

HOBBS OLD
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Devon Energy

WELL DETAILS: Bell Lake 19-18 State Com 35H

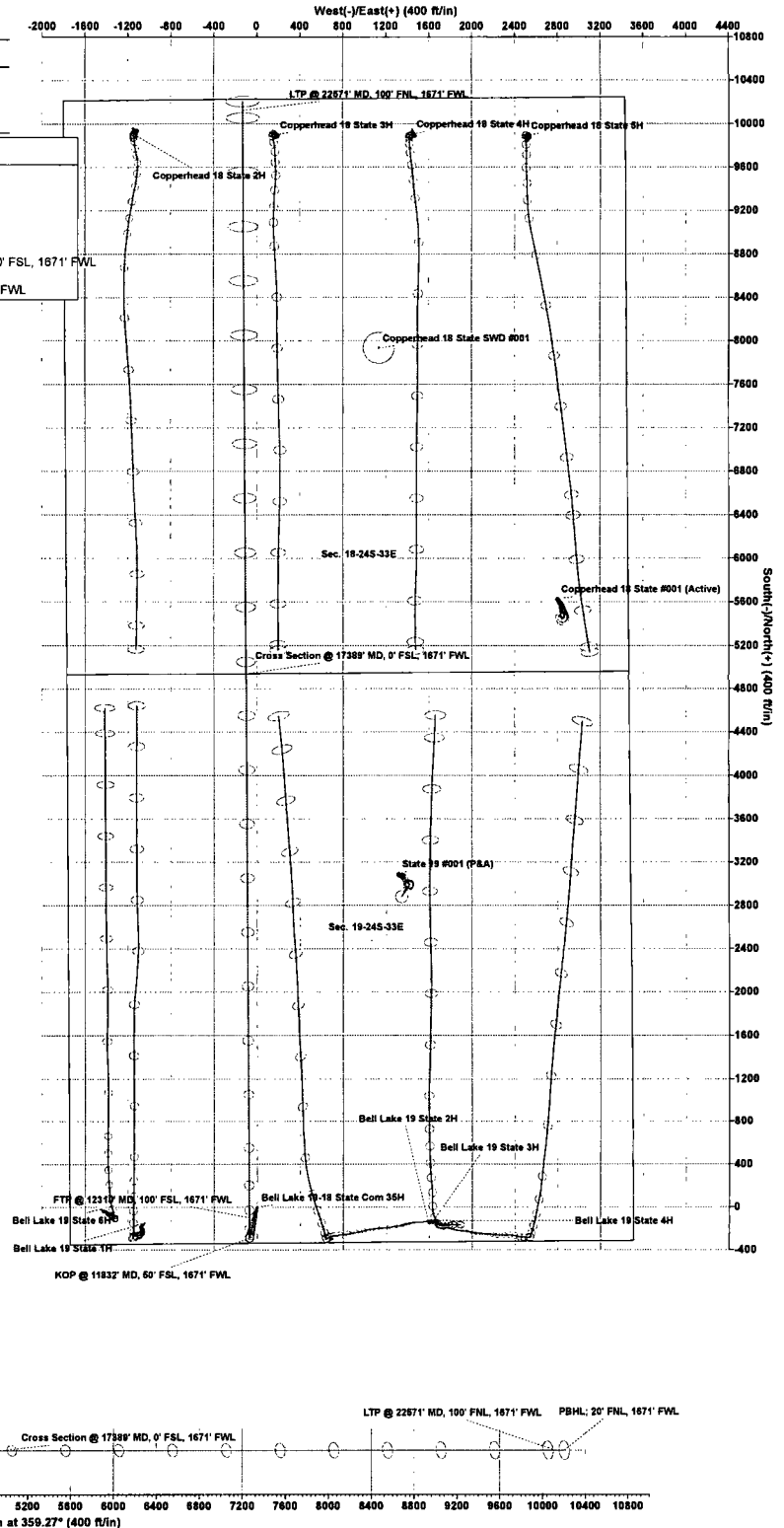
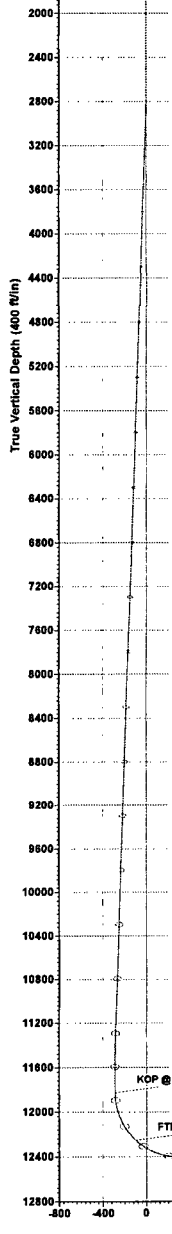
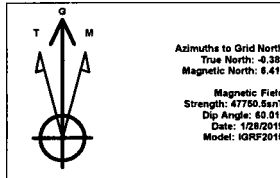
RKB @ 3574.20ft
3549.20

