

WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 19-T24S-R33E

Bell Lake 19-18 State Com 7H

Wellbore #1

Plan: Permit Plan 1

Standard Planning Report - Geographic

17 December, 2018

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 7H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3565.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3565.20ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

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 19-18 State Com 7H					
Well Position	+N/-S	0.00 ft	Northing:	436,249.73 usft	Latitude:	32.197239
	+E/-W	0.00 ft	Easting:	766,169.93 usft	Longitude:	-103.606488
Position Uncertainty		0.50 ft	Wellhead Elevation:		Ground Level:	3,540.20 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2015	12/11/2018	6.81	60.01	47,765.08133557

Design	Permit Plan 1				
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	358.65	

Plan Survey Tool Program	Date 12/12/2018				
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks	
(ft)	(ft)				
1 0.00	19,655.50	Permit Plan 1 (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	
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,893.83	4.92	209.96	4,893.34	-14.65	-8.45	1.25	1.25	0.00	209.96	
8,312.31	4.92	209.96	8,299.21	-268.79	-154.96	0.00	0.00	0.00	0.00	
8,640.50	0.00	0.00	8,627.00	-281.00	-162.00	1.50	-1.50	0.00	180.00	
8,990.54	0.00	0.00	8,977.04	-281.00	-162.00	0.00	0.00	0.00	0.00	
9,890.54	90.00	359.58	9,550.00	291.94	-166.20	10.00	10.00	0.00	359.58	PBHL - Bell Lake 19-1
19,655.50	90.00	359.58	9,550.00	10,056.64	-237.85	0.00	0.00	0.00	0.00	PBHL - Bell Lake 19-1

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Well:	Bell Lake 19-18 State Com 7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

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	436,249.73	766,169.93	32.197239	-103.606488
100.00	0.00	0.00	100.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
200.00	0.00	0.00	200.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
300.00	0.00	0.00	300.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
400.00	0.00	0.00	400.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
500.00	0.00	0.00	500.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
600.00	0.00	0.00	600.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
700.00	0.00	0.00	700.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
800.00	0.00	0.00	800.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
900.00	0.00	0.00	900.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
1,000.00	0.00	0.00	1,000.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
1,100.00	0.00	0.00	1,100.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
1,200.00	0.00	0.00	1,200.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
1,300.00	0.00	0.00	1,300.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
1,400.00	0.00	0.00	1,400.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
1,500.00	0.00	0.00	1,500.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
1,600.00	0.00	0.00	1,600.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
1,700.00	0.00	0.00	1,700.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
1,800.00	0.00	0.00	1,800.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
1,900.00	0.00	0.00	1,900.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
2,000.00	0.00	0.00	2,000.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
2,100.00	0.00	0.00	2,100.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
2,200.00	0.00	0.00	2,200.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
2,300.00	0.00	0.00	2,300.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
2,400.00	0.00	0.00	2,400.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
2,500.00	0.00	0.00	2,500.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
2,600.00	0.00	0.00	2,600.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
2,700.00	0.00	0.00	2,700.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
2,800.00	0.00	0.00	2,800.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
2,900.00	0.00	0.00	2,900.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
3,000.00	0.00	0.00	3,000.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
3,100.00	0.00	0.00	3,100.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
3,200.00	0.00	0.00	3,200.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
3,300.00	0.00	0.00	3,300.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
3,400.00	0.00	0.00	3,400.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
3,500.00	0.00	0.00	3,500.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
3,600.00	0.00	0.00	3,600.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
3,700.00	0.00	0.00	3,700.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
3,800.00	0.00	0.00	3,800.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
3,900.00	0.00	0.00	3,900.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
4,000.00	0.00	0.00	4,000.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
4,100.00	0.00	0.00	4,100.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
4,200.00	0.00	0.00	4,200.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
4,300.00	0.00	0.00	4,300.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
4,400.00	0.00	0.00	4,400.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
4,500.00	0.00	0.00	4,500.00	0.00	0.00	436,249.73	766,169.93	32.197239	-103.606488
4,600.00	1.25	209.96	4,599.99	-0.94	-0.54	436,248.78	766,169.38	32.197236	-103.606490
4,700.00	2.50	209.96	4,699.94	-3.78	-2.18	436,245.95	766,167.75	32.197229	-103.606495
4,800.00	3.75	209.96	4,799.79	-8.50	-4.90	436,241.23	766,165.03	32.197216	-103.606504
4,893.83	4.92	209.96	4,893.34	-14.65	-8.45	436,235.08	766,161.48	32.197199	-103.606516
4,900.00	4.92	209.96	4,899.49	-15.11	-8.71	436,234.62	766,161.22	32.197198	-103.606516
5,000.00	4.92	209.96	4,999.12	-22.54	-13.00	436,227.19	766,156.93	32.197177	-103.606530
5,100.00	4.92	209.96	5,098.76	-29.98	-17.28	436,219.75	766,152.65	32.197157	-103.606544
5,200.00	4.92	209.96	5,198.39	-37.41	-21.57	436,212.32	766,148.36	32.197136	-103.606559
5,300.00	4.92	209.96	5,298.02	-44.84	-25.85	436,204.88	766,144.07	32.197116	-103.606573

