



Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 3E-18H
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5187.0ft (Patt 326)
Site:	S18-T3N-R68W (Billings)	MD Reference:	32' KB @ 5187.0ft (Patt 326)
Well:	Billings 3E-18H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	SURVEYS	Database:	USA EDM 5000 Multi Users DB

Project	DJ Wattenberg		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		S18-T3N-R68W (Billings)			
Site Position:		Northing:	1,326,724.18 ft	Latitude:	40.229390
From:	Lat/Long	Easting:	3,124,452.97 ft	Longitude:	-105.054290
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.29 °

Well	Billings 3E-18H					
Well Position	+N/-S	0.0 ft	Northing:	1,324,262.30 ft	Latitude:	40.222622
	+E/-W	0.0 ft	Easting:	3,125,177.14 ft	Longitude:	-105.051741
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,155.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/18/2014	8.54	66.74	52,644

Design	SURVEYS				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	90.00	

Survey Program	Date	11/29/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
192.0	13,990.0	Survey #1 (Hz)	Geolink MWD	Geolink MWD	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
192.0	0.90	267.00	192.0	-0.1	-1.5	-1.5	0.47	0.47		
240.0	1.10	252.80	240.0	-0.2	-2.3	-2.3	0.66	0.42		
287.0	1.80	256.00	287.0	-0.5	-3.5	-3.5	1.50	1.49		
334.0	2.90	251.10	333.9	-1.1	-5.3	-5.3	2.38	2.34		
381.0	3.90	253.40	380.8	-2.0	-8.0	-8.0	2.15	2.13		
429.0	4.60	251.70	428.7	-3.0	-11.4	-11.4	1.48	1.46		
524.0	6.50	250.70	523.3	-6.0	-20.1	-20.1	2.00	2.00		
619.0	8.70	248.50	617.4	-10.4	-31.8	-31.8	2.34	2.32		
714.0	10.00	250.30	711.2	-15.8	-46.3	-46.3	1.40	1.37		
808.0	9.40	248.60	803.8	-21.4	-61.1	-61.1	0.71	-0.64		
840.0	9.40	249.80	835.4	-23.2	-66.0	-66.0	0.61	0.00		
926.0	9.10	248.60	920.3	-28.1	-78.9	-78.9	0.41	-0.35		
1,020.0	10.50	256.90	1,012.9	-32.8	-94.2	-94.2	2.11	1.49		

