



KSI 22 FED COM 2H

WEST UNRESTRICTED

Directional Survey

District PERMIAN BASIN	County LEA	Field Name CORBIN SOUTH	Project Group DELAWARE BASIN	State/Province NM
Surface Legal Location SEC22 T18S R33E	API/UWI 3002540911	Latitude (") 32° 43' 35.09" N	Longitude (") 103° 38' 41.61" W	Ground Elev... 3,837.10
			KB - GL (ft) 25.00	Orig KB Elev (ft) 3,862.10
				Tubing Head Elevation (ft)

Wellbores

Wellbore Name OH	Parent Wellbore OH	Kick Off Depth (ftKB) 9,046.0	Vertical Section Direction (") 1.10
Actual Deviation Survey WEATHERFORD, Proposed? No	Definitive? Yes	Proposed? No	Proposed Deviation Survey VES, Proposed? No

Deviation Survey

Date 2/11/2013		Description WEATHERFORD			
MD Tie In (ftKB)	TVD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (ft)	EW Tie In (ft)
8,990.00	8,987.64	1.55	249.33	45.88	77.28

Survey Data

Date	MD (ftKB)	Incl (")	Azm (")	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Survey Tool	Survey Company
2/11/2013	8,990.00	1.55	249.33	8,987.64	47.36	45.88	77.28	0.00	LWD	WEATHERFORD
2/11/2013	9,027.00	1.99	252.35	9,024.62	46.96	45.51	76.20	1.22	LWD	WEATHERFORD
2/11/2013	9,059.00	2.42	295.57	9,056.60	47.06	45.63	75.06	5.23	LWD	WEATHERFORD
2/11/2013	9,090.00	5.07	338.23	9,087.54	48.60	47.19	73.96	11.86	LWD	WEATHERFORD
2/11/2013	9,122.00	9.45	345.30	9,119.27	52.43	51.04	72.77	13.94	LWD	WEATHERFORD
2/11/2013	9,153.00	12.70	347.81	9,149.69	58.20	56.84	71.40	10.60	LWD	WEATHERFORD
2/11/2013	9,185.00	15.80	347.66	9,180.70	65.86	64.53	69.73	9.69	LWD	WEATHERFORD
2/11/2013	9,217.00	19.38	348.09	9,211.20	75.27	73.99	67.70	11.19	LWD	WEATHERFORD
2/11/2013	9,248.00	22.62	349.19	9,240.14	86.12	84.88	65.52	10.53	LWD	WEATHERFORD
2/11/2013	9,280.00	25.65	351.25	9,269.34	98.97	97.77	63.31	9.83	LWD	WEATHERFORD
2/11/2013	9,311.00	28.46	353.77	9,296.95	112.91	111.75	61.49	9.79	LWD	WEATHERFORD
2/11/2013	9,342.00	31.07	355.67	9,323.85	128.20	127.07	60.09	8.95	LWD	WEATHERFORD
2/11/2013	9,374.00	33.65	356.97	9,350.88	145.27	144.16	58.99	8.35	LWD	WEATHERFORD
2/11/2013	9,405.00	36.89	356.53	9,376.19	163.11	162.03	57.98	10.48	LWD	WEATHERFORD
2/11/2013	9,437.00	40.25	354.63	9,401.20	182.97	181.92	56.43	11.13	LWD	WEATHERFORD
2/11/2013	9,468.00	43.43	356.09	9,424.30	203.54	202.52	54.76	10.73	LWD	WEATHERFORD
2/11/2013	9,500.00	46.67	358.45	9,446.90	226.13	225.14	53.70	11.39	LWD	WEATHERFORD
2/11/2013	9,532.00	50.07	1.57	9,468.16	250.03	249.05	53.72	12.88	LWD	WEATHERFORD
