



Yates Petroleum
Project: Lea County, NM (NAD-83)
Site: Capella BOP Federal
Well: #5H
Wellbore: OH
Plan: Plan #1 (#5H/OH)

WELL DETAILS: #5H

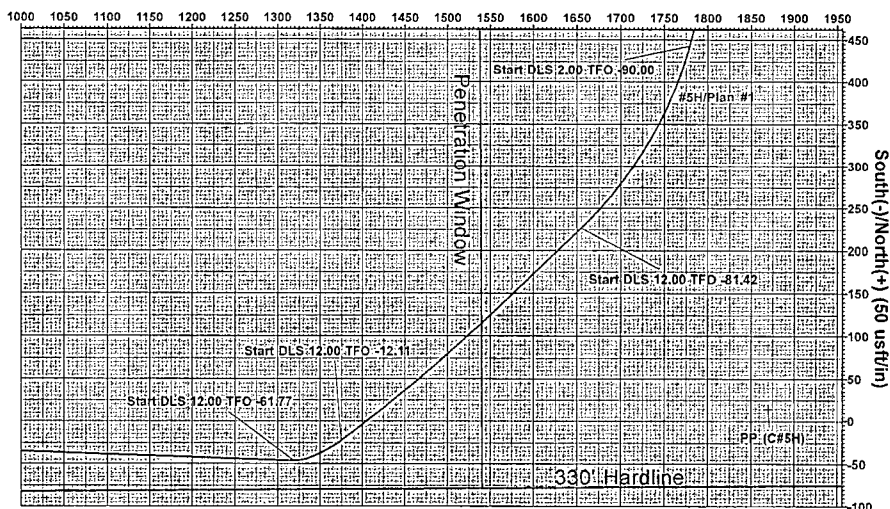
Ground Elevation:: 3707.0
RKB Elevation: WELL @ 3732.0usft (25' KB)
Rig Name: 25' KB

Surface Hole Location
Northing 541564.45 Easting 740341.49 Latitude 32° 29' 13.804 N Longitude 103° 41' 16.549 W

Section Details

	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2900.0	0.00	0.00	2900.0	0.0	0.0	0.00	0.00	0.0	
3	3650.0	15.00	92.00	3641.5	-3.4	97.6	2.00	92.00	33.5	
4	8369.5	15.00	92.00	8200.1	-46.0	1318.3	0.00	0.00	453.2	
5	8535.9	30.00	55.00	8354.2	-22.7	1374.5	12.00	-61.77	496.0	
6	8998.7	85.00	45.00	8593.7	226.5	1654.5	12.00	-12.11	832.1	
7	9251.8	90.00	15.00	8605.0	443.0	1779.3	12.00	-81.42	1079.7	
8	10030.2	90.00	359.43	8605.0	1212.9	1876.8	2.00	-90.00	1829.7	
9	13359.3	90.00	359.43	8605.0	4541.8	1843.8	0.00	0.00	4901.8	PBHL (C#5H)

West(-)/East(+) (50 usft/in)



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL (C#5H)	8605.0	4541.8	1843.8	546106.25	742185.26
PP (C#5H)	8605.0	14.7	1869.8	541579.20	742211.30

