



DIRECTIONAL TECHNOLOGIES INC.

Mostar Directional Technologies Inc.

610, 736 - 8 Ave. S.W.

Calgary, AB T2P 1H4

Tel: 403.279.5577

www.mostardirectional.com

Dejour Energy (USA) Corp.

Garfield County Co

Pad 21A

Federal 6/7-16-21

12-05-048

As Drilled Surveys Sept 23/2012

License:

UWI:

Survey Report

24 September, 2012



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal 6/7-16-21
Project:	Garfield County Co	TVD Reference:	Actual KB @ 7038.0usft
Site:	Pad 21A	MD Reference:	Actual KB @ 7038.0usft
Well:	Federal 6/7-16-21	North Reference:	True
Wellbore:	12-05-048	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled Surveys Sept 23/2012	Database:	SRV-EDM_2011

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 6/7-16-21		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	12-05-048	Well UWI		License	
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/29/2012	10.02	65.80	52,200

Design	As Drilled Surveys Sept 23/2012				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	247.59	

Survey Program	Date	9/24/2012			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
134.0	8,436.0	As Drilled Surveys Sept 23/2012 (12-05-048)	Mostar MWD	MWD - Standard	

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	7,038.00	0.0	0.0	0.0	0.00	0.00	0.00
Actual KOP										
104.0	0.75	214.10	104.0	6,934.00	-0.6	-0.4	0.6	0.72	0.72	0.00
134.0	0.97	214.10	134.0	6,904.01	-0.9	-0.6	0.9	0.72	0.72	0.00
195.0	2.55	239.59	195.0	6,843.04	-2.1	-2.1	2.7	2.83	2.59	41.79
286.0	5.01	247.68	285.8	6,752.24	-4.6	-7.5	8.7	2.76	2.70	8.89
377.0	8.44	246.62	376.1	6,661.88	-8.7	-17.3	19.4	3.77	3.77	-1.16
468.0	10.99	246.80	465.8	6,572.19	-14.8	-31.4	34.7	2.80	2.80	0.20
559.0	13.63	248.91	554.7	6,483.29	-22.1	-49.4	54.1	2.94	2.90	2.32
649.0	15.92	246.80	641.7	6,396.27	-30.8	-70.7	77.0	2.61	2.54	-2.34



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal 6/7-16-21
Project:	Garfield County Co	TVD Reference:	Actual KB @ 7038.0usft
Site:	Pad 21A	MD Reference:	Actual KB @ 7038.0usft
Well:	Federal 6/7-16-21	North Reference:	True
Wellbore:	12-05-048	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled Surveys Sept 23/2012	Database:	SRV-EDM_2011

