

HOBBBS

MAR 26 2019

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Devon Energy

WELL DETAILS: Bell Lake 19-18 State Com 32H

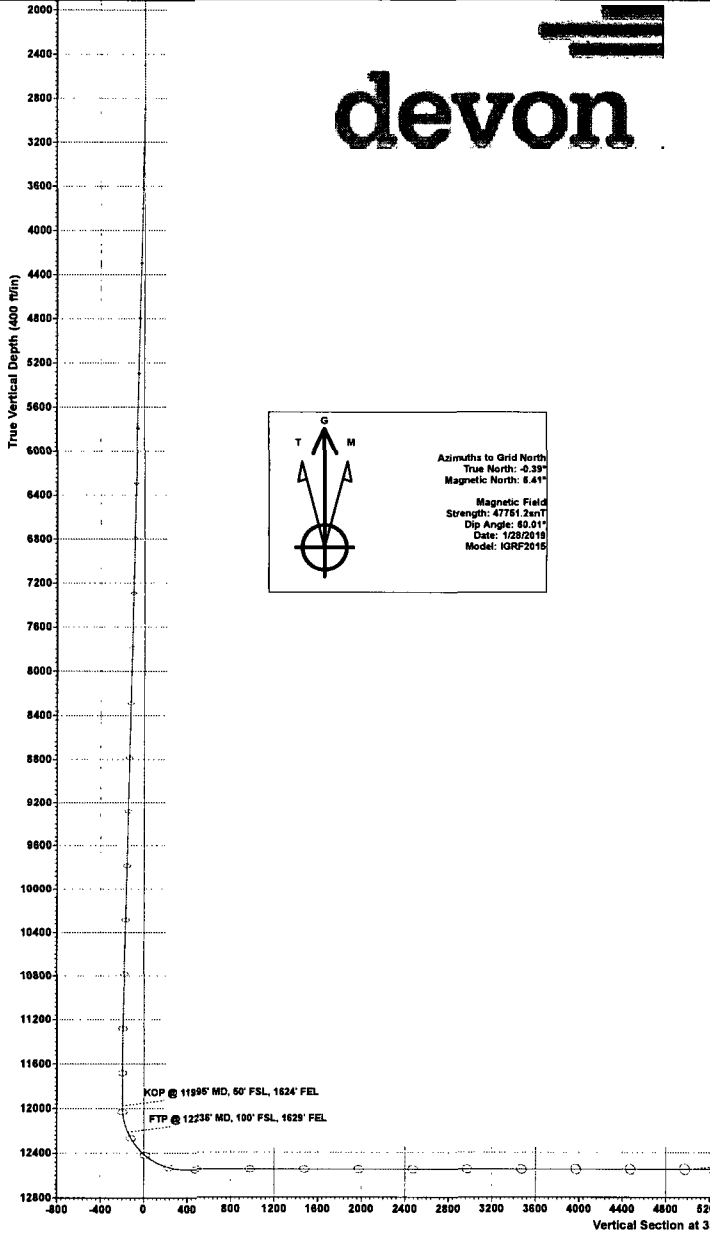
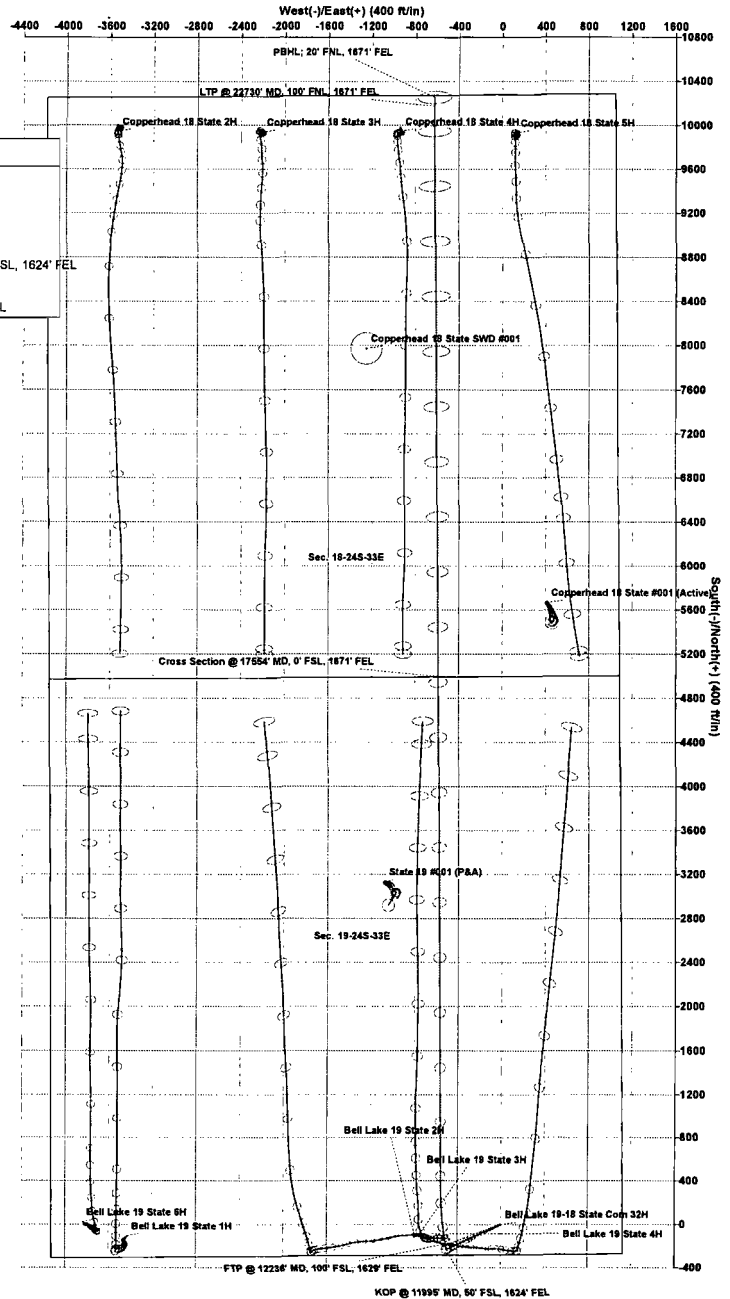
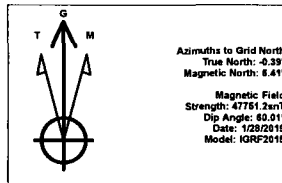
RKB @ 3565.50ft
3540.50

