

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) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
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

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

WELL API NO. 30-025-20218
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Northeast Drinkard Unit (NEDU) [22503]
8. Well Number 510
9. OGRID Number 873
10. Pool name or Wildcat Eunice; B-T-D, North [22900]
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3436' DF

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK OR 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 L : 1980 feet from the South line and 990 feet from the West line
Section 11 Township 21S Range 37E NMPM County Lea

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: CTI ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐
OTHER: ☐

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: 11/27/1963

Rig Release Date: 12/20/1963

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 OCS Hobbs prior to MIT

NEDU 510: (API: 30-025-20218)

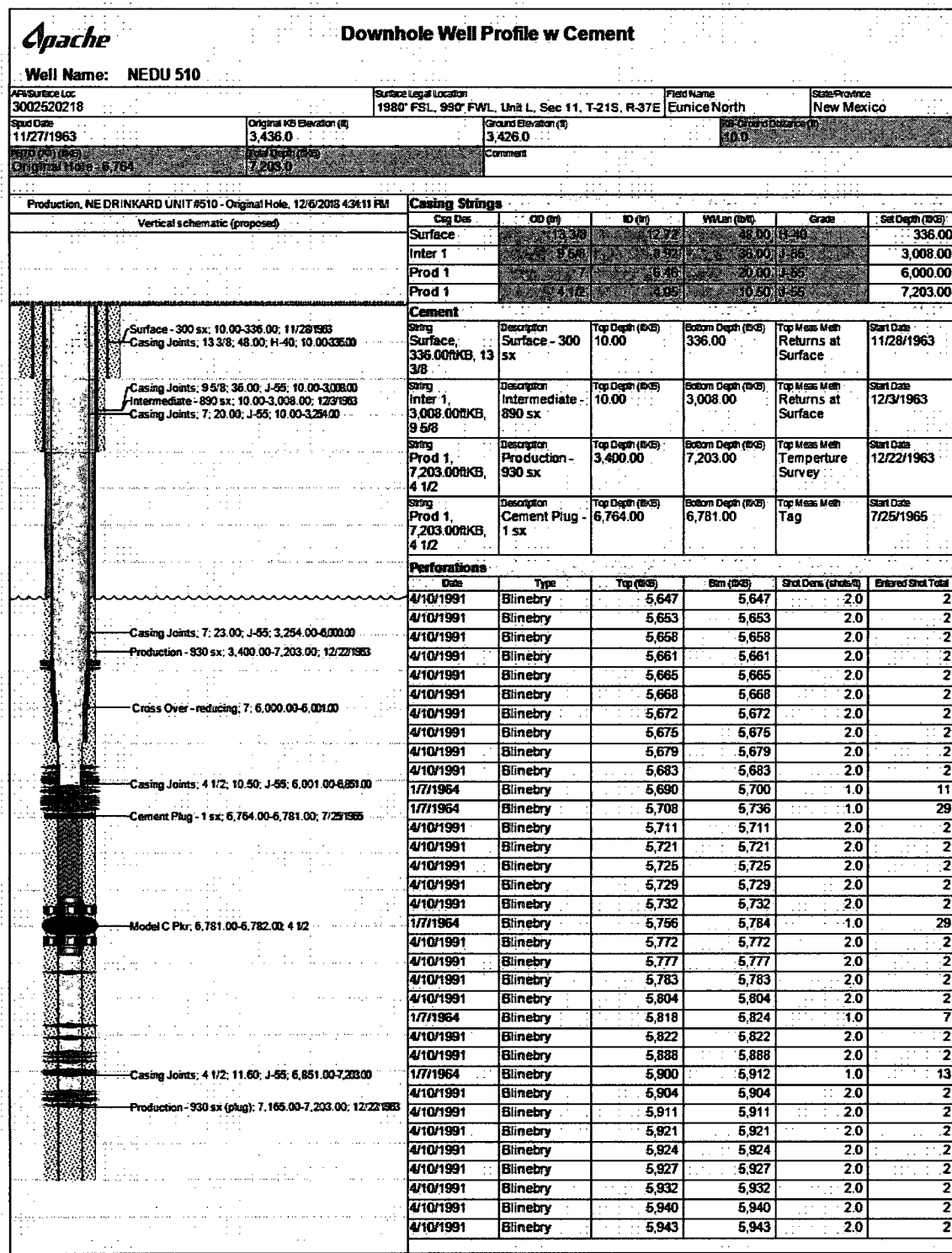
OBJECTIVE: CONVERT TO DRINKARD INJECTOR

Scenario 1: Dual Packer Isolation

1. POOH w rods and 2-3/8" production tubing.
2. PU 7" bit and scraper and run to 4.5" taper at 5998'.
3. PU 7" RBP and packer and RIH to around 5630' and set RBP.
 - Tight spot located around 3520'.
 - Milled from 3521'-3561' w/ tapered mill in 1991.
4. Test 7" casing to 500 psi.
 - If casing fails pressure test, POOH and isolate casing leak to prep for squeeze.
 - i. If unable to establish injection rate, POOH and prep to run 4.5" liner (Scenario 2).
 - ii. If able to establish injection rate, continue with cement squeeze.
 - If casing holds pressure, continue with step 5.
5. PU workstring and RIH w/ 3-7/8" bit or mill and clean out 4.5" casing to 6750'. POOH.
6. PU casing scraper and RIH to PBTD. POOH.
7. PU 4.5" RBP and packer and RIH to 6450'. Set and test RBP.
8. PU packer to 6290' and establish injection rate into lower Tubb perms.
9. PU RBP and set at 6290'. Test RBP.
10. PU packer to 6190' and establish injection rate into upper Tubb perms. POOH.
 - If Tubb perms don't hold, consider cement squeeze.
11. MIRU wireline. Run casing inspection log and cement bond log from top of Drinkard (6490') to surface. POOH.
12. RIH w/ wireline and perforate Drinkard formation f/ 6490'-6680' (actual depths TBD). POOH.
13. RIH w/ workstring and treating packer and set at 6150'.
 - May consider using isolation packers to prevent communication in Tubb perms.
14. Acid stimulate Drinkard formation w/ 5000 gals 15% HCl using rock salt for diversion. POOH.
15. MIRU wireline. RIH w/ 4-1/2" permanent packer and set in good casing between Blinbry and Drinkard (Depth dependent on casing inspection log).
16. PU 600-800' of 2-3/8" IPC externally coated tubing w/ 7" hydraulic packer on top and tie into permanent packer. Pressure up tubing to set hydraulic packer at 5600'. Test casing to 500 psi.
17. Perform MIT for NMOCD.
18. Open well up for injection.

