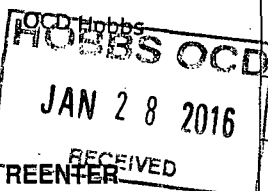


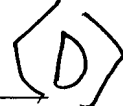
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER



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

15-577



5. Lease Serial No.
NMNM-090161

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.
NMNM-120042X ; W Blinbry Drinkard

8. Lease Name and Well No. <37346>
WEST BLINBRY DRINKARD UNIT #2 39X

9. API Well No.
30-025- 43045

10. Field and Pool, or Exploratory
EUNICE, BLI-TU-DR, NORTH<22900>

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

SEC: 9 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 2315' FSL & 340' FEL (I)

At proposed prod. zone 2450' FNL & 340' FEL (I)

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

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
340'

16. No. of acres in lease
640 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. ~ 590'

19. Proposed Depth
7000'

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
GL: 3462'

22. Approximate date work will start*
AS SOON AS APPROVED

23. Estimated duration
~ 8 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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).

- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- 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 4/13/15

Title
SUPV OF DRILLING SERVICES

Approved by (Signature) *Steve Caffey*

Name (Printed/Typed)

Date JAN 25 2016

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

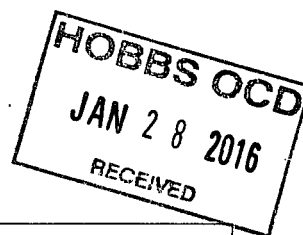
Xz 1/24/14

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

FEB 01 2016

**APACHE CORPORATION (OGRID: 873)
WEST BLINEBRY DRINKARD UNIT #239D**



1. Geologic Formations

TVD of target	6950'	Pilot hole depth	N/A
MD at TD:	6954'	Deepest expected fresh water:	65'

Back Reef

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Aeolian	Surface	Water	
Rustler	1285'	Water	
Top of Salt	1370'	Salt	
Tansil	2443'	Barren	
Yates	2618'	Oil, Gas, Water	
Seven Rivers	2848'	Oil, Gas, Water	
Queen	3380'	Oil, Gas, Water	Loss circ
Grayburg	3734'	Oil, Gas, Water	Loss circ
San Andres	4104'	Oil, Gas, Water	Loss circ
Glorieta	5184'	Oil, Gas, Water	
Paddock	5229'	Oil	
Blinebry	5699'	Oil	
Tubb	6166'	Oil	
Drinkard	6480'	Oil	
ABO	6745'	Oil	
TD	6954'	Target Zone	

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

See COA **2. Casing Program**

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
11"	0	1323' 1390'	8-5/8"	24	J55	STC	1.125	1.0	1.8
7-7/8"	0	6954'	5-1/2"	17	L80	LTC	1.125	1.0	1.8
BLM Minimum Safety 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

APACHE CORPORATION (OGRID: 873)
WEST BLINEBRY DRINKARD UNIT #239D

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	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	250	13.5	1.73	9.13	9	Lead: Cl C + 4% Bentonite + 1% CaCL ₂ + 0.25# CF (12hr: 677psi, 24hr: 1093psi)
	250	14.8	1.35	6.34	5	Tail: Cl C + 2% CaCL ₂ + 0.25# CF (12hr: 1121psi, 24hr: 1795psi)
Prod.	950	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/ECP 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	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Prod 1 st Stage	260	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)
DV/ECP Tool : 4440'						
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)

See
COA

Casing String	TOC	% Excess
Surface	0'	100%
Production	0'	30%

APACHE CORPORATION (OGRID: 873)
WEST BLINEBRY DRINKARD UNIT #239D

Include Pilot Hole Cementing specs:

Pilot hole depth: N/A

KOP: N/A

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

4. Pressure Control Equipment

NO	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	Type	✓	Tested to:
7-7/8"	11"	3M	Annular	x	50% of working pressure
			Blind Ram	x	<i>must test to 3000 psi</i> <i>3M</i> <i>3m</i>
			Pipe Ram	x	
			Double Ram		
			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.

	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil & Gas Order #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 multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. Provide description here See attached schematic.

