

WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 07-T26S-R34E

Jayhawk 7 FED 17H

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 17H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3364.40ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3364.40ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 17H	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 17H				
Well Position	+N/-S	0.00 ft	Northing:	387,895.29 usft	Latitude:	32.063737
	+E/-W	0.00 ft	Easting:	796,039.09 usft	Longitude:	-103.511127
Position Uncertainty		0.50 ft	Wellhead Elevation:		Ground Level:	3,339.40 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/23/2018	6.79	59.91	47,736.99554408

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	183.57

Plan Survey Tool Program	Date	7/25/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,196.64 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	
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,496.85	2.97	315.96	2,496.72	5.53	-5.34	1.00	1.00	0.00	315.96	
11,336.18	2.97	315.96	11,324.19	334.58	-323.57	0.00	0.00	0.00	0.00	
11,534.08	0.00	0.00	11,522.00	338.27	-327.13	1.50	-1.50	0.00	180.00	
11,884.12	0.00	0.00	11,872.04	338.27	-327.13	0.00	0.00	0.00	0.00	
12,784.12	90.00	179.57	12,445.00	-234.68	-322.87	10.00	10.00	0.00	179.57	PBHL - Jayhawk 7 FE
17,196.64	90.00	179.57	12,445.00	-4,647.07	-290.10	0.00	0.00	0.00	0.00	PBHL - Jayhawk 7 FE

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Well:	Jayhawk 7 FED 17H	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	387,895.29	796,039.09	32.063737	-103.511127
100.00	0.00	0.00	100.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
200.00	0.00	0.00	200.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
300.00	0.00	0.00	300.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
400.00	0.00	0.00	400.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
500.00	0.00	0.00	500.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
600.00	0.00	0.00	600.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
700.00	0.00	0.00	700.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
800.00	0.00	0.00	800.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
900.00	0.00	0.00	900.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
1,000.00	0.00	0.00	1,000.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
1,100.00	0.00	0.00	1,100.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
1,200.00	0.00	0.00	1,200.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
1,300.00	0.00	0.00	1,300.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
1,400.00	0.00	0.00	1,400.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
1,500.00	0.00	0.00	1,500.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
1,600.00	0.00	0.00	1,600.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
1,700.00	0.00	0.00	1,700.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
1,800.00	0.00	0.00	1,800.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
1,900.00	0.00	0.00	1,900.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
2,000.00	0.00	0.00	2,000.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
2,100.00	0.00	0.00	2,100.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
2,200.00	0.00	0.00	2,200.00	0.00	0.00	387,895.29	796,039.09	32.063737	-103.511127
2,300.00	1.00	315.96	2,299.99	0.63	-0.61	387,895.92	796,038.48	32.063739	-103.511129
2,400.00	2.00	315.96	2,399.96	2.51	-2.43	387,897.80	796,036.66	32.063744	-103.511135
2,496.85	2.97	315.96	2,496.72	5.53	-5.34	387,900.82	796,033.74	32.063752	-103.511144
2,500.00	2.97	315.96	2,499.86	5.64	-5.46	387,900.93	796,033.63	32.063753	-103.511145
2,600.00	2.97	315.96	2,599.73	9.37	-9.06	387,904.66	796,030.03	32.063763	-103.511156
2,700.00	2.97	315.96	2,699.59	13.09	-12.66	387,908.38	796,026.43	32.063773	-103.511168
2,800.00	2.97	315.96	2,799.46	16.81	-16.26	387,912.10	796,022.83	32.063784	-103.511179
2,900.00	2.97	315.96	2,899.33	20.53	-19.86	387,915.82	796,019.23	32.063794	-103.511191
3,000.00	2.97	315.96	2,999.19	24.26	-23.46	387,919.55	796,015.63	32.063804	-103.511202
3,100.00	2.97	315.96	3,099.06	27.98	-27.06	387,923.27	796,012.03	32.063814	-103.511214
3,200.00	2.97	315.96	3,198.92	31.70	-30.66	387,926.99	796,008.43	32.063825	-103.511225
3,300.00	2.97	315.96	3,298.79	35.42	-34.26	387,930.71	796,004.83	32.063835	-103.511237
3,400.00	2.97	315.96	3,398.66	39.15	-37.86	387,934.44	796,001.23	32.063845	-103.511248
3,500.00	2.97	315.96	3,498.52	42.87	-41.46	387,938.16	795,997.63	32.063856	-103.511260
3,600.00	2.97	315.96	3,598.39	46.59	-45.06	387,941.88	795,994.03	32.063866	-103.511271
3,700.00	2.97	315.96	3,698.25	50.32	-48.66	387,945.60	795,990.43	32.063876	-103.511283
3,800.00	2.97	315.96	3,798.12	54.04	-52.26	387,949.33	795,986.83	32.063887	-103.511294
3,900.00	2.97	315.96	3,897.98	57.76	-55.86	387,953.05	795,983.23	32.063897	-103.511306
4,000.00	2.97	315.96	3,997.85	61.48	-59.46	387,956.77	795,979.63	32.063907	-103.511317
4,100.00	2.97	315.96	4,097.72	65.21	-63.06	387,960.49	795,976.03	32.063918	-103.511329
4,200.00	2.97	315.96	4,197.58	68.93	-66.66	387,964.22	795,972.43	32.063928	-103.511341
4,300.00	2.97	315.96	4,297.45	72.65	-70.26	387,967.94	795,968.83	32.063938	-103.511352
4,400.00	2.97	315.96	4,397.31	76.37	-73.86	387,971.66	795,965.23	32.063948	-103.511364
4,500.00	2.97	315.96	4,497.18	80.10	-77.46	387,975.38	795,961.63	32.063959	-103.511375
4,600.00	2.97	315.96	4,597.05	83.82	-81.06	387,979.11	795,958.03	32.063969	-103.511387
4,700.00	2.97	315.96	4,696.91	87.54	-84.66	387,982.83	795,954.43	32.063979	-103.511398
4,800.00	2.97	315.96	4,796.78	91.26	-88.26	387,986.55	795,950.83	32.063990	-103.511410
4,900.00	2.97	315.96	4,896.64	94.99	-91.86	387,990.28	795,947.23	32.064000	-103.511421
5,000.00	2.97	315.96	4,996.51	98.71	-95.46	387,994.00	795,943.63	32.064010	-103.511433
5,100.00	2.97	315.96	5,096.37	102.43	-99.06	387,997.72	795,940.03	32.064021	-103.511444
5,200.00	2.97	315.96	5,196.24	106.15	-102.66	388,001.44	795,936.43	32.064031	-103.511456
5,300.00	2.97	315.96	5,296.11	109.88	-106.26	388,005.17	795,932.83	32.064041	-103.511467

