

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

HOBBS OCD

MAY 12 2015

RECEIVED

ATS-14-1028

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMLC-031741A	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name [V]	
2. Name of Operator APACHE CORPORATION (873)		7. If Unit or CA Agreement, Name and No.	
3a. Address 303 VETERANS AIRPARK LN #1000 MIDLAND, TX 79705		8. Lease Name and Well No. HAWK A #39 <24426>	
3b. Phone No. (include area code) 432-818-1167		9. API Well No. 30-025- 42552	
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 415' FNL & 2075' FEL (B) At proposed prod. zone SAME		10. Field and Pool, or Exploratory (62700) Wantz; ABO (67200)	
11. Sec., T. R. M. or Blk. and Survey or Area UL: B SEC: 8 T21S R37E		12. County or Parish LEA	
13. State NM		14. Distance in miles and direction from nearest town or post office* APPROX 3.5 MILES NORTH OF EUINCE, NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 415'	16. No. of acres in lease 320 ACRES	17. Spacing Unit dedicated to this well 40 ACRES	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. ~ 250'	19. Proposed Depth 7600'	20. BLM/BIA Bond No. on file BLM-CO-1463 NATIONWIDE / NMB000736	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL: 3513'	22. Approximate date work will start* As Soon As Approved	23. Estimated duration ~ 10 DAYS	
24. Attachments			

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature Sorina L. Flores	Name (Printed/Typed) SORINA L. FLORES	Date 3/31/14
Title SUPV OF DRILLING SERVICES		
Approved by (Signature) Steve Caffey	Name (Printed/Typed)	Date MAY - 6 2015
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval 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.

Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

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.

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

MAY 12 2015

DRILLING PLAN: BLM COMPLIANCE
(Supplement to BLM 3160-3)

HOBBS OCD

APACHE CORPORATION (OGRID: 873) HAWK A #39

Lease #: NMLC-031741A Projected TD: 7600' GL: 3513'
415' FNL & 2075' FEL UL: B Sec: 8 T21S R37E LEA COUNTY, NM

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RECEIVED

1. GEOLOGIC NAME OF SURFACE FORMATION: Quaternary Aeolian Deposits
2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Quaternary Aeolian	Surface	San Andres	4099'
Rustler	1321'	Glorieta	5230'
Top of Salt	1396'	Blinebry	5753'
Base of Salt/Tansill	2565'	Tubb	6239'
Yates	2698'	Drinkard	6586'
Queen	3504'	ABO	6862'
Grayburg	3789'	TD	7600'

Depth to Ground Water: ~ 65'

All fresh water & prospectively valuable minerals, as described by BLM, encountered during drilling, will be recorded by depth & adequately protected. All oil & gas shows within zones of correlative rights will be tested to determine commercial potential.

CASING PROGRAM: All casing is new & API approved

See
COA

HOLE SIZE	DEPTH	OD CSG	WEIGHT	COLLAR	GRADE	COLLAPSE	BURST	TENSION
11"	0' - 1365'	8-5/8"	24#	STC	J-55	1.0	1.21	1.8
7-7/8"	0' - 7600'	5-1/2"	17#	LTC	L-80	1.0	1.21	1.8

3. CEMENT PROGRAM:

A. 8-5/8" Surface (100% excess cmt to surf):

Lead: 330 sx Cl C w/ 2% CaCL2 + 0.13# CF + 3# LCM1 _ 0.005 gps FP-6L + 4% Bentonite
(13.5 wt, 1.75 yld, 8.962 gal/sx) Comp Strengths: **12 hr – 500 psi 24 hr – 782 psi**

Tail: 200 sx Cl C w/1% CaCL@ + 0.13# CF + 0.005 gps FP-6L
(14.8 wt, 1.34 yld, 6.302 gal/sx) Comp Strengths: **12 hr – 755psi 24hr – 1347psi**

B. 5-1/2" Production (Cmt to surf / 30 % excess cmt):

Lead: 620 sx (35:65) Poz Cl C w/ 5% CaCL2 + 0.125 # CF + 3# LCM1 + 0.5% FL52 + 0.005 gps FP6L + 6% Bentonite,
0.3% Sodium Metasilicate (12.6 wt, 2.07 yld, 10.995 gal/sx) Comp Strengths: **12 hr – 580 psi 24 hr – 1072 psi**

