

WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 07-T26S-R34E

Jayhawk 7 FED 16H

Wellbore #1

Plan: Permit Plan 1

Standard Planning Report - Geographic

25 July, 2018

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Jayhawk 7 FED 16H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3397.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3397.50ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 16H	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 07-T26S-R34E			
Site Position:		Northing:	383,354.91 usft	Latitude:	32.051193
From:	Lat/Long	Easting:	799,057.94 usft	Longitude:	-103.501496
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.44 °

Well	Jayhawk 7 FED 16H					
Well Position	+N-S	0.00 ft	Northing:	383,775.70 usft	Latitude:	32.052388
	+E-W	0.00 ft	Easting:	797,230.10 usft	Longitude:	-103.507384
Position Uncertainty		0.50 ft	Wellhead Elevation:		Ground Level:	3,372.50 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2015	7/23/2018	6.79	59.90	47,730.40467722

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	357.63

Plan Survey Tool Program	Date	7/25/2018		
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(ft)	(ft)			
1	0.00	17,200.02 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	
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,324.49	4.06	199.28	5,324.22	-10.84	-3.79	1.25	1.25	0.00	199.28	
11,266.97	4.06	199.28	11,251.82	-407.60	-142.58	0.00	0.00	0.00	0.00	
11,537.38	0.00	0.00	11,522.00	-416.63	-145.74	1.50	-1.50	0.00	180.00	
11,887.42	0.00	0.00	11,872.04	-416.63	-145.74	0.00	0.00	0.00	0.00	
12,787.42	90.00	359.50	12,445.00	156.31	-150.75	10.00	10.00	0.00	359.50	PBHL - Jayhawk 7 FE
17,200.02	90.00	359.50	12,445.00	4,568.74	-189.35	0.00	0.00	0.00	0.00	PBHL - Jayhawk 7 FE

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Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3397.50ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 16H	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	383,775.70	797,230.10	32.052388	-103.507384
100.00	0.00	0.00	100.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
200.00	0.00	0.00	200.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
300.00	0.00	0.00	300.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
400.00	0.00	0.00	400.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
500.00	0.00	0.00	500.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
600.00	0.00	0.00	600.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
700.00	0.00	0.00	700.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
800.00	0.00	0.00	800.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
900.00	0.00	0.00	900.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
1,000.00	0.00	0.00	1,000.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
1,100.00	0.00	0.00	1,100.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
1,200.00	0.00	0.00	1,200.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
1,300.00	0.00	0.00	1,300.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
1,400.00	0.00	0.00	1,400.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
1,500.00	0.00	0.00	1,500.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
1,600.00	0.00	0.00	1,600.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
1,700.00	0.00	0.00	1,700.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
1,800.00	0.00	0.00	1,800.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
1,900.00	0.00	0.00	1,900.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
2,000.00	0.00	0.00	2,000.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
2,100.00	0.00	0.00	2,100.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
2,200.00	0.00	0.00	2,200.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
2,300.00	0.00	0.00	2,300.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
2,400.00	0.00	0.00	2,400.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
2,500.00	0.00	0.00	2,500.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
2,600.00	0.00	0.00	2,600.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
2,700.00	0.00	0.00	2,700.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
2,800.00	0.00	0.00	2,800.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
2,900.00	0.00	0.00	2,900.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
3,000.00	0.00	0.00	3,000.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
3,100.00	0.00	0.00	3,100.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
3,200.00	0.00	0.00	3,200.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
3,300.00	0.00	0.00	3,300.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
3,400.00	0.00	0.00	3,400.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
3,500.00	0.00	0.00	3,500.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
3,600.00	0.00	0.00	3,600.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
3,700.00	0.00	0.00	3,700.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
3,800.00	0.00	0.00	3,800.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
3,900.00	0.00	0.00	3,900.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
4,000.00	0.00	0.00	4,000.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
4,100.00	0.00	0.00	4,100.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
4,200.00	0.00	0.00	4,200.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
4,300.00	0.00	0.00	4,300.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
4,400.00	0.00	0.00	4,400.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
4,500.00	0.00	0.00	4,500.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
4,600.00	0.00	0.00	4,600.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
4,700.00	0.00	0.00	4,700.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
4,800.00	0.00	0.00	4,800.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
4,900.00	0.00	0.00	4,900.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
5,000.00	0.00	0.00	5,000.00	0.00	0.00	383,775.70	797,230.10	32.052388	-103.507384
5,100.00	1.25	199.28	5,099.99	-1.03	-0.36	383,774.67	797,229.74	32.052386	-103.507386
5,200.00	2.50	199.28	5,199.94	-4.12	-1.44	383,771.58	797,228.66	32.052377	-103.507389
5,300.00	3.75	199.28	5,299.79	-9.26	-3.24	383,766.44	797,226.86	32.052363	-103.507395
5,324.49	4.06	199.28	5,324.22	-10.84	-3.79	383,764.86	797,226.31	32.052359	-103.507397

