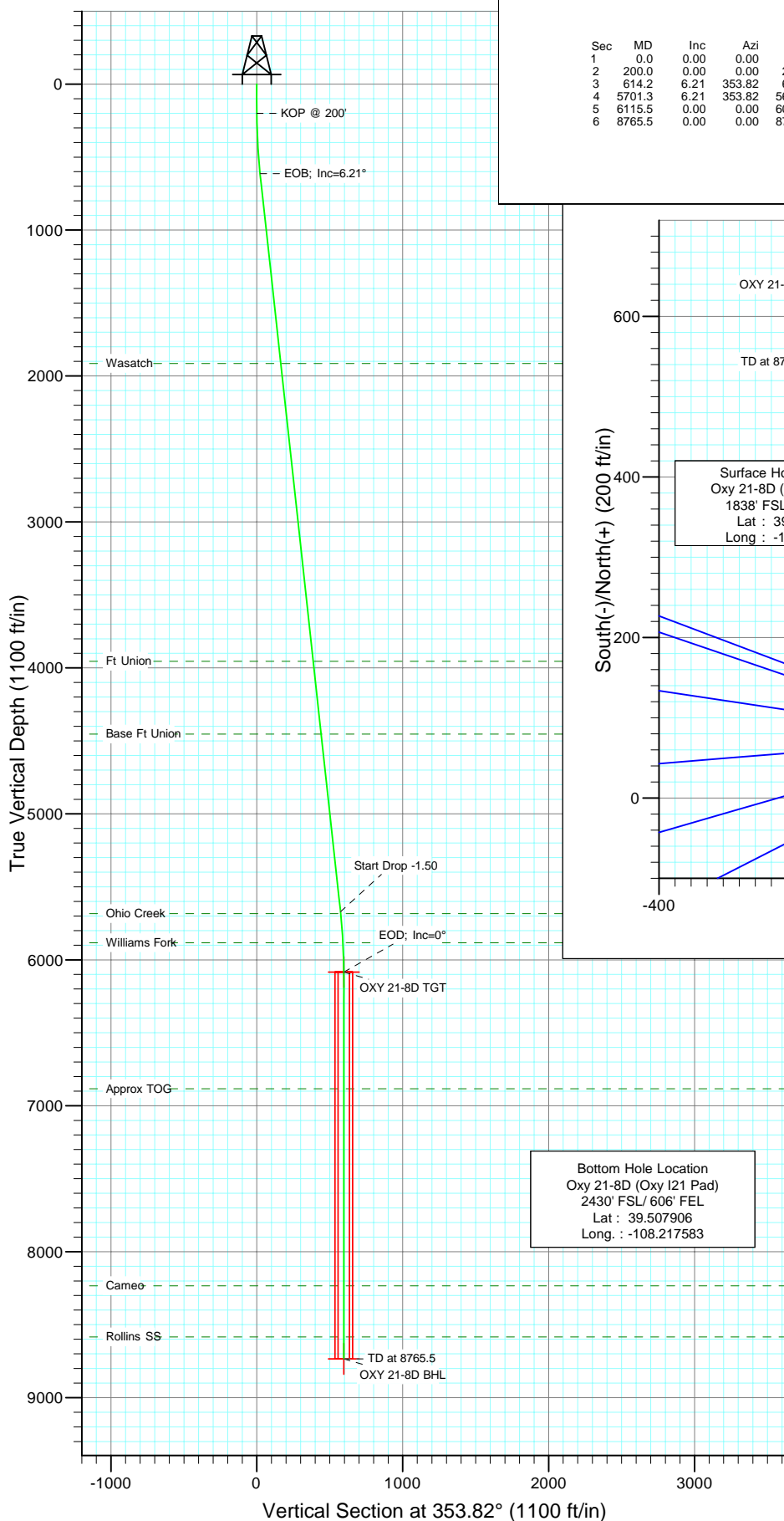




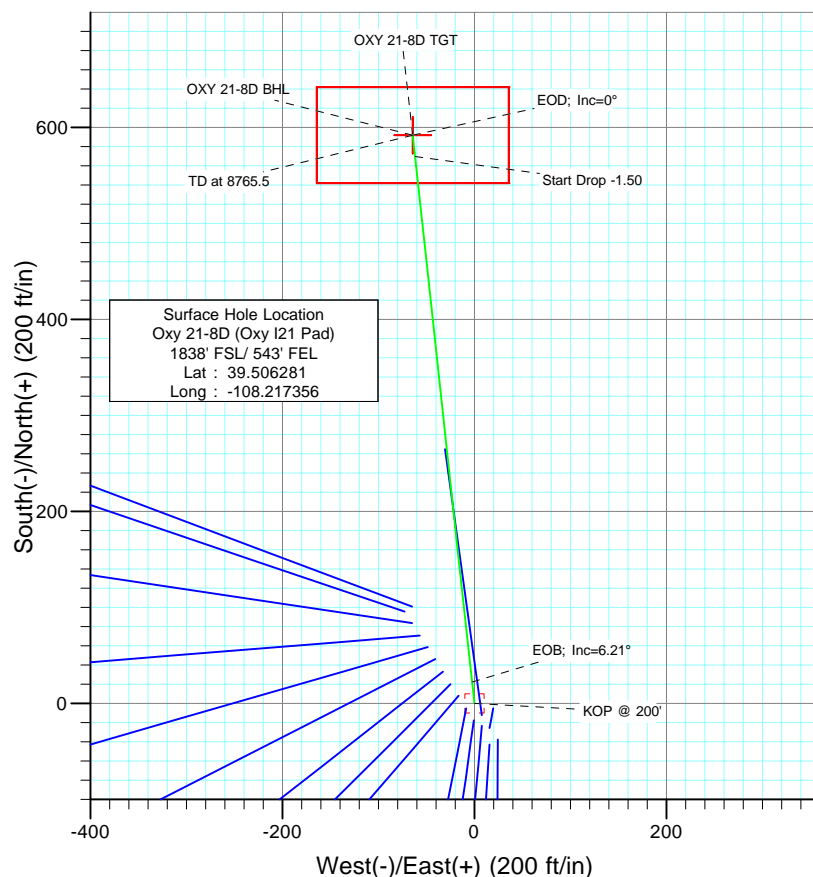
Berry Petroleum Company

Project: Garfield County
Site: NESE S21-T6S-R97W (Oxy I21 pad)
Well: Oxy 21-8D (Oxy I21 Pad)
Wellbore: DD
Design: Plan #2



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	614.2	6.21	353.82	613.3	22.3	-2.4	1.50	353.82	22.4	
4	5701.3	6.21	353.82	5670.7	569.6	-61.6	0.00	0.00	572.9	
5	6115.5	0.00	0.00	6084.0	591.9	-64.0	1.50	180.00	595.4	OXY 21-8D TGT
6	8765.5	0.00	0.00	8734.0	591.9	-64.0	0.00	0.00	595.4	OXY 21-8D BHL



Surface Hole Location
Oxy 21-8D (Oxy I21 Pad)
1838' FSL/ 543' FEL
Lat : 39.506281
Long : -108.217356

Bottom Hole Location
Oxy 21-8D (Oxy I21 Pad)
2430' FSL/ 606' FEL
Lat : 39.507906
Long : -108.217583

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1914.0	1922.5	Wasatch
3954.0	3974.5	Ft Union
4454.0	4477.5	Base Ft Union
5684.0	5714.8	Ohio Creek
5884.0	5915.4	Williams Fork
6884.0	6915.5	Approx TOG
8234.0	8265.5	Cameo
8584.0	8615.5	Rollins SS



Azimuths to True North
Magnetic North: 10.65°

Magnetic Field
Strength: 52405.4snT
Dip Angle: 65.76°
Date: 10/5/2009
Model: IGRF200510

DESIGN DETAILS: Plan #2

95XXX; BH
KBE @ 8381.0ft (Original Well Elev)

Target	Azimuth	Origin	N/S	E/W	From TVD
OXY 21-8D BHL	353.82	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 21-8D (Oxy I21 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site:	NESE S21-T6S-R97W (Oxy I21 pad)	North Reference:	True
Well:	Oxy 21-8D (Oxy I21 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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		NESE S21-T6S-R97W (Oxy I21 pad)			
Site Position:		Northing:	1,620,717.92 ft	Latitude:	39.506164
From:	Lat/Long	Easting:	2,233,406.18 ft	Longitude:	-108.217300
Position Uncertainty:	0.0 ft	Slot Radius:	in	Grid Convergence:	-1.71 °

Well	Oxy 21-8D (Oxy I21 Pad)					
Well Position	+N/-S	0.0 ft	Northing:	1,620,760.98 ft	Latitude:	39.506281
	+E/-W	0.0 ft	Easting:	2,233,391.66 ft	Longitude:	-108.217356
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,366.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	10/5/2009	10.65	65.76	52,405

Design	Plan #2			
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	353.82

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
614.2	6.21	353.82	613.3	22.3	-2.4	1.50	1.50	0.00	353.82	
5,701.3	6.21	353.82	5,670.7	569.6	-61.6	0.00	0.00	0.00	0.00	
6,115.5	0.00	0.00	6,084.0	591.9	-64.0	1.50	-1.50	0.00	180.00	OXY 21-8D TGT
8,765.5	0.00	0.00	8,734.0	591.9	-64.0	0.00	0.00	0.00	0.00	OXY 21-8D BHL

