

HOBBS OCD

FEB 26 2019

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Devon Energy

WELL DETAILS: Bell Lake 19-18 State Com 34H

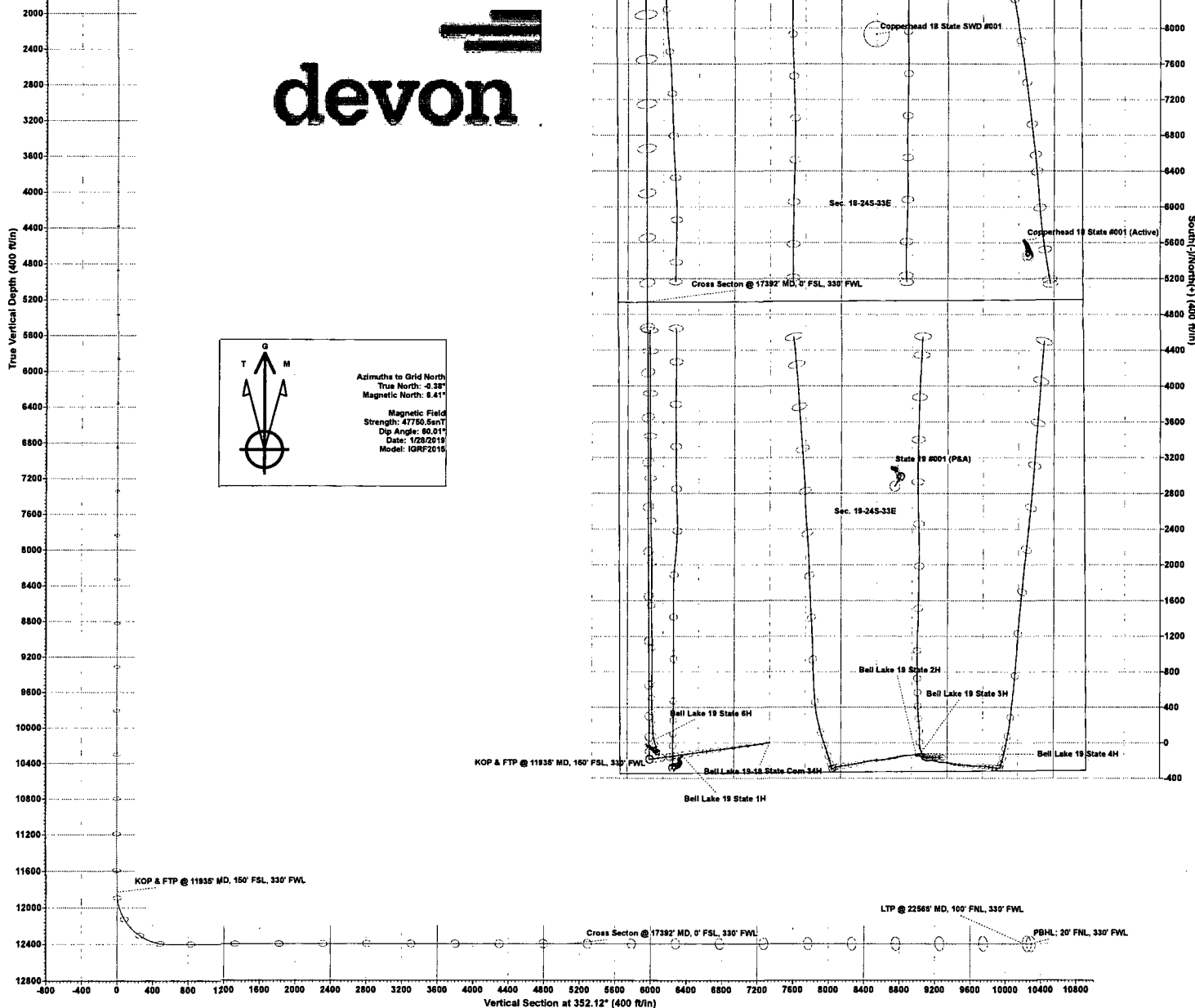
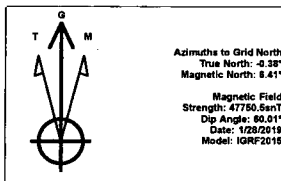
RKB @ 3571.90R
3546.90

Northing 436088.87 Easting 763726.84 Latitude 32.196842 Longitude -103.614389

SECTION DETAILS Permit Plan 1

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	
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	
3334.29	9.34	262.08	3330.15	-10.47	-75.28	1.00	-0.05	
10982.22	9.34	262.08	10856.90	-181.02	-1301.81	0.00	-0.80	
11585.08	0.00	0.00	11477.00	-188.00	-1352.00	1.50	-0.83	
11935.12	0.00	0.00	11827.04	-188.00	-1352.00	0.00	-0.83	KOP & FTP @ 11935' MD, 150' FSL, 330° FWL
12835.12	90.00	359.67	12400.00	384.95	-1355.28	10.00	567.16	
22645.96	90.00	359.67	12400.00	10195.63	-1411.43	0.00	10292.86	PBHL: 20' FNL, 330° FWL

