

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) 334-6108
1000 Rio Brazos Rd., Artesia, NM 88210
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. 30-025-06470
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No. B-935
7. Lease Name or Unit Agreement Name Northeast Drinkard Unit (NEDU) / 22503
8. Well Number 507
9. OGRID Number 873
10. Pool name or Wildcat Eunice; B-T-D, North (22900)
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3452' GL

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 Injection ☐

2. Name of Operator
Apache Corporation

3. Address of Operator
303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705

4. Well Location
Unit Letter I: 2100 feet from the South line and 760 feet from the East line
Section 10 Township 21S Range 37E NMPM County Lea

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3452' GL

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☒	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐		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 isolate the Drinkard for injection, per the attached. We are still evaluating which scenario will be the most operational and cost effective.

Spud Date: 12/10/1951 Rig Release Date: 1/31/1952

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 11/15/2018

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 11/21/18
Conditions of Approval (if any):

NEDU 507W: (API: 30-025-06470)

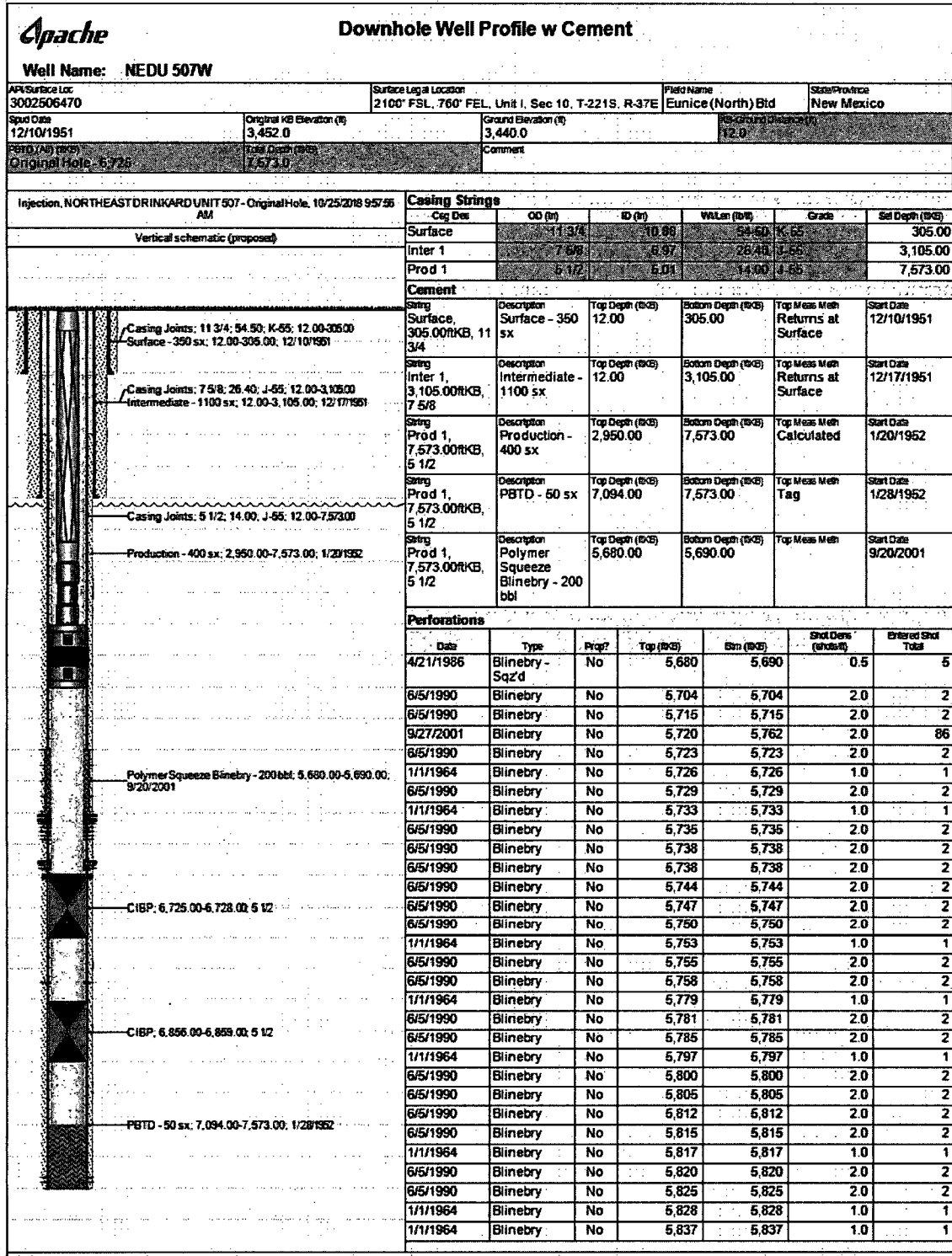
OBJECTIVE: ISOLATE DRINKARD FOR INJECTION

Scenario 1: Dual Packer Isolation

1. POOH w 2-7/8" injection tubing and 5-1/2" injection packer
2. PU workstring and RIH w bit and clean out well to PBDT at 6725'.
