

HOBBS OCD

Form 3160-3
(April 2004)

JUL 11 2013

OCD Hobbs

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

RECEIVED
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-00161
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
2. Name of Operator APACHE CORPORATION		7. If Unit or CA Agreement, Name and No. WBDU - NM 120042X
3a. Address 303 VETERANS AIRPARK LN #3000 MIDLAND, TX 79705	3b. Phone No. (include area code) 432-818-1167	8. Lease Name and Well No. <37346> WEST BLINEBRY DRINKARD UNIT #142
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 205' FSL & 535' FEL Unit P At proposed prod. zone 45' FSL & 330' FEL		9. API Well No. 30-025- 41262
14. Distance in miles and direction from nearest town or post office* Approx 3.4 miles North from Eunice, N.M.		10. Field and Pool, or Exploratory <22900> EUNICE; BLI-TU-DRI, NORTH
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 45'	16. No. of acres in lease 640 ACRES	11. Sec., T. R. M. or Blk. and Survey or Area SEC: 9 T21S R37E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. ~ 200'	19. Proposed Depth ~7150' TVD ~7161' MD	12. County or Parish LEA
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3466'	22. Approximate date work will start* As soon As Approved	13. State NM
23. Estimated duration ~ 10 DAYS		
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall 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 shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Sorina L Flores</i>	Name (Printed/Typed) SORINA L. FLORES	Date 7/27/12
--------------------------------------	--	-----------------

Title
SUPV OF DRILLING SERVICES

Approved by (Signature) <i>/s/George MacDonell</i>	Name (Printed/Typed) <i>/s/George MacDonell</i>	Date JUL 8 2013
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.

*(Instructions on page 2)

Capitan Controlled Water Basin

K#
07/12/13

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

JUL 16 2013

dm

PRIVATE SURFACE OWNER AGREEMENT

OPERATOR: APACHE CORPORATION

WELL NAME: WEST BLINEBRY DRINKARD UNIT #142

UL: P SECTION: 9 TOWNSHIP: 21S RANGE: 37E

LOCATION: 205' FSL & 535' FEL COUNTY: LEA STATE: NM

LEASE NUMBER: NMNM - 090161

STATEMENT OF SURFACE USE

The surface to the subject land is owned by THE MILLARD DECK ESTATE,
c/o BANK OF AMERICA, N.A., TRUSTEE of the MILLARD DECK TESTAMENTARY TRUST
under the LAST WILL and TESTAMENT of MILLARD DECK, PO BOX 270, MIDLAND, TX 79702,
817-374-9384 (Justin Bryan)

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: TERRY WEST

SIGNATURE: 

DATE: 4/18/13

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.

DRILLING PLAN: BLM COMPLIANCE

(Supplement to BLM 3160-3)

APACHE CORPORATION (OGRID: 873) WEST BLINEBRY DRINKARD UNIT #142

Lease #: NMNM-125054 Projected TVD: 7150' MD: 7161' GL: 3466'

SHL: 205' FSL & 535' FEL BHL: 45' FSL & 330' FEL UL: P SEC: 9 T21S 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	4005'
Rustler	1277'	Glorieta	5159'
Salt Top	1390'	Blinebry	5566' (Oil)
Salt Bottom	2457'	Tubb	6019' (Oil)
Yates	2600'	Drinkard	6435' (Oil)
Seven Rivers	2860'	ABO	6714'
Queen	3426'	TVD / MD	7150' / 7161'
Grayburg	3747'		

Depth to Ground Water: ~ 75'

All fresh water & prospectively valuable minerals, as described by BLM, encountered during drilling, will be recorded by depth and adequately protected. All oil & gas shows within zones of correlative rights will be tested to determine commercial potential. Surface fresh water sands will be protected by setting 12-1/4" csg @ 1325' & circ cmt back to surface. Hydrocarbon zones will be protected by setting 7-7/8" csg @ 7161'. Build @ ~4006'; EOB @ ~4339'; TVD @ 7150'; MD @ 7161'.

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

HOLE SIZE	DEPTH	OD CSG	WEIGHT	COLLAR	GRADE	COLLAPSE	BURST	TENSION
12-1/4"	0' - 1325'	8-5/8"	24#	STC	J-55	1.125	1.0	1.8
7-7/8"	0' - 7161'	5-1/2"	17#	LTC	L-80	1.125	1.0	1.8

4. **CEMENT PROGRAM:**

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

Lead: 500 sx Class C w/ 2% CaCl2 + 0.13# CF + 3# LCM1 + 0.005 gps FP-6L _ 4% Bentonite

(13.5 ppg, 1.75 yld) Comp Strengths : 12 hr – 500 psi 24 hr – 782 psi

Tail: 200 sx Class C w/ 1% CaCl2 + 0.13 # CF + 0.005 gps FP-6L

(14.8 ppg, 1.34 yld) Comp Strengths : 12 hr – 755 psi 24 hr – 1347 psi

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

Lead: 600 sx (35:65) Poz Cl C w/ 5% CaCl2 + 0.125 # CF + 3# LCM1 + 0.5% FL52 + 0.005gps FP6L + 6% Bentonite, 0.3%

