

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6199
1625 N. French Dr., Hobbs, NM 88240
District II - (505) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 364-6178
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

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

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.)		WELL API NO. 30-025-06594
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☐ FEE ☒
2. Name of Operator Apache Corporation		6. State Oil & Gas Lease No.
3. Address of Operator 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705		7. Lease Name or Unit Agreement Name Northeast Drinkard Unit (NEDU) / 22503
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>15</u> Township <u>21S</u> Range <u>37E</u> NMPM County <u>Lea</u>		8. Well Number <u>711</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3411' GR		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: 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 would like to convert this well to injection per the attached. We are deliberating two scenarios for time and cost efficiencies. WBD's also attached.

Spud Date:

9/23/1948

Rig Release Date:

11/8/1948

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 9/28/2018

Type or print name Reesa Fisher

E-mail address: Reesa.Fisher@apachecorp.com

PHONE: (432) 818-1062

For State Use Only

Petroleum Engineer

APPROVED BY:

TITLE

DATE 10/09/18

Conditions of Approval (if any):

Requires approval to inject from Santa Fe

NEDU 711: (API: 30-025-06594)

OBJECTIVE: CONVERT TO DRINKARD INJECTOR

Scenario 1: Dual Packer Isolation

1. POOH w rods and 2-3/8" production tubing
2. PU workstring and RIH w/ bit or mill and clean out well to PBTD at 6621'. Deepen another +/- 50'. 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/ 6440'-6630' (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 5650'. Test casing to 500 psi.
9. Perform MIT for NMOCD
10. Open well up for injection

Scenario 2: Cement 4-1/2" FJ liner from Blinebry to TD

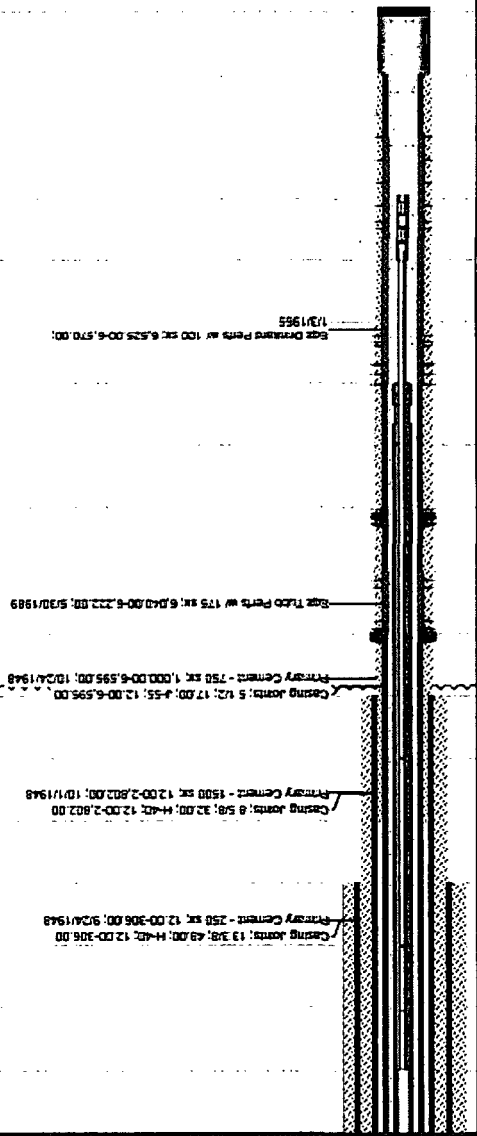
1. POOH w rods and 2-3/8" production tubing
2. PU workstring and RIH w/ bit and clean out well to PBTD at 6621'. Deepen another +/- 50'. POOH
3. MIRU cement and casing crew and PU 1500' of 4.5" 11.6# J-55 casing (including float shoe, float collar and landing collar) using 2-7/8" L-80 workstring.
4. 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 4-3/4" bit and drill out cement to TOL. Pressure test casing. POOH
9. PU 3-7/8" 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 from PBTD to surface
11. PU wireline guns and perforate Drinkard formation f/6440'—6630' (Depths TBD). POOH
12. PU 4-1/2" 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.