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MAR 26 2019

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WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 19-T24S-R33E

Bell Lake 19-18 State Com 34H

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 34H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3571.90ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3571.90ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 34H	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
From:	Map	Easting:	762,046.84 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "
		Latitude:	32.195913
		Longitude:	-103.619827
		Grid Convergence:	0.38 °

Well	Bell Lake 19-18 State Com 34H		
Well Position	+N-S	0.00 ft	Northing: 436,088.87 usft
	+E-W	0.00 ft	Easting: 763,726.84 usft
Position Uncertainty	0.50 ft	Wellhead Elevation:	Latitude: 32.196842
			Longitude: -103.614389
			Ground Level: 3,546.90 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2015	1/28/2019	6.80
			Dip Angle
			(°)
			60.01
			Field Strength
			(nT)
			47,750.45973245

Design	Permit Plan 1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(ft)	(ft)	(ft)
	0.00	0.00	0.00
			Direction
			(°)
			352.12

Plan Survey Tool Program	Date 1/29/2019		
Depth From	Depth To	Survey (Wellbore)	Tool Name
(ft)	(ft)		
1	0.00	22,645.96 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	
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,334.29	9.34	262.08	3,330.15	-10.47	-75.28	1.00	1.00	0.00	262.08	
10,962.22	9.34	262.08	10,856.90	-181.02	-1,301.81	0.00	0.00	0.00	0.00	
11,585.08	0.00	0.00	11,477.00	-188.00	-1,352.00	1.50	-1.50	0.00	180.00	
11,935.12	0.00	0.00	11,827.04	-188.00	-1,352.00	0.00	0.00	0.00	0.00	
12,835.12	90.00	359.67	12,400.00	384.95	-1,355.28	10.00	10.00	0.00	359.67	PBHL - Bell Lake 19-1
22,645.96	90.00	359.67	12,400.00	10,195.63	-1,411.43	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 34H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3571.90ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3571.90ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 34H	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	436,088.87	763,726.84	32.196842	-103.614389
100.00	0.00	0.00	100.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
200.00	0.00	0.00	200.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
300.00	0.00	0.00	300.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
400.00	0.00	0.00	400.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
500.00	0.00	0.00	500.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
600.00	0.00	0.00	600.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
700.00	0.00	0.00	700.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
800.00	0.00	0.00	800.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
900.00	0.00	0.00	900.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
1,000.00	0.00	0.00	1,000.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
1,100.00	0.00	0.00	1,100.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
1,200.00	0.00	0.00	1,200.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
1,300.00	0.00	0.00	1,300.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
1,400.00	0.00	0.00	1,400.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
1,500.00	0.00	0.00	1,500.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
1,600.00	0.00	0.00	1,600.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
1,700.00	0.00	0.00	1,700.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
1,800.00	0.00	0.00	1,800.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
1,900.00	0.00	0.00	1,900.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
2,000.00	0.00	0.00	2,000.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
2,100.00	0.00	0.00	2,100.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
2,200.00	0.00	0.00	2,200.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
2,300.00	0.00	0.00	2,300.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
2,400.00	0.00	0.00	2,400.00	0.00	0.00	436,088.87	763,726.84	32.196842	-103.614389
2,500.00	1.00	262.08	2,499.99	-0.12	-0.86	436,088.75	763,725.97	32.196842	-103.614392
2,600.00	2.00	262.08	2,599.96	-0.48	-3.46	436,088.39	763,723.38	32.196841	-103.614400
2,700.00	3.00	262.08	2,699.86	-1.08	-7.78	436,087.79	763,719.06	32.196839	-103.614414
2,800.00	4.00	262.08	2,799.68	-1.92	-13.82	436,086.95	763,713.01	32.196837	-103.614434
2,900.00	5.00	262.08	2,899.37	-3.00	-21.59	436,085.87	763,705.24	32.196834	-103.614459
3,000.00	6.00	262.08	2,998.90	-4.32	-31.09	436,084.55	763,695.75	32.196831	-103.614490
3,100.00	7.00	262.08	3,098.26	-5.88	-42.30	436,082.99	763,684.54	32.196826	-103.614526
3,200.00	8.00	262.08	3,197.40	-7.68	-55.23	436,081.19	763,671.61	32.196822	-103.614568
3,300.00	9.00	262.08	3,296.30	-9.72	-69.87	436,079.15	763,656.97	32.196816	-103.614615
3,334.29	9.34	262.08	3,330.15	-10.47	-75.28	436,078.40	763,651.56	32.196814	-103.614633
3,400.00	9.34	262.08	3,394.99	-11.94	-85.85	436,076.93	763,640.99	32.196811	-103.614667
3,500.00	9.34	262.08	3,493.67	-14.17	-101.93	436,074.70	763,624.91	32.196805	-103.614719
3,600.00	9.34	262.08	3,592.34	-16.41	-118.01	436,072.46	763,608.83	32.196799	-103.614771
3,700.00	9.34	262.08	3,691.01	-18.65	-134.09	436,070.22	763,592.75	32.196793	-103.614823
3,800.00	9.34	262.08	3,789.69	-20.88	-150.17	436,067.99	763,576.67	32.196787	-103.614875
3,900.00	9.34	262.08	3,888.36	-23.12	-166.24	436,065.75	763,560.59	32.196781	-103.614927
4,000.00	9.34	262.08	3,987.03	-25.35	-182.32	436,063.52	763,544.51	32.196776	-103.614979
4,100.00	9.34	262.08	4,085.71	-27.59	-198.40	436,061.28	763,528.43	32.196770	-103.615031
4,200.00	9.34	262.08	4,184.38	-29.82	-214.48	436,059.05	763,512.35	32.196764	-103.615083
4,300.00	9.34	262.08	4,283.05	-32.06	-230.56	436,056.81	763,496.27	32.196758	-103.615135
4,400.00	9.34	262.08	4,381.73	-34.30	-246.64	436,054.57	763,480.20	32.196752	-103.615187
4,500.00	9.34	262.08	4,480.40	-36.53	-262.72	436,052.34	763,464.12	32.196746	-103.615239
4,600.00	9.34	262.08	4,579.07	-38.77	-278.80	436,050.10	763,448.04	32.196740	-103.615291
4,700.00	9.34	262.08	4,677.75	-41.00	-294.88	436,047.87	763,431.96	32.196735	-103.615343
4,800.00	9.34	262.08	4,776.42	-43.24	-310.96	436,045.63	763,415.88	32.196729	-103.615395
4,900.00	9.34	262.08	4,875.10	-45.48	-327.04	436,043.39	763,399.80	32.196723	-103.615447
5,000.00	9.34	262.08	4,973.77	-47.71	-343.12	436,041.16	763,383.72	32.196717	-103.615499
5,100.00	9.34	262.08	5,072.44	-49.95	-359.20	436,038.92	763,367.64	32.196711	-103.615551
5,200.00	9.34	262.08	5,171.12	-52.18	-375.28	436,036.69	763,351.56	32.196705	-103.615603
5,300.00	9.34	262.08	5,269.79	-54.42	-391.36	436,034.45	763,335.48	32.196699	-103.615655

