

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.
30-025-06459

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
30-1349

7. Lease Name or Unit Agreement Name
Northeast Drinkard Unit (NEDU) [22503]

8. Well Number 401

9. OGRID Number
873

10. Pool name or Wildcat
Eunice; B-T-D, North [22900]

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 D : 990 feet from the North line and 840 feet from the West line
Section 10 Township 21S Range 37E NMPM County Lea

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3473' GL

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:

5/7/1953

Rig Release Date:

6/13/1953

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-105 approval
Must notify OCS Hobbs prior to MIT*

NEDU 401: (API: 30-025-06459)

OBJECTIVE: CONVERT TO DRINKARD INJECTOR

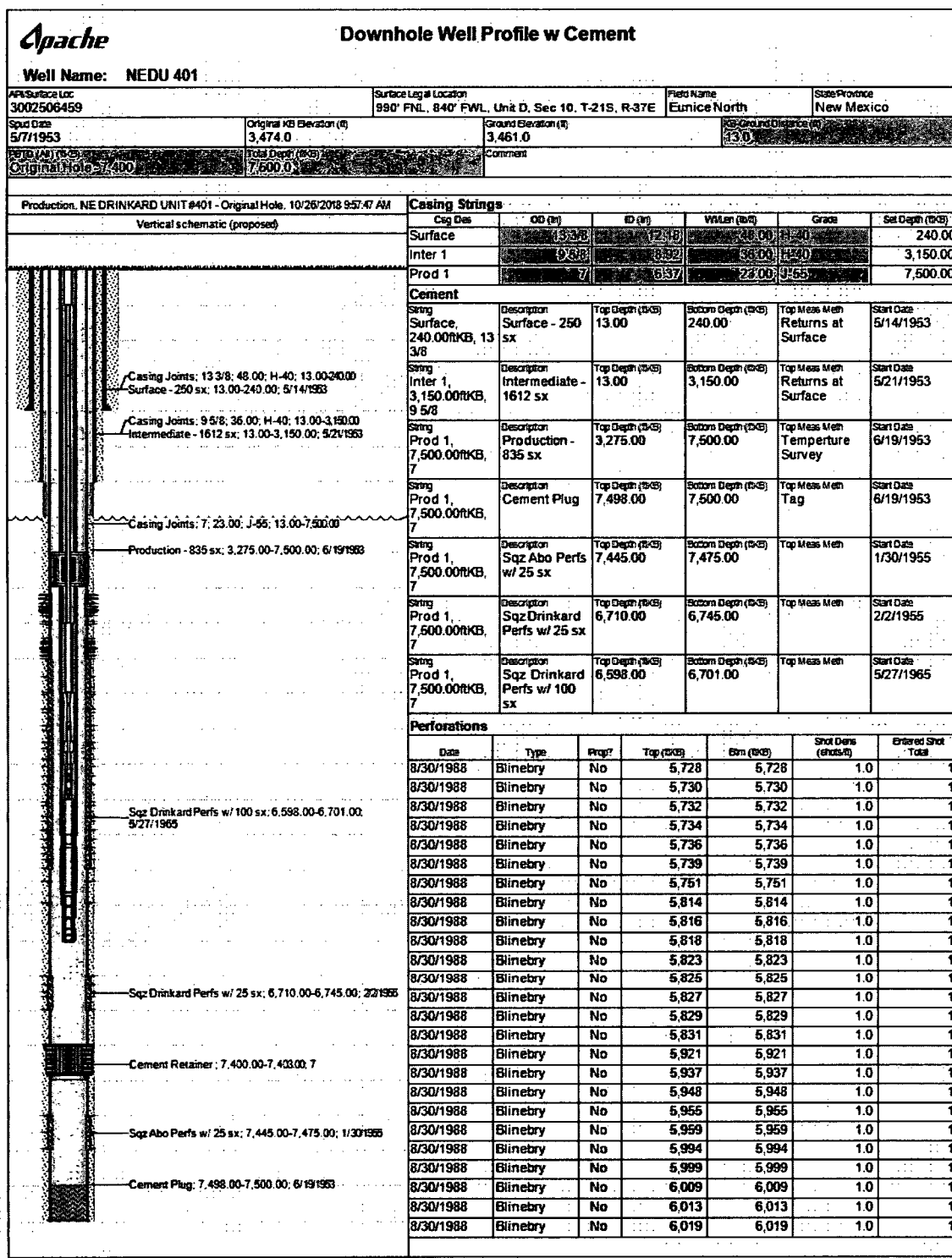
