

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
BML NO. 000-0137
Expires: January 31, 2018
Carlsbad Field Office
5. Lease Serial No. NMNM2512
HOBBS**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

HOBBS OCD

SUBMIT IN TRIPLICATE - Other instructions on page 2

NOV 28 2018

RECEIVED

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
73888U31608. Well Name and No.
NEDU 4049. API Well No.
30-025-06454-00-S110. Field and Pool or Exploratory Area
EUNICE11. County or Parish, State
LEA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Workover Operations
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Apache intends to isolate the Drinkard for injection, per the attached procedure and WBD's.
(WFX-774)

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #442686 verified by the BLM Well Information System
For APACHE CORPORATION, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 11/06/2018 (19PP0305SE)

Name (Printed/Typed) REESA FISHER

Title SR STAFF REGULATORY ANALYST

Signature (Electronic Submission)

Date 11/05/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By JONATHON SHEPARD

Title PETROELUM ENGINEER

Date 11/19/2018

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Hobbs

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

MWS/OCD
11/24/2018

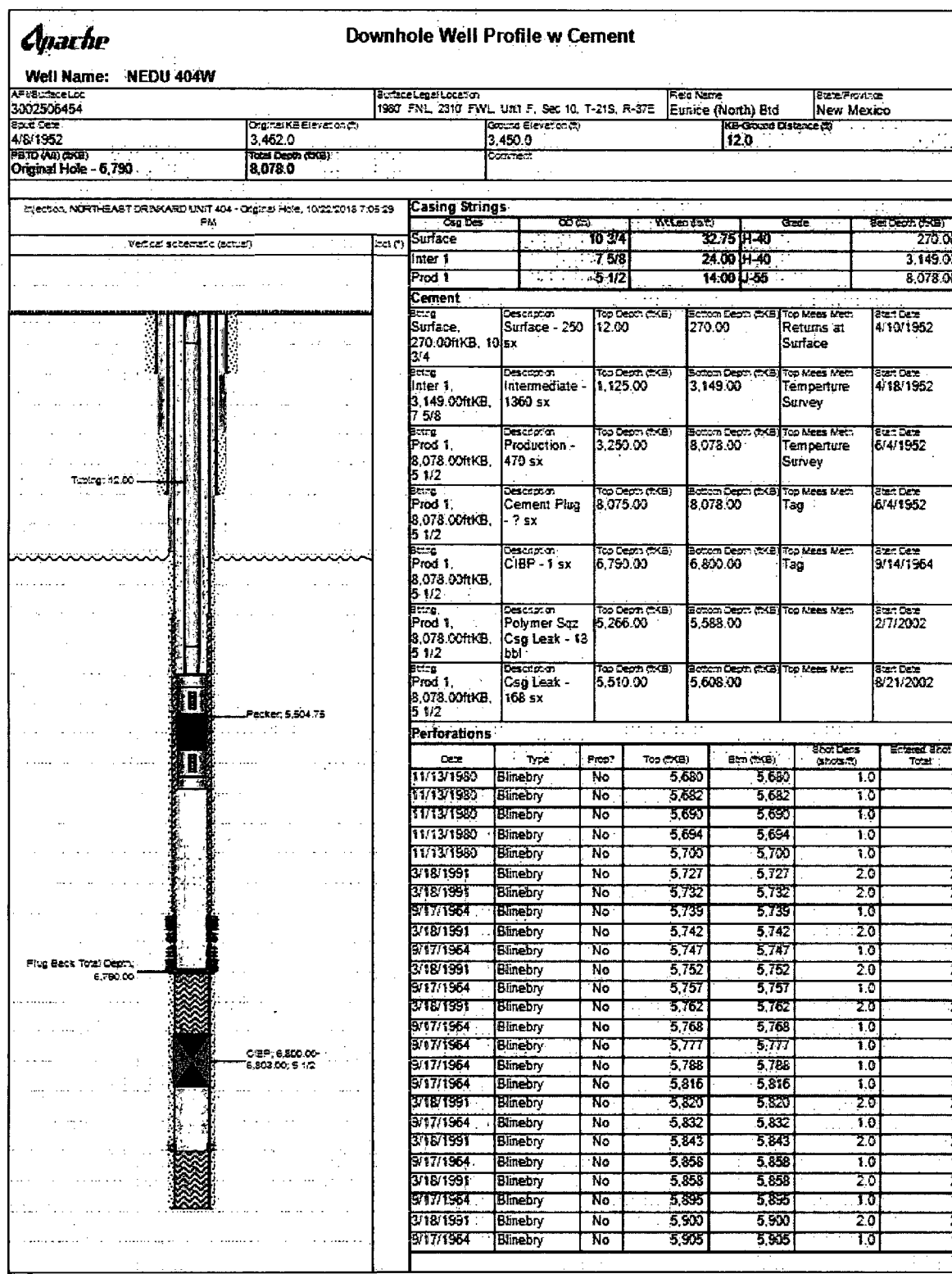
NEDU 404W: (API: 30-025-06454)

