

Mewbourne Oil Co

Eddy County, New Mexico

Sec 14, T26S, R27E

Owl Draw 23 DM Fed Com #2H

Wellbore #1

Plan: Design #1

DDC Curve Report

11 June, 2013

Oil Conservation Division
Case No. 19
Exhibit No. 1



DDC Curve Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Owl Draw 23 DM Fed Com #2H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3172.0usft (Patterson #75)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3172.0usft (Patterson #75)
Site:	Sec 14, T26S, R27E	North Reference:	Grid
Well:	Owl Draw 23 DM Fed Com #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Eddy County, New Mexico		
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 14, T26S, R27E		
Site Position:	Northing:	376,774.54 usft	Latitude: 32° 2' 8.725 N
From: Map	Easting:	551,931.04 usft	Longitude: 104° 9' 56.686 W
Position Uncertainty:	0.0 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.09 °

Well	Owl Draw 23 DM Fed Com #2H		
Well Position	+N/-S	1.3 usft	Northing: 376,775.82 usft
	+E/-W	65.0 usft	Easting: 551,996.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level: 3,152.0 usft

Wellbore	Wellbore #1		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/11/2013	7.60	59.86	48,240

Design	Design #1		
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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	185.58

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	
7,164.5	0.00	0.00	7,164.5	0.0	0.0	0.00	0.00	0.00	0.00	
7,914.5	90.00	185.58	7,642.0	-475.2	-46.4	12.00	12.00	-23.26	185.58	
12,794.1	90.00	185.58	7,642.0	-5,331.7	-520.7	0.00	0.00	0.00	0.00	PBHL Owl Draw 23

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Well:	Owl Draw 23 DM Fed Com #2H	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)
Build 12° / 100'									
7,164.5	0.00	0.00	7,164.5	0.0	0.0	0.0	0.00	0.00	0.00
7,170.0	0.66	185.58	7,170.0	0.0	0.0	0.0	12.00	12.00	0.00
7,200.0	4.26	185.58	7,200.0	-1.3	-0.1	1.3	12.00	12.00	0.00
7,230.0	7.86	185.58	7,229.8	-4.5	-0.4	4.5	12.00	12.00	0.00
7,260.0	11.46	185.58	7,259.4	-9.5	-0.9	9.5	12.00	12.00	0.00
7,290.0	15.06	185.58	7,288.6	-16.3	-1.6	16.4	12.00	12.00	0.00
7,320.0	18.66	185.58	7,317.3	-25.0	-2.4	25.1	12.00	12.00	0.00
7,350.0	22.26	185.58	7,345.4	-35.4	-3.5	35.6	12.00	12.00	0.00
7,380.0	25.86	185.58	7,372.8	-47.6	-4.6	47.8	12.00	12.00	0.00
7,410.0	29.46	185.58	7,399.3	-61.4	-6.0	61.7	12.00	12.00	0.00
7,440.0	33.06	185.58	7,425.0	-76.9	-7.5	77.3	12.00	12.00	0.00
7,470.0	36.66	185.58	7,449.6	-94.0	-9.2	94.4	12.00	12.00	0.00
7,500.0	40.26	185.58	7,473.1	-112.6	-11.0	113.1	12.00	12.00	0.00
7,530.0	43.86	185.58	7,495.3	-132.6	-12.9	133.2	12.00	12.00	0.00
7,560.0	47.46	185.58	7,516.3	-153.9	-15.0	154.6	12.00	12.00	0.00
7,590.0	51.06	185.58	7,535.9	-176.5	-17.2	177.4	12.00	12.00	0.00
7,620.0	54.66	185.58	7,554.0	-200.3	-19.6	201.3	12.00	12.00	0.00
7,650.0	58.26	185.58	7,570.6	-225.2	-22.0	226.3	12.00	12.00	0.00
7,680.0	61.86	185.58	7,585.5	-251.1	-24.5	252.3	12.00	12.00	0.00
7,710.0	65.46	185.58	7,598.8	-277.8	-27.1	279.2	12.00	12.00	0.00
7,740.0	69.06	185.58	7,610.4	-305.4	-29.8	306.8	12.00	12.00	0.00
7,770.0	72.66	185.58	7,620.3	-333.6	-32.6	335.2	12.00	12.00	0.00
7,800.0	76.26	185.58	7,628.3	-362.3	-35.4	364.1	12.00	12.00	0.00
7,830.0	79.86	185.58	7,634.5	-391.5	-38.2	393.4	12.00	12.00	0.00
7,860.0	83.46	185.58	7,638.9	-421.1	-41.1	423.1	12.00	12.00	0.00
7,890.0	87.06	185.58	7,641.3	-450.8	-44.0	453.0	12.00	12.00	0.00
EOB @ 90° Inc / 185.58° Azm / 7642' TVD									
7,914.5	90.00	185.58	7,642.0	-475.2	-46.4	477.5	12.00	12.00	0.00