Scenario 1: Dual Packer Isolation

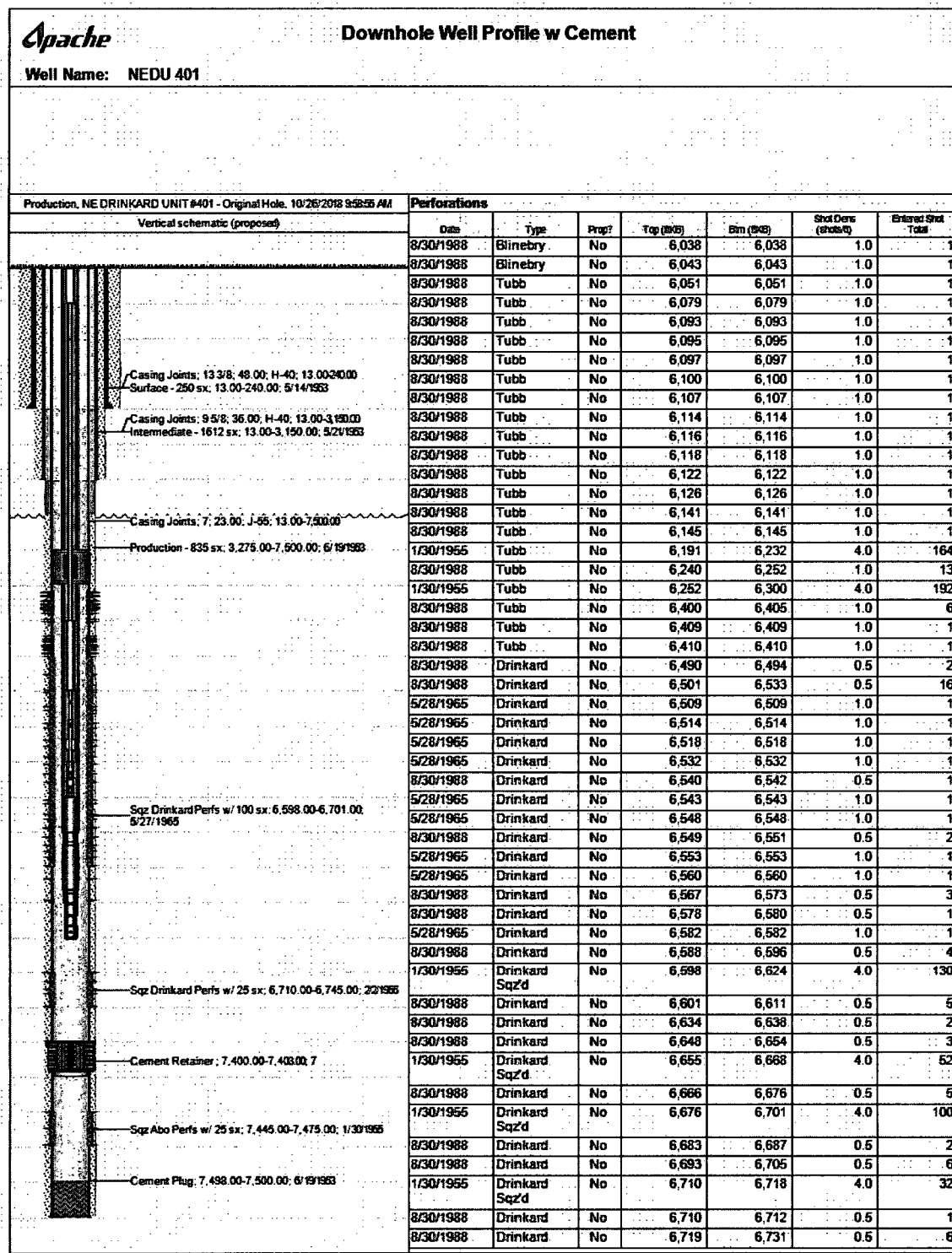
1. POOH w rods and 2-7/8" production tubing.
2. PU workstring and RIH with bit/mill w/ casing scraper and clean out well to PBTD at 7400' (cement retainer @ 7400'). POOH.
3. Run casing inspection log and cement bond log from top of Drinkard to surface. POOH.
4. RIH w/ wireline and perforate Drinkard formation f/ 6500'-6690' (actual depths TBD). POOH.
5. RIH w/ workstring and 7" treating packer to acid stimulate Drinkard formation w/ 5000 gals 15% HCl using rock salt for diversion. POOH.
6. MIRU wireline. RIH w/ 7" permanent packer and set in good casing between Blinebry and Drinkard (Depth dependent on casing inspection log).
7. PU 750-800' 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 within 50' of top perf. Test casing to 500 psi.
8. Perform MIT for NMOCD.
9. Open well up for injection.