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)
741.0	18.64	248.20	729.6	6,308.43	-41.2	-95.9	104.4	2.99	2.96	1.52
832.0	21.46	248.73	815.0	6,222.96	-52.6	-124.9	135.6	3.11	3.10	0.58
923.0	24.09	247.68	898.9	6,139.06	-65.7	-157.6	170.8	2.92	2.89	-1.15
1,015.0	25.77	247.68	982.4	6,055.63	-80.5	-193.5	209.6	1.83	1.83	0.00
1,108.0	26.47	247.50	1,065.9	5,972.13	-96.1	-231.3	250.5	0.76	0.75	-0.19
1,197.0	26.47	246.62	1,145.5	5,892.46	-111.5	-267.9	290.2	0.44	0.00	-0.99
Actual SFC										
1,246.0	27.01	246.71	1,189.3	5,848.70	-120.3	-288.1	312.2	1.11	1.11	0.19
1,292.0	27.52	246.80	1,230.2	5,807.81	-128.6	-307.5	333.3	1.11	1.11	0.19
1,385.0	25.77	248.56	1,313.3	5,724.69	-144.4	-346.1	375.0	2.06	-1.88	1.89
1,448.0	25.85	245.22	1,370.0	5,667.97	-155.2	-371.3	402.4	2.31	0.13	-5.30
1,511.0	26.73	244.16	1,426.5	5,611.49	-167.1	-396.5	430.3	1.58	1.40	-1.68
1,573.0	27.00	243.28	1,481.8	5,556.18	-179.5	-421.6	458.2	0.78	0.44	-1.42
1,666.0	26.82	244.34	1,564.7	5,473.25	-198.1	-459.4	500.2	0.55	-0.19	1.14
1,760.0	26.52	248.03	1,648.8	5,389.25	-215.2	-498.0	542.4	1.79	-0.32	3.93
1,852.0	27.08	247.68	1,730.9	5,307.13	-230.8	-536.4	583.9	0.63	0.61	-0.38
1,944.0	27.00	244.88	1,812.8	5,225.18	-247.6	-574.7	625.7	1.39	-0.09	-3.04
2,037.0	27.43	244.88	1,895.5	5,142.48	-265.7	-613.2	668.2	0.46	0.46	0.00
2,130.0	27.88	247.85	1,977.9	5,060.10	-283.0	-652.7	711.3	1.56	0.48	3.19
2,223.0	27.17	248.56	2,060.4	4,977.63	-298.9	-692.6	754.3	0.84	-0.76	0.76
2,316.0	27.88	247.85	2,142.8	4,895.15	-314.9	-732.5	797.2	0.84	0.76	-0.76
2,410.0	26.20	249.43	2,226.6	4,811.43	-330.5	-772.3	840.0	1.94	-1.79	1.68
2,503.0	27.17	249.43	2,309.7	4,728.34	-345.1	-811.4	881.7	1.04	1.04	0.00
2,596.0	25.59	248.38	2,393.0	4,645.02	-360.0	-850.0	923.0	1.77	-1.70	-1.13
2,689.0	26.56	248.91	2,476.5	4,561.49	-374.9	-888.0	963.9	1.07	1.04	0.57
2,783.0	25.06	248.38	2,561.1	4,476.87	-389.8	-926.2	1,004.8	1.61	-1.60	-0.56
2,876.0	24.45	246.62	2,645.6	4,392.41	-404.7	-962.1	1,043.7	1.03	-0.66	-1.89
2,968.0	24.01	246.45	2,729.5	4,308.52	-419.7	-996.8	1,081.5	0.48	-0.48	-0.18
3,062.0	22.95	246.45	2,815.7	4,222.30	-434.7	-1,031.1	1,118.9	1.13	-1.13	0.00
3,155.0	22.69	244.69	2,901.4	4,136.58	-449.6	-1,063.9	1,155.0	0.79	-0.28	-1.89
3,248.0	22.34	246.80	2,987.3	4,050.67	-464.2	-1,096.4	1,190.6	0.95	-0.38	2.27
3,342.0	23.83	246.27	3,073.8	3,964.20	-478.9	-1,130.2	1,227.4	1.60	1.59	-0.56
3,435.0	22.86	246.27	3,159.2	3,878.81	-493.7	-1,163.9	1,264.3	1.04	-1.04	0.00
3,530.0	21.46	248.38	3,247.2	3,790.83	-507.6	-1,197.0	1,300.1	1.69	-1.47	2.22
3,621.0	22.25	249.08	3,331.6	3,706.37	-519.8	-1,228.6	1,334.0	0.91	0.87	0.77
3,715.0	20.40	246.62	3,419.2	3,618.81	-532.7	-1,260.2	1,368.1	2.19	-1.97	-2.62
3,807.0	19.17	248.56	3,505.8	3,532.24	-544.6	-1,289.0	1,399.3	1.52	-1.34	2.11
3,900.0	19.43	249.08	3,593.5	3,444.47	-555.7	-1,317.7	1,430.0	0.34	0.28	0.56
3,994.0	19.08	247.33	3,682.3	3,355.73	-567.2	-1,346.4	1,461.0	0.72	-0.37	-1.86
4,086.0	17.15	249.08	3,769.7	3,268.29	-577.8	-1,373.0	1,489.6	2.18	-2.10	1.90
4,181.0	16.00	246.97	3,860.8	3,177.24	-588.0	-1,398.1	1,516.7	1.37	-1.21	-2.22
4,274.0	14.60	250.31	3,950.5	3,087.53	-596.9	-1,421.0	1,541.2	1.78	-1.51	3.59