Sodium Metasilicate (12.6ppg, 2.0 yld) Comp Strengths: 12 hr – 603 psi 24 hr – 850 psi

Tail: 350 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 ppg, 1.31 yld) Comp Strengths: 12 hr – 850 psi 24 psi – 1979 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. The above slurry design may change, but will meet BLM specifications. 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.**

5. PROPOSED CONTROL EQUIPMENT

"EXHIBIT 3" shows a 900 series 11" 3M psi WP BOP consisting of an annular bag type preventer, middle blind rams, bottom pipe 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 psi, maximum surface pressure is not expected to exceed 3M psi, BHP is calculated to be approximately 3146 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. Functional tests will be documented on the daily driller's log. "EXHIBIT 3" also shows a 3M psi choke manifold with a 4" 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.

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 – 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' - 1325' ^{1580'}	8.3	28 - 32	NC	Fresh Water
1325 - 7000'	10	28 - 32	NC	Brine
7000' - TD	10.1 - 10.2	32 - 33	10 - 12	Cut 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.*

8. LOGGING, CORING & TESTING PROGRAM:

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

9. 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 (SEE EXHIBIT 6)*. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP: 3146 psi and estimated BHT: 115°.

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 is available. Move in operations and drilling is expected to take 10 - 15 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 Eunice, BLI-TU-DRI, North formations will be perforated and stimulated in order to establish production. The well will be swab tested & potentialized as an oil well.



Apache Corporation

Lea County, NM

Sec 9, T21S, R37E

West Blinbry Drinkard Unit #142

Wellbore #1

Plan: Design #5

DDC Well Planning Report

13 April, 2012





DDC
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well West Blinbry Drinkard Unit #142
Company:	Apache Corporation	TVD Reference:	GL 2466 + 12'KB @ 3478.0usft (TBD)
Project:	Lea County, NM	MD Reference:	GL 2466 + 12'KB @ 3478.0usft (TBD)
Site:	Sec 9, T21S, R37E	North Reference:	Grid
Well:	West Blinbry Drinkard Unit #142	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #5		

Project	Lea County, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site		Sec 9, T21S, R37E			
Site Position:		Northing:	546,211.64 usft	Latitude:	32° 29' 46.234 N
From:	Map	Easting:	861,743.80 usft	Longitude:	103° 9' 36.255 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.63 °

Well	West Blinbry Drinkard Unit #142					
Well Position	+N/-S	-3,478.6 usft	Northing:	542,733.00 usft	Latitude:	32° 29' 11.834 N
	+E/-W	-164.2 usft	Easting:	861,579.57 usft	Longitude:	103° 9' 38.618 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,466.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/21/2012	7.32	60.48	48,743

Design		Design #5			
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:		Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
		0.0	0.0	0.0	127.38

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,006.0	0.00	0.00	4,006.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,339.1	5.00	127.38	4,338.6	-8.8	11.5	1.50	1.50	38.25	127.38	
7,161.1	5.00	127.38	7,150.0	-158.0	206.8	0.00	0.00	0.00	0.00	Plat Listed BHL - W



DDC Well Planning Report



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Project:	Lea County, NM	MD Reference:	GL 2466 + 12'KB @ 3478.0usft (TBD)
Site:	Sec 9, T21S, R37E	North Reference:	Grid
Well:	West Blinbry Drinkard Unit #142	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #5		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
1,277.0	0.00	0.00	1,277.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Yates									
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
Queen									
3,426.0	0.00	0.00	3,426.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
Grayburg									
3,747.0	0.00	0.00	3,747.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
San Andres									
4,005.0	0.00	0.00	4,005.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 1.5°/100' @ 4006' MD									
4,006.0	0.00	0.00	4,006.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	1.41	127.38	4,100.0	-0.7	0.9	1.2	1.50	1.50	0.00



