

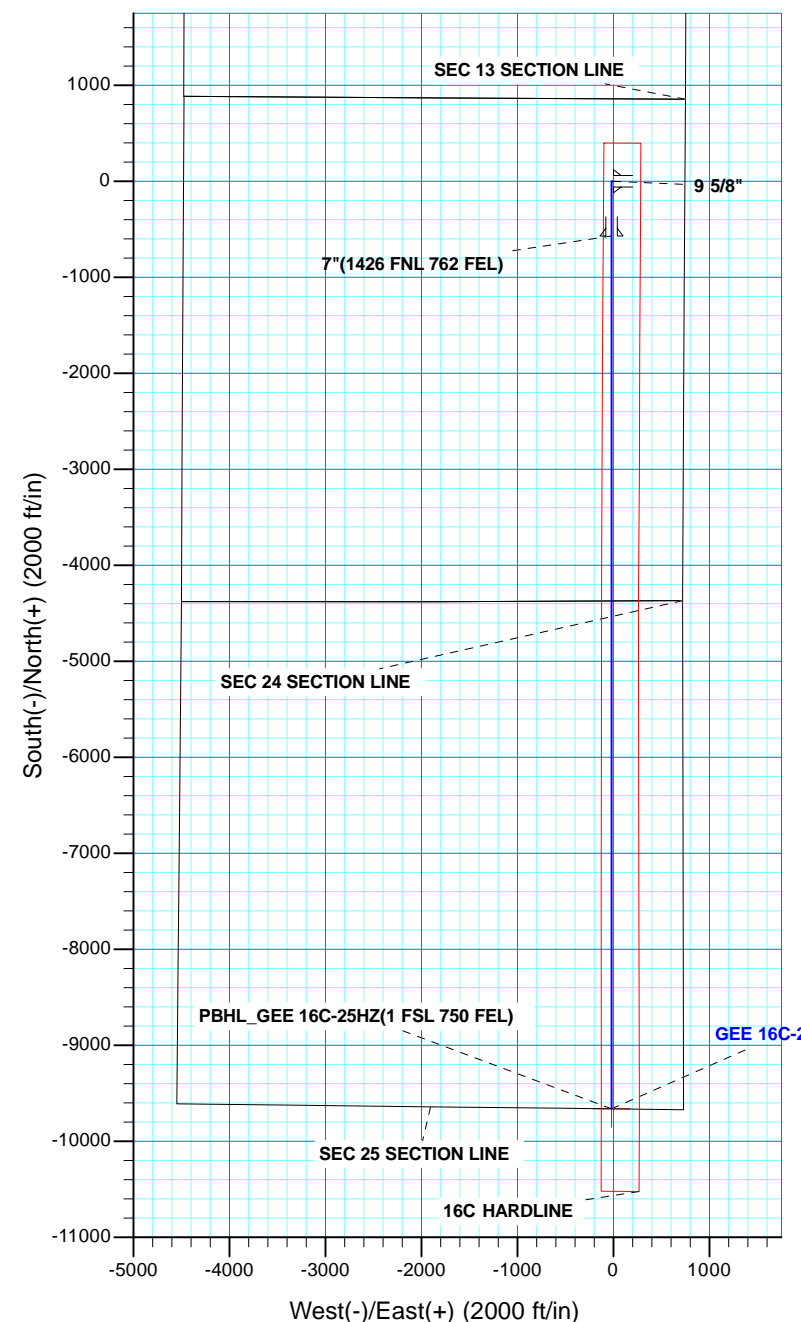