OBJECTIVE: ISOLATE DRINKARD FOR INJECTION

Run 4.5" FJ Casing from PBTD to Surface

1. POOH w 2-3/8" injection tubing and 5-1/2" injection packer
2. PU workstring and RIH w bit and clean out well to PBTD at ~6790'.
3. RIH w/ 4.5" FJ casing. Tag bottom and pump cement. Circulate cement to surface
4. Wait on Cement. Run Cement Bond Log.
5. RIH to perforate Drinkard formation f/ 6600-6730'. POOH.
6. RIH w/ workstring and treating packer to acid stimulate Drinkard formation w/ 5000 gals 15% HCl using 1.1 SG perf balls for diversion. Knock off balls.
7. PU ~6600' of 2-3/8" IPC coated tubing w/ 4.5" Lokset packer. Set packer within 20' of top perf.
8. Perform MIT for NMOCD and return well on injection.

**Condition of Approval: notify
OCD Hobbs office 24 hours
prior of running MIT Test & Chart**





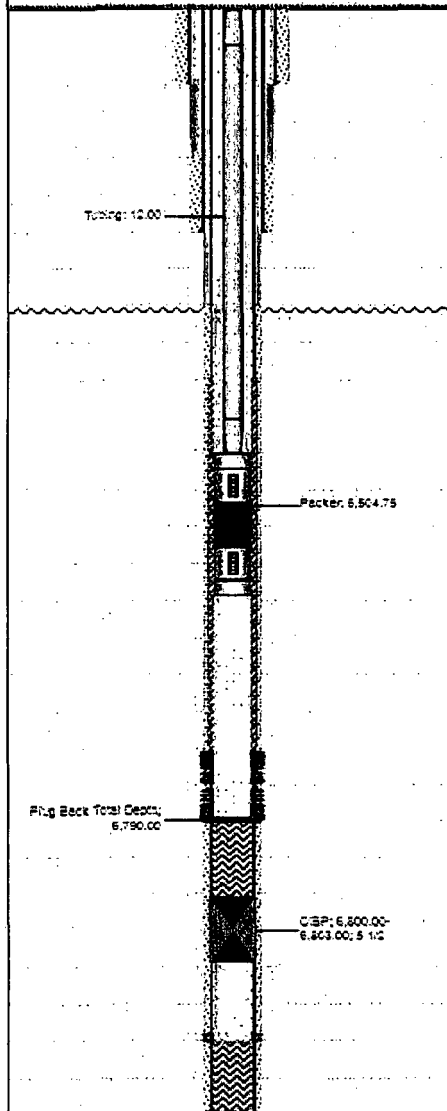
Downhole Well Profile w Cement

Well Name: NEDU 404W

Injection, NORTHEAST DRINKARD UNIT 404 - Original Hole, 10/22/2018 7:03:49
FM

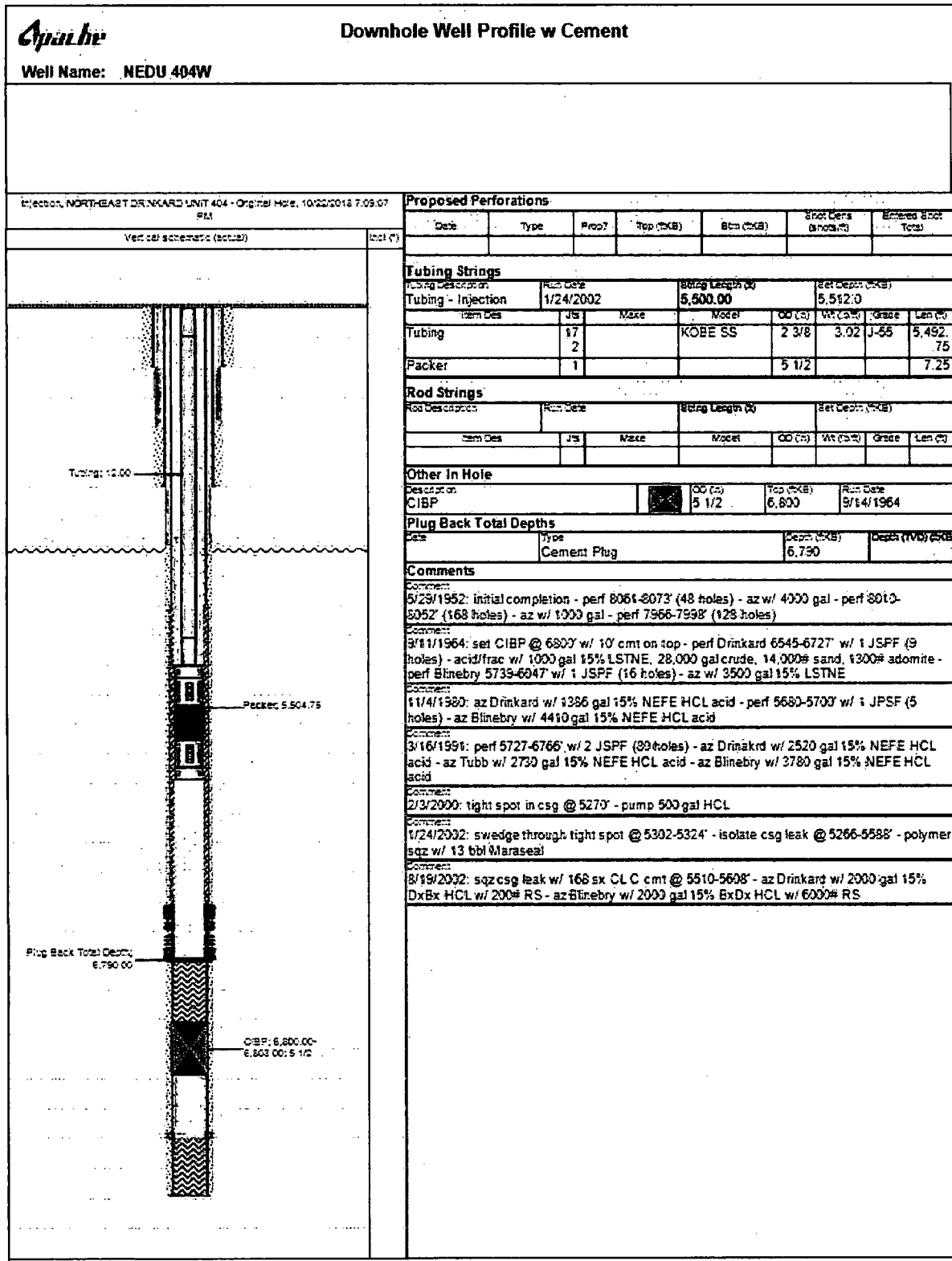
Vertical schematic (actual)

Total (ft)