Northing 436089.27 Easting 763786.84 Latitude 32.196842 Longitude -103.614195

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	
	2750.00	0.00	0.00	2750.00	0.00	0.00	0.00	0.00	
	2948.43	1.98	193.85	2948.39	-3.34	-0.82	1.00	-3.32	
	11349.82	1.98	193.85	11344.74	-285.78	-70.45	0.00	-284.85	
5	11482.10	0.00	0.00	11477.00	-288.00	-71.00	1.50	-287.07	
6	11832.14	0.00	0.00	11827.04	-288.00	-71.00	0.00	-287.07	KOP @ 11832' MD, 50' FSL, 1671' FWL
7	12732.15	90.00	359.68	12400.00	284.95	-74.25	10.00	285.86	
8	22650.76	90.00	359.68	12400.00	10203.40	-130.45	0.00	10204.23	PBHL: 20' FNL, 1671' FWL

devon



South(-)/North(+) (400 ft/in)

Vertical Section at 359.27° (400 ft/in)

WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 19-T24S-R33E

Bell Lake 19-18 State Com 35H

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 35H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3574.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3574.20ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 35H	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 35H		
Well Position	+N/-S	0.00 ft	Northing: 436,089.27 usft
	+E/-W	0.00 ft	Easting: 763,786.84 usft
Position Uncertainty	0.50 ft	Wellhead Elevation:	Ground Level: 3,549.20 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	1/28/2019	6.80
			Dip Angle (°) 60.01
			Field Strength (nT) 47,750.46317809

Design	Permit Plan 1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)
	0.00	0.00	0.00
			Direction (°) 359.27

Plan Survey Tool Program	Date	1/29/2019		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	22,650.61 Permit Plan 1 (Wellbore #1)	MWD+HDGM	OWSG MWD + HDGM

