

HOBBS OCD
MAY 09 2019
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WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 19-T24S-R33E

Bell Lake 19 State 33H

Wellbore #1

Plan: Permit Plan 2

Standard Planning Report - Geographic

13 March, 2019

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19 State 33H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3565.30ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3565.30ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19 State 33H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 2		

Project	Lea County (NAD83 New Mexico East)		
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 19-T24S-R33E			
Site Position:		Northing:	435,739.64 usft	Latitude:	32.195913
From:	Map	Easting:	762,046.84 usft	Longitude:	-103.619827
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.38 °

Well	Bell Lake 19 State 33H					
Well Position	+N/-S	0.00 ft	Northing:	436,050.20 usft	Latitude:	32.196689
	+E/-W	0.00 ft	Easting:	766,231.53 usft	Longitude:	-103.606293
Position Uncertainty		0.50 ft	Wellhead Elevation:		Ground Level:	3,540.30 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2015	1/28/2019	(°)	(°)	(nT)
			6.79	60.01	47,751.26266853

Design	Permit Plan 2			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	7.92

Plan Survey Tool Program	Date	3/13/2019			
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks	
(ft)	(ft)				
1	0.00	17,550.53 Permit Plan 2 (Wellbore #1)	MWD+HDGM		
			OWSG MWD + HDGM		

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,003.81	5.04	107.51	3,003.16	-6.66	21.11	1.00	1.00	0.00	107.51	
11,324.36	5.04	107.51	11,291.56	-226.56	717.93	0.00	0.00	0.00	0.00	
11,660.23	0.00	0.00	11,627.00	-231.00	732.00	1.50	-1.50	0.00	180.00	
12,010.27	0.00	0.00	11,977.04	-231.00	732.00	0.00	0.00	0.00	0.00	
12,910.27	90.00	359.58	12,550.00	341.94	727.77	10.00	10.00	0.00	359.58 PBHL - Bell Lake 19-1	
17,550.53	90.00	359.58	12,550.00	4,982.07	693.52	0.00	0.00	0.00	0.00 PBHL - 1 mi. Bell Lake	

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 Project: Lea County (NAD83 New Mexico East)
 Site: Sec 19-T24S-R33E
 Well: Bell Lake 19 State 33H
 Wellbore: Wellbore #1
 Design: Permit Plan 2

