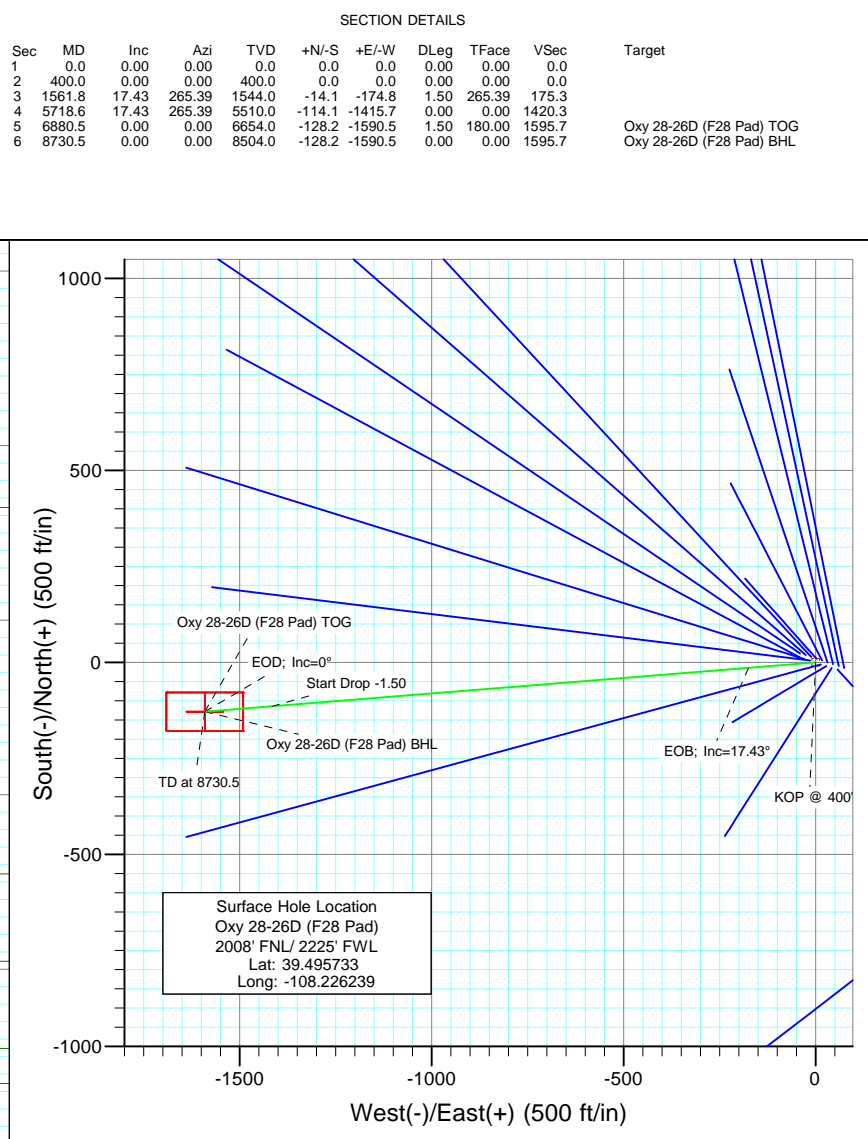
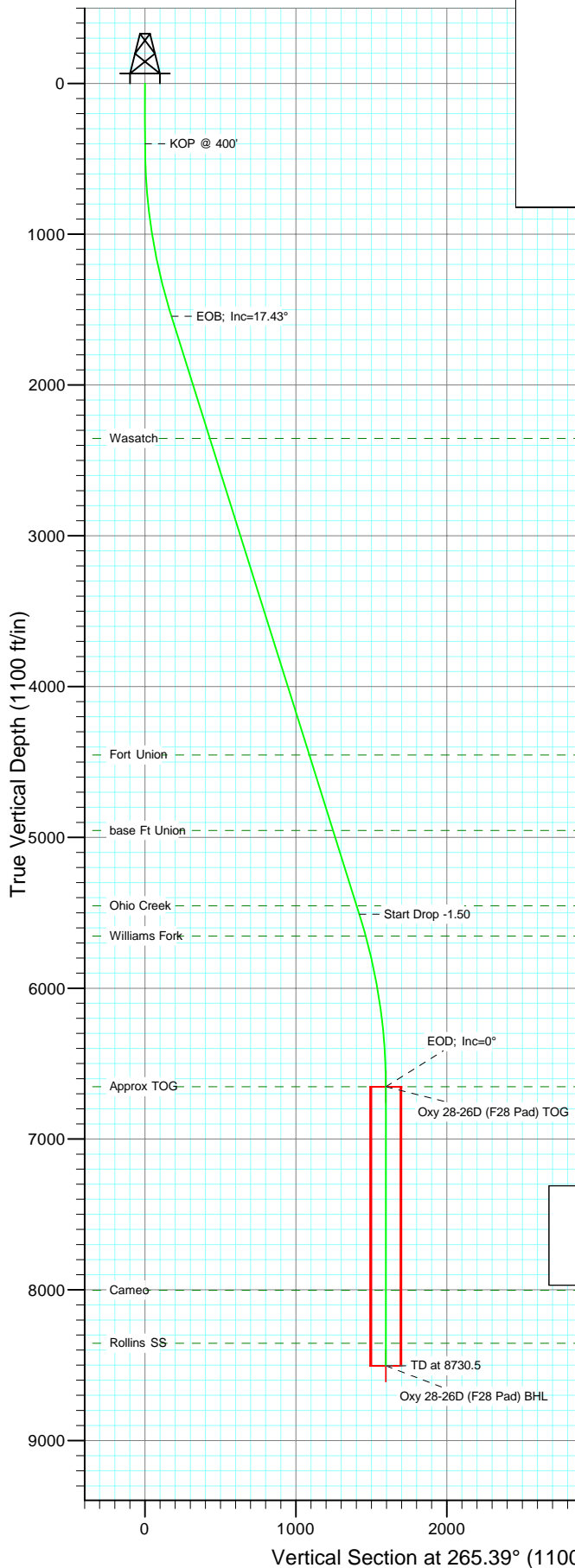


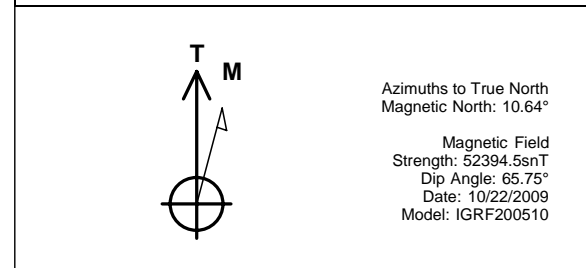


Berry Petroleum Company

Project: Garfield County
Site: SENW S28-T6S-R97W (F28 Pad)
Well: Oxy 28-26D (F28 Pad)
Wellbore: DD
Design: Plan #1



FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	
2354.0	2410.8	Wasatch	
4454.0	4611.8	Fort Union	
4954.0	5135.9	base Ft Union	
5454.0	5660.0	Ohio Creek	
5654.0	5868.7	Williams Fork	
6654.0	6880.5	Approx TOG	
8004.0	8230.5	Cameo	
8354.0	8580.5	Rollins SS	



DESIGN DETAILS: Plan #1					
95XXX; BH					
KBE @ 8308.0ft (Original Well Elev)					
Target	Azimuth	Origin	N/S	E/W	From TVD
Oxy 28-26D (F28 Pad)	BH265.39	Slot	0.0	0.0	0.0

Directional Plus

Planning Report

Database:	EDM 2003.21 US Multi User Db	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site:	SENW S28-T6S-R97W (F28 Pad)	North Reference:	True
Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Project	Garfield County		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	SENW S28-T6S-R97W (F28 Pad)			
Site Position:		Northing:	1,616,975.87 ft	Latitude: 39.495683
From:	Lat/Long	Easting:	2,230,827.80 ft	Longitude: -108.226036
Position Uncertainty:	0.0 ft	Slot Radius:	in	Grid Convergence: -1.72 °

Well	Oxy 28-26D (F28 Pad)			
Well Position	+N/-S	0.0 ft	Northing:	1,616,995.78 ft
	+E/-W	0.0 ft	Easting:	2,230,771.08 ft
Position Uncertainty	0.0 ft		Wellhead Elevation:	ft
			Ground Level:	8,293.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	10/22/2009	10.64	65.75	52,395

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	265.39

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,561.8	17.43	265.39	1,544.0	-14.1	-174.8	1.50	1.50	0.00	265.39	
5,718.6	17.43	265.39	5,510.0	-114.1	-1,415.7	0.00	0.00	0.00	0.00	
6,880.5	0.00	0.00	6,654.0	-128.2	-1,590.5	1.50	-1.50	0.00	180.00	Oxy 28-26D (F28 Pad)
8,730.5	0.00	0.00	8,504.0	-128.2	-1,590.5	0.00	0.00	0.00	0.00	Oxy 28-26D (F28 Pad)