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Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	SURVEYS	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
1,112.0	10.50	256.80	1,103.4	-36.6	-110.5	-110.5	0.02	0.00	
1,203.0	10.20	254.20	1,192.9	-40.7	-126.3	-126.3	0.61	-0.33	
1,295.0	10.30	251.70	1,283.4	-45.5	-142.0	-142.0	0.50	0.11	
1,387.0	10.20	249.80	1,373.9	-50.9	-157.4	-157.4	0.38	-0.11	
1,479.0	10.40	246.20	1,464.5	-57.1	-172.7	-172.7	0.73	0.22	
1,571.0	10.30	244.30	1,555.0	-64.0	-187.7	-187.7	0.39	-0.11	
1,663.0	10.30	243.30	1,645.5	-71.2	-202.4	-202.4	0.19	0.00	
1,755.0	10.20	241.60	1,736.0	-78.8	-216.9	-216.9	0.35	-0.11	
1,847.0	10.10	239.60	1,826.6	-86.8	-231.1	-231.1	0.40	-0.11	
1,939.0	9.20	245.40	1,917.3	-93.9	-244.7	-244.7	1.44	-0.98	
2,031.0	8.70	243.90	2,008.2	-100.0	-257.6	-257.6	0.60	-0.54	
2,123.0	8.80	244.20	2,099.1	-106.1	-270.2	-270.2	0.12	0.11	
2,215.0	9.80	249.60	2,189.9	-111.9	-283.9	-283.9	1.44	1.09	
2,307.0	9.70	248.90	2,280.5	-117.5	-298.5	-298.5	0.17	-0.11	
2,400.0	10.90	255.60	2,372.0	-122.5	-314.3	-314.3	1.82	1.29	
2,494.0	10.50	256.40	2,464.4	-126.7	-331.2	-331.2	0.45	-0.43	
2,589.0	10.30	254.50	2,557.9	-131.0	-347.8	-347.8	0.42	-0.21	
2,684.0	10.10	255.30	2,651.4	-135.4	-364.1	-364.1	0.26	-0.21	
2,778.0	12.40	252.00	2,743.5	-140.6	-381.7	-381.7	2.54	2.45	
2,873.0	12.30	251.60	2,836.3	-146.9	-401.0	-401.0	0.14	-0.11	
2,967.0	11.70	252.00	2,928.3	-153.0	-419.5	-419.5	0.64	-0.64	
3,062.0	11.00	250.00	3,021.4	-159.1	-437.2	-437.2	0.85	-0.74	
3,156.0	9.90	248.80	3,113.9	-165.1	-453.2	-453.2	1.19	-1.17	
3,251.0	8.70	246.60	3,207.6	-170.9	-467.4	-467.4	1.32	-1.26	
3,346.0	8.30	242.70	3,301.6	-176.9	-480.1	-480.1	0.74	-0.42	
3,440.0	10.10	248.90	3,394.4	-183.0	-493.8	-493.8	2.18	1.91	
