

WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 07-T26S-R34E

Jayhawk 7 FED 12H

Wellbore #1

Plan: Permit Plan 1

Standard Planning Report - Geographic

24 July, 2018

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Jayhawk 7 FED 12H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3353.10ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3353.10ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 12H	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 12H				
Well Position	+N/-S	0.00 ft	Northing:	387,886.21 usft	Latitude:	32.063737
	+E/-W	0.00 ft	Easting:	794,854.32 usft	Longitude:	-103.514952
Position Uncertainty		0.50 ft	Wellhead Elevation:		Ground Level:	3,328.10 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/23/2018	6.80	59.91	47,736.67981000

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	176.98

Plan Survey Tool Program	Date	7/24/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,714.94 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	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,767.25	3.34	22.77	2,767.10	7.18	3.01	1.25	1.25	0.00	22.77	
11,679.72	3.34	22.77	11,664.42	486.04	204.04	0.00	0.00	0.00	0.00	
11,902.42	0.00	0.00	11,887.00	492.02	206.55	1.50	-1.50	0.00	180.00	
12,252.46	0.00	0.00	12,237.04	492.02	206.55	0.00	0.00	0.00	0.00	
13,152.46	90.00	179.57	12,810.00	-80.92	210.80	10.00	10.00	0.00	179.57	PBHL - Jayhawk 7 FE
17,714.94	90.00	179.57	12,810.00	-4,643.27	244.69	0.00	0.00	0.00	0.00	PBHL - Jayhawk 7 FE

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Well:	Jayhawk 7 FED 12H	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	387,886.21	794,854.32	32.063737	-103.514952
100.00	0.00	0.00	100.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
200.00	0.00	0.00	200.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
300.00	0.00	0.00	300.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
400.00	0.00	0.00	400.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
500.00	0.00	0.00	500.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
600.00	0.00	0.00	600.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
700.00	0.00	0.00	700.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
800.00	0.00	0.00	800.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
900.00	0.00	0.00	900.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
1,000.00	0.00	0.00	1,000.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
1,100.00	0.00	0.00	1,100.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
1,200.00	0.00	0.00	1,200.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
1,300.00	0.00	0.00	1,300.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
1,400.00	0.00	0.00	1,400.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
1,500.00	0.00	0.00	1,500.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
1,600.00	0.00	0.00	1,600.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
1,700.00	0.00	0.00	1,700.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
1,800.00	0.00	0.00	1,800.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
1,900.00	0.00	0.00	1,900.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
2,000.00	0.00	0.00	2,000.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
2,100.00	0.00	0.00	2,100.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
2,200.00	0.00	0.00	2,200.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
2,300.00	0.00	0.00	2,300.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
2,400.00	0.00	0.00	2,400.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
2,500.00	0.00	0.00	2,500.00	0.00	0.00	387,886.21	794,854.32	32.063737	-103.514952
2,600.00	1.25	22.77	2,599.99	1.01	0.42	387,887.21	794,854.74	32.063740	-103.514950
2,700.00	2.50	22.77	2,699.94	4.02	1.69	387,890.23	794,856.01	32.063748	-103.514946
2,767.25	3.34	22.77	2,767.10	7.18	3.01	387,893.39	794,857.33	32.063756	-103.514942
2,800.00	3.34	22.77	2,799.79	8.94	3.75	387,895.15	794,858.07	32.063761	-103.514939
2,900.00	3.34	22.77	2,899.62	14.31	6.01	387,900.52	794,860.33	32.063776	-103.514932
3,000.00	3.34	22.77	2,999.45	19.69	8.26	387,905.90	794,862.58	32.063791	-103.514924
3,100.00	3.34	22.77	3,099.28	25.06	10.52	387,911.27	794,864.84	32.063805	-103.514917
3,200.00	3.34	22.77	3,199.11	30.43	12.78	387,916.64	794,867.09	32.063820	-103.514910
3,300.00	3.34	22.77	3,298.94	35.81	15.03	387,922.01	794,869.35	32.063835	-103.514902
3,400.00	3.34	22.77	3,398.77	41.18	17.29	387,927.39	794,871.60	32.063850	-103.514895
3,500.00	3.34	22.77	3,498.60	46.55	19.54	387,932.76	794,873.86	32.063864	-103.514887
3,600.00	3.34	22.77	3,598.43	51.92	21.80	387,938.13	794,876.12	32.063879	-103.514880
3,700.00	3.34	22.77	3,698.26	57.30	24.05	387,943.51	794,878.37	32.063894	-103.514872
3,800.00	3.34	22.77	3,798.09	62.67	26.31	387,948.88	794,880.63	32.063908	-103.514865
3,900.00	3.34	22.77	3,897.92	68.04	28.56	387,954.25	794,882.88	32.063923	-103.514858
4,000.00	3.34	22.77	3,997.75	73.42	30.82	387,959.62	794,885.14	32.063938	-103.514850
4,100.00	3.34	22.77	4,097.58	78.79	33.08	387,965.00	794,887.39	32.063953	-103.514843
4,200.00	3.34	22.77	4,197.41	84.16	35.33	387,970.37	794,889.65	32.063967	-103.514835
4,300.00	3.34	22.77	4,297.24	89.53	37.59	387,975.74	794,891.90	32.063982	-103.514828
4,400.00	3.34	22.77	4,397.07	94.91	39.84	387,981.12	794,894.16	32.063997	-103.514821
4,500.00	3.34	22.77	4,496.90	100.28	42.10	387,986.49	794,896.41	32.064012	-103.514813
4,600.00	3.34	22.77	4,596.73	105.65	44.35	387,991.86	794,898.67	32.064026	-103.514806
4,700.00	3.34	22.77	4,696.56	111.03	46.61	387,997.23	794,900.93	32.064041	-103.514798
4,800.00	3.34	22.77	4,796.39	116.40	48.86	388,002.61	794,903.18	32.064056	-103.514791
4,900.00	3.34	22.77	4,896.22	121.77	51.12	388,007.98	794,905.44	32.064070	-103.514784
5,000.00	3.34	22.77	4,996.05	127.15	53.37	388,013.35	794,907.69	32.064085	-103.514776
5,100.00	3.34	22.77	5,095.88	132.52	55.63	388,018.73	794,909.95	32.064100	-103.514769
5,200.00	3.34	22.77	5,195.71	137.89	57.89	388,024.10	794,912.20	32.064115	-103.514761
5,300.00	3.34	22.77	5,295.55	143.26	60.14	388,029.47	794,914.46	32.064129	-103.514754

