

Submit 1 Copy To Appropriate District
Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-0988
1000 Rio Brazos Rd., Alamogordo, NM 88310
District IV - (505) 438-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

SUNDRY NOTICES AND REPORTS ON WELLS (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.) 1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐ 2. Name of Operator Apache Corporation 3. Address of Operator 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 4. Well Location Unit Letter <u>P</u> : <u>660</u> feet from the <u>South</u> line and <u>660</u> feet from the <u>East</u> line Section <u>10</u> Township <u>21S</u> Range <u>37E</u> NMPM County <u>Lea</u> 11. Elevation (Show whether DR, RKB, RT, GR, etc.) <u>3441' GL</u>		WELL API NO. 30-025-20548
		5. Indicate Type of Lease STATE ☒ FEE ☐
		6. State Oil & Gas Lease No. B1-1349
		7. Lease Name or Unit Agreement Name Northeast Drinkard Unit (NEDU) [22503]
8. Well Number 508		
9. OGRID Number 873		
10. Pool name or Wildcat Eunice; B-T-D, North [22900]		

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

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ TEMPORARILY ABANDON ☐ CHANGE PLANS ☐ PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐ DOWNHOLE COMMINGLE ☐ CLOSED-LOOP SYSTEM ☐ OTHER: <u>CTI</u> ☒	SUBSEQUENT REPORT OF: REMEDIAL WORK ☐ ALTERING CASING ☐ COMMENCE DRILLING OPNS. ☐ P AND A ☐ CASING/CEMENT JOB ☐ OTHER: ☐
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13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Apache intends to convert this well to injection, per the attached procedure. We are still evaluating which scenario will be the most operational and cost effective.

We are concurrently submitting an Application for Injection to Santa Fe.

Spud Date: 2/7/1964 Rig Release Date: 2/24/1964

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

SIGNATURE Reesa Fisher TITLE Sr. Staff Reg Analyst DATE 12/17/2018

Type or print name Reesa Fisher E-mail address: Reesa.Fisher@apachecorp.com PHONE: (432) 818-1062

For State Use Only

APPROVED BY: [Signature] TITLE Petroleum Engineer DATE 12/27/18

Conditions of Approval (if any): May not inject prior to C-108 approval
Must notify OCD Hobbs prior to MIT

NEDU 508: (API: 30-025-20548)

OBJECTIVE: CONVERT TO DRINKARD INJECTOR

Scenario 1: Dual Packer Isolation

1. POOH w rods and 2-7/8" production tubing.
2. PU workstring and RIH w/ bit or mill and clean out well to PBTD at 6670'. POOH.
3. Make casing scraper run to casing shoe POOH.
4. Run casing inspection log and cement bond log from top of Drinkard to surface. POOH.
5. RIH w/ wireline and perforate Drinkard formation f/ 6550'-6650' (actual depths TBD). POOH.
6. RIH w/ workstring and treating packer to acid stimulate Drinkard formation w/ 5000 gals 15% HCl using rock salt for diversion. POOH.
7. MIRU wireline. RIH w/ 5-1/2" permanent packer and set in good casing between Blinebry and Drinkard (Depth dependent on casing inspection log).
8. PU 600-800' of 2-3/8" IPC externally coated tubing w/ 5-1/2" hydraulic packer on top and tie into permanent packer. Pressure up tubing to set hydraulic packer at 5670'. Test casing to 500 psi.
9. Perform MIT for NMOCD.
10. Open well up for injection.

Scenario 2: Cement 4" liner hanger from Blinebry to TD

1. POOH w rods and 2-7/8" production tubing.
2. PU workstring and RIH w/ bit or mill and clean out well to PBTD at 6670'. POOH
3. MIRU cement and casing crew and PU ~1500' of 4" casing (including float shoe, float collar, landing collar and liner hanger) using 2-7/8" L-80 workstring.
4. RIH and tag TD. Set TOL around 250-300' above top Blinebry perf. Pump spacer followed by 50-100 SX of cement. Flush with fresh water.
5. Release workstring from liner. Reverse circulate to clean hole. POOH.
6. If no cement circulated to surface, PU packer and attempt to squeeze liner top or RIH w/ liner packer and sting into tie back tool. Set liner packer and test casing.
7. PU bit and drill out cement to float collar. Pressure test casing. Continue drilling out cement if needed to perforate. POOH.
8. PU 3-7/8" bit and drill out cement to float collar. Pressure test casing. Continue drilling out cement if needed to perforate. POOH.
9. MIRU wireline. Run CBL from PBTD to surface.
10. PU wireline guns and perforate Drinkard formation f/6550'—6650' (Depths TBD). POOH.
11. PU 4" treating packer w/ ~40 jts of 2-3/8" followed by remaining 2-7/8" workstring to surface. Set packer ~100' above top perf and load backside.
12. Acid stimulate Drinkard formation w/ 5000 gals 15% HCl using 1.1 SG ball sealers for diversion. Release packer and knock off balls. POOH.