Northing 436049.74 Easting 766171.53 Latitude 32.195689 Longitude -103.606487

SECTION DETAILS Permit Plan 1

MD	Inc	Azi	TVD	+N-S	+E-W	Dieg	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2750.00	0.00	0.00	2750.00	0.00	0.00	0.00	0.00	
3117.71	3.68	245.20	3117.45	-4.95	-10.71	1.00	-4.29	
11399.33	3.68	245.20	11382.03	-227.70	-492.86	0.00	-197.25	
11644.47	0.00	0.00	11627.00	-231.00	-500.00	1.50	-200.11	
11994.51	0.00	0.00	11977.04	-231.00	-500.00	0.00	-200.11	KOP @ 11995' MD, 50' FSL, 1624' FEL
12474.68	48.21	351.65	12402.52	-42.64	-527.65	10.04	-10.41	
12896.93	90.00	359.58	12550.00	341.94	-553.23	10.04	375.01	
22809.61	90.00	359.58	12550.00	10254.35	-625.89	0.00	10273.44	PBHL: 20' FNL, 1671' FEL

devon



WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 19-T24S-R33E

Bell Lake 19-18 State Com 32H

Wellbore #1

Plan: Permit Plan 1

Standard Planning Report - Geographic

29 January, 2019

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 32H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3565.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3565.50ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 32H	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 32H			
Well Position	+N/-S	0.00 ft	Northing:	436,049.74 usft
	+E/-W	0.00 ft	Easting:	766,171.53 usft
Position Uncertainty		0.50 ft	Wellhead Elevation:	Ground Level: 3,540.50 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2015	1/28/2019	6.79	60.01	47,751.24087806

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	356.51

Plan Survey Tool Program	Date 1/29/2019			
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(ft)	(ft)			
1	0.00	22,809.61 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	
2,750.00	0.00	0.00	2,750.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,117.71	3.68	245.20	3,117.45	-4.95	-10.71	1.00	1.00	0.00	245.20	
11,399.33	3.68	245.20	11,382.03	-227.70	-492.86	0.00	0.00	0.00	0.00	
11,644.47	0.00	0.00	11,627.00	-231.00	-500.00	1.50	-1.50	0.00	180.00	
11,994.51	0.00	0.00	11,977.04	-231.00	-500.00	0.00	0.00	0.00	0.00	
12,474.68	48.21	351.65	12,402.52	-42.64	-527.65	10.04	10.04	0.00	351.65	
12,896.93	90.00	359.58	12,550.00	341.94	-553.23	10.04	9.90	1.88	11.81	
22,809.61	90.00	359.58	12,550.00	10,254.35	-625.89	0.00	0.00	0.00	0.00	PBHL - Bell Lake 19-1

