

WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 07-T26S-R34E

Jayhawk 7 FED 9H

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 9H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3365.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3365.50ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 9H	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 9H					
Well Position	+N/-S	0.00 ft	Northing:	387,896.00 usft	Latitude:	32.063737
	+E/-W	0.00 ft	Easting:	796,129.08 usft	Longitude:	-103.510837
Position Uncertainty		0.50 ft	Wellhead Elevation:		Ground Level:	3,340.50 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/23/2018	6.79	59.91	47,737.01778590

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)	Direction (°)
	0.00	0.00	0.00	179.57

Plan Survey Tool Program	Date	7/25/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,631.94 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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,290.81	2.91	359.62	2,290.69	7.38	-0.05	1.00	1.00	0.00	359.62	
11,725.48	2.91	359.62	11,713.21	486.03	-3.21	0.00	0.00	0.00	0.00	
11,919.36	0.00	0.00	11,907.00	490.95	-3.25	1.50	-1.50	0.00	180.00	
12,269.40	0.00	0.00	12,257.04	490.95	-3.25	0.00	0.00	0.00	0.00	
13,169.40	90.00	179.57	12,830.00	-82.00	1.01	10.00	10.00	0.00	179.57	PBHL - Jayhawk 7 FE
17,631.94	90.00	179.57	12,830.00	-4,544.41	34.16	0.00	0.00	0.00	0.00	PBHL - Jayhawk 7 FE

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Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 9H	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	387,896.00	796,129.08	32.063737	-103.510837
100.00	0.00	0.00	100.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
200.00	0.00	0.00	200.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
300.00	0.00	0.00	300.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
400.00	0.00	0.00	400.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
500.00	0.00	0.00	500.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
600.00	0.00	0.00	600.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
700.00	0.00	0.00	700.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
800.00	0.00	0.00	800.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
900.00	0.00	0.00	900.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
1,000.00	0.00	0.00	1,000.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
1,100.00	0.00	0.00	1,100.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
1,200.00	0.00	0.00	1,200.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
1,300.00	0.00	0.00	1,300.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
1,400.00	0.00	0.00	1,400.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
1,500.00	0.00	0.00	1,500.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
1,600.00	0.00	0.00	1,600.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
1,700.00	0.00	0.00	1,700.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
1,800.00	0.00	0.00	1,800.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
1,900.00	0.00	0.00	1,900.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
2,000.00	0.00	0.00	2,000.00	0.00	0.00	387,896.00	796,129.08	32.063737	-103.510837
2,100.00	1.00	359.62	2,099.99	0.87	-0.01	387,896.87	796,129.07	32.063739	-103.510837
2,200.00	2.00	359.62	2,199.96	3.49	-0.02	387,899.49	796,129.05	32.063747	-103.510837
2,290.81	2.91	359.62	2,290.69	7.38	-0.05	387,903.38	796,129.03	32.063757	-103.510837
2,300.00	2.91	359.62	2,299.86	7.84	-0.05	387,903.84	796,129.03	32.063759	-103.510837
2,400.00	2.91	359.62	2,399.73	12.92	-0.09	387,908.92	796,128.99	32.063773	-103.510837
2,500.00	2.91	359.62	2,499.61	17.99	-0.12	387,913.99	796,128.96	32.063786	-103.510837
2,600.00	2.91	359.62	2,599.48	23.06	-0.15	387,919.06	796,128.93	32.063800	-103.510836
2,700.00	2.91	359.62	2,699.35	28.14	-0.19	387,924.14	796,128.89	32.063814	-103.510836
2,800.00	2.91	359.62	2,799.22	33.21	-0.22	387,929.21	796,128.86	32.063828	-103.510836
2,900.00	2.91	359.62	2,899.09	38.28	-0.25	387,934.28	796,128.82	32.063842	-103.510836
3,000.00	2.91	359.62	2,998.96	43.36	-0.29	387,939.36	796,128.79	32.063856	-103.510836
3,100.00	2.91	359.62	3,098.83	48.43	-0.32	387,944.43	796,128.76	32.063870	-103.510836
3,200.00	2.91	359.62	3,198.70	53.50	-0.35	387,949.50	796,128.72	32.063884	-103.510836
3,300.00	2.91	359.62	3,298.58	58.58	-0.39	387,954.58	796,128.69	32.063898	-103.510836
3,400.00	2.91	359.62	3,398.45	63.65	-0.42	387,959.65	796,128.66	32.063912	-103.510836
3,500.00	2.91	359.62	3,498.32	68.72	-0.45	387,964.72	796,128.62	32.063926	-103.510836
3,600.00	2.91	359.62	3,598.19	73.80	-0.49	387,969.80	796,128.59	32.063940	-103.510836
3,700.00	2.91	359.62	3,698.06	78.87	-0.52	387,974.87	796,128.56	32.063954	-103.510836
3,800.00	2.91	359.62	3,797.93	83.94	-0.56	387,979.94	796,128.52	32.063968	-103.510836
3,900.00	2.91	359.62	3,897.80	89.02	-0.59	387,985.02	796,128.49	32.063982	-103.510836
4,000.00	2.91	359.62	3,997.67	94.09	-0.62	387,990.09	796,128.46	32.063996	-103.510836
4,100.00	2.91	359.62	4,097.55	99.16	-0.66	387,995.16	796,128.42	32.064010	-103.510836
4,200.00	2.91	359.62	4,197.42	104.24	-0.69	388,000.24	796,128.39	32.064024	-103.510836
4,300.00	2.91	359.62	4,297.29	109.31	-0.72	388,005.31	796,128.35	32.064038	-103.510836
4,400.00	2.91	359.62	4,397.16	114.38	-0.76	388,010.38	796,128.32	32.064051	-103.510836
4,500.00	2.91	359.62	4,497.03	119.46	-0.79	388,015.46	796,128.29	32.064065	-103.510836
4,600.00	2.91	359.62	4,596.90	124.53	-0.82	388,020.53	796,128.25	32.064079	-103.510836
4,700.00	2.91	359.62	4,696.77	129.60	-0.86	388,025.60	796,128.22	32.064093	-103.510836
4,800.00	2.91	359.62	4,796.64	134.68	-0.89	388,030.68	796,128.19	32.064107	-103.510836
4,900.00	2.91	359.62	4,896.52	139.75	-0.92	388,035.75	796,128.15	32.064121	-103.510836
5,000.00	2.91	359.62	4,996.39	144.82	-0.96	388,040.82	796,128.12	32.064135	-103.510836
5,100.00	2.91	359.62	5,096.26	149.90	-0.99	388,045.90	796,128.09	32.064149	-103.510836
5,200.00	2.91	359.62	5,196.13	154.97	-1.03	388,050.97	796,128.05	32.064163	-103.510836
5,300.00	2.91	359.62	5,296.00	160.04	-1.06	388,056.04	796,128.02	32.064177	-103.510836

