

HALLIBURTON

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State of New Mexico, Lea County

I, Scott Bellock, certify that I am employed by Halliburton Energy Services, Inc. (aka Sperry Drilling) and that on the dates of November 21, 2018 through December 12, 2018, I did conduct or supervise the taking of MWD directional surveys for the Marwari 28-16 State Fed Com 232H well from a depth of 132' MD to a depth of 21284' MD. This data is true, correct, complete and within the limitations of the tools as set forth by Halliburton Energy Services, Inc. (aka Sperry Drilling). I am authorized and qualified to make this report and these surveys were conducted at the request of Devon Energy, for the Marwari 28-16 State Fed Com 232H well, API # 30-025-45203 in Lea County, New Mexico. I have reviewed this report and find that it confirms to the principles and procedures as set forth by Halliburton Energy Services, Inc. (aka Sperry Drilling).



Scott Bellock
Field Engineer

Devon Energy Corporation

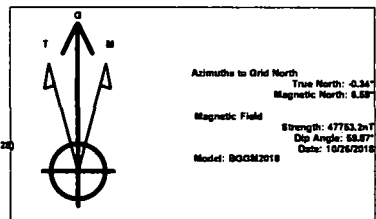
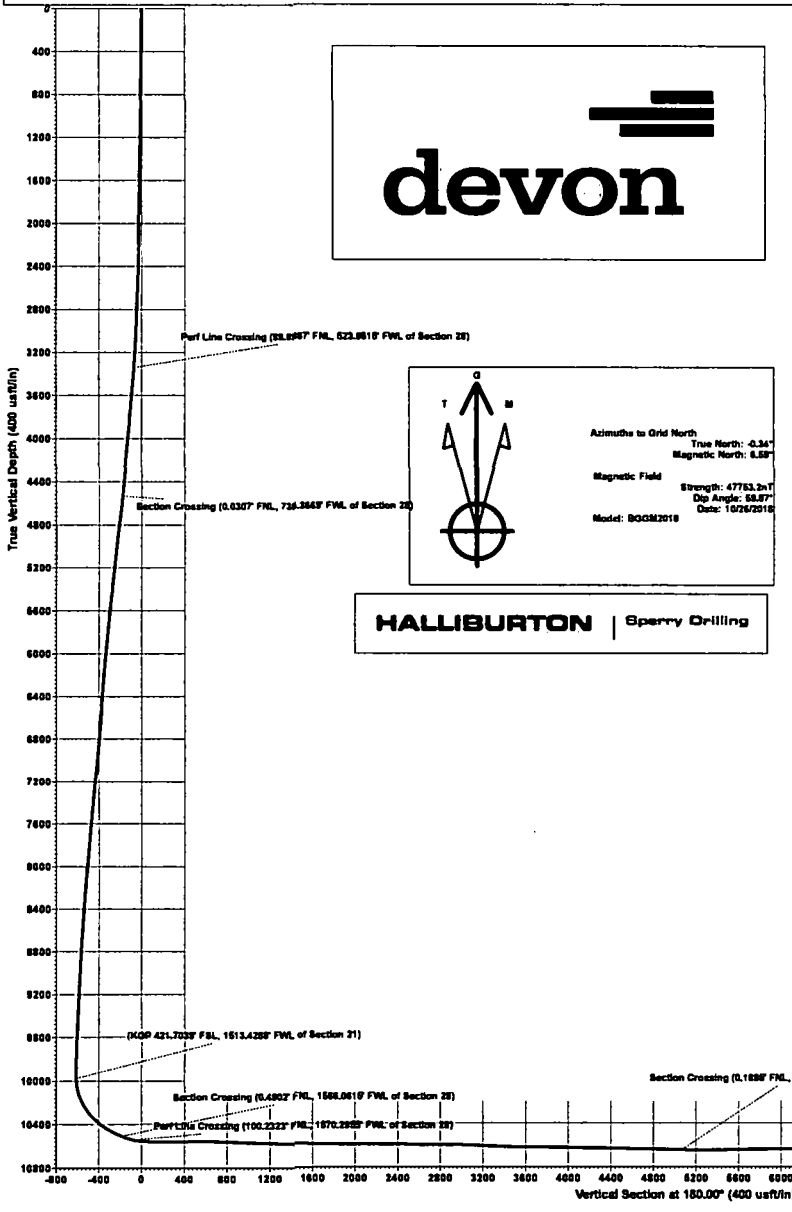
WELL DETAILS: Marwari 28-16 STATE FED COM 232H

RKB (Nabors X05) 32" x GL @ 3409.0usft
Ground Level: 3377.0

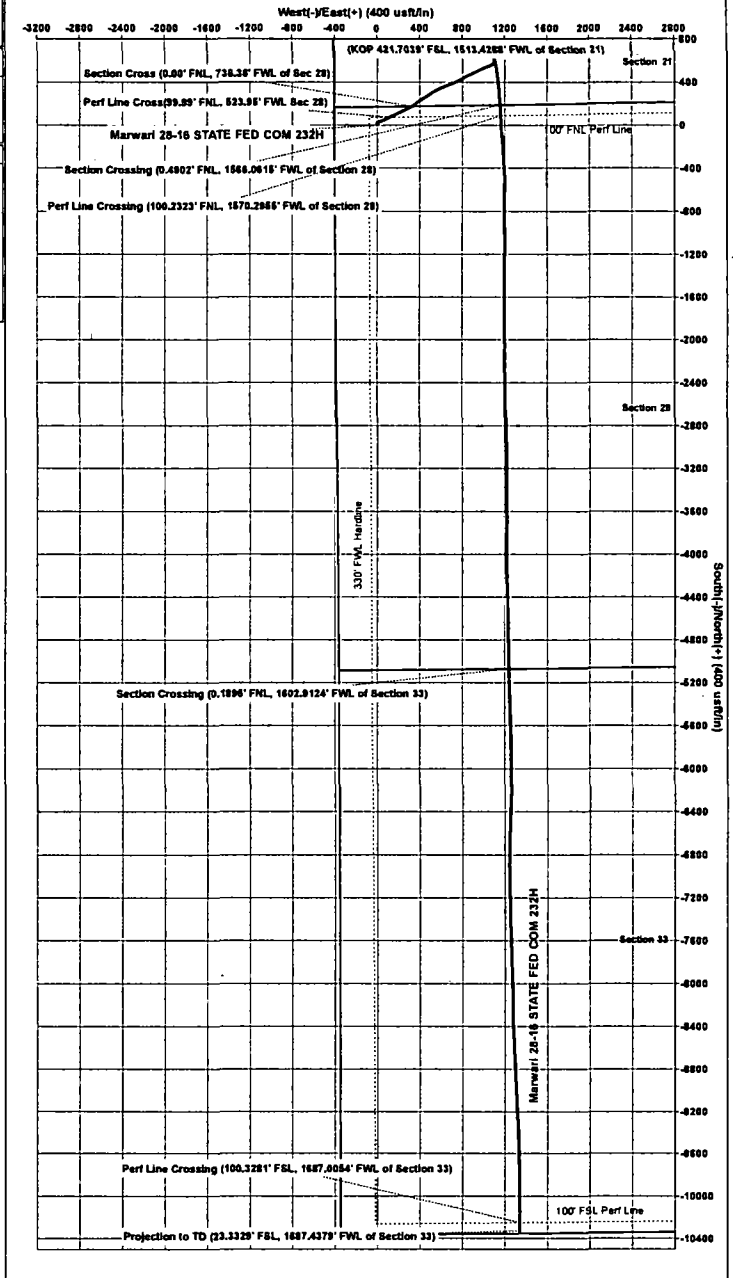
Northing 403663.01 Easting 741349.12 Latitude 32° 6' 29.165 N Longitude 103° 41' 14.484 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	V Sct	Departure	Annotation
3345.0	9.44	83.93	3338.3	74.2	112.7	-74.2	154.8	Perf Line Crossing (99.9967° FNL, 523.9515' FWL of Section 28)
4561.0	10.90	55.81	4531.2	177.4	324.2	-177.4	390.3	Section Crossing (0.0307° FNL, 736.3669' FWL of Section 28)
10089.0	0.85	161.98	9872.9	611.3	1088.8	-611.3	1298.5	(KOP 421.7039° FSL, 1513.4288' FWL of Section 21)
10814.0	68.03	175.58	10505.5	189.9	1153.8	-189.9	1722.2	Section Crossing (0.4907° FNL, 1566.0515' FWL of Section 28)
10819.0	77.13	177.67	10537.7	90.3	1158.0	-90.3	1822.0	Perf Line Crossing (100.2323° FNL, 1570.2955' FWL of Section 28)
161882.0	86.57	178.27	10542.1	-508.2	1239.7	508.2	6582.6	Section Crossing (0.1895° FNL, 1602.9124' FWL of Section 33)
21284.0	90.73	179.33	10595.2	-10247.1	1339.5	10247.1	12163.8	Perf Line Crossing (100.3281° FSL, 1687.0054' FWL of Section 33)
21342.0	90.62	179.53	10594.3	-10325.1	1340.2	10325.1	12241.8	Projection to TD (23.3329° FSL, 1687.4378' FWL of Section 33)