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 32H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3565.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3565.50ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 32H	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	436,049.74	766,171.53	32.196689	-103.606487
100.00	0.00	0.00	100.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
200.00	0.00	0.00	200.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
300.00	0.00	0.00	300.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
400.00	0.00	0.00	400.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
500.00	0.00	0.00	500.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
600.00	0.00	0.00	600.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
700.00	0.00	0.00	700.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
800.00	0.00	0.00	800.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
900.00	0.00	0.00	900.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
1,000.00	0.00	0.00	1,000.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
1,100.00	0.00	0.00	1,100.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
1,200.00	0.00	0.00	1,200.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
1,300.00	0.00	0.00	1,300.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
1,400.00	0.00	0.00	1,400.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
1,500.00	0.00	0.00	1,500.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
1,600.00	0.00	0.00	1,600.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
1,700.00	0.00	0.00	1,700.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
1,800.00	0.00	0.00	1,800.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
1,900.00	0.00	0.00	1,900.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
2,000.00	0.00	0.00	2,000.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
2,100.00	0.00	0.00	2,100.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
2,200.00	0.00	0.00	2,200.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
2,300.00	0.00	0.00	2,300.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
2,400.00	0.00	0.00	2,400.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
2,500.00	0.00	0.00	2,500.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
2,600.00	0.00	0.00	2,600.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
2,700.00	0.00	0.00	2,700.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
2,750.00	0.00	0.00	2,750.00	0.00	0.00	436,049.74	766,171.53	32.196689	-103.606487
2,800.00	0.50	245.20	2,800.00	-0.09	-0.20	436,049.65	766,171.33	32.196689	-103.606488
2,900.00	1.50	245.20	2,899.98	-0.82	-1.78	436,048.92	766,169.74	32.196687	-103.606493
3,000.00	2.50	245.20	2,999.92	-2.29	-4.95	436,047.45	766,166.58	32.196683	-103.606503
3,100.00	3.50	245.20	3,099.78	-4.48	-9.70	436,045.26	766,161.83	32.196677	-103.606519
3,117.71	3.68	245.20	3,117.45	-4.95	-10.71	436,044.79	766,160.82	32.196676	-103.606522
3,200.00	3.68	245.20	3,199.58	-7.16	-15.50	436,042.58	766,156.03	32.196670	-103.606537
3,300.00	3.68	245.20	3,299.37	-9.85	-21.32	436,039.89	766,150.21	32.196662	-103.606556
3,400.00	3.68	245.20	3,399.17	-12.54	-27.14	436,037.20	766,144.38	32.196655	-103.606575
3,500.00	3.68	245.20	3,498.96	-15.23	-32.96	436,034.51	766,138.56	32.196648	-103.606594
3,600.00	3.68	245.20	3,598.75	-17.92	-38.79	436,031.82	766,132.74	32.196641	-103.606613
3,700.00	3.68	245.20	3,698.55	-20.61	-44.61	436,029.13	766,126.92	32.196633	-103.606632
3,800.00	3.68	245.20	3,798.34	-23.30	-50.43	436,026.44	766,121.10	32.196626	-103.606651
3,900.00	3.68	245.20	3,898.14	-25.99	-56.25	436,023.75	766,115.27	32.196619	-103.606670
4,000.00	3.68	245.20	3,997.93	-28.68	-62.07	436,021.06	766,109.45	32.196611	-103.606688
4,100.00	3.68	245.20	4,097.73	-31.37	-67.90	436,018.37	766,103.63	32.196604	-103.606707
4,200.00	3.68	245.20	4,197.52	-34.06	-73.72	436,015.68	766,097.81	32.196597	-103.606726
4,300.00	3.68	245.20	4,297.31	-36.75	-79.54	436,012.99	766,091.99	32.196590	-103.606745
4,400.00	3.68	245.20	4,397.11	-39.44	-85.36	436,010.30	766,086.16	32.196582	-103.606764
4,500.00	3.68	245.20	4,496.90	-42.13	-91.18	436,007.61	766,080.34	32.196575	-103.606783
4,600.00	3.68	245.20	4,596.70	-44.82	-97.01	436,004.92	766,074.52	32.196568	-103.606802
4,700.00	3.68	245.20	4,696.49	-47.51	-102.83	436,002.23	766,068.70	32.196560	-103.606821
4,800.00	3.68	245.20	4,796.28	-50.20	-108.65	435,999.54	766,062.88	32.196553	-103.606839
4,900.00	3.68	245.20	4,896.08	-52.89	-114.47	435,996.85	766,057.06	32.196546	-103.606858
5,000.00	3.68	245.20	4,995.87	-55.58	-120.29	435,994.16	766,051.23	32.196539	-103.606877
5,100.00	3.68	245.20	5,095.67	-58.27	-126.12	435,991.47	766,045.41	32.196531	-103.606896
5,200.00	3.68	245.20	5,195.46	-60.96	-131.94	435,988.78	766,039.59	32.196524	-103.606915