Tail: 380 sx (50:50) Poz Cl C w/ 5% CaCL2 + 0.13% CF + 3# LCM1 + 0.005gps FP6L + 2% Bentonite + 1% FL25 + 1%
BA58 + 0.1% Sodium Metasilicate
(14.2 wt, 1.37 yld, 5.971 gal/sx) Comp Strengths: **12 hr – 1130 psi 24 hr – 1633 psi**

**** The above cmt volumes could be revised pending caliper measurement from open hole logs. For Surface csg: If cmt does not circ to surface, the appropriate BLM office shall be notified, TOC shall be determined by running a temperature log, operator will propose a remediation method & request BLM approval.**

Apache must test 3M to 3,000psi

4. PROPOSED CONTROL EQUIPMENT

See COA

"EXHIBIT 3" shows an 11" 3M psi WP BOP consisting of an annular bag type preventer, middle pipe rams, bottom blind rams. The BOP will be nipped up on the 8-5/8" surface csg head & tested to 2000psi using test plug & utilized continuously until TD is reached. The BOP will be tested at 2000psi, maximum surface pressure is not expected to exceed 2M psi, BHP is calculated to be approximately 3344 psi. *All BOP's and associated equipment will be tested as per BLM *Drilling Operations Order #2*. The BOP will be operated and checked each 24 hr period & the blind rams will be operated & checked when the drill pipe is out of the hole. Function tests will be documented on the daily driller's log. "EXHIBIT 5" also shows a 3M psi choke manifold with a 3" panic line. Full opening stabbing valve & Kelly cock will be on derrick floor in case of need. No abnormal pressures or temperatures are expected in this well. No nearby wells have encountered any problems.

5. PROPOSED MUD CIRCULATION SYSTEM: (Closed Loop System)

See COA

INTERVAL	MW (ppg)	VISC (sec/qt)	FLUID LOSS (cc)	MUD TYPE
0' - 1365'	8.3 - 8.8	28 - 32	NC	Fresh Water
1365' - 7600'	9.8 - 10.2	28 - 32	NC	Brine

**** Visual mud monitoring equipment shall be in place to detect volume changes. A mud test shall be performed every 24 hrs after mudding up to determine, as applicable: density, visc, gel strength, filtration, and pH. The necessary mud products for weight addition & fluid loss control will be on location at all times. In order to run open hole logs & casing, the above mud properties may have to be altered to meet these needs.**

6. AUXILIARY WELL CONTROL EQUIPMENT / MONITORING EQUIPMENT:

11" x 3000 psi Double BOP/Blind & pipe ram (3M BOP/BOPE to be used as 2M system)
4-1/2" x 3000 psi Kelly valve
11" x 3000 psi mud cross - H2S detector on production hole
Gate-type safety valve - 3" choke line from BOP to manifold
2" adjustable chokes - 3" blow down line
Fill up line as per Onshore Order 2

7. LOGGING, CORING & TESTING PROGRAM:

- OH logs: Dual Laterolog, MSFL, CNL, Litho-Density, Gamma Ray, Caliper from TD back to 8-5/8" csg shoe.
- Run CNL, Gamma Ray from 8-5/8" csg shoe back to surface.
- No cores, DST's or mud logger are planned at this time.
- Additional testing will be initiated subsequent to setting the 5-1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows & drill stem tests.

8. POTENTIAL HAZARDS:

See COA

No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, however, the proposed mud program will be modified to increase the mud-weight. There is known presence of H₂S in this area. If H₂S is encountered the operator will comply with the provisions of *Onshore Oil & Gas Order No. 6*. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP: 3344 psi and estimated BHT: 115°.

9. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

Road and location construction will begin after BLM has approved APD. Anticipated spud date will be as soon after BLM approval and as soon as rig will be available. Move in operations and drilling is expected to take approx 10 days. If production casing is run then an additional 90 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

10. OTHER FACETS OF OPERATION:

After running csg, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Wantz; ABO formation will be perforated and stimulated in order to establish production. The well will be tested & potentialized as an oil well.

