District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
August 1, 2011

Permit 182341

HOBBS OCD

MAR 0 4 2014

RECEIVED

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
CONOCOPHILLIPS COMPANY 600 North Dairy Ashford Rd. P10-4056 Houston, TX 77079	217817
	3. API Number 30-025-41708
4. Property Code 40439 / 5. Property Name RED HILLS WEST 16 STAE W2	6. Well No. 10H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	16	26S	32E		283	N	330	E	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
P	16	26S	32E		330	S	380	E	Lea

9. Pool Information

~~WOLFCAMP~~ WC-025 G-09 S263216A; WOLFCAMP	98065

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3224
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	17493	Wolfcamp		8/27/2014
Depth to Ground water		**Distance from nearest fresh water well**		**Distance to nearest surface water**
405ft		1.8 miles		1.8 miles

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	950	780	0
Int1	12.25	9.625	40	4605	1800	0
Int2	8.75	7.625	29.7	12100	640	4105
Prod	6.75	5.5	23	12100	N/A	N/A
Prod	6.75	4.5	15.1	17470	370	12100

Casing/Cement Program: Additional Comments

The Production casing is a tapered string of 5-1/2" x 4-1/2" casing with a cross-over at the shoe of the 7-5/8" intermediate string at 12100ft. The string will be cemented from TD to the shoe of that string.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	2500	HYDRIL
Blind	10000	5000	CAMERON
Pipe	10000	5000	CAMERON

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.

Signature: Kristina Mickens

Printed Name: KRISTINA MICKENS

Title: REGULATORY SPECIALIST

Email Address: Kristina.Mickens@conocophillips.com

Date: 02/28/2014 Phone: 281-206-5282

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date: 03/05/14 Expiration Date: 03/05/16

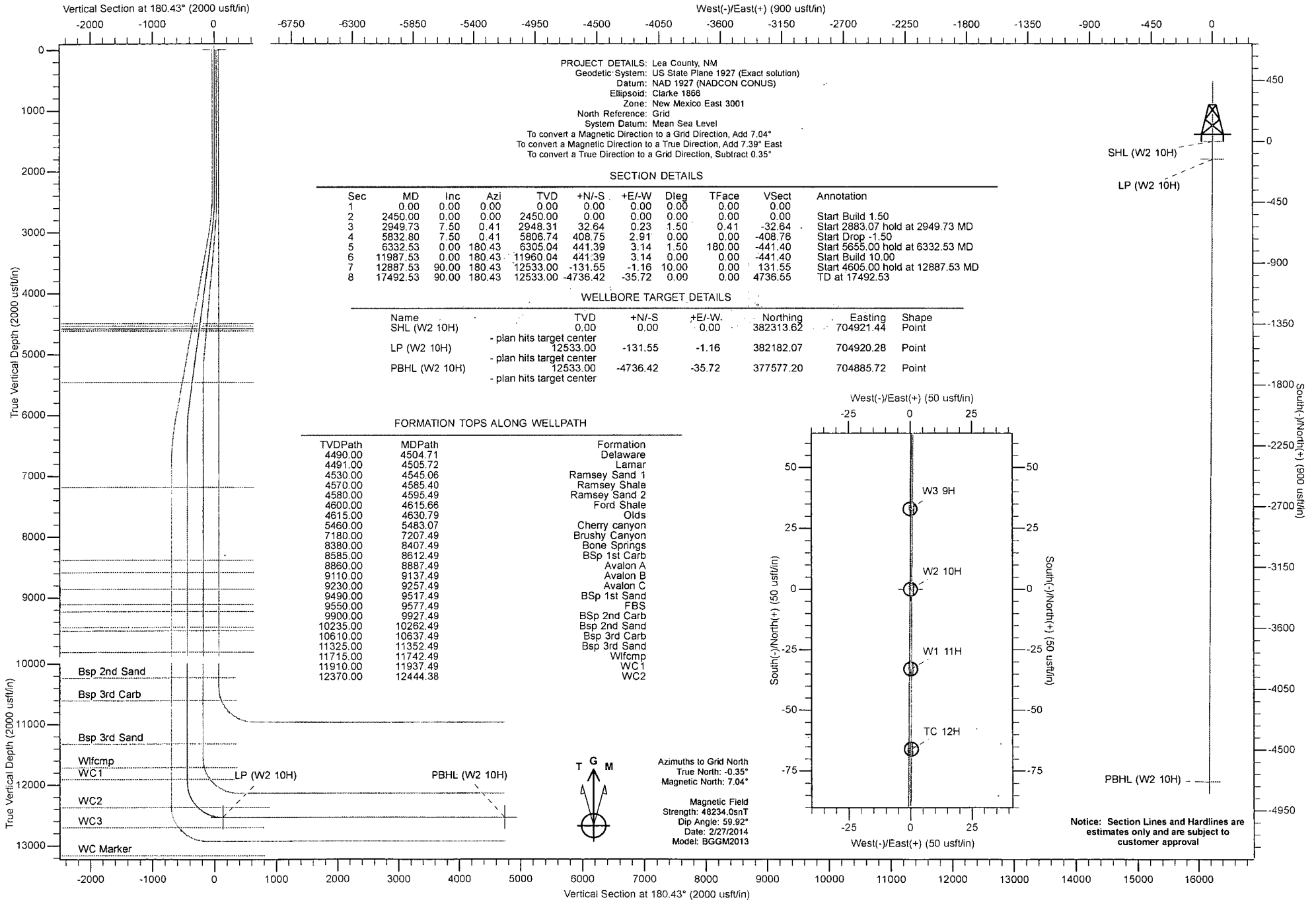
Conditions of Approval Attached

MAR 06 2014

ConocoPhillips

ConocoPhillips
Lea County, NM
Red Hills West 16 State
W2 10H
Original Hole
Plan: Design #1 (W2 10H/Original Hole)
Well @ 3249.00usft (RKB: 25' + GL: 3224')