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
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	
2,948.43	1.98	193.85	2,948.39	-3.34	-0.82	1.00	1.00	0.00	193.85	
11,349.82	1.98	193.85	11,344.74	-285.78	-70.45	0.00	0.00	0.00	0.00	
11,482.10	0.00	0.00	11,477.00	-288.00	-71.00	1.50	-1.50	0.00	180.00	
11,832.14	0.00	0.00	11,827.04	-288.00	-71.00	0.00	0.00	0.00	0.00	
12,732.15	90.00	359.68	12,400.00	284.95	-74.25	10.00	10.00	0.00	359.68	PBHL - Bell Lake 19-1
22,650.76	90.00	359.68	12,400.00	10,203.40	-130.45	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 35H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3574.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3574.20ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 35H	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	436,089.27	763,786.84	32.196842	-103.614195
100.00	0.00	0.00	100.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
200.00	0.00	0.00	200.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
300.00	0.00	0.00	300.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
400.00	0.00	0.00	400.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
500.00	0.00	0.00	500.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
600.00	0.00	0.00	600.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
700.00	0.00	0.00	700.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
800.00	0.00	0.00	800.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
900.00	0.00	0.00	900.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
1,000.00	0.00	0.00	1,000.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
1,100.00	0.00	0.00	1,100.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
1,200.00	0.00	0.00	1,200.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
1,300.00	0.00	0.00	1,300.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
1,400.00	0.00	0.00	1,400.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
1,500.00	0.00	0.00	1,500.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
1,600.00	0.00	0.00	1,600.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
1,700.00	0.00	0.00	1,700.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
1,800.00	0.00	0.00	1,800.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
1,900.00	0.00	0.00	1,900.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
2,000.00	0.00	0.00	2,000.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
2,100.00	0.00	0.00	2,100.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
2,200.00	0.00	0.00	2,200.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
2,300.00	0.00	0.00	2,300.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
2,400.00	0.00	0.00	2,400.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
2,500.00	0.00	0.00	2,500.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
2,600.00	0.00	0.00	2,600.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
2,700.00	0.00	0.00	2,700.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
2,750.00	0.00	0.00	2,750.00	0.00	0.00	436,089.27	763,786.84	32.196842	-103.614195
2,800.00	0.50	193.85	2,800.00	-0.21	-0.05	436,089.06	763,786.78	32.196841	-103.614195
2,900.00	1.50	193.85	2,899.98	-1.91	-0.47	436,087.36	763,786.37	32.196837	-103.614197
2,948.43	1.98	193.85	2,948.39	-3.34	-0.82	436,085.93	763,786.01	32.196833	-103.614198
3,000.00	1.98	193.85	2,999.93	-5.07	-1.25	436,084.20	763,785.59	32.196828	-103.614199
3,100.00	1.98	193.85	3,099.87	-8.43	-2.08	436,080.84	763,784.76	32.196819	-103.614202
3,200.00	1.98	193.85	3,199.81	-11.79	-2.91	436,077.48	763,783.93	32.196810	-103.614205
3,300.00	1.98	193.85	3,299.75	-15.16	-3.74	436,074.11	763,783.10	32.196800	-103.614207
3,400.00	1.98	193.85	3,399.69	-18.52	-4.56	436,070.75	763,782.27	32.196791	-103.614210
3,500.00	1.98	193.85	3,499.63	-21.88	-5.39	436,067.39	763,781.44	32.196782	-103.614213
3,600.00	1.98	193.85	3,599.57	-25.24	-6.22	436,064.03	763,780.61	32.196773	-103.614216
3,700.00	1.98	193.85	3,699.51	-28.60	-7.05	436,060.67	763,779.79	32.196763	-103.614218
3,800.00	1.98	193.85	3,799.45	-31.96	-7.88	436,057.31	763,778.96	32.196754	-103.614221
3,900.00	1.98	193.85	3,899.39	-35.33	-8.71	436,053.94	763,778.13	32.196745	-103.614224
4,000.00	1.98	193.85	3,999.33	-38.69	-9.54	436,050.58	763,777.30	32.196736	-103.614227
4,100.00	1.98	193.85	4,099.27	-42.05	-10.37	436,047.22	763,776.47	32.196726	-103.614229
4,200.00	1.98	193.85	4,199.21	-45.41	-11.20	436,043.86	763,775.64	32.196717	-103.614232
4,300.00	1.98	193.85	4,299.15	-48.77	-12.02	436,040.50	763,774.81	32.196708	-103.614235
4,400.00	1.98	193.85	4,399.09	-52.14	-12.85	436,037.13	763,773.98	32.196699	-103.614238
4,500.00	1.98	193.85	4,499.03	-55.50	-13.68	436,033.77	763,773.16	32.196690	-103.614240
4,600.00	1.98	193.85	4,598.97	-58.86	-14.51	436,030.41	763,772.33	32.196680	-103.614243
4,700.00	1.98	193.85	4,698.91	-62.22	-15.34	436,027.05	763,771.50	32.196671	-103.614246
4,800.00	1.98	193.85	4,798.85	-65.58	-16.17	436,023.69	763,770.67	32.196662	-103.614249
4,900.00	1.98	193.85	4,898.79	-68.94	-17.00	436,020.33	763,769.84	32.196653	-103.614251
5,000.00	1.98	193.85	4,998.73	-72.31	-17.83	436,016.96	763,769.01	32.196643	-103.614254
5,100.00	1.98	193.85	5,098.67	-75.67	-18.65	436,013.60	763,768.18	32.196634	-103.614257
5,200.00	1.98	193.85	5,198.61	-79.03	-19.48	436,010.24	763,767.35	32.196625	-103.614260