Directional Plus

Planning Report

Database:	EDM 2003.21 US Multi User Db	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site:	NESE S21-T6S-R97W (Oxy I21 pad)	North Reference:	True
Well:	Oxy 21-8D (Oxy I21 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200'
210.0	0.15	353.82	210.0	0.0	0.0	0.0	1.50	1.50	
240.0	0.60	353.82	240.0	0.2	0.0	0.2	1.50	1.50	
270.0	1.05	353.82	270.0	0.6	-0.1	0.6	1.50	1.50	
300.0	1.50	353.82	300.0	1.3	-0.1	1.3	1.50	1.50	
330.0	1.95	353.82	330.0	2.2	-0.2	2.2	1.50	1.50	
360.0	2.40	353.82	360.0	3.3	-0.4	3.4	1.50	1.50	
390.0	2.85	353.82	389.9	4.7	-0.5	4.7	1.50	1.50	
420.0	3.30	353.82	419.9	6.3	-0.7	6.3	1.50	1.50	
450.0	3.75	353.82	449.8	8.1	-0.9	8.2	1.50	1.50	
480.0	4.20	353.82	479.7	10.2	-1.1	10.3	1.50	1.50	
510.0	4.65	353.82	509.7	12.5	-1.4	12.6	1.50	1.50	
540.0	5.10	353.82	539.6	15.0	-1.6	15.1	1.50	1.50	
570.0	5.55	353.82	569.4	17.8	-1.9	17.9	1.50	1.50	
600.0	6.00	353.82	599.3	20.8	-2.3	20.9	1.50	1.50	
614.2	6.21	353.82	613.3	22.3	-2.4	22.4	1.50	1.50	EOB; Inc=6.21°
630.0	6.21	353.82	629.1	24.0	-2.6	24.1	0.00	0.00	
660.0	6.21	353.82	658.9	27.2	-2.9	27.4	0.00	0.00	
690.0	6.21	353.82	688.7	30.5	-3.3	30.6	0.00	0.00	
720.0	6.21	353.82	718.6	33.7	-3.6	33.9	0.00	0.00	
750.0	6.21	353.82	748.4	36.9	-4.0	37.1	0.00	0.00	
780.0	6.21	353.82	778.2	40.1	-4.3	40.4	0.00	0.00	
810.0	6.21	353.82	808.0	43.4	-4.7	43.6	0.00	0.00	
840.0	6.21	353.82	837.9	46.6	-5.0	46.9	0.00	0.00	
870.0	6.21	353.82	867.7	49.8	-5.4	50.1	0.00	0.00	
900.0	6.21	353.82	897.5	53.1	-5.7	53.4	0.00	0.00	
930.0	6.21	353.82	927.3	56.3	-6.1	56.6	0.00	0.00	
960.0	6.21	353.82	957.2	59.5	-6.4	59.9	0.00	0.00	
990.0	6.21	353.82	987.0	62.7	-6.8	63.1	0.00	0.00	
1,020.0	6.21	353.82	1,016.8	66.0	-7.1	66.3	0.00	0.00	
1,050.0	6.21	353.82	1,046.6	69.2	-7.5	69.6	0.00	0.00	
1,080.0	6.21	353.82	1,076.5	72.4	-7.8	72.8	0.00	0.00	
1,110.0	6.21	353.82	1,106.3	75.6	-8.2	76.1	0.00	0.00	
1,140.0	6.21	353.82	1,136.1	78.9	-8.5	79.3	0.00	0.00	
1,170.0	6.21	353.82	1,165.9	82.1	-8.9	82.6	0.00	0.00	
1,200.0	6.21	353.82	1,195.7	85.3	-9.2	85.8	0.00	0.00	
1,230.0	6.21	353.82	1,225.6	88.6	-9.6	89.1	0.00	0.00	
1,260.0	6.21	353.82	1,255.4	91.8	-9.9	92.3	0.00	0.00	
1,290.0	6.21	353.82	1,285.2	95.0	-10.3	95.6	0.00	0.00	
1,320.0	6.21	353.82	1,315.0	98.2	-10.6	98.8	0.00	0.00	
1,350.0	6.21	353.82	1,344.9	101.5	-11.0	102.1	0.00	0.00	
1,380.0	6.21	353.82	1,374.7	104.7	-11.3	105.3	0.00	0.00	
1,410.0	6.21	353.82	1,404.5	107.9	-11.7	108.6	0.00	0.00	
1,440.0	6.21	353.82	1,434.3	111.1	-12.0	111.8	0.00	0.00	
1,470.0	6.21	353.82	1,464.2	114.4	-12.4	115.0	0.00	0.00	

Directional Plus

Planning Report

Database:	EDM 2003.21 US Multi User Db	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site:	NESE S21-T6S-R97W (Oxy I21 pad)	North Reference:	True
Well:	Oxy 21-8D (Oxy I21 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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
1,500.0	6.21	353.82	1,494.0	117.6	-12.7	118.3	0.00	0.00	
1,530.0	6.21	353.82	1,523.8	120.8	-13.1	121.5	0.00	0.00	
1,560.0	6.21	353.82	1,553.6	124.1	-13.4	124.8	0.00	0.00	
1,590.0	6.21	353.82	1,583.5	127.3	-13.8	128.0	0.00	0.00	
1,620.0	6.21	353.82	1,613.3	130.5	-14.1	131.3	0.00	0.00	
1,650.0	6.21	353.82	1,643.1	133.7	-14.5	134.5	0.00	0.00	
1,680.0	6.21	353.82	1,672.9	137.0	-14.8	137.8	0.00	0.00	
1,710.0	6.21	353.82	1,702.8	140.2	-15.2	141.0	0.00	0.00	
1,740.0	6.21	353.82	1,732.6	143.4	-15.5	144.3	0.00	0.00	
1,770.0	6.21	353.82	1,762.4	146.7	-15.9	147.5	0.00	0.00	
1,800.0	6.21	353.82	1,792.2	149.9	-16.2	150.8	0.00	0.00	
1,830.0	6.21	353.82	1,822.0	153.1	-16.6	154.0	0.00	0.00	
1,860.0	6.21	353.82	1,851.9	156.3	-16.9	157.2	0.00	0.00	
1,890.0	6.21	353.82	1,881.7	159.6	-17.3	160.5	0.00	0.00	
1,920.0	6.21	353.82	1,911.5	162.8	-17.6	163.7	0.00	0.00	
1,922.5	6.21	353.82	1,914.0	163.1	-17.6	164.0	0.00	0.00	Wasatch
1,950.0	6.21	353.82	1,941.3	166.0	-18.0	167.0	0.00	0.00	
1,980.0	6.21	353.82	1,971.2	169.2	-18.3	170.2	0.00	0.00	
2,010.0	6.21	353.82	2,001.0	172.5	-18.7	173.5	0.00	0.00	
2,040.0	6.21	353.82	2,030.8	175.7	-19.0	176.7	0.00	0.00	
2,070.0	6.21	353.82	2,060.6	178.9	-19.4	180.0	0.00	0.00	
2,100.0	6.21	353.82	2,090.5	182.2	-19.7	183.2	0.00	0.00	
2,130.0	6.21	353.82	2,120.3	185.4	-20.1	186.5	0.00	0.00	
2,160.0	6.21	353.82	2,150.1	188.6	-20.4	189.7	0.00	0.00	
2,190.0	6.21	353.82	2,179.9	191.8	-20.8	193.0	0.00	0.00	
2,220.0	6.21	353.82	2,209.8	195.1	-21.1	196.2	0.00	0.00	
2,250.0	6.21	353.82	2,239.6	198.3	-21.5	199.4	0.00	0.00	
2,280.0	6.21	353.82	2,269.4	201.5	-21.8	202.7	0.00	0.00	
2,310.0	6.21	353.82	2,299.2	204.7	-22.2	205.9	0.00	0.00	
2,340.0	6.21	353.82	2,329.1	208.0	-22.5	209.2	0.00	0.00	
2,370.0	6.21	353.82	2,358.9	211.2	-22.9	212.4	0.00	0.00	
2,400.0	6.21	353.82	2,388.7	214.4	-23.2	215.7	0.00	0.00	
2,430.0	6.21	353.82	2,418.5	217.7	-23.6	218.9	0.00	0.00	
2,460.0	6.21	353.82	2,448.3	220.9	-23.9	222.2	0.00	0.00	
2,490.0	6.21	353.82	2,478.2	224.1	-24.3	225.4	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 21-8D BHL	0.00	0.00	8,734.0	591.9	-64.0	1,621,354.54	2,233,345.34	39.507906	-108.217583
- plan misses target center by 6266.8ft at 2490.0ft MD (2478.2 TVD, 224.1 N, -24.3 E)									
- Rectangle (sides W100.0 H200.0 D0.0)									
OXY 21-8D TGT	0.00	0.00	6,084.0	591.9	-64.0	1,621,354.54	2,233,345.34	39.507906	-108.217583
- plan misses target center by 3624.8ft at 2490.0ft MD (2478.2 TVD, 224.1 N, -24.3 E)									
- Point									

