

Survey Report

Report Date: May 2, 2006
 Client: LCX Energy LLC.
 Field: Eddy County, NM Nad 83
 Structure / Slot: 1724 State #271 / 1724 State #271
 Well: 1724 State #271
 Borehole: 1724 State #271
 UWAPI#:

Survey Name / Date: 1724 State #271_surveys / April 17, 2006
 Tort / AHD / DDI / ERD ratio: 144.281° / 3971.29 ft / 6.004 / 0.805
 Grid Coordinate System: NAD83 New Mexico State Planes, Eastern Zone, US Feet
 Location Lat/Long: N 32 48 43.047, W 104 34 44.825
 Location Grid N/E Y/X: N 659210.500 ftUS, E 465826.100 ftUS
 Grid Convergence Angle: -0.13318736°
 Grid Scale Factor: 0.99991562

Survey / DLS Computation Method: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 180.080°
 Vertical Section Origin: N 0.000 ft, E 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 0.0 ft relative to
 Sea Bed / Ground Level Elevation: 0.000 ft relative to
 Magnetic Declination: 8.692°
 Total Field Strength: 49411.551 nT
 Magnetic Dip: 60.679°
 Declination Date: April 17, 2006
 Magnetic Declination Model: IGRF 2005
 North Reference: Grid North
 Total Corr Mag North -> Grid North: +8.825°
 Local Coordinates Referenced To: Well Head

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Tool Face (deg)
In	4254.60	1.59	96.96	4254.40	1.60	-1.59	-7.69	7.85	258.33	0.00	108.80M
	4287.00	1.70	108.80	4286.79	1.81	-1.80	-6.79	7.02	255.18	1.10	138.90M
	4318.00	2.80	138.90	4317.76	2.52	-2.52	-5.86	6.37	246.75	5.09	159.50M
	4349.00	6.00	159.50	4348.67	4.61	-4.60	-4.79	6.64	226.14	11.35	51.88G
	4380.00	9.20	180.60	4379.40	8.61	-8.60	-4.25	9.59	206.29	13.53	-55.09G
	4411.00	12.30	163.20	4409.86	14.25	-14.24	-3.32	14.63	193.12	14.37	-29.47G
	4442.00	14.00	159.30	4440.05	20.91	-20.91	-1.04	20.94	182.85	6.18	-90.00G
	4470.00	14.00	158.50	4467.21	27.23	-27.23	1.40	27.27	177.06	0.69	-115.18G
	4501.00	13.90	157.60	4497.30	34.16	-34.16	4.19	34.42	173.01	0.77	130.12G
	4531.00	13.80	158.10	4526.43	40.81	-40.82	6.90	41.39	170.41	0.52	158.77G
	4561.00	13.50	158.60	4555.58	47.38	-47.40	9.51	48.34	168.65	1.07	27.96G
	4590.00	14.10	159.90	4583.74	53.85	-53.86	11.96	55.18	167.48	2.33	17.80G
	4621.00	16.30	162.40	4613.66	61.54	-61.56	14.57	63.26	166.68	7.40	3.90G
	4652.00	19.20	163.00	4643.18	70.56	-70.58	17.38	72.69	166.17	9.37	35.74G
	4683.00	21.80	167.90	4672.21	81.06	-81.09	20.08	83.54	166.09	10.04	16.15G
	4712.00	24.70	169.90	4698.86	92.29	-92.32	22.27	94.97	166.44	10.36	22.89G
	4744.00	27.70	172.60	4727.57	106.25	-106.28	24.40	109.05	167.07	10.09	28.03G
	4775.00	31.60	176.50	4754.51	121.50	-121.54	25.83	124.25	168.00	14.03	24.73G
	4806.00	35.70	179.70	4780.31	138.66	-138.70	26.37	141.19	169.24	14.41	14.48G
	4835.00	39.40	181.20	4803.30	156.33	-156.37	26.22	158.55	170.48	13.14	10.94G
	4865.00	43.70	182.40	4825.74	176.22	-176.25	25.59	178.10	171.74	14.58	6.20G
	4895.00	47.80	183.00	4846.67	197.68	-197.71	24.57	199.23	172.92	13.74	3.46G
	4924.00	51.70	183.30	4865.41	219.78	-219.81	23.35	221.05	173.94	13.47	0.00G
	4955.00	55.50	183.30	4883.80	244.68	-244.71	21.92	245.69	174.88	12.26	4.33G
	4985.00	61.30	183.80	4899.51	270.18	-270.21	20.33	270.97	175.70	19.39	3.37G
	5015.00	67.60	184.20	4912.44	297.17	-297.19	18.44	297.76	176.45	21.03	-1.81G
	5045.00	73.70	184.00	4922.38	325.39	-325.41	16.42	325.83	177.11	20.34	0.75G
	5077.00	81.30	184.10	4929.30	356.53	-356.55	14.22	356.84	177.72	23.75	1.08G
	5113.00	86.60	184.20	4933.09	392.23	-392.25	11.63	392.42	178.30	14.72	11.77G
	5142.00	89.00	184.70	4934.21	421.12	-421.13	9.38	421.24	178.72	8.45	-141.35G
	5172.00	88.50	184.30	4934.86	451.02	-451.04	7.02	451.09	179.11	2.13	-4.97G
	5202.00	90.80	184.10	4935.04	480.94	-480.95	4.83	480.98	179.43	7.70	-5.84G
	5232.00	94.70	183.70	4933.60	510.84	-510.84	2.79	510.85	179.69	13.07	-6.67G
	5264.00	96.40	183.50	4930.51	542.63	-542.63	0.79	542.63	179.92	5.35	-116.70G
	5295.00	96.30	183.30	4927.08	573.38	-573.38	-1.04	573.38	180.10	0.72	-158.28G
	5326.00	95.30	182.90	4923.95	604.18	-604.18	-2.71	604.19	180.26	3.47	153.52G
	5358.00	95.10	183.00	4921.05	636.01	-636.01	-4.35	636.02	180.39	0.70	-26.47G
	5390.00	95.30	182.90	4918.15	667.84	-667.83	-5.99	667.86	180.51	0.70	-166.01G