APACHE BOP AND CHOKE MANIFOLD SCHEMATIC
Hawk A #39
11" 3M PSI BOP (to be tested as a 2M) must test to 3,000 psi
EXHIBIT #3

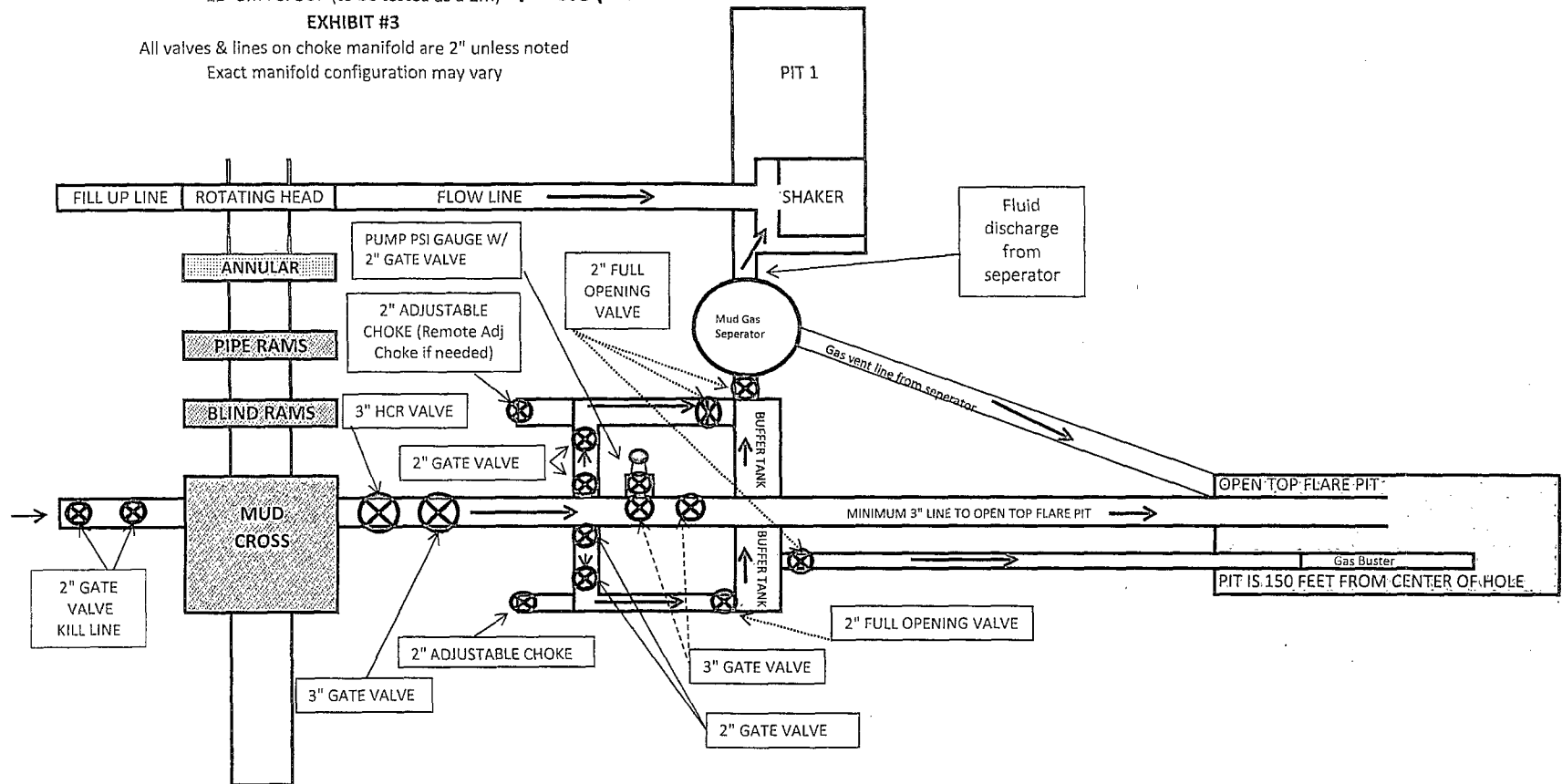
Hawk A #39

1.1" 3M PSI BOP (to be tested as a 2M)

EXHIBIT #3

All valves & lines on choke manifold are 2" unless noted

Exact manifold configuration may vary



*** If H2S is encountered in quantities greater than 100ppm, Apache will shut in well & install a remote operated choke ***



