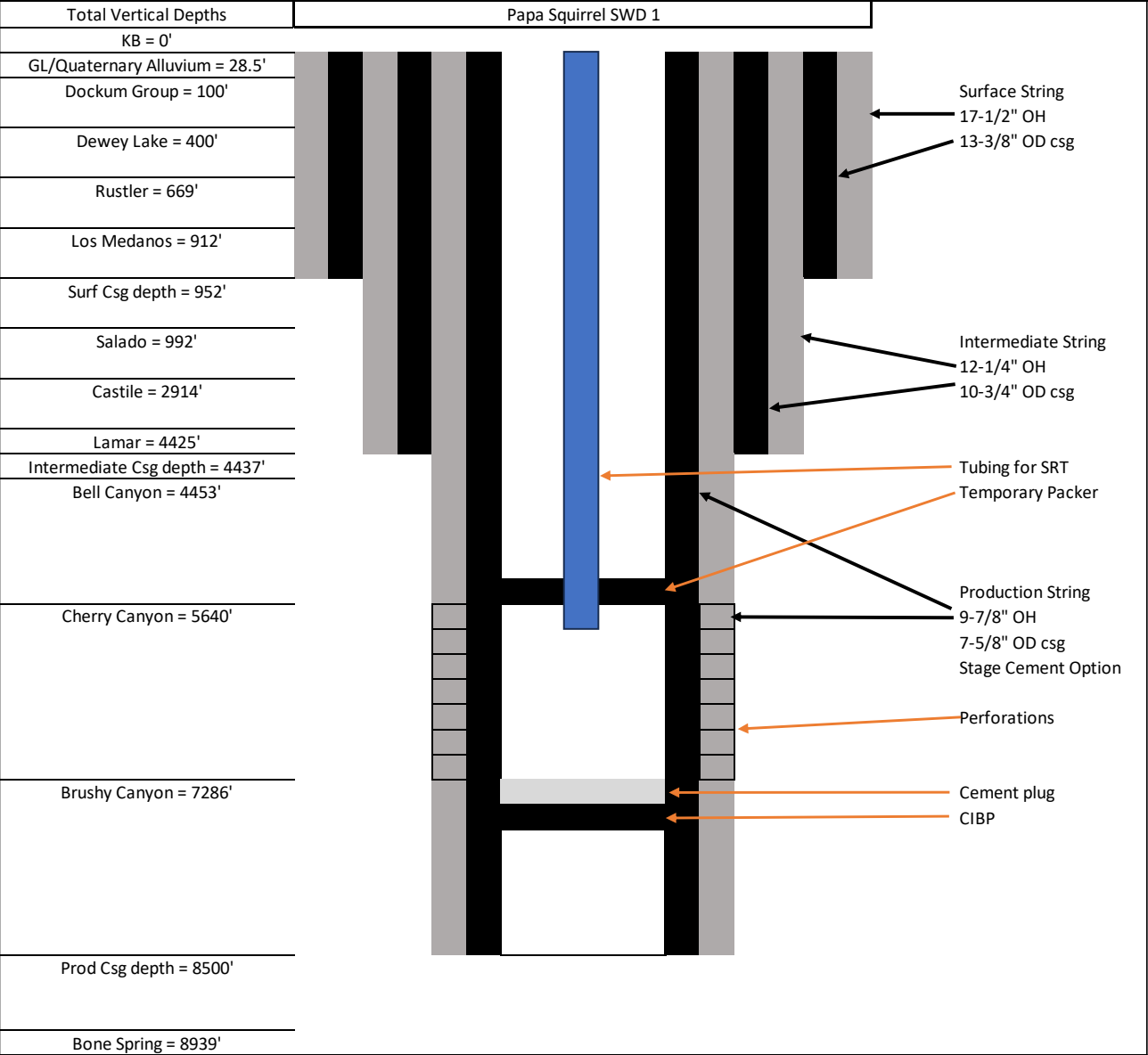


## Cherry Canyon Formation action

- Perforate holes and run 3 DFITs
- Target
  - Carbonate
  - Sand
  - Shale



# Cherry Canyon Fm Perforations and SRT



- Perforate remaining section of Cherry Canyon Formation post DFIT (check logs to evaluate the injection quality of lower Cherry that may not be perforated due to tool configuration)
- Run in memory pressure gauge and tubing/packer. Set Packer.
- Pressure Test Packer (MIT must pass)
- Rig Up pumping equipment and start SRT