Directional Plus

Planning Report

Database:	EDM 2003.21 US Multi User Db	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site:	NESE S21-T6S-R97W (Oxy I21 pad)	North Reference:	True
Well:	Oxy 21-8D (Oxy I21 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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	6.21	353.82	2,488.1	225.2	-24.4	226.5	0.00	0.00	
2,600.0	6.21	353.82	2,587.5	235.9	-25.5	237.3	0.00	0.00	
2,700.0	6.21	353.82	2,686.9	246.7	-26.7	248.1	0.00	0.00	
2,800.0	6.21	353.82	2,786.4	257.5	-27.9	259.0	0.00	0.00	
2,900.0	6.21	353.82	2,885.8	268.2	-29.0	269.8	0.00	0.00	
3,000.0	6.21	353.82	2,985.2	279.0	-30.2	280.6	0.00	0.00	
3,100.0	6.21	353.82	3,084.6	289.7	-31.4	291.4	0.00	0.00	
3,200.0	6.21	353.82	3,184.0	300.5	-32.5	302.3	0.00	0.00	
3,300.0	6.21	353.82	3,283.4	311.3	-33.7	313.1	0.00	0.00	
3,400.0	6.21	353.82	3,382.8	322.0	-34.8	323.9	0.00	0.00	
3,500.0	6.21	353.82	3,482.2	332.8	-36.0	334.7	0.00	0.00	
3,600.0	6.21	353.82	3,581.7	343.5	-37.2	345.5	0.00	0.00	
3,700.0	6.21	353.82	3,681.1	354.3	-38.3	356.4	0.00	0.00	
3,800.0	6.21	353.82	3,780.5	365.0	-39.5	367.2	0.00	0.00	
3,900.0	6.21	353.82	3,879.9	375.8	-40.7	378.0	0.00	0.00	
3,974.5	6.21	353.82	3,954.0	383.8	-41.5	386.1	0.00	0.00	Ft Union
4,000.0	6.21	353.82	3,979.3	386.6	-41.8	388.8	0.00	0.00	
4,100.0	6.21	353.82	4,078.7	397.3	-43.0	399.6	0.00	0.00	
4,200.0	6.21	353.82	4,178.1	408.1	-44.2	410.5	0.00	0.00	
4,300.0	6.21	353.82	4,277.5	418.8	-45.3	421.3	0.00	0.00	
4,400.0	6.21	353.82	4,377.0	429.6	-46.5	432.1	0.00	0.00	
4,477.5	6.21	353.82	4,454.0	437.9	-47.4	440.5	0.00	0.00	Base Ft Union
4,500.0	6.21	353.82	4,476.4	440.4	-47.7	442.9	0.00	0.00	
4,600.0	6.21	353.82	4,575.8	451.1	-48.8	453.7	0.00	0.00	
4,700.0	6.21	353.82	4,675.2	461.9	-50.0	464.6	0.00	0.00	
4,800.0	6.21	353.82	4,774.6	472.6	-51.1	475.4	0.00	0.00	
4,900.0	6.21	353.82	4,874.0	483.4	-52.3	486.2	0.00	0.00	
5,000.0	6.21	353.82	4,973.4	494.1	-53.5	497.0	0.00	0.00	
5,100.0	6.21	353.82	5,072.8	504.9	-54.6	507.9	0.00	0.00	
5,200.0	6.21	353.82	5,172.3	515.7	-55.8	518.7	0.00	0.00	
5,300.0	6.21	353.82	5,271.7	526.4	-57.0	529.5	0.00	0.00	
5,400.0	6.21	353.82	5,371.1	537.2	-58.1	540.3	0.00	0.00	
5,500.0	6.21	353.82	5,470.5	547.9	-59.3	551.1	0.00	0.00	
5,600.0	6.21	353.82	5,569.9	558.7	-60.5	562.0	0.00	0.00	
5,700.0	6.21	353.82	5,669.3	569.5	-61.6	572.8	0.00	0.00	
5,701.3	6.21	353.82	5,670.7	569.6	-61.6	572.9	0.00	0.00	Start Drop -1.50
5,714.8	6.01	353.82	5,684.0	571.0	-61.8	574.4	1.50	-1.50	Ohio Creek
5,800.0	4.73	353.82	5,768.9	579.0	-62.6	582.3	1.50	-1.50	
5,900.0	3.23	353.82	5,868.6	585.9	-63.4	589.3	1.50	-1.50	
5,915.4	3.00	353.82	5,884.0	586.7	-63.5	590.1	1.50	-1.50	Williams Fork
6,000.0	1.73	353.82	5,968.5	590.2	-63.9	593.6	1.50	-1.50	
6,100.0	0.23	353.82	6,068.5	591.9	-64.0	595.3	1.50	-1.50	
6,115.5	0.00	0.00	6,084.0	591.9	-64.0	595.4	1.50	-1.50	EOD; Inc=0° - OXY 21-8D TGT
6,200.0	0.00	0.00	6,168.5	591.9	-64.0	595.4	0.00	0.00	
6,300.0	0.00	0.00	6,268.5	591.9	-64.0	595.4	0.00	0.00	
6,400.0	0.00	0.00	6,368.5	591.9	-64.0	595.4	0.00	0.00	
6,500.0	0.00	0.00	6,468.5	591.9	-64.0	595.4	0.00	0.00	
6,600.0	0.00	0.00	6,568.5	591.9	-64.0	595.4	0.00	0.00	
6,700.0	0.00	0.00	6,668.5	591.9	-64.0	595.4	0.00	0.00	
6,800.0	0.00	0.00	6,768.5	591.9	-64.0	595.4	0.00	0.00	
6,900.0	0.00	0.00	6,868.5	591.9	-64.0	595.4	0.00	0.00	
6,915.5	0.00	0.00	6,884.0	591.9	-64.0	595.4	0.00	0.00	Approx TOG

Directional Plus

Planning Report

Database:	EDM 2003.21 US Multi User Db	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site:	NESE S21-T6S-R97W (Oxy I21 pad)	North Reference:	True
Well:	Oxy 21-8D (Oxy I21 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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
7,000.0	0.00	0.00	6,968.5	591.9	-64.0	595.4	0.00	0.00	
7,100.0	0.00	0.00	7,068.5	591.9	-64.0	595.4	0.00	0.00	
7,200.0	0.00	0.00	7,168.5	591.9	-64.0	595.4	0.00	0.00	
7,300.0	0.00	0.00	7,268.5	591.9	-64.0	595.4	0.00	0.00	
7,400.0	0.00	0.00	7,368.5	591.9	-64.0	595.4	0.00	0.00	
7,500.0	0.00	0.00	7,468.5	591.9	-64.0	595.4	0.00	0.00	
7,600.0	0.00	0.00	7,568.5	591.9	-64.0	595.4	0.00	0.00	
7,700.0	0.00	0.00	7,668.5	591.9	-64.0	595.4	0.00	0.00	
7,800.0	0.00	0.00	7,768.5	591.9	-64.0	595.4	0.00	0.00	
7,900.0	0.00	0.00	7,868.5	591.9	-64.0	595.4	0.00	0.00	
8,000.0	0.00	0.00	7,968.5	591.9	-64.0	595.4	0.00	0.00	
8,100.0	0.00	0.00	8,068.5	591.9	-64.0	595.4	0.00	0.00	
8,200.0	0.00	0.00	8,168.5	591.9	-64.0	595.4	0.00	0.00	
8,265.5	0.00	0.00	8,234.0	591.9	-64.0	595.4	0.00	0.00	Cameo
8,300.0	0.00	0.00	8,268.5	591.9	-64.0	595.4	0.00	0.00	
8,400.0	0.00	0.00	8,368.5	591.9	-64.0	595.4	0.00	0.00	
8,500.0	0.00	0.00	8,468.5	591.9	-64.0	595.4	0.00	0.00	
8,600.0	0.00	0.00	8,568.5	591.9	-64.0	595.4	0.00	0.00	
8,615.5	0.00	0.00	8,584.0	591.9	-64.0	595.4	0.00	0.00	Rollins SS
8,700.0	0.00	0.00	8,668.5	591.9	-64.0	595.4	0.00	0.00	
8,765.5	0.00	0.00	8,734.0	591.9	-64.0	595.4	0.00	0.00	TD at 8765.5 - OXY 21-8D BHL

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
OXY 21-8D BHL	0.00	0.00	8,734.0	591.9	-64.0	1,621,354.54	2,233,345.34	39.507906	-108.217583
- hit/miss target									
- Shape									
- plan hits target center									
- Rectangle (sides W100.0 H200.0 D0.0)									
OXY 21-8D TGT	0.00	0.00	6,084.0	591.9	-64.0	1,621,354.54	2,233,345.34	39.507906	-108.217583
- plan hits target center									
- Point									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,922.5	1,914.0	Wasatch		0.00		
3,974.5	3,954.0	Ft Union		0.00		
4,477.5	4,454.0	Base Ft Union		0.00		
5,714.8	5,684.0	Ohio Creek		0.00		
5,915.4	5,884.0	Williams Fork		0.00		
6,915.5	6,884.0	Approx TOG		0.00		
8,265.5	8,234.0	Cameo		0.00		
8,615.5	8,584.0	Rollins SS		0.00		

Directional Plus

Planning Report

Database:	EDM 2003.21 US Multi User Db	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Company:	Berry Petroleum Company (NAD 83)	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Project:	Garfield County	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site:	NESE S21-T6S-R97W (Oxy I21 pad)	North Reference:	True
Well:	Oxy 21-8D (Oxy I21 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
614.2	613.3	22.3	-2.4	EOB; Inc=6.21°
5,701.3	5,670.7	569.6	-61.6	Start Drop -1.50
6,115.5	6,084.0	591.9	-64.0	EOD; Inc=0°
8,765.5	8,734.0	591.9	-64.0	TD at 8765.5

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Reference	Plan #2		
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	11/3/2009		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	8,765.5	Plan #2 (DD)	MWD	Geolink MWD

