

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
1221 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 478-3480 Fax: (505) 478-3482

State of New Mexico
Energy, Minerals and Natural Resources Department

HOBBS OCD

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

1224 South St. Francis Dr.
Santa Fe, New Mexico 87505

RECEIVED

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-42284	Pool Code 97964	Pool Name WC-025 6-07 5243225C; LWR BS
Property Code 38470	Property Name BASILISK BQS STATE COM	Well Number 2H
OGRID No. 025575	Operator Name YATES PETROLEUM CORPORATION	Elevation 3558

Surface Location

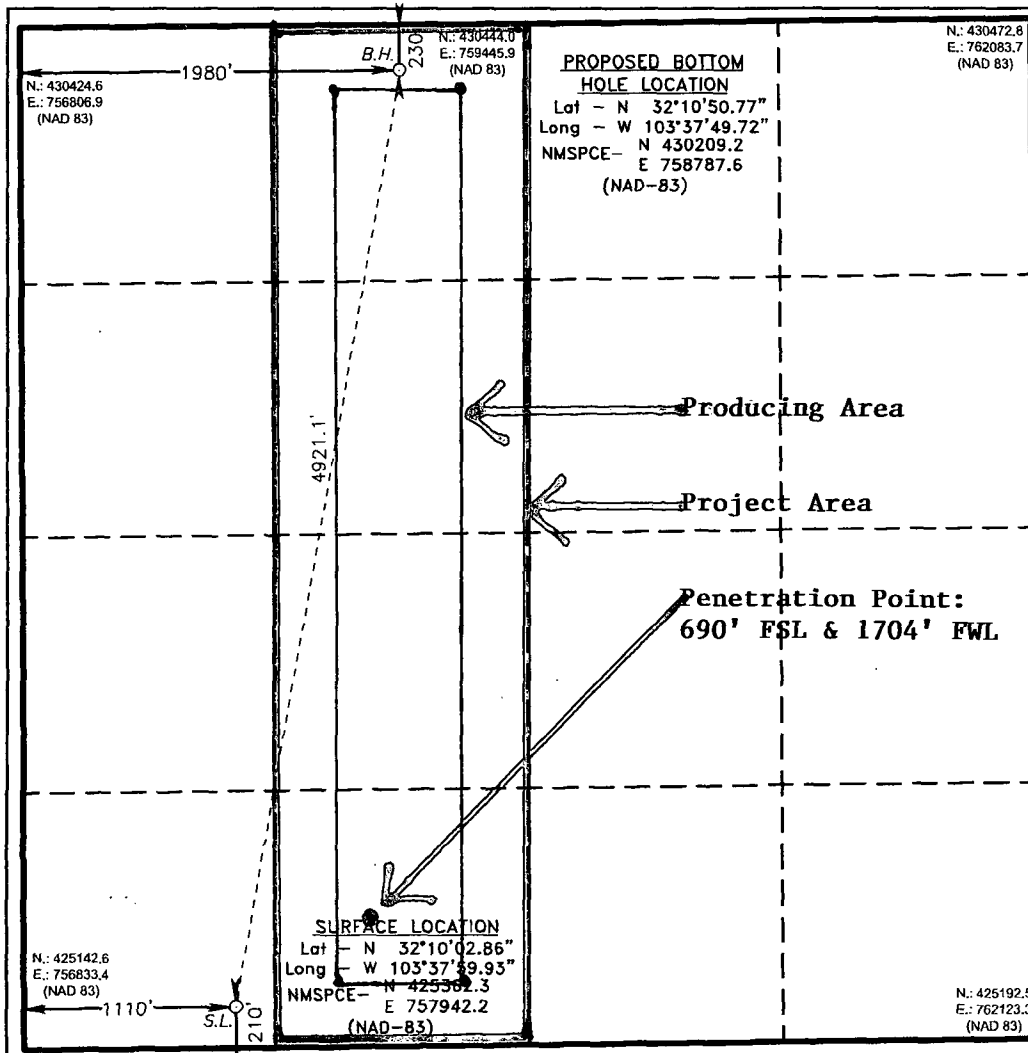
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	36	24 S	32 E		210	SOUTH	1110	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	36	24 S	32 E		230	NORTH	1980	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160.00			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

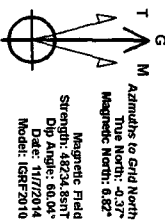
	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Ysenia Navarrette</i> Signature Date 11/24/14 Ysenia Navarrette Printed Name ynavarrette@yatespetroleum.com Email Address SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. MARCH 12 2014 Date Surveyed Signature & Seal of Professional Surveyor Certificate No. 7977 BASIC UNIT 0' 500' 1000' 1500' 2000' SCALE: 1" = 1000' WO Num.: 30255
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Yates Petroleum
Corporation
Project: Lea County, NM (NAD-83)
Site: Basilisk BGS State Com
Well: #2H
Wellbore: OH
Plan: Plan #2 (2H/CH)

WELL DETAILS: #2H

Ground Elevation: 3558.0
RKB Elevation: RKB @ 3583.0 (Cactus 124 - KB-25)
Rig Name: Cactus 124 - KB-25
Surface Hole Location
Northing: 425582.30
Easting: 757942.20
Latitude: 32° 40' 2.865" N
Longitude: 103° 37' 59.930" W

