

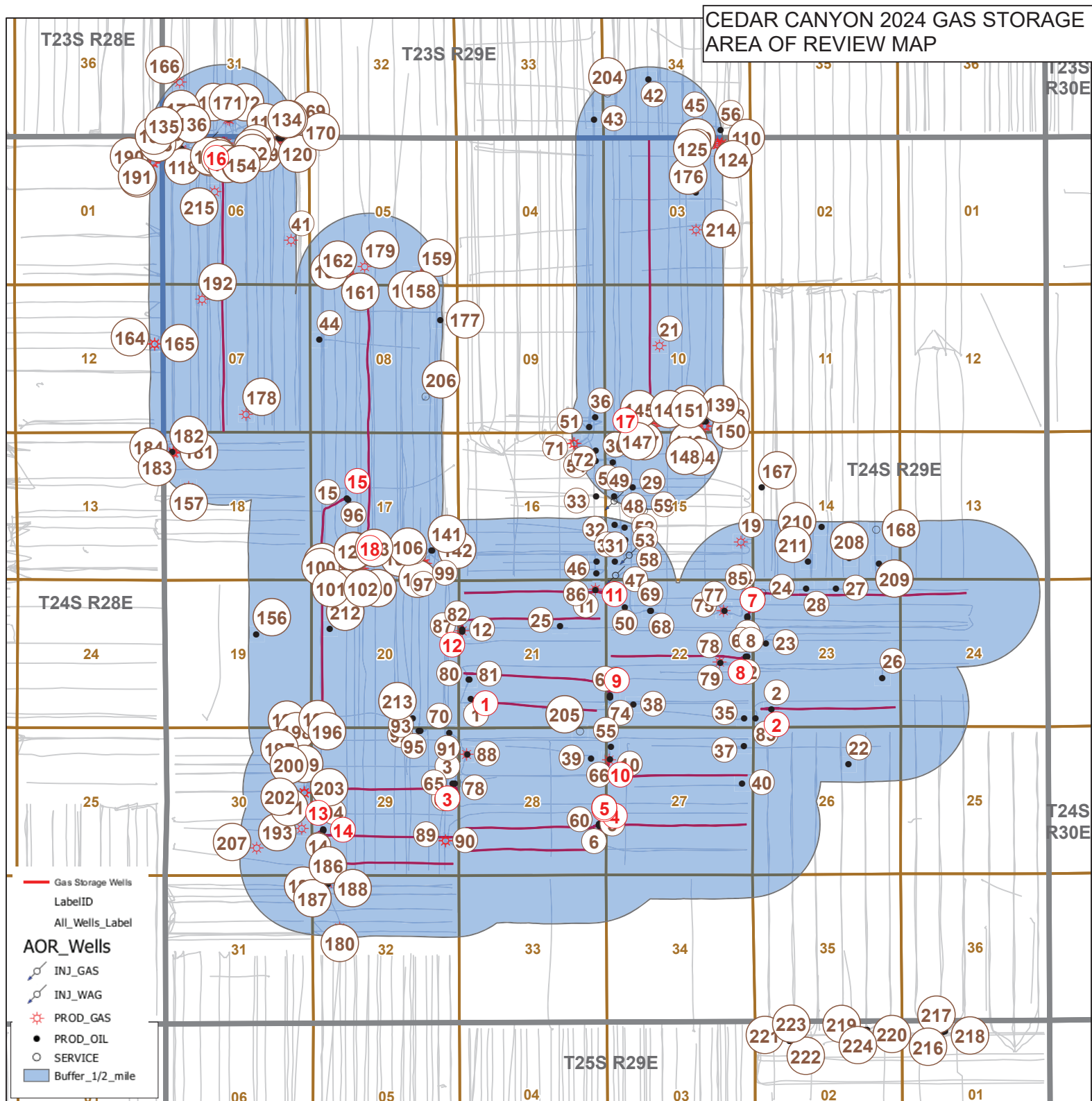
**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION OF OXY U.S.A. INC. AND
OCCIDENTAL PERMIAN, LTD FOR A CLOSED
LOOP GAS CAPTURE PILOT PROJECT,
EDDY COUNTY, NEW MEXICO.**

CASE NO. 24983

**Application Exhibits
PART 4**

**Cedar Canyon 2024 Gas Storage Area of Review Map
To
Cedar Canyon 2024 Gas Storage Notice Map Bone Spring HSU**



Area of Review Table

Well ID	API NUMBER	Current Operator	LEASE NAME	WELL NUMBER	Well Type:	Status:	Footages N/S	Footages E/W	Surface Location Unit	Surface Location Section	Surface Location TShip	Surface Location Range	Spud:	True Vertical Depth:	HOLE SIZE	CSG SIZE	SET AT	SX CMT	CMT TO	TOC Measure Method	Current Completion (ft)	Comments	Current Producing Pool
1	30-015-39968	OCCIDENTAL PERMIAN LTD	MORGAN FEE COM	001H	Oil	Active	1035	S 455	W	M	21	24S	29E	4/10/2012	8687	17.500 12.250 8.750	13.375 9.625 5.500	400 3037 12741	480 1040 2430	Surf Surf CBL	9150-12600		[96238] CORRAL DRAW; BONE SPRING
2	30-015-41194	OXY USA INC	CEDAR CANYON 23	002H	Oil	Active	650	S 660	W	M	23	24S	29E	8/17/2014	8902	14.75 10.625 7.875	11.75 8.625 5.5	467 3020 13421	721 1120 1360	Surf Surf CBL	9195-13220		[50371] PIERCE CROSSING; BONE SPRING
3	30-015-42993	OXY USA INC	CEDAR CANYON 29 FEDERAL COM	003H	Oil	Active	1990	N 210	E	H	29	24S	29E	12/23/2016	8563	14.750 9.875 6.750	10.750 7.625 5.5 x 4.5	670 8098 13340	700 1216 550	Surf Surf CBL	8582-13135	5.5' Tieback at 7991'	[50371] PIERCE CROSSING; BONE SPRING
4	30-015-43232	OXY USA INC	CEDAR CANYON 27 FEDERAL	006H	Oil	Active	1920	S 200	E	I	28	24S	29E	10/10/2015	8732	14.750 9.875 6.750	10.750 7.625 5.500	436 8003 8826	540 1530 740	Surf Surf CBL	9257-13441		[96473] PIERCE CROSSING; BONE SPRING, EAST
5	30-015-43234	OXY USA INC	CEDAR CANYON 28 FEDERAL	006H	Oil	Active	1870	S 200	E	I	28	24S	29E	10/2/2015	8605	14.750 9.875 6.750	10.750 7.625 5.500	430 7990 8839	440 2850 740	Surf Surf CBL	8898 - 13127	4.5' Liner top at 8829'	[96473] PIERCE CROSSING; BONE SPRING, EAST
6	30-015-43238	OXY USA INC	CEDAR CANYON 28 FEDERAL	007H	Oil	Active	1760	S 240	E	I	28	24S	29E	9/12/2015	8594	14.750 9.875 6.750	10.750 7.625 5.500	435 8010 8981	440 2425 610	Surf Surf CBL	9001 - 13285	4.5' Liner top at 8839'	[96473] PIERCE CROSSING; BONE SPRING, EAST
