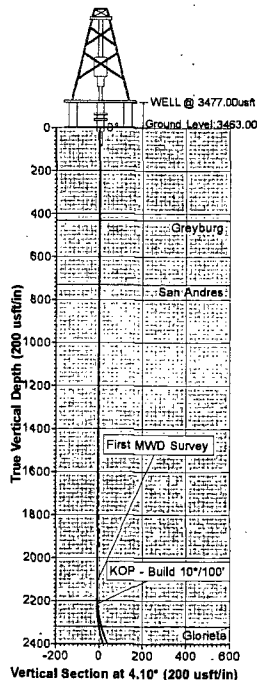


Nearburg Producing Co.

Project: Eddy County, NM (NAD27 NME) (10)
Well: Huber 3 Fed #6H
Wellbore: Lateral #1
Design: Design #3 (10°/100')

M3P
DIRECTIONAL
SERVICES



WELL DETAILS														
+N/-S		+E/-W		Northing		Ground Level		Latitude		Longitude				
0.00		0.00		580411.50		3483.00		32° 35' 44.057 N		104° 28' 48.854 W				
SECTION DETAILS														
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	VSet	Target	Annotation			
1	2000.00	0.53	191.75	1998.94	-8.48	-8.56	0.00	0.00	-4.08					
2	2216.85	0.53	191.75	2216.79	-10.45	-10.07	0.00	0.00	-11.07		KOP - Build 10°/100'			
3	3122.11	90.00	4.20	2795.00	581.00	32.22	10.00	172.45	581.88		EOC - Hold 90°			
4	7347.28	80.00	4.20	2795.00	4774.80	341.80	0.00	0.00	4787.03	PBHL - TD(H3F6H)				
DESIGN TARGET DETAILS														
Name		TVD		+N/-S		+E/-W		Northing		Latitude		Longitude	Shape	
PBHL - TD(H3F6H)		2795.00		4774.80		341.80		585188.30		455276.40		32° 38' 31.312 N	104° 28' 42.933 W	Point
-plan hits target center														

