| °⊷ \ | | BBS OC | D | ATS- | -16 | 932 |
|--|---------------------------------------|---|----------------|---|--|-----------------------------|
| Form 3160-3 (March 2012) UNITED S | Hobbs HO | MAY 09 2016 | | OME | M APPROV 3 No. 1004-01 October 31, | 37 |
| DEPARTMENT OF BUREAU OF LANE | THE INTERIOR | SCEIVE | D | 5. Lease Serial No NMNM-90161 | | |
| APPLICATION FOR PERMI | T TO DRILL OF | REENTER | | 6. If Indian, Allote | e or Tribe | Name |
| la. Type of work: 🔽 DRILL | REENTER | | | 7. If Unit or CA Ag | | |
| Ib. Type of Well: Oil Well Gas Well Oth | er 🔽 Si | ngle Zone 🔲 Mult | ple Zone | 8. Lease Name and | i Well No. | 고 ARD UNIT # 2 각사 |
| 2. Name of Operator APACHE CORPORATION | 573) / | | | 9. API Well No. | 1322 | 3 (37346) |
| 3a. Address 303 VETERANS AIRPARK LN #1000 MIDLAND, TX 79705 | 3b. Phone No 432-818-1 | . (include area code) 167 | | 10. Field and Pool, o EUNICE;BLI-TU-I | - | |
| 4. Location of Well (Report location clearly and in accordance | e with any State Territor | enis en i | | 11. Sec., T. R. M. or | Blk. and Su | rvey or Area |
| At surface 1765' FSL & 1555 FWL At proposed prod. zone 1870' FSL & 1340' FWL | î V | | | UL: K SEC: 9 T | 21S R37 | Έ |
| 4. Distance in miles and direction from nearest town or post of APPROX 5 MILES NORTH OF EUNICE, NM | fice* | | | 12. County or Parish LEA | | 13. State NM |
| 5. Distance from proposed* location to nearest property or lease line, ft. | 16. No. of a 640 ACR | | | g Unit dedicated to this | s well | |
| (Also to nearest drig, unit line, if any) 8. Distance from proposed location* ~300' | 19. Proposed | 1 Depth | | BIA Bond No. on file | | |
| to nearest well, drilling, completed, applied for, on this lease, ft. | MD: 685 TVD: 68 | 50' | | -1463 NATIONWI | | 000736 |
| Elevations (Show whether DF, KDB, RT, GL, etc.) GL: 3506' | 22. Approxir | nate date work will state $A \leq A \approx$ | noved | 23. Estimated durati~ 8 DAYS | on | |
| he following, completed in accordance with the requirements o . Well plat certified by a registered surveyor. 2 A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest SUPO must be filed with the appropriate Forest Service Off | System Lands, the | Bond to cover t Item 20 above). Operator certifi | he operation | s form: ns unless covered by a rmation and/or plans a | - | |
| 5. Signature Soria R. Ho | | (Printed/Typed) NA L. FLORES | <u> </u> | | Date 3 | 121116 |
| SUPV OF DRILLING SERVICES | | | | | | |
| pproved by (Signature) /s/Cody Layton | Name | (Printed/Typed) | | | | 2 0 2016 |
| FIELD MANAGER | Office | LM-CARL | SBAD | FIELD OFFI | CE | |
| pplication approval does not warrant or certify that the applic onduct operations the onditions of approvement of the second sec | ant holds legal or equit | able title to those righ | ts in the subj | ect lease which would | entitle the a | pplicant to |
| itle 18 U.S.C. Section tates any false, fictit | eval be | rson knowingly and vithin its jurisdiction. | villfully to m | ake to any department | or agency of | of the United |
| Continued on | · · · · · · · · · · · · · · · · · · · | | | *(Inst | tructions | on page 2) |
| APPROVAL SUBJECT TO GENERAL REQUIREMENTS AN SPECIAL STIPULATIONS ATTACHED | | | NS O | FOR FAPPROV | AL | |
| Witness Surface Casing | I | 0 | | trolled Water E | Basin | |