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 4-1/2" 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

Current WBD

Apache		Downhole Well Profile w Cement				
Well Name: NEDU 711						
APISurface Loc 3002506594		Surface Legal Location 660' FSL, 660' FEL, Unit P, Sec 15, T-21S, R-37E		Field Name Eunice North	State/Province New Mexico	
Spud Date 9/23/1948	Original KB Elevation (ft) 3,422.0	Ground Elevation (ft) 3,410.0		KB-Ground Distance (ft) 12.0		
PEED (ft) Original Hole - 6,621	Total Depth (ft) 6,595.0	Comment				
Production, NE DRINKARD UNIT #711 - Original Hole, 9/27/2018 4:44:25 PM						
Vertical schematic (proposed)		Casing strings				
		Csg Des	OD (in)	ID (in)	W/Len (ft)	Grade
		Surface	13 3/8	12.72	48.00	H-40
		Inter 1	8 5/8	7.92	32.00	H-40
		Prod 1	5 1/2	4.89	17.00	J-55
		Cement				
		String	Description	Top Depth (ft)	Bottom Depth (ft)	Top Mass Meth
		Surface	Primary Cement - 250 3/8	12.00	306.00	Returns at Surface
		String	Description	Top Depth (ft)	Bottom Depth (ft)	Top Mass Meth
		Inter 1	Primary Cement - 1500 8 5/8	12.00	2,802.00	Returns at Surface
		String	Description	Top Depth (ft)	Bottom Depth (ft)	Top Mass Meth
		Prod 1	Primary Cement - 750 5 1/2	1,000.00	6,595.00	Estimated
		String	Description	Top Depth (ft)	Bottom Depth (ft)	Top Mass Meth
		Prod 1	Sqz Drinkard Perfs	6,525.00	6,516.00	
		String	Description	Top Depth (ft)	Bottom Depth (ft)	Top Mass Meth
		Prod 1	Sqz Drinkard Perfs w/ 100 5 1/2	6,525.00	6,570.00	
		String	Description	Top Depth (ft)	Bottom Depth (ft)	Top Mass Meth
		Prod 1	Sqz Tubb Perfs w/ 175 5 1/2	6,040.00	6,222.00	
		Perforations				
		Date	Type	Prop?	Top (ft)	Size (ft)
		6/12/1989	Blinetry	No	5,672	5,672
		6/12/1989	Blinetry	No	5,674	5,674
		6/12/1989	Blinetry	No	5,678	5,678
		6/12/1989	Blinetry	No	5,680	5,680
		6/12/1989	Blinetry	No	5,723	5,723
		6/12/1989	Blinetry	No	5,735	5,735
		6/12/1989	Blinetry	No	5,737	5,737
		6/12/1989	Blinetry	No	5,740	5,740
		6/12/1989	Blinetry	No	5,742	5,742
		6/12/1989	Blinetry	No	5,745	5,745
		6/12/1989	Blinetry	No	5,748	5,748
		6/12/1989	Blinetry	No	5,750	5,750
		6/12/1989	Blinetry	No	5,768	5,768
		6/12/1989	Blinetry	No	5,770	5,770
		6/12/1989	Blinetry	No	5,776	5,776
		6/12/1989	Blinetry	No	5,825	5,825
		6/12/1989	Blinetry	No	5,827	5,827
		6/12/1989	Blinetry	No	5,836	5,836
		6/12/1989	Blinetry	No	5,846	5,846
		6/12/1989	Blinetry	No	5,848	5,848
		6/12/1989	Blinetry	No	5,850	5,850
		6/12/1989	Blinetry	No	5,868	5,868
		6/12/1989	Blinetry	No	5,870	5,870
		6/12/1989	Blinetry	No	5,872	5,872
		6/12/1989	Blinetry	No	5,924	5,924
		6/12/1989	Blinetry	No	5,929	5,929
		6/12/1989	Blinetry	No	5,932	5,932
		6/12/1989	Blinetry	No	5,937	5,937
		6/12/1989	Blinetry	No	5,939	5,939
		6/12/1989	Blinetry	No	5,953	5,953
		6/12/1989	Blinetry	No	5,968	5,968
		6/12/1989	Tubb	No	5,979	5,979

