

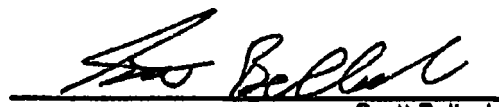
HALLIBURTON

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HOBBS OCD
JUN 25 2019
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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 October 17, 2018 through November 19, 2018, I did conduct or supervise the taking of MWD directional surveys for the Van Doo Dah 28-33 Fed Com 231H well from a depth of 141' MD to a depth of 20567' 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 Van Doo Dah 28-33 Fed Com 231H well, API # 30-025-45202 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: Van Doo Dah 28-33 Fed Com 231H

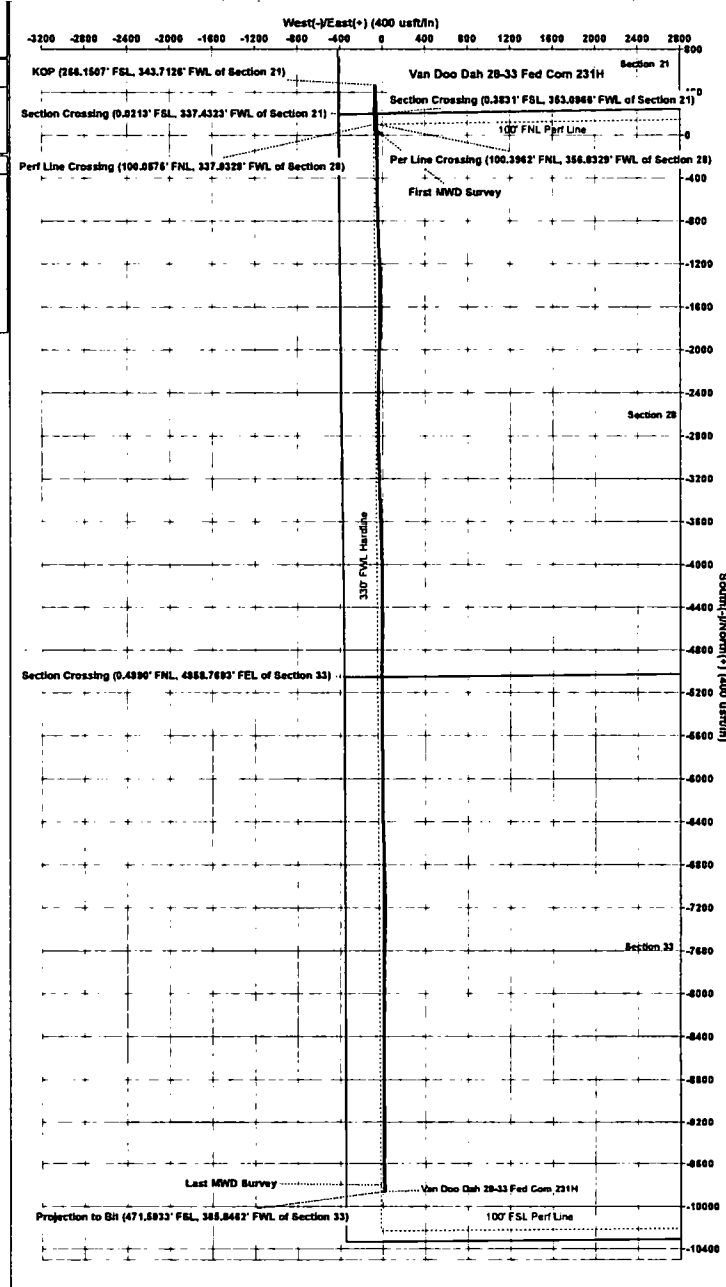
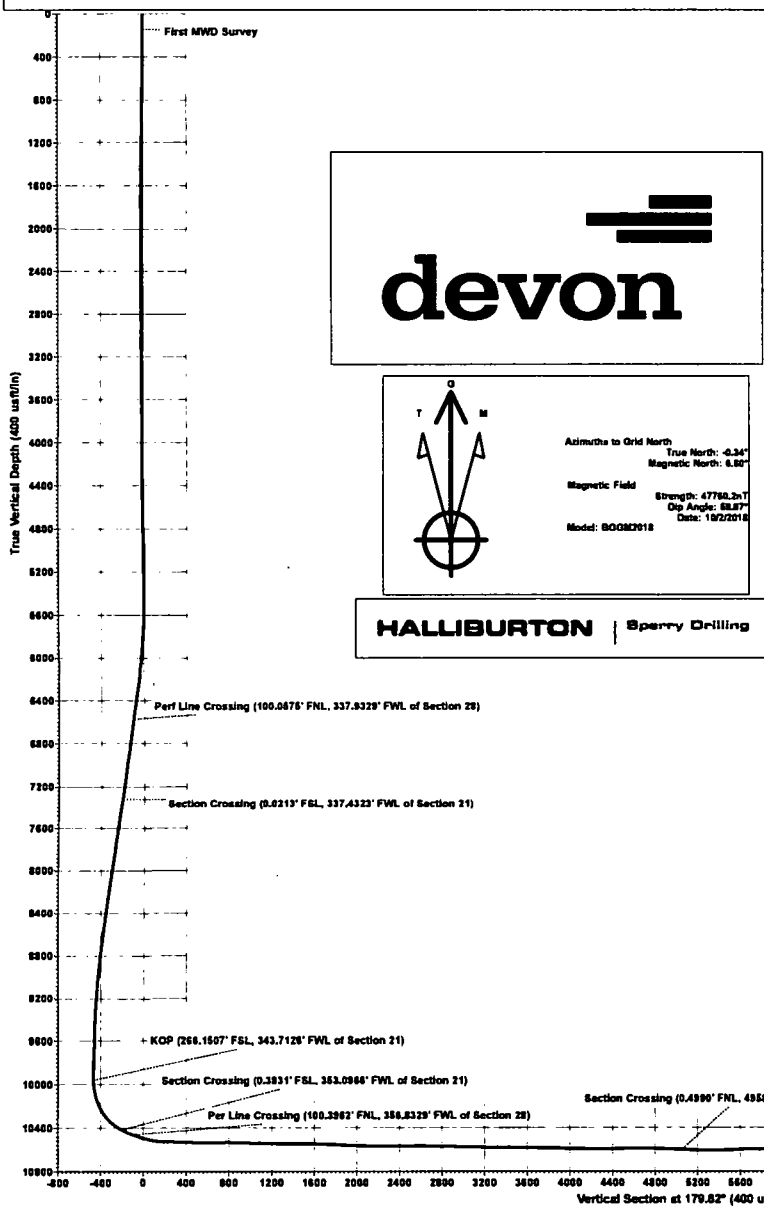
RKB (Nobara X05) 33' + GL @ 3410.0usft