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Devon Energy Corporation

Lea County, NM (NAD 83)

Sec 28 T. 25 S., R.32E.

Marwari 28-16 STATE FED COM 232H

Actual Drilled

Design: Actual Drilled

Survey Report - Geographic

13 December, 2018

Halliburton

Survey Report - Geographic

Company: Devon Energy Corporation	Local Co-ordinate Reference: Well Marwari 28-16 STATE FED COM 232H
Project: Lea County, NM (NAD 83)	TVD Reference: RKB (Nabors X05) 32' + GL @ 3409.0usft
Site: Sec 28 T. 25 S., R. 32E.	MD Reference: RKB (Nabors X05) 32' + GL @ 3409.0usft
Well: Marwari 28-16 STATE FED COM 232H	North Reference: Grid
Wellbore: Actual Drilled	Survey Calculation Method: Minimum Curvature
Design: Actual Drilled	Database: SOUTH US

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

Site	Sec 28 T. 25 S., R. 32E.				
Site Position:	Northing:	401,431.82 usft	Latitude:	32° 6' 6.985 N	
From: Map	Easting:	743,047.39 usft	Longitude:	103° 40' 54.896 W	
Position Uncertainty:	5.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.35 °

Well	Marwari 28-16 STATE FED COM 232H					
Well Position	+N/-S	0.0 usft	Northing:	403,663.01 usft	Latitude:	32° 6' 29.165 N
	+E/-W	0.0 usft	Easting:	741,349.12 usft	Longitude:	103° 41' 14.484 W
Position Uncertainty	0.5 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,377.0 usft	

Wellbore	Actual Drilled				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	BGGM2018	10/26/2018	(°)	(°)	(nT)
			6.93	59.87	47,753.17107932

Design	Actual Drilled				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	180.00	

Survey Program	Date	12/13/2018			
From	To	Survey (Wellbore)	Tool Name	Description	
(usft)	(usft)				
132.0	21,284.0	MWD (Actual Drilled)	MWD	Fixed:v2:standard declination	
21,342.0	21,342.0	Projection to TD (Actual Drilled)	2_Blind	A026Ua: Blind drilling - no survey data	

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	403,663.01	741,349.12	32° 6' 29.165 N	103° 41' 14.484 W
132.0	0.57	329.29	132.0	0.6	-0.3	403,663.57	741,348.78	32° 6' 29.171 N	103° 41' 14.488 W
224.0	0.59	318.08	224.0	1.3	-0.9	403,664.32	741,348.23	32° 6' 29.178 N	103° 41' 14.494 W
323.0	0.78	333.86	323.0	2.3	-1.5	403,665.30	741,347.59	32° 6' 29.188 N	103° 41' 14.502 W
415.0	0.99	326.08	415.0	3.5	-2.2	403,666.53	741,346.87	32° 6' 29.200 N	103° 41' 14.510 W
506.0	1.14	339.30	506.0	5.0	-3.0	403,668.02	741,346.12	32° 6' 29.215 N	103° 41' 14.519 W
597.0	1.13	341.28	596.9	6.7	-3.6	403,669.72	741,345.51	32° 6' 29.232 N	103° 41' 14.525 W
689.0	1.23	340.46	688.9	8.5	-4.2	403,671.51	741,344.89	32° 6' 29.249 N	103° 41' 14.533 W
779.0	1.33	336.70	778.9	10.4	-5.0	403,673.38	741,344.15	32° 6' 29.268 N	103° 41' 14.541 W
801.0	1.42	335.80	800.9	10.9	-5.2	403,673.86	741,343.94	32° 6' 29.273 N	103° 41' 14.543 W
964.0	1.25	346.61	963.8	14.4	-6.4	403,677.44	741,342.70	32° 6' 29.308 N	103° 41' 14.558 W

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Survey Report - Geographic

Company: Devon Energy Corporation
Project: Lea County, NM (NAD 83)
Site: Sec 28 T. 25 S., R. 32E.
Well: Marwari 28-16 STATE FED COM 232H
Wellbore: Actual Drilled
Design: Actual Drilled