DDC Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well West Blinbry Drinkard Unit #142
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Project:	Lea County, NM	MD Reference:	GL 2466 + 12'KB @ 3478.0usft (TBD)
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Well:	West Blinbry Drinkard Unit #142	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #5		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,200.0	2.91	127.38	4,199.9	-3.0	3.9	4.9	1.50	1.50	0.00
4,300.0	4.41	127.38	4,299.7	-6.9	9.0	11.3	1.50	1.50	0.00
EOB @ 4339' MD / 5° Inc / 127.38° Azm / 4339' TVD									
4,339.1	5.00	127.38	4,338.6	-8.8	11.5	14.5	1.50	1.50	0.00
4,400.0	5.00	127.38	4,399.3	-12.0	15.7	19.8	0.00	0.00	0.00
4,500.0	5.00	127.38	4,499.0	-17.3	22.7	28.5	0.00	0.00	0.00
4,600.0	5.00	127.38	4,598.6	-22.6	29.6	37.2	0.00	0.00	0.00
4,700.0	5.00	127.38	4,698.2	-27.9	36.5	45.9	0.00	0.00	0.00
4,800.0	5.00	127.38	4,797.8	-33.2	43.4	54.7	0.00	0.00	0.00
4,900.0	5.00	127.38	4,897.4	-38.5	50.3	63.4	0.00	0.00	0.00
5,000.0	5.00	127.38	4,997.1	-43.8	57.3	72.1	0.00	0.00	0.00
5,100.0	5.00	127.38	5,096.7	-49.0	64.2	80.8	0.00	0.00	0.00
Glorieta									
5,162.6	5.00	127.38	5,159.0	-52.3	68.5	86.2	0.00	0.00	0.00
5,200.0	5.00	127.38	5,196.3	-54.3	71.1	89.5	0.00	0.00	0.00
5,300.0	5.00	127.38	5,295.9	-59.6	78.0	98.2	0.00	0.00	0.00
5,400.0	5.00	127.38	5,395.5	-64.9	84.9	106.9	0.00	0.00	0.00
5,500.0	5.00	127.38	5,495.2	-70.2	91.9	115.6	0.00	0.00	0.00
Blinbry Mkr									
5,571.1	5.00	127.38	5,566.0	-73.9	96.8	121.8	0.00	0.00	0.00
5,600.0	5.00	127.38	5,594.8	-75.5	98.8	124.3	0.00	0.00	0.00
5,700.0	5.00	127.38	5,694.4	-80.8	105.7	133.0	0.00	0.00	0.00
5,800.0	5.00	127.38	5,794.0	-86.0	112.6	141.7	0.00	0.00	0.00
5,900.0	5.00	127.38	5,893.6	-91.3	119.6	150.4	0.00	0.00	0.00
6,000.0	5.00	127.38	5,993.3	-96.6	126.5	159.2	0.00	0.00	0.00
Tubb									
6,025.8	5.00	127.38	6,019.0	-98.0	128.3	161.4	0.00	0.00	0.00
6,100.0	5.00	127.38	6,092.9	-101.9	133.4	167.9	0.00	0.00	0.00
6,200.0	5.00	127.38	6,192.5	-107.2	140.3	176.6	0.00	0.00	0.00
6,300.0	5.00	127.38	6,292.1	-112.5	147.2	185.3	0.00	0.00	0.00
6,400.0	5.00	127.38	6,391.7	-117.8	154.2	194.0	0.00	0.00	0.00
Drinkard									
6,443.4	5.00	127.38	6,435.0	-120.1	157.2	197.8	0.00	0.00	0.00
6,500.0	5.00	127.38	6,491.4	-123.0	161.1	202.7	0.00	0.00	0.00
6,600.0	5.00	127.38	6,591.0	-128.3	168.0	211.4	0.00	0.00	0.00
6,700.0	5.00	127.38	6,690.6	-133.6	174.9	220.1	0.00	0.00	0.00
Abo									
6,723.5	5.00	127.38	6,714.0	-134.9	176.5	222.2	0.00	0.00	0.00
6,800.0	5.00	127.38	6,790.2	-138.9	181.8	228.8	0.00	0.00	0.00
6,900.0	5.00	127.38	6,889.8	-144.2	188.8	237.5	0.00	0.00	0.00
7,000.0	5.00	127.38	6,989.5	-149.5	195.7	246.2	0.00	0.00	0.00
7,100.0	5.00	127.38	7,089.1	-154.8	202.6	254.9	0.00	0.00	0.00
TD @ 7161' MD / 7150' TVD									
7,161.1	5.00	127.38	7,150.0	-158.0	206.8	260.3	0.00	0.00	0.00



DDC
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well West Blinbry Drinkard Unit #142
Company:	Apache Corporation	TVD Reference:	GL 2466 + 12'KB @ 3478.0usft (TBD)
Project:	Lea County, NM	MD Reference:	GL 2466 + 12'KB @ 3478.0usft (TBD)
Site:	Sec 9, T21S, R37E	North Reference:	Grid
Well:	West Blinbry Drinkard Unit #142	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #5		

Design Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
Plat Listed BHL - WBI	0.00	0.00	7,150.0	-158.0	206.8	542,575.00	861,786.39	32° 29' 10.248 N	103° 9' 36.224 W
- plan hits target center									
- Point									