2/11/2013	9,563.00	53.97	2.05	9,487.24	274.46	273.47	54.49	12.64	LWD	WEATHERFORD
2/11/2013	9,595.00	56.84	2.10	9,505.40	300.80	299.79	55.45	8.97	LWD	WEATHERFORD
2/11/2013	9,626.00	59.16	2.13	9,521.83	327.08	326.06	56.42	7.48	LWD	WEATHERFORD
2/11/2013	9,658.00	60.85	2.38	9,537.83	354.79	353.75	57.51	5.32	LWD	WEATHERFORD
2/11/2013	9,689.00	63.56	1.68	9,552.28	382.21	381.15	58.48	8.97	LWD	WEATHERFORD
2/11/2013	9,721.00	66.21	2.05	9,565.86	411.18	410.11	59.42	8.35	LWD	WEATHERFORD
2/11/2013	9,752.00	68.48	2.56	9,577.80	439.78	438.69	60.57	7.48	LWD	WEATHERFORD
2/11/2013	9,784.00	70.50	1.62	9,589.01	469.74	468.64	61.66	6.89	LWD	WEATHERFORD
2/11/2013	9,815.00	72.04	1.81	9,598.97	499.10	497.99	62.54	5.00	LWD	WEATHERFORD
2/11/2013	9,847.00	74.85	1.87	9,608.08	529.76	528.64	63.53	8.78	LWD	WEATHERFORD
2/11/2013	9,878.00	77.65	1.69	9,615.45	559.87	558.74	64.46	9.05	LWD	WEATHERFORD
2/11/2013	9,904.00	79.07	2.80	9,620.70	585.33	584.18	65.46	6.88	LWD	WEATHERFORD
2/11/2013	9,936.00	82.01	2.24	9,625.96	616.88	615.71	66.85	9.35	LWD	WEATHERFORD
2/11/2013	9,968.00	84.12	1.77	9,629.82	648.64	647.46	67.96	6.75	LWD	WEATHERFORD
2/11/2013	9,999.00	86.43	1.84	9,632.37	679.53	678.33	68.93	7.46	LWD	WEATHERFORD
2/11/2013	10,014.00	87.76	1.79	9,633.13	694.51	693.31	69.41	8.87	LWD	WEATHERFORD
2/11/2013	10,031.00	88.60	1.69	9,633.67	711.50	710.29	69.92	4.98	LWD	WEATHERFORD
2/11/2013	10,125.00	92.80	1.26	9,632.52	805.47	804.23	72.34	4.49	LWD	WEATHERFORD
2/11/2013	10,220.00	92.73	1.66	9,627.94	900.36	899.09	74.76	0.43	LWD	WEATHERFORD
2/11/2013	10,315.00	92.66	1.67	9,623.47	995.25	993.94	77.52	0.07	LWD	WEATHERFORD
2/11/2013	10,409.00	92.52	359.93	9,619.23	1,089.15	1,087.83	78.83	1.86	LWD	WEATHERFORD
2/11/2013	10,504.00	92.45	359.40	9,615.11	1,184.03	1,182.74	78.27	0.56	LWD	WEATHERFORD
2/11/2013	10,598.00	91.68	359.80	9,611.72	1,277.93	1,276.68	77.62	0.92	LWD	WEATHERFORD
2/11/2013	10,693.00	92.59	359.85	9,608.18	1,372.84	1,371.61	77.33	0.96	LWD	WEATHERFORD
2/11/2013	10,788.00	92.03	359.59	9,604.35	1,467.74	1,466.53	76.86	0.65	LWD	WEATHERFORD
2/11/2013	10,882.00	91.54	359.54	9,601.42	1,561.66	1,560.48	76.15	0.52	LWD	WEATHERFORD
2/11/2013	10,977.00	93.16	358.83	9,597.53	1,656.52	1,655.39	74.80	1.86	LWD	WEATHERFORD
2/11/2013	11,072.00	92.87	358.47	9,592.53	1,751.30	1,750.23	72.56	0.49	LWD	WEATHERFORD
2/11/2013	11,166.00	92.31	358.52	9,588.28	1,845.11	1,844.10	70.10	0.60	LWD	WEATHERFORD