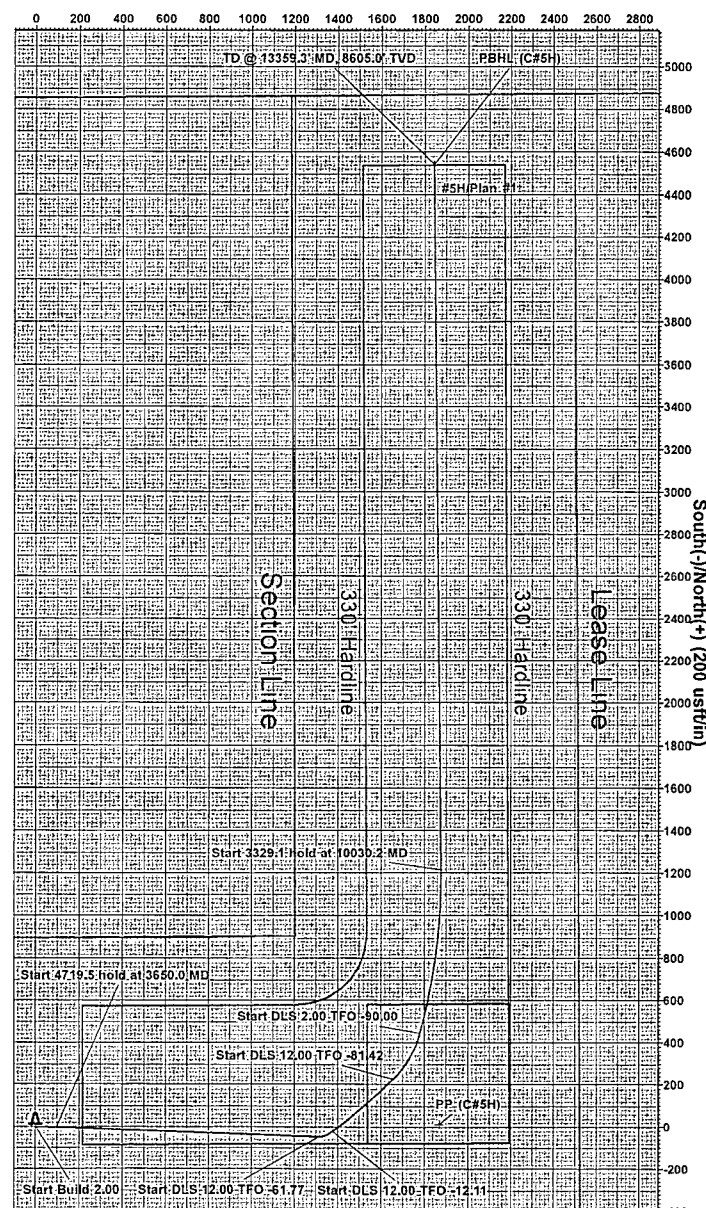


Magnetic Field
Strength: 48526.4nT
Dip Angle: 60.35°
Date: 10/15/2013
Model: IGRF2010

Vertical Section at 22.09° (200 usft/in)

Crescent Directional Drilling
7715 West Industrial Ave. Midland, Tx 79706
Phone: 432-618-1135

West(-)/East(+) (200 usft/in)



PROJECT DETAILS: Lea County, NM (NAD-83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level
Local North: Grid

Plan: Plan #1 (#5H/OH)
Created By: Matt Higgins Date: 12:49, October 15 2013



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Yates Petroleum

Lea County, NM (NAD-83)

Capella BOP Federal

#5H

OH

Plan: Plan #1

Standard Planning Report

15 October, 2013





Planning Report



Database:	Houston R5000 Database	Local Co-ordinate Reference:	Well #5H
Company:	Yates Petroleum	TVD Reference:	WELL @ 3732.0usft (25' KB)
Project:	Lea County, NM (NAD-83)	MD Reference:	WELL @ 3732.0usft (25' KB)
Site:	Capella BOP Federal	North Reference:	Grid
Well:	#5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Lea County, NM (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Capella BOP Federal		
Site Position:	From:	Map	
Position Uncertainty:	2.0 usft	Slot Radius:	12-1/4 "
Northing:	541,564.45 usft	Latitude:	32° 29' 13.804 N
Easting:	740,341.49 usft	Longitude:	103° 41' 16.549 W
Grid Convergence:	0.35 °		

Well	#5H		
Well Position	+N/-S	0.0 usft	Northing:
Position Uncertainty	+E/-W	0.0 usft	Easting:
Wellhead Elevation:	0.0 usft	Latitude:	32° 29' 13.804 N
Ground Level:	3,707.0 usft	Longitude:	103° 41' 16.549 W

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	10/15/2013	7.37
			Dip Angle
			60.35
			Field Strength
			48,526

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			22.09

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	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,650.0	15.00	92.00	3,641.5	-3.4	97.6	2.00	2.00	0.00	92.00	
8,369.5	15.00	92.00	8,200.1	-46.0	1,318.3	0.00	0.00	0.00	0.00	
8,535.9	30.00	55.00	8,354.2	-22.7	1,374.5	12.00	9.01	-22.23	-61.77	
8,998.7	85.00	45.00	8,593.7	226.5	1,654.5	12.00	11.89	-2.16	-12.11	
9,251.8	90.00	15.00	8,605.0	443.0	1,779.3	12.00	1.98	-11.85	-81.42	
10,030.2	90.00	359.43	8,605.0	1,212.9	1,876.8	2.00	0.00	-2.00	-90.00	
13,359.3	90.00	359.43	8,605.0	4,541.8	1,843.8	0.00	0.00	0.00	0.00	PBHL (C#5H)