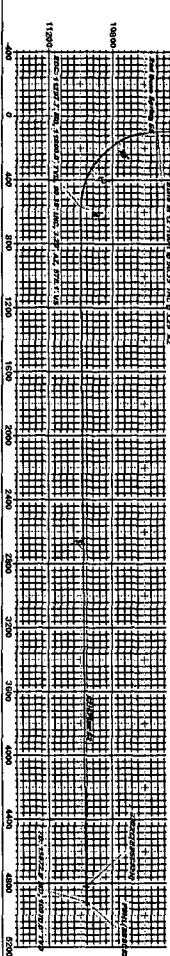
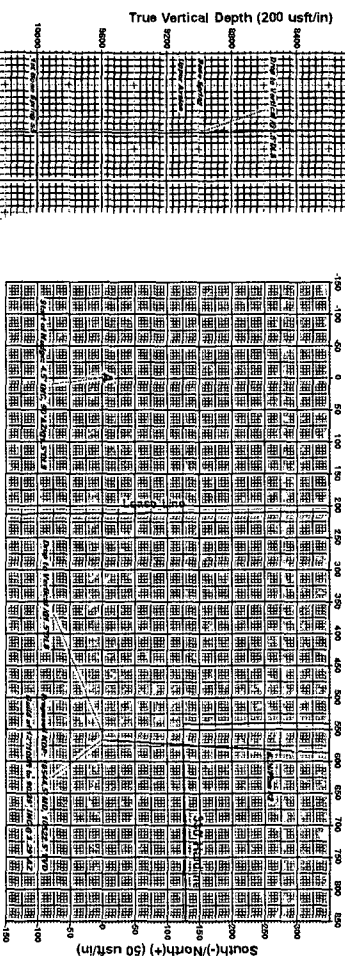


Section Details

MD	Inc	Azi	TYD	+N/-S	+E/-W	Dleg	TFace	Vsect
1	0.0	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	1800.0	0.00	1800.0	0.0	0.0	0.00	0.00	0.0
3	2100.0	4.50	2098.7	0.0	11.8	1.50	90.00	2.1
4	9021.6	4.50	90.00	0.0	554.8	0.00	0.00	96.6
5	9321.6	0.00	0.00	0.00	8299.7	0.0	180.00	98.7
6	10544.5	0.00	0.00	0.00	10522.5	0.0	568.6	0.00
7	11297.7	90.39	0.00	0.00	11000.0	473.9	594.2	12.00
8	15672.0	90.39	3.28	10970.0	4846.9	845.4	3.28	576.1
								4920.1

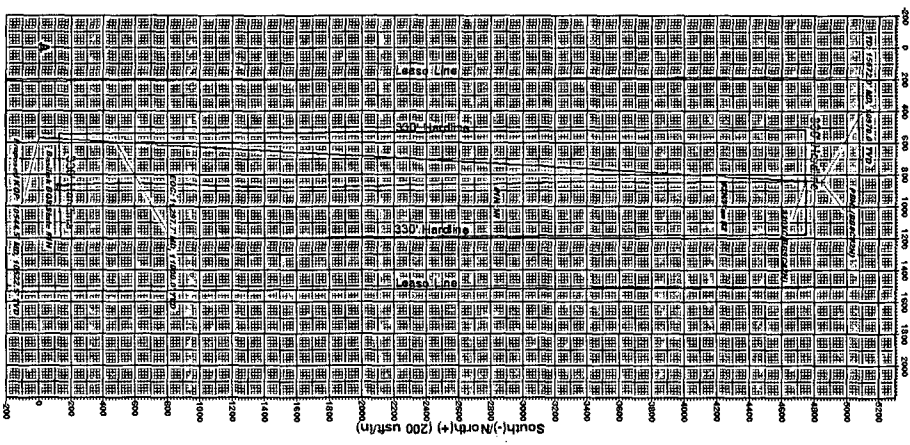
Measure	Value	Unit	Measure	Value	Unit
True Vertical Depth (200 usf/in)	15672.0	ft	Section Details		
Horizontal Distance (200 usf/in)	4846.9	ft			
Vertical Section at 10.03° (200 usf/in)	4846.9	ft			

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



CRESCENT
INDUSTRIAL DRILLING
7715 West Industrial Ave, Midland, TX 79706
Phone: 432-618-1135

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



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

Plan: Plan #2 (2H/CH)
Created By: Adnan Caste
Date: 2016, November 19 2014

Yates Petroleum

Lea County, NM (NAD-83)

Basilisk BQS State Com

#2H

OH

Plan: Plan #2

Standard Planning Report

10 November, 2014

Planning Report

Database:	Houston R5000 Database	Local Co-ordinate Reference:	Well #2H
Company:	Yates Petroleum	TVD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Project:	Lea County, NM (NAD-83)	MD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Site:	Basilisk BQS State Com	North Reference:	Grid
Well:	#2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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	Basilisk BQS State Com		
Site Position:		Northing:	425,362.30 usft
From:	Map	Easting:	757,942.20 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 10' 2.865 N
		Longitude:	103° 37' 59.930 W
		Grid Convergence:	0.37 °

Well	#2H		
Well Position	+N-S	0.0 usft	Northing: 425,362.30 usft
	+E-W	0.0 usft	Easting: 757,942.20 usft
Position Uncertainty		0.0 usft	Wellhead Elevation: 0.0 usft
			Latitude: 32° 10' 2.865 N
			Longitude: 103° 37' 59.930 W
			Ground Level: 3,558.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/7/2014	7.19	60.04	48,235

Design	Plan #2			
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	10.03

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	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,100.0	4.50	90.00	2,099.7	0.0	11.8	1.50	1.50	0.00	90.00	
9,021.6	4.50	90.00	9,000.0	0.0	554.8	0.00	0.00	0.00	0.00	
9,321.6	0.00	0.00	9,299.7	0.0	566.6	1.50	-1.50	0.00	180.00	
10,544.5	0.00	0.00	10,522.5	0.0	566.6	0.00	0.00	0.00	0.00	
11,297.7	90.39	3.29	11,000.0	479.9	594.2	12.00	12.00	0.44	3.29	
15,672.0	90.39	3.29	10,970.0	4,846.9	845.4	0.00	0.00	0.00	0.00	PBHL(BBSC#2H)

