

WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 07-T26S-R34E

Jayhawk 7-6 FED Fee Com 8H

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 7-6 FED Fee Com 8H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3398.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3398.20ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7-6 FED Fee Com 8H	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 7-6 FED Fee Com 8H					
Well Position	+N/-S	0.00 ft	Northing:	383,775.97 usft	Latitude:	32.052389
	+E/-W	0.00 ft	Easting:	797,260.13 usft	Longitude:	-103.507288
Position Uncertainty		0.50 ft	Wellhead Elevation:		Ground Level:	3,373.20 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/23/2018	6.79	59.90	47,730.40971573

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	358.47

Plan Survey Tool Program	Date	7/25/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	22,935.77 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	
2,490.30	3.63	197.27	2,490.11	-8.78	-2.73	1.25	1.25	0.00	197.27	
11,603.71	3.63	197.27	11,585.24	-559.59	-173.92	0.00	0.00	0.00	0.00	
11,845.63	0.00	0.00	11,827.00	-566.90	-176.19	1.50	-1.50	0.00	180.00	
12,195.67	0.00	0.00	12,177.04	-566.90	-176.19	0.00	0.00	0.00	0.00	
13,095.67	90.00	359.52	12,750.00	6.03	-181.00	10.00	10.00	0.00	359.52	PBHL - Jayhawk 7-6 f
22,935.77	90.00	359.52	12,750.00	9,845.78	-263.62	0.00	0.00	0.00	0.00	PBHL - Jayhawk 7-6 f

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Well:	Jayhawk 7-6 FED Fee Com 8H	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	383,775.97	797,260.13	32.052389	-103.507288
100.00	0.00	0.00	100.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
200.00	0.00	0.00	200.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
300.00	0.00	0.00	300.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
400.00	0.00	0.00	400.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
500.00	0.00	0.00	500.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
600.00	0.00	0.00	600.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
700.00	0.00	0.00	700.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
800.00	0.00	0.00	800.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
900.00	0.00	0.00	900.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
1,000.00	0.00	0.00	1,000.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
1,100.00	0.00	0.00	1,100.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
1,200.00	0.00	0.00	1,200.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
1,300.00	0.00	0.00	1,300.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
1,400.00	0.00	0.00	1,400.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
1,500.00	0.00	0.00	1,500.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
1,600.00	0.00	0.00	1,600.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
1,700.00	0.00	0.00	1,700.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
1,800.00	0.00	0.00	1,800.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
1,900.00	0.00	0.00	1,900.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
2,000.00	0.00	0.00	2,000.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