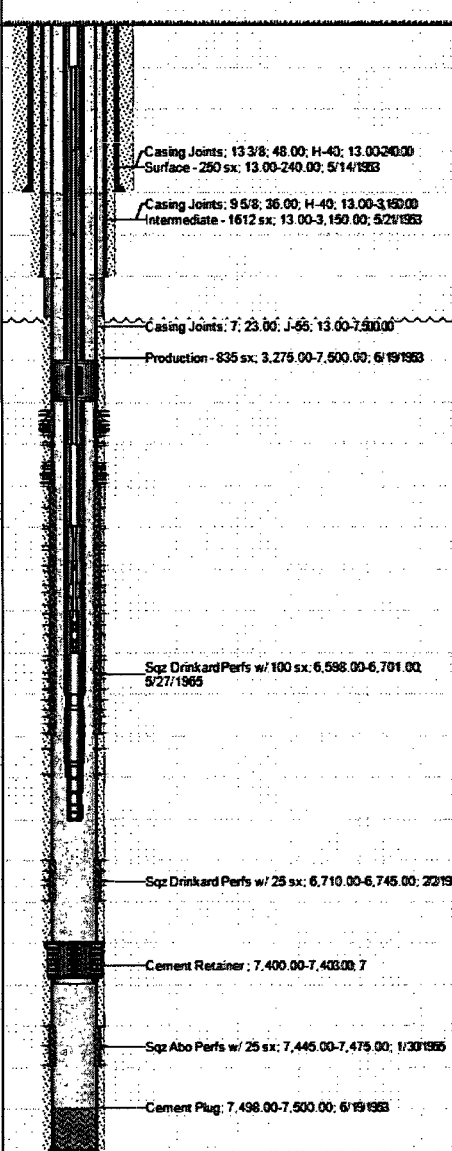
Scenario 2: Cement 5-1/2" liner from Blinebry to TD

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 7400'. POOH.
3. MIRU cement and casing crew and PU ~2000' of 5.5" 17# LTC J-55 casing (including float shoe, float collar and landing collar) 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. RIH w/ treating packer and tailpipe and spot cement over the top of the liner. PU packer and cement squeeze TOL.
7. POOH and lay down packer and tailpipe.
8. PU 6-1/4" bit and drill out cement to TOL. Pressure test casing. POOH.
9. PU 4-3/4" bit and drill out cement to float collar. Pressure test casing. Continue drilling out cement if needed to perforate. POOH.
10. MIRU wireline. Run CBL and casing inspection log from PBTD to surface.
11. PU wireline guns and perforate Drinkard formation f/6500'—6690' (Depths TBD). POOH.
12. PU 5-1/2" treating packer with 2-7/8" workstring to surface. Set packer ~100' above top perf and load backside.
13. Acid stimulate Drinkard formation w/ 5000 gals 15% HCl using 1.1 SG ball sealers for diversion. Release packer and knock off balls. POOH.

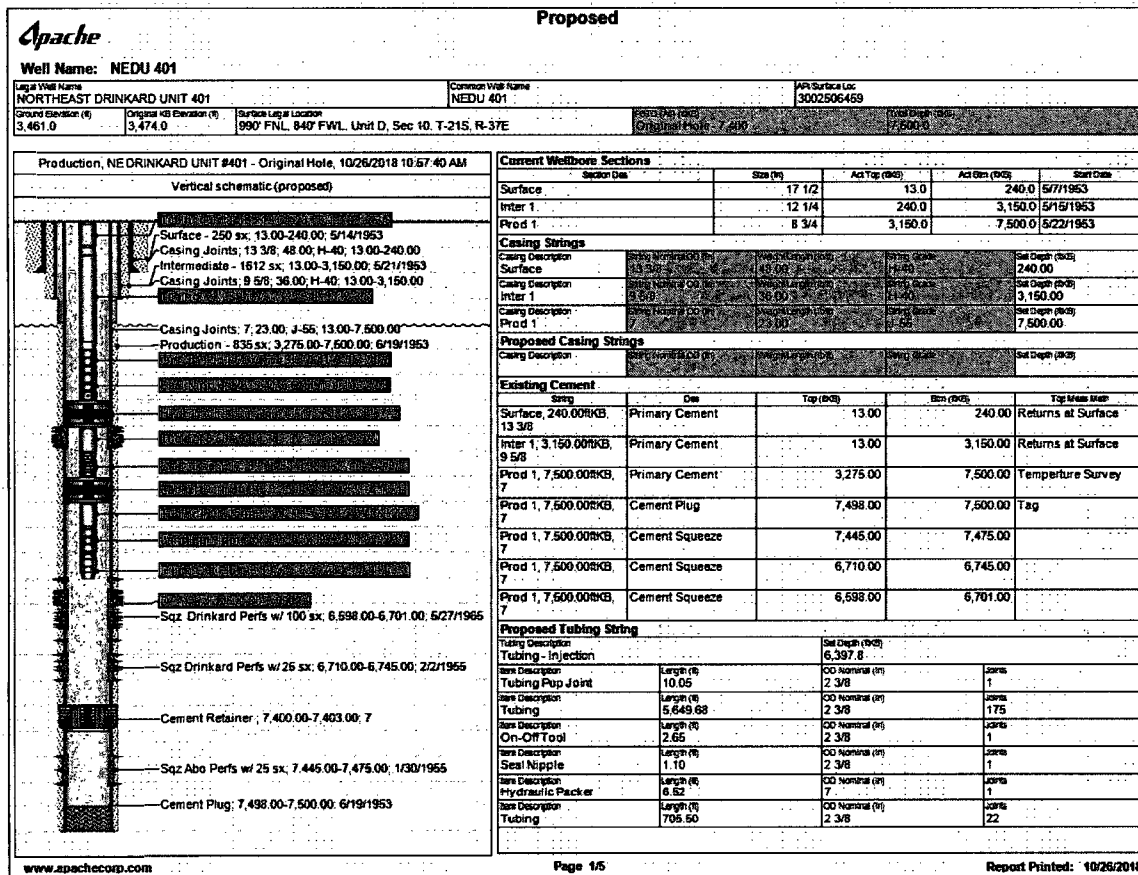
14. RIH w 5-1/2" injection packer and ~6500' of 2-3/8" IPC tubing. Set packer within 20' of top perf.
15. Circulate packer fluid and test backside to 500 psi.
16. Perform MIT for NMOCD.



