

HOBBS OCD

FEB 18 2019

WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 19-T24S-R33E

Bell Lake 19-18 State Com 13Y

Wellbore #1

Plan: Permit Plan 1

Standard Planning Report - Geographic

18 February, 2019

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 13Y
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3575.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3575.50ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 13Y	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 13Y			
Well Position	+N/-S	0.00 ft	Northing:	436,290.76 usft
	+E/-W	0.00 ft	Easting:	764,010.73 usft
Position Uncertainty		0.50 ft	Wellhead Elevation:	Ground Level: 3,550.50 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2015	12/10/2018	6.81	60.01	47,764.64765101

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	0.93

Plan Survey Tool Program	Date 2/18/2019			
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(ft)	(ft)			
1	0.00	19,633.77 Permit Plan 1 (Wellbore #1)	MWD+IFR1	
			OWSG MWD + IFR1	

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	
5,008.48	6.36	146.82	5,007.44	-23.58	15.42	1.25	1.25	0.00	146.82	
8,189.73	6.36	146.82	8,169.13	-318.35	208.15	0.00	0.00	0.00	0.00	
8,613.47	0.00	0.00	8,592.00	-338.00	221.00	1.50	-1.50	0.00	180.00	
8,963.51	0.00	0.00	8,942.04	-338.00	221.00	0.00	0.00	0.00	0.00	
9,863.51	90.00	359.68	9,515.00	234.95	217.79	10.00	10.00	0.00	359.68	PBHL - Bell Lake 19-1
19,633.77	90.00	359.68	9,515.00	10,005.06	163.14	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 13Y
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3575.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3575.50ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 13Y	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	436,290.76	764,010.73	32.197392	-103.613467	
100.00	0.00	0.00	100.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
200.00	0.00	0.00	200.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
300.00	0.00	0.00	300.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
400.00	0.00	0.00	400.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
500.00	0.00	0.00	500.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
600.00	0.00	0.00	600.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
700.00	0.00	0.00	700.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
800.00	0.00	0.00	800.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
900.00	0.00	0.00	900.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
1,900.00	0.00	0.00	1,900.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
2,100.00	0.00	0.00	2,100.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
2,200.00	0.00	0.00	2,200.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
2,300.00	0.00	0.00	2,300.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
2,400.00	0.00	0.00	2,400.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
2,600.00	0.00	0.00	2,600.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
2,700.00	0.00	0.00	2,700.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
2,800.00	0.00	0.00	2,800.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
2,900.00	0.00	0.00	2,900.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
3,100.00	0.00	0.00	3,100.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
3,200.00	0.00	0.00	3,200.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
3,300.00	0.00	0.00	3,300.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
3,400.00	0.00	0.00	3,400.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
3,500.00	0.00	0.00	3,500.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
3,600.00	0.00	0.00	3,600.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
3,700.00	0.00	0.00	3,700.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
3,800.00	0.00	0.00	3,800.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
3,900.00	0.00	0.00	3,900.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
4,000.00	0.00	0.00	4,000.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
4,100.00	0.00	0.00	4,100.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
4,200.00	0.00	0.00	4,200.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
4,300.00	0.00	0.00	4,300.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
4,400.00	0.00	0.00	4,400.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
4,500.00	0.00	0.00	4,500.00	0.00	0.00	436,290.76	764,010.73	32.197392	-103.613467	
4,600.00	1.25	146.82	4,599.99	-0.91	0.60	436,289.85	764,011.32	32.197389	-103.613465	
4,700.00	2.50	146.82	4,699.94	-3.65	2.39	436,287.11	764,013.11	32.197382	-103.613459	
4,800.00	3.75	146.82	4,799.79	-8.21	5.37	436,282.55	764,016.10	32.197369	-103.613450	
4,900.00	5.00	146.82	4,899.49	-14.60	9.55	436,276.16	764,020.27	32.197351	-103.613436	
5,000.00	6.25	146.82	4,999.01	-22.80	14.91	436,267.96	764,025.64	32.197329	-103.613419	
5,008.48	6.36	146.82	5,007.44	-23.58	15.42	436,267.18	764,026.15	32.197326	-103.613418	
5,100.00	6.36	146.82	5,098.40	-32.06	20.96	436,258.70	764,031.69	32.197303	-103.613400	
5,200.00	6.36	146.82	5,197.78	-41.33	27.02	436,249.43	764,037.75	32.197278	-103.613380	
5,300.00	6.36	146.82	5,297.17	-50.59	33.08	436,240.17	764,043.81	32.197252	-103.613361	