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 35H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3574.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3574.20ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 35H	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	1.98	193.85	5,298.55	-82.39	-20.31	436,006.88	763,766.53	32.196616	-103.614262
5,400.00	1.98	193.85	5,398.49	-85.75	-21.14	436,003.52	763,765.70	32.196607	-103.614265
5,500.00	1.98	193.85	5,498.43	-89.12	-21.97	436,000.15	763,764.87	32.196597	-103.614268
5,600.00	1.98	193.85	5,598.37	-92.48	-22.80	435,996.79	763,764.04	32.196588	-103.614271
5,700.00	1.98	193.85	5,698.31	-95.84	-23.63	435,993.43	763,763.21	32.196579	-103.614273
5,800.00	1.98	193.85	5,798.25	-99.20	-24.46	435,990.07	763,762.38	32.196570	-103.614276
5,900.00	1.98	193.85	5,898.19	-102.56	-25.28	435,986.71	763,761.55	32.196560	-103.614279
6,000.00	1.98	193.85	5,998.13	-105.92	-26.11	435,983.35	763,760.72	32.196551	-103.614282
6,100.00	1.98	193.85	6,098.07	-109.29	-26.94	435,979.98	763,759.90	32.196542	-103.614284
6,200.00	1.98	193.85	6,198.01	-112.65	-27.77	435,976.62	763,759.07	32.196533	-103.614287
6,300.00	1.98	193.85	6,297.95	-116.01	-28.60	435,973.26	763,758.24	32.196524	-103.614290
6,400.00	1.98	193.85	6,397.89	-119.37	-29.43	435,969.90	763,757.41	32.196514	-103.614293
6,500.00	1.98	193.85	6,497.83	-122.73	-30.26	435,966.54	763,756.58	32.196505	-103.614296
6,600.00	1.98	193.85	6,597.77	-126.10	-31.09	435,963.17	763,755.75	32.196496	-103.614298
6,700.00	1.98	193.85	6,697.71	-129.46	-31.91	435,959.81	763,754.92	32.196487	-103.614301
6,800.00	1.98	193.85	6,797.65	-132.82	-32.74	435,956.45	763,754.09	32.196477	-103.614304
6,900.00	1.98	193.85	6,897.59	-136.18	-33.57	435,953.09	763,753.26	32.196468	-103.614307
7,000.00	1.98	193.85	6,997.53	-139.54	-34.40	435,949.73	763,752.44	32.196459	-103.614309
7,100.00	1.98	193.85	7,097.47	-142.90	-35.23	435,946.37	763,751.61	32.196450	-103.614312
7,200.00	1.98	193.85	7,197.41	-146.27	-36.06	435,943.00	763,750.78	32.196441	-103.614315
7,300.00	1.98	193.85	7,297.35	-149.63	-36.89	435,939.64	763,749.95	32.196431	-103.614318
7,400.00	1.98	193.85	7,397.29	-152.99	-37.72	435,936.28	763,749.12	32.196422	-103.614320
7,500.00	1.98	193.85	7,497.23	-156.35	-38.55	435,932.92	763,748.29	32.196413	-103.614323
7,600.00	1.98	193.85	7,597.17	-159.71	-39.37	435,929.56	763,747.46	32.196404	-103.614326
7,700.00	1.98	193.85	7,697.11	-163.08	-40.20	435,926.19	763,746.63	32.196394	-103.614329
7,800.00	1.98	193.85	7,797.05	-166.44	-41.03	435,922.83	763,745.81	32.196385	-103.614331
