



Austin Exploration, LTD

Fremont Co., CO (NAD 83)

Pathfinder C-18

#4

OH

Plan: Plan #3

Standard Planning Report

27 May, 2015

WELL DETAILS: #4

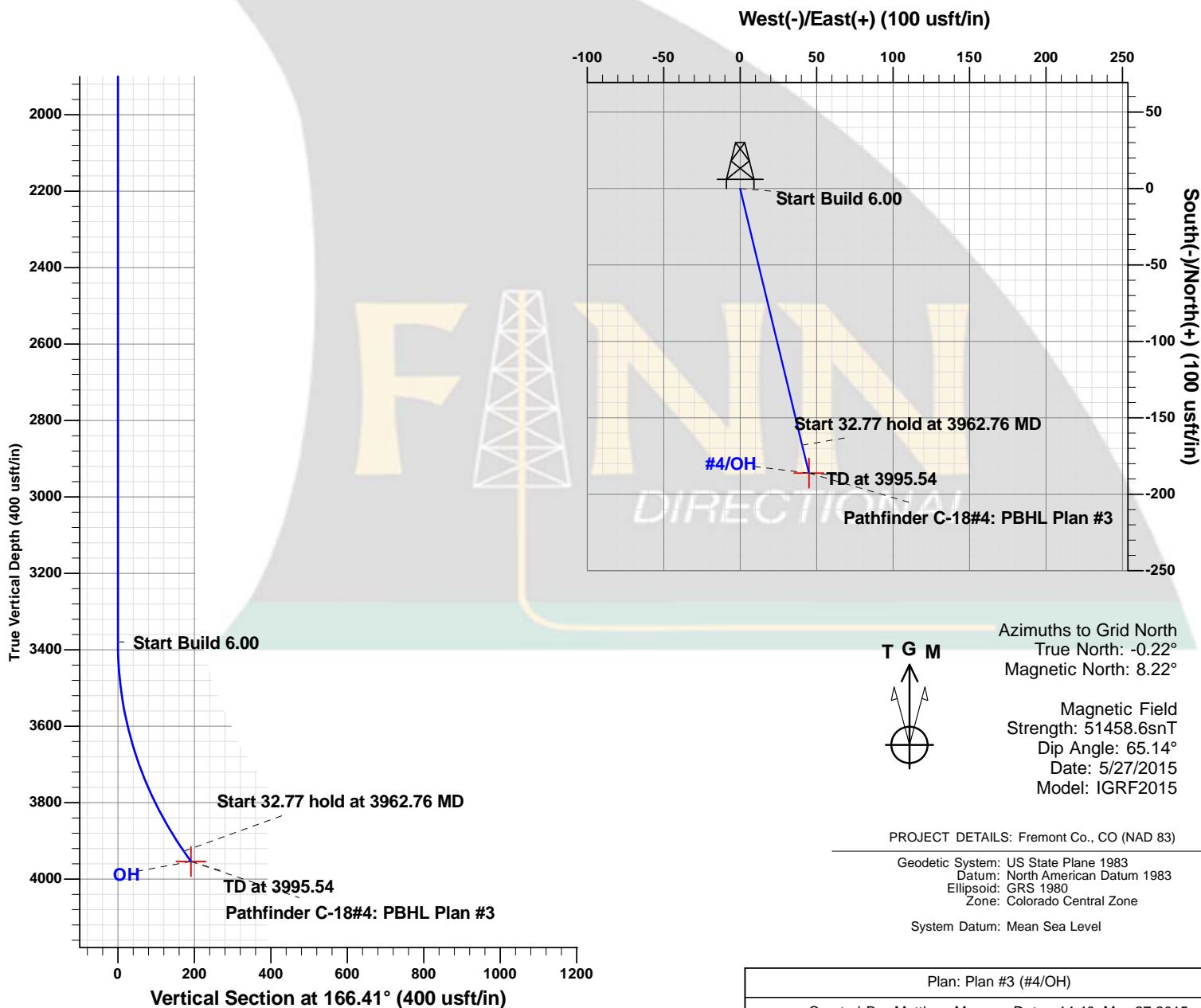
		Rig Name: Original Well Elev			
		Est. 20' RKB @ 5987.00usft (Original Well Elev)			
		Ground Level: 5967.00			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1174590.17	3101224.12	38.312172	-105.147236

