

Devon Energy Corporation

Thistle Unit 155H

Lea County, NM (NAD 83)

HOBBS OCD

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Sperry Drilling Services

End Of Well Report

08 April, 2019

HALLIBURTON

End Of Well Report

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Devon Energy Corporation

WELL DETAILS: Thistle Unit 155H

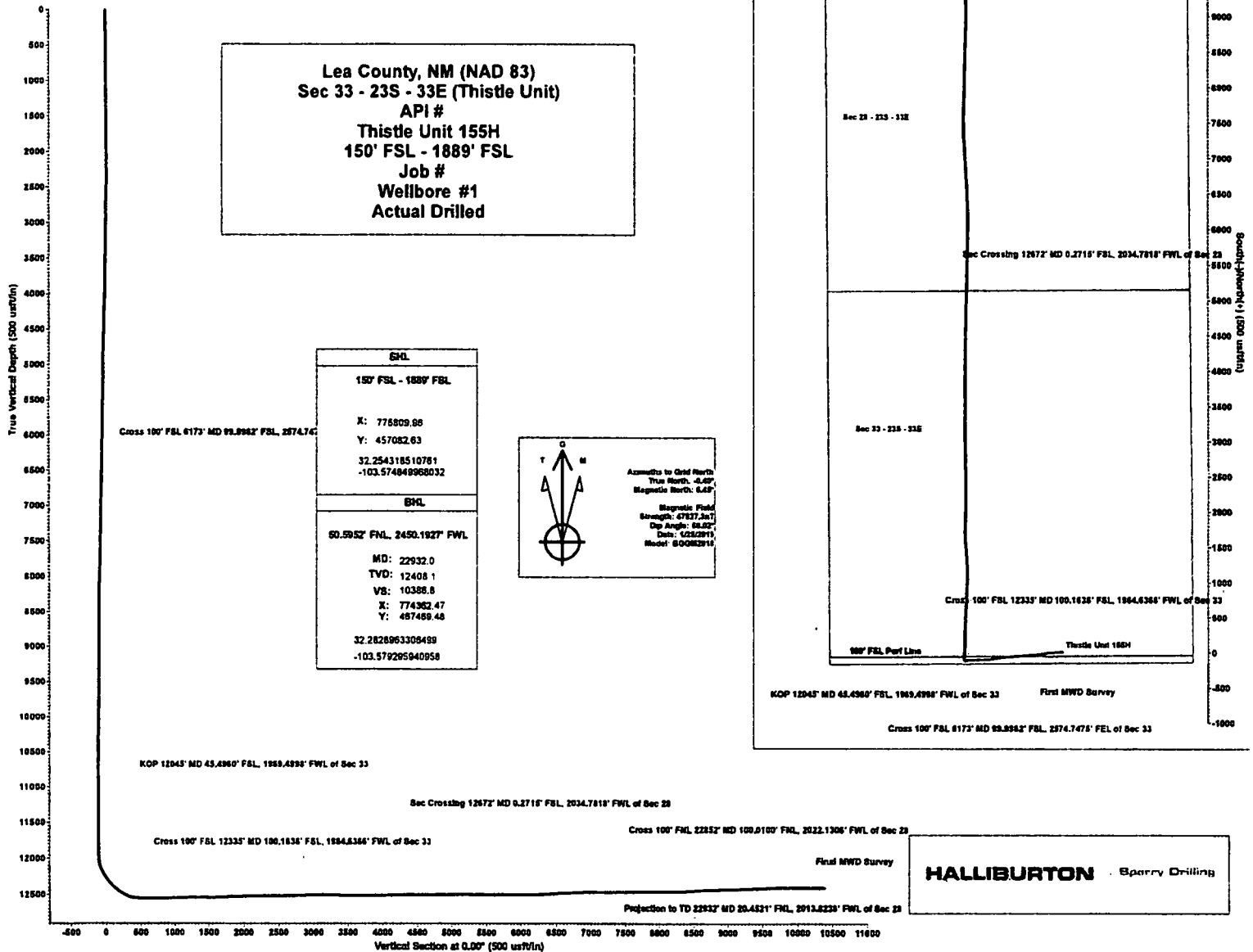
RKB (Nabors X05) 33' + GL @ 3686.0usft
3653.0

0.0 0.0 Northing 457082.63 Easting 775809.96 Longitude 103° 34' 29.450 W

ANNOTATIONS

MD	Inc	Atn	TVD	+N-S	+E-W	V-Sect	Annotation
234.0	1.40	58.82	234.0	1.5	2.4	1.5	First MWD Survey
6173.0	11.08	266.37	6104.6	-53.2	-485.6	-53.2	Cross 100' FSL 6173' MD 99.9962' FSL 2574.7475' FWL of Sec 33
12045.0	0.39	350.86	11912.4	-112.1	-1415.8	-112.1	KOP 12045' MD 45.4960' FSL 1969.4958' FWL of Sec 33
12335.0	29.76	3.54	12193.0	-57.5	-1420.8	-67.6	Cross 100' FSL 12335' MD 100.1636' FSL 1964.6366' FWL of Sec 33
17872.0	90.56	1.76	12503.7	5132.7	-1389.1	5132.7	Sec Crossing 12672' MD 0.2715' FSL 2034.7818' FWL of Sec 28
22852.0	89.85	354.36	12407.8	10307.4	-1438.5	10307.4	Cross 100' FSL 22852' MD 100.0100' FSL 2022.1306' FWL of Sec 28
22889.0	89.80	353.46	12407.8	10324.3	-1440.3	10324.3	Final MWD Survey
22932.0	89.60	353.46	12408.1	10388.8	-1447.5	10388.8	Projection to TD 22932' MD 20.4521' FSL 2013.6238' FWL of Sec 28

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Devon Energy Corporation

Lea County, NM (NAD 83)

Sec 33 - 23S - 33E (Thistle Unit)

Thistle Unit 155H

Wellbore #1

Design: Actual Drilled

Survey Report - Geographic

08 April, 2019

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Survey Report - Geographic

Company: Devon Energy Corporation	Local Co-ordinate Reference: Well Thistle Unit 155H
Project: Lea County, NM (NAD 83)	TVD Reference: RKB (Nabors X05) 33' + GL @ 3686.0usft
Site: Sec 33 - 23S - 33E (Thistle Unit)	MD Reference: RKB (Nabors X05) 33' + GL @ 3686.0usft
Well: Thistle Unit 155H	North Reference: Grid
Wellbore: Wellbore #1	Survey Calculation Method: Minimum Curvature
Design: Actual Drilled	Database: SOUTH US

Project Lea County, NM (NAD 83)	System Datum: Mean Sea Level
Map System: US State Plane 1983	
Geo Datum: North American Datum 1983	
Map Zone: New Mexico Eastern Zone	

Site Sec 33 - 23S - 33E (Thistle Unit)			
Site Position:	Northing: 457,083.16 usft	Latitude: 32° 15' 15.548 N	
From: Map	Easting: 775,859.81 usft	Longitude: 103° 34' 28.879 W	
Position Uncertainty: 5.0 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.40 °	