Local Co-ordinate Reference: Well Marwari 28-16 STATE FED COM 232H
TVD Reference: RKB (Nabors X05) 32' + GL @ 3409.0usft
MD Reference: RKB (Nabors X05) 32' + GL @ 3409.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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
1,054.0	1.16	341.67	1,053.8	16.2	-6.9	403,679.26	741,342.18	32° 6' 29.326 N	103° 41' 14.563 W
1,147.0	1.03	341.32	1,146.8	17.9	-7.5	403,680.94	741,341.62	32° 6' 29.343 N	103° 41' 14.570 W
1,268.0	0.91	7.64	1,267.8	19.9	-7.7	403,682.92	741,341.40	32° 6' 29.363 N	103° 41' 14.572 W
1,359.0	0.95	20.78	1,358.8	21.3	-7.4	403,684.34	741,341.76	32° 6' 29.377 N	103° 41' 14.568 W
1,450.0	1.31	53.83	1,449.8	22.7	-6.2	403,685.66	741,342.87	32° 6' 29.390 N	103° 41' 14.555 W
1,542.0	1.55	70.94	1,541.7	23.7	-4.2	403,686.69	741,344.90	32° 6' 29.400 N	103° 41' 14.531 W
1,632.0	1.35	80.06	1,631.7	24.3	-2.0	403,687.27	741,347.09	32° 6' 29.405 N	103° 41' 14.506 W
1,722.0	1.26	65.37	1,721.7	24.9	-0.1	403,687.87	741,349.03	32° 6' 29.411 N	103° 41' 14.483 W
1,817.0	0.82	54.24	1,816.7	25.7	1.4	403,688.70	741,350.54	32° 6' 29.419 N	103° 41' 14.466 W
1,912.0	1.08	60.80	1,911.7	26.5	2.8	403,689.53	741,351.87	32° 6' 29.427 N	103° 41' 14.450 W
2,007.0	1.01	63.59	2,006.6	27.3	4.3	403,690.34	741,353.40	32° 6' 29.435 N	103° 41' 14.432 W
2,102.0	1.58	70.56	2,101.6	28.1	6.3	403,691.15	741,355.38	32° 6' 29.443 N	103° 41' 14.409 W
2,197.0	1.99	72.92	2,196.6	29.1	9.1	403,692.07	741,358.20	32° 6' 29.452 N	103° 41' 14.376 W
2,292.0	2.65	68.87	2,291.5	30.3	12.7	403,693.35	741,361.82	32° 6' 29.464 N	103° 41' 14.334 W
2,387.0	3.66	72.05	2,386.3	32.1	17.6	403,695.07	741,366.75	32° 6' 29.481 N	103° 41' 14.277 W
2,482.0	4.39	65.31	2,481.1	34.5	23.8	403,697.53	741,372.94	32° 6' 29.505 N	103° 41' 14.205 W
2,577.0	4.64	65.26	2,575.8	37.6	30.6	403,700.65	741,379.74	32° 6' 29.536 N	103° 41' 14.125 W
2,672.0	4.73	66.37	2,670.5	40.8	37.7	403,703.83	741,386.81	32° 6' 29.567 N	103° 41' 14.043 W
2,766.0	5.17	67.28	2,764.2	44.0	45.2	403,707.02	741,394.27	32° 6' 29.598 N	103° 41' 13.956 W
2,861.0	6.05	68.19	2,858.7	47.5	53.8	403,710.53	741,402.87	32° 6' 29.632 N	103° 41' 13.856 W
2,956.0	6.28	66.99	2,953.1	51.4	63.2	403,714.43	741,412.30	32° 6' 29.670 N	103° 41' 13.746 W
3,051.0	7.24	68.08	3,047.5	55.7	73.5	403,718.69	741,422.64	32° 6' 29.712 N	103° 41' 13.625 W
3,146.0	8.17	65.04	3,141.6	60.8	85.2	403,723.77	741,434.31	32° 6' 29.761 N	103° 41' 13.489 W
3,241.0	8.88	63.62	3,235.6	66.9	97.9	403,729.88	741,447.00	32° 6' 29.821 N	103° 41' 13.341 W
3,334.0	9.35	63.95	3,327.4	73.4	111.1	403,736.39	741,460.22	32° 6' 29.885 N	103° 41' 13.187 W
3,345.0	9.44	63.93	3,338.3	74.2	112.7	403,737.18	741,461.83	32° 6' 29.892 N	103° 41' 13.168 W
Perf Line Crossing (99.9967' FNL, 523.9516' FWL of Section 28)									
3,428.0	10.08	63.80	3,420.1	80.4	125.3	403,743.37	741,474.46	32° 6' 29.953 N	103° 41' 13.021 W
3,522.0	10.68	62.82	3,512.5	88.0	140.5	403,750.98	741,489.59	32° 6' 30.027 N	103° 41' 12.845 W
3,617.0	11.28	64.76	3,605.8	96.0	156.7	403,758.97	741,505.82	32° 6' 30.105 N	103° 41' 12.655 W
3,711.0	10.90	64.49	3,698.0	103.7	173.0	403,766.71	741,522.16	32° 6' 30.181 N	103° 41' 12.465 W
3,805.0	10.49	65.42	3,790.4	111.1	188.8	403,774.10	741,537.96	32° 6' 30.253 N	103° 41' 12.281 W
3,900.0	11.11	65.04	3,883.7	118.6	205.0	403,781.56	741,554.12	32° 6' 30.326 N	103° 41' 12.092 W
3,994.0	12.09	66.51	3,975.8	126.3	222.2	403,789.31	741,571.36	32° 6' 30.402 N	103° 41' 11.891 W
4,089.0	11.71	61.97	4,068.7	134.8	239.9	403,797.80	741,589.00	32° 6' 30.485 N	103° 41' 11.686 W
4,183.0	11.54	64.40	4,160.8	143.3	256.8	403,806.35	741,605.90	32° 6' 30.568 N	103° 41' 11.489 W
4,278.0	11.83	65.66	4,253.8	151.5	274.2	403,814.47	741,623.34	32° 6' 30.648 N	103° 41' 11.285 W
4,372.0	11.65	65.31	4,345.9	159.4	291.6	403,822.40	741,640.74	32° 6' 30.725 N	103° 41' 11.082 W
4,467.0	11.49	61.35	4,438.9	167.9	308.6	403,830.95	741,657.76	32° 6' 30.809 N	103° 41' 10.884 W
4,561.0	10.90	55.61	4,531.2	177.4	324.2	403,840.45	741,673.31	32° 6' 30.902 N	103° 41' 10.702 W
Section Crossing (0.0307' FNL, 736.3669' FWL of Section 28)									
4,562.0	10.89	55.55	4,532.1	177.6	324.3	403,840.56	741,673.46	32° 6' 30.903 N	103° 41' 10.701 W
4,656.0	10.43	52.41	4,624.5	187.8	338.4	403,850.77	741,687.53	32° 6' 31.003 N	103° 41' 10.536 W
4,751.0	11.11	52.70	4,717.9	198.6	352.5	403,861.57	741,701.62	32° 6' 31.109 N	103° 41' 10.372 W
4,846.0	11.97	53.77	4,810.9	209.9	367.7	403,872.94	741,716.85	32° 6' 31.221 N	103° 41' 10.194 W
4,941.0	11.93	54.80	4,903.9	221.4	383.7	403,884.42	741,732.82	32° 6' 31.333 N	103° 41' 10.007 W
5,035.0	11.68	55.81	4,995.9	232.4	399.5	403,895.37	741,748.63	32° 6' 31.441 N	103° 41' 9.823 W
5,130.0	11.28	57.03	5,089.0	242.8	415.3	403,905.83	741,764.38	32° 6' 31.543 N	103° 41' 9.639 W
5,229.0	10.98	59.49	5,186.1	252.9	431.5	403,915.88	741,780.63	32° 6' 31.642 N	103° 41' 9.449 W
5,385.0	10.31	57.80	5,339.4	267.9	456.1	403,930.86	741,805.24	32° 6' 31.789 N	103° 41' 9.162 W
5,479.0	11.88	57.42	5,431.7	277.5	471.4	403,940.56	741,820.51	32° 6' 31.884 N	103° 41' 8.984 W
5,574.0	11.56	56.38	5,524.7	288.1	487.6	403,951.09	741,836.68	32° 6' 31.987 N	103° 41' 8.795 W
5,667.0	11.10	54.88	5,615.9	298.4	502.6	403,961.40	741,851.76	32° 6' 32.088 N	103° 41' 8.619 W
5,762.0	10.74	60.72	5,709.2	308.0	517.8	403,970.99	741,866.96	32° 6' 32.182 N	103° 41' 8.442 W
5,857.0	11.63	59.91	5,802.4	317.1	533.9	403,980.12	741,882.97	32° 6' 32.271 N	103° 41' 8.255 W