**APACHE CORPORATION (OGRID: 873)
WEST BLINEBRY DRINKARD UNIT #239D**

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
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.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
---	-----------------------------

6. Logging and Testing Procedures

Logging, 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	Int. shoe to TD
X	Density	Int. shoe to TD
X	CBL	Production casing
	Mud log	Intermediate shoe to TD
	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	3058 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	H ₂ S is present
	H ₂ S 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

N/A Directional Plan

N/A Other



Apache Corporation

Lea County, NM

Sec 9, T21S, R37E

West Blinebry Drinkard Unit #239D

Wellbore #1

Plan: Design #1

DDC Well Planning Report

10 December, 2014





DDC
Well Planning Report



Database:	Compass	Local Co-ordinate Reference:	Well West Blinebry Drinkard Unit #239D
Company:	Apache Corporation	TVD Reference:	Well @ 3472.0usft
Project:	Lea County, NM	MD Reference:	Well @ 3472.0usft
Site:	Sec 9, T21S, R37E	North Reference:	Grid
Well:	West Blinebry Drinkard Unit #239D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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:		From:		Map		Northing:		546,211.64 usft		Latitude:		32° 29' 46.234 N	
						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 Blinebry Drinkard Unit #239D					
Well Position	+N/-S	-1,405.8 usft	Northing:	544,805.87 usft	Latitude:	32° 29' 32.304 N
	+E/-W	193.4 usft	Easting:	861,937.20 usft	Longitude:	103° 9' 34.177 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,461.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/10/2014	6.98	60.41	48,471

Design		Design #1		
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	312.09

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	
1,410.0	0.00	0.00	1,410.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,630.5	0.00	0.00	3,630.5	0.0	0.0	0.00	0.00	0.00	0.00	
3,780.5	3.00	312.09	3,780.4	2.6	-2.9	2.00	2.00	0.00	312.09	
6,954.4	3.00	312.09	6,950.0	114.0	-126.2	0.00	0.00	0.00	0.00	PBHL WBDU 239D



DDC
Well Planning Report



Database:	Compass	Local Co-ordinate Reference:	Well West Blinebry Drinkard Unit #239D
Company:	Apache Corporation	TVD Reference:	Well @ 3472.0usft
Project:	Lea County, NM	MD Reference:	Well @ 3472.0usft
Site:	Sec 9, T21S, R37E	North Reference:	Grid
Well:	West Blinebry Drinkard Unit #239D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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									
1,285.0	0.00	0.00	1,285.0	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
Top Salt									
1,370.0	0.00	0.00	1,370.0	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
KOP									
1,410.0	0.00	0.00	1,410.0	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
Tansil									
2,443.0	0.00	0.00	2,443.0	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
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
Yates									
2,618.0	0.00	0.00	2,618.0	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
Seven Rivers									
2,848.0	0.00	0.00	2,848.0	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
Queen									
3,380.0	0.00	0.00	3,380.0	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
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
Build 2° / 100'									
3,630.5	0.00	0.00	3,630.5	0.0	0.0	0.0	0.00	0.00	0.00