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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	2.97	315.96	5,395.97	113.60	-109.86	388,008.89	795,929.23	32.064052	-103.511479
5,500.00	2.97	315.96	5,495.84	117.32	-113.46	388,012.61	795,925.63	32.064062	-103.511490
5,600.00	2.97	315.96	5,595.70	121.05	-117.06	388,016.33	795,922.03	32.064072	-103.511502
5,700.00	2.97	315.96	5,695.57	124.77	-120.66	388,020.06	795,918.43	32.064082	-103.511513
5,800.00	2.97	315.96	5,795.44	128.49	-124.26	388,023.78	795,914.83	32.064093	-103.511525
5,900.00	2.97	315.96	5,895.30	132.21	-127.86	388,027.50	795,911.23	32.064103	-103.511537
6,000.00	2.97	315.96	5,995.17	135.94	-131.46	388,031.22	795,907.63	32.064113	-103.511548
6,100.00	2.97	315.96	6,095.03	139.66	-135.06	388,034.95	795,904.03	32.064124	-103.511560
6,200.00	2.97	315.96	6,194.90	143.38	-138.66	388,038.67	795,900.43	32.064134	-103.511571
6,300.00	2.97	315.96	6,294.76	147.10	-142.26	388,042.39	795,896.83	32.064144	-103.511583
6,400.00	2.97	315.96	6,394.63	150.83	-145.86	388,046.11	795,893.23	32.064155	-103.511594
6,500.00	2.97	315.96	6,494.50	154.55	-149.46	388,049.84	795,889.63	32.064165	-103.511606
6,600.00	2.97	315.96	6,594.36	158.27	-153.06	388,053.56	795,886.03	32.064175	-103.511617
6,700.00	2.97	315.96	6,694.23	161.99	-156.66	388,057.28	795,882.43	32.064186	-103.511629
6,800.00	2.97	315.96	6,794.09	165.72	-160.26	388,061.00	795,878.83	32.064196	-103.511640
6,900.00	2.97	315.96	6,893.96	169.44	-163.86	388,064.73	795,875.23	32.064206	-103.511652
7,000.00	2.97	315.96	6,993.82	173.16	-167.46	388,068.45	795,871.63	32.064216	-103.511663
7,100.00	2.97	315.96	7,093.69	176.88	-171.06	388,072.17	795,868.03	32.064227	-103.511675
7,200.00	2.97	315.96	7,193.56	180.61	-174.66	388,075.90	795,864.43	32.064237	-103.511686
7,300.00	2.97	315.96	7,293.42	184.33	-178.26	388,079.62	795,860.83	32.064247	-103.511698
7,400.00	2.97	315.96	7,393.29	188.05	-181.86	388,083.34	795,857.23	32.064258	-103.511709
7,500.00	2.97	315.96	7,493.15	191.77	-185.46	388,087.06	795,853.63	32.064268	-103.511721
7,600.00	2.97	315.96	7,593.02	195.50	-189.06	388,090.79	795,850.03	32.064278	-103.511733
7,700.00	2.97	315.96	7,692.89	199.22	-192.66	388,094.51	795,846.43	32.064289	-103.511744
7,800.00	2.97	315.96	7,792.75	202.94	-196.26	388,098.23	795,842.83	32.064299	-103.511756
7,900.00	2.97	315.96	7,892.62	206.67	-199.86	388,101.95	795,839.23	32.064309	-103.511767
8,000.00	2.97	315.96	7,992.48	210.39	-203.46	388,105.68	795,835.63	32.064320	-103.511779
8,100.00	2.97	315.96	8,092.35	214.11	-207.06	388,109.40	795,832.03	32.064330	-103.511790
8,200.00	2.97	315.96	8,192.21	217.83	-210.66	388,113.12	795,828.43	32.064340	-103.511802
8,300.00	2.97	315.96	8,292.08	221.56	-214.26	388,116.84	795,824.83	32.064350	-103.511813
8,400.00	2.97	315.96	8,391.95	225.28	-217.86	388,120.57	795,821.23	32.064361	-103.511825
8,500.00	2.97	315.96	8,491.81	229.00	-221.46	388,124.29	795,817.63	32.064371	-103.511836
8,600.00	2.97	315.96	8,591.68	232.72	-225.06	388,128.01	795,814.03	32.064381	-103.511848
8,700.00	2.97	315.96	8,691.54	236.45	-228.66	388,131.73	795,810.43	32.064392	-103.511859
8,800.00	2.97	315.96	8,791.41	240.17	-232.26	388,135.46	795,806.83	32.064402	-103.511871
8,900.00	2.97	315.96	8,891.28	243.89	-235.86	388,139.18	795,803.23	32.064412	-103.511882
9,000.00	2.97	315.96	8,991.14	247.61	-239.46	388,142.90	795,799.63	32.064423	-103.511894
9,100.00	2.97	315.96	9,091.01	251.34	-243.06	388,146.62	795,796.03	32.064433	-103.511905
9,200.00	2.97	315.96	9,190.87	255.06	-246.66	388,150.35	795,792.43	32.064443	-103.511917
9,300.00	2.97	315.96	9,290.74	258.78	-250.26	388,154.07	795,788.83	32.064454	-103.511929
9,400.00	2.97	315.96	9,390.60	262.50	-253.86	388,157.79	795,785.23	32.064464	-103.511940
9,500.00	2.97	315.96	9,490.47	266.23	-257.46	388,161.52	795,781.63	32.064474	-103.511952
9,600.00	2.97	315.96	9,590.34	269.95	-261.06	388,165.24	795,778.03	32.064484	-103.511963
9,700.00	2.97	315.96	9,690.20	273.67	-264.66	388,168.96	795,774.43	32.064495	-103.511975
9,800.00	2.97	315.96	9,790.07	277.40	-268.26	388,172.68	795,770.82	32.064505	-103.511986
9,900.00	2.97	315.96	9,889.93	281.12	-271.86	388,176.41	795,767.22	32.064515	-103.511998
10,000.00	2.97	315.96	9,989.80	284.84	-275.46	388,180.13	795,763.62	32.064526	-103.512009
10,100.00	2.97	315.96	10,089.67	288.56	-279.06	388,183.85	795,760.02	32.064536	-103.512021
10,200.00	2.97	315.96	10,189.53	292.29	-282.66	388,187.57	795,756.42	32.064546	-103.512032
10,300.00	2.97	315.96	10,289.40	296.01	-286.26	388,191.30	795,752.82	32.064557	-103.512044
10,400.00	2.97	315.96	10,389.26	299.73	-289.86	388,195.02	795,749.22	32.064567	-103.512055
10,500.00	2.97	315.96	10,489.13	303.45	-293.46	388,198.74	795,745.62	32.064577	-103.512067
10,600.00	2.97	315.96	10,588.99	307.18	-297.06	388,202.46	795,742.02	32.064588	-103.512078
10,700.00	2.97	315.96	10,688.86	310.90	-300.66	388,206.19	795,738.42	32.064598	-103.512090
10,800.00	2.97	315.96	10,788.73	314.62	-304.26	388,209.91	795,734.82	32.064608	-103.512101

