
COMPANY: Cimarex
FIELD: Eddy County, NM (NAD 83 NME)
WELL NAME: Freedom 36 State SWD #1
WELLBORE NAME: OWB
Survey Name: AWB
Extraction Date: 10/31/2018

Calculation Method: Minimum Curvature
Datum Name: KB
LAT Reference: Well

Slot EW Map (us/ft): 566200.173
Slot NS Map (us/ft): 425578.866
Surface Latitude Map: 32° 10' 11.888 N
Surface Longitude Map: 104° 15' 10.726 W
Bottom Hole MD (us/ft): 13575.00
Bottom Hole TVD (us/ft): 13568.12
Bottom Hole EW Map (us/ft): 566262.804
Bottom Hole NS Map (us/ft): 425567.421

GL Elevation: 3387.00
KB Elevation: 3413.00

MAGNETIC CALCULATION DATE.....: 02-May-2018
Map-Zone: New Mexico Eastern Zone
North Reference: Grid
Total Correction: 7.13
Magnetic dip: 59.89
Magnetic field strength: 47743.38
Geo Datum: North American Datum 1983
VSDIR: 100.36

30-015-44489

Measured Depth (ft)	Incl.	Azim.	TVD (ft)	NS (ft)	EW (ft)	Vertical Section (ft)	Dogleg Rate (dega/100ft)	Easting	Northing
0	0	0	0	0	0	0	0	566200.2	425578.9
48	0.32	240.73	48	-0.07	-0.12	-0.1	0.67	566200.1	425578.8
147	0.53	232.97	147	-0.48	-0.72	-0.63	0.22	566199.4	425578.4
238	0.78	229.54	237.99	-1.13	-1.53	-1.3	0.28	566198.6	425577.7
329	0.98	226.81	328.98	-2.07	-2.57	-2.16	0.22	566197.6	425576.8
419	1.13	225.24	418.96	-3.22	-3.76	-3.12	0.17	566196.4	425575.6
511	1.2	223.47	510.95	-4.56	-5.07	-4.17	0.09	566195.1	425574.3
601	0.93	223.01	600.93	-5.77	-6.21	-5.08	0.3	566194	425573.1
691	0.38	224.82	690.92	-6.52	-6.92	-5.64	0.61	566193.3	425572.3
782	0.29	42.02	781.92	-6.56	-6.98	-5.69	0.74	566193.2	425572.3
871	0.68	46.32	870.92	-6.03	-6.45	-5.26	0.44	566193.7	425572.8
966	0.69	60.42	965.91	-5.36	-5.54	-4.49	0.18	566194.6	425573.5
1060	0.69	60.56	1059.91	-4.8	-4.56	-3.62	0	566195.6	425574.1
1155	0.73	72.47	1154.9	-4.34	-3.48	-2.65	0.16	566196.7	425574.5
1249	0.88	88.83	1248.89	-4.14	-2.19	-1.41	0.29	566198	425574.7
1343	1.68	100.36	1342.87	-4.38	-0.11	0.68	0.89	566200.1	425574.5
1438	3.43	101.68	1437.77	-5.2	4.04	4.91	1.84	566204.2	425573.7
1532	4.94	102.11	1531.51	-6.62	10.75	11.77	1.61	566210.9	425572.2
1627	5.02	100.39	1626.16	-8.23	18.84	20.01	0.18	566219	425570.6
1721	5.33	98.16	1719.77	-9.59	27.21	28.49	0.39	566227.4	425569.3
1815	5.38	97.55	1813.36	-10.79	35.9	37.25	0.08	566236.1	425568.1
1910	5.42	97.99	1907.94	-12	44.75	46.18	0.06	566244.9	425566.9
1993	4.15	97.17	1990.65	-12.92	51.62	53.1	1.53	566251.8	425565.9
2004	4.78	97.61	2001.62	-13.03	52.47	53.95	5.74	566252.6	425565.8
2186	3.2	96.6	2183.17	-14.62	65.03	66.6	0.87	566265.2	425564.3
2281	2.2	311	2278.13	-13.72	66.29	67.67	5.44	566266.5	425565.1
2375	3.1	295.5	2372.02	-11.44	62.63	63.67	1.22	566262.8	425567.4
2470	1.2	0	2466.98	-11.44	62.63	63.67	2.95	566262.8	425567.4
2564	0.6	0	2560.97	-11.44	62.63	63.67	0.64	566262.8	425567.4
2659	0.5	0	2655.96	-11.44	62.63	63.67	0.11	566262.8	425567.4