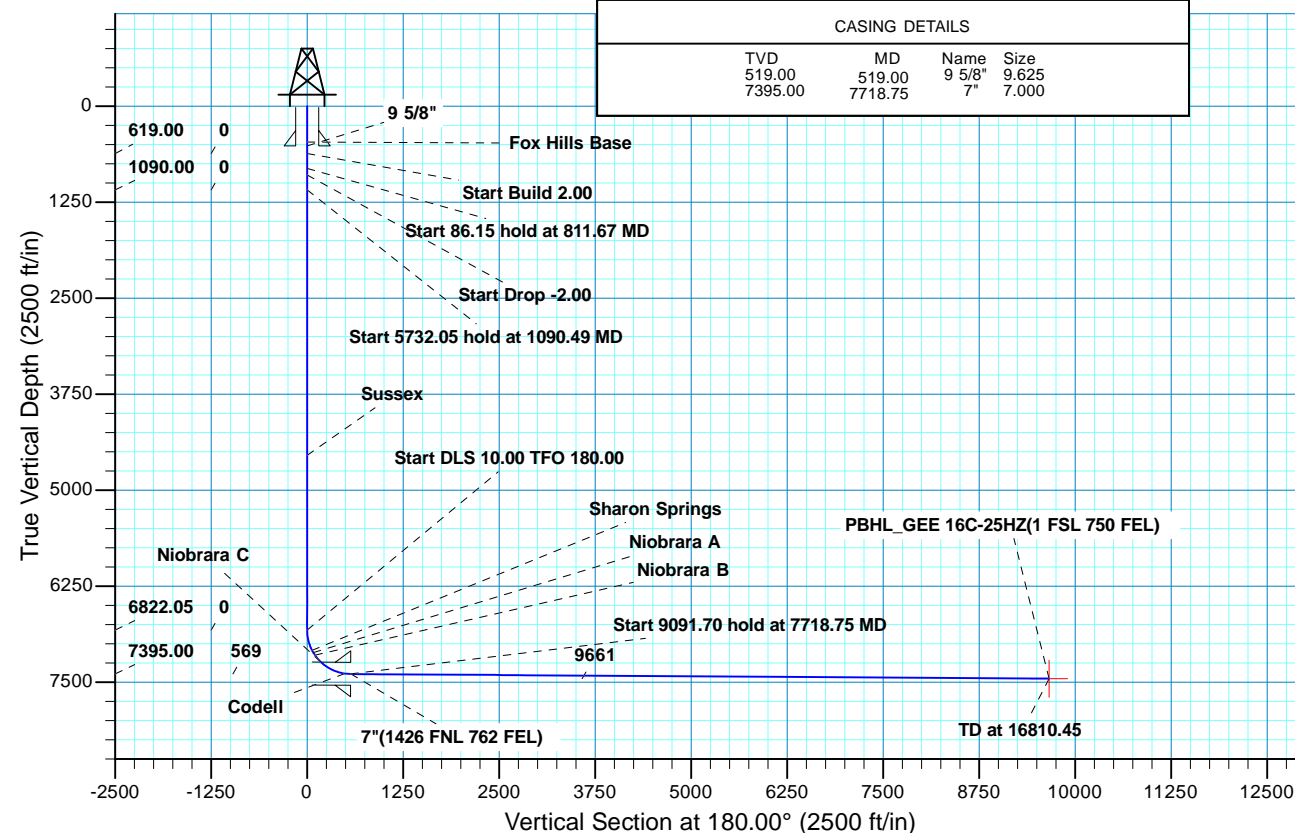


