

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. 30-025-06468
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 505
9. OGRID Number 873
10. Pool name or Wildcat Eunice; B-T-D, North [22900]
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3454' GL

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR TO GO BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-104) 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 J : 1980 feet from the South line and 1980 feet from the East line
Section 10 Township 21S Range 37E NMPM County Lea

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3454' 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: 8/25/1951

Rig Release Date: 10/24/1951

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 12/21/2018

Conditions of Approval (if any):

NEDU 505: (API: 30-025-06468)

OBJECTIVE: CONVERT TO DRINKARD INJECTOR

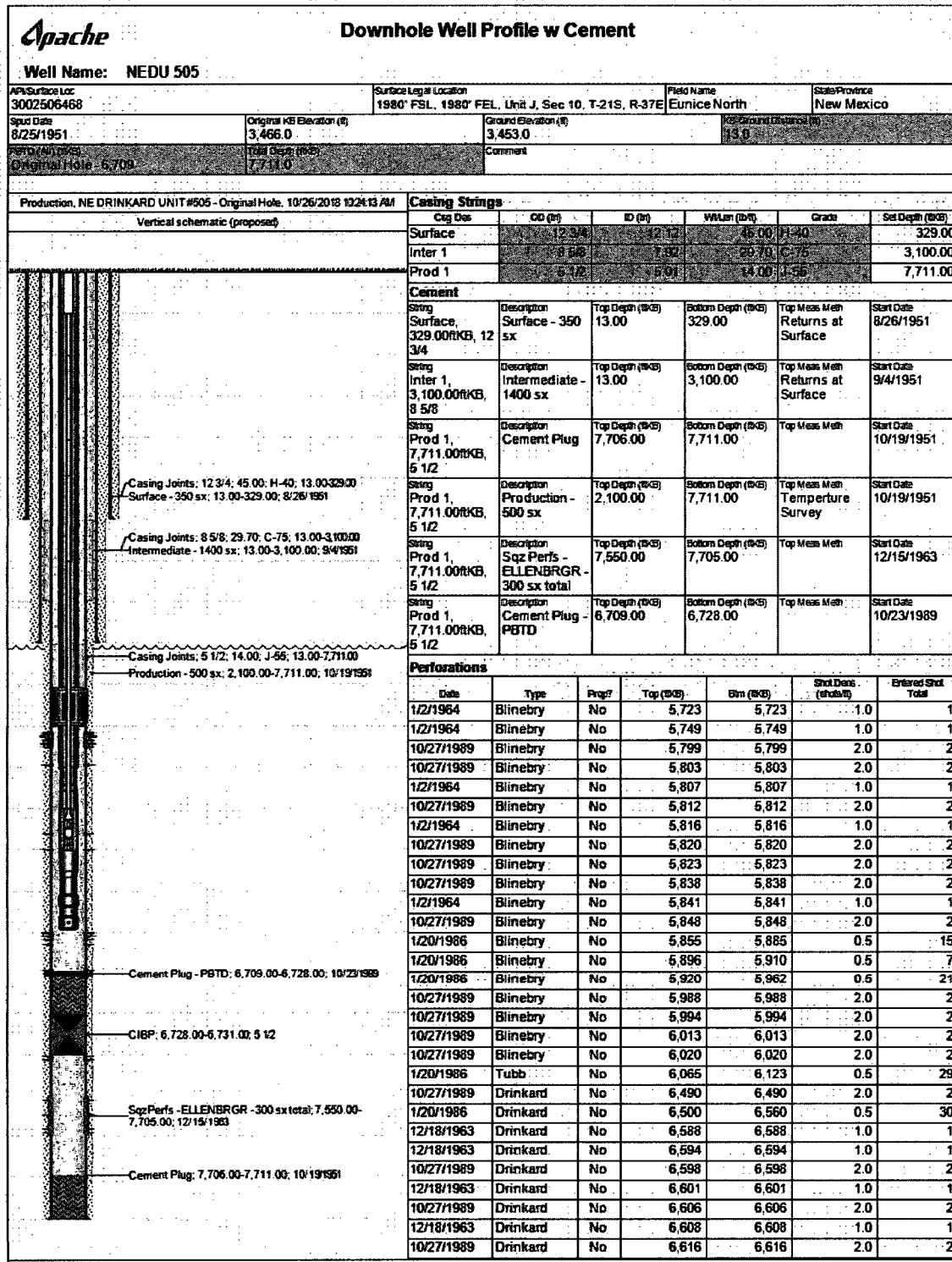
Scenario 1: Dual Packer Isolation

1. POOH w rods and 2-7/8" production tubing.
2. PU workstring and RIH w/ bit or mill and casing scraper. Clean out well to PBTD at 6709'. POOH.
3. RIH w/ RBP and packer and test casing to 500 psi.