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Well:	Jayhawk 7 FED 16H	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	4.06	199.28	5,399.54	-15.88	-5.55	383,759.82	797,224.54	32.052345	-103.507403	
5,500.00	4.06	199.28	5,499.29	-22.56	-7.89	383,753.14	797,222.21	32.052327	-103.507410	
5,600.00	4.06	199.28	5,599.04	-29.23	-10.23	383,746.47	797,219.87	32.052308	-103.507418	
5,700.00	4.06	199.28	5,698.79	-35.91	-12.56	383,739.79	797,217.54	32.052290	-103.507426	
5,800.00	4.06	199.28	5,798.54	-42.59	-14.90	383,733.11	797,215.20	32.052272	-103.507434	
5,900.00	4.06	199.28	5,898.29	-49.26	-17.23	383,726.44	797,212.87	32.052253	-103.507441	
6,000.00	4.06	199.28	5,998.04	-55.94	-19.57	383,719.76	797,210.53	32.052235	-103.507449	
6,100.00	4.06	199.28	6,097.79	-62.62	-21.90	383,713.08	797,208.19	32.052217	-103.507457	
6,200.00	4.06	199.28	6,197.54	-69.29	-24.24	383,706.41	797,205.86	32.052199	-103.507464	
6,300.00	4.06	199.28	6,297.29	-75.97	-26.57	383,699.73	797,203.52	32.052180	-103.507472	
6,400.00	4.06	199.28	6,397.04	-82.65	-28.91	383,693.05	797,201.19	32.052162	-103.507480	
6,500.00	4.06	199.28	6,496.78	-89.32	-31.25	383,686.38	797,198.85	32.052144	-103.507487	
6,600.00	4.06	199.28	6,596.53	-96.00	-33.58	383,679.70	797,196.52	32.052125	-103.507495	
6,700.00	4.06	199.28	6,696.28	-102.68	-35.92	383,673.02	797,194.18	32.052107	-103.507503	
6,800.00	4.06	199.28	6,796.03	-109.35	-38.25	383,666.35	797,191.85	32.052089	-103.507511	
6,900.00	4.06	199.28	6,895.78	-116.03	-40.59	383,659.67	797,189.51	32.052070	-103.507518	
7,000.00	4.06	199.28	6,995.53	-122.71	-42.92	383,652.99	797,187.17	32.052052	-103.507526	
7,100.00	4.06	199.28	7,095.28	-129.38	-45.26	383,646.32	797,184.84	32.052034	-103.507534	
7,200.00	4.06	199.28	7,195.03	-136.06	-47.59	383,639.64	797,182.50	32.052015	-103.507541	
7,300.00	4.06	199.28	7,294.78	-142.74	-49.93	383,632.96	797,180.17	32.051997	-103.507549	
7,400.00	4.06	199.28	7,394.53	-149.41	-52.27	383,626.29	797,177.83	32.051979	-103.507557	
7,500.00	4.06	199.28	7,494.28	-156.09	-54.60	383,619.61	797,175.50	32.051961	-103.507565	
7,600.00	4.06	199.28	7,594.03	-162.77	-56.94	383,612.93	797,173.16	32.051942	-103.507572	
7,700.00	4.06	199.28	7,693.78	-169.44	-59.27	383,606.26	797,170.83	32.051924	-103.507580	
7,800.00	4.06	199.28	7,793.53	-176.12	-61.61	383,599.58	797,168.49	32.051906	-103.507588	
7,900.00	4.06	199.28	7,893.28	-182.80	-63.94	383,592.90	797,166.15	32.051887	-103.507595	
8,000.00	4.06	199.28	7,993.03	-189.47	-66.28	383,586.23	797,163.82	32.051869	-103.507603	
