



Bass Enterprises Production Co.

Eddy Co., New Mexico (Nad 83)

Big Eddy #70

Big Eddy #70

Lateral #1 SE

30-015-23473

RECEIVED

JUL 16 2004

ODP-ARTESIA

Plan: Plan #4

Standard Planning Report

12 July, 2004





Black Viper Energy Services

Planning Report



Database: EDM 2003.5 Single User Db
Company: Bass Enterprises Production Co.
Project: Eddy Co., New Mexico (Nad 83)
Site: Big Eddy #70
Well: Big Eddy #70
Wellbore: Lateral #1 SE
Design: Plan #4

Local Co-ordinate Reference: Site Big Eddy #70
TVD Reference: WELL @ 0.00ft (Original Well Elev)
MD Reference: WELL @ 0.00ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project: Eddy Co., New Mexico (Nad 83)

Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: New Mexico Eastern Zone
System Datum: Ground Level

Site: Big Eddy #70

Site Position:
From: Map
Position Uncertainty: ft
Northing: 530026.70 ft
Easting: 627187.15 ft
Slot Radius: in
Latitude: 32° 27' 024" N
Longitude: 104° 03' 018" W
Grid Convergence: 0.15 °

Well: Big Eddy #70

Well Position: +N/-S 0.00 ft
Well Position: +E/-W 0.00 ft
Position Uncertainty: ft
Northing: 530026.70 ft
Easting: 627187.15 ft
Wellhead Elevation: 3224.00 ft
Latitude: 32° 27' 024" N
Longitude: 104° 03' 018" W
Ground Level: 0.00 ft

Wellbore: Lateral #1 SE

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2000	5/10/2004	8.85	60.57	49580

Design: Plan #4

Audit Notes:

Version: Phase: PLAN Tie On Depth: 11600.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	150.83

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
11600.00	0.00	0.00	11600.00	0.00	0.00	0.00	0.00	0.00	0.00	
11920.00	0.00	0.00	11920.00	0.00	0.00	0.00	0.00	0.00	0.00	
11928.00	3.00	150.83	11928.00	-0.18	0.10	37.50	37.50	0.00	150.83	
11932.00	3.00	150.83	11931.99	-0.37	0.20	0.00	0.00	0.00	0.00	
12153.59	83.79	150.83	12080.00	-122.56	68.40	36.46	36.46	0.00	0.00	
14464.18	83.79	150.83	12330.00	-2128.32	1187.87	0.00	0.00	0.00	0.00	PBHL - TD(BE#70S



Black Viper Energy Services

Planning Report



Database: EDM 2003.5 Single User Db
Company: Bass Enterprises Production Co.
Project: Eddy Co., New Mexico (Nad 83)
Site: Big Eddy #70
Well: Big Eddy #70
Wellbore: Lateral #1 SE
Design: Plan #4

Local Co-ordinate Reference: Site Big Eddy #70
TVD Reference: WELL @ 0.00ft (Original Well Elev)
MD Reference: WELL @ 0.00ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11600.00	0.00	0.00	11600.00	0.00	0.00	0.00	0.00	0.00	0.00
11920.00	0.00	0.00	11920.00	0.00	0.00	0.00	0.00	0.00	0.00
Top of Window									
11928.00	3.00	150.83	11928.00	-0.18	0.10	0.21	37.50	37.50	0.00
Btm of Window									
11932.00	3.00	150.83	11931.99	-0.37	0.20	0.42	0.00	0.00	0.00
KOP - Build 36.5/100									
12153.59	83.79	150.83	12080.00	-122.56	68.40	140.36	36.46	36.46	0.00
EOC - Hold 83.8 Deg									
14464.18	83.79	150.83	12330.00	-2128.32	1187.87	2437.37	0.00	0.00	0.00

Targets

Target Name	Shape	TVD (ft)	Northing (ft)	Easting (ft)	+N/-S ft	+E/-W ft	Created	Updated
PBHL - TD(BE#70SE)	Point	12330.00	527898.38	628375.02	-2128.32	1187.87	5/10/2004	7/12/2004

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
11920.00	11920.00	0.00	0.00	Top of Window
11928.00	11928.00	-0.18	0.10	Btm of Window
11932.00	11931.99	-0.37	0.20	KOP - Build 36.5/100
12153.59	12080.00	-122.55	68.40	EOC - Hold 83.8 Deg

Big Eddy #70 SE Plan#4 Report 7-12-04
 Bass Enterprises Production Co.
 Big Eddy #70 - Plan #4