gyrodata
Precision Wellbore Placement



PROJECT DETAILS: Lea County, NM
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
North Reference: Grid
System Datum: Mean Sea Level
To convert a Magnetic Direction to a Grid Direction, Add 7.04°
To convert a Magnetic Direction to a True Direction, Add 7.39° East
To convert a True Direction to a Grid Direction, Subtract 0.35°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2450.00	0.00	0.00	2450.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
3	2949.73	7.50	0.41	2948.31	32.64	0.23	1.50	0.41	-32.64	Start 2883.07 hold at 2949.73 MD
4	5832.80	7.50	0.41	5806.74	408.75	2.91	0.00	0.00	-408.76	Start Drop -1.50
5	6332.53	0.00	180.43	6305.04	441.39	3.14	1.50	180.00	-441.40	Start 5655.00 hold at 6332.53 MD
6	11987.53	0.00	180.43	11960.04	441.39	3.14	0.00	0.00	-441.40	Start Build 10.00
7	12887.53	90.00	180.43	12533.00	-131.55	-1.16	10.00	0.00	131.55	Start 4605.00 hold at 12887.53 MD
8	17492.53	90.00	180.43	12533.00	-4736.42	-35.72	0.00	0.00	4736.55	TD at 17492.53

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
SHL (W2 10H)	0.00 - plan hits target center	0.00	0.00	382313.62	704921.44	Point
LP (W2 10H)	12533.00 - plan hits target center	-131.55	-1.16	382182.07	704920.28	Point
PBHL (W2 10H)	12533.00 - plan hits target center	-4736.42	-35.72	377577.20	704885.72	Point

FORMATION TOPS ALONG WELLPATH

TVDPath	MDPath	Formation
4490.00	4504.71	Delaware
4491.00	4505.72	Lamar
4530.00	4545.06	Ramsey Sand 1
4570.00	4585.40	Ramsey Shale
4580.00	4595.49	Ramsey Sand 2
4600.00	4615.66	Ford Shale
4615.00	4630.79	Olds
5460.00	5483.07	Cherry canyon
7180.00	7207.49	Brushy Canyon
8380.00	8407.49	Bone Springs
8585.00	8612.49	BSp 1st Carb
8860.00	8887.49	Avalon A
9110.00	9137.49	Avalon B
9230.00	9257.49	Avalon C
9490.00	9517.49	BSp 1st Sand
9550.00	9577.49	FBS
9900.00	9927.49	BSp 2nd Carb
10235.00	10262.49	Bsp 2nd Sand
10610.00	10637.49	Bsp 3rd Carb
11325.00	11352.49	Bsp 3rd Sand
11715.00	11742.49	Wlfcmp
11910.00	11937.49	WC1
12370.00	12444.38	WC2

Azimuths to Grid North
True North: -0.35°
Magnetic North: 7.04°

Magnetic Field
Strength: 48234.0snT
Dip Angle: 59.92°
Date: 2/27/2014
Model: BGGM2013

Notice: Section Lines and Hardlines are estimates only and are subject to customer approval

Created By: James A Date: 8:39, February 27 2014

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well W2 10H
Company:	ConocoPhillips	**TVD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Project:	Lea County, NM	**MD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Site:	Red Hills West 16 State	**North Reference:**	Grid
Well:	W2 10H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
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	Red Hills West 16 State				
Site Position:		**Northing:**	382,247.67 usft	**Latitude:**	32° 2' 57.08 N
From:	Map	**Easting:**	704,921.73 usft	**Longitude:**	103° 40' 18.97 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.20 in	**Grid Convergence:**	0.35 °

Well	W2 10H					
Well Position	**+N/-S**	65.95 usft	**Northing:**	382,313.62 usft	**Latitude:**	32° 2' 57.73 N
	+E/-W	-0.29 usft	**Easting:**	704,921.44 usft	**Longitude:**	103° 40' 18.97 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	3,224.00 usft

Wellbore	Original Hole				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	User Defined	2/27/2014	7.39	59.92	48,234

Design	Design #1				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.00	0.00	0.00	180.43	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,450.00	0.00	0.00	2,450.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,949.73	7.50	0.41	2,948.31	32.64	0.23	1.50	1.50	0.00	0.41	
5,832.80	7.50	0.41	5,806.74	408.75	2.91	0.00	0.00	0.00	0.00	
6,332.53	0.00	180.43	6,305.04	441.39	3.14	1.50	-1.50	0.00	180.00	
11,987.53	0.00	180.43	11,960.04	441.39	3.14	0.00	0.00	0.00	0.00	
12,887.53	90.00	180.43	12,533.00	-131.55	-1.16	10.00	10.00	0.00	0.00	
17,492.53	90.00	180.43	12,533.00	-4,736.42	-35.72	0.00	0.00	0.00	0.00	PBHL (W2 10H)