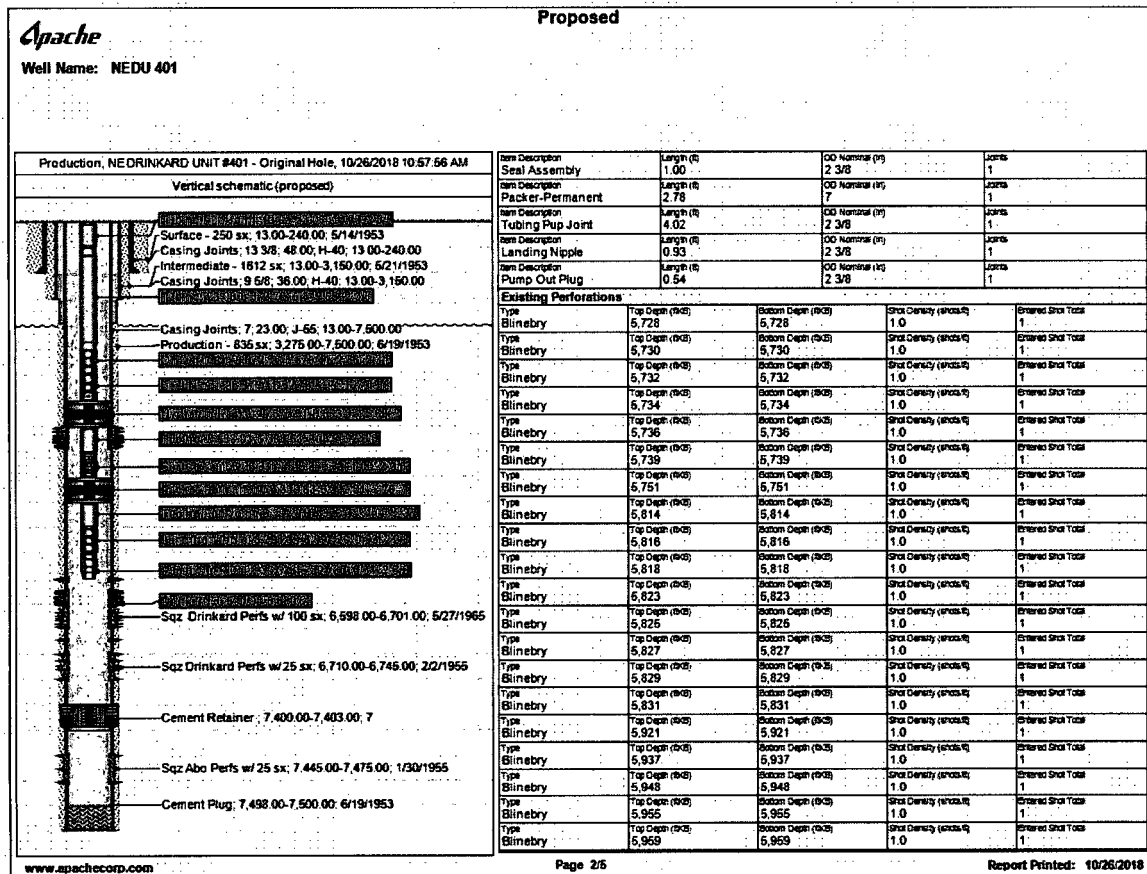


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Comment	5/27/1965: sqz Drinkard perfs 6598-6701' w/ 100 sx CL C cmt - perf 6509-6582' w/ 1 JSPF - az w/ 2000 gal 15% acid, frac w/ 30,000 gal crude, 27,000# sand, 15,000# adomite - az 6191-6300' w/ 3000 gal 15% acid																																																																																																																																																																																																																																																									
Comment	12/1/1983: az 6509-6582' w/ 27 bbl 15% HCL NEFE - az 6191-6300' w/ 100 bbl 15% HCL NEFE																																																																																																																																																																																																																																																									
Comment	8/23/1988: D/O & C/O to 6800' - perf 5728-6731' w/ 1 JSPF - az 5728-6731' w/ 12,600 gal 15% NEFE HCL acid + 1250# RS + 45 ball sealers																																																																																																																																																																																																																																																									
Comment	7/15/1977: shut in well until 10/29/1998																																																																																																																																																																																																																																																									
Comment	9/16/2016: pump 1000 gal acid																																																																																																																																																																																																																																																									