3. Make casing scraper run to around 6670' (Proposed bottom perf). 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'-6670' (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 Blinbry and Drinkard (Depth dependent on casing inspection log)
8. PU 700-800' of 2-3/8" IPC externally coated tubing w/ 5-1/2" hydraulic packer on top and tie into permanent packer. Ensure hydraulic packer is at or within 100' of top perf. Pressure up tubing to set hydraulic packer. Test casing to 500 psi.
9. Perform MIT for NMOCD and place well on injection.

Scenario 2: Cement 4" FJ liner from Blinbry to TD

1. POOH w 2-7/8" injection tubing and 5-1/2" injection packer
2. PU workstring and RIH w/ bit and clean out well to PBDT at 6725'. Deepen another +/- 50'. 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 Blinbry 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 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. MIRU wireline. Run CBL from PBDT to surface
9. PU wireline guns and perforate Drinkard formation f/6550'—6670' (Depths TBD). POOH
10. 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.
11. Acid stimulate Drinkard formation w/ 5000 gals 15% HCl using 1.1 SG ball sealers for diversion. Release packer and knock off balls. POOH.
12. RIH w 4" injection packer and ~6500' of 2-3/8" IPC tubing. Set packer within 20' of top perf. Circulate packer fluid and test backside to 500 psi
13. Perform MIT for NMOCD



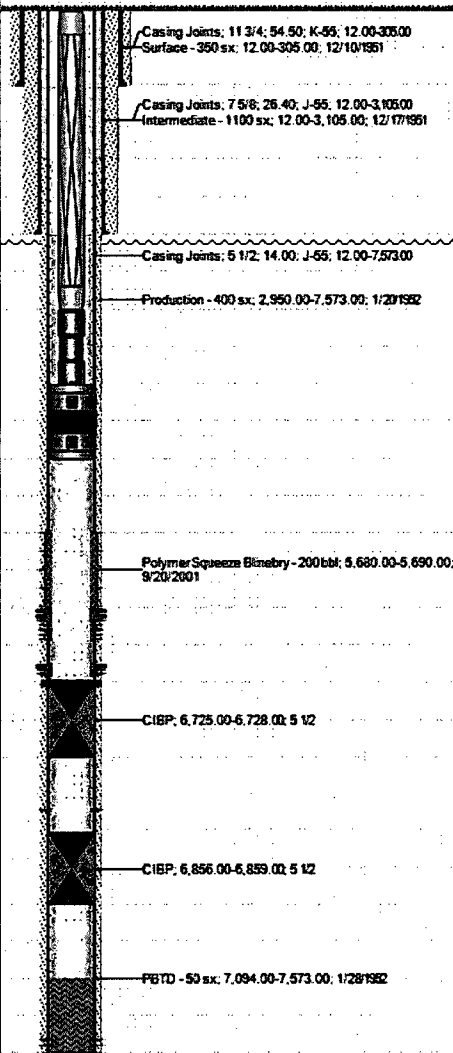


Downhole Well Profile w Cement

Well Name: NEDU 507W

Injection, NORTHEAST DRINKARD UNIT 507 - Original Hole, 10/25/2018 10:00:41 AM

Vertical schematic (proposed)