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 34H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3571.90ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3571.90ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 34H	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	9.34	262.08	5,368.46	-56.66	-407.44	436,032.21	763,319.40	32.196694	-103.615707	
5,500.00	9.34	262.08	5,467.14	-58.89	-423.52	436,029.98	763,303.32	32.196688	-103.615759	
5,600.00	9.34	262.08	5,565.81	-61.13	-439.60	436,027.74	763,287.24	32.196682	-103.615811	
5,700.00	9.34	262.08	5,664.48	-63.36	-455.68	436,025.51	763,271.16	32.196676	-103.615863	
5,800.00	9.34	262.08	5,763.16	-65.60	-471.75	436,023.27	763,255.08	32.196670	-103.615915	
5,900.00	9.34	262.08	5,861.83	-67.83	-487.83	436,021.03	763,239.00	32.196664	-103.615967	
6,000.00	9.34	262.08	5,960.50	-70.07	-503.91	436,018.80	763,222.92	32.196659	-103.616019	
6,100.00	9.34	262.08	6,059.18	-72.31	-519.99	436,016.56	763,206.84	32.196653	-103.616071	
6,200.00	9.34	262.08	6,157.85	-74.54	-536.07	436,014.33	763,190.77	32.196647	-103.616124	
6,300.00	9.34	262.08	6,256.52	-76.78	-552.15	436,012.09	763,174.69	32.196641	-103.616176	
6,400.00	9.34	262.08	6,355.20	-79.01	-568.23	436,009.86	763,158.61	32.196635	-103.616228	
6,500.00	9.34	262.08	6,453.87	-81.25	-584.31	436,007.62	763,142.53	32.196629	-103.616280	
6,600.00	9.34	262.08	6,552.54	-83.49	-600.39	436,005.38	763,126.45	32.196623	-103.616332	
6,700.00	9.34	262.08	6,651.22	-85.72	-616.47	436,003.15	763,110.37	32.196618	-103.616384	
6,800.00	9.34	262.08	6,749.89	-87.96	-632.55	436,000.91	763,094.29	32.196612	-103.616436	
6,900.00	9.34	262.08	6,848.56	-90.19	-648.63	435,998.68	763,078.21	32.196606	-103.616488	
7,000.00	9.34	262.08	6,947.24	-92.43	-664.71	435,996.44	763,062.13	32.196600	-103.616540	
7,100.00	9.34	262.08	7,045.91	-94.67	-680.79	435,994.20	763,046.05	32.196594	-103.616592	
7,200.00	9.34	262.08	7,144.58	-96.90	-696.87	435,991.97	763,029.97	32.196588	-103.616644	
7,300.00	9.34	262.08	7,243.26	-99.14	-712.95	435,989.73	763,013.89	32.196582	-103.616696	
7,400.00	9.34	262.08	7,341.93	-101.37	-729.03	435,987.50	762,997.81	32.196577	-103.616748	
7,500.00	9.34	262.08	7,440.61	-103.61	-745.11	435,985.26	762,981.73	32.196571	-103.616800	
7,600.00	9.34	262.08	7,539.28	-105.85	-761.19	435,983.02	762,965.65	32.196565	-103.616852	
7,700.00	9.34	262.08	7,637.95	-108.08	-777.26	435,980.79	762,949.57	32.196559	-103.616904	
7,800.00	9.34	262.08	7,736.63	-110.32	-793.34	435,978.55	762,933.49	32.196553	-103.616956	
7,900.00	9.34	262.08	7,835.30	-112.55	-809.42	435,976.32	762,917.42	32.196547	-103.617008	