Scenario 2: Cement 4-1/2" liner from Blinebry 5998' to Surface

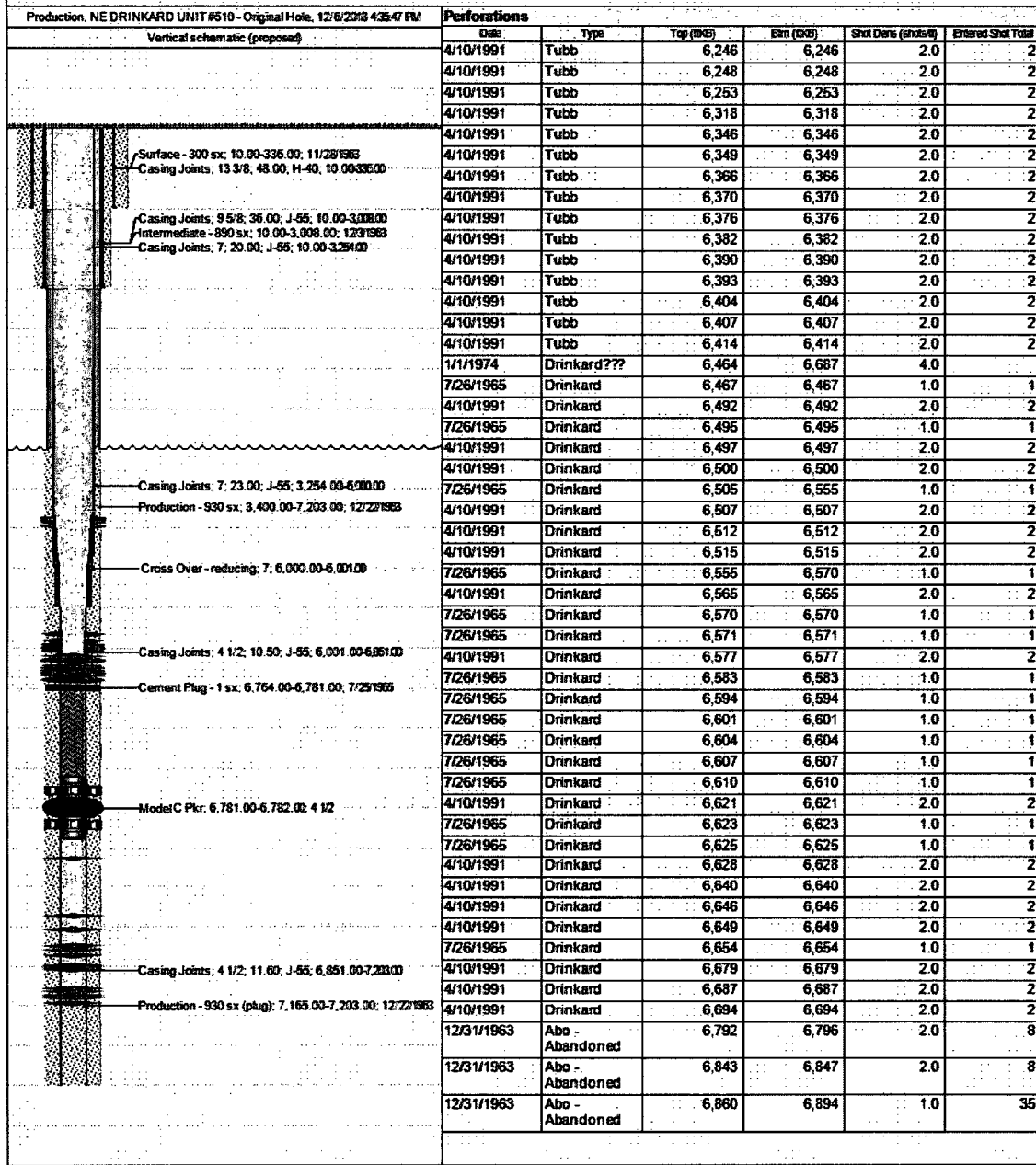
1. POOH w rods and 2-3/8" production tubing.
2. PU 7" bit and scraper and run to 4.5" taper at 5998'.
3. PU 7" RBP and packer and RIH to around 5630' and set RBP.
 - Tight spot located around 3520'.
 - Milled from 3521'-3561' w/ tapered mill in 1991.
4. Test 7" casing to 500 psi.
 - If casing does not hold pressure, isolate and attempt to establish injection rate.
5. PU 2-3/8" work string and 3-7/8" drill bit and clean out 4-1/2" casing to 6750'. POOH.
6. PU and making casing scraper run. POOH.
7. RIH w/ 4-1/2" RBP and packer.
8. Set RBP below Tubb perms around 6450'.
9. PU packer and set at 6210'. Attempt to establish injection rate into Tubb perms.
 - If injection rate established, consider running isolation packers on stimulation and on injection string.
10. PU and set RBP at 6220-6230'. Test RBP.
11. PU packer at set just below 7" X-Over at around 6000'.
12. Test 4-1/2" casing to 500 psi. POOH w/ 4-1/2" packer and RBP.
13. MIRU Slickline. RIH and set 4-1/2" composite bridge plug just below 7" crossover ~6020'.
14. MIRU casing crew. PU float shoe, float collar and ~ 6000' of 4.5" 11.6# LTC casing and tag 7"- 4.5" X-Over at 5998'.
15. MIRU cement crew. Pump lost circulation pad then attempt to circulate cement to surface (design TBD).
16. Cut casing and install 4-1/2" wellhead.
17. PU 3-7/8" bit and drill out cement to float collar. Pressure test casing.
18. Continue drilling out cement through float shoe. Pressure test casing again.
19. Drill out composite bridge plug and push to bottom.
20. MIRU wireline. Run CBL and casing inspection log from PBTD to surface.
21. PU wireline guns and perforate Drinkard formation f/ 6490'-6680' (Depths TBD). POOH.
22. PU 4-1/2" treating packer on 2-3/8" workstring. Set packer ~100' above top perf and load backside.
23. Acid stimulate Drinkard formation w/ 5000 gals 15% HCl using rock salt for diversion. POOH.
24. RIH w 4-1/2" injection packer and ~6500' of 2-3/8" IPC tubing. Set packer within 20' of top perf.
25. Circulate packer fluid and test backside to 500 psi.
26. Perform MIT for NMOCD.