3,535.0	10.40	248.00	3,487.8	-189.2	-509.5	-509.5	0.36	0.32	
3,629.0	10.30	246.50	3,580.3	-195.7	-525.1	-525.1	0.31	-0.11	
3,724.0	9.90	246.30	3,673.8	-202.4	-540.3	-540.3	0.42	-0.42	
3,818.0	9.30	244.40	3,766.5	-208.9	-554.6	-554.6	0.72	-0.64	
3,913.0	8.70	244.00	3,860.4	-215.4	-568.0	-568.0	0.64	-0.63	
4,008.0	10.40	249.80	3,954.0	-221.5	-582.5	-582.5	2.05	1.79	
4,102.0	10.50	247.70	4,046.5	-227.7	-598.4	-598.4	0.42	0.11	
4,197.0	10.00	247.10	4,140.0	-234.2	-614.0	-614.0	0.54	-0.53	
4,291.0	9.10	246.90	4,232.7	-240.3	-628.3	-628.3	0.96	-0.96	
4,386.0	10.80	251.30	4,326.2	-246.1	-643.7	-643.7	1.96	1.79	
4,481.0	10.70	253.60	4,419.6	-251.4	-660.6	-660.6	0.46	-0.11	
4,575.0	10.20	253.00	4,512.0	-256.3	-676.9	-676.9	0.54	-0.53	
4,670.0	9.40	250.60	4,605.6	-261.4	-692.2	-692.2	0.95	-0.84	
4,765.0	8.70	251.00	4,699.4	-266.3	-706.4	-706.4	0.74	-0.74	
4,859.0	9.80	246.90	4,792.2	-271.7	-720.4	-720.4	1.36	1.17	
4,954.0	9.30	246.70	4,885.9	-277.9	-734.9	-734.9	0.53	-0.53	
5,048.0	10.60	249.20	4,978.5	-284.0	-750.0	-750.0	1.46	1.38	
5,143.0	10.00	245.50	5,072.0	-290.5	-765.7	-765.7	0.94	-0.63	
5,238.0	9.00	244.50	5,165.6	-297.2	-779.9	-779.9	1.07	-1.05	
5,332.0	9.60	251.10	5,258.4	-302.9	-793.9	-793.9	1.30	0.64	
5,427.0	8.70	249.20	5,352.2	-308.0	-808.1	-808.1	1.00	-0.95	
5,521.0	8.90	255.20	5,445.1	-312.4	-821.8	-821.8	1.00	0.21	
5,616.0	10.90	257.40	5,538.7	-316.2	-837.7	-837.7	2.14	2.11	
5,710.0	9.80	255.50	5,631.1	-320.1	-854.1	-854.1	1.23	-1.17	
5,805.0	8.90	253.40	5,724.9	-324.3	-869.0	-869.0	1.01	-0.95	
5,852.0	8.20	251.40	5,771.4	-326.4	-875.6	-875.6	1.62	-1.49	
5,899.0	7.50	243.70	5,817.9	-328.8	-881.6	-881.6	2.68	-1.49	
5,946.0	6.10	231.80	5,864.6	-331.7	-886.3	-886.3	4.21	-2.98	

