



DIRECTIONAL TECHNOLOGIES INC.

Mostar Directional Technologies Inc.
610, 736 - 8 Ave. S.W.
Calgary, AB T2P 1H4
Tel: 403.279.5577
www.mostardirectional.com

Fram Exploration

Mesa County (NAD 83)
SEC.25 TWP.2S RGE.2E
Whiting #25-1-J
14-03-009

Plan #1

Planning Report

10 March, 2014





Mostar Directional Technologies Inc.

Planning Report



Database:	SRV-EDM_2011	Local Co-ordinate Reference:	Well Whiting #25-1-J
Company:	Fram Exploration	TVD Reference:	Est KB @ 5555.0usft
Project:	Mesa County (NAD 83)	MD Reference:	Est KB @ 5555.0usft
Site:	SEC.25 TWP.2S RGE.2E	North Reference:	True
Well:	Whiting #25-1-J	Survey Calculation Method:	Minimum Curvature
Wellbore:	14-03-009		
Design:	Plan #1		

Project	Mesa County (NAD 83)		
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		SEC.25 TWP.2S RGE.2E			
Site Position:		Northing:	1,423,234.81 usft	Latitude:	38° 57' 40.032 N
From:	Lat/Long	Easting:	2,196,482.84 usft	Longitude:	108° 19' 34.716 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.78

Well	Whiting #25-1-J					
Well Position	+N/-S	0.0 usft	Northing:	1,423,234.81 usft	Latitude:	38° 57' 40.032 N
	+E/-W	0.0 usft	Easting:	2,196,482.84 usft	Longitude:	108° 19' 34.716 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	5,525.0 usft

Wellbore	14-03-009	Well UWI		License	
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/10/2014	10.08	65.16	51,642

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	177.30

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	
1,522.5	0.00	0.00	1,522.5	0.0	0.0	0.00	0.00	0.00	0.00	
2,272.5	90.00	177.30	2,000.0	-476.9	22.5	12.00	12.00	0.00	177.30	
4,635.5	90.00	177.30	2,000.0	-2,837.3	133.7	0.00	0.00	0.00	0.00	BH #25-1-J