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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	2.91	359.62	5,395.87	165.12	-1.09	388,061.12	796,127.99	32.064191	-103.510836	
5,500.00	2.91	359.62	5,495.74	170.19	-1.13	388,066.19	796,127.95	32.064205	-103.510836	
5,600.00	2.91	359.62	5,595.61	175.26	-1.16	388,071.26	796,127.92	32.064219	-103.510836	
5,700.00	2.91	359.62	5,695.48	180.34	-1.19	388,076.34	796,127.88	32.064233	-103.510836	
5,800.00	2.91	359.62	5,795.36	185.41	-1.23	388,081.41	796,127.85	32.064247	-103.510836	
5,900.00	2.91	359.62	5,895.23	190.48	-1.26	388,086.48	796,127.82	32.064261	-103.510836	
6,000.00	2.91	359.62	5,995.10	195.56	-1.29	388,091.56	796,127.78	32.064275	-103.510836	
6,100.00	2.91	359.62	6,094.97	200.63	-1.33	388,096.63	796,127.75	32.064289	-103.510836	
6,200.00	2.91	359.62	6,194.84	205.70	-1.36	388,101.70	796,127.72	32.064302	-103.510836	
6,300.00	2.91	359.62	6,294.71	210.78	-1.39	388,106.77	796,127.68	32.064316	-103.510836	
6,400.00	2.91	359.62	6,394.58	215.85	-1.43	388,111.85	796,127.65	32.064330	-103.510836	
6,500.00	2.91	359.62	6,494.45	220.92	-1.46	388,116.92	796,127.62	32.064344	-103.510836	
6,600.00	2.91	359.62	6,594.33	226.00	-1.49	388,121.99	796,127.58	32.064358	-103.510836	
6,700.00	2.91	359.62	6,694.20	231.07	-1.53	388,127.07	796,127.55	32.064372	-103.510836	
6,800.00	2.91	359.62	6,794.07	236.14	-1.56	388,132.14	796,127.52	32.064386	-103.510836	
6,900.00	2.91	359.62	6,893.94	241.22	-1.60	388,137.21	796,127.48	32.064400	-103.510836	
7,000.00	2.91	359.62	6,993.81	246.29	-1.63	388,142.29	796,127.45	32.064414	-103.510836	
7,100.00	2.91	359.62	7,093.68	251.36	-1.66	388,147.36	796,127.42	32.064428	-103.510836	
7,200.00	2.91	359.62	7,193.55	256.44	-1.70	388,152.43	796,127.38	32.064442	-103.510836	
7,300.00	2.91	359.62	7,293.42	261.51	-1.73	388,157.51	796,127.35	32.064456	-103.510836	
7,400.00	2.91	359.62	7,393.30	266.58	-1.76	388,162.58	796,127.31	32.064470	-103.510836	
7,500.00	2.91	359.62	7,493.17	271.66	-1.80	388,167.65	796,127.28	32.064484	-103.510836	
7,600.00	2.91	359.62	7,593.04	276.73	-1.83	388,172.73	796,127.25	32.064498	-103.510836	
7,700.00	2.91	359.62	7,692.91	281.80	-1.86	388,177.80	796,127.21	32.064512	-103.510836	
7,800.00	2.91	359.62	7,792.78	286.88	-1.90	388,182.87	796,127.18	32.064526	-103.510836	
7,900.00	2.91	359.62	7,892.65	291.95	-1.93	388,187.95	796,127.15	32.064540	-103.510836	
8,000.00	2.91	359.62	7,992.52	297.02	-1.96	388,193.02	796,127.11	32.064553	-103.510836	