Planning Report



Database: Houston R5000 Database
Company: Yates Petroleum
Project: Lea County, NM (NAD-83)
Site: Capella BOP Federal
Well: #5H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #5H
TVD Reference: WELL @ 3732.0usft (25' KB)
MD Reference: WELL @ 3732.0usft (25' KB)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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
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
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
Start Build 2.00									
3,000.0	2.00	92.00	3,000.0	-0.1	1.7	0.6	2.00	2.00	0.00
3,100.0	4.00	92.00	3,099.8	-0.2	7.0	2.4	2.00	2.00	0.00
3,200.0	6.00	92.00	3,199.5	-0.5	15.7	5.4	2.00	2.00	0.00
3,300.0	8.00	92.00	3,298.7	-1.0	27.9	9.6	2.00	2.00	0.00
3,400.0	10.00	92.00	3,397.5	-1.5	43.5	15.0	2.00	2.00	0.00
3,500.0	12.00	92.00	3,495.6	-2.2	62.6	21.5	2.00	2.00	0.00
3,600.0	14.00	92.00	3,593.1	-3.0	85.0	29.2	2.00	2.00	0.00
3,650.0	15.00	92.00	3,641.5	-3.4	97.6	33.5	2.00	2.00	0.00
Start 4719.5 hold at 3650.0 MD									
3,700.0	15.00	92.00	3,689.8	-3.9	110.5	38.0	0.00	0.00	0.00
3,800.0	15.00	92.00	3,786.4	-4.8	136.4	46.9	0.00	0.00	0.00
3,900.0	15.00	92.00	3,882.9	-5.7	162.2	55.8	0.00	0.00	0.00
4,000.0	15.00	92.00	3,979.5	-6.6	188.1	64.7	0.00	0.00	0.00
4,100.0	15.00	92.00	4,076.1	-7.5	214.0	73.6	0.00	0.00	0.00
4,200.0	15.00	92.00	4,172.7	-8.4	239.8	82.4	0.00	0.00	0.00
4,300.0	15.00	92.00	4,269.3	-9.3	265.7	91.3	0.00	0.00	0.00
4,400.0	15.00	92.00	4,365.9	-10.2	291.6	100.2	0.00	0.00	0.00
4,500.0	15.00	92.00	4,462.5	-11.1	317.4	109.1	0.00	0.00	0.00
4,600.0	15.00	92.00	4,559.1	-12.0	343.3	118.0	0.00	0.00	0.00
4,700.0	15.00	92.00	4,655.7	-12.9	369.2	126.9	0.00	0.00	0.00
4,800.0	15.00	92.00	4,752.3	-13.8	395.0	135.8	0.00	0.00	0.00
4,900.0	15.00	92.00	4,848.9	-14.7	420.9	144.7	0.00	0.00	0.00
5,000.0	15.00	92.00	4,945.5	-15.6	446.7	153.6	0.00	0.00	0.00