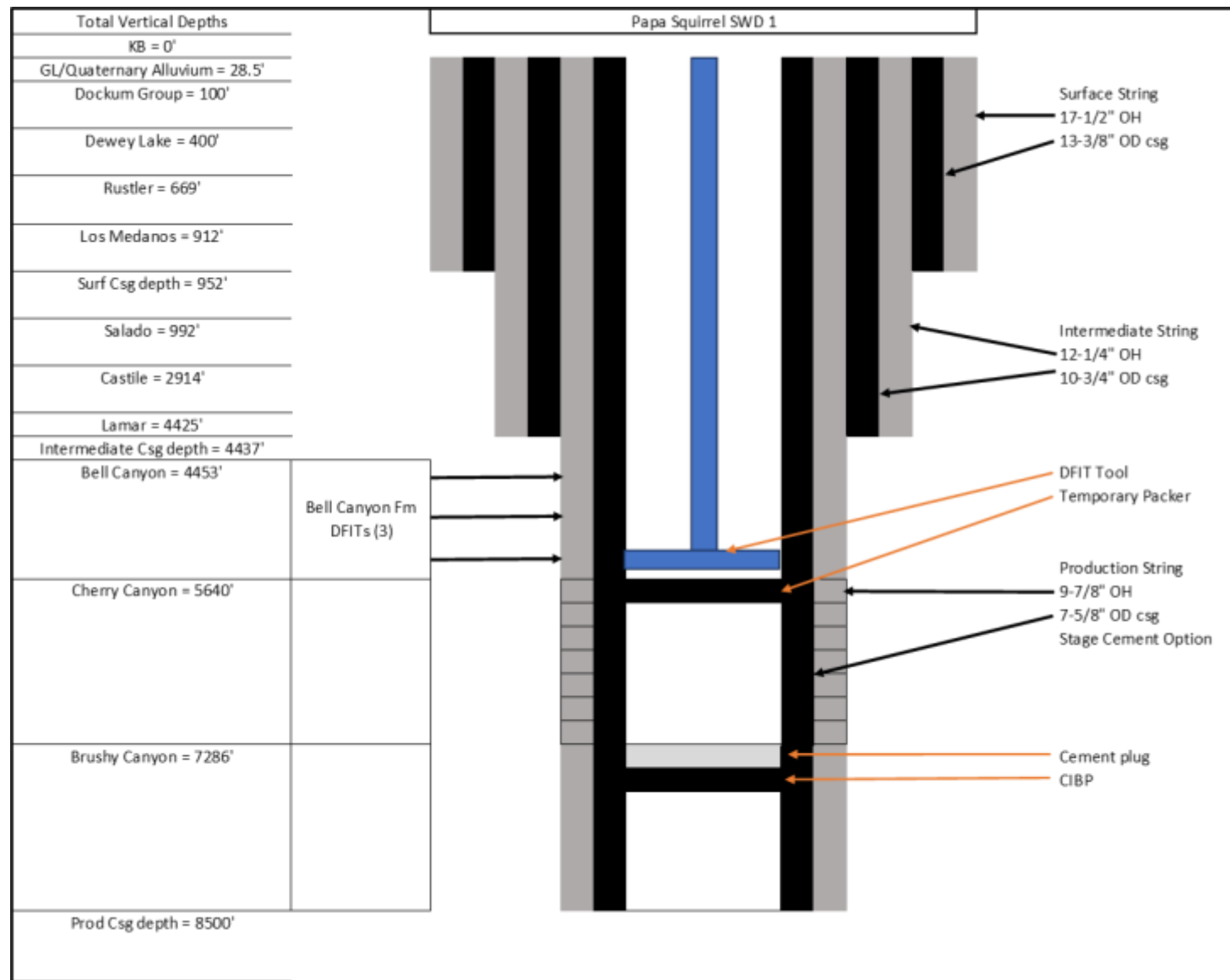
SRT Procedure			
Cherry Canyon			
Step	% of max rate	rate (BPM)	Duration (min)
1	5%	0.5	60
2	10%	1.0	60
3	20%	2.0	60
4	40%	4.1	60
5	60%	6.1	60
6	80%	8.2	60
7	100%	10.2	60

\*Rates calculated using Darcy's Law and estimated DMG pore pressure/frac gradients  
\*Higher rates expected in the Cherry formation than Bell formation due to thickness