Directional Plus

Planning Report

Database:	EDM 2003.21 US Multi User Db	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site:	SENW S28-T6S-R97W (F28 Pad)	North Reference:	True
Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
30.0	0.00	0.00	30.0	0.0	0.0	0.0	0.00	0.00	
60.0	0.00	0.00	60.0	0.0	0.0	0.0	0.00	0.00	
90.0	0.00	0.00	90.0	0.0	0.0	0.0	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	
180.0	0.00	0.00	180.0	0.0	0.0	0.0	0.00	0.00	
210.0	0.00	0.00	210.0	0.0	0.0	0.0	0.00	0.00	
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	
270.0	0.00	0.00	270.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
330.0	0.00	0.00	330.0	0.0	0.0	0.0	0.00	0.00	
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	
390.0	0.00	0.00	390.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	KOP @ 400'
420.0	0.30	265.39	420.0	0.0	-0.1	0.1	1.50	1.50	
450.0	0.75	265.39	450.0	0.0	-0.3	0.3	1.50	1.50	
480.0	1.20	265.39	480.0	-0.1	-0.8	0.8	1.50	1.50	
510.0	1.65	265.39	510.0	-0.1	-1.6	1.6	1.50	1.50	
540.0	2.10	265.39	540.0	-0.2	-2.6	2.6	1.50	1.50	
570.0	2.55	265.39	569.9	-0.3	-3.8	3.8	1.50	1.50	
600.0	3.00	265.39	599.9	-0.4	-5.2	5.2	1.50	1.50	
630.0	3.45	265.39	629.9	-0.6	-6.9	6.9	1.50	1.50	
660.0	3.90	265.39	659.8	-0.7	-8.8	8.8	1.50	1.50	
690.0	4.35	265.39	689.7	-0.9	-11.0	11.0	1.50	1.50	
720.0	4.80	265.39	719.6	-1.1	-13.4	13.4	1.50	1.50	
750.0	5.25	265.39	749.5	-1.3	-16.0	16.0	1.50	1.50	
780.0	5.70	265.39	779.4	-1.5	-18.8	18.9	1.50	1.50	
810.0	6.15	265.39	809.2	-1.8	-21.9	22.0	1.50	1.50	
840.0	6.60	265.39	839.0	-2.0	-25.2	25.3	1.50	1.50	
870.0	7.05	265.39	868.8	-2.3	-28.8	28.9	1.50	1.50	
900.0	7.50	265.39	898.6	-2.6	-32.6	32.7	1.50	1.50	
930.0	7.95	265.39	928.3	-2.9	-36.6	36.7	1.50	1.50	
960.0	8.40	265.39	958.0	-3.3	-40.8	41.0	1.50	1.50	
990.0	8.85	265.39	987.7	-3.7	-45.3	45.5	1.50	1.50	
1,020.0	9.30	265.39	1,017.3	-4.0	-50.0	50.2	1.50	1.50	
1,050.0	9.75	265.39	1,046.9	-4.4	-55.0	55.2	1.50	1.50	
1,080.0	10.20	265.39	1,076.4	-4.8	-60.2	60.4	1.50	1.50	
1,110.0	10.65	265.39	1,105.9	-5.3	-65.6	65.8	1.50	1.50	
1,140.0	11.10	265.39	1,135.4	-5.7	-71.2	71.5	1.50	1.50	
1,170.0	11.55	265.39	1,164.8	-6.2	-77.1	77.3	1.50	1.50	
1,200.0	12.00	265.39	1,194.2	-6.7	-83.2	83.5	1.50	1.50	
1,230.0	12.45	265.39	1,223.5	-7.2	-89.5	89.8	1.50	1.50	
1,260.0	12.90	265.39	1,252.8	-7.7	-96.1	96.4	1.50	1.50	
1,290.0	13.35	265.39	1,282.0	-8.3	-102.9	103.2	1.50	1.50	
1,320.0	13.80	265.39	1,311.1	-8.9	-109.9	110.3	1.50	1.50	
1,350.0	14.25	265.39	1,340.2	-9.4	-117.1	117.5	1.50	1.50	
1,380.0	14.70	265.39	1,369.3	-10.0	-124.6	125.0	1.50	1.50	
1,410.0	15.15	265.39	1,398.3	-10.7	-132.3	132.8	1.50	1.50	
1,440.0	15.60	265.39	1,427.2	-11.3	-140.3	140.7	1.50	1.50	
1,470.0	16.05	265.39	1,456.1	-12.0	-148.4	148.9	1.50	1.50	
1,500.0	16.50	265.39	1,484.9	-12.6	-156.8	157.3	1.50	1.50	

Directional Plus

Planning Report

Database:	EDM 2003.21 US Multi User Db	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site:	SENW S28-T6S-R97W (F28 Pad)	North Reference:	True
Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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)	Comments / Formations
1,530.0	16.95	265.39	1,513.6	-13.3	-165.4	165.9	1.50	1.50	
1,560.0	17.40	265.39	1,542.3	-14.0	-174.2	174.8	1.50	1.50	
1,561.8	17.43	265.39	1,544.0	-14.1	-174.8	175.3	1.50	1.50	EOB; Inc=17.43°
1,590.0	17.43	265.39	1,570.9	-14.8	-183.2	183.8	0.00	0.00	
1,620.0	17.43	265.39	1,599.5	-15.5	-192.1	192.8	0.00	0.00	
1,650.0	17.43	265.39	1,628.1	-16.2	-201.1	201.7	0.00	0.00	
1,680.0	17.43	265.39	1,656.7	-16.9	-210.0	210.7	0.00	0.00	
1,710.0	17.43	265.39	1,685.4	-17.6	-219.0	219.7	0.00	0.00	
1,740.0	17.43	265.39	1,714.0	-18.4	-228.0	228.7	0.00	0.00	
1,770.0	17.43	265.39	1,742.6	-19.1	-236.9	237.7	0.00	0.00	
1,800.0	17.43	265.39	1,771.2	-19.8	-245.9	246.7	0.00	0.00	
1,830.0	17.43	265.39	1,799.9	-20.5	-254.8	255.7	0.00	0.00	
1,860.0	17.43	265.39	1,828.5	-21.3	-263.8	264.6	0.00	0.00	
1,890.0	17.43	265.39	1,857.1	-22.0	-272.7	273.6	0.00	0.00	
1,920.0	17.43	265.39	1,885.7	-22.7	-281.7	282.6	0.00	0.00	
1,950.0	17.43	265.39	1,914.3	-23.4	-290.7	291.6	0.00	0.00	
1,980.0	17.43	265.39	1,943.0	-24.1	-299.6	300.6	0.00	0.00	
2,010.0	17.43	265.39	1,971.6	-24.9	-308.6	309.6	0.00	0.00	
2,040.0	17.43	265.39	2,000.2	-25.6	-317.5	318.6	0.00	0.00	
2,070.0	17.43	265.39	2,028.8	-26.3	-326.5	327.5	0.00	0.00	
2,100.0	17.43	265.39	2,057.5	-27.0	-335.4	336.5	0.00	0.00	
2,130.0	17.43	265.39	2,086.1	-27.7	-344.4	345.5	0.00	0.00	
2,160.0	17.43	265.39	2,114.7	-28.5	-353.3	354.5	0.00	0.00	
2,190.0	17.43	265.39	2,143.3	-29.2	-362.3	363.5	0.00	0.00	
2,220.0	17.43	265.39	2,172.0	-29.9	-371.3	372.5	0.00	0.00	
2,250.0	17.43	265.39	2,200.6	-30.6	-380.2	381.4	0.00	0.00	
2,280.0	17.43	265.39	2,229.2	-31.4	-389.2	390.4	0.00	0.00	
2,310.0	17.43	265.39	2,257.8	-32.1	-398.1	399.4	0.00	0.00	
2,340.0	17.43	265.39	2,286.4	-32.8	-407.1	408.4	0.00	0.00	
2,370.0	17.43	265.39	2,315.1	-33.5	-416.0	417.4	0.00	0.00	
2,400.0	17.43	265.39	2,343.7	-34.2	-425.0	426.4	0.00	0.00	
2,410.8	17.43	265.39	2,354.0	-34.5	-428.2	429.6	0.00	0.00	Wasatch
2,430.0	17.43	265.39	2,372.3	-35.0	-433.9	435.4	0.00	0.00	
2,460.0	17.43	265.39	2,400.9	-35.7	-442.9	444.3	0.00	0.00	
2,490.0	17.43	265.39	2,429.6	-36.4	-451.9	453.3	0.00	0.00	

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Oxy 28-26D (F28 Pad) E	0.00	0.00	8,504.0	-128.2	-1,590.5	1,616,915.41	2,229,177.45	39.495381	-108.231875
- plan misses target center by 6180.9ft at 2490.0ft MD (2429.6 TVD, -36.4 N, -451.9 E)									
- Rectangle (sides W100.0 H200.0 D0.0)									
Oxy 28-26D (F28 Pad) T	0.00	0.00	6,654.0	-128.2	-1,590.5	1,616,915.41	2,229,177.45	39.495381	-108.231875
- plan misses target center by 4376.2ft at 2490.0ft MD (2429.6 TVD, -36.4 N, -451.9 E)									
- Point									

Directional Plus

Planning Report

Database:	EDM 2003.21 US Multi User Db	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site:	SENW S28-T6S-R97W (F28 Pad)	North Reference:	True
Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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)	Comments / Formations
2,500.0	17.43	265.39	2,439.1	-36.6	-454.8	456.3	0.00	0.00	
2,600.0	17.43	265.39	2,534.5	-39.1	-484.7	486.3	0.00	0.00	
2,700.0	17.43	265.39	2,629.9	-41.5	-514.6	516.2	0.00	0.00	
2,800.0	17.43	265.39	2,725.3	-43.9	-544.4	546.2	0.00	0.00	
2,900.0	17.43	265.39	2,820.7	-46.3	-574.3	576.1	0.00	0.00	
3,000.0	17.43	265.39	2,916.1	-48.7	-604.1	606.1	0.00	0.00	
3,100.0	17.43	265.39	3,011.6	-51.1	-634.0	636.0	0.00	0.00	
3,200.0	17.43	265.39	3,107.0	-53.5	-663.8	666.0	0.00	0.00	
3,300.0	17.43	265.39	3,202.4	-55.9	-693.7	695.9	0.00	0.00	
3,400.0	17.43	265.39	3,297.8	-58.3	-723.5	725.9	0.00	0.00	
3,500.0	17.43	265.39	3,393.2	-60.7	-753.4	755.8	0.00	0.00	
3,600.0	17.43	265.39	3,488.6	-63.1	-783.2	785.8	0.00	0.00	
3,700.0	17.43	265.39	3,584.0	-65.5	-813.1	815.7	0.00	0.00	
3,800.0	17.43	265.39	3,679.4	-67.9	-842.9	845.7	0.00	0.00	
3,900.0	17.43	265.39	3,774.8	-70.3	-872.8	875.6	0.00	0.00	
4,000.0	17.43	265.39	3,870.2	-72.7	-902.7	905.6	0.00	0.00	
4,100.0	17.43	265.39	3,965.7	-75.1	-932.5	935.5	0.00	0.00	
4,200.0	17.43	265.39	4,061.1	-77.5	-962.4	965.5	0.00	0.00	
4,300.0	17.43	265.39	4,156.5	-79.9	-992.2	995.4	0.00	0.00	
4,400.0	17.43	265.39	4,251.9	-82.4	-1,022.1	1,025.4	0.00	0.00	
4,500.0	17.43	265.39	4,347.3	-84.8	-1,051.9	1,055.3	0.00	0.00	
4,600.0	17.43	265.39	4,442.7	-87.2	-1,081.8	1,085.3	0.00	0.00	
4,611.8	17.43	265.39	4,454.0	-87.4	-1,085.3	1,088.8	0.00	0.00	Fort Union
4,700.0	17.43	265.39	4,538.1	-89.6	-1,111.6	1,115.2	0.00	0.00	
4,800.0	17.43	265.39	4,633.5	-92.0	-1,141.5	1,145.2	0.00	0.00	
4,900.0	17.43	265.39	4,728.9	-94.4	-1,171.3	1,175.1	0.00	0.00	
5,000.0	17.43	265.39	4,824.3	-96.8	-1,201.2	1,205.1	0.00	0.00	
5,100.0	17.43	265.39	4,919.7	-99.2	-1,231.0	1,235.0	0.00	0.00	
5,135.9	17.43	265.39	4,954.0	-100.1	-1,241.8	1,245.8	0.00	0.00	base Ft Union
5,200.0	17.43	265.39	5,015.2	-101.6	-1,260.9	1,265.0	0.00	0.00	
5,300.0	17.43	265.39	5,110.6	-104.0	-1,290.7	1,294.9	0.00	0.00	
5,400.0	17.43	265.39	5,206.0	-106.4	-1,320.6	1,324.9	0.00	0.00	
5,500.0	17.43	265.39	5,301.4	-108.8	-1,350.5	1,354.8	0.00	0.00	
5,600.0	17.43	265.39	5,396.8	-111.2	-1,380.3	1,384.8	0.00	0.00	
5,660.0	17.43	265.39	5,454.0	-112.7	-1,398.2	1,402.7	0.00	0.00	Ohio Creek
5,700.0	17.43	265.39	5,492.2	-113.6	-1,410.2	1,414.7	0.00	0.00	
5,718.6	17.43	265.39	5,510.0	-114.1	-1,415.7	1,420.3	0.00	0.00	Start Drop -1.50
5,800.0	16.21	265.39	5,587.9	-116.0	-1,439.2	1,443.9	1.50	-1.50	
5,868.7	15.18	265.39	5,654.0	-117.5	-1,457.7	1,462.4	1.50	-1.50	Williams Fork
5,900.0	14.71	265.39	5,684.3	-118.1	-1,465.8	1,470.5	1.50	-1.50	
6,000.0	13.21	265.39	5,781.3	-120.0	-1,489.8	1,494.6	1.50	-1.50	
6,100.0	11.71	265.39	5,878.9	-121.8	-1,511.3	1,516.2	1.50	-1.50	
6,200.0	10.21	265.39	5,977.1	-123.3	-1,530.2	1,535.2	1.50	-1.50	
6,300.0	8.71	265.39	6,075.8	-124.6	-1,546.6	1,551.6	1.50	-1.50	
6,400.0	7.21	265.39	6,174.8	-125.7	-1,560.4	1,565.5	1.50	-1.50	
6,500.0	5.71	265.39	6,274.1	-126.6	-1,571.6	1,576.7	1.50	-1.50	
6,600.0	4.21	265.39	6,373.8	-127.3	-1,580.2	1,585.4	1.50	-1.50	
6,700.0	2.71	265.39	6,473.6	-127.8	-1,586.2	1,591.4	1.50	-1.50	
6,800.0	1.21	265.39	6,573.5	-128.1	-1,589.7	1,594.8	1.50	-1.50	
6,880.5	0.00	0.00	6,654.0	-128.2	-1,590.5	1,595.7	1.50	-1.50	EOD; Inc=0° - Approx TOG - Oxy 28-26D (F28
6,900.0	0.00	0.00	6,673.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
7,000.0	0.00	0.00	6,773.5	-128.2	-1,590.5	1,595.7	0.00	0.00	