2,100.00	0.00	0.00	2,100.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
2,200.00	0.00	0.00	2,200.00	0.00	0.00	383,775.97	797,260.13	32.052389	-103.507288
2,300.00	1.25	197.27	2,299.99	-1.04	-0.32	383,774.93	797,259.80	32.052386	-103.507289
2,400.00	2.50	197.27	2,399.94	-4.17	-1.29	383,771.80	797,258.83	32.052377	-103.507292
2,490.30	3.63	197.27	2,490.11	-8.78	-2.73	383,767.19	797,257.40	32.052365	-103.507297
2,500.00	3.63	197.27	2,499.79	-9.36	-2.91	383,766.61	797,257.22	32.052363	-103.507297
2,600.00	3.63	197.27	2,599.59	-15.41	-4.79	383,760.56	797,255.34	32.052346	-103.507303
2,700.00	3.63	197.27	2,699.39	-21.45	-6.67	383,754.52	797,253.46	32.052330	-103.507310
2,800.00	3.63	197.27	2,799.19	-27.49	-8.55	383,748.47	797,251.58	32.052313	-103.507316
2,900.00	3.63	197.27	2,898.98	-33.54	-10.42	383,742.43	797,249.70	32.052297	-103.507322
3,000.00	3.63	197.27	2,998.78	-39.58	-12.30	383,736.39	797,247.83	32.052280	-103.507328
3,100.00	3.63	197.27	3,098.58	-45.63	-14.18	383,730.34	797,245.95	32.052263	-103.507334
3,200.00	3.63	197.27	3,198.38	-51.67	-16.06	383,724.30	797,244.07	32.052247	-103.507341
3,300.00	3.63	197.27	3,298.18	-57.71	-17.94	383,718.25	797,242.19	32.052230	-103.507347
3,400.00	3.63	197.27	3,397.98	-63.76	-19.82	383,712.21	797,240.31	32.052214	-103.507353
3,500.00	3.63	197.27	3,497.78	-69.80	-21.69	383,706.17	797,238.43	32.052197	-103.507359
3,600.00	3.63	197.27	3,597.58	-75.85	-23.57	383,700.12	797,236.55	32.052181	-103.507365
3,700.00	3.63	197.27	3,697.38	-81.89	-25.45	383,694.08	797,234.68	32.052164	-103.507372
3,800.00	3.63	197.27	3,797.18	-87.93	-27.33	383,688.03	797,232.80	32.052147	-103.507378
3,900.00	3.63	197.27	3,896.98	-93.98	-29.21	383,681.99	797,230.92	32.052131	-103.507384
4,000.00	3.63	197.27	3,996.78	-100.02	-31.09	383,675.95	797,229.04	32.052114	-103.507390
4,100.00	3.63	197.27	4,096.58	-106.07	-32.97	383,669.90	797,227.16	32.052098	-103.507397
4,200.00	3.63	197.27	4,196.38	-112.11	-34.84	383,663.86	797,225.28	32.052081	-103.507403
4,300.00	3.63	197.27	4,296.18	-118.15	-36.72	383,657.81	797,223.41	32.052065	-103.507409
4,400.00	3.63	197.27	4,395.98	-124.20	-38.60	383,651.77	797,221.53	32.052048	-103.507415
4,500.00	3.63	197.27	4,495.78	-130.24	-40.48	383,645.73	797,219.65	32.052031	-103.507421
4,600.00	3.63	197.27	4,595.58	-136.29	-42.36	383,639.68	797,217.77	32.052015	-103.507428
4,700.00	3.63	197.27	4,695.38	-142.33	-44.24	383,633.64	797,215.89	32.051998	-103.507434
4,800.00	3.63	197.27	4,795.18	-148.37	-46.11	383,627.59	797,214.01	32.051982	-103.507440
4,900.00	3.63	197.27	4,894.97	-154.42	-47.99	383,621.55	797,212.13	32.051965	-103.507446
5,000.00	3.63	197.27	4,994.77	-160.46	-49.87	383,615.51	797,210.26	32.051949	-103.507452
5,100.00	3.63	197.27	5,094.57	-166.51	-51.75	383,609.46	797,208.38	32.051932	-103.507459
5,200.00	3.63	197.27	5,194.37	-172.55	-53.63	383,603.42	797,206.50	32.051915	-103.507465
5,300.00	3.63	197.27	5,294.17	-178.59	-55.51	383,597.37	797,204.62	32.051899	-103.507471

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Well:	Jayhawk 7-6 FED Fee Com 8H	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	3.63	197.27	5,393.97	-184.64	-57.39	383,591.33	797,202.74	32.051882	-103.507477