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/ 6580'-6680' (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 600-700' 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 5730'. 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 6709'. 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 3-7/8" 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 PBTD to surface.
9. PU wireline guns and perforate Drinkard formation f/6580'—6680' (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.

13. Circulate packer fluid and test backside to 500 psi.
14. Perform MIT for NMOCD.



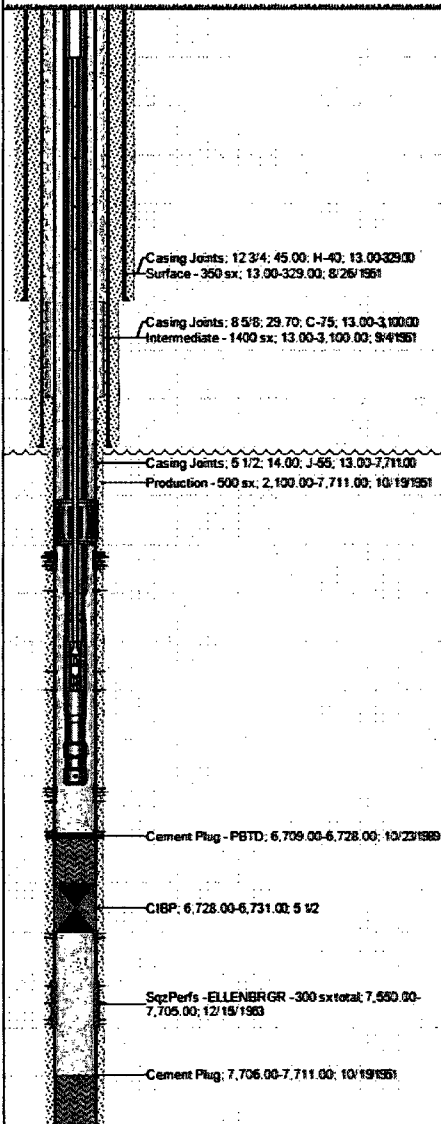


Downhole Well Profile w Cement

Well Name: NEDU 505

Production, NE DRINKARD UNIT #505 - Original Hole, 10/26/2013 10:26:17 AM

Vertical schematic (proposed)



Perforations

Date	Type	Prop?	Top (ft)	Bin (ft)	Shot Done (shots/ft)	Entered Shot Total
1/20/1986	Drinkard	No	6,630	6,700	0.5	35
1/20/1986	Drinkard Susp	No	6,758	6,804	0.5	23
1/20/1986	Drinkard Susp	No	6,830	6,848	0.5	9
10/22/1951	ELNBRGR Sqzd - 150 sx	No	7,570	7,675	4.0	420
10/22/1951	ELNBRGR Sqzd - 150 sx	No	7,690	7,705	4.0	60

Tubing Strings

Tubing Description	Run Date	String Length (ft)	Set Depth (ft)				
Tubing	8/1/2011	6,593.65	6,596.7				
Item Des	Jts	Make	Model	OD (in)	WT (lb/ft)	Grade	Len (ft)
Tubing	18 0		T&C Upset	2 7/8	6.50	J-55	5,670. 80
Anchor/catcher	1		Baker	5 1/2	23.00	N-80	2.75
Tubing	31		T&C Upset	2 7/8	6.50	J-55	976.5 1
Blast Joint	1			2 7/8			32.50
Seat Nipple	1			2 7/8	7.20	SS	1.10

