

District I

1625 N. French Dr., Hobbs, NM 88240
 Phone: (575) 393-6161 Fax: (575) 393-0720

District II

811 S. First St., Artesia, NM 88210
 Phone: (575) 748-1283 Fax: (575) 748-9720

District III

1000 Rio Brazos Road, Aztec, NM 87410
 Phone: (505) 334-6178 Fax: (505) 334-6170

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico**Energy Minerals and Natural Resources****Oil Conservation Division****1220 South St. Francis Dr.****Santa Fe, NM 87505**

Form C-101
 Revised November 14, 2012

☐ AMENDED REPORT**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

¹ Operator Name and Address ConocoPhillips Company P. O. Box 51810 Midland, TX 79710		² OGRID Number 217817
		³ API Number 025-36624
⁴ Property Code 31667	⁵ Property Name HARDY 36 STATE	⁶ Well No. 028

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
H	36	20S	37E		2374	N	511	E	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
H	3	2	3		2000	N	175	E	LEA

9. Pool Information

⁹ Pool Name HARDY; SAN ANDRES, NORTH	¹⁰ Pool Code 96393
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Additional Well Information

¹¹ Work Type RECOM/PLUGBACK	¹² Well Type OIL	¹³ Cable/Rotary	¹⁴ Lease Type STATE	¹⁵ Ground Level Elevation 3494'
¹⁶ Multiple N	¹⁷ Proposed Depth 4370'	¹⁸ Formation SAN ANDRES	¹⁹ Contractor	²⁰ Spud Date 10/02/2004
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
SURF	12.25"	8.625"	24#	1343'	895	0
PROD	7.875"	5.5#	15.5#	8062'	2495	1000'

Casing/Cement Program: Additional Comments

CIBP @ 4370'

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

I further certify that I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.

Signature:

Printed name: Rhonda Rogers

Title: Staff Regulatory Technician

E-mail Address: rogersr@conocophillips.com

Date:

Phone: (432)688-9174

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date:

Expiration Date:

Conditions of Approval Attached *

Petroleum Engineer
 Petroleum Engineer

THIS WELL IS NOT PROPERLY
 PLUGGED ABOVE 7379'

BEFORE WELL CAN BE PLUGGED
 WELL MUST BE PROPERLY PLUGGED
 FROM 7379'

HARDY 36 STATE 28
API 30-025-36624
RECOMPLETE HARDY; SAN ANDRES, NORTH (96393)

Completion (Stage 1 - Acid Frac):

- 1) RU Wireline. RIH w/CIBP & set @ ~4370'. RD wireline.
- 2) RU wireline services. Perforate intervals at 4 spf (perforating to be done w/lubricator in place)
 - a. 60-degree phasing w/ 4" Titan Slick Gun w/super deep penetrating charges (ch-40g, eh-0.52", pen-52.13")

<u>San Andres</u>	<u>Feet</u>	<u>Shots</u>
4,060- 4,260	200	800

- 3) TOOH w/perforating gun and inspect to verify # of shots fired.
- 4) RU hydrotesters. PU & RIH w/ pkr & 3 ½ L-80 Tbg work string to 3,730' while testing tbg below slips @ 8000#.
- 5) Test CIBP @ 4370' to 5,000 psi (surface), ~7272 (bottom hole).
- 6) RD hydrotesters. Pump away acid frac. Record perf break down pressure in Wellview.
- 7) Record: P(max); P(min); ISIP; SITP(5 min); SITP(10 min); SITP(15 min); SITP(20 min)
- 8) RDMO acid frac services.
- 9) POOH & LD packer. Stand back workstring.

Completion (Stage 2 - Sand Frac):

- 10) RIH w/CIBP & set @ ~4096'. RD wireline.
- 11) RU wireline services. Perforate intervals at 4 spf (perforating to be done w/lubricator in place)
 - a. 60-degree phasing w/ 4" Titan Slick Gun w/super deep penetrating charges (ch-40g, eh-0.52", pen-52.13")