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HOBBS OCD

MAY 09 2016

1. Geologic Formations

| TVD of target | 6850' | Pilot hole depth | N/A | RECEIV |
|---------------|-------|-------------------------------|-----|-------------|
| MD at TD: | 6855' | Deepest expected fresh water: | 65' | لان المناقب |

Back Reef

| Formation | Depth (TVD) | Water/Mineral Bearing/ Target | Hazards* | | |
|--------------------|-------------|-------------------------------|----------------------------|--|--|
| <u> </u> | from KB | Zone? | | | |
| Quaternary Aeolian | Surface . | Water | | | |
| Rustler | 1369' | Water | | | |
| Salado | 1518' | Salt | | | |
| Tansil | 2572' | Barren | | | |
| Yates | 2708' | Oil, Gas, Water | | | |
| Seven Rivers | 2927' | Oil, Gas, Water | | | |
| Queen | 3458' | Oil, Gas, Water | Loss circ | | |
| Grayburg | 3816' | Oil, Gas, Water | Loss circ | | |
| San Andres | 4158' | Oil, Gas, Water | Loss circ | | |
| Glorieta | 5202' | Oil, Gas, Water | | | |
| Paddock | 5272' | Oil | | | |
| Blinebry | 5689' | Oil | Target Zone | | |
| Tubb | 6174' | Oil | Target Zone | | |
| Drinkard | 6482' | Oil | Target Zone Target Zone | | |
| ABO | 6741' | Oil | | | |
| TD | 6855' | Target Zone | | | |

*H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

| Hole | Casi | ng Interval | Csg. Size | Weight | Grade | Conn. | SF | SF Burst | SF |
|--------|------------|-------------|-----------|--------|------------|-------------|----------|----------|--------------------|
| Size | From | То | | (lbs) | | | Collapse | : | Tension |
| 11" | 0 | 1400' | 8-5/8" | 24 | J55 | STC | 3.41 | 1.95 | 1.8 |
| 7-7/8" | 0 | 6855' | 5-1/2" | 17 | L80 | LTC | 1.74 | 1.93 | 1.8 |
| | - <u>L</u> | | | BLM | Minimum Sa | fety Factor | 1.125 | 1 | 1.6 Dry 1.8 Wet |

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Must have table for contingency casing

| | Y or N |
|--|--------|
| Is casing new? If used, attach certification as required in Onshore Order #1 | Y |
| Does casing meet API specifications? If no, attach casing specification sheet. | Y |
| Is premium or uncommon casing planned? If yes attach casing specification sheet. | N |
| Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria). | Y |
| Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing? | N/A |
| | |
| Is well located within Capitan Reef? | N |
| If yes, does production casing cement tie back a minimum of 50' above the Reef? | |
| Is well within the designated 4 string boundary. | |
| Is well located in SOPA but not in R-111-P? | N |

| If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back | |
|---|---------------------------------------|
| 500' into previous casing? | |
| | |
| Is well located in R-111-P and SOPA? | N |
| If yes, are the first three strings cemented to surface? | |
| Is 2 nd string set 100' to 600' below the base of salt? | |
| | |
| Is well located in high Cave/Karst? | N |
| If yes, are there two strings cemented to surface? | |
| (For 2 string wells) If yes, is there a contingency casing if lost circulation occurs? | |
| | · · · · · · · · · · · · · · · · · · · |
| Is well located in critical Cave/Karst? | N |
| If yes, are there three strings cemented to surface? | |