DDC
Well Planning Report



Database:	Compass	Local Co-ordinate Reference:	Well West Blinebry Drinkard Unit #239D
Company:	Apache Corporation	TVD Reference:	Well @ 3472.0usft
Project:	Lea County, NM	MD Reference:	Well @ 3472.0usft
Site:	Sec 9, T21S, R37E	North Reference:	Grid
Well:	West Blinebry Drinkard Unit #239D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)	
3,700.0	1.39	312.09	3,700.0	0.6	-0.6	0.8	2.00	2.00	0.00	
Grayburg										
3,734.0	2.07	312.09	3,734.0	1.3	-1.4	1.9	2.00	2.00	0.00	
Hold 3° Inc / 312.09° Azm										
3,780.5	3.00	312.09	3,780.4	2.6	-2.9	3.9	2.00	2.00	0.00	
3,800.0	3.00	312.09	3,799.9	3.3	-3.7	4.9	0.00	0.00	0.00	
3,900.0	3.00	312.09	3,899.8	6.8	-7.6	10.2	0.00	0.00	0.00	
4,000.0	3.00	312.09	3,999.6	10.3	-11.4	15.4	0.00	0.00	0.00	
4,100.0	3.00	312.09	4,099.5	13.8	-15.3	20.6	0.00	0.00	0.00	
San Andres										
4,104.5	3.00	312.09	4,104.0	14.0	-15.5	20.9	0.00	0.00	0.00	
4,200.0	3.00	312.09	4,199.4	17.3	-19.2	25.9	0.00	0.00	0.00	
4,300.0	3.00	312.09	4,299.2	20.9	-23.1	31.1	0.00	0.00	0.00	
4,400.0	3.00	312.09	4,399.1	24.4	-27.0	36.4	0.00	0.00	0.00	
4,500.0	3.00	312.09	4,498.9	27.9	-30.9	41.6	0.00	0.00	0.00	
4,600.0	3.00	312.09	4,598.8	31.4	-34.7	46.8	0.00	0.00	0.00	
4,700.0	3.00	312.09	4,698.7	34.9	-38.6	52.1	0.00	0.00	0.00	
4,800.0	3.00	312.09	4,798.5	38.4	-42.5	57.3	0.00	0.00	0.00	
4,900.0	3.00	312.09	4,898.4	41.9	-46.4	62.5	0.00	0.00	0.00	
5,000.0	3.00	312.09	4,998.3	45.4	-50.3	67.8	0.00	0.00	0.00	
5,100.0	3.00	312.09	5,098.1	48.9	-54.2	73.0	0.00	0.00	0.00	
Glorieta										
5,186.0	3.00	312.09	5,184.0	51.9	-57.5	77.5	0.00	0.00	0.00	
5,200.0	3.00	312.09	5,198.0	52.4	-58.0	78.2	0.00	0.00	0.00	
Paddock										
5,231.1	3.00	312.09	5,229.0	53.5	-59.3	79.8	0.00	0.00	0.00	
5,300.0	3.00	312.09	5,297.8	55.9	-61.9	83.5	0.00	0.00	0.00	
5,400.0	3.00	312.09	5,397.7	59.4	-65.8	88.7	0.00	0.00	0.00	
5,500.0	3.00	312.09	5,497.6	63.0	-69.7	93.9	0.00	0.00	0.00	
5,600.0	3.00	312.09	5,597.4	66.5	-73.6	99.2	0.00	0.00	0.00	
5,700.0	3.00	312.09	5,697.3	70.0	-77.5	104.4	0.00	0.00	0.00	
Blinebry										
5,701.7	3.00	312.09	5,699.0	70.0	-77.5	104.5	0.00	0.00	0.00	
5,800.0	3.00	312.09	5,797.2	73.5	-81.4	109.6	0.00	0.00	0.00	
5,900.0	3.00	312.09	5,897.0	77.0	-85.2	114.9	0.00	0.00	0.00	
6,000.0	3.00	312.09	5,996.9	80.5	-89.1	120.1	0.00	0.00	0.00	
6,100.0	3.00	312.09	6,096.8	84.0	-93.0	125.3	0.00	0.00	0.00	
Tubb										
6,169.3	3.00	312.09	6,166.0	86.4	-95.7	129.0	0.00	0.00	0.00	
6,200.0	3.00	312.09	6,196.6	87.5	-96.9	130.6	0.00	0.00	0.00	
6,300.0	3.00	312.09	6,296.5	91.0	-100.8	135.8	0.00	0.00	0.00	
6,400.0	3.00	312.09	6,396.3	94.5	-104.7	141.0	0.00	0.00	0.00	
Dinkard										
6,483.8	3.00	312.09	6,480.0	97.5	-107.9	145.4	0.00	0.00	0.00	
6,500.0	3.00	312.09	6,496.2	98.0	-108.5	146.3	0.00	0.00	0.00	
6,600.0	3.00	312.09	6,596.1	101.5	-112.4	151.5	0.00	0.00	0.00	
6,700.0	3.00	312.09	6,695.9	105.0	-116.3	156.7	0.00	0.00	0.00	
Abo										
6,749.1	3.00	312.09	6,745.0	106.8	-118.2	159.3	0.00	0.00	0.00	
6,800.0	3.00	312.09	6,795.8	108.6	-120.2	162.0	0.00	0.00	0.00	
6,900.0	3.00	312.09	6,895.7	112.1	-124.1	167.2	0.00	0.00	0.00	
PBHL 6954' MD / 6950' TVD										
6,954.4	3.00	312.09	6,950.0	114.0	-126.2	170.0	0.00	0.00	0.00	



DDC
Well Planning Report



Database:	Compass	Local Co-ordinate Reference:	Well West Blinebry Drinkard Unit #239D
Company:	Apache Corporation	TVD Reference:	Well @ 3472.0usft
Project:	Lea County, NM	MD Reference:	Well @ 3472.0usft
Site:	Sec 9, T21S, R37E	North Reference:	Grid
Well:	West Blinebry Drinkard Unit #239D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL WBDU 239D	0.00	0.00	6,950.0	114.0	-126.2	544,919.85	861,811.01	32° 29' 33.445 N	103° 9' 35.636 W
- plan hits target center									
- Point									