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
NESE S21-T6S-R97W (Oxy I21 pad)						
Oxy 21-10D (Oxy I21 Pad) - DD - Plan #1	412.9	412.1	30.1	28.7	21.240	CC, ES
Oxy 21-10D (Oxy I21 Pad) - DD - Plan #1	500.0	498.2	31.8	30.1	18.150	SF
Oxy 21-11D (Oxy I21 Pad) - DD - Plan #1	553.1	551.4	39.3	37.4	20.155	CC, ES
Oxy 21-11D (Oxy I21 Pad) - DD - Plan #1	700.0	695.0	46.9	44.3	18.333	SF
Oxy 21-12D (Oxy I21 Pad) - DD - Plan #1	600.1	597.0	52.7	50.6	24.735	CC, ES
Oxy 21-12D (Oxy I21 Pad) - DD - Plan #1	700.0	694.5	55.8	53.3	21.783	SF
Oxy 21-13D (Oxy I21 Pad) - DD - Plan #1	624.0	619.5	66.9	64.7	30.189	CC, ES
Oxy 21-13D (Oxy I21 Pad) - DD - Plan #1	800.0	790.5	75.1	72.1	25.276	SF
Oxy 21-14D (Oxy I21 Pad) - DD - Plan #1	634.1	628.1	82.1	79.9	36.663	CC, ES
Oxy 21-14D (Oxy I21 Pad) - DD - Plan #1	900.0	885.2	98.0	94.6	29.089	SF
Oxy 21-15D (Oxy I21 Pad) - DD - Plan #1	638.7	630.9	98.0	95.8	43.800	CC, ES
Oxy 21-15D (Oxy I21 Pad) - DD - Plan #1	1,000.0	978.9	122.9	119.2	32.803	SF
Oxy 21-16D (Oxy I21 Pad) - DD - Plan #1	665.2	655.2	111.0	108.7	47.901	CC
Oxy 21-16D (Oxy I21 Pad) - DD - Plan #1	700.0	689.0	111.1	108.6	45.285	ES
Oxy 21-16D (Oxy I21 Pad) - DD - Plan #1	1,100.0	1,072.8	143.4	139.3	34.958	SF
Oxy 21-17D (Oxy I21 pad) - DD - Plan #1	403.1	397.8	120.2	118.8	88.814	CC
Oxy 21-17D (Oxy I21 pad) - DD - Plan #1	500.0	491.9	120.4	118.7	70.683	ES
Oxy 21-17D (Oxy I21 pad) - DD - Plan #1	1,100.0	1,065.5	170.1	166.0	41.380	SF
Oxy 21-1D (Oxy I21 Pad) - DD - Plan #1	200.0	200.0	45.4	44.8	70.376	CC, ES
Oxy 21-1D (Oxy I21 Pad) - DD - Plan #1	500.0	496.8	61.8	60.1	36.615	SF
Oxy 21-2D (Oxy I21 Pad) - DD - Plan #2	200.0	200.0	44.8	44.2	69.427	CC, ES
Oxy 21-2D (Oxy I21 Pad) - DD - Plan #2	500.0	495.3	66.0	64.3	39.020	SF
Oxy 21-3D (Oxy I21 Pad) - DD - Plan #1	200.0	200.0	24.6	24.0	38.115	CC, ES
Oxy 21-3D (Oxy I21 Pad) - DD - Plan #1	500.0	499.7	36.2	34.5	21.408	SF
Oxy 21-4D (Oxy I21 Pad) - DD - Plan #1	200.0	200.0	17.5	16.8	27.088	CC, ES
Oxy 21-4D (Oxy I21 Pad) - DD - Plan #1	400.0	399.9	22.7	21.3	16.894	SF
Oxy 21-5D (Oxy I21 Pad) - DD - Plan #1	200.0	200.0	9.9	9.2	15.303	CC, ES
Oxy 21-5D (Oxy I21 Pad) - DD - Plan #1	400.0	399.9	13.0	11.6	9.619	SF
Oxy 21-6D (Oxy I21 Pad) - DD - Plan #2	200.0	500.0	30.0	29.4	46.450	CC, ES
Oxy 21-6D (Oxy I21 Pad) - DD - Plan #2	600.0	900.0	48.7	46.7	23.823	SF
Oxy 21-7D (Oxy I21 Pad) - DD - Plan #2	200.0	200.0	14.7	14.0	22.747	CC, ES
Oxy 21-7D (Oxy I21 Pad) - DD - Plan #2	3,000.0	3,004.6	36.4	26.0	3.488	SF
Oxy 21-9D (Oxy I21 Pad) - DD - Plan #1	308.3	308.1	18.0	17.0	17.505	CC, ES
Oxy 21-9D (Oxy I21 Pad) - DD - Plan #1	400.0	399.3	19.2	17.9	14.105	SF