Planning Report

Database:	Houston R5000 Database	Local Co-ordinate Reference:	Well #2H
Company:	Yates Petroleum	TVD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Project:	Lea County, NM (NAD-83)	MD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Site:	Basilisk BQS State Corn	North Reference:	Grid
Well:	#2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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
Basilisk BQS State #1H									
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
1,030.0	0.00	0.00	1,030.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
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
1,370.0	0.00	0.00	1,370.0	0.0	0.0	0.0	0.00	0.00	0.00
Salado									
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
Start of Nudge: 4.5° INC, 90°AZ/@1.5°DLS									
1,900.0	1.50	90.00	1,900.0	0.0	1.3	0.2	1.50	1.50	0.00
2,000.0	3.00	90.00	1,999.9	0.0	5.2	0.9	1.50	1.50	0.00
2,100.0	4.50	90.00	2,099.7	0.0	11.8	2.1	1.50	1.50	0.00
2,200.0	4.50	90.00	2,199.4	0.0	19.6	3.4	0.00	0.00	0.00
2,300.0	4.50	90.00	2,299.1	0.0	27.5	4.8	0.00	0.00	0.00
2,400.0	4.50	90.00	2,398.8	0.0	35.3	6.2	0.00	0.00	0.00
2,500.0	4.50	90.00	2,498.5	0.0	43.2	7.5	0.00	0.00	0.00
2,600.0	4.50	90.00	2,598.2	0.0	51.0	8.9	0.00	0.00	0.00
2,700.0	4.50	90.00	2,697.8	0.0	58.9	10.3	0.00	0.00	0.00
2,800.0	4.50	90.00	2,797.5	0.0	66.7	11.6	0.00	0.00	0.00
2,900.0	4.50	90.00	2,897.2	0.0	74.5	13.0	0.00	0.00	0.00
3,000.0	4.50	90.00	2,996.9	0.0	82.4	14.4	0.00	0.00	0.00
3,100.0	4.50	90.00	3,096.6	0.0	90.2	15.7	0.00	0.00	0.00
3,200.0	4.50	90.00	3,196.3	0.0	98.1	17.1	0.00	0.00	0.00
3,300.0	4.50	90.00	3,296.0	0.0	105.9	18.5	0.00	0.00	0.00
3,400.0	4.50	90.00	3,395.7	0.0	113.8	19.8	0.00	0.00	0.00
3,500.0	4.50	90.00	3,495.4	0.0	121.6	21.2	0.00	0.00	0.00
3,600.0	4.50	90.00	3,595.1	0.0	129.5	22.6	0.00	0.00	0.00
3,700.0	4.50	90.00	3,694.8	0.0	137.3	23.9	0.00	0.00	0.00
3,800.0	4.50	90.00	3,794.5	0.0	145.2	25.3	0.00	0.00	0.00
3,900.0	4.50	90.00	3,894.1	0.0	153.0	26.6	0.00	0.00	0.00
4,000.0	4.50	90.00	3,993.8	0.0	160.8	28.0	0.00	0.00	0.00
4,100.0	4.50	90.00	4,093.5	0.0	168.7	29.4	0.00	0.00	0.00
4,200.0	4.50	90.00	4,193.2	0.0	176.5	30.7	0.00	0.00	0.00
4,300.0	4.50	90.00	4,292.9	0.0	184.4	32.1	0.00	0.00	0.00
4,400.0	4.50	90.00	4,392.6	0.0	192.2	33.5	0.00	0.00	0.00
4,500.0	4.50	90.00	4,492.3	0.0	200.1	34.8	0.00	0.00	0.00
4,600.0	4.50	90.00	4,592.0	0.0	207.9	36.2	0.00	0.00	0.00
4,700.0	4.50	90.00	4,691.7	0.0	215.8	37.6	0.00	0.00	0.00