Directional Plus

Planning Report

Database:	EDM 2003.21 US Multi User Db	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site:	SENW S28-T6S-R97W (F28 Pad)	North Reference:	True
Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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)	Comments / Formations
7,100.0	0.00	0.00	6,873.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
7,200.0	0.00	0.00	6,973.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
7,300.0	0.00	0.00	7,073.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
7,400.0	0.00	0.00	7,173.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
7,500.0	0.00	0.00	7,273.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
7,600.0	0.00	0.00	7,373.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
7,700.0	0.00	0.00	7,473.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
7,800.0	0.00	0.00	7,573.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
7,900.0	0.00	0.00	7,673.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
8,000.0	0.00	0.00	7,773.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
8,100.0	0.00	0.00	7,873.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
8,200.0	0.00	0.00	7,973.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
8,230.5	0.00	0.00	8,004.0	-128.2	-1,590.5	1,595.7	0.00	0.00	Cameo
8,300.0	0.00	0.00	8,073.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
8,400.0	0.00	0.00	8,173.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
8,500.0	0.00	0.00	8,273.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
8,580.5	0.00	0.00	8,354.0	-128.2	-1,590.5	1,595.7	0.00	0.00	Rollins SS
8,600.0	0.00	0.00	8,373.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
8,700.0	0.00	0.00	8,473.5	-128.2	-1,590.5	1,595.7	0.00	0.00	
8,730.5	0.00	0.00	8,504.0	-128.2	-1,590.5	1,595.7	0.00	0.00	TD at 8730.5 - Oxy 28-26D (F28 Pad) BHL

Targets									
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude Longitude
Oxy 28-26D (F28 Pad) E	- plan hits target center - Rectangle (sides W100.0 H200.0 D0.0)	0.00	0.00	8,504.0	-128.2	-1,590.5	1,616,915.41	2,229,177.45	39.495381 -108.231875
Oxy 28-26D (F28 Pad) T	- plan hits target center - Point	0.00	0.00	6,654.0	-128.2	-1,590.5	1,616,915.41	2,229,177.45	39.495381 -108.231875

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,410.8	2,354.0	Wasatch		0.00		
4,611.8	4,454.0	Fort Union		0.00		
5,135.9	4,954.0	base Ft Union		0.00		
5,660.0	5,454.0	Ohio Creek		0.00		
5,868.7	5,654.0	Williams Fork		0.00		
6,880.5	6,654.0	Approx TOG		0.00		
8,230.5	8,004.0	Cameo		0.00		
8,580.5	8,354.0	Rollins SS		0.00		

Directional Plus

Planning Report

Database:	EDM 2003.21 US Multi User Db	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site:	SENW S28-T6S-R97W (F28 Pad)	North Reference:	True
Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
400.0	400.0	0.0	0.0	KOP @ 400'
1,561.8	1,544.0	-14.1	-174.8	EOB; Inc=17.43°
5,718.6	5,510.0	-114.1	-1,415.7	Start Drop -1.50
6,880.5	6,654.0	-128.2	-1,590.5	EOD; Inc=0°
8,730.5	8,504.0	-128.2	-1,590.5	TD at 8730.5

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 200.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	10/26/2009		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	8,730.5	Plan #1 (DD)	MWD	Geolink MWD	

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth	Offset Measured Depth	Distance		Separation Factor	Warning
	(ft)	(ft)	Between Centres (ft)	Between Ellipses (ft)		
SENW S28-T6S-R97W (F28 Pad)						
687-28A-18 (Marathon offset) - DD - Plan #1						Out of range
Oxy 28-15D (F28 Pad) - DD - Plan #1	400.0	400.0	60.1	58.8	44.729	CC, ES
Oxy 28-15D (F28 Pad) - DD - Plan #1	700.0	696.5	75.5	73.1	31.623	SF
Oxy 28-17D (F28 Pad) - DD - Plan #1	400.0	400.0	44.7	43.3	33.224	CC, ES
Oxy 28-17D (F28 Pad) - DD - Plan #1	800.0	800.3	62.7	60.0	22.810	SF
Oxy 28-18D (F28 pad) - DD - Plan #1	400.0	400.0	29.7	28.3	22.065	CC, ES
Oxy 28-18D (F28 pad) - DD - Plan #1	800.0	801.1	45.7	43.0	16.649	SF
Oxy 28-19D (F28 Pad) - DD - Plan #1	400.0	400.0	9.6	8.3	7.159	CC, ES
Oxy 28-19D (F28 Pad) - DD - Plan #1	500.0	500.0	10.2	8.5	6.029	SF
Oxy 28-20D (F28 Pad) - DD - Plan #1	400.0	400.0	18.0	16.6	13.359	CC, ES
Oxy 28-20D (F28 Pad) - DD - Plan #1	600.0	600.0	22.8	20.8	11.181	SF
Oxy 28-21D (F28 Pad) - DD - Plan #1	400.0	400.0	31.3	30.0	23.309	CC, ES
Oxy 28-21D (F28 Pad) - DD - Plan #1	700.0	700.1	41.1	38.7	17.004	SF
Oxy 28-22D (F28 Pad) - DD - Plan #1	400.0	400.0	75.8	74.5	56.435	CC, ES
Oxy 28-22D (F28 Pad) - DD - Plan #1	900.0	900.5	103.3	100.2	32.882	SF
Oxy 28-23D (F28 Pad) - DD - Plan #1	400.0	400.0	45.6	44.3	33.939	CC, ES
Oxy 28-23D (F28 Pad) - DD - Plan #1	800.0	800.1	64.2	61.4	23.249	SF
Oxy 28-24D (F28 Pad) - DD - Plan #1	446.7	447.5	60.4	58.9	39.908	CC, ES
Oxy 28-24D (F28 Pad) - DD - Plan #1	800.0	799.6	78.3	75.4	27.058	SF
Oxy 28-25D (F28 Pad) - DD - Plan #1	400.0	400.0	15.0	13.7	11.164	CC
Oxy 28-25D (F28 Pad) - DD - Plan #1	500.0	500.3	15.1	13.4	8.927	ES
Oxy 28-25D (F28 Pad) - DD - Plan #1	1,900.0	1,902.3	59.5	47.1	4.784	SF
Oxy 28-27D (F28 Pad) - DD - Plan #1	400.0	400.0	15.0	13.7	11.164	CC
Oxy 28-27D (F28 Pad) - DD - Plan #1	600.0	599.2	15.4	13.3	7.518	ES
Oxy 28-27D (F28 Pad) - DD - Plan #1	1,700.0	1,694.4	50.0	40.2	5.075	SF
Oxy 28-28D (F28 Pad) - DD - Plan #1	400.0	400.0	30.5	29.1	22.665	CC
Oxy 28-28D (F28 Pad) - DD - Plan #1	600.0	598.4	30.9	28.8	15.128	ES
Oxy 28-28D (F28 Pad) - DD - Plan #1	1,500.0	1,488.3	70.9	63.4	9.465	SF
Oxy 28-29D (F28 Pad) - DD - Plan #1	400.0	400.0	45.5	44.1	33.822	CC
Oxy 28-29D (F28 Pad) - DD - Plan #1	600.0	597.6	45.8	43.8	22.472	ES
Oxy 28-29D (F28 Pad) - DD - Plan #1	1,400.0	1,383.3	89.1	82.8	13.966	SF
Oxy 28-30D (F28 Pad) - DD - Plan #1	200.0	200.0	46.4	45.7	71.790	CC, ES
Oxy 28-30D (F28 Pad) - DD - Plan #1	1,600.0	1,557.2	186.9	178.7	22.782	SF
Oxy 28-31D (F28 Pad) - DD - Plan #1	300.0	300.0	31.7	30.7	31.842	CC, ES
Oxy 28-31D (F28 Pad) - DD - Plan #1	800.0	794.3	51.1	48.3	18.254	SF
Oxy 28-32D (F28 Pad) - DD - Plan #1	200.0	200.0	18.0	17.3	27.827	CC, ES
Oxy 28-32D (F28 Pad) - DD - Plan #1	400.0	398.9	23.2	21.8	17.090	SF