8,000.00	9.34	262.08	7,933.97	-114.79	-825.50	435,974.08	762,901.34	32.196542	-103.617060	
8,100.00	9.34	262.08	8,032.65	-117.02	-841.58	435,971.85	762,885.26	32.196536	-103.617112	
8,200.00	9.34	262.08	8,131.32	-119.26	-857.66	435,969.61	762,869.18	32.196530	-103.617164	
8,300.00	9.34	262.08	8,229.99	-121.50	-873.74	435,967.37	762,853.10	32.196524	-103.617216	
8,400.00	9.34	262.08	8,328.67	-123.73	-889.82	435,965.14	762,837.02	32.196518	-103.617268	
8,500.00	9.34	262.08	8,427.34	-125.97	-905.90	435,962.90	762,820.94	32.196512	-103.617320	
8,600.00	9.34	262.08	8,526.01	-128.20	-921.98	435,960.67	762,804.86	32.196506	-103.617372	
8,700.00	9.34	262.08	8,624.69	-130.44	-938.06	435,958.43	762,788.78	32.196501	-103.617424	
8,800.00	9.34	262.08	8,723.36	-132.68	-954.14	435,956.19	762,772.70	32.196495	-103.617476	
8,900.00	9.34	262.08	8,822.03	-134.91	-970.22	435,953.96	762,756.62	32.196489	-103.617528	
9,000.00	9.34	262.08	8,920.71	-137.15	-986.30	435,951.72	762,740.54	32.196483	-103.617580	
9,100.00	9.34	262.08	9,019.38	-139.38	-1,002.38	435,949.49	762,724.46	32.196477	-103.617632	
9,200.00	9.34	262.08	9,118.05	-141.62	-1,018.46	435,947.25	762,708.38	32.196471	-103.617684	
9,300.00	9.34	262.08	9,216.73	-143.86	-1,034.54	435,945.01	762,692.30	32.196465	-103.617736	
9,400.00	9.34	262.08	9,315.40	-146.09	-1,050.62	435,942.78	762,676.22	32.196460	-103.617788	
9,500.00	9.34	262.08	9,414.07	-148.33	-1,066.70	435,940.54	762,660.14	32.196454	-103.617840	
9,600.00	9.34	262.08	9,512.75	-150.56	-1,082.77	435,938.31	762,644.06	32.196448	-103.617892	
9,700.00	9.34	262.08	9,611.42	-152.80	-1,098.85	435,936.07	762,627.99	32.196442	-103.617944	
9,800.00	9.34	262.08	9,710.09	-155.04	-1,114.93	435,933.83	762,611.91	32.196436	-103.617996	
9,900.00	9.34	262.08	9,808.77	-157.27	-1,131.01	435,931.60	762,595.83	32.196430	-103.618048	
10,000.00	9.34	262.08	9,907.44	-159.51	-1,147.09	435,929.36	762,579.75	32.196424	-103.618101	
10,100.00	9.34	262.08	10,006.12	-161.74	-1,163.17	435,927.13	762,563.67	32.196419	-103.618153	
10,200.00	9.34	262.08	10,104.79	-163.98	-1,179.25	435,924.89	762,547.59	32.196413	-103.618205	
10,300.00	9.34	262.08	10,203.46	-166.21	-1,195.33	435,922.66	762,531.51	32.196407	-103.618257	
10,400.00	9.34	262.08	10,302.14	-168.45	-1,211.41	435,920.42	762,515.43	32.196401	-103.618309	
10,500.00	9.34	262.08	10,400.81	-170.69	-1,227.49	435,918.18	762,499.35	32.196395	-103.618361	
10,600.00	9.34	262.08	10,499.48	-172.92	-1,243.57	435,915.95	762,483.27	32.196389	-103.618413	
10,700.00	9.34	262.08	10,598.16	-175.16	-1,259.65	435,913.71	762,467.19	32.196384	-103.618465	
10,800.00	9.34	262.08	10,696.83	-177.39	-1,275.73	435,911.48	762,451.11	32.196378	-103.618517	