Formations

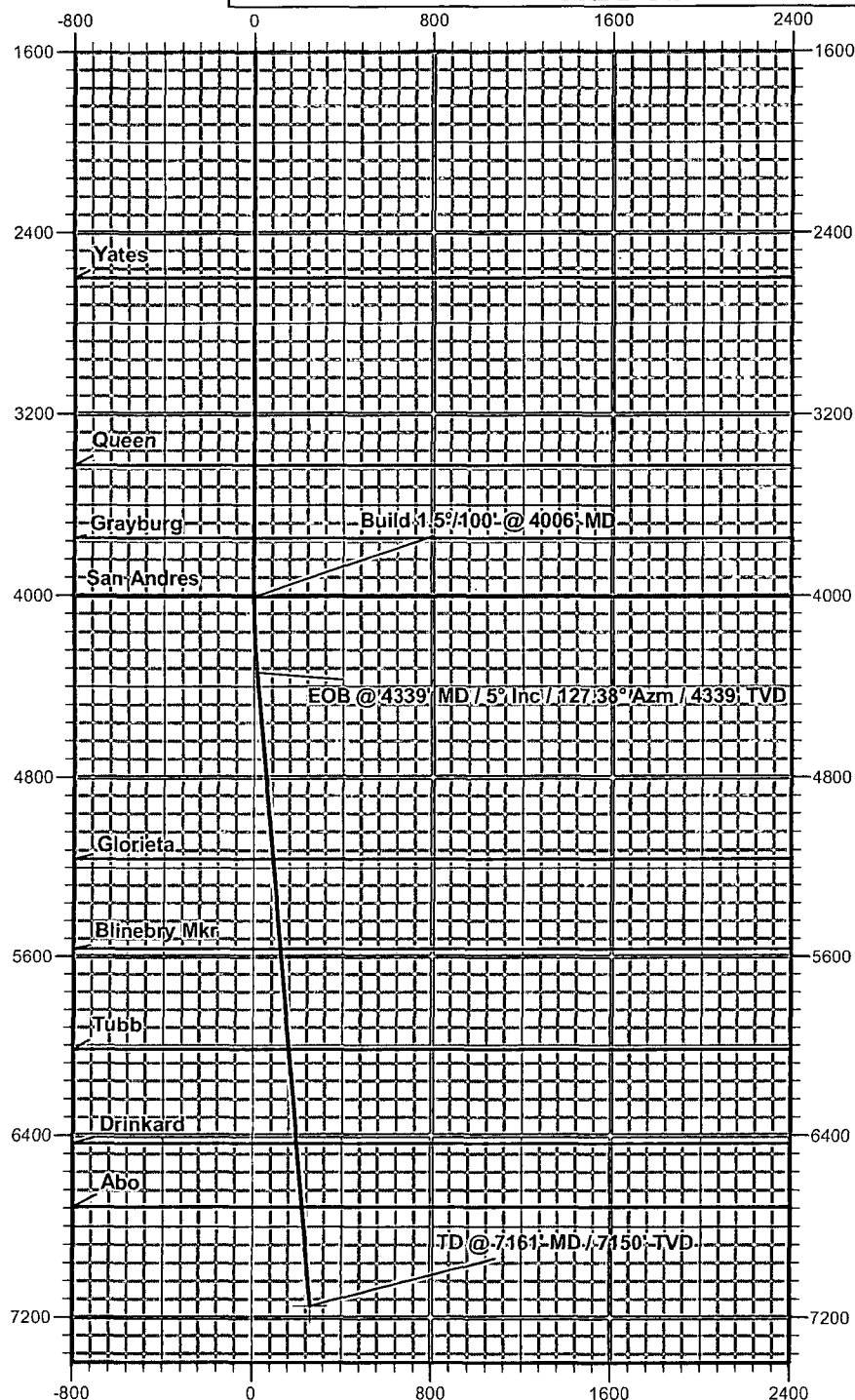
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,277.0	1,277.0	Rustler		0.00	127.38
2,600.0	2,600.0	Yates		0.00	127.38
3,426.0	3,426.0	Queen		0.00	127.38
3,747.0	3,747.0	Grayburg		0.00	127.38
4,005.0	4,005.0	San Andres		0.00	127.38
5,162.6	5,159.0	Glorieta		0.00	127.38
5,571.1	5,566.0	Blinebry Mkr		0.00	127.38
6,025.8	6,019.0	Tubb		0.00	127.38
6,443.4	6,435.0	Drinkard		0.00	127.38
6,723.5	6,714.0	Abo		0.00	127.38

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4,006.0	4,006.0	0.0	0.0	Build 1.5"/100' @ 4006' MD
4,339.1	4,338.6	-8.8	11.5	EOB @ 4339' MD / 5° Inc / 127.38° Azm / 4339' TVD
7,161.1	7,150.0	-158.0	206.8	TD @ 7161' MD / 7150' TVD

Apache Corporation

West Blinbry Drinkard Unit #142
Sec 9, T21S, R37E
Lea County, NM
Design #5
WBDU#142