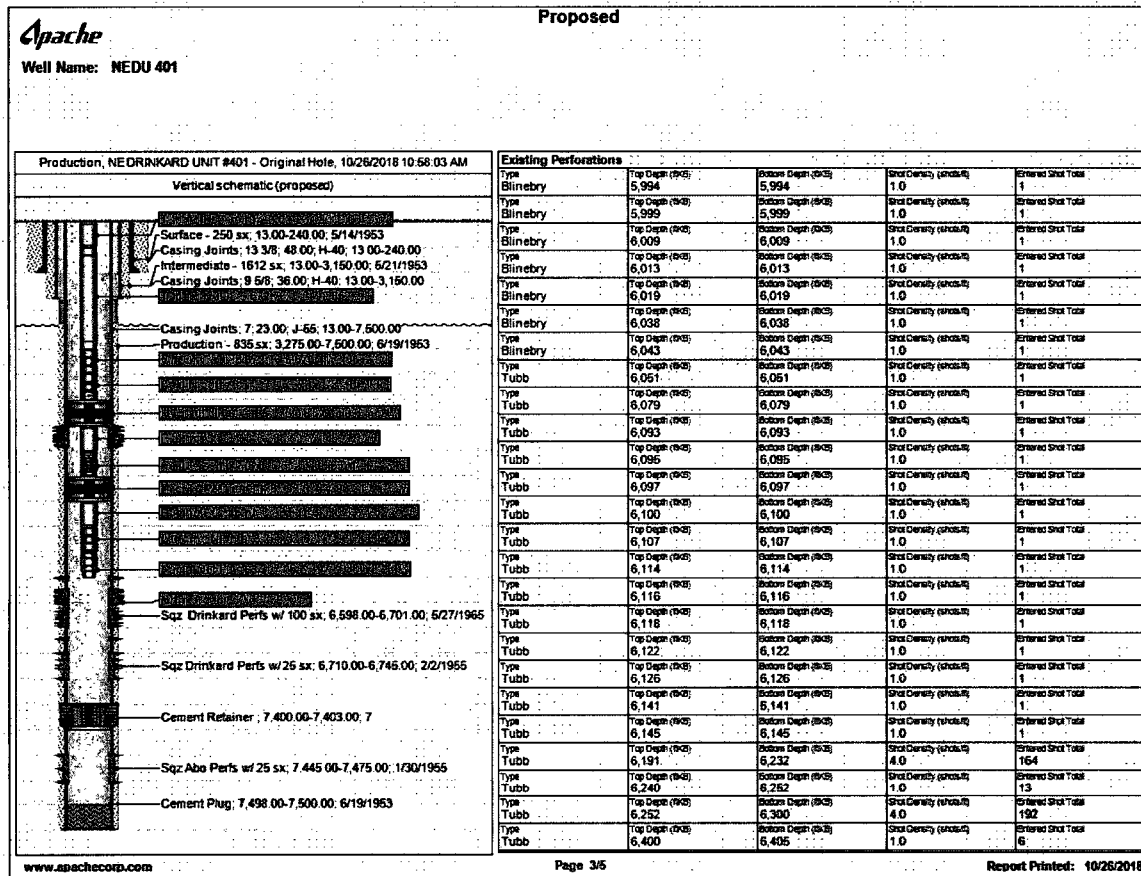
Scenario 1: Dual Packer Proposed WBD ()



