

HOBBS OCD

Form 3160-3
(March 2012)

OCD Hobbs SEP 29 2014

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

5. Lease Serial No.
NMNM-42057 125057

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No. **<24428>**
LOCKHART B 12 #14 < 24428 >

9. API Well No.
30-025- 42152

10. Field and Pool, or Exploratory
Blinberg 049 < 66660 >; Drinkard < 19190 >
Tubb 049 < 60240 >; Wante; RSO < 62700 >

11. Sec., T. R. M. or Blk. and Survey or Area

UL: B SEC: 12 T21S R37E

12. County or Parish
LEA

13. State
NM

1a. Type of work: DRILL REENTER

1b. Type of Well: Oil Well Gas Well Other
 Single Zone Multiple Zone

2. Name of Operator APACHE CORPORATION **<873>**

3a. Address 303 VETERANS AIRPARK LN #1000
MIDLAND, TX 79705

3b. Phone No. (include area code)
432-818-1167

4. Location of Well (Report location clearly and in accordance with any State requirements.)*
At surface 660' FNL & 1905' FEL
At proposed prod. zone SAME

14. Distance in miles and direction from nearest town or post office*
APPROX 4 MILES NORTHEAST OF EUNICE, NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
660'

16. No. of acres in lease
1200 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.
~ 135'

19. Proposed Depth
7700'

20. BLM/BIA Bond No. on file
BLM-CO-1463 NATIONWIDE / NMB000736

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
GL: 3508'

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.
- 2. A Drilling Plan.
- 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).
- 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- 5. Operator certification
- 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 12/17/13

Title
SUPV OF DRILLING SERVICES

Approved by (Signature) **Steve Caffey** Name (Printed/Typed) Date **SEP 23 2014**

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)

Ganitan Controlled Water Basin

*Kz
09/29/14*

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

SEP 30 2014

PRIVATE SURFACE OWNER AGREEMENT

HOBBS OCD

SEP 29 2014

OPERATOR: APACHE CORPORATION

RECEIVED

WELL NAME: LOCKHART B 12 #14

UL: B SECTION: 12 TOWNSHIP: 21S RANGE: 37E

LOCATION: 660' FNL & 1905' FEL COUNTY: LEA STATE: NM

LEASE NUMBER: NMNM - 0557256

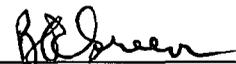
STATEMENT OF SURFACE USE

The surface to the subject land is owned by MC NEILL RANCH ATTN: PAIGE MC NEILL
PO BOX 1092, HOBBS, NM 88241
575-390-2870

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: BARRY GREEN

SIGNATURE: 

DATE: 12/13/2013

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.



Lockhart B 12 #14, #15, #16

Flores, Sorina <Sorina.Flores@apachecorp.com>
 To: "jamason@blm.gov" <jamason@blm.gov>

Wed, Jun 18, 2014 at 2:57 PM

Jennifer.. just for paperwork.. per Max Grove, engineer... the csg program should be as follows for the Lockhart B 12 #14, #15, #16.

APACHE CORPORATION (OGRID: 873) LOCHART B 12 #14
 Lease #: NMNM-125057 Projected TD: 7700' GL: 3508'
 660' FNL & 1905' FEL UL: B SEC: 12 T215 R37E LEA COUNTY, NM

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 | Surf | San Andres | 4238' |
| Rustler | 1520' | Glorieta | 5426' |
| Top of Salt | 1601' | Blinberry | 5810' (Oil) |
| Base of Salt/Tansill | 2655' | Jubb | 6269' (Oil) |
| Yates | 2798' | Drinkard | 6721' (Oil) |
| Queen | 3630' | ABO | 6599' (Oil) |
| Grayburg | 3975' | TD | 7700' |
| 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.

3. CASING PROGRAM: All casing is new & API approved

| HOLE SIZE | DEPTH | OD CSG | WEIGHT | COLLAR | GRADE | COLLAPSE | BURST | TENSION |
|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|------------------|----------------|----------------|
| 11" | 0' - 1550' | 8-5/8" | 24# | STC | J-55 | 1.125 | 1.0 | 1.8 |
| 7-7/8" | 0' - 7700' | 5-1/2" | 17# | LTC | L-80 | 1.125 | 1.0 | 1.8 |
| 7-7/8" | 1000' - 7700' | 5-1/2" | 17# | LTC | J-55 | 1.125 | 1.0 | 1.8 |