Apache

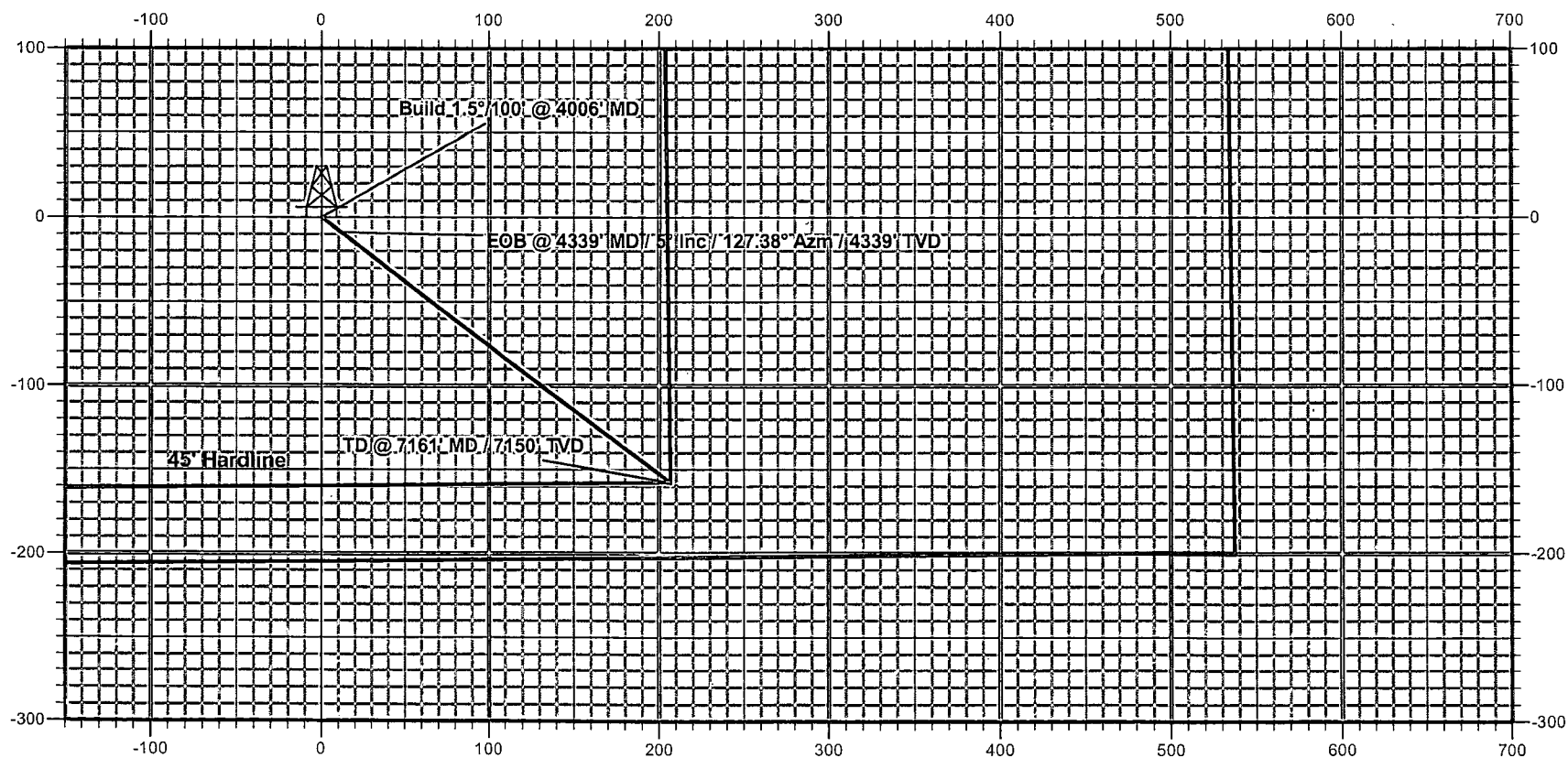
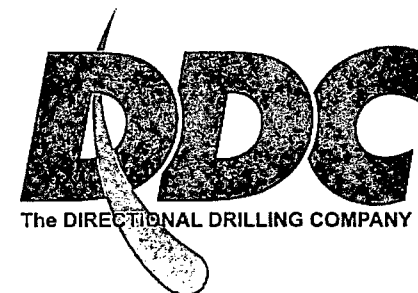