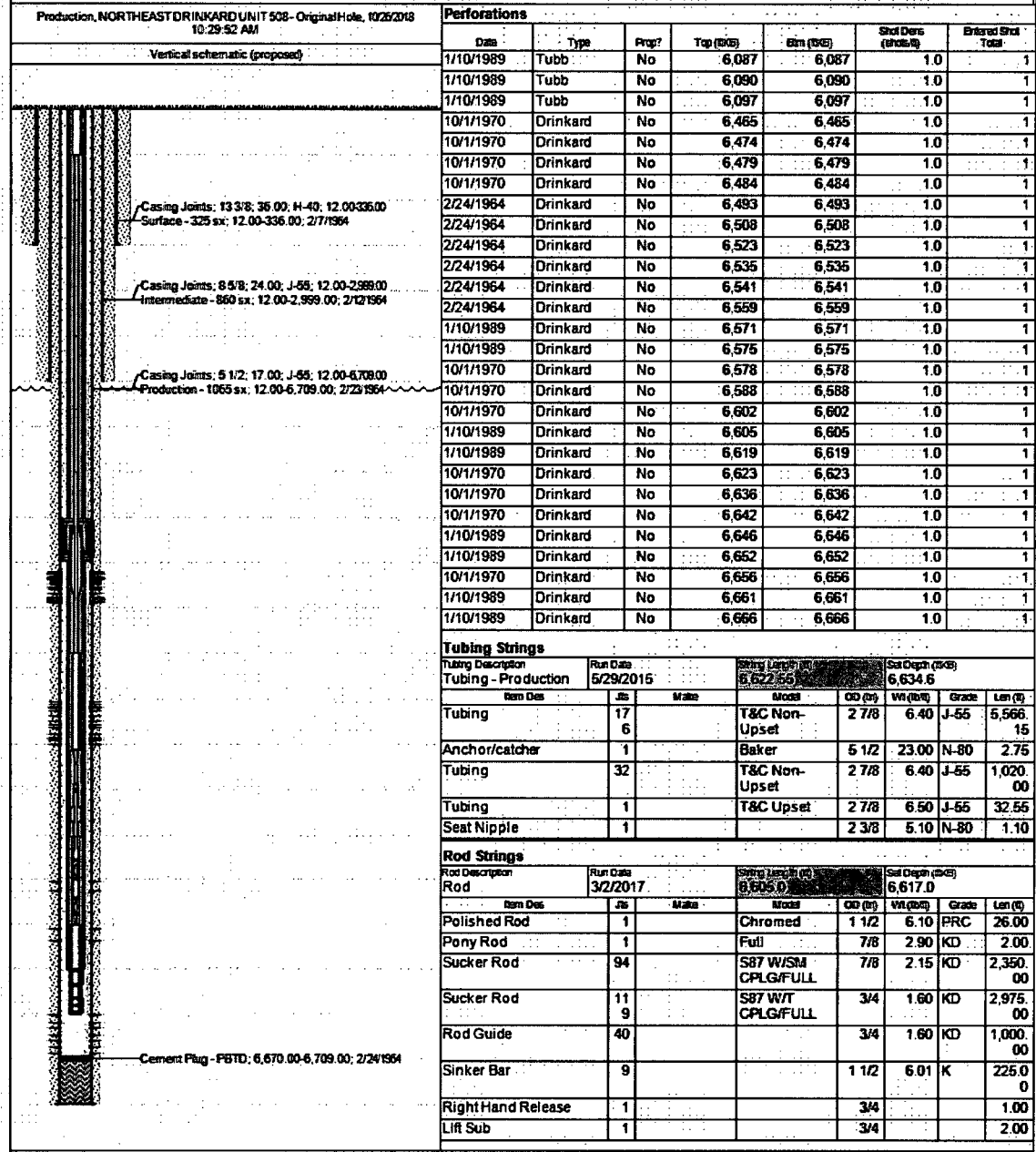
13. RIH w 4" injection packer and ~6500' of 2-3/8" IPC tubing. Set packer within 20' of top perf.
14. Circulate packer fluid and test backside to 500 psi.
15. Perform MIT for NMOCD.