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well W2 10H
Company:	ConocoPhillips	**TVD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Project:	Lea County, NM	**MD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Site:	Red Hills West 16 State	**North Reference:**	Grid
Well:	W2 10H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL (W2 10H)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,450.00	0.00	0.00	2,450.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50									
2,500.00	0.75	0.41	2,500.00	0.33	0.00	-0.33	1.50	1.50	0.00
2,600.00	2.25	0.41	2,599.96	2.94	0.02	-2.94	1.50	1.50	0.00
2,700.00	3.75	0.41	2,699.82	8.18	0.06	-8.18	1.50	1.50	0.00
2,800.00	5.25	0.41	2,799.51	16.02	0.11	-16.02	1.50	1.50	0.00
2,900.00	6.75	0.41	2,898.96	26.48	0.19	-26.48	1.50	1.50	0.00
2,949.73	7.50	0.41	2,948.31	32.64	0.23	-32.64	1.50	1.50	0.00
Start 2883.07 hold at 2949.73 MD									
3,000.00	7.50	0.41	2,998.15	39.20	0.28	-39.20	0.00	0.00	0.00
3,100.00	7.50	0.41	3,097.29	52.25	0.37	-52.25	0.00	0.00	0.00
3,200.00	7.50	0.41	3,196.44	65.29	0.46	-65.29	0.00	0.00	0.00
3,300.00	7.50	0.41	3,295.58	78.34	0.56	-78.34	0.00	0.00	0.00
3,400.00	7.50	0.41	3,394.73	91.38	0.65	-91.38	0.00	0.00	0.00
3,500.00	7.50	0.41	3,493.87	104.43	0.74	-104.43	0.00	0.00	0.00
3,600.00	7.50	0.41	3,593.02	117.47	0.84	-117.48	0.00	0.00	0.00
3,700.00	7.50	0.41	3,692.16	130.52	0.93	-130.52	0.00	0.00	0.00
3,800.00	7.50	0.41	3,791.31	143.56	1.02	-143.57	0.00	0.00	0.00
3,900.00	7.50	0.41	3,890.45	156.61	1.11	-156.61	0.00	0.00	0.00
4,000.00	7.50	0.41	3,989.60	169.65	1.21	-169.66	0.00	0.00	0.00
4,100.00	7.50	0.41	4,088.75	182.70	1.30	-182.70	0.00	0.00	0.00
4,200.00	7.50	0.41	4,187.89	195.74	1.39	-195.75	0.00	0.00	0.00
4,300.00	7.50	0.41	4,287.04	208.79	1.49	-208.79	0.00	0.00	0.00
4,400.00	7.50	0.41	4,386.18	221.83	1.58	-221.84	0.00	0.00	0.00
4,500.00	7.50	0.41	4,485.33	234.88	1.67	-234.89	0.00	0.00	0.00
4,504.71	7.50	0.41	4,490.00	235.50	1.68	-235.50	0.00	0.00	0.00
Delaware									
4,505.72	7.50	0.41	4,491.00	235.63	1.68	-235.63	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well W2 10H
Company:	ConocoPhillips	**TVD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Project:	Lea County, NM	**MD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Site:	Red Hills West 16 State	**North Reference:**	Grid
Well:	W2 10H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Lamar									
4,545.06	7.50	0.41	4,530.00	240.76	1.71	-240.76	0.00	0.00	0.00
Ramsey Sand 1									
4,585.40	7.50	0.41	4,570.00	246.02	1.75	-246.03	0.00	0.00	0.00
Ramsey Shale									
4,595.49	7.50	0.41	4,580.00	247.34	1.76	-247.34	0.00	0.00	0.00
Ramsey Sand 2									
4,600.00	7.50	0.41	4,584.47	247.93	1.76	-247.93	0.00	0.00	0.00
4,615.66	7.50	0.41	4,600.00	249.97	1.78	-249.97	0.00	0.00	0.00
Ford Shale									
4,630.79	7.50	0.41	4,615.00	251.94	1.79	-251.95	0.00	0.00	0.00
Olds									
4,700.00	7.50	0.41	4,683.62	260.97	1.86	-260.98	0.00	0.00	0.00
4,800.00	7.50	0.41	4,782.76	274.02	1.95	-274.02	0.00	0.00	0.00
4,900.00	7.50	0.41	4,881.91	287.06	2.04	-287.07	0.00	0.00	0.00
5,000.00	7.50	0.41	4,981.05	300.11	2.13	-300.11	0.00	0.00	0.00
5,100.00	7.50	0.41	5,080.20	313.15	2.23	-313.16	0.00	0.00	0.00
5,200.00	7.50	0.41	5,179.34	326.20	2.32	-326.21	0.00	0.00	0.00
5,300.00	7.50	0.41	5,278.49	339.24	2.41	-339.25	0.00	0.00	0.00
5,400.00	7.50	0.41	5,377.64	352.29	2.51	-352.30	0.00	0.00	0.00
5,483.07	7.50	0.41	5,460.00	363.13	2.58	-363.13	0.00	0.00	0.00
Cherry canyon									
5,500.00	7.50	0.41	5,476.78	365.33	2.60	-365.34	0.00	0.00	0.00
5,600.00	7.50	0.41	5,575.93	378.38	2.69	-378.39	0.00	0.00	0.00
5,700.00	7.50	0.41	5,675.07	391.42	2.78	-391.43	0.00	0.00	0.00
5,800.00	7.50	0.41	5,774.22	404.47	2.88	-404.48	0.00	0.00	0.00
5,832.80	7.50	0.41	5,806.74	408.75	2.91	-408.76	0.00	0.00	0.00
Start Drop -1.50									
5,900.00	6.49	0.41	5,873.44	416.93	2.97	-416.94	1.50	-1.50	0.00