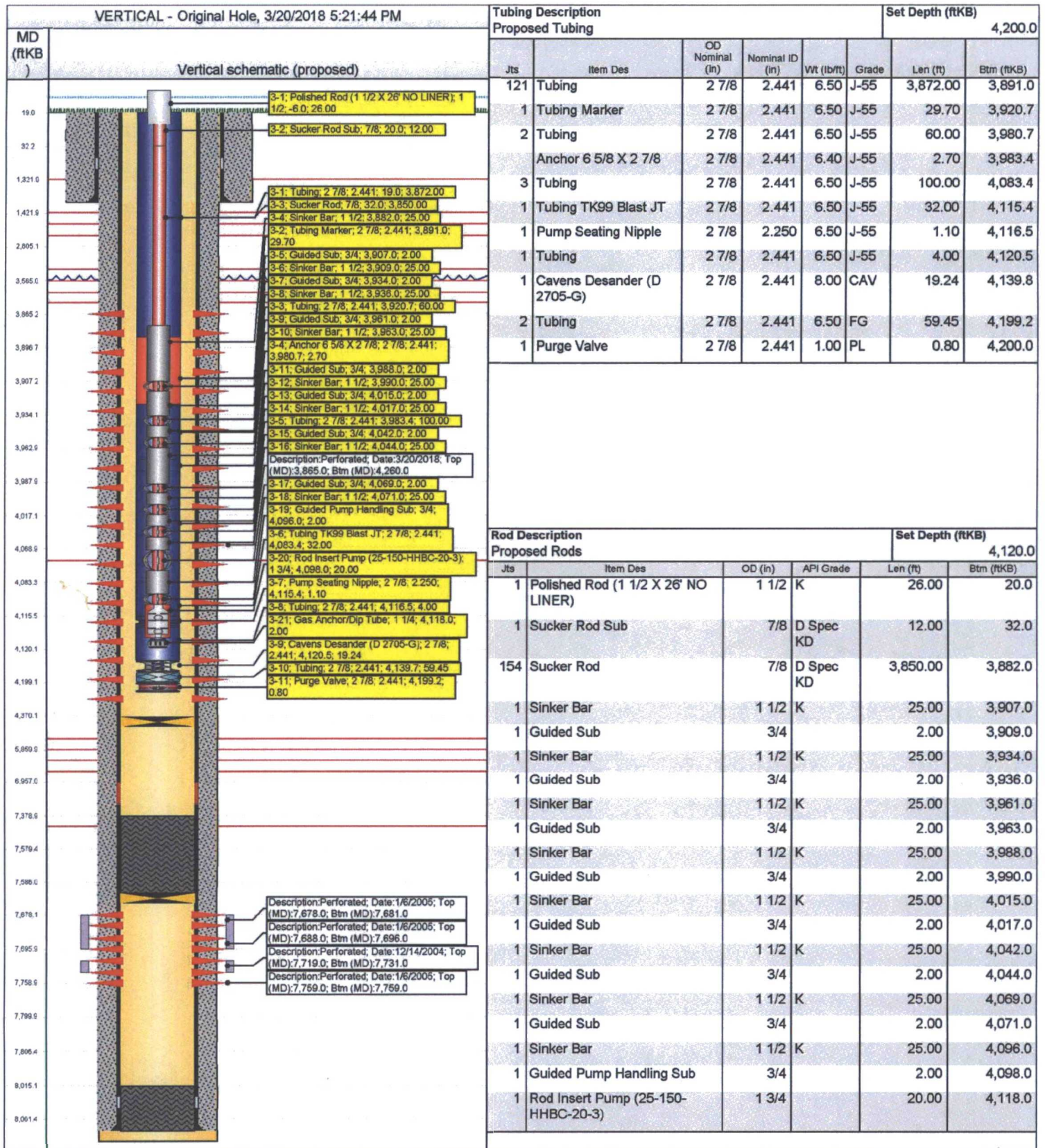
<u>Grayburg</u>	<u>Feet</u>	<u>Shots</u>
3,865- 4,060	195	780

- 12) TOOH w/perforating gun and inspect to verify # of shots fired. RD wireline services.
- 13) PU & TIH w/ packer on workstring. Test CBP @ 4096' to 5,000 psi (surface), ~7130 (bottom hole).
- 14) Pull up workstring to 3,765 (100' above top perf)
- 15) Pump away acid to break down perms before frac. Record perf break down pressure in Wellview.
- 16) NDBOP. NU full-bore frac valve to 7-1/16" flange.
- 17) RDMO pulling unit.
- 18) RU frac services. Frac well without pulling unit on location.