Local Co-ordinate Reference: Well Bell Lake 19 State 33H
 TVD Reference: RKB @ 3565.30ft
 MD Reference: RKB @ 3565.30ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
100.00	0.00	0.00	100.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
200.00	0.00	0.00	200.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
300.00	0.00	0.00	300.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
400.00	0.00	0.00	400.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
500.00	0.00	0.00	500.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
600.00	0.00	0.00	600.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
700.00	0.00	0.00	700.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
800.00	0.00	0.00	800.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
900.00	0.00	0.00	900.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
1,000.00	0.00	0.00	1,000.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
1,100.00	0.00	0.00	1,100.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
1,200.00	0.00	0.00	1,200.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
1,300.00	0.00	0.00	1,300.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
1,400.00	0.00	0.00	1,400.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
1,500.00	0.00	0.00	1,500.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
1,600.00	0.00	0.00	1,600.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
1,700.00	0.00	0.00	1,700.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
1,800.00	0.00	0.00	1,800.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
1,900.00	0.00	0.00	1,900.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
2,000.00	0.00	0.00	2,000.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
2,100.00	0.00	0.00	2,100.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
2,200.00	0.00	0.00	2,200.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
2,300.00	0.00	0.00	2,300.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
2,400.00	0.00	0.00	2,400.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
2,500.00	0.00	0.00	2,500.00	0.00	0.00	436,050.20	766,231.53	32.196689	-103.606293
2,600.00	1.00	107.51	2,599.99	-0.26	0.83	436,049.94	766,232.36	32.196689	-103.606291
2,700.00	2.00	107.51	2,699.96	-1.05	3.33	436,049.15	766,234.86	32.196686	-103.606282
2,800.00	3.00	107.51	2,799.86	-2.36	7.49	436,047.84	766,239.02	32.196683	-103.606269
2,900.00	4.00	107.51	2,899.68	-4.20	13.31	436,046.00	766,244.84	32.196678	-103.606250
3,000.00	5.00	107.51	2,999.37	-6.56	20.79	436,043.64	766,252.32	32.196671	-103.606226
3,003.81	5.04	107.51	3,003.16	-6.66	21.11	436,043.54	766,252.64	32.196671	-103.606225
3,100.00	5.04	107.51	3,098.98	-9.20	29.17	436,041.00	766,260.69	32.196663	-103.606199
3,200.00	5.04	107.51	3,198.59	-11.85	37.54	436,038.35	766,269.07	32.196656	-103.606172
3,300.00	5.04	107.51	3,298.21	-14.49	45.91	436,035.71	766,277.44	32.196649	-103.606145
3,400.00	5.04	107.51	3,397.82	-17.13	54.29	436,033.07	766,285.82	32.196641	-103.606118
3,500.00	5.04	107.51	3,497.43	-19.78	62.66	436,030.42	766,294.19	32.196634	-103.606091
3,600.00	5.04	107.51	3,597.05	-22.42	71.04	436,027.78	766,302.57	32.196626	-103.606064
3,700.00	5.04	107.51	3,696.66	-25.06	79.41	436,025.14	766,310.94	32.196619	-103.606037
3,800.00	5.04	107.51	3,796.28	-27.70	87.79	436,022.50	766,319.31	32.196612	-103.606010
3,900.00	5.04	107.51	3,895.89	-30.35	96.16	436,019.85	766,327.69	32.196604	-103.605983
4,000.00	5.04	107.51	3,995.50	-32.99	104.54	436,017.21	766,336.06	32.196597	-103.605956
4,100.00	5.04	107.51	4,095.12	-35.63	112.91	436,014.57	766,344.44	32.196589	-103.605929
4,200.00	5.04	107.51	4,194.73	-38.27	121.29	436,011.92	766,352.81	32.196582	-103.605902
4,300.00	5.04	107.51	4,294.34	-40.92	129.66	436,009.28	766,361.19	32.196574	-103.605875
4,400.00	5.04	107.51	4,393.96	-43.56	138.04	436,006.64	766,369.56	32.196567	-103.605848
4,500.00	5.04	107.51	4,493.57	-46.20	146.41	436,004.00	766,377.94	32.196560	-103.605821
4,600.00	5.04	107.51	4,593.18	-48.85	154.79	436,001.35	766,386.31	32.196552	-103.605794
4,700.00	5.04	107.51	4,692.80	-51.49	163.16	435,998.71	766,394.69	32.196545	-103.605767
4,800.00	5.04	107.51	4,792.41	-54.13	171.53	435,996.07	766,403.06	32.196537	-103.605740
4,900.00	5.04	107.51	4,892.03	-56.77	179.91	435,993.43	766,411.44	32.196530	-103.605713
5,000.00	5.04	107.51	4,991.64	-59.42	188.28	435,990.78	766,419.81	32.196522	-103.605686
5,100.00	5.04	107.51	5,091.25	-62.06	196.66	435,988.14	766,428.19	32.196515	-103.605659
5,200.00	5.04	107.51	5,190.87	-64.70	205.03	435,985.50	766,436.56	32.196508	-103.605632
5,300.00	5.04	107.51	5,290.48	-67.35	213.41	435,982.85	766,444.93	32.196500	-103.605605