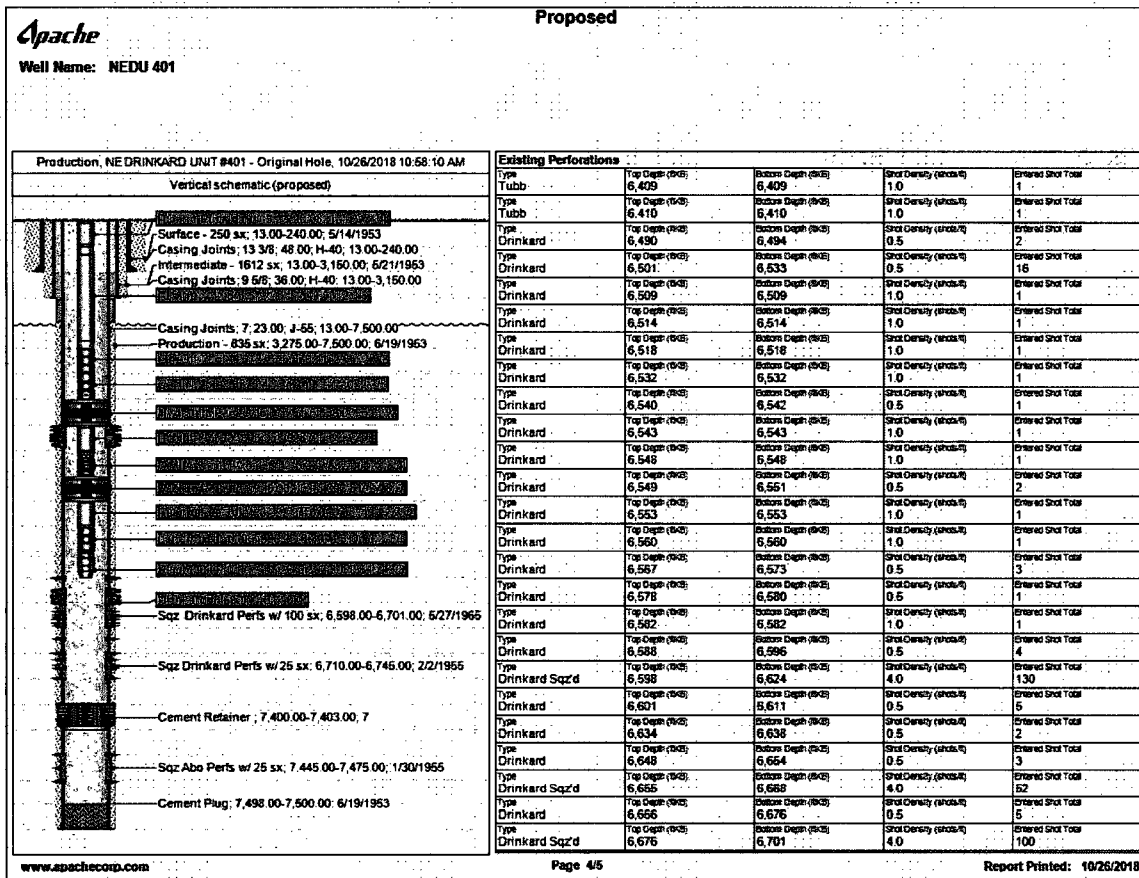
Scenario 1: Dual Packer Proposed WBD



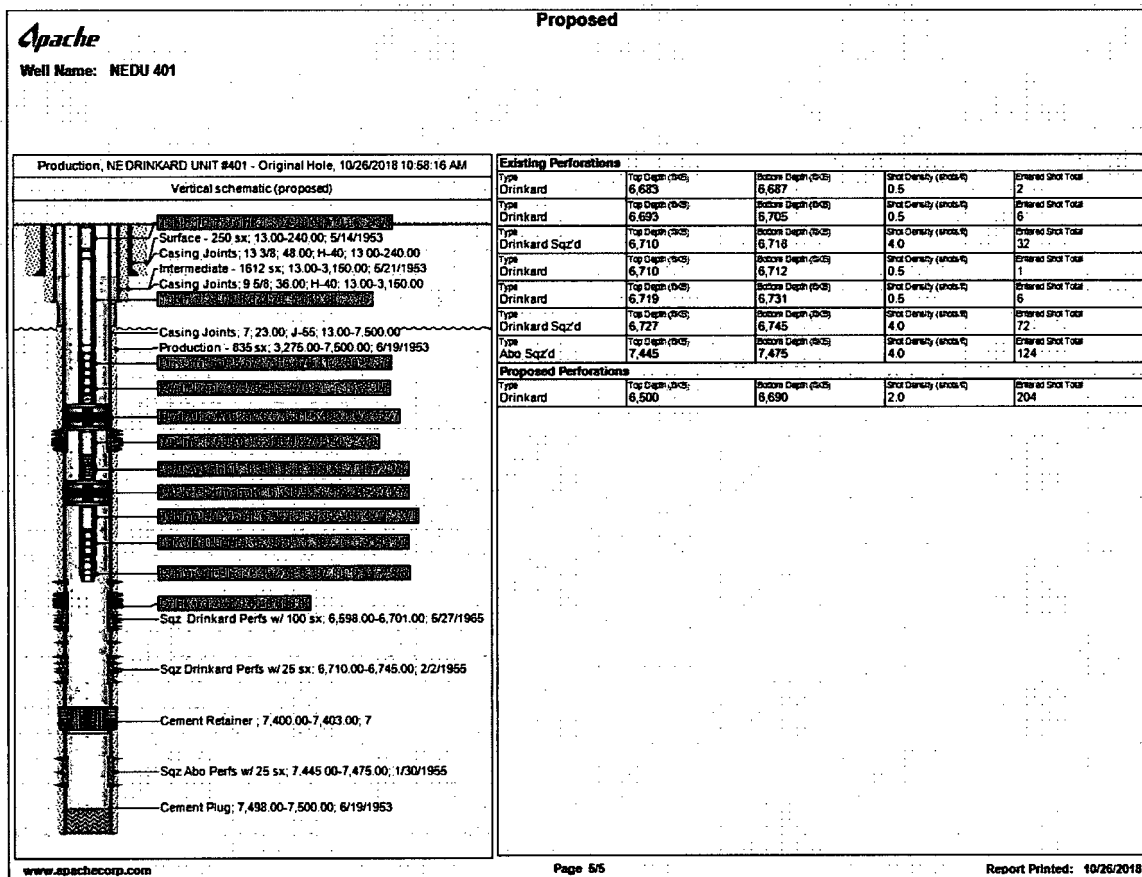
Scenario 1: Dual Packer Proposed WBD ()



Scenario 1: Dual Packer Proposed WBD ()