5,500.00	3.63	197.27	5,493.77	-190.68	-59.26	383,585.29	797,200.86	32.051866	-103.507483
5,600.00	3.63	197.27	5,593.57	-196.73	-61.14	383,579.24	797,198.99	32.051849	-103.507490
5,700.00	3.63	197.27	5,693.37	-202.77	-63.02	383,573.20	797,197.11	32.051833	-103.507496
5,800.00	3.63	197.27	5,793.17	-208.81	-64.90	383,567.15	797,195.23	32.051816	-103.507502
5,900.00	3.63	197.27	5,892.97	-214.86	-66.78	383,561.11	797,193.35	32.051799	-103.507508
6,000.00	3.63	197.27	5,992.77	-220.90	-68.66	383,555.07	797,191.47	32.051783	-103.507515
6,100.00	3.63	197.27	6,092.57	-226.95	-70.53	383,549.02	797,189.59	32.051766	-103.507521
6,200.00	3.63	197.27	6,192.37	-232.99	-72.41	383,542.98	797,187.71	32.051750	-103.507527
6,300.00	3.63	197.27	6,292.17	-239.03	-74.29	383,536.93	797,185.84	32.051733	-103.507533
6,400.00	3.63	197.27	6,391.97	-245.08	-76.17	383,530.89	797,183.96	32.051717	-103.507539
6,500.00	3.63	197.27	6,491.77	-251.12	-78.05	383,524.85	797,182.08	32.051700	-103.507546
6,600.00	3.63	197.27	6,591.57	-257.17	-79.93	383,518.80	797,180.20	32.051683	-103.507552
6,700.00	3.63	197.27	6,691.37	-263.21	-81.81	383,512.76	797,178.32	32.051667	-103.507558
6,800.00	3.63	197.27	6,791.17	-269.25	-83.68	383,506.71	797,176.44	32.051650	-103.507564
6,900.00	3.63	197.27	6,890.96	-275.30	-85.56	383,500.67	797,174.57	32.051634	-103.507570
7,000.00	3.63	197.27	6,990.76	-281.34	-87.44	383,494.63	797,172.69	32.051617	-103.507577
7,100.00	3.63	197.27	7,090.56	-287.39	-89.32	383,488.58	797,170.81	32.051601	-103.507583
7,200.00	3.63	197.27	7,190.36	-293.43	-91.20	383,482.54	797,168.93	32.051584	-103.507589
7,300.00	3.63	197.27	7,290.16	-299.47	-93.08	383,476.49	797,167.05	32.051567	-103.507595
7,400.00	3.63	197.27	7,389.96	-305.52	-94.96	383,470.45	797,165.17	32.051551	-103.507602
7,500.00	3.63	197.27	7,489.76	-311.56	-96.83	383,464.41	797,163.29	32.051534	-103.507608
7,600.00	3.63	197.27	7,589.56	-317.61	-98.71	383,458.36	797,161.42	32.051518	-103.507614
7,700.00	3.63	197.27	7,689.36	-323.65	-100.59	383,452.32	797,159.54	32.051501	-103.507620
7,800.00	3.63	197.27	7,789.16	-329.69	-102.47	383,446.27	797,157.66	32.051485	-103.507626
7,900.00	3.63	197.27	7,888.96	-335.74	-104.35	383,440.23	797,155.78	32.051468	-103.507633
8,000.00	3.63	197.27	7,988.76	-341.78	-106.23	383,434.19	797,153.90	32.051451	-103.507639
8,100.00	3.63	197.27	8,088.56	-347.83	-108.10	383,428.14	797,152.02	32.051435	-103.507645
8,200.00	3.63	197.27	8,188.36	-353.87	-109.98	383,422.10	797,150.15	32.051418	-103.507651
8,300.00	3.63	197.27	8,288.16	-359.91	-111.86	383,416.05	797,148.27	32.051402	-103.507657
8,400.00	3.63	197.27	8,387.96	-365.96	-113.74	383,410.01	797,146.39	32.051385	-103.507664
8,500.00	3.63	197.27	8,487.76	-372.00	-115.62	383,403.97	797,144.51	32.051369	-103.507670
8,600.00	3.63	197.27	8,587.56	-378.05	-117.50	383,397.92	797,142.63	32.051352	-103.507676
8,700.00	3.63	197.27	8,687.36	-384.09	-119.38	383,391.88	797,140.75	32.051335	-103.507682
8,800.00	3.63	197.27	8,787.16	-390.13	-121.25	383,385.83	797,138.87	32.051319	-103.507688