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 32H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3565.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3565.50ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 32H	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
5,300.00	3.68	245.20	5,295.26	-63.65	-137.76	435,986.09	766,033.77	32.196517	-103.606934
5,400.00	3.68	245.20	5,395.05	-66.33	-143.58	435,983.40	766,027.95	32.196509	-103.606953
5,500.00	3.68	245.20	5,494.84	-69.02	-149.40	435,980.72	766,022.12	32.196502	-103.606972
5,600.00	3.68	245.20	5,594.64	-71.71	-155.23	435,978.03	766,016.30	32.196495	-103.606991
5,700.00	3.68	245.20	5,694.43	-74.40	-161.05	435,975.34	766,010.48	32.196488	-103.607009
5,800.00	3.68	245.20	5,794.23	-77.09	-166.87	435,972.65	766,004.66	32.196480	-103.607028
5,900.00	3.68	245.20	5,894.02	-79.78	-172.69	435,969.96	765,998.84	32.196473	-103.607047
6,000.00	3.68	245.20	5,993.81	-82.47	-178.51	435,967.27	765,993.01	32.196466	-103.607066
6,100.00	3.68	245.20	6,093.61	-85.16	-184.34	435,964.58	765,987.19	32.196458	-103.607085
6,200.00	3.68	245.20	6,193.40	-87.85	-190.16	435,961.89	765,981.37	32.196451	-103.607104
6,300.00	3.68	245.20	6,293.20	-90.54	-195.98	435,959.20	765,975.55	32.196444	-103.607123
6,400.00	3.68	245.20	6,392.99	-93.23	-201.80	435,956.51	765,969.73	32.196437	-103.607142
6,500.00	3.68	245.20	6,492.78	-95.92	-207.62	435,953.82	765,963.90	32.196429	-103.607160
6,600.00	3.68	245.20	6,592.58	-98.61	-213.45	435,951.13	765,958.08	32.196422	-103.607179
6,700.00	3.68	245.20	6,692.37	-101.30	-219.27	435,948.44	765,952.26	32.196415	-103.607198
6,800.00	3.68	245.20	6,792.17	-103.99	-225.09	435,945.75	765,946.44	32.196407	-103.607217
6,900.00	3.68	245.20	6,891.96	-106.68	-230.91	435,943.06	765,940.62	32.196400	-103.607236
7,000.00	3.68	245.20	6,991.76	-109.37	-236.73	435,940.37	765,934.79	32.196393	-103.607255
7,100.00	3.68	245.20	7,091.55	-112.06	-242.56	435,937.68	765,928.97	32.196386	-103.607274
7,200.00	3.68	245.20	7,191.34	-114.75	-248.38	435,934.99	765,923.15	32.196378	-103.607293
7,300.00	3.68	245.20	7,291.14	-117.44	-254.20	435,932.30	765,917.33	32.196371	-103.607311
7,400.00	3.68	245.20	7,390.93	-120.13	-260.02	435,929.61	765,911.51	32.196364	-103.607330
7,500.00	3.68	245.20	7,490.73	-122.82	-265.84	435,926.92	765,905.68	32.196356	-103.607349
7,600.00	3.68	245.20	7,590.52	-125.51	-271.67	435,924.23	765,899.86	32.196349	-103.607368
7,700.00	3.68	245.20	7,690.31	-128.20	-277.49	435,921.54	765,894.04	32.196342	-103.607387
7,800.00	3.68	245.20	7,790.11	-130.89	-283.31	435,918.85	765,888.22	32.196335	-103.607406
