

WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 19-T24S-R33E

Bell Lake 19-18 State Com 13H

Wellbore #1

HOBBS OCD
DEC 18 2018
RECEIVED

Plan: Permit Plan 1

Standard Planning Report - Geographic

12 December, 2018

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 13H
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 13H	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 13H					
Well Position	+N-S	0.00 ft	Northing:	436,290.66 usft	Latitude:	32.197392
	+E-W	0.00 ft	Easting:	763,995.73 usft	Longitude:	-103.613515
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	47,764.64258279

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	1.02	

Plan Survey Tool Program	Date	12/12/2018			
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks	
(ft)	(ft)				
1	0.00	19,634.81 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	
5,020.55	6.51	145.08	5,019.43	-24.21	16.90	1.25	1.25	0.00	145.08	
8,180.61	6.51	145.08	8,159.14	-317.83	221.91	0.00	0.00	0.00	0.00	
8,614.41	0.00	0.00	8,592.00	-338.00	236.00	1.50	-1.50	0.00	180.00	
8,964.45	0.00	0.00	8,942.04	-338.00	236.00	0.00	0.00	0.00	0.00	
9,864.45	90.00	359.68	9,515.00	234.95	232.77	10.00	10.00	0.00	359.68	PBHL - Bell Lake 19-1
19,634.81	90.00	359.68	9,515.00	10,005.16	177.65	0.00	0.00	0.00	0.00	PBHL - Bell Lake 19-1

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 Company: WCDSC Permian NM
 Project: Lea County (NAD83 New Mexico East)
 Site: Sec 19-T24S-R33E
 Well: Bell Lake 19-18 State Com 13H
 Wellbore: Wellbore #1
 Design: Permit Plan 1

Local Co-ordinate Reference: Well Bell Lake 19-18 State Com 13H
 TVD Reference: RKB @ 3575.50ft
 MD Reference: RKB @ 3575.50ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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	436,290.66	763,995.73	32.197392	-103.613515
100.00	0.00	0.00	100.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
200.00	0.00	0.00	200.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
300.00	0.00	0.00	300.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
400.00	0.00	0.00	400.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
500.00	0.00	0.00	500.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
600.00	0.00	0.00	600.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
700.00	0.00	0.00	700.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
800.00	0.00	0.00	800.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
900.00	0.00	0.00	900.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
1,000.00	0.00	0.00	1,000.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
1,100.00	0.00	0.00	1,100.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
1,200.00	0.00	0.00	1,200.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
1,300.00	0.00	0.00	1,300.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
1,400.00	0.00	0.00	1,400.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
1,500.00	0.00	0.00	1,500.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
1,600.00	0.00	0.00	1,600.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
1,700.00	0.00	0.00	1,700.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
1,800.00	0.00	0.00	1,800.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
1,900.00	0.00	0.00	1,900.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
2,000.00	0.00	0.00	2,000.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
2,100.00	0.00	0.00	2,100.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
2,200.00	0.00	0.00	2,200.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
2,300.00	0.00	0.00	2,300.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
2,400.00	0.00	0.00	2,400.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
2,500.00	0.00	0.00	2,500.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
2,600.00	0.00	0.00	2,600.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
2,700.00	0.00	0.00	2,700.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
2,800.00	0.00	0.00	2,800.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
2,900.00	0.00	0.00	2,900.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
3,000.00	0.00	0.00	3,000.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
3,100.00	0.00	0.00	3,100.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
3,200.00	0.00	0.00	3,200.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
3,300.00	0.00	0.00	3,300.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
3,400.00	0.00	0.00	3,400.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
3,500.00	0.00	0.00	3,500.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
3,600.00	0.00	0.00	3,600.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
3,700.00	0.00	0.00	3,700.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
3,800.00	0.00	0.00	3,800.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
3,900.00	0.00	0.00	3,900.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
4,000.00	0.00	0.00	4,000.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
4,100.00	0.00	0.00	4,100.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
4,200.00	0.00	0.00	4,200.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
4,300.00	0.00	0.00	4,300.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
4,400.00	0.00	0.00	4,400.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
4,500.00	0.00	0.00	4,500.00	0.00	0.00	436,290.66	763,995.73	32.197392	-103.613515
4,600.00	1.25	145.08	4,599.99	-0.89	0.62	436,289.77	763,996.35	32.197389	-103.613513
4,700.00	2.50	145.08	4,699.94	-3.58	2.50	436,287.08	763,998.22	32.197382	-103.613507
4,800.00	3.75	145.08	4,799.79	-8.05	5.62	436,282.61	764,001.35	32.197369	-103.613497
4,900.00	5.00	145.08	4,899.49	-14.30	9.99	436,276.36	764,005.71	32.197352	-103.613483
5,000.00	6.25	145.08	4,999.01	-22.34	15.60	436,268.32	764,011.32	32.197330	-103.613465
5,020.55	6.51	145.08	5,019.43	-24.21	16.90	436,266.45	764,012.63	32.197325	-103.613461
5,100.00	6.51	145.08	5,098.37	-31.59	22.06	436,259.07	764,017.78	32.197304	-103.613445
5,200.00	6.51	145.08	5,197.73	-40.88	28.55	436,249.78	764,024.27	32.197279	-103.613424
5,300.00	6.51	145.08	5,297.08	-50.17	35.03	436,240.49	764,030.76	32.197253	-103.613403