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Jayhawk 7 FED 17H
Company:	WCDCS Permian NM	TVD Reference:	RKB @ 3364.40ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3364.40ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 17H	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	2.97	315.96	10,888.59	318.34	-307.86	388,213.63	795,731.22	32.064618	-103.512113
11,000.00	2.97	315.96	10,988.46	322.07	-311.46	388,217.35	795,727.62	32.064629	-103.512124
11,100.00	2.97	315.96	11,088.32	325.79	-315.06	388,221.08	795,724.02	32.064639	-103.512136
11,200.00	2.97	315.96	11,188.19	329.51	-318.66	388,224.80	795,720.42	32.064649	-103.512148
11,300.00	2.97	315.96	11,288.06	333.23	-322.26	388,228.52	795,716.82	32.064660	-103.512159
11,336.18	2.97	315.96	11,324.19	334.58	-323.57	388,229.87	795,715.52	32.064663	-103.512163
11,400.00	2.01	315.96	11,387.95	336.57	-325.49	388,231.86	795,713.59	32.064669	-103.512169
11,500.00	0.51	315.96	11,487.92	338.16	-327.02	388,233.44	795,712.06	32.064673	-103.512174
11,534.08	0.00	0.00	11,522.00	338.27	-327.13	388,233.55	795,711.96	32.064674	-103.512175
11,600.00	0.00	0.00	11,587.92	338.27	-327.13	388,233.55	795,711.96	32.064674	-103.512175
11,700.00	0.00	0.00	11,687.92	338.27	-327.13	388,233.55	795,711.96	32.064674	-103.512175
11,800.00	0.00	0.00	11,787.92	338.27	-327.13	388,233.55	795,711.96	32.064674	-103.512175
11,884.12	0.00	0.00	11,872.04	338.27	-327.13	388,233.55	795,711.96	32.064674	-103.512175
KOP @ 11884' MD, 202' FNL, 1657' FWL									
11,900.00	1.59	179.57	11,887.92	338.05	-327.13	388,233.33	795,711.96	32.064673	-103.512175
12,000.00	11.59	179.57	11,987.13	326.59	-327.04	388,221.88	795,712.05	32.064642	-103.512175
12,100.00	21.59	179.57	12,082.85	298.08	-326.83	388,193.36	795,712.26	32.064563	-103.512175
12,200.00	31.59	179.57	12,172.16	253.38	-326.50	388,148.67	795,712.59	32.064440	-103.512175
12,300.00	41.59	179.57	12,252.35	193.85	-326.06	388,089.14	795,713.03	32.064277	-103.512175
12,384.12	50.00	179.57	12,310.95	133.61	-325.61	388,028.89	795,713.48	32.064111	-103.512175
First Take Point @ 12384' MD, 674' FNL, 1659' FWL									
12,400.00	51.59	179.57	12,320.99	121.30	-325.52	388,016.59	795,713.57	32.064077	-103.512175
12,500.00	61.59	179.57	12,375.98	37.94	-324.90	387,933.23	795,714.19	32.063848	-103.512175
12,600.00	71.59	179.57	12,415.67	-53.71	-324.22	387,841.58	795,714.87	32.063596	-103.512175
12,700.00	81.59	179.57	12,438.83	-150.86	-323.50	387,744.43	795,715.59	32.063329	-103.512175
12,784.12	90.00	179.57	12,445.00	-234.68	-322.87	387,660.61	795,716.21	32.063099	-103.512175