6,000.00	4.99	0.41	5,972.93	426.93	3.04	-426.94	1.50	-1.50	0.00
6,100.00	3.49	0.41	6,072.66	434.32	3.09	-434.33	1.50	-1.50	0.00
6,200.00	1.99	0.41	6,172.54	439.09	3.12	-439.10	1.50	-1.50	0.00
6,300.00	0.49	0.41	6,272.51	441.25	3.14	-441.26	1.50	-1.50	0.00
6,332.53	0.00	180.43	6,305.04	441.39	3.14	-441.40	1.50	-1.50	0.00
Start 5655.00 hold at 6332.53 MD									
6,400.00	0.00	0.00	6,372.51	441.39	3.14	-441.40	0.00	0.00	0.00
6,500.00	0.00	0.00	6,472.51	441.39	3.14	-441.40	0.00	0.00	0.00
6,600.00	0.00	0.00	6,572.51	441.39	3.14	-441.40	0.00	0.00	0.00
6,700.00	0.00	0.00	6,672.51	441.39	3.14	-441.40	0.00	0.00	0.00
6,800.00	0.00	0.00	6,772.51	441.39	3.14	-441.40	0.00	0.00	0.00
6,900.00	0.00	0.00	6,872.51	441.39	3.14	-441.40	0.00	0.00	0.00
7,000.00	0.00	0.00	6,972.51	441.39	3.14	-441.40	0.00	0.00	0.00
7,100.00	0.00	0.00	7,072.51	441.39	3.14	-441.40	0.00	0.00	0.00
7,200.00	0.00	0.00	7,172.51	441.39	3.14	-441.40	0.00	0.00	0.00
7,207.49	0.00	0.00	7,180.00	441.39	3.14	-441.40	0.00	0.00	0.00
Brushy Canyon									
7,300.00	0.00	0.00	7,272.51	441.39	3.14	-441.40	0.00	0.00	0.00
7,400.00	0.00	0.00	7,372.51	441.39	3.14	-441.40	0.00	0.00	0.00
7,500.00	0.00	0.00	7,472.51	441.39	3.14	-441.40	0.00	0.00	0.00
7,600.00	0.00	0.00	7,572.51	441.39	3.14	-441.40	0.00	0.00	0.00
7,700.00	0.00	0.00	7,672.51	441.39	3.14	-441.40	0.00	0.00	0.00
7,800.00	0.00	0.00	7,772.51	441.39	3.14	-441.40	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well W2 10H
Company:	ConocoPhillips	**TVD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Project:	Lea County, NM	**MD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Site:	Red Hills West 16 State	**North Reference:**	Grid
Well:	W2 10H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,900.00	0.00	0.00	7,872.51	441.39	3.14	-441.40	0.00	0.00	0.00
8,000.00	0.00	0.00	7,972.51	441.39	3.14	-441.40	0.00	0.00	0.00
8,100.00	0.00	0.00	8,072.51	441.39	3.14	-441.40	0.00	0.00	0.00
8,200.00	0.00	0.00	8,172.51	441.39	3.14	-441.40	0.00	0.00	0.00
8,300.00	0.00	0.00	8,272.51	441.39	3.14	-441.40	0.00	0.00	0.00
8,400.00	0.00	0.00	8,372.51	441.39	3.14	-441.40	0.00	0.00	0.00
8,407.49	0.00	0.00	8,380.00	441.39	3.14	-441.40	0.00	0.00	0.00
Bone Springs									
8,500.00	0.00	0.00	8,472.51	441.39	3.14	-441.40	0.00	0.00	0.00
8,600.00	0.00	0.00	8,572.51	441.39	3.14	-441.40	0.00	0.00	0.00
8,612.49	0.00	0.00	8,585.00	441.39	3.14	-441.40	0.00	0.00	0.00
BSp 1st Carb									
8,700.00	0.00	0.00	8,672.51	441.39	3.14	-441.40	0.00	0.00	0.00
8,800.00	0.00	0.00	8,772.51	441.39	3.14	-441.40	0.00	0.00	0.00
8,887.49	0.00	0.00	8,860.00	441.39	3.14	-441.40	0.00	0.00	0.00
Avalon A									
8,900.00	0.00	0.00	8,872.51	441.39	3.14	-441.40	0.00	0.00	0.00
9,000.00	0.00	0.00	8,972.51	441.39	3.14	-441.40	0.00	0.00	0.00
9,100.00	0.00	0.00	9,072.51	441.39	3.14	-441.40	0.00	0.00	0.00
9,137.49	0.00	0.00	9,110.00	441.39	3.14	-441.40	0.00	0.00	0.00
Avalon B									
9,200.00	0.00	0.00	9,172.51	441.39	3.14	-441.40	0.00	0.00	0.00
9,257.49	0.00	0.00	9,230.00	441.39	3.14	-441.40	0.00	0.00	0.00
Avalon C									
9,300.00	0.00	0.00	9,272.51	441.39	3.14	-441.40	0.00	0.00	0.00
9,400.00	0.00	0.00	9,372.51	441.39	3.14	-441.40	0.00	0.00	0.00
9,500.00	0.00	0.00	9,472.51	441.39	3.14	-441.40	0.00	0.00	0.00
9,517.49	0.00	0.00	9,490.00	441.39	3.14	-441.40	0.00	0.00	0.00
BSp 1st Sand									
9,577.49	0.00	0.00	9,550.00	441.39	3.14	-441.40	0.00	0.00	0.00
FBS									
9,600.00	0.00	0.00	9,572.51	441.39	3.14	-441.40	0.00	0.00	0.00
9,700.00	0.00	0.00	9,672.51	441.39	3.14	-441.40	0.00	0.00	0.00
9,800.00	0.00	0.00	9,772.51	441.39	3.14	-441.40	0.00	0.00	0.00
9,900.00	0.00	0.00	9,872.51	441.39	3.14	-441.40	0.00	0.00	0.00
9,927.49	0.00	0.00	9,900.00	441.39	3.14	-441.40	0.00	0.00	0.00
BSp 2nd Carb									
10,000.00	0.00	0.00	9,972.51	441.39	3.14	-441.40	0.00	0.00	0.00
10,100.00	0.00	0.00	10,072.51	441.39	3.14	-441.40	0.00	0.00	0.00