8,100.00	4.06	199.28	8,092.78	-196.15	-68.61	383,579.55	797,161.48	32.051851	-103.507611	
8,200.00	4.06	199.28	8,192.53	-202.83	-70.95	383,572.87	797,159.15	32.051832	-103.507618	
8,300.00	4.06	199.28	8,292.28	-209.50	-73.29	383,566.20	797,156.81	32.051814	-103.507626	
8,400.00	4.06	199.28	8,392.03	-216.18	-75.62	383,559.52	797,154.48	32.051796	-103.507634	
8,500.00	4.06	199.28	8,491.78	-222.86	-77.96	383,552.84	797,152.14	32.051778	-103.507642	
8,600.00	4.06	199.28	8,591.52	-229.53	-80.29	383,546.17	797,149.81	32.051759	-103.507649	
8,700.00	4.06	199.28	8,691.27	-236.21	-82.63	383,539.49	797,147.47	32.051741	-103.507657	
8,800.00	4.06	199.28	8,791.02	-242.89	-84.96	383,532.81	797,145.14	32.051723	-103.507665	
8,900.00	4.06	199.28	8,890.77	-249.56	-87.30	383,526.14	797,142.80	32.051704	-103.507672	
9,000.00	4.06	199.28	8,990.52	-256.24	-89.63	383,519.46	797,140.46	32.051686	-103.507680	
9,100.00	4.06	199.28	9,090.27	-262.92	-91.97	383,512.78	797,138.13	32.051668	-103.507688	
9,200.00	4.06	199.28	9,190.02	-269.59	-94.31	383,506.11	797,135.79	32.051649	-103.507695	
9,300.00	4.06	199.28	9,289.77	-276.27	-96.64	383,499.43	797,133.46	32.051631	-103.507703	
9,400.00	4.06	199.28	9,389.52	-282.95	-98.98	383,492.75	797,131.12	32.051613	-103.507711	
9,500.00	4.06	199.28	9,489.27	-289.62	-101.31	383,486.08	797,128.79	32.051595	-103.507719	
9,600.00	4.06	199.28	9,589.02	-296.30	-103.65	383,479.40	797,126.45	32.051576	-103.507726	
9,700.00	4.06	199.28	9,688.77	-302.98	-105.98	383,472.72	797,124.12	32.051558	-103.507734	
9,800.00	4.06	199.28	9,788.52	-309.65	-108.32	383,466.05	797,121.78	32.051540	-103.507742	
9,900.00	4.06	199.28	9,888.27	-316.33	-110.65	383,459.37	797,119.44	32.051521	-103.507749	
10,000.00	4.06	199.28	9,988.02	-323.01	-112.99	383,452.69	797,117.11	32.051503	-103.507757	
10,100.00	4.06	199.28	10,087.77	-329.68	-115.33	383,446.02	797,114.77	32.051485	-103.507765	
10,200.00	4.06	199.28	10,187.52	-336.36	-117.66	383,439.34	797,112.44	32.051466	-103.507772	
10,300.00	4.06	199.28	10,287.27	-343.04	-120.00	383,432.66	797,110.10	32.051448	-103.507780	
10,400.00	4.06	199.28	10,387.02	-349.71	-122.33	383,425.99	797,107.77	32.051430	-103.507788	
10,500.00	4.06	199.28	10,486.77	-356.39	-124.67	383,419.31	797,105.43	32.051411	-103.507796	
10,600.00	4.06	199.28	10,586.52	-363.07	-127.00	383,412.63	797,103.10	32.051393	-103.507803	
10,700.00	4.06	199.28	10,686.26	-369.74	-129.34	383,405.96	797,100.76	32.051375	-103.507811	
10,800.00	4.06	199.28	10,786.01	-376.42	-131.67	383,399.28	797,098.42	32.051357	-103.507819	