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

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-10D (Oxy I21 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	-51.10	20.0	-24.8	31.9					
100.0	100.0	100.0	100.0	0.1	0.1	-51.10	20.0	-24.8	31.9	31.6	0.30	107.527		
200.0	200.0	200.0	200.0	0.3	0.3	-51.10	20.0	-24.8	31.9	31.3	0.65	49.404		
300.0	300.0	299.9	299.8	0.5	0.5	-49.02	19.1	-25.8	31.2	30.2	1.00	31.268		
400.0	399.9	399.4	399.3	0.7	0.7	-62.05	16.4	-28.5	30.1	28.7	1.37	22.048		
412.9	412.7	412.1	412.0	0.7	0.7	-64.41	15.9	-29.0	30.1	28.7	1.42	21.240 CC, ES		
500.0	499.7	498.2	497.9	0.9	0.9	-83.41	11.8	-33.1	31.8	30.1	1.75	18.150 SF		
600.0	599.3	596.1	595.4	1.1	1.1	-105.56	5.5	-39.3	40.3	38.2	2.14	18.829		
700.0	698.7	692.9	691.5	1.4	1.4	-120.71	-2.4	-47.3	55.9	53.4	2.50	22.361		
800.0	798.1	788.7	786.4	1.6	1.6	-128.97	-12.0	-56.9	76.3	73.4	2.86	26.660		
900.0	897.5	883.5	879.8	1.9	2.0	-133.57	-23.1	-68.0	99.9	96.7	3.22	30.987		
1,000.0	996.9	977.0	971.7	2.1	2.3	-136.25	-35.6	-80.6	126.3	122.7	3.59	35.155		
1,100.0	1,096.3	1,069.3	1,061.9	2.4	2.7	-137.85	-49.6	-94.5	155.2	151.2	3.96	39.136		
1,200.0	1,195.7	1,160.3	1,150.2	2.6	3.1	-138.82	-64.8	-109.8	186.4	182.0	4.34	42.943		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-11D (Oxy I21 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	-44.64	33.1	-32.7	46.6					
100.0	100.0	100.0	100.0	0.1	0.1	-44.64	33.1	-32.7	46.6	46.3	0.30	156.999		
200.0	200.0	200.0	200.0	0.3	0.3	-44.64	33.1	-32.7	46.6	45.9	0.65	72.135		
300.0	300.0	300.0	300.0	0.5	0.5	-39.50	33.1	-32.7	45.6	44.6	1.00	45.769		
400.0	399.9	399.7	399.7	0.7	0.7	-44.58	32.3	-33.8	42.9	41.5	1.35	31.732		
500.0	499.7	498.9	498.8	0.9	0.9	-56.65	30.0	-36.8	40.0	38.2	1.73	23.102		
553.1	552.6	551.4	551.2	1.0	1.0	-66.22	28.0	-39.2	39.3	37.4	1.95	20.155 CC, ES		
600.0	599.3	597.4	597.1	1.1	1.1	-76.08	26.0	-41.8	40.0	37.8	2.15	18.620		
700.0	698.7	695.0	694.3	1.4	1.3	-96.79	20.6	-48.8	46.9	44.3	2.56	18.333 SF		
800.0	798.1	791.8	790.4	1.6	1.5	-111.33	13.7	-57.6	60.8	57.8	2.93	20.709		
900.0	897.5	887.6	885.3	1.9	1.8	-120.20	5.3	-68.3	79.6	76.3	3.30	24.124		
1,000.0	996.9	982.5	978.9	2.1	2.1	-125.51	-4.3	-80.6	102.0	98.3	3.67	27.825		
1,100.0	1,096.3	1,076.2	1,070.9	2.4	2.4	-128.75	-15.3	-94.6	127.3	123.3	4.04	31.534		
1,200.0	1,195.7	1,168.7	1,161.3	2.6	2.8	-130.76	-27.5	-110.2	155.3	150.9	4.42	35.158		
1,300.0	1,295.2	1,260.0	1,249.9	2.9	3.2	-132.02	-40.8	-127.2	185.6	180.8	4.80	38.673		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-12D (Oxy I21 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	-41.29	46.3	-40.6	61.6					
100.0	100.0	100.0	100.0	0.1	0.1	-41.29	46.3	-40.6	61.6	61.3	0.30	207.508		
200.0	200.0	200.0	200.0	0.3	0.3	-41.29	46.3	-40.6	61.6	60.9	0.65	95.342		
300.0	300.0	300.0	300.0	0.5	0.5	-35.84	46.3	-40.6	60.5	59.5	1.00	60.782		
400.0	399.9	399.4	399.4	0.7	0.7	-39.38	45.7	-41.8	57.8	56.4	1.35	42.809		
500.0	499.7	498.5	498.4	0.9	0.9	-47.61	43.9	-45.2	54.5	52.8	1.72	31.656		
600.0	599.3	596.9	596.6	1.1	1.1	-61.14	41.0	-50.9	52.7	50.6	2.13	24.741		
600.1	599.4	597.0	596.7	1.1	1.1	-61.16	41.0	-50.9	52.7	50.6	2.13	24.735 CC, ES		
700.0	698.7	694.5	693.8	1.4	1.3	-77.73	37.0	-58.8	55.8	53.3	2.56	21.783 SF		
800.0	798.1	791.4	790.1	1.6	1.5	-92.26	31.9	-68.7	65.5	62.5	2.98	22.012		
900.0	897.5	887.5	885.2	1.9	1.8	-102.82	25.7	-80.8	80.8	77.4	3.37	24.008		
1,000.0	996.9	982.7	979.1	2.1	2.1	-109.89	18.6	-94.8	100.5	96.7	3.75	26.805		
1,100.0	1,096.3	1,076.8	1,071.5	2.4	2.4	-114.53	10.4	-110.7	123.6	119.4	4.13	29.903		
1,200.0	1,195.7	1,169.8	1,162.3	2.6	2.8	-117.58	1.4	-128.4	149.6	145.1	4.52	33.079		
1,300.0	1,295.2	1,261.6	1,251.4	2.9	3.2	-119.59	-8.5	-147.8	178.2	173.3	4.92	36.237		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-13D (Oxy I21 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	-39.61	58.6	-48.5	76.1					
100.0	100.0	100.0	100.0	0.1	0.1	-39.61	58.6	-48.5	76.1	75.8	0.30	256.551		
200.0	200.0	200.0	200.0	0.3	0.3	-39.61	58.6	-48.5	76.1	75.5	0.65	117.875		
300.0	300.0	300.0	300.0	0.5	0.5	-33.99	58.6	-48.5	75.0	74.0	1.00	75.383		
400.0	399.9	399.1	399.1	0.7	0.7	-36.67	58.3	-49.8	72.4	71.0	1.35	53.702		
500.0	499.7	497.8	497.7	0.9	0.9	-42.73	57.2	-53.5	69.3	67.6	1.72	40.376		
600.0	599.3	596.0	595.7	1.1	1.0	-52.55	55.5	-59.5	67.1	64.9	2.12	31.705		
624.0	623.1	619.5	619.1	1.2	1.1	-55.41	54.9	-61.4	66.9	64.7	2.22	30.189 CC, ES		
700.0	698.7	693.6	692.9	1.4	1.3	-65.06	53.0	-68.0	68.3	65.8	2.54	26.874		
800.0	798.1	790.5	789.2	1.6	1.5	-77.29	49.9	-78.8	75.1	72.1	2.97	25.276 SF		
900.0	897.5	886.7	884.4	1.9	1.8	-87.46	46.2	-91.7	87.3	83.9	3.39	25.769		
1,000.0	996.9	982.1	978.5	2.1	2.1	-95.08	41.8	-106.9	104.0	100.2	3.79	27.445		
1,100.0	1,096.3	1,076.5	1,071.2	2.4	2.4	-100.50	36.9	-124.1	124.6	120.4	4.19	29.724		
1,200.0	1,195.7	1,169.9	1,162.4	2.6	2.8	-104.29	31.3	-143.3	148.3	143.7	4.59	32.283		
1,300.0	1,295.2	1,263.2	1,253.1	2.9	3.2	-106.95	25.2	-164.5	174.8	169.8	5.00	34.932		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-14D (Oxy I21 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	-38.89	70.7	-57.0	90.8					
100.0	100.0	100.0	100.0	0.1	0.1	-38.89	70.7	-57.0	90.8	90.5	0.30	305.974		
200.0	200.0	200.0	200.0	0.3	0.3	-38.89	70.7	-57.0	90.8	90.1	0.65	140.583		
300.0	300.0	300.0	300.0	0.5	0.5	-33.17	70.7	-57.0	89.7	88.7	1.00	90.109		
400.0	399.9	398.6	398.6	0.7	0.7	-35.27	70.6	-58.3	87.2	85.8	1.35	64.760		
500.0	499.7	496.9	496.8	0.9	0.9	-39.89	70.3	-62.1	84.4	82.7	1.71	49.376		
600.0	599.3	594.8	594.5	1.1	1.0	-47.19	69.8	-68.3	82.4	80.3	2.10	39.228		
634.1	633.2	628.1	627.7	1.2	1.1	-50.23	69.5	-71.0	82.1	79.9	2.24	36.663 CC, ES		
700.0	698.7	692.1	691.4	1.4	1.3	-56.53	69.0	-77.0	83.0	80.4	2.52	32.982		
800.0	798.1	789.0	787.6	1.6	1.5	-66.08	68.2	-88.2	88.1	85.2	2.94	29.947		
900.0	897.5	885.2	882.9	1.9	1.8	-74.69	67.1	-101.6	98.0	94.6	3.37	29.089 SF		
1,000.0	996.9	980.7	977.1	2.1	2.1	-81.73	65.8	-117.3	112.2	108.4	3.79	29.615		
1,100.0	1,096.3	1,075.4	1,070.1	2.4	2.4	-87.15	64.4	-135.2	130.2	126.0	4.20	30.964		
1,200.0	1,195.7	1,169.1	1,161.7	2.6	2.8	-91.17	62.8	-155.1	151.5	146.9	4.62	32.779		
1,300.0	1,295.2	1,264.5	1,254.4	2.9	3.2	-94.20	61.0	-177.3	175.3	170.3	5.05	34.725		
1,400.0	1,394.6	1,361.2	1,348.4	3.1	3.6	-96.53	59.2	-199.8	199.6	194.1	5.48	36.405		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-15D (Oxy I21 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					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)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-37.76	83.8	-64.9	106.0					
100.0	100.0	100.0	100.0	0.1	0.1	-37.76	83.8	-64.9	106.0	105.7	0.30	357.159		
200.0	200.0	200.0	200.0	0.3	0.3	-37.76	83.8	-64.9	106.0	105.3	0.65	164.100		
300.0	300.0	300.0	300.0	0.5	0.5	-31.97	83.8	-64.9	104.9	103.9	1.00	105.358		
400.0	399.9	398.0	397.9	0.7	0.7	-33.61	84.0	-66.1	102.5	101.2	1.34	76.230		
500.0	499.7	495.7	495.7	0.9	0.8	-37.09	84.5	-69.9	100.1	98.4	1.70	58.742		
600.0	599.3	593.2	592.9	1.1	1.0	-42.50	85.4	-76.0	98.3	96.2	2.08	47.164		
638.7	637.8	630.9	630.5	1.2	1.1	-45.04	85.9	-79.1	98.0	95.8	2.24	43.800 CC, ES		
700.0	698.7	690.3	689.6	1.4	1.3	-49.36	86.7	-84.6	98.6	96.1	2.48	39.671		
800.0	798.1	787.0	785.7	1.6	1.5	-56.50	88.3	-95.6	102.7	99.8	2.90	35.419		
900.0	897.5	883.2	881.0	1.9	1.8	-63.25	90.3	-108.9	110.9	107.6	3.32	33.373		
1,000.0	996.9	978.9	975.3	2.1	2.1	-69.11	92.6	-124.4	122.9	119.2	3.75	32.803 SF		
1,100.0	1,096.3	1,073.8	1,068.5	2.4	2.4	-73.90	95.3	-142.1	138.5	134.3	4.17	33.195		
1,200.0	1,195.7	1,167.8	1,160.4	2.6	2.8	-77.66	98.2	-162.0	157.3	152.7	4.60	34.200		
1,300.0	1,295.2	1,263.0	1,252.9	2.9	3.2	-80.59	101.5	-184.1	178.8	173.8	5.04	35.513		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-16D (Oxy I21 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	-32.75	100.9	-64.9	120.0					
100.0	100.0	100.0	100.0	0.1	0.1	-32.75	100.9	-64.9	120.0	119.7	0.30	404.319		
200.0	200.0	200.0	200.0	0.3	0.3	-32.75	100.9	-64.9	120.0	119.3	0.65	185.768		
300.0	300.0	300.0	300.0	0.5	0.5	-26.86	100.9	-64.9	118.8	117.8	1.00	119.381		
400.0	399.9	397.5	397.5	0.7	0.7	-28.10	101.3	-66.1	116.3	115.0	1.34	86.670		
500.0	499.7	494.9	494.8	0.9	0.8	-30.70	102.6	-69.5	113.8	112.1	1.70	67.075		
600.0	599.3	592.0	591.8	1.1	1.0	-34.76	104.8	-75.3	111.6	109.5	2.07	54.025		
665.2	664.1	655.2	654.7	1.3	1.2	-38.04	106.7	-80.3	111.0	108.7	2.32	47.901 CC		
700.0	698.7	689.0	688.3	1.4	1.3	-39.97	107.9	-83.4	111.1	108.6	2.45	45.285 ES		
800.0	798.1	785.6	784.3	1.6	1.5	-45.54	111.7	-93.8	113.9	111.0	2.85	39.916		
900.0	897.5	881.9	879.6	1.9	1.8	-51.03	116.5	-106.3	120.2	117.0	3.26	36.844		
1,000.0	996.9	977.7	974.1	2.1	2.1	-56.05	122.0	-121.0	130.1	126.4	3.68	35.357		
1,100.0	1,096.3	1,072.8	1,067.5	2.4	2.4	-60.36	128.3	-137.8	143.4	139.3	4.10	34.958 SF		
1,200.0	1,195.7	1,167.2	1,159.8	2.6	2.8	-63.91	135.4	-156.7	159.8	155.3	4.53	35.300		
1,300.0	1,295.2	1,261.5	1,251.4	2.9	3.2	-66.75	143.2	-177.6	179.1	174.1	4.96	36.130		
1,400.0	1,394.6	1,359.1	1,346.0	3.1	3.6	-69.10	151.6	-199.9	199.6	194.2	5.40	36.957		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design		NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-17D (Oxy I21 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(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	-37.23	95.8	-72.8	120.3					
100.0	100.0	100.0	100.0	0.1	0.1	-37.23	95.8	-72.8	120.3	120.0	0.30	405.509		
200.0	200.0	200.0	200.0	0.3	0.3	-37.23	95.8	-72.8	120.3	119.7	0.65	186.315		
300.0	300.0	297.4	297.4	0.5	0.5	-31.70	96.2	-74.0	120.3	119.3	0.99	121.297		
400.0	399.9	394.8	394.7	0.7	0.7	-33.64	97.4	-77.5	120.2	118.8	1.34	89.541		
403.1	403.0	397.8	397.7	0.7	0.7	-33.72	97.4	-77.6	120.2	118.8	1.35	88.814 CC		
500.0	499.7	491.9	491.6	0.9	0.9	-36.85	99.4	-83.4	120.4	118.7	1.70	70.683 ES		
600.0	599.3	588.6	588.0	1.1	1.1	-41.27	102.1	-91.5	121.3	119.2	2.08	58.317		
700.0	698.7	685.0	683.7	1.4	1.3	-46.49	105.7	-101.9	124.2	121.7	2.47	50.257		
800.0	798.1	781.0	778.8	1.6	1.6	-51.67	109.9	-114.6	130.6	127.7	2.87	45.458		
900.0	897.5	876.5	873.0	1.9	1.9	-56.47	115.0	-129.4	140.4	137.2	3.28	42.817		
1,000.0	996.9	971.4	966.2	2.1	2.3	-60.67	120.7	-146.3	153.7	150.0	3.69	41.616		
1,100.0	1,096.3	1,065.5	1,058.1	2.4	2.7	-64.19	127.1	-165.3	170.1	166.0	4.11	41.380 SF		
1,200.0	1,195.7	1,158.8	1,148.8	2.6	3.1	-67.04	134.2	-186.2	189.5	185.0	4.53	41.797		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-1D (Oxy I21 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	159.65	-42.6	15.8	45.4					
100.0	100.0	100.0	100.0	0.1	0.1	159.65	-42.6	15.8	45.4	45.2	0.30	153.172		
200.0	200.0	200.0	200.0	0.3	0.3	159.65	-42.6	15.8	45.4	44.8	0.65	70.376 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	166.22	-42.6	15.8	46.7	45.7	0.99	46.964		
400.0	399.9	398.7	398.7	0.7	0.7	167.79	-43.9	15.7	51.7	50.4	1.34	38.565		
500.0	499.7	496.8	496.7	0.9	0.9	170.35	-47.7	15.5	61.8	60.1	1.69	36.615 SF		
600.0	599.3	593.9	593.6	1.1	1.0	173.01	-53.9	15.1	76.9	74.9	2.03	37.887		
700.0	698.7	689.9	689.2	1.4	1.3	175.27	-62.5	14.6	96.2	93.8	2.37	40.547		
800.0	798.1	784.8	783.5	1.6	1.5	177.04	-73.3	13.9	117.9	115.2	2.71	43.487		
900.0	897.5	878.7	876.5	1.9	1.8	178.44	-86.3	13.1	142.2	139.1	3.05	46.601		
1,000.0	996.9	971.3	967.9	2.1	2.0	179.58	-101.3	12.2	168.8	165.4	3.39	49.828		
1,100.0	1,096.3	1,062.7	1,057.6	2.4	2.4	-179.48	-118.4	11.1	197.7	194.0	3.72	53.134		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design													NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-2D (Oxy I21 Pad) - DD - Plan #2		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	Separation	Warning				
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor					
0.0	0.0	0.0	0.0	0.0	0.0	146.80	-37.5	24.5	44.8								
100.0	100.0	100.0	100.0	0.1	0.1	146.80	-37.5	24.5	44.8	44.5	0.30	151.107					
200.0	200.0	200.0	200.0	0.3	0.3	146.80	-37.5	24.5	44.8	44.2	0.65	69.427	CC, ES				
300.0	300.0	299.0	299.0	0.5	0.5	154.54	-38.8	24.5	47.1	46.1	0.99	47.390					
400.0	399.9	397.5	397.4	0.7	0.7	158.43	-42.6	24.5	54.1	52.7	1.34	40.236					
500.0	499.7	495.3	495.0	0.9	0.9	163.04	-48.9	24.5	66.0	64.3	1.69	39.020	SF				
600.0	599.3	591.9	591.2	1.1	1.1	167.21	-57.6	24.4	83.2	81.2	2.04	40.854					
700.0	698.7	687.2	685.9	1.4	1.3	170.51	-68.5	24.3	104.6	102.3	2.38	43.998					
800.0	798.1	781.4	779.1	1.6	1.6	172.95	-81.7	24.2	128.7	126.0	2.72	47.356					
900.0	897.5	874.3	870.8	1.9	1.9	174.79	-96.9	24.1	155.2	152.1	3.05	50.830					
1,000.0	996.9	965.9	960.8	2.1	2.2	176.22	-114.1	24.0	184.1	180.7	3.39	54.368					