Project: COLORADO NORTHERN ZONE - 83
 Site: GEE 1-24HZ PAD
 Well: GEE 16C-25HZ
 Wellbore: OH
 Design: PLAN #1 PRELIMINARY



WELL DETAILS: GEE 16C-25HZ																	
GL 4858 & KB 17 @ 4875.00ft (ASSUMED)																	
+N/-S 0.00		+E/-W 0.00		Northing 1290305.09		Easting 3186621.40		Latitude 40.1283530		Longitude -104.8325980							
SECTION DETAILS																	
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target								
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
619.00	0.00	0.00	619.00	0.00	0.00	0.00	0.00	0.00									
811.67	3.85	270.00	811.52	0.00	-6.48	2.00	270.00	0.00									
897.82	3.85	270.00	897.48	0.00	-12.27	0.00	0.00	0.00									
1090.49	0.00	0.00	1090.00	0.00	-18.74	2.00	180.00	0.00									
6822.54	0.00	0.00	6822.05	0.00	-18.74	0.00	0.00	0.00									
7718.75	89.62	180.00	7395.00	-569.18	-18.74	10.00	180.00	569.18									
16810.45	89.62	180.00	7455.00	-9660.68	-18.74	0.00	9660.68		PBHL_GEE 16C-25HZ(1 FSL 750 FEL)								
DESIGN TARGET DETAILS																	
Name		TVD		+N/-S		+E/-W		Northing		Easting		Latitude		Longitude		Shape	
PBHL		7455.00		-9660.68		-18.74		1280644.56		3186675.37		40.1018330		-104.8326650		Point	
- plan hits target center																	
FORMATION TOP DETAILS																	
TVDPATH				MDPATH		FORMATION		DIPANGLE		DIPDIRINC							
469.00				469.00		Fox Hills Base				0.00							
4547.00				4547.49		Sussex				0.00							
7086.00				7096.85		Sharon Springs				27.43							
7115.00				7130.04		Niobrara A				30.75							
7148.00				7169.26		Niobrara B				34.67							
7236.00				7285.13		Niobrara C				46.26							
7370.00				7552.63		Fort Hays				73.01							
7389.00				7639.49		Codell				81.70							

CASING DETAILS			
TVD	MD	Name	Size
519.00	519.00	9 5/8"	9.625
7395.00	7718.75	7"	7.000





Scientific Drilling

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

GEE 1-24HZ PAD

GEE 16C-25HZ

OH

Plan: PLAN #1 PRELIMINARY

Standard Planning Report

12 June, 2014

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GEE 16C-25HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4858 & KB 17 @ 4875.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4858 & KB 17 @ 4875.00ft (ASSUMED)
Site:	GEE 1-24HZ PAD	North Reference:	True
Well:	GEE 16C-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Project	COLORADO NORTHERN ZONE - 83, KERR MCGEE OIL & GAS ONSHORE LP		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	GEE 1-24HZ PAD, SECTION 24 T2N R67W			
Site Position:		Northing:	1,290,363.14 usft	Latitude: 40.1285120
From:	Lat/Long	Easting:	3,186,636.63 usft	Longitude: -104.8325420
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence: 0.43 °

Well	GEE 16C-25HZ, 858 FNL 745 FEL			
Well Position	+N/-S	-57.93 ft	Northing:	1,290,305.09 usft
	+E/-W	-15.66 ft	Easting:	3,186,621.40 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level: 4,858.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	06/12/14	8.52	66.70	52,580

Design	PLAN #1 PRELIMINARY			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	180.00

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
619.00	0.00	0.00	619.00	0.00	0.00	0.00	0.00	0.00	0.00	
811.67	3.85	270.00	811.52	0.00	-6.48	2.00	2.00	0.00	270.00	
897.82	3.85	270.00	897.48	0.00	-12.27	0.00	0.00	0.00	0.00	
1,090.49	0.00	0.00	1,090.00	0.00	-18.74	2.00	-2.00	0.00	180.00	
6,822.54	0.00	0.00	6,822.05	0.00	-18.74	0.00	0.00	0.00	0.00	
7,718.75	89.62	180.00	7,395.00	-569.18	-18.74	10.00	10.00	20.08	180.00	
16,810.45	89.62	180.00	7,455.00	-9,660.68	-18.74	0.00	0.00	0.00	0.00	PBHL_GEE 16C-25H

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GEE 16C-25HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4858 & KB 17 @ 4875.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4858 & KB 17 @ 4875.00ft (ASSUMED)
Site:	GEE 1-24HZ PAD	North Reference:	True
Well:	GEE 16C-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