Eddy Co., New Mexico (Nad 83)
 Big Eddy #70

Measured Dogleg Depth Rate (ft) (°/100ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)
11600.00	0.000	0.000	11600.00	0.00 N	0.00 E	0.00
0.00						
11700.00	0.000	0.000	11700.00	0.00 N	0.00 E	0.00
0.00						
11800.00	0.000	0.000	11800.00	0.00 N	0.00 E	0.00
0.00						
11900.00	0.000	0.000	11900.00	0.00 N	0.00 E	0.00
0.00						
11920.00	0.000	0.000	11920.00	0.00 N	0.00 E	0.00
0.00						
11928.00	3.000	150.830	11928.00	0.18 S	0.10 E	0.21
37.50						
11932.00	3.000	150.830	11931.99	0.37 S	0.20 E	0.42
0.00						
11940.00	5.917	150.831	11939.97	0.91 S	0.51 E	1.04
36.46						
11950.00	9.562	150.832	11949.87	2.08 S	1.16 E	2.39
36.46						
11960.00	13.208	150.832	11959.67	3.81 S	2.13 E	4.36
36.46						
11970.00	16.854	150.832	11969.33	6.07 S	3.39 E	6.95
36.46						
11980.00	20.500	150.833	11978.80	8.87 S	4.95 E	10.16
36.46						
11990.00	24.146	150.833	11988.05	12.18 S	6.80 E	13.95
36.46						
12000.00	27.791	150.833	11997.04	16.01 S	8.93 E	18.33
36.46						
12010.00	31.437	150.833	12005.73	20.32 S	11.34 E	23.27
36.46						
12020.00	35.083	150.833	12014.09	25.11 S	14.01 E	28.76
36.46						
12030.00	38.729	150.833	12022.09	30.35 S	16.94 E	34.76
36.46						
12040.00	42.374	150.833	12029.69	36.03 S	20.11 E	41.26
36.46						
12050.00	46.020	150.833	12036.85	42.11 S	23.51 E	48.23
36.46						
12060.00	49.666	150.833	12043.56	48.59 S	27.12 E	55.64
36.46						
12070.00	53.312	150.833	12049.79	55.42 S	30.93 E	63.46
36.46						
12080.00	56.958	150.833	12055.50	62.58 S	34.93 E	71.67
36.46						
12090.00	60.603	150.833	12060.69	70.05 S	39.10 E	80.22
36.46						
12100.00	64.249	150.833	12065.32	77.79 S	43.41 E	89.08
36.46						
12110.00	67.895	150.833	12069.37	85.77 S	47.87 E	98.22
36.46						

Big Eddy #70 SE Plan#4 Report 7-12-04						
12120.00	71.541	150.833	12072.84	93.96 S	52.44 E	107.60
36.46						
12130.00	75.186	150.833	12075.70	102.32 S	57.11 E	117.18
36.46						
12140.00	78.832	150.833	12077.95	110.83 S	61.86 E	126.92
36.46						
12150.00	82.478	150.833	12079.57	119.44 S	66.66 E	136.79
36.46						
12153.59	83.789	150.833	12080.00	122.56 S	68.40 E	140.36
36.46						
12200.00	83.789	150.833	12085.02	162.84 S	90.89 E	186.49
0.00						
12300.00	83.789	150.833	12095.84	249.65 S	139.34 E	285.90
0.00						
12400.00	83.789	150.833	12106.66	336.46 S	187.79 E	385.31
0.00						
12500.00	83.789	150.833	12117.48	423.27 S	236.24 E	484.73
0.00						
12600.00	83.789	150.833	12128.30	510.07 S	284.69 E	584.14
0.00						
12700.00	83.789	150.833	12139.12	596.88 S	333.13 E	683.55
0.00						
12800.00	83.789	150.833	12149.94	683.69 S	381.58 E	782.97
0.00						
12900.00	83.789	150.833	12160.76	770.50 S	430.03 E	882.38
0.00						
13000.00	83.789	150.833	12171.58	857.30 S	478.48 E	981.79
0.00						
13100.00	83.789	150.833	12182.40	944.11 S	526.93 E	1081.21
0.00						
13200.00	83.789	150.833	12193.22	1030.92 S	575.38 E	1180.62
0.00						
13300.00	83.789	150.833	12204.04	1117.73 S	623.83 E	1280.03
0.00						
13400.00	83.789	150.833	12214.86	1204.53 S	672.28 E	1379.44
0.00						
13500.00	83.789	150.833	12225.68	1291.34 S	720.73 E	1478.86
0.00						
13600.00	83.789	150.833	12236.50	1378.15 S	769.18 E	1578.27
0.00						
13700.00	83.789	150.833	12247.32	1464.96 S	817.63 E	1677.68
0.00						
13800.00	83.789	150.833	12258.14	1551.76 S	866.08 E	1777.10
0.00						
13900.00	83.789	150.833	12268.96	1638.57 S	914.53 E	1876.51
0.00						
14000.00	83.789	150.833	12279.78	1725.38 S	962.98 E	1975.92
0.00						
14100.00	83.789	150.833	12290.60	1812.19 S	1011.43 E	2075.33
0.00						
14200.00	83.789	150.833	12301.42	1899.00 S	1059.88 E	2174.75
0.00						
14300.00	83.789	150.833	12312.24	1985.80 S	1108.33 E	2274.16
0.00						
14400.00	83.789	150.833	12323.06	2072.61 S	1156.78 E	2373.57
0.00						
14464.18	83.789	150.833	12330.00	2128.32 S	1187.87 E	2437.37
0.00						