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Well:	Whiting #25-1-J	Survey Calculation Method:	Minimum Curvature
Wellbore:	14-03-009		
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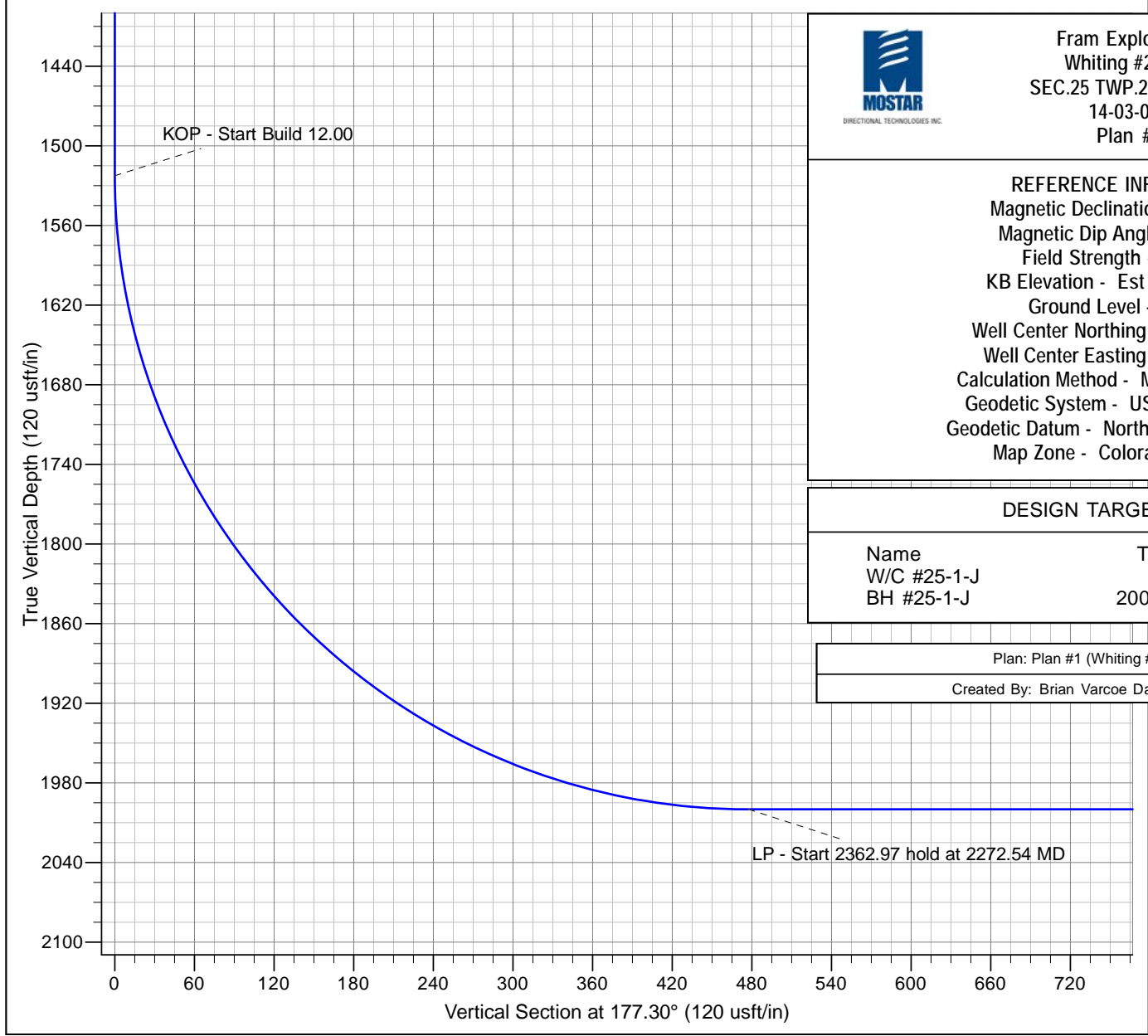
Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,500.0	0.00	0.00	1,500.0	4,054.99	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 12.00										
1,522.5	0.00	0.00	1,522.5	4,032.46	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	9.30	177.30	1,599.7	3,955.33	-6.3	0.3	6.3	12.00	12.00	0.00
1,700.0	21.30	177.30	1,695.9	3,859.05	-32.6	1.5	32.6	12.00	12.00	0.00
1,800.0	33.30	177.30	1,784.6	3,770.35	-78.3	3.7	78.4	12.00	12.00	0.00
1,900.0	45.30	177.30	1,861.9	3,693.10	-141.4	6.7	141.6	12.00	12.00	0.00
2,000.0	57.30	177.30	1,924.3	3,630.68	-219.2	10.3	219.5	12.00	12.00	0.00
2,100.0	69.30	177.30	1,969.2	3,585.83	-308.3	14.5	308.7	12.00	12.00	0.00
2,200.0	81.30	177.30	1,994.5	3,560.49	-404.8	19.1	405.2	12.00	12.00	0.00
LP - Start 2362.97 hold at 2272.54 MD										
2,272.5	90.00	177.30	2,000.0	3,554.99	-476.9	22.5	477.5	12.00	12.00	0.00
2,300.0	90.00	177.30	2,000.0	3,554.99	-504.4	23.8	504.9	0.00	0.00	0.00
2,400.0	90.00	177.30	2,000.0	3,554.99	-604.3	28.5	604.9	0.00	0.00	0.00
2,500.0	90.00	177.30	2,000.0	3,554.99	-704.1	33.2	704.9	0.00	0.00	0.00
2,600.0	90.00	177.30	2,000.0	3,554.99	-804.0	37.9	804.9	0.00	0.00	0.00
2,700.0	90.00	177.30	2,000.0	3,554.99	-903.9	42.6	904.9	0.00	0.00	0.00
2,800.0	90.00	177.30	2,000.0	3,554.99	-1,003.8	47.3	1,004.9	0.00	0.00	0.00
2,900.0	90.00	177.30	2,000.0	3,554.99	-1,103.7	52.0	1,104.9	0.00	0.00	0.00
3,000.0	90.00	177.30	2,000.0	3,554.99	-1,203.6	56.7	1,204.9	0.00	0.00	0.00
3,100.0	90.00	177.30	2,000.0	3,554.99	-1,303.5	61.4	1,304.9	0.00	0.00	0.00
3,200.0	90.00	177.30	2,000.0	3,554.99	-1,403.4	66.1	1,404.9	0.00	0.00	0.00
3,300.0	90.00	177.30	2,000.0	3,554.99	-1,503.3	70.8	1,504.9	0.00	0.00	0.00
3,400.0	90.00	177.30	2,000.0	3,554.99	-1,603.1	75.5	1,604.9	0.00	0.00	0.00
3,500.0	90.00	177.30	2,000.0	3,554.99	-1,703.0	80.2	1,704.9	0.00	0.00	0.00
3,600.0	90.00	177.30	2,000.0	3,554.99	-1,802.9	84.9	1,804.9	0.00	0.00	0.00
3,700.0	90.00	177.30	2,000.0	3,554.99	-1,902.8	89.6	1,904.9	0.00	0.00	0.00
3,800.0	90.00	177.30	2,000.0	3,554.99	-2,002.7	94.3	2,004.9	0.00	0.00	0.00
3,900.0	90.00	177.30	2,000.0	3,554.99	-2,102.6	99.1	2,104.9	0.00	0.00	0.00
4,000.0	90.00	177.30	2,000.0	3,554.99	-2,202.5	103.8	2,204.9	0.00	0.00	0.00
4,100.0	90.00	177.30	2,000.0	3,554.99	-2,302.4	108.5	2,304.9	0.00	0.00	0.00
4,200.0	90.00	177.30	2,000.0	3,554.99	-2,402.3	113.2	2,404.9	0.00	0.00	0.00
4,300.0	90.00	177.30	2,000.0	3,554.99	-2,502.1	117.9	2,504.9	0.00	0.00	0.00
4,400.0	90.00	177.30	2,000.0	3,554.99	-2,602.0	122.6	2,604.9	0.00	0.00	0.00
4,500.0	90.00	177.30	2,000.0	3,554.99	-2,701.9	127.3	2,704.9	0.00	0.00	0.00
4,600.0	90.00	177.30	2,000.0	3,554.99	-2,801.8	132.0	2,804.9	0.00	0.00	0.00
TD at 4635.50										
4,635.5	90.00	177.30	2,000.0	3,554.99	-2,837.3	133.7	2,840.4	0.00	0.00	0.00


Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
W/C #25-1-J	0.00	0.00	0.0	0.0	0.0	1,423,234.81	2,196,482.84	38° 57' 40.032 N	108° 19' 34.716 W
BH #25-1-J	0.00	0.00	2,000.0	-2,837.3	133.7	1,420,394.92	2,196,528.18	38° 57' 11.988 N	108° 19' 33.024 W




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Project:	Mesa County (NAD 83)	MD Reference:	Est KB @ 5555.0usft
Site:	SEC.25 TWP.2S RGE.2E	North Reference:	True
Well:	Whiting #25-1-J	Survey Calculation Method:	Minimum Curvature
Wellbore:	14-03-009		
Design:	Plan #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,522.5	1,522.5	0.0	0.0	KOP - Start Build 12.00
2,272.5	2,000.0	-476.9	22.5	LP - Start 2362.97 hold at 2272.54 MD
4,635.5	2,000.0	-2,837.3	133.7	TD at 4635.50





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Whiting #25-1-J
SEC.25 TWP.2S RGE.2E
14-03-009
Plan #1



REFERENCE INFORMATION

Magnetic Declination - 10.08°
Magnetic Dip Angle - 65.16°
Field Strength - 51642
KB Elevation - Est KB @ 5555.0usft
Ground Level - 5525.0
Well Center Northing - 1423234.81
Well Center Easting - 2196482.84
Calculation Method - Minimum Curvature
Geodetic System - US State Plane 1983
Geodetic Datum - North American Datum 1983
Map Zone - Colorado Central Zone

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W
W/C #25-1-J	0.0	0.0	0.0
BH #25-1-J	2000.0	-2837.3	133.7

Plan: Plan #1 (Whiting #25-1-J/14-03-009)

Created By: Brian Varcoe Date: 11:27, March 10 2014