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		SENW S28-T6S-R97W (F28 Pad) - Oxy 28-15D (F28 Pad) - DD - Plan #1											Offset Site Error:	0.0 ft	
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance								
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between	Between	Total	Separation	Warning			
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Centres (ft)	Ellipses (ft)	Uncertainty Axis			Factor	
0.0	0.0	0.0	0.0	0.0	0.0	107.63	-18.2	57.3	60.1						
100.0	100.0	100.0	100.0	0.1	0.1	107.63	-18.2	57.3	60.1	59.8	0.30	202.594			
200.0	200.0	200.0	200.0	0.3	0.3	107.63	-18.2	57.3	60.1	59.5	0.65	93.084			
300.0	300.0	300.0	300.0	0.5	0.5	107.63	-18.2	57.3	60.1	59.1	0.99	60.423			
400.0	400.0	400.0	400.0	0.7	0.7	107.63	-18.2	57.3	60.1	58.8	1.34	44.729 CC, ES			
500.0	500.0	500.0	500.0	0.8	0.8	-158.22	-18.2	57.3	61.3	59.6	1.69	36.227			
600.0	599.9	598.5	598.4	1.0	1.0	-158.88	-19.1	58.1	66.1	64.0	2.04	32.406			
700.0	699.7	696.5	696.4	1.2	1.2	-159.11	-21.9	60.7	75.5	73.1	2.39	31.623 SF			
800.0	799.3	793.7	793.4	1.4	1.4	-159.00	-26.5	64.9	89.5	86.8	2.74	32.684			
900.0	898.6	889.8	889.1	1.7	1.6	-158.68	-32.8	70.7	108.0	104.9	3.09	34.917			
1,000.0	997.5	984.6	983.3	2.0	1.8	-158.27	-40.8	78.0	131.1	127.6	3.46	37.912			
1,100.0	1,096.1	1,077.7	1,075.5	2.3	2.1	-157.83	-50.3	86.8	158.5	154.7	3.83	41.395			
1,200.0	1,194.2	1,168.9	1,165.5	2.6	2.3	-157.39	-61.2	96.8	190.3	186.0	4.21	45.179			

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-17D (F28 Pad) - DD - Plan #1													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Between Centres (ft)	Between Ellipses (ft)					
0.0	0.0	0.0	0.0	0.0	0.0	108.55	-14.2	42.3	44.7				
100.0	100.0	100.0	100.0	0.1	0.1	108.55	-14.2	42.3	44.7	44.4	0.30	150.487	
200.0	200.0	200.0	200.0	0.3	0.3	108.55	-14.2	42.3	44.7	44.0	0.65	69.142	
300.0	300.0	300.0	300.0	0.5	0.5	108.55	-14.2	42.3	44.7	43.7	0.99	44.882	
400.0	400.0	400.0	400.0	0.7	0.7	108.55	-14.2	42.3	44.7	43.3	1.34	33.224 CC, ES	
500.0	500.0	500.0	500.0	0.8	0.8	-157.48	-14.2	42.3	45.9	44.2	1.69	27.089	
600.0	599.9	599.9	599.9	1.0	1.0	-159.20	-14.2	42.3	49.5	47.5	2.04	24.248	
700.0	699.7	700.1	700.1	1.2	1.2	-160.28	-15.3	41.6	55.3	52.9	2.39	23.103	
800.0	799.3	800.3	800.2	1.4	1.4	-159.63	-18.6	39.5	62.7	60.0	2.75	22.810 SF	
900.0	898.6	900.3	900.0	1.7	1.6	-157.84	-24.2	36.0	71.9	68.8	3.12	23.021	
1,000.0	997.5	999.9	999.2	2.0	1.8	-155.67	-31.5	31.3	83.0	79.5	3.52	23.598	
1,100.0	1,096.1	1,099.0	1,097.9	2.3	2.0	-154.53	-39.0	26.5	96.5	92.5	3.93	24.577	
1,200.0	1,194.2	1,197.7	1,196.2	2.6	2.2	-154.22	-46.5	21.8	112.3	108.0	4.34	25.854	
1,300.0	1,291.7	1,296.0	1,294.1	3.1	2.4	-154.45	-54.0	17.0	130.5	125.7	4.77	27.357	
1,400.0	1,388.6	1,393.9	1,391.6	3.5	2.6	-155.02	-61.4	12.3	150.9	145.8	5.20	29.045	
1,500.0	1,484.9	1,491.2	1,488.5	4.0	2.8	-155.78	-68.8	7.6	173.8	168.2	5.63	30.889	
1,600.0	1,580.4	1,588.0	1,584.9	4.5	3.1	-156.66	-76.2	2.9	198.8	192.8	6.06	32.821	

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-18D (F28 pad) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	107.88	-9.1	28.2	29.7					
100.0	100.0	100.0	100.0	0.1	0.1	107.88	-9.1	28.2	29.7	29.4	0.30	99.941		
200.0	200.0	200.0	200.0	0.3	0.3	107.88	-9.1	28.2	29.7	29.0	0.65	45.919		
300.0	300.0	300.0	300.0	0.5	0.5	107.88	-9.1	28.2	29.7	28.7	0.99	29.807		
400.0	400.0	400.0	400.0	0.7	0.7	107.88	-9.1	28.2	29.7	28.3	1.34	22.065 CC, ES		
500.0	500.0	500.0	500.0	0.8	0.8	-158.43	-9.1	28.2	30.9	29.2	1.69	18.234		
600.0	599.9	599.9	599.9	1.0	1.0	-160.81	-9.1	28.2	34.5	32.5	2.04	16.923		
700.0	699.7	700.5	700.4	1.2	1.2	-162.54	-9.8	27.1	39.8	37.4	2.39	16.652		
800.0	799.3	801.1	801.0	1.4	1.4	-162.54	-11.8	23.7	45.7	43.0	2.75	16.649 SF		
900.0	898.6	901.5	901.2	1.7	1.6	-161.49	-15.1	18.1	52.3	49.2	3.11	16.829		
1,000.0	997.5	1,001.1	1,000.6	2.0	1.8	-161.07	-18.8	12.1	60.9	57.4	3.47	17.539		
1,100.0	1,096.1	1,100.5	1,099.7	2.3	2.0	-161.42	-22.4	6.1	72.0	68.2	3.84	18.747		
1,200.0	1,194.2	1,199.6	1,198.5	2.6	2.2	-162.20	-25.9	0.1	85.6	81.4	4.21	20.335		
1,300.0	1,291.7	1,298.3	1,297.0	3.1	2.4	-163.19	-29.5	-5.9	101.6	97.1	4.57	22.226		
1,400.0	1,388.6	1,396.5	1,395.0	3.5	2.6	-164.23	-33.1	-11.8	120.2	115.3	4.93	24.365		
1,500.0	1,484.9	1,494.2	1,492.4	4.0	2.8	-165.24	-36.6	-17.8	141.3	136.0	5.29	26.710		
1,600.0	1,580.4	1,591.4	1,589.4	4.5	3.0	-166.21	-40.1	-23.7	164.7	159.0	5.65	29.167		
1,700.0	1,675.8	1,688.5	1,686.2	5.1	3.2	-167.01	-43.7	-29.5	188.6	182.6	6.01	31.363		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-19D (F28 Pad) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	18.82	9.1	3.1	9.6					
100.0	100.0	100.0	100.0	0.1	0.1	18.82	9.1	3.1	9.6	9.3	0.30	32.425		
200.0	200.0	200.0	200.0	0.3	0.3	18.82	9.1	3.1	9.6	9.0	0.65	14.898		
300.0	300.0	300.0	300.0	0.5	0.5	18.82	9.1	3.1	9.6	8.6	0.99	9.671		
400.0	400.0	400.0	400.0	0.7	0.7	18.82	9.1	3.1	9.6	8.3	1.34	7.159 CC, ES		
500.0	500.0	500.0	500.0	0.8	0.8	120.18	9.1	3.1	10.2	8.5	1.69	6.029 SF		
600.0	599.9	599.9	599.9	1.0	1.0	135.71	9.1	3.1	12.6	10.6	2.05	6.184		
700.0	699.7	699.7	699.7	1.2	1.2	146.26	10.1	2.2	17.8	15.4	2.40	7.422		
800.0	799.3	799.5	799.4	1.4	1.4	148.88	13.0	-0.4	25.2	22.4	2.76	9.132		
900.0	898.6	899.1	898.8	1.7	1.6	148.29	17.8	-4.6	34.6	31.5	3.14	11.017		
1,000.0	997.5	998.4	997.9	2.0	1.8	148.78	23.1	-9.3	46.2	42.6	3.53	13.063		
1,100.0	1,096.1	1,097.5	1,096.7	2.3	2.0	150.31	28.3	-14.0	60.0	56.0	3.93	15.255		
1,200.0	1,194.2	1,196.1	1,195.1	2.6	2.2	152.17	33.6	-18.7	76.1	71.7	4.33	17.575		
1,300.0	1,291.7	1,294.4	1,293.1	3.1	2.4	154.06	38.8	-23.3	94.5	89.8	4.72	20.011		
1,400.0	1,388.6	1,392.1	1,390.5	3.5	2.6	155.82	44.0	-28.0	115.4	110.3	5.12	22.553		
1,500.0	1,484.9	1,489.3	1,487.5	4.0	2.8	157.43	49.2	-32.6	138.8	133.3	5.51	25.190		
1,600.0	1,580.4	1,585.8	1,583.8	4.5	3.0	158.90	54.3	-37.2	164.4	158.5	5.90	27.864		
1,700.0	1,675.8	1,682.3	1,680.0	5.1	3.2	160.10	59.4	-41.7	190.5	184.2	6.30	30.249		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		SENW S28-T6S-R97W (F28 Pad) - Oxy 28-20D (F28 Pad) - DD - Plan #1											Offset Site Error:		0.0 ft
Survey Program:		0-MWD											Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft) +E/-W (ft)		Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	73.50	5.1	17.2	18.0						
100.0	100.0	100.0	100.0	0.1	0.1	73.50	5.1	17.2	18.0	17.7	0.30	60.510			
200.0	200.0	200.0	200.0	0.3	0.3	73.50	5.1	17.2	18.0	17.3	0.65	27.802			
300.0	300.0	300.0	300.0	0.5	0.5	73.50	5.1	17.2	18.0	17.0	0.99	18.047			
400.0	400.0	400.0	400.0	0.7	0.7	73.50	5.1	17.2	18.0	16.6	1.34	13.359	CC, ES		
500.0	500.0	500.0	500.0	0.8	0.8	168.91	5.1	17.2	19.2	17.5	1.69	11.365			
600.0	599.9	600.0	600.0	1.0	1.0	167.57	6.3	16.6	22.8	20.8	2.04	11.181	SF		
700.0	699.7	699.9	699.8	1.2	1.2	162.63	9.7	14.8	28.6	26.2	2.40	11.938			
800.0	799.3	799.6	799.2	1.4	1.4	156.72	15.5	11.8	36.9	34.2	2.77	13.329			
900.0	898.6	898.9	898.2	1.7	1.6	151.88	23.2	7.9	48.0	44.8	3.17	15.150			
1,000.0	997.5	997.9	996.9	2.0	1.8	149.90	30.9	3.9	61.5	57.9	3.58	17.188			
1,100.0	1,096.1	1,096.7	1,095.2	2.3	2.0	149.59	38.7	-0.1	77.3	73.3	4.00	19.321			
1,200.0	1,194.2	1,195.0	1,193.2	2.6	2.2	150.15	46.4	-4.1	95.3	90.8	4.43	21.517			
1,300.0	1,291.7	1,292.9	1,290.7	3.1	2.5	151.11	54.0	-8.0	115.5	110.7	4.86	23.767			
1,400.0	1,388.6	1,390.3	1,387.7	3.5	2.7	152.26	61.7	-12.0	138.1	132.8	5.30	26.072			
1,500.0	1,484.9	1,487.1	1,484.1	4.0	2.9	153.45	69.3	-15.9	163.0	157.2	5.73	28.432			
1,600.0	1,580.4	1,583.3	1,579.9	4.5	3.1	154.67	76.8	-19.8	190.0	183.9	6.17	30.803			

