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District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
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HOBBS, NM

SEP 25 2014

RECEIVED

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 July 18, 2013

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address Amtex Energy, Inc. P.O. Box 3418 Midland, TX 79702		4. OGRID Number 000785
3. Property Code 313204	2. Property Name Wool Head 20 State	5. API Number 30-025-42142
		6. Well No. 3

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
M	20	21S	33E		330'	S	330'	W	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name	Pool Code
WC-025 G-10 S2133280: Wolfcamp & Wildcat Bone Spring	

Additional Well Information

11. Work Type N	12. Well Type O	13. Cable/Rotary Rotary	14. Lease Type S	15. Ground Level Elevation 3739.50
16. Multiple N	17. Proposed Depth 13,000'	18. Formation Wolfcamp, Bone Spring	19. Contractor	20. Spud Date TBD
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☐ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf.	17.5"	13.375"	54.5#	600' 1600	500	
Int. 1	12.25"	9.625"	40#	5180'	2400	
Prod.	8.75"	7"	29#	13000'	1400	2500'

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Cameron

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: <i>William J. Savage</i>		OIL CONSERVATION DIVISION	
Printed name: William J. Savage		Approved By: <i>[Signature]</i>	
Title: President		Title: Petroleum Engineer	
E-mail Address: bsavage@amtexenergy.com		Approved Date: 09/25/14 Expiration Date: 09/25/16	
Date: 9-23-14	Phone: 432-686-0847	Conditions of Approval Attached	

SEP 26 2014

Amtex Energy, Inc.

Drilling Program

Standard Well Location

SL: 330' FSL & 330' FWL

SEC. 20 - T 21S - R 33E

Lea County, New Mexico

1. WELL NAME: WOOL HEAD 20 State Well No. 3

2. GEOLOGIC NAME OF SURFACE FORMATION: Permian

3. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

GL: 3738.3'

KB:

Formation Tops	Depth
Rustler	1150'
Cowden Anhydrite	3040'
Base/Salt	3100'
Capitan Reef Sequence	3400'
Delaware Mountain	4916'
Bell Canyon Sand	4966'
Cherry Canyon	6066'
Brushy Canyon	7061'
Bone Spring (Top of Avalon).....	8560'
Cut Off Sand (UCOS)	8980'
Lower Avalon	9295'
1 st Bone Spring Sand	9960'
2 nd Bone Spring Carbonate	10230'
2 nd Bone Spring Sand	10550'
3 rd Bone Spring Carbonate	11340'
3 rd Bone Spring Sand	11630'
Wolfcamp	11910'
PTD (Pilot Hole)	13000'
Projected True Vertical Depth ("TVD")	TBD

4. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Upper Permian Sands	Above 350'	Fresh Water
2nd Bone Spring Sand	10500' - 10950'	Oil

Fresh water sands will be protected by setting a 13-3/8" csg at 600' and circ the cmt back to surface, 9-5/8" csg will be set at 5180' with cmt circ back to surface.

5. DRILLING PROCEDURE:

1. Plan to drill a 17-1/2" hole to 600' with FW. Run 13-3/8", 54.5#, J-55 csg. and cement to surface.
2. Drill 12-1/4" hole to 5,180' with brine, and run 9-5/8", 40#/47#, J-55/N-80 (with possible DVT/ECP set 200' above reef @ approximately 3,300') and cement to surface.
3. Drill 8-3/4" hole with FW to 13,000' +/-.
4. Run open hole logs.
5. Run 7" 29#, P-110 csg. and cement to 2,500' in 2 stages.

6. CASING PROGRAM: Vertical Well Completion

Casing	TrueVertical Depth	Hole Size	Casing Size	Casing Weight	Casing Grade	Desired TOC
Surface	600'	17-1/2"	13-3/8"	54.5 lb/ft	J-55	Surface
Intermediate	5180'	12-1/4"	9-5/8"	40/47 lb/ft	J-55 & N-80	Surface
Production	13000'	8-3/4"	7"	29 lb/ft	P-110	2500'