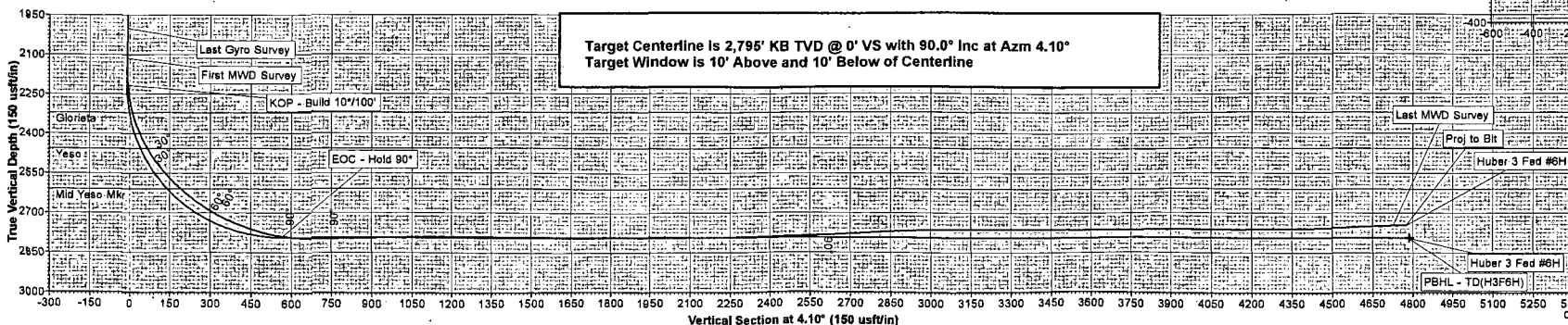
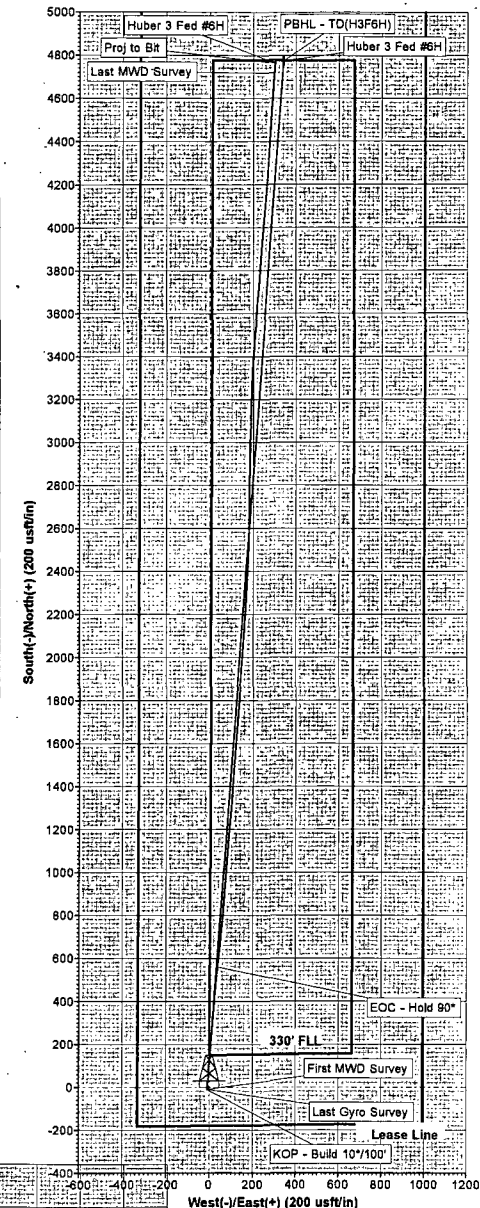
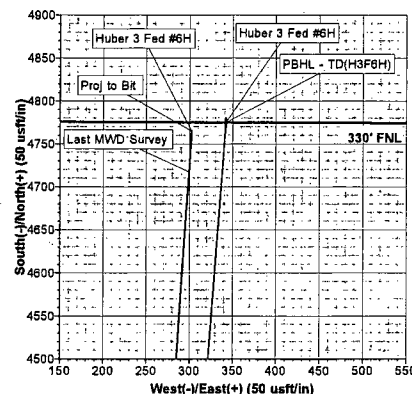
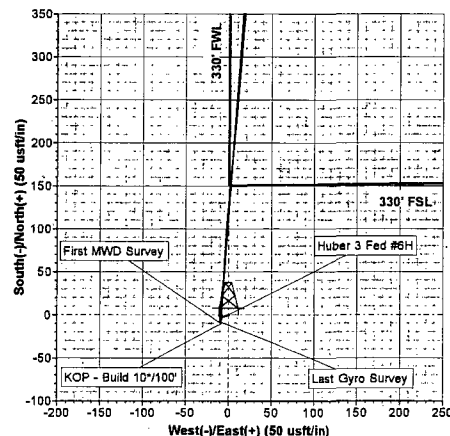
Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001
Local Origin: Site Huber 3 Fed #6H, Grid North
Latitude: 32° 35' 44.057 N
Longitude: 104° 28' 46.854 W
Grid East: 454928.50
Grid North: 580411.50
Scale Factor: 1.000
Geomagnetic Model: IGRF2010
Sample Date: 25-Sep-14
Magnetic Declination: 7.63°
Dip Angle from Horizontal: 60.29°
Magnetic Field Strength: 48412
To convert a Magnetic Direction to a Grid Direction, Add 7.71°
To convert a Magnetic Direction to a True Direction, Add 7.63° East
To convert a True Direction to a Grid Direction, Add 0.08°



Azimuths to Grid North
True North: 0.08°
Magnetic North: 7.71°
Magnetic Field
Strength: 48411.7nT
Dip Angle: 60.29°
Date: 9/25/2014
Model: IGRF2010

LEGEND

Huber 3 Fed #6H, Lateral #1, Lateral #1 V0
Design #3 (10°/100')



Target Centerline is 2,795' KB TVD @ 0° VS with 90.0° Inc at Azm 4.10°
Target Window is 10' Above and 10' Below of Centerline

30-015-39745

NM OIL CONSERVATION

ARTESIA DISTRICT

MAR 30 2015

RECEIVED

Nearburg Producing Co.