2753	0.4	0	2749.96	-11.44	62.63	63.67	0.11	566262.8	425567.4
2848	0.7	0	2844.95	-11.44	62.63	63.67	0.32	566262.8	425567.4
2943	0.8	0	2939.95	-11.44	62.63	63.67	0.11	566262.8	425567.4
3038	0.9	0	3034.94	-11.44	62.63	63.67	0.11	566262.8	425567.4
3132	0.9	0	3128.92	-11.44	62.63	63.67	0	566262.8	425567.4
3226	1	0	3222.91	-11.44	62.63	63.67	0.11	566262.8	425567.4
3321	0.9	0	3317.9	-11.44	62.63	63.67	0.11	566262.8	425567.4
3415	1.1	0	3411.88	-11.44	62.63	63.67	0.21	566262.8	425567.4
3510	0.9	0	3506.87	-11.44	62.63	63.67	0.21	566262.8	425567.4
3604	1	0	3600.86	-11.44	62.63	63.67	0.11	566262.8	425567.4
3699	1.1	0	3695.84	-11.44	62.63	63.67	0.11	566262.8	425567.4
3794	0.9	0	3790.83	-11.44	62.63	63.67	0.21	566262.8	425567.4
3889	0.9	0	3885.81	-11.44	62.63	63.67	0	566262.8	425567.4
3983	1	0	3979.8	-11.44	62.63	63.67	0.11	566262.8	425567.4
4078	0.9	0	4074.79	-11.44	62.63	63.67	0.11	566262.8	425567.4
4173	0.8	0	4169.78	-11.44	62.63	63.67	0.11	566262.8	425567.4
4331	0.6	0	4327.77	-11.44	62.63	63.67	0.13	566262.8	425567.4
4425	0.6	0	4421.76	-11.44	62.63	63.67	0	566262.8	425567.4
4520	0.8	0	4516.75	-11.44	62.63	63.67	0.21	566262.8	425567.4
4614	0.9	0	4610.74	-11.44	62.63	63.67	0.11	566262.8	425567.4
4709	1	0	4705.73	-11.44	62.63	63.67	0.11	566262.8	425567.4
4804	1.2	0	4800.71	-11.44	62.63	63.67	0.21	566262.8	425567.4
4899	1.1	0	4895.69	-11.44	62.63	63.67	0.11	566262.8	425567.4
4994	1.5	0	4990.67	-11.44	62.63	63.67	0.42	566262.8	425567.4
5088	1.5	0	5084.64	-11.44	62.63	63.67	0	566262.8	425567.4
5183	1.5	0	5179.6	-11.44	62.63	63.67	0	566262.8	425567.4
5277	1.7	0	5273.57	-11.44	62.63	63.67	0.21	566262.8	425567.4
5372	1.6	0	5368.53	-11.44	62.63	63.67	0.11	566262.8	425567.4
5466	2	0	5462.48	-11.44	62.63	63.67	0.43	566262.8	425567.4
5561	2	0	5557.42	-11.44	62.63	63.67	0	566262.8	425567.4
5657	2	0	5653.37	-11.44	62.63	63.67	0	566262.8	425567.4
5750	1.8	0	5746.31	-11.44	62.63	63.67	0.22	566262.8	425567.4
5845	1.9	0	5841.26	-11.44	62.63	63.67	0.11	566262.8	425567.4
5939	0.9	0	5935.24	-11.44	62.63	63.67	1.06	566262.8	425567.4

6034	0.9	0	6030.22	-11.44	62.63	63.67	0	566262.8	425567.4
6120	1.3	0	6116.21	-11.44	62.63	63.67	0.47	566262.8	425567.4
6215	2.3	0	6211.16	-11.44	62.63	63.67	1.05	566262.8	425567.4
6309	1.8	0	6305.1	-11.44	62.63	63.67	0.53	566262.8	425567.4
6404	2.3	0	6400.04	-11.44	62.63	63.67	0.53	566262.8	425567.4
6498	2	0	6493.97	-11.44	62.63	63.67	0.32	566262.8	425567.4
6593	2.2	0	6588.91	-11.44	62.63	63.67	0.21	566262.8	425567.4
6687	1.6	0	6682.86	-11.44	62.63	63.67	0.64	566262.8	425567.4
6782	2.1	0	6777.81	-11.44	62.63	63.67	0.53	566262.8	425567.4
6877	1.9	0	6872.75	-11.44	62.63	63.67	0.21	566262.8	425567.4
6971	2.2	0	6966.69	-11.44	62.63	63.67	0.32	566262.8	425567.4
7066	1.9	0	7061.63	-11.44	62.63	63.67	0.32	566262.8	425567.4
7160	1	0	7155.6	-11.44	62.63	63.67	0.96	566262.8	425567.4
7255	0.6	0	7250.59	-11.44	62.63	63.67	0.42	566262.8	425567.4
7340	0.7	0	7335.58	-11.44	62.63	63.67	0.12	566262.8	425567.4
7444	0.8	0	7439.57	-11.44	62.63	63.67	0.1	566262.8	425567.4
7538	1.2	0	7533.56	-11.44	62.63	63.67	0.43	566262.8	425567.4
7633	0.7	0	7628.54	-11.44	62.63	63.67	0.53	566262.8	425567.4
7727	1.3	0	7722.53	-11.44	62.63	63.67	0.64	566262.8	425567.4
7822	1.5	0	7817.5	-11.44	62.63	63.67	0.21	566262.8	425567.4
7916	1.8	0	7911.46	-11.44	62.63	63.67	0.32	566262.8	425567.4
8011	3.3	0	8006.36	-11.44	62.63	63.67	1.58	566262.8	425567.4
8105	2.5	0	8100.24	-11.44	62.63	63.67	0.85	566262.8	425567.4
8200	2.1	0	8195.17	-11.44	62.63	63.67	0.42	566262.8	425567.4
8295	2	0	8290.11	-11.44	62.63	63.67	0.11	566262.8	425567.4
8389	1.9	0	8384.05	-11.44	62.63	63.67	0.11	566262.8	425567.4
8483	1.8	0	8478	-11.44	62.63	63.67	0.11	566262.8	425567.4
8672	1.3	0	8666.93	-11.44	62.63	63.67	0.26	566262.8	425567.4
8869	1.9	0	8863.86	-11.44	62.63	63.67	0.3	566262.8	425567.4
9058	0.3	0	9052.81	-11.44	62.63	63.67	0.85	566262.8	425567.4
9247	0.5	0	9241.81	-11.44	62.63	63.67	0.11	566262.8	425567.4
9436	0.2	0	9430.81	-11.44	62.63	63.67	0.16	566262.8	425567.4
9720	1.4	0	9714.77	-11.44	62.63	63.67	0.42	566262.8	425567.4
10003	0.6	0	9997.73	-11.44	62.63	63.67	0.28	566262.8	425567.4