Rod Strings

Rod Description	Run Date	String Length (ft)	Set Depth (ft)				
Rod	8/2/2011	6,681.0	6,594.0				
Item Des	Jts	Make	Model	OD (in)	WT (lb/ft)	Grade	Len (ft)
Polished Rod	1		Sprayloy	1 1/2	6.10	PRS	22.00
Rod Sub	1			7/8			8.00
Rod Sub	1			7/8			6.00
Rod Sub	1			7/8			2.00
Rod Sub	1			7/8			2.00
Rod	77			7/8			1,950.00
Rod	183			3/4			4,575.00
Rod Insert/Pump	1			1 1/2		RHB C W/ RHR	16.00

Other in Hole

Description	OD (in)	Top (ft)	Run Date
CIBP	5 1/2	6,728	10/23/1989

Plug Back Total Depths

Date	Type	Depth (ft)	Depth (ft) (log)
		6,709	

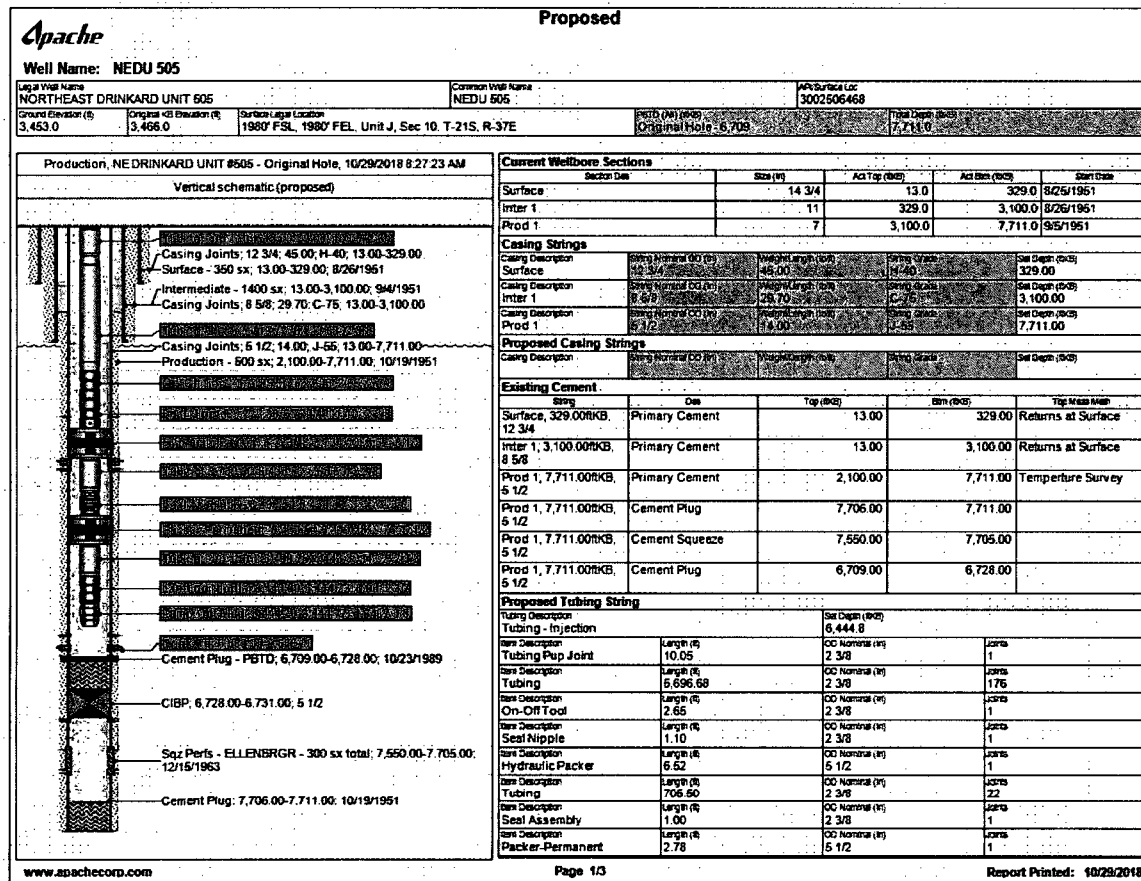
Failed Component Links & Details

Category	Description	Failure Depth (ft)	Comp Date	Failure Date
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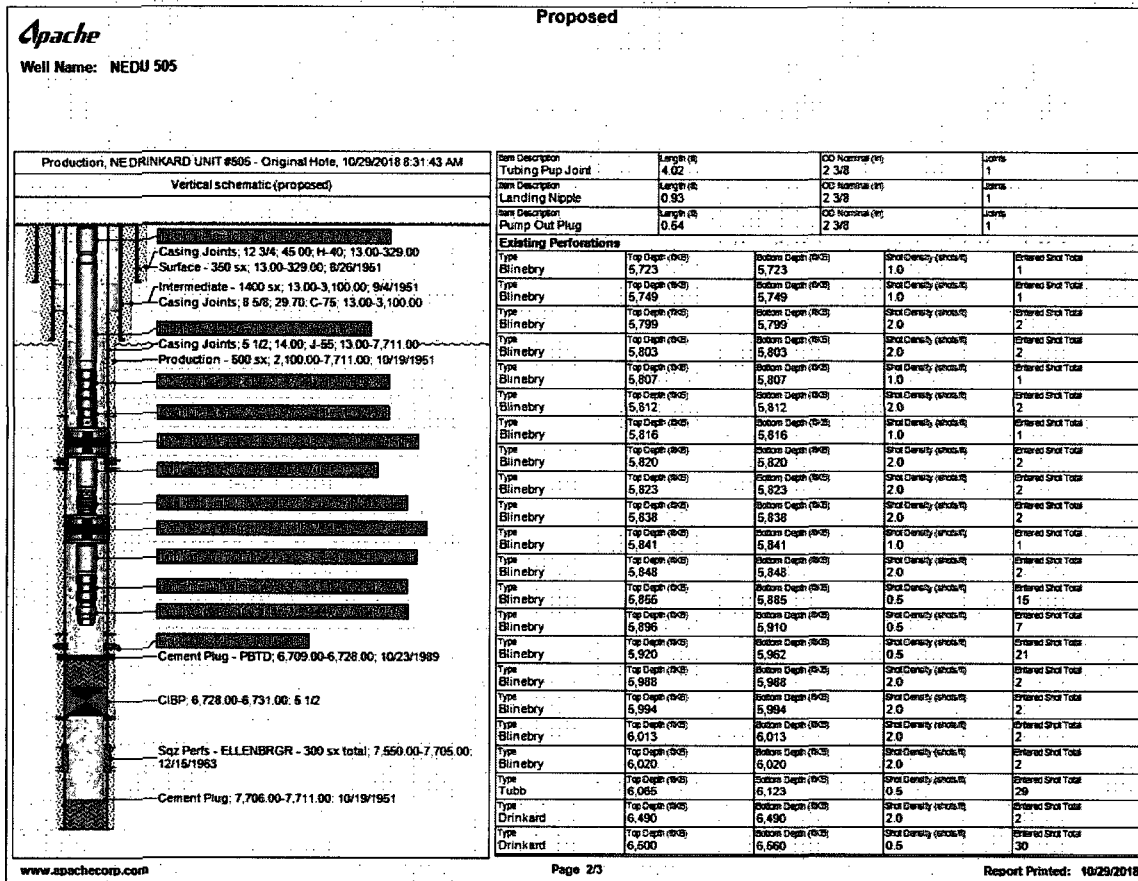
Comments