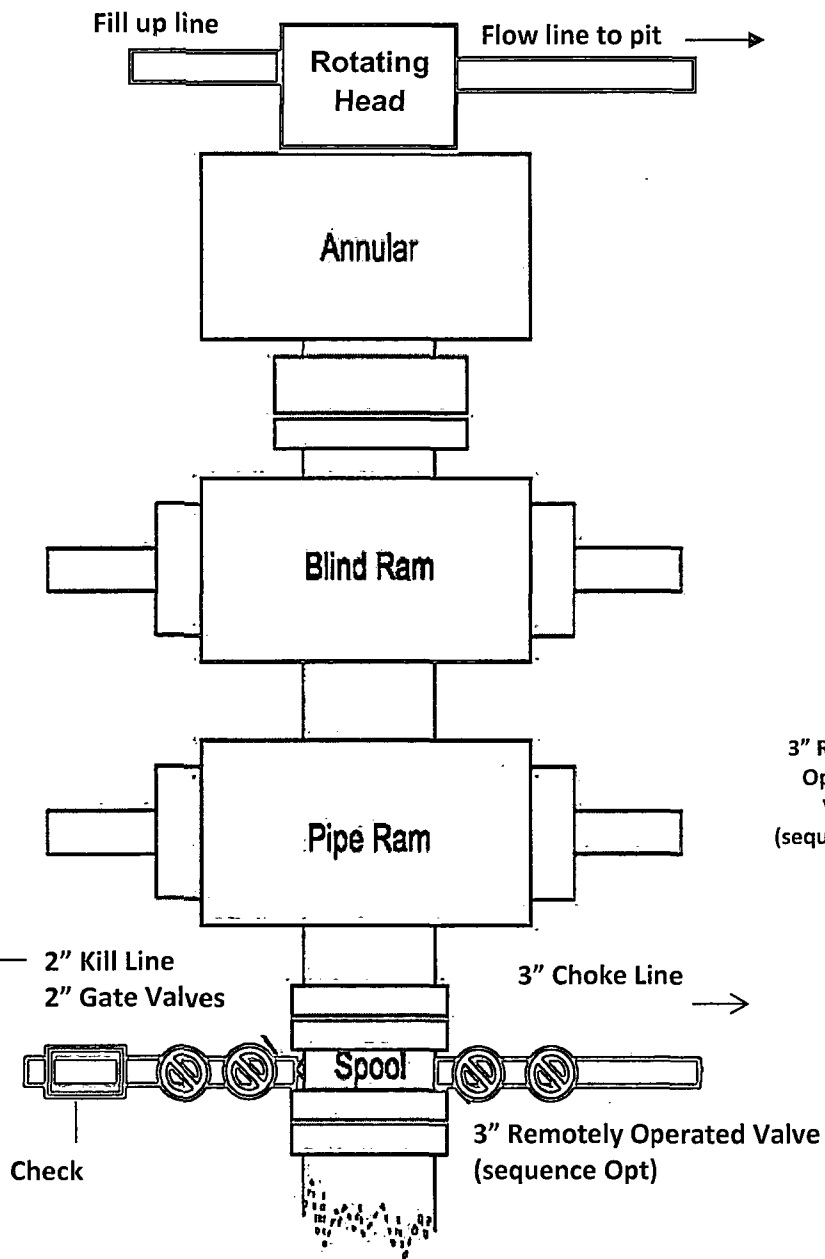
Vertical Section at 127.38° (800 usft/in)

Apache

Apache Corporation

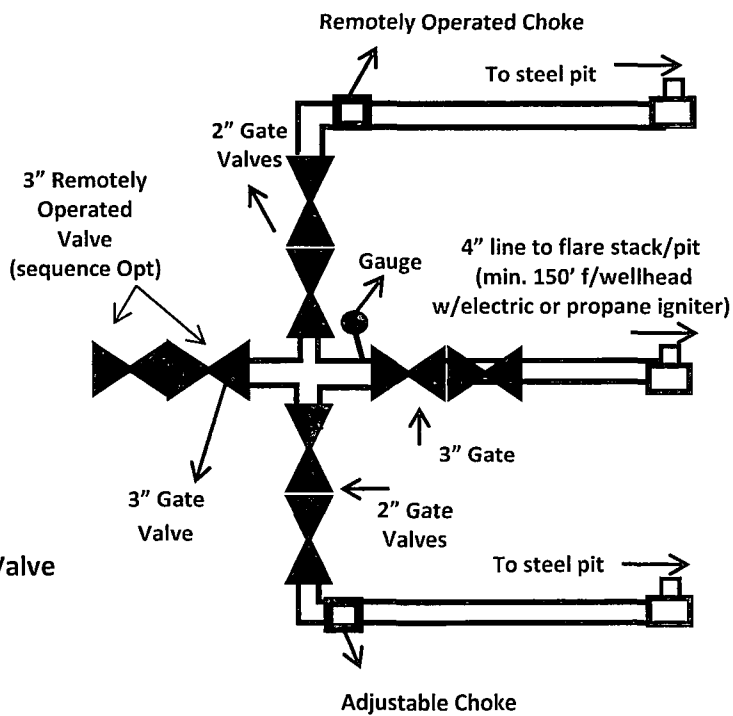
West Blinbry Drinkard Unit #142
Sec 9, T21S, R37E
Lea County, NM
Design #5
WBDU#142