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Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,400.00	5.04	107.51	5,390.09	-69.99	221.78	435,980.21	766,453.31	32.196493	-103.605578
5,500.00	5.04	107.51	5,489.71	-72.63	230.16	435,977.57	766,461.68	32.196485	-103.605551
5,600.00	5.04	107.51	5,589.32	-75.27	238.53	435,974.93	766,470.06	32.196478	-103.605524
5,700.00	5.04	107.51	5,688.93	-77.92	246.91	435,972.28	766,478.43	32.196471	-103.605497
5,800.00	5.04	107.51	5,788.55	-80.56	255.28	435,969.64	766,486.81	32.196463	-103.605470
5,900.00	5.04	107.51	5,888.16	-83.20	263.66	435,967.00	766,495.18	32.196456	-103.605443
6,000.00	5.04	107.51	5,987.78	-85.85	272.03	435,964.35	766,503.56	32.196448	-103.605416
6,100.00	5.04	107.51	6,087.39	-88.49	280.41	435,961.71	766,511.93	32.196441	-103.605389
6,200.00	5.04	107.51	6,187.00	-91.13	288.78	435,959.07	766,520.31	32.196433	-103.605362
6,300.00	5.04	107.51	6,286.62	-93.77	297.15	435,956.43	766,528.68	32.196426	-103.605335
6,400.00	5.04	107.51	6,386.23	-96.42	305.53	435,953.78	766,537.06	32.196419	-103.605308
6,500.00	5.04	107.51	6,485.84	-99.06	313.90	435,951.14	766,545.43	32.196411	-103.605281
6,600.00	5.04	107.51	6,585.46	-101.70	322.28	435,948.50	766,553.80	32.196404	-103.605254
6,700.00	5.04	107.51	6,685.07	-104.35	330.65	435,945.85	766,562.18	32.196396	-103.605227
6,800.00	5.04	107.51	6,784.68	-106.99	339.03	435,943.21	766,570.55	32.196389	-103.605200
6,900.00	5.04	107.51	6,884.30	-109.63	347.40	435,940.57	766,578.93	32.196381	-103.605173
7,000.00	5.04	107.51	6,983.91	-112.27	355.78	435,937.93	766,587.30	32.196374	-103.605146
7,100.00	5.04	107.51	7,083.53	-114.92	364.15	435,935.28	766,595.68	32.196367	-103.605119
7,200.00	5.04	107.51	7,183.14	-117.56	372.53	435,932.64	766,604.05	32.196359	-103.605092
7,300.00	5.04	107.51	7,282.75	-120.20	380.90	435,930.00	766,612.43	32.196352	-103.605065
7,400.00	5.04	107.51	7,382.37	-122.85	389.28	435,927.35	766,620.80	32.196344	-103.605038
7,500.00	5.04	107.51	7,481.98	-125.49	397.65	435,924.71	766,629.18	32.196337	-103.605011
7,600.00	5.04	107.51	7,581.59	-128.13	406.02	435,922.07	766,637.55	32.196330	-103.604983
7,700.00	5.04	107.51	7,681.21	-130.77	414.40	435,919.43	766,645.93	32.196322	-103.604956
7,800.00	5.04	107.51	7,780.82	-133.42	422.77	435,916.78	766,654.30	32.196315	-103.604929
7,900.00	5.04	107.51	7,880.44	-136.06	431.15	435,914.14	766,662.68	32.196307	-103.604902
8,000.00	5.04	107.51	7,980.05	-138.70	439.52	435,911.50	766,671.05	32.196300	-103.604875