Eddy County, NM (NAD27 NME) (10)

Huber 3 Fed #6H

Huber 3 Fed #6H

30-015-39765

Lateral #1

Survey: M3P MWD Survey #1

Standard Survey Report

12 January, 2015

M3P
DIRECTIONAL
SERVICES

M3P Directional Services

Survey Report



Company:	Nearburg Producing Co.	Local Co-ordinate Reference:	Site Huber 3 Fed #6H
Project:	Eddy County, NM (NAD27 NME) (10)	TVD Reference:	WELL @ 3477.00usft
Site:	Huber 3 Fed #6H	MD Reference:	WELL @ 3477.00usft
Well:	Huber 3 Fed #6H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	Database:	EDM 5000.1 Single User Db

Project	Eddy County, NM (NAD27 NME) (10)		
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	Huber 3 Fed #6H, Sec 3, T-20-S, R-25-E		
Site Position:	Northing:	580,411.50 usft	Latitude: 32° 35' 44.057 N
From: Map	Easting:	454,928.50 usft	Longitude: 104° 28' 46.854 W
Position Uncertainty: 0.00 usft	Slot Radius: 13-3/16 "	Grid Convergence:	-0.08 °

Well	Huber 3 Fed #6H		
Well Position	+N/-S	0.00 usft	Northing: 580,411.50 usft
	+E/-W	0.00 usft	Easting: 454,928.50 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,477.00 usft
		Ground Level:	3,463.00 usft

Wellbore	Lateral #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	9/25/2014	7.63
			Dip Angle (°) 60.29
			Field Strength (nT) 48,412

Design	Lateral #1		
Audit Notes:			
Version: 1.0	Phase: ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction (°) 4.10

Survey Program	Date 1/12/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.00	2,000.00	Gyro Survey #1 (Lateral #1)	MS Energy - NS-GYRO-MS	North sensing gyrocompassing m/s
2,113.00	7,303.00	M3P MWD Survey #1 (Lateral #1)	M3P MWD	M3P MWD - Standard

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)
2,000.00	0.53	191.75	1,999.94	-8.48	-8.66	-9.08	0.00	0.00	0.00
2,113.00	0.60	217.20	2,112.94	-9.47	-9.12	-10.10	0.23	0.06	22.52
First MWD Survey									
2,145.00	0.40	244.00	2,144.94	-9.65	-9.32	-10.29	0.95	-0.63	83.75
2,177.00	1.60	340.80	2,176.93	-9.28	-9.57	-9.94	5.30	3.75	302.50
2,209.00	4.00	352.20	2,208.89	-7.75	-9.87	-8.44	7.66	7.50	35.63
2,241.00	6.90	355.80	2,240.75	-4.73	-10.16	-5.44	9.12	9.06	11.25
2,272.00	10.00	358.20	2,271.41	-0.18	-10.38	-0.92	10.06	10.00	7.74
2,303.00	12.80	6.60	2,301.79	5.93	-10.07	5.19	10.48	9.03	27.10
2,335.00	15.60	7.90	2,332.81	13.71	-9.07	13.03	8.81	8.75	4.06

M3P Directional Services

Survey Report



Company:	Nearburg Producing Co.	Local Co-ordinate Reference:	Site Huber 3 Fed #6H
Project:	Eddy County, NM (NAD27 NME) (10)	TVD Reference:	WELL @ 3477.00usft
Site:	Huber 3 Fed #6H	MD Reference:	WELL @ 3477.00usft
Well:	Huber 3 Fed #6H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	Database:	EDM 5000.1 Single User Db