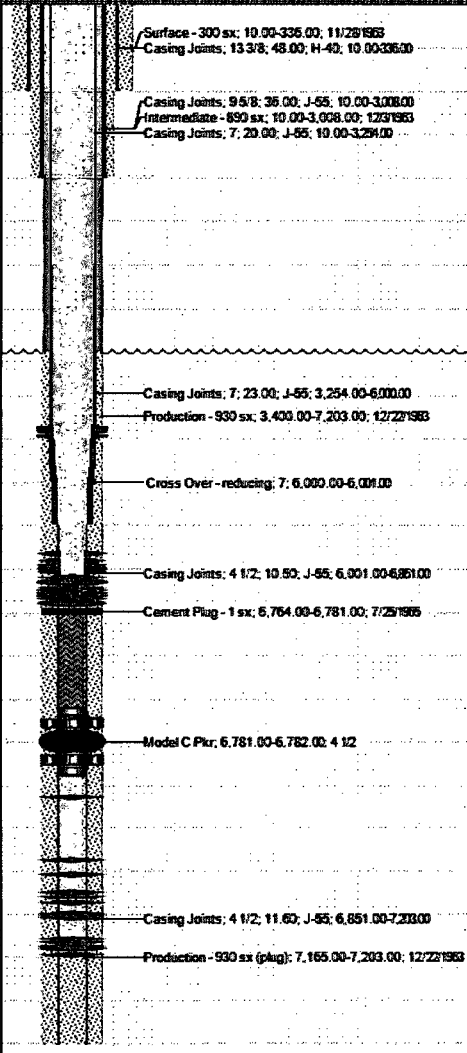




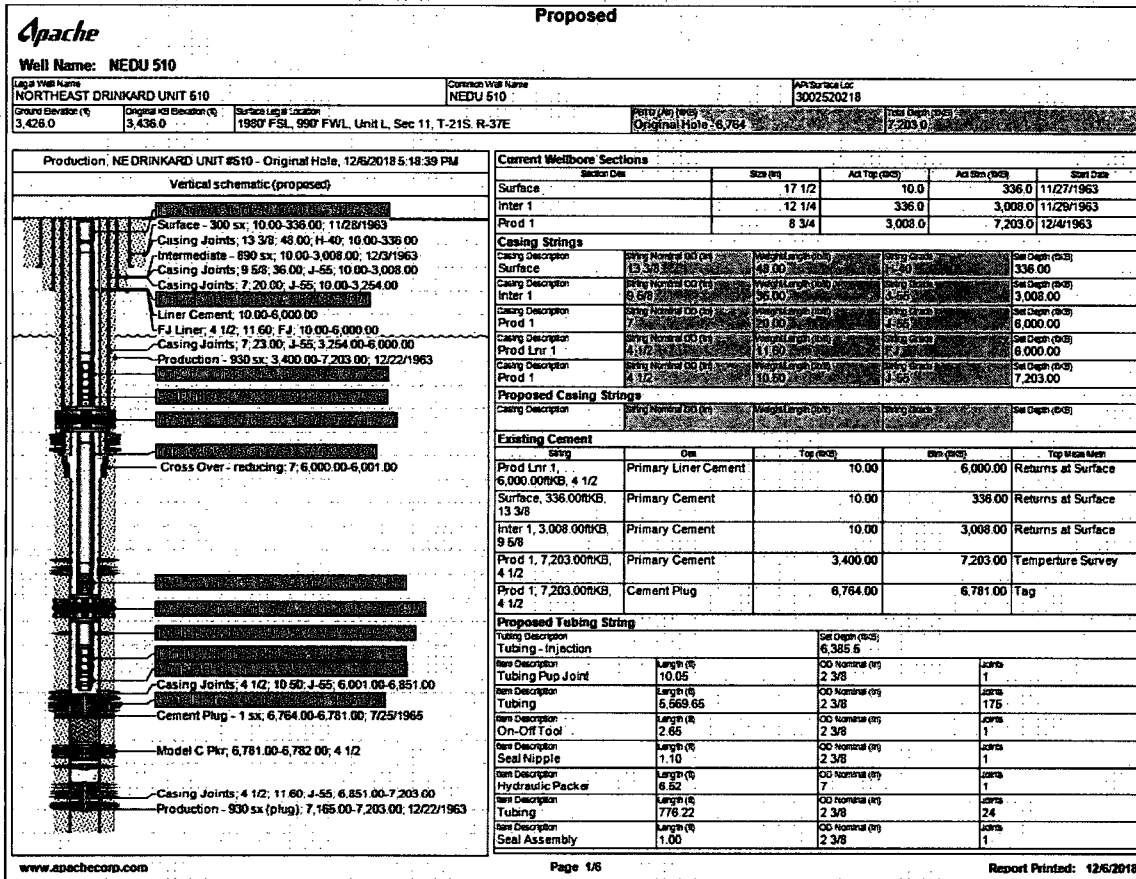
Downhole Well Profile w Cement

Well Name: NEDU 510

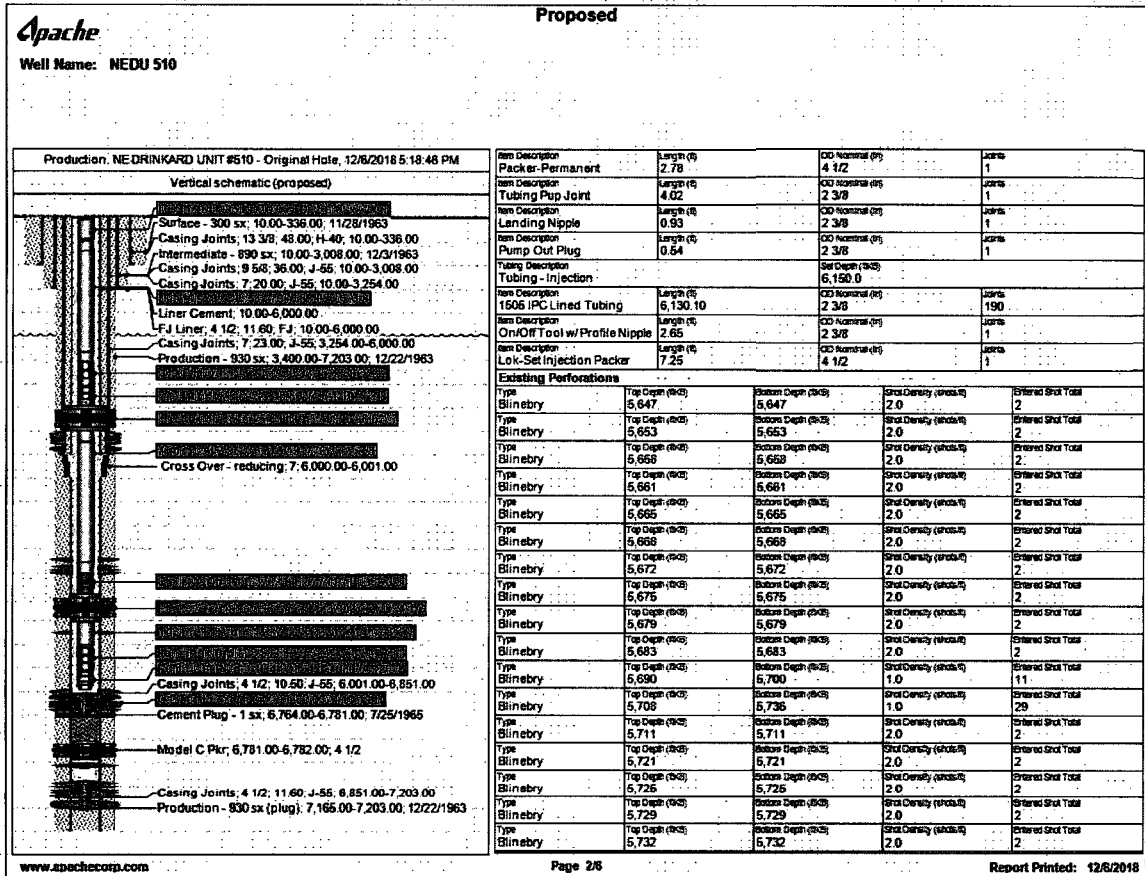


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Production, NEDRINKARD UNIT #510 - Original Hole. 12/6/2019 4:36:53 PM																																																																																					
Vertical schematic (proposed) 	<table border="1"> <thead> <tr> <th>Date</th> <th>Type</th> <th>Top (ft)</th> <th>6in (ft)</th> <th>Shot Dens (shots/ft)</th> <th>Entered Shot Total</th> </tr> </thead> <tbody> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>6,930</td><td>6,936</td><td>2.0</td><td>12</td></tr> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>6,946</td><td>6,956</td><td>2.0</td><td>20</td></tr> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>6,963</td><td>6,973</td><td>2.0</td><td>20</td></tr> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>7,003</td><td>7,007</td><td>2.0</td><td>8</td></tr> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>7,010</td><td>7,012</td><td>2.0</td><td>4</td></tr> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>7,014</td><td>7,016</td><td>2.0</td><td>4</td></tr> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>7,018</td><td>7,020</td><td>2.0</td><td>4</td></tr> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>7,097</td><td>7,104</td><td>2.0</td><td>14</td></tr> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>7,108</td><td>7,112</td><td>2.0</td><td>8</td></tr> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>7,122</td><td>7,124</td><td>2.0</td><td>4</td></tr> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>7,126</td><td>7,132</td><td>2.0</td><td>12</td></tr> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>7,136</td><td>7,140</td><td>2.0</td><td>8</td></tr> <tr><td>12/31/1963</td><td>Abn - Abandoned</td><td>7,152</td><td>7,158</td><td>2.0</td><td>12</td></tr> </tbody> </table>	Date	Type	Top (ft)	6in (ft)	Shot Dens (shots/ft)	Entered Shot Total	12/31/1963	Abn - Abandoned	6,930	6,936	2.0	12	12/31/1963	Abn - Abandoned	6,946	6,956	2.0	20	12/31/1963	Abn - Abandoned	6,963	6,973	2.0	20	12/31/1963	Abn - Abandoned	7,003	7,007	2.0	8	12/31/1963	Abn - Abandoned	7,010	7,012	2.0	4	12/31/1963	Abn - Abandoned	7,014	7,016	2.0	4	12/31/1963	Abn - Abandoned	7,018	7,020	2.0	4	12/31/1963	Abn - Abandoned	7,097	7,104	2.0	14	12/31/1963	Abn - Abandoned	7,108	7,112	2.0	8	12/31/1963	Abn - Abandoned	7,122	7,124	2.0	4	12/31/1963	Abn - Abandoned	7,126	7,132	2.0	12	12/31/1963	Abn - Abandoned	7,136	7,140	2.0	8	12/31/1963	Abn - Abandoned	7,152	7,158	2.0	12
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Other In Hole Description: Model C Pkr OD (in): 4 1/2 Top (ft): 6,781 Run Date:																																																																																					
Plug Back Total Depths Date: Type: Depth (ft): 6,764 Depth (ft) (1955):																																																																																					
Failed Component Links & Details Category: Description: Failure Depth (ft): Comp Date: Failure Date:																																																																																					
Comments Comment: 4/1/1991: perf 5647-6694' w/ 2 JSPF - az w/ 10,080 gal 15% NEFE HCL																																																																																					

