



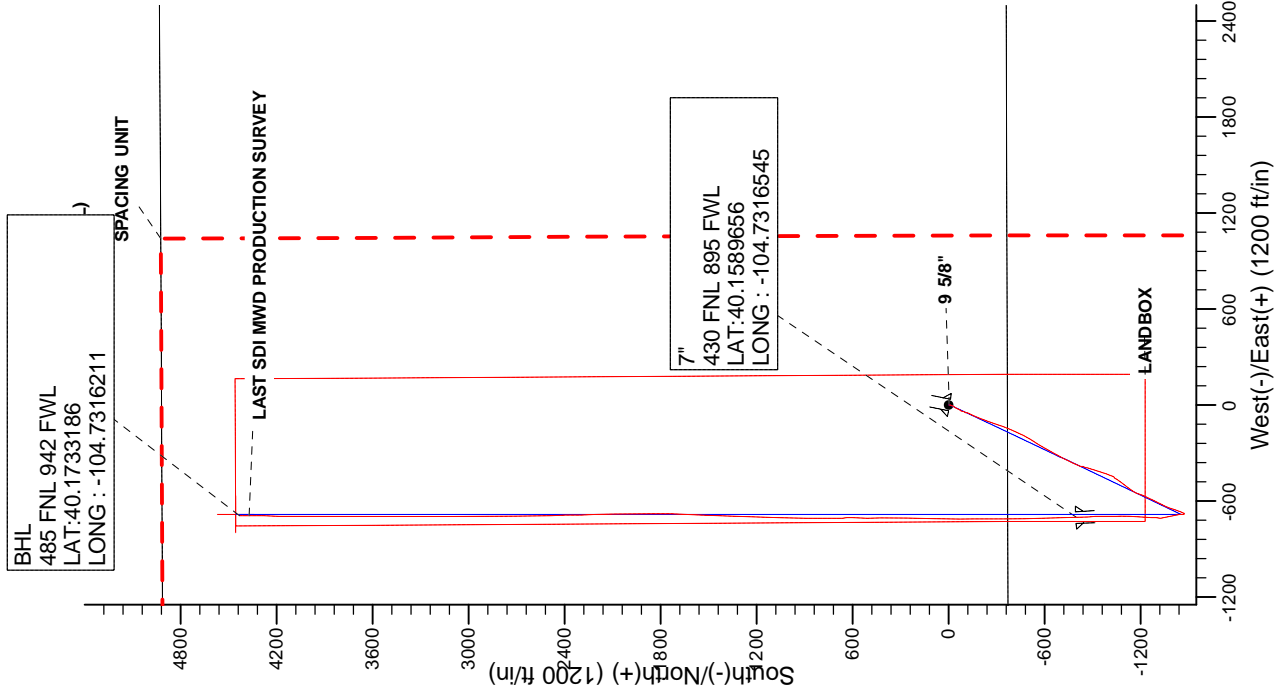
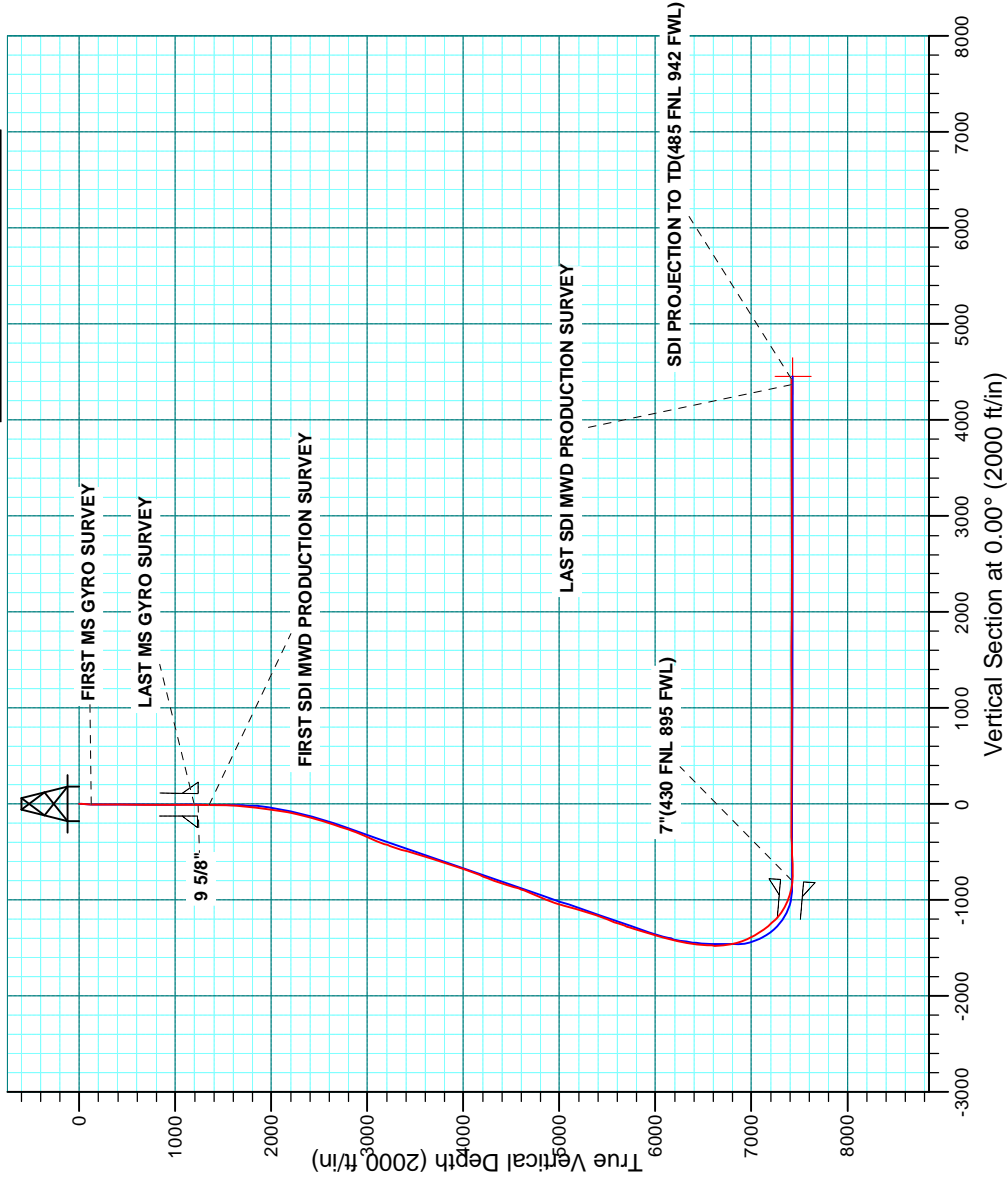
Project: COLORADO NORTHERN ZONE - 83
Site: DOLPH 14-1HZ PAD
Well: DOLPH 4C-1HZ
Wellbore: OH
Design: OH