7	30-015-43282	OXY USA INC	CEDAR CANYON 23 FEDERAL	005H	Oil	Active	1305	N 155	E	A	22	24S	29E	11/28/2015	9012	14.750 9.875 6.750	10.750 7.625 5.500	444 7675 9104	550 1570 1110	Surf Surf CBL	9186-16263	4.5' Liner top at 9104'	[96473] PIERCE CROSSING; BONE SPRING, EAST
8	30-015-43708	OXY USA INC	CEDAR CANYON 22 FEDERAL COM	004H	Oil	Active	2540	S 260	E	I	22	24S	29E	10/25/2016	8728	14.75 9.875 6.75	10.75 7.625 5.5 x 4.5	488 8197 13424	382 2686 700	Surf Surf CBL	8827-13265	4.5' Liner top at 8848'	[96473] PIERCE CROSSING; BONE SPRING, EAST
9	30-015-43749	OXY USA INC	CEDAR CANYON 21 FEDERAL COM	005H	Oil	Active	1090	S 207	W	M	22	24S	29E	8/6/2016	8626	14.750 9.875 6.750	10.750 7.625 5.500	430 8138 8840	470 1170 560	Surf Surf CBL	8918-13313		[96238] CORRAL DRAW; BONE SPRING
10	30-015-43775	OXY USA INC	CEDAR CANYON 27 FEDERAL COM	005H	Oil	Active	1154	N 151	W	D	27	24S	29E	5/28/2016	8819	14.750 9.875 6.750	10.750 7.625 5.5 x 4.5	518 8102 13743	530 1500 630	Surf Surf CBL	9079-13583	4.5' Liner top at 8886'	[96473] PIERCE CROSSING; BONE SPRING, EAST
11	30-015-44181	OXY USA INC	CEDAR CANYON 21 FEDERAL COM	021H	Oil	Active	369	N 368	E	A	21	24S	29E	7/30/2017	8550	14.750 9.875 6.750	10.750 7.625 4.500	463 7885 13496	329 1951 7713	Surf Surf CBL	8751-13302	5.5' Tieback at 7713'	[96238] CORRAL DRAW; BONE SPRING
12	30-015-44190	OXY USA INC	CEDAR CANYON 21 FEDERAL COM	022H	Oil	Active	1764	N 141	W	E	21	24S	29E	8/10/2017	8713	14.750 9.875 6.750	10.750 7.625 4.500	448 8168 13353	350 1854 659	Surf Surf CBL	8602-13198	5.5' Tieback at 7922'	[96238] CORRAL DRAW; BONE SPRING
13	30-015-44522	OXY USA INC	CEDAR CANYON 29 FEDERAL COM	025H	Oil	Active	1640	S 420	W	L	29	24S	29E	11/12/2017	8612	14.750 9.875 6.750	10.750 7.625 5.500	612 7936 7731	913 1605 683	Surf Surf CBL	8575 - 13170	5.5' Tieback at 7736'	[50371] PIERCE CROSSING; BONE SPRING
14	30-015-44523	OXY USA INC	CEDAR CANYON 29 FEDERAL	026H	Oil	Active	1610	S 420	W	L	29	24S	29E	11/15/2017	8630	14.750 9.875 6.750	10.750 7.625 5.500	618 8012 7796	680 1853 678	Surf Surf CBL	8633 - 13231	4.5' Liner top at 7796'	[50371] PIERCE CROSSING; BONE SPRING