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Survey Report - Geographic

Company: Devon Energy Corporation
Project: Lea County, NM (NAD 83)
Site: Sec 28 T. 25 S., R.32E.
Well: Marwari 28-16 STATE FED COM 232H
Wellbore: Actual Drilled
Design: Actual Drilled

Local Co-ordinate Reference: Well Marwari 28-16 STATE FED COM 232H
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North Reference: Grid
Survey Calculation Method: Minimum Curvature
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
5,952.0	11.88	64.50	5,895.4	326.1	551.0	403,989.13	741,900.08	32° 6' 32.360 N	103° 41' 8.056 W
6,046.0	11.93	64.58	5,987.3	334.5	568.5	403,997.47	741,917.59	32° 6' 32.441 N	103° 41' 7.851 W
6,141.0	11.91	62.93	6,080.3	343.1	586.1	404,006.14	741,935.18	32° 6' 32.526 N	103° 41' 7.646 W
6,236.0	11.71	67.98	6,173.3	351.2	603.7	404,014.22	741,952.85	32° 6' 32.605 N	103° 41' 7.440 W
6,331.0	11.27	63.95	6,266.4	358.9	621.0	404,021.91	741,970.13	32° 6' 32.680 N	103° 41' 7.239 W
6,426.0	11.53	71.60	6,359.5	366.0	638.4	404,028.99	741,987.48	32° 6' 32.749 N	103° 41' 7.037 W
6,520.0	11.12	72.29	6,451.7	371.7	655.9	404,034.71	742,005.03	32° 6' 32.804 N	103° 41' 6.832 W
6,615.0	10.58	72.23	6,545.0	377.1	672.9	404,040.16	742,022.06	32° 6' 32.857 N	103° 41' 6.634 W
6,709.0	10.91	69.44	6,637.3	382.9	689.5	404,045.91	742,038.61	32° 6' 32.913 N	103° 41' 6.441 W
6,804.0	12.21	66.12	6,730.4	390.1	707.1	404,053.14	742,056.21	32° 6' 32.984 N	103° 41' 6.236 W
6,899.0	11.93	66.10	6,823.3	398.2	725.3	404,061.18	742,074.37	32° 6' 33.062 N	103° 41' 6.024 W
6,994.0	11.47	66.43	6,916.3	405.9	742.9	404,068.94	742,092.01	32° 6' 33.138 N	103° 41' 5.819 W
7,089.0	11.72	63.45	7,009.4	414.0	760.2	404,077.03	742,109.30	32° 6' 33.217 N	103° 41' 5.617 W
7,183.0	12.92	61.21	7,101.2	423.3	777.9	404,086.36	742,127.05	32° 6' 33.308 N	103° 41' 5.410 W
7,278.0	12.09	60.56	7,194.0	433.4	795.9	404,096.36	742,145.02	32° 6' 33.406 N	103° 41' 5.200 W
7,372.0	11.39	59.91	7,286.0	442.8	812.5	404,105.86	742,161.63	32° 6' 33.499 N	103° 41' 5.007 W
7,467.0	11.85	62.41	7,379.1	452.1	829.3	404,115.08	742,178.39	32° 6' 33.589 N	103° 41' 4.811 W
7,559.0	12.13	66.32	7,469.1	460.3	846.5	404,123.33	742,195.61	32° 6' 33.670 N	103° 41' 4.610 W
7,653.0	11.12	64.56	7,561.1	468.2	863.7	404,131.19	742,212.84	32° 6' 33.747 N	103° 41' 4.409 W
7,746.0	11.97	63.74	7,652.3	476.3	880.5	404,139.31	742,229.59	32° 6' 33.826 N	103° 41' 4.214 W
7,840.0	11.42	64.36	7,744.3	484.6	897.6	404,147.65	742,246.72	32° 6' 33.908 N	103° 41' 4.014 W
7,934.0	12.24	64.43	7,836.3	493.0	915.0	404,155.98	742,264.10	32° 6' 33.989 N	103° 41' 3.812 W
8,028.0	11.88	64.32	7,928.2	501.5	932.7	404,164.47	742,281.81	32° 6' 34.072 N	103° 41' 3.605 W
8,123.0	11.33	63.99	8,021.3	509.8	949.9	404,172.80	742,299.01	32° 6' 34.153 N	103° 41' 3.405 W
8,217.0	12.34	64.89	8,113.3	518.1	967.3	404,181.12	742,316.40	32° 6' 34.235 N	103° 41' 3.202 W
8,311.0	11.44	64.70	8,205.3	526.4	984.8	404,189.36	742,333.92	32° 6' 34.315 N	103° 41' 2.997 W
8,406.0	11.89	70.77	8,298.3	533.6	1,002.6	404,196.61	742,351.68	32° 6' 34.386 N	103° 41' 2.790 W
8,500.0	10.74	68.62	8,390.5	540.0	1,019.9	404,202.99	742,368.98	32° 6' 34.448 N	103° 41' 2.589 W
8,594.0	10.27	66.69	8,482.9	546.5	1,035.7	404,209.50	742,384.84	32° 6' 34.511 N	103° 41' 2.404 W
8,689.0	9.20	66.91	8,576.5	552.8	1,050.5	404,215.83	742,399.60	32° 6' 34.573 N	103° 41' 2.232 W
8,783.0	8.02	66.68	8,669.5	558.4	1,063.4	404,221.38	742,412.53	32° 6' 34.627 N	103° 41' 2.081 W
8,877.0	5.92	62.37	8,762.8	563.2	1,073.7	404,226.22	742,422.85	32° 6' 34.675 N	103° 41' 1.961 W
8,971.0	5.44	58.01	8,856.3	567.8	1,081.8	404,230.83	742,430.93	32° 6' 34.720 N	103° 41' 1.867 W
9,065.0	4.83	51.33	8,949.9	572.7	1,088.7	404,235.66	742,437.79	32° 6' 34.767 N	103° 41' 1.787 W
9,158.0	3.43	30.75	9,042.7	577.5	1,093.2	404,240.50	742,442.27	32° 6' 34.815 N	103° 41' 1.734 W
9,250.0	3.77	17.95	9,134.5	582.7	1,095.5	404,245.74	742,444.61	32° 6' 34.866 N	103° 41' 1.707 W
9,343.0	2.65	8.33	9,227.4	587.8	1,096.8	404,250.78	742,445.87	32° 6' 34.916 N	103° 41' 1.692 W
9,435.0	2.91	3.52	9,319.3	592.2	1,097.2	404,255.21	742,446.32	32° 6' 34.960 N	103° 41' 1.686 W
9,527.0	1.93	5.02	9,411.2	596.1	1,097.5	404,259.09	742,446.60	32° 6' 34.998 N	103° 41' 1.683 W
9,619.0	2.08	2.30	9,503.1	599.3	1,097.7	404,262.30	742,446.80	32° 6' 35.030 N	103° 41' 1.680 W
9,712.0	1.88	9.92	9,596.1	602.5	1,098.0	404,265.49	742,447.13	32° 6' 35.062 N	103° 41' 1.676 W
9,806.0	1.75	2.74	9,690.0	605.4	1,098.3	404,268.44	742,447.46	32° 6' 35.091 N	103° 41' 1.672 W
9,900.0	1.55	359.80	9,784.0	608.1	1,098.4	404,271.15	742,447.53	32° 6' 35.118 N	103° 41' 1.671 W
9,995.0	1.23	2.99	9,879.0	610.4	1,098.5	404,273.45	742,447.58	32° 6' 35.140 N	103° 41' 1.670 W
10,021.0	1.17	3.18	9,904.9	611.0	1,098.5	404,273.99	742,447.61	32° 6' 35.146 N	103° 41' 1.670 W
10,089.0	0.65	161.98	9,972.9	611.3	1,098.6	404,274.32	742,447.76	32° 6' 35.149 N	103° 41' 1.668 W
(KOP 421.7039' FSL, 1513.4288' FWL of Section 21)									
10,121.0	3.70	166.91	10,004.9	610.1	1,098.9	404,273.14	742,448.05	32° 6' 35.137 N	103° 41' 1.665 W
10,152.0	7.46	165.60	10,035.8	607.2	1,099.7	404,270.22	742,448.78	32° 6' 35.108 N	103° 41' 1.656 W
10,184.0	11.26	165.34	10,067.3	602.2	1,101.0	404,265.18	742,450.09	32° 6' 35.058 N	103° 41' 1.642 W
10,214.0	14.83	166.22	10,096.6	595.6	1,102.6	404,258.62	742,451.75	32° 6' 34.993 N	103° 41' 1.623 W
10,249.0	19.41	164.08	10,130.0	585.7	1,105.3	404,248.67	742,454.41	32° 6' 34.895 N	103° 41' 1.593 W
10,282.0	23.73	164.29	10,160.7	574.0	1,108.6	404,237.00	742,457.71	32° 6' 34.779 N	103° 41' 1.555 W
10,311.0	26.48	166.52	10,186.9	562.1	1,111.7	404,225.09	742,460.80	32° 6' 34.661 N	103° 41' 1.520 W
10,338.0	28.58	169.46	10,210.9	549.9	1,114.3	404,212.89	742,463.39	32° 6' 34.540 N	103° 41' 1.491 W