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Well:	Bell Lake 19-18 State Com 13H	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	6.51	145.08	5,396.44	-59.47	41.52	436,231.19	764,037.25	32.197227	-103.613382
5,500.00	6.51	145.08	5,495.79	-68.76	48.01	436,221.90	764,043.74	32.197202	-103.613362
5,600.00	6.51	145.08	5,595.15	-78.05	54.50	436,212.61	764,050.22	32.197176	-103.613341
5,700.00	6.51	145.08	5,694.51	-87.34	60.98	436,203.32	764,056.71	32.197150	-103.613320
5,800.00	6.51	145.08	5,793.86	-96.63	67.47	436,194.03	764,063.20	32.197125	-103.613299
5,900.00	6.51	145.08	5,893.22	-105.92	73.96	436,184.74	764,069.69	32.197099	-103.613279
6,000.00	6.51	145.08	5,992.57	-115.21	80.45	436,175.45	764,076.17	32.197073	-103.613258
6,100.00	6.51	145.08	6,091.93	-124.51	86.93	436,166.15	764,082.66	32.197048	-103.613237
6,200.00	6.51	145.08	6,191.28	-133.80	93.42	436,156.86	764,089.15	32.197022	-103.613216
6,300.00	6.51	145.08	6,290.64	-143.09	99.91	436,147.57	764,095.64	32.196996	-103.613196
6,400.00	6.51	145.08	6,390.00	-152.38	106.40	436,138.28	764,102.12	32.196971	-103.613175
6,500.00	6.51	145.08	6,489.35	-161.67	112.88	436,128.99	764,108.61	32.196945	-103.613154
6,600.00	6.51	145.08	6,588.71	-170.96	119.37	436,119.70	764,115.10	32.196919	-103.613133
6,700.00	6.51	145.08	6,688.06	-180.25	125.86	436,110.41	764,121.59	32.196894	-103.613112
6,800.00	6.51	145.08	6,787.42	-189.55	132.35	436,101.11	764,128.07	32.196868	-103.613092
6,900.00	6.51	145.08	6,886.78	-198.84	138.83	436,091.82	764,134.56	32.196843	-103.613071
7,000.00	6.51	145.08	6,986.13	-208.13	145.32	436,082.53	764,141.05	32.196817	-103.613050
7,100.00	6.51	145.08	7,085.49	-217.42	151.81	436,073.24	764,147.54	32.196791	-103.613029
7,200.00	6.51	145.08	7,184.84	-226.71	158.30	436,063.95	764,154.02	32.196766	-103.613009
7,300.00	6.51	145.08	7,284.20	-236.00	164.78	436,054.66	764,160.51	32.196740	-103.612988
7,400.00	6.51	145.08	7,383.55	-245.30	171.27	436,045.37	764,167.00	32.196714	-103.612967
7,500.00	6.51	145.08	7,482.91	-254.59	177.76	436,036.07	764,173.49	32.196689	-103.612946
7,600.00	6.51	145.08	7,582.27	-263.88	184.25	436,026.78	764,179.97	32.196663	-103.612926
7,700.00	6.51	145.08	7,681.62	-273.17	190.73	436,017.49	764,186.46	32.196637	-103.612905
7,800.00	6.51	145.08	7,780.98	-282.46	197.22	436,008.20	764,192.95	32.196612	-103.612884
7,900.00	6.51	145.08	7,880.33	-291.75	203.71	435,998.91	764,199.44	32.196586	-103.612863