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Well:	Bell Lake 19-18 State Com 7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

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	4.92	209.96	5,397.65	-52.28	-30.14	436,197.45	766,139.79	32.197096	-103.606587
5,500.00	4.92	209.96	5,497.28	-59.71	-34.43	436,190.02	766,135.50	32.197075	-103.606601
5,600.00	4.92	209.96	5,596.91	-67.15	-38.71	436,182.58	766,131.22	32.197055	-103.606615
5,700.00	4.92	209.96	5,696.54	-74.58	-43.00	436,175.15	766,126.93	32.197035	-103.606629
5,800.00	4.92	209.96	5,796.17	-82.02	-47.28	436,167.71	766,122.64	32.197014	-103.606643
5,900.00	4.92	209.96	5,895.80	-89.45	-51.57	436,160.28	766,118.36	32.196994	-103.606657
6,000.00	4.92	209.96	5,995.44	-96.89	-55.86	436,152.84	766,114.07	32.196974	-103.606671
6,100.00	4.92	209.96	6,095.07	-104.32	-60.14	436,145.41	766,109.79	32.196953	-103.606685
6,200.00	4.92	209.96	6,194.70	-111.75	-64.43	436,137.98	766,105.50	32.196933	-103.606699
6,300.00	4.92	209.96	6,294.33	-119.19	-68.71	436,130.54	766,101.21	32.196913	-103.606713
6,400.00	4.92	209.96	6,393.96	-126.62	-73.00	436,123.11	766,096.93	32.196892	-103.606727
6,500.00	4.92	209.96	6,493.59	-134.06	-77.29	436,115.67	766,092.64	32.196872	-103.606741
6,600.00	4.92	209.96	6,593.22	-141.49	-81.57	436,108.24	766,088.36	32.196851	-103.606755
6,700.00	4.92	209.96	6,692.85	-148.93	-85.86	436,100.80	766,084.07	32.196831	-103.606769
6,800.00	4.92	209.96	6,792.48	-156.36	-90.14	436,093.37	766,079.78	32.196811	-103.606783
6,900.00	4.92	209.96	6,892.12	-163.80	-94.43	436,085.93	766,075.50	32.196790	-103.606797
7,000.00	4.92	209.96	6,991.75	-171.23	-98.72	436,078.50	766,071.21	32.196770	-103.606811
7,100.00	4.92	209.96	7,091.38	-178.66	-103.00	436,071.07	766,066.92	32.196750	-103.606825
7,200.00	4.92	209.96	7,191.01	-186.10	-107.29	436,063.63	766,062.64	32.196729	-103.606839
7,300.00	4.92	209.96	7,290.64	-193.53	-111.57	436,056.20	766,058.35	32.196709	-103.606853
7,400.00	4.92	209.96	7,390.27	-200.97	-115.86	436,048.76	766,054.07	32.196689	-103.606867
7,500.00	4.92	209.96	7,489.90	-208.40	-120.15	436,041.33	766,049.78	32.196668	-103.606881
7,600.00	4.92	209.96	7,589.53	-215.84	-124.43	436,033.89	766,045.49	32.196648	-103.606895
7,700.00	4.92	209.96	7,689.16	-223.27	-128.72	436,026.46	766,041.21	32.196628	-103.606909
7,800.00	4.92	209.96	7,788.80	-230.71	-133.00	436,019.02	766,036.92	32.196607	-103.606923
7,900.00	4.92	209.96	7,888.43	-238.14	-137.29	436,011.59	766,032.64	32.196587	-103.606937