Well Thistle Unit 155H			
Well Position	Northing: 457,082.83 usft	Latitude: 32° 15' 15.547 N	
+N/-S 0.0 usft	Easting: 775,809.96 usft	Longitude: 103° 34' 29.460 W	
+E/-W 0.0 usft	Wellhead Elevation: usft	Ground Level: 3,653.0 usft	
Position Uncertainty 0.5 usft			

Wellbore Wellbore #1			
Magnetics	Model Name	Sample Date	Declination
	BGGM2018	1/25/2019	(°) 6.85
			Dip Angle (°) 60.02
			Field Strength (nT) 47,827.33125633

Design Actual Drilled			
Audit Notes:			
Version: 1.0	Phase: ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction (°) 0.00

Survey Program		Date 4/8/2019
From	To	Survey (Wellbore)
(usft)	(usft)	
234.0	22,869.0	Actual Drilled (Wellbore #1)
22,932.0	22,932.0	Projection to TD (Wellbore #1)
		Tool Name
		2_MWD
		2_Blind
		Description
		A001Mb/ISC4: BGGM declination correction only
		A026Ua: Blind drilling - no survey data

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Map	Map	Latitude	Longitude
Depth	(°)	(°)	Depth	(usft)	(usft)	Northing	Easting		
(usft)			(usft)			(usft)	(usft)		
0.0	0.00	0.00	0.0	0.0	0.0	457,082.83	775,809.96	32° 15' 15.547 N	103° 34' 29.460 W
51.3	0.31	58.82	51.3	0.1	0.1	457,082.70	775,810.07	32° 15' 15.547 N	103° 34' 29.459 W
PBHL of Thistle Unit 155H (20' FNL - 2085' FWL)									
234.0	1.40	58.82	234.0	1.5	2.4	457,084.11	775,812.40	32° 15' 15.561 N	103° 34' 28.431 W
First MWD Survey									
326.0	1.22	66.38	326.0	2.5	4.3	457,085.08	775,814.28	32° 15' 15.571 N	103° 34' 29.410 W
427.0	1.23	78.33	426.9	3.1	6.4	457,085.73	775,816.31	32° 15' 15.577 N	103° 34' 29.386 W
522.0	1.28	74.31	521.8	3.6	8.4	457,086.23	775,818.33	32° 15' 15.582 N	103° 34' 29.362 W
617.0	1.13	69.02	616.9	4.2	10.3	457,086.85	775,820.23	32° 15' 15.588 N	103° 34' 29.340 W
712.0	1.25	75.92	711.8	4.8	12.1	457,087.44	775,822.10	32° 15' 15.593 N	103° 34' 29.318 W
807.0	1.19	74.78	806.8	5.3	14.1	457,087.95	775,824.06	32° 15' 15.598 N	103° 34' 29.295 W

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Survey Report - Geographic

Company: Devon Energy Corporation	Local Co-ordinate Reference: Well Thistle Unit 155H	
Project: Lea County, NM (NAD 83)	TVD Reference: RKB (Nabors X05) 33' + GL @ 3686.0usft	
Site: Sec 33 - 23S - 33E (Thistle Unit)	MD Reference: RKB (Nabors X05) 33' + GL @ 3686.0usft	
Well: Thistle Unit 155H	North Reference: Grid	
Wellbore: Wellbore #1	Survey Calculation Method: Minimum Curvature	
Design: Actual Drilled	Database: SOUTH US	

