



DIRECTIONAL TECHNOLOGIES INC.

Mostar Directional Technologies Inc.

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Dejour Energy (USA) Corp.

Garfield County, CO

Pad 21A

Federal PWD 21-6-91

13-01-007

Plan #2

Planning Report

19 September, 2013



Mostar Directional Technologies Inc.

Planning Report



Database:	SRV-EDM_2011	Local Co-ordinate Reference:	Well Federal PWD 21-6-91
Company:	Dejour Energy (USA) Corp.	TVD Reference:	Actual KB @ 7030.0usft
Project:	Garfield County, CO	MD Reference:	Actual KB @ 7030.0usft
Site:	Pad 21A	North Reference:	True
Well:	Federal PWD 21-6-91	Survey Calculation Method:	Minimum Curvature
Wellbore:	13-01-007		
Design:	Plan #2		

Project	Garfield County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		Using geodetic scale factor

Site	Pad 21A		
Site Position:		Northing:	1,616,692.52 usft
From:	Map	Easting:	2,419,922.52 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	39° 30' 30.877 N
		Longitude:	107° 33' 21.938 W
		Grid Convergence:	-1.30 °

Well	Federal PWD 21-6-91		
Well Position	+N/-S	-13.9 usft	Northing:
	+E/-W	8.0 usft	Easting:
Position Uncertainty	0.0 usft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	13-01-007	Well UWI		License	
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/1/2013	9.85	65.76	52,064

Design	Plan #2		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
			Direction (°)
			260.42

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.00	0.00	0.00	
995.1	17.50	260.42	981.5	-22.1	-130.8	2.00	2.00	0.00	260.42	
2,947.2	17.50	260.42	2,843.3	-119.8	-709.6	0.00	0.00	0.00	0.00	
4,114.0	0.00	0.00	3,992.0	-149.2	-884.0	1.50	-1.50	0.00	180.00	Target PWD
4,972.0	0.00	0.00	4,850.0	-149.2	-884.0	0.00	0.00	0.00	0.00	



Database:	SRV-EDM_2011	Local Co-ordinate Reference:	Well Federal PWD 21-6-91
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Project:	Garfield County, CO	MD Reference:	Actual KB @ 7030.0usft
Site:	Pad 21A	North Reference:	True
Well:	Federal PWD 21-6-91	Survey Calculation Method:	Minimum Curvature
Wellbore:	13-01-007		
Design:	Plan #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	7,030.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	6,930.00	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 2.00										
120.0	0.00	0.00	120.0	6,910.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	1.60	260.42	200.0	6,830.01	-0.2	-1.1	1.1	2.00	2.00	0.00
300.0	3.60	260.42	299.9	6,730.12	-0.9	-5.6	5.7	2.00	2.00	0.00
400.0	5.60	260.42	399.6	6,630.45	-2.3	-13.5	13.7	2.00	2.00	0.00
500.0	7.60	260.42	498.9	6,531.11	-4.2	-24.8	25.2	2.00	2.00	0.00
600.0	9.60	260.42	597.8	6,432.24	-6.7	-39.6	40.1	2.00	2.00	0.00
700.0	11.60	260.42	696.0	6,333.95	-9.7	-57.7	58.5	2.00	2.00	0.00
800.0	13.60	260.42	793.6	6,236.37	-13.4	-79.2	80.3	2.00	2.00	0.00
900.0	15.60	260.42	890.4	6,139.60	-17.6	-104.1	105.5	2.00	2.00	0.00
Start 1952.1 hold at 995.1 MD										
995.1	17.50	260.42	981.5	6,048.47	-22.1	-130.8	132.6	2.00	2.00	0.00
1,000.0	17.50	260.42	986.2	6,043.77	-22.3	-132.2	134.1	0.00	0.00	0.00
1,100.0	17.50	260.42	1,081.6	5,948.40	-27.3	-161.9	164.2	0.00	0.00	0.00
1,200.0	17.50	260.42	1,177.0	5,853.03	-32.3	-191.5	194.2	0.00	0.00	0.00
SFC										
1,224.1	17.50	260.42	1,200.0	5,830.00	-33.5	-198.7	201.5	0.00	0.00	0.00
1,300.0	17.50	260.42	1,272.3	5,757.66	-37.3	-221.2	224.3	0.00	0.00	0.00
1,400.0	17.50	260.42	1,367.7	5,662.29	-42.3	-250.8	254.4	0.00	0.00	0.00
1,500.0	17.50	260.42	1,463.1	5,566.92	-47.4	-280.5	284.5	0.00	0.00	0.00
1,600.0	17.50	260.42	1,558.5	5,471.55	-52.4	-310.1	314.5	0.00	0.00	0.00
1,700.0	17.50	260.42	1,653.8	5,376.18	-57.4	-339.8	344.6	0.00	0.00	0.00
1,800.0	17.50	260.42	1,749.2	5,280.81	-62.4	-369.5	374.7	0.00	0.00	0.00
1,900.0	17.50	260.42	1,844.6	5,185.43	-67.4	-399.1	404.8	0.00	0.00	0.00
2,000.0	17.50	260.42	1,939.9	5,090.06	-72.4	-428.8	434.8	0.00	0.00	0.00
2,100.0	17.50	260.42	2,035.3	4,994.69	-77.4	-458.4	464.9	0.00	0.00	0.00
2,200.0	17.50	260.42	2,130.7	4,899.32	-82.4	-488.1	495.0	0.00	0.00	0.00
2,300.0	17.50	260.42	2,226.0	4,803.95	-87.4	-517.7	525.0	0.00	0.00	0.00
2,400.0	17.50	260.42	2,321.4	4,708.58	-92.4	-547.4	555.1	0.00	0.00	0.00
2,500.0	17.50	260.42	2,416.8	4,613.21	-97.4	-577.0	585.2	0.00	0.00	0.00
2,600.0	17.50	260.42	2,512.2	4,517.84	-102.4	-606.7	615.3	0.00	0.00	0.00
2,700.0	17.50	260.42	2,607.5	4,422.47	-107.4	-636.3	645.3	0.00	0.00	0.00
2,800.0	17.50	260.42	2,702.9	4,327.10	-112.4	-666.0	675.4	0.00	0.00	0.00
2,900.0	17.50	260.42	2,798.3	4,231.73	-117.4	-695.6	705.5	0.00	0.00	0.00
Start Drop -1.50										
2,947.2	17.50	260.42	2,843.3	4,186.71	-119.8	-709.6	719.7	0.00	0.00	0.00
3,000.0	16.71	260.42	2,893.8	4,136.25	-122.4	-724.9	735.2	1.50	-1.50	0.00
3,100.0	15.21	260.42	2,989.9	4,040.10	-127.0	-752.1	762.7	1.50	-1.50	0.00
3,200.0	13.71	260.42	3,086.7	3,943.27	-131.1	-776.7	787.7	1.50	-1.50	0.00
3,300.0	12.21	260.42	3,184.2	3,845.82	-134.9	-798.8	810.1	1.50	-1.50	0.00
3,400.0	10.71	260.42	3,282.2	3,747.82	-138.2	-818.4	830.0	1.50	-1.50	0.00
3,500.0	9.21	260.42	3,380.7	3,649.33	-141.0	-835.4	847.3	1.50	-1.50	0.00
3,600.0	7.71	260.42	3,479.6	3,550.42	-143.5	-849.9	862.0	1.50	-1.50	0.00
3,700.0	6.21	260.42	3,578.8	3,451.16	-145.5	-861.9	874.1	1.50	-1.50	0.00
3,800.0	4.71	260.42	3,678.4	3,351.62	-147.1	-871.3	883.6	1.50	-1.50	0.00
3,900.0	3.21	260.42	3,778.1	3,251.86	-148.2	-878.1	890.5	1.50	-1.50	0.00
4,000.0	1.71	260.42	3,878.0	3,151.95	-149.0	-882.3	894.8	1.50	-1.50	0.00
4,100.0	0.21	260.42	3,978.0	3,051.97	-149.2	-884.0	896.5	1.50	-1.50	0.00
Target - Start 858.0 hold at 4114.0 MD										
4,114.0	0.00	0.00	3,992.0	3,038.00	-149.2	-884.0	896.5	1.50	-1.50	0.00