15	30-015-44945	OXY USA INC	SALT RIDGE CC 20 17 FEDERAL COM	021H	Oil	Active	2359	N 1302	W	E	17	24S	29E	6/2/2018	8534	14.750 9.875 6.75	10.750 7.625 5.500	525 8074 8621	548 1513 1024	Surf Surf CBL	8454-16126	4.5' Liner top at 8621'	[50371] PIERCE CROSSING; BONE SPRING
16	30-015-45551	OXY USA INC	LENGTH CC 6 7 FEDERAL COM	023H	Oil	Active	230	N 2320	W	C	6	24S	29E	2/8/2019	8301	14.75 9.875 6.750	10.75 7.625 4.500	400 7723 15265	460 1867 1024	Surf Surf CBL	8421 - 18547		[50371] PIERCE CROSSING; BONE SPRING
17	30-015-47957	OXY USA INC	TAILS CC 10 3 FEDERAL COM	022H	Oil	Active	220	S 1450	W	N	10	24S	29E	2/22/2021	8762	14.750 9.875 6.75	10.750 7.625 5.500	560 7854 8849	605 1667 1356	Surf Surf CBL	8883 - 18462	4.5' Liner top at 8849'	[11520] CEDAR CANYON; BONE SPRING; [96473] PIERCE CROSSING; BONE SPRING, EAST
18	30-015-47975	OXY USA INC	VAGABOND CC 8 17 FEDERAL COM	023H	Oil	Active	546	S 1740	W	N	17	24S	29E	8/2/2021	8544	14.75 9.875 6.75	10.750 7.625 5.500	524 8205 17366	512 1682 1319	Surf Surf CBL	14798 - 17222		[11520] CEDAR CANYON; BONE SPRING; [50371] PIERCE CROSSING; BONE SPRING
19	30-015-45218	OXY USA INC	WHOMPING WILLOW CC 15 16 STATE COM	044H	Gas	Active	1385	S 420	E	I	15	24S	29E	10/12/2018	10844	14.750 9.875 6.750	10.750 7.875 5.500	455 10445 21152	600 1135 1500	Surf Surf CBL	10512-20714		[98220] PURPLE SAGE; WOLFCAMP (GAS)
21	30-015-20756	OXY USA INC	RIVER BEND 10 FEDERAL	002	Oil	Plugged, Site Released	2180	N 1980	W	F	10	24S	29E	9/26/2004	13859	17.5 12.25 6.75	13.375 9.625 4.500	697 7398 8455	750 3645 1160	Surf Surf CBL			
22	30-015-25706	OXY USA INC	OWEN MESA 26 FEDERAL	001	Oil	Plugged, Site Released	1350	N 1880	E	G	26	24S	29E	12/31/1986	12860	17.5 9.625 7.000	13.375 9.625 7.000	680 3050 11050	500 1955 1525	Surf Surf CBL			
23	30-015-27994	OXY USA INC	RIVERBEND FEDERAL	007	Oil	Plugged, Site Released	2280	N 460	W	E	23	24S	29E	5/31/1994	9020	17.500 11.000 7.875	13.375 8.625 5.500	465 2334 9020	640 1450 1800	Surf Surf CBL			
24	30-015-28390	OXY USA INC	RIVERBEND FEDERAL	008	Salt Water Disposal	Plugged, Site Released	460	N 330	W	D	23	24S	29E	11/17/1995	9000	10.750 7.625 4.500	10.750 7.625 4.500	451 2900 9000	570 806 1220	Surf Surf CBL			
25	30-015-28559	OXY USA INC	MITCHELL 21 FEDERAL	001	Oil	Plugged, Site Released	1650	N 1650	E	G	21	24S	29E	8/15/1995	8900	17.5 8.625 5.500	13.375 8.625 5.500	580 2840 8900	650 1520 2405	Surf Surf CBL			