Scenario 1: Dual Packer Proposed WBD (



Scenario 2: Liner Proposed WBD

Apache					
Proposed					
Well Name: NEDU 401		Corrosion Well Name: NEDU 401		APR Surface Loc: 3002506459	
Legal Well Name: NORTHEAST DRINKARD UNIT 401	Ground Elevation (ft): 3,461.0	Original IWB Elevation (ft): 3,474.0	Surface Log # Location: 9907 FNL, 8407 FWL, Unit D, Sec 10, T-21S, R-37E	APR Day 1 Date: 10/31/2018	Original Hole: 7,500.0
Production, NEDRINKARD UNIT #401 - Original Hole, 10/31/2018 10:51:44 AM					
Vertical schematic (proposed)					
Surface - 250 sx; 13.00-240.00; 5/14/1953 Casing Joints; 13 3/8; 48.00; H-40; 13.00-240.00 Casing Joints; 9 5/8; 36.00; H-40; 13.00-3,150.00 Intermediate - 1612 sx; 13.00-3,150.00; 5/21/1953 Casing Joints; 7 23/32; J-55; 13.00-7,500.00 Production - 835 sx; 3,275.00-7,500.00; 6/19/1953 Sqz Drinkard Perfs w/ 100 sx; 6,698.00-6,701.00; 5/27/1955 Sqz Drinkard Perfs w/ 25 sx; 6,710.00-6,745.00; 2/2/1955 Cement Retainer; 7,400.00-7,403.00; 7 Sqz Abo Perfs w/ 25 sx; 7,445.00-7,475.00; 1/30/1955 Cement Plug; 7,488.00-7,500.00; 6/19/1953					
Current Wellbore Sections					
Section Des	Size (in)	Act Top (ft)	Act Btm (ft)	Start Date	
Surface	17 1/2	13.0	240.0	5/7/1953	
Inter 1	12 1/4	240.0	3,150.0	5/16/1953	
Prod 1	8 3/4	3,150.0	7,500.0	5/22/1953	
Casing Strings					
Casing Description	Weight (lb/ft)	Length (ft)	Set Depth (ft)	Set Date	
Surface	13.3/8	240.0	240.0	5/7/1953	
Inter 1	12.1/4	3,150.0	3,150.0	5/16/1953	
Prod 1	8.3/4	7,500.0	7,500.0	5/22/1953	
Proposed Casing Strings					
Casing Description	Weight (lb/ft)	Length (ft)	Set Depth (ft)	Set Date	
Prod Lnr 1	57.00	7,400.00	7,400.00		
Existing Cement					
String	Des	Top (ft)	Btm (ft)	Top Measurement	
Surface, 240.00ftKB, 13 3/8	Primary Cement	13.00	240.00	Returns at Surface	
Inter 1, 3,150.00ftKB, 9 5/8	Primary Cement	13.00	3,150.00	Returns at Surface	
Prod 1, 7,500.00ftKB, 7	Primary Cement	3,275.00	7,500.00	Temperature Survey	
Prod 1, 7,500.00ftKB, 7	Cement Plug	7,498.00	7,500.00	Tag	
Prod 1, 7,500.00ftKB, 7	Cement Squeeze	7,445.00	7,475.00		
Prod 1, 7,500.00ftKB, 7	Cement Squeeze	6,710.00	6,745.00		
Prod 1, 7,500.00ftKB, 7	Cement Squeeze	6,698.00	6,701.00		
Proposed Cement					
String	Description	Top Depth (ft)	Bottom Depth (ft)	Top Measurement Method	
Prod Lnr 1, 7,400.00ftKB, 5 1/2	Primary Liner Cement	5,453.00	7,400.00	Returns at Surface	
Proposed Tubing String					
Tubing Description	Length (ft)	Set Depth (ft)	Joints		
Tubing - Injection	6,487.10	6,480.0	200		
1506 IPC Lined Tubing	2 3/8	6,487.10	200		
On/Off Tool w/ Profile Nipple	2 65	2 3/8	1		
Leak-Set Injection Packer	7 25	5 1/2	1		
Existing Perforations					
Type	Top Depth (ft)	Bottom Depth (ft)	Shot Density (shots/ft)	Entered Shot Total	
Bitumen	5,728	5,728	1.0	1	