8,900.00	3.63	197.27	8,886.96	-396.18	-123.13	383,379.79	797,137.00	32.051302	-103.507695
9,000.00	3.63	197.27	8,986.75	-402.22	-125.01	383,373.75	797,135.12	32.051286	-103.507701
9,100.00	3.63	197.27	9,086.55	-408.27	-126.89	383,367.70	797,133.24	32.051269	-103.507707
9,200.00	3.63	197.27	9,186.35	-414.31	-128.77	383,361.66	797,131.36	32.051252	-103.507713
9,300.00	3.63	197.27	9,286.15	-420.35	-130.65	383,355.61	797,129.48	32.051236	-103.507720
9,400.00	3.63	197.27	9,385.95	-426.40	-132.52	383,349.57	797,127.60	32.051219	-103.507726
9,500.00	3.63	197.27	9,485.75	-432.44	-134.40	383,343.53	797,125.72	32.051203	-103.507732
9,600.00	3.63	197.27	9,585.55	-438.49	-136.28	383,337.48	797,123.85	32.051186	-103.507738
9,700.00	3.63	197.27	9,685.35	-444.53	-138.16	383,331.44	797,121.97	32.051170	-103.507744
9,800.00	3.63	197.27	9,785.15	-450.57	-140.04	383,325.39	797,120.09	32.051153	-103.507751
9,900.00	3.63	197.27	9,884.95	-456.62	-141.92	383,319.35	797,118.21	32.051136	-103.507757
10,000.00	3.63	197.27	9,984.75	-462.66	-143.80	383,313.31	797,116.33	32.051120	-103.507763
10,100.00	3.63	197.27	10,084.55	-468.71	-145.67	383,307.26	797,114.45	32.051103	-103.507769
10,200.00	3.63	197.27	10,184.35	-474.75	-147.55	383,301.22	797,112.58	32.051087	-103.507775
10,300.00	3.63	197.27	10,284.15	-480.79	-149.43	383,295.17	797,110.70	32.051070	-103.507782
10,400.00	3.63	197.27	10,383.95	-486.84	-151.31	383,289.13	797,108.82	32.051054	-103.507788
10,500.00	3.63	197.27	10,483.75	-492.88	-153.19	383,283.09	797,106.94	32.051037	-103.507794
10,600.00	3.63	197.27	10,583.55	-498.93	-155.07	383,277.04	797,105.06	32.051020	-103.507800
10,700.00	3.63	197.27	10,683.35	-504.97	-156.95	383,271.00	797,103.18	32.051004	-103.507806
10,800.00	3.63	197.27	10,783.15	-511.01	-158.82	383,264.95	797,101.30	32.050987	-103.507813

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Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3398.20ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7-6 FED Fee Com 8H	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	3.63	197.27	10,882.95	-517.06	-160.70	383,258.91	797,099.43	32.050971	-103.507819
11,000.00	3.63	197.27	10,982.74	-523.10	-162.58	383,252.87	797,097.55	32.050954	-103.507825
11,100.00	3.63	197.27	11,082.54	-529.15	-164.46	383,246.82	797,095.67	32.050938	-103.507831
11,200.00	3.63	197.27	11,182.34	-535.19	-166.34	383,240.78	797,093.79	32.050921	-103.507838
11,300.00	3.63	197.27	11,282.14	-541.23	-168.22	383,234.74	797,091.91	32.050904	-103.507844
11,400.00	3.63	197.27	11,381.94	-547.28	-170.09	383,228.69	797,090.03	32.050888	-103.507850
11,500.00	3.63	197.27	11,481.74	-553.32	-171.97	383,222.65	797,088.16	32.050871	-103.507856
11,600.00	3.63	197.27	11,581.54	-559.37	-173.85	383,216.60	797,086.28	32.050855	-103.507862
11,603.71	3.63	197.27	11,585.24	-559.59	-173.92	383,216.38	797,086.21	32.050854	-103.507863
11,700.00	2.18	197.27	11,681.41	-564.25	-175.37	383,211.72	797,084.76	32.050841	-103.507867
11,800.00	0.68	197.27	11,781.37	-566.64	-176.11	383,209.33	797,084.02	32.050835	-103.507870
11,845.63	0.00	0.00	11,827.00	-566.90	-176.19	383,209.07	797,083.93	32.050834	-103.507870