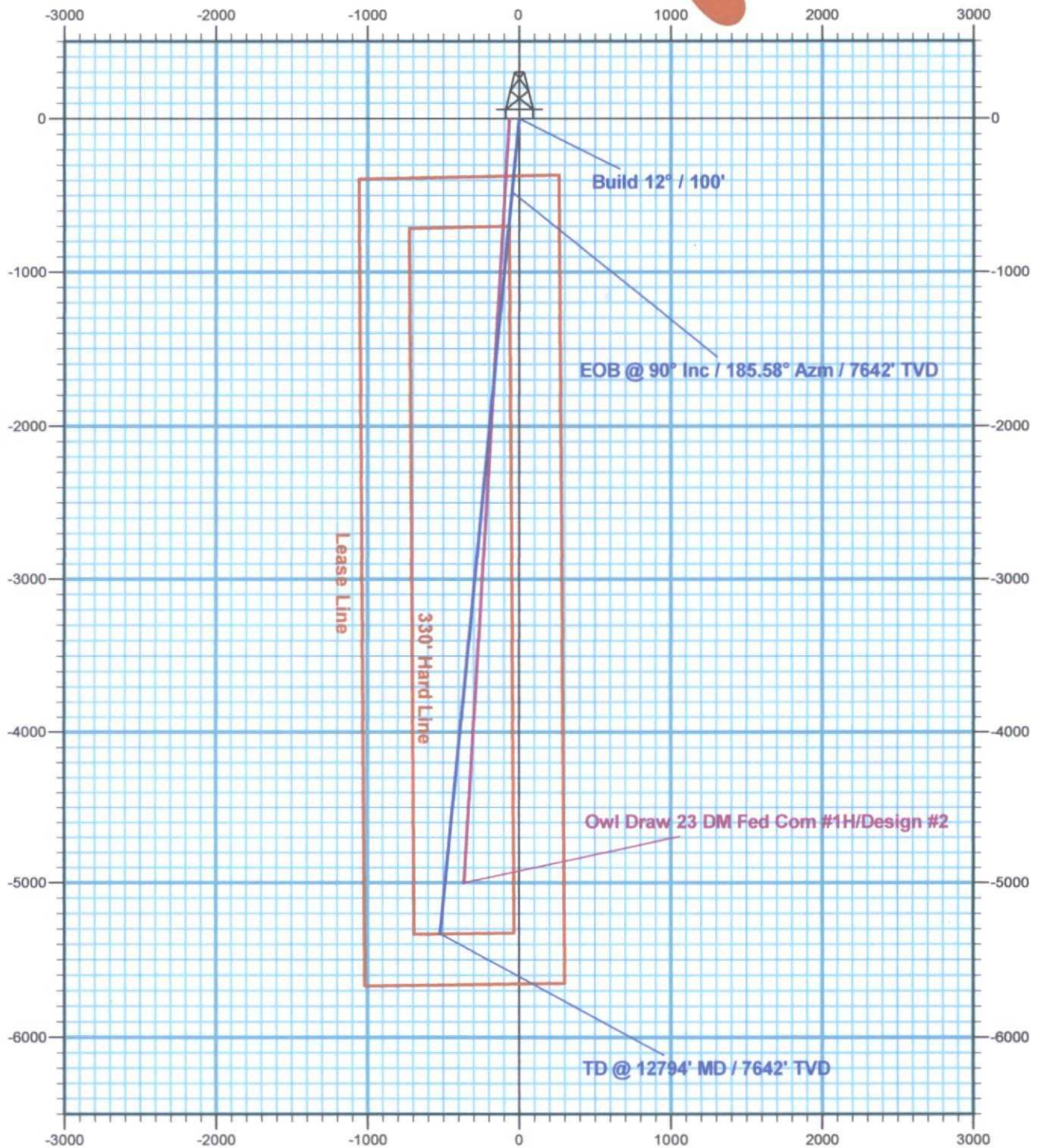
Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL Owl Draw 23 D	0.00	0.00	7,642.0	-5,331.7	-520.7	371,444.12	551,475.30	32° 1' 15.979 N	104° 10' 2.075 W
- plan misses target center by 4879.6usft at 7914.5usft MD (7642.0 TVD, -475.2 N, -46.4 E)									
- Point									