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 34H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3571.90ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3571.90ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 34H	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
10,900.00	9.34	262.08	10,795.50	-179.63	-1,291.81	435,909.24	762,435.03	32.196372	-103.618569
10,962.22	9.34	262.08	10,856.90	-181.02	-1,301.81	435,907.85	762,425.03	32.196368	-103.618601
11,000.00	8.78	262.08	10,894.21	-181.84	-1,307.70	435,907.03	762,419.14	32.196366	-103.618620
11,100.00	7.28	262.08	10,993.22	-183.76	-1,321.53	435,905.11	762,405.31	32.196361	-103.618665
11,200.00	5.78	262.08	11,092.57	-185.33	-1,332.79	435,903.54	762,394.05	32.196357	-103.618701
11,300.00	4.28	262.08	11,192.19	-186.54	-1,341.47	435,902.33	762,385.37	32.196354	-103.618729
11,400.00	2.78	262.08	11,291.99	-187.38	-1,347.56	435,901.49	762,379.28	32.196352	-103.618749
11,500.00	1.28	262.08	11,391.93	-187.87	-1,351.06	435,901.00	762,375.78	32.196350	-103.618760
11,585.08	0.00	0.00	11,477.00	-188.00	-1,352.00	435,900.87	762,374.84	32.196350	-103.618764
11,600.00	0.00	0.00	11,491.92	-188.00	-1,352.00	435,900.87	762,374.84	32.196350	-103.618764
11,700.00	0.00	0.00	11,591.92	-188.00	-1,352.00	435,900.87	762,374.84	32.196350	-103.618764
11,800.00	0.00	0.00	11,691.92	-188.00	-1,352.00	435,900.87	762,374.84	32.196350	-103.618764
11,900.00	0.00	0.00	11,791.92	-188.00	-1,352.00	435,900.87	762,374.84	32.196350	-103.618764
11,935.12	0.00	0.00	11,827.04	-188.00	-1,352.00	435,900.87	762,374.84	32.196350	-103.618764
KOP & FTP @ 11935' MD, 160' FSL, 330' FWL									
12,000.00	6.49	359.67	11,891.78	-184.33	-1,352.02	435,904.54	762,374.82	32.196360	-103.618764
12,100.00	16.49	359.67	11,989.65	-164.44	-1,352.13	435,924.43	762,374.70	32.196415	-103.618763
12,200.00	26.49	359.67	12,082.59	-127.86	-1,352.34	435,961.01	762,374.50	32.196515	-103.618763
12,300.00	36.49	359.67	12,167.75	-75.69	-1,352.64	436,013.18	762,374.20	32.196659	-103.618763
12,400.00	46.49	359.67	12,242.57	-9.53	-1,353.02	436,079.34	762,373.82	32.196840	-103.618763
12,500.00	56.49	359.67	12,304.76	68.62	-1,353.47	436,157.49	762,373.37	32.197055	-103.618763
12,600.00	66.49	359.67	12,352.43	156.38	-1,353.97	436,245.25	762,372.87	32.197297	-103.618762
12,700.00	76.49	359.67	12,384.14	251.08	-1,354.51	436,339.95	762,372.33	32.197557	-103.618762
12,800.00	86.49	359.67	12,398.92	349.85	-1,355.08	436,438.72	762,371.76	32.198288	-103.618762
12,835.12	90.00	359.67	12,400.00	384.95	-1,355.28	436,473.82	762,371.56	32.197925	-103.618762
12,900.00	90.00	359.67	12,400.00	449.83	-1,355.65	436,538.70	762,371.19	32.198103	-103.618762
13,000.00	90.00	359.67	12,400.00	549.83	-1,356.22	436,638.69	762,370.62	32.198378	-103.618761
13,100.00	90.00	359.67	12,400.00	649.82	-1,356.80	436,738.69	762,370.04	32.198653	-103.618761
13,200.00	90.00	359.67	12,400.00	749.82	-1,357.37	436,838.69	762,369.47	32.198928	-103.618761
13,300.00	90.00	359.67	12,400.00	849.82	-1,357.94	436,938.69	762,368.90	32.199203	-103.618760
13,400.00	90.00	359.67	12,400.00	949.82	-1,358.51	437,038.69	762,368.33	32.199478	-103.618760
13,500.00	90.00	359.67	12,400.00	1,049.82	-1,359.08	437,138.69	762,367.75	32.199752	-103.618760
13,600.00	90.00	359.67	12,400.00	1,149.82	-1,359.66	437,238.68	762,367.18	32.200027	-103.618760
13,700.00	90.00	359.67	12,400.00	1,249.81	-1,360.23	437,338.68	762,366.61	32.200302	-103.618759
13,800.00	90.00	359.67	12,400.00	1,349.81	-1,360.80	437,438.68	762,366.04	32.200577	-103.618759
13,900.00	90.00	359.67	12,400.00	1,449.81	-1,361.37	437,538.68	762,365.47	32.200852	-103.618759
14,000.00	90.00	359.67	12,400.00	1,549.81	-1,361.95	437,638.68	762,364.89	32.201127	-103.618758
14,100.00	90.00	359.67	12,400.00	1,649.81	-1,362.52	437,738.67	762,364.32	32.201402	-103.618758
14,200.00	90.00	359.67	12,400.00	1,749.81	-1,363.09	437,838.67	762,363.75	32.201677	-103.618758
14,300.00	90.00	359.67	12,400.00	1,849.80	-1,363.66	437,938.67	762,363.18	32.201951	-103.618757
14,400.00	90.00	359.67	12,400.00	1,949.80	-1,364.24	438,038.67	762,362.60	32.202226	-103.618757
14,500.00	90.00	359.67	12,400.00	2,049.80	-1,364.81	438,138.67	762,362.03	32.202501	-103.618757
14,600.00	90.00	359.67	12,400.00	2,149.80	-1,365.38	438,238.67	762,361.46	32.202776	-103.618757
14,700.00	90.00	359.67	12,400.00	2,249.80	-1,365.95	438,338.66	762,360.89	32.203051	-103.618756
14,800.00	90.00	359.67	12,400.00	2,349.80	-1,366.53	438,438.66	762,360.31	32.203326	-103.618756
14,900.00	90.00	359.67	12,400.00	2,449.79	-1,367.10	438,538.66	762,359.74	32.203601	-103.618756
15,000.00	90.00	359.67	12,400.00	2,549.79	-1,367.67	438,638.66	762,359.17	32.203876	-103.618755
15,100.00	90.00	359.67	12,400.00	2,649.79	-1,368.24	438,738.66	762,358.60	32.204150	-103.618755
15,200.00	90.00	359.67	12,400.00	2,749.79	-1,368.82	438,838.65	762,358.02	32.204425	-103.618755
15,300.00	90.00	359.67	12,400.00	2,849.79	-1,369.39	438,938.65	762,357.45	32.204700	-103.618754
15,400.00	90.00	359.67	12,400.00	2,949.79	-1,369.96	439,038.65	762,356.88	32.204975	-103.618754
15,500.00	90.00	359.67	12,400.00	3,049.78	-1,370.53	439,138.65	762,356.31	32.205250	-103.618754
15,600.00	90.00	359.67	12,400.00	3,149.78	-1,371.10	439,238.65	762,355.74	32.205525	-103.618754
15,700.00	90.00	359.67	12,400.00	3,249.78	-1,371.68	439,338.64	762,355.16	32.205800	-103.618753