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Well Name: NEDU 401

Well Name: NEDU 401

Proposed

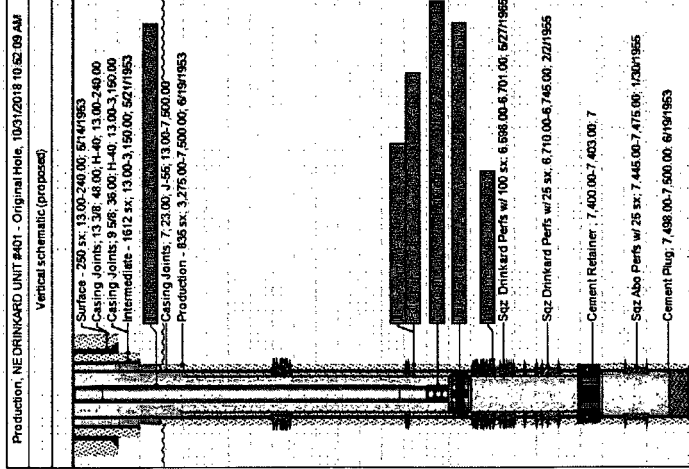
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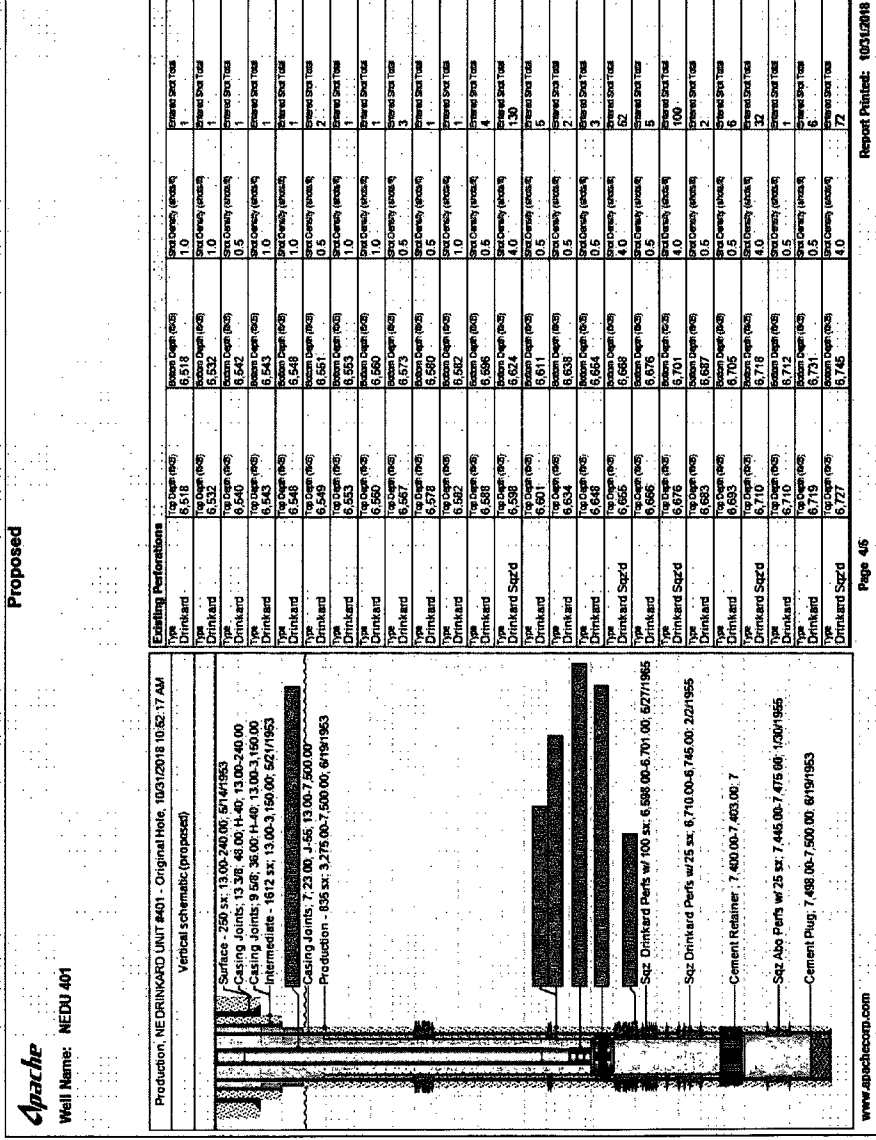
Well Name: NEDU 401

Proposed



Endling Performances					
Type	Shimultery	Top Open (sec)	Bottom Open (sec)	Start Density (g/cc)	Shore Start Total
Type 1 Tub	6.043	5.043	5.043	1.0	1
	6.051	5.051	5.051	1.0	1
	6.078	5.078	5.078	1.0	1
Type 2 Tub	6.093	6.093	6.093	1.0	1
	6.095	6.095	6.095	1.0	1
	6.097	6.097	6.097	1.0	1
Type 3 Tub	6.100	6.100	6.100	1.0	1
	6.107	6.107	6.107	1.0	1
	6.114	6.114	6.114	1.0	1
Type 4 Tub	6.118	6.118	6.118	1.0	1
	6.122	6.122	6.122	1.0	1
	6.125	6.125	6.125	1.0	1
Type 5 Tub	6.141	6.141	6.141	1.0	1
	6.145	6.145	6.145	1.0	1
	6.191	6.191	6.232	4.0	164
Type 6 Tub	6.240	6.240	6.240	1.0	13
	6.300	6.300	6.300	4.0	192
	6.400	6.400	6.405	1.0	6
Type 7 Tub	6.405	6.405	6.405	1.0	1
	6.410	6.410	6.410	1.0	1
	6.494	6.494	6.494	0.5	2
Type 8 Drum	6.501	6.501	6.501	1.0	16
	6.509	6.509	6.509	1.0	1
	6.514	6.514	6.514	1.0	1

Scenario 2: Liner Proposed WBD



Scenario 2: Liner Proposed WBD