Perforations

Date	Type	Prod?	Top (ft)	Bot (ft)	Shot Bars (shots)	Entered Shot Total
9/17/1964	Blindbry	No	5,921	5,921	1.0	1
9/17/1964	Blindbry	No	5,938	5,938	1.0	1
9/17/1964	Blindbry	No	5,953	5,953	1.0	1
9/17/1964	Blindbry	No	6,026	6,026	1.0	1
3/18/1991	Blindbry	No	6,040	6,040	2.0	2
9/17/1964	Blindbry	No	6,047	6,047	1.0	1
3/18/1991	Tubb	No	6,093	6,093	2.0	2
3/18/1991	Tubb	No	6,100	6,100	2.0	2
3/18/1991	Tubb	No	6,106	6,106	2.0	2
3/18/1991	Tubb	No	6,123	6,123	2.0	2
3/18/1991	Tubb	No	6,140	6,140	2.0	2
3/18/1991	Tubb	No	6,145	6,145	2.0	2
3/18/1991	Tubb	No	6,152	6,152	2.0	2
3/18/1991	Tubb	No	6,265	6,265	2.0	2
3/18/1991	Tubb	No	6,303	6,303	2.0	2
3/18/1991	Tubb	No	6,310	6,310	2.0	2
3/18/1991	Tubb	No	6,378	6,378	2.0	2
3/18/1991	Tubb	No	6,382	6,382	2.0	2
3/18/1991	Tubb	No	6,389	6,389	2.0	2
3/18/1991	Tubb	No	6,402	6,402	2.0	2
3/18/1991	Tubb	No	6,452	6,452	2.0	2
3/18/1991	Tubb	No	6,460	6,460	2.0	2
3/18/1991	Tubb	No	6,465	6,465	2.0	2
3/18/1991	Tubb	No	6,470	6,470	2.0	2
9/14/1964	Drinkard	No	6,545	6,545	1.0	1
9/14/1964	Drinkard	No	6,553	6,553	1.0	1
3/18/1991	Drinkard	No	6,556	6,556	2.0	2
9/14/1964	Drinkard	No	6,572	6,572	1.0	1
3/18/1991	Drinkard	No	6,580	6,580	2.0	2
3/18/1991	Drinkard	No	6,634	6,634	2.0	2
9/14/1964	Drinkard	No	6,642	6,642	1.0	1
9/14/1964	Drinkard	No	6,649	6,649	1.0	1
9/14/1964	Drinkard	No	6,673	6,673	1.0	1
3/18/1991	Drinkard	No	6,701	6,701	2.0	2
9/14/1964	Drinkard	No	6,705	6,705	1.0	1
3/18/1991	Drinkard	No	6,711	6,711	2.0	2
3/18/1991	Drinkard	No	6,717	6,717	2.0	2
9/14/1964	Drinkard	No	6,722	6,722	1.0	1
9/14/1964	Drinkard	No	6,727	6,727	1.0	1
3/18/1991	Drinkard	No	6,734	6,734	2.0	2
3/18/1991	Drinkard	No	6,736	6,736	2.0	2
3/18/1991	Drinkard	No	6,740	6,740	2.0	2
3/18/1991	Drinkard	No	6,745	6,745	2.0	2
3/18/1991	Drinkard	No	6,752	6,752	2.0	2
3/18/1991	Drinkard	No	6,766	6,766	2.0	2
6/11/1952	Eburger Susp	No	7,966	7,998	2.0	128
6/11/1952	Eburger Susp	No	8,010	8,052	4.0	168
6/5/1952	Eburger Susp	No	8,061	8,073	4.0	48