8,100.00	2.91	359.62	8,092.39	302.10	-2.00	388,198.09	796,127.08	32.064567	-103.510836	
8,200.00	2.91	359.62	8,192.27	307.17	-2.03	388,203.17	796,127.05	32.064581	-103.510836	
8,300.00	2.91	359.62	8,292.14	312.24	-2.07	388,208.24	796,127.01	32.064595	-103.510836	
8,400.00	2.91	359.62	8,392.01	317.32	-2.10	388,213.31	796,126.98	32.064609	-103.510836	
8,500.00	2.91	359.62	8,491.88	322.39	-2.13	388,218.39	796,126.95	32.064623	-103.510836	
8,600.00	2.91	359.62	8,591.75	327.46	-2.17	388,223.46	796,126.91	32.064637	-103.510835	
8,700.00	2.91	359.62	8,691.62	332.54	-2.20	388,228.53	796,126.88	32.064651	-103.510835	
8,800.00	2.91	359.62	8,791.49	337.61	-2.23	388,233.61	796,126.84	32.064665	-103.510835	
8,900.00	2.91	359.62	8,891.36	342.68	-2.27	388,238.68	796,126.81	32.064679	-103.510835	
9,000.00	2.91	359.62	8,991.24	347.76	-2.30	388,243.75	796,126.78	32.064693	-103.510835	
9,100.00	2.91	359.62	9,091.11	352.83	-2.33	388,248.83	796,126.74	32.064707	-103.510835	
9,200.00	2.91	359.62	9,190.98	357.90	-2.37	388,253.90	796,126.71	32.064721	-103.510835	
9,300.00	2.91	359.62	9,290.85	362.98	-2.40	388,258.97	796,126.68	32.064735	-103.510835	
9,400.00	2.91	359.62	9,390.72	368.05	-2.43	388,264.05	796,126.64	32.064749	-103.510835	
9,500.00	2.91	359.62	9,490.59	373.12	-2.47	388,269.12	796,126.61	32.064763	-103.510835	
9,600.00	2.91	359.62	9,590.46	378.20	-2.50	388,274.19	796,126.58	32.064777	-103.510835	
9,700.00	2.91	359.62	9,690.33	383.27	-2.54	388,279.27	796,126.54	32.064791	-103.510835	
9,800.00	2.91	359.62	9,790.21	388.34	-2.57	388,284.34	796,126.51	32.064805	-103.510835	
9,900.00	2.91	359.62	9,890.08	393.42	-2.60	388,289.41	796,126.48	32.064818	-103.510835	
10,000.00	2.91	359.62	9,989.95	398.49	-2.64	388,294.49	796,126.44	32.064832	-103.510835	
10,100.00	2.91	359.62	10,089.82	403.56	-2.67	388,299.56	796,126.41	32.064846	-103.510835	
10,200.00	2.91	359.62	10,189.69	408.64	-2.70	388,304.63	796,126.37	32.064860	-103.510835	
10,300.00	2.91	359.62	10,289.56	413.71	-2.74	388,309.71	796,126.34	32.064874	-103.510835	
10,400.00	2.91	359.62	10,389.43	418.78	-2.77	388,314.78	796,126.31	32.064888	-103.510835	
10,500.00	2.91	359.62	10,489.30	423.86	-2.80	388,319.85	796,126.27	32.064902	-103.510835	
10,600.00	2.91	359.62	10,589.17	428.93	-2.84	388,324.93	796,126.24	32.064916	-103.510835	
10,700.00	2.91	359.62	10,689.05	434.00	-2.87	388,330.00	796,126.21	32.064930	-103.510835	
10,800.00	2.91	359.62	10,788.92	439.08	-2.90	388,335.07	796,126.17	32.064944	-103.510835	