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal 6/7-16-21
Project:	Garfield County Co	TVD Reference:	Actual KB @ 7038.0usft
Site:	Pad 21A	MD Reference:	Actual KB @ 7038.0usft
Well:	Federal 6/7-16-21	North Reference:	True
Wellbore:	12-05-048	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled Surveys Sept 23/2012	Database:	SRV-EDM_2011

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)
4,367.0	13.45	245.92	4,040.7	2,997.31	-605.3	-1,441.9	1,563.7	1.68	-1.24	-4.72
4,460.0	11.96	248.03	4,131.4	2,906.59	-613.3	-1,460.7	1,584.2	1.68	-1.60	2.27
4,553.0	10.11	245.74	4,222.7	2,815.31	-620.3	-1,477.1	1,602.0	2.04	-1.99	-2.46
4,647.0	9.06	246.09	4,315.4	2,722.62	-626.6	-1,491.4	1,617.6	1.12	-1.12	0.37
4,740.0	7.21	241.52	4,407.4	2,630.56	-632.4	-1,503.2	1,630.7	2.11	-1.99	-4.91
4,833.0	7.74	241.35	4,499.6	2,538.35	-638.2	-1,513.8	1,642.8	0.57	0.57	-0.18
4,926.0	5.98	241.17	4,592.0	2,446.02	-643.5	-1,523.5	1,653.8	1.89	-1.89	-0.19
5,020.0	5.63	243.46	4,685.5	2,352.50	-647.9	-1,532.0	1,663.3	0.45	-0.37	2.44
5,113.0	4.31	248.56	4,778.1	2,259.85	-651.3	-1,539.3	1,671.3	1.50	-1.42	5.48
5,206.0	2.90	254.88	4,871.0	2,167.04	-653.2	-1,544.8	1,677.2	1.57	-1.52	6.80
5,299.0	2.64	251.19	4,963.9	2,074.15	-654.5	-1,549.1	1,681.6	0.34	-0.28	-3.97
5,392.0	2.55	256.64	5,056.8	1,981.24	-655.6	-1,553.2	1,685.8	0.28	-0.10	5.86
5,485.0	2.29	260.33	5,149.7	1,888.33	-656.4	-1,557.0	1,689.7	0.33	-0.28	3.97
5,578.0	2.20	258.40	5,242.6	1,795.40	-657.1	-1,560.6	1,693.2	0.13	-0.10	-2.08
5,671.0	1.94	268.42	5,335.5	1,702.46	-657.5	-1,563.9	1,696.4	0.48	-0.28	10.77
5,765.0	1.67	268.42	5,429.5	1,608.51	-657.6	-1,566.9	1,699.2	0.29	-0.29	0.00
5,858.0	1.14	260.51	5,522.5	1,515.53	-657.8	-1,569.1	1,701.4	0.61	-0.57	-8.51
5,952.0	1.23	255.21	5,616.4	1,421.55	-658.2	-1,571.0	1,703.3	0.15	0.10	-5.64
6,044.0	1.05	246.45	5,708.4	1,329.57	-658.8	-1,572.8	1,705.1	0.27	-0.20	-9.52
6,138.0	0.88	249.43	5,802.4	1,235.59	-659.4	-1,574.2	1,706.7	0.19	-0.18	3.17
6,231.0	0.97	239.42	5,895.4	1,142.60	-660.0	-1,575.6	1,708.2	0.20	0.10	-10.76
6,324.0	0.79	239.94	5,988.4	1,049.61	-660.7	-1,576.8	1,709.6	0.19	-0.19	0.56
6,417.0	0.79	244.59	6,081.4	956.62	-661.3	-1,577.9	1,710.9	0.07	0.00	5.00
6,510.0	1.14	240.82	6,174.4	863.63	-662.1	-1,579.3	1,712.4	0.38	0.38	-4.05
6,603.0	0.70	301.99	6,267.4	770.64	-662.2	-1,580.6	1,713.7	1.09	-0.47	65.77
6,696.0	0.88	292.85	6,360.4	677.65	-661.6	-1,581.7	1,714.5	0.24	0.19	-9.83
6,789.0	0.97	30.41	6,453.3	584.66	-660.7	-1,582.0	1,714.4	1.50	0.10	104.90
6,882.0	0.79	28.65	6,546.3	491.67	-659.4	-1,581.3	1,713.3	0.20	-0.19	-1.89
6,975.0	0.88	26.72	6,639.3	398.68	-658.2	-1,580.7	1,712.2	0.10	0.10	-2.08
7,068.0	0.26	347.34	6,732.3	305.68	-657.4	-1,580.4	1,711.7	0.75	-0.67	-42.34
7,161.0	2.11	343.65	6,825.3	212.71	-655.5	-1,580.9	1,711.4	1.99	1.99	-3.97
7,254.0	2.46	341.19	6,918.2	119.78	-652.0	-1,582.1	1,711.1	0.39	0.38	-2.65
7,347.0	2.29	337.15	7,011.1	26.86	-648.4	-1,583.4	1,711.0	0.26	-0.18	-4.34
7,441.0	2.37	334.16	7,105.1	-67.06	-644.9	-1,585.0	1,711.2	0.15	0.09	-3.18
7,534.0	2.55	343.83	7,198.0	-159.98	-641.2	-1,586.4	1,711.0	0.49	0.19	10.40
7,627.0	2.37	343.30	7,290.9	-252.89	-637.4	-1,587.5	1,710.6	0.20	-0.19	-0.57
7,720.0	2.55	341.37	7,383.8	-345.80	-633.6	-1,588.7	1,710.3	0.21	0.19	-2.08
7,811.0	2.29	345.76	7,474.7	-436.72	-629.9	-1,589.8	1,709.9	0.35	-0.29	4.82
7,906.0	2.46	346.29	7,569.6	-531.64	-626.1	-1,590.8	1,709.3	0.18	0.18	0.56
8,000.0	2.46	350.51	7,663.6	-625.56	-622.1	-1,591.6	1,708.6	0.19	0.00	4.49
8,093.0	2.37	351.21	7,756.5	-718.47	-618.3	-1,592.2	1,707.7	0.10	-0.10	0.75
8,186.0	2.11	348.05	7,849.4	-811.40	-614.7	-1,592.9	1,706.9	0.31	-0.28	-3.40
8,279.0	2.29	337.32	7,942.3	-904.33	-611.3	-1,593.9	1,706.6	0.48	0.19	-11.54