8,100.00	5.04	107.51	8,079.66	-141.34	447.90	435,908.86	766,679.42	32.196292	-103.604848
8,200.00	5.04	107.51	8,179.28	-143.99	456.27	435,906.21	766,687.80	32.196285	-103.604821
8,300.00	5.04	107.51	8,278.89	-146.63	464.65	435,903.57	766,696.17	32.196278	-103.604794
8,400.00	5.04	107.51	8,378.50	-149.27	473.02	435,900.93	766,704.55	32.196270	-103.604767
8,500.00	5.04	107.51	8,478.12	-151.92	481.40	435,898.28	766,712.92	32.196263	-103.604740
8,600.00	5.04	107.51	8,577.73	-154.56	489.77	435,895.64	766,721.30	32.196255	-103.604713
8,700.00	5.04	107.51	8,677.34	-157.20	498.15	435,893.00	766,729.67	32.196248	-103.604686
8,800.00	5.04	107.51	8,776.96	-159.84	506.52	435,890.36	766,738.05	32.196241	-103.604659
8,900.00	5.04	107.51	8,876.57	-162.49	514.90	435,887.71	766,746.42	32.196233	-103.604632
9,000.00	5.04	107.51	8,976.19	-165.13	523.27	435,885.07	766,754.80	32.196226	-103.604605
9,100.00	5.04	107.51	9,075.80	-167.77	531.64	435,882.43	766,763.17	32.196218	-103.604578
9,200.00	5.04	107.51	9,175.41	-170.42	540.02	435,879.78	766,771.55	32.196211	-103.604551
9,300.00	5.04	107.51	9,275.03	-173.06	548.39	435,877.14	766,779.92	32.196203	-103.604524
9,400.00	5.04	107.51	9,374.64	-175.70	556.77	435,874.50	766,788.29	32.196196	-103.604497
9,500.00	5.04	107.51	9,474.25	-178.34	565.14	435,871.86	766,796.67	32.196189	-103.604470
9,600.00	5.04	107.51	9,573.87	-180.99	573.52	435,869.21	766,805.04	32.196181	-103.604443
9,700.00	5.04	107.51	9,673.48	-183.63	581.89	435,866.57	766,813.42	32.196174	-103.604416
9,800.00	5.04	107.51	9,773.09	-186.27	590.27	435,863.93	766,821.79	32.196166	-103.604389
9,900.00	5.04	107.51	9,872.71	-188.92	598.64	435,861.28	766,830.17	32.196159	-103.604362
10,000.00	5.04	107.51	9,972.32	-191.56	607.02	435,858.64	766,838.54	32.196151	-103.604335
10,100.00	5.04	107.51	10,071.94	-194.20	615.39	435,856.00	766,846.92	32.196144	-103.604308
10,200.00	5.04	107.51	10,171.55	-196.84	623.77	435,853.36	766,855.29	32.196137	-103.604281
10,300.00	5.04	107.51	10,271.16	-199.49	632.14	435,850.71	766,863.67	32.196129	-103.604254
10,400.00	5.04	107.51	10,370.78	-202.13	640.52	435,848.07	766,872.04	32.196122	-103.604227
10,500.00	5.04	107.51	10,470.39	-204.77	648.89	435,845.43	766,880.42	32.196114	-103.604200
10,600.00	5.04	107.51	10,570.00	-207.42	657.26	435,842.78	766,888.79	32.196107	-103.604173
10,700.00	5.04	107.51	10,669.62	-210.06	665.64	435,840.14	766,897.17	32.196100	-103.604146
10,800.00	5.04	107.51	10,769.23	-212.70	674.01	435,837.50	766,905.54	32.196092	-103.604119