26	30-015-29318	OXY USA INC	CANYON 23 FEDERAL	001	Oil	Plugged, Site Released	1750	S 660	E	I	23	24S	29E	2/28/1997	13950	17.5 9.625 7.000	13.375 9.625 7.000	20.000 3120 10500	40 1200 1495	Surf Surf CBL			
27	30-015-29320	OXY USA INC	RIVERBEND 8 FEDERAL	011	Oil	Plugged, Site Released	330	N 2310	E	B	23	24S	29E	4/19/1997	8250	17.5 8.625 5.500	13.375 8.625 5.500	535 2959 8250	950 1107 1590	Surf Surf CBL			
28	30-015-29616	OXY USA INC	RIVERBEND 23 FEDERAL	014	Oil	Plugged, Site Released	330	N 1910	W	C	23	24S	29E	5/31/1997	8200	10.750 7.625 4.500	10.750 7.625 4.500	529 2976 8200	550 800 1325	Surf Surf CBL			
29	30-015-33317	OXY USA INC	HARROUN 15	015	Oil	Active	1980	N 990	W	E	15	24S	29E	8/12/2004	10192	17.500 12.250 7.875	13.375 9.625 5.500	545 2865 10192	800 890	Surf Surf CBL	8249 - 10100		[96473] PIERCE CROSSING; BONE SPRING, EAST
30	30-015-33820	OXY USA INC	H BUCK STATE	003	Oil	Active	660	N 330	E	A	16	24S	29E	4/15/2005	10750	17.500 12.250	13.375 9.625	337 2870	350 1050	Surf Surf	7971 - 10667		[96473] PIERCE CROSSING; BONE SPRING, EAST

31	30-015-33822	OXY USA INC	HARROUN 15	017	Oil	Active	660	S	330	W	M	15	24S	29E	7/9/2006	10887	8,500 17,500 12,250 8,500	5,500 13,375 9,625 5,500	10750 315 2880 2005	2050 580 1000 2005	Surf Circ Surf Circ	8405-10740	[96473] PIERCE CROSSING; BONE SPRING, EAST
32	30-015-33823	OXY USA INC	HARROUN 15	016A	Oil	Active	1980	S	330	W	L	15	24S	29E	2/25/2005	10800	17,500 12,250 8,500	5,500 13,375 9,625 5,500	10750 514 2970 10865	2050 900 1100 2150	Surf Circ Surf Circ	8053 - 10750	[96473] PIERCE CROSSING; BONE SPRING, EAST
33	30-015-34444	OXY USA INC	H BUCK STATE	004H	Oil	Active	2310	N	330	E	H	16	24S	29E	11/29/2005	10696	17,500 12,250 8,500	5,500 13,375 9,625 5,500	10750 254 2830 10686	2050 350 900 2050	Surf Circ Surf Circ	7879 - 10326	[96473] PIERCE CROSSING; BONE SPRING, EAST
34	30-015-34695	OXY USA INC	H BUCK STATE	010	Oil	Active	660	S	330	E	P	16	24S	29E	3/18/2006	10865	17,500 12,250 8,500	5,500 13,375 9,625 5,500	10750 288 2910 10865	2050 1030 1300 2150	Surf Circ Surf Circ	8396 - 10710	[96473] PIERCE CROSSING; BONE SPRING, EAST