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Company:	Dejour Energy (USA) Corp.	TVD Reference:	Actual KB @ 7030.0usft
Project:	Garfield County, CO	MD Reference:	Actual KB @ 7030.0usft
Site:	Pad 21A	North Reference:	True
Well:	Federal PWD 21-6-91	Survey Calculation Method:	Minimum Curvature
Wellbore:	13-01-007		
Design:	Plan #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,200.0	0.00	0.00	4,078.0	2,951.97	-149.2	-884.0	896.5	0.00	0.00	0.00
4,300.0	0.00	0.00	4,178.0	2,851.97	-149.2	-884.0	896.5	0.00	0.00	0.00
4,400.0	0.00	0.00	4,278.0	2,751.97	-149.2	-884.0	896.5	0.00	0.00	0.00
4,500.0	0.00	0.00	4,378.0	2,651.97	-149.2	-884.0	896.5	0.00	0.00	0.00
Mesaverde/Williams Fork										
4,577.0	0.00	0.00	4,455.0	2,575.00	-149.2	-884.0	896.5	0.00	0.00	0.00
4,600.0	0.00	0.00	4,478.0	2,551.97	-149.2	-884.0	896.5	0.00	0.00	0.00
4,700.0	0.00	0.00	4,578.0	2,451.97	-149.2	-884.0	896.5	0.00	0.00	0.00
4,800.0	0.00	0.00	4,678.0	2,351.97	-149.2	-884.0	896.5	0.00	0.00	0.00
4,900.0	0.00	0.00	4,778.0	2,251.97	-149.2	-884.0	896.5	0.00	0.00	0.00
TD at 4972.0										
4,972.0	0.00	0.00	4,850.0	2,180.00	-149.2	-884.0	896.5	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
WC PWD 21-6-91	0.00	0.00	0.0	0.0	0.0	1,616,678.48	2,419,930.20	39° 30' 30.740 N	107° 33' 21.836 W
WC 10/11-15-21	0.00	0.00	0.0	-1.9	12.7	1,616,676.27	2,419,942.82	39° 30' 30.721 N	107° 33' 21.675 W
WC 10/11-14-21	0.00	0.00	0.0	11.9	4.7	1,616,690.30	2,419,935.13	39° 30' 30.858 N	107° 33' 21.777 W
WC 6/7-14-21	0.00	0.00	0.0	6.9	-4.0	1,616,685.50	2,419,926.36	39° 30' 30.809 N	107° 33' 21.887 W
Target PWD	0.00	0.00	3,992.0	-149.2	-884.0	1,616,549.29	2,419,043.10	39° 30' 29.265 N	107° 33' 33.115 W

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,224.1	1,200.0	SFC	0	0	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Subsea Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,577.0	4,455.0	2,575.00	Mesaverde/Williams Fork		0.00	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
120.0	120.0	0.0	0.0	KOP - Start Build 2.00	
995.1	981.5	-22.1	-130.8	Start 1952.1 hold at 995.1 MD	
2,947.2	2,843.3	-119.8	-709.6	Start Drop -1.50	
4,114.0	3,992.0	-149.2	-884.0	Target - Start 858.0 hold at 4114.0 MD	
4,972.0	4,850.0	-149.2	-884.0	TD at 4972.0	



DIRECTIONAL TECHNOLOGIES INC.

Dejour Energy (USA) Corp.

Garfield County, CO

Pad 21A

Federal PWD 21-6-91

13-01-007

Plan #2

Anticollision Risk Report

19 September, 2013



Mostar Directional Technologies Inc.

Anticollision Risk Report



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal PWD 21-6-91
Project:	Garfield County, CO	TVD Reference:	Actual KB @ 7030.0usft
Reference Site:	Pad 21A	MD Reference:	Actual KB @ 7030.0usft
Site Error:	0.0	North Reference:	True
Reference Well:	Federal PWD 21-6-91	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0	Output errors are at	2.00 sigma
Reference Wellbore	13-01-007	Database:	SRV-EDM_2011
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Reference	Plan #2
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD + Stations Interval 30.0usft
Depth Range:	0.0 to 4,972.0usft
Results Limited by:	Maximum center-center distance of 100.0usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Elliptical Conic
Casing Method:	Not applied

Risk Settings		
Vertical Depth for Analysis:	usft	(Below TVD Reference Datum)
Level of Acceptable Risk (1 in):		
Minimum Separation:	0	usft

Survey Tool Program		Date	9/19/2013		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	4,972.0	Plan #2 (13-01-007)	Mostar MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Pad 21A						
Federal 10/11-13-21 - 13-01-003 - Plan #2A	120.0	120.0	18.9	18.6	71.143 CC, ES	
Federal 10/11-13-21 - 13-01-003 - Plan #2A	800.0	795.9	98.8	94.4	22.730 SF	
Federal 10/11-14-21 - 13-01-004 - Plan #2A	120.0	120.0	12.8	12.5	48.289 CC, ES	
Federal 10/11-14-21 - 13-01-004 - Plan #2A	270.0	269.0	19.1	18.1	19.763 SF	
Federal 10/11-15-21 - 13-01-005 - Plan #1C	482.2	483.5	5.3	3.1	2.447 CC, ES	
Federal 10/11-15-21 - 13-01-005 - Plan #1C	500.0	501.3	5.4	3.2	2.383 SF	
Federal 10/11-16-21 - 13-01-006 - Plan #1C	120.0	120.0	18.9	18.6	71.141 CC, ES	
Federal 10/11-16-21 - 13-01-006 - Plan #1C	360.0	358.2	33.0	31.6	24.165 SF	
Federal 6/7-13-21 - 13-01-001 - Final Surveys April 22, 2	163.6	163.5	15.7	15.3	39.007 CC	
Federal 6/7-13-21 - 13-01-001 - Final Surveys April 22, 2	180.0	179.8	15.7	15.3	33.481 ES	
Federal 6/7-13-21 - 13-01-001 - Final Surveys April 22, 2	450.0	448.7	25.3	23.6	14.782 SF	
Federal 6/7-14-21 - 12-05-047 - Final Surveys - May 6	0.0	0.0	8.0			
Federal 6/7-14-21 - 12-05-047 - Final Surveys - May 6	60.0	60.0	8.1	8.0	80.618 ES	
Federal 6/7-14-21 - 12-05-047 - Final Surveys - May 6	390.0	389.1	13.5	12.0	9.018 SF	
Federal 6/7-15-21 - 13-01-002 - Final Surveys - May 13	176.4	176.4	7.0	6.6	15.208 CC	
Federal 6/7-15-21 - 13-01-002 - Final Surveys - May 13	180.0	180.0	7.0	6.5	14.718 ES	
Federal 6/7-15-21 - 13-01-002 - Final Surveys - May 13	300.0	299.7	10.2	9.2	10.153 SF	
Federal 6/7-16-21 - 12-05-048 - As Drilled Surveys Sept	0.0	8.0	15.8			
Federal 6/7-16-21 - 12-05-048 - As Drilled Surveys Sept	30.0	38.0	15.8	15.7	362.413 ES	
Federal 6/7-16-21 - 12-05-048 - As Drilled Surveys Sept	540.0	546.2	30.4	27.9	12.191 SF	