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
903.0	0.88	70.87	902.8	5.8	15.8	457,088.45	775,825.72	32° 15' 15.603 N	103° 34' 29.276 W
998.0	0.46	63.55	997.8	6.2	16.8	457,088.88	775,826.75	32° 15' 15.607 N	103° 34' 29.264 W
1,093.0	0.28	41.02	1,092.8	6.6	17.3	457,089.21	775,827.24	32° 15' 15.610 N	103° 34' 29.258 W
1,188.0	0.18	325.44	1,187.8	6.9	17.4	457,089.49	775,827.32	32° 15' 15.613 N	103° 34' 29.257 W
1,283.0	0.10	344.14	1,282.8	7.0	17.3	457,089.68	775,827.22	32° 15' 15.615 N	103° 34' 29.258 W
1,378.0	0.20	279.81	1,377.8	7.2	17.1	457,089.79	775,827.04	32° 15' 15.616 N	103° 34' 29.260 W
1,473.0	0.50	300.42	1,472.8	7.4	16.6	457,090.03	775,826.52	32° 15' 15.619 N	103° 34' 29.266 W
1,568.0	0.94	323.88	1,567.8	8.2	15.7	457,090.86	775,825.70	32° 15' 15.627 N	103° 34' 29.276 W
1,663.0	1.19	330.65	1,662.8	9.7	14.8	457,092.35	775,824.78	32° 15' 15.642 N	103° 34' 29.287 W
1,758.0	0.56	304.76	1,758.8	10.9	13.9	457,093.49	775,823.88	32° 15' 15.653 N	103° 34' 29.297 W
1,854.0	0.55	326.15	1,853.8	11.5	13.3	457,094.13	775,823.25	32° 15' 15.660 N	103° 34' 29.304 W
1,949.0	0.57	342.84	1,948.8	12.3	12.9	457,094.96	775,822.85	32° 15' 15.668 N	103° 34' 29.309 W
2,044.0	0.57	347.27	2,043.8	13.2	12.7	457,095.88	775,822.61	32° 15' 15.677 N	103° 34' 29.311 W
2,139.0	0.87	282.32	2,138.8	13.9	11.8	457,096.49	775,821.80	32° 15' 15.683 N	103° 34' 29.321 W
2,234.0	1.55	258.02	2,233.7	13.7	9.9	457,096.38	775,819.84	32° 15' 15.682 N	103° 34' 29.344 W
2,330.0	2.53	258.33	2,329.7	13.1	6.5	457,095.68	775,818.50	32° 15' 15.675 N	103° 34' 29.383 W
2,425.0	3.19	259.99	2,424.6	12.2	1.9	457,094.80	775,811.84	32° 15' 15.687 N	103° 34' 29.437 W
2,520.0	3.99	260.39	2,519.4	11.2	-4.0	457,093.79	775,805.98	32° 15' 15.657 N	103° 34' 29.505 W
2,615.0	4.77	260.98	2,614.1	10.0	-11.1	457,092.61	775,798.82	32° 15' 15.648 N	103° 34' 29.589 W
2,710.0	5.83	259.43	2,708.7	8.5	-19.8	457,091.10	775,790.17	32° 15' 15.632 N	103° 34' 29.690 W
2,805.0	6.84	260.72	2,803.1	6.7	-30.1	457,089.30	775,779.85	32° 15' 15.615 N	103° 34' 29.810 W
2,901.0	7.97	262.94	2,898.3	4.9	-42.4	457,087.56	775,767.60	32° 15' 15.598 N	103° 34' 29.953 W
2,996.0	8.87	261.90	2,992.3	3.1	-58.1	457,085.72	775,753.81	32° 15' 15.581 N	103° 34' 30.113 W
3,091.0	8.93	266.35	3,086.1	1.6	-70.8	457,084.22	775,739.20	32° 15' 15.567 N	103° 34' 30.284 W
3,186.0	9.19	268.89	3,180.0	1.0	-85.7	457,083.60	775,724.26	32° 15' 15.562 N	103° 34' 30.458 W
3,281.0	9.85	265.92	3,273.6	0.2	-101.4	457,082.87	775,708.57	32° 15' 15.556 N	103° 34' 30.640 W
3,377.0	10.52	264.58	3,368.1	-1.2	-118.3	457,081.46	775,691.66	32° 15' 15.543 N	103° 34' 30.838 W
3,472.0	11.15	263.86	3,461.4	-3.0	-136.1	457,079.66	775,673.89	32° 15' 15.527 N	103° 34' 31.045 W
3,567.0	11.70	263.04	3,554.6	-5.1	-154.8	457,077.51	775,655.19	32° 15' 15.507 N	103° 34' 31.262 W
3,662.0	11.44	267.78	3,647.6	-6.7	-173.7	457,075.97	775,636.22	32° 15' 15.493 N	103° 34' 31.484 W
3,757.0	11.00	272.65	3,740.8	-6.6	-192.2	457,076.03	775,617.75	32° 15' 15.495 N	103° 34' 31.699 W
3,853.0	9.48	266.39	3,835.3	-6.7	-209.2	457,075.95	775,600.73	32° 15' 15.495 N	103° 34' 31.897 W
3,948.0	9.45	256.98	3,929.0	-8.9	-224.6	457,073.71	775,585.34	32° 15' 15.474 N	103° 34' 32.076 W
4,043.0	10.85	255.72	4,022.5	-12.9	-240.9	457,069.74	775,569.07	32° 15' 15.438 N	103° 34' 32.266 W
4,138.0	11.68	258.98	4,115.7	-16.9	-259.0	457,065.70	775,550.97	32° 15' 15.397 N	103° 34' 32.477 W
4,233.0	11.93	261.25	4,208.7	-20.3	-278.1	457,062.36	775,531.82	32° 15' 15.385 N	103° 34' 32.700 W
4,328.0	11.56	266.63	4,301.7	-22.3	-297.3	457,060.31	775,512.62	32° 15' 15.347 N	103° 34' 32.924 W
4,424.0	10.63	265.15	4,395.9	-23.6	-315.8	457,058.99	775,494.19	32° 15' 15.335 N	103° 34' 33.139 W
4,519.0	10.44	259.95	4,489.3	-25.9	-333.0	457,056.75	775,476.98	32° 15' 15.314 N	103° 34' 33.339 W
4,614.0	10.49	259.91	4,582.7	-28.9	-350.0	457,053.73	775,460.00	32° 15' 15.285 N	103° 34' 33.537 W
4,709.0	10.76	260.65	4,676.1	-31.8	-367.2	457,050.81	775,442.73	32° 15' 15.257 N	103° 34' 33.739 W
4,804.0	11.56	259.99	4,769.3	-34.9	-385.4	457,047.74	775,424.60	32° 15' 15.228 N	103° 34' 33.950 W
4,900.0	12.25	264.47	4,863.2	-37.5	-405.0	457,045.09	775,404.99	32° 15' 15.203 N	103° 34' 34.179 W
4,995.0	12.04	268.89	4,956.1	-38.7	-424.9	457,043.93	775,385.05	32° 15' 15.193 N	103° 34' 34.411 W
5,090.0	10.83	268.01	5,049.2	-39.2	-443.7	457,043.42	775,366.22	32° 15' 15.190 N	103° 34' 34.630 W
5,185.0	12.40	270.76	5,142.3	-39.4	-462.9	457,043.25	775,347.10	32° 15' 15.189 N	103° 34' 34.853 W
5,280.0	12.20	267.94	5,235.1	-39.6	-483.1	457,043.02	775,328.87	32° 15' 15.188 N	103° 34' 35.088 W
5,375.0	12.88	267.51	5,327.8	-40.4	-503.7	457,042.20	775,308.26	32° 15' 15.182 N	103° 34' 35.329 W
5,471.0	13.56	266.56	5,421.3	-41.6	-525.6	457,041.06	775,284.34	32° 15' 15.172 N	103° 34' 35.584 W
5,566.0	14.03	265.62	5,513.5	-43.1	-548.2	457,039.52	775,261.74	32° 15' 15.158 N	103° 34' 35.847 W
5,661.0	14.56	265.92	5,605.6	-44.8	-571.6	457,037.79	775,238.34	32° 15' 15.143 N	103° 34' 36.120 W
5,756.0	13.99	263.13	5,697.7	-47.1	-594.9	457,035.56	775,215.03	32° 15' 15.122 N	103° 34' 36.391 W
5,851.0	13.06	264.05	5,790.0	-49.6	-617.0	457,033.08	775,192.86	32° 15' 15.099 N	103° 34' 36.649 W
5,946.0	12.73	268.19	5,882.6	-51.0	-638.1	457,031.63	775,171.82	32° 15' 15.087 N	103° 34' 36.895 W
6,042.0	12.44	267.44	5,976.3	-51.8	-659.0	457,030.84	775,150.92	32° 15' 15.080 N	103° 34' 37.138 W

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Survey Report - Geographic

Company: Devon Energy Corporation	Local Co-ordinate Reference: Well Thistle Unit 155H	
Project: Lea County, NM (NAD 83)	TVD Reference: RKB (Nabors X05) 33' + GL @ 3686.0usft	
Site: Sec 33 - 23S - 33E (Thistle Unit)	MD Reference: RKB (Nabors X05) 33' + GL @ 3686.0usft	
Well: Thistle Unit 155H	North Reference: Grid	
Wellbore: Wellbore #1	Survey Calculation Method: Minimum Curvature	
Design: Actual Drilled	Database: SOUTH US	