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Tool Face (deg)
	5421.00	94.90	182.80	4915.39	698.68	-698.67	-7.52	698.71	180.62	1.33	0.00G
	5453.00	94.90	182.80	4912.66	730.53	-730.52	-9.08	730.57	180.71	0.00	0.00G
	5484.00	95.10	182.80	4909.96	761.37	-761.36	-10.59	761.43	180.80	0.65	90.00G
	5516.00	95.10	183.10	4907.11	793.21	-793.19	-12.23	793.29	180.88	0.93	180.00G
	5548.00	94.90	183.10	4904.32	825.04	-825.02	-13.95	825.14	180.97	0.62	135.10G
	5579.00	94.80	183.20	4901.70	855.89	-855.87	-15.65	856.01	181.05	0.46	-162.49G
	5611.00	92.90	182.60	4899.55	887.77	-887.75	-17.26	887.92	181.11	6.23	-156.80G
	5642.00	91.50	182.00	4898.36	918.73	-918.70	-18.51	918.89	181.15	4.91	-170.54G
	5673.00	90.90	181.90	4897.72	949.70	-949.68	-19.56	949.88	181.18	1.96	-135.00G
	5705.00	90.50	181.50	4897.32	981.69	-981.66	-20.51	981.88	181.20	1.77	-135.00G
	5737.00	90.10	181.10	4897.16	1013.68	-1013.65	-21.24	1013.87	181.20	1.77	-29.05G
	5768.00	91.00	180.60	4896.86	1044.68	-1044.65	-21.70	1044.87	181.19	3.32	0.00G
	5800.00	91.00	180.60	4896.30	1076.67	-1076.64	-22.03	1076.87	181.17	0.00	-108.43G
	5832.00	90.90	180.30	4895.77	1108.66	-1108.63	-22.28	1108.86	181.15	0.99	90.00G
	5863.00	90.90	180.40	4895.28	1139.66	-1139.63	-22.47	1139.85	181.13	0.32	-135.00G
	5895.00	90.80	180.30	4894.81	1171.66	-1171.63	-22.67	1171.85	181.11	0.44	-135.00G
	5926.00	90.60	180.10	4894.43	1202.65	-1202.62	-22.78	1202.84	181.08	0.91	-161.56G
	5958.00	90.30	180.00	4894.18	1234.65	-1234.62	-22.80	1234.83	181.06	0.99	0.00G
	5990.00	91.10	180.00	4893.79	1266.65	-1266.62	-22.80	1266.83	181.03	2.50	-116.57G
	6021.00	91.00	179.80	4893.22	1297.65	-1297.61	-22.75	1297.81	181.00	0.72	-135.00G
	6053.00	90.90	179.70	4892.69	1329.64	-1329.61	-22.61	1329.80	180.97	0.44	-116.57G
	6085.00	90.80	179.50	4892.21	1361.64	-1361.61	-22.39	1361.79	180.94	0.70	-90.00G
	6116.00	90.80	179.40	4891.78	1392.63	-1392.60	-22.09	1392.78	180.91	0.32	-90.00G
	6148.00	90.80	179.30	4891.33	1424.62	-1424.60	-21.73	1424.76	180.87	0.31	-153.44G
	6179.00	90.60	179.20	4890.96	1455.62	-1455.59	-21.32	1455.75	180.84	0.72	171.87G
	6242.00	89.20	179.40	4891.07	1518.61	-1518.58	-20.55	1518.72	180.78	2.24	-123.70G
	6306.00	88.80	178.80	4892.18	1582.59	-1582.57	-19.55	1582.69	180.71	1.13	180.00G
	6369.00	88.40	178.80	4893.72	1645.56	-1645.53	-18.23	1645.63	180.63	0.63	30.26G
	6432.00	89.60	179.50	4894.82	1708.54	-1708.52	-17.29	1708.60	180.58	2.21	53.13G
	6495.00	90.20	180.30	4894.93	1771.54	-1771.51	-17.18	1771.60	180.56	1.59	54.46G
	6558.00	90.70	181.00	4894.44	1834.53	-1834.51	-17.90	1834.60	180.56	1.37	-138.36G
	6621.00	89.80	180.20	4894.16	1897.53	-1897.50	-18.56	1897.59	180.56	1.91	0.00G
	6684.00	90.00	180.20	4894.27	1960.53	-1960.50	-18.78	1960.59	180.55	0.32	-75.96G
	6747.00	90.10	179.80	4894.22	2023.53	-2023.50	-18.78	2023.59	180.53	0.65	180.00G
	6810.00	89.90	179.80	4894.22	2086.53	-2086.50	-18.56	2086.58	180.51	0.32	-146.31G
	6873.00	89.60	179.60	4894.49	2149.52	-2149.50	-18.23	2149.58	180.49	0.57	-45.00G
	6936.00	89.70	179.50	4894.88	2212.52	-2212.50	-17.73	2212.57	180.46	0.22	-116.57G
	6999.00	89.60	179.30	4895.26	2275.51	-2275.49	-17.07	2275.56	180.43	0.35	-143.13G
	7063.00	89.20	179.00	4895.93	2339.50	-2339.48	-16.12	2339.54	180.39	0.78	19.98G
	7126.00	90.30	179.40	4896.21	2402.49	-2402.47	-15.24	2402.52	180.36	1.86	-11.31G
	7189.00	90.80	179.30	4895.60	2465.48	-2465.47	-14.53	2465.51	180.34	0.81	-111.80G
	7252.00	90.60	178.80	4894.83	2528.47	-2528.45	-13.48	2528.49	180.31	0.85	90.00G
	7315.00	90.60	179.90	4894.17	2591.46	-2591.44	-12.77	2591.48	180.28	1.75	-108.43G
	7378.00	90.20	178.70	4893.73	2654.45	-2654.44	-12.00	2654.46	180.26	2.01	-18.43G
	7441.00	91.10	178.40	4893.02	2717.42	-2717.41	-10.41	2717.43	180.22	1.51	-123.69G
	7502.00	90.90	178.10	4891.95	2778.38	-2778.37	-8.54	2778.39	180.18	0.59	-153.44G
	7564.00	90.70	178.00	4891.09	2840.34	-2840.33	-6.43	2840.34	180.13	0.36	-90.00G
	7627.00	90.70	177.90	4890.32	2903.29	-2903.29	-4.18	2903.29	180.08	0.16	-104.03G
	7691.00	90.60	177.50	4889.59	2967.23	-2967.23	-1.61	2967.23	180.03	0.64	-173.66G
	7754.00	89.70	177.40	4889.43	3030.16	-3030.17	1.19	3030.17	179.98	1.44	-110.56G
	7817.00	89.40	176.60	4889.92	3093.07	-3093.08	4.49	3093.08	179.92	1.36	-127.89G
	7880.00	88.70	175.70	4890.97	3155.91	-3155.93	8.72	3155.94	179.84	1.81	6.34G
	7943.00	89.60	175.80	4891.90	3218.72	-3218.75	13.38	3218.77	179.76	1.44	110.56G
	8006.00	89.30	176.60	4892.51	3281.58	-3281.60	17.56	3281.65	179.69	1.36	38.66G