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 13Y
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3575.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3575.50ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 13Y	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	6.36	146.82	5,396.55	-59.86	39.14	436,230.90	764,049.87	32.197226	-103.613342
5,500.00	6.36	146.82	5,495.94	-69.12	45.20	436,221.64	764,055.92	32.197201	-103.613322
5,600.00	6.36	146.82	5,595.32	-78.39	51.26	436,212.37	764,061.98	32.197175	-103.613303
5,700.00	6.36	146.82	5,694.71	-87.66	57.31	436,203.10	764,068.04	32.197150	-103.613284
5,800.00	6.36	146.82	5,794.09	-96.92	63.37	436,193.84	764,074.10	32.197124	-103.613264
5,900.00	6.36	146.82	5,893.48	-106.19	69.43	436,184.57	764,080.16	32.197098	-103.613245
6,000.00	6.36	146.82	5,992.86	-115.45	75.49	436,175.31	764,086.22	32.197073	-103.613225
6,100.00	6.36	146.82	6,092.25	-124.72	81.55	436,166.04	764,092.27	32.197047	-103.613206
6,200.00	6.36	146.82	6,191.63	-133.98	87.61	436,156.78	764,098.33	32.197022	-103.613187
6,300.00	6.36	146.82	6,291.02	-143.25	93.66	436,147.51	764,104.39	32.196996	-103.613167
6,400.00	6.36	146.82	6,390.40	-152.52	99.72	436,138.24	764,110.45	32.196971	-103.613148
6,500.00	6.36	146.82	6,489.79	-161.78	105.78	436,128.98	764,116.51	32.196945	-103.613128
6,600.00	6.36	146.82	6,589.18	-171.05	111.84	436,119.71	764,122.57	32.196919	-103.613109
6,700.00	6.36	146.82	6,688.56	-180.31	117.90	436,110.45	764,128.62	32.196894	-103.613090
6,800.00	6.36	146.82	6,787.95	-189.58	123.96	436,101.18	764,134.68	32.196868	-103.613070
6,900.00	6.36	146.82	6,887.33	-198.85	130.01	436,091.91	764,140.74	32.196843	-103.613051
7,000.00	6.36	146.82	6,986.72	-208.11	136.07	436,082.65	764,146.80	32.196817	-103.613032
7,100.00	6.36	146.82	7,086.10	-217.38	142.13	436,073.38	764,152.86	32.196791	-103.613012
7,200.00	6.36	146.82	7,185.49	-226.64	148.19	436,064.12	764,158.92	32.196766	-103.612993
7,300.00	6.36	146.82	7,284.87	-235.91	154.25	436,054.85	764,164.97	32.196740	-103.612973
7,400.00	6.36	146.82	7,384.26	-245.17	160.31	436,045.59	764,171.03	32.196715	-103.612954
7,500.00	6.36	146.82	7,483.64	-254.44	166.36	436,036.32	764,177.09	32.196689	-103.612935
7,600.00	6.36	146.82	7,583.03	-263.71	172.42	436,027.05	764,183.15	32.196664	-103.612915
7,700.00	6.36	146.82	7,682.41	-272.97	178.48	436,017.79	764,189.21	32.196638	-103.612896
7,800.00	6.36	146.82	7,781.80	-282.24	184.54	436,008.52	764,195.27	32.196612	-103.612877