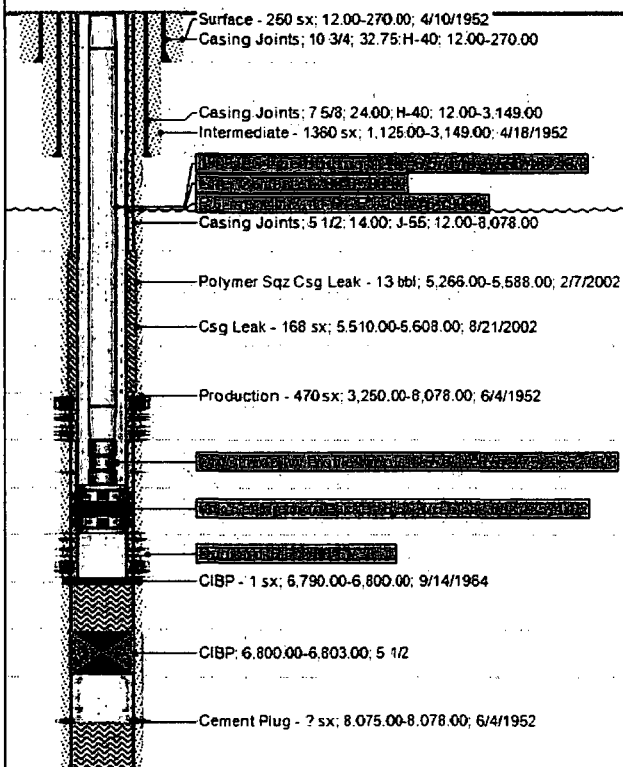
Proposed

Well Name: NEDU 404W

Legal Well Name NORTHEAST DRINKARD UNIT 404W		Common Well Name NEDU 404W		API Surface Loc 3002506454	
Ground Elevation (ft) 3,450.0	Original KB Elevation (ft) 3,462.0	Surface Legal Location 1980' FNL, 2310' FWL, Unit F, Sec 10, T-21S, R-37E		PSD (ft) (ft) Original Hole - 6,790	Total Depth (ft) 8,078.0

Injection, NORTHEAST DRINKARD UNIT 404 - Original Hole, 10/24/2018 8:51:58 AM

Vertical schematic (proposed)



Current Wellbore Sections

Section Desc	Size (in)	Act Top (ft)	Act Btm (ft)	Start Date
Surface	13 1/2	12.0	270.0	4/8/1952
Inter 1	9 7/8	270.0	3,149.0	4/11/1952
Prod 1	6 3/4	3,149.0	8,078.0	4/19/1952

Casing Strings

Casing Description	String Nominal OD (in)	Weight/Length (lb/ft)	String Grade	Set Depth (ft)
Surface	10 3/4	32.75	H-40	270.00
Inter 1	7 5/8	24.00	H-40	3,149.00
Prod 1	5 1/2	14.00	J-55	8,078.00

Proposed Casing Strings

Casing Description	String Nominal OD (in)	Weight/Length (lb/ft)	String Grade	Set Depth (ft)
Prod Lnr 1	4 1/2	11.60	FJ	6,790.00

Existing Cement

String	Des	Top (ft)	Btm (ft)	Top Meas Meth
Surface, 270.00ftKB, 10 3/4	Primary Cement	12.00	270.00	Returns at Surface
Inter 1, 3,149.00ftKB, 7 5/8	Primary Cement	1,125.00	3,149.00	Temperature Survey
Prod 1, 8,078.00ftKB, 5 1/2	Primary Cement	3,250.00	8,078.00	Temperature Survey
Prod 1, 8,078.00ftKB, 5 1/2	Cement Plug	8,075.00	8,078.00	Tag
Prod 1, 8,078.00ftKB, 5 1/2	Cement Plug	6,790.00	6,800.00	Tag
Prod 1, 8,078.00ftKB, 5 1/2	Cement Squeeze	5,266.00	5,588.00	
Prod 1, 8,078.00ftKB, 5 1/2	Cement Squeeze	5,510.00	5,608.00	

Proposed Cement

String	Description	Top Depth (ft)	Bottom Depth (ft)	Top Measurement Method
Prod Lnr 1, 6,790.00ftKB, 4 1/2	Primary Liner Cement	12.00	6,790.00	Returns at Surface

Proposed Tubing String

Tubing Description	Length (ft)	Set Depth (ft)
Tubing - Injection	6,558.10	6,580.0
Item Description	Length (ft)	OD Nominal (in)
1505 IPC Lined Tubing	6,558.10	2 3/8
Item Description	Length (ft)	OD Nominal (in)
On/Off Tool w/ Profile Nipple	2.65	2 3/8
Item Description	Length (ft)	OD Nominal (in)
Lok-Set Injection Packer	7.25	4 1/2

Existing Perforations

Type	Top Depth (ft)	Bottom Depth (ft)	Shot Density (shots/ft)	Entered Shot Total
Blindbry	5,680	5,680	1.0	1