10287	1.1	0	10281.7	-11.44	62.63	63.67	0.18	566262.8	425567.4
10476	1.2	0	10470.66	-11.44	62.63	63.67	0.05	566262.8	425567.4
10760	1	0	10754.6	-11.44	62.63	63.67	0.07	566262.8	425567.4
10979	1	0	10973.57	-11.44	62.63	63.67	0	566262.8	425567.4
11054	1.7	0	11048.55	-11.44	62.63	63.67	0.93	566262.8	425567.4
11148	1.7	0	11142.51	-11.44	62.63	63.67	0	566262.8	425567.4
11243	1.4	0	11237.47	-11.44	62.63	63.67	0.32	566262.8	425567.4
11337	1.8	0	11331.44	-11.44	62.63	63.67	0.43	566262.8	425567.4
11432	1.6	0	11426.4	-11.44	62.63	63.67	0.21	566262.8	425567.4
11526	1.2	0	11520.37	-11.44	62.63	63.67	0.43	566262.8	425567.4
11622	1.2	0	11616.35	-11.44	62.63	63.67	0	566262.8	425567.4
11716	1	0	11710.33	-11.44	62.63	63.67	0.21	566262.8	425567.4
11811	1.1	0	11805.31	-11.44	62.63	63.67	0.11	566262.8	425567.4
11905	1	0	11899.3	-11.44	62.63	63.67	0.11	566262.8	425567.4
12000	0.8	0	11994.29	-11.44	62.63	63.67	0.21	566262.8	425567.4
12095	0.8	0	12089.28	-11.44	62.63	63.67	0	566262.8	425567.4
12189	1.1	0	12183.26	-11.44	62.63	63.67	0.32	566262.8	425567.4
12284	1.1	0	12278.25	-11.44	62.63	63.67	0	566262.8	425567.4
12378	1.4	0	12372.22	-11.44	62.63	63.67	0.32	566262.8	425567.4
12472	1.5	0	12466.19	-11.44	62.63	63.67	0.11	566262.8	425567.4
12567	1.9	0	12561.15	-11.44	62.63	63.67	0.42	566262.8	425567.4
12697	2.1	0	12691.07	-11.44	62.63	63.67	0.15	566262.8	425567.4
12798	1.9	0	12792.01	-11.44	62.63	63.67	0.2	566262.8	425567.4
12893	2	0	12886.95	-11.44	62.63	63.67	0.11	566262.8	425567.4
12988	2	0	12981.9	-11.44	62.63	63.67	0	566262.8	425567.4
13083	2.8	0	13076.81	-11.44	62.63	63.67	0.84	566262.8	425567.4
13178	2.3	0	13171.72	-11.44	62.63	63.67	0.53	566262.8	425567.4
13273	2.8	0	13266.62	-11.44	62.63	63.67	0.53	566262.8	425567.4
13370	3.2	0	13363.49	-11.44	62.63	63.67	0.41	566262.8	425567.4
13463	3.6	0	13456.33	-11.44	62.63	63.67	0.43	566262.8	425567.4
13530	3.4	0	13523.2	-11.44	62.63	63.67	0.3	566262.8	425567.4
13575	3.4	0	13568.12	-11.44	62.63	63.67	0	566262.8	425567.4