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Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Jayhawk 7 FED 9H
Company:	WCDCS Permian NM	TVD Reference:	RKB @ 3365.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3365.50ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 9H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

Planned Survey									
Measured			Vertical			Map	Map		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
10,900.00	2.91	359.62	10,888.79	444.15	-2.94	388,340.15	796,126.14	32.064958	-103.510835
11,000.00	2.91	359.62	10,988.66	449.22	-2.97	388,345.22	796,126.11	32.064972	-103.510835
11,100.00	2.91	359.62	11,088.53	454.30	-3.00	388,350.29	796,126.07	32.064986	-103.510835
11,200.00	2.91	359.62	11,188.40	459.37	-3.04	388,355.37	796,126.04	32.065000	-103.510835
11,300.00	2.91	359.62	11,288.27	464.44	-3.07	388,360.44	796,126.01	32.065014	-103.510835
11,400.00	2.91	359.62	11,388.14	469.51	-3.11	388,365.51	796,125.97	32.065028	-103.510835
11,500.00	2.91	359.62	11,488.02	474.59	-3.14	388,370.59	796,125.94	32.065042	-103.510835
11,600.00	2.91	359.62	11,587.89	479.66	-3.17	388,375.66	796,125.91	32.065056	-103.510835
11,700.00	2.91	359.62	11,687.76	484.73	-3.21	388,380.73	796,125.87	32.065069	-103.510835
11,725.48	2.91	359.62	11,713.21	486.03	-3.21	388,382.03	796,125.86	32.065073	-103.510835
11,800.00	1.79	359.62	11,787.66	489.08	-3.24	388,385.08	796,125.84	32.065081	-103.510835
11,900.00	0.29	359.62	11,887.64	490.90	-3.25	388,386.90	796,125.83	32.065086	-103.510835
11,919.36	0.00	0.00	11,907.00	490.95	-3.25	388,386.94	796,125.83	32.065087	-103.510835
12,000.00	0.00	0.00	11,987.64	490.95	-3.25	388,386.94	796,125.83	32.065087	-103.510835
12,100.00	0.00	0.00	12,087.64	490.95	-3.25	388,386.94	796,125.83	32.065087	-103.510835
12,200.00	0.00	0.00	12,187.64	490.95	-3.25	388,386.94	796,125.83	32.065087	-103.510835
12,269.40	0.00	0.00	12,257.04	490.95	-3.25	388,386.94	796,125.83	32.065087	-103.510835
KOP @ 12269' MD, 50' FNL, 2072' FWL									
12,300.00	3.06	179.57	12,287.63	490.13	-3.24	388,386.13	796,125.84	32.065084	-103.510835
12,400.00	13.06	179.57	12,386.51	476.13	-3.14	388,372.12	796,125.94	32.065046	-103.510835
12,500.00	23.06	179.57	12,481.47	445.17	-2.91	388,341.16	796,126.17	32.064961	-103.510835
12,512.85	24.35	179.57	12,493.23	440.00	-2.87	388,336.00	796,126.21	32.064947	-103.510835
First Take Point @ 12513' MD, 100' FNL, 2072' FWL									
12,600.00	33.06	179.57	12,569.60	398.19	-2.56	388,294.18	796,126.52	32.064832	-103.510835
12,700.00	43.06	179.57	12,648.24	336.62	-2.10	388,232.62	796,126.98	32.064662	-103.510835
12,800.00	53.06	179.57	12,714.99	262.33	-1.55	388,158.33	796,127.53	32.064458	-103.510835
12,900.00	63.06	179.57	12,767.82	177.58	-0.92	388,073.58	796,128.16	32.064225	-103.510835
13,000.00	73.06	179.57	12,805.14	84.94	-0.23	387,980.94	796,128.85	32.063971	-103.510835
13,100.00	83.06	179.57	12,825.80	-12.77	0.49	387,883.23	796,129.57	32.063702	-103.510835
13,169.40	90.00	179.57	12,830.00	-82.00	1.01	387,814.00	796,130.09	32.063512	-103.510835
13,200.00	90.00	179.57	12,830.00	-112.60	1.24	387,783.40	796,130.31	32.063428	-103.510835
13,300.00	90.00	179.57	12,830.00	-212.59	1.98	387,683.41	796,131.06	32.063153	-103.510835
13,400.00	90.00	179.57	12,830.00	-312.59	2.72	387,583.41	796,131.80	32.062878	-103.510835
13,500.00	90.00	179.57	12,830.00	-412.59	3.46	387,483.41	796,132.54	32.062603	-103.510836
13,600.00	90.00	179.57	12,830.00	-512.58	4.21	387,383.42	796,133.28	32.062328	-103.510836
13,700.00	90.00	179.57	12,830.00	-612.58	4.95	387,283.42	796,134.03	32.062053	-103.510836
13,800.00	90.00	179.57	12,830.00	-712.58	5.69	387,183.42	796,134.77	32.061778	-103.510836
13,900.00	90.00	179.57	12,830.00	-812.58	6.44	387,083.42	796,135.51	32.061503	-103.510836
14,000.00	90.00	179.57	12,830.00	-912.57	7.18	386,983.43	796,136.26	32.061229	-103.510836
14,100.00	90.00	179.57	12,830.00	-1,012.57	7.92	386,883.43	796,137.00	32.060954	-103.510836
14,200.00	90.00	179.57	12,830.00	-1,112.57	8.66	386,783.43	796,137.74	32.060679	-103.510836
14,300.00	90.00	179.57	12,830.00	-1,212.57	9.41	386,683.44	796,138.48	32.060404	-103.510836
14,400.00	90.00	179.57	12,830.00	-1,312.56	10.15	386,583.44	796,139.23	32.060129	-103.510836
14,500.00	90.00	179.57	12,830.00	-1,412.56	10.89	386,483.44	796,139.97	32.059854	-103.510836
14,600.00	90.00	179.57	12,830.00	-1,512.56	11.64	386,383.44	796,140.71	32.059579	-103.510836
14,700.00	90.00	179.57	12,830.00	-1,612.55	12.38	386,283.45	796,141.46	32.059304	-103.510836
14,800.00	90.00	179.57	12,830.00	-1,712.55	13.12	386,183.45	796,142.20	32.059029	-103.510836
14,900.00	90.00	179.57	12,830.00	-1,812.55	13.86	386,083.45	796,142.94	32.058755	-103.510836
15,000.00	90.00	179.57	12,830.00	-1,912.55	14.61	385,983.46	796,143.68	32.058480	-103.510836
15,100.00	90.00	179.57	12,830.00	-2,012.54	15.35	385,883.46	796,144.43	32.058205	-103.510837
15,200.00	90.00	179.57	12,830.00	-2,112.54	16.09	385,783.46	796,145.17	32.057930	-103.510837
15,300.00	90.00	179.57	12,830.00	-2,212.54	16.83	385,683.47	796,145.91	32.057655	-103.510837
15,400.00	90.00	179.57	12,830.00	-2,312.53	17.58	385,583.47	796,146.66	32.057380	-103.510837
15,500.00	90.00	179.57	12,830.00	-2,412.53	18.32	385,483.47	796,147.40	32.057105	-103.510837