8,000.00	4.92	209.96	7,988.06	-245.57	-141.58	436,004.16	766,028.35	32.196567	-103.606951
8,100.00	4.92	209.96	8,087.69	-253.01	-145.86	435,996.72	766,024.06	32.196546	-103.606965
8,200.00	4.92	209.96	8,187.32	-260.44	-150.15	435,989.29	766,019.78	32.196526	-103.606979
8,300.00	4.92	209.96	8,286.95	-267.88	-154.43	435,981.85	766,015.49	32.196505	-103.606993
8,312.31	4.92	209.96	8,299.21	-268.79	-154.96	435,980.94	766,014.96	32.196503	-103.606995
8,400.00	3.61	209.96	8,386.66	-274.44	-158.22	435,975.29	766,011.71	32.196487	-103.607005
8,500.00	2.11	209.96	8,486.53	-278.76	-160.71	435,970.97	766,009.22	32.196476	-103.607014
8,600.00	0.61	209.96	8,586.50	-280.81	-161.89	435,968.92	766,008.03	32.196470	-103.607017
8,640.50	0.00	0.00	8,627.00	-281.00	-162.00	435,968.73	766,007.93	32.196470	-103.607018
8,700.00	0.00	0.00	8,686.50	-281.00	-162.00	435,968.73	766,007.93	32.196470	-103.607018
8,800.00	0.00	0.00	8,786.50	-281.00	-162.00	435,968.73	766,007.93	32.196470	-103.607018
8,900.00	0.00	0.00	8,886.50	-281.00	-162.00	435,968.73	766,007.93	32.196470	-103.607018
8,990.54	0.00	0.00	8,977.04	-281.00	-162.00	435,968.73	766,007.93	32.196470	-103.607018
KOP & FTP @ 8991' MD, 200' FSL, 1284' FEL									
9,000.00	0.95	359.58	8,986.50	-280.92	-162.00	435,968.81	766,007.93	32.196470	-103.607018
9,100.00	10.95	359.58	9,085.84	-270.58	-162.08	435,979.15	766,007.85	32.196498	-103.607018
9,200.00	20.95	359.58	9,181.87	-243.14	-162.28	436,006.59	766,007.65	32.196574	-103.607018
9,300.00	30.95	359.58	9,271.67	-199.44	-162.60	436,050.29	766,007.33	32.196694	-103.607018
9,400.00	40.95	359.58	9,352.53	-140.82	-163.03	436,108.91	766,006.90	32.196855	-103.607018
9,500.00	50.95	359.58	9,421.97	-69.04	-163.56	436,180.69	766,006.37	32.197052	-103.607018
9,600.00	60.95	359.58	9,477.90	13.70	-164.16	436,263.43	766,005.77	32.197280	-103.607018
9,700.00	70.95	359.58	9,518.61	104.90	-164.83	436,354.63	766,005.10	32.197530	-103.607019
9,800.00	80.95	359.58	9,542.86	201.78	-165.54	436,451.51	766,004.39	32.197797	-103.607019
9,890.54	90.00	359.58	9,550.00	291.94	-166.20	436,541.67	766,003.72	32.198044	-103.607019
9,900.00	90.00	359.58	9,550.00	301.40	-166.27	436,551.13	766,003.65	32.198070	-103.607019
10,000.00	90.00	359.58	9,550.00	401.40	-167.01	436,651.13	766,002.92	32.198345	-103.607019
10,100.00	90.00	359.58	9,550.00	501.40	-167.74	436,751.13	766,002.19	32.198620	-103.607019
10,200.00	90.00	359.58	9,550.00	601.40	-168.47	436,851.12	766,001.45	32.198895	-103.607019