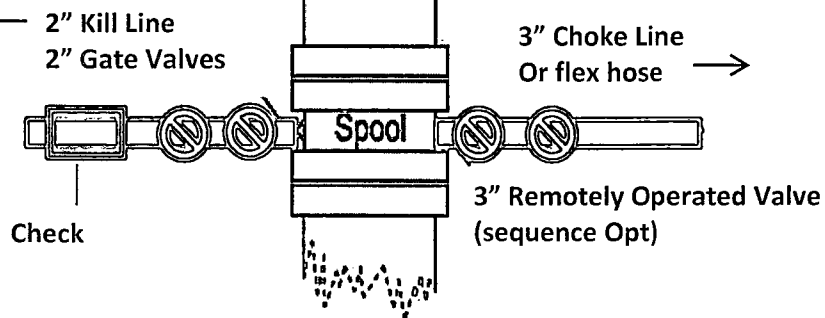
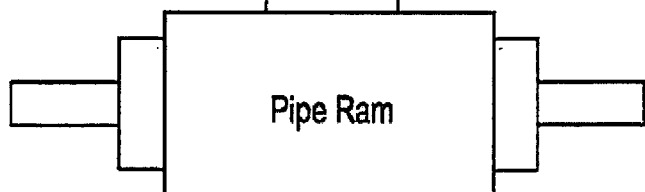
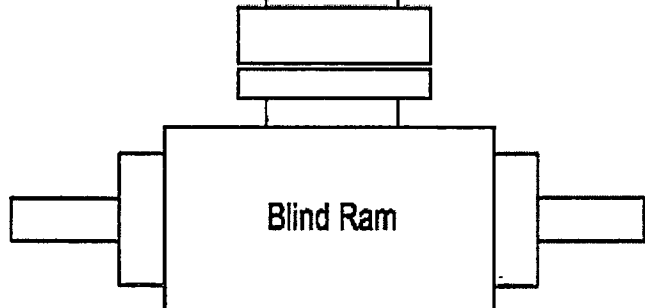
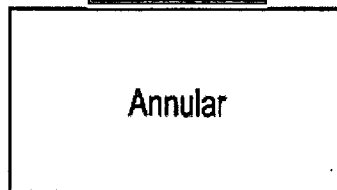
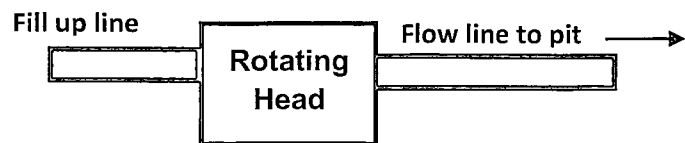


**11" 3M psi
BOPE & Choke Manifold
EXHIBIT 3**

All valve & lines on choke manifold are 2" unless noted.
Exact manifold configuration may vary

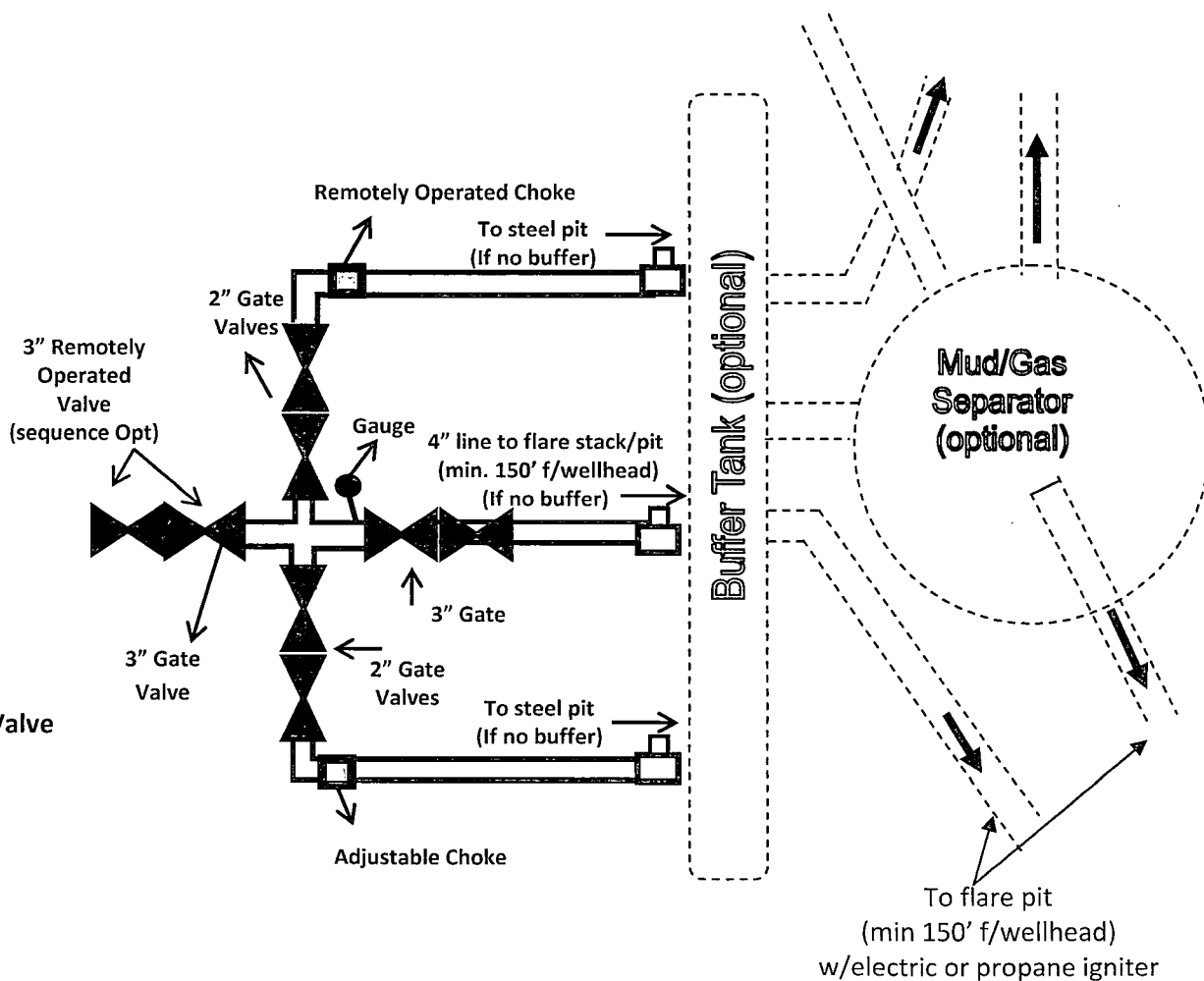


All bleed lines to pit
minimum 2"