3. Cementing Program

| Casing | # Sks | Wt. lb/ gal | Yld ft3/ sack | H20 gal/sk | 500# Comp. Strength (hours) | Slurry Description |
|--------|-------|---------------------------------------|---------------------|---------------|--------------------------------------|--|
| Surf. | 250 | 13.5 | 1.75 | 9.13 | 9 | Lead: Cl C + 4% Bentonite + 1% CaCL2 + 0.25# CF (12hr: 677psi, 24hr: 1093psi) |
| | 200 | 14.8 | 1.34 | 6.34 | 5 | Tail: Cl C + 2% CaCL2 + 0.25# <i>CF (12hr: 1121psi, 24hr: 1795psi)</i> |
| Prod. | 600 | 12.6 | 1.95 | 10.65 | 9 | Lead: Cl C 35/65 + 6% Bentonite + 0.1% R-20 + 0.25# CF + 3% Salt (12hr-677psi, 24hr-1093psi) |
| | | · · · · · · · · · · · · · · · · · · · | | | DV/E | CP Tool : N/A |
| | 300 | 14.2 | 1.28 | 5.81 | 5 | Tail: Cl C 50:50 + 2% Bentonite + 0.4% Fl-12 + 0.1% R- 20 + 0.25# CF + 3% Salt (12hr-1121psi, 24hr-1795psi) |

**If DVT used: DV tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

*****PRODUCTION CMT CONTINGENCY IF WATER FLOWS ENCOUNTERED******

| Casing | # Sks | Wt. lb/ gal | Yld ft3/ sack | H20 gal/sk | 500# Comp. Strength (hours) | Slurry Description |
|-------------------------------|-------|----------------|---------------------|---------------|--------------------------------------|--|
| Prod 1 st Stage | 200 | 12.6 | 1.95 | 10.65 | 8.5 | Lead: Cl C 35/65 + 6% Bentonite + 0.1% R-20 + 0.25# CF + 3% Salt (12hr-671psi, 24hr-979psi) |
| | 300 | 14.2 | 1.28 | 5.81 | 8.5 | Tail: Cl C 50/50 + 2% Bentonite + 0.4% FL-12 + 0.1% R- 20 + 0.25# CF + 3% Salt (12hr-910psi, 24hr-16985psi) |
| 1 | | | | 1 | DV/EC | CP Tool : 4300' |
| Prod 2 nd Stage | 415 | 12.6 | 1.95 | 10.65 | 8.5 | Lead: Cl C 35/65 + 6% Bentonite + 0.1% R-20 + 0.25# CF + 3% Salt (12hr-671psi, 24hr-979psi) |
| ′ | 100 | 14.8 | 1.33 | 6.32 | 6.5 | Tail: Cl C (12hr-1281psi, 24hr-1951psi) |

| 1 du 1 | Prod 2 nd Stage | 415 | 12.6 | 1.95 | 10.65 | 8.5 | | C 35/65 + 6% Bentonite + 0.1% R-20 + 0.7 (12hr-671psi, 24hr-979psi) |
|--------------------|-------------------------------|-----|------|------|-------|-----|------------|--|
| MEN | | 100 | 14.8 | 1.33 | 6.32 | 6.5 | Tail: Cl C | c (12hr-1281psi, 24hr-1951psi) |
| CC. | | _ | | - | | | | |
| SEL | Casing Str | ing | | | TQC | | · · · · | % Excess |
| rof | Surface | | | | 0' | | | 100% |
| $\dot{\mathbf{U}}$ | Production | 1 | | | 0' | • | | 30% |
| | | | | | | | | |

Include Pilot Hole Cementing specs: Pilot hole depth: N/A KOP: N/A

| Plug | Plug | % | No. | Wt. | Yld | Water | Slurry Description and |
|------|--------|--------|-------|--------|----------|--------|------------------------|
| top | Bottom | Excess | Sacks | lb/gal | ft3/sack | gal/sk | Cement Type |
| | | | | | | | |

4. Pressure Control Equipment

N/A | A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

| BOP installed and tested before drilling which hole? | Size? | Min. Required WP | Туре | | Tested to: |
|---|-------|------------------------|------------|---|-------------------------|
| | | | Annular | x | 50% of working pressure |
| | 11" | 3M | Blind Ram | x | |
| 7-7/8" | | | Pipe Ram | x | 3M |
| | | | Double Ram | | 5171 |
| | | | Other* | | |

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low & the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional & tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock & floor safety valve (inside BOP) & choke lines and choke manifold. See attached schematics.