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)	Turn Rate (°/100ft)
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
469.00	0.00	0.00	469.00	0.00	0.00	0.00	0.00	0.00	0.00
Fox Hills Base									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
519.00	0.00	0.00	519.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
619.00	0.00	0.00	619.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
700.00	1.62	270.00	699.99	0.00	-1.15	0.00	2.00	2.00	0.00
800.00	3.62	270.00	799.88	0.00	-5.72	0.00	2.00	2.00	0.00
811.67	3.85	270.00	811.52	0.00	-6.48	0.00	2.00	2.00	0.00
Start 86.15 hold at 811.67 MD									
897.82	3.85	270.00	897.48	0.00	-12.27	0.00	0.00	0.00	0.00
Start Drop -2.00									
900.00	3.81	270.00	899.66	0.00	-12.41	0.00	2.00	-2.00	0.00
1,000.00	1.81	270.00	999.53	0.00	-17.31	0.00	2.00	-2.00	0.00
1,090.49	0.00	0.00	1,090.00	0.00	-18.74	0.00	2.00	-2.00	0.00
Start 5732.05 hold at 1090.49 MD									
1,100.00	0.00	0.00	1,099.51	0.00	-18.74	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,199.51	0.00	-18.74	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,299.51	0.00	-18.74	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,399.51	0.00	-18.74	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,499.51	0.00	-18.74	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,599.51	0.00	-18.74	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,699.51	0.00	-18.74	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,799.51	0.00	-18.74	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,899.51	0.00	-18.74	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	1,999.51	0.00	-18.74	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,099.51	0.00	-18.74	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,199.51	0.00	-18.74	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,299.51	0.00	-18.74	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,399.51	0.00	-18.74	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,499.51	0.00	-18.74	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,599.51	0.00	-18.74	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,699.51	0.00	-18.74	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,799.51	0.00	-18.74	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,899.51	0.00	-18.74	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	2,999.51	0.00	-18.74	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,099.51	0.00	-18.74	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,199.51	0.00	-18.74	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,299.51	0.00	-18.74	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,399.51	0.00	-18.74	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,499.51	0.00	-18.74	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,599.51	0.00	-18.74	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,699.51	0.00	-18.74	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,799.51	0.00	-18.74	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,899.51	0.00	-18.74	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	3,999.51	0.00	-18.74	0.00	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GEE 16C-25HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4858 & KB 17 @ 4875.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4858 & KB 17 @ 4875.00ft (ASSUMED)
Site:	GEE 1-24HZ PAD	North Reference:	True
Well:	GEE 16C-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