Ground Level: 3377.0

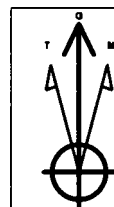
Northing 403833.07 Easting 741349.43 Latitude 32° 6' 28.889 N Longitude 103° 41' 14.482 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N-S	+E-W	Vsect	Departure	Annotation
141.0	0.46	282.78	141.0	0.1	-0.6	-0.1	0.6	First MWD Survey
6579.0	7.56	353.41	6571.6	101.1	-73.6	-101.4	206.0	Perf Line Crossing (100.0575' FNL, 337.9329' FWL of Section 28)
7331.0	8.10	357.41	7316.9	201.2	-75.0	-201.4	306.3	Section Crossing (0.0213' FSL, 337.4323' FWL of Section 21)
9989.0	0.99	195.80	9958.6	457.4	-70.4	-457.7	574.4	KOP (268.1507' FSL, 343.7128' FWL of Section 21)
10546.0	62.41	177.18	10418.7	201.8	-59.4	-202.0	840.5	Section Crossing (0.3831' FSL, 353.0968' FWL of Section 21)
10656.0	70.17	176.98	10460.4	101.1	-54.7	-101.3	941.3	Per Line Crossing (100.3962' FNL, 356.8329' FWL of Section 28)
15819.0	87.60	179.49	10597.8	-5051.0	-8.0	5051.0	6094.7	Section Crossing (0.4990' FNL, 4958.7693' FEL of Section 33)
20567.0	89.26	178.41	10585.7	-9797.3	15.3	9797.3	10841.5	Last MWD Survey
20626.0	89.26	178.41	10588.5	-8858.3	17.0	9858.3	10902.5	Projection to Bit (471.5933' FSL, 385.8462' FWL of Section 33)



devon



Azimuths to Grid North
True North: 0.34°
Magnetic North: 8.82°
Magnetic Field
Strength: 47780.2nT
Dip Angle: 68.87°
Date: 10/2/2018
Model: BOGMD2018

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Devon Energy Corporation

Lea County, NM (NAD 83)

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

Van Doo Dah 28-33 Fed Com 231H

Wellbore #1

Design: Actual Drilled

Survey Report - Geographic

13 December, 2018

Halliburton

Survey Report - Geographic

Company: Devon Energy Corporation
Project: Lea County, NM (NAD 83)
Site: Sec 28 T. 25 S., R.32E.
Well: Van Doo Dah 28-33 Fed Com 231H
Wellbore: Wellbore #1
Design: Actual Drilled

Local Co-ordinate Reference: Well Van Doo Dah 28-33 Fed Com 231H
TVD Reference: RKB (Nabors X05) 33' + GL @ 3410.0usft
MD Reference: RKB (Nabors X05) 33' + GL @ 3410.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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	Van Doo Dah 28-33 Fed Com 231H				
Well Position	+N/-S	0.0 usft	Northing:	403,633.07 usft	Latitude: 32° 6' 28.869 N
	+E/-W	0.0 usft	Easting:	741,349.43 usft	Longitude: 103° 41' 14.482 W
Position Uncertainty		0.5 usft	Wellhead Elevation:	0.0 usft	Ground Level: 3,377.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2018	10/2/2018	6.94	59.87	47,760.20692157

Design	Actual Drilled				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	179.82	

Survey Program	Date 12/13/2018				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
141.0	20,567.0	MWD (Wellbore #1)	MWD	Fixed:v2:standard declination	
20,628.0	20,628.0	Projection to TD (Wellbore #1)	2_Blind	A026Ua: Blind drilling - no survey data	

Survey									
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	403,633.07	741,349.43	32° 6' 28.869 N	103° 41' 14.482 W
141.0	0.46	282.78	141.0	0.1	-0.6	403,633.19	741,348.87	32° 6' 28.870 N	103° 41' 14.489 W
First MWD Survey									
231.0	0.33	286.21	231.0	0.3	-1.2	403,633.35	741,348.27	32° 6' 28.872 N	103° 41' 14.496 W
330.0	0.62	317.23	330.0	0.8	-1.8	403,633.82	741,347.64	32° 6' 28.876 N	103° 41' 14.503 W
421.0	0.69	320.40	421.0	1.5	-2.5	403,634.60	741,346.95	32° 6' 28.884 N	103° 41' 14.511 W
513.0	0.97	328.87	513.0	2.6	-3.2	403,635.70	741,346.20	32° 6' 28.895 N	103° 41' 14.520 W
604.0	1.02	329.60	604.0	4.0	-4.0	403,637.05	741,345.39	32° 6' 28.908 N	103° 41' 14.529 W
696.0	1.27	342.33	695.9	5.7	-4.8	403,638.73	741,344.66	32° 6' 28.925 N	103° 41' 14.537 W
786.0	1.15	349.79	785.9	7.5	-5.2	403,640.57	741,344.20	32° 6' 28.943 N	103° 41' 14.543 W
898.0	1.24	345.81	897.9	9.8	-5.7	403,642.85	741,343.71	32° 6' 28.966 N	103° 41' 14.548 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: Van Doo Dah 28-33 Fed Com 231H
Wellbore: Wellbore #1
Design: Actual Drilled