Apache		Downhole Well Profile w Cement																																																																																																																																																																																																																																																																				
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3/5/1964	Blindbry	No	5,791	5,791	1.0	1																																																																																																																																																																																																																																																																
3/5/1964	Blindbry	No	5,796	5,796	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Blindbry	No	5,803	5,803	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Blindbry	No	5,819	5,819	1.0	1																																																																																																																																																																																																																																																																
3/5/1964	Blindbry	No	5,821	5,821	1.0	1																																																																																																																																																																																																																																																																
3/5/1964	Blindbry	No	5,837	5,837	1.0	1																																																																																																																																																																																																																																																																
3/5/1964	Blindbry	No	5,861	5,861	1.0	1																																																																																																																																																																																																																																																																
3/5/1964	Blindbry	No	5,893	5,893	1.0	1																																																																																																																																																																																																																																																																
3/5/1964	Blindbry	No	5,902	5,902	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Blindbry	No	5,909	5,909	1.0	1																																																																																																																																																																																																																																																																
3/5/1964	Blindbry	No	5,925	5,925	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Blindbry	No	5,979	5,979	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Blindbry	No	5,981	5,981	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Tubb	No	6,023	6,023	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Tubb	No	6,027	6,027	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Tubb	No	6,036	6,036	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Tubb	No	6,042	6,042	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Tubb	No	6,045	6,045	1.0	1																																																																																																																																																																																																																																																																
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1/10/1989	Tubb	No	6,063	6,063	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Tubb	No	6,066	6,066	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Tubb	No	6,069	6,069	1.0	1																																																																																																																																																																																																																																																																
1/10/1989	Tubb	No	6,075	6,075	1.0	1																																																																																																																																																																																																																																																																