| | On Exp integrity | on integrity test will be performed per Onshore Order #2. loratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure y test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil & Gas 2 III.B.1.i. | | | | | |
|----|--|---|--|--|--|--|--|
| NO | A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs & hydrostatic test chart. Y /N Are anchors required by manufacturer? NO | | | | | | |
| NO | A multi surface | bowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test is broken the system must be tested. <i>Provide description here</i> | | | | | |
| | See atta | ched schematic. | | | | | |

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5. Mud Program

| | Depth | Туре | Weight (ppg) | Viscosity | Water Loss |
|-----------|------------|---------|--------------|-----------|------------|
| From | То |] · · · | · · · · · | | |
| 0 | Surf. shoe | FW | 8.7 - 9.1 | 32-34 | N/C |
| Surf shoe | TD | Brine | 9.8 - 10.2 | 32-34 | N/C |

Sufficient mud materials to maintain mud properties & meet minimum lost circulation & weight increase requirements will be kept on location at all times.

| VV VI | | . 1 1 | | PVT/Pason/Visual Monitoring | |
|----------------|---------------|-----------------|-------------------|--------------------------------|--|
| What will be a | upod to monit | ow the lease of | n again of thindy | 1 DV/T/Docon/Vieuol Monitoring | |
| | | | | | |
| | | | | | |
| | | | | | |

6. Logging and Testing Procedures

| Loggi | ing, Coring and Testing. |
|-------|---|
| X | Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in |
| | the Completion Report and submitted to the BLM. |
| | No Logs are planned based on well control or offset log information. |
| | Drill stem test? If yes, explain |
| | Coring? If yes, explain |

| Additional logs planned | | Interval | |
|-------------------------|-------------|-------------------|--|
| X | Resistivity | Surf. shoe to TD | |
| Х | Density | Surf. shoe to TD | |
| Х | CBL | Production casing | |
| | Mud log | | |
| | PEX | | |



7. Drilling Conditions

| Condition | Specify what type and where? |
|----------------------------|------------------------------|
| BH Pressure at deepest TVD | 3016 psi |
| Abnormal Temperature | NO |

Mitigation measure for abnormal conditions. Describe: Lost circulation material/sweeps/mud scavengers.

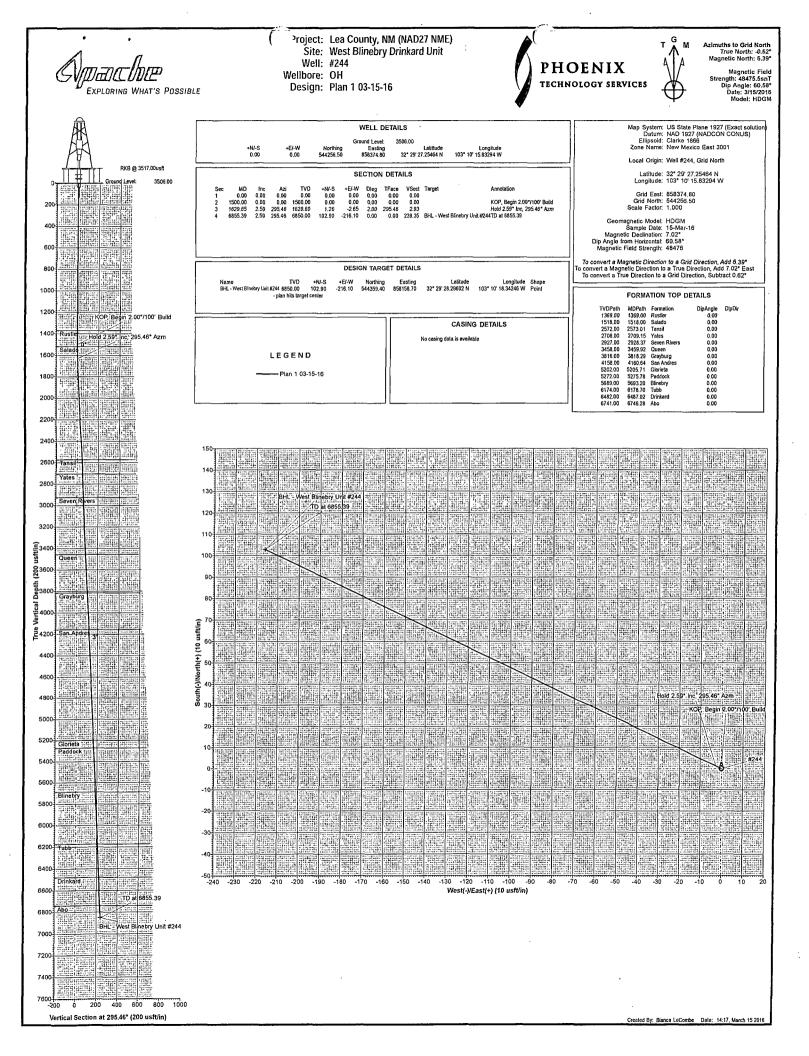
Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

