



REPORT OF PROOF OF APPARENT DEVIATION
CACTUS DRILLING COMPANY, L.L.C.
NEW MEXICO

30-025-37703

OPERATOR CIMAREX ENERGY CO OF COLORADO
600 EAST LAS COLINAS BLVD. STE 1100
IRVING, TX 75039

FIELD NAME _____

COUNTY/PARISH LEA _____

WELL NAME & NO. QUAIL RIDGE 32 STATE #2 Unit K

LEGAL SEC 32-19S-34E 1980/s & 1980/w

MEASURED DEPTH (FT)	COURSE LENGTH (HUNDREDS OF FT)	ANGLE OF INCLINATION (DEGREES)	DISPLACEMENT PER HUNDRED FT (SINE OF ANGLE X 100)	COURSE DISPLACEMENT (FEET)	ACCUMULATIVE DISPLACEMENT (FEET)	REMARKS
250	2.50	1/2	0.8727	2.18	2.18	
437	1.87	1/2	0.8727	1.63	3.81	
936	4.99	1/2	0.8727	4.35	8.17	
1626	6.90	1/2	0.8727	6.02	14.19	
1912	2.86	1/2	0.8727	2.50	16.69	
2198	2.86	1/2	0.8727	2.50	19.18	
2452	2.54	1/2	0.8727	2.22	21.40	
2738	2.86	1	1.7452	4.99	26.39	
2926	1.88	1/2	0.8727	1.64	28.03	
3300	3.74	1 2/3	2.9666	11.10	39.12	
3730	4.30	7 1/2	13.0526	56.13	95.25	
3765	0.35	7 5/7	13.3986	4.69	99.94	
3793	0.28	7	12.1869	3.41	103.35	
3928	1.35	6 4/5	11.8404	15.98	119.34	
3991	0.83	6 1/2	11.3203	7.13	126.47	
4047	0.56	6 2/7	10.9734	6.15	132.61	
4079	0.32	6 5/7	11.6871	3.73	136.35	
4155	0.76	6 2/7	10.9734	8.34	144.69	
4270	1.15	5	8.7156	10.02	154.71	
4345	0.75	5 2/7	9.2371	6.93	161.64	
4367	0.22	4 3/4	8.2808	1.82	163.46	
4584	2.17	4 1/5	7.3238	15.89	179.35	
4835	0.51	4	7.1497	3.65	183.00	
4754	1.19	3 1/9	5.4079	6.44	189.43	
4770	0.16	3 5/8	6.3139	1.01	190.44	
4918	1.48	2 1/2	4.3619	6.46	196.90	
5014	0.96	2 1/2	4.3619	4.19	201.09	
5117	1.03	3 1/5	5.5822	5.75	206.84	
5158	0.41	2	3.4899	1.43	208.27	
5234	0.76	2 1/9	3.6644	2.78	211.05	
5372	1.38	1 3/5	2.7922	3.85	214.91	
5584	2.12	1 8/9	3.3155	7.03	221.94	
5648	0.64	1 2/5	2.4432	1.56	223.50	
5712	0.64	4/5	1.3962	0.89	224.39	
5900	1.88	8/9	1.5533	2.92	227.31	
6095	1.95	1	1.8674	3.64	230.95	
6220	1.25	2/3	1.1344	1.42	232.37	
6413	1.93	2/5	0.7156	1.38	233.75	
6604	1.91	1/3	0.6283	1.20	234.95	
6795	1.91	3/5	1.0472	2.00	236.95	
7018	2.23	2/5	0.6981	1.56	238.51	
7422	4.04	0	0.1745	0.71	239.22	
7670	2.48	2/5	0.6981	1.73	240.95	
7900	2.30	3/5	1.0472	2.41	243.36	
8153	2.53	2/5	0.6981	1.77	245.12	
8253	1.00	1/2	0.8727	0.87	245.99	
8448	1.95	3/5	1.0472	2.04	248.04	
8662	2.14	1 1/9	1.9197	4.11	252.14	
8734	0.72	1 2/5	2.4432	1.76	253.90	
8766	0.32	1 1/3	2.2687	0.73	254.63	
8798	0.32	1 1/2	2.6177	0.84	255.47	
8862	0.64	1 2/5	2.4432	1.56	257.03	
8913	0.51	1 3/5	2.7922	1.42	258.45	
8946	0.33	1 4/5	3.1411	1.04	259.49	
8982	0.36	2	3.4899	1.26	260.75	
9052	0.70	2 1/5	3.8388	2.69	263.43	
9115	0.83	2 1/5	3.8388	2.42	265.85	
9237	1.22	1 2/5	2.4432	2.98	268.83	
9428	1.91	1 2/3	2.9666	5.67	274.50	
9498	0.70	2 1/5	3.8388	2.69	277.19	
9557	0.59	1 4/5	3.1411	1.85	279.04	
9591	0.34	8/9	1.5707	0.53	279.57	
9622	0.31	1 1/9	1.9197	0.60	280.17	
9811	1.89	4/5	1.3962	2.64	282.81	
9900	0.89	1 1/9	1.9197	1.71	284.52	
10019	1.19	1 4/5	3.1411	3.74	288.26	
10155	1.36	1	1.6231	2.21	290.46	
10306	1.51	1 3/5	2.7922	4.22	294.68	
10466	1.80	2 1/4	3.9434	6.31	300.99	
10825	1.59	3	5.0767	8.07	309.06	
10791	1.66	2 2/7	4.0132	6.66	315.72	
10826	0.35	1 8/9	3.3155	1.18	316.88	
11080	2.54	4/5	1.3962	3.55	320.43	
11292	2.12	1 2/5	2.4432	5.18	325.61	
11460	1.68	1 1/2	2.6177	4.40	330.01	
11528	0.68	1 2/3	2.9666	2.02	332.02	
11620	0.92	1 1/2	2.6177	2.41	334.43	
11710	0.90	1 3/5	2.7922	2.51	336.94	
11837	1.27	1 1/3	2.2687	2.88	339.83	
12091	2.54	2/5	0.6981	1.77	341.60	
13363	12.72	2/3	1.1868	15.10	356.70	



NOTARY
SEAL
PUBLIC
LESLIE N. KIDD
Oklahoma County
Notary Public in and for
State of Oklahoma
Commission # 03003457 Expires 2/27/07
Leslie N. Kidd
6-14-2006