Local Co-ordinate Reference: Well Van Doo Dah 28-33 Fed Com 231H
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MD Reference: RKB (Nabors X05) 33' + GL @ 3410.0usft
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
958.0	1.36	343.15	957.9	11.1	-6.1	403,644.16	741,343.34	32° 6' 28.979 N	103° 41' 14.552 W
1,049.0	1.37	344.92	1,048.9	13.2	-6.7	403,646.25	741,342.74	32° 6' 29.000 N	103° 41' 14.559 W
1,140.0	1.39	336.85	1,139.8	15.2	-7.4	403,648.31	741,342.03	32° 6' 29.020 N	103° 41' 14.567 W
1,232.0	1.58	325.55	1,231.8	17.3	-8.6	403,650.38	741,340.87	32° 6' 29.041 N	103° 41' 14.581 W
1,322.0	1.67	313.81	1,321.8	19.2	-10.2	403,652.32	741,339.22	32° 6' 29.060 N	103° 41' 14.600 W
1,414.0	1.64	304.27	1,413.7	20.9	-12.3	403,653.98	741,337.17	32° 6' 29.076 N	103° 41' 14.624 W
1,504.0	1.39	286.78	1,503.7	22.0	-14.4	403,655.02	741,335.06	32° 6' 29.087 N	103° 41' 14.648 W
1,595.0	1.29	273.36	1,594.7	22.3	-16.4	403,655.40	741,332.98	32° 6' 29.091 N	103° 41' 14.672 W
1,686.0	1.28	275.52	1,685.6	22.5	-18.5	403,655.56	741,330.94	32° 6' 29.092 N	103° 41' 14.696 W
1,780.0	1.05	271.46	1,779.6	22.6	-20.4	403,655.68	741,329.04	32° 6' 29.094 N	103° 41' 14.718 W
1,811.0	0.79	274.44	1,810.6	22.6	-20.9	403,655.71	741,328.54	32° 6' 29.094 N	103° 41' 14.724 W
1,906.0	1.03	273.69	1,905.6	22.7	-22.4	403,655.81	741,327.04	32° 6' 29.095 N	103° 41' 14.741 W
2,001.0	1.77	272.79	2,000.6	22.9	-24.7	403,655.94	741,324.72	32° 6' 29.097 N	103° 41' 14.768 W
2,097.0	2.13	266.73	2,096.5	22.8	-28.0	403,655.91	741,321.46	32° 6' 29.096 N	103° 41' 14.806 W
2,191.0	2.25	261.44	2,190.5	22.5	-31.5	403,655.54	741,317.89	32° 6' 29.093 N	103° 41' 14.848 W
2,286.0	1.98	246.97	2,285.4	21.5	-34.9	403,654.62	741,314.53	32° 6' 29.084 N	103° 41' 14.887 W
2,381.0	2.32	254.21	2,380.3	20.4	-38.3	403,653.45	741,311.17	32° 6' 29.073 N	103° 41' 14.926 W
2,476.0	2.06	263.05	2,475.3	19.7	-41.8	403,652.72	741,307.63	32° 6' 29.066 N	103° 41' 14.967 W
2,571.0	1.79	254.50	2,570.2	19.0	-44.9	403,652.12	741,304.50	32° 6' 29.060 N	103° 41' 15.003 W
2,666.0	2.14	252.77	2,665.2	18.1	-48.0	403,651.20	741,301.38	32° 6' 29.051 N	103° 41' 15.040 W
2,760.0	2.16	253.75	2,759.1	17.1	-51.4	403,650.18	741,298.00	32° 6' 29.041 N	103° 41' 15.079 W
2,855.0	1.78	250.99	2,854.0	16.1	-54.5	403,649.20	741,294.89	32° 6' 29.032 N	103° 41' 15.115 W
2,950.0	1.43	249.55	2,949.0	15.2	-57.0	403,648.30	741,292.38	32° 6' 29.023 N	103° 41' 15.145 W
3,046.0	1.33	257.97	3,045.0	14.6	-59.3	403,647.65	741,290.17	32° 6' 29.017 N	103° 41' 15.170 W
3,140.0	0.83	264.92	3,138.9	14.3	-61.0	403,647.37	741,288.43	32° 6' 29.014 N	103° 41' 15.191 W
3,235.0	0.50	261.83	3,233.9	14.2	-62.1	403,647.25	741,287.33	32° 6' 29.013 N	103° 41' 15.203 W
3,329.0	0.40	242.64	3,327.9	14.0	-62.8	403,647.04	741,286.63	32° 6' 29.011 N	103° 41' 15.212 W
3,422.0	0.09	358.62	3,420.9	13.9	-63.1	403,646.96	741,286.34	32° 6' 29.010 N	103° 41' 15.215 W
3,516.0	0.31	34.51	3,514.9	14.2	-62.9	403,647.24	741,286.48	32° 6' 29.013 N	103° 41' 15.213 W
3,610.0	0.14	32.08	3,608.9	14.5	-62.7	403,647.55	741,286.69	32° 6' 29.016 N	103° 41' 15.211 W
3,705.0	0.21	11.26	3,703.9	14.8	-62.6	403,647.82	741,286.79	32° 6' 29.018 N	103° 41' 15.210 W
3,799.0	0.21	10.40	3,797.9	15.1	-62.6	403,648.16	741,286.85	32° 6' 29.022 N	103° 41' 15.209 W
3,893.0	0.37	85.56	3,891.9	15.3	-62.2	403,648.35	741,287.18	32° 6' 29.024 N	103° 41' 15.205 W
3,988.0	0.46	113.29	3,986.9	15.2	-61.6	403,648.22	741,287.84	32° 6' 29.022 N	103° 41' 15.197 W
4,083.0	0.73	119.19	4,081.9	14.7	-60.7	403,647.78	741,288.72	32° 6' 29.018 N	103° 41' 15.187 W
4,177.0	1.03	107.21	4,175.9	14.2	-59.4	403,647.24	741,290.05	32° 6' 29.012 N	103° 41' 15.172 W
4,272.0	0.98	123.04	4,270.9	13.5	-57.9	403,646.54	741,291.55	32° 6' 29.005 N	103° 41' 15.154 W
4,366.0	1.43	118.42	4,364.9	12.5	-56.2	403,645.54	741,293.25	32° 6' 28.996 N	103° 41' 15.135 W
4,461.0	1.26	153.09	4,459.9	11.0	-54.7	403,644.05	741,294.77	32° 6' 28.981 N	103° 41' 15.117 W
4,555.0	0.99	187.23	4,553.8	9.3	-54.3	403,642.32	741,295.13	32° 6' 28.964 N	103° 41' 15.113 W
4,650.0	1.19	218.85	4,648.8	7.7	-55.0	403,640.74	741,294.41	32° 6' 28.948 N	103° 41' 15.122 W
4,745.0	0.68	201.32	4,743.8	6.4	-55.8	403,639.45	741,293.59	32° 6' 28.935 N	103° 41' 15.131 W
4,839.0	0.85	204.27	4,837.8	5.2	-56.3	403,638.29	741,293.10	32° 6' 28.924 N	103° 41' 15.137 W
4,934.0	0.82	199.31	4,932.8	3.9	-56.8	403,637.01	741,292.58	32° 6' 28.911 N	103° 41' 15.143 W
5,029.0	0.53	210.12	5,027.8	2.9	-57.3	403,635.99	741,292.14	32° 6' 28.901 N	103° 41' 15.148 W
5,123.0	0.61	205.44	5,121.8	2.1	-57.7	403,635.16	741,291.70	32° 6' 28.893 N	103° 41' 15.153 W
5,218.0	0.76	208.67	5,216.8	1.1	-58.2	403,634.15	741,291.18	32° 6' 28.883 N	103° 41' 15.160 W
5,254.0	0.60	206.11	5,252.8	0.7	-58.4	403,633.77	741,290.99	32° 6' 28.879 N	103° 41' 15.162 W
5,347.0	0.56	174.61	5,345.8	-0.2	-58.6	403,632.88	741,290.81	32° 6' 28.870 N	103° 41' 15.164 W
5,379.0	0.64	176.40	5,377.8	-0.5	-58.6	403,632.55	741,290.84	32° 6' 28.867 N	103° 41' 15.164 W
5,473.0	0.74	307.51	5,471.8	-0.7	-59.0	403,632.39	741,290.39	32° 6' 28.866 N	103° 41' 15.169 W
5,568.0	0.94	322.11	5,566.7	0.3	-60.0	403,633.38	741,289.43	32° 6' 28.875 N	103° 41' 15.180 W
5,661.0	1.80	1.74	5,659.7	2.4	-60.4	403,635.44	741,289.00	32° 6' 28.896 N	103° 41' 15.185 W
5,756.0	2.78	358.22	5,754.6	6.2	-60.5	403,639.24	741,288.98	32° 6' 28.933 N	103° 41' 15.185 W
5,851.0	3.98	359.32	5,849.5	11.8	-60.6	403,644.84	741,288.87	32° 6' 28.989 N	103° 41' 15.186 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: Van Doo Dah 28-33 Fed Com 231H
Wellbore: Wellbore #1
Design: Actual Drilled