Planning Report



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Company:	Yates Petroleum	TVD Reference:	WELL @ 3732.0usft (25' KB)
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Site:	Capella BOP Federal	North Reference:	Grid
Well:	#5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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)
5,100.0	15.00	92.00	5,042.1	-16.5	472.6	162.5	0.00	0.00	0.00
5,200.0	15.00	92.00	5,138.6	-17.4	498.5	171.4	0.00	0.00	0.00
5,300.0	15.00	92.00	5,235.2	-18.3	524.3	180.3	0.00	0.00	0.00
5,400.0	15.00	92.00	5,331.8	-19.2	550.2	189.2	0.00	0.00	0.00
5,500.0	15.00	92.00	5,428.4	-20.1	576.1	198.0	0.00	0.00	0.00
5,600.0	15.00	92.00	5,525.0	-21.0	601.9	206.9	0.00	0.00	0.00
5,700.0	15.00	92.00	5,621.6	-21.9	627.8	215.8	0.00	0.00	0.00
5,800.0	15.00	92.00	5,718.2	-22.8	653.7	224.7	0.00	0.00	0.00
5,900.0	15.00	92.00	5,814.8	-23.7	679.5	233.6	0.00	0.00	0.00
6,000.0	15.00	92.00	5,911.4	-24.6	705.4	242.5	0.00	0.00	0.00
6,100.0	15.00	92.00	6,008.0	-25.5	731.3	251.4	0.00	0.00	0.00
6,200.0	15.00	92.00	6,104.6	-26.4	757.1	260.3	0.00	0.00	0.00
6,300.0	15.00	92.00	6,201.2	-27.3	783.0	269.2	0.00	0.00	0.00
6,400.0	15.00	92.00	6,297.8	-28.2	808.9	278.1	0.00	0.00	0.00
6,500.0	15.00	92.00	6,394.4	-29.1	834.7	287.0	0.00	0.00	0.00
6,600.0	15.00	92.00	6,490.9	-30.1	860.6	295.9	0.00	0.00	0.00
6,700.0	15.00	92.00	6,587.5	-31.0	886.5	304.8	0.00	0.00	0.00
6,800.0	15.00	92.00	6,684.1	-31.9	912.3	313.7	0.00	0.00	0.00
6,900.0	15.00	92.00	6,780.7	-32.8	938.2	322.5	0.00	0.00	0.00
7,000.0	15.00	92.00	6,877.3	-33.7	964.1	331.4	0.00	0.00	0.00
7,100.0	15.00	92.00	6,973.9	-34.6	989.9	340.3	0.00	0.00	0.00
7,200.0	15.00	92.00	7,070.5	-35.5	1,015.8	349.2	0.00	0.00	0.00
7,300.0	15.00	92.00	7,167.1	-36.4	1,041.7	358.1	0.00	0.00	0.00
7,400.0	15.00	92.00	7,263.7	-37.3	1,067.5	367.0	0.00	0.00	0.00
7,500.0	15.00	92.00	7,360.3	-38.2	1,093.4	375.9	0.00	0.00	0.00
7,600.0	15.00	92.00	7,456.9	-39.1	1,119.3	384.8	0.00	0.00	0.00
7,700.0	15.00	92.00	7,553.5	-40.0	1,145.1	393.7	0.00	0.00	0.00
7,800.0	15.00	92.00	7,650.1	-40.9	1,171.0	402.6	0.00	0.00	0.00
7,900.0	15.00	92.00	7,746.6	-41.8	1,196.9	411.5	0.00	0.00	0.00
8,000.0	15.00	92.00	7,843.2	-42.7	1,222.7	420.4	0.00	0.00	0.00
8,100.0	15.00	92.00	7,939.8	-43.6	1,248.6	429.3	0.00	0.00	0.00
8,200.0	15.00	92.00	8,036.4	-44.5	1,274.5	438.1	0.00	0.00	0.00
8,300.0	15.00	92.00	8,133.0	-45.4	1,300.3	447.0	0.00	0.00	0.00
8,369.5	15.00	92.00	8,200.1	-46.0	1,318.3	453.2	0.00	0.00	0.00
Start DLS 12.00 TFO -61.77									
8,375.0	15.32	89.80	8,205.5	-46.1	1,319.7	453.7	12.00	5.87	-40.02
8,400.0	17.03	80.93	8,229.5	-45.5	1,326.7	456.9	12.00	6.84	-35.48
8,425.0	19.05	73.76	8,253.2	-43.8	1,334.2	461.3	12.00	8.09	-28.68
8,450.0	21.30	67.99	8,276.7	-40.9	1,342.3	467.0	12.00	8.99	-23.10
8,475.0	23.71	63.30	8,299.8	-36.9	1,351.0	473.9	12.00	9.63	-18.75
8,500.0	26.23	59.45	8,322.5	-31.9	1,360.3	482.1	12.00	10.09	-15.40
8,525.0	28.84	56.24	8,344.6	-25.7	1,370.1	491.5	12.00	10.43	-12.84
8,535.9	30.00	55.00	8,354.2	-22.7	1,374.5	496.0	12.00	10.63	-11.35
Start DLS 12.00 TFO -12.11									
8,550.0	31.65	54.32	8,366.2	-18.5	1,380.4	502.1	12.00	11.75	-4.80
8,575.0	34.60	53.27	8,387.2	-10.4	1,391.4	513.7	12.00	11.78	-4.22
8,600.0	37.55	52.36	8,407.4	-1.5	1,403.1	526.3	12.00	11.81	-3.64
8,625.0	40.51	51.56	8,426.8	8.2	1,415.5	540.0	12.00	11.83	-3.18
8,650.0	43.47	50.86	8,445.4	18.6	1,428.5	554.6	12.00	11.85	-2.82
8,675.0	46.44	50.23	8,463.1	29.9	1,442.2	570.1	12.00	11.87	-2.52
8,700.0	49.41	49.66	8,479.8	41.8	1,456.4	586.5	12.00	11.88	-2.29
8,725.0	52.38	49.13	8,495.6	54.4	1,471.1	603.8	12.00	11.89	-2.09
8,750.0	55.35	48.65	8,510.3	67.7	1,486.3	621.8	12.00	11.90	-1.93
8,775.0	58.33	48.20	8,524.0	81.6	1,502.0	640.6	12.00	11.91	-1.80