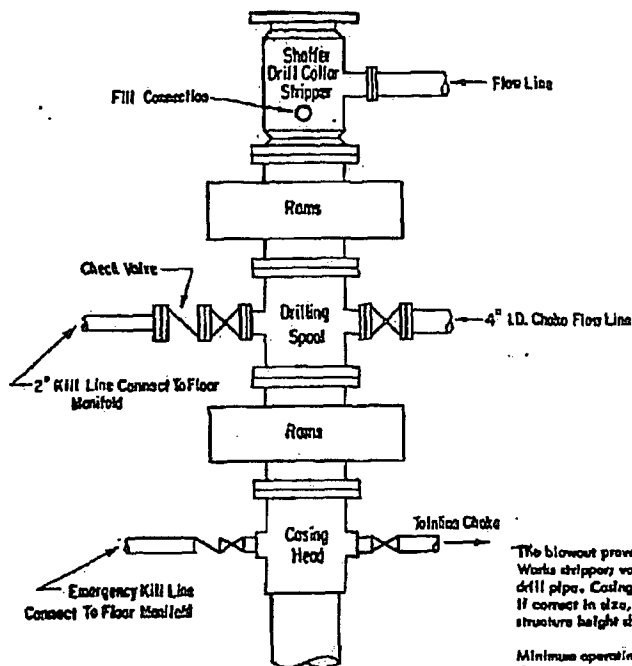
7. CEMENT PROGRAM:

True Vertical Depth	Number of Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
Surface: 600'	240	13.5	1.75	Lead: 240 sks econocem @13.5 ppg, y-1.75, h20- 9.2
	340	14.8	1.33	Tail: 340 sks halcem @ 14.8 ppg, Y-1.33, H20-6.34
Intermediate: 5180'	1300	12.5	1.94	Lead: 1300 sks econocem-HLC cmt @ 12.5 PPG, 1.94
				yield, 10.66 wtr
	725	14.8	1.34	Tail: 725 sks cmt blend@14.8 PPG, 1.34 yield, 6.36 wtr.
Production:				
1st Stage	870	15	2.63	Lead: 870 sks solucem-D, 15.0 Y 2.63 WR 11.38-BBLS
				407.5 0.25LBM D-Air, 0.75% hr 601
2nd Stage	1060	12.9	1.9	Lead: 1060 sks econocem-D 12.9 Y 1.9 WR 9.86 BBLS
				358 0.1%
	100	15.8	1.2	Tail: 100 sks Halcem-D 15.8 Y 1.16 WR 5.15 BBLS 20.6
Top of Curve: 10360'				0.2% HR-800
Length of Lateral:				
5290'				
TD @ MD is 15,650'				

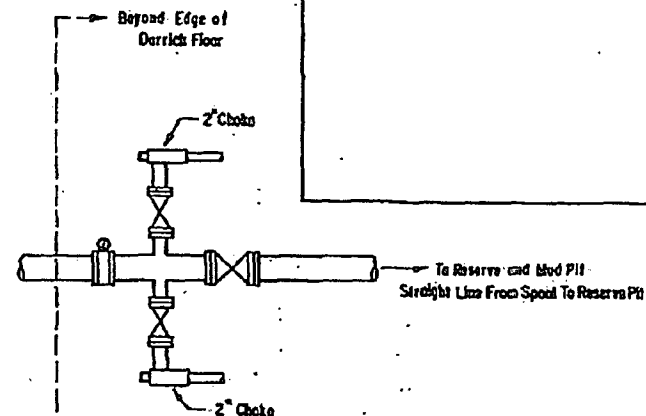
8. MUD PROGRAM:

True Measured Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 600'	Fresh Water	8.5 - 9.2	30 - 34	No Control (N/C)*
600' - 5180'	Brine	9.5 - 10.0	28 - 29	N/C*
5180' - 13,000'	Fresh Water Mud System	8.4 - 9.3	28 - 32	9150' < 15*