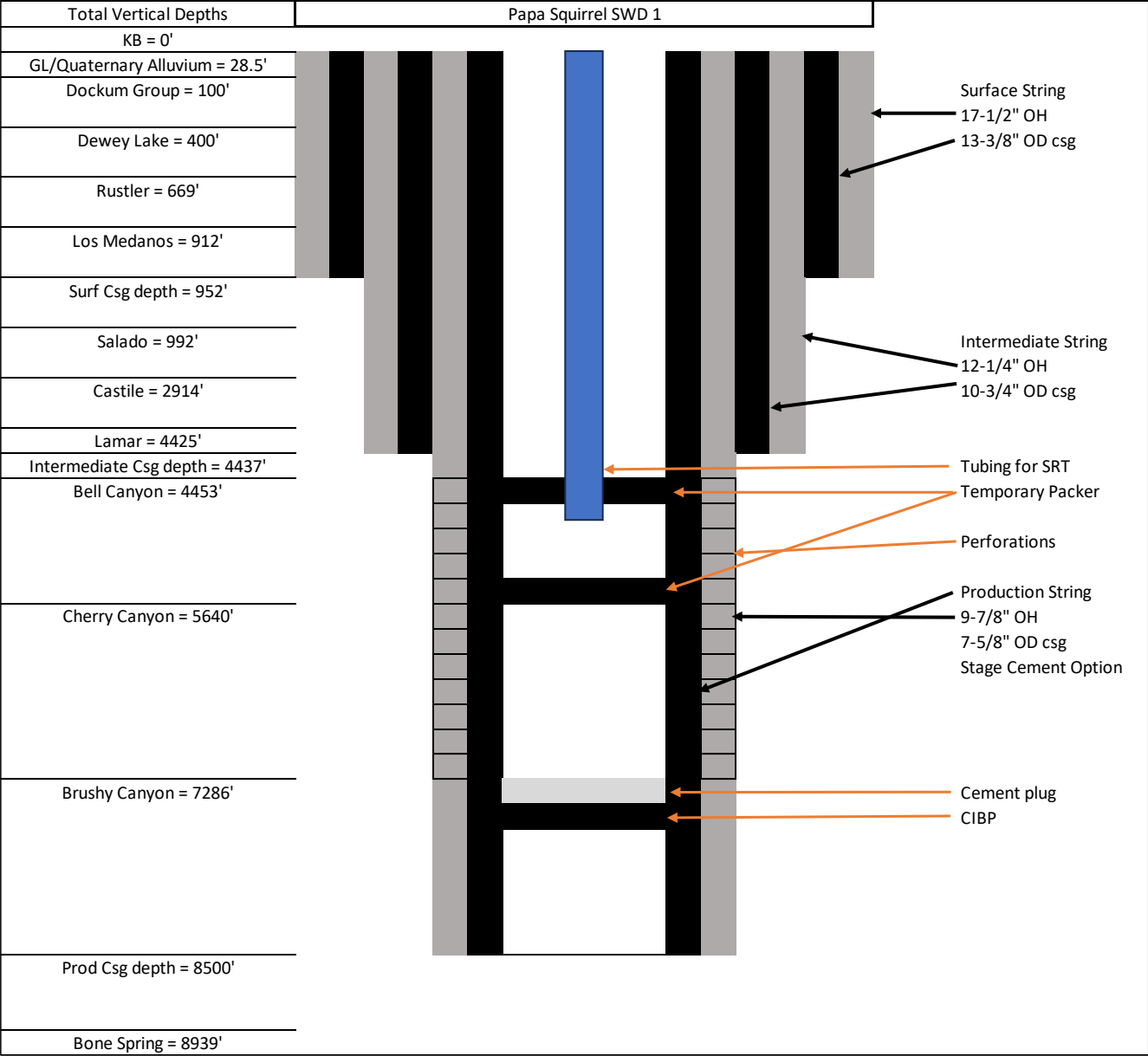
# Bell Canyon Fm DFITs



## Bell Canyon Formation action

- Perforate holes and run 3 DFITs
- Target
  - Carbonate
  - Sand
  - Shale

# Bell Canyon Fm Perforations and SRT



- Perforate remaining section of Bell Canyon Formation post DFIT (check logs to evaluate the injection quality of lower Bell that may not be perforated due to tool configuration)
- Run in memory pressure gauge and tubing/packer. Set Packer.
- Pressure test Packer (MIT must pass)
- Execute SRT