7,900.00	3.68	245.20	7,889.90	-133.58	-289.13	435,916.16	765,882.40	32.196327	-103.607425
8,000.00	3.68	245.20	7,989.70	-136.27	-294.95	435,913.47	765,876.57	32.196320	-103.607444
8,100.00	3.68	245.20	8,089.49	-138.96	-300.78	435,910.78	765,870.75	32.196313	-103.607462
8,200.00	3.68	245.20	8,189.29	-141.65	-306.60	435,908.09	765,864.93	32.196305	-103.607481
8,300.00	3.68	245.20	8,289.08	-144.34	-312.42	435,905.40	765,859.11	32.196298	-103.607500
8,400.00	3.68	245.20	8,388.87	-147.03	-318.24	435,902.71	765,853.29	32.196291	-103.607519
8,500.00	3.68	245.20	8,488.67	-149.72	-324.06	435,900.02	765,847.46	32.196284	-103.607538
8,600.00	3.68	245.20	8,588.46	-152.41	-329.89	435,897.33	765,841.64	32.196276	-103.607557
8,700.00	3.68	245.20	8,688.26	-155.10	-335.71	435,894.64	765,835.82	32.196269	-103.607576
8,800.00	3.68	245.20	8,788.05	-157.79	-341.53	435,891.95	765,830.00	32.196262	-103.607595
8,900.00	3.68	245.20	8,887.84	-160.48	-347.35	435,889.26	765,824.18	32.196255	-103.607614
9,000.00	3.68	245.20	8,987.64	-163.17	-353.17	435,886.57	765,818.35	32.196247	-103.607632
9,100.00	3.68	245.20	9,087.43	-165.86	-359.00	435,883.88	765,812.53	32.196240	-103.607651
9,200.00	3.68	245.20	9,187.23	-168.55	-364.82	435,881.19	765,806.71	32.196233	-103.607670
9,300.00	3.68	245.20	9,287.02	-171.24	-370.64	435,878.50	765,800.89	32.196225	-103.607689
9,400.00	3.68	245.20	9,386.81	-173.93	-376.46	435,875.82	765,795.07	32.196218	-103.607708
9,500.00	3.68	245.20	9,486.61	-176.61	-382.28	435,873.13	765,789.24	32.196211	-103.607727
9,600.00	3.68	245.20	9,586.40	-179.30	-388.11	435,870.44	765,783.42	32.196204	-103.607746
9,700.00	3.68	245.20	9,686.20	-181.99	-393.93	435,867.75	765,777.60	32.196196	-103.607765
9,800.00	3.68	245.20	9,785.99	-184.68	-399.75	435,865.06	765,771.78	32.196189	-103.607783
9,900.00	3.68	245.20	9,885.79	-187.37	-405.57	435,862.37	765,765.96	32.196182	-103.607802
10,000.00	3.68	245.20	9,985.58	-190.06	-411.39	435,859.68	765,760.14	32.196174	-103.607821
10,100.00	3.68	245.20	10,085.37	-192.75	-417.21	435,856.99	765,754.31	32.196167	-103.607840
10,200.00	3.68	245.20	10,185.17	-195.44	-423.04	435,854.30	765,748.49	32.196160	-103.607859
10,300.00	3.68	245.20	10,284.96	-198.13	-428.86	435,851.61	765,742.67	32.196153	-103.607878
10,400.00	3.68	245.20	10,384.76	-200.82	-434.68	435,848.92	765,736.85	32.196145	-103.607897
10,500.00	3.68	245.20	10,484.55	-203.51	-440.50	435,846.23	765,731.03	32.196138	-103.607916
10,600.00	3.68	245.20	10,584.34	-206.20	-446.32	435,843.54	765,725.20	32.196131	-103.607934
10,700.00	3.68	245.20	10,684.14	-208.89	-452.15	435,840.85	765,719.38	32.196123	-103.607953