Offset Design													Pad 21A - Federal 10/11-13-21 - 13-01-003 - Plan #2A		Offset Site Error:		0.0 usft	
Survey Program:													0-Mostar MWD		Offset Well Error:		0.0 usft	
Reference		Offset		Semi Major Axis		Distance												
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Riskd Separation Factor	Probability of Collision	Warning					
0.0	0.0	0.0	0.0	0.0	0.0	2.01	18.9					0						
30.0	30.0	30.0	30.0	0.0	0.0	2.01	18.9	18.8	0.0	534.702		0						
60.0	60.0	60.0	60.0	0.0	0.1	2.01	18.9	18.8	0.1	197.991		0						

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



Mostar Directional Technologies Inc.

Anticollision Risk Report



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal PWD 21-6-91
Project:	Garfield County, CO	TVD Reference:	Actual KB @ 7030.0usft
Reference Site:	Pad 21A	MD Reference:	Actual KB @ 7030.0usft
Site Error:	0.0	North Reference:	True
Reference Well:	Federal PWD 21-6-91	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0	Output errors are at	2.00 sigma
Reference Wellbore	13-01-007	Database:	SRV-EDM_2011
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 0-Mostar MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision		
90.0	90.0	90.0	90.0	0.1	0.1	2.01	18.9	18.7	0.2	121.488	0		CC, ES	
100.0	100.0	100.0	100.0	0.1	0.1	2.01	18.9	18.7	0.2	107.626	0			
120.0	120.0	120.0	120.0	0.1	0.1	2.01	18.9	18.6	0.3	71.143	0			
150.0	150.0	149.7	149.7	0.2	0.2	101.90	19.1	18.7	0.4	47.933	0			
180.0	180.0	179.4	179.4	0.3	0.3	102.78	19.9	19.4	0.5	37.316	0			
200.0	200.0	199.2	199.2	0.3	0.3	103.61	20.7	20.1	0.6	33.230	0			
210.0	210.0	209.1	209.0	0.3	0.3	104.09	21.2	20.6	0.7	31.594	0			
240.0	240.0	238.7	238.6	0.4	0.4	105.66	23.1	22.3	0.8	28.257	0			
270.0	269.9	268.2	268.1	0.5	0.5	107.35	25.5	24.5	1.0	26.485	0			
300.0	299.9	297.6	297.4	0.5	0.6	109.01	28.4	27.3	1.1	25.670	0			
330.0	329.8	327.0	326.6	0.6	0.6	110.56	32.0	30.7	1.3	25.171	0			
360.0	359.7	356.3	355.7	0.7	0.7	111.97	36.0	34.6	1.4	25.179	0			
390.0	389.6	386.1	385.3	0.8	0.8	113.04	40.4	38.8	1.6	25.564	0			
400.0	399.6	396.1	395.1	0.8	0.8	113.30	41.8	40.2	1.6	25.680	0			
420.0	419.5	416.0	414.9	0.8	0.9	113.69	44.7	43.0	1.7	25.825	0			
450.0	449.3	445.9	444.5	0.9	1.0	114.02	49.0	47.2	1.9	26.017	0			
480.0	479.1	475.8	474.2	1.0	1.1	114.11	53.3	51.3	2.0	26.143	0			
500.0	498.9	495.8	493.9	1.1	1.1	114.07	56.2	54.1	2.1	26.201	0			
510.0	508.8	505.8	503.8	1.1	1.2	114.02	57.7	55.4	2.2	26.147	0			
540.0	538.5	535.7	533.4	1.2	1.3	113.78	61.9	59.5	2.4	25.936	0			
570.0	568.2	565.7	562.9	1.3	1.4	113.42	66.2	63.6	2.6	25.745	0			
600.0	597.8	595.7	592.4	1.4	1.5	112.97	70.5	67.7	2.8	25.573	0			
630.0	627.3	625.7	621.9	1.5	1.6	112.44	74.7	71.8	3.0	25.146	0			
660.0	656.8	655.8	651.3	1.6	1.7	111.83	79.0	75.8	3.2	24.750	0			
690.0	686.2	685.8	680.6	1.8	1.8	111.18	83.2	79.8	3.4	24.403	0			
700.0	696.0	695.8	690.4	1.8	1.9	110.94	84.6	81.1	3.5	24.297	0			
720.0	715.6	715.8	709.8	1.9	2.0	110.47	87.4	83.8	3.7	23.941	0			
750.0	744.9	745.9	739.0	2.0	2.1	109.72	91.7	87.8	3.9	23.434	0			
780.0	774.2	775.9	768.0	2.2	2.2	108.93	95.9	91.8	4.2	22.993	0			
800.0	793.6	795.9	787.3	2.2	2.3	108.39	98.8	94.4	4.3	22.730	0			SF

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



Mostar Directional Technologies Inc.