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Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,300.00	90.00	359.58	9,550.00	701.39	-169.21	436,951.12	766,000.72	32.199170	-103.607020
10,400.00	90.00	359.58	9,550.00	801.39	-169.94	437,051.12	765,999.99	32.199445	-103.607020
10,500.00	90.00	359.58	9,550.00	901.39	-170.68	437,151.11	765,999.25	32.199720	-103.607020
10,600.00	90.00	359.58	9,550.00	1,001.38	-171.41	437,251.11	765,998.52	32.199995	-103.607020
10,700.00	90.00	359.58	9,550.00	1,101.38	-172.14	437,351.11	765,997.78	32.200269	-103.607020
10,800.00	90.00	359.58	9,550.00	1,201.38	-172.88	437,451.11	765,997.05	32.200544	-103.607021
10,900.00	90.00	359.58	9,550.00	1,301.38	-173.61	437,551.10	765,996.32	32.200819	-103.607021
11,000.00	90.00	359.58	9,550.00	1,401.37	-174.34	437,651.10	765,995.58	32.201094	-103.607021
11,100.00	90.00	359.58	9,550.00	1,501.37	-175.08	437,751.10	765,994.85	32.201369	-103.607021
11,200.00	90.00	359.58	9,550.00	1,601.37	-175.81	437,851.09	765,994.12	32.201644	-103.607021
11,300.00	90.00	359.58	9,550.00	1,701.37	-176.55	437,951.09	765,993.38	32.201919	-103.607022
11,400.00	90.00	359.58	9,550.00	1,801.36	-177.28	438,051.09	765,992.65	32.202194	-103.607022
11,500.00	90.00	359.58	9,550.00	1,901.36	-178.01	438,151.09	765,991.91	32.202468	-103.607022
11,600.00	90.00	359.58	9,550.00	2,001.36	-178.75	438,251.08	765,991.18	32.202743	-103.607022
11,700.00	90.00	359.58	9,550.00	2,101.35	-179.48	438,351.08	765,990.45	32.203018	-103.607022
11,800.00	90.00	359.58	9,550.00	2,201.35	-180.21	438,451.08	765,989.71	32.203293	-103.607022
11,900.00	90.00	359.58	9,550.00	2,301.35	-180.95	438,551.07	765,988.98	32.203568	-103.607023
12,000.00	90.00	359.58	9,550.00	2,401.35	-181.68	438,651.07	765,988.25	32.203843	-103.607023
12,100.00	90.00	359.58	9,550.00	2,501.34	-182.41	438,751.07	765,987.51	32.204118	-103.607023
12,200.00	90.00	359.58	9,550.00	2,601.34	-183.15	438,851.07	765,986.78	32.204393	-103.607023
12,300.00	90.00	359.58	9,550.00	2,701.34	-183.88	438,951.06	765,986.05	32.204667	-103.607023
12,400.00	90.00	359.58	9,550.00	2,801.34	-184.62	439,051.06	765,985.31	32.204942	-103.607024
12,500.00	90.00	359.58	9,550.00	2,901.33	-185.35	439,151.06	765,984.58	32.205217	-103.607024
12,600.00	90.00	359.58	9,550.00	3,001.33	-186.08	439,251.05	765,983.84	32.205492	-103.607024
12,700.00	90.00	359.58	9,550.00	3,101.33	-186.82	439,351.05	765,983.11	32.205767	-103.607024
12,800.00	90.00	359.58	9,550.00	3,201.33	-187.55	439,451.05	765,982.38	32.206042	-103.607024