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Tool Face (deg)
	8068.00	89.80	177.00	4892.99	3343.47	-3343.51	21.02	3343.57	179.64	1.03	180.00G
	8132.00	89.50	177.00	4893.38	3407.38	-3407.42	24.37	3407.50	179.59	0.47	23.63G
	8196.00	91.10	177.70	4893.05	3471.30	-3471.35	27.33	3471.45	179.55	2.73	-10.30G
	8258.00	92.20	177.50	4891.26	3533.22	-3533.26	29.92	3533.39	179.51	1.80	129.81G
	8322.00	91.70	178.10	4889.09	3597.13	-3597.18	32.38	3597.33	179.48	1.22	126.87G
	8385.00	91.10	178.90	4887.55	3660.09	-3660.14	34.03	3660.30	179.47	1.59	129.80G
	8448.00	90.60	179.50	4886.61	3723.07	-3723.12	34.91	3723.29	179.46	1.24	-140.53G
	8511.00	88.90	178.10	4886.89	3786.05	-3786.11	36.23	3786.28	179.45	3.50	0.00G
	8574.00	88.90	178.10	4888.10	3849.00	-3849.06	38.32	3849.25	179.43	0.00	0.00G
	8637.00	88.90	178.10	4889.31	3911.95	-3912.01	40.40	3912.22	179.41	0.00	0.00G
ected TD	8689.00	88.90	178.10	4890.30	3963.91	-3963.98	42.13	3964.20	179.39	0.00	0.00G