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 32H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3565.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3565.50ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 32H	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
10,800.00	3.68	245.20	10,783.93	-211.58	-457.97	435,838.16	765,713.56	32.196116	-103.607972
10,900.00	3.68	245.20	10,883.73	-214.27	-463.79	435,835.47	765,707.74	32.196109	-103.607991
11,000.00	3.68	245.20	10,983.52	-216.96	-469.61	435,832.78	765,701.92	32.196102	-103.608010
11,100.00	3.68	245.20	11,083.32	-219.65	-475.43	435,830.09	765,696.09	32.196094	-103.608029
11,200.00	3.68	245.20	11,183.11	-222.34	-481.26	435,827.40	765,690.27	32.196087	-103.608048
11,300.00	3.68	245.20	11,282.90	-225.03	-487.08	435,824.71	765,684.45	32.196080	-103.608067
11,399.33	3.68	245.20	11,382.03	-227.70	-492.86	435,822.04	765,678.67	32.196072	-103.608085
11,400.00	3.67	245.20	11,382.70	-227.72	-492.90	435,822.02	765,678.63	32.196072	-103.608085
11,500.00	2.17	245.20	11,482.57	-229.85	-497.52	435,819.89	765,674.01	32.196067	-103.608100
11,600.00	0.67	245.20	11,582.53	-230.89	-499.77	435,818.85	765,671.76	32.196064	-103.608108
11,644.47	0.00	0.00	11,627.00	-231.00	-500.00	435,818.74	765,671.53	32.196063	-103.608108
11,700.00	0.00	0.00	11,682.53	-231.00	-500.00	435,818.74	765,671.53	32.196063	-103.608108
11,800.00	0.00	0.00	11,782.53	-231.00	-500.00	435,818.74	765,671.53	32.196063	-103.608108
11,900.00	0.00	0.00	11,882.53	-231.00	-500.00	435,818.74	765,671.53	32.196063	-103.608108
11,994.51	0.00	0.00	11,977.04	-231.00	-500.00	435,818.74	765,671.53	32.196063	-103.608108
KOP @ 11995' MD, 50' FSL, 1624' FEL									
12,000.00	0.55	351.65	11,982.53	-230.97	-500.00	435,818.77	765,671.52	32.196064	-103.608109
12,100.00	10.59	351.65	12,081.93	-221.38	-501.41	435,828.36	765,670.12	32.196090	-103.608113
12,200.00	20.63	351.65	12,178.12	-194.79	-505.31	435,854.95	765,666.21	32.196163	-103.608125
12,236.48	24.30	351.65	12,211.82	-181.00	-507.34	435,868.74	765,664.19	32.196201	-103.608131
FTP @ 12236' MD, 100' FSL, 1629' FEL									
12,300.00	30.67	351.65	12,268.15	-152.01	-511.59	435,897.73	765,659.93	32.196281	-103.608144
12,400.00	40.71	351.65	12,349.26	-94.36	-520.05	435,955.38	765,651.47	32.196439	-103.608170
12,474.68	48.21	351.65	12,402.52	-42.64	-527.65	436,007.10	765,643.88	32.196582	-103.608194
12,500.00	50.70	352.32	12,418.98	-23.59	-530.33	436,026.15	765,641.20	32.196634	-103.608202
12,600.00	60.57	354.58	12,475.36	58.32	-539.63	436,108.06	765,631.90	32.196859	-103.608230
12,700.00	70.47	356.44	12,516.75	148.94	-546.68	436,198.68	765,624.85	32.197109	-103.608251
12,800.00	80.38	358.08	12,541.88	245.49	-551.27	436,295.23	765,620.26	32.197374	-103.608264
12,896.93	90.00	359.58	12,550.00	341.94	-553.23	436,391.68	765,618.30	32.197639	-103.608268
12,900.00	90.00	359.58	12,550.00	345.01	-553.25	436,394.75	765,618.28	32.197648	-103.608268
13,000.00	90.00	359.58	12,550.00	445.01	-553.99	436,494.75	765,617.54	32.197923	-103.608268
13,100.00	90.00	359.58	12,550.00	545.00	-554.72	436,594.74	765,616.81	32.198197	-103.608268
13,200.00	90.00	359.58	12,550.00	645.00	-555.45	436,694.74	765,616.08	32.198472	-103.608269
13,300.00	90.00	359.58	12,550.00	745.00	-556.18	436,794.74	765,615.34	32.198747	-103.608269
13,400.00	90.00	359.58	12,550.00	845.00	-556.92	436,894.73	765,614.61	32.199022	-103.608269
13,500.00	90.00	359.58	12,550.00	944.99	-557.65	436,994.73	765,613.88	32.199297	-103.608269
13,600.00	90.00	359.58	12,550.00	1,044.99	-558.38	437,094.73	765,613.14	32.199572	-103.608269
13,700.00	90.00	359.58	12,550.00	1,144.99	-559.12	437,194.73	765,612.41	32.199847	-103.608270
13,800.00	90.00	359.58	12,550.00	1,244.99	-559.85	437,294.72	765,611.68	32.200122	-103.608270
13,900.00	90.00	359.58	12,550.00	1,344.98	-560.58	437,394.72	765,610.95	32.200396	-103.608270
14,000.00	90.00	359.58	12,550.00	1,444.98	-561.32	437,494.72	765,610.21	32.200671	-103.608270
14,100.00	90.00	359.58	12,550.00	1,544.98	-562.05	437,594.71	765,609.48	32.200946	-103.608270
14,200.00	90.00	359.58	12,550.00	1,644.98	-562.78	437,694.71	765,608.75	32.201221	-103.608271
14,300.00	90.00	359.58	12,550.00	1,744.97	-563.51	437,794.71	765,608.01	32.201496	-103.608271
14,400.00	90.00	359.58	12,550.00	1,844.97	-564.25	437,894.71	765,607.28	32.201771	-103.608271
14,500.00	90.00	359.58	12,550.00	1,944.97	-564.98	437,994.70	765,606.55	32.202046	-103.608271
14,600.00	90.00	359.58	12,550.00	2,044.96	-565.71	438,094.70	765,605.81	32.202321	-103.608271
14,700.00	90.00	359.58	12,550.00	2,144.96	-566.45	438,194.70	765,605.08	32.202596	-103.608271
14,800.00	90.00	359.58	12,550.00	2,244.96	-567.18	438,294.69	765,604.35	32.202870	-103.608272
14,900.00	90.00	359.58	12,550.00	2,344.96	-567.91	438,394.69	765,603.62	32.203145	-103.608272
15,000.00	90.00	359.58	12,550.00	2,444.95	-568.65	438,494.69	765,602.88	32.203420	-103.608272
15,100.00	90.00	359.58	12,550.00	2,544.95	-569.38	438,594.69	765,602.15	32.203695	-103.608272
15,200.00	90.00	359.58	12,550.00	2,644.95	-570.11	438,694.68	765,601.42	32.203970	-103.608272
15,300.00	90.00	359.58	12,550.00	2,744.95	-570.85	438,794.68	765,600.68	32.204245	-103.608273