WELL DETAILS: DOLPH 4C-1HZ				
GL 4999 & KB 25 @ 5024.00ft (HP 311)				
+N/-S 0.00	+E/-W 0.00	Northing 1302486.53	Easting 3215443.93	Latitude 40.1611500 Longitude -104.7291480

PROJECT DETAILS: COLORADO NORTHERN ZONE - 83	
Geodetic System: US State Plane 1983	
Datum: North American Datum 1983	
Ellipsoid: GRS 1980	
Zone: Colorado Northern Zone	
Location: SEC 1 T2N R66W	
System Datum: Mean Sea Level	

CASING DETAILS			
TVD	MD	Name	Size
1236.97	1237.00	9 5/8"	9.625
7426.13	8056.00	7"	7.000



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

DOLPH 14-1HZ PAD

DOLPH 4C-1HZ

OH

Design: OH

Standard Survey Report

29 September, 2014

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well DOLPH 4C-1HZ
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	GL 4999 & KB 25 @ 5024.00ft (HP 311)
Site:	DOLPH 14-1HZ PAD	MD Reference:	GL 4999 & KB 25 @ 5024.00ft (HP 311)
Well:	DOLPH 4C-1HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales

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	DOLPH 14-1HZ PAD, SEC 1 T2N R66W				
Site Position:		Northing:	1,302,486.80 usft	Latitude:	40.1611500
From:	Lat/Long	Easting:	3,215,474.12 usft	Longitude:	-104.7290400
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.50 °