11,900.00	0.00	0.00	11,881.37	-566.90	-176.19	383,209.07	797,083.93	32.050834	-103.507870
12,000.00	0.00	0.00	11,981.37	-566.90	-176.19	383,209.07	797,083.93	32.050834	-103.507870
12,100.00	0.00	0.00	12,081.37	-566.90	-176.19	383,209.07	797,083.93	32.050834	-103.507870
12,195.67	0.00	0.00	12,177.04	-566.90	-176.19	383,209.07	797,083.93	32.050834	-103.507870
KOP @ 12196' MD, 48' FSL, 2927' FEL									
12,200.00	0.43	359.52	12,181.37	-566.89	-176.19	383,209.08	797,083.93	32.050834	-103.507870
12,300.00	10.43	359.52	12,280.80	-557.43	-176.27	383,218.54	797,083.85	32.050860	-103.507870
12,400.00	20.43	359.52	12,377.07	-530.85	-176.50	383,245.11	797,083.63	32.050933	-103.507870
12,441.43	24.58	359.52	12,415.34	-515.00	-176.63	383,260.97	797,083.50	32.050977	-103.507870
First Take Point @ 12441' MD, 100' FSL, 2297' FEL									
12,500.00	30.43	359.52	12,467.26	-487.96	-176.86	383,288.00	797,083.27	32.051051	-103.507870
12,600.00	40.43	359.52	12,548.64	-430.07	-177.34	383,345.90	797,082.79	32.051210	-103.507870
12,700.00	50.43	359.52	12,618.72	-358.91	-177.94	383,417.05	797,082.19	32.051406	-103.507871
12,800.00	60.43	359.52	12,675.39	-276.68	-178.63	383,499.29	797,081.50	32.051632	-103.507871
12,900.00	70.43	359.52	12,716.91	-185.85	-179.39	383,590.12	797,080.73	32.051882	-103.507871
13,000.00	80.43	359.52	12,742.03	-89.19	-180.20	383,686.78	797,079.92	32.052147	-103.507871
13,095.67	90.00	359.52	12,750.00	6.03	-181.00	383,782.00	797,079.12	32.052409	-103.507872
13,100.00	90.00	359.52	12,750.00	10.37	-181.04	383,786.33	797,079.09	32.052421	-103.507872
13,200.00	90.00	359.52	12,750.00	110.36	-181.88	383,886.33	797,078.25	32.052696	-103.507872
13,300.00	90.00	359.52	12,750.00	210.36	-182.72	383,986.33	797,077.41	32.052971	-103.507872
13,400.00	90.00	359.52	12,750.00	310.35	-183.56	384,086.32	797,076.57	32.053246	-103.507872
13,500.00	90.00	359.52	12,750.00	410.35	-184.40	384,186.32	797,075.73	32.053520	-103.507873
13,600.00	90.00	359.52	12,750.00	510.35	-185.24	384,286.32	797,074.89	32.053795	-103.507873
13,700.00	90.00	359.52	12,750.00	610.34	-186.08	384,386.31	797,074.05	32.054070	-103.507873
13,800.00	90.00	359.52	12,750.00	710.34	-186.92	384,486.31	797,073.21	32.054345	-103.507873
13,900.00	90.00	359.52	12,750.00	810.34	-187.76	384,586.30	797,072.37	32.054620	-103.507873
14,000.00	90.00	359.52	12,750.00	910.33	-188.60	384,686.30	797,071.53	32.054895	-103.507874
14,100.00	90.00	359.52	12,750.00	1,010.33	-189.44	384,786.30	797,070.69	32.055170	-103.507874
14,200.00	90.00	359.52	12,750.00	1,110.33	-190.28	384,886.29	797,069.85	32.055445	-103.507874
14,300.00	90.00	359.52	12,750.00	1,210.32	-191.12	384,986.29	797,069.01	32.055719	-103.507874
14,400.00	90.00	359.52	12,750.00	1,310.32	-191.96	385,086.29	797,068.17	32.055994	-103.507875
14,500.00	90.00	359.52	12,750.00	1,410.32	-192.80	385,186.28	797,067.33	32.056269	-103.507875
14,600.00	90.00	359.52	12,750.00	1,510.31	-193.63	385,286.28	797,066.49	32.056544	-103.507875
14,700.00	90.00	359.52	12,750.00	1,610.31	-194.47	385,386.27	797,065.65	32.056819	-103.507875
14,800.00	90.00	359.52	12,750.00	1,710.31	-195.31	385,486.27	797,064.81	32.057094	-103.507876