10,200.00	0.00	0.00	10,172.51	441.39	3.14	-441.40	0.00	0.00	0.00
10,262.49	0.00	0.00	10,235.00	441.39	3.14	-441.40	0.00	0.00	0.00
Bsp 2nd Sand									
10,300.00	0.00	0.00	10,272.51	441.39	3.14	-441.40	0.00	0.00	0.00
10,400.00	0.00	0.00	10,372.51	441.39	3.14	-441.40	0.00	0.00	0.00
10,500.00	0.00	0.00	10,472.51	441.39	3.14	-441.40	0.00	0.00	0.00
10,600.00	0.00	0.00	10,572.51	441.39	3.14	-441.40	0.00	0.00	0.00
10,637.49	0.00	0.00	10,610.00	441.39	3.14	-441.40	0.00	0.00	0.00
Bsp 3rd Carb									
10,700.00	0.00	0.00	10,672.51	441.39	3.14	-441.40	0.00	0.00	0.00
10,800.00	0.00	0.00	10,772.51	441.39	3.14	-441.40	0.00	0.00	0.00
10,900.00	0.00	0.00	10,872.51	441.39	3.14	-441.40	0.00	0.00	0.00
11,000.00	0.00	0.00	10,972.51	441.39	3.14	-441.40	0.00	0.00	0.00
11,100.00	0.00	0.00	11,072.51	441.39	3.14	-441.40	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well W2 10H
Company:	ConocoPhillips	**TVD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Project:	Lea County, NM	**MD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Site:	Red Hills West 16 State	**North Reference:**	Grid
Well:	W2 10H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11,200.00	0.00	0.00	11,172.51	441.39	3.14	-441.40	0.00	0.00	0.00
11,300.00	0.00	0.00	11,272.51	441.39	3.14	-441.40	0.00	0.00	0.00
11,352.49	0.00	0.00	11,325.00	441.39	3.14	-441.40	0.00	0.00	0.00
Bsp 3rd Sand									
11,400.00	0.00	0.00	11,372.51	441.39	3.14	-441.40	0.00	0.00	0.00
11,500.00	0.00	0.00	11,472.51	441.39	3.14	-441.40	0.00	0.00	0.00
11,600.00	0.00	0.00	11,572.51	441.39	3.14	-441.40	0.00	0.00	0.00
11,700.00	0.00	0.00	11,672.51	441.39	3.14	-441.40	0.00	0.00	0.00
11,742.49	0.00	0.00	11,715.00	441.39	3.14	-441.40	0.00	0.00	0.00
Wlfcmp									
11,800.00	0.00	0.00	11,772.51	441.39	3.14	-441.40	0.00	0.00	0.00
11,900.00	0.00	0.00	11,872.51	441.39	3.14	-441.40	0.00	0.00	0.00
11,937.49	0.00	0.00	11,910.00	441.39	3.14	-441.40	0.00	0.00	0.00
WC1									
11,987.53	0.00	0.00	11,960.04	441.39	3.14	-441.40	0.00	0.00	0.00
Start Build 10.00									
12,000.00	1.25	180.43	11,972.51	441.26	3.14	-441.27	10.00	10.00	0.00
12,050.00	6.25	180.43	12,022.39	437.99	3.11	-438.00	10.00	10.00	0.00
12,100.00	11.25	180.43	12,071.79	430.39	3.06	-430.40	10.00	10.00	0.00
12,150.00	16.25	180.43	12,120.34	418.51	2.97	-418.52	10.00	10.00	0.00
12,200.00	21.25	180.43	12,167.68	402.45	2.85	-402.46	10.00	10.00	0.00
12,250.00	26.25	180.43	12,213.43	382.32	2.70	-382.33	10.00	10.00	0.00
12,300.00	31.25	180.43	12,257.25	358.28	2.52	-358.29	10.00	10.00	0.00
12,350.00	36.25	180.43	12,298.81	330.51	2.31	-330.52	10.00	10.00	0.00
12,400.00	41.25	180.43	12,337.80	299.23	2.07	-299.24	10.00	10.00	0.00
12,444.38	45.69	180.43	12,370.00	268.71	1.84	-268.71	10.00	10.00	0.00
WC2									
12,450.00	46.25	180.43	12,373.91	264.67	1.81	-264.67	10.00	10.00	0.00
12,500.00	51.25	180.43	12,406.86	227.09	1.53	-227.10	10.00	10.00	0.00
12,550.00	56.25	180.43	12,436.42	186.78	1.23	-186.79	10.00	10.00	0.00
12,600.00	61.25	180.43	12,462.36	144.05	0.91	-144.06	10.00	10.00	0.00
12,650.00	66.25	180.43	12,484.47	99.23	0.57	-99.23	10.00	10.00	0.00
12,700.00	71.25	180.43	12,502.58	52.64	0.22	-52.64	10.00	10.00	0.00
12,750.00	76.25	180.43	12,516.57	4.66	-0.14	-4.66	10.00	10.00	0.00
12,800.00	81.25	180.43	12,526.33	-44.36	-0.51	44.37	10.00	10.00	0.00
12,850.00	86.25	180.43	12,531.77	-94.05	-0.88	94.05	10.00	10.00	0.00
12,887.53	90.00	180.43	12,533.00	-131.55	-1.16	131.55	10.00	10.00	0.00
Start 4605.00 hold at 12887.53 MD - LP (W2 10H)									
12,900.00	90.00	180.43	12,533.00	-144.02	-1.25	144.03	0.00	0.00	0.00
13,000.00	90.00	180.43	12,533.00	-244.02	-2.00	244.03	0.00	0.00	0.00
13,100.00	90.00	180.43	12,533.00	-344.01	-2.75	344.03	0.00	0.00	0.00
13,200.00	90.00	180.43	12,533.00	-444.01	-3.51	444.03	0.00	0.00	0.00
13,300.00	90.00	180.43	12,533.00	-544.01	-4.26	544.03	0.00	0.00	0.00
13,400.00	90.00	180.43	12,533.00	-644.01	-5.01	644.03	0.00	0.00	0.00