12,800.00	90.00	179.57	12,445.00	-250.55	-322.76	387,644.74	795,716.33	32.063055	-103.512175
12,900.00	90.00	179.57	12,445.00	-350.55	-322.01	387,544.74	795,717.07	32.062780	-103.512175
13,000.00	90.00	179.57	12,445.00	-450.55	-321.27	387,444.74	795,717.82	32.062505	-103.512175
13,100.00	90.00	179.57	12,445.00	-550.54	-320.53	387,344.74	795,718.56	32.062230	-103.512175
13,200.00	90.00	179.57	12,445.00	-650.54	-319.79	387,244.75	795,719.30	32.061956	-103.512175
13,300.00	90.00	179.57	12,445.00	-750.54	-319.04	387,144.75	795,720.05	32.061681	-103.512175
13,400.00	90.00	179.57	12,445.00	-850.54	-318.30	387,044.75	795,720.79	32.061406	-103.512175
13,500.00	90.00	179.57	12,445.00	-950.53	-317.56	386,944.76	795,721.53	32.061131	-103.512175
13,600.00	90.00	179.57	12,445.00	-1,050.53	-316.81	386,844.76	795,722.27	32.060856	-103.512175
13,700.00	90.00	179.57	12,445.00	-1,150.53	-316.07	386,744.76	795,723.02	32.060581	-103.512176
13,800.00	90.00	179.57	12,445.00	-1,250.53	-315.33	386,644.77	795,723.76	32.060306	-103.512176
13,900.00	90.00	179.57	12,445.00	-1,350.52	-314.59	386,544.77	795,724.50	32.060031	-103.512176
14,000.00	90.00	179.57	12,445.00	-1,450.52	-313.84	386,444.77	795,725.25	32.059757	-103.512176
14,100.00	90.00	179.57	12,445.00	-1,550.52	-313.10	386,344.77	795,725.99	32.059482	-103.512176
14,200.00	90.00	179.57	12,445.00	-1,650.51	-312.36	386,244.78	795,726.73	32.059207	-103.512176
14,300.00	90.00	179.57	12,445.00	-1,750.51	-311.61	386,144.78	795,727.47	32.058932	-103.512176
14,400.00	90.00	179.57	12,445.00	-1,850.51	-310.87	386,044.78	795,728.22	32.058657	-103.512176
14,500.00	90.00	179.57	12,445.00	-1,950.51	-310.13	385,944.79	795,728.96	32.058382	-103.512176
14,600.00	90.00	179.57	12,445.00	-2,050.50	-309.39	385,844.79	795,729.70	32.058107	-103.512176
14,700.00	90.00	179.57	12,445.00	-2,150.50	-308.64	385,744.79	795,730.45	32.057832	-103.512176
14,800.00	90.00	179.57	12,445.00	-2,250.50	-307.90	385,644.80	795,731.19	32.057557	-103.512176
14,900.00	90.00	179.57	12,445.00	-2,350.50	-307.16	385,544.80	795,731.93	32.057283	-103.512176
15,000.00	90.00	179.57	12,445.00	-2,450.49	-306.41	385,444.80	795,732.67	32.057008	-103.512176
15,100.00	90.00	179.57	12,445.00	-2,550.49	-305.67	385,344.80	795,733.42	32.056733	-103.512176
15,200.00	90.00	179.57	12,445.00	-2,650.49	-304.93	385,244.81	795,734.16	32.056458	-103.512176
15,300.00	90.00	179.57	12,445.00	-2,750.48	-304.19	385,144.81	795,734.90	32.056183	-103.512176
15,400.00	90.00	179.57	12,445.00	-2,850.48	-303.44	385,044.81	795,735.65	32.055908	-103.512177
15,500.00	90.00	179.57	12,445.00	-2,950.48	-302.70	384,944.82	795,736.39	32.055633	-103.512177