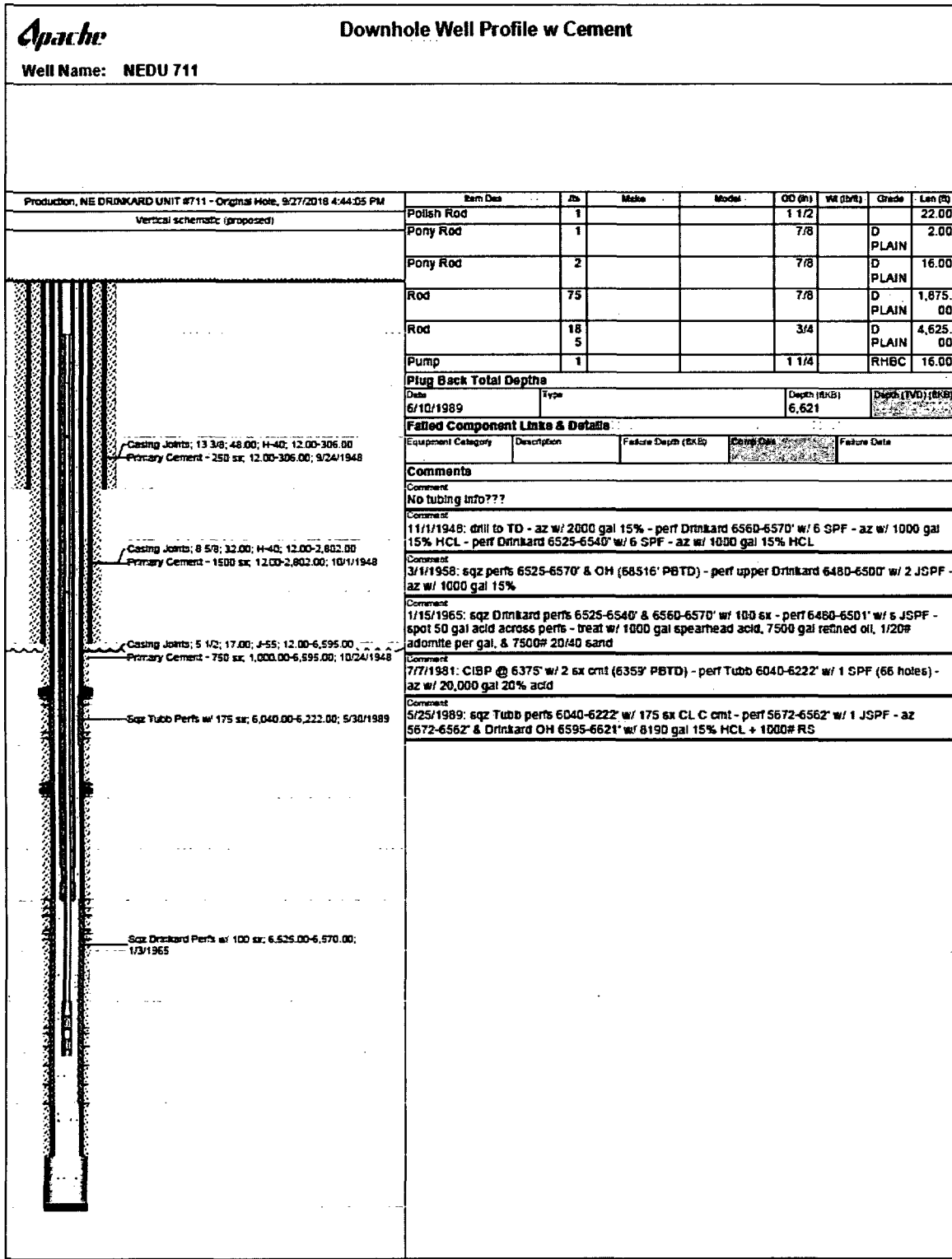
Downhole Well Profile w/ Cement



Date	Type	Prog?	Top (ft)	Bm (ft)	Shot Data (ft)	Total
6/12/1989	Tub	NO	5.981	5.981		1.0
6/12/1989	Tub	NO	5.993	5.993		1.0
6/12/1989	Tub	NO	6.003	6.003		1.0
6/12/1989	Tub	NO	6.009	6.009		1.0
6/12/1989	Tub	NO	6.015	6.015		1.0
6/12/1989	Tub	NO	6.019	6.019		1.0
6/12/1989	Tub	NO	6.025	6.025		1.0
6/12/1989	Tub	NO	6.027	6.027		1.0
6/12/1989	Tub	NO	6.030	6.030		1.0
6/12/1989	Tub	NO	6.033	6.033		1.0
7/3/1991	Tub Sqzd	NO	6.040	6.060		1.0
6/12/1989	Tub	NO	6.040	6.040		1.0
6/12/1989	Tub	NO	6.044	6.044		1.0
6/12/1989	Tub	NO	6.046	6.046		1.0
6/12/1989	Tub	NO	6.052	6.052		1.0
6/12/1989	Tub	NO	6.054	6.054		1.0
7/3/1991	Tub Sqzd	NO	6.078	6.089		1.0
7/3/1991	Tub Sqzd	NO	6.175	6.188		1.0
7/3/1991	Tub Sqzd	NO	6.198	6.222		1.0
6/12/1989	Tub	NO	6.437	6.437		1.0
6/12/1989	Tub	NO	6.444	6.444		1.0
6/12/1989	Tub	NO	6.446	6.446		1.0
6/12/1989	Tub	NO	6.450	6.450		1.0
6/12/1989	Tub	NO	6.452	6.452		1.0
6/12/1989	Tub	NO	6.455	6.455		1.0
6/12/1989	Tub	NO	6.457	6.457		1.0
6/12/1989	Tub	NO	6.469	6.469		1.0
6/12/1989	Tub	NO	6.473	6.473		1.0
6/12/1989	Tub	NO	6.476	6.476		1.0
1/20/1965	Tub	NO	6.480	6.481		2.0
6/12/1989	Tub	NO	6.484	6.484		1.0