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 32H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3565.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3565.50ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 32H	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
15,400.00	90.00	359.58	12,550.00	2,844.94	-571.58	438,894.68	765,599.95	32.204520	-103.608273
15,500.00	90.00	359.58	12,550.00	2,944.94	-572.31	438,994.67	765,599.22	32.204795	-103.608273
15,600.00	90.00	359.58	12,550.00	3,044.94	-573.04	439,094.67	765,598.48	32.205069	-103.608273
15,700.00	90.00	359.58	12,550.00	3,144.94	-573.78	439,194.67	765,597.75	32.205344	-103.608273
15,800.00	90.00	359.58	12,550.00	3,244.93	-574.51	439,294.67	765,597.02	32.205619	-103.608274
15,900.00	90.00	359.58	12,550.00	3,344.93	-575.24	439,394.66	765,596.28	32.205894	-103.608274
16,000.00	90.00	359.58	12,550.00	3,444.93	-575.98	439,494.66	765,595.55	32.206169	-103.608274
16,100.00	90.00	359.58	12,550.00	3,544.92	-576.71	439,594.66	765,594.82	32.206444	-103.608274
16,200.00	90.00	359.58	12,550.00	3,644.92	-577.44	439,694.65	765,594.09	32.206719	-103.608274
16,300.00	90.00	359.58	12,550.00	3,744.92	-578.18	439,794.65	765,593.35	32.206994	-103.608275
16,400.00	90.00	359.58	12,550.00	3,844.92	-578.91	439,894.65	765,592.62	32.207268	-103.608275
16,500.00	90.00	359.58	12,550.00	3,944.91	-579.64	439,994.65	765,591.89	32.207543	-103.608275
16,600.00	90.00	359.58	12,550.00	4,044.91	-580.37	440,094.64	765,591.15	32.207818	-103.608275
16,700.00	90.00	359.58	12,550.00	4,144.91	-581.11	440,194.64	765,590.42	32.208093	-103.608275
16,800.00	90.00	359.58	12,550.00	4,244.91	-581.84	440,294.64	765,589.69	32.208368	-103.608275
16,900.00	90.00	359.58	12,550.00	4,344.90	-582.57	440,394.63	765,588.95	32.208643	-103.608276
17,000.00	90.00	359.58	12,550.00	4,444.90	-583.31	440,494.63	765,588.22	32.208918	-103.608276
17,100.00	90.00	359.58	12,550.00	4,544.90	-584.04	440,594.63	765,587.49	32.209193	-103.608276
17,200.00	90.00	359.58	12,550.00	4,644.89	-584.77	440,694.63	765,586.76	32.209467	-103.608276
17,300.00	90.00	359.58	12,550.00	4,744.89	-585.51	440,794.62	765,586.02	32.209742	-103.608276
17,400.00	90.00	359.58	12,550.00	4,844.89	-586.24	440,894.62	765,585.29	32.210017	-103.608277
17,500.00	90.00	359.58	12,550.00	4,944.89	-586.97	440,994.62	765,584.56	32.210292	-103.608277
17,554.00	90.00	359.58	12,550.00	4,998.89	-587.37	441,048.62	765,584.16	32.210440	-103.608277
Cross Section @ 17554' MD, 0' FSL, 1671' FEL									
17,600.00	90.00	359.58	12,550.00	5,044.88	-587.71	441,094.61	765,583.82	32.210567	-103.608277
17,700.00	90.00	359.58	12,550.00	5,144.88	-588.44	441,194.61	765,583.09	32.210842	-103.608277
17,800.00	90.00	359.58	12,550.00	5,244.88	-589.17	441,294.61	765,582.36	32.211117	-103.608277
17,900.00	90.00	359.58	12,550.00	5,344.88	-589.90	441,394.61	765,581.62	32.211392	-103.608278
18,000.00	90.00	359.58	12,550.00	5,444.87	-590.64	441,494.60	765,580.89	32.211666	-103.608278
18,100.00	90.00	359.58	12,550.00	5,544.87	-591.37	441,594.60	765,580.16	32.211941	-103.608278
18,200.00	90.00	359.58	12,550.00	5,644.87	-592.10	441,694.60	765,579.43	32.212216	-103.608278
18,300.00	90.00	359.58	12,550.00	5,744.87	-592.84	441,794.59	765,578.69	32.212491	-103.608278
18,400.00	90.00	359.58	12,550.00	5,844.86	-593.57	441,894.59	765,577.96	32.212766	-103.608278
18,500.00	90.00	359.58	12,550.00	5,944.86	-594.30	441,994.59	765,577.23	32.213041	-103.608279
18,600.00	90.00	359.58	12,550.00	6,044.86	-595.04	442,094.58	765,576.49	32.213316	-103.608279
18,700.00	90.00	359.58	12,550.00	6,144.85	-595.77	442,194.58	765,575.76	32.213590	-103.608279
18,800.00	90.00	359.58	12,550.00	6,244.85	-596.50	442,294.58	765,575.03	32.213865	-103.608279
18,900.00	90.00	359.58	12,550.00	6,344.85	-597.23	442,394.58	765,574.29	32.214140	-103.608279
19,000.00	90.00	359.58	12,550.00	6,444.85	-597.97	442,494.57	765,573.56	32.214415	-103.608280
19,100.00	90.00	359.58	12,550.00	6,544.84	-598.70	442,594.57	765,572.83	32.214690	-103.608280
19,200.00	90.00	359.58	12,550.00	6,644.84	-599.43	442,694.57	765,572.09	32.214965	-103.608280
19,300.00	90.00	359.58	12,550.00	6,744.84	-600.17	442,794.56	765,571.36	32.215240	-103.608280
19,400.00	90.00	359.58	12,550.00	6,844.84	-600.90	442,894.56	765,570.63	32.215515	-103.608280
19,500.00	90.00	359.58	12,550.00	6,944.83	-601.63	442,994.56	765,569.90	32.215789	-103.608281
19,600.00	90.00	359.58	12,550.00	7,044.83	-602.37	443,094.56	765,569.16	32.216064	-103.608281
19,700.00	90.00	359.58	12,550.00	7,144.83	-603.10	443,194.55	765,568.43	32.216339	-103.608281
19,800.00	90.00	359.58	12,550.00	7,244.83	-603.83	443,294.55	765,567.70	32.216614	-103.608281
19,900.00	90.00	359.58	12,550.00	7,344.82	-604.56	443,394.55	765,566.96	32.216889	-103.608281
20,000.00	90.00	359.58	12,550.00	7,444.82	-605.30	443,494.54	765,566.23	32.217164	-103.608282
20,100.00	90.00	359.58	12,550.00	7,544.82	-606.03	443,594.54	765,565.50	32.217439	-103.608282
20,200.00	90.00	359.58	12,550.00	7,644.81	-606.76	443,694.54	765,564.76	32.217714	-103.608282
20,300.00	90.00	359.58	12,550.00	7,744.81	-607.50	443,794.54	765,564.03	32.217988	-103.608282
20,400.00	90.00	359.58	12,550.00	7,844.81	-608.23	443,894.53	765,563.30	32.218263	-103.608282
20,500.00	90.00	359.58	12,550.00	7,944.81	-608.96	443,994.53	765,562.57	32.218538	-103.608282