Perforations

Date	Type	Prop?	Top (ftCB)	50m (ftCB)	Shot Data (shots/ft)	Entered Shot Total
1/1/1964	Blinetry	No	5,846	5,846	1.0	1
6/5/1990	Blinetry	No	5,858	5,858	2.0	2
6/5/1990	Blinetry	No	5,870	5,870	2.0	2
4/21/1986	Blinetry	No	5,922	5,970	0.5	24
4/21/1986	Blinetry	No	5,980	5,990	0.5	5
4/21/1986	Tubb	No	6,000	6,046	0.5	23
4/21/1986	Tubb	No	6,066	6,120	0.5	27
6/5/1990	Tubb	No	6,125	6,125	2.0	2
6/5/1990	Drinkard	No	6,481	6,481	2.0	2
6/5/1990	Drinkard	No	6,484	6,484	2.0	2
6/5/1990	Drinkard	No	6,487	6,487	2.0	2
1/1/1964	Drinkard	No	6,490	6,490	1.0	1
1/1/1964	Drinkard	No	6,494	6,494	1.0	1
6/5/1990	Drinkard	No	6,496	6,496	2.0	2
6/5/1990	Drinkard	No	6,503	6,503	2.0	2
1/1/1964	Drinkard	No	6,506	6,506	1.0	1
6/5/1990	Drinkard	No	6,508	6,508	2.0	2
6/5/1990	Drinkard	No	6,511	6,511	2.0	2
1/1/1964	Drinkard	No	6,513	6,513	1.0	1
1/1/1964	Drinkard	No	6,516	6,516	1.0	1
1/1/1964	Drinkard	No	6,519	6,519	1.0	1
6/5/1990	Drinkard	No	6,527	6,527	2.0	2
6/5/1990	Drinkard	No	6,536	6,536	2.0	2
6/5/1990	Drinkard	No	6,564	6,564	2.0	2
4/21/1986	Drinkard	No	6,566	6,589	0.5	12
6/5/1990	Drinkard	No	6,591	6,591	2.0	2
6/5/1990	Drinkard	No	6,594	6,594	2.0	2
6/5/1990	Drinkard	No	6,604	6,604	2.0	2
1/29/1962	Drinkard	No	6,608	6,670	6.0	372
1/27/1962	Ellenburger Sq'd	No	6,820	6,832	6.0	72
1/27/1962	Ellenburger Sq'd	No	7,488	7,502	6.0	84
1/27/1962	Ellenburger Sq'd	No	7,525	7,545	6.0	120

Tubing Strings

Tubing Description	Run Date	String Length (ft)			Set Depth (ftCB)		
Tubing - Injection	9/28/2001	5,580.00			5,592.0		
Item Des	Jts	Make	Model	OD (in)	WT (lb/ft)	Grade	Len (ft)
Fibertine Tubing	17			2 7/8			5,570.97
On/Off Tool	1			2 7/8			1.78
Packer	1			5 1/2			7.25

Other In Hole

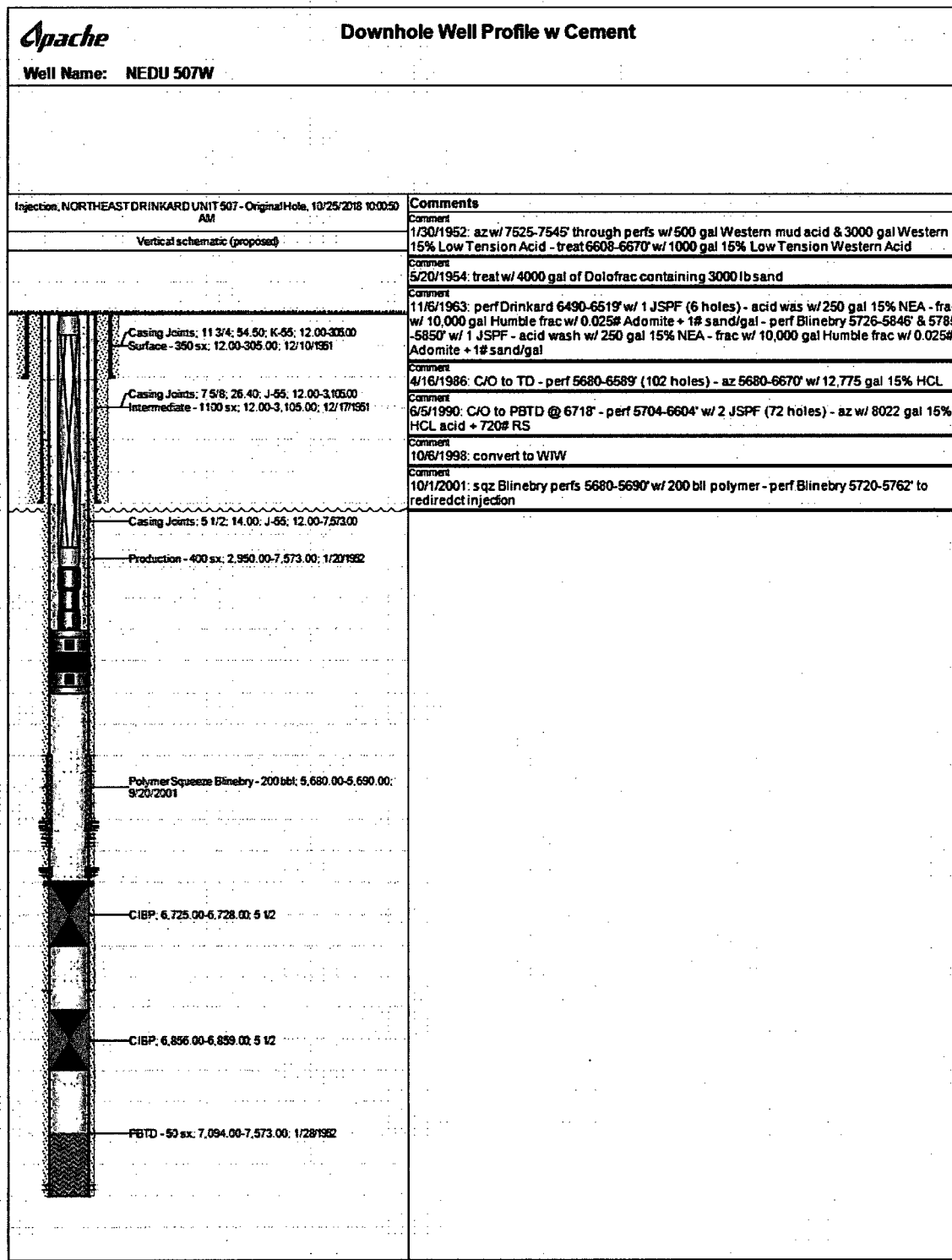
Description	OD (in)	Top (ftCB)	Run Date
CIBP	5 1/2	6,856	1/29/1962
CIBP	5 1/2	6,725	1/1/1964