1951: D/C in Ellenberger
 1963: Ellenberger Abandoned, Drinkard Perfed, Stim w/ 10000 gals oil/10000# 20/40 sand
 1964: Blinbery perfed, Stim w/ 10000 gals oil/10000# 20/40 sand
 1971: Az Drinkard w/ 750 gals 15% NE HCl
 1974: SI
 1977: Put back on Production
 1986: Perf B-T-D, Az Drinkard w/ 13100 gals 20% HCl, Az Tubb w/ 3300 gals 20% HCl, Az Blinbery w/ 6000 gals 20% HCl
 1989: C/O to 7000', CIBP set @ 6728', perf B-D, Az Drinkard w/ 3780 gals 15% HCl, Az Tubb w/ 1260 gals 15% HCl, Az Blinbery w/ 2362 gals 15% NEFE HCl
 2016: 500 gal acid dump

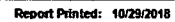
Scenario 1: Dual Packer Proposed WBD



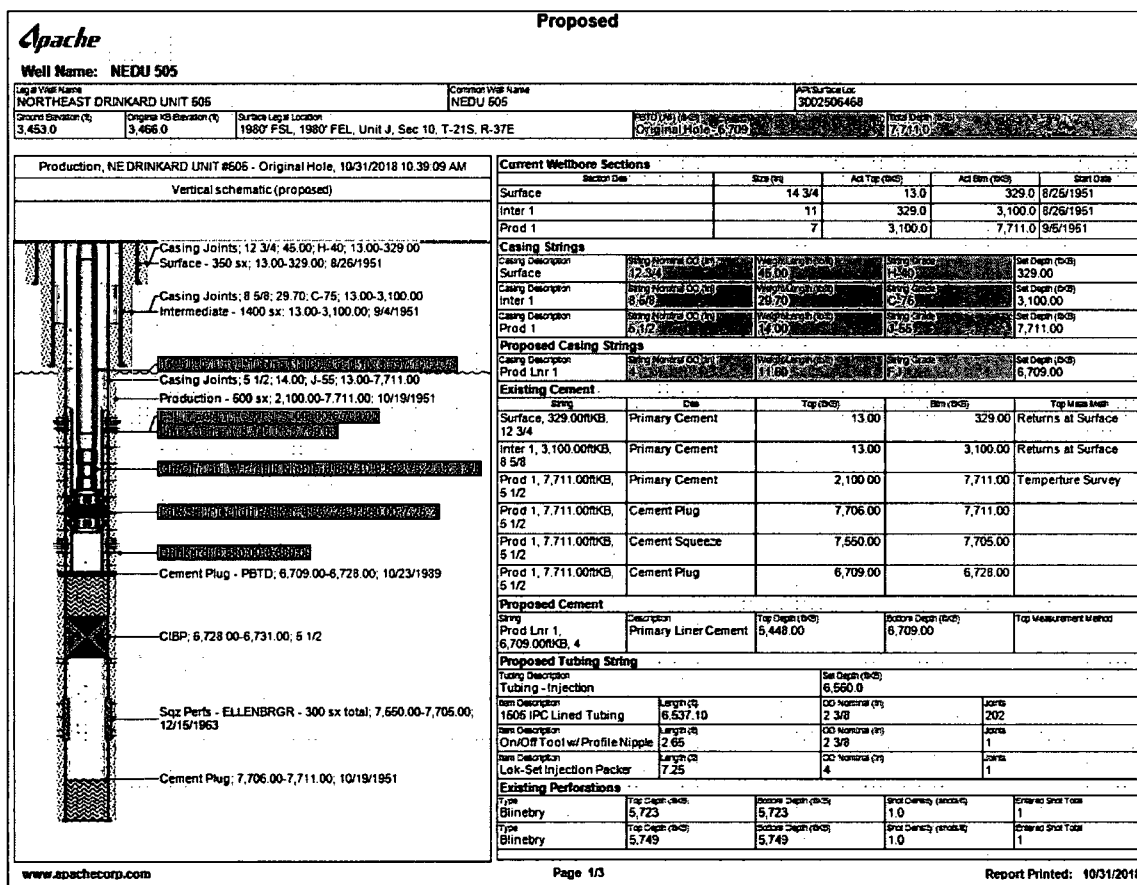
Scenario 1: Dual Packer Proposed WBD



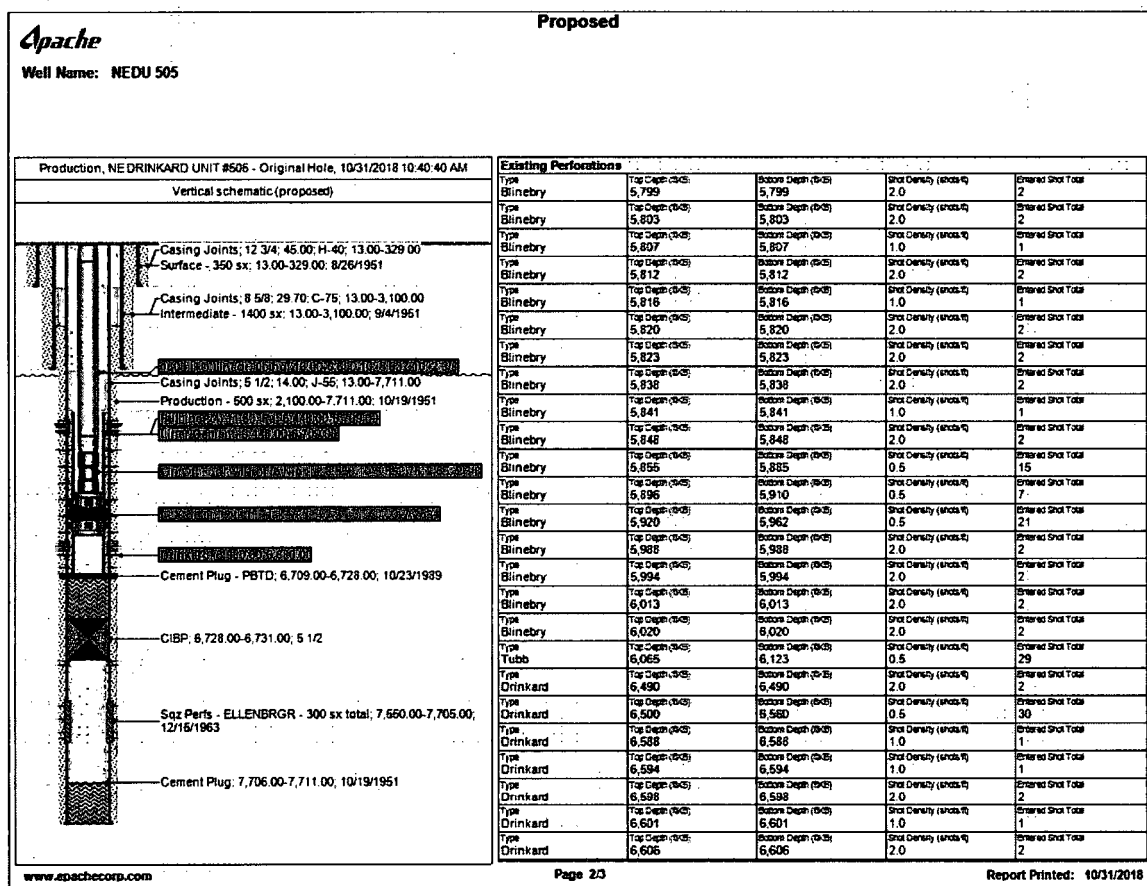
Report of the Committee



Scenario 2: FJ Liner Proposed WBD (Proposed Changes to Well)



Scenario 2: FJ Liner Proposed WBD (Proposed Change Only)



Scenario 2: FJ Liner Proposed WBD (REDACTED)