Planning Report

Database:	Houston R5000 Database	Local Co-ordinate Reference:	Well #2H
Company:	Yates Petroleum	TVD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Project:	Lea County, NM (NAD-83)	MD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Site:	Basilisk BQS State Com	North Reference:	Grid
Well:	#2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)
4,723.4	4.50	90.00	4,715.0	0.0	217.6	37.9	0.00	0.00	0.00
Base of Salt									
4,800.0	4.50	90.00	4,791.4	0.0	223.6	38.9	0.00	0.00	0.00
4,900.0	4.50	90.00	4,891.1	0.0	231.5	40.3	0.00	0.00	0.00
4,959.1	4.50	90.00	4,950.0	0.0	236.1	41.1	0.00	0.00	0.00
Delaware									
4,979.2	4.50	90.00	4,970.0	0.0	237.7	41.4	0.00	0.00	0.00
Bell Canyon									
5,000.0	4.50	90.00	4,990.8	0.0	239.3	41.7	0.00	0.00	0.00
5,100.0	4.50	90.00	5,090.4	0.0	247.2	43.0	0.00	0.00	0.00
5,200.0	4.50	90.00	5,190.1	0.0	255.0	44.4	0.00	0.00	0.00
5,300.0	4.50	90.00	5,289.8	0.0	262.8	45.8	0.00	0.00	0.00
5,400.0	4.50	90.00	5,389.5	0.0	270.7	47.1	0.00	0.00	0.00
5,500.0	4.50	90.00	5,489.2	0.0	278.5	48.5	0.00	0.00	0.00
5,600.0	4.50	90.00	5,588.9	0.0	286.4	49.9	0.00	0.00	0.00
5,700.0	4.50	90.00	5,688.6	0.0	294.2	51.2	0.00	0.00	0.00
5,800.0	4.50	90.00	5,788.3	0.0	302.1	52.6	0.00	0.00	0.00
5,900.0	4.50	90.00	5,888.0	0.0	309.9	54.0	0.00	0.00	0.00
5,942.2	4.50	90.00	5,930.0	0.0	313.2	54.6	0.00	0.00	0.00
Cherry Canyon									
6,000.0	4.50	90.00	5,987.7	0.0	317.8	55.3	0.00	0.00	0.00
6,100.0	4.50	90.00	6,087.4	0.0	325.6	56.7	0.00	0.00	0.00
6,200.0	4.50	90.00	6,187.1	0.0	333.5	58.1	0.00	0.00	0.00
6,300.0	4.50	90.00	6,286.7	0.0	341.3	59.4	0.00	0.00	0.00
6,400.0	4.50	90.00	6,386.4	0.0	349.1	60.8	0.00	0.00	0.00
6,500.0	4.50	90.00	6,486.1	0.0	357.0	62.2	0.00	0.00	0.00
6,600.0	4.50	90.00	6,585.8	0.0	364.8	63.5	0.00	0.00	0.00
6,700.0	4.50	90.00	6,685.5	0.0	372.7	64.9	0.00	0.00	0.00
6,800.0	4.50	90.00	6,785.2	0.0	380.5	66.3	0.00	0.00	0.00
6,900.0	4.50	90.00	6,884.9	0.0	388.4	67.6	0.00	0.00	0.00
7,000.0	4.50	90.00	6,984.6	0.0	396.2	69.0	0.00	0.00	0.00
7,100.0	4.50	90.00	7,084.3	0.0	404.1	70.4	0.00	0.00	0.00
7,200.0	4.50	90.00	7,184.0	0.0	411.9	71.7	0.00	0.00	0.00
7,300.0	4.50	90.00	7,283.7	0.0	419.8	73.1	0.00	0.00	0.00
7,400.0	4.50	90.00	7,383.4	0.0	427.6	74.5	0.00	0.00	0.00
7,500.0	4.50	90.00	7,483.0	0.0	435.5	75.8	0.00	0.00	0.00
7,600.0	4.50	90.00	7,582.7	0.0	443.3	77.2	0.00	0.00	0.00
7,700.0	4.50	90.00	7,682.4	0.0	451.1	78.6	0.00	0.00	0.00
7,757.7	4.50	90.00	7,740.0	0.0	455.7	79.4	0.00	0.00	0.00
Brushy Canyon									
7,800.0	4.50	90.00	7,782.1	0.0	459.0	79.9	0.00	0.00	0.00
7,900.0	4.50	90.00	7,881.8	0.0	466.8	81.3	0.00	0.00	0.00
8,000.0	4.50	90.00	7,981.5	0.0	474.7	82.7	0.00	0.00	0.00
8,100.0	4.50	90.00	8,081.2	0.0	482.5	84.0	0.00	0.00	0.00
8,200.0	4.50	90.00	8,180.9	0.0	490.4	85.4	0.00	0.00	0.00
8,300.0	4.50	90.00	8,280.6	0.0	498.2	86.8	0.00	0.00	0.00
8,400.0	4.50	90.00	8,380.3	0.0	506.1	88.1	0.00	0.00	0.00
8,500.0	4.50	90.00	8,480.0	0.0	513.9	89.5	0.00	0.00	0.00
8,600.0	4.50	90.00	8,579.7	0.0	521.8	90.9	0.00	0.00	0.00
8,700.0	4.50	90.00	8,679.3	0.0	529.6	92.2	0.00	0.00	0.00
8,800.0	4.50	90.00	8,779.0	0.0	537.5	93.6	0.00	0.00	0.00
8,900.0	4.50	90.00	8,878.7	0.0	545.3	95.0	0.00	0.00	0.00
8,981.5	4.50	90.00	8,960.0	0.0	551.7	96.1	0.00	0.00	0.00