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-3D (Oxy I21 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	161.28	-23.3	7.9	24.6					
100.0	100.0	100.0	100.0	0.1	0.1	161.28	-23.3	7.9	24.6	24.3	0.30	82.957		
200.0	200.0	200.0	200.0	0.3	0.3	161.28	-23.3	7.9	24.6	24.0	0.65	38.115 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	168.08	-23.3	7.9	25.9	24.9	0.99	26.031		
400.0	399.9	399.9	399.9	0.7	0.7	169.63	-23.3	7.9	29.7	28.4	1.34	22.144		
500.0	499.7	499.7	499.7	0.9	0.8	171.48	-23.3	7.9	36.2	34.5	1.69	21.408 SF		
600.0	599.3	598.1	598.1	1.1	1.0	173.65	-24.6	7.8	46.5	44.4	2.03	22.843		
700.0	698.7	695.8	695.7	1.4	1.2	175.84	-28.3	7.4	60.9	58.5	2.38	25.599		
800.0	798.1	792.6	792.3	1.6	1.4	177.65	-34.5	6.9	77.8	75.1	2.72	28.594		
900.0	897.5	888.5	887.9	1.9	1.6	179.12	-43.0	6.1	97.2	94.2	3.06	31.741		
1,000.0	996.9	983.5	982.2	2.1	1.8	-179.66	-53.7	5.1	119.1	115.7	3.40	34.988		
1,100.0	1,096.3	1,077.3	1,075.1	2.4	2.1	-178.66	-66.7	4.0	143.3	139.6	3.74	38.304		
1,200.0	1,195.7	1,170.8	1,167.4	2.6	2.3	-177.82	-81.8	2.6	169.9	165.8	4.08	41.641		
1,300.0	1,295.2	1,267.0	1,262.2	2.9	2.6	-177.15	-98.0	1.1	197.2	192.8	4.42	44.587		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-4D (Oxy I21 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(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	-178.15	-17.5	-0.6	17.5					
100.0	100.0	100.0	100.0	0.1	0.1	-178.15	-17.5	-0.6	17.5	17.2	0.30	58.956		
200.0	200.0	200.0	200.0	0.3	0.3	-178.15	-17.5	-0.6	17.5	16.8	0.65	27.088	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	-172.53	-17.5	-0.6	18.8	17.8	0.99	18.891		
400.0	399.9	399.9	399.9	0.7	0.7	-173.81	-17.5	-0.6	22.7	21.3	1.34	16.894	SF	
500.0	499.7	499.7	499.7	0.9	0.8	-175.19	-17.5	-0.6	29.2	27.5	1.69	17.276		
600.0	599.3	599.3	599.3	1.1	1.0	-176.33	-17.5	-0.6	38.3	36.3	2.04	18.824		
700.0	698.7	697.4	697.4	1.4	1.2	-176.85	-18.7	-0.7	50.3	48.0	2.38	21.140		
800.0	798.1	794.9	794.8	1.6	1.4	-176.74	-22.4	-1.2	64.9	62.1	2.73	23.800		
900.0	897.5	891.7	891.4	1.9	1.6	-176.34	-28.5	-2.1	81.9	78.8	3.07	26.677		
1,000.0	996.9	987.5	986.8	2.1	1.8	-175.84	-36.9	-3.2	101.3	97.9	3.41	29.701		
1,100.0	1,096.3	1,084.0	1,082.8	2.4	2.0	-175.33	-47.4	-4.7	122.8	119.0	3.75	32.700		
1,200.0	1,195.7	1,181.6	1,179.8	2.6	2.2	-174.95	-58.2	-6.2	144.5	140.4	4.10	35.235		
1,300.0	1,295.2	1,279.3	1,276.8	2.9	2.4	-174.68	-69.0	-7.7	166.2	161.7	4.45	37.376		
1,400.0	1,394.6	1,376.9	1,373.8	3.1	2.7	-174.46	-79.9	-9.2	187.9	183.1	4.79	39.209		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-5D (Oxy I21 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	-121.07	-5.1	-8.5	9.9					
100.0	100.0	100.0	100.0	0.1	0.1	-121.07	-5.1	-8.5	9.9	9.6	0.30	33.306		
200.0	200.0	200.0	200.0	0.3	0.3	-121.07	-5.1	-8.5	9.9	9.2	0.65	15.303 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-121.37	-5.1	-8.5	10.5	9.5	1.00	10.539		
400.0	399.9	399.9	399.9	0.7	0.7	-136.30	-5.1	-8.5	13.0	11.6	1.35	9.619 SF		
500.0	499.7	499.7	499.7	0.9	0.8	-150.56	-5.1	-8.5	18.3	16.6	1.70	10.747		
600.0	599.3	599.3	599.3	1.1	1.0	-160.23	-5.1	-8.5	26.6	24.6	2.05	13.009		
700.0	698.7	697.7	697.7	1.4	1.2	-165.74	-6.3	-8.7	38.2	35.9	2.39	15.988		
800.0	798.1	795.5	795.4	1.6	1.4	-168.39	-10.0	-9.4	52.6	49.9	2.74	19.222		
900.0	897.5	892.6	892.3	1.9	1.6	-169.63	-16.1	-10.6	69.5	66.4	3.08	22.565		
1,000.0	996.9	991.0	990.4	2.1	1.7	-170.30	-23.3	-12.1	87.5	84.1	3.43	25.544		
1,100.0	1,096.3	1,089.3	1,088.5	2.4	1.9	-170.74	-30.6	-13.5	105.6	101.8	3.77	27.976		
1,200.0	1,195.7	1,187.7	1,186.6	2.6	2.1	-171.06	-37.8	-14.9	123.6	119.5	4.12	29.998		
1,300.0	1,295.2	1,286.1	1,284.7	2.9	2.3	-171.29	-45.0	-16.3	141.6	137.2	4.47	31.706		
1,400.0	1,394.6	1,384.4	1,382.7	3.1	2.6	-171.47	-52.3	-17.8	159.7	154.9	4.81	33.167		
1,500.0	1,494.0	1,482.8	1,480.8	3.4	2.8	-171.61	-59.5	-19.2	177.7	172.6	5.16	34.431		
1,600.0	1,593.4	1,581.1	1,578.9	3.6	3.0	-171.73	-66.8	-20.6	195.8	190.3	5.51	35.536		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-6D (Oxy I21 Pad) - DD - Plan #2													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	300.0	300.0	0.0	0.0	148.21	-25.5	15.8	30.0					
100.0	100.0	400.0	400.0	0.1	0.1	148.21	-25.5	15.8	30.0	29.7	0.30	101.097		
200.0	200.0	500.0	500.0	0.3	0.3	148.21	-25.5	15.8	30.0	29.4	0.65	46.450 CC, ES		
300.0	300.0	600.0	600.0	0.5	0.5	155.42	-25.5	15.8	31.2	30.2	1.00	31.338		
400.0	399.9	699.9	699.9	0.7	0.7	158.09	-25.5	15.8	34.8	33.4	1.34	25.869		
500.0	499.7	799.7	799.7	0.9	0.8	161.48	-25.5	15.8	40.9	39.2	1.69	24.155		
600.0	599.3	900.0	900.0	1.1	1.0	164.08	-24.4	16.0	48.7	46.7	2.04	23.823 SF		
700.0	698.7	999.6	999.6	1.4	1.2	166.07	-22.6	16.4	57.7	55.3	2.40	24.075		
800.0	798.1	1,099.2	1,099.1	1.6	1.4	167.53	-20.9	16.7	66.7	64.0	2.75	24.292		
900.0	897.5	1,198.7	1,198.7	1.9	1.5	168.64	-19.2	17.0	75.8	72.7	3.10	24.474		
1,000.0	996.9	1,298.3	1,298.2	2.1	1.7	169.52	-17.5	17.4	84.8	81.4	3.45	24.628		
1,100.0	1,096.3	1,397.9	1,397.8	2.4	1.9	170.22	-15.8	17.7	93.9	90.1	3.79	24.758		
1,200.0	1,195.7	1,497.5	1,497.4	2.6	2.1	170.80	-14.0	18.0	103.1	98.9	4.14	24.871		
1,300.0	1,295.2	1,597.1	1,596.9	2.9	2.3	171.29	-12.3	18.4	112.2	107.7	4.49	24.969		
1,400.0	1,394.6	1,696.6	1,696.5	3.1	2.4	171.70	-10.6	18.7	121.3	116.5	4.84	25.054		
1,500.0	1,494.0	1,796.2	1,796.1	3.4	2.6	172.06	-8.9	19.0	130.4	125.2	5.19	25.129		
1,600.0	1,593.4	1,895.8	1,895.6	3.6	2.8	172.37	-7.2	19.3	139.6	134.0	5.54	25.196		
1,700.0	1,692.8	1,994.9	1,994.8	3.9	3.0	172.64	-5.5	19.7	148.7	142.8	5.89	25.261		
1,800.0	1,792.2	2,092.4	2,092.2	4.1	3.1	173.07	-5.1	19.8	159.1	152.9	6.23	25.532		
1,900.0	1,891.6	2,191.8	2,191.6	4.4	3.3	173.51	-5.1	19.8	169.8	163.3	6.58	25.821		
2,000.0	1,991.1	2,291.2	2,291.1	4.6	3.5	173.90	-5.1	19.8	180.6	173.7	6.92	26.082		
2,100.0	2,090.5	2,390.6	2,390.5	4.9	3.6	174.24	-5.1	19.8	191.4	184.1	7.27	26.319		