Downhole Well Profile w Cement

Well Name: NEDU 508

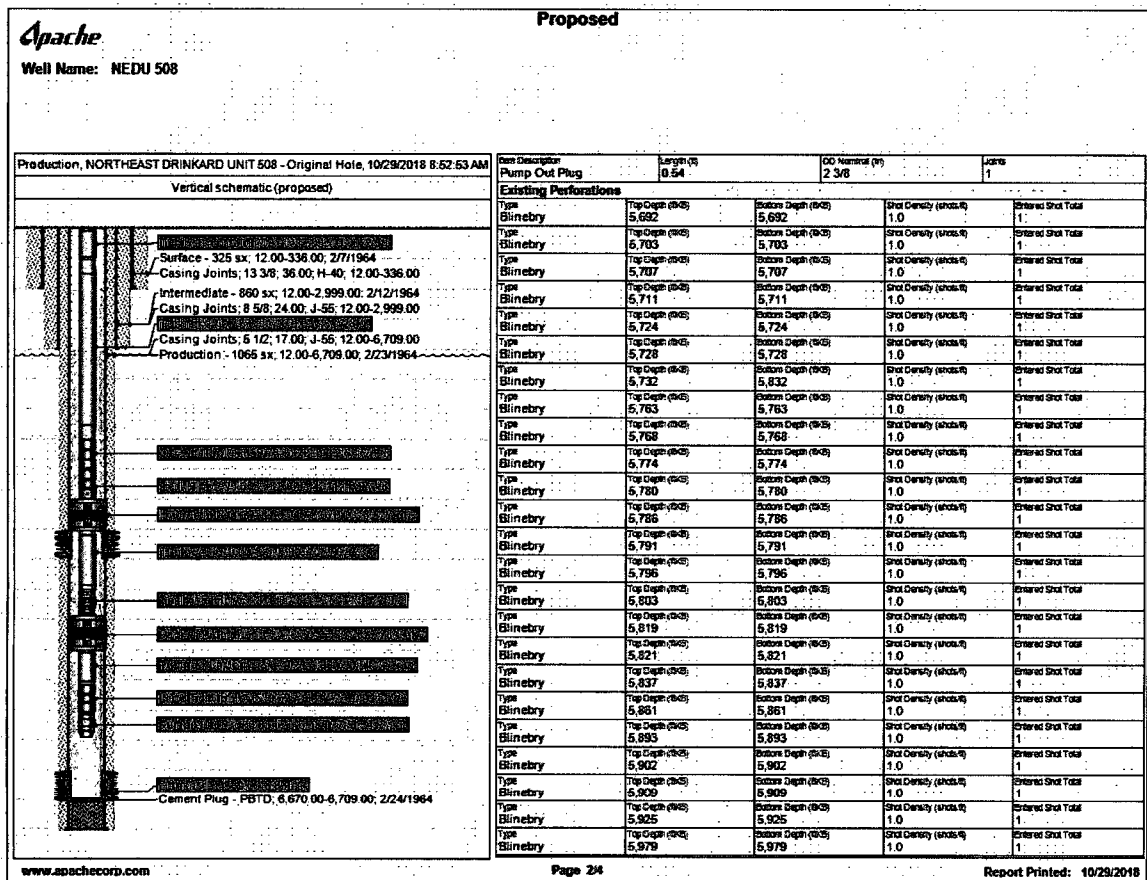


Apache		Downhole Well Profile w Cement																	
Well Name: NEDU 508																			
Production, NORTHEAST DRINKARD UNIT 508 - Original Hole, 10/26/2018 10:29:59 AM																			
Vertical schematic (proposed)		<table border="1"> <thead> <tr> <th>Item Des</th> <th>JIS</th> <th>Make</th> <th>Model</th> <th>OD (in)</th> <th>Wt (lb/ft)</th> <th>Grade</th> <th>Len (ft)</th> </tr> </thead> <tbody> <tr> <td>Rod Insert Pump</td> <td>1</td> <td>Quinn</td> <td>20-125-RHBC</td> <td>1 1/4</td> <td>1.00</td> <td>X</td> <td>24.00</td> </tr> </tbody> </table>		Item Des	JIS	Make	Model	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Rod Insert Pump	1	Quinn	20-125-RHBC	1 1/4	1.00	X	24.00
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Rod Insert Pump	1	Quinn	20-125-RHBC	1 1/4	1.00	X	24.00												
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Scenario 2: FJ Liner Proposed WBD ()

Apache				Proposed																																																																																							
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Ground Elevation (ft) 3,441.0	Original Kd Elevation (ft) 3,453.0	Surface Legal Location 660' FSL, 660' FEL, Unit P, Sec 10, T-21S, R-37E	APF Well Type Original State - 6 FWD	APF Depth (ft) 6,709.0																																																																																							
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Scenario 2: FJ Liner Proposed WBD ()



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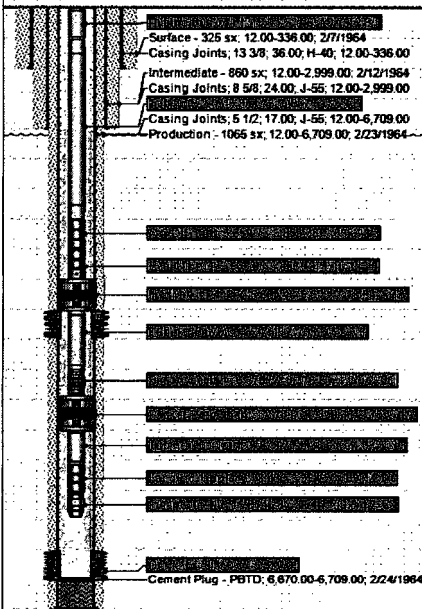
Apache