14,900.00	90.00	359.52	12,750.00	1,810.30	-196.15	385,586.27	797,063.97	32.057369	-103.507876
15,000.00	90.00	359.52	12,750.00	1,910.30	-196.99	385,686.26	797,063.14	32.057644	-103.507876
15,100.00	90.00	359.52	12,750.00	2,010.29	-197.83	385,786.26	797,062.30	32.057918	-103.507876
15,200.00	90.00	359.52	12,750.00	2,110.29	-198.67	385,886.26	797,061.46	32.058193	-103.507877
15,300.00	90.00	359.52	12,750.00	2,210.29	-199.51	385,986.25	797,060.62	32.058468	-103.507877
15,400.00	90.00	359.52	12,750.00	2,310.28	-200.35	386,086.25	797,059.78	32.058743	-103.507877
15,500.00	90.00	359.52	12,750.00	2,410.28	-201.19	386,186.24	797,058.94	32.059018	-103.507877

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Jayhawk 7-6 FED Fee Com 8H
Company:	WCDCS Permian NM	TVD Reference:	RKB @ 3398.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3398.20ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7-6 FED Fee Com 8H	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	359.52	12,750.00	2,510.28	-202.03	386,286.24	797,058.10	32.059293	-103.507878
15,700.00	90.00	359.52	12,750.00	2,610.27	-202.87	386,386.24	797,057.26	32.059568	-103.507878
15,800.00	90.00	359.52	12,750.00	2,710.27	-203.71	386,486.23	797,056.42	32.059843	-103.507878
15,900.00	90.00	359.52	12,750.00	2,810.27	-204.55	386,586.23	797,055.58	32.060117	-103.507878
16,000.00	90.00	359.52	12,750.00	2,910.26	-205.39	386,686.23	797,054.74	32.060392	-103.507879
16,100.00	90.00	359.52	12,750.00	3,010.26	-206.23	386,786.22	797,053.90	32.060667	-103.507879
16,200.00	90.00	359.52	12,750.00	3,110.26	-207.07	386,886.22	797,053.06	32.060942	-103.507879
16,300.00	90.00	359.52	12,750.00	3,210.25	-207.91	386,986.21	797,052.22	32.061217	-103.507879
16,400.00	90.00	359.52	12,750.00	3,310.25	-208.75	387,086.21	797,051.38	32.061492	-103.507880
16,500.00	90.00	359.52	12,750.00	3,410.25	-209.59	387,186.21	797,050.54	32.061767	-103.507880
16,600.00	90.00	359.52	12,750.00	3,510.24	-210.43	387,286.20	797,049.70	32.062042	-103.507880
16,700.00	90.00	359.52	12,750.00	3,610.24	-211.27	387,386.20	797,048.86	32.062316	-103.507880
16,800.00	90.00	359.52	12,750.00	3,710.23	-212.11	387,486.20	797,048.02	32.062591	-103.507880
16,900.00	90.00	359.52	12,750.00	3,810.23	-212.95	387,586.19	797,047.18	32.062866	-103.507881
17,000.00	90.00	359.52	12,750.00	3,910.23	-213.79	387,686.19	797,046.34	32.063141	-103.507881
17,100.00	90.00	359.52	12,750.00	4,010.22	-214.62	387,786.18	797,045.50	32.063416	-103.507881
17,200.00	90.00	359.52	12,750.00	4,110.22	-215.46	387,886.18	797,044.66	32.063691	-103.507881
17,300.00	90.00	359.52	12,750.00	4,210.22	-216.30	387,986.18	797,043.82	32.063966	-103.507882
17,400.00	90.00	359.52	12,750.00	4,310.21	-217.14	388,086.17	797,042.98	32.064241	-103.507882
17,500.00	90.00	359.52	12,750.00	4,410.21	-217.98	388,186.17	797,042.15	32.064515	-103.507882
17,600.00	90.00	359.52	12,750.00	4,510.21	-218.82	388,286.17	797,041.31	32.064790	-103.507882
17,700.00	90.00	359.52	12,750.00	4,610.20	-219.66	388,386.16	797,040.47	32.065065	-103.507883
17,800.00	90.00	359.52	12,750.00	4,710.20	-220.50	388,486.16	797,039.63	32.065340	-103.507883