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-21D (F28 Pad) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	31.3	31.3					
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	31.3	31.3	31.0	0.30	105.574		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	31.3	31.3	30.7	0.65	48.507		
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	31.3	31.3	30.3	0.99	31.487		
400.0	400.0	400.0	400.0	0.7	0.7	90.00	0.0	31.3	31.3	30.0	1.34	23.309 CC, ES		
500.0	500.0	500.2	500.2	0.8	0.8	-177.80	1.2	30.9	32.2	30.5	1.69	19.030		
600.0	599.9	600.3	600.2	1.0	1.0	175.80	5.0	29.7	35.3	33.2	2.05	17.216		
700.0	699.7	700.1	699.8	1.2	1.2	167.44	11.2	27.6	41.1	38.7	2.42	17.004 SF		
800.0	799.3	799.4	798.7	1.4	1.4	159.25	19.8	24.7	50.4	47.6	2.81	17.900		
900.0	898.6	898.1	896.7	1.7	1.7	152.39	30.7	21.0	63.2	59.9	3.24	19.490		
1,000.0	997.5	996.4	994.1	2.0	1.9	147.47	43.5	16.8	79.4	75.7	3.70	21.466		
1,100.0	1,096.1	1,094.6	1,091.3	2.3	2.2	144.98	56.3	12.5	98.0	93.9	4.17	23.491		
1,200.0	1,194.2	1,192.4	1,188.2	2.6	2.5	143.97	69.1	8.2	118.9	114.2	4.67	25.464		
1,300.0	1,291.7	1,289.7	1,284.6	3.1	2.8	143.84	81.8	3.9	141.8	136.7	5.18	27.370		
1,400.0	1,388.6	1,386.5	1,380.5	3.5	3.0	144.21	94.5	-0.3	166.8	161.1	5.71	29.224		
1,500.0	1,484.9	1,482.8	1,475.8	4.0	3.3	144.87	107.1	-4.5	193.9	187.7	6.25	31.044		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												SENW S28-T6S-R97W (F28 Pad) - Oxy 28-22D (F28 Pad) - DD - Plan #1		Offset Site Error:		0.0 ft
Survey Program:												0-MWD	Offset Well Error:		0.0 ft	
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	Total Uncertainty Axis	Separation Factor	Warning			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)						
0.0	0.0	0.0	0.0	0.0	0.0	100.80	-14.2	74.5	75.8							
100.0	100.0	100.0	100.0	0.1	0.1	100.80	-14.2	74.5	75.8	75.5	0.30	255.618				
200.0	200.0	200.0	200.0	0.3	0.3	100.80	-14.2	74.5	75.8	75.2	0.65	117.446				
300.0	300.0	300.0	300.0	0.5	0.5	100.80	-14.2	74.5	75.8	74.8	0.99	76.237				
400.0	400.0	400.0	400.0	0.7	0.7	100.80	-14.2	74.5	75.8	74.5	1.34	56.435	CC, ES			
500.0	500.0	500.0	500.0	0.8	0.8	-164.85	-14.2	74.5	77.1	75.4	1.69	45.552				
600.0	599.9	600.7	600.6	1.0	1.0	-166.45	-12.9	74.2	80.4	78.4	2.04	39.369				
700.0	699.7	701.1	701.0	1.2	1.2	-169.96	-9.0	73.5	85.6	83.2	2.40	35.696				
800.0	799.3	801.1	800.8	1.4	1.4	-174.82	-2.6	72.1	93.0	90.3	2.76	33.688				
900.0	898.6	900.5	899.8	1.7	1.6	179.62	6.4	70.3	103.3	100.2	3.14	32.882	SF			
1,000.0	997.5	999.2	997.8	2.0	1.8	173.94	17.7	68.0	116.9	113.4	3.55	32.952				
1,100.0	1,096.1	1,096.9	1,094.5	2.3	2.1	168.58	31.4	65.3	134.1	130.1	3.99	33.627				
1,200.0	1,194.2	1,193.5	1,189.7	2.6	2.4	163.77	47.3	62.1	155.0	150.6	4.47	34.683				
1,300.0	1,291.7	1,288.9	1,283.3	3.1	2.7	159.58	65.4	58.4	179.7	174.7	5.00	35.966				

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-23D (F28 Pad) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	95.04	-4.0	45.4	45.6					
100.0	100.0	100.0	100.0	0.1	0.1	95.04	-4.0	45.4	45.6	45.3	0.30	153.724		
200.0	200.0	200.0	200.0	0.3	0.3	95.04	-4.0	45.4	45.6	45.0	0.65	70.630		
300.0	300.0	300.0	300.0	0.5	0.5	95.04	-4.0	45.4	45.6	44.6	0.99	45.848		
400.0	400.0	400.0	400.0	0.7	0.7	95.04	-4.0	45.4	45.6	44.3	1.34	33.939 CC, ES		
500.0	500.0	500.0	500.0	0.8	0.8	-170.62	-4.0	45.4	46.9	45.2	1.69	27.709		
600.0	599.9	600.3	600.3	1.0	1.0	-172.76	-2.7	45.1	50.4	48.4	2.04	24.678		
700.0	699.7	700.4	700.3	1.2	1.2	-177.48	1.1	44.2	56.0	53.6	2.40	23.365		
800.0	799.3	800.1	799.8	1.4	1.4	176.42	7.4	42.6	64.2	61.4	2.76	23.249 SF		
900.0	898.6	899.2	898.5	1.7	1.6	170.04	16.2	40.5	75.5	72.3	3.14	24.002		
1,000.0	997.5	997.6	996.2	2.0	1.8	164.14	27.4	37.8	90.2	86.7	3.56	25.344		
1,100.0	1,096.1	1,095.1	1,092.7	2.3	2.1	159.04	40.9	34.5	108.6	104.5	4.02	27.032		
1,200.0	1,194.2	1,191.6	1,187.8	2.6	2.4	154.78	56.7	30.7	130.5	125.9	4.52	28.875		
1,300.0	1,291.7	1,286.9	1,281.4	3.1	2.7	151.27	74.5	26.3	155.8	150.8	5.07	30.738		
1,400.0	1,388.6	1,380.9	1,373.1	3.5	3.1	148.37	94.3	21.5	184.6	178.9	5.67	32.539		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-24D (F28 Pad) - DD - Plan #1													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
0.0	0.0	0.0	0.0	0.0	0.0	98.57	-9.1	60.4	61.1				
100.0	100.0	100.0	100.0	0.1	0.1	98.57	-9.1	60.4	61.1	60.8	0.30	205.840	
200.0	200.0	200.0	200.0	0.3	0.3	98.57	-9.1	60.4	61.1	60.4	0.65	94.575	
300.0	300.0	300.0	300.0	0.5	0.5	98.57	-9.1	60.4	61.1	60.1	0.99	61.391	
400.0	400.0	400.5	400.5	0.7	0.7	97.40	-7.8	60.1	60.6	59.3	1.35	45.067	
446.7	446.7	447.5	447.4	0.8	0.8	-169.41	-6.3	59.8	60.4	58.9	1.51	39.908 CC, ES	
500.0	500.0	500.9	500.9	0.8	0.9	-171.77	-3.9	59.3	60.7	59.0	1.70	35.613	
600.0	599.9	601.0	600.7	1.0	1.1	-178.03	2.5	57.9	63.2	61.1	2.08	30.409	
700.0	699.7	700.7	699.9	1.2	1.3	174.24	11.4	56.0	68.8	66.4	2.47	27.834	
800.0	799.3	799.6	798.2	1.4	1.5	166.30	22.8	53.5	78.3	75.4	2.89	27.058 SF	
900.0	898.6	897.7	895.3	1.7	1.8	159.14	36.5	50.6	92.0	88.6	3.35	27.484	
1,000.0	997.5	994.9	991.1	2.0	2.1	153.17	52.5	47.1	109.8	105.9	3.83	28.647	
1,100.0	1,096.1	1,090.9	1,085.3	2.3	2.5	148.41	70.7	43.2	131.6	127.2	4.36	30.201	
1,200.0	1,194.2	1,185.6	1,177.7	2.6	2.9	144.66	90.8	38.9	157.1	152.2	4.92	31.915	
1,300.0	1,291.7	1,279.0	1,268.3	3.1	3.3	141.72	112.9	34.1	186.2	180.7	5.54	33.647	