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)	Turn Rate (°/100ft)
4,100.00	0.00	0.00	4,099.51	0.00	-18.74	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,199.51	0.00	-18.74	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,299.51	0.00	-18.74	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,399.51	0.00	-18.74	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,499.51	0.00	-18.74	0.00	0.00	0.00	0.00
4,547.49	0.00	0.00	4,547.00	0.00	-18.74	0.00	0.00	0.00	0.00
Sussex									
4,600.00	0.00	0.00	4,599.51	0.00	-18.74	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,699.51	0.00	-18.74	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,799.51	0.00	-18.74	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,899.51	0.00	-18.74	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	4,999.51	0.00	-18.74	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,099.51	0.00	-18.74	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,199.51	0.00	-18.74	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,299.51	0.00	-18.74	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,399.51	0.00	-18.74	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,499.51	0.00	-18.74	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,599.51	0.00	-18.74	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,699.51	0.00	-18.74	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,799.51	0.00	-18.74	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,899.51	0.00	-18.74	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	5,999.51	0.00	-18.74	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,099.51	0.00	-18.74	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,199.51	0.00	-18.74	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,299.51	0.00	-18.74	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,399.51	0.00	-18.74	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,499.51	0.00	-18.74	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,599.51	0.00	-18.74	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,699.51	0.00	-18.74	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,799.51	0.00	-18.74	0.00	0.00	0.00	0.00
6,822.54	0.00	0.00	6,822.05	0.00	-18.74	0.00	0.00	0.00	0.00
Start DLS 10.00 TFO 180.00									
6,900.00	7.75	180.00	6,899.28	-5.23	-18.74	5.23	10.00	10.00	0.00
7,000.00	17.75	180.00	6,996.69	-27.26	-18.74	27.26	10.00	10.00	0.00
7,096.85	27.43	180.00	7,086.00	-64.42	-18.74	64.42	10.00	10.00	0.00
Sharon Springs									
7,100.00	27.75	180.00	7,088.80	-65.88	-18.74	65.88	10.00	10.00	0.00
7,130.04	30.75	180.00	7,115.00	-80.55	-18.74	80.55	10.00	10.00	0.00
Niobrara A									
7,169.26	34.67	180.00	7,148.00	-101.75	-18.74	101.75	10.00	10.00	0.00
Niobrara B									
7,200.00	37.75	180.00	7,172.80	-119.90	-18.74	119.90	10.00	10.00	0.00
7,285.13	46.26	180.00	7,236.00	-176.82	-18.74	176.82	10.00	10.00	0.00
Niobrara C									
7,300.00	47.75	180.00	7,246.14	-187.69	-18.74	187.69	10.00	10.00	0.00
7,400.00	57.75	180.00	7,306.60	-267.19	-18.74	267.19	10.00	10.00	0.00
7,500.00	67.75	180.00	7,352.33	-355.98	-18.74	355.98	10.00	10.00	0.00
7,552.63	73.01	180.00	7,370.00	-405.53	-18.74	405.53	10.00	10.00	0.00
Fort Hays									
7,600.00	77.75	180.00	7,381.95	-451.35	-18.74	451.35	10.00	10.00	0.00
7,639.49	81.70	180.00	7,389.00	-490.20	-18.74	490.20	10.00	10.00	0.00
Codell									
7,700.00	87.75	180.00	7,394.56	-550.43	-18.74	550.43	10.00	10.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GEE 16C-25HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4858 & KB 17 @ 4875.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4858 & KB 17 @ 4875.00ft (ASSUMED)
Site:	GEE 1-24HZ PAD	North Reference:	True
Well:	GEE 16C-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