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,137.0	11.36	266.86	6,069.3	-52.8	-678.6	457,029.87	775,131.35	32° 15' 15.072 N	103° 34' 37.366 W
6,173.0	11.08	266.37	6,104.6	-53.2	-685.6	457,029.45	775,124.36	32° 15' 15.068 N	103° 34' 37.448 W
Cross 100' FSL 6173' MD 89.9962' FSL, 2574.7475' FEL of Sec 33									
6,232.0	10.62	265.50	6,162.5	-54.0	-696.7	457,028.67	775,113.28	32° 15' 15.061 N	103° 34' 37.577 W
6,327.0	11.39	265.13	6,255.8	-55.4	-714.7	457,027.19	775,095.21	32° 15' 15.048 N	103° 34' 37.787 W
6,423.0	11.32	265.16	6,349.9	-57.0	-733.6	457,025.59	775,078.37	32° 15' 15.033 N	103° 34' 38.007 W
6,518.0	11.59	264.63	6,443.0	-58.7	-752.4	457,023.91	775,057.58	32° 15' 15.018 N	103° 34' 38.228 W
6,613.0	11.86	264.12	6,536.0	-60.8	-771.6	457,022.01	775,038.37	32° 15' 15.001 N	103° 34' 38.450 W
6,708.0	11.94	263.28	6,629.0	-62.8	-791.1	457,019.86	775,018.90	32° 15' 14.981 N	103° 34' 38.677 W
6,803.0	11.81	263.12	6,722.0	-65.1	-810.5	457,017.55	774,999.49	32° 15' 14.959 N	103° 34' 38.903 W
6,899.0	10.99	263.32	6,816.1	-67.3	-829.3	457,015.31	774,980.65	32° 15' 14.938 N	103° 34' 39.122 W
6,994.0	10.34	264.06	6,909.4	-69.3	-846.8	457,013.37	774,963.17	32° 15' 14.920 N	103° 34' 39.326 W
7,089.0	9.97	264.56	7,002.9	-70.9	-863.5	457,011.71	774,946.51	32° 15' 14.905 N	103° 34' 39.520 W
7,184.0	10.13	263.86	7,096.5	-72.6	-879.9	457,010.05	774,930.01	32° 15' 14.890 N	103° 34' 39.712 W
7,279.0	10.48	264.72	7,189.9	-74.3	-896.8	457,008.38	774,913.12	32° 15' 14.874 N	103° 34' 39.909 W
7,374.0	10.58	264.57	7,283.3	-75.9	-914.1	457,006.76	774,895.85	32° 15' 14.860 N	103° 34' 40.111 W
7,469.0	10.68	265.05	7,376.7	-77.5	-931.6	457,005.17	774,878.39	32° 15' 14.845 N	103° 34' 40.314 W
7,565.0	10.94	264.61	7,471.0	-79.1	-949.5	457,003.55	774,860.46	32° 15' 14.830 N	103° 34' 40.523 W
7,660.0	11.21	262.35	7,564.2	-81.2	-967.6	457,001.47	774,842.34	32° 15' 14.811 N	103° 34' 40.734 W
7,755.0	10.00	258.34	7,657.8	-84.1	-984.9	456,998.58	774,825.10	32° 15' 14.784 N	103° 34' 40.935 W
7,850.0	10.37	258.63	7,751.1	-87.3	-1,001.3	456,995.37	774,808.62	32° 15' 14.753 N	103° 34' 41.127 W
7,945.0	11.54	259.76	7,844.4	-90.5	-1,019.1	456,992.14	774,790.85	32° 15' 14.722 N	103° 34' 41.334 W
8,040.0	10.92	257.76	7,937.6	-94.1	-1,037.2	456,988.55	774,772.71	32° 15' 14.688 N	103° 34' 41.546 W
8,135.0	11.12	260.60	8,030.8	-97.5	-1,055.1	456,985.14	774,754.88	32° 15' 14.656 N	103° 34' 41.754 W
8,231.0	11.50	264.64	8,125.0	-99.9	-1,073.7	456,982.74	774,736.22	32° 15' 14.633 N	103° 34' 41.971 W
8,326.0	11.23	268.91	8,218.1	-101.0	-1,092.4	456,981.68	774,717.54	32° 15' 14.624 N	103° 34' 42.189 W
8,421.0	10.17	268.05	8,311.4	-101.4	-1,110.1	456,981.21	774,699.91	32° 15' 14.621 N	103° 34' 42.394 W
8,516.0	10.70	269.01	8,404.9	-101.9	-1,127.3	456,980.78	774,682.71	32° 15' 14.617 N	103° 34' 42.595 W
8,612.0	11.88	270.86	8,499.0	-101.9	-1,146.0	456,980.77	774,663.91	32° 15' 14.610 N	103° 34' 42.813 W
8,707.0	11.67	269.30	8,592.0	-101.8	-1,165.4	456,980.80	774,644.53	32° 15' 14.620 N	103° 34' 43.039 W
8,802.0	10.31	268.29	8,685.3	-102.2	-1,183.5	456,980.43	774,626.42	32° 15' 14.618 N	103° 34' 43.250 W
8,897.0	11.00	268.97	8,778.6	-102.9	-1,201.1	456,979.70	774,608.88	32° 15' 14.612 N	103° 34' 43.454 W
8,992.0	11.40	268.45	8,871.8	-103.7	-1,219.5	456,978.96	774,590.44	32° 15' 14.606 N	103° 34' 43.669 W
9,087.0	11.95	268.54	8,964.9	-104.2	-1,238.7	456,978.46	774,571.22	32° 15' 14.602 N	103° 34' 43.893 W
9,183.0	11.03	267.79	9,058.9	-104.8	-1,257.8	456,977.85	774,552.11	32° 15' 14.598 N	103° 34' 44.116 W
9,278.0	10.69	268.28	9,152.2	-105.4	-1,275.7	456,977.24	774,534.22	32° 15' 14.593 N	103° 34' 44.324 W
9,373.0	9.97	270.37	9,245.7	-105.6	-1,292.8	456,977.03	774,517.19	32° 15' 14.592 N	103° 34' 44.522 W
9,468.0	8.08	270.03	9,339.5	-105.5	-1,307.7	456,977.08	774,502.29	32° 15' 14.593 N	103° 34' 44.696 W
9,564.0	7.02	265.36	9,434.7	-106.0	-1,320.3	456,976.61	774,489.69	32° 15' 14.590 N	103° 34' 44.842 W
9,659.0	6.21	270.51	9,529.0	-106.4	-1,331.2	456,976.19	774,478.77	32° 15' 14.586 N	103° 34' 44.970 W
9,754.0	4.97	267.74	9,623.6	-106.6	-1,340.4	456,976.07	774,469.52	32° 15' 14.586 N	103° 34' 45.077 W
9,849.0	4.51	269.92	9,718.3	-106.7	-1,348.3	456,975.90	774,461.67	32° 15' 14.585 N	103° 34' 45.169 W
9,944.0	4.67	267.45	9,813.0	-106.9	-1,355.9	456,975.73	774,454.07	32° 15' 14.583 N	103° 34' 45.257 W
9,982.0	4.83	269.24	9,850.8	-107.0	-1,359.0	456,975.64	774,450.93	32° 15' 14.583 N	103° 34' 45.294 W
10,077.0	5.46	263.65	9,945.5	-107.5	-1,367.5	456,975.08	774,442.44	32° 15' 14.578 N	103° 34' 45.393 W
10,172.0	4.08	255.02	10,040.1	-108.9	-1,375.3	456,973.71	774,434.88	32° 15' 14.565 N	103° 34' 45.483 W
10,268.0	2.81	238.55	10,135.9	-111.0	-1,380.6	456,971.60	774,429.37	32° 15' 14.544 N	103° 34' 45.545 W
10,363.0	2.51	216.55	10,230.8	-113.9	-1,383.8	456,968.71	774,426.15	32° 15' 14.516 N	103° 34' 45.583 W
10,458.0	1.94	218.12	10,325.8	-116.9	-1,386.0	456,965.78	774,423.92	32° 15' 14.487 N	103° 34' 45.609 W
10,554.0	1.12	234.74	10,421.7	-118.7	-1,387.8	456,963.96	774,422.15	32° 15' 14.469 N	103° 34' 45.630 W
10,649.0	1.31	245.52	10,516.7	-119.7	-1,388.6	456,962.97	774,420.40	32° 15' 14.459 N	103° 34' 45.650 W
10,744.0	1.24	261.36	10,611.7	-120.3	-1,391.6	456,962.37	774,418.40	32° 15' 14.454 N	103° 34' 45.674 W
10,839.0	1.71	266.18	10,708.7	-119.8	-1,393.8	456,962.84	774,418.11	32° 15' 14.458 N	103° 34' 45.700 W
10,935.0	1.86	315.10	10,802.6	-118.1	-1,396.2	456,964.57	774,413.72	32° 15' 14.476 N	103° 34' 45.728 W
11,030.0	1.51	321.39	10,897.6	-118.0	-1,398.1	456,966.64	774,411.85	32° 15' 14.496 N	103° 34' 45.750 W