Planning Report - Geographic

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Company:	WCDCS Permian NM	TVD Reference:	RKB @ 3397.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3397.50ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 16H	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	4.06	199.28	10,885.76	-383.10	-134.01	383,392.60	797,096.09	32.051338	-103.507826
11,000.00	4.06	199.28	10,985.51	-389.77	-136.34	383,385.93	797,093.75	32.051320	-103.507834
11,100.00	4.06	199.28	11,085.26	-396.45	-138.68	383,379.25	797,091.42	32.051302	-103.507842
11,200.00	4.06	199.28	11,185.01	-403.13	-141.02	383,372.57	797,089.08	32.051283	-103.507849
11,266.97	4.06	199.28	11,251.82	-407.60	-142.58	383,368.10	797,087.52	32.051271	-103.507855
11,300.00	3.56	199.28	11,284.77	-409.67	-143.30	383,366.03	797,086.79	32.051265	-103.507857
11,400.00	2.06	199.28	11,384.65	-414.30	-144.92	383,361.40	797,085.17	32.051253	-103.507862
11,500.00	0.56	199.28	11,484.62	-416.46	-145.68	383,359.24	797,084.42	32.051247	-103.507865
11,537.38	0.00	0.00	11,522.00	-416.63	-145.74	383,359.07	797,084.36	32.051246	-103.507865
11,600.00	0.00	0.00	11,584.62	-416.63	-145.74	383,359.07	797,084.36	32.051246	-103.507865
11,700.00	0.00	0.00	11,684.62	-416.63	-145.74	383,359.07	797,084.36	32.051246	-103.507865
11,800.00	0.00	0.00	11,784.62	-416.63	-145.74	383,359.07	797,084.36	32.051246	-103.507865
11,887.42	0.00	0.00	11,872.04	-416.63	-145.74	383,359.07	797,084.36	32.051246	-103.507865
KOP @ 11887' MD, 199' FSL, 2296' FEL									
11,900.00	1.26	359.50	11,884.62	-416.49	-145.74	383,359.21	797,084.36	32.051247	-103.507865
12,000.00	11.26	359.50	11,983.90	-405.61	-145.84	383,370.09	797,084.26	32.051277	-103.507865
12,100.00	21.26	359.50	12,079.78	-377.65	-146.08	383,398.05	797,084.02	32.051354	-103.507865
12,200.00	31.26	359.50	12,169.34	-333.46	-146.47	383,442.24	797,083.63	32.051475	-103.507865
12,300.00	41.26	359.50	12,249.88	-274.40	-146.98	383,501.30	797,083.11	32.051637	-103.507866
12,387.42	50.00	359.50	12,310.95	-211.97	-147.53	383,563.73	797,082.57	32.051809	-103.507866
First Take Point @ 12387' MD, 403' FSL, 2298' FEL									
12,400.00	51.26	359.50	12,318.93	-202.25	-147.61	383,573.45	797,082.48	32.051836	-103.507866
12,500.00	61.26	359.50	12,374.41	-119.20	-148.34	383,656.50	797,081.76	32.052064	-103.507866
12,600.00	71.26	359.50	12,414.62	-27.78	-149.14	383,747.91	797,080.96	32.052315	-103.507866
12,700.00	81.26	359.50	12,438.34	69.23	-149.99	383,844.92	797,080.11	32.052582	-103.507867
12,787.42	90.00	359.50	12,445.00	156.31	-150.75	383,932.01	797,079.35	32.052821	-103.507867