Scenario 1: Dual Packer Proposed WBD



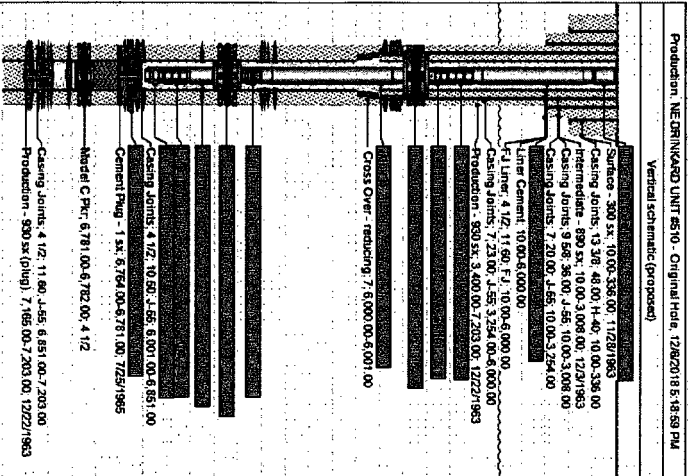
Scenario 1: Dual Packer Proposed WBD ()



2009年12月10日

Apache
Well Name: **NEDU 510**

Proposed

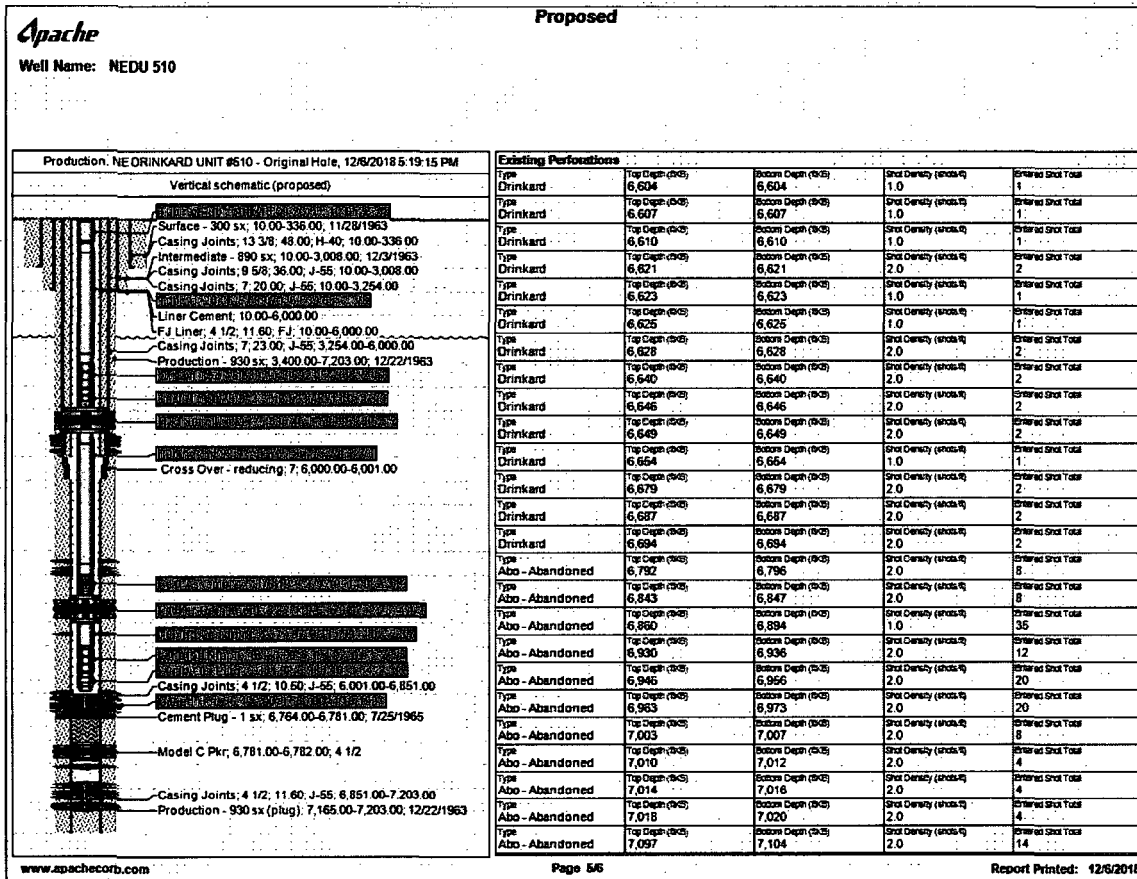


Easting Performance						
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.766	5.764	1.0	29		
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.772	5.772	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.777	5.777	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.783	5.783	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.804	5.804	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.814	5.814	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.822	5.822	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.885	5.888	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.900	5.912	2.0	13		
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.904	5.904	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.911	5.911	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.921	5.921	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.934	5.934	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.927	5.927	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.932	5.932	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.940	5.940	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	5.943	5.943	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	6.246	6.246	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	6.248	6.248	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	6.253	6.253	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	6.318	6.318	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	6.346	6.346	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	6.355	6.355	2.0			
Type	Reg. (kg/m ³)	Mean (kg/m ³)	Std. Dev. (kg/m ³)	Mean Std. Dev.		
Blindly	6.370	6.370	2.0			