AUG 04 2015

Directional Survey

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2/11/2013	11,261.00	90.28	358.39	9,586.14	1,939.98	1,939.04	67.54	2.14	LWD	WEATHERFORD
2/11/2013	11,356.00	90.42	358.83	9,585.56	2,034.89	2,034.01	65.23	0.49	LWD	WEATHERFORD
2/11/2013	11,450.00	90.14	358.92	9,585.10	2,128.82	2,127.99	63.39	0.31	LWD	WEATHERFORD
2/11/2013	11,545.00	92.10	359.70	9,583.24	2,223.75	2,222.96	62.24	2.22	LWD	WEATHERFORD
2/11/2013	11,640.00	91.54	359.25	9,580.22	2,318.66	2,317.91	61.37	0.76	LWD	WEATHERFORD
2/11/2013	11,734.00	90.63	359.27	9,578.44	2,412.59	2,411.88	60.16	0.97	LWD	WEATHERFORD
2/11/2013	11,829.00	92.45	0.44	9,575.89	2,507.53	2,506.84	59.92	2.28	LWD	WEATHERFORD
2/11/2013	11,924.00	92.17	0.15	9,572.06	2,602.44	2,601.76	60.41	0.42	LWD	WEATHERFORD
2/11/2013	12,018.00	91.75	2.02	9,568.85	2,696.38	2,695.69	62.19	2.04	LWD	WEATHERFORD
2/11/2013	12,113.00	91.26	1.07	9,566.35	2,791.35	2,790.62	64.75	1.12	LWD	WEATHERFORD
2/11/2013	12,207.00	92.39	0.70	9,563.36	2,885.30	2,884.56	66.20	1.26	LWD	WEATHERFORD
2/11/2013	12,302.00	93.30	359.93	9,558.64	2,980.17	2,979.44	66.72	1.25	LWD	WEATHERFORD
2/11/2013	12,396.00	92.38	359.39	9,553.99	3,074.02	3,073.32	66.16	1.13	LWD	WEATHERFORD
2/11/2013	12,491.00	91.82	359.77	9,550.50	3,168.93	3,168.25	65.47	0.71	LWD	WEATHERFORD
2/11/2013	12,585.00	93.22	0.55	9,546.37	3,262.82	3,262.16	65.73	1.70	LWD	WEATHERFORD
2/11/2013	12,680.00	92.73	0.89	9,541.44	3,357.69	3,357.02	66.92	0.63	LWD	WEATHERFORD
2/11/2013	12,775.00	92.24	1.22	9,537.32	3,452.60	3,451.92	68.67	0.62	LWD	WEATHERFORD
2/11/2013	12,869.00	94.13	1.75	9,532.10	3,546.45	3,545.73	71.10	2.09	LWD	WEATHERFORD
2/11/2013	12,964.00	93.23	1.90	9,526.00	3,641.24	3,640.49	74.12	0.96	LWD	WEATHERFORD
2/11/2013	13,059.00	92.66	1.85	9,521.12	3,736.11	3,735.31	77.22	0.60	LWD	WEATHERFORD
2/11/2013	13,153.00	94.20	2.05	9,515.50	3,829.93	3,829.09	80.42	1.65	LWD	WEATHERFORD
2/11/2013	13,248.00	94.34	2.23	9,508.42	3,924.65	3,923.76	83.95	0.24	LWD	WEATHERFORD
2/11/2013	13,343.00	93.78	2.49	9,501.70	4,019.38	4,018.44	87.86	0.65	LWD	WEATHERFORD
2/11/2013	13,437.00	93.57	2.28	9,495.67	4,113.17	4,112.16	91.76	0.32	LWD	WEATHERFORD
2/11/2013	13,532.00	92.87	1.78	9,490.34	4,208.00	4,206.95	95.12	0.91	LWD	WEATHERFORD
2/11/2013	13,627.00	91.82	1.29	9,486.45	4,302.92	4,301.84	97.66	1.22	LWD	WEATHERFORD
2/11/2013	13,721.00	91.54	1.39	9,483.69	4,396.88	4,395.77	99.86	0.32	LWD	WEATHERFORD
2/11/2013	13,816.00	91.12	1.87	9,481.49	4,491.85	4,490.71	102.56	0.67	LWD	WEATHERFORD
2/11/2013	13,938.00	91.12	1.87	9,479.10	4,613.81	4,612.62	106.54	0.00	BIT	WEATHERFORD