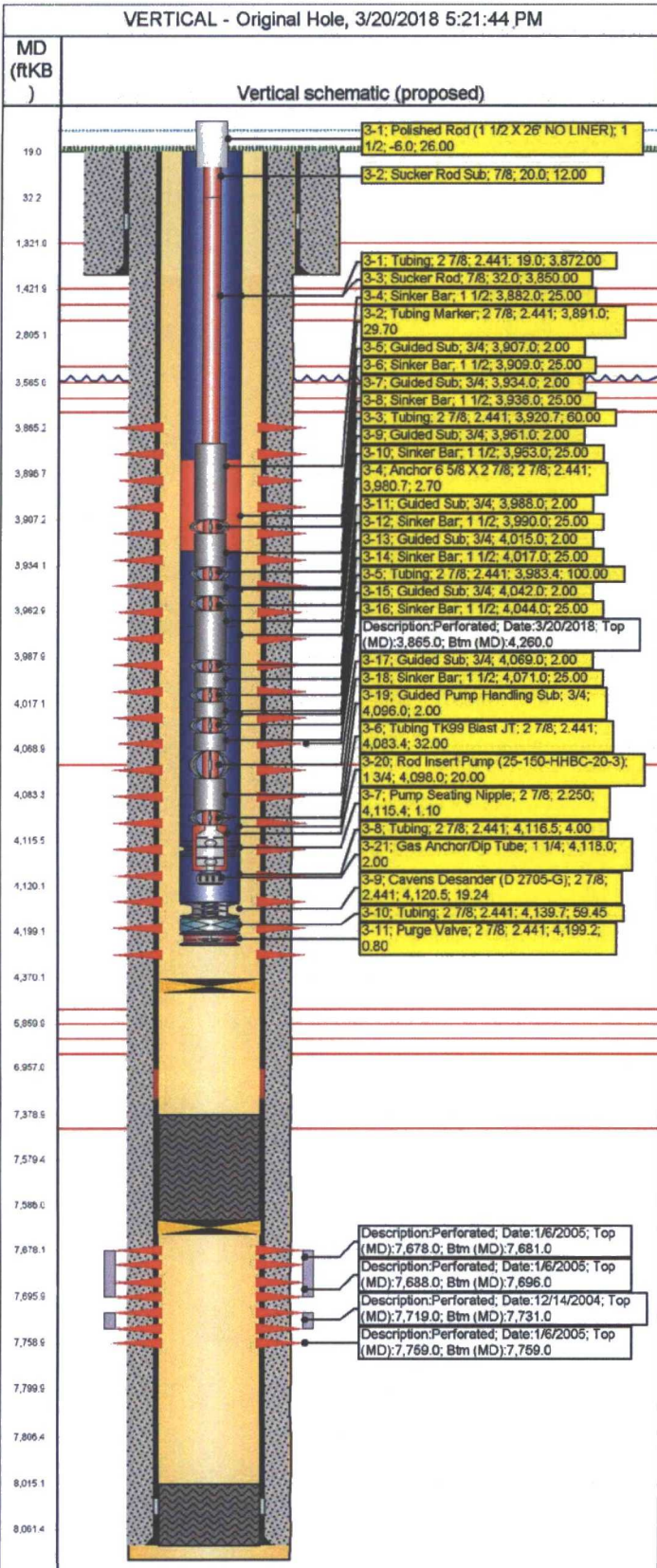
HARDY 36 STATE 28
API 30-025-36624
RECOMPLETE HARDY; SAN ANDRES, NORTH (96393)

- 19) Acid BreakDown
- 20) Frac-treat Grayburg perforated interval (3865-4060) down 3-1/2", 9.3#, L-80 tbg @ 40 BPM – anticipated treating pressure at 3000# - 4000#
- 21) Record: P(max); P(min); ISIP; SITP(5 min); SITP(10 min); SITP(15 min); SITP(20 min)
- 22) RDMO sand frac services.
- 23) Shut well in for 24 hours to let resin coat cure.
- 24) Open well and flow back well until dead. Max 1 bbl/min
- 25) MIRU pulling unit.
- 26) Release packer. Tag for fill.
- 27) POOH & LD tbg & packer (workstring).
- 28) PU & RIH w/drill bit and 2-7/8", 6.5#, L-80 tbg. Drill out CBP set at 4096'.
- 29) Clean out. RIH to PBTD and circulate well clean.
- 30) TOH w/bit and tbg. Lay down bit.
- 31) RIH w/tbg and TAC. Set tbg.
- 32) ND BOP. NU well.
- 33) RIH w/pump and rods. Space pump, hang well off.
- 34) Notify MSO to sign-off on well.
- 35) RDMO and release all rental equipment. Return well to production.

Proposed Rod and Tubing Configuration HARDY 36 STATE 28



**Proposed Rod and Tubing Configuration
HARDY 36 STATE 28**

[illegible]