Local Co-ordinate Reference: Well Van Doo Dah 28-33 Fed Com 231H
TVD Reference: RKB (Nabors X05) 33' + GL @ 3410.0usft
MD Reference: RKB (Nabors X05) 33' + GL @ 3410.0usft
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
5,946.0	5.07	352.64	5,944.2	19.2	-61.1	403,652.30	741,288.29	32° 6' 29.063 N	103° 41' 15.192 W
6,041.0	6.42	353.45	6,038.7	28.7	-62.3	403,661.74	741,287.15	32° 6' 29.156 N	103° 41' 15.205 W
6,135.0	7.36	351.21	6,132.0	39.8	-63.8	403,672.91	741,285.63	32° 6' 29.267 N	103° 41' 15.221 W
6,230.0	8.30	350.88	6,226.1	52.6	-65.8	403,685.69	741,283.61	32° 6' 29.393 N	103° 41' 15.244 W
6,325.0	8.68	349.10	6,320.1	66.4	-68.3	403,699.50	741,281.17	32° 6' 29.530 N	103° 41' 15.271 W
6,420.0	8.05	350.31	6,414.1	80.0	-70.7	403,713.10	741,278.69	32° 6' 29.665 N	103° 41' 15.299 W
6,514.0	7.56	353.06	6,507.2	92.7	-72.6	403,725.72	741,276.84	32° 6' 29.790 N	103° 41' 15.320 W
6,579.0	7.56	353.41	6,571.6	101.1	-73.6	403,734.21	741,275.83	32° 6' 29.874 N	103° 41' 15.331 W
Perf Line Crossing (100.0575' FNL, 337.9329' FWL of Section 28)									
6,609.0	7.56	353.57	6,601.4	105.1	-74.0	403,738.14	741,275.38	32° 6' 29.913 N	103° 41' 15.336 W
6,703.0	7.75	358.91	6,694.6	117.5	-74.9	403,750.62	741,274.57	32° 6' 30.036 N	103° 41' 15.345 W
6,798.0	7.60	359.34	6,788.7	130.2	-75.1	403,763.30	741,274.37	32° 6' 30.162 N	103° 41' 15.346 W
6,893.0	7.42	359.52	6,882.9	142.7	-75.2	403,775.72	741,274.25	32° 6' 30.285 N	103° 41' 15.347 W
6,988.0	7.59	1.93	6,977.1	155.1	-75.0	403,788.12	741,274.41	32° 6' 30.408 N	103° 41' 15.344 W
7,083.0	7.43	1.78	7,071.3	167.5	-74.6	403,800.53	741,274.81	32° 6' 30.530 N	103° 41' 15.338 W
7,177.0	8.08	0.05	7,164.4	180.1	-74.4	403,813.22	741,275.01	32° 6' 30.656 N	103° 41' 15.335 W
7,272.0	7.65	357.64	7,258.5	193.1	-74.7	403,826.21	741,274.75	32° 6' 30.784 N	103° 41' 15.337 W
7,331.0	8.10	357.41	7,316.9	201.2	-75.0	403,834.28	741,274.40	32° 6' 30.864 N	103° 41' 15.341 W
Section Crossing (0.0213' FSL, 337.4323' FWL of Section 21)									
7,366.0	8.36	357.29	7,351.6	206.2	-75.3	403,839.29	741,274.17	32° 6' 30.914 N	103° 41' 15.343 W
7,461.0	8.51	358.79	7,445.6	220.1	-75.7	403,853.21	741,273.70	32° 6' 31.052 N	103° 41' 15.348 W
7,553.0	7.76	358.89	7,536.6	233.2	-76.0	403,866.23	741,273.43	32° 6' 31.180 N	103° 41' 15.350 W
7,647.0	7.95	2.61	7,629.8	246.0	-75.8	403,879.07	741,273.61	32° 6' 31.308 N	103° 41' 15.347 W
7,740.0	7.65	6.34	7,721.9	258.6	-74.8	403,891.64	741,274.58	32° 6' 31.432 N	103° 41' 15.335 W
7,834.0	8.45	5.58	7,815.0	271.7	-73.5	403,904.74	741,275.94	32° 6' 31.561 N	103° 41' 15.318 W
7,928.0	8.34	5.16	7,908.0	285.3	-72.2	403,918.40	741,277.23	32° 6' 31.697 N	103° 41' 15.302 W
8,023.0	7.81	7.14	8,002.0	298.6	-70.8	403,931.67	741,278.65	32° 6' 31.828 N	103° 41' 15.285 W
8,117.0	8.65	4.46	8,095.0	312.0	-69.4	403,945.05	741,279.99	32° 6' 31.960 N	103° 41' 15.268 W
8,211.0	8.01	3.47	8,188.1	325.6	-68.5	403,958.64	741,280.94	32° 6' 32.094 N	103° 41' 15.256 W
8,305.0	7.68	2.36	8,281.2	338.4	-67.8	403,971.45	741,281.60	32° 6' 32.221 N	103° 41' 15.247 W
8,400.0	7.90	358.97	8,375.3	351.3	-67.7	403,984.32	741,281.74	32° 6' 32.349 N	103° 41' 15.245 W
8,494.0	7.49	357.48	8,468.5	363.8	-68.1	403,996.90	741,281.35	32° 6' 32.473 N	103° 41' 15.249 W
8,588.0	7.82	358.42	8,561.6	376.3	-68.5	404,009.41	741,280.91	32° 6' 32.597 N	103° 41' 15.253 W
8,683.0	6.79	357.91	8,655.8	388.4	-68.9	404,021.49	741,280.53	32° 6' 32.716 N	103° 41' 15.256 W
8,777.0	6.81	0.18	8,749.2	399.5	-69.1	404,032.61	741,280.34	32° 6' 32.827 N	103° 41' 15.258 W
8,871.0	5.84	9.48	8,842.6	409.8	-68.3	404,042.90	741,281.15	32° 6' 32.928 N	103° 41' 15.248 W
8,965.0	5.94	13.43	8,936.1	419.3	-66.4	404,052.35	741,283.06	32° 6' 33.022 N	103° 41' 15.225 W
9,059.0	5.23	3.72	9,029.7	428.3	-65.0	404,061.36	741,284.47	32° 6' 33.111 N	103° 41' 15.208 W
9,152.0	4.06	351.66	9,122.4	435.8	-65.2	404,068.84	741,284.27	32° 6' 33.185 N	103° 41' 15.210 W
9,244.0	3.46	347.88	9,214.2	441.7	-66.2	404,074.78	741,283.21	32° 6' 33.244 N	103° 41' 15.222 W
9,337.0	3.06	349.80	9,307.0	446.9	-67.2	404,079.97	741,282.18	32° 6' 33.295 N	103° 41' 15.233 W
9,429.0	2.75	342.33	9,398.9	451.4	-68.3	404,084.49	741,281.08	32° 6' 33.340 N	103° 41' 15.246 W
9,521.0	1.73	352.48	9,490.8	454.9	-69.2	404,087.97	741,280.23	32° 6' 33.374 N	103° 41' 15.255 W
9,613.0	1.20	12.74	9,582.8	457.2	-69.2	404,090.28	741,280.26	32° 6' 33.397 N	103° 41' 15.255 W
9,706.0	1.39	357.95	9,675.8	459.3	-69.0	404,092.36	741,280.43	32° 6' 33.418 N	103° 41' 15.253 W
9,800.0	1.63	358.13	9,769.7	461.8	-69.1	404,094.84	741,280.35	32° 6' 33.442 N	103° 41' 15.253 W
9,894.0	2.29	347.39	9,863.7	464.9	-69.5	404,098.01	741,279.89	32° 6' 33.474 N	103° 41' 15.258 W
9,928.0	2.40	346.31	9,897.7	466.3	-69.8	404,099.36	741,279.58	32° 6' 33.487 N	103° 41' 15.262 W
9,959.0	1.55	340.35	9,928.6	467.3	-70.1	404,100.39	741,279.28	32° 6' 33.497 N	103° 41' 15.265 W
9,989.0	0.99	195.80	9,958.6	467.4	-70.4	404,100.52	741,279.08	32° 6' 33.499 N	103° 41' 15.268 W
KOP (266.1507' FSL, 343.7126' FWL of Section 21)									
10,020.0	4.63	180.21	9,989.6	465.9	-70.4	404,099.01	741,279.00	32° 6' 33.484 N	103° 41' 15.269 W
10,051.0	7.54	181.11	10,020.4	462.7	-70.5	404,095.72	741,278.95	32° 6' 33.451 N	103° 41' 15.270 W
10,083.0	10.04	178.73	10,052.0	457.8	-70.5	404,090.83	741,278.98	32° 6' 33.403 N	103° 41' 15.270 W
10,114.0	12.96	182.72	10,082.4	451.6	-70.6	404,084.66	741,278.87	32° 6' 33.342 N	103° 41' 15.271 W