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)	
2,367.00	19.20	7.40	2,363.34	23.19	-7.81	22.58	11.26	11.25	-1.56	
2,398.00	22.30	6.30	2,392.33	34.10	-6.50	33.55	10.08	10.00	-3.55	
2,429.00	25.90	4.50	2,420.62	46.70	-5.33	46.20	11.85	11.61	-5.81	
2,461.00	29.40	2.70	2,448.96	61.52	-4.41	61.04	11.24	10.94	-5.63	
2,493.00	32.90	3.10	2,476.35	78.04	-3.57	77.59	10.96	10.94	1.25	
2,525.00	35.50	3.60	2,502.81	96.00	-2.51	95.57	8.17	8.13	1.56	
2,557.00	38.40	4.50	2,528.38	115.18	-1.15	114.81	9.22	9.06	2.81	
2,589.00	41.20	4.40	2,552.96	135.60	0.44	135.29	8.75	8.75	-0.31	
2,621.00	43.50	4.80	2,576.61	157.09	2.17	156.84	7.24	7.19	1.25	
2,653.00	46.10	5.30	2,599.32	179.55	4.16	179.38	8.20	8.13	1.56	
2,684.00	48.50	5.00	2,620.34	202.24	6.20	202.16	7.77	7.74	-0.97	
2,716.00	50.80	5.20	2,641.05	226.53	8.37	226.54	7.20	7.19	0.63	
2,748.00	53.30	5.10	2,660.73	251.65	10.63	251.77	7.82	7.81	-0.31	
2,779.00	55.80	4.50	2,678.71	276.82	12.74	277.02	8.22	8.06	-1.94	
2,811.00	58.60	4.50	2,696.04	303.63	14.85	303.92	8.75	8.75	0.00	
2,843.00	61.70	4.70	2,711.97	331.29	17.08	331.67	9.70	9.69	0.63	
2,874.00	64.50	4.50	2,725.99	358.85	19.30	359.31	9.05	9.03	-0.65	
2,906.00	66.80	4.20	2,739.19	387.91	21.51	388.46	7.24	7.19	-0.94	
2,937.00	68.70	3.80	2,750.92	416.53	23.51	417.15	6.24	6.13	-1.29	
2,969.00	70.80	4.50	2,762.00	446.48	25.68	447.17	6.88	6.56	2.19	
3,001.00	73.10	5.10	2,771.91	476.79	28.23	477.59	7.41	7.19	1.88	
3,033.00	76.00	5.70	2,780.44	507.49	31.13	508.42	9.24	9.06	1.88	
3,064.00	79.90	6.20	2,786.91	537.64	34.27	538.72	12.68	12.58	1.61	
3,092.00	83.10	6.30	2,791.05	565.17	37.29	566.39	11.43	11.43	0.36	
3,206.00	88.80	5.50	2,799.09	678.23	48.97	680.00	5.05	5.00	-0.70	
3,268.00	90.40	5.30	2,799.53	739.95	54.80	741.98	2.60	2.58	-0.32	
3,332.00	91.20	4.70	2,798.63	803.70	60.38	805.96	1.56	1.25	-0.94	
3,395.00	91.50	4.00	2,797.15	866.50	65.16	868.94	1.21	0.48	-1.11	
3,458.00	91.60	4.00	2,795.44	929.33	69.55	931.92	0.16	0.16	0.00	
3,521.00	91.40	4.40	2,793.80	992.14	74.16	994.90	0.71	-0.32	0.63	
3,584.00	90.40	4.40	2,792.81	1,054.94	79.00	1,057.89	1.59	-1.59	0.00	
3,648.00	90.70	4.50	2,792.19	1,118.75	83.96	1,121.89	0.49	0.47	0.16	
3,743.00	90.10	5.00	2,791.53	1,213.42	91.83	1,216.88	0.82	-0.63	0.53	
3,837.00	89.30	4.50	2,792.02	1,307.09	99.61	1,310.87	1.00	-0.85	-0.53	
3,932.00	90.20	3.10	2,792.44	1,401.88	105.91	1,405.86	1.75	0.95	-1.47	
4,027.00	89.90	4.50	2,792.35	1,496.67	112.20	1,500.86	1.51	-0.32	1.47	
4,121.00	89.80	4.60	2,792.60	1,590.37	119.66	1,594.86	0.15	-0.11	0.11	
4,216.00	90.10	4.00	2,792.68	1,685.10	126.78	1,689.85	0.71	0.32	-0.63	
4,308.00	89.50	4.40	2,793.00	1,776.85	133.52	1,781.85	0.78	-0.65	0.43	
4,401.00	90.50	4.50	2,793.00	1,869.57	140.74	1,874.85	1.08	1.08	0.11	
4,493.00	89.60	4.20	2,792.92	1,961.31	147.72	1,966.85	1.03	-0.98	-0.33	
4,585.00	89.50	4.10	2,793.64	2,053.06	154.37	2,058.85	0.15	-0.11	-0.11	
4,677.00	89.40	3.30	2,794.53	2,144.87	160.31	2,150.84	0.88	-0.11	-0.87	