13,500.00	90.00	180.43	12,533.00	-744.00	-5.76	744.03	0.00	0.00	0.00
13,600.00	90.00	180.43	12,533.00	-844.00	-6.51	844.03	0.00	0.00	0.00
13,700.00	90.00	180.43	12,533.00	-944.00	-7.26	944.03	0.00	0.00	0.00
13,800.00	90.00	180.43	12,533.00	-1,043.99	-8.01	1,044.03	0.00	0.00	0.00
13,900.00	90.00	180.43	12,533.00	-1,143.99	-8.76	1,144.03	0.00	0.00	0.00
14,000.00	90.00	180.43	12,533.00	-1,243.99	-9.51	1,244.03	0.00	0.00	0.00
14,100.00	90.00	180.43	12,533.00	-1,343.99	-10.26	1,344.03	0.00	0.00	0.00
14,200.00	90.00	180.43	12,533.00	-1,443.98	-11.01	1,444.03	0.00	0.00	0.00
14,300.00	90.00	180.43	12,533.00	-1,543.98	-11.76	1,544.03	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well W2 10H
Company:	ConocoPhillips	**TVD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Project:	Lea County, NM	**MD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Site:	Red Hills West 16 State	**North Reference:**	Grid
Well:	W2 10H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
14,400.00	90.00	180.43	12,533.00	-1,643.98	-12.51	1,644.03	0.00	0.00	0.00
14,500.00	90.00	180.43	12,533.00	-1,743.98	-13.26	1,744.03	0.00	0.00	0.00
14,600.00	90.00	180.43	12,533.00	-1,843.97	-14.01	1,844.03	0.00	0.00	0.00
14,700.00	90.00	180.43	12,533.00	-1,943.97	-14.76	1,944.03	0.00	0.00	0.00
14,800.00	90.00	180.43	12,533.00	-2,043.97	-15.51	2,044.03	0.00	0.00	0.00
14,900.00	90.00	180.43	12,533.00	-2,143.96	-16.26	2,144.03	0.00	0.00	0.00
15,000.00	90.00	180.43	12,533.00	-2,243.96	-17.01	2,244.03	0.00	0.00	0.00
15,100.00	90.00	180.43	12,533.00	-2,343.96	-17.76	2,344.03	0.00	0.00	0.00
15,200.00	90.00	180.43	12,533.00	-2,443.96	-18.51	2,444.03	0.00	0.00	0.00
15,300.00	90.00	180.43	12,533.00	-2,543.95	-19.27	2,544.03	0.00	0.00	0.00
15,400.00	90.00	180.43	12,533.00	-2,643.95	-20.02	2,644.03	0.00	0.00	0.00
15,500.00	90.00	180.43	12,533.00	-2,743.95	-20.77	2,744.03	0.00	0.00	0.00
15,600.00	90.00	180.43	12,533.00	-2,843.94	-21.52	2,844.03	0.00	0.00	0.00
15,700.00	90.00	180.43	12,533.00	-2,943.94	-22.27	2,944.03	0.00	0.00	0.00
15,800.00	90.00	180.43	12,533.00	-3,043.94	-23.02	3,044.03	0.00	0.00	0.00
15,900.00	90.00	180.43	12,533.00	-3,143.94	-23.77	3,144.03	0.00	0.00	0.00
16,000.00	90.00	180.43	12,533.00	-3,243.93	-24.52	3,244.03	0.00	0.00	0.00
16,100.00	90.00	180.43	12,533.00	-3,343.93	-25.27	3,344.03	0.00	0.00	0.00
16,200.00	90.00	180.43	12,533.00	-3,443.93	-26.02	3,444.03	0.00	0.00	0.00
16,300.00	90.00	180.43	12,533.00	-3,543.92	-26.77	3,544.03	0.00	0.00	0.00
16,400.00	90.00	180.43	12,533.00	-3,643.92	-27.52	3,644.03	0.00	0.00	0.00
16,500.00	90.00	180.43	12,533.00	-3,743.92	-28.27	3,744.03	0.00	0.00	0.00
16,600.00	90.00	180.43	12,533.00	-3,843.92	-29.02	3,844.03	0.00	0.00	0.00
16,700.00	90.00	180.43	12,533.00	-3,943.91	-29.77	3,944.03	0.00	0.00	0.00
16,800.00	90.00	180.43	12,533.00	-4,043.91	-30.52	4,044.03	0.00	0.00	0.00
16,900.00	90.00	180.43	12,533.00	-4,143.91	-31.27	4,144.03	0.00	0.00	0.00
17,000.00	90.00	180.43	12,533.00	-4,243.90	-32.02	4,244.03	0.00	0.00	0.00
17,100.00	90.00	180.43	12,533.00	-4,343.90	-32.77	4,344.03	0.00	0.00	0.00
17,200.00	90.00	180.43	12,533.00	-4,443.90	-33.52	4,444.03	0.00	0.00	0.00
17,300.00	90.00	180.43	12,533.00	-4,543.90	-34.28	4,544.03	0.00	0.00	0.00
17,400.00	90.00	180.43	12,533.00	-4,643.89	-35.03	4,644.03	0.00	0.00	0.00
17,492.53	90.00	180.43	12,533.00	-4,736.42	-35.72	4,736.55	0.00	0.00	0.00
TD at 17492.53 - PBHL (W2 10H)									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL (W2 10H) - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	382,313.62	704,921.44	32° 2' 57.73 N	103° 40' 18.97 W
PBHL (W2 10H) - plan hits target center - Point	0.00	0.00	12,533.00	-4,736.42	-35.72	377,577.20	704,885.72	32° 2' 10.86 N	103° 40' 19.72 W
LP (W2 10H) - plan hits target center - Point	0.00	0.00	12,533.00	-131.55	-1.16	382,182.07	704,920.28	32° 2' 56.43 N	103° 40' 19.00 W