Planning Report

Database:	Houston R5000 Database	Local Co-ordinate Reference:	Well #2H
Company:	Yates Petroleum	TVD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Project:	Lea County, NM (NAD-83)	MD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Site:	Basilisk BQS State Corn	North Reference:	Grid
Well:	#2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)
Bone Spring									
9,000.0	4.50	90.00	8,978.4	0.0	553.1	96.3	0.00	0.00	0.00
9,021.6	4.50	90.00	9,000.0	0.0	554.8	96.6	0.00	0.00	0.00
Drop to Vertical @1.5°DLS									
9,100.0	3.32	90.00	9,078.2	0.0	560.2	97.6	1.50	-1.50	0.00
9,101.8	3.30	90.00	9,080.0	0.0	560.3	97.6	1.50	-1.50	0.00
Upper Avalon									
9,200.0	1.82	90.00	9,178.1	0.0	564.7	98.4	1.50	-1.50	0.00
9,300.0	0.32	90.00	9,278.0	0.0	566.6	98.7	1.50	-1.50	0.00
9,321.6	0.00	0.00	9,299.7	0.0	566.6	98.7	1.50	-1.50	0.00
9,400.0	0.00	0.00	9,378.0	0.0	566.6	98.7	0.00	0.00	0.00
9,500.0	0.00	0.00	9,478.0	0.0	566.6	98.7	0.00	0.00	0.00
9,600.0	0.00	0.00	9,578.0	0.0	566.6	98.7	0.00	0.00	0.00
9,700.0	0.00	0.00	9,678.0	0.0	566.6	98.7	0.00	0.00	0.00
9,800.0	0.00	0.00	9,778.0	0.0	566.6	98.7	0.00	0.00	0.00
9,900.0	0.00	0.00	9,878.0	0.0	566.6	98.7	0.00	0.00	0.00
10,000.0	0.00	0.00	9,978.0	0.0	566.6	98.7	0.00	0.00	0.00
10,017.0	0.00	0.00	9,995.0	0.0	566.6	98.7	0.00	0.00	0.00
1st Bone Spring SS									
10,100.0	0.00	0.00	10,078.0	0.0	566.6	98.7	0.00	0.00	0.00
10,200.0	0.00	0.00	10,178.0	0.0	566.6	98.7	0.00	0.00	0.00
10,300.0	0.00	0.00	10,278.0	0.0	566.6	98.7	0.00	0.00	0.00
10,400.0	0.00	0.00	10,378.0	0.0	566.6	98.7	0.00	0.00	0.00
10,500.0	0.00	0.00	10,478.0	0.0	566.6	98.7	0.00	0.00	0.00
10,544.5	0.00	0.00	10,522.5	0.0	566.6	98.7	0.00	0.00	0.00
Build at 12°/100ft to 90.39° INC @ 3.29° AZ - Proposed KOP: 10544.5' MD, 10522.5' TVD									
10,547.0	0.30	3.29	10,525.0	0.0	566.6	98.7	12.23	12.23	0.00
2nd Bone Spring SS									
10,550.0	0.67	3.29	10,528.0	0.0	566.6	98.7	12.00	12.00	0.00
10,575.0	3.67	3.29	10,553.0	1.0	566.7	99.7	12.00	12.00	0.00
10,600.0	6.67	3.29	10,577.9	3.2	566.8	101.9	12.00	12.00	0.00
10,625.0	9.67	3.29	10,602.7	6.8	567.0	105.4	12.00	12.00	0.00
10,650.0	12.67	3.29	10,627.2	11.6	567.3	110.2	12.00	12.00	0.00
10,675.0	15.67	3.29	10,651.4	17.7	567.6	116.3	12.00	12.00	0.00
10,700.0	18.67	3.29	10,675.3	25.1	568.1	123.6	12.00	12.00	0.00
10,725.0	21.67	3.29	10,698.8	33.7	568.6	132.2	12.00	12.00	0.00
10,750.0	24.67	3.29	10,721.8	43.5	569.1	142.0	12.00	12.00	0.00
10,775.0	27.67	3.29	10,744.2	54.5	569.8	152.9	12.00	12.00	0.00
10,800.0	30.67	3.29	10,766.0	66.7	570.4	165.0	12.00	12.00	0.00
10,825.0	33.67	3.29	10,787.2	79.9	571.2	178.2	12.00	12.00	0.00
10,850.0	36.67	3.29	10,807.6	94.3	572.0	192.5	12.00	12.00	0.00
10,875.0	39.67	3.29	10,827.3	109.7	572.9	207.9	12.00	12.00	0.00
10,900.0	42.67	3.29	10,846.1	126.2	573.9	224.2	12.00	12.00	0.00
10,925.0	45.67	3.29	10,864.0	143.6	574.9	241.5	12.00	12.00	0.00
10,950.0	48.67	3.29	10,881.0	161.9	575.9	259.7	12.00	12.00	0.00
10,975.0	51.67	3.29	10,897.0	181.0	577.0	278.8	12.00	12.00	0.00
11,000.0	54.67	3.29	10,912.0	201.0	578.2	298.6	12.00	12.00	0.00
11,025.0	57.67	3.29	10,925.9	221.7	579.4	319.2	12.00	12.00	0.00
11,050.0	60.67	3.29	10,938.7	243.1	580.6	340.6	12.00	12.00	0.00
11,075.0	63.67	3.29	10,950.4	265.2	581.9	362.5	12.00	12.00	0.00
11,100.0	66.67	3.29	10,960.9	287.9	583.2	385.0	12.00	12.00	0.00
11,125.0	69.67	3.29	10,970.2	311.0	584.5	408.1	12.00	12.00	0.00
11,150.0	72.67	3.29	10,978.3	334.7	585.9	431.6	12.00	12.00	0.00