35	30-015-34817	OXY USA INC	VORTEC 22	001	Oil	Plugged, Not Released	330	S	330	E	P	22	24S	29E	4/28/2006	10852	17,500 12,250 8,500	5,500 13,375 9,625 5,500	10750 555 2915 10852	2050 475 1075 2100	Surf Circ Surf Circ		
36	30-015-34997	OXY USA INC	HARROUN 9	001	Oil	Active	530	S	330	E	P	9	24S	29E	6/5/2006	10680	17,500 12,250 8,500	5,500 13,375 9,625 5,500	10750 550 2875 10680	2050 425 950 2100	Surf Circ Surf Circ	7860 - 10580	[96473] PIERCE CROSSING; BONE SPRING, EAST
37	30-015-35041	OXY USA INC	VORTEC 27	001	Oil	Active	660	N	330	E	A	27	24S	29E	10/1/2006	10848	17,500 12,250 8,500	5,500 13,375 9,625 5,500	10750 552 2898 10848	2050 600 1030 2200	Surf Circ Surf Circ	10770-8102	[96473] PIERCE CROSSING; BONE SPRING, EAST
38	30-015-35186	OXY USA INC	GAINES 22 FEDERAL	001	Oil	Active	820	S	990	W	M	22	24S	29E	11/15/2006	10752	17,500 12,250 8,500	5,500 13,375 9,625 5,500	10752 557 2902 10752	2050 500 1175 2300	Surf Circ Surf Circ	8110-10660	[96473] PIERCE CROSSING; BONE SPRING, EAST
39	30-015-35353	OXY USA INC	GAINES 28 COM	001	Oil	Plugged, Site Released	1120	N	530	E	A	28	24S	29E	3/17/2007	10575	17,500 12,250 8,500	5,500 13,375 9,625 5,500	10752 550 2873 10575	2050 725 1050 2100	Surf Circ Surf Circ		
40	30-015-35492	OXY USA INC	VORTEC 27	002	Oil	Active	2010	N	380	E	H	27	24S	29E	8/31/2007	11376	17,500 12,250 8,500	5,500 13,375 9,625 5,500	10752 550 2920 11376	2050 900 750 2250	Surf Circ Surf Circ	7981-11180	ACTIVE 1BS PROD. TOC 2400' MD, CBL
41	30-015-35539	OXY USA INC	DOUBLE DALE FEE COM	001	Gas	Plugged, Not Released	1600	S	660	E	I	6	24S	29E	12/20/2008	13620	17,500 12,250 8,500	5,500 13,375 9,625 7	10752 380 10132 10550	2050 400 1550 1700	Surf Circ Surf Circ		
42	30-015-35692	OXY USA INC	CYPRESS 34 FEDERAL	003H	Oil	Active	2100	S	1650	W	K	34	23S	29E	7/20/2007	11065	17,500 12,250 8,500	5,500 13,375 9,625 5,500	10752 550 3000 11065	2050 600 1100 2325	Surf Circ Surf Circ	8102 - 10950	[11520] CEDAR CANYON; BONE SPRING
43	30-015-36321	OXY USA INC	CYPRESS 33 FEDERAL	001H	Oil	Active	660	S	330	E	P	33	23S	29E	7/15/2008	11694	17,500 12,250 8,500	5,500 13,375 9,625 5,500	10752 550 2950 11694	2050 650 1000 4300	Surf Circ Surf Circ	8150 - 11202	[11520] CEDAR CANYON; BONE SPRING