Halliburton

Survey Report - Geographic

Company: Devon Energy Corporation
Project: Lea County, NM (NAD 83)
Site: Sec 28 T. 25 S., R. 32E.
Well: Van Doo Dah 28-33 Fed Com 231H
Wellbore: Wellbore #1
Design: Actual Drilled

Local Co-ordinate Reference: Well Van Doo Dah 28-33 Fed Com 231H
TVD Reference: RKB (Nabors X05) 33' + GL @ 3410.0usft
MD Reference: RKB (Nabors X05) 33' + GL @ 3410.0usft
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
10,146.0	16.16	180.35	10,113.4	443.6	-70.8	404,076.62	741,278.67	32° 6' 33.262 N	103° 41' 15.274 W
10,177.0	19.54	181.42	10,142.9	434.1	-70.9	404,067.12	741,278.52	32° 6' 33.168 N	103° 41' 15.277 W
10,208.0	22.19	178.00	10,171.8	423.0	-70.8	404,056.09	741,278.59	32° 6' 33.059 N	103° 41' 15.277 W
10,241.0	25.21	177.68	10,202.1	409.8	-70.3	404,042.83	741,279.10	32° 6' 32.928 N	103° 41' 15.272 W
10,272.0	28.37	175.54	10,229.7	395.8	-69.5	404,028.89	741,279.94	32° 6' 32.790 N	103° 41' 15.263 W
10,304.0	32.57	175.76	10,257.3	379.6	-68.3	404,012.71	741,281.17	32° 6' 32.630 N	103° 41' 15.250 W
10,334.0	36.34	176.57	10,282.0	362.7	-67.1	403,995.78	741,282.29	32° 6' 32.462 N	103° 41' 15.238 W
10,366.0	40.13	176.24	10,307.2	342.9	-65.9	403,976.02	741,283.54	32° 6' 32.266 N	103° 41' 15.225 W
10,398.0	44.28	176.67	10,330.9	321.5	-64.6	403,954.57	741,284.86	32° 6' 32.054 N	103° 41' 15.211 W
10,429.0	48.96	177.86	10,352.2	299.0	-63.5	403,932.07	741,285.93	32° 6' 31.831 N	103° 41' 15.200 W
10,460.0	53.41	177.68	10,371.6	274.9	-62.6	403,907.94	741,286.87	32° 6' 31.592 N	103° 41' 15.191 W
10,492.0	57.46	177.46	10,389.7	248.5	-61.4	403,881.62	741,287.99	32° 6' 31.332 N	103° 41' 15.179 W
10,524.0	60.62	177.58	10,406.2	221.1	-60.3	403,854.20	741,289.18	32° 6' 31.061 N	103° 41' 15.168 W
10,546.0	62.41	177.16	10,416.7	201.8	-59.4	403,834.89	741,290.06	32° 6' 30.869 N	103° 41' 15.159 W
Section Crossing (0.3831' FSL, 353.0966' FWL of Section 21)									
10,556.0	63.22	176.97	10,421.3	192.9	-58.9	403,826.01	741,290.52	32° 6' 30.781 N	103° 41' 15.154 W
10,587.0	65.67	177.45	10,434.6	165.0	-57.5	403,798.07	741,291.88	32° 6' 30.505 N	103° 41' 15.140 W
10,619.0	67.91	177.76	10,447.2	135.6	-56.3	403,768.69	741,293.11	32° 6' 30.214 N	103° 41' 15.128 W
10,651.0	69.95	176.97	10,458.7	105.8	-54.9	403,738.86	741,294.48	32° 6' 29.919 N	103° 41' 15.114 W
10,656.0	70.17	176.98	10,460.4	101.1	-54.7	403,734.17	741,294.73	32° 6' 29.872 N	103° 41' 15.111 W
Per Line Crossing (100.3962' FNL, 356.8329' FWL of Section 28)									
10,682.0	71.29	177.04	10,469.0	76.6	-53.4	403,709.66	741,296.01	32° 6' 29.630 N	103° 41' 15.098 W
10,714.0	72.03	177.59	10,479.1	46.3	-52.0	403,679.32	741,297.43	32° 6' 29.330 N	103° 41' 15.084 W
10,746.0	73.86	179.40	10,488.5	15.7	-51.2	403,648.74	741,298.23	32° 6' 29.027 N	103° 41' 15.077 W
10,777.0	75.89	179.91	10,496.6	-14.3	-51.0	403,618.82	741,298.41	32° 6' 28.731 N	103° 41' 15.077 W
10,809.0	77.41	180.21	10,504.0	-45.4	-51.0	403,587.68	741,298.38	32° 6' 28.423 N	103° 41' 15.079 W
10,841.0	79.08	180.28	10,510.5	-76.7	-51.2	403,556.36	741,298.25	32° 6' 28.113 N	103° 41' 15.083 W
10,873.0	81.28	180.01	10,515.9	-108.2	-51.3	403,524.83	741,298.17	32° 6' 27.801 N	103° 41' 15.086 W
10,904.0	83.60	179.54	10,520.0	-139.0	-51.1	403,494.10	741,298.29	32° 6' 27.497 N	103° 41' 15.087 W
10,931.0	85.13	179.59	10,522.7	-165.8	-50.9	403,467.23	741,298.49	32° 6' 27.231 N	103° 41' 15.086 W
10,961.0	87.10	179.14	10,524.7	-195.8	-50.6	403,437.30	741,298.82	32° 6' 26.935 N	103° 41' 15.084 W
10,992.0	88.52	179.17	10,525.9	-226.7	-50.1	403,406.33	741,299.28	32° 6' 26.628 N	103° 41' 15.081 W
11,055.0	88.70	179.75	10,527.4	-289.7	-49.6	403,343.35	741,299.87	32° 6' 26.005 N	103° 41' 15.079 W
11,150.0	88.03	179.75	10,530.1	-384.7	-49.1	403,248.39	741,300.29	32° 6' 25.065 N	103° 41' 15.081 W
11,245.0	88.61	180.06	10,532.9	-479.6	-49.0	403,153.43	741,300.45	32° 6' 24.125 N	103° 41' 15.085 W
11,340.0	89.66	179.73	10,534.3	-574.6	-48.8	403,058.45	741,300.62	32° 6' 23.185 N	103° 41' 15.090 W
11,435.0	90.80	178.27	10,534.0	-669.6	-47.1	402,963.46	741,302.28	32° 6' 22.245 N	103° 41' 15.077 W
11,529.0	90.06	178.35	10,533.3	-763.6	-44.4	402,869.51	741,305.05	32° 6' 21.315 N	103° 41' 15.052 W
11,625.0	88.70	177.96	10,534.3	-859.5	-41.3	402,773.57	741,308.14	32° 6' 20.366 N	103° 41' 15.022 W
11,719.0	88.21	178.12	10,536.8	-953.4	-38.1	402,679.66	741,311.35	32° 6' 19.436 N	103° 41' 14.992 W
11,813.0	87.59	177.57	10,540.3	-1,047.3	-34.5	402,585.79	741,314.89	32° 6' 18.507 N	103° 41' 14.957 W
11,909.0	88.46	177.75	10,543.6	-1,143.1	-30.6	402,489.92	741,318.80	32° 6' 17.558 N	103° 41' 14.918 W
12,004.0	89.45	178.17	10,545.3	-1,238.1	-27.2	402,395.00	741,322.18	32° 6' 16.619 N	103° 41' 14.885 W
12,098.0	89.48	178.77	10,546.2	-1,332.0	-24.7	402,301.04	741,324.69	32° 6' 15.689 N	103° 41' 14.863 W
12,192.0	90.12	179.58	10,546.5	-1,426.0	-23.4	402,207.05	741,326.05	32° 6' 14.759 N	103° 41' 14.854 W
12,287.0	90.37	179.69	10,546.1	-1,521.0	-22.8	402,112.05	741,326.65	32° 6' 13.819 N	103° 41' 14.853 W
12,382.0	88.58	179.71	10,547.0	-1,616.0	-22.3	402,017.06	741,327.15	32° 6' 12.879 N	103° 41' 14.854 W
12,477.0	87.69	180.98	10,550.1	-1,711.0	-22.8	401,922.12	741,326.58	32° 6' 11.939 N	103° 41' 14.867 W
12,571.0	87.45	180.82	10,554.1	-1,804.9	-24.3	401,828.21	741,325.10	32° 6' 11.010 N	103° 41' 14.891 W
12,665.0	86.73	181.31	10,558.8	-1,898.7	-26.1	401,734.35	741,323.36	32° 6' 10.081 N	103° 41' 14.918 W
12,759.0	88.31	182.04	10,562.9	-1,992.6	-28.8	401,640.48	741,320.61	32° 6' 9.153 N	103° 41' 14.956 W
12,852.0	87.97	181.93	10,565.9	-2,085.5	-32.0	401,547.59	741,317.39	32° 6' 8.234 N	103° 41' 15.000 W
12,944.0	89.54	182.10	10,567.9	-2,177.4	-35.3	401,455.67	741,314.16	32° 6' 7.324 N	103° 41' 15.044 W
13,037.0	90.86	181.59	10,567.6	-2,270.3	-38.3	401,362.72	741,311.17	32° 6' 6.405 N	103° 41' 15.085 W
13,130.0	91.30	180.09	10,565.8	-2,363.3	-39.6	401,269.75	741,309.80	32° 6' 5.485 N	103° 41' 15.108 W