6/12/1989	Tub	NO	6.488	6.487		2.0
6/12/1989	Tub	NO	6.489	6.489		1.0
6/12/1989	Tub	NO	6.495	6.495		1.0
1/20/1965	Tub	NO	6.500	6.501		2.0
6/12/1989	Tub	NO	6.512	6.512		1.0
11/5/1948	Sqzd	NO	6.525	6.540		6.0
6/12/1989	Tub	NO	6.529	6.529		1.0
6/12/1989	Tub	NO	6.533	6.533		1.0
6/12/1989	Tub	NO	6.542	6.542		1.0
6/12/1989	Tub	NO	6.545	6.545		1.0
11/5/1948	Sqzd	NO	6.560	6.570		6.0
6/12/1989	Tub	NO	6.562	6.562		1.0
6/12/1989	Tub	NO	6.562	6.562		1.0
Run Date	11/25/2007	Run Date	11/26/2007	Run Date	11/26/2007	Run Date
5.981	5.981	5.981	5.981	5.981	5.981	5.981
5.993	5.993	5.993	5.993	5.993	5.993	5.993
6.003	6.003	6.003	6.003	6.003	6.003	6.003
6.009	6.009	6.009	6.009	6.009	6.009	6.009
6.015	6.015	6.015	6.015	6.015	6.015	6.015
6.019	6.019	6.019	6.019	6.019	6.019	6.019
6.025	6.025	6.025	6.025	6.025	6.025	6.025
6.027	6.027	6.027	6.027	6.027	6.027	6.027
6.030	6.030	6.030	6.030	6.030	6.030	6.030
6.033	6.033	6.033	6.033	6.033	6.033	6.033
6.040	6.040	6.040	6.040	6.040	6.040	6.040
6.044	6.044	6.044	6.044	6.044	6.044	6.044
6.046	6.046	6.046	6.046	6.046	6.046	6.046
6.052	6.052	6.052	6.052	6.052	6.052	6.052
6.054	6.054	6.054	6.054	6.054	6.054	6.054
6.078	6.078	6.078	6.078	6.0		