Planning Report

Database:	Houston R5000 Database	Local Co-ordinate Reference:	Well #2H
Company:	Yates Petroleum	TVD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Project:	Lea County, NM (NAD-83)	MD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Site:	Basilisk BQS State Com	North Reference:	Grid
Well:	#2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)
11,175.0	75.67	3.29	10,985.1	358.7	587.2	455.5	12.00	12.00	0.00
11,200.0	78.67	3.29	10,990.7	383.0	588.6	479.7	12.00	12.00	0.00
11,225.0	81.67	3.29	10,994.9	407.6	590.1	504.1	12.00	12.00	0.00
11,250.0	84.67	3.29	10,997.9	432.4	591.5	528.8	12.00	12.00	0.00
11,275.0	87.67	3.29	10,999.6	457.3	592.9	553.5	12.00	12.00	0.00
11,297.7	90.39	3.29	11,000.0	479.9	594.2	576.1	12.00	12.00	0.00
EOC: 11297.7' MD, 11000.0' TVD, 90.39° INC, 3.29° AZ, 576.1' VS									
11,300.0	90.39	3.29	10,999.9	482.2	594.4	578.4	0.12	0.12	0.00
11,400.0	90.39	3.29	10,999.3	582.0	600.1	677.7	0.00	0.00	0.00
11,500.0	90.39	3.29	10,998.6	681.9	605.8	777.0	0.00	0.00	0.00
11,600.0	90.39	3.29	10,997.9	781.7	611.6	876.3	0.00	0.00	0.00
11,700.0	90.39	3.29	10,997.2	881.5	617.3	975.6	0.00	0.00	0.00
11,800.0	90.39	3.29	10,996.5	981.4	623.1	1,074.9	0.00	0.00	0.00
11,900.0	90.39	3.29	10,995.8	1,081.2	628.8	1,174.2	0.00	0.00	0.00
12,000.0	90.39	3.29	10,995.1	1,181.0	634.5	1,273.5	0.00	0.00	0.00
12,100.0	90.39	3.29	10,994.5	1,280.9	640.3	1,372.8	0.00	0.00	0.00
12,200.0	90.39	3.29	10,993.8	1,380.7	646.0	1,472.1	0.00	0.00	0.00
12,300.0	90.39	3.29	10,993.1	1,480.5	651.8	1,571.4	0.00	0.00	0.00
12,400.0	90.39	3.29	10,992.4	1,580.4	657.5	1,670.7	0.00	0.00	0.00
12,500.0	90.39	3.29	10,991.7	1,680.2	663.3	1,770.0	0.00	0.00	0.00
12,600.0	90.39	3.29	10,991.0	1,780.0	669.0	1,869.4	0.00	0.00	0.00
12,700.0	90.39	3.29	10,990.4	1,879.9	674.7	1,968.7	0.00	0.00	0.00
12,800.0	90.39	3.29	10,989.7	1,979.7	680.5	2,068.0	0.00	0.00	0.00
12,900.0	90.39	3.29	10,989.0	2,079.5	686.2	2,167.3	0.00	0.00	0.00
13,000.0	90.39	3.29	10,988.3	2,179.4	692.0	2,266.6	0.00	0.00	0.00
13,100.0	90.39	3.29	10,987.6	2,279.2	697.7	2,365.9	0.00	0.00	0.00
13,200.0	90.39	3.29	10,986.9	2,379.0	703.5	2,465.2	0.00	0.00	0.00
13,300.0	90.39	3.29	10,986.2	2,478.9	709.2	2,564.5	0.00	0.00	0.00
13,400.0	90.39	3.29	10,985.6	2,578.7	714.9	2,663.8	0.00	0.00	0.00
13,500.0	90.39	3.29	10,984.9	2,678.5	720.7	2,763.1	0.00	0.00	0.00
13,600.0	90.39	3.29	10,984.2	2,778.4	726.4	2,862.4	0.00	0.00	0.00
13,700.0	90.39	3.29	10,983.5	2,878.2	732.2	2,961.7	0.00	0.00	0.00
13,800.0	90.39	3.29	10,982.8	2,978.0	737.9	3,061.0	0.00	0.00	0.00
13,900.0	90.39	3.29	10,982.1	3,077.9	743.6	3,160.3	0.00	0.00	0.00
14,000.0	90.39	3.29	10,981.4	3,177.7	749.4	3,259.6	0.00	0.00	0.00
14,100.0	90.39	3.29	10,980.8	3,277.5	755.1	3,359.0	0.00	0.00	0.00
14,200.0	90.39	3.29	10,980.1	3,377.4	760.9	3,458.3	0.00	0.00	0.00
14,300.0	90.39	3.29	10,979.4	3,477.2	766.6	3,557.6	0.00	0.00	0.00
14,400.0	90.39	3.29	10,978.7	3,577.0	772.4	3,656.9	0.00	0.00	0.00
14,500.0	90.39	3.29	10,978.0	3,676.9	778.1	3,756.2	0.00	0.00	0.00
14,600.0	90.39	3.29	10,977.3	3,776.7	783.8	3,855.5	0.00	0.00	0.00
14,700.0	90.39	3.29	10,976.7	3,876.5	789.6	3,954.8	0.00	0.00	0.00
14,800.0	90.39	3.29	10,976.0	3,976.4	795.3	4,054.1	0.00	0.00	0.00
14,900.0	90.39	3.29	10,975.3	4,076.2	801.1	4,153.4	0.00	0.00	0.00
15,000.0	90.39	3.29	10,974.6	4,176.0	806.8	4,252.7	0.00	0.00	0.00
15,100.0	90.39	3.29	10,973.9	4,275.9	812.6	4,352.0	0.00	0.00	0.00
15,200.0	90.39	3.29	10,973.2	4,375.7	818.3	4,451.3	0.00	0.00	0.00
15,300.0	90.39	3.29	10,972.5	4,475.5	824.0	4,550.6	0.00	0.00	0.00
15,400.0	90.39	3.29	10,971.9	4,575.4	829.8	4,649.9	0.00	0.00	0.00
15,500.0	90.39	3.29	10,971.2	4,675.2	835.5	4,749.3	0.00	0.00	0.00
15,571.7	90.39	3.29	10,970.7	4,746.8	839.6	4,820.5	0.00	0.00	0.00
330XC(BBSC#2H)									
15,600.0	90.39	3.29	10,970.5	4,775.0	841.3	4,848.6	0.00	0.00	0.00
15,672.0	90.39	3.29	10,970.0	4,846.9	845.4	4,920.1	0.00	0.00	0.00

Planning Report

Database:	Houston R5000 Database	Local Co-ordinate Reference:	Well #2H
Company:	Yates Petroleum	TVD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Project:	Lea County, NM (NAD-83)	MD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Site:	Basilisk BQS State Corn	North Reference:	Grid
Well:	#2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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)
TD: 15672.0' MD, 10970.0' TVD - PBHL(BBSC#2H)									

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									
Basilisk BQS State #1H	0.00	0.01	0.0	129.0	869.5	425,491.28	758,811.67	32° 10' 4.085 N	103° 37' 49.805 W
- plan misses target center by 879.0usft at 0.0usft MD (0.0 TVD, 0.0 N, 0.0 E)									
- Point									
PBHL(BBSC#2H)	0.00	0.01	10,970.0	4,846.9	845.4	430,209.20	758,787.60	32° 10' 50.772 N	103° 37' 49.727 W
- plan hits target center									
- Point									
330XC(BBSC#2H)	0.00	0.00	10,970.7	4,746.8	839.6	430,109.11	758,781.84	32° 10' 49.782 N	103° 37' 49.801 W
- plan hits target center									
- Point									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,030.0	1,030.0	Rustler		0.00		
1,370.0	1,370.0	Salado		0.00		
4,723.4	4,715.0	Base of Salt		0.00		
4,959.1	4,950.0	Delaware		0.00		
4,979.2	4,970.0	Bell Canyon		0.00		
5,942.2	5,930.0	Cherry Canyon		0.00		
7,757.7	7,740.0	Brushy Canyon		0.00		
8,981.5	8,960.0	Bone Spring		0.00		
9,101.8	9,080.0	Upper Avalon		0.00		
10,017.0	9,995.0	1st Bone Spring SS		0.00		
10,547.0	10,525.0	2nd Bone Spring SS		0.00		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
1,800.0	1,800.0	0.0	0.0	Start of Nudge: 4.5° INC, 90° AZ / @1.5° DLS
9,021.6	9,000.0	0.0	554.8	Drop to Vertical / @1.5° DLS
10,544.5	10,522.5	0.0	566.6	Build at 12°/100ft to 90.39° INC @ 3.29° AZ
10,544.5	10,522.5	0.0	566.6	Proposed KOP: 10544.5' MD, 10522.5' TVD
11,297.7	11,000.0	479.9	594.2	EOC: 11297.7' MD, 11000.0' TVD, 90.39° INC, 3.29° AZ, 576.1' VS
15,672.0	10,970.0	4,846.9	845.4	TD: 15672.0' MD, 10970.0' TVD