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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	3.34	22.77	5,395.38	148.64	62.40	388,034.85	794,916.71	32.064144	-103.514746
5,500.00	3.34	22.77	5,495.21	154.01	64.65	388,040.22	794,918.97	32.064159	-103.514739
5,600.00	3.34	22.77	5,595.04	159.38	66.91	388,045.59	794,921.23	32.064173	-103.514732
5,700.00	3.34	22.77	5,694.87	164.76	69.16	388,050.96	794,923.48	32.064188	-103.514724
5,800.00	3.34	22.77	5,794.70	170.13	71.42	388,056.34	794,925.74	32.064203	-103.514717
5,900.00	3.34	22.77	5,894.53	175.50	73.67	388,061.71	794,927.99	32.064218	-103.514709
6,000.00	3.34	22.77	5,994.36	180.87	75.93	388,067.08	794,930.25	32.064232	-103.514702
6,100.00	3.34	22.77	6,094.19	186.25	78.19	388,072.46	794,932.50	32.064247	-103.514695
6,200.00	3.34	22.77	6,194.02	191.62	80.44	388,077.83	794,934.76	32.064262	-103.514687
6,300.00	3.34	22.77	6,293.85	196.99	82.70	388,083.20	794,937.01	32.064277	-103.514680
6,400.00	3.34	22.77	6,393.68	202.37	84.95	388,088.57	794,939.27	32.064291	-103.514672
6,500.00	3.34	22.77	6,493.51	207.74	87.21	388,093.95	794,941.52	32.064306	-103.514665
6,600.00	3.34	22.77	6,593.34	213.11	89.46	388,099.32	794,943.78	32.064321	-103.514658
6,700.00	3.34	22.77	6,693.17	218.48	91.72	388,104.69	794,946.04	32.064335	-103.514650
6,800.00	3.34	22.77	6,793.00	223.86	93.97	388,110.07	794,948.29	32.064350	-103.514643
6,900.00	3.34	22.77	6,892.83	229.23	96.23	388,115.44	794,950.55	32.064365	-103.514635
7,000.00	3.34	22.77	6,992.66	234.60	98.48	388,120.81	794,952.80	32.064380	-103.514628
7,100.00	3.34	22.77	7,092.49	239.98	100.74	388,126.18	794,955.06	32.064394	-103.514620
7,200.00	3.34	22.77	7,192.32	245.35	103.00	388,131.56	794,957.31	32.064409	-103.514613
7,300.00	3.34	22.77	7,292.15	250.72	105.25	388,136.93	794,959.57	32.064424	-103.514606
7,400.00	3.34	22.77	7,391.98	256.09	107.51	388,142.30	794,961.82	32.064438	-103.514598
7,500.00	3.34	22.77	7,491.81	261.47	109.76	388,147.68	794,964.08	32.064453	-103.514591
7,600.00	3.34	22.77	7,591.64	266.84	112.02	388,153.05	794,966.34	32.064468	-103.514583
7,700.00	3.34	22.77	7,691.47	272.21	114.27	388,158.42	794,968.59	32.064483	-103.514576
7,800.00	3.34	22.77	7,791.30	277.59	116.53	388,163.79	794,970.85	32.064497	-103.514569
7,900.00	3.34	22.77	7,891.13	282.96	118.78	388,169.17	794,973.10	32.064512	-103.514561
8,000.00	3.34	22.77	7,990.96	288.33	121.04	388,174.54	794,975.36	32.064527	-103.514554