Well	DOLPH 4C-1HZ, 365 FSL 1599 FWL					
Well Position	+N/-S	0.00 ft	Northing:	1,302,486.53 usft	Latitude:	40.1611500
	+E/-W	0.00 ft	Easting:	3,215,443.94 usft	Longitude:	-104.7291480
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,999.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	7/30/2014	8.49	66.75	52,578

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	0.00	

Survey Program	Date	9/29/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
25.00	1,197.00	Survey #1 MS GYRO SURVEY (OH)	NS-GYRO-MS	North sensing gyrocompassing m/s	
1,349.00	13,286.00	Survey #2 SDI MWD PRODUCTION (OH)	SDI_MWD+CRUST_1.0	SDI MWD + Crustal anomaly, Version 1.0	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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	
25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00	
125.00	0.51	185.88	125.00	-0.44	-0.05	-0.44	0.51	0.51	0.00	
FIRST MS GYRO SURVEY										
225.00	0.28	183.46	225.00	-1.13	-0.11	-1.13	0.23	-0.23	-2.42	
325.00	0.36	191.93	324.99	-1.68	-0.19	-1.68	0.09	0.08	8.47	
425.00	0.32	198.05	424.99	-2.25	-0.34	-2.25	0.05	-0.04	6.12	
525.00	0.41	166.84	524.99	-2.87	-0.34	-2.87	0.21	0.09	-31.21	
625.00	0.77	134.59	624.99	-3.69	0.22	-3.69	0.48	0.36	-32.25	
725.00	0.55	121.89	724.98	-4.41	1.10	-4.41	0.26	-0.22	-12.70	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well DOLPH 4C-1HZ
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	GL 4999 & KB 25 @ 5024.00ft (HP 311)
Site:	DOLPH 14-1HZ PAD	MD Reference:	GL 4999 & KB 25 @ 5024.00ft (HP 311)
Well:	DOLPH 4C-1HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
825.00	0.44	100.19	824.98	-4.73	1.89	-4.73	0.22	-0.11	-21.70
925.00	0.30	101.56	924.97	-4.85	2.52	-4.85	0.14	-0.14	1.37
1,025.00	0.08	273.46	1,024.97	-4.90	2.71	-4.90	0.38	-0.22	171.90
1,125.00	0.26	223.73	1,124.97	-5.06	2.48	-5.06	0.22	0.18	-49.73
1,197.00	0.29	205.83	1,196.97	-5.34	2.29	-5.34	0.13	0.04	-24.86
LAST MS GYRO SURVEY									
1,237.00	0.31	190.43	1,236.97	-5.54	2.23	-5.54	0.20	0.04	-38.51
9 5/8"									
1,349.00	0.44	161.07	1,348.97	-6.24	2.31	-6.24	0.20	0.12	-26.21
FIRST SDI MWD PRODUCTION SURVEY									
1,441.00	0.50	169.43	1,440.97	-6.97	2.50	-6.97	0.10	0.07	9.09
1,532.00	2.15	201.19	1,531.94	-8.95	1.96	-8.95	1.92	1.81	34.90
1,623.00	4.01	213.22	1,622.80	-13.21	-0.40	-13.21	2.15	2.04	13.22
1,715.00	5.43	210.76	1,714.49	-19.64	-4.39	-19.64	1.56	1.54	-2.67
1,807.00	7.61	211.04	1,805.89	-28.60	-9.76	-28.60	2.37	2.37	0.30
1,899.00	8.96	208.81	1,896.93	-40.10	-16.35	-40.10	1.51	1.47	-2.42
1,993.00	10.30	205.92	1,989.60	-54.07	-23.56	-54.07	1.52	1.43	-3.07
2,087.00	10.80	207.32	2,082.01	-69.45	-31.27	-69.45	0.60	0.53	1.49
2,182.00	11.33	202.35	2,175.25	-85.99	-38.90	-85.99	1.15	0.56	-5.23
2,276.00	13.68	198.19	2,267.01	-105.10	-45.89	-105.10	2.68	2.50	-4.43
2,370.00	14.35	201.96	2,358.22	-126.46	-53.71	-126.46	1.20	0.71	4.01
2,465.00	16.59	206.92	2,449.77	-149.48	-64.26	-149.48	2.74	2.36	5.22
2,559.00	17.98	202.62	2,539.53	-174.84	-75.91	-174.84	2.01	1.48	-4.57
2,654.00	18.75	199.02	2,629.69	-202.81	-86.53	-202.81	1.44	0.81	-3.79
2,748.00	19.54	197.98	2,718.49	-232.04	-96.31	-232.04	0.92	0.84	-1.11
2,842.00	20.13	199.08	2,806.92	-262.28	-106.45	-262.28	0.74	0.63	1.17
3,031.00	25.88	201.82	2,980.82	-331.37	-132.43	-331.37	3.09	3.04	1.45
3,125.00	23.54	199.57	3,066.21	-368.11	-146.35	-368.11	2.68	-2.49	-2.39
3,219.00	22.89	202.56	3,152.60	-402.68	-159.65	-402.68	1.43	-0.69	3.18
3,314.00	21.17	205.91	3,240.66	-435.17	-174.23	-435.17	2.24	-1.81	3.53
3,502.00	18.46	208.82	3,417.52	-491.80	-203.42	-491.80	1.53	-1.44	1.55
3,597.00	18.76	210.06	3,507.55	-518.20	-218.32	-518.20	0.52	0.32	1.31
3,691.00	18.44	213.67	3,596.65	-543.65	-234.14	-543.65	1.27	-0.34	3.84
3,785.00	19.58	208.93	3,685.52	-569.81	-250.00	-569.81	2.04	1.21	-5.04
3,879.00	20.52	211.42	3,773.83	-597.66	-266.21	-597.66	1.35	1.00	2.65
3,973.00	20.94	211.54	3,861.74	-626.03	-283.59	-626.03	0.45	0.45	0.13
4,068.00	21.26	209.29	3,950.37	-655.53	-300.89	-655.53	0.92	0.34	-2.37
4,162.00	21.40	206.64	4,037.94	-685.72	-316.92	-685.72	1.04	0.15	-2.82
4,257.00	22.91	206.22	4,125.92	-717.80	-332.86	-717.80	1.60	1.59	-0.44
4,351.00	24.81	204.96	4,211.88	-752.10	-349.27	-752.10	2.09	2.02	-1.34
4,445.00	23.09	204.07	4,297.79	-786.81	-365.11	-786.81	1.87	-1.83	-0.95
4,634.00	16.55	197.02	4,475.52	-846.46	-388.13	-846.46	3.68	-3.46	-3.73
4,823.00	23.28	195.36	4,653.12	-908.29	-405.93	-908.29	3.57	3.56	-0.88
4,917.00	22.82	197.57	4,739.61	-943.58	-416.35	-943.58	1.04	-0.49	2.35