Yates Petroleum

Lea County, NM (NAD-83)

Basilisk BQS State Com

#2H

OH

Plan #2

Anticollision Report

10 November, 2014

Anticollision Report

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #2H
Project:	Lea County, NM (NAD-83)	TVD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Reference Site:	Basilisk BQS State Com	MD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	#2H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Houston R5000 Database
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum separation factor of 20.00	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	11/10/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	15,672.0	Plan #2 (OH)	MWD	MWD - Standard	

Summary	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Site Name						
Offset Well - Wellbore - Design						
Basilisk BQS State Com						
#1H - OH - OH	8,957.5	8,913.6	347.1	310.2	9.421 CC, ES	
#1H - OH - OH	9,021.6	8,964.8	348.5	311.3	9.372 SF	

Offset Design		Basilisk BQS State Com - #1H - OH - OH										Offset Site Error:		0.0 usft	
Survey Program:		100-NS-GYRO-MS, 1129-MWD										Offset Well Error:		0.0 usft	
Reference		Offset		Semi Major Axis			Distance								
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)				
6,700.0	6,685.5	6,691.5	6,690.5	16.0	11.9	-12.95	116.9	882.8	523.3	496.6	26.76	19.557			
6,800.0	6,785.2	6,791.5	6,790.4	16.3	12.1	-13.24	117.4	881.8	514.9	487.7	27.20	18.928			
6,900.0	6,884.9	6,890.7	6,889.6	16.6	12.4	-13.52	118.0	880.8	506.3	478.7	27.64	18.318			
7,000.0	6,984.6	6,990.4	6,989.3	16.8	12.6	-13.82	118.5	879.8	497.8	469.8	28.08	17.728			
7,100.0	7,084.3	7,084.9	7,083.8	17.1	12.8	-14.14	119.4	879.2	489.9	461.4	28.51	17.182			
7,200.0	7,184.0	7,185.4	7,184.3	17.3	13.0	-14.52	120.6	879.0	482.4	453.5	28.96	16.659			
7,300.0	7,283.7	7,285.9	7,284.8	17.6	13.2	-14.88	121.6	878.7	474.8	445.4	29.41	16.146			
7,400.0	7,383.4	7,386.1	7,385.1	17.9	13.4	-15.21	122.2	878.3	467.0	437.1	29.85	15.644			
7,500.0	7,483.0	7,485.3	7,484.2	18.1	13.6	-15.54	122.6	878.0	459.2	428.9	30.29	15.159			
7,600.0	7,582.7	7,585.9	7,584.8	18.4	13.8	-15.85	122.9	877.7	451.5	420.8	30.74	14.687			
7,700.0	7,682.4	7,687.7	7,686.6	18.7	14.0	-16.21	123.3	877.0	443.3	412.1	31.19	14.213			
7,800.0	7,782.1	7,787.5	7,786.4	18.9	14.2	-16.55	123.5	876.0	434.9	403.3	31.64	13.745			
7,900.0	7,881.8	7,887.3	7,886.2	19.2	14.4	-16.89	123.5	875.1	426.6	394.5	32.09	13.295			
8,000.0	7,981.5	7,986.8	7,985.6	19.4	14.6	-17.23	123.4	874.1	418.1	385.6	32.53	12.852			
8,100.0	8,081.2	8,084.3	8,083.2	19.7	14.8	-17.57	123.4	873.5	410.0	377.0	32.98	12.432			
8,200.0	8,180.9	8,183.9	8,182.8	20.0	15.0	-17.91	123.3	873.2	402.2	368.8	33.42	12.034			
8,300.0	8,280.6	8,283.5	8,282.4	20.2	15.2	-18.27	123.2	872.8	394.4	360.5	33.87	11.643			
8,400.0	8,380.3	8,382.7	8,381.6	20.5	15.4	-18.61	123.0	872.6	386.7	352.3	34.32	11.266			
8,500.0	8,480.0	8,483.0	8,481.9	20.8	15.7	-18.94	122.6	872.5	379.0	344.2	34.77	10.899			
8,600.0	8,579.7	8,582.6	8,581.5	21.0	15.9	-19.24	121.9	872.3	371.2	335.9	35.22	10.538			
8,700.0	8,679.3	8,683.5	8,682.4	21.3	16.1	-19.52	121.0	872.1	363.3	327.6	35.67	10.183			
8,800.0	8,779.0	8,782.9	8,781.8	21.5	16.3	-19.83	120.0	871.6	355.1	319.0	36.12	9.830			
8,900.0	8,878.7	8,870.2	8,868.9	21.8	16.5	-20.95	124.4	870.5	348.4	311.8	36.57	9.526			
8,957.5	8,936.1	8,913.6	8,911.4	22.0	16.6	-22.53	133.0	869.4	347.1	310.2	36.84	9.421 CC, ES			
9,000.0	8,978.4	8,947.6	8,943.9	22.1	16.6	-24.24	142.7	868.3	347.7	310.6	37.06	9.381			