Tubing String		Tubing String		Seari Nuppie		Root String	
Run Date	11/25/2007	Run Date	11/26/2007	Run Date	11/26/2007	Run Date	11/26/2007
5.981	5.981	5.981	5.981	5.981	5.981	5.981	5.981
5.993	5.993	5.993	5.993	5.993	5.993	5.993	5.993
6.003	6.003	6.003	6.003	6.003	6.003	6.003	6.003
6.009	6.009	6.009	6.009	6.009	6.009	6.009	6.009
6.015	6.015	6.015	6.015	6.015	6.015	6.015	6.015
6.019	6.019	6.019	6.019	6.019	6.019	6.019	6.019
6.025	6.025	6.025	6.025	6.025	6.025	6.025	6.025
6.027	6.027	6.027	6.027	6.027	6.027	6.027	6.027
6.030	6.030	6.030	6.030	6.030	6.030	6.030	6.030
6.033	6.033	6.033	6.033	6.033	6.033	6.033	6.033
6.040	6.040	6.040	6.040	6.040	6.040	6.040	6.040
6.044	6.044	6.044	6.044	6.044	6.044	6.044	6.044
6.046	6.046	6.046	6.046	6.046	6.046	6.046	6.046
6.052	6.052	6.052	6.052	6.052	6.052	6.052	6.052
6.054	6.054	6.054	6.054	6.054	6.054	6.054	6.054
6.078	6.078	6.078	6.078	6.078	6.078	6.078	6.078
6.175	6.175	6.175	6.175	6.175	6.175	6.175	6.175
6.198	6.198	6.198	6.198	6.198	6.198	6.198	6.198
6.437	6.437	6.437	6.437	6.437	6.437	6.437	6.437
6.444	6.444	6.444	6.444	6.444	6.444	6.444	6.444
6.446	6.446	6.446	6.446	6.446	6.446	6.446	6.446
6.450	6.450	6.450	6.450	6.450	6.450	6.450	6.450
6.452	6.452	6.452	6.452	6.452	6.452	6.452	6.452
6.455	6.455	6.455	6.455	6.455	6.455	6.455	6.455
6.457	6.457	6.457	6.457	6.457	6.457	6.457	6.457
6.469	6.469	6.469	6.469	6.469	6.469	6.469	6.469
6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473
6.476	6.476	6.476	6.476	6.476	6.476	6.476	6.476
6.480	6.480	6.480	6.480	6.480	6.480	6.480	6.480
6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484
6.488	6.488	6.488	6.488	6.488	6.488	6.488	6.488
6.489	6.489	6.489	6.489	6.489	6.489	6.489	6.489
6.495	6.495	6.495	6.495	6.495	6.495	6.495	6.495
6.500	6.500	6.500	6.500	6.500	6.500	6.500	6.500
6.512	6.512	6.512	6.512	6.512	6.512	6.512	6.512
6.525	6.525	6.525	6.525	6.525	6.525	6.525	6.525
6.529	6.529	6.529	6.529	6.529	6.529	6.529	6.529
6.533	6.533	6.533	6.533	6.533	6.533	6.533	6.533
6.542	6.542	6.542	6.542	6.542	6.542	6.542	6.542
6.545	6.545	6.545	6.545	6.545	6.545	6.545	6.545
6.560	6.560	6.560	6.560	6.560	6.560	6.560	6.560
6.562	6.562	6.562	6.562	6.562	6.562	6.562	6.562
6.562	6.562	6.562	6.562	6.562	6.562	6.562	6.562
Run Date	11/25/2007	Run Date	11/26/2007	Run Date	11/26/2007	Run Date	11/26/2007
5.981	5.981	5.981	5.981	5.981	5.981	5.981	5.981
5.993	5.993	5.993	5.993	5.993	5.993	5.993	5.993
6.003	6.003	6.003	6.003	6.003	6.003	6.003	6.003