Anticollision Risk Report



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal PWD 21-6-91
Project:	Garfield County, CO	TVD Reference:	Actual KB @ 7030.0usft
Reference Site:	Pad 21A	MD Reference:	Actual KB @ 7030.0usft
Site Error:	0.0	North Reference:	True
Reference Well:	Federal PWD 21-6-91	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0	Output errors are at	2.00 sigma
Reference Wellbore	13-01-007	Database:	SRV-EDM_2011
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 0-Mostar MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision		
0.0	0.0	0.0	0.0	0.0	0.0	21.35	12.8				0		CC, ES	
30.0	30.0	30.0	30.0	0.0	0.0	21.35	12.8	12.8	0.0	362.933	0			
60.0	60.0	60.0	60.0	0.0	0.1	21.35	12.8	12.7	0.1	134.388	0			
90.0	90.0	90.0	90.0	0.1	0.1	21.35	12.8	12.7	0.2	82.461	0			
100.0	100.0	100.0	100.0	0.1	0.1	21.35	12.8	12.6	0.2	73.052	0			
120.0	120.0	120.0	120.0	0.1	0.1	21.35	12.8	12.5	0.3	48.289	0			
150.0	150.0	149.9	149.9	0.2	0.2	122.49	13.0	12.6	0.4	32.801	0		SF	
180.0	180.0	179.8	179.8	0.3	0.3	126.89	13.5	13.0	0.5	25.652	0			
200.0	200.0	199.7	199.7	0.3	0.3	131.06	14.2	13.6	0.6	23.001	0			
210.0	210.0	209.6	209.6	0.3	0.3	133.39	14.7	14.0	0.7	21.983	0			
240.0	240.0	239.4	239.3	0.4	0.4	140.85	16.5	15.6	0.8	20.198	0			
270.0	269.9	269.0	268.8	0.5	0.5	148.19	19.1	18.1	1.0	19.763	0			
300.0	299.9	298.5	298.3	0.5	0.6	154.66	22.6	21.5	1.1	19.953	0			
330.0	329.8	328.2	327.9	0.6	0.6	159.69	26.7	25.4	1.3	20.868	0			
360.0	359.7	358.1	357.6	0.7	0.7	163.39	31.1	29.6	1.4	21.984	0			
390.0	389.6	387.9	387.4	0.8	0.8	166.15	35.6	34.1	1.5	23.086	0			
400.0	399.6	397.9	397.3	0.8	0.8	166.92	37.1	35.6	1.6	23.445	0			
420.0	419.5	417.8	417.2	0.8	0.8	168.26	40.3	38.6	1.7	24.128	0			
450.0	449.3	447.7	447.0	0.9	0.9	169.89	45.1	43.3	1.8	25.114	0			
480.0	479.1	477.6	476.9	1.0	0.9	171.18	50.0	48.1	1.9	26.049	0			
500.0	498.9	497.6	496.9	1.1	1.0	171.89	53.4	51.4	2.0	26.644	0			
510.0	508.8	507.6	506.8	1.1	1.0	172.20	55.1	53.0	2.0	26.911	0			
540.0	538.5	537.5	536.8	1.2	1.1	173.03	60.2	58.0	2.2	27.680	0			
570.0	568.2	567.5	566.8	1.3	1.1	173.70	65.4	63.1	2.3	28.408	0			
600.0	597.8	597.6	596.8	1.4	1.2	174.25	70.8	68.3	2.4	29.098	0			
630.0	627.3	627.6	626.9	1.5	1.3	174.69	76.2	73.6	2.6	29.781	0			
660.0	656.8	657.6	656.8	1.6	1.3	175.05	81.7	79.0	2.7	30.381	0			
690.0	686.2	687.2	686.5	1.8	1.4	175.37	87.4	84.6	2.8	31.020	0			
700.0	696.0	697.3	696.6	1.8	1.4	175.47	89.4	86.5	2.9	31.223	0			
720.0	715.6	717.5	716.8	1.9	1.4	175.63	93.3	90.3	3.0	31.576	0			
750.0	744.9	748.0	747.2	2.0	1.5	175.82	99.1	96.1	3.1	32.080	0			

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



Mostar Directional Technologies Inc.

Anticollision Risk Report



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal PWD 21-6-91
Project:	Garfield County, CO	TVD Reference:	Actual KB @ 7030.0usft
Reference Site:	Pad 21A	MD Reference:	Actual KB @ 7030.0usft
Site Error:	0.0	North Reference:	True
Reference Well:	Federal PWD 21-6-91	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0	Output errors are at	2.00 sigma
Reference Wellbore	13-01-007	Database:	SRV-EDM_2011
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 0-Mostar MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision		
0.0	0.0	0.0	0.0	0.0	0.0	98.67	12.8							
30.0	30.0	30.0	30.0	0.0	0.0	98.67	12.8	12.8	0.0	362.911	0			
60.0	60.0	60.0	60.0	0.0	0.1	98.67	12.8	12.7	0.1	134.380	0			
90.0	90.0	90.0	90.0	0.1	0.1	98.67	12.8	12.7	0.2	82.456	0			
100.0	100.0	100.0	100.0	0.1	0.1	98.67	12.8	12.6	0.2	73.047	0			
120.0	120.0	120.0	120.0	0.1	0.1	98.67	12.8	12.5	0.3	48.286	0			
150.0	150.0	150.2	150.2	0.2	0.2	-161.60	12.7	12.3	0.4	31.981	0			
180.0	180.0	180.4	180.4	0.3	0.3	-161.14	12.5	12.0	0.5	23.672	0			
200.0	200.0	200.5	200.5	0.3	0.3	-160.65	12.3	11.7	0.6	20.051	0			
210.0	210.0	210.6	210.5	0.3	0.3	-160.34	12.2	11.5	0.7	18.435	0			
240.0	240.0	240.7	240.6	0.4	0.4	-159.13	11.6	10.9	0.8	14.626	0			
270.0	269.9	270.9	270.7	0.5	0.5	-157.41	11.0	10.1	0.9	11.823	0			
300.0	299.9	301.0	300.7	0.5	0.6	-155.03	10.2	9.2	1.1	9.627	0			
330.0	329.8	331.1	330.7	0.6	0.6	-151.73	9.4	8.2	1.2	7.731	0			
360.0	359.7	361.2	360.6	0.7	0.7	-147.08	8.4	7.0	1.4	6.168	0			
390.0	389.6	391.3	390.4	0.8	0.8	-140.42	7.4	5.9	1.5	4.861	0			
400.0	399.6	401.3	400.3	0.8	0.8	-137.58	7.1	5.5	1.6	4.476	0			
420.0	419.5	421.3	420.1	0.8	0.9	-130.69	6.4	4.7	1.7	3.763	0			
450.0	449.3	451.3	449.7	0.9	1.0	-116.56	5.7	3.7	1.9	2.934	0			
480.0	479.1	481.3	479.2	1.0	1.1	-97.68	5.3	3.2	2.2	2.464	0			
482.2	481.2	483.5	481.3	1.0	1.1	-96.19	5.3	3.1	2.2	2.447	0		CC, ES	
500.0	498.9	501.3	498.7	1.1	1.2	-83.75	5.4	3.2	2.3	2.383	0		SF	
510.0	508.8	511.2	508.5	1.1	1.3	-76.97	5.6	3.3	2.3	2.399	0			
540.0	538.5	541.1	537.7	1.2	1.4	-59.24	6.6	4.2	2.5	2.674	0			
570.0	568.2	570.9	566.8	1.3	1.5	-46.36	8.2	5.6	2.6	3.178	0			
600.0	597.8	600.7	595.7	1.4	1.7	-37.47	10.2	7.5	2.7	3.798	0			
630.0	627.3	630.5	624.4	1.5	1.8	-31.28	12.5	9.7	2.8	4.433	0			
660.0	656.8	660.2	653.0	1.6	2.0	-26.83	15.1	12.1	3.0	5.091	0			
690.0	686.2	689.8	681.4	1.8	2.1	-23.54	17.8	14.7	3.1	5.754	0			
700.0	696.0	700.0	691.1	1.8	2.2	-22.59	18.8	15.7	3.1	5.975	0			
720.0	715.6	719.3	709.6	1.9	2.3	-21.02	20.8	17.5	3.3	6.392	0			
750.0	744.9	748.8	737.5	2.0	2.5	-19.05	23.9	20.5	3.4	7.012	0			
780.0	774.2	778.3	765.3	2.2	2.7	-17.47	27.2	23.6	3.6	7.627	0			
800.0	793.6	797.9	783.7	2.2	2.8	-16.59	29.5	25.8	3.7	8.034	0			
810.0	803.3	807.6	792.9	2.3	2.9	-16.19	30.6	26.9	3.7	8.224	0			
840.0	832.4	836.9	820.2	2.5	3.1	-15.13	34.2	30.4	3.9	8.786	0			
870.0	861.5	866.2	847.3	2.6	3.4	-14.23	38.0	33.9	4.1	9.344	0			
900.0	890.4	895.3	874.2	2.8	3.6	-13.48	41.9	37.7	4.2	9.897	0			
930.0	919.3	924.4	900.8	2.9	3.8	-12.83	46.0	41.6	4.4	10.405	0			
960.0	948.0	953.3	927.1	3.1	4.1	-12.26	50.2	45.6	4.6	10.907	0			
990.0	976.7	982.2	953.2	3.3	4.3	-11.77	54.5	49.7	4.8	11.409	0			
995.1	981.5	987.1	957.6	3.3	4.4	-11.70	55.3	50.5	4.8	11.494	0			
1,000.0	986.2	991.9	961.9	3.3	4.4	-11.63	56.0	51.2	4.8	11.573	0			
1,020.0	1,005.3	1,011.0	979.1	3.5	4.6	-11.34	59.1	54.1	5.0	11.887	0			
1,050.0	1,033.9	1,039.7	1,004.6	3.6	4.9	-10.91	64.1	59.0	5.2	12.399	0			
1,080.0	1,062.5	1,068.2	1,029.7	3.8	5.1	-10.48	69.6	64.2	5.4	12.975	0			
1,100.0	1,081.6	1,087.1	1,046.3	3.9	5.3	-10.21	73.5	68.0	5.5	13.392	0			
1,110.0	1,091.1	1,097.2	1,055.1	4.0	5.4	-10.07	75.5	70.0	5.6	13.596	0			
1,140.0	1,119.7	1,125.9	1,080.1	4.2	5.7	-9.70	81.6	75.9	5.8	14.189	0			
1,170.0	1,148.4	1,155.3	1,105.7	4.4	6.0	-9.37	87.8	81.8	5.9	14.782	0			
1,200.0	1,177.0	1,184.6	1,131.3	4.6	6.3	-9.08	93.9	87.8	6.1	15.301	0			