44	30-015-37644	OXY USA INC	MORNING FEDERAL	001H	Oil	Active	1980	N	330	W	E	8	24S	29E	5/22/2010	12023	17,500 12,250 8,500	5,500 13,375 9,625 5,500	10752 323 2798 11823	0 0 0 0	Surf Circ Surf Circ	7800 - 12023	[11520] CEDAR CANYON; BONE SPRING
45	30-015-39430	OXY USA INC	CYPRESS 34 FEDERAL	008H	Oil	Active	575	S	1980	E	O	34	23S	29E	3/12/2013	8910	16,000 12,250 8,500	5,500 13,375 9,625 5,500	10752 408 3100 13073	0 0 0 0	Surf Circ Surf Circ	8725 - 8871	[11520] CEDAR CANYON; BONE SPRING
46	30-015-41024	OXY USA INC	CEDAR CANYON 16 STATE	002H	Oil	Active	230	S	330	E	P	16	24S	29E	2/12/2013	8575	16,000 12,250 8,500	5,500 13,375 9,625 5,500	10752 356 2977 13240	625 1260 2210	Surf Circ Surf Circ	8860-13000	[96473] PIERCE CROSSING; BONE SPRING, EAST
47	30-015-41032	OXY USA INC	CEDAR CANYON 15	002H	Oil	Active	170	S	360	W	M	15	24S	29E	2/23/2013	8795	14,750 10,625 7,875	5,500 11,750 8,625 5,500	13786 334 3101 12960	280 840 1450	Surf Circ Surf Circ	8900-12800	[96473] PIERCE CROSSING; BONE SPRING, EAST
48	30-015-41251	OXY USA INC	CEDAR CANYON 16 STATE	007H	Oil	Active	2485	N	330	W	E	15	24S	29E	4/15/2013	8644	14,750 10,625 7,875	5,500 11,750 8,625 5,500	13786 335 3095 13725	880 1000 1570	Surf Circ Surf Circ	8200 - 13560	[96473] PIERCE CROSSING; BONE SPRING, EAST
49	30-015-41291	OXY USA INC	CEDAR CANYON 15	004H	Oil	Active	2310	N	330	W	E	15	24S	29E	5/13/2013	8783	14,750 10,625 7,875	5,500 11,750 8,625 5,500	13786 357 3091 13108	950 960 1420	Surf Circ Surf Circ	9000 - 12900	[96473] PIERCE CROSSING; BONE SPRING, EAST
50	30-015-41327	OXY USA INC	CEDAR CANYON 22	002H	Oil	Active	990	N	690	W	D	22	24S	29E	6/8/2013	8813	14,750 10,625 7,875	5,500 11,750 8,625 5,500	13786 380 3105 12678	0 960 1400	Surf Circ Surf Circ	8920-12520	[96473] PIERCE CROSSING; BONE SPRING, EAST
51	30-015-41488	OXY USA INC	HARROUN 9	003H	Oil	Active	200	S	550	E	P	9	24S	29E	10/29/2013	8645	14,750 10,625 7,875	5,500 11,750 8,625 5,500	13786 567 3000 13187	620 910	Surf Circ Surf Circ	9262 - 13013	[96473] PIERCE CROSSING; BONE SPRING, EAST
52	30-015-41594	OXY USA INC	CEDAR CANYON 15	003H	Oil	Active	1888	S	700	W	L	15	24S	29E	6/14/2014	8810	14,750 10,625 7,875	5,500 11,750 8,625 5,500	13786 599 3125 13177	840 850	Surf Circ Surf Circ	9152-13041	[96473] PIERCE CROSSING; BONE SPRING, EAST