8,000.00	6.51	145.08	7,979.69	-301.04	210.20	435,989.62	764,205.92	32.196560	-103.612842
8,100.00	6.51	145.08	8,079.05	-310.34	216.68	435,980.33	764,212.41	32.196535	-103.612822
8,180.61	6.51	145.08	8,159.14	-317.83	221.91	435,972.83	764,217.64	32.196514	-103.612805
8,200.00	6.22	145.08	8,178.41	-319.59	223.14	435,971.07	764,218.87	32.196509	-103.612801
8,300.00	4.72	145.08	8,277.95	-327.40	228.60	435,963.26	764,224.32	32.196487	-103.612784
8,400.00	3.22	145.08	8,377.71	-333.07	232.56	435,957.59	764,228.28	32.196472	-103.612771
8,500.00	1.72	145.08	8,477.61	-336.60	235.02	435,954.07	764,230.75	32.196462	-103.612763
8,600.00	0.22	145.08	8,577.59	-337.98	235.98	435,952.68	764,231.71	32.196458	-103.612760
8,614.41	0.00	0.00	8,592.00	-338.00	236.00	435,952.66	764,231.73	32.196458	-103.612760
8,700.00	0.00	0.00	8,677.59	-338.00	236.00	435,952.66	764,231.73	32.196458	-103.612760
8,800.00	0.00	0.00	8,777.59	-338.00	236.00	435,952.66	764,231.73	32.196458	-103.612760
8,900.00	0.00	0.00	8,877.59	-338.00	236.00	435,952.66	764,231.73	32.196458	-103.612760
8,964.45	0.00	0.00	8,942.04	-338.00	236.00	435,952.66	764,231.73	32.196458	-103.612760
KOP & FTP @ 8964' MD, 200' FSL, 2188' FWL									
9,000.00	3.56	359.68	8,977.57	-336.90	235.99	435,953.76	764,231.72	32.196461	-103.612760
9,100.00	13.56	359.68	9,076.33	-322.04	235.91	435,968.62	764,231.64	32.196502	-103.612760
9,200.00	23.56	359.68	9,171.01	-290.26	235.73	436,000.40	764,231.46	32.196589	-103.612760
9,300.00	33.56	359.68	9,258.74	-242.52	235.46	436,048.14	764,231.19	32.196721	-103.612760
9,400.00	43.56	359.68	9,336.84	-180.27	235.11	436,110.39	764,230.84	32.196892	-103.612759
9,500.00	53.56	359.68	9,402.95	-105.41	234.69	436,185.25	764,230.41	32.197098	-103.612759
9,600.00	63.56	359.68	9,455.05	-20.20	234.21	436,270.46	764,229.93	32.197332	-103.612759
9,700.00	73.56	359.68	9,491.56	72.75	233.68	436,363.41	764,229.41	32.197587	-103.612758
9,800.00	83.56	359.68	9,511.38	170.64	233.13	436,461.30	764,228.86	32.197856	-103.612758
9,864.45	90.00	359.68	9,515.00	234.95	232.77	436,525.61	764,228.49	32.198033	-103.612758
9,900.00	90.00	359.68	9,515.00	270.50	232.57	436,561.16	764,228.29	32.198131	-103.612758
10,000.00	90.00	359.68	9,515.00	370.50	232.00	436,661.16	764,227.73	32.198406	-103.612757
10,100.00	90.00	359.68	9,515.00	470.50	231.44	436,761.16	764,227.17	32.198681	-103.612757
10,200.00	90.00	359.68	9,515.00	570.50	230.87	436,861.15	764,226.60	32.198955	-103.612757