Halliburton

Survey Report - Geographic

Company: Devon Energy Corporation
Project: Lea County, NM (NAD 83)
Site: Sec 28 T. 25 S., R. 32E.
Well: Marwari 28-16 STATE FED COM 232H
Wellbore: Actual Drilled
Design: Actual Drilled

Local Co-ordinate Reference: Well Marwari 28-16 STATE FED COM 232H
TVD Reference: RKB (Nabors X05) 32' + GL @ 3409.0usft
MD Reference: RKB (Nabors X05) 32' + GL @ 3409.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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
10,378.0	32.72	172.34	10,245.3	529.7	1,117.5	404,192.76	742,466.58	32° 6' 34.341 N	103° 41' 1.455 W
10,404.0	35.59	171.82	10,266.8	515.3	1,119.5	404,178.30	742,468.59	32° 6' 34.198 N	103° 41' 1.433 W
10,436.0	39.96	170.33	10,292.1	495.9	1,122.5	404,158.94	742,471.64	32° 6' 34.006 N	103° 41' 1.398 W
10,467.0	43.71	171.11	10,315.2	475.5	1,125.9	404,138.54	742,474.97	32° 6' 33.804 N	103° 41' 1.361 W
10,499.0	46.83	171.32	10,337.7	453.1	1,129.3	404,116.07	742,478.44	32° 6' 33.581 N	103° 41' 1.322 W
10,531.0	49.02	173.00	10,359.1	429.5	1,132.6	404,092.55	742,481.68	32° 6' 33.348 N	103° 41' 1.286 W
10,564.0	51.00	174.54	10,380.3	404.4	1,135.3	404,067.41	742,484.42	32° 6' 33.099 N	103° 41' 1.256 W
10,594.0	52.64	175.46	10,398.9	380.9	1,137.4	404,043.92	742,486.47	32° 6' 32.867 N	103° 41' 1.234 W
10,626.0	54.98	174.83	10,417.8	355.2	1,139.5	404,018.19	742,488.66	32° 6' 32.612 N	103° 41' 1.210 W
10,657.0	58.33	175.41	10,434.8	329.4	1,141.7	403,992.39	742,490.86	32° 6' 32.357 N	103° 41' 1.187 W
10,689.0	60.48	175.29	10,451.1	301.9	1,144.0	403,964.94	742,493.09	32° 6' 32.085 N	103° 41' 1.163 W
10,721.0	61.90	175.12	10,466.5	274.0	1,146.3	403,937.00	742,495.43	32° 6' 31.808 N	103° 41' 1.137 W
10,752.0	64.17	174.56	10,480.6	246.5	1,148.8	403,909.48	742,497.92	32° 6' 31.536 N	103° 41' 1.110 W
10,784.0	66.62	174.80	10,493.9	217.5	1,151.5	403,880.52	742,500.62	32° 6' 31.249 N	103° 41' 1.081 W
10,814.0	68.03	175.56	10,505.5	189.9	1,153.8	403,852.94	742,502.94	32° 6' 30.976 N	103° 41' 1.056 W
Section Crossing (0.4902' FNL, 1566.0615' FWL of Section 28)									
10,816.0	68.12	175.61	10,506.2	188.1	1,154.0	403,851.09	742,503.08	32° 6' 30.958 N	103° 41' 1.054 W
10,847.0	69.87	176.88	10,517.3	159.2	1,155.9	403,822.21	742,504.98	32° 6' 30.672 N	103° 41' 1.034 W
10,879.0	73.29	177.54	10,527.4	128.9	1,157.3	403,791.89	742,506.45	32° 6' 30.372 N	103° 41' 1.019 W
10,911.0	76.30	177.65	10,535.8	98.0	1,158.6	403,761.04	742,507.75	32° 6' 30.066 N	103° 41' 1.007 W
10,919.0	77.13	177.67	10,537.7	90.3	1,159.0	403,753.26	742,508.07	32° 6' 29.989 N	103° 41' 1.003 W
Perf Line Crossing (100.2323' FNL, 1570.2955' FWL of Section 28)									
10,919.6	77.19	177.67	10,537.8	89.7	1,159.0	403,752.71	742,508.09	32° 6' 29.984 N	103° 41' 1.003 W
LP Marwari 28-16 STATE FED COM 232H									
10,943.0	79.61	177.73	10,542.5	66.8	1,159.9	403,729.77	742,509.01	32° 6' 29.757 N	103° 41' 0.994 W
11,015.0	85.91	175.80	10,551.6	-4.5	1,163.9	403,658.50	742,513.05	32° 6' 29.051 N	103° 41' 0.952 W
11,108.0	89.45	174.86	10,555.3	-97.1	1,171.5	403,565.90	742,520.61	32° 6' 28.134 N	103° 41' 0.871 W