***NOTE:** Follow specific instructions according to Mud Company's Program.



**3000 PSI WORKING PRESSURE
BLOWOUT PREVENTER HOOK-UP**



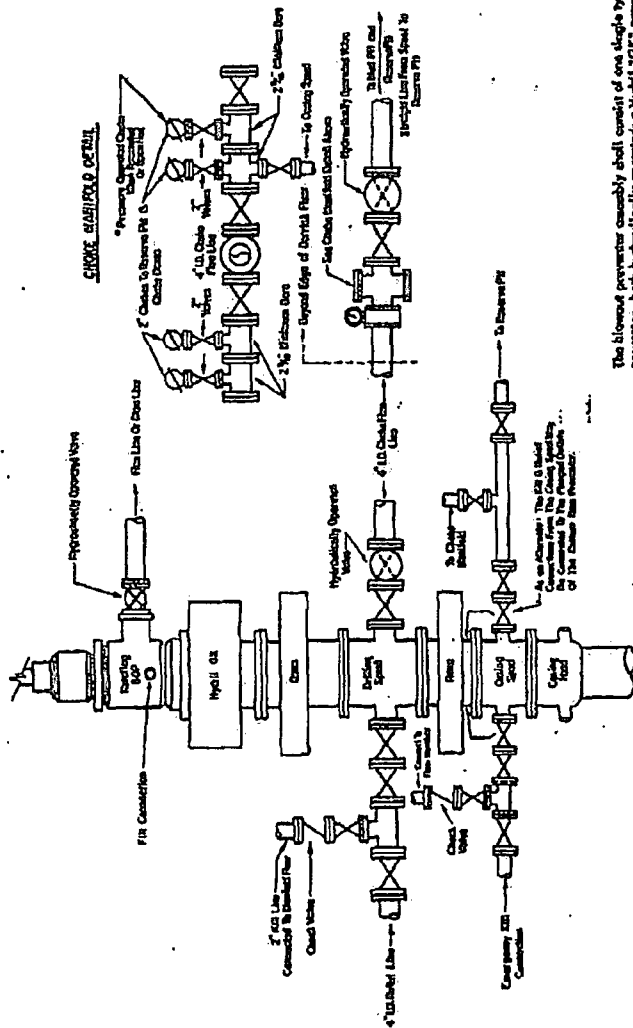
**ADDITIONS - DELETIONS - CHANGES
SPECIFY**

The blowout preventer assembly shall consist of one blind ram preventer and one pipe ram preventer, both hydraulically operated; a Shaffer Tool Works stripper valves; chokes and connectors, as illustrated. If a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to fit the preventers are to be available as needed. The ram preventer may be two singles or a double type. If correct in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and kill line. The substructure height shall be sufficient to install a rotating blowout preventer.

Minimum operating equipment for the preventer shall be as follows: (1) Pump (A), driven by a continuous source of power, capable of closing all the pressure-operated devices simultaneously within _____ seconds. The pump (A) is to be connected to a closed type hydraulic operating system. (2) When requested, accumulator with a precharge of nitrogen of not less than 750 PSI and connected so as to receive a fluid charge from the above pump (A). With the charging pump (A) shut down, the pressurized fluid volume stored in the accumulator must be sufficient to close all the pressure-operated devices simultaneously within _____ seconds; after closure, the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least _____ percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pump (A) or there shall be an additional pump (A) operated by separate power and equal in performance capabilities.

The closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided if a Hydril preventer is used. Gulf Logon No. 30 hydraulic oil, or equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valve connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

[illegible]

5000# PSI WORKING PRESSURE
BLOWOUT PREVENTER HOOK-UP

The blowout preventer assembly shall consist of one single type blowout preventer and one single type pipe ram preventer, both hydraulically operated, a hydraulic "Q" preventing a rotating blowout preventer rotary actuator and connections, as illustrated, if a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing runs to fit the preventers are to be available as needed. If correct in size, the flanged outlet of the ram preventer may be used for connecting to the 4-inch I.D. choke line and 4-inch I.D. relief line. Alternate when oil or gas drillers. All connecting connections are to be one-piece flanged.

[illegible]

Each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. When required, a second pressure release shall be available to limit operating fluid pressure to safe proportions. No operate this hydraulic equipment.

ed by metal slabs and adequately anchored. The choke flow line, relief line, and choke line shall be constructed to the choke manifold. If deemed necessary, walkways shall be erected in and around the choke manifold and drilling lines. The choke flow valves and well tie valves connected to the drilling stand and all are type. The valves shall be equipped with handwheels and shall be equipped with a locking device. All other valves are to be equipped with a locking device. The valves shall be equipped with a locking device. The valves shall be equipped with a locking device.

• To include detailed floor measured controls.