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #2H
Project:	Lea County, NM (NAD-83)	TVD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Reference Site:	Basilisk BQS State Com	MD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	#2H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Houston R5000 Database
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
Basilisk BQS State Com - #1H - OH - OH													Offset Well Error:	0.0 usft
Survey Program: 100-NS-GYRO-MS, 1129-MWD														
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/S (usft)	+E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,021.8	9,000.0	8,964.8	8,960.2	22.1	16.7	-25.24	148.5	867.5	348.5	311.3	37.18	9.372 SF		
9,100.0	9,078.2	9,020.3	9,011.0	22.3	16.8	-28.98	170.6	864.8	355.6	318.0	37.61	9.456		
9,200.0	9,178.1	9,081.5	9,064.1	22.5	16.9	-33.70	200.6	862.0	376.5	338.4	38.10	9.882		
9,300.0	9,278.0	9,132.0	9,105.4	22.7	17.1	-37.91	228.6	860.5	411.2	372.7	38.54	10.670		
9,321.6	9,299.7	9,144.5	9,115.2	22.7	17.1	51.03	237.5	860.1	420.4	381.7	38.76	10.848		
9,400.0	9,378.0	9,179.8	9,141.8	22.8	17.2	48.31	260.7	859.4	458.0	418.9	39.09	11.716		
9,500.0	9,478.0	9,218.4	9,168.7	23.0	17.4	45.36	288.3	858.5	514.1	474.6	39.48	13.022		
9,600.0	9,578.0	9,259.0	9,194.5	23.2	17.5	42.32	319.6	857.6	578.1	538.3	39.87	14.501		
9,700.0	9,678.0	9,278.5	9,206.0	23.4	17.6	40.92	335.3	857.3	648.2	608.1	40.15	16.145		
9,800.0	9,778.0	9,301.9	9,219.0	23.6	17.7	39.29	354.8	857.0	723.4	683.0	40.45	17.886		
9,900.0	9,878.0	9,321.0	9,228.7	23.8	17.8	38.02	371.2	856.8	802.6	761.9	40.72	19.712		

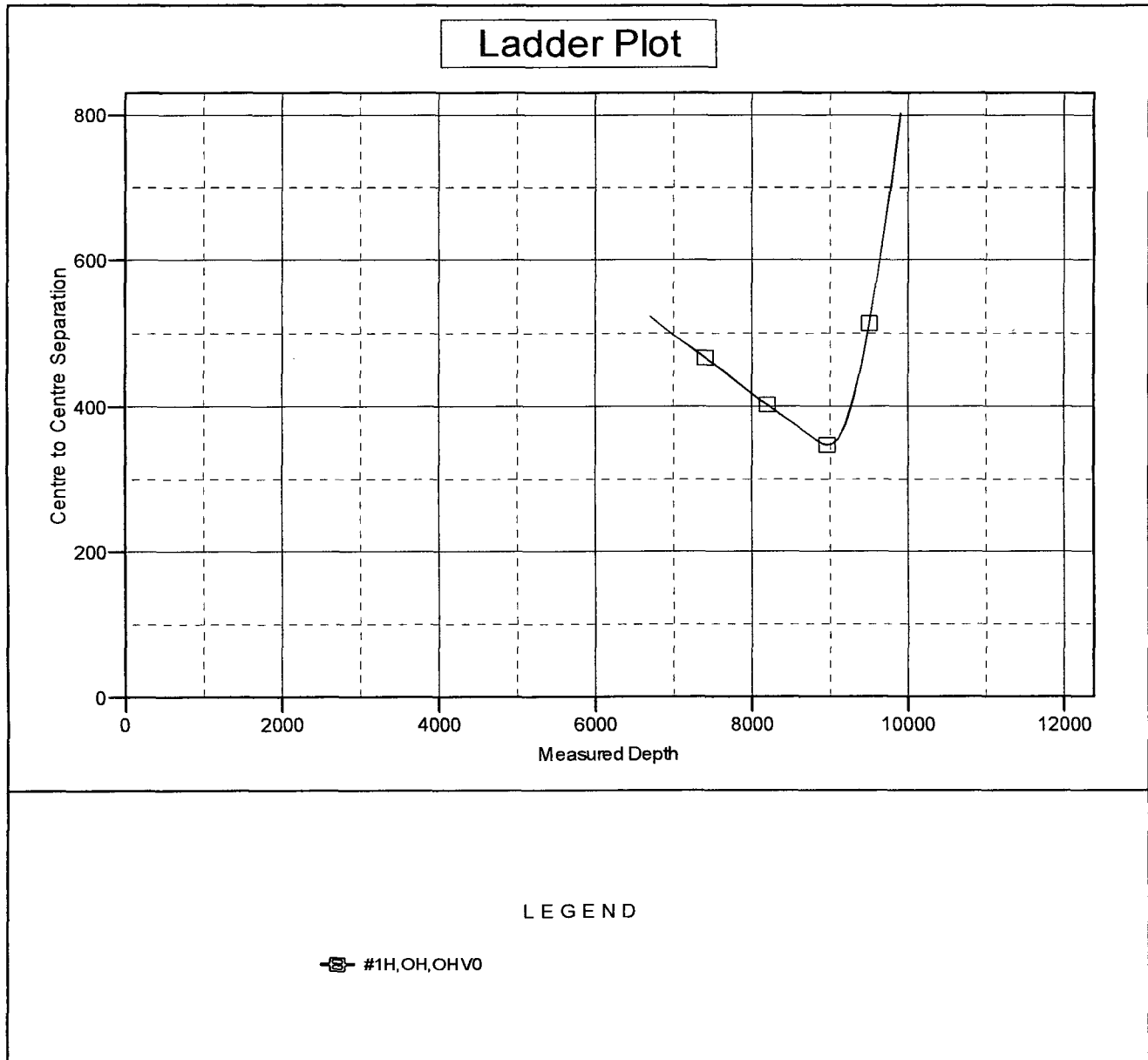
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #2H
Project:	Lea County, NM (NAD-83)	TVD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Reference Site:	Basilisk BQS State Corn	MD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	#2H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Houston R5000 Database
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB @ 3583.0usft (Cactus 124 - KB=
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: #2H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.37°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #2H
Project:	Lea County, NM (NAD-83)	TVD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Reference Site:	Basilisk BQS State Com	MD Reference:	RKB @ 3583.0usft (Cactus 124 - KB=25')
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	#2H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Houston R5000 Database
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB @ 3583.0usft (Cactus 124 - KB=
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

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Grid Convergence at Surface is: 0.37°