Plug Back Total Depths

Date	Type	Depth (ftCB)	Depth (ftCB) (ftCB)
		6,725	

Failed Component Links & Details

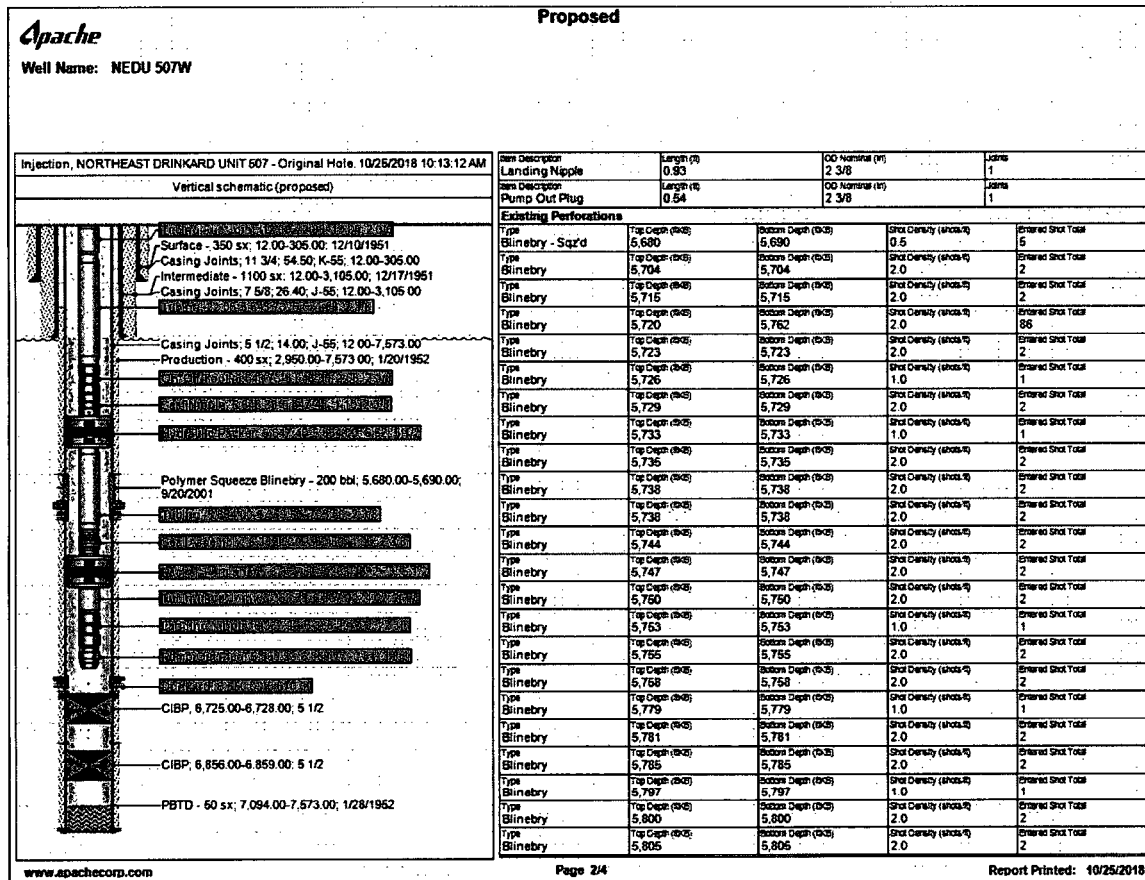
Category	Description	Failure Depth (ftCB)	Comp Date	Failure Date
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Proposed Changes: 10/3/1992