12,900.00	90.00	359.58	9,550.00	3,301.32	-188.28	439,551.05	765,981.64	32.206317	-103.607025
13,000.00	90.00	359.58	9,550.00	3,401.32	-189.02	439,651.04	765,980.91	32.206592	-103.607025
13,100.00	90.00	359.58	9,550.00	3,501.32	-189.75	439,751.04	765,980.18	32.206866	-103.607025
13,200.00	90.00	359.58	9,550.00	3,601.31	-190.49	439,851.04	765,979.44	32.207141	-103.607025
13,300.00	90.00	359.58	9,550.00	3,701.31	-191.22	439,951.03	765,978.71	32.207416	-103.607025
13,400.00	90.00	359.58	9,550.00	3,801.31	-191.95	440,051.03	765,977.97	32.207691	-103.607025
13,500.00	90.00	359.58	9,550.00	3,901.31	-192.69	440,151.03	765,977.24	32.207966	-103.607026
13,600.00	90.00	359.58	9,550.00	4,001.30	-193.42	440,251.03	765,976.51	32.208241	-103.607026
13,700.00	90.00	359.58	9,550.00	4,101.30	-194.15	440,351.02	765,975.77	32.208516	-103.607026
13,800.00	90.00	359.58	9,550.00	4,201.30	-194.89	440,451.02	765,975.04	32.208791	-103.607026
13,900.00	90.00	359.58	9,550.00	4,301.30	-195.62	440,551.02	765,974.31	32.209065	-103.607026
14,000.00	90.00	359.58	9,550.00	4,401.29	-196.36	440,651.01	765,973.57	32.209340	-103.607027
14,100.00	90.00	359.58	9,550.00	4,501.29	-197.09	440,751.01	765,972.84	32.209615	-103.607027
14,200.00	90.00	359.58	9,550.00	4,601.29	-197.82	440,851.01	765,972.10	32.209890	-103.607027
14,300.00	90.00	359.58	9,550.00	4,701.28	-198.56	440,951.01	765,971.37	32.210165	-103.607027
14,398.00	90.00	359.58	9,550.00	4,799.28	-199.28	441,049.00	765,970.65	32.210434	-103.607027
Cross Section @ 14398' MD, 0' FSL, 1284' FEL									
14,400.00	90.00	359.58	9,550.00	4,801.28	-199.29	441,051.00	765,970.64	32.210440	-103.607027
14,500.00	90.00	359.58	9,550.00	4,901.28	-200.02	441,151.00	765,969.90	32.210715	-103.607028
14,600.00	90.00	359.58	9,550.00	5,001.28	-200.76	441,251.00	765,969.17	32.210990	-103.607028
14,700.00	90.00	359.58	9,550.00	5,101.27	-201.49	441,350.99	765,968.44	32.211264	-103.607028
14,800.00	90.00	359.58	9,550.00	5,201.27	-202.23	441,450.99	765,967.70	32.211539	-103.607028
14,900.00	90.00	359.58	9,550.00	5,301.27	-202.96	441,550.99	765,966.97	32.211814	-103.607028
15,000.00	90.00	359.58	9,550.00	5,401.27	-203.69	441,650.98	765,966.23	32.212089	-103.607028
15,100.00	90.00	359.58	9,550.00	5,501.26	-204.43	441,750.98	765,965.50	32.212364	-103.607029
15,200.00	90.00	359.58	9,550.00	5,601.26	-205.16	441,850.98	765,964.77	32.212639	-103.607029
15,300.00	90.00	359.58	9,550.00	5,701.26	-205.89	441,950.98	765,964.03	32.212914	-103.607029
15,400.00	90.00	359.58	9,550.00	5,801.26	-206.63	442,050.97	765,963.30	32.213189	-103.607029