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19 State 33H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3565.30ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3565.30ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19 State 33H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,900.00	5.04	107.51	10,868.84	-215.34	682.39	435,834.86	766,913.91	32.196085	-103.604092
11,000.00	5.04	107.51	10,968.46	-217.99	690.76	435,832.21	766,922.29	32.196077	-103.604065
11,100.00	5.04	107.51	11,068.07	-220.63	699.14	435,829.57	766,930.66	32.196070	-103.604038
11,200.00	5.04	107.51	11,167.69	-223.27	707.51	435,826.93	766,939.04	32.196062	-103.604011
11,300.00	5.04	107.51	11,267.30	-225.92	715.89	435,824.28	766,947.41	32.196055	-103.603984
11,324.36	5.04	107.51	11,291.56	-226.56	717.93	435,823.64	766,949.45	32.196053	-103.603977
11,400.00	3.90	107.51	11,366.97	-228.33	723.55	435,821.87	766,955.08	32.196048	-103.603959
11,500.00	2.40	107.51	11,466.82	-229.99	728.80	435,820.21	766,960.32	32.196044	-103.603942
11,600.00	0.90	107.51	11,566.78	-230.86	731.55	435,819.34	766,963.07	32.196041	-103.603933
11,660.23	0.00	0.00	11,627.00	-231.00	732.00	435,819.20	766,963.53	32.196041	-103.603932
11,700.00	0.00	0.00	11,666.77	-231.00	732.00	435,819.20	766,963.53	32.196041	-103.603932
11,800.00	0.00	0.00	11,766.77	-231.00	732.00	435,819.20	766,963.53	32.196041	-103.603932
11,900.00	0.00	0.00	11,866.77	-231.00	732.00	435,819.20	766,963.53	32.196041	-103.603932
12,000.00	0.00	0.00	11,966.77	-231.00	732.00	435,819.20	766,963.53	32.196041	-103.603932
12,010.27	0.00	0.00	11,977.04	-231.00	732.00	435,819.20	766,963.53	32.196041	-103.603932
KOP @ 12010' MD, 60' FSL, 330' FEL									
12,100.00	8.97	359.58	12,066.41	-223.99	731.95	435,826.21	766,963.47	32.196060	-103.603932
12,200.00	18.97	359.58	12,163.32	-199.87	731.77	435,850.33	766,963.30	32.196126	-103.603932
12,251.41	24.11	359.58	12,211.13	-181.00	731.63	435,869.20	766,963.16	32.196178	-103.603932
FTP @ 12251' MD, 100' FSL, 330' FEL									
12,300.00	28.97	359.58	12,254.58	-159.29	731.47	435,890.91	766,963.00	32.196238	-103.603932
12,400.00	38.97	359.58	12,337.41	-103.49	731.06	435,946.71	766,962.58	32.196391	-103.603932
12,500.00	48.97	359.58	12,409.28	-34.14	730.55	436,016.06	766,962.07	32.196582	-103.603932
12,600.00	58.97	359.58	12,468.02	46.63	729.95	436,096.83	766,961.48	32.196804	-103.603933
12,700.00	68.97	359.58	12,511.85	136.37	729.29	436,186.57	766,960.81	32.197051	-103.603933
12,800.00	78.97	359.58	12,539.42	232.36	728.58	436,282.56	766,960.11	32.197314	-103.603933