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 34H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3571.90ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3571.90ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 34H	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
15,800.00	90.00	359.67	12,400.00	3,349.78	-1,372.25	439,438.64	762,354.59	32.206075	-103.618753
15,900.00	90.00	359.67	12,400.00	3,449.78	-1,372.82	439,538.64	762,354.02	32.206349	-103.618753
16,000.00	90.00	359.67	12,400.00	3,549.78	-1,373.39	439,638.64	762,353.45	32.206624	-103.618752
16,100.00	90.00	359.67	12,400.00	3,649.78	-1,373.97	439,738.64	762,352.87	32.206899	-103.618752
16,200.00	90.00	359.67	12,400.00	3,749.77	-1,374.54	439,838.64	762,352.30	32.207174	-103.618752
16,300.00	90.00	359.67	12,400.00	3,849.77	-1,375.11	439,938.63	762,351.73	32.207449	-103.618751
16,400.00	90.00	359.67	12,400.00	3,949.77	-1,375.68	440,038.63	762,351.16	32.207724	-103.618751
16,500.00	90.00	359.67	12,400.00	4,049.77	-1,376.26	440,138.63	762,350.58	32.207999	-103.618751
16,600.00	90.00	359.67	12,400.00	4,149.77	-1,376.83	440,238.63	762,350.01	32.208274	-103.618751
16,700.00	90.00	359.67	12,400.00	4,249.77	-1,377.40	440,338.63	762,349.44	32.208548	-103.618750
16,800.00	90.00	359.67	12,400.00	4,349.76	-1,377.97	440,438.62	762,348.87	32.208823	-103.618750
16,900.00	90.00	359.67	12,400.00	4,449.76	-1,378.55	440,538.62	762,348.29	32.209098	-103.618750
17,000.00	90.00	359.67	12,400.00	4,549.76	-1,379.12	440,638.62	762,347.72	32.209373	-103.618749
17,100.00	90.00	359.67	12,400.00	4,649.76	-1,379.69	440,738.62	762,347.15	32.209648	-103.618749
17,200.00	90.00	359.67	12,400.00	4,749.76	-1,380.26	440,838.62	762,346.58	32.209923	-103.618749
17,300.00	90.00	359.67	12,400.00	4,849.76	-1,380.83	440,938.62	762,346.01	32.210198	-103.618748
17,392.25	90.00	359.67	12,400.00	4,942.00	-1,381.36	441,030.86	762,345.48	32.210451	-103.618748
Cross Section @ 17392' MD, 0' FSL, 330' FWL									
17,400.00	90.00	359.67	12,400.00	4,949.75	-1,381.41	441,038.61	762,345.43	32.210473	-103.618748
17,500.00	90.00	359.67	12,400.00	5,049.75	-1,381.98	441,138.61	762,344.86	32.210747	-103.618748
17,600.00	90.00	359.67	12,400.00	5,149.75	-1,382.55	441,238.61	762,344.29	32.211022	-103.618748
17,700.00	90.00	359.67	12,400.00	5,249.75	-1,383.12	441,338.61	762,343.72	32.211297	-103.618747
17,800.00	90.00	359.67	12,400.00	5,349.75	-1,383.70	441,438.61	762,343.14	32.211572	-103.618747
17,900.00	90.00	359.67	12,400.00	5,449.75	-1,384.27	441,538.60	762,342.57	32.211847	-103.618747
18,000.00	90.00	359.67	12,400.00	5,549.74	-1,384.84	441,638.60	762,342.00	32.212122	-103.618746
18,100.00	90.00	359.67	12,400.00	5,649.74	-1,385.41	441,738.60	762,341.43	32.212397	-103.618746