8,100.00	3.34	22.77	8,090.79	293.71	123.30	388,179.91	794,977.61	32.064541	-103.514546
8,200.00	3.34	22.77	8,190.62	299.08	125.55	388,185.29	794,979.87	32.064556	-103.514539
8,300.00	3.34	22.77	8,290.45	304.45	127.81	388,190.66	794,982.12	32.064571	-103.514532
8,400.00	3.34	22.77	8,390.28	309.82	130.06	388,196.03	794,984.38	32.064586	-103.514524
8,500.00	3.34	22.77	8,490.11	315.20	132.32	388,201.40	794,986.63	32.064600	-103.514517
8,600.00	3.34	22.77	8,589.94	320.57	134.57	388,206.78	794,988.89	32.064615	-103.514509
8,700.00	3.34	22.77	8,689.77	325.94	136.83	388,212.15	794,991.15	32.064630	-103.514502
8,800.00	3.34	22.77	8,789.60	331.32	139.08	388,217.52	794,993.40	32.064645	-103.514494
8,900.00	3.34	22.77	8,889.43	336.69	141.34	388,222.90	794,995.66	32.064659	-103.514487
9,000.00	3.34	22.77	8,989.26	342.06	143.59	388,228.27	794,997.91	32.064674	-103.514480
9,100.00	3.34	22.77	9,089.09	347.43	145.85	388,233.64	795,000.17	32.064689	-103.514472
9,200.00	3.34	22.77	9,188.92	352.81	148.11	388,239.02	795,002.42	32.064703	-103.514465
9,300.00	3.34	22.77	9,288.75	358.18	150.36	388,244.39	795,004.68	32.064718	-103.514457
9,400.00	3.34	22.77	9,388.58	363.55	152.62	388,249.76	795,006.93	32.064733	-103.514450
9,500.00	3.34	22.77	9,488.41	368.93	154.87	388,255.13	795,009.19	32.064748	-103.514443
9,600.00	3.34	22.77	9,588.24	374.30	157.13	388,260.51	795,011.45	32.064762	-103.514435
9,700.00	3.34	22.77	9,688.07	379.67	159.38	388,265.88	795,013.70	32.064777	-103.514428
9,800.00	3.34	22.77	9,787.90	385.04	161.64	388,271.25	795,015.96	32.064792	-103.514420
9,900.00	3.34	22.77	9,887.73	390.42	163.89	388,276.63	795,018.21	32.064806	-103.514413
10,000.00	3.34	22.77	9,987.56	395.79	166.15	388,282.00	795,020.47	32.064821	-103.514406
10,100.00	3.34	22.77	10,087.39	401.16	168.41	388,287.37	795,022.72	32.064836	-103.514398
10,200.00	3.34	22.77	10,187.22	406.54	170.66	388,292.74	795,024.98	32.064851	-103.514391
10,300.00	3.34	22.77	10,287.05	411.91	172.92	388,298.12	795,027.23	32.064865	-103.514383
10,400.00	3.34	22.77	10,386.88	417.28	175.17	388,303.49	795,029.49	32.064880	-103.514376
10,500.00	3.34	22.77	10,486.71	422.66	177.43	388,308.86	795,031.74	32.064895	-103.514368
10,600.00	3.34	22.77	10,586.54	428.03	179.68	388,314.24	795,034.00	32.064910	-103.514361
10,700.00	3.34	22.77	10,686.37	433.40	181.94	388,319.61	795,036.26	32.064924	-103.514354
10,800.00	3.34	22.77	10,786.20	438.77	184.19	388,324.98	795,038.51	32.064939	-103.514346