Planning Report



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Project: Lea County, NM (NAD-83)
Site: Capella BOP Federal
Well: #5H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #5H
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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)
8,800.0	61.31	47.78	8,536.6	96.1	1,518.0	660.0	12.00	11.91	-1.69
8,825.0	64.29	47.38	8,548.0	111.1	1,534.4	680.1	12.00	11.92	-1.59
8,850.0	67.27	47.00	8,558.2	126.5	1,551.2	700.7	12.00	11.92	-1.51
8,875.0	70.25	46.64	8,567.3	142.5	1,568.1	721.9	12.00	11.92	-1.45
8,900.0	73.23	46.29	8,575.1	158.8	1,585.4	743.5	12.00	11.93	-1.40
8,925.0	76.21	45.95	8,581.7	175.5	1,602.7	765.5	12.00	11.93	-1.35
8,950.0	79.19	45.62	8,587.0	192.6	1,620.2	787.9	12.00	11.93	-1.32
8,975.0	82.18	45.30	8,591.1	209.9	1,637.8	810.5	12.00	11.93	-1.29
8,998.7	85.00	45.00	8,593.7	226.5	1,654.5	832.1	12.00	11.93	-1.28
Start DLS 12.00 TFO -81.42									
9,000.0	85.02	44.84	8,593.9	227.4	1,655.4	833.4	12.00	1.79	-11.91
9,025.0	85.48	41.86	8,595.9	245.5	1,672.5	856.6	12.00	1.82	-11.90
9,050.0	85.95	38.89	8,597.8	264.5	1,688.7	880.3	12.00	1.87	-11.89
9,075.0	86.42	35.92	8,599.5	284.3	1,703.8	904.3	12.00	1.91	-11.87
9,100.0	86.91	32.96	8,600.9	304.9	1,718.0	928.7	12.00	1.95	-11.86
9,125.0	87.41	30.00	8,602.1	326.2	1,731.0	953.3	12.00	1.98	-11.85
9,150.0	87.91	27.04	8,603.2	348.1	1,742.9	978.2	12.00	2.01	-11.84
9,175.0	88.42	24.08	8,604.0	370.7	1,753.7	1,003.1	12.00	2.03	-11.83
9,200.0	88.93	21.12	8,604.5	393.8	1,763.3	1,028.1	12.00	2.05	-11.83
9,225.0	89.45	18.17	8,604.9	417.3	1,771.7	1,053.1	12.00	2.06	-11.82
9,251.8	90.00	15.00	8,605.0	443.0	1,779.3	1,079.7	12.00	2.07	-11.82
Start DLS 2.00 TFO -90.00									
9,300.0	90.00	14.04	8,605.0	489.6	1,791.4	1,127.5	2.00	0.00	-2.00
9,400.0	90.00	12.04	8,605.0	587.1	1,814.0	1,226.3	2.00	0.00	-2.00
9,500.0	90.00	10.04	8,605.0	685.2	1,833.1	1,324.4	2.00	0.00	-2.00
9,600.0	90.00	8.04	8,605.0	784.0	1,848.8	1,421.8	2.00	0.00	-2.00
9,700.0	90.00	6.04	8,605.0	883.2	1,861.1	1,518.4	2.00	0.00	-2.00
9,800.0	90.00	4.04	8,605.0	982.8	1,869.8	1,614.0	2.00	0.00	-2.00
9,900.0	90.00	2.04	8,605.0	1,082.7	1,875.1	1,708.5	2.00	0.00	-2.00
10,000.0	90.00	0.04	8,605.0	1,182.6	1,877.0	1,801.8	2.00	0.00	-2.00
10,030.2	90.00	359.43	8,605.0	1,212.9	1,876.8	1,829.7	2.00	0.00	-2.00
Start 3329.1 hold at 10030.2 MD									
10,100.0	90.00	359.43	8,605.0	1,282.6	1,876.1	1,894.1	0.00	0.00	0.00
10,200.0	90.00	359.43	8,605.0	1,382.6	1,875.1	1,986.4	0.00	0.00	0.00
10,300.0	90.00	359.43	8,605.0	1,482.6	1,874.1	2,078.7	0.00	0.00	0.00
10,400.0	90.00	359.43	8,605.0	1,582.6	1,873.1	2,171.0	0.00	0.00	0.00
10,500.0	90.00	359.43	8,605.0	1,682.6	1,872.1	2,263.2	0.00	0.00	0.00
10,600.0	90.00	359.43	8,605.0	1,782.6	1,871.2	2,355.5	0.00	0.00	0.00
10,700.0	90.00	359.43	8,605.0	1,882.6	1,870.2	2,447.8	0.00	0.00	0.00
10,800.0	90.00	359.43	8,605.0	1,982.6	1,869.2	2,540.1	0.00	0.00	0.00
10,900.0	90.00	359.43	8,605.0	2,082.6	1,868.2	2,632.4	0.00	0.00	0.00
11,000.0	90.00	359.43	8,605.0	2,182.6	1,867.2	2,724.6	0.00	0.00	0.00
11,100.0	90.00	359.43	8,605.0	2,282.6	1,866.2	2,816.9	0.00	0.00	0.00
11,200.0	90.00	359.43	8,605.0	2,382.6	1,865.2	2,909.2	0.00	0.00	0.00
11,300.0	90.00	359.43	8,605.0	2,482.6	1,864.2	3,001.5	0.00	0.00	0.00
11,400.0	90.00	359.43	8,605.0	2,582.6	1,863.2	3,093.7	0.00	0.00	0.00
11,500.0	90.00	359.43	8,605.0	2,682.6	1,862.2	3,186.0	0.00	0.00	0.00
11,600.0	90.00	359.43	8,605.0	2,782.6	1,861.2	3,278.3	0.00	0.00	0.00
11,700.0	90.00	359.43	8,605.0	2,882.6	1,860.2	3,370.6	0.00	0.00	0.00
11,800.0	90.00	359.43	8,605.0	2,982.5	1,859.2	3,462.9	0.00	0.00	0.00
11,900.0	90.00	359.43	8,605.0	3,082.5	1,858.3	3,555.1	0.00	0.00	0.00
12,000.0	90.00	359.43	8,605.0	3,182.5	1,857.3	3,647.4	0.00	0.00	0.00
12,100.0	90.00	359.43	8,605.0	3,282.5	1,856.3	3,739.7	0.00	0.00	0.00