Planning Report - Geographic

Database: EDM r5000.141_Prod US
 Company: WCDSC Permian NM
 Project: Lea County (NAD83 New Mexico East)
 Site: Sec 19-T24S-R33E
 Well: Bell Lake 19-18 State Com 13H
 Wellbore: Wellbore #1
 Design: Permit Plan 1

Local Co-ordinate Reference: Well Bell Lake 19-18 State Com 13H
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 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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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	670.49	230.31	436,961.15	764,226.04	32.199230	-103.612756
10,400.00	90.00	359.68	9,515.00	770.49	229.75	437,061.15	764,225.47	32.199505	-103.612756
10,500.00	90.00	359.68	9,515.00	870.49	229.18	437,161.15	764,224.91	32.199780	-103.612756
10,600.00	90.00	359.68	9,515.00	970.49	228.62	437,261.15	764,224.34	32.200055	-103.612755
10,700.00	90.00	359.68	9,515.00	1,070.49	228.05	437,361.15	764,223.78	32.200330	-103.612755
10,800.00	90.00	359.68	9,515.00	1,170.49	227.49	437,461.14	764,223.22	32.200605	-103.612755
10,900.00	90.00	359.68	9,515.00	1,270.49	226.93	437,561.14	764,222.65	32.200880	-103.612754
11,000.00	90.00	359.68	9,515.00	1,370.48	226.36	437,661.14	764,222.09	32.201154	-103.612754
11,100.00	90.00	359.68	9,515.00	1,470.48	225.80	437,761.14	764,221.52	32.201429	-103.612754
11,200.00	90.00	359.68	9,515.00	1,570.48	225.23	437,861.14	764,220.96	32.201704	-103.612753
11,300.00	90.00	359.68	9,515.00	1,670.48	224.67	437,961.14	764,220.40	32.201979	-103.612753
11,400.00	90.00	359.68	9,515.00	1,770.48	224.11	438,061.13	764,219.83	32.202254	-103.612753
11,500.00	90.00	359.68	9,515.00	1,870.48	223.54	438,161.13	764,219.27	32.202529	-103.612752
11,600.00	90.00	359.68	9,515.00	1,970.47	222.98	438,261.13	764,218.70	32.202804	-103.612752
11,700.00	90.00	359.68	9,515.00	2,070.47	222.41	438,361.13	764,218.14	32.203079	-103.612752
11,800.00	90.00	359.68	9,515.00	2,170.47	221.85	438,461.13	764,217.58	32.203353	-103.612751
11,900.00	90.00	359.68	9,515.00	2,270.47	221.28	438,561.12	764,217.01	32.203628	-103.612751
12,000.00	90.00	359.68	9,515.00	2,370.47	220.72	438,661.12	764,216.45	32.203903	-103.612751
12,100.00	90.00	359.68	9,515.00	2,470.47	220.16	438,761.12	764,215.88	32.204178	-103.612750
12,200.00	90.00	359.68	9,515.00	2,570.46	219.59	438,861.12	764,215.32	32.204453	-103.612750
12,300.00	90.00	359.68	9,515.00	2,670.46	219.03	438,961.12	764,214.75	32.204728	-103.612750
12,400.00	90.00	359.68	9,515.00	2,770.46	218.46	439,061.12	764,214.19	32.205003	-103.612749
12,500.00	90.00	359.68	9,515.00	2,870.46	217.90	439,161.11	764,213.63	32.205278	-103.612749
12,600.00	90.00	359.68	9,515.00	2,970.46	217.34	439,261.11	764,213.06	32.205552	-103.612749