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)	Turn Rate (°/100ft)
7,718.75	89.62	180.00	7,395.00	-569.17	-18.74	569.17	10.00	10.00	0.00
Start 9091.70 hold at 7718.75 MD - 7"(1426 FNL 762 FEL)									
7,800.00	89.62	180.00	7,395.53	-650.42	-18.74	650.42	0.00	0.00	0.00
7,900.00	89.62	180.00	7,396.19	-750.42	-18.74	750.42	0.00	0.00	0.00
8,000.00	89.62	180.00	7,396.85	-850.42	-18.74	850.42	0.00	0.00	0.00
8,100.00	89.62	180.00	7,397.51	-950.41	-18.74	950.41	0.00	0.00	0.00
8,200.00	89.62	180.00	7,398.17	-1,050.41	-18.74	1,050.41	0.00	0.00	0.00
8,300.00	89.62	180.00	7,398.83	-1,150.41	-18.74	1,150.41	0.00	0.00	0.00
8,400.00	89.62	180.00	7,399.49	-1,250.41	-18.74	1,250.41	0.00	0.00	0.00
8,500.00	89.62	180.00	7,400.15	-1,350.41	-18.74	1,350.41	0.00	0.00	0.00
8,600.00	89.62	180.00	7,400.81	-1,450.40	-18.74	1,450.40	0.00	0.00	0.00
8,700.00	89.62	180.00	7,401.47	-1,550.40	-18.74	1,550.40	0.00	0.00	0.00
8,800.00	89.62	180.00	7,402.13	-1,650.40	-18.74	1,650.40	0.00	0.00	0.00
8,900.00	89.62	180.00	7,402.79	-1,750.40	-18.74	1,750.40	0.00	0.00	0.00
9,000.00	89.62	180.00	7,403.45	-1,850.39	-18.74	1,850.39	0.00	0.00	0.00
9,100.00	89.62	180.00	7,404.11	-1,950.39	-18.74	1,950.39	0.00	0.00	0.00
9,200.00	89.62	180.00	7,404.77	-2,050.39	-18.74	2,050.39	0.00	0.00	0.00
9,300.00	89.62	180.00	7,405.43	-2,150.39	-18.74	2,150.39	0.00	0.00	0.00
9,400.00	89.62	180.00	7,406.09	-2,250.39	-18.74	2,250.39	0.00	0.00	0.00
9,500.00	89.62	180.00	7,406.75	-2,350.38	-18.74	2,350.38	0.00	0.00	0.00
9,600.00	89.62	180.00	7,407.41	-2,450.38	-18.74	2,450.38	0.00	0.00	0.00
9,700.00	89.62	180.00	7,408.07	-2,550.38	-18.74	2,550.38	0.00	0.00	0.00
9,800.00	89.62	180.00	7,408.73	-2,650.38	-18.74	2,650.38	0.00	0.00	0.00
9,900.00	89.62	180.00	7,409.39	-2,750.38	-18.74	2,750.38	0.00	0.00	0.00
10,000.00	89.62	180.00	7,410.05	-2,850.37	-18.74	2,850.37	0.00	0.00	0.00
10,100.00	89.62	180.00	7,410.71	-2,950.37	-18.74	2,950.37	0.00	0.00	0.00
10,200.00	89.62	180.00	7,411.37	-3,050.37	-18.74	3,050.37	0.00	0.00	0.00
10,300.00	89.62	180.00	7,412.03	-3,150.37	-18.74	3,150.37	0.00	0.00	0.00
10,400.00	89.62	180.00	7,412.69	-3,250.36	-18.74	3,250.36	0.00	0.00	0.00
10,500.00	89.62	180.00	7,413.35	-3,350.36	-18.74	3,350.36	0.00	0.00	0.00
10,600.00	89.62	180.00	7,414.01	-3,450.36	-18.74	3,450.36	0.00	0.00	0.00
10,700.00	89.62	180.00	7,414.67	-3,550.36	-18.74	3,550.36	0.00	0.00	0.00
10,800.00	89.62	180.00	7,415.33	-3,650.36	-18.74	3,650.36	0.00	0.00	0.00
10,900.00	89.62	180.00	7,415.99	-3,750.35	-18.74	3,750.35	0.00	0.00	0.00
11,000.00	89.62	180.00	7,416.65	-3,850.35	-18.74	3,850.35	0.00	0.00	0.00
11,100.00	89.62	180.00	7,417.31	-3,950.35	-18.74	3,950.35	0.00	0.00	0.00
11,200.00	89.62	180.00	7,417.97	-4,050.35	-18.74	4,050.35	0.00	0.00	0.00
11,300.00	89.62	180.00	7,418.63	-4,150.34	-18.74	4,150.34	0.00	0.00	0.00
11,400.00	89.62	180.00	7,419.29	-4,250.34	-18.74	4,250.34	0.00	0.00	0.00
11,500.00	89.62	180.00	7,419.95	-4,350.34	-18.74	4,350.34	0.00	0.00	0.00
11,600.00	89.62	180.00	7,420.61	-4,450.34	-18.74	4,450.34	0.00	0.00	0.00
11,700.00	89.62	180.00	7,421.27	-4,550.34	-18.74	4,550.34	0.00	0.00	0.00
11,800.00	89.62	180.00	7,421.93	-4,650.33	-18.74	4,650.33	0.00	0.00	0.00
11,900.00	89.62	180.00	7,422.59	-4,750.33	-18.74	4,750.33	0.00	0.00	0.00
12,000.00	89.62	180.00	7,423.25	-4,850.33	-18.74	4,850.33	0.00	0.00	0.00
12,100.00	89.62	180.00	7,423.91	-4,950.33	-18.74	4,950.33	0.00	0.00	0.00
12,200.00	89.62	180.00	7,424.57	-5,050.33	-18.74	5,050.33	0.00	0.00	0.00
12,300.00	89.62	180.00	7,425.23	-5,150.32	-18.74	5,150.32	0.00	0.00	0.00
12,400.00	89.62	180.00	7,425.89	-5,250.32	-18.74	5,250.32	0.00	0.00	0.00
12,500.00	89.62	180.00	7,426.55	-5,350.32	-18.74	5,350.32	0.00	0.00	0.00
12,600.00	89.62	180.00	7,427.21	-5,450.32	-18.74	5,450.32	0.00	0.00	0.00
12,700.00	89.62	180.00	7,427.87	-5,550.31	-18.74	5,550.31	0.00	0.00	0.00
12,800.00	89.62	180.00	7,428.53	-5,650.31	-18.74	5,650.31	0.00	0.00	0.00
12,900.00	89.62	180.00	7,429.19	-5,750.31	-18.74	5,750.31	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GEE 16C-25HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4858 & KB 17 @ 4875.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4858 & KB 17 @ 4875.00ft (ASSUMED)
Site:	GEE 1-24HZ PAD	North Reference:	True
Well:	GEE 16C-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