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Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 12H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

Planned Survey									
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10,900.00	3.34	22.77	10,886.03	444.15	186.45	388,330.35	795,040.77	32.064954	-103.514339
11,000.00	3.34	22.77	10,985.86	449.52	188.71	388,335.73	795,043.02	32.064968	-103.514331
11,100.00	3.34	22.77	11,085.69	454.89	190.96	388,341.10	795,045.28	32.064983	-103.514324
11,200.00	3.34	22.77	11,185.52	460.27	193.22	388,346.47	795,047.53	32.064998	-103.514317
11,300.00	3.34	22.77	11,285.35	465.64	195.47	388,351.85	795,049.79	32.065013	-103.514309
11,400.00	3.34	22.77	11,385.18	471.01	197.73	388,357.22	795,052.04	32.065027	-103.514302
11,500.00	3.34	22.77	11,485.01	476.38	199.98	388,362.59	795,054.30	32.065042	-103.514294
11,600.00	3.34	22.77	11,584.84	481.76	202.24	388,367.96	795,056.56	32.065057	-103.514287
11,679.72	3.34	22.77	11,664.42	486.04	204.04	388,372.25	795,058.35	32.065068	-103.514281
11,700.00	3.04	22.77	11,684.67	487.08	204.47	388,373.29	795,058.79	32.065071	-103.514280
11,800.00	1.54	22.77	11,784.59	490.76	206.02	388,376.97	795,060.33	32.065081	-103.514275
11,900.00	0.04	22.77	11,884.58	492.02	206.55	388,378.23	795,060.87	32.065085	-103.514273
11,902.42	0.00	0.00	11,887.00	492.02	206.55	388,378.23	795,060.87	32.065085	-103.514273
12,000.00	0.00	0.00	11,984.58	492.02	206.55	388,378.23	795,060.87	32.065085	-103.514273
12,100.00	0.00	0.00	12,084.58	492.02	206.55	388,378.23	795,060.87	32.065085	-103.514273
12,200.00	0.00	0.00	12,184.58	492.02	206.55	388,378.23	795,060.87	32.065085	-103.514273
12,252.46	0.00	0.00	12,237.04	492.02	206.55	388,378.23	795,060.87	32.065085	-103.514273
12,300.00	4.75	179.57	12,284.52	490.05	206.56	388,376.26	795,060.88	32.065079	-103.514273
12,400.00	14.75	179.57	12,382.95	473.13	206.69	388,359.34	795,061.01	32.065033	-103.514273
12,498.52	24.61	179.57	12,475.60	440.00	206.93	388,326.21	795,061.25	32.064942	-103.514273
First Take Point @ 12499' MD, 100' FNL, 1007' FWL									
12,500.00	24.75	179.57	12,476.95	439.38	206.94	388,325.59	795,061.26	32.064940	-103.514273
12,600.00	34.75	179.57	12,563.66	389.82	207.31	388,276.02	795,061.62	32.064804	-103.514273
12,700.00	44.75	179.57	12,640.44	325.95	207.78	388,212.16	795,062.10	32.064628	-103.514273
12,800.00	54.75	179.57	12,704.96	249.72	208.35	388,135.93	795,062.67	32.064419	-103.514273
12,900.00	64.75	179.57	12,755.27	163.45	208.99	388,049.66	795,063.31	32.064182	-103.514273