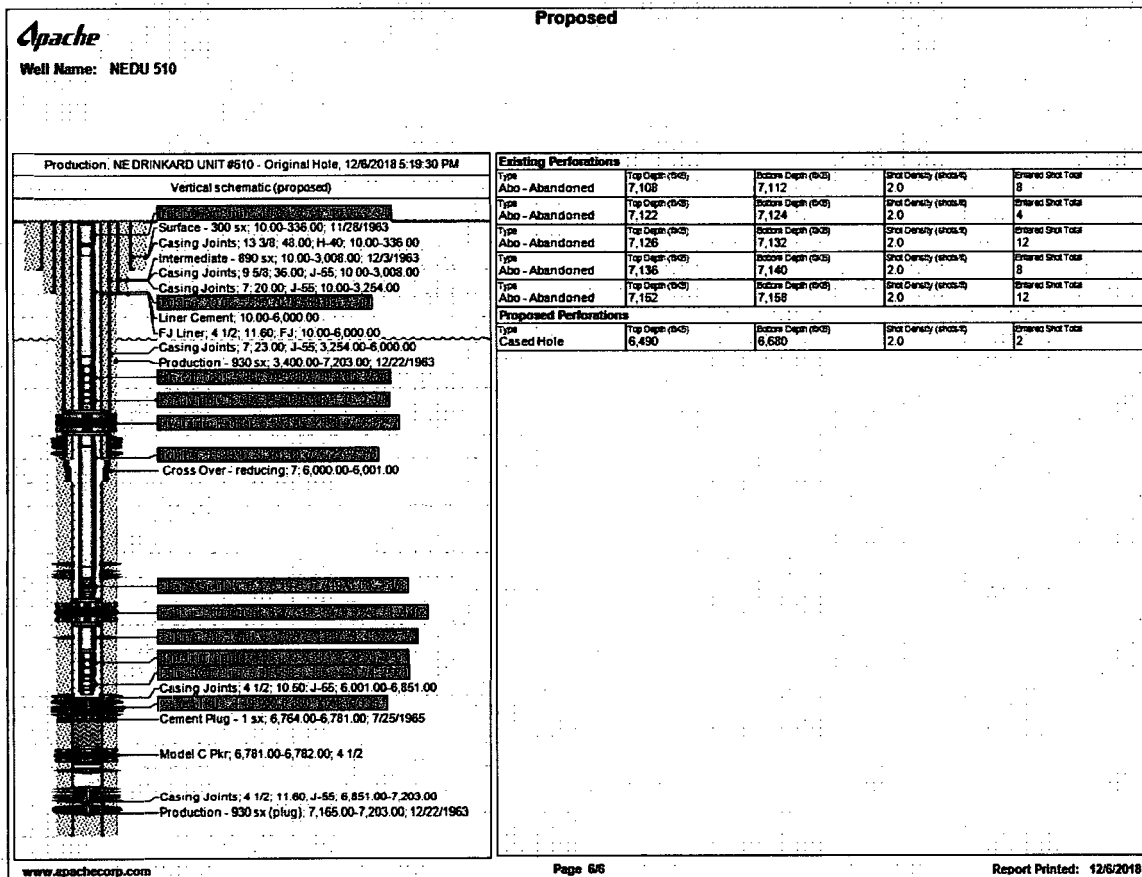
(A) Speaker (a) has a friend (b) now.