7,900.00	6.36	146.82	7,881.18	-291.50	190.60	435,999.26	764,201.32	32.196587	-103.612857
8,000.00	6.36	146.82	7,980.57	-300.77	196.66	435,989.99	764,207.38	32.196561	-103.612838
8,100.00	6.36	146.82	8,079.95	-310.03	202.71	435,980.73	764,213.44	32.196536	-103.612818
8,189.73	6.36	146.82	8,169.13	-318.35	208.15	435,972.41	764,218.88	32.196513	-103.612801
8,200.00	6.20	146.82	8,179.34	-319.29	208.77	435,971.47	764,219.49	32.196510	-103.612799
8,300.00	4.70	146.82	8,278.89	-327.24	213.97	435,963.52	764,224.69	32.196488	-103.612782
8,400.00	3.20	146.82	8,378.65	-333.01	217.74	435,957.75	764,228.46	32.196472	-103.612770
8,500.00	1.70	146.82	8,478.55	-336.59	220.08	435,954.17	764,230.80	32.196462	-103.612763
8,600.00	0.20	146.82	8,578.53	-337.98	220.99	435,952.78	764,231.71	32.196459	-103.612760
8,613.47	0.00	0.00	8,592.00	-338.00	221.00	435,952.76	764,231.73	32.196458	-103.612760
8,700.00	0.00	0.00	8,678.53	-338.00	221.00	435,952.76	764,231.73	32.196458	-103.612760
8,800.00	0.00	0.00	8,778.53	-338.00	221.00	435,952.76	764,231.73	32.196458	-103.612760
8,900.00	0.00	0.00	8,878.53	-338.00	221.00	435,952.76	764,231.73	32.196458	-103.612760
8,963.51	0.00	0.00	8,942.04	-338.00	221.00	435,952.76	764,231.73	32.196458	-103.612760
KOP & FTP @ 8964' MD, 200' FSL, 2188' FWL									
9,000.00	3.65	359.68	8,978.51	-336.84	220.99	435,953.92	764,231.72	32.196462	-103.612760
9,100.00	13.65	359.68	9,077.25	-321.82	220.91	435,968.94	764,231.64	32.196503	-103.612760
9,200.00	23.65	359.68	9,171.88	-289.88	220.73	436,000.88	764,231.46	32.196591	-103.612760
9,300.00	33.65	359.68	9,259.52	-242.00	220.46	436,048.76	764,231.19	32.196722	-103.612760
9,400.00	43.65	359.68	9,337.52	-179.62	220.11	436,111.14	764,230.84	32.196894	-103.612759
9,500.00	53.65	359.68	9,403.50	-104.65	219.69	436,186.11	764,230.42	32.197100	-103.612759
9,600.00	63.65	359.68	9,455.47	-19.36	219.22	436,271.40	764,229.94	32.197334	-103.612759
9,700.00	73.65	359.68	9,491.83	73.66	218.70	436,364.42	764,229.42	32.197590	-103.612758
9,800.00	83.65	359.68	9,511.48	171.57	218.15	436,462.33	764,228.88	32.197859	-103.612758
9,863.51	90.00	359.68	9,515.00	234.95	217.79	436,525.71	764,228.52	32.198033	-103.612758
9,900.00	90.00	359.68	9,515.00	271.44	217.59	436,562.20	764,228.32	32.198134	-103.612758
10,000.00	90.00	359.68	9,515.00	371.44	217.03	436,662.20	764,227.76	32.198409	-103.612757
10,100.00	90.00	359.68	9,515.00	471.44	216.47	436,762.20	764,227.20	32.198683	-103.612757
10,200.00	90.00	359.68	9,515.00	571.44	215.91	436,862.20	764,226.64	32.198958	-103.612757