6.009	6.009	6.009	6.009	6.009	6.009	6.009	6.009
6.015	6.015	6.015	6.015	6.015	6.015	6.015	6.015
6.019	6.019	6.019	6.019	6.019	6.019	6.019	6.019
6.025	6.025	6.025	6.025	6.025	6.025	6.025	6.025
6.027	6.027	6.027	6.027	6.027	6.027	6.027	6.027
6.030	6.030	6.030	6.030	6.030	6.030	6.030	6.030
6.033	6.033	6.033	6.033	6.033	6.033	6.033	6.033
6.040	6.040	6.040	6.040	6.040	6.040	6.040	6.040
6.044	6.044	6.044	6.044	6.044	6.044	6.044	6.044
6.046	6.046	6.046	6.046	6.046	6.046	6.046	6.046
6.052	6.052	6.052	6.052	6.052	6.052	6.052	6.052
6.054	6.054	6.054	6.054	6.054	6.054	6.054	6.054
6.078	6.078	6.078	6.078	6.078	6.078	6.078	6.078
6.175	6.175	6.175	6.175	6.175	6.175	6.175	6.175
6.198	6.198	6.198	6.198	6.198	6.198	6.198	6.198
6.437	6.437	6.437	6.437	6.437	6.437	6.437	6.437
6.444	6.444	6.444	6.444	6.444	6.444	6.444	6.444
6.446	6.446	6.446	6.446	6.446	6.446	6.446	6.446
6.450	6.450	6.450	6.450	6.450	6.450	6.450	6.450
6.452	6.452	6.452	6.452	6.452	6.452	6.452	6.452
6.455	6.455	6.455	6.455	6.455	6.455	6.455	6.455
6.457	6.457	6.457	6.457	6.457	6.457	6.457	6.457
6.469	6.469	6.469	6.469	6.469	6.469	6.469	6.469
6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473
6.476	6.476	6.476	6.476	6.476	6.476	6.476	6.476
6.480	6.480	6.480	6.480	6.480	6.480	6.480	6.480
6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484
6.488	6.488	6.488	6.488	6.488	6.488	6.488	6.488
6.489	6.489	6.489	6.489	6.489	6.489	6.489	6.489
6.495	6.495	6.495	6.495	6.495	6.495	6.495	6.495
6.500	6.500	6.500	6.500	6.500	6.500	6.500	6.500
6.512	6.512	6.512	6.512	6.512	6.512	6.512	6.512
6.525	6.525	6.525	6.525	6.525	6.525	6.525	6.525
6.529	6.529	6.529	6.529	6.529	6.529	6.529	6.529
6.533	6.533	6.533	6.533	6.533	6.533	6.533	6.533
6.542	6.542	6.542	6.542	6.542	6.542	6.542	6.542
6.545	6.545	6.545	6.545	6.545	6.545	6.545	6.545
6.560	6.560	6.560	6.560	6.560	6.560	6.560	6.560
6.562	6.562	6.562	6.562	6.562	6.562	6.562	6.562
6.562	6.562	6.562	6.562	6.562	6.562	6.562	6.562
Run Date	11/25/2007	Run Date	11/26/2007	Run Date	11/26/2007	Run Date	11/26/2007
5.981	5.981	5.981	5.981	5.981	5.981	5.981	5.981
5.993	5.993	5.993	5.993	5.993	5.993	5.993	5.993
6.003	6.003	6.003	6.003	6.003	6.003	6.003	6.003
6.009	6.009	6.009	6.009	6.009	6.009	6.009	6.009
6.015	6.015	6.015	6.015	6.015	6.015	6.015	6.015
6.019	6.019	6.019	6.019	6.019	6.019	6.019	6.019
6.025	6.025	6.025	6.025	6.025	6.025	6.025	6.025
6.027	6.027	6.027	6.027	6.027	6.027	6.027	6.027
6.030	6.030	6.030	6.030	6.030	6.030	6.030	6.030
6.033	6.033	6.033	6.033				