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-25D (F28 Pad) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	109.87	-5.1	14.1	15.0					
100.0	100.0	100.0	100.0	0.1	0.1	109.87	-5.1	14.1	15.0	14.7	0.30	50.566		
200.0	200.0	200.0	200.0	0.3	0.3	109.87	-5.1	14.1	15.0	14.4	0.65	23.233		
300.0	300.0	300.0	300.0	0.5	0.5	109.87	-5.1	14.1	15.0	14.0	0.99	15.081		
400.0	400.0	400.0	400.0	0.7	0.7	109.87	-5.1	14.1	15.0	13.7	1.34	11.164 CC		
500.0	500.0	500.3	500.3	0.8	0.8	-154.72	-5.4	12.8	15.1	13.4	1.69	8.927 ES		
600.0	599.9	600.6	600.5	1.0	1.0	-152.37	-6.5	9.0	15.5	13.4	2.05	7.566		
700.0	699.7	701.0	700.6	1.2	1.2	-148.71	-8.2	2.7	16.2	13.8	2.41	6.699		
800.0	799.3	801.3	800.5	1.4	1.4	-144.10	-10.6	-6.2	17.2	14.4	2.80	6.135		
900.0	898.6	901.5	900.1	1.7	1.7	-138.97	-13.7	-17.6	18.7	15.4	3.24	5.761		
1,000.0	997.5	1,001.8	999.3	2.0	2.0	-133.76	-17.5	-31.5	20.7	16.9	3.75	5.507		
1,100.0	1,096.1	1,102.0	1,098.1	2.3	2.3	-128.79	-22.0	-48.0	23.2	18.8	4.35	5.328		
1,200.0	1,194.2	1,202.3	1,196.4	2.6	2.7	-124.27	-27.1	-66.9	26.2	21.2	5.04	5.200		
1,300.0	1,291.7	1,302.5	1,294.1	3.1	3.1	-120.30	-32.9	-88.3	29.8	24.0	5.84	5.107		
1,400.0	1,388.6	1,402.6	1,391.1	3.5	3.5	-116.88	-39.4	-112.1	34.0	27.2	6.74	5.040		
1,500.0	1,484.9	1,502.7	1,487.5	4.0	4.0	-113.95	-46.6	-138.4	38.7	30.9	7.74	4.992		
1,600.0	1,580.4	1,602.8	1,583.0	4.5	4.6	-111.27	-54.4	-167.1	43.8	35.0	8.84	4.953		
1,700.0	1,675.8	1,702.8	1,677.7	5.1	5.1	-106.89	-62.8	-198.1	48.8	38.8	10.04	4.860		
1,800.0	1,771.2	1,802.6	1,772.0	5.6	5.7	-102.78	-71.3	-229.4	54.0	42.8	11.25	4.804		
1,900.0	1,866.6	1,902.3	1,866.4	6.2	6.3	-99.40	-79.8	-260.8	59.5	47.1	12.44	4.784 SF		
2,000.0	1,962.1	2,002.1	1,960.7	6.7	6.9	-96.59	-88.3	-292.2	65.1	51.5	13.61	4.785		
2,100.0	2,057.5	2,101.9	2,055.1	7.3	7.5	-94.24	-96.9	-323.6	70.9	56.1	14.77	4.800		
2,200.0	2,152.9	2,201.7	2,149.4	7.9	8.1	-92.24	-105.4	-354.9	76.7	60.8	15.91	4.823		
2,300.0	2,248.3	2,301.5	2,243.8	8.4	8.7	-90.53	-113.9	-386.3	82.7	65.6	17.05	4.849		
2,400.0	2,343.7	2,401.3	2,338.1	9.0	9.4	-89.05	-122.4	-417.7	88.7	70.5	18.18	4.879		
2,500.0	2,439.1	2,501.1	2,432.5	9.5	10.0	-87.75	-131.0	-449.1	94.7	75.4	19.30	4.909		
2,600.0	2,534.5	2,600.9	2,526.8	10.1	10.6	-86.61	-139.5	-480.4	100.8	80.4	20.42	4.939		
2,700.0	2,629.9	2,700.7	2,621.2	10.7	11.2	-85.61	-148.0	-511.8	107.0	85.4	21.53	4.969		
2,800.0	2,725.3	2,800.5	2,715.5	11.2	11.8	-84.71	-156.6	-543.2	113.1	90.5	22.63	4.998		
2,900.0	2,820.7	2,900.3	2,809.9	11.8	12.4	-83.90	-165.1	-574.6	119.3	95.6	23.74	5.026		
3,000.0	2,916.1	3,000.1	2,904.2	12.4	13.0	-83.18	-173.6	-606.0	125.5	100.7	24.84	5.052		
3,100.0	3,011.6	3,099.9	2,998.6	12.9	13.6	-82.52	-182.1	-637.3	131.7	105.8	25.94	5.078		
3,200.0	3,107.0	3,199.7	3,092.9	13.5	14.3	-81.92	-190.7	-668.7	138.0	110.9	27.04	5.103		
3,300.0	3,202.4	3,299.5	3,187.3	14.1	14.9	-81.38	-199.2	-700.1	144.2	116.1	28.14	5.126		
3,400.0	3,297.8	3,399.3	3,281.6	14.6	15.5	-80.87	-207.7	-731.5	150.5	121.3	29.23	5.149		
3,500.0	3,393.2	3,499.1	3,376.0	15.2	16.1	-80.41	-216.2	-762.8	156.8	126.5	30.32	5.170		
3,600.0	3,488.6	3,598.9	3,470.3	15.8	16.7	-79.99	-224.8	-794.2	163.1	131.6	31.42	5.190		
3,700.0	3,584.0	3,698.7	3,564.7	16.4	17.3	-79.59	-233.3	-825.6	169.4	136.8	32.51	5.210		
3,800.0	3,679.4	3,798.5	3,659.0	16.9	18.0	-79.23	-241.8	-857.0	175.7	142.1	33.60	5.228		
3,900.0	3,774.8	3,898.3	3,753.4	17.5	18.6	-78.89	-250.4	-888.3	182.0	147.3	34.69	5.246		
4,000.0	3,870.2	3,998.0	3,847.7	18.1	19.2	-78.57	-258.9	-919.7	188.3	152.5	35.78	5.263		
4,100.0	3,965.7	4,097.8	3,942.1	18.6	19.8	-78.28	-267.4	-951.1	194.6	157.7	36.86	5.279		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-27D (F28 Pad) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-70.13	5.1	-14.1	15.0					
100.0	100.0	100.0	100.0	0.1	0.1	-70.13	5.1	-14.1	15.0	14.7	50.566			
200.0	200.0	200.0	200.0	0.3	0.3	-70.13	5.1	-14.1	15.0	14.4	0.65	23.233		
300.0	300.0	300.0	300.0	0.5	0.5	-70.13	5.1	-14.1	15.0	14.0	0.99	15.081		
400.0	400.0	400.0	400.0	0.7	0.7	-70.13	5.1	-14.1	15.0	13.7	1.34	11.164 CC		
500.0	500.0	499.6	499.6	0.8	0.8	25.43	5.3	-15.4	15.1	13.4	1.69	8.914		
600.0	599.9	599.2	599.1	1.0	1.0	28.22	5.7	-19.3	15.4	13.3	2.04	7.518 ES		
700.0	699.7	698.8	698.5	1.2	1.2	32.64	6.5	-25.7	15.9	13.5	2.40	6.618		
800.0	799.3	798.4	797.7	1.4	1.4	38.31	7.6	-34.7	16.8	14.0	2.78	6.035		
900.0	898.6	898.0	896.6	1.7	1.7	44.68	9.1	-46.3	18.1	14.9	3.20	5.662		
1,000.0	997.5	997.6	995.1	2.0	2.0	51.20	10.8	-60.4	20.0	16.3	3.69	5.424		
1,100.0	1,096.1	1,097.1	1,093.2	2.3	2.3	57.37	12.8	-77.1	22.5	18.3	4.28	5.271		
1,200.0	1,194.2	1,196.6	1,190.9	2.6	2.6	62.90	15.2	-96.3	25.7	20.7	4.97	5.176		
1,300.0	1,291.7	1,296.1	1,287.9	3.1	3.0	67.67	17.9	-118.0	29.5	23.7	5.76	5.119		
1,400.0	1,388.6	1,395.5	1,384.3	3.5	3.5	71.70	20.8	-142.2	33.9	27.3	6.67	5.090		
1,500.0	1,484.9	1,495.0	1,480.0	4.0	4.0	75.04	24.1	-168.8	39.0	31.3	7.67	5.079		
1,600.0	1,580.4	1,594.6	1,575.3	4.5	4.5	78.14	27.6	-197.6	44.4	35.7	8.75	5.078		
1,700.0	1,675.8	1,694.4	1,670.8	5.1	5.0	80.91	31.2	-226.6	50.0	40.2	9.85	5.075 SF		
1,800.0	1,771.2	1,794.2	1,766.2	5.6	5.6	83.12	34.8	-255.7	55.7	44.7	10.97	5.077		
1,900.0	1,866.6	1,894.0	1,861.6	6.2	6.1	84.92	38.3	-284.7	61.4	49.3	12.08	5.083		
2,000.0	1,962.1	1,993.9	1,957.1	6.7	6.6	86.42	41.9	-313.8	67.2	54.0	13.20	5.091		
2,100.0	2,057.5	2,093.7	2,052.5	7.3	7.2	87.67	45.5	-342.8	73.0	58.7	14.32	5.100		
2,200.0	2,152.9	2,193.5	2,147.9	7.9	7.7	88.74	49.0	-371.9	78.9	63.5	15.44	5.110		
2,300.0	2,248.3	2,293.3	2,243.4	8.4	8.3	89.66	52.6	-400.9	84.8	68.2	16.56	5.119		
2,400.0	2,343.7	2,393.1	2,338.8	9.0	8.8	90.46	56.2	-430.0	90.7	73.0	17.68	5.128		
2,500.0	2,439.1	2,493.0	2,434.2	9.5	9.4	91.17	59.7	-459.0	96.6	77.8	18.80	5.137		
2,600.0	2,534.5	2,592.8	2,529.7	10.1	9.9	91.79	63.3	-488.1	102.5	82.6	19.93	5.146		
2,700.0	2,629.9	2,692.6	2,625.1	10.7	10.5	92.34	66.9	-517.1	108.5	87.4	21.05	5.154		
2,800.0	2,725.3	2,792.4	2,720.5	11.2	11.1	92.84	70.4	-546.2	114.4	92.3	22.17	5.162		
2,900.0	2,820.7	2,892.2	2,816.0	11.8	11.6	93.29	74.0	-575.2	120.4	97.1	23.29	5.169		
3,000.0	2,916.1	2,992.0	2,911.4	12.4	12.2	93.69	77.6	-604.2	126.3	101.9	24.41	5.176		
3,100.0	3,011.6	3,091.9	3,006.8	12.9	12.7	94.06	81.1	-633.3	132.3	106.8	25.53	5.182		
3,200.0	3,107.0	3,191.7	3,102.3	13.5	13.3	94.40	84.7	-662.3	138.3	111.6	26.65	5.188		
3,300.0	3,202.4	3,291.5	3,197.7	14.1	13.8	94.71	88.3	-691.4	144.3	116.5	27.77	5.194		
3,400.0	3,297.8	3,391.3	3,293.1	14.6	14.4	94.99	91.8	-720.4	150.3	121.4	28.90	5.200		
3,500.0	3,393.2	3,491.1	3,388.5	15.2	14.9	95.25	95.4	-749.5	156.2	126.2	30.02	5.205		
3,600.0	3,488.6	3,591.0	3,484.0	15.8	15.5	95.50	99.0	-778.5	162.2	131.1	31.14	5.210		
3,700.0	3,584.0	3,690.8	3,579.4	16.4	16.1	95.72	102.6	-807.6	168.2	136.0	32.26	5.215		
3,800.0	3,679.4	3,790.6	3,674.8	16.9	16.6	95.93	106.1	-836.6	174.2	140.8	33.38	5.219		
3,900.0	3,774.8	3,890.4	3,770.3	17.5	17.2	96.13	109.7	-865.7	180.2	145.7	34.50	5.223		
4,000.0	3,870.2	3,990.2	3,865.7	18.1	17.7	96.31	113.3	-894.7	186.2	150.6	35.62	5.227		
4,100.0	3,965.7	4,090.0	3,961.1	18.6	18.3	96.48	116.8	-923.8	192.2	155.5	36.74	5.231		
4,200.0	4,061.1	4,189.9	4,056.6	19.2	18.8	96.65	120.4	-952.8	198.2	160.3	37.86	5.235		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-28D (F28 Pad) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-72.61	9.1	-29.1	30.5					
100.0	100.0	100.0	100.0	0.1	0.1	-72.61	9.1	-29.1	30.5	30.2	0.30	102.660		
200.0	200.0	200.0	200.0	0.3	0.3	-72.61	9.1	-29.1	30.5	29.8	0.65	47.168		
300.0	300.0	300.0	300.0	0.5	0.5	-72.61	9.1	-29.1	30.5	29.5	0.99	30.618		
400.0	400.0	400.0	400.0	0.7	0.7	-72.61	9.1	-29.1	30.5	29.1	1.34	22.665 CC		
500.0	500.0	499.2	499.2	0.8	0.8	22.90	9.5	-30.3	30.5	28.9	1.69	18.060		
600.0	599.9	598.4	598.3	1.0	1.0	25.58	10.6	-34.0	30.9	28.8	2.04	15.128 ES		
700.0	699.7	697.6	697.3	1.2	1.2	29.90	12.5	-40.1	31.5	29.1	2.39	13.174		
800.0	799.3	796.7	796.0	1.4	1.4	35.59	15.2	-48.7	32.7	30.0	2.76	11.860		
900.0	898.6	895.8	894.4	1.7	1.7	42.22	18.6	-59.8	34.7	31.6	3.16	10.983		
1,000.0	997.5	994.8	992.4	2.0	2.0	49.23	22.8	-73.2	37.7	34.1	3.63	10.401		
1,100.0	1,096.1	1,093.7	1,089.9	2.3	2.3	56.08	27.7	-89.1	41.9	37.7	4.18	10.014		
1,200.0	1,194.2	1,192.5	1,186.8	2.6	2.6	62.36	33.3	-107.3	47.3	42.5	4.85	9.758		
1,300.0	1,291.7	1,291.2	1,283.1	3.1	3.0	67.86	39.7	-127.9	53.9	48.3	5.62	9.597		
1,400.0	1,388.6	1,389.8	1,378.8	3.5	3.5	72.53	46.8	-150.9	61.8	55.3	6.50	9.506		
1,500.0	1,484.9	1,488.3	1,473.6	4.0	3.9	76.44	54.6	-176.2	70.9	63.4	7.49	9.465 SF		
1,600.0	1,580.4	1,586.6	1,567.6	4.5	4.5	79.60	63.1	-203.7	81.1	72.5	8.55	9.481		
1,700.0	1,675.8	1,685.3	1,661.2	5.1	5.0	81.17	72.3	-233.5	92.6	83.0	9.62	9.620		
1,800.0	1,771.2	1,784.6	1,755.3	5.6	5.6	82.19	81.7	-263.8	104.3	93.6	10.71	9.745		
1,900.0	1,866.6	1,883.9	1,849.4	6.2	6.2	83.01	91.1	-294.2	116.1	104.3	11.80	9.840		
2,000.0	1,962.1	1,983.2	1,943.5	6.7	6.8	83.68	100.5	-324.5	127.9	115.0	12.90	9.914		
2,100.0	2,057.5	2,082.4	2,037.5	7.3	7.4	84.23	109.9	-354.9	139.7	125.7	14.01	9.973		
2,200.0	2,152.9	2,181.7	2,131.6	7.9	8.0	84.70	119.3	-385.2	151.5	136.4	15.12	10.021		
2,300.0	2,248.3	2,281.0	2,225.7	8.4	8.5	85.10	128.6	-415.5	163.3	147.1	16.24	10.061		
2,400.0	2,343.7	2,380.3	2,319.8	9.0	9.1	85.45	138.0	-445.9	175.2	157.8	17.35	10.094		
2,500.0	2,439.1	2,479.6	2,413.9	9.5	9.7	85.75	147.4	-476.2	187.0	168.5	18.48	10.122		
2,600.0	2,534.5	2,578.9	2,507.9	10.1	10.3	86.02	156.8	-506.5	198.8	179.2	19.60	10.146		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-29D (F28 Pad) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-71.79	14.2	-43.2	45.5					
100.0	100.0	100.0	100.0	0.1	0.1	-71.79	14.2	-43.2	45.5	45.2	0.30	153.194		
200.0	200.0	200.0	200.0	0.3	0.3	-71.79	14.2	-43.2	45.5	44.8	0.65	70.387		
300.0	300.0	300.0	300.0	0.5	0.5	-71.79	14.2	-43.2	45.5	44.5	0.99	45.690		
400.0	400.0	400.0	400.0	0.7	0.7	-71.79	14.2	-43.2	45.5	44.1	1.34	33.822 CC		
500.0	500.0	498.8	498.8	0.8	0.8	23.73	14.8	-44.3	45.5	43.8	1.69	26.925		
600.0	599.9	597.6	597.6	1.0	1.0	26.44	16.6	-47.7	45.8	43.8	2.04	22.472 ES		
700.0	699.7	696.4	696.1	1.2	1.2	30.86	19.6	-53.3	46.5	44.1	2.39	19.459		
800.0	799.3	795.0	794.3	1.4	1.4	36.75	23.9	-61.2	48.0	45.2	2.76	17.406		
900.0	898.6	893.6	892.2	1.7	1.7	43.72	29.3	-71.2	50.5	47.4	3.15	16.033		
1,000.0	997.5	991.9	989.6	2.0	1.9	51.18	35.9	-83.5	54.6	51.0	3.60	15.139		
1,100.0	1,096.1	1,090.1	1,086.4	2.3	2.3	58.53	43.6	-97.9	60.3	56.2	4.14	14.572		
1,200.0	1,194.2	1,188.1	1,182.5	2.6	2.6	65.29	52.5	-114.5	68.0	63.2	4.78	14.228		
1,300.0	1,291.7	1,285.8	1,277.9	3.1	3.0	71.21	62.6	-133.3	77.6	72.1	5.53	14.041		
1,400.0	1,388.6	1,383.3	1,372.5	3.5	3.4	76.22	73.8	-154.1	89.1	82.8	6.38	13.966 SF		
1,500.0	1,484.9	1,480.5	1,466.1	4.0	3.9	80.38	86.0	-176.9	102.4	95.1	7.33	13.969		
1,600.0	1,580.4	1,577.4	1,558.8	4.5	4.4	83.79	99.4	-201.8	117.5	109.1	8.36	14.049		
1,700.0	1,675.8	1,674.6	1,651.1	5.1	5.0	85.93	113.8	-228.7	134.2	124.8	9.40	14.265		
1,800.0	1,771.2	1,773.0	1,744.4	5.6	5.5	87.43	128.7	-256.4	151.3	140.9	10.47	14.459		
1,900.0	1,866.6	1,871.5	1,837.6	6.2	6.1	88.62	143.6	-284.2	168.6	157.0	11.54	14.611		
2,000.0	1,962.1	1,969.9	1,930.9	6.7	6.7	89.60	158.5	-311.9	185.9	173.3	12.62	14.734		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-30D (F28 Pad) - DD - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft) +E/-W (ft)		Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-59.81	23.3	-40.1	46.4					
100.0	100.0	100.0	100.0	0.1	0.1	-59.81	23.3	-40.1	46.4	46.1	0.30	156.248		
200.0	200.0	200.0	200.0	0.3	0.3	-59.81	23.3	-40.1	46.4	45.7	0.65	71.790 CC, ES		
300.0	300.0	298.8	298.8	0.5	0.5	-59.71	24.0	-41.1	47.7	46.7	0.99	47.900		
400.0	400.0	397.4	397.3	0.7	0.7	-59.42	26.2	-44.3	51.5	50.2	1.35	38.080		
500.0	500.0	495.9	495.6	0.8	0.9	36.28	29.7	-49.6	56.9	55.2	1.69	33.743		
600.0	599.9	594.1	593.4	1.0	1.1	38.66	34.7	-56.9	62.8	60.8	2.04	30.863		
700.0	699.7	692.1	690.8	1.2	1.4	41.91	41.1	-66.3	69.4	67.0	2.39	29.028		
800.0	799.3	789.9	787.5	1.4	1.6	45.71	48.8	-77.7	76.9	74.2	2.77	27.816		
900.0	898.6	887.3	883.6	1.7	2.0	49.77	57.9	-91.1	85.5	82.4	3.17	26.960		
1,000.0	997.5	984.3	978.8	2.0	2.3	53.89	68.3	-106.5	95.4	91.8	3.63	26.275		
1,100.0	1,096.1	1,081.0	1,073.2	2.3	2.7	57.89	80.0	-123.8	106.7	102.5	4.16	25.648		
1,200.0	1,194.2	1,177.2	1,166.6	2.6	3.2	61.66	93.0	-143.0	119.5	114.7	4.78	25.029		
1,300.0	1,291.7	1,273.0	1,258.9	3.1	3.6	65.15	107.3	-164.0	133.9	128.4	5.49	24.412		
1,400.0	1,388.6	1,368.2	1,350.1	3.5	4.2	68.32	122.7	-186.8	149.9	143.6	6.30	23.812		
1,500.0	1,484.9	1,463.0	1,440.1	4.0	4.7	71.16	139.4	-211.4	167.6	160.4	7.21	23.248		
1,600.0	1,580.4	1,557.2	1,528.8	4.5	5.3	73.76	157.1	-237.6	186.9	178.7	8.20	22.782 SF		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-31D (F28 Pad) - DD - Plan #1												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)					
0.0	0.0	0.0	0.0	0.0	0.0	-52.45	19.3	-25.1	31.7				
100.0	100.0	100.0	100.0	0.1	0.1	-52.45	19.3	-25.1	31.7	31.4	0.30	106.765	
200.0	200.0	200.0	200.0	0.3	0.3	-52.45	19.3	-25.1	31.7	31.0	0.65	49.054	
300.0	300.0	300.0	300.0	0.5	0.5	-52.45	19.3	-25.1	31.7	30.7	0.99	31.842 CC, ES	
400.0	400.0	399.2	399.1	0.7	0.7	-52.31	20.2	-26.1	33.0	31.6	1.34	24.534	
500.0	500.0	498.2	498.1	0.8	0.9	44.03	22.7	-29.0	35.9	34.2	1.69	21.242	
600.0	599.9	597.1	596.8	1.0	1.1	48.18	26.9	-33.8	39.7	37.6	2.04	19.429	
700.0	699.7	695.8	695.1	1.2	1.3	53.83	32.8	-40.5	44.6	42.2	2.41	18.540	
800.0	799.3	794.3	792.9	1.4	1.5	60.13	40.3	-49.2	51.1	48.3	2.80	18.254 SF	
900.0	898.6	892.4	890.0	1.7	1.8	66.35	49.5	-59.6	59.3	56.1	3.24	18.340	
1,000.0	997.5	990.1	986.4	2.0	2.1	72.06	60.2	-71.9	69.6	65.9	3.74	18.623	
1,100.0	1,096.1	1,087.5	1,081.9	2.3	2.5	77.03	72.6	-86.0	82.1	77.7	4.32	18.987	
1,200.0	1,194.2	1,184.3	1,176.4	2.6	2.9	81.25	86.4	-101.8	96.6	91.6	4.99	19.368	
1,300.0	1,291.7	1,280.6	1,269.9	3.1	3.3	84.76	101.7	-119.3	113.2	107.5	5.74	19.735	
1,400.0	1,388.6	1,376.3	1,362.1	3.5	3.8	87.66	118.5	-138.5	131.9	125.4	6.57	20.074	
1,500.0	1,484.9	1,471.4	1,453.1	4.0	4.3	90.05	136.7	-159.2	152.6	145.1	7.49	20.381	
1,600.0	1,580.4	1,565.9	1,542.8	4.5	4.8	92.10	156.2	-181.5	175.3	166.8	8.47	20.686	
1,700.0	1,675.8	1,659.8	1,631.2	5.1	5.4	93.46	177.0	-205.4	199.7	190.2	9.49	21.049	