12,800.00	90.00	359.50	12,445.00	168.88	-150.86	383,944.58	797,079.24	32.052856	-103.507867
12,900.00	90.00	359.50	12,445.00	268.88	-151.74	384,044.58	797,078.36	32.053131	-103.507868
13,000.00	90.00	359.50	12,445.00	368.88	-152.61	384,144.57	797,077.49	32.053406	-103.507868
13,100.00	90.00	359.50	12,445.00	468.87	-153.49	384,244.57	797,076.61	32.053680	-103.507868
13,200.00	90.00	359.50	12,445.00	568.87	-154.36	384,344.57	797,075.74	32.053955	-103.507869
13,300.00	90.00	359.50	12,445.00	668.86	-155.24	384,444.56	797,074.86	32.054230	-103.507869
13,400.00	90.00	359.50	12,445.00	768.86	-156.11	384,544.56	797,073.99	32.054505	-103.507869
13,500.00	90.00	359.50	12,445.00	868.86	-156.99	384,644.55	797,073.11	32.054780	-103.507870
13,600.00	90.00	359.50	12,445.00	968.85	-157.86	384,744.55	797,072.24	32.055055	-103.507870
13,700.00	90.00	359.50	12,445.00	1,068.85	-158.74	384,844.55	797,071.36	32.055330	-103.507870
13,800.00	90.00	359.50	12,445.00	1,168.84	-159.61	384,944.54	797,070.49	32.055605	-103.507871
13,900.00	90.00	359.50	12,445.00	1,268.84	-160.48	385,044.54	797,069.61	32.055880	-103.507871
14,000.00	90.00	359.50	12,445.00	1,368.84	-161.36	385,144.53	797,068.74	32.056154	-103.507871
14,100.00	90.00	359.50	12,445.00	1,468.83	-162.23	385,244.53	797,067.86	32.056429	-103.507872
14,200.00	90.00	359.50	12,445.00	1,568.83	-163.11	385,344.53	797,066.99	32.056704	-103.507872
14,300.00	90.00	359.50	12,445.00	1,668.83	-163.98	385,444.52	797,066.11	32.056979	-103.507872
14,400.00	90.00	359.50	12,445.00	1,768.82	-164.86	385,544.52	797,065.24	32.057254	-103.507873
14,500.00	90.00	359.50	12,445.00	1,868.82	-165.73	385,644.51	797,064.36	32.057529	-103.507873
14,600.00	90.00	359.50	12,445.00	1,968.81	-166.61	385,744.51	797,063.49	32.057804	-103.507874
14,700.00	90.00	359.50	12,445.00	2,068.81	-167.48	385,844.50	797,062.61	32.058079	-103.507874
14,800.00	90.00	359.50	12,445.00	2,168.81	-168.36	385,944.50	797,061.74	32.058353	-103.507874
14,900.00	90.00	359.50	12,445.00	2,268.80	-169.23	386,044.50	797,060.87	32.058628	-103.507875
15,000.00	90.00	359.50	12,445.00	2,368.80	-170.11	386,144.49	797,059.99	32.058903	-103.507875
15,100.00	90.00	359.50	12,445.00	2,468.80	-170.98	386,244.49	797,059.12	32.059178	-103.507875
15,200.00	90.00	359.50	12,445.00	2,568.79	-171.86	386,344.48	797,058.24	32.059453	-103.507876
15,300.00	90.00	359.50	12,445.00	2,668.79	-172.73	386,444.48	797,057.37	32.059728	-103.507876
15,400.00	90.00	359.50	12,445.00	2,768.78	-173.61	386,544.48	797,056.49	32.060003	-103.507876
15,500.00	90.00	359.50	12,445.00	2,868.78	-174.48	386,644.47	797,055.62	32.060278	-103.507877