Company:	Dejour Energy (USA) Corp.	Local Co-ordinate Reference:	Well Federal 6/7-16-21
Project:	Garfield County Co	TVD Reference:	Actual KB @ 7038.0usft
Site:	Pad 21A	MD Reference:	Actual KB @ 7038.0usft
Well:	Federal 6/7-16-21	North Reference:	True
Wellbore:	12-05-048	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled Surveys Sept 23/2012	Database:	SRV-EDM_2011

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)
8,372.0	2.29	341.02	8,035.3	-997.26	-607.8	-1,595.3	1,706.5	0.16	0.00	3.98
8,391.0	2.11	341.72	8,054.2	-1,016.25	-607.1	-1,595.5	1,706.5	0.96	-0.95	3.68
Extrapolation to TD										
8,436.0	2.11	341.72	8,099.2	-1,061.21	-605.6	-1,596.0	1,706.3	0.00	0.00	0.00

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,246.0	1,189.3	Actual SFC	0	0

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
104.0	104.0	-0.6	-0.4	Actual KOP
8,436.0	8,099.2	-605.6	-1,596.0	Extrapolation to TD

REFERENCE INFORMATION
Magnetic Declination - 10.02°
Magnetic Dip Angle - 65.80°
Field Strength - 52200
Geodetic System - US State Plane 1983
Geodetic Datum - North American Datum 1983
Map Zone - Colorado Central Zone
Est.KB Elevation - Actual KB @ 7038.0usft
Ground Level - 7008.0
Site Northing - 1616692.52
Site Easting - 2419922.52

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
WC 6/7-13-21	10.0	27.1	-16.6	Point
WC 6/7-14-21	10.0	20.1	-12.6	Point
WC 6/7-15-21	10.0	6.9	-4.0	Point
WC 6/7-16-21	10.0	0.0	0.0	Point
Target 6/7-16-21	4463.0	-639.5	-1550.7	Rectangle (Sides: L160.0 W200.0)
TGT New	4900.0	-639.5	-1550.7	Point