12,700.00	90.00	359.68	9,515.00	3,070.46	216.77	439,361.11	764,212.50	32.205827	-103.612748
12,800.00	90.00	359.68	9,515.00	3,170.46	216.21	439,461.11	764,211.93	32.206102	-103.612748
12,900.00	90.00	359.68	9,515.00	3,270.45	215.64	439,561.11	764,211.37	32.206377	-103.612747
13,000.00	90.00	359.68	9,515.00	3,370.45	215.08	439,661.10	764,210.81	32.206652	-103.612747
13,100.00	90.00	359.68	9,515.00	3,470.45	214.52	439,761.10	764,210.24	32.206927	-103.612747
13,200.00	90.00	359.68	9,515.00	3,570.45	213.95	439,861.10	764,209.68	32.207202	-103.612746
13,300.00	90.00	359.68	9,515.00	3,670.45	213.39	439,961.10	764,209.11	32.207477	-103.612746
13,400.00	90.00	359.68	9,515.00	3,770.45	212.82	440,061.10	764,208.55	32.207751	-103.612746
13,500.00	90.00	359.68	9,515.00	3,870.44	212.26	440,161.10	764,207.99	32.208026	-103.612745
13,600.00	90.00	359.68	9,515.00	3,970.44	211.69	440,261.09	764,207.42	32.208301	-103.612745
13,700.00	90.00	359.68	9,515.00	4,070.44	211.13	440,361.09	764,206.86	32.208576	-103.612745
13,800.00	90.00	359.68	9,515.00	4,170.44	210.57	440,461.09	764,206.29	32.208851	-103.612744
13,900.00	90.00	359.68	9,515.00	4,270.44	210.00	440,561.09	764,205.73	32.209126	-103.612744
14,000.00	90.00	359.68	9,515.00	4,370.44	209.44	440,661.09	764,205.16	32.209401	-103.612744
14,100.00	90.00	359.68	9,515.00	4,470.43	208.87	440,761.09	764,204.60	32.209676	-103.612743
14,200.00	90.00	359.68	9,515.00	4,570.43	208.31	440,861.08	764,204.04	32.209950	-103.612743
14,300.00	90.00	359.68	9,515.00	4,670.43	207.75	440,961.08	764,203.47	32.210225	-103.612743
14,372.00	90.00	359.68	9,515.00	4,742.43	207.34	441,033.08	764,203.07	32.210423	-103.612742
Cross Section @ 14372' MD, 0' FSL, 2188' FWL									
14,400.00	90.00	359.68	9,515.00	4,770.43	207.18	441,061.08	764,202.91	32.210500	-103.612742
14,500.00	90.00	359.68	9,515.00	4,870.43	206.62	441,161.08	764,202.34	32.210775	-103.612742
14,600.00	90.00	359.68	9,515.00	4,970.43	206.05	441,261.08	764,201.78	32.211050	-103.612742
14,700.00	90.00	359.68	9,515.00	5,070.42	205.49	441,361.07	764,201.22	32.211325	-103.612741
14,800.00	90.00	359.68	9,515.00	5,170.42	204.92	441,461.07	764,200.65	32.211600	-103.612741
14,900.00	90.00	359.68	9,515.00	5,270.42	204.36	441,561.07	764,200.09	32.211875	-103.612741
15,000.00	90.00	359.68	9,515.00	5,370.42	203.80	441,661.07	764,199.52	32.212149	-103.612740
15,100.00	90.00	359.68	9,515.00	5,470.42	203.23	441,761.07	764,198.96	32.212424	-103.612740
15,200.00	90.00	359.68	9,515.00	5,570.42	202.67	441,861.07	764,198.40	32.212699	-103.612740
15,300.00	90.00	359.68	9,515.00	5,670.42	202.10	441,961.06	764,197.83	32.212974	-103.612739
15,400.00	90.00	359.68	9,515.00	5,770.41	201.54	442,061.06	764,197.27	32.213249	-103.612739