12,900.00	88.97	359.58	12,549.91	331.67	727.85	436,381.87	766,959.37	32.197587	-103.603933
12,910.27	90.00	359.58	12,550.00	341.94	727.77	436,392.14	766,959.30	32.197616	-103.603933
13,000.00	90.00	359.58	12,550.00	431.67	727.11	436,481.87	766,958.63	32.197862	-103.603933
13,100.00	90.00	359.58	12,550.00	531.67	726.37	436,581.87	766,957.90	32.198137	-103.603933
13,200.00	90.00	359.58	12,550.00	631.67	725.63	436,681.86	766,957.16	32.198412	-103.603934
13,300.00	90.00	359.58	12,550.00	731.66	724.89	436,781.86	766,956.42	32.198687	-103.603934
13,400.00	90.00	359.58	12,550.00	831.66	724.16	436,881.86	766,955.68	32.198962	-103.603934
13,500.00	90.00	359.58	12,550.00	931.66	723.42	436,981.86	766,954.94	32.199237	-103.603934
13,600.00	90.00	359.58	12,550.00	1,031.66	722.68	437,081.85	766,954.20	32.199512	-103.603934
13,700.00	90.00	359.58	12,550.00	1,131.65	721.94	437,181.85	766,953.47	32.199786	-103.603935
13,800.00	90.00	359.58	12,550.00	1,231.65	721.20	437,281.85	766,952.73	32.200061	-103.603935
13,900.00	90.00	359.58	12,550.00	1,331.65	720.46	437,381.84	766,951.99	32.200336	-103.603935
14,000.00	90.00	359.58	12,550.00	1,431.64	719.73	437,481.84	766,951.25	32.200611	-103.603935
14,100.00	90.00	359.58	12,550.00	1,531.64	718.99	437,581.84	766,950.51	32.200886	-103.603935
14,200.00	90.00	359.58	12,550.00	1,631.64	718.25	437,681.84	766,949.78	32.201161	-103.603936
14,300.00	90.00	359.58	12,550.00	1,731.64	717.51	437,781.83	766,949.04	32.201436	-103.603936
14,400.00	90.00	359.58	12,550.00	1,831.63	716.77	437,881.83	766,948.30	32.201711	-103.603936
14,500.00	90.00	359.58	12,550.00	1,931.63	716.04	437,981.83	766,947.56	32.201985	-103.603936
14,600.00	90.00	359.58	12,550.00	2,031.63	715.30	438,081.82	766,946.82	32.202260	-103.603936
14,700.00	90.00	359.58	12,550.00	2,131.63	714.56	438,181.82	766,946.08	32.202535	-103.603937
14,800.00	90.00	359.58	12,550.00	2,231.62	713.82	438,281.82	766,945.35	32.202810	-103.603937
14,900.00	90.00	359.58	12,550.00	2,331.62	713.08	438,381.81	766,944.61	32.203085	-103.603937
15,000.00	90.00	359.58	12,550.00	2,431.62	712.34	438,481.81	766,943.87	32.203360	-103.603937
15,100.00	90.00	359.58	12,550.00	2,531.61	711.61	438,581.81	766,943.13	32.203635	-103.603937
15,200.00	90.00	359.58	12,550.00	2,631.61	710.87	438,681.81	766,942.39	32.203910	-103.603938
15,300.00	90.00	359.58	12,550.00	2,731.61	710.13	438,781.80	766,941.66	32.204184	-103.603938
15,400.00	90.00	359.58	12,550.00	2,831.61	709.39	438,881.80	766,940.92	32.204459	-103.603938
15,500.00	90.00	359.58	12,550.00	2,931.60	708.65	438,981.80	766,940.18	32.204734	-103.603938