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Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
5,994.0	5.10	209.70	5,912.4	-335.1	-889.3	-889.3	4.91	-2.08	
6,041.0	5.10	184.40	5,959.2	-339.0	-890.5	-890.5	4.75	0.00	
6,088.0	5.50	165.50	6,006.0	-343.3	-890.1	-890.1	3.79	0.85	
6,135.0	5.80	144.90	6,052.8	-347.4	-888.2	-888.2	4.34	0.64	
6,183.0	6.90	123.00	6,100.5	-351.0	-884.4	-884.4	5.50	2.29	
6,230.0	8.80	118.60	6,147.0	-354.2	-878.9	-878.9	4.24	4.04	
6,278.0	10.90	113.70	6,194.3	-357.8	-871.5	-871.5	4.71	4.37	
6,325.0	12.70	107.90	6,240.3	-361.2	-862.5	-862.5	4.58	3.83	
6,372.0	14.50	102.10	6,286.0	-364.0	-851.8	-851.8	4.80	3.83	
6,419.0	17.20	104.90	6,331.2	-367.0	-839.4	-839.4	5.97	5.74	
6,467.0	20.70	101.10	6,376.6	-370.5	-824.2	-824.2	7.73	7.29	
6,514.0	23.50	98.30	6,420.2	-373.4	-806.7	-806.7	6.36	5.96	
6,561.0	25.50	100.40	6,462.9	-376.6	-787.5	-787.5	4.64	4.26	
6,608.0	27.50	101.20	6,505.0	-380.6	-766.9	-766.9	4.32	4.26	
6,656.0	30.20	100.40	6,547.0	-384.9	-744.2	-744.2	5.68	5.62	
6,703.0	32.20	98.80	6,587.2	-388.9	-720.2	-720.2	4.61	4.26	
6,750.0	33.80	98.20	6,626.6	-392.7	-694.8	-694.8	3.47	3.40	
6,797.0	37.20	98.40	6,664.9	-396.7	-667.8	-667.8	7.24	7.23	
6,845.0	40.90	94.40	6,702.2	-400.0	-637.8	-637.8	9.32	7.71	
6,892.0	43.10	92.90	6,737.1	-402.0	-606.4	-606.4	5.14	4.68	
6,939.0	45.30	91.90	6,770.8	-403.3	-573.7	-573.7	4.91	4.68	
6,986.0	49.80	91.90	6,802.5	-404.5	-539.0	-539.0	9.57	9.57	
7,034.0	54.00	92.10	6,832.1	-405.8	-501.3	-501.3	8.76	8.75	
7,081.0	57.20	90.90	6,858.7	-406.8	-462.5	-462.5	7.13	6.81	
7,128.0	59.30	90.40	6,883.4	-407.3	-422.6	-422.6	4.56	4.47	
7,175.0	62.10	90.60	6,906.4	-407.6	-381.6	-381.6	5.97	5.96	
7,223.0	65.80	91.20	6,927.5	-408.3	-338.5	-338.5	7.79	7.71	
7,270.0	68.80	91.70	6,945.6	-409.4	-295.1	-295.1	6.46	6.38	
7,317.0	72.50	91.40	6,961.2	-410.6	-250.8	-250.8	7.90	7.87	
7,364.0	76.80	91.30	6,973.6	-411.7	-205.5	-205.5	9.15	9.15	
7,412.0	80.90	91.30	6,982.9	-412.7	-158.4	-158.4	8.54	8.54	
7,458.0	83.90	91.10	6,989.0	-413.7	-112.9	-112.9	6.54	6.52	
7,488.0	85.70	90.20	6,991.7	-414.0	-83.0	-83.0	6.70	6.00	
7,558.0	88.70	89.30	6,995.1	-413.7	-13.1	-13.1	4.47	4.29	
7,650.0	89.10	89.70	6,996.9	-412.9	78.9	78.9	0.61	0.43	
7,742.0	88.70	89.30	6,998.7	-412.1	170.9	170.9	0.61	-0.43	
7,834.0	90.20	91.20	6,999.5	-412.5	262.9	262.9	2.63	1.63	
7,926.0	90.10	91.20	6,999.3	-414.5	354.8	354.8	0.11	-0.11	
8,018.0	89.50	90.20	6,999.6	-415.6	446.8	446.8	1.27	-0.65	
8,110.0	89.50	90.60	7,000.4	-416.2	538.8	538.8	0.43	0.00	
8,202.0	88.90	90.90	7,001.7	-417.4	630.8	630.8	0.73	-0.65	
8,294.0	89.40	91.10	7,003.1	-419.0	722.8	722.8	0.59	0.54	
8,386.0	87.60	90.50	7,005.5	-420.3	814.7	814.7	2.06	-1.96	
8,479.0	88.00	90.30	7,009.1	-421.0	907.7	907.7	0.48	0.43	
8,571.0	88.00	89.80	7,012.3	-421.0	999.6	999.6	0.54	0.00	
8,665.0	90.70	90.50	7,013.3	-421.3	1,093.6	1,093.6	2.97	2.87	
8,760.0	92.10	90.00	7,011.0	-421.7	1,188.6	1,188.6	1.56	1.47	
8,855.0	91.50	89.60	7,008.0	-421.4	1,283.5	1,283.5	0.76	-0.63	
8,949.0	90.30	89.00	7,006.6	-420.2	1,377.5	1,377.5	1.43	-1.28	
9,043.0	88.60	89.00	7,007.5	-418.6	1,471.5	1,471.5	1.81	-1.81	
9,138.0	88.60	88.90	7,009.8	-416.8	1,566.4	1,566.4	0.11	0.00	
9,233.0	89.70	89.20	7,011.2	-415.3	1,661.4	1,661.4	1.20	1.16	
9,327.0	87.70	88.90	7,013.3	-413.7	1,755.4	1,755.4	2.15	-2.13	
9,422.0	87.50	88.10	7,017.3	-411.2	1,850.2	1,850.2	0.87	-0.21	