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 13H
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 13H	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	5,870.41	200.98	442,161.06	764,196.70	32.213524	-103.612739
15,600.00	90.00	359.68	9,515.00	5,970.41	200.41	442,261.06	764,196.14	32.213799	-103.612738
15,700.00	90.00	359.68	9,515.00	6,070.41	199.85	442,361.06	764,195.57	32.214074	-103.612738
15,800.00	90.00	359.68	9,515.00	6,170.41	199.28	442,461.05	764,195.01	32.214348	-103.612738
15,900.00	90.00	359.68	9,515.00	6,270.41	198.72	442,561.05	764,194.45	32.214623	-103.612737
16,000.00	90.00	359.68	9,515.00	6,370.40	198.16	442,661.05	764,193.88	32.214898	-103.612737
16,100.00	90.00	359.68	9,515.00	6,470.40	197.59	442,761.05	764,193.32	32.215173	-103.612736
16,200.00	90.00	359.68	9,515.00	6,570.40	197.03	442,861.05	764,192.75	32.215448	-103.612736
16,300.00	90.00	359.68	9,515.00	6,670.40	196.46	442,961.05	764,192.19	32.215723	-103.612736
16,400.00	90.00	359.68	9,515.00	6,770.40	195.90	443,061.04	764,191.63	32.215998	-103.612735
16,500.00	90.00	359.68	9,515.00	6,870.40	195.33	443,161.04	764,191.06	32.216273	-103.612735
16,600.00	90.00	359.68	9,515.00	6,970.39	194.77	443,261.04	764,190.50	32.216547	-103.612735
16,700.00	90.00	359.68	9,515.00	7,070.39	194.21	443,361.04	764,189.93	32.216822	-103.612734
16,800.00	90.00	359.68	9,515.00	7,170.39	193.64	443,461.04	764,189.37	32.217097	-103.612734
16,900.00	90.00	359.68	9,515.00	7,270.39	193.08	443,561.04	764,188.80	32.217372	-103.612734
17,000.00	90.00	359.68	9,515.00	7,370.39	192.51	443,661.03	764,188.24	32.217647	-103.612733
17,100.00	90.00	359.68	9,515.00	7,470.39	191.95	443,761.03	764,187.68	32.217922	-103.612733
17,200.00	90.00	359.68	9,515.00	7,570.39	191.39	443,861.03	764,187.11	32.218197	-103.612733
17,300.00	90.00	359.68	9,515.00	7,670.38	190.82	443,961.03	764,186.55	32.218472	-103.612732
17,400.00	90.00	359.68	9,515.00	7,770.38	190.26	444,061.03	764,185.98	32.218746	-103.612732
17,500.00	90.00	359.68	9,515.00	7,870.38	189.69	444,161.02	764,185.42	32.219021	-103.612732
17,600.00	90.00	359.68	9,515.00	7,970.38	189.13	444,261.02	764,184.86	32.219296	-103.612731
17,700.00	90.00	359.68	9,515.00	8,070.38	188.57	444,361.02	764,184.29	32.219571	-103.612731
17,800.00	90.00	359.68	9,515.00	8,170.38	188.00	444,461.02	764,183.73	32.219846	-103.612731
17,900.00	90.00	359.68	9,515.00	8,270.37	187.44	444,561.02	764,183.16	32.220121	-103.612730
18,000.00	90.00	359.68	9,515.00	8,370.37	186.87	444,661.02	764,182.60	32.220396	-103.612730
18,100.00	90.00	359.68	9,515.00	8,470.37	186.31	444,761.01	764,182.04	32.220671	-103.612730
18,200.00	90.00	359.68	9,515.00	8,570.37	185.74	444,861.01	764,181.47	32.220945	-103.612729
18,300.00	90.00	359.68	9,515.00	8,670.37	185.18	444,961.01	764,180.91	32.221220	-103.612729
18,400.00	90.00	359.68	9,515.00	8,770.37	184.62	445,061.01	764,180.34	32.221495	-103.612729
18,500.00	90.00	359.68	9,515.00	8,870.36	184.05	445,161.01	764,179.78	32.221770	-103.612728
18,600.00	90.00	359.68	9,515.00	8,970.36	183.49	445,261.00	764,179.21	32.222045	-103.612728
18,700.00	90.00	359.68	9,515.00	9,070.36	182.92	445,361.00	764,178.65	32.222320	-103.612728
18,800.00	90.00	359.68	9,515.00	9,170.36	182.36	445,461.00	764,178.09	32.222595	-103.612727
18,900.00	90.00	359.68	9,515.00	9,270.36	181.80	445,561.00	764,177.52	32.222870	-103.612727
19,000.00	90.00	359.68	9,515.00	9,370.36	181.23	445,661.00	764,176.96	32.223144	-103.612727
19,100.00	90.00	359.68	9,515.00	9,470.35	180.67	445,761.00	764,176.39	32.223419	-103.612726
19,200.00	90.00	359.68	9,515.00	9,570.35	180.10	445,860.99	764,175.83	32.223694	-103.612726
19,300.00	90.00	359.68	9,515.00	9,670.35	179.54	445,960.99	764,175.27	32.223969	-103.612725
19,400.00	90.00	359.68	9,515.00	9,770.35	178.98	446,060.99	764,174.70	32.224244	-103.612725
19,500.00	90.00	359.68	9,515.00	9,870.35	178.41	446,160.99	764,174.14	32.224519	-103.612725
19,554.80	90.00	359.68	9,515.00	9,925.15	178.10	446,215.79	764,173.83	32.224669	-103.612725
LTP @ 19555' MD, 100' FNL, 2188' FWL									
19,600.00	90.00	359.68	9,515.00	9,970.35	177.85	446,260.99	764,173.57	32.224794	-103.612724
19,634.80	90.00	359.68	9,515.00	10,005.15	177.65	446,295.79	764,173.38	32.224889	-103.612724
PBHL; 20' FNL, 2188' FWL									
19,634.81	90.00	359.68	9,515.00	10,005.16	177.65	446,295.80	764,173.38	32.224889	-103.612724

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Bell Lake 19-18 State Com 13H
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 13H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

Design Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
PBHL - Bell Lake 19-18 :	0.00	0.00	0.00	10,005.16	177.65	446,295.80	764,173.38	32.224889	-103.612724
- plan misses target center by 9515.00ft at 19634.81ft MD (9515.00 TVD, 10005.16 N, 177.65 E)									
- Point									

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
8,964.45	8,942.04	-338.00	236.00	KOP & FTP @ 8964' MD, 200' FSL, 2188' FWL
14,372.00	9,515.00	4,742.43	207.34	Cross Section @ 14372' MD, 0' FSL, 2188' FWL
19,554.80	9,515.00	9,925.15	178.10	LTP @ 19555' MD, 100' FNL, 2188' FWL
19,634.80	9,515.00	10,005.15	177.65	PBHL; 20' FNL, 2188' FWL