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 13Y
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3575.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3575.50ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 13Y	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	359.68	9,515.00	671.44	215.35	436,962.19	764,226.08	32.199233	-103.612756
10,400.00	90.00	359.68	9,515.00	771.43	214.79	437,062.19	764,225.52	32.199508	-103.612756
10,500.00	90.00	359.68	9,515.00	871.43	214.23	437,162.19	764,224.96	32.199783	-103.612756
10,600.00	90.00	359.68	9,515.00	971.43	213.67	437,262.19	764,224.40	32.200058	-103.612755
10,700.00	90.00	359.68	9,515.00	1,071.43	213.12	437,362.19	764,223.84	32.200333	-103.612755
10,800.00	90.00	359.68	9,515.00	1,171.43	212.56	437,462.19	764,223.28	32.200608	-103.612754
10,900.00	90.00	359.68	9,515.00	1,271.43	212.00	437,562.18	764,222.72	32.200882	-103.612754
11,000.00	90.00	359.68	9,515.00	1,371.43	211.44	437,662.18	764,222.16	32.201157	-103.612754
11,100.00	90.00	359.68	9,515.00	1,471.42	210.88	437,762.18	764,221.60	32.201432	-103.612753
11,200.00	90.00	359.68	9,515.00	1,571.42	210.32	437,862.18	764,221.05	32.201707	-103.612753
11,300.00	90.00	359.68	9,515.00	1,671.42	209.76	437,962.18	764,220.49	32.201982	-103.612753
11,400.00	90.00	359.68	9,515.00	1,771.42	209.20	438,062.17	764,219.93	32.202257	-103.612752
11,500.00	90.00	359.68	9,515.00	1,871.42	208.64	438,162.17	764,219.37	32.202532	-103.612752
11,600.00	90.00	359.68	9,515.00	1,971.42	208.08	438,262.17	764,218.81	32.202807	-103.612752
11,700.00	90.00	359.68	9,515.00	2,071.41	207.52	438,362.17	764,218.25	32.203081	-103.612751
11,800.00	90.00	359.68	9,515.00	2,171.41	206.96	438,462.17	764,217.69	32.203356	-103.612751
11,900.00	90.00	359.68	9,515.00	2,271.41	206.40	438,562.17	764,217.13	32.203631	-103.612751
12,000.00	90.00	359.68	9,515.00	2,371.41	205.84	438,662.16	764,216.57	32.203906	-103.612750
12,100.00	90.00	359.68	9,515.00	2,471.41	205.28	438,762.16	764,216.01	32.204181	-103.612750
12,200.00	90.00	359.68	9,515.00	2,571.41	204.72	438,862.16	764,215.45	32.204456	-103.612749
12,300.00	90.00	359.68	9,515.00	2,671.40	204.17	438,962.16	764,214.89	32.204731	-103.612749
12,400.00	90.00	359.68	9,515.00	2,771.40	203.61	439,062.16	764,214.33	32.205006	-103.612749
12,500.00	90.00	359.68	9,515.00	2,871.40	203.05	439,162.16	764,213.77	32.205280	-103.612748
12,600.00	90.00	359.68	9,515.00	2,971.40	202.49	439,262.15	764,213.21	32.205555	-103.612748
12,700.00	90.00	359.68	9,515.00	3,071.40	201.93	439,362.15	764,212.65	32.205830	-103.612748