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,164.5	7,164.5	0.0	0.0	Build 12° / 100'
7,914.5	7,642.0	-475.2	-46.4	EOB @ 90° Inc / 185.58° Azm / 7642' TVD
12,794.1	7,642.0	-5,331.7	-520.7	TD @ 12794' MD / 7642' TVD

Mewbourne Oil Company

Eddy County, New Mexico
Owl Draw 23 DM Fed Com #2H
Quote 130502
Design #1

DDC
The DIRECTIONAL DRILLING COMPANY



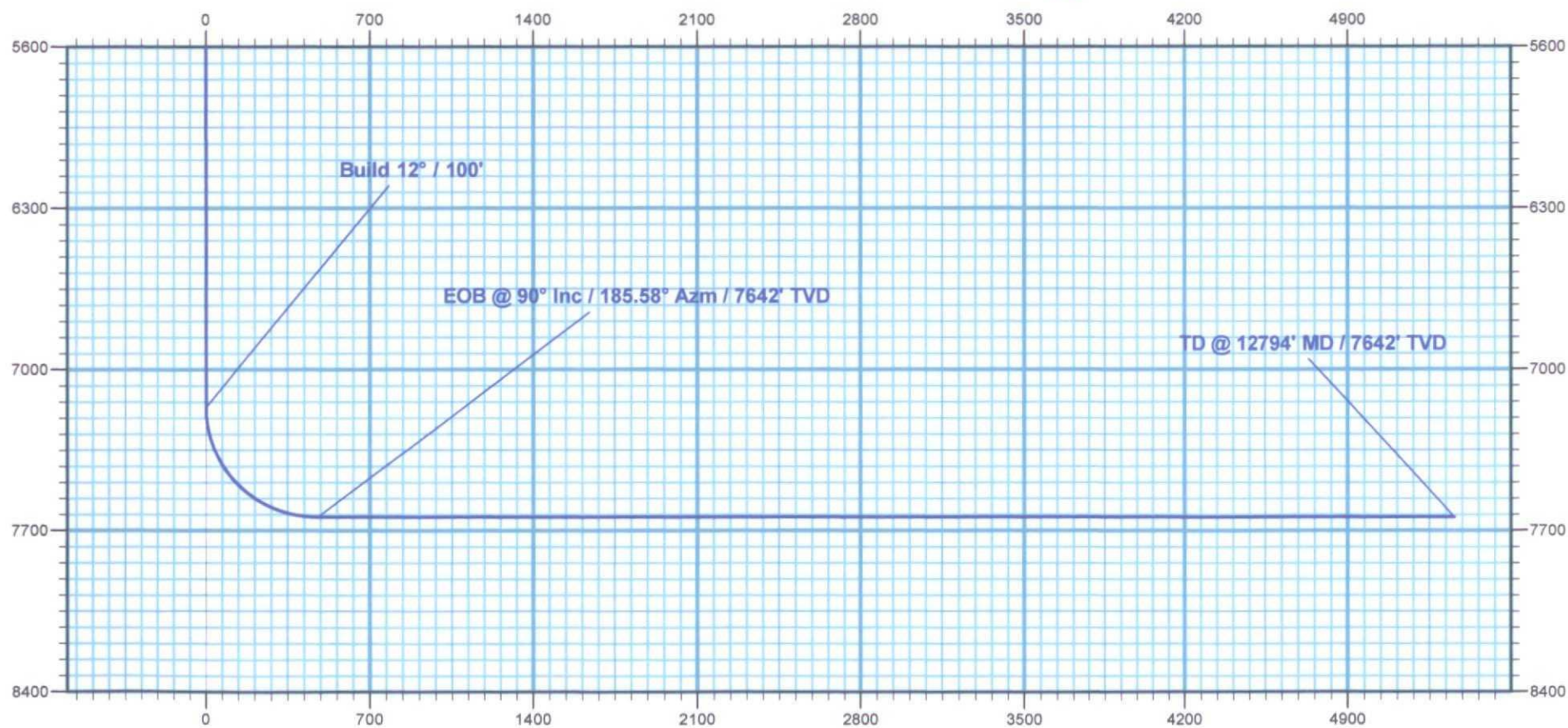
Mewbourne Oil Company

Eddy County, New Mexico

Owl Draw 23 DM Fed Com #2H

Quote 130502

Design #1



Vertical Section at 185.58° (700 usft/in)