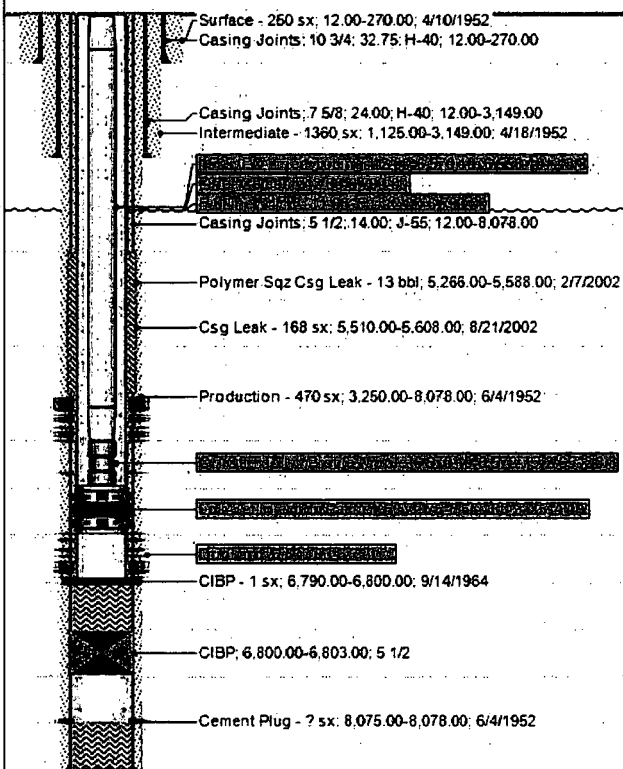
Apache

Well Name: NEDU 404W

Proposed

Injection, NORTHEAST DRINKARD UNIT 404 - Original Hole, 10/24/2018 8:52:49 AM

Vertical schematic (proposed)

**Existing Perforations**

Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,682	5,682	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,690	5,690	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,694	5,694	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,700	5,700	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,727	5,727	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,732	5,732	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,739	5,739	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,742	5,742	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,747	5,747	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,752	5,752	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,757	5,757	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,762	5,762	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,768	5,768	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,777	5,777	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,788	5,788	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,816	5,816	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,820	5,820	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,832	5,832	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,843	5,843	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,858	5,858	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,858	5,858	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,895	5,895	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,900	5,900	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,905	5,905	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,921	5,921	1.0	1

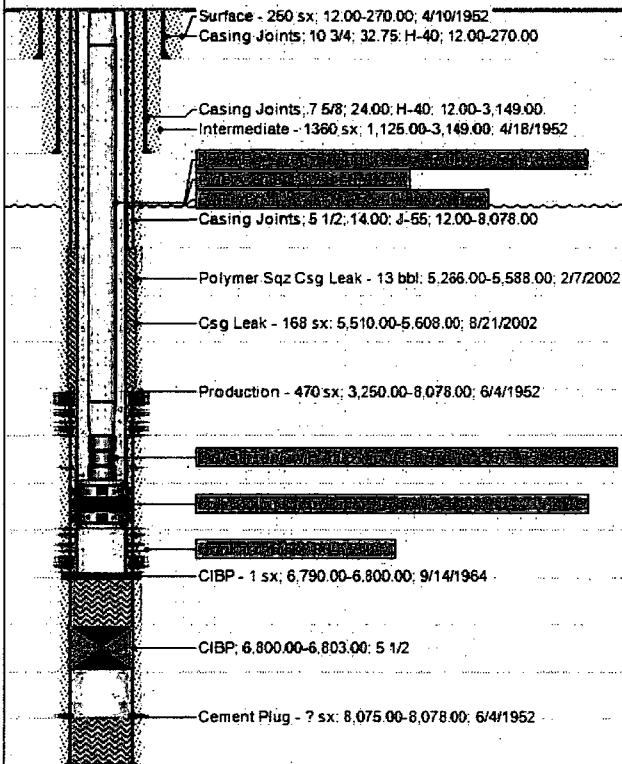
Apache

Well Name: NEDU 404W

Proposed

Injection, NORTHEAST DRINKARD UNIT 404 - Original Hole, 10/24/2018 8:52:56 AM

Vertical schematic (proposed)