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)	Turn Rate (°/100ft)
13,000.00	89.62	180.00	7,429.85	-5,850.31	-18.74	5,850.31	0.00	0.00	0.00
13,100.00	89.62	180.00	7,430.51	-5,950.31	-18.74	5,950.31	0.00	0.00	0.00
13,200.00	89.62	180.00	7,431.17	-6,050.30	-18.74	6,050.30	0.00	0.00	0.00
13,300.00	89.62	180.00	7,431.83	-6,150.30	-18.74	6,150.30	0.00	0.00	0.00
13,400.00	89.62	180.00	7,432.49	-6,250.30	-18.74	6,250.30	0.00	0.00	0.00
13,500.00	89.62	180.00	7,433.15	-6,350.30	-18.74	6,350.30	0.00	0.00	0.00
13,600.00	89.62	180.00	7,433.81	-6,450.29	-18.74	6,450.29	0.00	0.00	0.00
13,700.00	89.62	180.00	7,434.47	-6,550.29	-18.74	6,550.29	0.00	0.00	0.00
13,800.00	89.62	180.00	7,435.13	-6,650.29	-18.74	6,650.29	0.00	0.00	0.00
13,900.00	89.62	180.00	7,435.79	-6,750.29	-18.74	6,750.29	0.00	0.00	0.00
14,000.00	89.62	180.00	7,436.45	-6,850.29	-18.74	6,850.29	0.00	0.00	0.00
14,100.00	89.62	180.00	7,437.11	-6,950.28	-18.74	6,950.28	0.00	0.00	0.00
14,200.00	89.62	180.00	7,437.77	-7,050.28	-18.74	7,050.28	0.00	0.00	0.00
14,300.00	89.62	180.00	7,438.43	-7,150.28	-18.74	7,150.28	0.00	0.00	0.00
14,400.00	89.62	180.00	7,439.09	-7,250.28	-18.74	7,250.28	0.00	0.00	0.00
14,500.00	89.62	180.00	7,439.75	-7,350.28	-18.74	7,350.28	0.00	0.00	0.00
14,600.00	89.62	180.00	7,440.41	-7,450.27	-18.74	7,450.27	0.00	0.00	0.00
14,700.00	89.62	180.00	7,441.07	-7,550.27	-18.74	7,550.27	0.00	0.00	0.00
14,800.00	89.62	180.00	7,441.73	-7,650.27	-18.74	7,650.27	0.00	0.00	0.00
14,900.00	89.62	180.00	7,442.39	-7,750.27	-18.74	7,750.27	0.00	0.00	0.00
15,000.00	89.62	180.00	7,443.05	-7,850.26	-18.74	7,850.26	0.00	0.00	0.00
15,100.00	89.62	180.00	7,443.71	-7,950.26	-18.74	7,950.26	0.00	0.00	0.00
15,200.00	89.62	180.00	7,444.37	-8,050.26	-18.74	8,050.26	0.00	0.00	0.00
15,300.00	89.62	180.00	7,445.03	-8,150.26	-18.74	8,150.26	0.00	0.00	0.00
15,400.00	89.62	180.00	7,445.69	-8,250.26	-18.74	8,250.26	0.00	0.00	0.00
15,500.00	89.62	180.00	7,446.35	-8,350.25	-18.74	8,350.25	0.00	0.00	0.00
15,600.00	89.62	180.00	7,447.01	-8,450.25	-18.74	8,450.25	0.00	0.00	0.00
15,700.00	89.62	180.00	7,447.67	-8,550.25	-18.74	8,550.25	0.00	0.00	0.00
15,800.00	89.62	180.00	7,448.33	-8,650.25	-18.74	8,650.25	0.00	0.00	0.00
15,900.00	89.62	180.00	7,448.99	-8,750.24	-18.74	8,750.24	0.00	0.00	0.00
16,000.00	89.62	180.00	7,449.65	-8,850.24	-18.74	8,850.24	0.00	0.00	0.00
16,100.00	89.62	180.00	7,450.31	-8,950.24	-18.74	8,950.24	0.00	0.00	0.00
16,200.00	89.62	180.00	7,450.97	-9,050.24	-18.74	9,050.24	0.00	0.00	0.00
16,300.00	89.62	180.00	7,451.63	-9,150.24	-18.74	9,150.24	0.00	0.00	0.00
16,400.00	89.62	180.00	7,452.29	-9,250.23	-18.74	9,250.23	0.00	0.00	0.00
16,500.00	89.62	180.00	7,452.95	-9,350.23	-18.74	9,350.23	0.00	0.00	0.00
16,600.00	89.62	180.00	7,453.61	-9,450.23	-18.74	9,450.23	0.00	0.00	0.00
16,700.00	89.62	180.00	7,454.27	-9,550.23	-18.74	9,550.23	0.00	0.00	0.00
16,800.00	89.62	180.00	7,454.93	-9,650.22	-18.74	9,650.22	0.00	0.00	0.00
16,810.45	89.62	180.00	7,455.00	-9,660.68	-18.74	9,660.68	0.00	0.00	0.00
TD at 16810.45 - PBHL_GEE 16C-25HZ(1 FSL 750 FEL)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL_GEE 16C-25HZ('	0.00	0.00	7,455.00	-9,660.68	-18.74	1,280,644.56	3,186,675.37	40.1018330	-104.8326650
- plan hits target center									
- Point									