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Jayhawk 7 FED 9H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3365.50ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3365.50ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 9H	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	179.57	12,830.00	-2,512.53	19.06	385,383.47	796,148.14	32.056830	-103.510837	
15,700.00	90.00	179.57	12,830.00	-2,612.53	19.81	385,283.48	796,148.88	32.056556	-103.510837	
15,800.00	90.00	179.57	12,830.00	-2,712.52	20.55	385,183.48	796,149.63	32.056281	-103.510837	
15,900.00	90.00	179.57	12,830.00	-2,812.52	21.29	385,083.48	796,150.37	32.056006	-103.510837	
16,000.00	90.00	179.57	12,830.00	-2,912.52	22.03	384,983.49	796,151.11	32.055731	-103.510837	
16,100.00	90.00	179.57	12,830.00	-3,012.52	22.78	384,883.49	796,151.85	32.055456	-103.510837	
16,200.00	90.00	179.57	12,830.00	-3,112.51	23.52	384,783.49	796,152.60	32.055181	-103.510837	
16,300.00	90.00	179.57	12,830.00	-3,212.51	24.26	384,683.49	796,153.34	32.054906	-103.510837	
16,400.00	90.00	179.57	12,830.00	-3,312.51	25.01	384,583.50	796,154.08	32.054631	-103.510837	
16,500.00	90.00	179.57	12,830.00	-3,412.50	25.75	384,483.50	796,154.83	32.054357	-103.510837	
16,600.00	90.00	179.57	12,830.00	-3,512.50	26.49	384,383.50	796,155.57	32.054082	-103.510837	
16,700.00	90.00	179.57	12,830.00	-3,612.50	27.23	384,283.51	796,156.31	32.053807	-103.510838	
16,800.00	90.00	179.57	12,830.00	-3,712.50	27.98	384,183.51	796,157.05	32.053532	-103.510838	
16,900.00	90.00	179.57	12,830.00	-3,812.49	28.72	384,083.51	796,157.80	32.053257	-103.510838	
17,000.00	90.00	179.57	12,830.00	-3,912.49	29.46	383,983.52	796,158.54	32.052982	-103.510838	
17,100.00	90.00	179.57	12,830.00	-4,012.49	30.21	383,883.52	796,159.28	32.052707	-103.510838	
17,200.00	90.00	179.57	12,830.00	-4,112.49	30.95	383,783.52	796,160.03	32.052432	-103.510838	
17,300.00	90.00	179.57	12,830.00	-4,212.48	31.69	383,683.52	796,160.77	32.052158	-103.510838	
17,400.00	90.00	179.57	12,830.00	-4,312.48	32.43	383,583.53	796,161.51	32.051883	-103.510838	
17,500.00	90.00	179.57	12,830.00	-4,412.48	33.18	383,483.53	796,162.25	32.051608	-103.510838	
17,600.00	90.00	179.57	12,830.00	-4,512.47	33.92	383,383.53	796,163.00	32.051333	-103.510838	
17,630.50	90.00	179.57	12,830.00	-4,542.97	34.15	383,353.03	796,163.22	32.051249	-103.510838	
Last Take Point @ 17631' MD, 100' FSL, 2320' FWL										
17,631.94	90.00	179.57	12,830.00	-4,544.41	34.16	383,351.59	796,163.23	32.051245	-103.510838	
PBHL; 100' FSL, 2320' FWL										