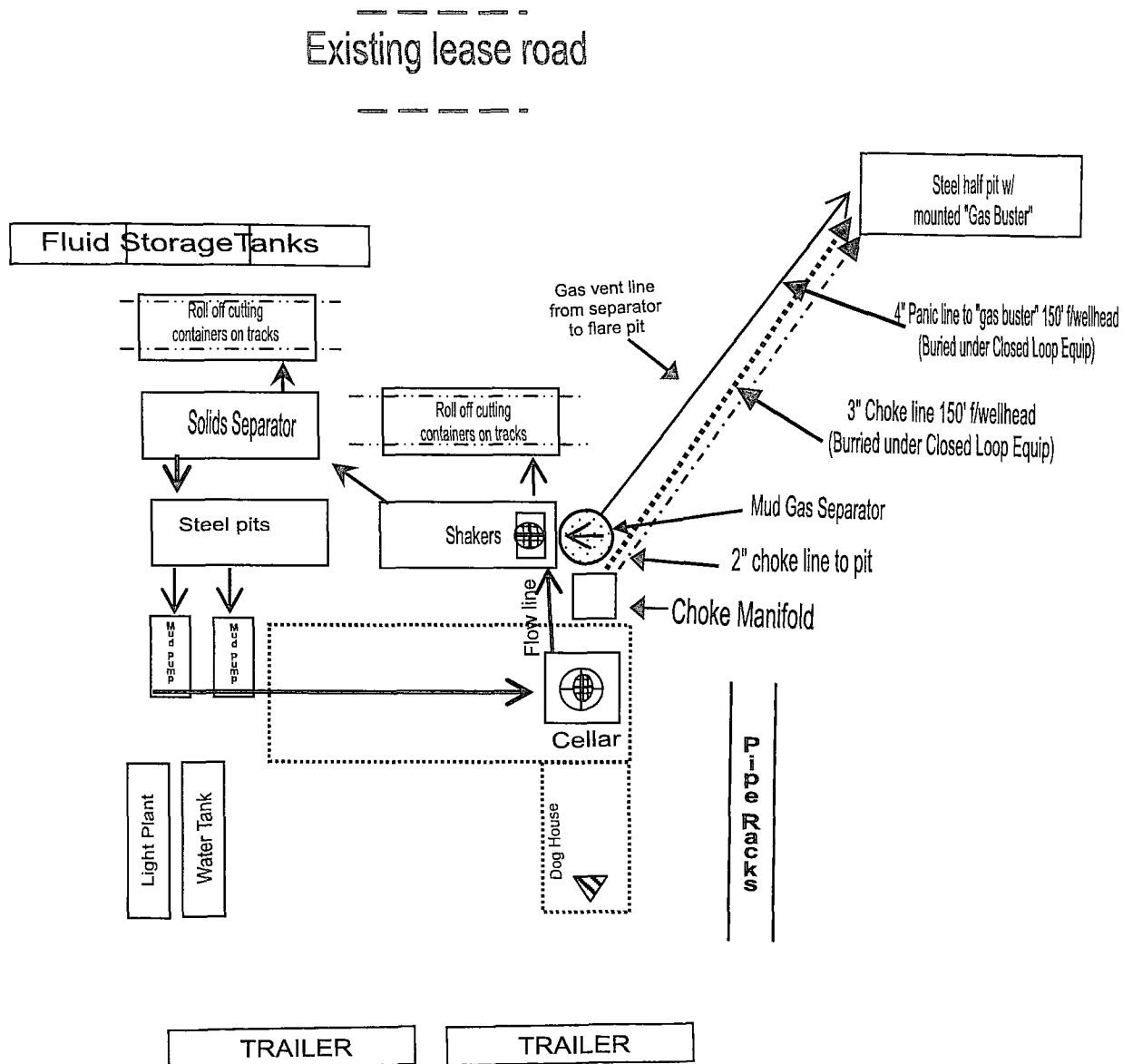
Closed Loop Equipment Diagram

Exhibit 4

HAWK A #39



Existing lease road

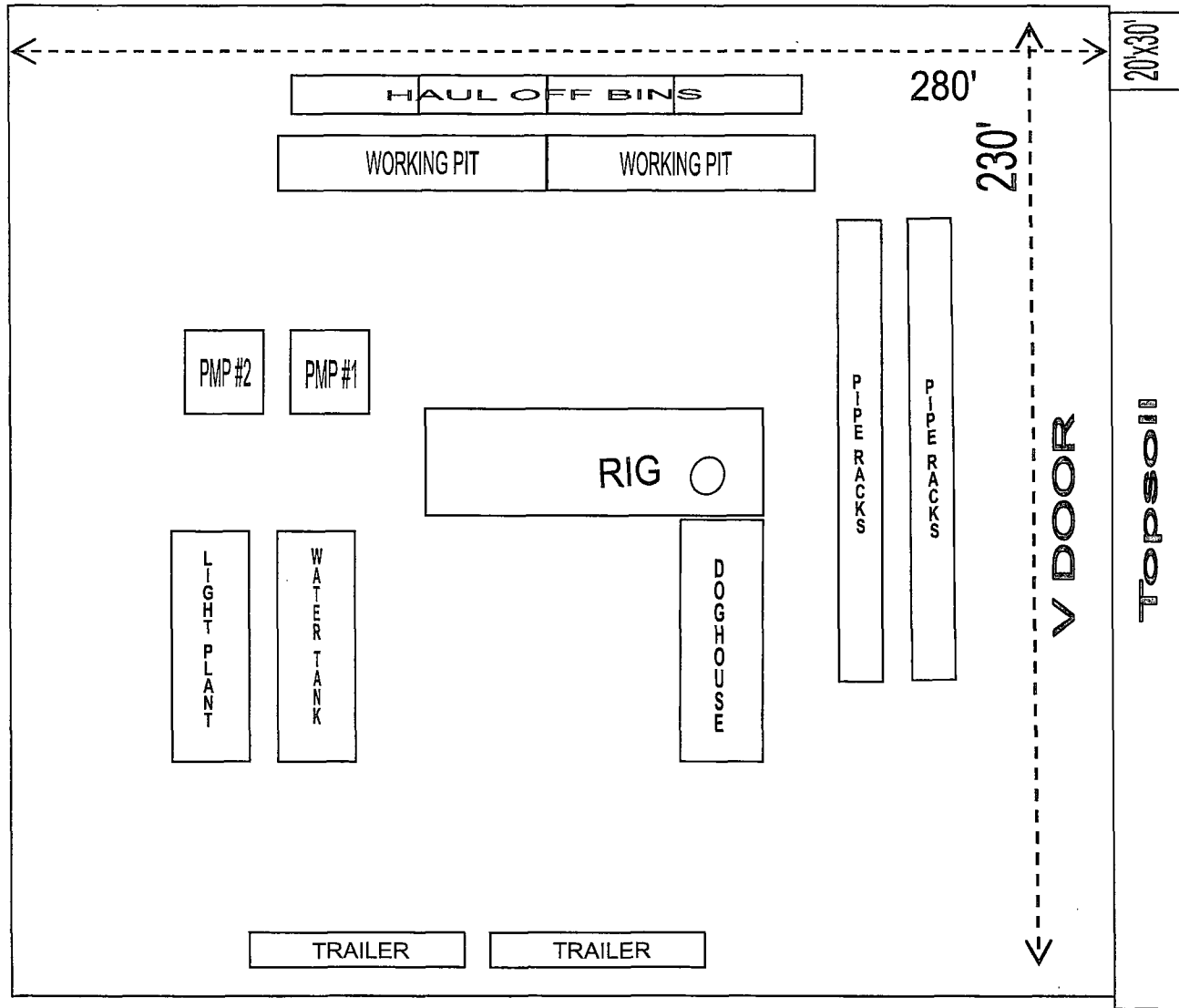
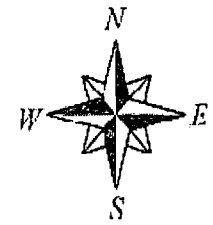


RIG ORIENTATION & LAYOUT

HAWK A #39

EXHIBIT 5

Existing lease
road



Existing lease
road

PRIVATE SURFACE OWNER AGREEMENT

OPERATOR: APACHE CORPORATION

WELL NAME: HAWK A #39

UL: B SECTION: 8 TOWNSHIP: 21S RANGE: 37E

LOCATION: 415' FNL & 2075' FEL COUNTY: LEA STATE: NM

LEASE NUMBER: NMLC-0031741A

STATEMENT OF SURFACE USE

The surface to the subject land is owned by Millard Deck Estate, c/o Bank of America NA, Trustee of Millard Deck Testamentary Trust under Last Will & Testament of Millard Deck, ATTN: Jeff Petter, Asst VP, US Trust-Farm & Ranch, Bank of America Private Wealth Mgmt, 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: MAXWELL GROVE