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Jayhawk 7 FED 16H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3397.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3397.50ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 16H	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
15,600.00	90.00	359.50	12,445.00	2,968.78	-175.36	386,744.47	797,054.74	32.060552	-103.507877
15,700.00	90.00	359.50	12,445.00	3,068.77	-176.23	386,844.46	797,053.87	32.060827	-103.507877
15,800.00	90.00	359.50	12,445.00	3,168.77	-177.11	386,944.46	797,052.99	32.061102	-103.507878
15,900.00	90.00	359.50	12,445.00	3,268.76	-177.98	387,044.46	797,052.12	32.061377	-103.507878
16,000.00	90.00	359.50	12,445.00	3,368.76	-178.86	387,144.45	797,051.24	32.061652	-103.507879
16,100.00	90.00	359.50	12,445.00	3,468.76	-179.73	387,244.45	797,050.37	32.061927	-103.507879
16,200.00	90.00	359.50	12,445.00	3,568.75	-180.61	387,344.44	797,049.49	32.062202	-103.507879
16,300.00	90.00	359.50	12,445.00	3,668.75	-181.48	387,444.44	797,048.62	32.062477	-103.507880
16,400.00	90.00	359.50	12,445.00	3,768.75	-182.36	387,544.44	797,047.74	32.062751	-103.507880
16,500.00	90.00	359.50	12,445.00	3,868.74	-183.23	387,644.43	797,046.87	32.063026	-103.507880
16,600.00	90.00	359.50	12,445.00	3,968.74	-184.11	387,744.43	797,045.99	32.063301	-103.507881
16,700.00	90.00	359.50	12,445.00	4,068.73	-184.98	387,844.42	797,045.12	32.063576	-103.507881
16,800.00	90.00	359.50	12,445.00	4,168.73	-185.85	387,944.42	797,044.24	32.063851	-103.507881
16,900.00	90.00	359.50	12,445.00	4,268.73	-186.73	388,044.42	797,043.37	32.064126	-103.507882
17,000.00	90.00	359.50	12,445.00	4,368.72	-187.60	388,144.41	797,042.49	32.064401	-103.507882
17,100.00	90.00	359.50	12,445.00	4,468.72	-188.48	388,244.41	797,041.62	32.064676	-103.507882
17,199.50	90.00	359.50	12,445.00	4,568.21	-189.35	388,343.90	797,040.75	32.064949	-103.507883
Last Take Point @ 17200' MD, 100' FNL, 2300' FEL									
17,200.00	90.00	359.50	12,445.00	4,568.71	-189.35	388,344.40	797,040.74	32.064950	-103.507883
17,200.02	90.00	359.50	12,445.00	4,568.73	-189.35	388,344.42	797,040.74	32.064950	-103.507883
PBHL; 100' FNL, 2300' FEL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL - Jayhawk 7 FED	0.00	0.00	0.00	4,568.74	-189.35	388,344.43	797,040.74	32.064950	-103.507883
- hit/miss target									
- Shape									
- plan misses target center by 4572.66ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
VP - Jayhawk 7 FED 16I	0.00	0.00	11,500.00	-566.63	-145.74	383,209.07	797,084.36	32.050834	-103.507869
- plan misses target center by 150.06ft at 11516.07ft MD (11500.69 TVD, -416.57 N, -145.72 E)									
- Point									

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
11,887.42	11,872.04	-416.63	-145.74	KOP @ 11887' MD, 199' FSL, 2296' FEL	
12,387.42	12,310.95	-211.97	-147.53	First Take Point @ 12387' MD, 403' FSL, 2298' FEL	
17,199.50	12,445.00	4,568.21	-189.35	Last Take Point @ 17200' MD, 100' FNL, 2300' FEL	
17,200.02	12,445.00	4,568.73	-189.35	PBHL; 100' FNL, 2300' FEL	