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



Mostar Directional Technologies Inc.

Anticollision Risk Report



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal PWD 21-6-91
Project:	Garfield County, CO	TVD Reference:	Actual KB @ 7030.0usft
Reference Site:	Pad 21A	MD Reference:	Actual KB @ 7030.0usft
Site Error:	0.0	North Reference:	True
Reference Well:	Federal PWD 21-6-91	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0	Output errors are at	2.00 sigma
Reference Wellbore	13-01-007	Database:	SRV-EDM_2011
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 0-Mostar MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision		
0.0	0.0	0.0	0.0	0.0	0.0	118.00	18.9				0		CC, ES	
30.0	30.0	30.0	30.0	0.0	0.0	118.00	18.9	18.8	0.0	534.692	0			
60.0	60.0	60.0	60.0	0.0	0.1	118.00	18.9	18.8	0.1	197.987	0			
90.0	90.0	90.0	90.0	0.1	0.1	118.00	18.9	18.7	0.2	121.486	0			
100.0	100.0	100.0	100.0	0.1	0.1	118.00	18.9	18.7	0.2	107.624	0			
120.0	120.0	120.0	120.0	0.1	0.1	118.00	18.9	18.6	0.3	71.141	0			
150.0	150.0	149.9	149.9	0.2	0.2	-142.33	19.1	18.7	0.4	48.582	0			
180.0	180.0	179.7	179.7	0.3	0.3	-142.09	19.8	19.2	0.5	37.828	0			
200.0	200.0	199.6	199.6	0.3	0.3	-141.85	20.4	19.8	0.6	33.590	0			
210.0	210.0	209.6	209.6	0.3	0.3	-141.71	20.9	20.2	0.7	31.875	0			
240.0	240.0	239.4	239.4	0.4	0.4	-141.25	22.4	21.6	0.8	28.293	0			
270.0	269.9	269.2	269.1	0.5	0.5	-140.75	24.4	23.5	0.9	26.253	0		SF	
300.0	299.9	298.9	298.8	0.5	0.5	-140.23	26.8	25.8	1.1	25.160	0			
330.0	329.8	328.6	328.4	0.6	0.6	-139.72	29.7	28.5	1.2	24.429	0			
360.0	359.7	358.2	357.9	0.7	0.7	-139.24	33.0	31.6	1.4	24.165	0			
390.0	389.6	387.9	387.5	0.8	0.7	-138.77	36.7	35.2	1.5	24.189	0			
400.0	399.6	397.8	397.4	0.8	0.8	-138.60	38.0	36.4	1.6	24.231	0			
420.0	419.5	417.7	417.2	0.8	0.8	-138.24	40.7	39.0	1.7	24.316	0			
450.0	449.3	447.4	446.8	0.9	0.9	-137.67	44.8	43.0	1.8	24.505	0			
480.0	479.1	477.2	476.3	1.0	1.0	-137.07	49.1	47.2	2.0	24.752	0			
500.0	498.9	497.0	495.9	1.1	1.0	-136.66	52.1	50.1	2.1	24.959	0			
510.0	508.8	506.8	505.8	1.1	1.1	-136.46	53.7	51.5	2.1	25.010	0			
540.0	538.5	536.5	535.2	1.2	1.2	-135.84	58.4	56.1	2.3	25.166	0			
570.0	568.2	566.1	564.5	1.3	1.3	-135.22	63.4	60.9	2.5	25.391	0			
600.0	597.8	595.7	593.8	1.4	1.3	-134.61	68.6	65.9	2.7	25.670	0			
630.0	627.3	625.2	623.0	1.5	1.5	-134.01	74.0	71.1	2.9	25.793	0			
660.0	656.8	654.7	652.0	1.6	1.6	-133.42	79.5	76.5	3.1	25.980	0			
690.0	686.2	684.2	681.0	1.8	1.7	-132.84	85.3	82.1	3.3	26.175	0			
700.0	696.0	694.0	690.7	1.8	1.7	-132.65	87.3	84.0	3.3	26.241	0			
720.0	715.6	713.6	709.9	1.9	1.8	-132.28	91.3	87.9	3.5	26.297	0			
750.0	744.9	742.9	738.7	2.0	1.9	-131.73	97.6	93.9	3.7	26.394	0			

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



Mostar Directional Technologies Inc.