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Jayhawk 7 FED 17H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3364.40ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3364.40ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 17H	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	12,445.00	-3,050.48	-301.96	384,844.82	795,737.13	32.055358	-103.512177
15,700.00	90.00	179.57	12,445.00	-3,150.47	-301.21	384,744.82	795,737.87	32.055084	-103.512177
15,800.00	90.00	179.57	12,445.00	-3,250.47	-300.47	384,644.82	795,738.62	32.054809	-103.512177
15,900.00	90.00	179.57	12,445.00	-3,350.47	-299.73	384,544.83	795,739.36	32.054534	-103.512177
16,000.00	90.00	179.57	12,445.00	-3,450.46	-298.99	384,444.83	795,740.10	32.054259	-103.512177
16,100.00	90.00	179.57	12,445.00	-3,550.46	-298.24	384,344.83	795,740.84	32.053984	-103.512177
16,200.00	90.00	179.57	12,445.00	-3,650.46	-297.50	384,244.84	795,741.59	32.053709	-103.512177
16,300.00	90.00	179.57	12,445.00	-3,750.46	-296.76	384,144.84	795,742.33	32.053434	-103.512177
16,400.00	90.00	179.57	12,445.00	-3,850.45	-296.02	384,044.84	795,743.07	32.053159	-103.512177
16,500.00	90.00	179.57	12,445.00	-3,950.45	-295.27	383,944.85	795,743.82	32.052885	-103.512177
16,600.00	90.00	179.57	12,445.00	-4,050.45	-294.53	383,844.85	795,744.56	32.052610	-103.512177
16,700.00	90.00	179.57	12,445.00	-4,150.45	-293.79	383,744.85	795,745.30	32.052335	-103.512177
16,800.00	90.00	179.57	12,445.00	-4,250.44	-293.04	383,644.85	795,746.04	32.052060	-103.512177
16,900.00	90.00	179.57	12,445.00	-4,350.44	-292.30	383,544.86	795,746.79	32.051785	-103.512177
17,000.00	90.00	179.57	12,445.00	-4,450.44	-291.56	383,444.86	795,747.53	32.051510	-103.512177
17,100.00	90.00	179.57	12,445.00	-4,550.43	-290.82	383,344.86	795,748.27	32.051235	-103.512177
17,195.50	90.00	179.57	12,445.00	-4,645.93	-290.11	383,249.37	795,748.98	32.050973	-103.512178
Last Take Point @ 17196' MD, 100' FSL, 1660' FWL									
17,196.64	90.00	179.57	12,445.00	-4,647.07	-290.10	383,248.23	795,748.99	32.050970	-103.512178
PBHL; 100' FSL, 1660' FWL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL - Jayhawk 7 FED	0.00	0.00	0.00	-4,647.07	-290.10	383,248.23	795,748.99	32.050970	-103.512178
- plan misses target center by 4656.12ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
VP - Jayhawk 7 FED 17I	0.00	0.00	11,200.00	338.27	-327.13	388,233.55	795,711.96	32.064674	-103.512175
- plan misses target center by 11.55ft at 11212.43ft MD (11200.60 TVD, 329.97 N, -319.11 E)									
- Point									