11,198.0	88.92	174.85	10,556.6	-186.7	1,179.6	403,476.27	742,528.68	32° 6' 27.247 N	103° 41' 0.783 W
11,290.0	89.23	174.44	10,558.1	-278.3	1,188.2	403,384.69	742,537.27	32° 6' 26.340 N	103° 41' 0.690 W
11,382.0	90.43	176.88	10,558.4	-370.0	1,195.1	403,292.96	742,544.23	32° 6' 25.432 N	103° 41' 0.615 W
11,472.0	89.82	178.40	10,558.2	-460.0	1,198.8	403,203.04	742,547.93	32° 6' 24.542 N	103° 41' 0.578 W
11,563.0	89.45	178.76	10,558.8	-550.9	1,201.1	403,112.07	742,550.19	32° 6' 23.642 N	103° 41' 0.559 W
11,653.0	89.48	178.99	10,559.6	-640.9	1,202.8	403,022.09	742,551.96	32° 6' 22.751 N	103° 41' 0.544 W
11,744.0	87.57	180.08	10,561.9	-731.9	1,203.6	402,931.13	742,552.70	32° 6' 21.851 N	103° 41' 0.542 W
11,835.0	88.34	180.80	10,565.2	-822.8	1,202.9	402,840.19	742,552.00	32° 6' 20.951 N	103° 41' 0.557 W
11,926.0	88.03	180.55	10,568.1	-913.8	1,201.8	402,749.25	742,550.93	32° 6' 20.051 N	103° 41' 0.575 W
12,017.0	87.26	180.50	10,571.8	-1,004.7	1,201.0	402,658.33	742,550.09	32° 6' 19.152 N	103° 41' 0.592 W
12,109.0	88.92	180.46	10,574.9	-1,096.6	1,200.2	402,566.38	742,549.32	32° 6' 18.242 N	103° 41' 0.607 W
12,199.0	89.02	180.44	10,576.5	-1,186.6	1,199.5	402,476.40	742,548.62	32° 6' 17.351 N	103° 41' 0.621 W
12,290.0	88.06	180.32	10,578.8	-1,277.6	1,198.9	402,385.43	742,548.01	32° 6' 16.451 N	103° 41' 0.635 W
12,385.0	87.81	180.93	10,582.2	-1,372.5	1,197.9	402,290.50	742,546.98	32° 6' 15.512 N	103° 41' 0.654 W
12,479.0	89.45	179.56	10,584.5	-1,466.5	1,197.5	402,196.54	742,546.57	32° 6' 14.582 N	103° 41' 0.665 W
12,573.0	89.01	180.20	10,585.8	-1,560.5	1,197.7	402,102.54	742,546.77	32° 6' 13.652 N	103° 41' 0.669 W
12,666.0	88.77	180.77	10,587.6	-1,653.4	1,196.9	402,009.57	742,545.98	32° 6' 12.732 N	103° 41' 0.685 W
12,760.0	89.51	181.22	10,589.0	-1,747.4	1,195.2	401,915.59	742,544.35	32° 6' 11.802 N	103° 41' 0.710 W
12,852.0	89.60	178.85	10,589.7	-1,839.4	1,195.2	401,823.60	742,544.30	32° 6' 10.892 N	103° 41' 0.717 W
12,945.0	89.20	178.48	10,590.7	-1,932.4	1,197.3	401,730.63	742,546.46	32° 6' 9.972 N	103° 41' 0.699 W
13,038.0	88.98	178.78	10,592.1	-2,025.3	1,199.6	401,637.67	742,548.69	32° 6' 9.052 N	103° 41' 0.679 W
13,130.0	90.12	179.38	10,592.9	-2,117.3	1,201.0	401,545.69	742,550.16	32° 6' 8.141 N	103° 41' 0.669 W
13,223.0	90.40	179.45	10,592.4	-2,210.3	1,202.0	401,452.69	742,551.11	32° 6' 7.221 N	103° 41' 0.664 W
13,315.0	90.31	179.73	10,591.9	-2,302.3	1,202.7	401,360.70	742,551.77	32° 6' 6.311 N	103° 41' 0.663 W
13,407.0	89.54	179.16	10,592.0	-2,394.3	1,203.5	401,268.70	742,552.66	32° 6' 5.400 N	103° 41' 0.659 W
13,500.0	89.07	179.02	10,593.1	-2,487.3	1,205.0	401,175.72	742,554.14	32° 6' 4.480 N	103° 41' 0.648 W
13,594.0	89.29	178.85	10,594.5	-2,581.3	1,206.8	401,081.75	742,555.89	32° 6' 3.550 N	103° 41' 0.635 W
13,688.0	89.17	178.38	10,595.7	-2,675.2	1,209.0	400,987.78	742,558.16	32° 6' 2.620 N	103° 41' 0.615 W

Halliburton

Survey Report - Geographic

Company: Devon Energy Corporation
Project: Lea County, NM (NAD 83)
Site: Sec 28 T. 25 S., R.32E.
Well: Marwari 28-16 STATE FED COM 232H
Wellbore: Actual Drilled
Design: Actual Drilled