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GEE 16C-25HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4858 & KB 17 @ 4875.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4858 & KB 17 @ 4875.00ft (ASSUMED)
Site:	GEE 1-24HZ PAD	North Reference:	True
Well:	GEE 16C-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
519.00	519.00	9 5/8"	9.625	13.500	
7,718.75	7,395.00	7"(1426 FNL 762 FEL)	7.000	8.750	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
469.00	-4,406.00	Fox Hills Base				
4,547.49	-328.00	Sussex				
7,096.85	2,211.00	Sharon Springs				
7,130.04	2,240.00	Niobrara A				
7,169.26	2,273.00	Niobrara B				
7,285.13	2,361.00	Niobrara C				
7,552.63	2,495.00	Fort Hays				
7,639.49	2,514.00	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
619.00	619.00	0.00	0.00	Start Build 2.00	
811.67	811.52	0.00	-6.48	Start 86.15 hold at 811.67 MD	
897.82	897.48	0.00	-12.27	Start Drop -2.00	
1,090.49	1,090.00	0.00	-18.74	Start 5732.05 hold at 1090.49 MD	
6,822.54	6,822.05	0.00	-18.74	Start DLS 10.00 TFO 180.00	
7,718.75	7,395.00	-569.18	-18.74	Start 9091.70 hold at 7718.75 MD	
16,810.45	7,455.00	-9,660.68	-18.74	TD at 16810.45	