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
11,884.12	11,872.04	338.27	-327.13	KOP @ 11884' MD, 202' FNL, 1657' FWL
12,384.12	12,310.95	133.61	-325.61	First Take Point @ 12384' MD, 674' FNL, 1659' FWL
17,195.50	12,445.00	-4,645.93	-290.11	Last Take Point @ 17196' MD, 100' FSL, 1660' FWL
17,196.64	12,445.00	-4,647.07	-290.10	PBHL; 100' FSL, 1660' FWL

WCDSC Permian NM

WELL DETAILS: Jayhawk 7 FED 17H

RKB @ 3364.40ft
3339.40

Northing
387895.29

Easting
796039.09

Latitude
32.063737

Longitude
-103.511127

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	
	2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	
	2496.85	2.97	315.96	2496.72	5.53	-5.34	1.00	-5.18	
	11336.18	2.97	315.96	11324.19	334.58	-323.57	0.00	-313.77	
5	11534.08	0.00	0.00	11522.00	338.27	-327.13	1.50	-317.23	
6	11884.12	0.00	0.00	11872.04	338.27	-327.13	0.00	-317.23	KOP @ 11884' MD, 202' FNL, 1657' FWL
7	12784.12	90.00	179.57	12445.00	-234.68	-322.87	10.00	254.34	
8	17196.64	90.00	179.57	12445.00	-4647.07	-290.10	0.00	4656.12	PBHL; 100' FSL, 1660' FWL