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 32H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3565.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3565.50ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 32H	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	
20,600.00	90.00	359.58	12,550.00	8,044.80	-609.70	444,094.53	765,561.83	32.218813	-103.608283	
20,700.00	90.00	359.58	12,550.00	8,144.80	-610.43	444,194.52	765,561.10	32.219088	-103.608283	
20,800.00	90.00	359.58	12,550.00	8,244.80	-611.16	444,294.52	765,560.37	32.219363	-103.608283	
20,900.00	90.00	359.58	12,550.00	8,344.80	-611.90	444,394.52	765,559.63	32.219638	-103.608283	
21,000.00	90.00	359.58	12,550.00	8,444.79	-612.63	444,494.52	765,558.90	32.219913	-103.608283	
21,100.00	90.00	359.58	12,550.00	8,544.79	-613.36	444,594.51	765,558.17	32.220187	-103.608284	
21,200.00	90.00	359.58	12,550.00	8,644.79	-614.09	444,694.51	765,557.43	32.220462	-103.608284	
21,300.00	90.00	359.58	12,550.00	8,744.78	-614.83	444,794.51	765,556.70	32.220737	-103.608284	
21,400.00	90.00	359.58	12,550.00	8,844.78	-615.56	444,894.50	765,555.97	32.221012	-103.608284	
21,500.00	90.00	359.58	12,550.00	8,944.78	-616.29	444,994.50	765,555.24	32.221287	-103.608284	
21,600.00	90.00	359.58	12,550.00	9,044.78	-617.03	445,094.50	765,554.50	32.221562	-103.608285	
21,700.00	90.00	359.58	12,550.00	9,144.77	-617.76	445,194.50	765,553.77	32.221837	-103.608285	
21,800.00	90.00	359.58	12,550.00	9,244.77	-618.49	445,294.49	765,553.04	32.222112	-103.608285	
21,900.00	90.00	359.58	12,550.00	9,344.77	-619.23	445,394.49	765,552.30	32.222386	-103.608285	
22,000.00	90.00	359.58	12,550.00	9,444.77	-619.96	445,494.49	765,551.57	32.222661	-103.608285	
22,100.00	90.00	359.58	12,550.00	9,544.76	-620.69	445,594.48	765,550.84	32.222936	-103.608285	
22,200.00	90.00	359.58	12,550.00	9,644.76	-621.42	445,694.48	765,550.10	32.223211	-103.608286	
22,300.00	90.00	359.58	12,550.00	9,744.76	-622.16	445,794.48	765,549.37	32.223486	-103.608286	
22,400.00	90.00	359.58	12,550.00	9,844.76	-622.89	445,894.48	765,548.64	32.223761	-103.608286	
22,500.00	90.00	359.58	12,550.00	9,944.75	-623.62	445,994.47	765,547.90	32.224036	-103.608286	
22,600.00	90.00	359.58	12,550.00	10,044.75	-624.36	446,094.47	765,547.17	32.224311	-103.608286	
22,700.00	90.00	359.58	12,550.00	10,144.75	-625.09	446,194.47	765,546.44	32.224585	-103.608287	
22,729.61	90.00	359.58	12,550.00	10,174.36	-625.31	446,224.08	765,546.22	32.224667	-103.608287	
LTP @ 22730' MD, 100' FNL, 1671' FEL										
22,800.00	90.00	359.58	12,550.00	10,244.74	-625.82	446,294.46	765,545.71	32.224860	-103.608287	
22,809.60	90.00	359.58	12,550.00	10,254.34	-625.89	446,304.06	765,545.64	32.224887	-103.608287	
PBHL; 20' FNL, 1671' FEL										
22,809.61	90.00	359.58	12,550.00	10,254.35	-625.89	446,304.07	765,545.64	32.224887	-103.608287	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
PBHL - Bell Lake 19-18	0.00	0.00	0.00	10,254.32	-626.44	446,304.04	765,545.09	32.224887	-103.608289	
- plan misses target center by 10273.44ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)										
- Point										

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
11,994.51	11,977.04	-231.00	-500.00	KOP @ 11995' MD, 50' FSL, 1624' FEL	
12,236.48	12,211.82	-181.00	-507.34	FTP @ 12236' MD, 100' FSL, 1629' FEL	
17,554.00	12,550.00	4,998.89	-587.37	Cross Section @ 17554' MD, 0' FSL, 1671' FEL	
22,729.61	12,550.00	10,174.36	-625.31	LTP @ 22730' MD, 100' FNL, 1671' FEL	
22,809.60	12,550.00	10,254.34	-625.89	PBHL; 20' FNL, 1671' FEL	