Halliburton

Survey Report - Geographic

Company: Devon Energy Corporation	Local Co-ordinate Reference: Well Van Doo Dah 28-33 Fed Com 231H
Project: Lea County, NM (NAD 83)	TVD Reference: RKB (Nabors X05) 33' + GL @ 3410.0usft
Site: Sec 28 T. 25 S., R.32E.	MD Reference: RKB (Nabors X05) 33' + GL @ 3410.0usft
Well: Van Doo Dah 28-33 Fed Com 231H	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
13,223.0	90.18	180.40	10,564.6	-2,456.3	-40.0	401,176.76	741,309.40	32° 6' 4.564 N	103° 41' 15.119 W
13,315.0	89.75	180.46	10,564.7	-2,548.3	-40.7	401,084.76	741,308.71	32° 6' 3.654 N	103° 41' 15.133 W
13,408.0	89.51	180.73	10,565.3	-2,641.3	-41.7	400,991.77	741,307.75	32° 6' 2.734 N	103° 41' 15.151 W
13,500.0	88.86	180.99	10,566.6	-2,733.3	-43.1	400,899.79	741,306.37	32° 6' 1.824 N	103° 41' 15.173 W
13,592.0	88.86	178.68	10,568.4	-2,825.3	-42.8	400,807.82	741,306.63	32° 6' 0.914 N	103° 41' 15.177 W
13,686.0	88.71	178.04	10,570.4	-2,919.2	-40.1	400,713.88	741,309.32	32° 5' 59.984 N	103° 41' 15.152 W
13,780.0	88.18	178.24	10,573.0	-3,013.1	-37.1	400,619.96	741,312.37	32° 5' 59.054 N	103° 41' 15.123 W
13,875.0	89.20	178.03	10,575.1	-3,108.0	-34.0	400,525.04	741,315.46	32° 5' 58.115 N	103° 41' 15.094 W
13,969.0	88.31	178.23	10,577.2	-3,202.0	-30.9	400,431.11	741,318.53	32° 5' 57.185 N	103° 41' 15.065 W
14,062.0	89.01	180.21	10,579.4	-3,294.9	-29.6	400,338.15	741,319.80	32° 5' 56.265 N	103° 41' 15.056 W
14,156.0	89.88	177.93	10,580.3	-3,388.9	-28.1	400,244.17	741,321.32	32° 5' 55.335 N	103° 41' 15.045 W
14,249.0	89.88	178.20	10,580.5	-3,481.8	-25.0	400,151.23	741,324.46	32° 5' 54.415 N	103° 41' 15.015 W
14,343.0	89.91	178.06	10,580.6	-3,575.8	-21.9	400,057.28	741,327.53	32° 5' 53.485 N	103° 41' 14.986 W
14,438.0	89.23	177.39	10,581.4	-3,670.7	-18.1	399,962.36	741,331.30	32° 5' 52.546 N	103° 41' 14.949 W
14,532.0	88.83	177.91	10,582.9	-3,764.6	-14.3	399,868.45	741,335.15	32° 5' 51.616 N	103° 41' 14.911 W
14,627.0	88.98	178.28	10,584.8	-3,859.5	-11.1	399,773.52	741,338.31	32° 5' 50.677 N	103° 41' 14.881 W
14,721.0	87.45	178.51	10,587.7	-3,953.5	-8.5	399,679.60	741,340.94	32° 5' 49.747 N	103° 41' 14.856 W
14,814.0	88.71	179.45	10,590.8	-4,046.4	-6.8	399,586.67	741,342.60	32° 5' 48.828 N	103° 41' 14.844 W
14,909.0	87.93	179.91	10,593.6	-4,141.4	-6.3	399,491.72	741,343.13	32° 5' 47.888 N	103° 41' 14.844 W
15,003.0	89.66	180.01	10,595.6	-4,235.3	-6.2	399,397.74	741,343.19	32° 5' 46.958 N	103° 41' 14.850 W
15,097.0	91.79	180.09	10,594.4	-4,329.3	-6.3	399,303.76	741,343.11	32° 5' 46.028 N	103° 41' 14.857 W
15,190.0	92.65	180.51	10,590.8	-4,422.2	-6.8	399,210.83	741,342.62	32° 5' 45.108 N	103° 41' 14.870 W
15,282.0	91.26	179.50	10,587.6	-4,514.2	-6.8	399,118.88	741,342.62	32° 5' 44.198 N	103° 41' 14.876 W
15,374.0	89.44	179.54	10,587.1	-4,606.2	-6.0	399,026.89	741,343.39	32° 5' 43.288 N	103° 41' 14.873 W
15,467.0	89.04	180.32	10,588.3	-4,699.2	-5.9	398,933.90	741,343.50	32° 5' 42.368 N	103° 41' 14.879 W