## SRT Procedure

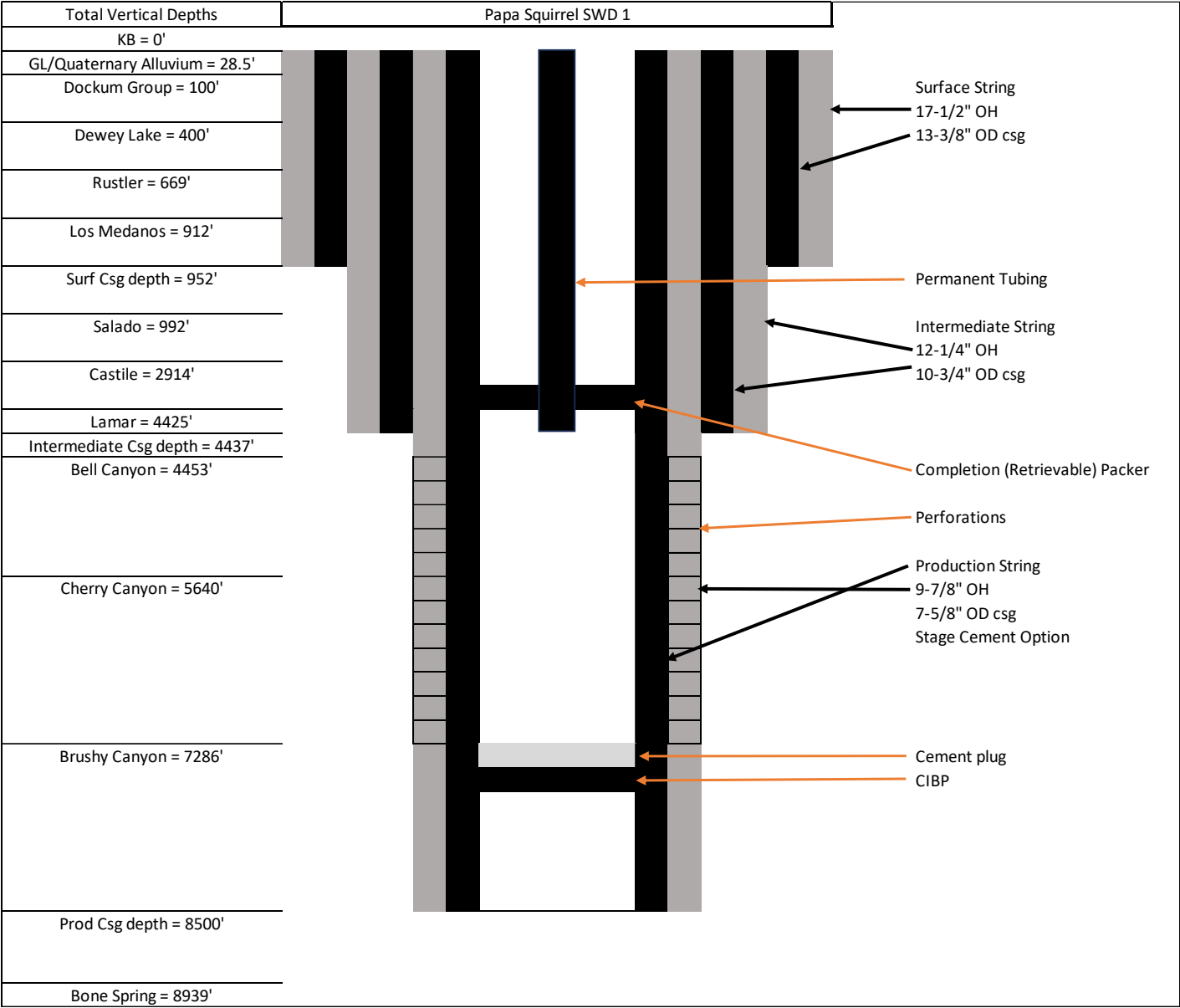
Bell Canyon			
Step	% of max	BPM	Duration (min)
1	11%	0.5	60
2	20%	0.9	60
3	30%	1.4	60
4	40%	1.9	60
5	60%	2.8	60
6	80%	3.8	60
7	100%	4.7	60

\*Rates calculated using Darcy's Law and estimated DMG pore pressure/frac gradients

- Pull tubing/packer
- Pull RBP isolating Cherry Canyon



# Final Completion Run (upon approvals)



- Make final completion run with 5.5” tubing and 7-5/8” packer. Set Packer per NMOCD permit.
- Conduct MIT and submit results of MIT and SRTs to NM OCD.
- Land tubing and terminate TEC line for DHPG.
- Nipple Up Injection Tree.
- Wait for all final approvals before starting injection.



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CONDITIONS

Action 444392

CONDITIONS

Operator:  CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:  4323
	Action Number:  444392
	Action Type:  [C-103] NOI General Sundry (C-103X)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	Please ensure adherence to OCD's SRT guidelines. Once the SRT is conducted, kindly submit the results for OCD to review.	3/21/2025