18,200.00	90.00	359.67	12,400.00	5,749.74	-1,385.99	441,838.60	762,340.85	32.212672	-103.618746
18,300.00	90.00	359.67	12,400.00	5,849.74	-1,386.56	441,938.60	762,340.28	32.212946	-103.618745
18,400.00	90.00	359.67	12,400.00	5,949.74	-1,387.13	442,038.60	762,339.71	32.213221	-103.618745
18,500.00	90.00	359.67	12,400.00	6,049.74	-1,387.70	442,138.59	762,339.14	32.213496	-103.618745
18,600.00	90.00	359.67	12,400.00	6,149.73	-1,388.28	442,238.59	762,338.56	32.213771	-103.618745
18,700.00	90.00	359.67	12,400.00	6,249.73	-1,388.85	442,338.59	762,337.99	32.214046	-103.618744
18,800.00	90.00	359.67	12,400.00	6,349.73	-1,389.42	442,438.59	762,337.42	32.214321	-103.618744
18,900.00	90.00	359.67	12,400.00	6,449.73	-1,389.99	442,538.59	762,336.85	32.214596	-103.618744
19,000.00	90.00	359.67	12,400.00	6,549.73	-1,390.56	442,638.58	762,336.28	32.214871	-103.618743
19,100.00	90.00	359.67	12,400.00	6,649.73	-1,391.14	442,738.58	762,335.70	32.215145	-103.618743
19,200.00	90.00	359.67	12,400.00	6,749.72	-1,391.71	442,838.58	762,335.13	32.215420	-103.618743
19,300.00	90.00	359.67	12,400.00	6,849.72	-1,392.28	442,938.58	762,334.56	32.215695	-103.618743
19,400.00	90.00	359.67	12,400.00	6,949.72	-1,392.85	443,038.58	762,333.99	32.215970	-103.618742
19,500.00	90.00	359.67	12,400.00	7,049.72	-1,393.43	443,138.58	762,333.41	32.216245	-103.618742
19,600.00	90.00	359.67	12,400.00	7,149.72	-1,394.00	443,238.57	762,332.84	32.216520	-103.618742
19,700.00	90.00	359.67	12,400.00	7,249.72	-1,394.57	443,338.57	762,332.27	32.216795	-103.618741
19,800.00	90.00	359.67	12,400.00	7,349.71	-1,395.14	443,438.57	762,331.70	32.217070	-103.618741
19,900.00	90.00	359.67	12,400.00	7,449.71	-1,395.72	443,538.57	762,331.12	32.217344	-103.618741
20,000.00	90.00	359.67	12,400.00	7,549.71	-1,396.29	443,638.57	762,330.55	32.217619	-103.618740
20,100.00	90.00	359.67	12,400.00	7,649.71	-1,396.86	443,738.56	762,329.98	32.217894	-103.618740
20,200.00	90.00	359.67	12,400.00	7,749.71	-1,397.43	443,838.56	762,329.41	32.218169	-103.618740
20,300.00	90.00	359.67	12,400.00	7,849.71	-1,398.01	443,938.56	762,328.83	32.218444	-103.618740
20,400.00	90.00	359.67	12,400.00	7,949.70	-1,398.58	444,038.56	762,328.26	32.218719	-103.618739
20,500.00	90.00	359.67	12,400.00	8,049.70	-1,399.15	444,138.56	762,327.69	32.218994	-103.618739
20,600.00	90.00	359.67	12,400.00	8,149.70	-1,399.72	444,238.55	762,327.12	32.219269	-103.618739
20,700.00	90.00	359.67	12,400.00	8,249.70	-1,400.29	444,338.55	762,326.54	32.219543	-103.618738
20,800.00	90.00	359.67	12,400.00	8,349.70	-1,400.87	444,438.55	762,325.97	32.219818	-103.618738
20,900.00	90.00	359.67	12,400.00	8,449.70	-1,401.44	444,538.55	762,325.40	32.220093	-103.618738