15,559.0	88.86	180.70	10,590.0	-4,791.1	-6.7	398,841.92	741,342.68	32° 5' 41.458 N	103° 41' 14.895 W
15,566.8	88.83	180.68	10,590.2	-4,798.9	-6.8	398,834.12	741,342.59	32° 5' 41.381 N	103° 41' 14.896 W
Interp @ 10538.9 (Van Doo Dah 28-33 Fed Com 231H W)									
15,652.0	88.49	180.50	10,592.1	-4,884.1	-7.7	398,748.95	741,341.71	32° 5' 40.538 N	103° 41' 14.912 W
15,744.0	88.18	180.16	10,594.8	-4,976.1	-8.2	398,656.99	741,341.18	32° 5' 39.628 N	103° 41' 14.925 W
15,819.0	87.60	179.49	10,597.6	-5,051.0	-8.0	398,582.04	741,341.41	32° 5' 38.886 N	103° 41' 14.927 W
Section Crossing (0.4990' FNL, 4958.7693' FEL of Section 33)									
15,839.0	87.44	179.31	10,598.4	-5,071.0	-7.8	398,562.06	741,341.62	32° 5' 38.688 N	103° 41' 14.926 W
15,933.0	86.45	179.29	10,603.5	-5,164.9	-6.7	398,468.21	741,342.76	32° 5' 37.760 N	103° 41' 14.920 W
16,029.0	89.07	179.45	10,607.2	-5,260.8	-5.6	398,372.29	741,343.82	32° 5' 36.810 N	103° 41' 14.914 W
16,123.0	91.05	180.17	10,607.1	-5,354.8	-5.3	398,278.30	741,344.13	32° 5' 35.880 N	103° 41' 14.917 W
16,218.0	91.91	179.27	10,604.7	-5,449.7	-4.8	398,183.33	741,344.59	32° 5' 34.940 N	103° 41' 14.918 W
16,313.0	93.03	180.06	10,600.6	-5,544.6	-4.3	398,088.43	741,345.15	32° 5' 34.001 N	103° 41' 14.918 W
16,407.0	92.59	180.62	10,596.0	-5,638.5	-4.8	397,994.54	741,344.59	32° 5' 33.072 N	103° 41' 14.931 W
16,501.0	89.23	179.70	10,594.5	-5,732.5	-5.1	397,900.57	741,344.33	32° 5' 32.142 N	103° 41' 14.941 W
16,596.0	88.58	179.33	10,596.3	-5,827.5	-4.3	397,805.59	741,345.13	32° 5' 31.202 N	103° 41' 14.938 W
16,691.0	88.33	179.06	10,598.8	-5,922.4	-3.0	397,710.63	741,346.47	32° 5' 30.263 N	103° 41' 14.929 W
16,786.0	89.45	180.21	10,600.7	-6,017.4	-2.4	397,615.66	741,347.07	32° 5' 29.323 N	103° 41' 14.929 W
16,881.0	90.34	180.21	10,600.9	-6,112.4	-2.7	397,520.66	741,346.73	32° 5' 28.383 N	103° 41' 14.940 W
16,975.0	91.54	179.67	10,599.3	-6,206.4	-2.6	397,426.67	741,346.82	32° 5' 27.453 N	103° 41' 14.945 W
17,069.0	91.39	179.16	10,596.9	-6,300.4	-1.6	397,332.71	741,347.78	32° 5' 26.523 N	103° 41' 14.940 W
17,164.0	90.28	178.58	10,595.5	-6,395.3	0.2	397,237.74	741,349.66	32° 5' 25.583 N	103° 41' 14.925 W
17,261.0	90.65	177.82	10,594.7	-6,492.3	3.3	397,140.79	741,352.70	32° 5' 24.623 N	103° 41' 14.897 W
17,356.0	92.40	177.53	10,592.2	-6,587.2	7.1	397,045.91	741,356.56	32° 5' 23.684 N	103° 41' 14.858 W
17,448.0	93.95	178.43	10,587.1	-6,679.0	10.4	396,954.11	741,359.79	32° 5' 22.776 N	103° 41' 14.827 W
17,543.0	90.96	179.38	10,583.0	-6,773.8	12.2	396,859.23	741,361.61	32° 5' 21.837 N	103° 41' 14.813 W
17,637.0	89.38	179.76	10,582.8	-6,867.8	12.9	396,765.23	741,362.31	32° 5' 20.906 N	103° 41' 14.811 W
17,732.0	88.08	179.36	10,584.9	-6,962.8	13.6	396,670.26	741,363.04	32° 5' 19.967 N	103° 41' 14.809 W
17,826.0	87.81	179.11	10,588.2	-7,056.7	14.9	396,576.33	741,364.30	32° 5' 19.037 N	103° 41' 14.801 W
17,921.0	89.38	179.56	10,590.6	-7,151.7	16.0	396,481.37	741,365.40	32° 5' 18.097 N	103° 41' 14.795 W