Current WBD Cont'd



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

Proposed					
Apache Well Name: NEDU 711					
Legal Well Name NORTHEAST DRINKARD UNIT 711		Common Well Name NEDU 711		Wellbore APCUR1 (API 12 Digit) 3002506594	
Closure Elevation (ft) 3,410.0	Original KB Elevation (ft) 3,422.0	Surface Legal Location 660' FSL, 660' FEL, Unit P, Sec 15, T-21S, R-37E	Perfs (ft) (ft)	Total Depth (ft) 6,675.0	
Production, NE DRINKARD UNIT #711 - Original Hole, 9/27/2018 5:32:13 PM Vertical schematic (proposed)					
Current Wellbore Sections					
Section Desc	Size (in)	Act Top (ft)	Act Bot (ft)	Start Date	
Surface	17 1/2	12.0	306.0	9/23/1948	
Inter 1	12 1/4	306.0	2,802.0	9/25/1948	
Prod 1	7 7/8	2,802.0	6,550.0	10/3/1948	
Prod 2	7 3/8	6,550.0	6,621.0		
Prod 1 Pilot	4 3/4	6,621.0	6,675.0		
Casing Strings					
Casing Description	Casing Nominal OD (in)	Weight Length (ft)	Casing Grade	Set Depth (ft-B)	
Surface	53 3/8	48.00	H-40	306.00	
Casing Description	Casing Nominal OD (in)	Weight Length (ft)	Casing Grade	Set Depth (ft-B)	
Inter 1	8 5/8	32.00	H-40	2,802.00	
Casing Description	Casing Nominal OD (in)	Weight Length (ft)	Casing Grade	Set Depth (ft-B)	
Prod 1	5 1/2	17.00	J-55	6,595.00	
Proposed Casing Strings					
Casing Description	Casing Nominal OD (in)	Weight Length (ft)	Casing Grade	Set Depth (ft-B)	
Existing Cement					
Casing	Des	Top (ft)	Bot (ft)	Top Meas Depth	
Prod 1, 6,595.00ftKB, 5 1/2	Cement Squeeze	6,525.00	6,516.00		
Surface, 306.00ftKB, 13 3/8	Primary Cement	12.00	306.00	Returns at Surface	
Inter 1, 2,802.00ftKB, 8 5/8	Primary Cement	12.00	2,802.00	Returns at Surface	
Prod 1, 6,595.00ftKB, 5 1/2	Primary Cement	1,000.00	6,595.00	Estimated	
Prod 1, 6,595.00ftKB, 5 1/2	Cement Squeeze	6,040.00	6,222.00		
Prod 1, 6,595.00ftKB, 5 1/2	Cement Squeeze	6,525.00	6,570.00		
Proposed Tubing String					
Tubing Description	Length (ft)	Set Depth (ft-B)	Joints		
Tubing - Injection		6,358.4			
IPC Pup Joint	Length (ft) 10.05	OO Nominal (in) 2 3/8	Joints 1		
IPC Tubing	Length (ft) 5,018.67	OO Nominal (in) 2 3/8	Joints 174		
On/Off Tool	Length (ft) 2.65	OO Nominal (in) 2 3/8	Joints 1		
Seal Nipple	Length (ft) 0.10	OO Nominal (in) 2 3/8	Joints 1		
DLH Packer	Length (ft) 6.52	OO Nominal (in) 5 1/2	Joints 1		
IPC Tubing	Length (ft) 700.00	OO Nominal (in) 2 3/8	Joints 22		
Seal Assembly	Length (ft) 0.10	OO Nominal (in) 2 3/8	Joints 1		