Local Co-ordinate Reference: Well Marwari 28-16 STATE FED COM 232H
TVD Reference: RKB (Nabors X05) 32' + GL @ 3409.0usft
MD Reference: RKB (Nabors X05) 32' + GL @ 3409.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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
13,783.0	90.00	178.78	10,596.4	-2,770.2	1,211.4	400,892.82	742,560.51	32° 6' 1.680 N	103° 41' 0.594 W
13,876.0	90.56	178.54	10,596.0	-2,863.2	1,213.6	400,799.84	742,562.69	32° 6' 0.760 N	103° 41' 0.575 W
13,970.0	88.67	179.02	10,596.6	-2,957.1	1,215.6	400,705.87	742,564.69	32° 5' 59.830 N	103° 41' 0.559 W
14,063.0	88.21	179.36	10,599.1	-3,050.1	1,216.9	400,612.92	742,566.00	32° 5' 58.910 N	103° 41' 0.550 W
14,157.0	87.81	179.28	10,602.4	-3,144.0	1,218.0	400,518.98	742,567.12	32° 5' 57.980 N	103° 41' 0.544 W
14,251.0	87.32	179.38	10,606.4	-3,237.9	1,219.1	400,425.07	742,568.22	32° 5' 57.051 N	103° 41' 0.537 W
14,345.0	86.63	179.86	10,611.3	-3,331.8	1,219.7	400,331.20	742,568.84	32° 5' 56.122 N	103° 41' 0.537 W
14,440.0	87.90	179.69	10,615.9	-3,426.7	1,220.1	400,236.32	742,569.21	32° 5' 55.183 N	103° 41' 0.539 W
14,535.0	89.35	179.19	10,618.1	-3,521.7	1,221.0	400,141.35	742,570.14	32° 5' 54.243 N	103° 41' 0.535 W
14,629.0	89.75	179.65	10,618.9	-3,615.7	1,222.0	400,047.36	742,571.09	32° 5' 53.313 N	103° 41' 0.530 W
14,722.0	89.97	180.00	10,619.1	-3,708.7	1,222.3	399,954.36	742,571.37	32° 5' 52.393 N	103° 41' 0.534 W
14,817.0	89.63	180.74	10,619.4	-3,803.6	1,221.6	399,859.36	742,570.76	32° 5' 51.453 N	103° 41' 0.547 W
14,911.0	89.07	181.16	10,620.5	-3,897.6	1,220.1	399,765.38	742,569.20	32° 5' 50.523 N	103° 41' 0.572 W
15,005.0	89.01	179.23	10,622.1	-3,991.6	1,219.8	399,671.40	742,568.88	32° 5' 49.593 N	103° 41' 0.582 W
15,097.0	88.95	179.86	10,623.7	-4,083.6	1,220.5	399,579.42	742,569.61	32° 5' 48.683 N	103° 41' 0.580 W
15,190.0	88.83	178.51	10,625.5	-4,176.6	1,221.8	399,486.45	742,570.94	32° 5' 47.763 N	103° 41' 0.571 W
15,282.0	89.39	178.67	10,627.0	-4,268.5	1,224.1	399,394.49	742,573.20	32° 5' 46.853 N	103° 41' 0.552 W
15,374.0	89.17	178.66	10,628.1	-4,360.5	1,226.2	399,302.52	742,575.34	32° 5' 45.942 N	103° 41' 0.533 W
15,467.0	88.92	178.81	10,629.7	-4,453.5	1,228.3	399,209.55	742,577.40	32° 5' 45.022 N	103° 41' 0.516 W
15,559.0	89.01	178.97	10,631.3	-4,545.4	1,230.1	399,117.59	742,579.18	32° 5' 44.112 N	103° 41' 0.502 W
15,652.0	89.32	178.50	10,632.7	-4,638.4	1,232.1	399,024.62	742,581.23	32° 5' 43.192 N	103° 41' 0.484 W
15,746.0	88.61	178.87	10,634.4	-4,732.3	1,234.3	398,930.66	742,583.39	32° 5' 42.262 N	103° 41' 0.466 W
15,841.0	88.52	178.96	10,636.8	-4,827.3	1,236.1	398,835.71	742,585.19	32° 5' 41.322 N	103° 41' 0.451 W
15,936.0	88.80	179.07	10,639.0	-4,922.3	1,237.7	398,740.75	742,586.82	32° 5' 40.383 N	103° 41' 0.439 W
16,031.0	88.80	179.28	10,641.0	-5,017.2	1,239.1	398,645.78	742,588.19	32° 5' 39.443 N	103° 41' 0.430 W
16,082.0	88.57	179.27	10,642.1	-5,068.2	1,239.7	398,594.80	742,588.83	32° 5' 38.938 N	103° 41' 0.426 W
Section Crossing (0.1895' FNL, 1602.9124' FWL of Section 33)									
16,126.0	88.37	179.26	10,643.3	-5,112.2	1,240.3	398,550.81	742,589.40	32° 5' 38.503 N	103° 41' 0.422 W
16,220.0	88.21	178.86	10,646.1	-5,206.1	1,241.8	398,456.87	742,590.94	32° 5' 37.573 N	103° 41' 0.411 W
16,315.0	90.15	177.78	10,647.5	-5,301.1	1,244.6	398,361.93	742,593.72	32° 5' 36.633 N	103° 41' 0.385 W
16,409.0	91.48	177.94	10,646.1	-5,395.0	1,248.1	398,268.00	742,597.23	32° 5' 35.704 N	103° 41' 0.351 W
16,504.0	91.33	178.31	10,643.8	-5,489.9	1,251.2	398,173.08	742,600.34	32° 5' 34.764 N	103° 41' 0.322 W
16,599.0	91.26	178.50	10,641.7	-5,584.9	1,253.9	398,078.14	742,602.98	32° 5' 33.825 N	103° 41' 0.298 W
16,694.0	90.86	178.51	10,639.9	-5,679.8	1,256.3	397,983.19	742,605.46	32° 5' 32.885 N	103° 41' 0.275 W
16,789.0	90.53	179.11	10,638.8	-5,774.8	1,258.3	397,888.22	742,607.43	32° 5' 31.945 N	103° 41' 0.259 W
16,882.0	90.31	179.86	10,638.1	-5,867.8	1,259.2	397,795.23	742,608.27	32° 5' 31.025 N	103° 41' 0.256 W
16,977.0	90.34	180.19	10,637.5	-5,962.8	1,259.1	397,700.23	742,608.23	32° 5' 30.085 N	103° 41' 0.263 W
17,072.0	90.15	180.61	10,637.1	-6,057.8	1,258.4	397,605.23	742,607.56	32° 5' 29.145 N	103° 41' 0.277 W
17,166.0	90.18	181.30	10,636.9	-6,151.8	1,256.9	397,511.25	742,606.00	32° 5' 28.215 N	103° 41' 0.302 W
17,261.0	90.28	181.07	10,636.5	-6,246.7	1,254.9	397,416.27	742,604.03	32° 5' 27.275 N	103° 41' 0.332 W
17,355.0	90.37	181.72	10,635.9	-6,340.7	1,252.6	397,322.30	742,601.75	32° 5' 26.345 N	103° 41' 0.365 W
17,449.0	90.56	181.51	10,635.2	-6,434.7	1,250.0	397,228.34	742,599.10	32° 5' 25.416 N	103° 41' 0.402 W
17,544.0	89.85	181.63	10,634.8	-6,529.6	1,247.4	397,133.38	742,596.49	32° 5' 24.476 N	103° 41' 0.439 W
17,638.0	89.69	181.68	10,635.2	-6,623.6	1,244.7	397,039.42	742,593.78	32° 5' 23.546 N	103° 41' 0.477 W
17,733.0	91.01	181.01	10,634.6	-6,718.6	1,242.4	396,944.45	742,591.55	32° 5' 22.607 N	103° 41' 0.510 W
17,827.0	90.71	180.65	10,633.2	-6,812.5	1,241.1	396,850.47	742,590.19	32° 5' 21.677 N	103° 41' 0.532 W
17,921.0	92.28	178.86	10,630.8	-6,906.5	1,241.5	396,756.51	742,590.59	32° 5' 20.747 N	103° 41' 0.534 W
18,015.0	93.03	179.11	10,626.4	-7,000.4	1,243.1	396,662.62	742,592.25	32° 5' 19.818 N	103° 41' 0.521 W
18,110.0	91.57	178.76	10,622.6	-7,095.3	1,244.9	396,567.72	742,594.02	32° 5' 18.879 N	103° 41' 0.508 W
18,205.0	90.49	178.41	10,620.9	-7,190.2	1,247.2	396,472.76	742,596.36	32° 5' 17.939 N	103° 41' 0.487 W
18,300.0	90.65	179.13	10,620.0	-7,285.2	1,249.3	396,377.79	742,598.40	32° 5' 16.999 N	103° 41' 0.470 W
18,394.0	89.75	178.36	10,619.6	-7,379.2	1,251.3	396,283.82	742,600.46	32° 5' 16.069 N	103° 41' 0.453 W
18,488.0	88.98	178.35	10,620.7	-7,473.1	1,254.0	396,189.86	742,603.16	32° 5' 15.139 N	103° 41' 0.428 W
18,583.0	89.60	177.96	10,621.8	-7,568.1	1,257.1	396,094.92	742,606.22	32° 5' 14.199 N	103° 41' 0.399 W
18,677.0	89.20	177.83	10,622.8	-7,662.0	1,260.6	396,000.99	742,609.67	32° 5' 13.270 N	103° 41' 0.365 W