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Pathfinder C-18#4: PBHL Plan #3	3954.00	-186.13	45.00	1174404.04	3101269.12	38.311660	-105.147082

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	3379.43	0.00	0.00	3379.43	0.00	0.00	0.00	0.00	0.00	
3	3962.76	35.00	166.41	3927.15	-167.86	40.59	6.00	166.41	172.70	
4	3995.54	35.00	166.41	3954.00	-186.13	45.00	0.00	0.00	191.49	Pathfinder C-18#4: PBHL Plan #3



Database:	Single User DB Primary	Local Co-ordinate Reference:	Well #4
Company:	Austin Exploration, LTD	TVD Reference:	Est. 20' RKB @ 5987.00usft (Original Well Elev)
Project:	Fremont Co., CO (NAD 83)	MD Reference:	Est. 20' RKB @ 5987.00usft (Original Well Elev)
Site:	Pathfinder C-18	North Reference:	Grid
Well:	#4	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Project	Fremont Co., CO (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		Pathfinder C-18			
Site Position:		Northing:	1,175,533.76 usft	Latitude:	38.314773
From:	Lat/Long	Easting:	3,100,268.11 usft	Longitude:	-105.150555
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.22 °

Well	#4					
Well Position	+N-S	-943.59 usft	Northing:	1,174,590.17 usft	Latitude:	38.312172
	+E-W	956.01 usft	Easting:	3,101,224.12 usft	Longitude:	-105.147236
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,967.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/27/2015	8.44	65.14	51,459

Design	Plan #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	166.41

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,379.43	0.00	0.00	3,379.43	0.00	0.00	0.00	0.00	0.00	0.00	
3,962.76	35.00	166.41	3,927.15	-167.86	40.59	6.00	6.00	0.00	166.41	
3,995.54	35.00	166.41	3,954.00	-186.13	45.00	0.00	0.00	0.00	0.00	Pathfinder C-18#4:

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Site:	Pathfinder C-18	North Reference:	Grid
Well:	#4	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,379.43	0.00	0.00	3,379.43	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	1.23	166.41	3,400.00	-0.22	0.05	0.22	6.00	6.00	0.00
3,450.00	4.23	166.41	3,449.94	-2.53	0.61	2.61	6.00	6.00	0.00
3,500.00	7.23	166.41	3,499.68	-7.39	1.79	7.60	6.00	6.00	0.00
3,550.00	10.23	166.41	3,549.09	-14.77	3.57	15.19	6.00	6.00	0.00
3,600.00	13.23	166.41	3,598.04	-24.65	5.96	25.36	6.00	6.00	0.00
3,650.00	16.23	166.41	3,646.39	-37.01	8.95	38.08	6.00	6.00	0.00
3,700.00	19.23	166.41	3,694.01	-51.81	12.53	53.30	6.00	6.00	0.00
3,750.00	22.23	166.41	3,740.77	-69.02	16.69	71.00	6.00	6.00	0.00
3,800.00	25.23	166.41	3,786.53	-88.57	21.42	91.13	6.00	6.00	0.00
3,850.00	28.23	166.41	3,831.18	-110.43	26.70	113.62	6.00	6.00	0.00
3,900.00	31.23	166.41	3,874.60	-134.54	32.53	138.41	6.00	6.00	0.00
3,950.00	34.23	166.41	3,916.65	-160.81	38.88	165.45	6.00	6.00	0.00
3,962.76	35.00	166.41	3,927.15	-167.86	40.59	172.70	6.00	6.00	0.00
3,995.54	35.00	166.41	3,954.00	-186.13	45.00	191.49	0.00	0.00	0.00

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Site:	Pathfinder C-18	North Reference:	Grid
Well:	#4	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
Pathfinder C-18#4: PE	0.00	0.00	3,954.00	-186.13	45.00	1,174,404.04	3,101,269.12	38.311660	-105.147082
- plan hits target center									
- Point									