**Existing Perforations**

Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Blinebry	5,938	5,938	1.0	1
Blinebry	5,953	5,953	1.0	1
Blinebry	6,026	6,026	1.0	1
Blinebry	6,040	6,040	2.0	2
Blinebry	6,047	6,047	1.0	1
Tubb	6,093	6,093	2.0	2
Tubb	6,100	6,100	2.0	2
Tubb	6,106	6,106	2.0	2
Tubb	6,123	6,123	2.0	2
Tubb	6,140	6,140	2.0	2
Tubb	6,145	6,145	2.0	2
Tubb	6,152	6,152	2.0	2
Tubb	6,285	6,285	2.0	2
Tubb	6,303	6,303	2.0	2
Tubb	6,310	6,310	2.0	2
Tubb	6,378	6,378	2.0	2
Tubb	6,382	6,382	2.0	2
Tubb	6,389	6,389	2.0	2
Tubb	6,402	6,402	2.0	2
Tubb	6,452	6,452	2.0	2
Tubb	6,460	6,460	2.0	2
Tubb	6,465	6,465	2.0	2
Tubb	6,470	6,470	2.0	2
Drinkard	6,545	6,545	1.0	1
Drinkard	6,553	6,553	1.0	1

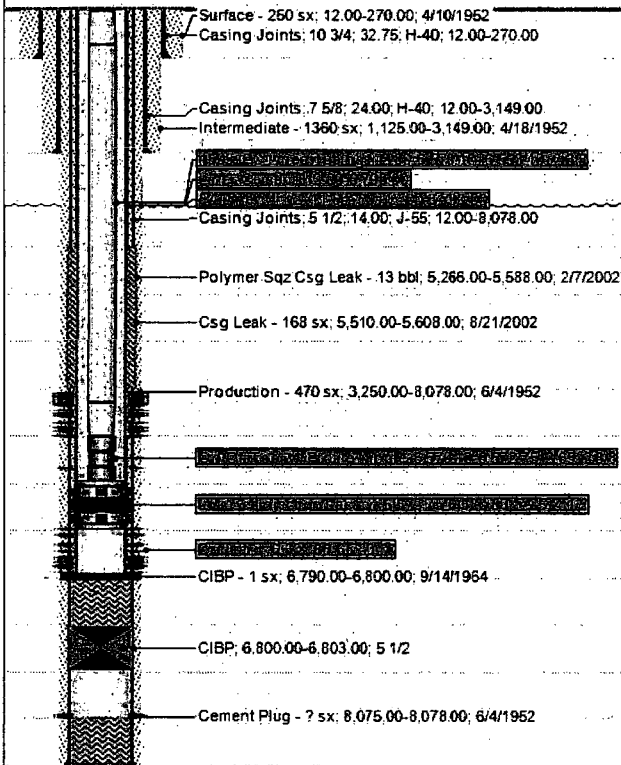
Apache

Well Name: NEDU' 404W

Proposed

Injection: NORTHEAST DRINKARD UNIT 404 - Original Hole, 10/24/2018 8:53:04 AM

Vertical schematic (proposed)

**Existing Perforations**

Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,556	6,556	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,572	6,572	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,580	6,580	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,604	6,604	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,642	6,642	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,649	6,649	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,673	6,673	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,701	6,701	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,705	6,705	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,711	6,711	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,717	6,717	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,722	6,722	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,727	6,727	1.0	1
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,734	6,734	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,736	6,736	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,740	6,740	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,745	6,745	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,752	6,752	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,766	6,766	2.0	2
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Eburger Susp	7,966	7,998	2.0	128
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Eburger Susp	8,010	8,052	4.0	168
Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Eburger Susp	8,061	8,073	4.0	48

Proposed Perforations

Type	Top Depth (ftGS)	Bottom Depth (ftGS)	Shot Density (shots/ft)	Entered Shot Total
Drinkard	6,600	6,730	2.0	130