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Site:	S18-T3N-R68W (Billings)	MD Reference:	32' KB @ 5187.0ft (Patt 326)
Well:	Billings 3E-18H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	SURVEYS	Database:	USA EDM 5000 Multi Users DB

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Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
9,516.0	90.10	89.70	7,019.3	-409.4	1,944.2	1,944.2	3.25	2.77	
9,611.0	91.50	89.80	7,017.9	-409.0	2,039.2	2,039.2	1.48	1.47	
9,705.0	92.40	89.90	7,014.7	-408.8	2,133.1	2,133.1	0.96	0.96	
9,800.0	90.40	89.40	7,012.4	-408.2	2,228.1	2,228.1	2.17	-2.11	
9,894.0	89.30	88.60	7,012.7	-406.5	2,322.1	2,322.1	1.45	-1.17	
9,988.0	88.80	87.50	7,014.2	-403.3	2,416.0	2,416.0	1.29	-0.53	
10,082.0	88.60	89.20	7,016.4	-400.6	2,509.9	2,509.9	1.82	-0.21	
10,177.0	90.10	90.50	7,017.4	-400.4	2,604.9	2,604.9	2.09	1.58	
10,272.0	90.00	90.60	7,017.3	-401.3	2,699.9	2,699.9	0.15	-0.11	
10,366.0	90.20	90.70	7,017.2	-402.4	2,793.9	2,793.9	0.24	0.21	
10,461.0	90.20	90.50	7,016.9	-403.4	2,888.9	2,888.9	0.21	0.00	
10,555.0	90.20	90.10	7,016.5	-403.9	2,982.9	2,982.9	0.43	0.00	
10,650.0	90.20	89.80	7,016.2	-403.8	3,077.9	3,077.9	0.32	0.00	
10,744.0	90.60	89.60	7,015.5	-403.3	3,171.9	3,171.9	0.48	0.43	
10,839.0	89.30	89.90	7,015.6	-402.9	3,266.9	3,266.9	1.40	-1.37	
10,933.0	87.30	88.80	7,018.4	-401.8	3,360.9	3,360.9	2.43	-2.13	
11,028.0	87.10	89.50	7,023.1	-400.4	3,455.7	3,455.7	0.77	-0.21	
11,122.0	87.40	89.60	7,027.6	-399.7	3,549.6	3,549.6	0.34	0.32	
11,217.0	87.40	91.30	7,031.9	-400.4	3,644.5	3,644.5	1.79	0.00	
11,311.0	88.00	91.70	7,035.6	-402.9	3,738.4	3,738.4	0.77	0.64	
11,406.0	86.80	91.20	7,040.0	-405.3	3,833.3	3,833.3	1.37	-1.26	
11,501.0	88.00	91.80	7,044.3	-407.7	3,928.1	3,928.1	1.41	1.26	
11,595.0	86.60	91.30	7,048.7	-410.3	4,022.0	4,022.0	1.58	-1.49	
11,690.0	86.00	91.20	7,054.8	-412.4	4,116.8	4,116.8	0.64	-0.63	
11,784.0	86.30	91.00	7,061.1	-414.2	4,210.5	4,210.5	0.38	0.32	
11,879.0	86.80	91.00	7,066.8	-415.8	4,305.4	4,305.4	0.53	0.53	
11,973.0	86.50	90.50	7,072.3	-417.0	4,399.2	4,399.2	0.62	-0.32	
12,068.0	87.30	90.00	7,077.5	-417.5	4,494.1	4,494.1	0.99	0.84	
12,162.0	87.10	88.30	7,082.1	-416.1	4,587.9	4,587.9	1.82	-0.21	
12,257.0	88.00	88.60	7,086.1	-413.5	4,682.8	4,682.8	1.00	0.95	
12,351.0	88.50	90.10	7,089.0	-412.4	4,776.8	4,776.8	1.68	0.53	
12,446.0	89.60	91.20	7,090.6	-413.5	4,871.8	4,871.8	1.64	1.16	
12,540.0	89.00	90.30	7,091.7	-414.7	4,965.7	4,965.7	1.15	-0.64	
12,635.0	88.50	90.10	7,093.8	-415.1	5,060.7	5,060.7	0.57	-0.53	
12,729.0	87.80	89.30	7,096.8	-414.6	5,154.7	5,154.7	1.13	-0.74	
12,824.0	88.40	89.30	7,100.0	-413.4	5,249.6	5,249.6	0.63	0.63	
12,918.0	89.30	90.20	7,101.9	-413.0	5,343.6	5,343.6	1.35	0.96	
13,013.0	89.20	90.10	7,103.1	-413.3	5,438.6	5,438.6	0.15	-0.11	
13,107.0	88.60	89.80	7,104.9	-413.2	5,532.6	5,532.6	0.71	-0.64	
13,202.0	88.10	90.50	7,107.7	-413.4	5,627.5	5,627.5	0.91	-0.53	
13,296.0	88.10	89.20	7,110.8	-413.2	5,721.4	5,721.4	1.38	0.00	
13,391.0	89.00	89.90	7,113.2	-412.4	5,816.4	5,816.4	1.20	0.95	
13,486.0	88.80	89.00	7,115.0	-411.5	5,911.4	5,911.4	0.97	-0.21	
13,580.0	89.40	89.00	7,116.5	-409.9	6,005.3	6,005.3	0.64	0.64	
13,675.0	89.70	88.60	7,117.2	-407.9	6,100.3	6,100.3	0.53	0.32	
13,769.0	90.30	88.70	7,117.2	-405.7	6,194.3	6,194.3	0.65	0.64	
13,864.0	90.90	88.80	7,116.2	-403.6	6,289.3	6,289.3	0.64	0.63	
13,940.0	91.90	88.40	7,114.4	-401.7	6,365.2	6,365.2	1.42	1.32	Last CES Survey @ 13,940' MD
13,990.0	91.90	88.40	7,112.7	-400.3	6,415.2	6,415.2	0.00	0.00	PTB @ 13,990' MD