Report Printed: 10/25/2018

Scenario 1: Dual Packer Proposed WBD (Proposed Changes in Yellow)



Scenario 1: Dual Packer Proposed WBD ()

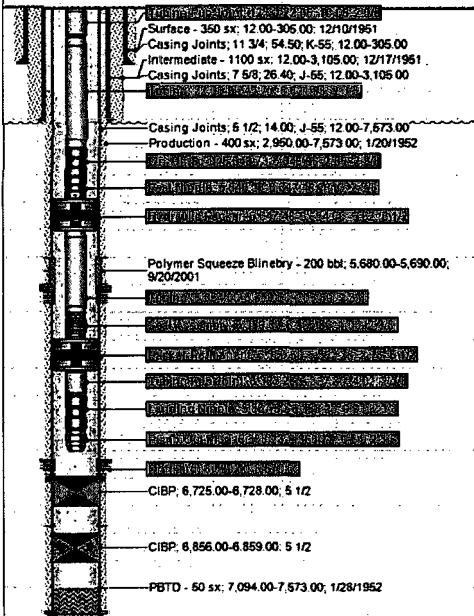
Apache

Well Name: NEDU 507W

Proposed

Injection, NORTHEAST DRINKARD UNIT 607 - Original Hole, 10/25/2018 10:13:21 AM

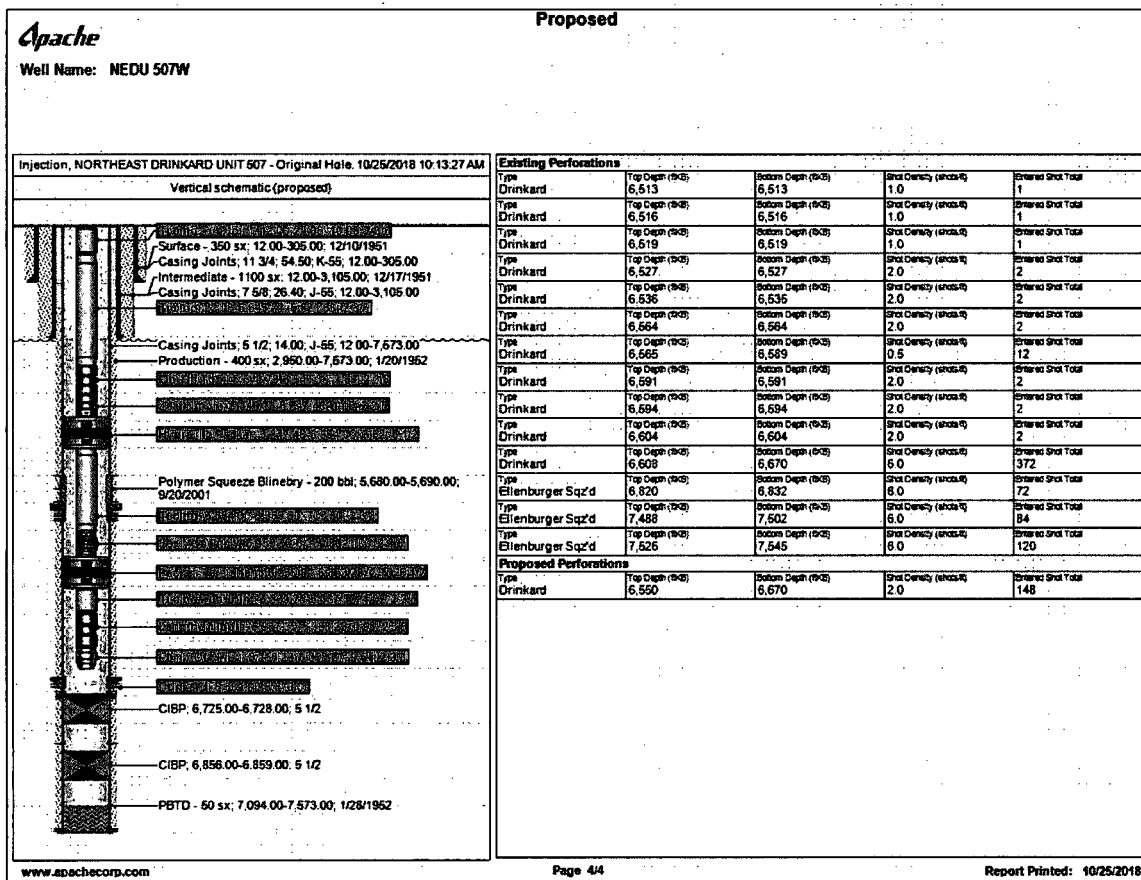
Vertical schematic (proposed)