Planning Report



Database: Houston R5000 Database
Company: Yates Petroleum
Project: Lea County, NM (NAD-83)
Site: Capella BOP Federal
Well: #5H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #5H
TVD Reference: WELL @ 3732.0usft (25' KB)
MD Reference: WELL @ 3732.0usft (25' KB)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
12,200.0	90.00	359.43	8,605.0	3,382.5	1,855.3	3,832.0	0.00	0.00	0.00
12,300.0	90.00	359.43	8,605.0	3,482.5	1,854.3	3,924.2	0.00	0.00	0.00
12,400.0	90.00	359.43	8,605.0	3,582.5	1,853.3	4,016.5	0.00	0.00	0.00
12,500.0	90.00	359.43	8,605.0	3,682.5	1,852.3	4,108.8	0.00	0.00	0.00
12,600.0	90.00	359.43	8,605.0	3,782.5	1,851.3	4,201.1	0.00	0.00	0.00
12,700.0	90.00	359.43	8,605.0	3,882.5	1,850.3	4,293.4	0.00	0.00	0.00
12,800.0	90.00	359.43	8,605.0	3,982.5	1,849.3	4,385.6	0.00	0.00	0.00
12,900.0	90.00	359.43	8,605.0	4,082.5	1,848.3	4,477.9	0.00	0.00	0.00
13,000.0	90.00	359.43	8,605.0	4,182.5	1,847.3	4,570.2	0.00	0.00	0.00
13,100.0	90.00	359.43	8,605.0	4,282.5	1,846.3	4,662.5	0.00	0.00	0.00
13,200.0	90.00	359.43	8,605.0	4,382.5	1,845.4	4,754.8	0.00	0.00	0.00
13,300.0	90.00	359.43	8,605.0	4,482.5	1,844.4	4,847.0	0.00	0.00	0.00
13,359.3	90.00	359.43	8,605.0	4,541.8	1,843.8	4,901.8	0.00	0.00	0.00

TD @ 13359.3' MD, 8605.0' TVD

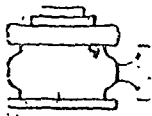
Design Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PP (C#5H) - plan misses target center by 302.2usft at 9000.0usft MD (8593.9 TVD, 227.4 N, 1655.4 E) - Point	0.00	0.00	8,605.0	14.7	1,869.8	541,579.20	742,211.30	32° 29' 13.837 N	103° 40' 54.718 W
PBHL (C#5H) - plan hits target center - Point	0.00	0.01	8,605.0	4,541.8	1,843.8	546,106.25	742,185.26	32° 29' 58.634 N	103° 40' 54.699 W