SORINA L. FLORES

SUPV OF DRILLING SERVICES

Permian Drilling

direct 432-818-1167 | fax 432-818-1981 | office 4116A

sorina.flores@apachecorp.com

APACHE CORPORATION

303 Veterans Airport Ln. Suite 1000

Midland, Texas 79705
 USA

ApacheCorp.com | LinkedIn | Facebook | Twitter | StockTwits | YouTube

*** Things may come to those who wait, but only what's left behind by those that hustle** -Abraham Lincoln*

HOBBS OCD

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

SEP 29 2014

APACHE CORPORATION (OGRID: 873) LOCHART B 12 #14
Lease #: NMLC-032096B Projected TD: 7700' GL: 3508'
660' FNL & 1905' FEL UL: B SEC: 12 T21S R37E LEA COUNTY, NM

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 | Surf | San Andres | 4238' |
| Rustler | 1520' | Glorieta | 5426' |
| Salt Top | 1601' | Blinebry | 5810' (Oil) |
| Salt Bottom | 2655' | Tubb | 6269' (Oil) |
| Yates | 2798' | Drinkard | 6721' (Oil) |
| Queen | 3630' | ABO | 6599' (Oil) |
| Grayburg | 3975' | TD | 7700' |

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.

- 3. CASING PROGRAM: All casing is new & API approved

See COA

| HOLE SIZE | DEPTH | OD CSG | WEIGHT | COLLAR | GRADE | COLLAPSE | BURST | TENSION |
|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|------------------|----------------|----------------|
| 11" | 0' - 1520' | 8-5/8" | 24# | STC | J-55 | 1.125 | 1.0 | 1.8 |
| 7-7/8" | 0' - 1000' | 5-1/2" | 17# | LTC | L-80 | 1.125 | 1.0 | 1.8 |
| 7-7/8" | 1000' - 7700' | 5-1/2" | 17# | LTC | J-55 | 1.125 | 1.0 | 1.8 |

- 4. CEMENT PROGRAM:

per Spring Flores 6/18/14

A. 8-5/8" Surface, cmt with (100% excess cmt; Cmt to Surf):

Lead: 340 sx Class C w/ 2% CaCl2, 4% Bentonite (13.5 ppg, 1.75 yld)
Comp Strengths : 12 hr - 755 psi 24 hr - 1347 psi

Tail: 180 sx Class C w/ 1% CaCl2, 0.13 # CF, 0.005 gps FP-6L (14.8 ppg, 1.34 yld)
Comp Strengths : 12 hr - 500 psi 24 hr - 782 psi

B. 5-1/2" Production, cmt with (50% excess cmt; cmt to surf):

Lead: 660 sx (50:50) Poz C w/ 5% Sodium Chloride, 6% Bentonite (12.5 ppg, 2.04 yld) Comp Strengths: 12 hr - 344 psi 24 hr - 835 psi

Tail: 450 sx (50:50) Poz C w/ 5% Sodium Chloride, 2% Bentonite (14.2 ppg, 1.31 yld)
Comp Strengths: 12 hr - 869 psi 24 psi - 1768 psi

** The above cmt volumes could be revised pending caliper measurement from open hole logs. TOC is designed to reach surface on Surface and Production. For Surface csg: If cmt does not circ to surface, the appropriate BLM office shall be notified, TOC shall be determined by a method approved by BLM, operator will propose a remediation method & request BLM approval. All slurries will be tested prior to loading to confirm thickening times & a lab report furnished to Apache. Fluid loss will be tested & reported on slurries with fluid loss additives. Lab test report will be furnished prior to pumping cement.

See COA

5. PROPOSED CONTROL EQUIPMENT *must test to 3,000 psi*

"EXHIBIT 3" shows a 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" csg and utilized continuously until TD is reached. The BOP will be tested at ~~2000~~ 3,000 psi, maximum surface pressure is not expected to exceed 2M psi, BHP is calculated to be approximately 3388 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 3" also shows a 3M psi choke manifold with a 3" blow down 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 well control problems.

See COA

6. AUXILIARY WELL CONTROL EQUIPMENT / MONITORING EQUIPMENT:

- 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 - 4" blow down line
- Fill up line as per Onshore Order #2

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

| INTERVAL | MW (ppg) | VISC (sec/qt) | FLUID LOSS (cc) | MUD TYPE |
|--|------------|---------------|-----------------|-------------|
| 0' - 1550' ^{1580'} | 8.4 | 28 - 32 | NC | Fresh Water |
| 1580' - 7100' | 9.8 - 10.0 | 28 - 32 | NC | Brine |
| 7100' - 7700' | 9.0 - 10.0 | 28 - 32 | 10 - 12 | Cut Brine |

See COA

**** 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 be altered to meet these needs.**

8. LOGGING, CORING & TESTING PROGRAM:

- A. OH logs: Dual Laterolog, MSFL, CNL, Litho-Density, Spectral Gamma Ray, Caliper & Sonic from TD back to 8-5/8" csg shoe.
- B. Run CNL, Gamma Ray from 8-5/8" csg shoe back to surface.
- C. No cores or DST's are planned at this time. Mud log will be included on this well.
- D. 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.