17,900.00	90.00	359.52	12,750.00	4,810.20	-221.34	388,586.16	797,038.79	32.065615	-103.507883
18,000.00	90.00	359.52	12,750.00	4,910.19	-222.18	388,686.15	797,037.95	32.065890	-103.507883
18,100.00	90.00	359.52	12,750.00	5,010.19	-223.02	388,786.15	797,037.11	32.066165	-103.507884
18,200.00	90.00	359.52	12,750.00	5,110.19	-223.86	388,886.14	797,036.27	32.066440	-103.507884
18,300.00	90.00	359.52	12,750.00	5,210.18	-224.70	388,986.14	797,035.43	32.066714	-103.507884
18,400.00	90.00	359.52	12,750.00	5,310.18	-225.54	389,086.14	797,034.59	32.066989	-103.507884
18,500.00	90.00	359.52	12,750.00	5,410.17	-226.38	389,186.13	797,033.75	32.067264	-103.507885
18,600.00	90.00	359.52	12,750.00	5,510.17	-227.22	389,286.13	797,032.91	32.067539	-103.507885
18,700.00	90.00	359.52	12,750.00	5,610.17	-228.06	389,386.13	797,032.07	32.067814	-103.507885
18,800.00	90.00	359.52	12,750.00	5,710.16	-228.90	389,486.12	797,031.23	32.068089	-103.507885
18,900.00	90.00	359.52	12,750.00	5,810.16	-229.74	389,586.12	797,030.39	32.068364	-103.507886
19,000.00	90.00	359.52	12,750.00	5,910.16	-230.58	389,686.11	797,029.55	32.068639	-103.507886
19,100.00	90.00	359.52	12,750.00	6,010.15	-231.42	389,786.11	797,028.71	32.068913	-103.507886
19,200.00	90.00	359.52	12,750.00	6,110.15	-232.26	389,886.11	797,027.87	32.069188	-103.507886
19,300.00	90.00	359.52	12,750.00	6,210.15	-233.10	389,986.10	797,027.03	32.069463	-103.507887
19,400.00	90.00	359.52	12,750.00	6,310.14	-233.94	390,086.10	797,026.19	32.069738	-103.507887
19,500.00	90.00	359.52	12,750.00	6,410.14	-234.77	390,186.10	797,025.35	32.070013	-103.507887
19,600.00	90.00	359.52	12,750.00	6,510.14	-235.61	390,286.09	797,024.51	32.070288	-103.507887
19,700.00	90.00	359.52	12,750.00	6,610.13	-236.45	390,386.09	797,023.67	32.070563	-103.507887
19,800.00	90.00	359.52	12,750.00	6,710.13	-237.29	390,486.08	797,022.83	32.070838	-103.507888
19,900.00	90.00	359.52	12,750.00	6,810.13	-238.13	390,586.08	797,022.00	32.071112	-103.507888
20,000.00	90.00	359.52	12,750.00	6,910.12	-238.97	390,686.08	797,021.16	32.071387	-103.507888
20,100.00	90.00	359.52	12,750.00	7,010.12	-239.81	390,786.07	797,020.32	32.071662	-103.507888
20,200.00	90.00	359.52	12,750.00	7,110.12	-240.65	390,886.07	797,019.48	32.071937	-103.507889
20,300.00	90.00	359.52	12,750.00	7,210.11	-241.49	390,986.07	797,018.64	32.072212	-103.507889
20,400.00	90.00	359.52	12,750.00	7,310.11	-242.33	391,086.06	797,017.80	32.072487	-103.507889
20,500.00	90.00	359.52	12,750.00	7,410.10	-243.17	391,186.06	797,016.96	32.072762	-103.507889
20,600.00	90.00	359.52	12,750.00	7,510.10	-244.01	391,286.05	797,016.12	32.073037	-103.507890
20,700.00	90.00	359.52	12,750.00	7,610.10	-244.85	391,386.05	797,015.28	32.073312	-103.507890
20,800.00	90.00	359.52	12,750.00	7,710.09	-245.69	391,486.05	797,014.44	32.073586	-103.507890
20,900.00	90.00	359.52	12,750.00	7,810.09	-246.53	391,586.04	797,013.60	32.073861	-103.507890
21,000.00	90.00	359.52	12,750.00	7,910.09	-247.37	391,686.04	797,012.76	32.074136	-103.507891

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Jayhawk 7-6 FED Fee Com 8H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3398.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	RKB @ 3398.20ft