Halliburton

Survey Report - Geographic

Company: Devon Energy Corporation
Project: Lea County, NM (NAD 83)
Site: Sec 28 T. 25 S., R. 32E.
Well: Marwari 28-16 STATE FED COM 232H
Wellbore: Actual Drilled
Design: Actual Drilled

Local Co-ordinate Reference: Well Marwari 28-16 STATE FED COM 232H
TVD Reference: RKB (Nabors X05) 32' + GL @ 3409.0usft
MD Reference: RKB (Nabors X05) 32' + GL @ 3409.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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
18,772.0	89.05	178.41	10,624.3	-7,757.0	1,263.7	395,906.05	742,612.79	32° 5' 12.330 N	103° 41' 0.336 W
18,866.0	89.44	178.69	10,625.5	-7,850.9	1,266.0	395,812.09	742,615.16	32° 5' 11.400 N	103° 41' 0.315 W
18,961.0	89.11	178.62	10,626.7	-7,945.9	1,268.3	395,717.12	742,617.39	32° 5' 10.460 N	103° 41' 0.295 W
19,055.0	90.62	178.86	10,626.9	-8,039.9	1,270.3	395,623.15	742,619.46	32° 5' 9.530 N	103° 41' 0.278 W
19,150.0	90.74	179.23	10,625.8	-8,134.8	1,271.9	395,528.17	742,621.04	32° 5' 8.590 N	103° 41' 0.266 W
19,245.0	90.71	178.81	10,624.6	-8,229.8	1,273.6	395,433.19	742,622.67	32° 5' 7.650 N	103° 41' 0.254 W
19,339.0	89.57	178.71	10,624.4	-8,323.8	1,275.6	395,339.21	742,624.70	32° 5' 6.720 N	103° 41' 0.237 W
19,433.0	91.67	177.39	10,623.4	-8,417.7	1,278.8	395,245.28	742,627.90	32° 5' 5.790 N	103° 41' 0.206 W
19,528.0	92.47	177.54	10,619.9	-8,512.6	1,283.0	395,150.44	742,632.10	32° 5' 4.851 N	103° 41' 0.164 W
19,623.0	91.26	177.56	10,616.8	-8,607.4	1,287.0	395,055.58	742,636.16	32° 5' 3.913 N	103° 41' 0.124 W
19,717.0	90.71	177.45	10,615.2	-8,701.3	1,291.1	394,961.68	742,640.25	32° 5' 2.983 N	103° 41' 0.083 W
19,811.0	90.25	176.97	10,614.4	-8,795.2	1,295.7	394,867.79	742,644.82	32° 5' 2.054 N	103° 41' 0.036 W
19,905.0	89.54	177.30	10,614.6	-8,889.1	1,300.4	394,773.91	742,649.52	32° 5' 1.124 N	103° 40' 59.988 W
19,999.0	90.65	177.81	10,614.5	-8,983.0	1,304.4	394,680.00	742,653.53	32° 5' 0.195 N	103° 40' 59.948 W
20,094.0	90.89	176.55	10,613.2	-9,077.9	1,309.1	394,585.13	742,658.21	32° 4' 59.256 N	103° 40' 59.900 W
20,189.0	90.59	176.53	10,612.0	-9,172.7	1,314.8	394,490.31	742,663.94	32° 4' 58.317 N	103° 40' 59.840 W
20,284.0	90.61	176.74	10,611.0	-9,267.5	1,320.4	394,395.48	742,669.52	32° 4' 57.378 N	103° 40' 59.782 W
20,379.0	91.02	177.83	10,609.6	-9,362.4	1,324.9	394,300.59	742,674.01	32° 4' 56.439 N	103° 40' 59.737 W
20,473.0	91.11	178.37	10,607.9	-9,456.3	1,328.0	394,206.66	742,677.13	32° 4' 55.510 N	103° 40' 59.707 W
20,568.0	90.28	178.39	10,606.7	-9,551.3	1,330.7	394,111.71	742,679.82	32° 4' 54.570 N	103° 40' 59.682 W
20,662.0	90.49	178.66	10,606.1	-9,645.3	1,333.1	394,017.74	742,682.24	32° 4' 53.640 N	103° 40' 59.661 W
20,756.0	90.95	178.97	10,604.9	-9,739.2	1,335.1	393,923.77	742,684.18	32° 4' 52.710 N	103° 40' 59.645 W
20,851.0	90.74	178.89	10,603.5	-9,834.2	1,336.8	393,828.80	742,685.95	32° 4' 51.770 N	103° 40' 59.631 W
20,946.0	90.92	180.44	10,602.1	-9,929.2	1,337.4	393,733.81	742,686.51	32° 4' 50.830 N	103° 40' 59.631 W
21,039.0	91.54	180.02	10,600.1	-10,022.2	1,337.0	393,640.83	742,686.14	32° 4' 49.910 N	103° 40' 59.642 W
21,134.0	91.42	179.28	10,597.7	-10,117.1	1,337.6	393,545.87	742,686.72	32° 4' 48.970 N	103° 40' 59.642 W
21,229.0	90.93	178.99	10,595.7	-10,212.1	1,339.0	393,450.90	742,688.15	32° 4' 48.030 N	103° 40' 59.632 W
21,264.0	90.73	179.33	10,595.2	-10,247.1	1,339.5	393,415.91	742,688.66	32° 4' 47.684 N	103° 40' 59.628 W
Perf Line Crossing (100.3281' FSL, 1687.0054' FWL of Section 33)									
21,284.0	90.62	179.53	10,595.0	-10,267.1	1,339.7	393,395.91	742,688.86	32° 4' 47.486 N	103° 40' 59.627 W
21,342.0	90.62	179.53	10,594.3	-10,325.1	1,340.2	393,337.91	742,689.34	32° 4' 46.912 N	103° 40' 59.626 W
Projection to TD (23.3329' FSL, 1687.4379' FWL of Section 33) - PBHL of Marwari 28-16 STATE FED COM 232H									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,345.0	3,338.3	74.2	112.7	Perf Line Crossing (99.9967' FNL, 523.9515' FWL of Section 28)
4,561.0	4,531.2	177.4	324.2	Section Crossing (0.0307' FNL, 736.3669' FWL of Section 28)
10,089.0	9,972.9	611.3	1,098.6	(KOP 421.7039' FSL, 1513.4288' FWL of Section 21)
10,814.0	10,505.5	189.9	1,153.8	Section Crossing (0.4902' FNL, 1566.0615' FWL of Section 28)
10,919.0	10,537.7	90.3	1,159.0	Perf Line Crossing (100.2323' FNL, 1570.2955' FWL of Section 28)
16,082.0	10,642.1	-5,068.2	1,239.7	Section Crossing (0.1895' FNL, 1602.9124' FWL of Section 33)
21,264.0	10,595.2	-10,247.1	1,339.5	Perf Line Crossing (100.3281' FSL, 1687.0054' FWL of Section 33)
21,342.0	10,594.3	-10,325.1	1,340.2	Projection to TD (23.3329' FSL, 1687.4379' FWL of Section 33)

Checked By: _____ **Approved By:** _____ **Date:** _____