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 7H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3565.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3565.20ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,500.00	90.00	359.58	9,550.00	5,901.25	-207.36	442,150.97	765,962.57	32.213463	-103.607029
15,600.00	90.00	359.58	9,550.00	6,001.25	-208.09	442,250.97	765,961.83	32.213738	-103.607030
15,700.00	90.00	359.58	9,550.00	6,101.25	-208.83	442,350.96	765,961.10	32.214013	-103.607030
15,800.00	90.00	359.58	9,550.00	6,201.24	-209.56	442,450.96	765,960.37	32.214288	-103.607030
15,900.00	90.00	359.58	9,550.00	6,301.24	-210.30	442,550.96	765,959.63	32.214563	-103.607030
16,000.00	90.00	359.58	9,550.00	6,401.24	-211.03	442,650.96	765,958.90	32.214838	-103.607030
16,100.00	90.00	359.58	9,550.00	6,501.24	-211.76	442,750.95	765,958.16	32.215113	-103.607031
16,200.00	90.00	359.58	9,550.00	6,601.23	-212.50	442,850.95	765,957.43	32.215388	-103.607031
16,300.00	90.00	359.58	9,550.00	6,701.23	-213.23	442,950.95	765,956.70	32.215662	-103.607031
16,400.00	90.00	359.58	9,550.00	6,801.23	-213.96	443,050.94	765,955.96	32.215937	-103.607031
16,500.00	90.00	359.58	9,550.00	6,901.23	-214.70	443,150.94	765,955.23	32.216212	-103.607031
16,600.00	90.00	359.58	9,550.00	7,001.22	-215.43	443,250.94	765,954.50	32.216487	-103.607031
16,700.00	90.00	359.58	9,550.00	7,101.22	-216.17	443,350.94	765,953.76	32.216762	-103.607032
16,800.00	90.00	359.58	9,550.00	7,201.22	-216.90	443,450.93	765,953.03	32.217037	-103.607032
16,900.00	90.00	359.58	9,550.00	7,301.21	-217.63	443,550.93	765,952.29	32.217312	-103.607032
17,000.00	90.00	359.58	9,550.00	7,401.21	-218.37	443,650.93	765,951.56	32.217587	-103.607032
17,100.00	90.00	359.58	9,550.00	7,501.21	-219.10	443,750.92	765,950.83	32.217861	-103.607032
17,200.00	90.00	359.58	9,550.00	7,601.21	-219.83	443,850.92	765,950.09	32.218136	-103.607033
17,300.00	90.00	359.58	9,550.00	7,701.20	-220.57	443,950.92	765,949.36	32.218411	-103.607033
17,400.00	90.00	359.58	9,550.00	7,801.20	-221.30	444,050.92	765,948.63	32.218686	-103.607033
17,500.00	90.00	359.58	9,550.00	7,901.20	-222.04	444,150.91	765,947.89	32.218961	-103.607033
17,600.00	90.00	359.58	9,550.00	8,001.20	-222.77	444,250.91	765,947.16	32.219236	-103.607033
17,700.00	90.00	359.58	9,550.00	8,101.19	-223.50	444,350.91	765,946.42	32.219511	-103.607034
17,800.00	90.00	359.58	9,550.00	8,201.19	-224.24	444,450.90	765,945.69	32.219786	-103.607034
17,900.00	90.00	359.58	9,550.00	8,301.19	-224.97	444,550.90	765,944.96	32.220060	-103.607034
18,000.00	90.00	359.58	9,550.00	8,401.19	-225.70	444,650.90	765,944.22	32.220335	-103.607034
18,100.00	90.00	359.58	9,550.00	8,501.18	-226.44	444,750.90	765,943.49	32.220610	-103.607034
18,200.00	90.00	359.58	9,550.00	8,601.18	-227.17	444,850.89	765,942.76	32.220885	-103.607034
18,300.00	90.00	359.58	9,550.00	8,701.18	-227.91	444,950.89	765,942.02	32.221160	-103.607035
18,400.00	90.00	359.58	9,550.00	8,801.17	-228.64	445,050.89	765,941.29	32.221435	-103.607035
18,500.00	90.00	359.58	9,550.00	8,901.17	-229.37	445,150.88	765,940.56	32.221710	-103.607035
18,600.00	90.00	359.58	9,550.00	9,001.17	-230.11	445,250.88	765,939.82	32.221985	-103.607035
18,700.00	90.00	359.58	9,550.00	9,101.17	-230.84	445,350.88	765,939.09	32.222259	-103.607035
18,800.00	90.00	359.58	9,550.00	9,201.16	-231.57	445,450.88	765,938.35	32.222534	-103.607036
18,900.00	90.00	359.58	9,550.00	9,301.16	-232.31	445,550.87	765,937.62	32.222809	-103.607036
19,000.00	90.00	359.58	9,550.00	9,401.16	-233.04	445,650.87	765,936.89	32.223084	-103.607036
19,100.00	90.00	359.58	9,550.00	9,501.16	-233.77	445,750.87	765,936.15	32.223359	-103.607036
19,200.00	90.00	359.58	9,550.00	9,601.15	-234.51	445,850.86	765,935.42	32.223634	-103.607036
19,300.00	90.00	359.58	9,550.00	9,701.15	-235.24	445,950.86	765,934.69	32.223909	-103.607037
19,400.00	90.00	359.58	9,550.00	9,801.15	-235.98	446,050.86	765,933.95	32.224184	-103.607037
19,500.00	90.00	359.58	9,550.00	9,901.14	-236.71	446,150.85	765,933.22	32.224458	-103.607037
19,575.49	90.00	359.58	9,550.00	9,976.63	-237.26	446,226.34	765,932.66	32.224666	-103.607037
LTP @ 19575' MD, 100' FNL, 1284' FEL									
19,600.00	90.00	359.58	9,550.00	10,001.14	-237.44	446,250.85	765,932.48	32.224733	-103.607037
19,655.49	90.00	359.58	9,550.00	10,056.63	-237.85	446,306.34	765,932.08	32.224886	-103.607037
PBHL; 20' FNL, 1284' FEL									
19,655.50	90.00	359.58	9,550.00	10,056.64	-237.85	446,306.35	765,932.08	32.224886	-103.607037