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-7D (Oxy I21 Pad) - DD - Plan #2													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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(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	147.46	-12.4	7.9	14.7					
100.0	100.0	100.0	100.0	0.1	0.1	147.46	-12.4	7.9	14.7	14.4	0.30	49.509		
200.0	200.0	200.0	200.0	0.3	0.3	147.46	-12.4	7.9	14.7	14.0	0.65	22.747	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	155.73	-12.4	7.9	15.9	14.9	1.00	15.953		
400.0	399.9	399.9	399.9	0.7	0.7	160.45	-12.4	7.9	19.5	18.2	1.34	14.518		
500.0	499.7	499.7	499.7	0.9	0.8	165.30	-12.4	7.9	25.8	24.1	1.69	15.226		
600.0	599.3	599.3	599.3	1.1	1.0	169.11	-12.4	7.9	34.7	32.7	2.04	17.019		
700.0	698.7	698.7	698.7	1.4	1.2	171.68	-12.4	7.9	45.4	43.0	2.39	19.004		
800.0	798.1	799.5	799.5	1.6	1.4	173.18	-11.1	7.7	54.8	52.1	2.74	20.027		
900.0	897.5	900.8	900.7	1.9	1.6	174.07	-7.2	7.2	61.7	58.6	3.09	19.966		
1,000.0	996.9	1,002.4	1,002.1	2.1	1.7	174.63	-0.5	6.3	65.9	62.4	3.44	19.147		
1,100.0	1,096.3	1,104.2	1,103.4	2.4	2.0	174.99	8.8	5.0	67.4	63.7	3.79	17.777		
1,200.0	1,195.7	1,205.5	1,204.0	2.6	2.2	175.22	20.6	3.3	66.4	62.3	4.15	16.024		
1,300.0	1,295.2	1,305.5	1,303.2	2.9	2.4	175.43	33.0	1.6	64.7	60.2	4.50	14.395		
1,400.0	1,394.6	1,405.5	1,402.4	3.1	2.7	175.64	45.4	-0.1	63.0	58.2	4.85	13.001		
1,500.0	1,494.0	1,505.5	1,501.6	3.4	2.9	175.87	57.8	-1.8	61.3	56.1	5.20	11.796		
1,600.0	1,593.4	1,605.4	1,600.8	3.6	3.2	176.11	70.1	-3.5	59.6	54.1	5.55	10.744		
1,700.0	1,692.8	1,705.4	1,700.0	3.9	3.4	176.36	82.5	-5.2	57.9	52.0	5.90	9.817		
1,800.0	1,792.2	1,805.4	1,799.2	4.1	3.7	176.63	94.9	-7.0	56.2	49.9	6.25	8.995		
1,900.0	1,891.6	1,905.4	1,898.4	4.4	4.0	176.92	107.3	-8.7	54.5	47.9	6.60	8.259		
2,000.0	1,991.1	2,005.4	1,997.6	4.6	4.2	177.23	119.7	-10.4	52.8	45.8	6.94	7.599		
2,100.0	2,090.5	2,105.4	2,096.8	4.9	4.5	177.55	132.1	-12.1	51.1	43.8	7.29	7.001		
2,200.0	2,189.9	2,205.4	2,196.0	5.2	4.8	177.90	144.4	-13.8	49.4	41.7	7.64	6.459		
2,300.0	2,289.3	2,305.3	2,295.2	5.4	5.1	178.27	156.8	-15.5	47.7	39.7	7.99	5.964		
2,400.0	2,388.7	2,405.3	2,394.4	5.7	5.3	178.67	169.2	-17.2	46.0	37.6	8.34	5.511		
2,500.0	2,488.1	2,505.3	2,493.7	5.9	5.6	179.10	181.6	-19.0	44.3	35.6	8.69	5.094		
2,600.0	2,587.5	2,605.3	2,592.9	6.2	5.9	179.57	194.0	-20.7	42.6	33.5	9.04	4.710		
2,700.0	2,686.9	2,705.3	2,692.1	6.4	6.1	-179.93	206.4	-22.4	40.9	31.5	9.39	4.354		
2,800.0	2,786.4	2,805.3	2,791.3	6.7	6.4	-179.38	218.7	-24.1	39.2	29.5	9.74	4.024		
2,900.0	2,885.8	2,905.3	2,890.5	7.0	6.7	-178.79	231.1	-25.8	37.5	27.4	10.09	3.717		
2,997.0	2,982.2	3,001.6	2,986.1	7.2	6.9	-178.21	242.5	-27.4	36.4	26.0	10.44	3.491		
3,000.0	2,985.2	3,004.6	2,989.1	7.2	7.0	-178.20	242.9	-27.4	36.4	26.0	10.45	3.488	SF	
3,100.0	3,084.6	3,103.6	3,087.7	7.5	7.2	-177.84	252.1	-28.7	37.8	27.0	10.80	3.502		
3,200.0	3,184.0	3,202.5	3,186.3	7.7	7.4	-177.76	258.9	-29.7	41.8	30.6	11.15	3.748		
3,300.0	3,283.4	3,301.2	3,284.9	8.0	7.5	-177.91	263.1	-30.2	48.3	36.8	11.49	4.204		
3,400.0	3,382.8	3,400.0	3,383.7	8.2	7.7	-178.19	264.8	-30.5	57.4	45.6	11.84	4.850		
3,500.0	3,482.2	3,498.6	3,482.2	8.5	7.8	-178.47	264.8	-30.5	68.2	56.0	12.18	5.598		
3,600.0	3,581.7	3,598.0	3,581.7	8.8	7.9	-178.68	264.8	-30.5	79.0	66.5	12.53	6.306		
3,700.0	3,681.1	3,697.4	3,681.1	9.0	8.1	-178.84	264.8	-30.5	89.8	76.9	12.87	6.977		
3,800.0	3,780.5	3,796.8	3,780.5	9.3	8.2	-178.96	264.8	-30.5	100.6	87.4	13.22	7.612		
3,900.0	3,879.9	3,896.2	3,879.9	9.5	8.4	-179.07	264.8	-30.5	111.5	97.9	13.57	8.215		
4,000.0	3,979.3	3,995.6	3,979.3	9.8	8.5	-179.15	264.8	-30.5	122.3	108.4	13.92	8.787		
4,100.0	4,078.7	4,095.0	4,078.7	10.0	8.6	-179.22	264.8	-30.5	133.1	118.8	14.26	9.332		
4,200.0	4,178.1	4,194.4	4,178.1	10.3	8.8	-179.28	264.8	-30.5	143.9	129.3	14.61	9.850		
4,300.0	4,277.5	4,293.9	4,277.5	10.6	8.9	-179.33	264.8	-30.5	154.7	139.8	14.96	10.345		
4,400.0	4,377.0	4,393.3	4,377.0	10.8	9.1	-179.37	264.8	-30.5	165.6	150.3	15.31	10.817		
4,500.0	4,476.4	4,492.7	4,476.4	11.1	9.2	-179.41	264.8	-30.5	176.4	160.7	15.65	11.268		
4,600.0	4,575.8	4,592.1	4,575.8	11.3	9.4	-179.44	264.8	-30.5	187.2	171.2	16.00	11.699		
4,700.0	4,675.2	4,691.5	4,675.2	11.6	9.5	-179.47	264.8	-30.5	198.0	181.7	16.35	12.112		