Well Name: NEDU 508

Proposed

Production, NORTHEAST DRINKARD UNIT 508 - Original Hole, 10/29/2016 8:53:00 AM

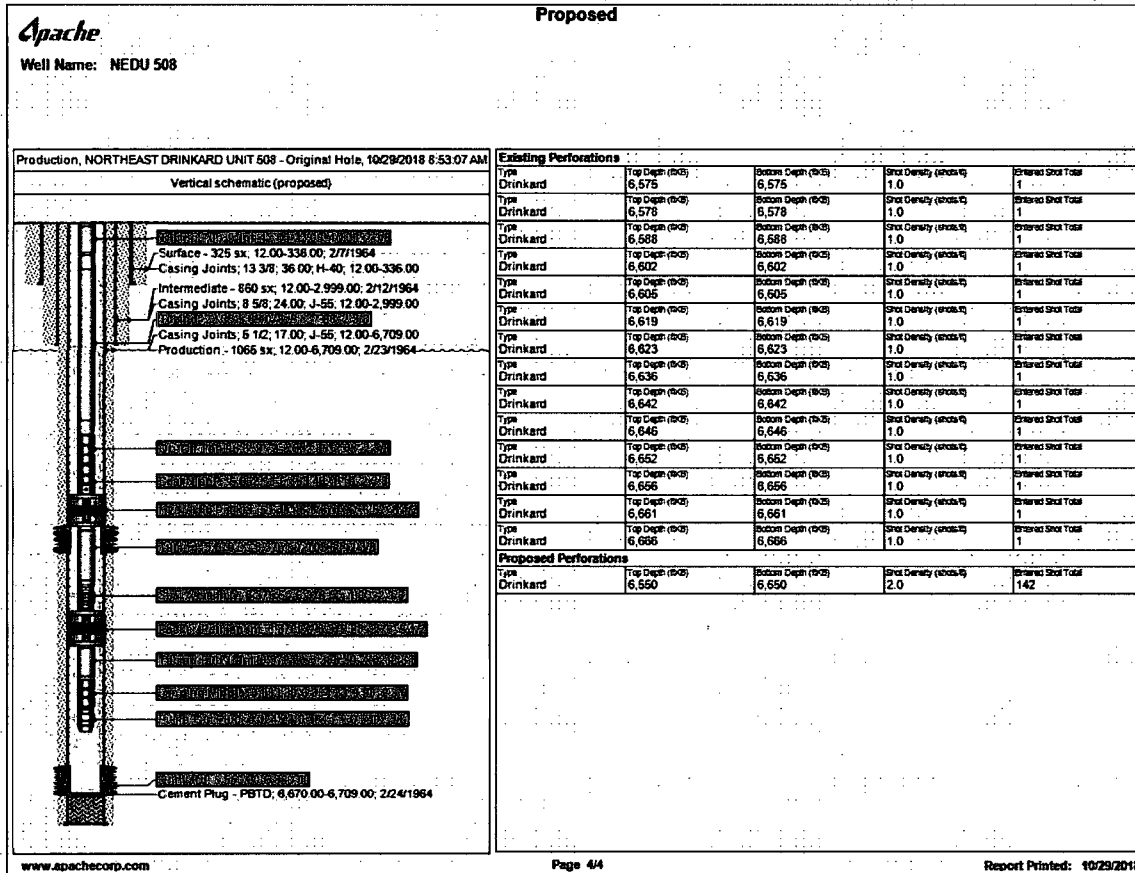
Vertical schematic (proposed)



Existing Perforations

Type	Blindbore	Top Depth (ft)	Bottom Depth (ft)	Shot Density (shots/ft)	Entered Shot Total
Type	Tub	6,981	6,981	1.0	1
Type	Tub	6,023	6,023	1.0	1
Type	Tub	6,027	6,027	1.0	1
Type	Tub	6,036	6,036	1.0	1
Type	Tub	6,042	6,042	1.0	1
Type	Tub	6,045	6,045	1.0	1
Type	Tub	6,056	6,056	1.0	1
Type	Tub	6,063	6,063	1.0	1
Type	Tub	6,066	6,066	1.0	1
Type	Tub	6,069	6,069	1.0	1
Type	Tub	6,075	6,075	1.0	1
Type	Tub	6,087	6,087	1.0	1
Type	Tub	6,090	6,090	1.0	1
Type	Tub	6,097	6,097	1.0	1
Type	Drinkard	6,465	6,465	1.0	1
Type	Drinkard	6,474	6,474	1.0	1
Type	Drinkard	6,479	6,479	1.0	1
Type	Drinkard	6,484	6,484	1.0	1
Type	Drinkard	6,493	6,493	1.0	1
Type	Drinkard	6,508	6,508	1.0	1
Type	Drinkard	6,523	6,523	1.0	1
Type	Drinkard	6,535	6,535	1.0	1
Type	Drinkard	6,541	6,541	1.0	1
Type	Drinkard	6,559	6,559	1.0	1
Type	Drinkard	6,571	6,571	1.0	1

Scenario 2: FJ Liner Proposed WBD



Scenario 2: FJ Liner Proposed WBD ()

