



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

3D-025-38237

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

FIELD NAME

COUNTY/PARISH LEA

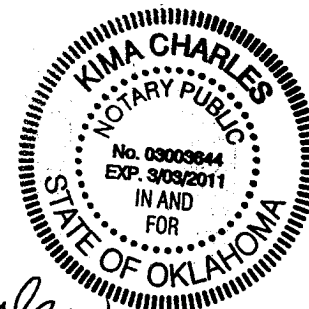
WELL NAME & NO. MADURO UNIT #7

Unit K

LEGAL SEC 29-19S-33E

1860/5 & 1800/10

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
519	5.19	7/9	1.3439	6.97	6.97	
1014	4.95	1 1/6	2.0593	10.19	17.17	
1295	2.81	5/8	1.0995	3.09	20.26	
1740	4.45	1/2	0.8377	3.73	23.99	
2244	5.04	1 1/2	2.6526	13.37	37.36	
2725	4.81	3 3/7	5.9829	28.78	66.13	
2846	1.21	3 5/9	6.1920	7.49	73.63	
2973	1.27	2 4/7	4.5014	5.72	79.34	
3230	2.57	2 3/4	4.7978	12.33	91.67	
3613	3.83	1	1.8325	7.02	98.69	
3865	2.52	1	1.6231	4.09	102.78	
4345	4.80	1	1.7278	8.29	111.07	
5000	6.55	1 2/3	2.8794	18.86	129.93	
5500	5.00	3 1/7	5.4776	27.39	157.32	
5760	2.60	1	1.6754	4.36	161.68	
6237	4.77	2 1/8	3.6993	17.65	179.32	
6485	2.48	2 1/2	4.3096	10.69	190.01	
6775	2.90	2	3.4027	9.87	199.88	
7025	2.50	1 1/5	2.0768	5.19	205.07	
7539	5.14	1 7/8	3.2806	16.86	221.93	
7751	2.12	2 2/9	3.8737	8.21	230.15	
8238	4.87	2 7/9	4.8501	23.62	253.77	
8714	4.76	3	5.2336	24.91	278.68	
9190	4.76	2 7/8	5.0070	23.83	302.51	
9667	4.77	1 2/9	2.1466	10.24	312.75	
10167	5.00	3	5.3556	26.78	339.53	
10402	2.35	3 1/6	5.5473	13.04	352.56	
10690	2.88	3 3/8	5.8784	16.93	369.49	
10950	2.60	3 3/4	6.5577	17.05	386.54	
11206	2.56	3 4/9	6.0177	15.41	401.95	
11690	4.84	2 4/7	4.4840	21.70	423.65	
12159	4.69	1 1/3	2.3734	11.13	434.78	
12637	4.78	1 3/5	2.7747	13.26	448.05	
13151	5.14	1	1.8499	9.51	457.56	
13500	3.49	4/5	1.3962	4.87	462.43	
13785	2.85	1 1/9	1.9372	5.52	467.95	



Kima Charles

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