Report Printed: 12/8/2018

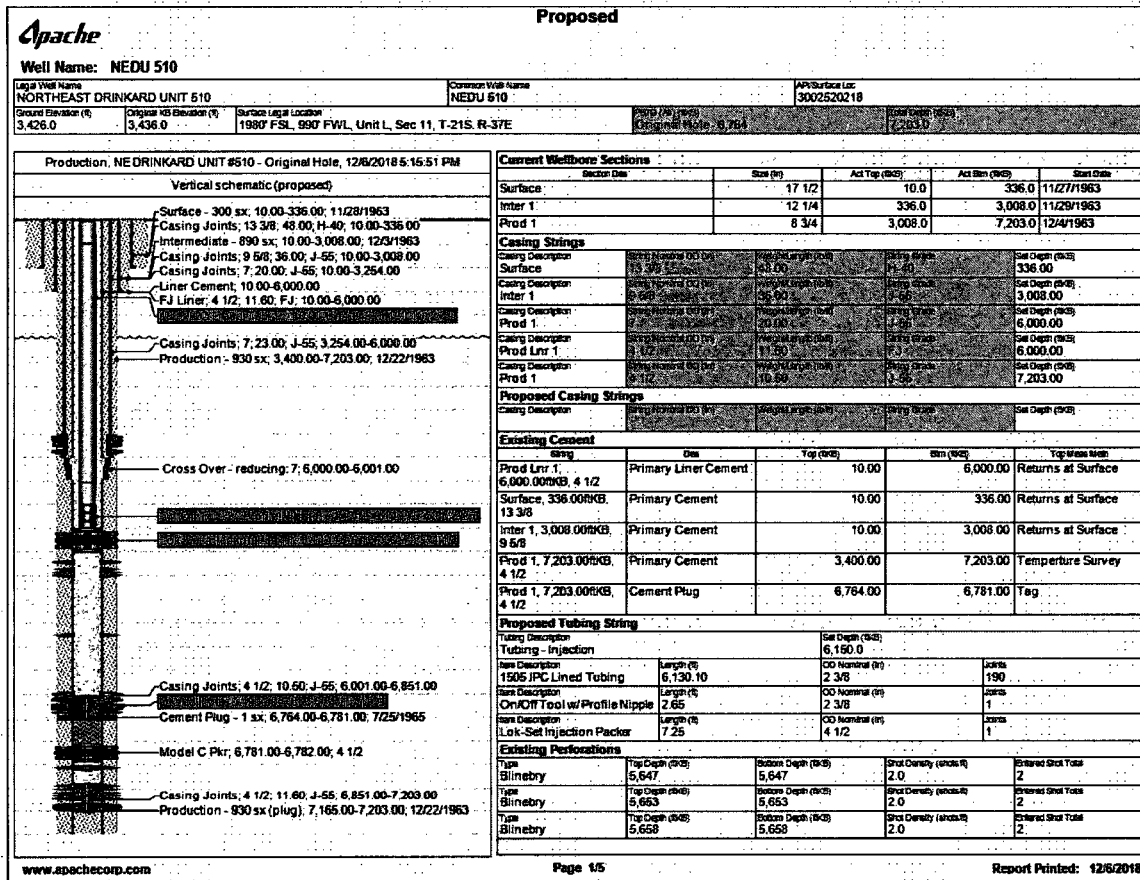
Scenario 1: Dual Packer Proposed WBD



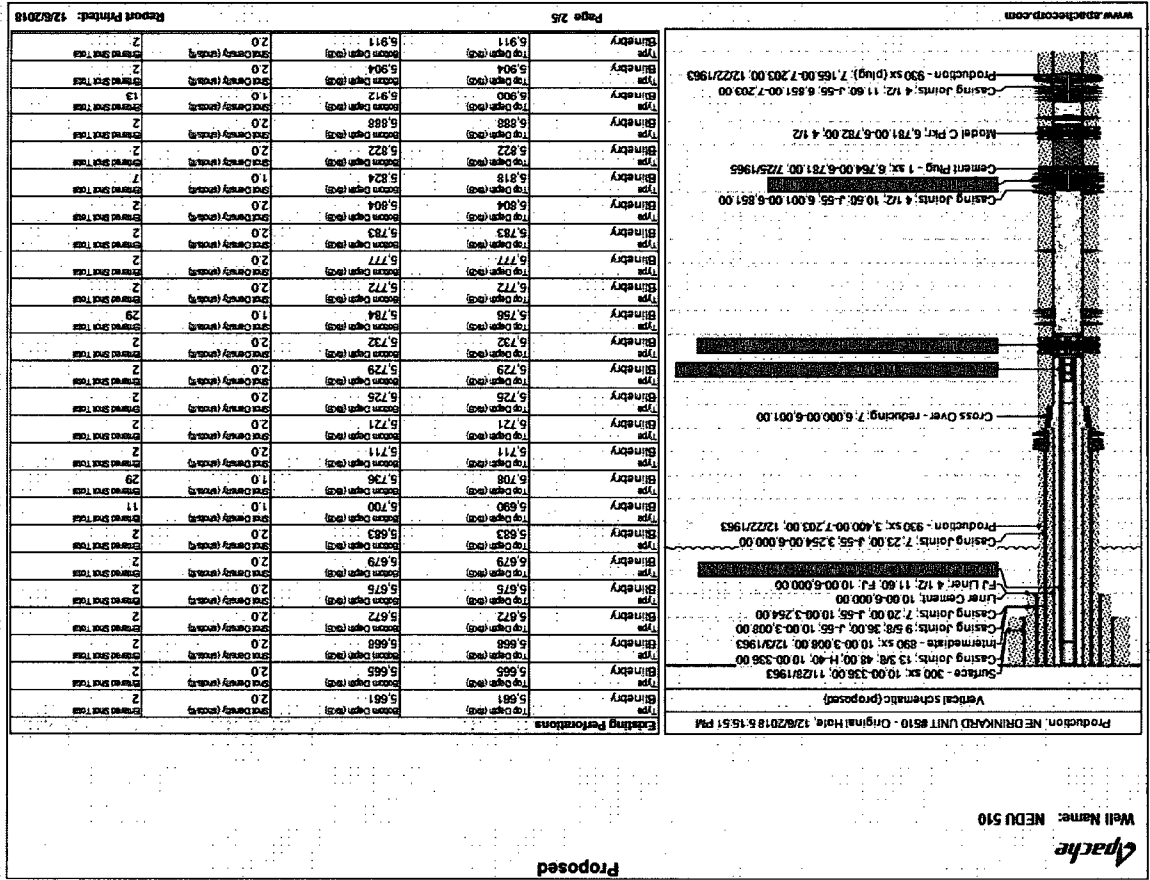
Scenario 1: Dual Packer Proposed WBD (Redacted)