7,900.00	1.98	193.85	7,896.99	-169.80	-41.86	435,919.47	763,744.98	32.196376	-103.614334
8,000.00	1.98	193.85	7,996.93	-173.16	-42.69	435,916.11	763,744.15	32.196367	-103.614337
8,100.00	1.98	193.85	8,096.87	-176.52	-43.52	435,912.75	763,743.32	32.196357	-103.614340
8,200.00	1.98	193.85	8,196.81	-179.88	-44.35	435,909.39	763,742.49	32.196348	-103.614342
8,300.00	1.98	193.85	8,296.75	-183.25	-45.18	435,906.02	763,741.66	32.196339	-103.614345
8,400.00	1.98	193.85	8,396.69	-186.61	-46.00	435,902.66	763,740.83	32.196330	-103.614348
8,500.00	1.98	193.85	8,496.63	-189.97	-46.83	435,899.30	763,740.00	32.196321	-103.614351
8,600.00	1.98	193.85	8,596.57	-193.33	-47.66	435,895.94	763,739.18	32.196311	-103.614353
8,700.00	1.98	193.85	8,696.51	-196.69	-48.49	435,892.58	763,738.35	32.196302	-103.614356
8,800.00	1.98	193.85	8,796.45	-200.06	-49.32	435,889.21	763,737.52	32.196293	-103.614359
8,900.00	1.98	193.85	8,896.39	-203.42	-50.15	435,885.85	763,736.69	32.196284	-103.614362
9,000.00	1.98	193.85	8,996.33	-206.78	-50.98	435,882.49	763,735.86	32.196274	-103.614364
9,100.00	1.98	193.85	9,096.27	-210.14	-51.81	435,879.13	763,735.03	32.196265	-103.614367
9,200.00	1.98	193.85	9,196.21	-213.50	-52.63	435,875.77	763,734.20	32.196256	-103.614370
9,300.00	1.98	193.85	9,296.15	-216.86	-53.46	435,872.41	763,733.37	32.196247	-103.614373
9,400.00	1.98	193.85	9,396.09	-220.23	-54.29	435,869.04	763,732.55	32.196238	-103.614375
9,500.00	1.98	193.85	9,496.03	-223.59	-55.12	435,865.68	763,731.72	32.196228	-103.614378
9,600.00	1.98	193.85	9,595.97	-226.95	-55.95	435,862.32	763,730.89	32.196219	-103.614381
9,700.00	1.98	193.85	9,695.91	-230.31	-56.78	435,858.96	763,730.06	32.196210	-103.614384
9,800.00	1.98	193.85	9,795.85	-233.67	-57.61	435,855.60	763,729.23	32.196201	-103.614386
9,900.00	1.98	193.85	9,895.79	-237.04	-58.44	435,852.23	763,728.40	32.196191	-103.614389
10,000.00	1.98	193.85	9,995.73	-240.40	-59.26	435,848.87	763,727.57	32.196182	-103.614392
10,100.00	1.98	193.85	10,095.67	-243.76	-60.09	435,845.51	763,726.74	32.196173	-103.614395
10,200.00	1.98	193.85	10,195.61	-247.12	-60.92	435,842.15	763,725.91	32.196164	-103.614397
10,300.00	1.98	193.85	10,295.55	-250.48	-61.75	435,838.79	763,725.09	32.196155	-103.614400
10,400.00	1.98	193.85	10,395.49	-253.84	-62.58	435,835.43	763,724.26	32.196145	-103.614403
10,500.00	1.98	193.85	10,495.43	-257.21	-63.41	435,832.06	763,723.43	32.196136	-103.614406
10,600.00	1.98	193.85	10,595.37	-260.57	-64.24	435,828.70	763,722.60	32.196127	-103.614408
10,700.00	1.98	193.85	10,695.31	-263.93	-65.07	435,825.34	763,721.77	32.196118	-103.614411