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 3E-18H
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5187.0ft (Patt 326)
Site:	S18-T3N-R68W (Billings)	MD Reference:	32' KB @ 5187.0ft (Patt 326)
Well:	Billings 3E-18H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	SURVEYS	Database:	USA EDM 5000 Multi Users DB

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Billings 3E-18H PBHL	0.00	0.00	7,159.0	-415.2	6,489.9	1,323,879.96	3,131,669.07	40.221480	-105.028500
- survey misses target center by 89.2ft at 13990.0ft MD (7112.7 TVD, -400.3 N, 6415.2 E)									
- Point									
Billings 3E-18H 10800'	0.00	0.00	7,000.0	-413.4	3,197.1	1,323,865.02	3,128,376.28	40.221486	-105.040292
- survey misses target center by 18.5ft at 10769.1ft MD (7015.4 TVD, -403.1 N, 3197.0 E)									
- Point									
Billings 3E-18H TGT	0.00	0.00	6,789.7	-400.4	-567.1	1,323,859.04	3,124,612.04	40.221523	-105.053772
- survey misses target center by 9.7ft at 6956.5ft MD (6782.9 TVD, -403.8 N, -561.1 E)									
- Point									
Billings 3E-18H 7530'	0.00	0.00	7,000.0	-413.2	-72.4	1,323,848.75	3,125,106.82	40.221488	-105.052000
- survey misses target center by 7.6ft at 7499.0ft MD (6992.5 TVD, -414.1 N, -72.0 E)									
- Point									
Billings 3E-18H PBHL 2	0.00	0.00	7,130.0	-413.7	6,488.8	1,323,881.41	3,131,667.94	40.221484	-105.028504
- survey misses target center by 76.8ft at 13990.0ft MD (7112.7 TVD, -400.3 N, 6415.2 E)									
- Point									
Billings 3E-18H 13000'	0.00	0.00	7,110.0	-413.6	5,411.8	1,323,876.06	3,130,590.94	40.221485	-105.032361
- survey misses target center by 7.3ft at 12986.3ft MD (7102.7 TVD, -413.2 N, 5411.9 E)									
- Point									
Billings 3E-18H PBHL P.	0.00	0.00	7,129.0	-413.7	6,488.8	1,323,881.41	3,131,667.94	40.221484	-105.028504
- survey misses target center by 76.6ft at 13990.0ft MD (7112.7 TVD, -400.3 N, 6415.2 E)									
- Point									

Survey Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
13,940.0	7,114.4	-401.7	6,365.2	Last CES Survey @ 13,940' MD
13,990.0	7,112.7	-400.3	6,415.2	PTB @ 13,990' MD

Checked By: _____	Approved By: _____	Date: _____
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