M3P Directional Services

Survey Report



Company:	Nearburg Producing Co.	Local Co-ordinate Reference:	Site Huber 3 Fed #6H
Project:	Eddy County, NM (NAD27 NME) (10)	TVD Reference:	WELL @ 3477.00usft
Site:	Huber 3 Fed #6H	MD Reference:	WELL @ 3477.00usft
Well:	Huber 3 Fed #6H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	Database:	EDM 5000.1 Single User Db

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)
4,770.00	90.70	3.10	2,794.45	2,237.72	165.50	2,243.82	1.41	1.40	-0.22
4,862.00	90.40	3.00	2,793.56	2,329.58	170.40	2,335.80	0.34	-0.33	-0.11
4,954.00	91.50	2.60	2,792.04	2,421.46	174.89	2,427.77	1.27	1.20	-0.43
5,046.00	92.10	1.90	2,789.15	2,513.34	178.50	2,519.67	1.00	0.65	-0.76
5,141.00	93.10	1.10	2,784.84	2,608.21	180.98	2,614.48	1.35	1.05	-0.84
5,236.00	93.80	0.30	2,779.12	2,703.03	182.14	2,709.13	1.12	0.74	-0.84
5,331.00	92.70	0.50	2,773.74	2,797.87	182.81	2,803.78	1.18	-1.16	0.21
5,426.00	92.00	0.90	2,769.84	2,892.79	183.97	2,898.54	0.85	-0.74	0.42
5,521.00	92.00	1.20	2,766.53	2,987.71	185.71	2,993.34	0.32	0.00	0.32
5,616.00	90.90	1.30	2,764.12	3,082.66	187.78	3,088.19	1.16	-1.16	0.11
5,711.00	89.90	1.50	2,763.46	3,177.63	190.10	3,183.08	1.07	-1.05	0.21
5,806.00	89.90	2.10	2,763.62	3,272.58	193.08	3,278.01	0.63	0.00	0.63
5,901.00	89.80	3.40	2,763.87	3,367.47	197.64	3,372.98	1.37	-0.11	1.37
5,996.00	89.90	4.40	2,764.12	3,462.24	204.10	3,467.98	1.06	0.11	1.05
6,091.00	89.70	4.70	2,764.45	3,556.94	211.64	3,562.97	0.38	-0.21	0.32
6,186.00	89.50	5.00	2,765.12	3,651.60	219.67	3,657.96	0.38	-0.21	0.32
6,281.00	89.90	4.60	2,765.61	3,746.27	227.62	3,752.95	0.60	0.42	-0.42
6,375.00	91.10	4.10	2,764.79	3,839.99	234.75	3,846.95	1.38	1.28	-0.53
6,470.00	90.10	4.80	2,763.80	3,934.70	242.12	3,941.94	1.28	-1.05	0.74
6,565.00	89.70	5.40	2,763.96	4,029.32	250.56	4,036.92	0.76	-0.42	0.63
6,660.00	90.30	4.70	2,763.96	4,123.95	258.93	4,131.91	0.97	0.63	-0.74
6,755.00	90.60	4.10	2,763.22	4,218.67	266.21	4,226.90	0.71	0.32	-0.63
6,850.00	90.90	3.90	2,761.97	4,313.43	272.84	4,321.90	0.38	0.32	-0.21
6,945.00	91.40	3.90	2,760.07	4,408.19	279.30	4,416.88	0.53	0.53	0.00
7,040.00	92.40	3.20	2,756.92	4,502.95	285.18	4,511.82	1.28	1.05	-0.74
7,135.00	92.40	3.90	2,752.94	4,597.69	291.06	4,606.73	0.74	0.00	0.74
7,230.00	92.00	4.00	2,749.29	4,692.39	297.60	4,701.66	0.43	-0.42	0.11
7,255.00	92.20	3.90	2,748.38	4,717.31	299.32	4,726.64	0.89	0.80	-0.40
Last MWD Survey									
7,303.00	92.20	3.90	2,746.53	4,765.17	302.58	4,774.61	0.00	0.00	0.00
Proj to Bit									

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
2,113.00	2,112.94	-9.47	-9.12	First MWD Survey
7,255.00	2,748.38	4,717.31	299.32	Last MWD Survey
7,303.00	2,746.53	4,765.17	302.58	Proj to Bit

Checked By: _____ Approved By: _____ Date: _____