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well W2 10H
Company:	ConocoPhillips	**TVD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Project:	Lea County, NM	**MD Reference:**	Well @ 3249.00usft (RKB: 25' + GL: 3224')
Site:	Red Hills West 16 State	**North Reference:**	Grid
Well:	W2 10H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Design #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,504.71	4,490.00	Delaware		0.00	0.00
4,505.72	4,491.00	Lamar		0.00	0.00
4,545.06	4,530.00	Ramsey Sand 1		0.00	0.00
4,585.40	4,570.00	Ramsey Shale		0.00	0.00
4,595.49	4,580.00	Ramsey Sand 2		0.00	0.00
4,615.66	4,600.00	Ford Shale		0.00	0.00
4,630.79	4,615.00	Olds		0.00	0.00
5,483.07	5,460.00	Cherry canyon		0.00	0.00
7,207.49	7,180.00	Brushy Canyon		0.00	0.00
8,407.49	8,380.00	Bone Springs		0.00	0.00
8,612.49	8,585.00	BSp 1st Carb		0.00	0.00
8,887.49	8,860.00	Avalon A		0.00	0.00
9,137.49	9,110.00	Avalon B		0.00	0.00
9,257.49	9,230.00	Avalon C		0.00	0.00
9,517.49	9,490.00	BSp 1st Sand		0.00	0.00
9,577.49	9,550.00	FBS		0.00	0.00
9,927.49	9,900.00	BSp 2nd Carb		0.00	0.00
10,262.49	10,235.00	Bsp 2nd Sand		0.00	0.00
10,637.49	10,610.00	Bsp 3rd Carb		0.00	0.00
11,352.49	11,325.00	Bsp 3rd Sand		0.00	0.00
11,742.49	11,715.00	Wlfcmp		0.00	0.00
11,937.49	11,910.00	WC1		0.00	0.00
12,444.38	12,370.00	WC2		0.00	0.00