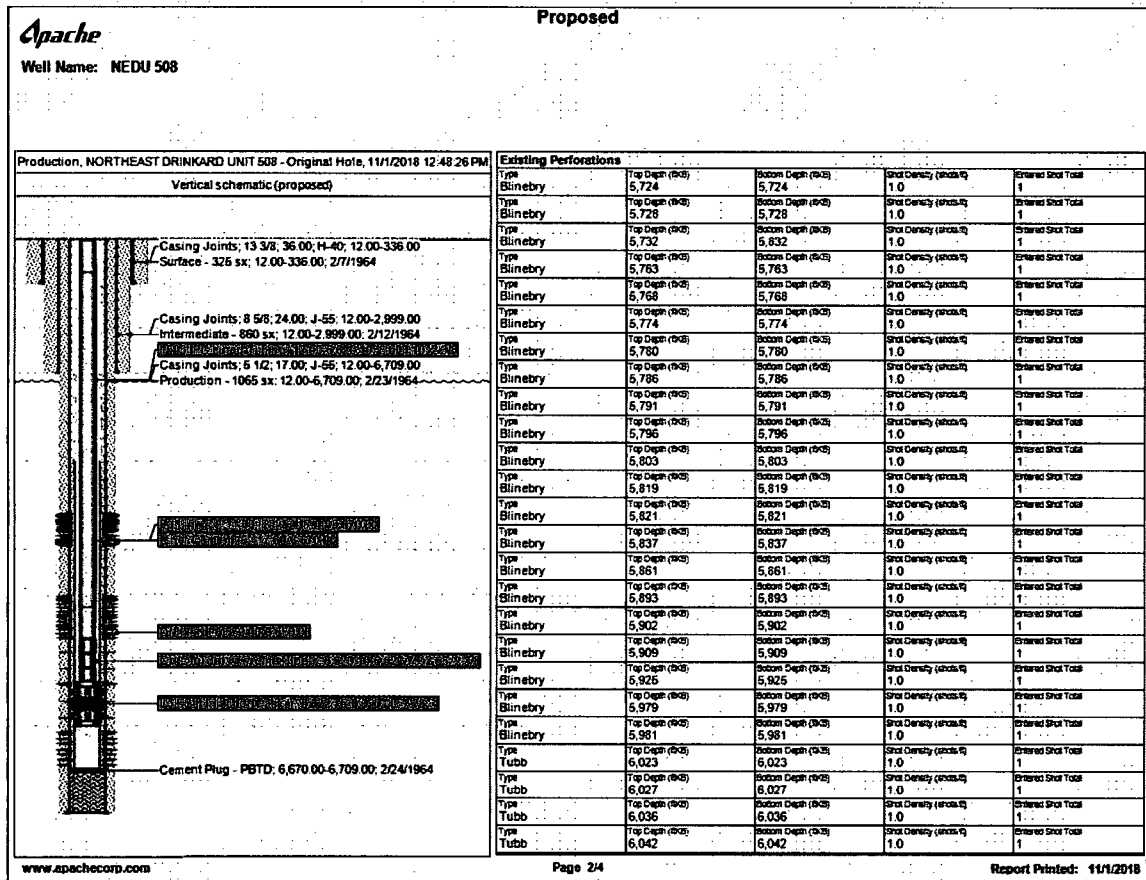
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Well Name: NEDU 508																																																																																																																			
Legal Well Name	Creation Well Name	API Surface Loc																																																																																																																	
NORTHEAST DRINKARD UNIT 508	NEDU 508	3002520548																																																																																																																	
Ground Elevation (ft)	Original K&B Elevation (ft)	Surface Legal Location	Depth (ft)																																																																																																																
3,441.0	3,453.0	660' FSL, 660' FEL, Unit P, Sec 10, T-21S, R-37E	8,709.0																																																																																																																
Production, NORTHEAST DRINKARD UNIT 508 - Original Hole, 11/12/2018 12:47:55 PM		Current Wellbore Sections																																																																																																																	