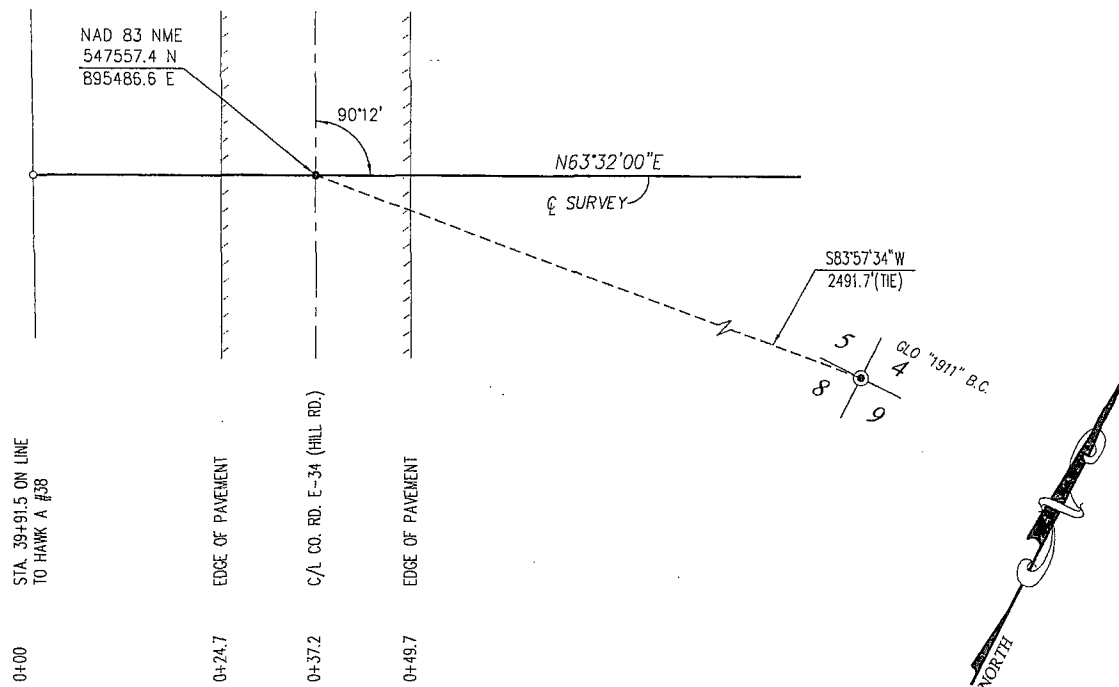
SIGNATURE: 

DATE: 02/12/2014

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

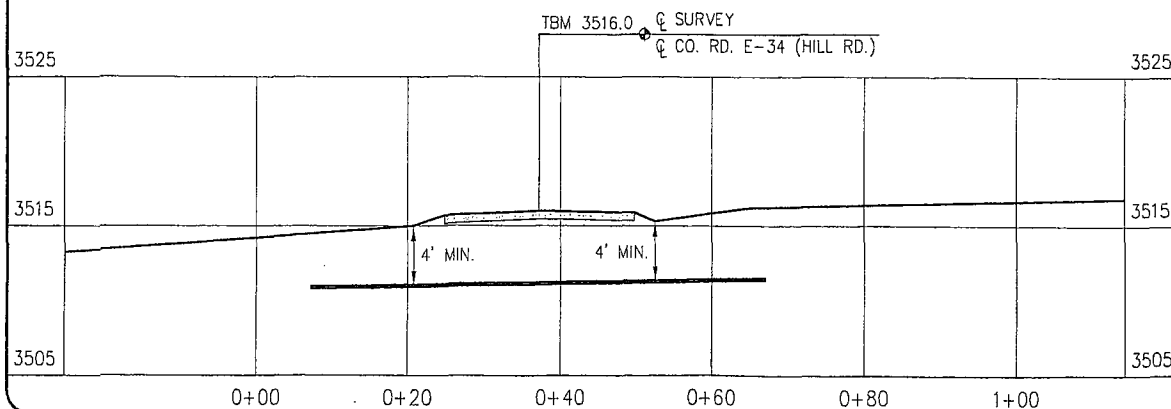
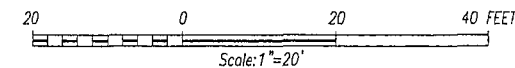
The original document with signature should be mailed as soon as possible.



CASING
OR HEAVY
WALL PIPE

CONTENTS:
MATERIAL:
OUTSIDE DIA:
GRADE & SPEC:
WALL THICKNESS:

NOTE:
BEARINGS AND COORDINATE VALUES SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE", NORTH AMERICAN DATUM OF 1983. DISTANCES ARE SURFACE VALUES. ELEVATIONS ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM 1988 (GEOID 2003).



APACHE CORPORATION

PIPELINE CROSSING UNDER LEA CO. RD. E-34
(HILL ROAD) IN SECTION 8,
TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz

SCALE:
HORZ. - 1" = 20'
VERT. - 1" = 10'

Drawn By: BKL
Date: 1/10/14

W.O. No.: 13111402