12,800.00	90.00	359.68	9,515.00	3,171.40	201.37	439,462.15	764,212.09	32.206105	-103.612747
12,900.00	90.00	359.68	9,515.00	3,271.40	200.81	439,562.15	764,211.54	32.206380	-103.612747
13,000.00	90.00	359.68	9,515.00	3,371.39	200.25	439,662.15	764,210.98	32.206655	-103.612747
13,100.00	90.00	359.68	9,515.00	3,471.39	199.69	439,762.14	764,210.42	32.206930	-103.612746
13,200.00	90.00	359.68	9,515.00	3,571.39	199.13	439,862.14	764,209.86	32.207205	-103.612746
13,300.00	90.00	359.68	9,515.00	3,671.39	198.57	439,962.14	764,209.30	32.207479	-103.612745
13,400.00	90.00	359.68	9,515.00	3,771.39	198.01	440,062.14	764,208.74	32.207754	-103.612745
13,500.00	90.00	359.68	9,515.00	3,871.39	197.45	440,162.14	764,208.18	32.208029	-103.612745
13,600.00	90.00	359.68	9,515.00	3,971.38	196.89	440,262.14	764,207.62	32.208304	-103.612744
13,700.00	90.00	359.68	9,515.00	4,071.38	196.33	440,362.13	764,207.06	32.208579	-103.612744
13,800.00	90.00	359.68	9,515.00	4,171.38	195.77	440,462.13	764,206.50	32.208854	-103.612744
13,900.00	90.00	359.68	9,515.00	4,271.38	195.21	440,562.13	764,205.94	32.209129	-103.612743
14,000.00	90.00	359.68	9,515.00	4,371.38	194.66	440,662.13	764,205.38	32.209404	-103.612743
14,100.00	90.00	359.68	9,515.00	4,471.38	194.10	440,762.13	764,204.82	32.209678	-103.612743
14,200.00	90.00	359.68	9,515.00	4,571.38	193.54	440,862.13	764,204.26	32.209953	-103.612742
14,300.00	90.00	359.68	9,515.00	4,671.37	192.98	440,962.12	764,203.70	32.210228	-103.612742
14,371.00	90.00	359.68	9,515.00	4,742.37	192.58	441,033.12	764,203.31	32.210423	-103.612742
Cross Section @ 14371' MD, 0' FSL, 2188' FWL									
14,400.00	90.00	359.68	9,515.00	4,771.37	192.42	441,062.12	764,203.14	32.210503	-103.612742
14,500.00	90.00	359.68	9,515.00	4,871.37	191.86	441,162.12	764,202.59	32.210778	-103.612741
14,600.00	90.00	359.68	9,515.00	4,971.37	191.30	441,262.12	764,202.03	32.211053	-103.612741
14,700.00	90.00	359.68	9,515.00	5,071.37	190.74	441,362.12	764,201.47	32.211328	-103.612740
14,800.00	90.00	359.68	9,515.00	5,171.37	190.18	441,462.12	764,200.91	32.211603	-103.612740
14,900.00	90.00	359.68	9,515.00	5,271.36	189.62	441,562.11	764,200.35	32.211877	-103.612740
15,000.00	90.00	359.68	9,515.00	5,371.36	189.06	441,662.11	764,199.79	32.212152	-103.612739
15,100.00	90.00	359.68	9,515.00	5,471.36	188.50	441,762.11	764,199.23	32.212427	-103.612739
15,200.00	90.00	359.68	9,515.00	5,571.36	187.94	441,862.11	764,198.67	32.212702	-103.612739
15,300.00	90.00	359.68	9,515.00	5,671.36	187.38	441,962.11	764,198.11	32.212977	-103.612738
15,400.00	90.00	359.68	9,515.00	5,771.36	186.82	442,062.10	764,197.55	32.213252	-103.612738