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

Directional Plus

Anticollision Report

Company:	Berry Petroleum Company (NAD 83)	Local Co-ordinate Reference:	Well Oxy 21-8D (Oxy I21 Pad)
Project:	Garfield County	TVD Reference:	KBE @ 8381.0ft (Original Well Elev)
Reference Site:	NESE S21-T6S-R97W (Oxy I21 pad)	MD Reference:	KBE @ 8381.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Oxy 21-8D (Oxy I21 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 #2	Offset TVD Reference:	Offset Datum

Offset Design													NESE S21-T6S-R97W (Oxy I21 pad) - Oxy 21-9D (Oxy I21 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	-63.91	8.0	-16.4	18.2								
100.0	100.0	100.0	100.0	0.1	0.1	-63.91	8.0	-16.4	18.2	17.9	0.30	61.414					
200.0	200.0	200.0	200.0	0.3	0.3	-63.91	8.0	-16.4	18.2	17.6	0.65	28.217					
300.0	300.0	299.8	299.8	0.5	0.5	-65.29	7.0	-17.2	18.0	17.0	1.00	18.044					
308.3	308.3	308.1	308.1	0.5	0.5	-66.60	6.9	-17.4	18.0	17.0	1.03	17.505 CC, ES					
400.0	399.9	399.3	399.2	0.7	0.7	-87.11	4.1	-19.8	19.2	17.9	1.36	14.105 SF					
500.0	499.7	498.1	497.8	0.9	0.9	-112.36	-0.8	-23.9	26.0	24.2	1.73	14.995					
600.0	599.3	595.9	595.2	1.1	1.1	-129.09	-7.5	-29.7	39.7	37.6	2.09	18.969					
700.0	698.7	692.5	691.2	1.4	1.4	-137.88	-16.0	-37.0	58.7	56.3	2.45	23.982					
800.0	798.1	788.2	785.9	1.6	1.6	-142.06	-26.3	-45.8	80.9	78.1	2.81	28.789					
900.0	897.5	882.7	879.1	1.9	1.9	-144.16	-38.2	-56.0	105.8	102.6	3.18	33.276					
1,000.0	996.9	976.1	970.7	2.1	2.3	-145.24	-51.6	-67.5	133.0	129.4	3.55	37.479					
1,100.0	1,096.3	1,068.1	1,060.7	2.4	2.7	-145.76	-66.5	-80.3	162.5	158.6	3.92	41.452					
1,200.0	1,195.7	1,158.9	1,148.8	2.6	3.1	-145.96	-82.8	-94.3	194.2	189.9	4.29	45.242					

Directional Plus

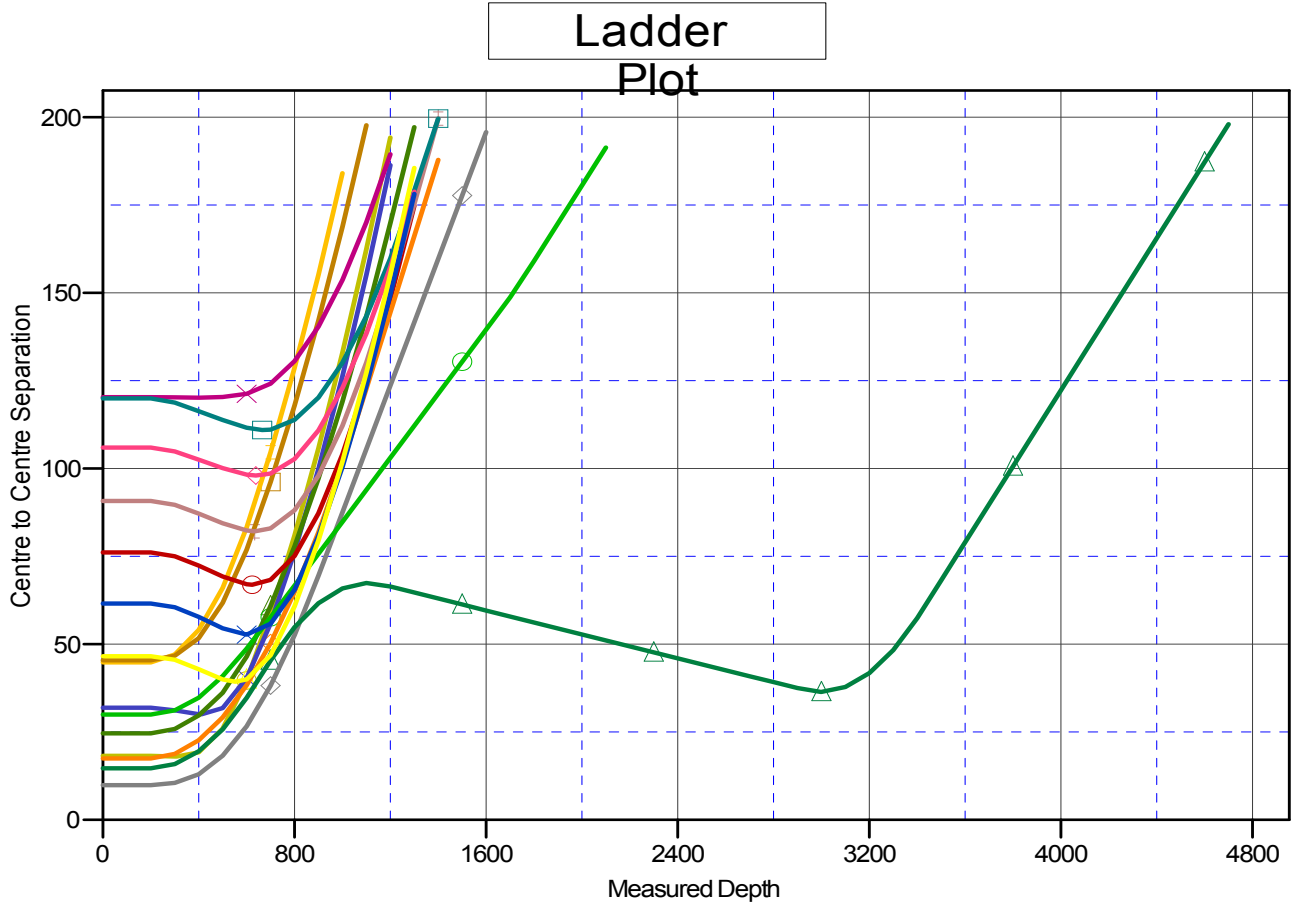
Anticollision Report

Company: Berry Petroleum Company (NAD 83)
Project: Garfield County
Reference Site: NESE S21-T6S-R97W (Oxy I21 pad)
Site Error: 0.0ft
Reference Well: Oxy 21-8D (Oxy I21 Pad)
Well Error: 0.0ft
Reference Wellbore: DD
Reference Design: Plan #2

Local Co-ordinate Reference: Well Oxy 21-8D (Oxy I21 Pad)
TVD Reference: KBE @ 8381.0ft (Original Well Elev)
MD Reference: KBE @ 8381.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 2003.21 US Multi User Db
Offset TVD Reference: Offset Datum

Reference Depths are relative to KBE @ 8381.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: Oxy 21-8D (Oxy I21 Pad)
 Coordinate System is US State Plane 1983, Colorado Central Zone
 Grid Convergence at Surface is: -1.71°



LEGEND

- | | | |
|--|--|--|
| Oxy 21-9D (Oxy I21 Pad), DD, Plan #1 V0 | Oxy 21-13D (Oxy I21 Pad), DD, Plan #1 V0 | Oxy 21-6D (Oxy I21 Pad), DD, Plan #2 V0 |
| Oxy 21-5D (Oxy I21 Pad), DD, Plan #1 V0 | Oxy 21-14D (Oxy I21 Pad), DD, Plan #1 V0 | Oxy 21-15D (Oxy I21 Pad), DD, Plan #1 V0 |
| Oxy 21-10D (Oxy I21 Pad), DD, Plan #1 V0 | Oxy 21-4D (Oxy I21 Pad), DD, Plan #1 V0 | Oxy 21-12D (Oxy I21 Pad), DD, Plan #1 V0 |
| Oxy 21-2D (Oxy I21 Pad), DD, Plan #2 V0 | Oxy 21-17D (Oxy I21 pad), DD, Plan #1 V0 | Oxy 21-11D (Oxy I21 Pad), DD, Plan #1 V0 |
| Oxy 21-3D (Oxy I21 Pad), DD, Plan #1 V0 | Oxy 21-7D (Oxy I21 Pad), DD, Plan #2 V0 | |
| Oxy 21-1D (Oxy I21 Pad), DD, Plan #1 V0 | Oxy 21-16D (Oxy I21 Pad), DD, Plan #1 V0 | |