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 35H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3574.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3574.20ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 35H	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	1.98	193.85	10,795.25	-267.29	-65.89	435,821.98	763,720.94	32.196108	-103.614414
10,900.00	1.98	193.85	10,895.19	-270.65	-66.72	435,818.62	763,720.11	32.196099	-103.614417
11,000.00	1.98	193.85	10,995.13	-274.02	-67.55	435,815.25	763,719.28	32.196090	-103.614419
11,100.00	1.98	193.85	11,095.07	-277.38	-68.38	435,811.89	763,718.46	32.196081	-103.614422
11,200.00	1.98	193.85	11,195.01	-280.74	-69.21	435,808.53	763,717.63	32.196071	-103.614425
11,300.00	1.98	193.85	11,294.95	-284.10	-70.04	435,805.17	763,716.80	32.196062	-103.614428
11,349.82	1.98	193.85	11,344.74	-285.78	-70.45	435,803.49	763,716.39	32.196058	-103.614429
11,400.00	1.23	193.85	11,394.90	-287.14	-70.79	435,802.13	763,716.05	32.196054	-103.614430
11,482.10	0.00	0.00	11,477.00	-288.00	-71.00	435,801.27	763,715.84	32.196052	-103.614431
11,500.00	0.00	0.00	11,494.90	-288.00	-71.00	435,801.27	763,715.84	32.196052	-103.614431
11,600.00	0.00	0.00	11,594.90	-288.00	-71.00	435,801.27	763,715.84	32.196052	-103.614431
11,700.00	0.00	0.00	11,694.90	-288.00	-71.00	435,801.27	763,715.84	32.196052	-103.614431
11,800.00	0.00	0.00	11,794.90	-288.00	-71.00	435,801.27	763,715.84	32.196052	-103.614431
11,832.14	0.00	0.00	11,827.04	-288.00	-71.00	435,801.27	763,715.84	32.196052	-103.614431
KOP @ 11832' MD, 50' FSL, 1671' FWL									
11,900.00	6.79	359.68	11,894.74	-283.99	-71.02	435,805.28	763,715.81	32.196063	-103.614431
12,000.00	16.79	359.68	11,992.51	-263.59	-71.14	435,825.68	763,715.70	32.196119	-103.614431
12,100.00	26.79	359.68	12,085.25	-226.52	-71.35	435,862.75	763,715.49	32.196221	-103.614431
12,200.00	36.79	359.68	12,170.14	-173.92	-71.65	435,915.35	763,715.19	32.196365	-103.614430
12,300.00	46.79	359.68	12,244.61	-107.37	-72.02	435,981.90	763,714.81	32.196548	-103.614430
12,310.03	47.79	359.68	12,251.41	-100.00	-72.07	435,989.27	763,714.77	32.196568	-103.614430
FTP @ 12310' MD, 100' FSL, 1671' FWL									
12,400.00	56.79	359.68	12,306.39	-28.90	-72.47	436,060.37	763,714.37	32.196764	-103.614430
12,500.00	66.79	359.68	12,353.61	59.11	-72.97	436,148.38	763,713.87	32.197006	-103.614430
12,600.00	76.79	359.68	12,384.83	153.97	-73.50	436,243.24	763,713.33	32.197266	-103.614429
12,700.00	86.79	359.68	12,399.10	252.82	-74.06	436,342.09	763,712.77	32.197538	-103.614429
12,732.15	90.00	359.68	12,400.00	284.95	-74.25	436,374.22	763,712.59	32.197626	-103.614429
12,800.00	90.00	359.68	12,400.00	352.80	-74.63	436,442.07	763,712.21	32.197813	-103.614429
12,900.00	90.00	359.68	12,400.00	452.80	-75.20	436,542.07	763,711.64	32.198088	-103.614428
13,000.00	90.00	359.68	12,400.00	552.80	-75.76	436,642.07	763,711.07	32.198363	-103.614428
13,100.00	90.00	359.68	12,400.00	652.80	-76.33	436,742.07	763,710.51	32.198638	-103.614428
13,200.00	90.00	359.68	12,400.00	752.80	-76.90	436,842.06	763,709.94	32.198913	-103.614427
13,300.00	90.00	359.68	12,400.00	852.80	-77.46	436,942.06	763,709.37	32.199187	-103.614427
13,400.00	90.00	359.68	12,400.00	952.79	-78.03	437,042.06	763,708.81	32.199462	-103.614427
13,500.00	90.00	359.68	12,400.00	1,052.79	-78.60	437,142.06	763,708.24	32.199737	-103.614426
13,600.00	90.00	359.68	12,400.00	1,152.79	-79.16	437,242.06	763,707.67	32.200012	-103.614426
13,700.00	90.00	359.68	12,400.00	1,252.79	-79.73	437,342.06	763,707.11	32.200287	-103.614426
13,800.00	90.00	359.68	12,400.00	1,352.79	-80.30	437,442.05	763,706.54	32.200562	-103.614425
13,900.00	90.00	359.68	12,400.00	1,452.79	-80.86	437,542.05	763,705.97	32.200837	-103.614425
14,000.00	90.00	359.68	12,400.00	1,552.78	-81.43	437,642.05	763,705.41	32.201112	-103.614425
14,100.00	90.00	359.68	12,400.00	1,652.78	-82.00	437,742.05	763,704.84	32.201386	-103.614424
14,200.00	90.00	359.68	12,400.00	1,752.78	-82.56	437,842.05	763,704.27	32.201661	-103.614424
14,300.00	90.00	359.68	12,400.00	1,852.78	-83.13	437,942.05	763,703.71	32.201936	-103.614424
14,400.00	90.00	359.68	12,400.00	1,952.78	-83.70	438,042.04	763,703.14	32.202211	-103.614423
14,500.00	90.00	359.68	12,400.00	2,052.78	-84.26	438,142.04	763,702.57	32.202486	-103.614423
14,600.00	90.00	359.68	12,400.00	2,152.77	-84.83	438,242.04	763,702.01	32.202761	-103.614423
14,700.00	90.00	359.68	12,400.00	2,252.77	-85.40	438,342.04	763,701.44	32.203036	-103.614422
14,800.00	90.00	359.68	12,400.00	2,352.77	-85.96	438,442.04	763,700.87	32.203311	-103.614422
14,900.00	90.00	359.68	12,400.00	2,452.77	-86.53	438,542.03	763,700.31	32.203585	-103.614422
15,000.00	90.00	359.68	12,400.00	2,552.77	-87.10	438,642.03	763,699.74	32.203860	-103.614421
15,100.00	90.00	359.68	12,400.00	2,652.77	-87.66	438,742.03	763,699.17	32.204135	-103.614421
15,200.00	90.00	359.68	12,400.00	2,752.76	-88.23	438,842.03	763,698.61	32.204410	-103.614421
15,300.00	90.00	359.68	12,400.00	2,852.76	-88.80	438,942.03	763,698.04	32.204685	-103.614420
15,400.00	90.00	359.68	12,400.00	2,952.76	-89.36	439,042.03	763,697.47	32.204960	-103.614420