Halliburton

Survey Report - Geographic

Company: Devon Energy Corporation	Local Co-ordinate Reference: Well Thistle Unit 155H	
Project: Lea County, NM (NAD 83)	TVD Reference: RKB (Nabors X05) 33' + GL @ 3686.0usft	
Site: Sec 33 - 23S - 33E (Thistle Unit)	MD Reference: RKB (Nabors X05) 33' + GL @ 3686.0usft	
Well: Thistle Unit 155H	North Reference: Grid	
Wellbore: Wellbore #1	Survey Calculation Method: Minimum Curvature	
Design: Actual Drilled	Database: SOUTH US	

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,125.0	1.14	318.13	10,992.6	-114.3	-1,399.5	456,968.32	774,410.44	32° 15' 14.513 N	103° 34' 45.766 W
11,220.0	1.35	294.53	11,087.5	-113.1	-1,401.2	456,969.49	774,408.79	32° 15' 14.525 N	103° 34' 45.785 W
11,316.0	1.83	266.75	11,183.5	-112.8	-1,403.7	456,969.88	774,406.23	32° 15' 14.529 N	103° 34' 45.815 W
11,411.0	0.71	256.37	11,278.5	-113.0	-1,405.8	456,969.65	774,404.15	32° 15' 14.527 N	103° 34' 45.839 W
11,506.0	0.43	214.76	11,373.5	-113.4	-1,406.6	456,969.22	774,403.37	32° 15' 14.522 N	103° 34' 45.848 W
11,601.0	0.68	262.95	11,468.5	-113.8	-1,407.3	456,968.86	774,402.61	32° 15' 14.519 N	103° 34' 45.857 W
11,696.0	0.36	275.96	11,563.5	-113.8	-1,408.2	456,968.82	774,401.75	32° 15' 14.519 N	103° 34' 45.867 W
11,791.0	0.83	252.00	11,658.5	-114.0	-1,409.2	456,968.64	774,400.80	32° 15' 14.517 N	103° 34' 45.878 W
11,886.0	2.10	288.50	11,753.4	-113.7	-1,411.5	456,968.98	774,398.50	32° 15' 14.520 N	103° 34' 45.905 W
11,981.0	1.84	287.47	11,848.4	-112.6	-1,414.6	456,968.99	774,395.39	32° 15' 14.531 N	103° 34' 45.941 W
12,045.0	0.39	350.86	11,912.4	-112.1	-1,415.6	456,970.51	774,394.38	32° 15' 14.538 N	103° 34' 45.953 W
KOP 12045' MD 45.4960' FSL, 1969.4998' FWL of Sec 33									
12,140.0	2.19	354.31	12,007.3	-110.0	-1,415.8	456,972.64	774,394.14	32° 15' 14.557 N	103° 34' 45.955 W
12,172.0	6.33	351.50	12,039.2	-107.6	-1,416.1	456,974.99	774,393.82	32° 15' 14.580 N	103° 34' 45.959 W
12,203.0	10.72	350.27	12,069.9	-103.1	-1,416.9	456,979.52	774,393.08	32° 15' 14.625 N	103° 34' 45.967 W
12,235.0	15.79	349.72	12,101.0	-95.9	-1,418.2	456,986.75	774,391.80	32° 15' 14.697 N	103° 34' 45.982 W
12,267.0	20.39	350.97	12,131.4	-88.1	-1,419.8	456,986.54	774,390.15	32° 15' 14.794 N	103° 34' 46.000 W
12,298.0	24.35	356.60	12,160.1	-74.4	-1,421.0	457,008.26	774,388.92	32° 15' 14.910 N	103° 34' 46.013 W
12,330.0	29.34	3.17	12,188.6	-59.9	-1,421.0	457,022.69	774,388.96	32° 15' 15.053 N	103° 34' 46.012 W
12,335.0	29.76	3.54	12,193.0	-57.5	-1,420.8	457,025.15	774,389.11	32° 15' 15.077 N	103° 34' 46.010 W
Cross 100' FSL 12335' MD 100.1636' FSL, 1964.6368' FWL of Sec 33									
12,377.0	33.31	6.27	12,228.8	-35.6	-1,418.9	457,047.02	774,391.01	32° 15' 15.293 N	103° 34' 45.986 W
12,425.0	33.98	7.14	12,268.7	-9.2	-1,415.8	457,073.43	774,394.12	32° 15' 15.554 N	103° 34' 45.948 W
12,472.0	36.85	8.02	12,307.1	17.7	-1,412.2	457,100.36	774,397.71	32° 15' 15.821 N	103° 34' 45.903 W
12,520.0	41.71	5.07	12,344.3	47.8	-1,408.8	457,130.48	774,401.12	32° 15' 16.118 N	103° 34' 45.881 W
12,568.0	45.88	0.64	12,378.9	81.0	-1,407.2	457,163.63	774,402.73	32° 15' 16.446 N	103° 34' 45.840 W
12,616.0	48.60	1.51	12,411.5	116.2	-1,406.6	457,198.86	774,403.39	32° 15' 16.795 N	103° 34' 45.829 W
12,662.0	53.88	0.64	12,440.3	152.1	-1,405.9	457,234.71	774,404.06	32° 15' 17.150 N	103° 34' 45.819 W
12,711.0	58.10	359.75	12,487.7	192.7	-1,405.8	457,275.32	774,404.19	32° 15' 17.551 N	103° 34' 45.814 W
12,757.0	61.96	0.11	12,490.7	232.5	-1,405.8	457,315.16	774,404.14	32° 15' 17.946 N	103° 34' 45.811 W
12,806.0	65.70	0.32	12,512.3	276.5	-1,405.7	457,359.13	774,404.31	32° 15' 18.381 N	103° 34' 45.806 W
12,853.0	68.99	0.47	12,530.4	319.9	-1,405.4	457,402.50	774,404.61	32° 15' 18.810 N	103° 34' 45.798 W
12,901.0	77.25	0.79	12,544.3	365.8	-1,404.8	457,448.39	774,405.11	32° 15' 19.284 N	103° 34' 45.789 W
12,933.0	82.49	1.90	12,550.0	397.2	-1,404.1	457,479.87	774,405.85	32° 15' 19.575 N	103° 34' 45.778 W
12,964.0	84.88	2.79	12,553.4	428.0	-1,402.8	457,510.65	774,407.12	32° 15' 19.880 N	103° 34' 45.760 W
12,996.0	85.00	2.90	12,556.2	459.9	-1,401.3	457,542.49	774,408.70	32° 15' 20.195 N	103° 34' 45.739 W
13,058.0	89.26	2.46	12,559.3	522.7	-1,398.3	457,605.33	774,411.64	32° 15' 20.618 N	103° 34' 45.700 W
13,091.0	88.92	2.35	12,559.8	554.7	-1,397.0	457,637.29	774,412.98	32° 15' 21.133 N	103° 34' 45.682 W
13,186.0	91.26	2.11	12,559.7	649.6	-1,393.3	457,732.22	774,416.68	32° 15' 22.072 N	103° 34' 45.631 W
13,281.0	90.12	2.44	12,558.6	744.5	-1,389.5	457,827.13	774,420.45	32° 15' 23.010 N	103° 34' 45.579 W
13,377.0	89.66	3.65	12,558.7	840.4	-1,384.4	457,922.99	774,425.55	32° 15' 23.859 N	103° 34' 45.512 W
13,472.0	91.23	3.51	12,558.0	935.2	-1,378.5	458,017.80	774,431.48	32° 15' 24.898 N	103° 34' 45.435 W
13,567.0	92.07	3.01	12,555.3	1,030.0	-1,373.1	458,112.61	774,436.88	32° 15' 25.834 N	103° 34' 45.365 W
13,662.0	92.00	357.67	12,551.9	1,124.9	-1,372.5	458,207.51	774,437.44	32° 15' 26.773 N	103° 34' 45.350 W
13,757.0	91.48	356.95	12,549.0	1,219.7	-1,377.0	458,302.36	774,432.99	32° 15' 27.712 N	103° 34' 45.394 W
13,852.0	89.75	355.81	12,548.0	1,314.5	-1,383.0	458,397.16	774,426.99	32° 15' 28.651 N	103° 34' 45.456 W
13,947.0	90.06	357.00	12,548.1	1,409.3	-1,388.9	458,491.97	774,421.03	32° 15' 29.589 N	103° 34' 45.518 W
14,042.0	90.83	355.87	12,547.4	1,504.2	-1,394.8	458,586.79	774,415.13	32° 15' 30.528 N	103° 34' 45.579 W
14,138.0	91.60	355.81	12,545.4	1,599.9	-1,402.0	458,682.50	774,408.00	32° 15' 31.475 N	103° 34' 45.654 W
14,233.0	93.61	359.81	12,541.0	1,694.7	-1,405.7	458,777.30	774,404.28	32° 15' 32.414 N	103° 34' 45.690 W
14,328.0	91.39	1.12	12,536.9	1,789.6	-1,404.8	458,872.20	774,405.14	32° 15' 33.353 N	103° 34' 45.672 W
14,424.0	91.11	0.79	12,534.8	1,885.5	-1,403.2	458,968.16	774,406.74	32° 15' 34.302 N	103° 34' 45.646 W
14,519.0	91.51	0.07	12,532.6	1,980.5	-1,402.5	459,063.13	774,407.45	32° 15' 35.242 N	103° 34' 45.630 W
14,614.0	91.14	0.38	12,530.4	2,075.5	-1,402.1	459,158.11	774,407.82	32° 15' 36.182 N	103° 34' 45.617 W