Halliburton

Survey Report - Geographic

Company: Devon Energy Corporation	Local Co-ordinate Reference: Well Van Doo Dah 28-33 Fed Com 231H
Project: Lea County, NM (NAD 83)	TVD Reference: RKB (Nabors X05) 33' + GL @ 3410.0usft
Site: Sec 28 T. 25 S., R.32E.	MD Reference: RKB (Nabors X05) 33' + GL @ 3410.0usft
Well: Van Doo Dah 28-33 Fed Com 231H	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
18,014.0	88.92	179.64	10,592.0	-7,244.7	16.6	396,388.38	741,366.05	32° 5' 17.177 N	103° 41' 14.794 W
18,108.0	90.22	179.82	10,592.7	-7,338.7	17.1	396,294.39	741,366.49	32° 5' 16.247 N	103° 41' 14.795 W
18,203.0	89.88	180.90	10,592.6	-7,433.7	16.5	396,199.39	741,365.89	32° 5' 15.307 N	103° 41' 14.809 W
18,298.0	89.07	181.07	10,593.4	-7,528.7	14.8	396,104.41	741,364.26	32° 5' 14.367 N	103° 41' 14.834 W
18,393.0	89.88	181.17	10,594.3	-7,623.6	13.0	396,009.43	741,362.40	32° 5' 13.427 N	103° 41' 14.863 W
18,487.0	88.83	179.74	10,595.4	-7,717.6	12.2	395,915.44	741,361.66	32° 5' 12.497 N	103° 41' 14.878 W
18,581.0	91.01	179.95	10,595.5	-7,811.6	12.5	395,821.45	741,361.91	32° 5' 11.567 N	103° 41' 14.881 W
18,676.0	91.51	180.17	10,593.4	-7,906.6	12.4	395,726.47	741,361.81	32° 5' 10.627 N	103° 41' 14.889 W
18,770.0	91.24	180.29	10,591.2	-8,000.6	12.0	395,632.50	741,361.43	32° 5' 9.697 N	103° 41' 14.900 W
18,865.0	90.62	181.16	10,589.6	-8,095.5	10.8	395,537.52	741,360.23	32° 5' 8.758 N	103° 41' 14.921 W
18,960.0	89.94	180.90	10,589.2	-8,190.5	9.1	395,442.54	741,358.52	32° 5' 7.818 N	103° 41' 14.947 W
19,054.0	90.65	180.13	10,588.7	-8,284.5	8.3	395,348.55	741,357.68	32° 5' 6.888 N	103° 41' 14.963 W
19,148.0	91.11	179.89	10,587.2	-8,378.5	8.2	395,254.56	741,357.66	32° 5' 5.958 N	103° 41' 14.970 W
19,243.0	91.08	179.44	10,585.4	-8,473.5	8.8	395,159.58	741,358.22	32° 5' 5.018 N	103° 41' 14.970 W
19,338.0	90.37	179.87	10,584.2	-8,568.5	9.4	395,064.59	741,358.79	32° 5' 4.078 N	103° 41' 14.970 W
19,433.0	90.22	180.09	10,583.7	-8,663.5	9.4	394,969.59	741,358.82	32° 5' 3.138 N	103° 41' 14.976 W
19,526.0	89.38	180.01	10,584.0	-8,756.5	9.3	394,876.59	741,358.74	32° 5' 2.217 N	103° 41' 14.984 W
19,622.0	90.25	179.61	10,584.4	-8,852.5	9.6	394,780.59	741,359.06	32° 5' 1.267 N	103° 41' 14.987 W
19,716.0	90.62	180.06	10,583.6	-8,946.5	9.9	394,686.60	741,359.33	32° 5' 0.337 N	103° 41' 14.990 W
19,810.0	90.25	179.58	10,582.9	-9,040.5	10.2	394,592.60	741,359.63	32° 4' 59.407 N	103° 41' 14.993 W
19,905.0	89.88	179.40	10,582.8	-9,135.5	11.0	394,497.60	741,360.47	32° 4' 58.467 N	103° 41' 14.990 W
19,999.0	89.32	179.79	10,583.5	-9,229.5	11.7	394,403.61	741,361.14	32° 4' 57.537 N	103° 41' 14.989 W
20,093.0	90.28	180.30	10,583.8	-9,323.5	11.6	394,309.61	741,361.06	32° 4' 56.606 N	103° 41' 14.996 W
20,187.0	90.49	180.46	10,583.2	-9,417.5	11.0	394,215.61	741,360.44	32° 4' 55.676 N	103° 41' 15.010 W
20,282.0	90.46	180.95	10,582.4	-9,512.4	9.8	394,120.63	741,359.27	32° 4' 54.736 N	103° 41' 15.030 W
20,377.0	89.38	178.59	10,582.5	-9,607.4	10.2	394,025.63	741,359.65	32° 4' 53.796 N	103° 41' 15.033 W
20,472.0	88.74	178.43	10,584.1	-9,702.4	12.7	393,930.68	741,362.12	32° 4' 52.857 N	103° 41' 15.010 W
20,567.0	89.26	178.41	10,585.7	-9,797.3	15.3	393,835.73	741,364.74	32° 4' 51.917 N	103° 41' 14.987 W
Last MWD Survey									
20,628.0	89.26	178.41	10,586.5	-9,858.3	17.0	393,774.76	741,366.43	32° 4' 51.313 N	103° 41' 14.971 W
Projection to Bit (471.5933' FSL, 365.8462' FWL of Section 33) - Plan @ 10549.0 (Van Doo Dah 28-33 Fed Com 231H Well)									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
141.0	141.0	0.1	-0.6	First MWD Survey
6,579.0	6,571.6	101.1	-73.6	Perf Line Crossing (100.0575' FNL, 337.9329' FWL of Section 28)
7,331.0	7,316.9	201.2	-75.0	Section Crossing (0.0213' FSL, 337.4323' FWL of Section 21)
9,989.0	9,958.6	467.4	-70.4	KOP (266.1507' FSL, 343.7126' FWL of Section 21)
10,546.0	10,416.7	201.8	-59.4	Section Crossing (0.3831' FSL, 353.0966' FWL of Section 21)
10,656.0	10,460.4	101.1	-54.7	Per Line Crossing (100.3962' FNL, 356.8329' FWL of Section 28)
15,819.0	10,597.6	-5,051.0	-8.0	Section Crossing (0.4990' FNL, 4958.7693' FEL of Section 33)
20,567.0	10,585.7	-9,797.3	15.3	Last MWD Survey
20,628.0	10,586.5	-9,858.3	17.0	Projection to Bit (471.5933' FSL, 365.8462' FWL of Section 33)

Checked By: _____	Approved By: _____	Date: _____
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