Plan Annotations

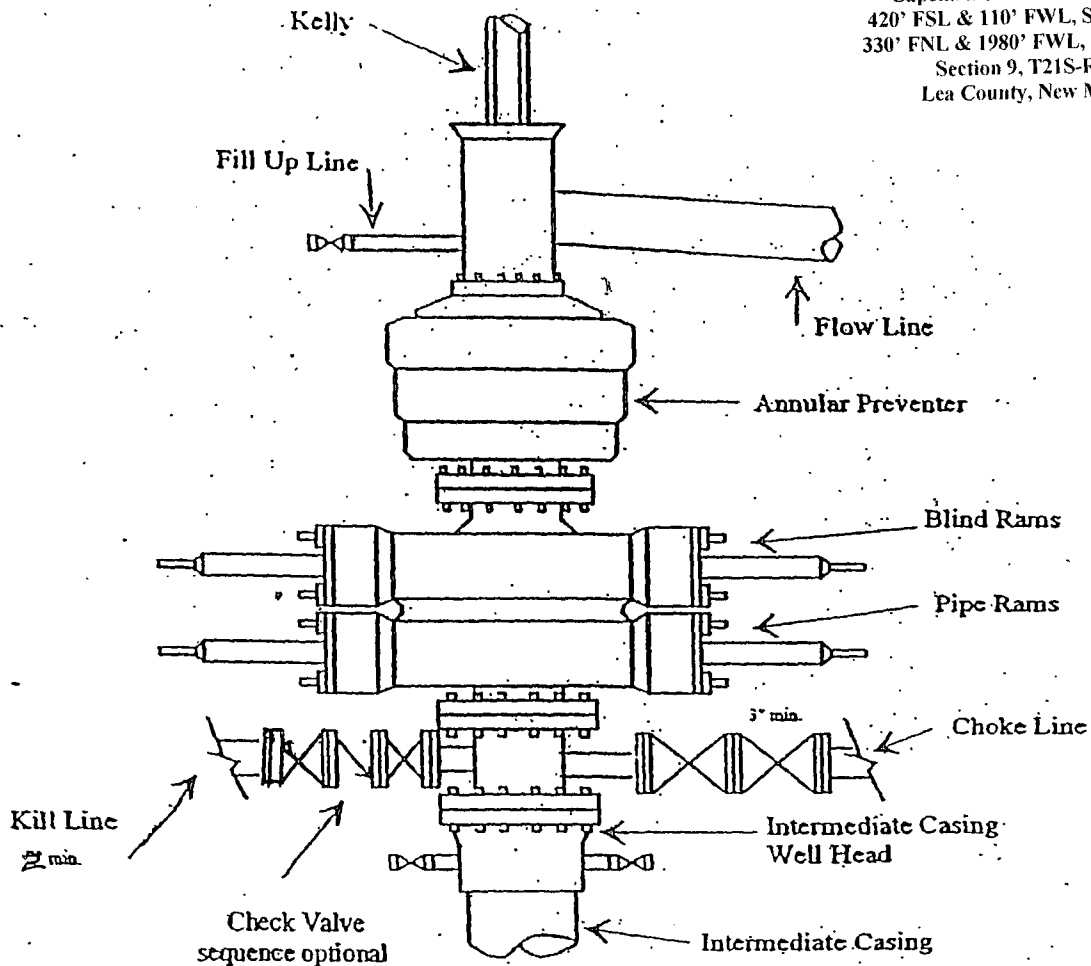
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
2,900.0	2,900.0	0.0	0.0	Start Build 2.00
3,650.0	3,641.5	-3.4	97.6	Start 4719.5 hold at 3650.0 MD
8,369.5	8,200.1	-46.0	1,318.3	Start DLS 12.00 TFO -61.77
8,535.9	8,354.2	-22.7	1,374.5	Start DLS 12.00 TFO -12.11
8,998.7	8,593.7	226.5	1,654.5	Start DLS 12.00 TFO -81.42
9,251.8	8,605.0	443.0	1,779.3	Start DLS 2.00 TFO -90.00
10,030.2	8,605.0	1,212.9	1,876.8	Start 3329.1 hold at 10030.2 MD
13,359.3	8,605.0	4,541.8	1,843.8	TD @ 13359.3' MD, 8605.0' TVD



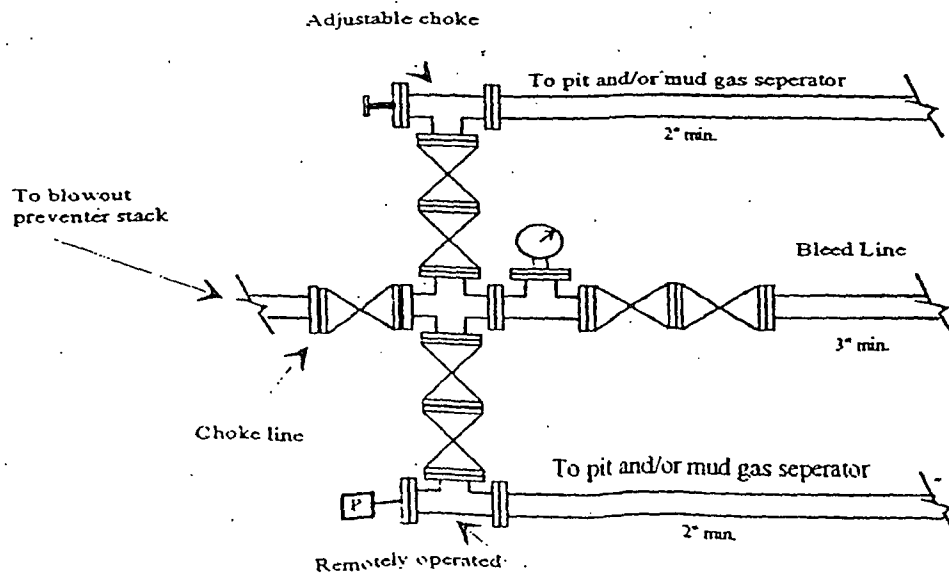
Yates Petroleum Corporation
Typical 3,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack

BOP-3

Capella BOP Federal #5H
 420' FSL & 110' FWL, Surface Hole
 330' FNL & 1980' FWL, Bottom Hole
 Section 9, T21S-R32E
 Lea County, New Mexico

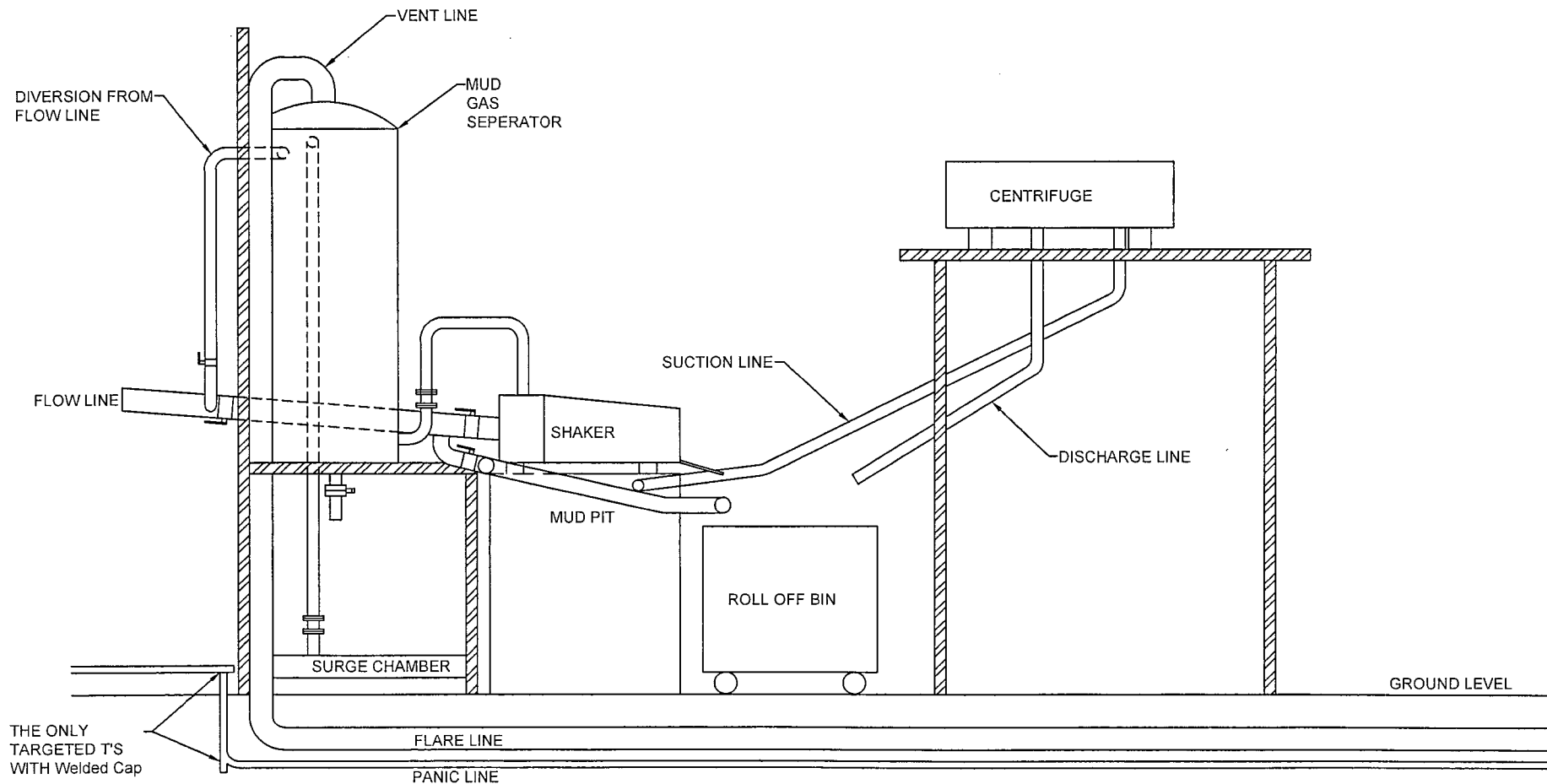


Typical 3,000 psi choke manifold assembly with at least these minimum features



YATES PETROLEUM CORPORATION

Piping from Choke Manifold to the Closed Loop Drilling Mud System



The flare discharge must be 100' from wellhead for non H₂S wells and 150' from wellhead for wells expected to encounter H₂S.

YATES PETROLEUM CORPORATION

SILVER OAK RIG #11