Halliburton

Survey Report - Geographic

Company: Devon Energy Corporation	Local Co-ordinate Reference: Well Thistle Unit 155H	
Project: Lea County, NM (NAD 83)	TVD Reference: RKB (Nabors X05) 33' + GL @ 3686.0usft	
Site: Sec 33 - 23S - 33E (Thistle Unit)	MD Reference: RKB (Nabors X05) 33' + GL @ 3686.0usft	
Well: Thistle Unit 155H	North Reference: Grid	
Wellbore: Wellbore #1	Survey Calculation Method: Minimum Curvature	
Design: Actual Drilled	Database: SOUTH US	

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
14,709.0	91.29	0.50	12,528.4	2,170.5	-1,401.4	459,253.08	774,408.55	32° 15' 37.121 N	103° 34' 45.601 W
14,804.0	91.66	0.14	12,526.0	2,265.4	-1,400.9	459,348.05	774,409.08	32° 15' 38.061 N	103° 34' 45.587 W
14,900.0	90.40	0.57	12,524.3	2,361.4	-1,400.3	459,444.03	774,409.88	32° 15' 39.011 N	103° 34' 45.572 W
14,995.0	90.34	0.00	12,523.6	2,456.4	-1,399.8	459,539.03	774,410.15	32° 15' 39.951 N	103° 34' 45.559 W
15,089.0	90.83	359.63	12,522.7	2,550.4	-1,400.1	459,633.02	774,409.85	32° 15' 40.881 N	103° 34' 45.555 W
15,184.0	90.71	359.02	12,521.4	2,645.4	-1,401.2	459,728.01	774,408.73	32° 15' 41.821 N	103° 34' 45.560 W
15,280.0	91.79	359.23	12,518.3	2,741.3	-1,402.7	459,823.97	774,407.26	32° 15' 42.770 N	103° 34' 45.569 W
15,375.0	92.00	359.78	12,516.2	2,836.3	-1,404.3	459,918.90	774,405.81	32° 15' 43.710 N	103° 34' 45.581 W
15,470.0	90.62	359.45	12,514.0	2,931.2	-1,405.8	460,013.86	774,404.15	32° 15' 44.650 N	103° 34' 45.590 W
15,565.0	90.65	358.26	12,512.9	3,026.2	-1,407.7	460,108.84	774,402.25	32° 15' 45.590 N	103° 34' 45.605 W
15,660.0	90.37	359.69	12,512.1	3,121.2	-1,408.4	460,203.82	774,400.55	32° 15' 46.529 N	103° 34' 45.617 W
15,756.0	88.48	0.39	12,513.1	3,217.2	-1,409.3	460,299.81	774,400.82	32° 15' 47.479 N	103° 34' 45.608 W
15,851.0	89.08	0.99	12,515.1	3,312.1	-1,408.2	460,394.78	774,401.78	32° 15' 48.419 N	103° 34' 45.587 W
15,946.0	89.48	0.34	12,516.3	3,407.1	-1,407.1	460,489.76	774,402.86	32° 15' 49.359 N	103° 34' 45.566 W
16,041.0	89.32	359.77	12,517.3	3,502.1	-1,407.0	460,584.76	774,402.95	32° 15' 50.299 N	103° 34' 45.557 W
16,137.0	89.54	359.52	12,518.3	3,598.1	-1,407.6	460,680.75	774,402.36	32° 15' 51.249 N	103° 34' 45.558 W
16,232.0	89.35	358.68	12,519.2	3,693.1	-1,409.1	460,775.73	774,400.87	32° 15' 52.189 N	103° 34' 45.566 W
16,327.0	90.19	0.49	12,519.6	3,788.1	-1,409.8	460,870.72	774,400.18	32° 15' 53.129 N	103° 34' 45.566 W
16,422.0	90.40	0.64	12,519.1	3,883.1	-1,408.8	460,965.72	774,401.12	32° 15' 54.069 N	103° 34' 45.548 W
16,517.0	90.95	0.56	12,518.0	3,978.1	-1,407.8	461,060.71	774,402.11	32° 15' 55.008 N	103° 34' 45.528 W
16,612.0	90.98	0.47	12,516.4	4,073.1	-1,407.0	461,155.69	774,402.98	32° 15' 55.948 N	103° 34' 45.511 W
16,707.0	90.86	359.75	12,514.7	4,168.0	-1,406.8	461,250.67	774,403.15	32° 15' 56.888 N	103° 34' 45.501 W
16,802.0	90.83	1.12	12,513.3	4,263.0	-1,406.1	461,345.66	774,403.87	32° 15' 57.828 N	103° 34' 45.484 W
16,897.0	91.45	1.37	12,511.4	4,358.0	-1,404.0	461,440.62	774,405.93	32° 15' 58.767 N	103° 34' 45.453 W
16,992.0	89.72	0.80	12,510.4	4,453.0	-1,402.2	461,535.59	774,407.73	32° 15' 59.707 N	103° 34' 45.424 W
17,087.0	89.63	0.24	12,510.9	4,548.0	-1,401.4	461,630.58	774,408.59	32° 16' 0.647 N	103° 34' 45.406 W
17,183.0	89.51	0.80	12,511.7	4,643.9	-1,400.5	461,726.58	774,409.46	32° 16' 1.597 N	103° 34' 45.388 W