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design SENW S28-T6S-R97W (F28 Pad) - Oxy 28-32D (F28 Pad) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-37.77	14.2	-11.0	18.0					
100.0	100.0	100.0	100.0	0.1	0.1	-37.77	14.2	-11.0	18.0	17.7	0.30	60.565		
200.0	200.0	200.0	200.0	0.3	0.3	-37.77	14.2	-11.0	18.0	17.3	0.65	27.827 CC, ES		
300.0	300.0	299.5	299.5	0.5	0.5	-38.10	15.2	-11.9	19.3	18.3	1.00	19.345		
400.0	400.0	398.9	398.8	0.7	0.7	-38.88	18.0	-14.5	23.2	21.8	1.36	17.090 SF		
500.0	500.0	498.0	497.7	0.8	0.9	56.93	22.7	-18.9	28.9	27.2	1.69	17.104		
600.0	599.9	596.9	596.2	1.0	1.1	60.77	29.3	-25.0	35.9	33.9	2.05	17.553		
700.0	699.7	695.5	694.1	1.2	1.4	65.63	37.8	-32.8	44.4	42.0	2.42	18.355		
800.0	799.3	793.7	791.3	1.4	1.7	70.58	48.0	-42.3	54.7	51.9	2.83	19.331		
900.0	898.6	891.3	887.6	1.7	2.0	75.17	60.0	-53.3	66.9	63.6	3.29	20.337		
1,000.0	997.5	988.5	982.9	2.0	2.3	79.22	73.8	-66.0	81.2	77.4	3.82	21.279		
1,100.0	1,096.1	1,085.0	1,077.1	2.3	2.7	82.71	89.2	-80.3	97.6	93.2	4.41	22.109		
1,200.0	1,194.2	1,180.9	1,170.1	2.6	3.2	85.66	106.2	-96.0	116.1	111.0	5.09	22.816		
1,300.0	1,291.7	1,276.0	1,261.8	3.1	3.6	88.15	124.8	-113.2	136.8	131.0	5.84	23.408		
1,400.0	1,388.6	1,370.3	1,352.1	3.5	4.1	90.25	144.9	-131.7	159.6	152.9	6.68	23.903		
1,500.0	1,484.9	1,463.8	1,440.9	4.0	4.7	92.01	166.4	-151.6	184.4	176.8	7.58	24.316		