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well DOLPH 4C-1HZ
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	GL 4999 & KB 25 @ 5024.00ft (HP 311)
Site:	DOLPH 14-1HZ PAD	MD Reference:	GL 4999 & KB 25 @ 5024.00ft (HP 311)
Well:	DOLPH 4C-1HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,011.00	23.73	198.84	4,825.96	-978.86	-427.96	-978.86	1.11	0.97	1.35
5,106.00	22.31	202.96	4,913.40	-1,013.55	-441.17	-1,013.55	2.26	-1.49	4.34
5,295.00	18.86	220.58	5,090.48	-1,069.86	-475.08	-1,069.86	3.73	-1.83	9.32
5,389.00	19.84	215.72	5,179.17	-1,094.35	-494.27	-1,094.35	2.00	1.04	-5.17
5,483.00	21.12	217.90	5,267.23	-1,120.67	-513.99	-1,120.67	1.58	1.36	2.32
5,578.00	21.19	214.01	5,355.83	-1,148.41	-534.11	-1,148.41	1.48	0.07	-4.09
5,672.00	21.24	206.06	5,443.48	-1,177.79	-551.10	-1,177.79	3.06	0.05	-8.46
5,766.00	22.97	202.90	5,530.57	-1,209.99	-565.71	-1,209.99	2.23	1.84	-3.36
5,860.00	21.45	205.13	5,617.60	-1,242.44	-580.15	-1,242.44	1.85	-1.62	2.37
5,954.00	19.51	200.29	5,705.66	-1,272.73	-592.90	-1,272.73	2.74	-2.06	-5.15
6,049.00	17.06	207.26	5,795.86	-1,300.01	-604.78	-1,300.01	3.45	-2.58	7.34
6,143.00	17.67	206.70	5,885.58	-1,325.01	-617.51	-1,325.01	0.67	0.65	-0.60
6,237.00	19.45	203.70	5,974.69	-1,352.09	-630.21	-1,352.09	2.15	1.89	-3.19
6,332.00	18.93	200.97	6,064.41	-1,380.96	-642.08	-1,380.96	1.09	-0.55	-2.87
6,426.00	13.52	197.72	6,154.64	-1,405.68	-650.89	-1,405.68	5.83	-5.76	-3.46
6,521.00	12.60	199.14	6,247.18	-1,426.05	-657.67	-1,426.05	1.03	-0.97	1.49
6,615.00	11.73	202.53	6,339.07	-1,444.56	-664.69	-1,444.56	1.20	-0.93	3.61
6,709.00	7.94	202.93	6,431.67	-1,459.37	-670.88	-1,459.37	4.03	-4.03	0.43
6,803.00	4.21	210.55	6,525.13	-1,468.33	-675.17	-1,468.33	4.05	-3.97	8.11
6,898.00	2.69	233.57	6,619.95	-1,472.66	-678.74	-1,472.66	2.13	-1.60	24.23
6,992.00	4.36	337.51	6,713.84	-1,470.66	-681.88	-1,470.66	6.01	1.78	110.57
7,039.00	9.05	350.17	6,760.51	-1,465.37	-683.20	-1,465.37	10.40	9.98	26.94
7,086.00	13.15	358.21	6,806.62	-1,456.38	-683.99	-1,456.38	9.30	8.72	17.11
7,133.00	16.73	352.24	6,852.03	-1,444.32	-685.07	-1,444.32	8.28	7.62	-12.70
7,180.00	19.55	351.27	6,896.69	-1,429.85	-687.18	-1,429.85	6.03	6.00	-2.06
7,227.00	22.67	351.92	6,940.53	-1,413.10	-689.65	-1,413.10	6.66	6.64	1.38
7,274.00	26.52	349.57	6,983.26	-1,393.81	-692.82	-1,393.81	8.45	8.19	-5.00
7,321.00	29.75	347.52	7,024.70	-1,372.10	-697.24	-1,372.10	7.17	6.87	-4.36
7,369.00	32.32	350.89	7,065.83	-1,347.79	-701.85	-1,347.79	6.46	5.35	7.02
7,416.00	33.82	358.56	7,105.23	-1,322.30	-704.17	-1,322.30	9.45	3.19	16.32
7,463.00	36.18	4.40	7,143.74	-1,295.38	-703.43	-1,295.38	8.71	5.02	12.43
7,510.00	39.08	3.61	7,180.96	-1,266.76	-701.44	-1,266.76	6.25	6.17	-1.68
7,556.00	43.67	1.93	7,215.47	-1,236.40	-699.99	-1,236.40	10.27	9.98	-3.65
7,603.00	46.33	2.88	7,248.70	-1,203.20	-698.59	-1,203.20	5.84	5.66	2.02
7,651.00	50.69	2.72	7,280.49	-1,167.29	-696.83	-1,167.29	9.09	9.08	-0.33
7,698.00	55.07	1.26	7,308.85	-1,129.85	-695.55	-1,129.85	9.64	9.32	-3.11
7,745.00	59.85	359.93	7,334.13	-1,090.24	-695.15	-1,090.24	10.45	10.17	-2.83
7,792.00	64.25	359.35	7,356.15	-1,048.73	-695.41	-1,048.73	9.42	9.36	-1.23
7,840.00	68.73	359.27	7,375.29	-1,004.73	-695.94	-1,004.73	9.33	9.33	-0.17
7,887.00	71.21	359.34	7,391.39	-960.58	-696.48	-960.58	5.28	5.28	0.15
7,934.00	74.10	359.18	7,405.40	-915.73	-697.06	-915.73	6.16	6.15	-0.34
7,981.00	79.47	358.45	7,416.14	-870.00	-698.01	-870.00	11.53	11.43	-1.55
8,056.00	85.22	357.59	7,426.13	-795.75	-700.58	-795.75	7.75	7.66	-1.15