17,278.0	91.94	1.14	12,510.5	4,738.9	-1,398.9	461,821.55	774,411.07	32° 16' 2.536 N	103° 34' 45.362 W
17,373.0	90.22	1.49	12,508.7	4,833.9	-1,396.7	461,916.50	774,413.25	32° 16' 3.476 N	103° 34' 45.328 W
17,468.0	90.92	1.55	12,507.7	4,928.8	-1,394.2	462,011.46	774,415.77	32° 16' 4.415 N	103° 34' 45.291 W
17,563.0	91.54	1.13	12,505.7	5,023.8	-1,392.0	462,106.42	774,417.99	32° 16' 5.355 N	103° 34' 45.258 W
17,658.0	90.71	1.83	12,503.8	5,118.7	-1,389.5	462,201.36	774,420.45	32° 16' 6.294 N	103° 34' 45.221 W
17,672.0	90.56	1.76	12,503.7	5,132.7	-1,389.1	462,215.36	774,420.88	32° 16' 6.433 N	103° 34' 45.215 W
Sec Crossing 12672' MD 0.2716' FSL, 2034.7816' FWL of Sec 28									
17,754.0	89.66	1.37	12,503.5	5,214.7	-1,386.8	462,297.32	774,423.13	32° 16' 7.243 N	103° 34' 45.182 W
17,849.0	89.32	1.80	12,504.4	5,309.7	-1,384.2	462,392.28	774,425.75	32° 16' 8.183 N	103° 34' 45.144 W
17,944.0	90.12	1.27	12,504.8	5,404.6	-1,381.7	462,487.25	774,428.30	32° 16' 9.122 N	103° 34' 45.107 W
18,039.0	89.14	1.19	12,505.4	5,499.6	-1,379.6	462,582.22	774,430.34	32° 16' 10.062 N	103° 34' 45.075 W
18,134.0	89.72	1.82	12,506.4	5,594.6	-1,377.1	462,677.18	774,432.83	32° 16' 11.002 N	103° 34' 45.038 W
18,229.0	90.34	1.52	12,506.3	5,689.5	-1,374.4	462,772.14	774,435.80	32° 16' 11.941 N	103° 34' 44.998 W
18,325.0	89.20	1.15	12,506.7	5,785.5	-1,372.1	462,868.12	774,437.84	32° 16' 12.890 N	103° 34' 44.964 W
18,420.0	89.35	0.29	12,507.9	5,880.5	-1,370.9	462,963.10	774,439.03	32° 16' 13.830 N	103° 34' 44.943 W
18,515.0	90.03	0.63	12,508.4	5,975.5	-1,370.2	463,058.09	774,439.79	32° 16' 14.770 N	103° 34' 44.926 W
18,610.0	89.48	359.92	12,508.8	6,070.5	-1,369.7	463,153.09	774,440.25	32° 16' 15.710 N	103° 34' 44.913 W
18,706.0	91.26	359.58	12,508.2	6,166.5	-1,370.1	463,249.08	774,439.83	32° 16' 16.660 N	103° 34' 44.910 W
18,801.0	92.22	358.95	12,505.3	6,261.4	-1,371.3	463,344.93	774,438.81	32° 16' 17.600 N	103° 34' 44.916 W
18,896.0	92.93	358.81	12,501.1	6,356.3	-1,373.2	463,439.92	774,438.76	32° 16' 18.539 N	103° 34' 44.930 W
18,991.0	93.70	357.15	12,495.6	6,451.1	-1,376.5	463,533.69	774,433.42	32° 16' 19.477 N	103° 34' 44.961 W
19,087.0	93.46	357.44	12,489.6	6,546.8	-1,381.1	463,629.40	774,428.89	32° 16' 20.424 N	103° 34' 45.006 W
19,182.0	92.71	356.67	12,484.5	6,641.5	-1,385.9	463,724.14	774,424.02	32° 16' 21.362 N	103° 34' 45.055 W
19,277.0	92.34	356.30	12,480.3	6,736.2	-1,391.8	463,818.86	774,418.20	32° 16' 22.300 N	103° 34' 45.115 W
19,371.0	93.45	356.39	12,475.5	6,829.9	-1,397.7	463,912.55	774,412.22	32° 16' 23.227 N	103° 34' 45.177 W
19,466.0	91.76	356.63	12,471.2	6,924.6	-1,403.5	464,007.27	774,408.44	32° 16' 24.165 N	103° 34' 45.237 W
19,561.0	90.92	357.86	12,469.0	7,019.5	-1,408.1	464,102.14	774,401.88	32° 16' 25.104 N	103° 34' 45.282 W
19,656.0	90.18	356.88	12,468.1	7,114.4	-1,412.5	464,197.03	774,397.50	32° 16' 26.043 N	103° 34' 45.325 W

Halliburton

Survey Report - Geographic

Company:	Devon Energy Corporation	Local Co-ordinate Reference:	Well Thistle Unit 155H
Project:	Lea County, NM (NAD 83)	TVD Reference:	RKB (Nabors X05) 33' + GL @ 3686.0usft
Site:	Sec 33 - 23S - 33E (Thistle Unit)	MD Reference:	RKB (Nabors X05) 33' + GL @ 3686.0usft
Well:	Thistle Unit 155H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual Drilled	Database:	SOUTH US