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
 Vertical depths are relative to WELL. Northings and Eastings are relative to well.
 Page 2

Big Eddy #70 SE Plan#4 Report 7-12-04

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Slot and calculated along an Azimuth of 150.830° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.

Central meridian is -104.333°.

Grid Convergence at Surface is 0.149°.

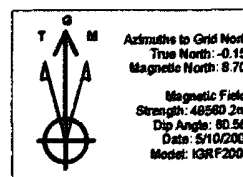
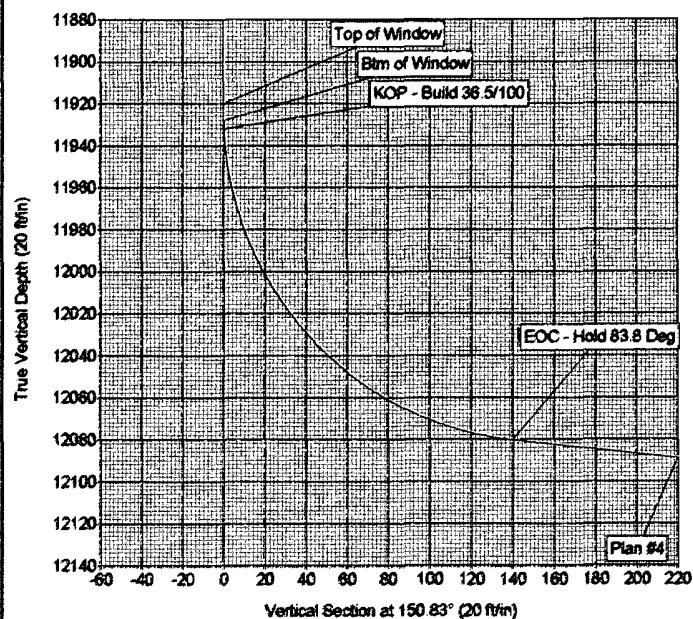
Based upon Minimum Curvature type calculations, at a Measured Depth of 14464.18ft., the Bottom Hole Displacement is 2437.37ft., in the Direction of 150.830° (Grid).



Project: Eddy Co., New Mexico (Nad 83)
 Site: Big Eddy #70
 Well: Big Eddy #70
 Wellbore: Lateral #1 SE
 Plan: Plan #4

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	DLeg	TFace	VSec	Target
1	11800.00	0.00	0.00	11800.00	0.00	0.00	0.00	0.00	0.00	
2	11820.00	0.00	0.00	11820.00	0.00	0.00	0.00	0.00	0.00	
3	11828.00	3.00	150.83	11928.00	-0.18	0.10	37.50	150.83	0.21	
4	11832.00	3.00	150.83	11831.99	-0.37	0.20	0.00	0.00	0.42	
5	12153.59	83.79	150.83	12080.00	-122.56	68.46	36.46	0.00	140.36	
6	14464.18	83.79	150.83	12330.00	-2128.32	1187.87	0.00	0.00	2437.37	PBHL - TD(BE#70SE)

Bass Enterprises Production Co.



Plan: Plan #4 (Big Eddy #70 Lateral #1 SE)
 Created By: Mike Starkey Date: 09/25/2004
 Checked: _____ Date: _____

ANNOTATIONS

TVD	MD	Annotation
11820.00	11820.00	Top of Window
11828.00	11828.00	Btm of Window
11831.99	11831.99	KOP - Build 36.5/100
12080.00	12153.59	EOC - Hold 83.8 Deg

PROJECT DETAILS: Eddy Co., New Mexico (Nad 83)
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Ground Level