See COA

9. POTENTIAL HAZARDS:

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: 3388 psi and estimated BHT: 115°.

See COA

10. 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 ~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.

11. OTHER FACETS OF OPERATION:

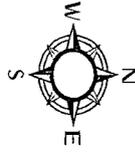
After running csg, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Blinbery, Tubb, Drinkard & Wantz; ABO formations will be perforated and stimulated in order to establish production. The well will be swab tested & potentialized as an oil well.

Apache

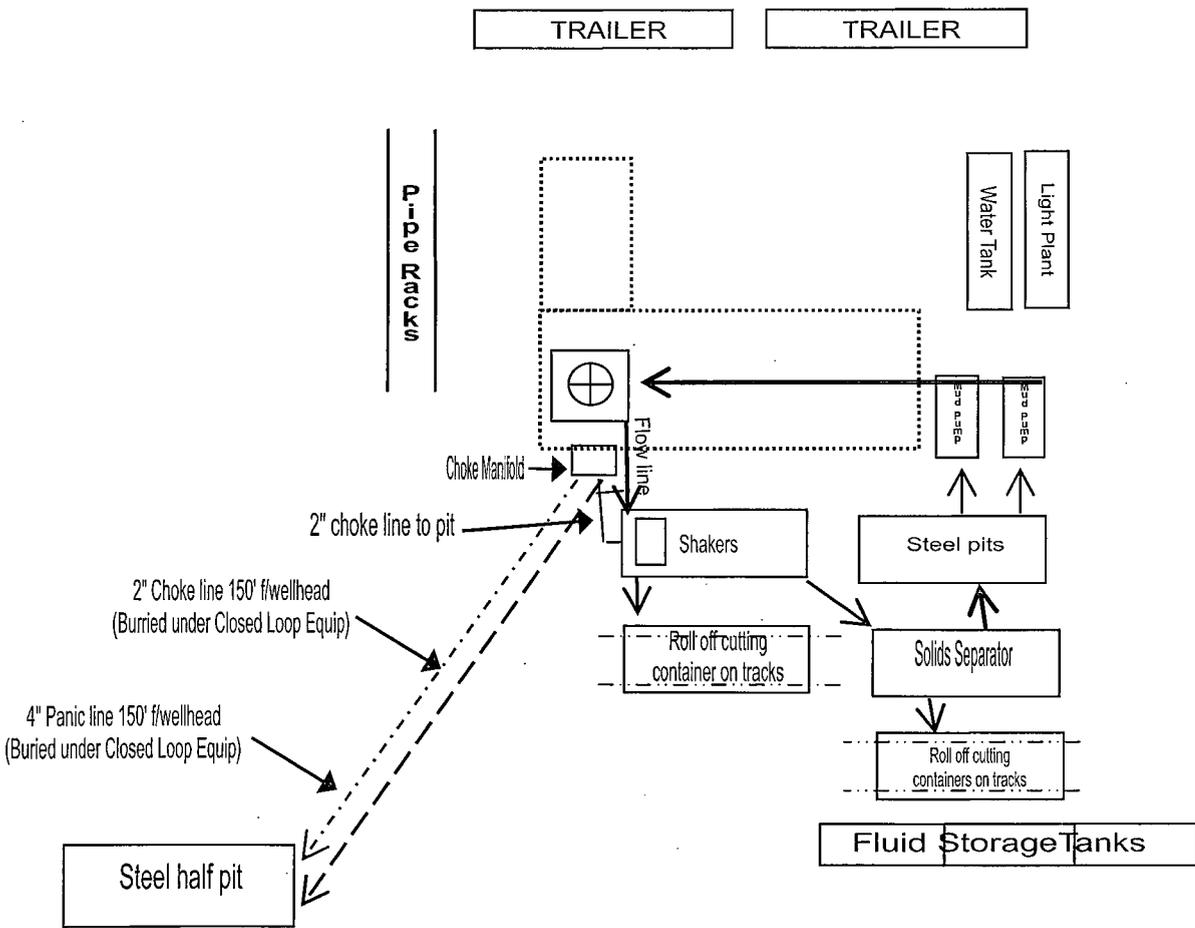
Closed Loop Equipment Diagram

Exhibit 4

Lockhart B 12 #14



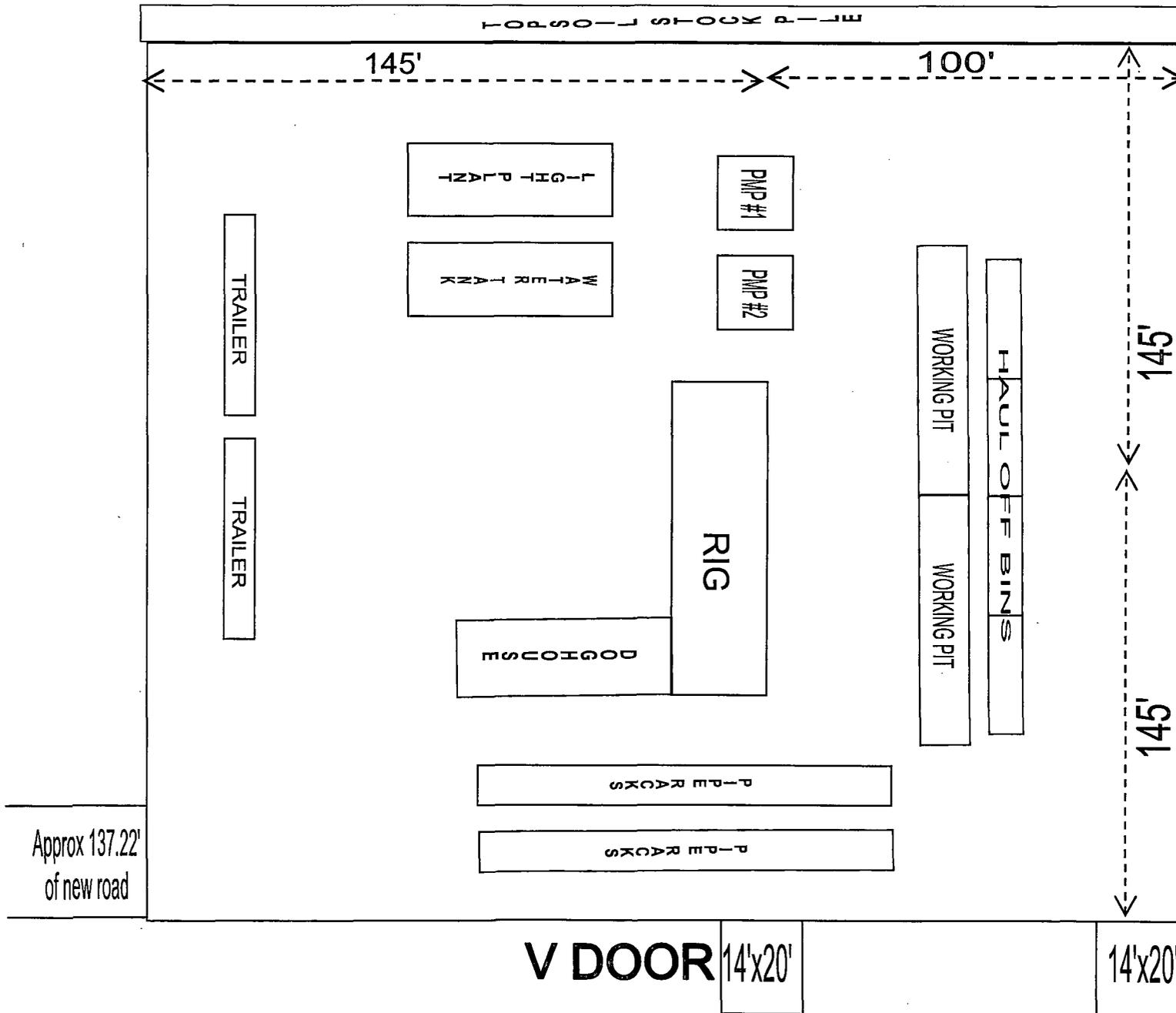
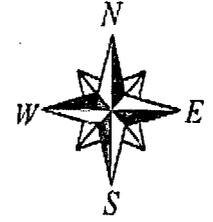
Approx 137.22'
new road



RIG ORIENTATION & LAYOUT

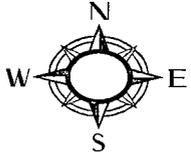
LOCKHART B 12 #14

EXHIBIT 5

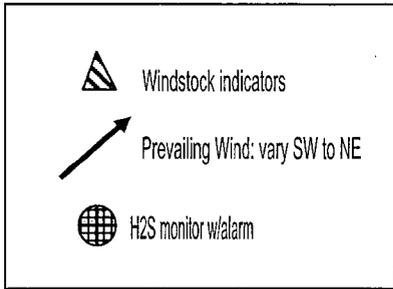


Apache

Drilling Location
H2S Safety Equipment Diagram
Exhibit 3A



Lockhart B 12 #14



H2S Warning Sign
~ 200' but no
more than 500'
from well location

Approx 137.22'
new road



Secondary
Egress