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 13Y
Company:	WCDCS Permian NM	TVD Reference:	RKB @ 3575.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3575.50ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 13Y	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	9,515.00	5,871.35	186.26	442,162.10	764,196.99	32.213527	-103.612738
15,600.00	90.00	359.68	9,515.00	5,971.35	185.71	442,262.10	764,196.43	32.213802	-103.612737
15,700.00	90.00	359.68	9,515.00	6,071.35	185.15	442,362.10	764,195.87	32.214076	-103.612737
15,800.00	90.00	359.68	9,515.00	6,171.35	184.59	442,462.10	764,195.31	32.214351	-103.612737
15,900.00	90.00	359.68	9,515.00	6,271.35	184.03	442,562.10	764,194.75	32.214626	-103.612736
16,000.00	90.00	359.68	9,515.00	6,371.35	183.47	442,662.09	764,194.19	32.214901	-103.612736
16,100.00	90.00	359.68	9,515.00	6,471.35	182.91	442,762.09	764,193.63	32.215176	-103.612735
16,200.00	90.00	359.68	9,515.00	6,571.34	182.35	442,862.09	764,193.08	32.215451	-103.612735
16,300.00	90.00	359.68	9,515.00	6,671.34	181.79	442,962.09	764,192.52	32.215726	-103.612735
16,400.00	90.00	359.68	9,515.00	6,771.34	181.23	443,062.09	764,191.96	32.216001	-103.612734
16,500.00	90.00	359.68	9,515.00	6,871.34	180.67	443,162.09	764,191.40	32.216275	-103.612734
16,600.00	90.00	359.68	9,515.00	6,971.34	180.11	443,262.08	764,190.84	32.216550	-103.612734
16,700.00	90.00	359.68	9,515.00	7,071.34	179.55	443,362.08	764,190.28	32.216825	-103.612733
16,800.00	90.00	359.68	9,515.00	7,171.33	178.99	443,462.08	764,189.72	32.217100	-103.612733
16,900.00	90.00	359.68	9,515.00	7,271.33	178.43	443,562.08	764,189.16	32.217375	-103.612733
17,000.00	90.00	359.68	9,515.00	7,371.33	177.87	443,662.08	764,188.60	32.217650	-103.612732
17,100.00	90.00	359.68	9,515.00	7,471.33	177.31	443,762.07	764,188.04	32.217925	-103.612732
17,200.00	90.00	359.68	9,515.00	7,571.33	176.75	443,862.07	764,187.48	32.218200	-103.612731
17,300.00	90.00	359.68	9,515.00	7,671.33	176.20	443,962.07	764,186.92	32.218474	-103.612731
17,400.00	90.00	359.68	9,515.00	7,771.33	175.64	444,062.07	764,186.36	32.218749	-103.612731
17,500.00	90.00	359.68	9,515.00	7,871.32	175.08	444,162.07	764,185.80	32.219024	-103.612730
17,600.00	90.00	359.68	9,515.00	7,971.32	174.52	444,262.07	764,185.24	32.219299	-103.612730
17,700.00	90.00	359.68	9,515.00	8,071.32	173.96	444,362.06	764,184.68	32.219574	-103.612730
17,800.00	90.00	359.68	9,515.00	8,171.32	173.40	444,462.06	764,184.13	32.219849	-103.612729
17,900.00	90.00	359.68	9,515.00	8,271.32	172.84	444,562.06	764,183.57	32.220124	-103.612729
18,000.00	90.00	359.68	9,515.00	8,371.32	172.28	444,662.06	764,183.01	32.220399	-103.612729
18,100.00	90.00	359.68	9,515.00	8,471.31	171.72	444,762.06	764,182.45	32.220673	-103.612728
18,200.00	90.00	359.68	9,515.00	8,571.31	171.16	444,862.06	764,181.89	32.220948	-103.612728
18,300.00	90.00	359.68	9,515.00	8,671.31	170.60	444,962.05	764,181.33	32.221223	-103.612728
18,400.00	90.00	359.68	9,515.00	8,771.31	170.04	445,062.05	764,180.77	32.221498	-103.612727
18,500.00	90.00	359.68	9,515.00	8,871.31	169.48	445,162.05	764,180.21	32.221773	-103.612727
18,600.00	90.00	359.68	9,515.00	8,971.31	168.92	445,262.05	764,179.65	32.222048	-103.612726
18,700.00	90.00	359.68	9,515.00	9,071.30	168.36	445,362.05	764,179.09	32.222323	-103.612726
18,800.00	90.00	359.68	9,515.00	9,171.30	167.80	445,462.04	764,178.53	32.222598	-103.612726
18,900.00	90.00	359.68	9,515.00	9,271.30	167.25	445,562.04	764,177.97	32.222872	-103.612725
19,000.00	90.00	359.68	9,515.00	9,371.30	166.69	445,662.04	764,177.41	32.223147	-103.612725
19,100.00	90.00	359.68	9,515.00	9,471.30	166.13	445,762.04	764,176.85	32.223422	-103.612725
19,200.00	90.00	359.68	9,515.00	9,571.30	165.57	445,862.04	764,176.29	32.223697	-103.612724
19,300.00	90.00	359.68	9,515.00	9,671.30	165.01	445,962.04	764,175.73	32.223972	-103.612724
19,400.00	90.00	359.68	9,515.00	9,771.29	164.45	446,062.03	764,175.17	32.224247	-103.612724
19,500.00	90.00	359.68	9,515.00	9,871.29	163.89	446,162.03	764,174.62	32.224522	-103.612723
19,554.77	90.00	359.68	9,515.00	9,926.06	163.58	446,216.80	764,174.31	32.224672	-103.612723
LTP @ 19555' MD, 100' FNL, 2188' FWL									
19,600.00	90.00	359.68	9,515.00	9,971.29	163.33	446,262.03	764,174.06	32.224797	-103.612723
19,633.77	90.00	359.68	9,515.00	10,005.06	163.14	446,295.80	764,173.87	32.224889	-103.612723
PBHL; 20' FNL, 2188' FWL									

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 13Y
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3575.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3575.50ft
Site:	Sec 19-T24S-R33E	North Reference:	Grid
Well:	Bell Lake 19-18 State Com 13Y	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	10,005.06	163.14	446,295.80	764,173.87	32.224889	-103.612723
- plan misses target center by 9515.00ft at 19633.77ft MD (9515.00 TVD, 10005.06 N, 163.14 E)									
- Point									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
8,963.51	8,942.04	-338.00	221.00	KOP & FTP @ 8964' MD, 200' FSL, 2188' FWL
14,371.00	9,515.00	4,742.37	192.58	Cross Section @ 14371' MD, 0' FSL, 2188' FWL
19,554.77	9,515.00	9,926.06	163.58	LTP @ 19555' MD, 100' FNL, 2188' FWL
19,633.77	9,515.00	10,005.06	163.14	PBHL; 20' FNL, 2188' FWL