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Site:	DOLPH 14-1HZ PAD	MD Reference:	GL 4999 & KB 25 @ 5024.00ft (HP 311)
Well:	DOLPH 4C-1HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7"(430 FNL 895 FWL)									
8,103.00	88.82	357.06	7,428.57	-748.87	-702.77	-748.87	7.75	7.66	-1.13
8,135.00	89.10	357.06	7,429.15	-716.92	-704.41	-716.92	0.88	0.88	0.00
8,229.00	90.91	358.93	7,429.15	-622.98	-707.70	-622.98	2.77	1.93	1.99
8,323.00	91.92	359.21	7,426.82	-529.02	-709.22	-529.02	1.11	1.07	0.30
8,418.00	92.32	359.20	7,423.31	-434.10	-710.54	-434.10	0.42	0.42	-0.01
8,512.00	90.81	0.61	7,420.74	-340.14	-710.69	-340.14	2.20	-1.61	1.50
8,606.00	91.01	359.71	7,419.25	-246.15	-710.43	-246.15	0.98	0.21	-0.96
8,701.00	89.97	0.31	7,418.44	-151.16	-710.42	-151.16	1.26	-1.09	0.63
8,795.00	89.70	359.73	7,418.71	-57.16	-710.38	-57.16	0.68	-0.29	-0.62
8,889.00	89.70	0.57	7,419.20	36.84	-710.14	36.84	0.89	0.00	0.89
8,984.00	90.50	1.14	7,419.03	131.83	-708.72	131.83	1.03	0.84	0.60
9,078.00	90.47	1.16	7,418.24	225.81	-706.83	225.81	0.04	-0.03	0.02
9,173.00	90.77	1.57	7,417.21	320.77	-704.57	320.77	0.53	0.32	0.43
9,267.00	89.29	359.56	7,417.16	414.76	-703.64	414.76	2.66	-1.57	-2.14
9,361.00	87.88	359.95	7,419.48	508.73	-704.04	508.73	1.56	-1.50	0.41
9,456.00	89.90	0.20	7,421.32	603.71	-703.92	603.71	2.14	2.13	0.26
9,550.00	88.05	358.99	7,423.00	697.68	-704.58	697.68	2.35	-1.97	-1.29
9,644.00	90.07	0.63	7,424.55	791.66	-704.90	791.66	2.77	2.15	1.74
9,739.00	91.27	0.31	7,423.44	886.65	-704.12	886.65	1.31	1.26	-0.34
9,833.00	91.68	0.50	7,421.02	980.62	-703.45	980.62	0.48	0.44	0.20
9,927.00	90.37	1.51	7,419.33	1,074.58	-701.80	1,074.58	1.76	-1.39	1.07
10,021.00	90.50	1.30	7,418.62	1,168.55	-699.50	1,168.55	0.26	0.14	-0.22
10,116.00	89.60	1.59	7,418.54	1,263.52	-697.10	1,263.52	1.00	-0.95	0.31
10,304.00	90.37	2.38	7,418.59	1,451.41	-690.59	1,451.41	0.59	0.41	0.42
10,398.00	91.24	2.76	7,417.27	1,545.30	-686.38	1,545.30	1.01	0.93	0.40
10,492.00	89.53	2.06	7,416.63	1,639.21	-682.42	1,639.21	1.97	-1.82	-0.74
10,587.00	89.90	1.05	7,417.11	1,734.17	-679.85	1,734.17	1.13	0.39	-1.06
10,681.00	89.03	359.81	7,417.98	1,828.16	-679.14	1,828.16	1.61	-0.93	-1.32
10,776.00	89.19	359.36	7,419.46	1,923.15	-679.83	1,923.15	0.50	0.17	-0.47
10,870.00	89.09	359.68	7,420.87	2,017.14	-680.62	2,017.14	0.36	-0.11	0.34
10,964.00	89.80	358.66	7,421.78	2,111.12	-681.98	2,111.12	1.32	0.76	-1.09
11,059.00	90.13	358.28	7,421.84	2,206.09	-684.51	2,206.09	0.53	0.35	-0.40
11,153.00	91.28	358.89	7,420.68	2,300.05	-686.84	2,300.05	1.38	1.22	0.65
11,247.00	88.62	358.63	7,420.77	2,394.02	-688.87	2,394.02	2.84	-2.83	-0.28
11,342.00	88.39	359.20	7,423.24	2,488.97	-690.67	2,488.97	0.65	-0.24	0.60
11,436.00	89.70	359.35	7,424.81	2,582.95	-691.86	2,582.95	1.40	1.39	0.16
11,530.00	89.80	359.13	7,425.22	2,676.94	-693.10	2,676.94	0.26	0.11	-0.23
11,625.00	91.21	359.89	7,424.38	2,771.93	-693.92	2,771.93	1.69	1.48	0.80
11,719.00	91.08	359.23	7,422.51	2,865.90	-694.64	2,865.90	0.72	-0.14	-0.70
11,813.00	90.47	0.23	7,421.23	2,959.89	-695.08	2,959.89	1.25	-0.65	1.06
11,908.00	90.44	359.74	7,420.48	3,054.89	-695.11	3,054.89	0.52	-0.03	-0.52
12,002.00	90.34	359.52	7,419.84	3,148.88	-695.71	3,148.88	0.26	-0.11	-0.23