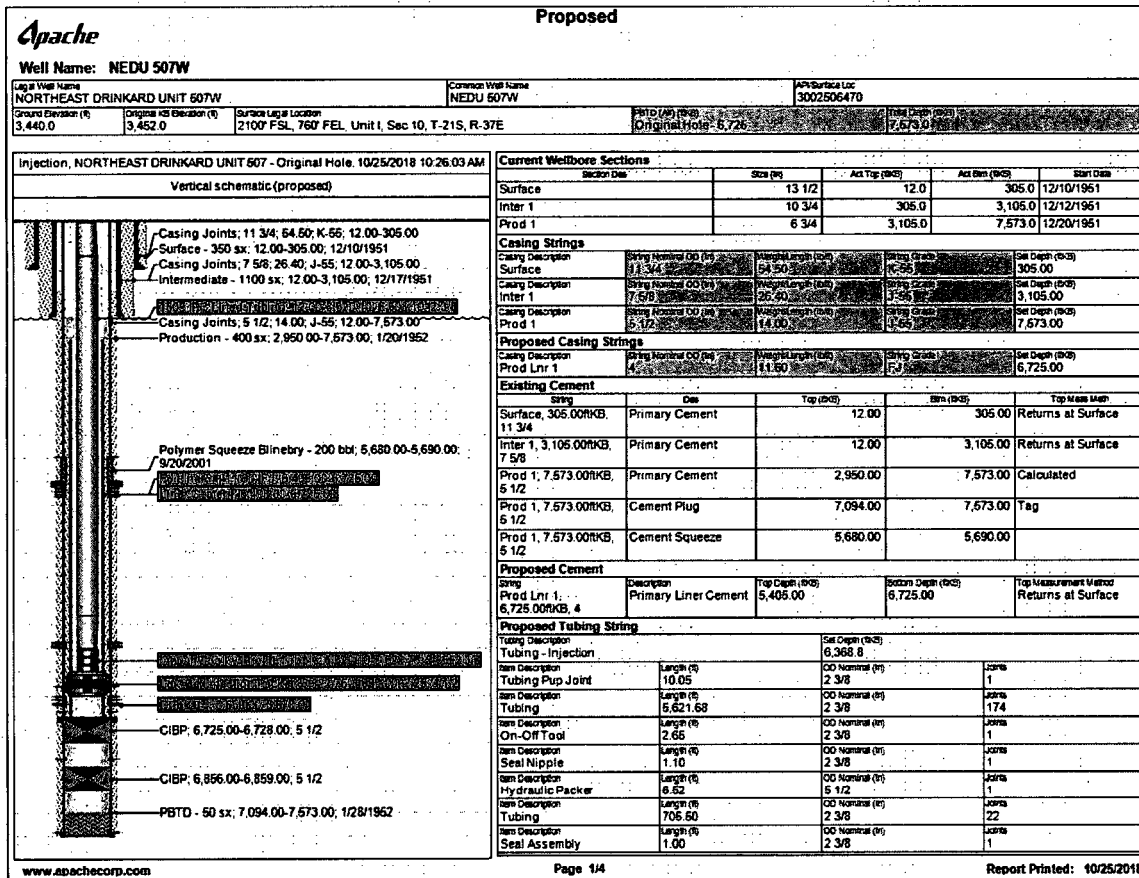
Existing Perforations

Type	Top Depth (ft)	Bottom Depth (ft)	Shot Density (shots/ft)	Entered Shot Total
Blinberry	5,812	5,812	2.0	2
Blinberry	5,815	5,815	2.0	2
Blinberry	5,817	5,817	1.0	1
Blinberry	5,820	5,820	2.0	2
Blinberry	5,825	5,825	2.0	2
Blinberry	5,828	5,828	1.0	1
Blinberry	5,837	5,837	1.0	1
Blinberry	5,846	5,846	1.0	1
Blinberry	5,858	5,858	2.0	2
Blinberry	5,870	5,870	2.0	2
Blinberry	5,922	5,970	0.5	24
Blinberry	5,990	5,990	0.5	5
Tubb	6,000	6,046	0.5	23
Tubb	6,066	6,120	0.5	27
Tubb	6,125	6,125	2.0	2
Drinkard	6,481	6,481	2.0	2
Drinkard	6,484	6,484	2.0	2
Drinkard	6,487	6,487	2.0	2
Drinkard	6,490	6,490	1.0	1
Drinkard	6,494	6,494	1.0	1
Drinkard	6,496	6,496	2.0	2
Drinkard	6,503	6,503	2.0	2
Drinkard	6,506	6,506	1.0	1
Drinkard	6,508	6,508	2.0	2
Drinkard	6,511	6,511	2.0	2