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 34H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3571.90ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3571.90ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 34H	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		
21,000.00	90.00	359.67	12,400.00	8,549.69	-1,402.01	444,638.55	762,324.83	32.220368	-103.618737	
21,100.00	90.00	359.67	12,400.00	8,649.69	-1,402.58	444,738.55	762,324.26	32.220643	-103.618737	
21,200.00	90.00	359.67	12,400.00	8,749.69	-1,403.16	444,838.54	762,323.68	32.220918	-103.618737	
21,300.00	90.00	359.67	12,400.00	8,849.69	-1,403.73	444,938.54	762,323.11	32.221193	-103.618737	
21,400.00	90.00	359.67	12,400.00	8,949.69	-1,404.30	445,038.54	762,322.54	32.221468	-103.618736	
21,500.00	90.00	359.67	12,400.00	9,049.69	-1,404.87	445,138.54	762,321.97	32.221742	-103.618736	
21,600.00	90.00	359.67	12,400.00	9,149.69	-1,405.45	445,238.54	762,321.39	32.222017	-103.618736	
21,700.00	90.00	359.67	12,400.00	9,249.68	-1,406.02	445,338.53	762,320.82	32.222292	-103.618735	
21,800.00	90.00	359.67	12,400.00	9,349.68	-1,406.59	445,438.53	762,320.25	32.222567	-103.618735	
21,900.00	90.00	359.67	12,400.00	9,449.68	-1,407.16	445,538.53	762,319.68	32.222842	-103.618735	
22,000.00	90.00	359.67	12,400.00	9,549.68	-1,407.74	445,638.53	762,319.10	32.223117	-103.618734	
22,100.00	90.00	359.67	12,400.00	9,649.68	-1,408.31	445,738.53	762,318.53	32.223392	-103.618734	
22,200.00	90.00	359.67	12,400.00	9,749.68	-1,408.88	445,838.53	762,317.96	32.223667	-103.618734	
22,300.00	90.00	359.67	12,400.00	9,849.67	-1,409.45	445,938.52	762,317.39	32.223941	-103.618734	
22,400.00	90.00	359.67	12,400.00	9,949.67	-1,410.03	446,038.52	762,316.81	32.224216	-103.618733	
22,500.00	90.00	359.67	12,400.00	10,049.67	-1,410.60	446,138.52	762,316.24	32.224491	-103.618733	
22,565.95	90.00	359.67	12,400.00	10,115.62	-1,410.97	446,204.47	762,315.86	32.224672	-103.618733	
LTP @ 22566' MD, 100' FNL, 330' FWL										
22,600.00	90.00	359.67	12,400.00	10,149.67	-1,411.17	446,238.52	762,315.67	32.224766	-103.618733	
22,645.95	90.00	359.67	12,400.00	10,195.62	-1,411.43	446,284.47	762,315.41	32.224892	-103.618732	
PBHL; 20' FNL, 330' FWL										
22,645.96	90.00	359.67	12,400.00	10,195.63	-1,411.43	446,284.48	762,315.41	32.224892	-103.618732	

Design Targets										
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude		Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)			
- Shape										
PBHL - Bell Lake 19-18	0.00	0.00	0.00	10,195.63	-1,411.43	446,284.48	762,315.41	32.224892	-103.618732	
- plan misses target center by 10292.86ft 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	
11,935.12	11,827.04	-188.00	-1,352.00	KOP & FTP @ 11935' MD, 150' FSL, 330' FWL	
17,392.25	12,400.00	4,942.00	-1,381.36	Cross Section @ 17392' MD, 0' FSL, 330' FWL	
22,565.95	12,400.00	10,115.62	-1,410.97	LTP @ 22566' MD, 100' FNL, 330' FWL	
22,645.95	12,400.00	10,195.62	-1,411.43	PBHL; 20' FNL, 330' FWL	