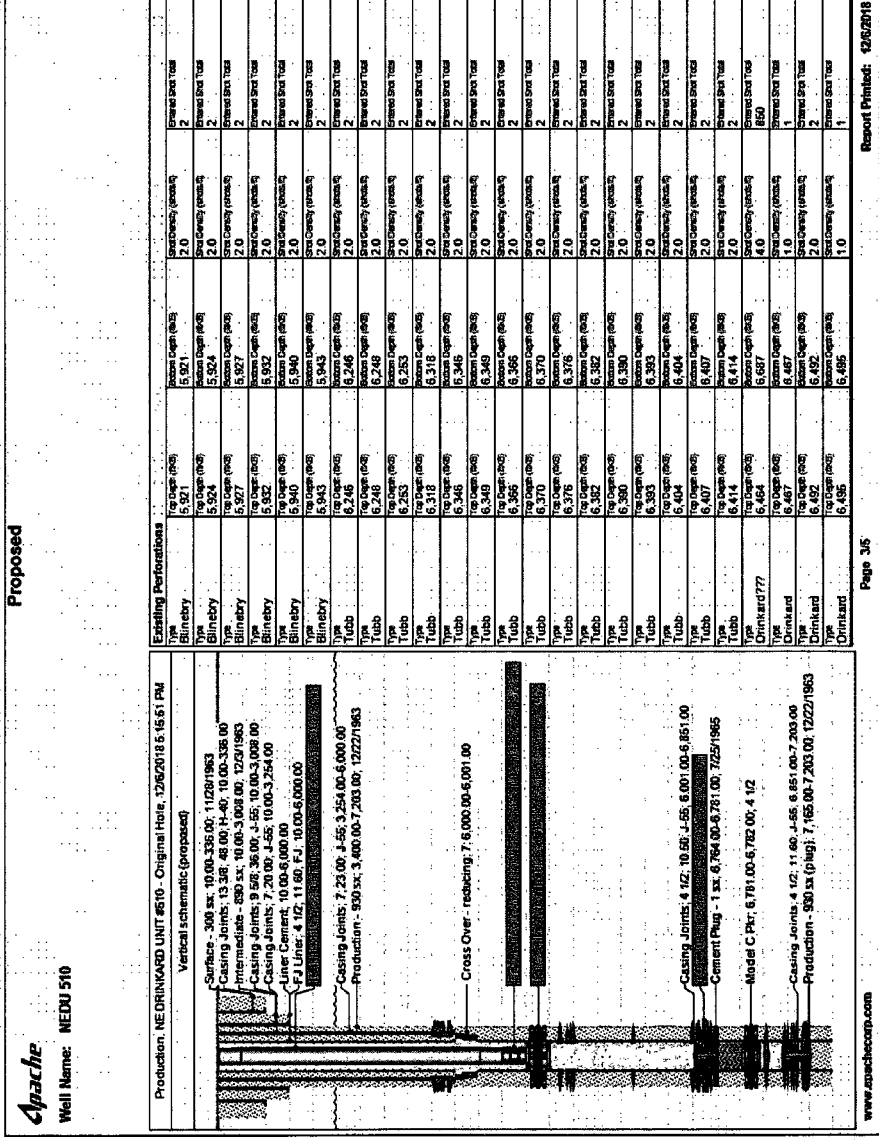
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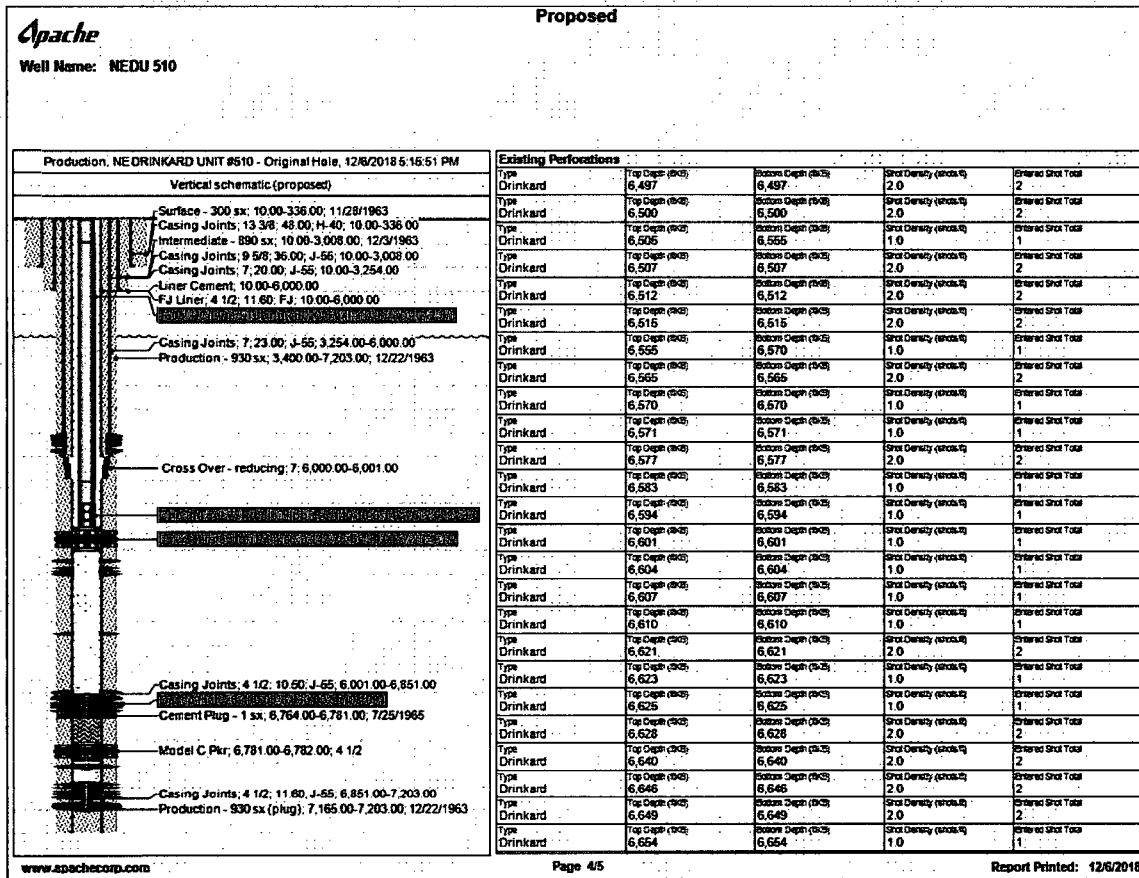
Scenario 2: FJ Liner Proposed WBD



Scenario 2: FJ Liner Proposed WBD



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