Anticollision Risk Report



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal PWD 21-6-91
Project:	Garfield County, CO	TVD Reference:	Actual KB @ 7030.0usft
Reference Site:	Pad 21A	MD Reference:	Actual KB @ 7030.0usft
Site Error:	0.0	North Reference:	True
Reference Well:	Federal PWD 21-6-91	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0	Output errors are at	2.00 sigma
Reference Wellbore	13-01-007	Database:	SRV-EDM_2011
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 145-Mostar MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision		
0.0	0.0	0.0	0.0	0.0	0.0	-29.99	16.0				0		CC ES	
30.0	30.0	30.0	30.0	0.0	0.0	-30.04	16.0	16.0	0.0	424.131	0			
60.0	60.0	60.0	60.0	0.0	0.1	-30.20	16.0	15.9	0.1	159.443	0			
90.0	90.0	90.0	90.0	0.1	0.1	-30.46	15.9	15.8	0.2	97.946	0			
100.0	100.0	100.0	100.0	0.1	0.1	-30.57	15.9	15.7	0.2	86.731	0			
120.0	120.0	120.0	120.0	0.1	0.1	-30.82	15.9	15.6	0.2	64.098	0			
150.0	150.0	150.0	150.0	0.2	0.1	68.84	15.7	15.4	0.3	45.453	0			
163.6	163.6	163.5	163.5	0.2	0.2	69.40	15.7	15.3	0.4	39.007	0			
180.0	180.0	179.8	179.8	0.3	0.2	70.64	15.7	15.3	0.5	33.481	0			
200.0	200.0	199.8	199.8	0.3	0.3	72.69	15.9	15.3	0.6	28.641	0			
210.0	210.0	209.7	209.7	0.3	0.3	73.88	15.9	15.3	0.6	26.701	0			
240.0	240.0	239.6	239.6	0.4	0.3	78.06	16.2	15.5	0.7	22.378	0		SF	
270.0	269.9	269.6	269.5	0.5	0.4	83.17	16.7	15.8	0.9	19.436	0			
300.0	299.9	299.5	299.4	0.5	0.5	88.75	17.3	16.3	1.0	17.440	0			
330.0	329.8	329.2	329.2	0.6	0.5	94.58	18.3	17.1	1.1	16.088	0			
360.0	359.7	359.1	359.1	0.7	0.6	101.13	19.6	18.3	1.3	15.343	0			
390.0	389.6	389.0	388.9	0.8	0.7	107.29	21.3	19.9	1.4	14.993	0			
400.0	399.6	399.0	398.9	0.8	0.7	109.01	21.9	20.4	1.5	14.937	0			
420.0	419.5	418.9	418.8	0.8	0.7	111.99	23.2	21.6	1.6	14.817	0			
450.0	449.3	448.7	448.6	0.9	0.8	115.80	25.3	23.6	1.7	14.782	0			
480.0	479.1	478.5	478.3	1.0	0.9	119.43	27.8	26.0	1.9	14.940	0			
500.0	498.9	498.3	498.0	1.1	0.9	121.79	29.7	27.7	2.0	15.143	0			
510.0	508.8	508.1	507.8	1.1	0.9	122.89	30.7	28.7	2.0	15.252	0			
540.0	538.5	538.6	538.3	1.2	1.0	125.89	33.7	31.5	2.2	15.546	0			
570.0	568.2	568.1	567.7	1.3	1.1	128.43	36.7	34.4	2.3	15.830	0			
600.0	597.8	598.0	597.5	1.4	1.1	130.59	40.1	37.6	2.5	16.201	0			
630.0	627.3	627.4	626.9	1.5	1.2	132.20	43.8	41.1	2.6	16.558	0			
660.0	656.8	657.4	656.7	1.6	1.3	133.69	47.8	45.0	2.8	16.997	0			
690.0	686.2	687.1	686.2	1.8	1.4	135.08	51.9	48.9	3.0	17.450	0			
700.0	696.0	696.9	696.0	1.8	1.4	135.49	53.3	50.3	3.0	17.606	0			
720.0	715.6	716.6	715.6	1.9	1.4	136.25	56.3	53.1	3.1	17.880	0			
750.0	744.9	746.8	745.6	2.0	1.5	137.31	60.8	57.5	3.3	18.306	0			
780.0	774.2	776.1	774.7	2.2	1.6	138.20	65.5	62.0	3.5	18.730	0			
800.0	793.6	795.4	793.9	2.2	1.6	138.66	68.9	65.3	3.6	19.047	0			
810.0	803.3	805.0	803.4	2.3	1.7	138.89	70.7	67.0	3.7	19.199	0			
840.0	832.4	833.9	832.0	2.5	1.8	139.53	76.4	72.5	3.9	19.707	0			
870.0	861.5	862.7	860.6	2.6	1.8	140.06	82.5	78.4	4.1	20.278	0			
900.0	890.4	891.4	889.0	2.8	1.9	140.48	89.1	84.8	4.3	20.903	0			
930.0	919.3	919.8	917.0	2.9	2.0	140.82	96.1	91.6	4.5	21.495	0			

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



Mostar Directional Technologies Inc.

Anticollision Risk Report



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal PWD 21-6-91
Project:	Garfield County, CO	TVD Reference:	Actual KB @ 7030.0usft
Reference Site:	Pad 21A	MD Reference:	Actual KB @ 7030.0usft
Site Error:	0.0	North Reference:	True
Reference Well:	Federal PWD 21-6-91	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0	Output errors are at	2.00 sigma
Reference Wellbore	13-01-007	Database:	SRV-EDM_2011
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 146-Mostar MWD													Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision		
0.0	0.0	0.0	0.0	0.0	0.0	-29.99	8.0				0		ES	
30.0	30.0	30.0	30.0	0.0	0.0	-30.08	8.0	8.0	0.0	212.689	0			
60.0	60.0	60.0	60.0	0.0	0.1	-30.34	8.1	8.0	0.1	80.618	0			
90.0	90.0	90.0	90.0	0.1	0.1	-30.76	8.2	8.0	0.2	50.209	0			
100.0	100.0	100.0	100.0	0.1	0.1	-30.93	8.2	8.0	0.2	44.718	0			
120.0	120.0	120.0	120.0	0.1	0.1	-31.33	8.3	8.0	0.2	33.492	0			
150.0	150.0	149.9	149.9	0.2	0.1	68.50	8.4	8.0	0.3	24.284	0		SF	
180.0	180.0	179.9	179.9	0.3	0.2	69.11	8.6	8.1	0.5	17.910	0			
200.0	200.0	199.9	199.9	0.3	0.3	69.69	8.7	8.1	0.6	15.341	0			
210.0	210.0	209.9	209.8	0.3	0.3	70.13	8.7	8.1	0.6	14.288	0			
240.0	240.0	239.8	239.7	0.4	0.4	71.34	9.0	8.2	0.7	12.022	0			
270.0	269.9	269.7	269.6	0.5	0.4	72.21	9.4	8.6	0.9	10.655	0			
300.0	299.9	299.6	299.4	0.5	0.5	72.29	10.1	9.0	1.0	9.798	0			
330.0	329.8	329.4	329.2	0.6	0.6	70.63	10.9	9.8	1.2	9.258	0			
360.0	359.7	359.3	358.8	0.7	0.7	67.20	12.1	10.8	1.3	9.063	0			
390.0	389.6	389.1	388.4	0.8	0.8	63.33	13.5	12.0	1.5	9.018	0			
400.0	399.6	399.0	398.2	0.8	0.8	62.11	14.0	12.5	1.6	9.037	0			
420.0	419.5	418.9	417.8	0.8	0.9	59.77	15.1	13.5	1.7	9.088	0			
450.0	449.3	448.7	447.1	0.9	1.0	56.54	16.9	15.1	1.8	9.257	0			
480.0	479.1	478.4	476.3	1.0	1.1	53.84	18.9	16.9	2.0	9.471	0			
500.0	498.9	498.1	495.7	1.1	1.2	52.38	20.4	18.3	2.1	9.665	0			
510.0	508.8	508.0	505.3	1.1	1.2	51.74	21.2	19.0	2.2	9.760	0			
540.0	538.5	538.0	534.6	1.2	1.3	50.11	23.7	21.4	2.4	10.085	0			
570.0	568.2	567.2	563.0	1.3	1.5	48.82	26.4	23.9	2.5	10.401	0			
600.0	597.8	596.7	591.7	1.4	1.6	47.67	29.2	26.5	2.7	10.738	0			
630.0	627.3	626.2	620.2	1.5	1.7	46.66	32.2	29.3	2.9	11.057	0			
660.0	656.8	655.5	648.4	1.6	1.9	45.61	35.4	32.3	3.1	11.352	0			
690.0	686.2	684.7	676.3	1.8	2.1	44.37	38.8	35.5	3.3	11.710	0			
700.0	696.0	694.5	685.5	1.8	2.1	43.93	40.0	36.7	3.4	11.843	0			
720.0	715.6	713.9	703.9	1.9	2.3	43.01	42.5	39.0	3.5	12.105	0			
750.0	744.9	743.2	731.6	2.0	2.5	41.65	46.4	42.7	3.7	12.475	0			
780.0	774.2	772.7	759.3	2.2	2.7	40.46	50.2	46.3	3.9	12.797	0			
800.0	793.6	792.3	777.7	2.2	2.8	39.75	52.8	48.7	4.1	12.991	0			
810.0	803.3	802.1	786.9	2.3	2.9	39.42	54.0	49.9	4.1	13.070	0			
840.0	832.4	831.3	814.1	2.5	3.1	38.49	57.8	53.5	4.4	13.276	0			
870.0	861.5	860.3	841.0	2.6	3.3	37.55	61.7	57.1	4.6	13.496	0			
900.0	890.4	889.2	867.7	2.8	3.5	36.61	65.8	61.0	4.8	13.746	0			
930.0	919.3	918.1	894.1	2.9	3.8	35.67	69.9	64.9	5.0	13.954	0			
960.0	948.0	946.9	920.2	3.1	4.0	34.75	74.2	69.0	5.2	14.167	0			
990.0	976.7	975.6	946.1	3.3	4.3	33.86	78.7	73.2	5.5	14.409	0			
995.1	981.5	980.4	950.5	3.3	4.3	33.71	79.4	73.9	5.5	14.453	0			
1,000.0	986.2	985.1	954.7	3.3	4.4	33.57	80.2	74.6	5.5	14.492	0			
1,020.0	1,005.3	1,004.3	971.9	3.5	4.5	32.99	83.3	77.6	5.7	14.650	0			
1,050.0	1,033.9	1,033.0	997.5	3.6	4.8	32.14	88.2	82.3	5.9	14.919	0			
1,080.0	1,062.5	1,061.7	1,022.9	3.8	5.1	31.33	93.5	87.4	6.1	15.224	0			
1,100.0	1,081.6	1,080.7	1,039.6	3.9	5.3	30.81	97.2	90.9	6.3	15.446	0			
1,110.0	1,091.1	1,090.2	1,048.0	4.0	5.4	30.55	99.0	92.7	6.4	15.555	0			