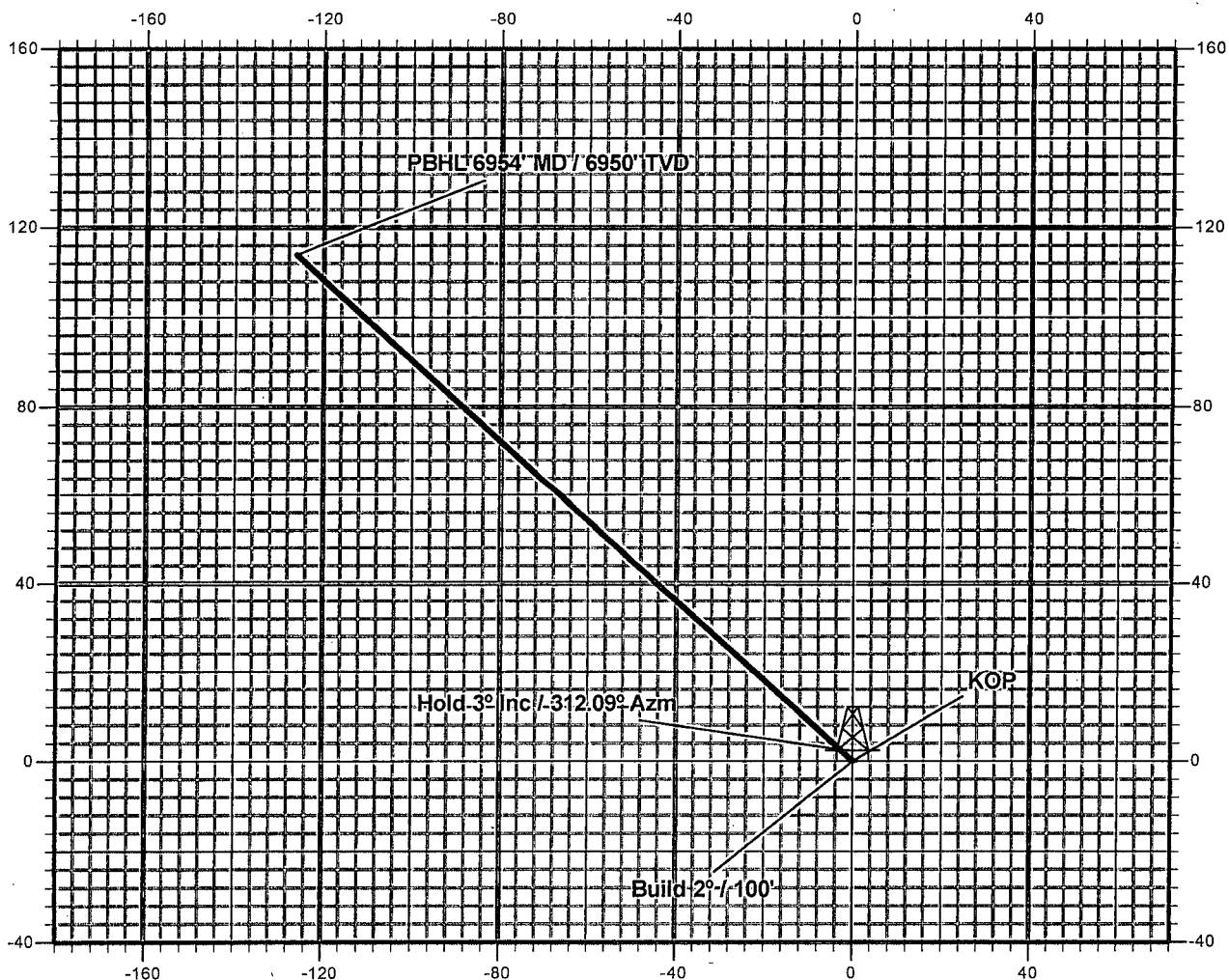
Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,285.0	1,302.0	Rustler		0.00	312.09	
1,370.0	1,387.0	Top Salt		0.00	312.09	
2,443.0	2,460.0	Tansil		0.00	312.09	
2,618.0	2,635.0	Yates		0.00	312.09	
2,848.0	2,865.0	Seven Rivers		0.00	312.09	
3,380.0	3,397.0	Queen		0.00	312.09	
3,734.0	3,751.0	Grayburg		0.00	312.09	
4,104.5	4,121.0	San Andres		0.00	312.09	
5,186.0	5,201.0	Glorieta		0.00	312.09	
5,231.1	5,246.0	Paddock		0.00	312.09	
5,701.7	5,716.0	Blinebry		0.00	312.09	
6,169.3	6,183.0	Tubb		0.00	312.09	
6,483.8	6,497.0	Dinkard		0.00	312.09	
6,749.1	6,762.0	Abo		0.00	312.09	