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 35H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3574.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3574.20ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 35H	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	359.68	12,400.00	3,052.76	-89.93	439,142.02	763,696.91	32.205235	-103.614420
15,600.00	90.00	359.68	12,400.00	3,152.76	-90.50	439,242.02	763,696.34	32.205510	-103.614419
15,700.00	90.00	359.68	12,400.00	3,252.76	-91.06	439,342.02	763,695.77	32.205784	-103.614419
15,800.00	90.00	359.68	12,400.00	3,352.76	-91.63	439,442.02	763,695.21	32.206059	-103.614419
15,900.00	90.00	359.68	12,400.00	3,452.75	-92.20	439,542.02	763,694.64	32.206334	-103.614418
16,000.00	90.00	359.68	12,400.00	3,552.75	-92.76	439,642.01	763,694.07	32.206609	-103.614418
16,100.00	90.00	359.68	12,400.00	3,652.75	-93.33	439,742.01	763,693.51	32.206884	-103.614418
16,200.00	90.00	359.68	12,400.00	3,752.75	-93.90	439,842.01	763,692.94	32.207159	-103.614417
16,300.00	90.00	359.68	12,400.00	3,852.75	-94.46	439,942.01	763,692.37	32.207434	-103.614417
16,400.00	90.00	359.68	12,400.00	3,952.75	-95.03	440,042.01	763,691.81	32.207709	-103.614417
16,500.00	90.00	359.68	12,400.00	4,052.74	-95.60	440,142.01	763,691.24	32.207983	-103.614416
16,600.00	90.00	359.68	12,400.00	4,152.74	-96.16	440,242.00	763,690.67	32.208258	-103.614416
16,700.00	90.00	359.68	12,400.00	4,252.74	-96.73	440,342.00	763,690.11	32.208533	-103.614416
16,800.00	90.00	359.68	12,400.00	4,352.74	-97.30	440,442.00	763,689.54	32.208808	-103.614415
16,900.00	90.00	359.68	12,400.00	4,452.74	-97.86	440,542.00	763,688.97	32.209083	-103.614415
17,000.00	90.00	359.68	12,400.00	4,552.74	-98.43	440,642.00	763,688.41	32.209358	-103.614415
17,100.00	90.00	359.68	12,400.00	4,652.73	-99.00	440,741.99	763,687.84	32.209633	-103.614414
17,200.00	90.00	359.68	12,400.00	4,752.73	-99.56	440,841.99	763,687.27	32.209908	-103.614414
17,300.00	90.00	359.68	12,400.00	4,852.73	-100.13	440,941.99	763,686.71	32.210182	-103.614414
17,389.27	90.00	359.68	12,400.00	4,942.00	-100.64	441,031.26	763,686.20	32.210428	-103.614414
Cross Section @ 17389' MD, 0' FSL, 1671' FWL									
17,400.00	90.00	359.68	12,400.00	4,952.73	-100.70	441,041.99	763,686.14	32.210457	-103.614413
17,500.00	90.00	359.68	12,400.00	5,052.73	-101.26	441,141.99	763,685.57	32.210732	-103.614413
17,600.00	90.00	359.68	12,400.00	5,152.73	-101.83	441,241.99	763,685.01	32.211007	-103.614413
17,700.00	90.00	359.68	12,400.00	5,252.72	-102.40	441,341.98	763,684.44	32.211282	-103.614413
17,800.00	90.00	359.68	12,400.00	5,352.72	-102.96	441,441.98	763,683.87	32.211557	-103.614412
17,900.00	90.00	359.68	12,400.00	5,452.72	-103.53	441,541.98	763,683.31	32.211832	-103.614412
18,000.00	90.00	359.68	12,400.00	5,552.72	-104.10	441,641.98	763,682.74	32.212107	-103.614412
18,100.00	90.00	359.68	12,400.00	5,652.72	-104.66	441,741.98	763,682.17	32.212381	-103.614411
18,200.00	90.00	359.68	12,400.00	5,752.72	-105.23	441,841.97	763,681.61	32.212656	-103.614411
18,300.00	90.00	359.68	12,400.00	5,852.71	-105.80	441,941.97	763,681.04	32.212931	-103.614411
18,400.00	90.00	359.68	12,400.00	5,952.71	-106.36	442,041.97	763,680.47	32.213206	-103.614410
18,500.00	90.00	359.68	12,400.00	6,052.71	-106.93	442,141.97	763,679.91	32.213481	-103.614410
18,600.00	90.00	359.68	12,400.00	6,152.71	-107.50	442,241.97	763,679.34	32.213756	-103.614410
18,700.00	90.00	359.68	12,400.00	6,252.71	-108.06	442,341.97	763,678.77	32.214031	-103.614409
18,800.00	90.00	359.68	12,400.00	6,352.71	-108.63	442,441.96	763,678.21	32.214306	-103.614409
18,900.00	90.00	359.68	12,400.00	6,452.71	-109.20	442,541.96	763,677.64	32.214580	-103.614409
19,000.00	90.00	359.68	12,400.00	6,552.70	-109.76	442,641.96	763,677.07	32.214855	-103.614408
19,100.00	90.00	359.68	12,400.00	6,652.70	-110.33	442,741.96	763,676.51	32.215130	-103.614408
19,200.00	90.00	359.68	12,400.00	6,752.70	-110.90	442,841.96	763,675.94	32.215405	-103.614408
19,300.00	90.00	359.68	12,400.00	6,852.70	-111.46	442,941.95	763,675.37	32.215680	-103.614407
19,400.00	90.00	359.68	12,400.00	6,952.70	-112.03	443,041.95	763,674.81	32.215955	-103.614407
19,500.00	90.00	359.68	12,400.00	7,052.70	-112.60	443,141.95	763,674.24	32.216230	-103.614407
19,600.00	90.00	359.68	12,400.00	7,152.69	-113.16	443,241.95	763,673.67	32.216505	-103.614406
19,700.00	90.00	359.68	12,400.00	7,252.69	-113.73	443,341.95	763,673.11	32.216779	-103.614406
19,800.00	90.00	359.68	12,400.00	7,352.69	-114.30	443,441.95	763,672.54	32.217054	-103.614406
19,900.00	90.00	359.68	12,400.00	7,452.69	-114.86	443,541.94	763,671.97	32.217329	-103.614405
20,000.00	90.00	359.68	12,400.00	7,552.69	-115.43	443,641.94	763,671.41	32.217604	-103.614405
20,100.00	90.00	359.68	12,400.00	7,652.69	-116.00	443,741.94	763,670.84	32.217879	-103.614405
20,200.00	90.00	359.68	12,400.00	7,752.68	-116.56	443,841.94	763,670.27	32.218154	-103.614404
20,300.00	90.00	359.68	12,400.00	7,852.68	-117.13	443,941.94	763,669.71	32.218429	-103.614404
20,400.00	90.00	359.68	12,400.00	7,952.68	-117.70	444,041.94	763,669.14	32.218704	-103.614404
20,500.00	90.00	359.68	12,400.00	8,052.68	-118.26	444,141.93	763,668.57	32.218978	-103.614403
20,600.00	90.00	359.68	12,400.00	8,152.68	-118.83	444,241.93	763,668.01	32.219253	-103.614403