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



Mostar Directional Technologies Inc.

Anticollision Risk Report



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal PWD 21-6-91
Project:	Garfield County, CO	TVD Reference:	Actual KB @ 7030.0usft
Reference Site:	Pad 21A	MD Reference:	Actual KB @ 7030.0usft
Site Error:	0.0	North Reference:	True
Reference Well:	Federal PWD 21-6-91	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0	Output errors are at	2.00 sigma
Reference Wellbore	13-01-007	Database:	SRV-EDM_2011
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 146-Mostar MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision		
0.0	0.0	0.0	0.0	0.0	0.0	143.63	7.8				0			
30.0	30.0	30.0	30.0	0.0	0.0	143.88	7.8	7.7	0.0	202.331	0			
60.0	60.0	60.0	60.0	0.0	0.1	144.67	7.7	7.6	0.1	75.533	0			
90.0	90.0	90.0	90.0	0.1	0.1	146.02	7.5	7.3	0.2	45.610	0			
100.0	100.0	100.1	100.1	0.1	0.1	146.61	7.4	7.3	0.2	40.089	0			
120.0	120.0	120.1	120.1	0.1	0.1	148.00	7.3	7.0	0.3	29.152	0			
150.0	150.0	150.1	150.1	0.2	0.2	-110.88	7.1	6.7	0.3	20.428	0			
176.4	176.4	176.4	176.4	0.3	0.2	-110.49	7.0	6.6	0.5	15.208	0		CC	
180.0	180.0	180.0	180.0	0.3	0.2	-110.49	7.0	6.5	0.5	14.718	0		ES	
200.0	200.0	200.0	200.0	0.3	0.3	-110.63	7.2	6.6	0.6	12.696	0			
210.0	210.0	210.0	210.0	0.3	0.3	-110.82	7.3	6.7	0.6	12.003	0			
240.0	240.0	239.9	239.9	0.4	0.3	-113.82	7.9	7.2	0.7	10.701	0			
270.0	269.9	269.9	269.8	0.5	0.4	-118.74	8.8	8.0	0.9	10.161	0			
300.0	299.9	299.7	299.7	0.5	0.5	-123.93	10.2	9.2	1.0	10.153	0		SF	
330.0	329.8	329.6	329.6	0.6	0.5	-128.20	12.0	10.9	1.2	10.445	0			
360.0	359.7	359.5	359.4	0.7	0.6	-131.75	14.2	12.9	1.3	10.955	0			
390.0	389.6	389.5	389.4	0.8	0.7	-135.10	16.6	15.1	1.4	11.541	0			
400.0	399.6	399.5	399.3	0.8	0.7	-136.10	17.4	15.9	1.5	11.734	0			
420.0	419.5	419.4	419.2	0.8	0.7	-137.71	19.1	17.5	1.6	12.110	0			
450.0	449.3	449.1	449.0	0.9	0.8	-139.64	21.9	20.2	1.7	12.718	0			
480.0	479.1	478.9	478.7	1.0	0.9	-141.50	25.1	23.3	1.9	13.438	0			
500.0	498.9	498.7	498.5	1.1	0.9	-142.71	27.5	25.5	2.0	13.964	0			
510.0	508.8	508.6	508.3	1.1	0.9	-143.27	28.7	26.7	2.0	14.227	0			
540.0	538.5	538.6	538.2	1.2	1.0	-144.50	32.5	30.3	2.2	14.970	0			
570.0	568.2	568.8	568.4	1.3	1.1	-145.06	36.2	33.9	2.3	15.612	0			
600.0	597.8	598.7	598.2	1.4	1.2	-145.30	39.9	37.5	2.5	16.155	0			
630.0	627.3	628.5	627.9	1.5	1.2	-145.37	43.9	41.2	2.6	16.611	0			
660.0	656.8	658.3	657.5	1.6	1.3	-145.26	48.0	45.2	2.8	17.045	0			
690.0	686.2	688.1	687.1	1.8	1.4	-145.10	52.3	49.3	3.0	17.495	0			
700.0	696.0	698.0	696.9	1.8	1.4	-145.04	53.8	50.8	3.0	17.648	0			
720.0	715.6	717.8	716.6	1.9	1.5	-144.90	56.9	53.7	3.2	17.925	0			
750.0	744.9	747.9	746.4	2.0	1.6	-144.74	61.5	58.2	3.4	18.329	0			
780.0	774.2	778.0	776.3	2.2	1.7	-144.74	66.2	62.7	3.5	18.702	0			
800.0	793.6	798.1	796.2	2.2	1.7	-144.80	69.4	65.7	3.7	18.937	0			
810.0	803.3	808.2	806.2	2.3	1.8	-144.85	70.9	67.2	3.7	19.034	0			
840.0	832.4	837.7	835.4	2.5	1.8	-145.02	75.8	71.9	3.9	19.332	0			
870.0	861.5	867.2	864.6	2.6	1.9	-145.18	80.9	76.8	4.1	19.675	0			
900.0	890.4	896.5	893.6	2.8	2.0	-145.33	86.4	82.1	4.3	20.061	0			
930.0	919.3	926.1	922.9	2.9	2.1	-145.48	92.1	87.6	4.5	20.390	0			
960.0	948.0	955.7	952.2	3.1	2.2	-145.63	98.0	93.3	4.7	20.727	0			

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



Mostar Directional Technologies Inc.