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 7H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3565.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3565.20ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

Design Targets

Target Name

- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
PBHL - Bell Lake 19-18 :	0.00	0.00	0.00	10,056.64	-237.85	446,306.35	765,932.08	32.224886	-103.607037
- plan misses target center by 9550.00ft at 19655.50ft MD (9550.00 TVD, 10056.64 N, -237.85 E)									
- Point									

Plan Annotations

Measured	Vertical	Local Coordinates		Comment
Depth	Depth	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	
8,990.54	8,977.04	-281.00	-162.00	KOP & FTP @ 8991' MD, 200' FSL, 1284' FEL
14,398.00	9,550.00	4,799.28	-199.28	Cross Section @ 14398' MD, 0' FSL, 1284' FEL
19,575.49	9,550.00	9,976.63	-237.26	LTP @ 19575' MD, 100' FNL, 1284' FEL
19,655.49	9,550.00	10,056.63	-237.85	PBHL; 20' FNL, 1284' FEL

Devon Energy

WELL DETAILS: Bell Lake 19-18 State Com 7H

RKB @ 3565.20ft

3540.20
Northing 436249.73 Easting 766169.93 Latitude 32.197239 Longitude -103.606468

SECTION DETAILS Permit Plan 1

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	
4893.83	4.92	209.96	4893.34	-14.65	-8.45	1.25	-14.44	
8312.31	4.92	209.96	8299.21	-268.79	-154.96	0.00	-265.05	
8640.50	0.00	0.00	8627.00	-281.00	-162.00	1.50	-277.09	
8990.54	0.00	0.00	8977.04	-281.00	-162.00	0.00	-277.09	KOP & FTP @ 8991' MD, 200' FSL, 1284' FEL
9890.54	90.00	359.58	9550.00	291.94	-166.20	10.00	295.79	
19655.50	90.00	359.58	9550.00	10056.64	-237.85	0.00	10059.45	PBHL: 20' FNL, 1284' FEL

devon