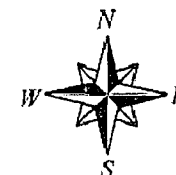
11" or 13-5/8" 5M psi BOPE & Choke Manifold EXHIBIT 3A

All valve & lines on choke manifold are 2" unless noted.
Exact manifold configuration may vary





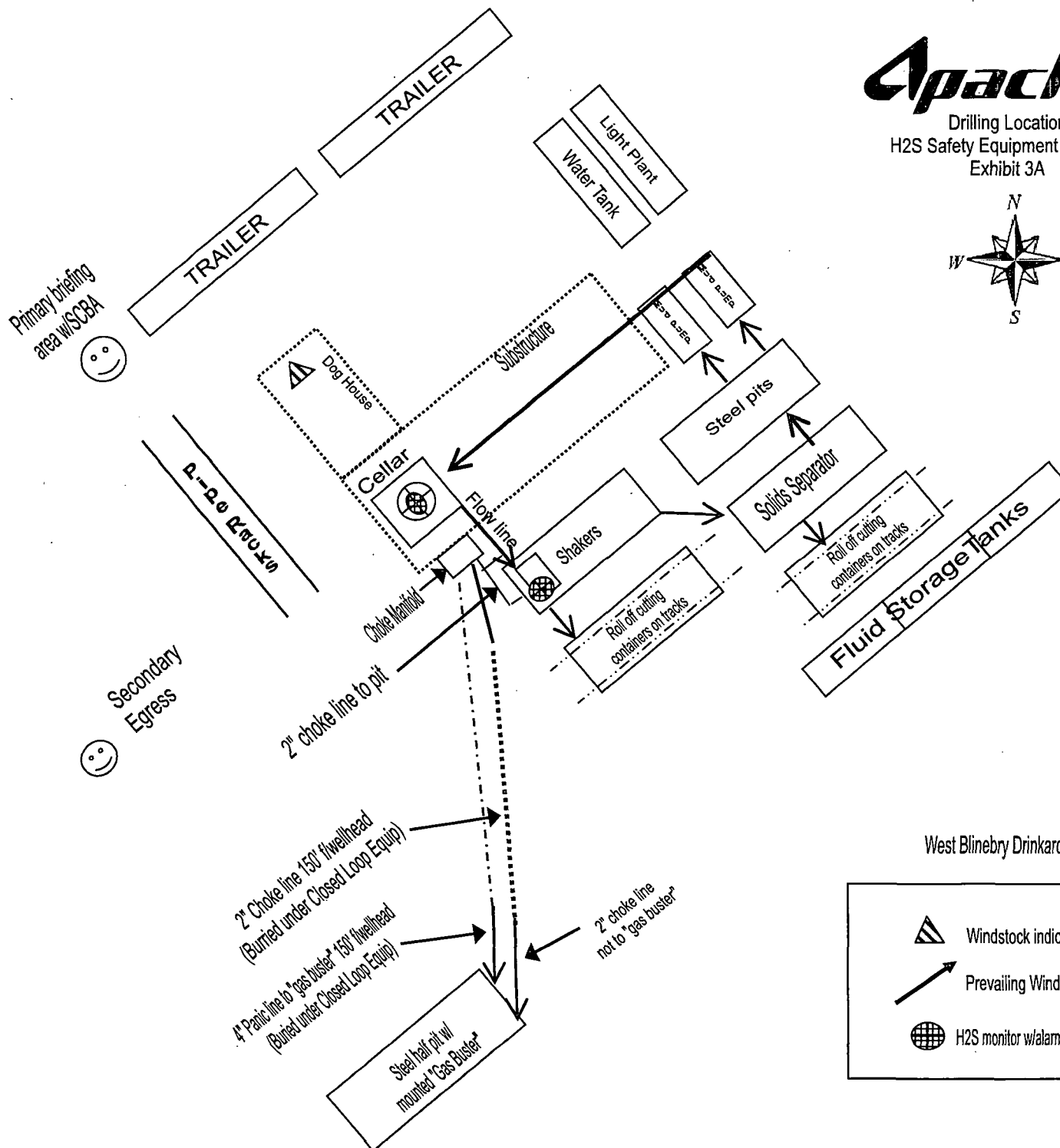
Drilling Location
H2S Safety Equipment Diagram
Exhibit 3A



Existing lease road

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

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



West Blinbry Drinkard Unit #142

Apache

Closed Loop Equipment Diagram

Exhibit 4

West Blineby Drinkard Unit #142



Existing lease road