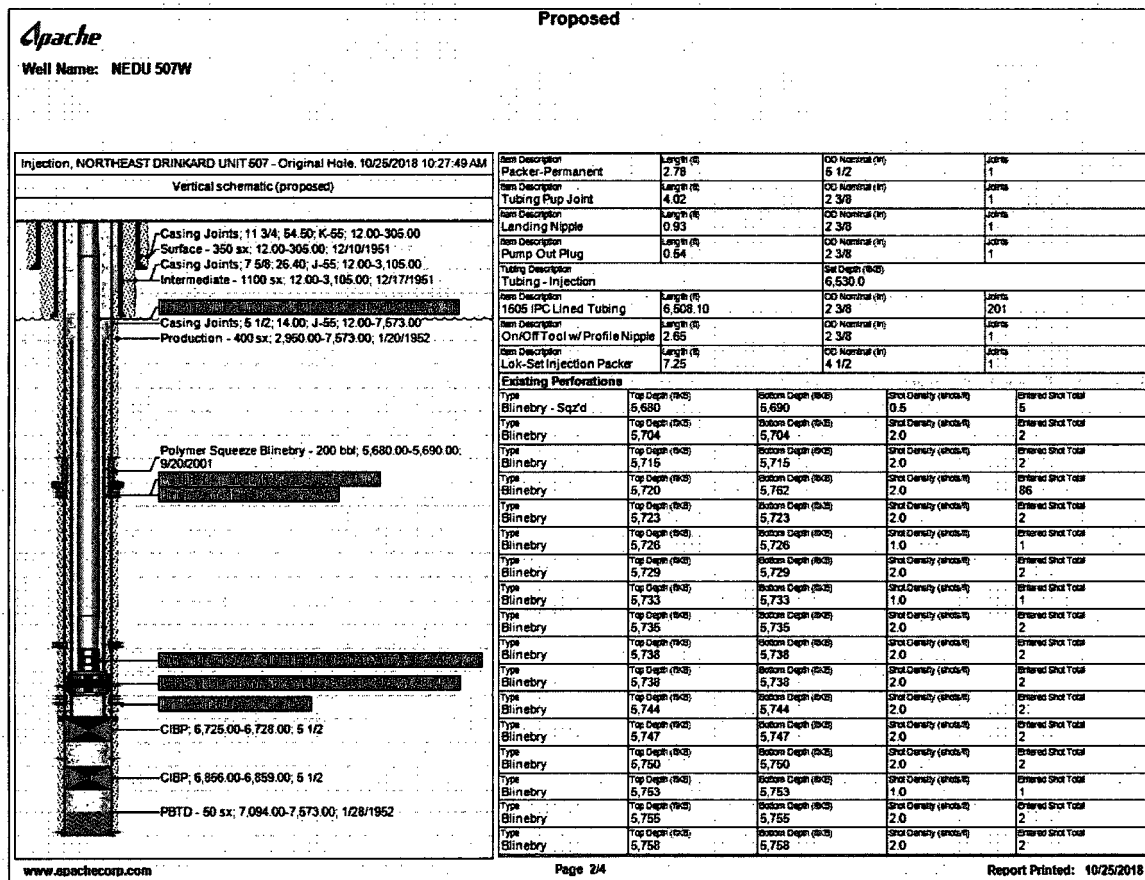
Scenario 1: Dual Packer Proposed WBD (Proposed Blinley in Well)



Scenario 2: FJ Liner Proposed WBD (Proposed Wellbore Diagram)



Scenario 2: FJ Liner Proposed WBD (Proposed)



Scenario 2: FJ Liner Proposed WBD (Proposed)