13,000.00	74.75	179.57	12,789.83	69.75	209.69	387,955.96	795,064.00	32.063924	-103.514273
13,100.00	84.75	179.57	12,807.60	-28.53	210.42	387,857.68	795,064.73	32.063654	-103.514273
13,152.46	90.00	179.57	12,810.00	-80.92	210.80	387,805.29	795,065.12	32.063510	-103.514273
Land Point @ 13152' MD, 621' FNL, 1011' FWL									
13,200.00	90.00	179.57	12,810.00	-128.45	211.16	387,757.76	795,065.47	32.063379	-103.514273
13,300.00	90.00	179.57	12,810.00	-228.45	211.90	387,657.76	795,066.22	32.063104	-103.514273
13,400.00	90.00	179.57	12,810.00	-328.45	212.64	387,557.76	795,066.96	32.062830	-103.514273
13,500.00	90.00	179.57	12,810.00	-428.45	213.39	387,457.76	795,067.70	32.062555	-103.514273
13,600.00	90.00	179.57	12,810.00	-528.44	214.13	387,357.77	795,068.45	32.062280	-103.514273
13,700.00	90.00	179.57	12,810.00	-628.44	214.87	387,257.77	795,069.19	32.062005	-103.514273
13,800.00	90.00	179.57	12,810.00	-728.44	215.61	387,157.77	795,069.93	32.061730	-103.514273
13,900.00	90.00	179.57	12,810.00	-828.43	216.36	387,057.78	795,070.67	32.061455	-103.514273
14,000.00	90.00	179.57	12,810.00	-928.43	217.10	386,957.78	795,071.42	32.061180	-103.514273
14,100.00	90.00	179.57	12,810.00	-1,028.43	217.84	386,857.78	795,072.16	32.060905	-103.514274
14,200.00	90.00	179.57	12,810.00	-1,128.43	218.59	386,757.78	795,072.90	32.060631	-103.514274
14,300.00	90.00	179.57	12,810.00	-1,228.42	219.33	386,657.79	795,073.65	32.060356	-103.514274
14,400.00	90.00	179.57	12,810.00	-1,328.42	220.07	386,557.79	795,074.39	32.060081	-103.514274
14,500.00	90.00	179.57	12,810.00	-1,428.42	220.81	386,457.79	795,075.13	32.059806	-103.514274
14,600.00	90.00	179.57	12,810.00	-1,528.42	221.56	386,357.80	795,075.87	32.059531	-103.514274
14,700.00	90.00	179.57	12,810.00	-1,628.41	222.30	386,257.80	795,076.62	32.059256	-103.514274
14,800.00	90.00	179.57	12,810.00	-1,728.41	223.04	386,157.80	795,077.36	32.058981	-103.514274
14,900.00	90.00	179.57	12,810.00	-1,828.41	223.79	386,057.81	795,078.10	32.058706	-103.514274
15,000.00	90.00	179.57	12,810.00	-1,928.40	224.53	385,957.81	795,078.85	32.058431	-103.514274
15,100.00	90.00	179.57	12,810.00	-2,028.40	225.27	385,857.81	795,079.59	32.058157	-103.514274
15,200.00	90.00	179.57	12,810.00	-2,128.40	226.01	385,757.81	795,080.33	32.057882	-103.514274
15,300.00	90.00	179.57	12,810.00	-2,228.40	226.76	385,657.82	795,081.07	32.057607	-103.514274
15,400.00	90.00	179.57	12,810.00	-2,328.39	227.50	385,557.82	795,081.82	32.057332	-103.514274
15,500.00	90.00	179.57	12,810.00	-2,428.39	228.24	385,457.82	795,082.56	32.057057	-103.514274