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
19,752.0	90.00	356.37	12,467.9	7,210.2	-1,418.1	464,292.86	774,391.83	32° 16' 26.992 N	103° 34' 45.383 W
19,847.0	89.48	357.31	12,468.4	7,305.1	-1,423.4	464,387.71	774,386.59	32° 16' 27.831 N	103° 34' 45.437 W
19,942.0	89.82	358.18	12,468.9	7,400.0	-1,427.1	464,482.64	774,382.86	32° 16' 28.870 N	103° 34' 45.472 W
20,037.0	89.91	358.11	12,469.2	7,495.0	-1,430.2	464,577.59	774,379.78	32° 16' 29.810 N	103° 34' 45.501 W
20,133.0	91.29	0.75	12,468.2	7,590.9	-1,431.1	464,673.57	774,378.83	32° 16' 30.760 N	103° 34' 45.504 W
20,228.0	91.54	2.72	12,465.8	7,685.9	-1,428.3	464,768.49	774,381.70	32° 16' 31.699 N	103° 34' 45.463 W
20,323.0	90.89	2.23	12,463.8	7,780.7	-1,424.2	464,863.38	774,385.80	32° 16' 32.638 N	103° 34' 45.407 W
20,418.0	90.28	1.50	12,462.8	7,875.7	-1,421.1	464,958.32	774,388.89	32° 16' 33.577 N	103° 34' 45.363 W
20,513.0	88.83	1.41	12,463.6	7,970.7	-1,418.7	465,053.29	774,391.31	32° 16' 34.516 N	103° 34' 45.327 W
20,609.0	90.71	1.26	12,464.0	8,066.6	-1,416.4	465,149.26	774,393.54	32° 16' 35.466 N	103° 34' 45.293 W
20,704.0	90.28	0.75	12,463.1	8,161.6	-1,414.7	465,244.24	774,395.21	32° 16' 36.405 N	103° 34' 45.266 W
20,799.0	91.82	1.21	12,461.4	8,256.6	-1,413.1	465,339.20	774,396.83	32° 16' 37.345 N	103° 34' 45.240 W
20,894.0	91.76	1.22	12,458.4	8,351.5	-1,411.1	465,434.14	774,398.85	32° 16' 38.284 N	103° 34' 45.208 W
20,989.0	93.05	2.30	12,454.4	8,446.4	-1,408.2	465,529.00	774,401.76	32° 16' 39.223 N	103° 34' 45.167 W
21,085.0	92.58	1.55	12,449.7	8,542.2	-1,405.0	465,624.83	774,404.98	32° 16' 40.171 N	103° 34' 45.121 W
21,180.0	92.59	1.39	12,445.5	8,637.1	-1,402.5	465,719.71	774,407.42	32° 16' 41.109 N	103° 34' 45.085 W
21,275.0	92.25	0.89	12,441.5	8,732.0	-1,400.7	465,814.60	774,409.31	32° 16' 42.048 N	103° 34' 45.055 W
21,370.0	92.06	2.09	12,437.9	8,826.9	-1,398.2	465,909.50	774,411.77	32° 16' 42.987 N	103° 34' 45.019 W
21,465.0	91.54	0.37	12,434.9	8,921.8	-1,396.1	466,004.43	774,413.81	32° 16' 43.926 N	103° 34' 44.987 W
21,561.0	91.48	359.71	12,432.4	9,017.8	-1,396.1	466,100.40	774,413.88	32° 16' 44.876 N	103° 34' 44.979 W
21,656.0	91.23	359.37	12,430.1	9,112.7	-1,396.8	466,195.37	774,413.12	32° 16' 45.816 N	103° 34' 44.980 W
21,751.0	92.07	358.91	12,427.4	9,207.7	-1,398.3	466,290.31	774,411.69	32° 16' 46.755 N	103° 34' 44.989 W
21,846.0	91.97	358.56	12,424.0	9,302.6	-1,400.4	466,385.23	774,409.60	32° 16' 47.695 N	103° 34' 45.005 W
21,941.0	93.39	358.11	12,419.8	9,397.5	-1,403.1	466,480.09	774,406.84	32° 16' 48.634 N	103° 34' 45.030 W
22,036.0	92.59	359.33	12,414.6	9,492.3	-1,405.2	466,574.93	774,404.72	32° 16' 49.572 N	103° 34' 45.047 W
22,132.0	92.65	358.27	12,410.3	9,588.2	-1,407.2	466,670.81	774,402.71	32° 16' 50.521 N	103° 34' 45.062 W
22,227.0	91.02	357.84	12,407.2	9,683.1	-1,410.5	466,765.70	774,399.49	32° 16' 51.460 N	103° 34' 45.092 W
22,322.0	90.85	357.49	12,405.8	9,778.0	-1,414.3	466,860.61	774,395.62	32° 16' 52.400 N	103° 34' 45.129 W
22,417.0	88.89	357.89	12,406.2	9,872.9	-1,418.2	466,955.53	774,391.79	32° 16' 53.339 N	103° 34' 45.166 W
22,512.0	88.86	357.89	12,408.1	9,967.8	-1,421.7	467,050.45	774,388.29	32° 16' 54.279 N	103° 34' 45.199 W
22,607.0	89.82	357.65	12,409.2	10,062.7	-1,425.4	467,145.37	774,384.60	32° 16' 55.218 N	103° 34' 45.234 W
22,702.0	90.59	357.03	12,408.8	10,157.6	-1,429.8	467,240.26	774,380.19	32° 16' 56.157 N	103° 34' 45.278 W
22,797.0	90.65	357.27	12,407.8	10,252.5	-1,434.5	467,335.14	774,375.46	32° 16' 57.097 N	103° 34' 45.325 W
22,852.0	89.85	354.36	12,407.6	10,307.4	-1,438.5	467,389.99	774,371.45	32° 16' 57.640 N	103° 34' 45.387 W
Cross 100' FNL 22852' MD 100.0100' FNL, 2022.1306' FWL of Sec 28									
22,869.0	89.60	353.46	12,407.6	10,324.3	-1,440.3	467,406.89	774,369.65	32° 16' 57.807 N	103° 34' 45.387 W
Final MWD Survey									
22,932.0	89.60	353.46	12,408.1	10,386.8	-1,447.5	467,469.48	774,362.47	32° 16' 58.427 N	103° 34' 45.465 W
Projection to TD 22932' MD 20.4621' FNL, 2013.8238' FWL of Sec 28									

Halliburton

Survey Report - Geographic

Company:	Devon Energy Corporation	Local Co-ordinate Reference:	Well Thistle Unit 155H
Project:	Lea County, NM (NAD 83)	TVD Reference:	RKB (Nabors X05) 33' + GL @ 3686.0usft
Site:	Sec 33 - 23S - 33E (Thistle Unit)	MD Reference:	RKB (Nabors X05) 33' + GL @ 3686.0usft
Well:	Thistle Unit 155H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual Drilled	Database:	SOUTH US

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
234.0	234.0	1.5	2.4	First MWD Survey
6,173.0	6,104.6	-53.2	-685.6	Cross 100' FSL 6173' MD 89.9962' FSL, 2574.7475' FEL of Sec 33
12,045.0	11,912.4	-112.1	-1,415.6	KOP 12045' MD 45.4960' FSL, 1969.4998' FWL of Sec 33
12,335.0	12,193.0	-57.5	-1,420.8	Cross 100' FSL 12335' MD 100.1636' FSL, 1964.6366' FWL of Sec 33
17,672.0	12,503.7	5,132.7	-1,389.1	Sec Crossing 12672' MD 0.2715' FSL, 2034.7818' FWL of Sec 28
22,852.0	12,407.6	10,307.4	-1,438.5	Cross 100' FNL 22852' MD 100.0100' FNL, 2022.1306' FWL of Sec 28
22,869.0	12,407.6	10,324.3	-1,440.3	Final MWD Survey
22,932.0	12,408.1	10,366.8	-1,447.5	Projection to TD 22932' MD 20.4521' FNL, 2013.8238' FWL of Sec 28

Checked By: _____	Approved By: _____	Date: _____
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