Vertical schematic (proposed)		<table border="1"> <thead> <tr> <th>Section Desc</th> <th>Size (in)</th> <th>Act Top (ftSS)</th> <th>Act Btm (ftSS)</th> <th>Start Date</th> </tr> </thead> <tbody> <tr> <td>Surface</td> <td>17 1/4</td> <td>12.0</td> <td>336.0</td> <td>2/7/1964</td> </tr> <tr> <td>Inter 1</td> <td>12 1/4</td> <td>336.0</td> <td>2,999.0</td> <td>2/8/1964</td> </tr> <tr> <td>Prod 1</td> <td>7 7/8</td> <td>2,999.0</td> <td>6,709.0</td> <td>2/13/1964</td> </tr> </tbody> </table>		Section Desc	Size (in)	Act Top (ftSS)	Act Btm (ftSS)	Start Date	Surface	17 1/4	12.0	336.0	2/7/1964	Inter 1	12 1/4	336.0	2,999.0	2/8/1964	Prod 1	7 7/8	2,999.0	6,709.0	2/13/1964																																																																																												
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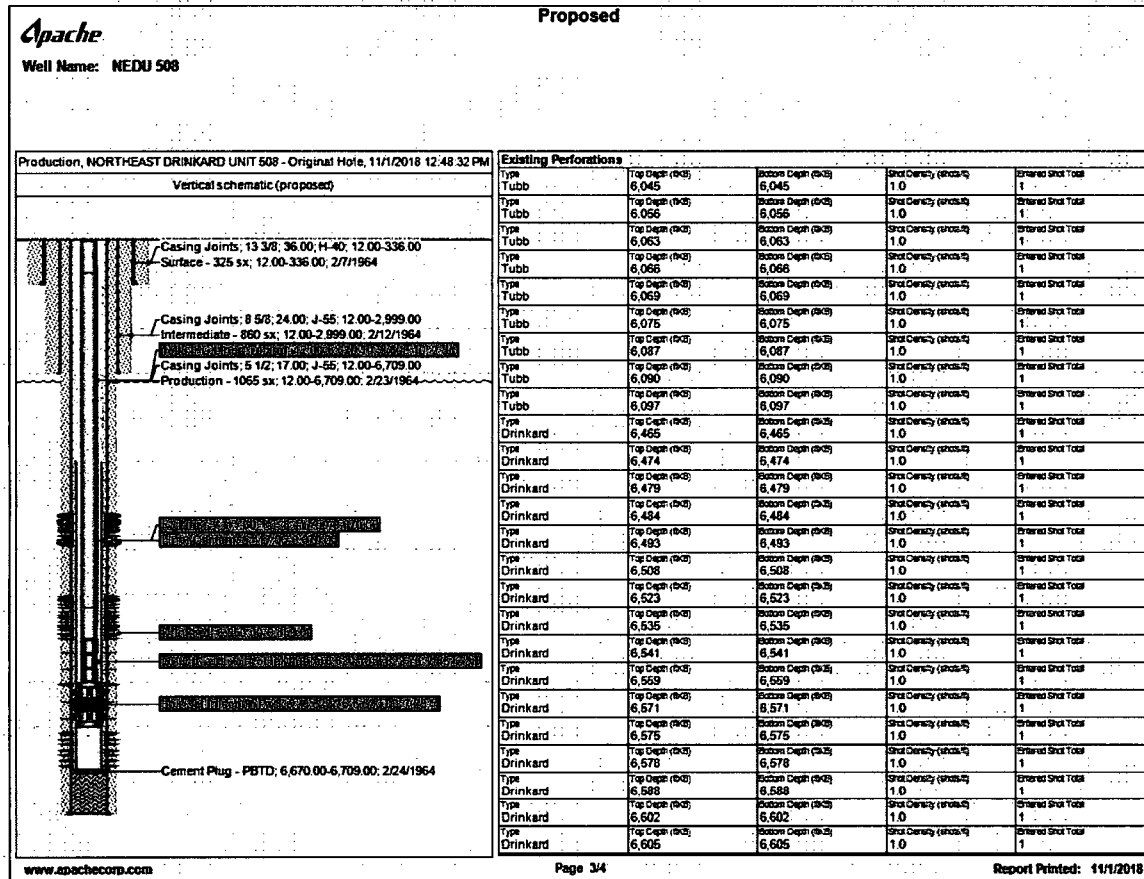
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Report Printed: 11/1/2018

Scenario 2: FJ Liner Proposed WBD (Blind-Flushed) (Blind-Flushed)



Scenario 2: FJ Liner Proposed WBD (REDACTED)



Scenario 2: FJ Liner Proposed WBD