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Jayhawk 7 FED 12H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3353.10ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3353.10ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7 FED 12H	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	12,810.00	-2,528.39	228.98	385,357.83	795,083.30	32.056782	-103.514274
15,700.00	90.00	179.57	12,810.00	-2,628.38	229.73	385,257.83	795,084.04	32.056507	-103.514274
15,800.00	90.00	179.57	12,810.00	-2,728.38	230.47	385,157.83	795,084.79	32.056232	-103.514274
15,900.00	90.00	179.57	12,810.00	-2,828.38	231.21	385,057.84	795,085.53	32.055958	-103.514274
16,000.00	90.00	179.57	12,810.00	-2,928.38	231.96	384,957.84	795,086.27	32.055683	-103.514275
16,100.00	90.00	179.57	12,810.00	-3,028.37	232.70	384,857.84	795,087.02	32.055408	-103.514275
16,200.00	90.00	179.57	12,810.00	-3,128.37	233.44	384,757.84	795,087.76	32.055133	-103.514275
16,300.00	90.00	179.57	12,810.00	-3,228.37	234.18	384,657.85	795,088.50	32.054858	-103.514275
16,400.00	90.00	179.57	12,810.00	-3,328.37	234.93	384,557.85	795,089.24	32.054583	-103.514275
16,500.00	90.00	179.57	12,810.00	-3,428.36	235.67	384,457.85	795,089.99	32.054308	-103.514275
16,600.00	90.00	179.57	12,810.00	-3,528.36	236.41	384,357.86	795,090.73	32.054033	-103.514275
16,700.00	90.00	179.57	12,810.00	-3,628.36	237.16	384,257.86	795,091.47	32.053759	-103.514275
16,800.00	90.00	179.57	12,810.00	-3,728.35	237.90	384,157.86	795,092.22	32.053484	-103.514275
16,900.00	90.00	179.57	12,810.00	-3,828.35	238.64	384,057.86	795,092.96	32.053209	-103.514275
17,000.00	90.00	179.57	12,810.00	-3,928.35	239.38	383,957.87	795,093.70	32.052934	-103.514275
17,100.00	90.00	179.57	12,810.00	-4,028.35	240.13	383,857.87	795,094.44	32.052659	-103.514275
17,200.00	90.00	179.57	12,810.00	-4,128.34	240.87	383,757.87	795,095.19	32.052384	-103.514275
17,300.00	90.00	179.57	12,810.00	-4,228.34	241.61	383,657.88	795,095.93	32.052109	-103.514275
17,400.00	90.00	179.57	12,810.00	-4,328.34	242.36	383,557.88	795,096.67	32.051834	-103.514275
17,500.00	90.00	179.57	12,810.00	-4,428.34	243.10	383,457.88	795,097.42	32.051560	-103.514275
17,600.00	90.00	179.57	12,810.00	-4,528.33	243.84	383,357.89	795,098.16	32.051285	-103.514275
17,700.00	90.00	179.57	12,810.00	-4,628.33	244.58	383,257.89	795,098.90	32.051010	-103.514275
17,714.00	90.00	179.57	12,810.00	-4,642.33	244.69	383,243.89	795,099.00	32.050971	-103.514275
Last Take Point @ 17714' MD, 100' FSL, 1010' FWL									
17,714.94	90.00	179.57	12,810.00	-4,643.27	244.69	383,242.95	795,099.01	32.050969	-103.514275
PBHL; 100' FSL, 1010' 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	-4,643.27	244.69	383,242.95	795,099.01	32.050969	-103.514275
- plan misses target center by 4649.71ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
VP - Jayhawk 7 FED 12I	0.00	0.00	11,800.00	492.02	206.55	388,378.23	795,060.87	32.065085	-103.514273
- plan misses target center by 0.99ft at 11815.43ft MD (11800.01 TVD, 491.11 N, 206.16 E)									
- Point									

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
12,498.52	12,475.60	440.00	206.93	First Take Point @ 12499' MD, 100' FNL, 1007' FWL	
13,152.46	12,810.00	-80.92	210.80	Land Point @ 13152' MD, 621' FNL, 1011' FWL	
17,714.00	12,810.00	-4,642.33	244.69	Last Take Point @ 17714' MD, 100' FSL, 1010' FWL	
17,714.94	12,810.00	-4,643.27	244.69	PBHL; 100' FSL, 1010' FWL	