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2,450.00	2,450.00	0.00	0.00	Start Build 1.50
2,949.73	2,948.31	32.64	0.23	Start 2883.07 hold at 2949.73 MD
5,832.80	5,806.74	408.75	2.91	Start Drop -1.50
6,332.53	6,305.04	441.39	3.14	Start 5655.00 hold at 6332.53 MD
11,987.53	11,960.04	441.39	3.14	Start Build 10.00
12,887.53	12,533.00	-131.55	-1.16	Start 4605.00 hold at 12887.53 MD
17,492.53	12,533.00	-4,736.42	-35.72	TD at 17492.53

Closed Loop System Design, Operating and Maintenance, and Closure Plan

ConocoPhillips Company
Well: Red Hills West 16 State W2 10H
Location: Sec. 16, T26S, R32E
Date: 2/28/2014

ConocoPhillips proposes the following plan for design, operating and maintenance, and closure of our proposed closed loop system for the above named well:

1. We propose to use a closed loop system with steel pits, haul-off bins, and frac tanks for containing all cuttings, solids, mud, water, brine, and liquids. We will not dig a pit, nor will we use a drying pad, nor will we build an earth pit above ground level, nor will we dispose of or bury any waste on location.

   All drilling waste and all drilling fluids (fresh water, brine, mud, cuttings, drill solids, cement returns, and any other liquid or solid that may be involved) will be contained on location in the rig's steel pits or in haul-off bins or in frac tanks as needed. The intent is as follows:

   - We propose to use the rigs' steel pits for containing and maintaining the drilling fluids.
   - We propose to remove cuttings and drilled solids from the mud by using solids control equipment and to contain such cuttings and drilled solids on location in haul-off bins.
   - We propose that any excess water that may need to be stored on location will be stored in tanks.

The closed loop system components will be inspected daily by each tour and any needed repairs will be made immediately. Any leak in the system will be repaired immediately, and any spilled liquids and/or solids will be cleaned immediately, and the area where any such spill occurred will be remediated immediately.

2. Cuttings and solids will be removed from location in haul-off bins by an authorized contractor and disposed of at an authorized facility. For this well, we propose the following disposal facility:

   R-360 Inc.
   4507 West Carlsbad Hwy, Hobbs, NM 88240,
   P.O. Box 388; Hobbs, New Mexico 88241
   Toll Free Phone: 877.505.4274, Local Phone Number: 432.638.4076

   The physical address for the plant where the disposal facility is located is Highway 62/180 at mile marker 66 (33 miles East of Hobbs, NM and 32 miles West of Carlsbad, NM).

   The Permit Number for R-360 is NM-01-0006.

   A photograph showing the type of haul-off bins that will be used is attached.

3. Mud will be transported by vacuum truck and disposed of at R-360 Inc. at the facility described above.

4. Fresh Water and Brine will be hauled off by vacuum truck and disposed of at an authorized salt water disposal well. We propose the following for disposal of fresh water and brine as needed:

   - Nabors Well Services Company, 3221 NW County Rd; Hobbs, NM 88240, PO 5208 Hobbs, NM, 88241, Permit SWD 092. (Well Location: **Section 3, T19S R37E**)

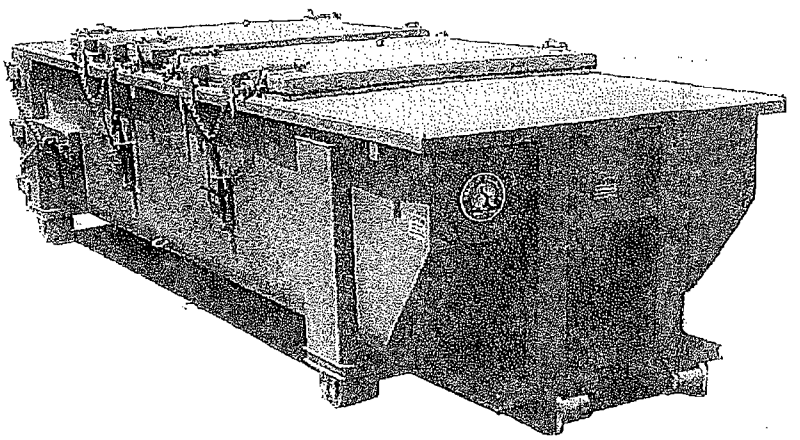
   - Basic Energy Services, P.O. Box 1869; Eunice, NM 88231 Phone Number: 575.394.2545, Facility located at Hwy 18, Mile Marker 19; Eunice, NM.

Jason Levinson
Drilling Engineer
Office: 281-206-5334
Cell: 281-682-2783

SPECIFICATIONS

FLOOR: 3/16" PL one piece
CROSS MEMBER: 3 x 4.1 channel 16" on center
WALLS: 3/16" PL solid welded with tubing top, inside liner hooks
DOOR: 3/16" PL with tubing frame
FRONT: 3/16" PL slant formed
PICK UP: Standard cable with 2" x 6" x 1/4" rails, gusset at each crossmember
WHEELS: 10 DIA x 9 long with rease fittings
DOOR LATCH: 3 independent ratchet binders with chains, vertical second latch
GASKETS: Extruded rubber seal with metal retainers
WELDS: All welds continuous except sub-structure crossmembers
FINISH: Coated inside and out with direct to metal, rust inhibiting acrylic enamel color coat
HYDROTESTING: Full capacity static test
DIMENSIONS: 22'-11" long (21'-8" inside), 99" wide (88" inside), see drawing for height
OPTIONS: Steel grit blast and special paint, Ampliroll, Heil and Dino pickup
ROOF: 3/16" PL roof panels with tubing and channel support frame
LIDS: (2) 68" x 90" metal rolling lids spring loaded, self raising
ROLLERS: 4" V-groove rollers with delrin bearings and grease fittings
OPENING: (2) 60" x 82" openings with 8" divider centered on container
LATCH (2) independent ratchet binders with chains per lid
GASKETS: Extruded rubber seal with metal retainers

Heavy Duty Split Metal Rolling Lid



CONT.	A	B
20 YD	41	53
25 YD	53	65
30 YD	65	77