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,410.0	1,410.0	0.0	0.0	KOP
3,630.5	3,630.5	0.0	0.0	Build 2° / 100'
3,780.5	3,780.4	2.6	-2.9	Hold 3° Inc / 312.09° Azm
6,954.4	6,950.0	114.0	-126.2	PBHL 6954' MD / 6950' TVD

Apache



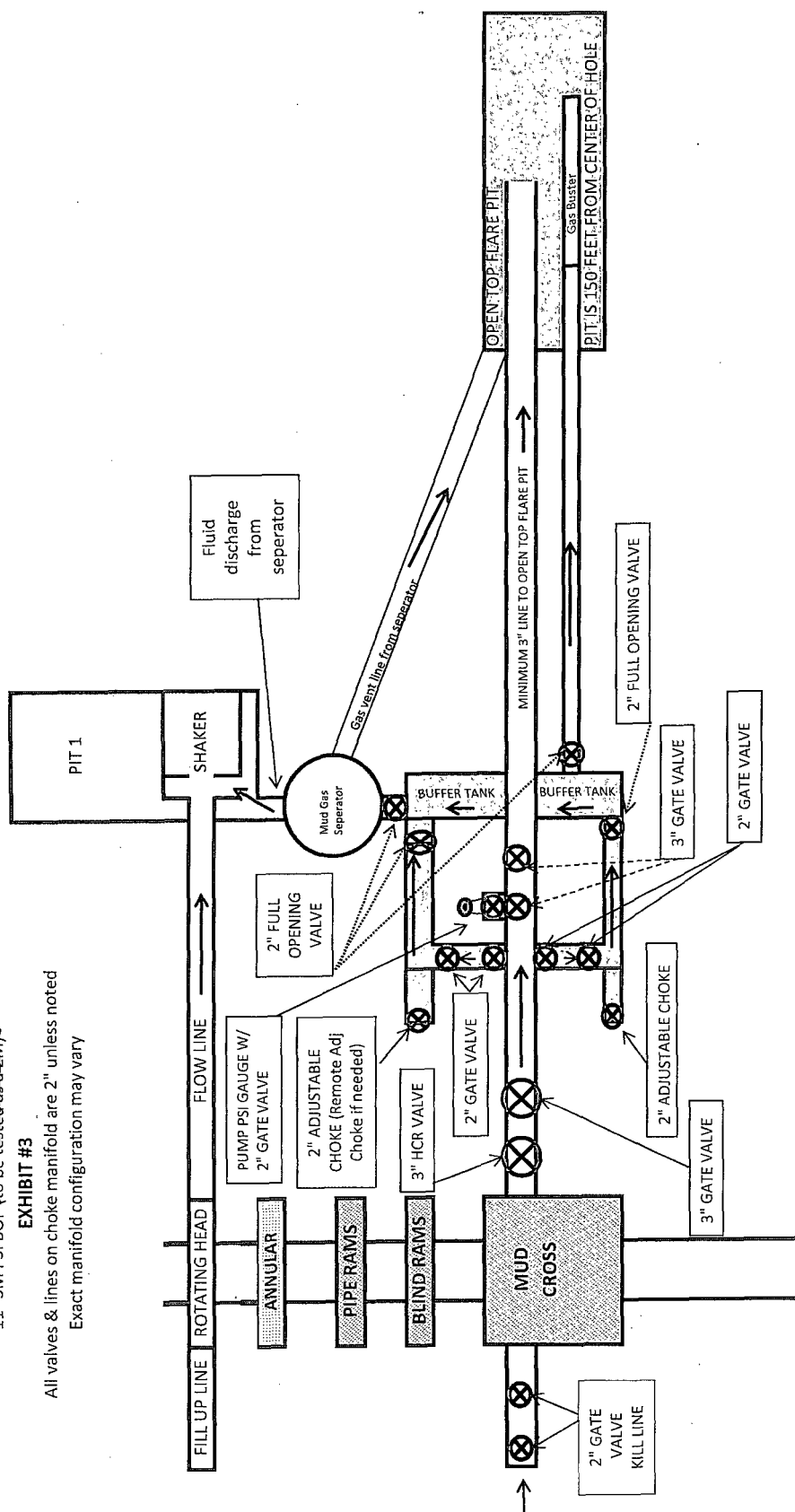
Lea County, NM
Sec 9, T21S, R37E
West Blinebry Drinkard Unit #239D
Design #1



11" 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



West Blinbry Drinkard Unit #239D

Approx 1501.98' of
new road

TRAILER

TRAILER