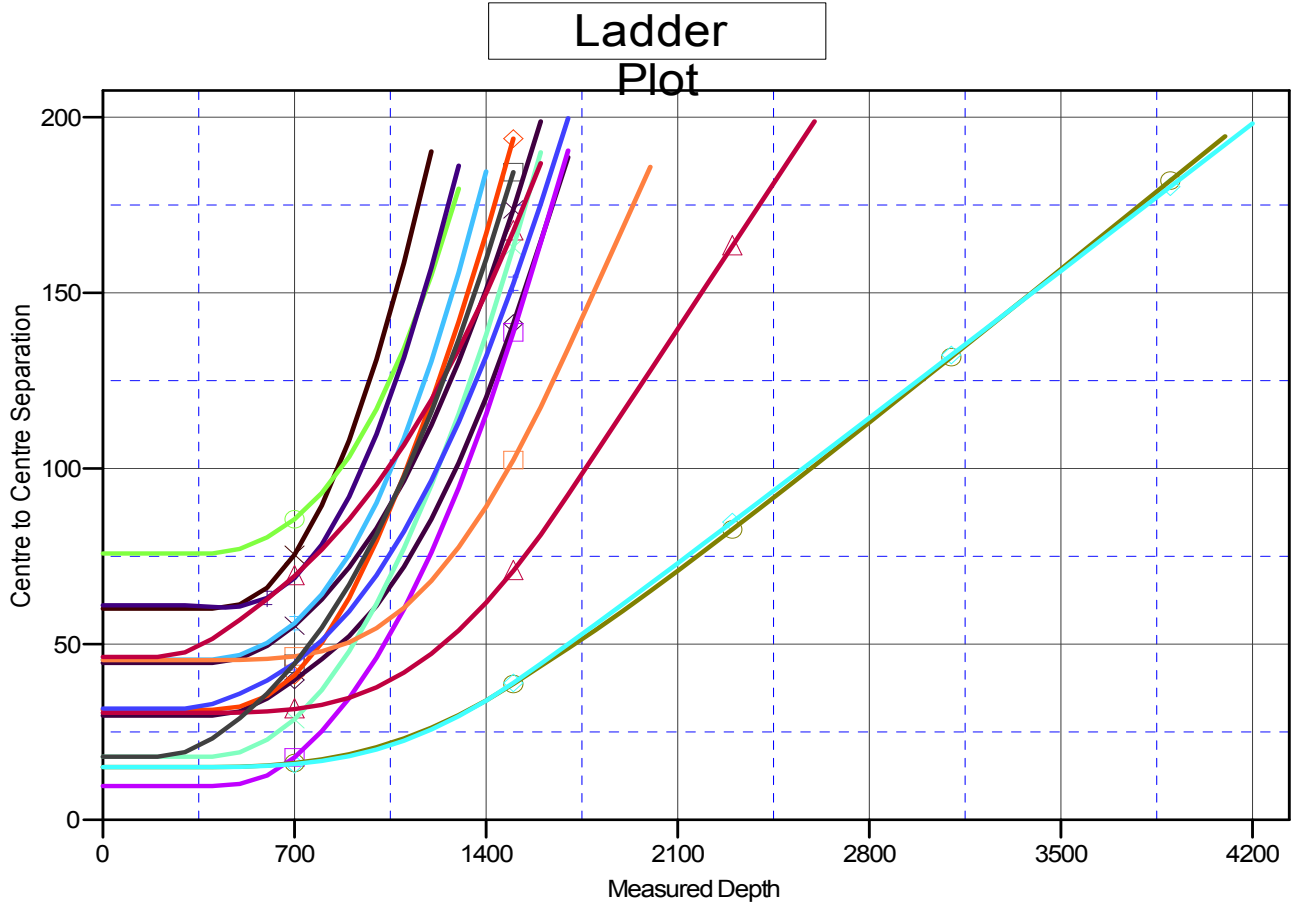
Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 28-26D (F28 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8308.0ft (Original Well Elev)
Reference Site:	SENW S28-T6S-R97W (F28 Pad)	MD Reference:	KBE @ 8308.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 28-26D (F28 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 2003.21 US Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KBE @ 8308.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Oxy 28-26D (F28 Pad)
Coordinate System is US State Plane 1983, Colorado Central Zone
Grid Convergence at Surface is: -1.72°



LEGEND

✱ Oxy 28-15D (F28 Pad), DD, Plan #1 V0	○ Oxy 28-22D (F28 Pad), DD, Plan #1 V0	□ Oxy 28-29D (F28 Pad), DD, Plan #1 V0
✱ Oxy 28-17D (F28 Pad), DD, Plan #1 V0	○ Oxy 28-23D (F28 Pad), DD, Plan #1 V0	△ Oxy 28-30D (F28 Pad), DD, Plan #1 V0
✱ Oxy 28-18D (F28 pad), DD, Plan #1 V0	○ Oxy 28-24D (F28 Pad), DD, Plan #1 V0	○ Oxy 28-31D (F28 Pad), DD, Plan #1 V0
✱ Oxy 28-19D (F28 Pad), DD, Plan #1 V0	○ Oxy 28-25D (F28 Pad), DD, Plan #1 V0	□ Oxy 28-32D (F28 Pad), DD, Plan #1 V0
✱ Oxy 28-20D (F28 Pad), DD, Plan #1 V0	○ Oxy 28-27D (F28 Pad), DD, Plan #1 V0	
✱ Oxy 28-21D (F28 Pad), DD, Plan #1 V0	△ Oxy 28-28D (F28 Pad), DD, Plan #1 V0	