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 35H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3574.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3574.20ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 35H	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
20,700.00	90.00	359.68	12,400.00	8,252.68	-119.40	444,341.93	763,667.44	32.219528	-103.614403
20,800.00	90.00	359.68	12,400.00	8,352.67	-119.96	444,441.93	763,666.87	32.219803	-103.614402
20,900.00	90.00	359.68	12,400.00	8,452.67	-120.53	444,541.93	763,666.31	32.220078	-103.614402
21,000.00	90.00	359.68	12,400.00	8,552.67	-121.10	444,641.92	763,665.74	32.220353	-103.614402
21,100.00	90.00	359.68	12,400.00	8,652.67	-121.66	444,741.92	763,665.17	32.220628	-103.614401
21,200.00	90.00	359.68	12,400.00	8,752.67	-122.23	444,841.92	763,664.61	32.220903	-103.614401
21,300.00	90.00	359.68	12,400.00	8,852.67	-122.80	444,941.92	763,664.04	32.221177	-103.614401
21,400.00	90.00	359.68	12,400.00	8,952.67	-123.36	445,041.92	763,663.47	32.221452	-103.614400
21,500.00	90.00	359.68	12,400.00	9,052.66	-123.93	445,141.92	763,662.91	32.221727	-103.614400
21,600.00	90.00	359.68	12,400.00	9,152.66	-124.50	445,241.91	763,662.34	32.222002	-103.614400
21,700.00	90.00	359.68	12,400.00	9,252.66	-125.06	445,341.91	763,661.77	32.222277	-103.614399
21,800.00	90.00	359.68	12,400.00	9,352.66	-125.63	445,441.91	763,661.21	32.222552	-103.614399
21,900.00	90.00	359.68	12,400.00	9,452.66	-126.20	445,541.91	763,660.64	32.222827	-103.614399
22,000.00	90.00	359.68	12,400.00	9,552.66	-126.76	445,641.91	763,660.07	32.223102	-103.614398
22,100.00	90.00	359.68	12,400.00	9,652.65	-127.33	445,741.90	763,659.51	32.223376	-103.614398
22,200.00	90.00	359.68	12,400.00	9,752.65	-127.90	445,841.90	763,658.94	32.223651	-103.614398
22,300.00	90.00	359.68	12,400.00	9,852.65	-128.46	445,941.90	763,658.37	32.223926	-103.614397
22,400.00	90.00	359.68	12,400.00	9,952.65	-129.03	446,041.90	763,657.81	32.224201	-103.614397
22,500.00	90.00	359.68	12,400.00	10,052.65	-129.60	446,141.90	763,657.24	32.224476	-103.614397
22,570.75	90.00	359.68	12,400.00	10,123.40	-130.00	446,212.65	763,656.84	32.224670	-103.614396
LTP @ 22571' MD, 100' FNL, 1671' FWL									
22,600.00	90.00	359.68	12,400.00	10,152.65	-130.16	446,241.90	763,656.67	32.224751	-103.614396
22,650.75	90.00	359.68	12,400.00	10,203.40	-130.45	446,292.64	763,656.39	32.224890	-103.614396
PBHL; 20' FNL, 1671' FWL									
22,650.76	90.00	359.68	12,400.00	10,203.40	-130.45	446,292.65	763,656.39	32.224890	-103.614396

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	10,203.40	-130.45	446,292.65	763,656.39	32.224890	-103.614396
- plan misses target center by 10204.23ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
11,832.14	11,827.04	-288.00	-71.00	KOP @ 11832' MD, 50' FSL, 1671' FWL
12,310.03	12,251.41	-100.00	-72.07	FTP @ 12310' MD, 100' FSL, 1671' FWL
17,389.27	12,400.00	4,942.00	-100.64	Cross Section @ 17389' MD, 0' FSL, 1671' FWL
22,570.75	12,400.00	10,123.40	-130.00	LTP @ 22571' MD, 100' FNL, 1671' FWL
22,650.75	12,400.00	10,203.40	-130.45	PBHL; 20' FNL, 1671' FWL