X H2S is present H2S Plan attached

8. Other facets of operation

Is this a walking operation? If yes, describe. N/A Will be pre-setting casing? If yes, describe. N/A

Attachments <u>Y</u> Directional Plan N/A Other



UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT Carlsbad Field Office 620 E. Greene Street Carlsbad, NM 88220

HOBBS OCD

MAY 092016

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

| Operator Name: | APACHE CORPORATION |
|----------------|--------------------|
| | |

Street or Box: 303 VETERANS AIRPARK LANE, STE. 1000

City, State: <u>Midland, TX</u> Zip Code: **79705**

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No: NMNM-90161 / WEST BLINEBRY DRINKARD UNIT #244

Legal Description of Land: SHL: 1765' FSL & 1555' FWL BHL: 1870' FSL & 1340' FWL Section: _9_____ Township: _21S_____ Range: _37E____

County: LEA State: NM

Bond Coverage: \$150,000

3/21/16

Statewide Oil and Gas Surety Bond, APACHE CORPORATION.

BLM Bond File No.: ______BLM-CO-1463 NATIONWIDE / NMB000736_____

| Signature: | Lolby & Smith | Printed Name: | BOBBY L. SMITH |
|-----------------|------------------------------|---------------|----------------|
| | 7 | | |
| Title: <u>D</u> | RILLING MANAGER, PERMIAN REC | GION | • |

.

Date:

Ńr

Apache Corporation Responsibility Letter

PRIVATE SURFACE OWNER AGREEMENT

HOBBS OCD

MAY 09 2016

| OPERATOR:APACHE CORPORATION | RECEIVED |
|--|----------|
| WELL NAME: WEST BLINEBRY DRINKARD UNIT #244 | |
| SECTION <mark>: 9</mark> TOWNSHIP <u>: 21S</u> RANGE: 37E | - • |
| LOCATION: <u>1765' FSL & 1555' FWL</u> COUNTY: <u>LEA</u> STATE: <u>NM</u> | |
| LEASE NUMBER: NMNM-90161 | |

STATEMENT OF SURFACE USE

The surface to the subject land is owned by <u>Millard Deck Estate, c/o Bank of America NA,</u> <u>Trustee of Millard Deck Testamentary Trust under Last Will & Testament of Millard Deck,</u> <u>ATTN: Jeff Petter, Asst VP, US Trust-Farm & Ranch, Bank of America Private Wealth Mgmt,</u> PO Box 270, Midland, TX 79702 (303 W. Wall St, Midland, TX 79701) 432-688-7926

The surface owner has been contacted regarding the drilling of the subject well, and an agreement for surface use has been negotiated.

CERTIFICATION: I hereby certify that the statements made in this statement are to the best of my knowledge, true and correct.

| NAME: | JOHN VACEK | |
|---------|-------------------|--|
| SIGNATU | RE: John Keak | |
| DATE: | 3/21/2016 | |
| TITLE: | DRILLING ENGINEER | |

To expedite your Application to Drill please fax the completed form to the Bureau of Land Management (575) 234-5927 or (575) 885-9264 Attn: Legal Instruments Examiner 620 E. Green Street Carlsbad, NM 88220

The original document with signature should be mailed as soon as possible.

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