Planning Report - Geographic

Database: EDM r5000.141_Prod US
 Company: WCDSC Permian NM
 Project: Lea County (NAD83 New Mexico East)
 Site: Sec 19-T24S-R33E
 Well: Bell Lake 19 State 33H
 Wellbore: Wellbore #1
 Design: Permit Plan 2

Local Co-ordinate Reference: Well Bell Lake 19 State 33H
 TVD Reference: RKB @ 3565.30ft
 MD Reference: RKB @ 3565.30ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,600.00	90.00	359.58	12,550.00	3,031.60	707.92	439,081.79	766,939.44	32.205009	-103.603938
15,700.00	90.00	359.58	12,550.00	3,131.60	707.18	439,181.79	766,938.70	32.205284	-103.603939
15,800.00	90.00	359.58	12,550.00	3,231.60	706.44	439,281.79	766,937.96	32.205559	-103.603939
15,900.00	90.00	359.58	12,550.00	3,331.59	705.70	439,381.79	766,937.23	32.205834	-103.603939
16,000.00	90.00	359.58	12,550.00	3,431.59	704.96	439,481.78	766,936.49	32.206109	-103.603939
16,100.00	90.00	359.58	12,550.00	3,531.59	704.22	439,581.78	766,935.75	32.206383	-103.603939
16,200.00	90.00	359.58	12,550.00	3,631.58	703.49	439,681.78	766,935.01	32.206658	-103.603939
16,300.00	90.00	359.58	12,550.00	3,731.58	702.75	439,781.77	766,934.27	32.206933	-103.603940
16,400.00	90.00	359.58	12,550.00	3,831.58	702.01	439,881.77	766,933.54	32.207208	-103.603940
16,500.00	90.00	359.58	12,550.00	3,931.58	701.27	439,981.77	766,932.80	32.207483	-103.603940
16,600.00	90.00	359.58	12,550.00	4,031.57	700.53	440,081.77	766,932.06	32.207758	-103.603940
16,700.00	90.00	359.58	12,550.00	4,131.57	699.80	440,181.76	766,931.32	32.208033	-103.603940
16,800.00	90.00	359.58	12,550.00	4,231.57	699.06	440,281.76	766,930.58	32.208308	-103.603941
16,900.00	90.00	359.58	12,550.00	4,331.57	698.32	440,381.76	766,929.84	32.208582	-103.603941
17,000.00	90.00	359.58	12,550.00	4,431.56	697.58	440,481.75	766,929.11	32.208857	-103.603941
17,100.00	90.00	359.58	12,550.00	4,531.56	696.84	440,581.75	766,928.37	32.209132	-103.603941
17,200.00	90.00	359.58	12,550.00	4,631.56	696.10	440,681.75	766,927.63	32.209407	-103.603941
17,300.00	90.00	359.58	12,550.00	4,731.55	695.37	440,781.74	766,926.89	32.209682	-103.603942
17,400.00	90.00	359.58	12,550.00	4,831.55	694.63	440,881.74	766,926.15	32.209957	-103.603942
17,470.53	90.00	359.58	12,550.00	4,902.08	694.11	440,952.27	766,925.63	32.210151	-103.603942
LTP @ 17471' MD, 100' FNL, 330' FEL									
17,500.00	90.00	359.58	12,550.00	4,931.55	693.89	440,981.74	766,925.42	32.210232	-103.603942
17,550.53	90.00	359.58	12,550.00	4,982.07	693.52	441,032.26	766,925.04	32.210371	-103.603942
PBHL; 20' FNL, 330' FEL									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL - 1 mi. Bell Lake 1									
- plan misses target center by 5030.11ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)	0.00	0.00	0.00	4,982.08	693.43	441,032.27	766,924.96	32.210371	-103.603942
- Point									
PBHL - Bell Lake 19-18									
- plan misses target center by 10282.73ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)	0.00	0.01	0.00	10,261.88	654.54	446,312.06	766,886.07	32.224884	-103.603952
- Point									

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
12,010.27	11,977.04	-231.00	732.00	KOP @ 12010' MD, 50' FSL, 330' FEL
12,251.41	12,211.13	-181.00	731.63	FTP @ 12251' MD, 100' FSL, 330' FEL
17,470.53	12,550.00	4,902.08	694.11	LTP @ 17471' MD, 100' FNL, 330' FEL
17,550.53	12,550.00	4,982.07	693.52	PBHL; 20' FNL, 330' FEL

HOBBS OCD

MAY 09 2019

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Devon Energy

WELL DETAILS: Bell Lake 19 State 33H

RKB @ 3565.30R

3540.30

Northing 436050.20 Easting 766231.53 Latitude 32.196689 Longitude -103.606293

SECTION DETAILS Permit Plan 2

MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	
3003.81	5.04	107.51	3003.16	-6.66	21.11	1.00	-3.69	
11324.36	5.04	107.51	11291.56	-226.56	717.83	0.00	-125.41	
5 11680.23	0.00	0.00	11627.00	-231.00	732.00	1.50	-127.87	
6 12010.27	0.00	0.00	11977.04	-231.00	732.00	0.00	-127.87	KOP @ 12010' MD, 50' FSL, 330° FEL
7 12910.27	90.00	359.58	12550.00	341.84	727.77	10.00	439.02	
8 17550.53	90.00	359.58	12550.00	4982.07	693.52	0.00	5030.11	PBHL: 20' FNL, 330° FEL

devon