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	-4,544.41	34.16	383,351.59	796,163.23	32.051245	-103.510838	
- hit/miss target										
- Shape										
- plan misses target center by 4544.54ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)										
- Point										
VP - Jayhawk 7 FED 9H	0.00	0.00	11,600.00	490.95	-3.25	388,386.94	796,125.83	32.065087	-103.510835	
- hit/miss target										
- Shape										
- plan misses target center by 10.66ft at 11612.67ft MD (11600.54 TVD, 480.30 N, -3.18 E)										
- Point										

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
12,269.40	12,257.04	490.95	-3.25	KOP @ 12269' MD, 50' FNL, 2072' FWL	
12,512.85	12,493.23	440.00	-2.87	First Take Point @ 12513' MD, 100' FNL, 2072' FWL	
17,630.50	12,830.00	-4,542.97	34.15	Last Take Point @ 17631' MD, 100' FSL, 2320' FWL	
17,631.94	12,830.00	-4,544.41	34.16	PBHL; 100' FSL, 2320' FWL	

WCDSC Permian NM

WELL DETAILS: Jayhawk 7 FED 9H

RKB @ 3365.50ft
3340.50

Northing
387896.00

Easting
796129.08

Latitude
32.063737

Longitude
-103.510836

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	
	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	
	2290.81	2.91	359.62	2290.69	7.38	-0.05	1.00	-7.38	
	11725.48	2.91	359.62	11713.21	486.03	-3.21	0.00	-486.04	
5	11919.36	0.00	0.00	11907.00	490.95	-3.25	1.50	-490.96	
6	12269.40	0.00	0.00	12257.04	490.95	-3.25	0.00	-490.96	KOP @ 12269' MD, 50' FNL, 2072' FWL
7	13169.40	90.00	179.57	12830.00	-82.00	1.01	10.00	82.00	
8	17631.94	90.00	179.57	12830.00	-4544.41	34.16	0.00	4544.54	PBHL; 100' FSL, 2320' FWL