Scenario 2: 4.5" FJ Liner from Blinebry to TD (Proposed Chnages in Yellow)

Apache		Proposed	
Well Name: NEDU 711			
Legal Well Name NORTHEAST DRINKARD UNIT 711	Common Well Name NEDU 711	Wellbore API/WT (API 12 Digits) 3002506594	
Ground Elevation (ft) 3,410.0	Original KB Elevation (ft) 3,422.0	Surface Legal Location 650' FSL, 660' FEL, Unit P, Sec 15, T-21S, R-37E	KB/D (ft) (ft/b) 6,675.0
Production, NE DRINKARD UNIT #711 - Original Hole, 9/27/2018 5:47:07 PM			
Vertical schematic (proposed)			
Current Wellbore Sections			
Section One	Size (in)	Act Top (ft/b)	Act Bot (ft/b)
Surface	17 1/2	12.0	306.0
Inter 1	12 1/4	306.0	2,802.0
Prod 1	7 7/8	2,802.0	6,550.0
Prod 2	7 3/8	6,550.0	6,621.0
Prod 1 Pilot	4 3/4	6,621.0	6,675.0
Casing Strings			
Casing Description	String Nominal OD (in)	Weight Length (ft/b)	String Grade
Surface	13 3/8	48.00	H-40
Casing Description	String Nominal OD (in)	Weight Length (ft/b)	String Grade
Inter 1	8 5/8	32.00	H-40
Casing Description	String Nominal OD (in)	Weight Length (ft/b)	String Grade
Prod 1	5 1/2	17.00	J-55
Proposed Casing Strings			
Casing Description	String Nominal OD (in)	Weight Length (ft/b)	String Grade
Prod Lnr 1	4 1/2	11.00	J-55
Existing Cement			
String	One	Top (ft/b)	Bot (ft/b)
Prod 1, 6,595.00ft/b, 5 1/2	Cement Squeeze	6,525.00	6,516.00
Surface, 306.00ft/b, 13 3/8	Primary Cement	12.00	306.00
Inter 1, 2,802.00ft/b, 8 5/8	Primary Cement	12.00	2,802.00
Prod 1, 6,595.00ft/b, 5 1/2	Primary Cement	1,000.00	6,595.00
Prod 1, 6,595.00ft/b, 5 1/2	Cement Squeeze	6,040.00	6,222.00
Prod 1, 6,595.00ft/b, 5 1/2	Cement Squeeze	6,525.00	6,570.00
Proposed Cement			
Casing	Description	Top Depth (ft/b)	Bottom Depth (ft/b)
Prod Lnr 1, 6,675.00ft/b, 4 1/2		5,387.00	6,675.00
Proposed Tubing String			
Tubing Description	Length (ft)	Set Depth (ft/b)	
Tubing - Injection		6,387.0	
Item Description	Length (ft)	OD Nominal (in)	Joints
IPC Tubing	6,372.22	2 3/8	198
Item Description	Length (ft)	OD Nominal (in)	Joints
Injection Packer	2.78	4 1/2	1
Existing Perforations			
Type	Top Depth (ft/b)	Bottom Depth (ft/b)	Shot Density (shots/ft)
Blindbry	5,672	5,672	1.0
Type	Top Depth (ft/b)	Bottom Depth (ft/b)	Shot Density (shots/ft)
Blindbry	5,674	5,674	1.0
Type	Top Depth (ft/b)	Bottom Depth (ft/b)	Shot Density (shots/ft)
Blindbry	5,676	5,676	1.0
Entered Shot Total 1			