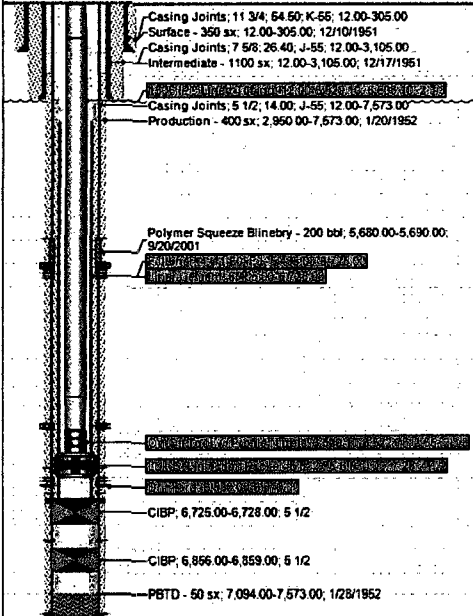


Well Name: NEDU 507W

Proposed

Injection, NORTHEAST DRINKARD UNIT 507 - Original Hole, 10/25/2018 10:27:56 AM

Vertical schematic (proposed)



Existing Perforations

Type	Top Depth (ft)	Bottom Depth (ft)	Shot Density (shots/ft)	Entered Shot Total
Blinberry	5,779	5,779	1.0	1
Blinberry	5,781	5,781	2.0	2
Blinberry	5,785	5,785	2.0	2
Blinberry	5,797	5,797	1.0	1
Blinberry	5,800	5,800	2.0	2
Blinberry	5,805	5,805	2.0	2
Blinberry	5,812	5,812	2.0	2
Blinberry	5,815	5,815	2.0	2
Blinberry	5,817	5,817	1.0	1
Blinberry	5,820	5,820	2.0	2
Blinberry	5,825	5,825	2.0	2
Blinberry	5,828	5,828	1.0	1
Blinberry	5,837	5,837	1.0	1
Blinberry	5,846	5,846	1.0	1
Blinberry	5,858	5,858	2.0	2
Blinberry	5,870	5,870	2.0	2
Blinberry	5,922	5,970	0.5	24
Blinberry	5,980	5,990	0.5	5
Tubb	6,000	6,046	0.5	23
Tubb	6,066	6,120	0.5	27
Tubb	6,125	6,125	2.0	2
Drinkard	6,481	6,481	2.0	2
Drinkard	6,484	6,484	2.0	2
Drinkard	6,487	6,487	2.0	2
Drinkard	6,490	6,490	1.0	1

Scenario 2: FJ Liner Proposed WBD ()

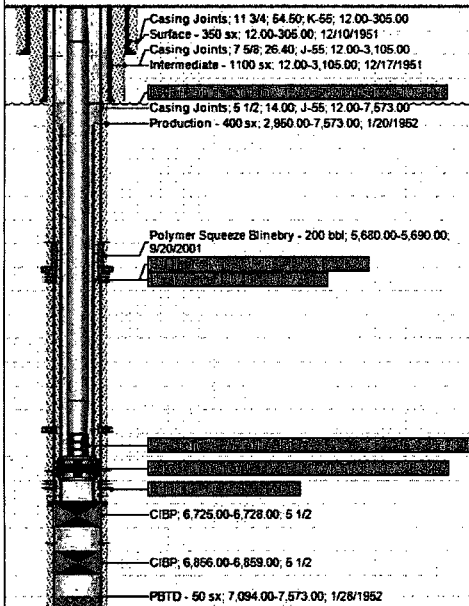
Apache

Well Name: NEDU 507W

Proposed

Injection, NORTHEAST DRINKARD UNIT 507 - Original Hole, 10/25/2018 10:28:04 AM

Vertical schematic (proposed)



Existing Perforations

Type	Top Depth (ftd)	Bottom Depth (ftd)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,494	6,494	1.0	1
Drinkard	6,496	6,496	2.0	2
Drinkard	6,503	6,503	2.0	2
Drinkard	6,506	6,506	1.0	1
Drinkard	6,508	6,508	2.0	2
Drinkard	6,511	6,511	2.0	2
Drinkard	6,513	6,513	1.0	1
Drinkard	6,516	6,516	1.0	1
Drinkard	6,519	6,519	1.0	1
Drinkard	6,527	6,527	2.0	2
Drinkard	6,536	6,536	2.0	2
Drinkard	6,564	6,564	2.0	2
Drinkard	6,565	6,569	0.5	12
Drinkard	6,591	6,591	2.0	2
Drinkard	6,594	6,594	2.0	2
Drinkard	6,604	6,604	2.0	2
Drinkard	6,608	6,670	6.0	372
Ellenburger Sqz'd	6,820	6,832	6.0	72
Ellenburger Sqz'd	7,488	7,502	6.0	84
Ellenburger Sqz'd	7,525	7,545	6.0	120

Proposed Perforations

Type	Top Depth (ftd)	Bottom Depth (ftd)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,550	6,670	2.0	148