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well DOLPH 4C-1HZ
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	GL 4999 & KB 25 @ 5024.00ft (HP 311)
Site:	DOLPH 14-1HZ PAD	MD Reference:	GL 4999 & KB 25 @ 5024.00ft (HP 311)
Well:	DOLPH 4C-1HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,191.00	90.54	359.90	7,418.39	3,337.88	-696.67	3,337.88	0.23	0.11	0.20
12,285.00	89.97	359.31	7,417.97	3,431.87	-697.32	3,431.87	0.87	-0.61	-0.63
12,379.00	89.73	0.91	7,418.22	3,525.87	-697.14	3,525.87	1.72	-0.26	1.70
12,474.00	89.46	359.86	7,418.89	3,620.86	-696.50	3,620.86	1.14	-0.28	-1.11
12,568.00	90.34	0.68	7,419.05	3,714.86	-696.06	3,714.86	1.28	0.94	0.87
12,662.00	90.44	0.38	7,418.41	3,808.85	-695.19	3,808.85	0.34	0.11	-0.32
12,757.00	90.23	0.16	7,417.86	3,903.85	-694.74	3,903.85	0.32	-0.22	-0.23
12,945.00	90.00	0.18	7,417.48	4,091.85	-694.18	4,091.85	0.12	-0.12	0.01
13,039.00	89.63	0.85	7,417.78	4,185.84	-693.34	4,185.84	0.81	-0.39	0.71
13,133.00	89.46	0.60	7,418.53	4,279.83	-692.15	4,279.83	0.32	-0.18	-0.27
13,224.00	89.29	0.31	7,419.52	4,370.83	-691.42	4,370.83	0.37	-0.19	-0.32
LAST SDI MWD PRODUCTION SURVEY									
13,286.00	89.29	0.31	7,420.29	4,432.82	-691.09	4,432.82	0.00	0.00	0.00
SDI PROJECTION TO TD(485 FNL 942 FWL)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,237.00	1,236.97	9 5/8"	9.625	13.500	
8,056.00	7,426.13	7"(430 FNL 895 FWL)	7.000	8.750	

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
125.00	125.00	-0.44	-0.05	FIRST MS GYRO SURVEY
1,197.00	1,196.97	-5.34	2.29	LAST MS GYRO SURVEY
1,349.00	1,348.97	-6.24	2.31	FIRST SDI MWD PRODUCTION SURVEY
13,224.00	7,419.52	4,370.83	-691.42	LAST SDI MWD PRODUCTION SURVEY
13,286.00	7,420.29	4,432.82	-691.09	SDI PROJECTION TO TD(485 FNL 942 FWL)

Checked By: _____	Approved By: _____	Date: _____
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