Site:	Sec 07-T26S-R34E	North Reference:	Grid
Well:	Jayhawk 7-6 FED Fee Com 8H	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
21,100.00	90.00	359.52	12,750.00	8,010.08	-248.21	391,786.04	797,011.92	32.074411	-103.507891
21,200.00	90.00	359.52	12,750.00	8,110.08	-249.05	391,886.03	797,011.08	32.074686	-103.507891
21,300.00	90.00	359.52	12,750.00	8,210.08	-249.89	391,986.03	797,010.24	32.074961	-103.507891
21,400.00	90.00	359.52	12,750.00	8,310.07	-250.73	392,086.02	797,009.40	32.075236	-103.507892
21,500.00	90.00	359.52	12,750.00	8,410.07	-251.57	392,186.02	797,008.56	32.075511	-103.507892
21,600.00	90.00	359.52	12,750.00	8,510.07	-252.41	392,286.02	797,007.72	32.075785	-103.507892
21,700.00	90.00	359.52	12,750.00	8,610.06	-253.25	392,386.01	797,006.88	32.076060	-103.507892
21,800.00	90.00	359.52	12,750.00	8,710.06	-254.09	392,486.01	797,006.04	32.076335	-103.507893
21,900.00	90.00	359.52	12,750.00	8,810.06	-254.93	392,586.01	797,005.20	32.076610	-103.507893
22,000.00	90.00	359.52	12,750.00	8,910.05	-255.76	392,686.00	797,004.36	32.076885	-103.507893
22,100.00	90.00	359.52	12,750.00	9,010.05	-256.60	392,786.00	797,003.52	32.077160	-103.507893
22,200.00	90.00	359.52	12,750.00	9,110.04	-257.44	392,885.99	797,002.68	32.077435	-103.507893
22,300.00	90.00	359.52	12,750.00	9,210.04	-258.28	392,985.99	797,001.84	32.077710	-103.507894
22,400.00	90.00	359.52	12,750.00	9,310.04	-259.12	393,085.99	797,001.01	32.077984	-103.507894
22,500.00	90.00	359.52	12,750.00	9,410.03	-259.96	393,185.98	797,000.17	32.078259	-103.507894
22,600.00	90.00	359.52	12,750.00	9,510.03	-260.80	393,285.98	796,999.33	32.078534	-103.507894
22,700.00	90.00	359.52	12,750.00	9,610.03	-261.64	393,385.98	796,998.49	32.078809	-103.507895
22,800.00	90.00	359.52	12,750.00	9,710.02	-262.48	393,485.97	796,997.65	32.079084	-103.507895
22,900.00	90.00	359.52	12,750.00	9,810.02	-263.32	393,585.97	796,996.81	32.079359	-103.507895
22,934.50	90.00	359.52	12,750.00	9,844.52	-263.61	393,620.47	796,996.52	32.079454	-103.507895
Last Take Point @ 22935' MD, 100' FNL, 2300' FEL									
22,935.77	90.00	359.52	12,750.00	9,845.78	-263.62	393,621.73	796,996.51	32.079457	-103.507895
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
- hit/miss target									
- Shape									
PBHL - Jayhawk 7-6 Fed Fee Com 8H	0.00	0.00	0.00	9,845.78	-263.62	393,621.73	796,996.51	32.079457	-103.507895
- plan misses target center by 9849.31ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
VP - Jayhawk 7-6 Fed Fee Com 8H	0.00	0.00	11,800.00	-566.90	-176.19	383,209.07	797,083.93	32.050834	-103.507870
- plan misses target center by 0.10ft at 11818.63ft MD (11800.00 TVD, -566.81 N, -176.17 E)									
- Point									

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
12,195.67	12,177.04	-566.90	-176.19	KOP @ 12196' MD, 48' FSL, 2927' FEL	
12,441.43	12,415.34	-515.00	-176.63	First Take Point @ 12441' MD, 100' FSL, 2297' FEL	
22,934.50	12,750.00	9,844.52	-263.61	Last Take Point @ 22935' MD, 100' FNL, 2300' FEL	
22,935.77	12,750.00	9,845.78	-263.62	PBHL; 100' FNL, 2300' FEL	