Anticollision Risk Report



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal PWD 21-6-91
Project:	Garfield County, CO	TVD Reference:	Actual KB @ 7030.0usft
Reference Site:	Pad 21A	MD Reference:	Actual KB @ 7030.0usft
Site Error:	0.0	North Reference:	True
Reference Well:	Federal PWD 21-6-91	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0	Output errors are at	2.00 sigma
Reference Wellbore	13-01-007	Database:	SRV-EDM_2011
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 134-Mostar MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision		
0.0	0.0	8.0	0.0	0.0	0.0	146.87	15.8				0		ES	
30.0	30.0	38.0	30.0	0.0	0.0	147.17	15.8	15.7	0.0	362.413	0			
60.0	60.0	67.9	59.9	0.0	0.1	147.83	15.9	15.8	0.1	151.788	0			
90.0	90.0	97.9	89.9	0.1	0.1	148.86	16.0	15.8	0.2	96.675	0			
100.0	100.0	107.9	99.9	0.1	0.1	149.28	16.1	15.9	0.2	86.407	0			
120.0	120.0	127.9	119.9	0.1	0.1	150.24	16.2	15.9	0.2	65.033	0			
150.0	150.0	157.9	149.9	0.2	0.2	-108.63	16.4	16.1	0.4	44.212	0			
180.0	180.0	188.0	179.9	0.3	0.2	-106.67	16.7	16.2	0.5	33.136	0			
200.0	200.0	208.0	199.9	0.3	0.3	-105.15	16.9	16.3	0.6	28.391	0			
210.0	210.0	218.0	209.9	0.3	0.3	-104.34	17.0	16.4	0.6	26.458	0			
240.0	240.0	248.0	239.9	0.4	0.4	-101.68	17.4	16.6	0.8	22.133	0			
270.0	269.9	278.0	269.8	0.5	0.5	-98.74	17.8	16.8	0.9	19.191	0		SF	
300.0	299.9	308.0	299.6	0.5	0.6	-95.43	18.3	17.2	1.1	16.956	0			
330.0	329.8	337.9	329.3	0.6	0.6	-91.54	19.0	17.7	1.2	15.288	0			
360.0	359.7	367.7	358.9	0.7	0.7	-87.22	19.9	18.5	1.4	14.198	0			
390.0	389.6	397.5	388.4	0.8	0.8	-82.77	21.1	19.5	1.6	13.418	0			
400.0	399.6	407.5	398.2	0.8	0.9	-81.33	21.6	19.9	1.6	13.219	0			
420.0	419.5	427.3	417.8	0.8	0.9	-78.56	22.6	20.8	1.8	12.864	0			
450.0	449.3	457.1	447.1	0.9	1.1	-74.68	24.2	22.3	1.9	12.542	0			
480.0	479.1	486.8	476.3	1.0	1.2	-71.12	26.1	24.0	2.1	12.342	0			
500.0	498.9	506.7	495.7	1.1	1.3	-68.89	27.5	25.2	2.2	12.266	0			
510.0	508.8	516.6	505.4	1.1	1.3	-67.80	28.2	25.9	2.3	12.227	0		SF	
540.0	538.5	546.2	534.3	1.2	1.4	-64.72	30.4	27.9	2.5	12.191	0			
570.0	568.2	575.8	563.0	1.3	1.6	-61.90	32.8	30.1	2.7	12.213	0			
600.0	597.8	605.3	591.6	1.4	1.7	-59.51	35.4	32.5	2.9	12.306	0			
630.0	627.3	634.7	620.0	1.5	1.9	-57.53	38.3	35.2	3.1	12.426	0			
660.0	656.8	664.1	648.3	1.6	2.0	-55.86	41.3	38.0	3.3	12.572	0			
690.0	686.2	693.5	676.4	1.8	2.2	-54.32	44.5	41.0	3.5	12.736	0			
700.0	696.0	703.3	685.7	1.8	2.3	-53.82	45.6	42.0	3.6	12.800	0			
720.0	715.6	722.9	704.4	1.9	2.4	-52.86	47.8	44.1	3.7	12.909	0			
750.0	744.9	752.1	732.1	2.0	2.6	-51.48	51.3	47.4	3.9	13.081	0			
780.0	774.2	781.2	759.6	2.2	2.8	-50.20	55.0	50.8	4.1	13.257	0		SF	
800.0	793.6	800.6	777.8	2.2	2.9	-49.39	57.5	53.2	4.3	13.398	0			
810.0	803.3	810.3	786.8	2.3	3.0	-48.99	58.8	54.4	4.4	13.460	0			
840.0	832.4	839.3	813.8	2.5	3.2	-47.87	62.7	58.2	4.6	13.658	0			
870.0	861.5	868.1	840.5	2.6	3.4	-46.88	66.9	62.1	4.8	13.850	0			
900.0	890.4	896.9	867.0	2.8	3.6	-46.03	71.3	66.2	5.1	14.071	0			
930.0	919.3	925.6	893.3	2.9	3.9	-45.30	75.8	70.5	5.3	14.272	0			
960.0	948.0	954.6	919.7	3.1	4.1	-44.67	80.5	74.9	5.6	14.438	0			
990.0	976.7	983.6	946.0	3.3	4.4	-44.16	85.1	79.3	5.8	14.595	0			
995.1	981.5	988.5	950.4	3.3	4.4	-44.08	85.9	80.1	5.9	14.621	0			
1,000.0	986.2	993.2	954.7	3.3	4.5	-44.02	86.7	80.8	5.9	14.641	0		SF	
1,020.0	1,005.3	1,012.5	972.1	3.5	4.6	-43.75	89.9	83.8	6.1	14.732	0			
1,050.0	1,033.9	1,041.7	998.4	3.6	4.9	-43.32	94.8	88.4	6.4	14.857	0			
1,080.0	1,062.5	1,071.0	1,024.7	3.8	5.2	-42.91	99.9	93.2	6.7	15.010	0			

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

FORMATION TOP DETAILS

VDPPath	MDPath	Formation
4455.0	4577.0	Mesaverde/Williams Fork

REFERENCE INFORMATION

Magnetic Declination - 9.85°
Magnetic Dip Angle - 65.76°
Field Strength - 52064
Geodetic System - US State Plane 1983
Geodetic Datum - North American Datum 1983
Map Zone - Colorado Central Zone
Est.KB Elevation - Actual KB @ 7030.0usft
Ground Level - 7008.0
Site Northing - 1616692.52
Site Easting - 2419922.52

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
WC 10/11-14-21	0.0	11.9	4.7	Point
WC 10/11-15-21	0.0	-1.9	12.7	Point
WC 6/7-14-21	0.0	6.9	-4.0	Point
WC PWD 21-6-91	0.0	0.0	0.0	Point
Target PWD	3992.0	-149.2	-884.0	Circle (Radius: 100.0)