53	30-015-41595	OXY USA INC	CEDAR CANYON 16 STATE	006H	Oil	Active	1430	S	710	W	L	15	24S	29E	6/10/2014	8620	14,750 10,625 7,875	5,500 11,750 8,625 5,500	13786 364 3144 13786	550 890	Surf Circ Surf Circ	9115 - 13625	[96473] PIERCE CROSSING; BONE SPRING, EAST
54	30-015-41596	OXY USA INC	CEDAR CANYON 16 STATE	008H	Oil	Active	1040	N	330	E	A	16	24S	29E	6/29/2014	8618	14,750 10,625 7,875	5,500 11,750 8,625 5,500	13786 364 3118 13844	599 890	Surf Circ Surf Circ	9017 - 13407	[96473] PIERCE CROSSING; BONE SPRING, EAST
55	30-015-42063	OXY USA INC	CEDAR CANYON 27 STATE COM	004H	Oil	Active	700	N	173	W	D	27	24S	29E	7/17/2014	8826	14,750 10,625 7,875	5,500 11,750 8,625 5,500	13786 464 3115 13585	910 880	Surf Circ Surf Circ	9110-12449	[96473] PIERCE CROSSING; BONE SPRING, EAST
56	30-015-42088	OXY USA INC	CYPRESS 34 FEDERAL	009H	Oil	Active	279	S	1070	E	P	34	23S	29E	3/30/2014	8999	14,750 10,625 7,875	5,500 11,750 8,625 5,500	13786 599 3170 13333	470 850	Surf Circ Surf Circ	9300-13200	[11520] CEDAR CANYON; BONE SPRING
57	30-015-42421	OXY USA INC	CEDAR CANYON 15 FEDERAL COM	005H	Oil	Active	1095	N	290	W	D	15	24S	29E	10/14/2014	8809	14,750 10,625 7,875	5,500 11,750 8,625 5,500	13786 380 2937 13508	796 930	Surf Circ Surf Circ	9536 - 13319	[96473] PIERCE CROSSING; BONE SPRING, EAST
58	30-015-42683	OXY USA INC	CEDAR CANYON 16 STATE	012H	Oil	Active	900	S	860	W	M	15	24S	29E	11/7/2014	8624	14,750 10,625 7,875	5,500 11,750 8,625 5,500	13786 445 2965 14417	680 850	Surf Circ Surf Circ	9704 - 14214	[96473] PIERCE CROSSING; BONE SPRING, EAST
59	30-015-42797	OXY USA INC	CEDAR CANYON 15 SWD	001	Salt Water Disposal	Active	2500	S	1400	W	K	15	24S	29E	1/14/2015	16014	24,000 17,500 12,250 8,500	18,625 13,375 9,625 5,500	277 3107 10155 13888	900 2720 3450 8785	Surf Circ Surf Circ	14842 - 15964	[97869] SWD; DEVONIAN-SILURIAN
60	30-015-43233	OXY USA INC	CEDAR CANYON 27 FEDERAL	007H	Oil	Active	1745	S	200	E	I	28	24S	29E	9/22/2015	8769	14,750 63750.000	5,500 4,500 7,875 6,750	14842 13888 7997 8949	830 8785	Surf Circ Surf Circ	9453-13798	[96473] PIERCE CROSSING; BONE SPRING, EAST
61	30-015-43281	OXY USA INC	CEDAR CANYON 23 FEDERAL	004H	Oil	Active	1415	N	155	E	H	22	24S	29E	11/26/2015	9006	14,750 10,625 6,750	5,500 10,750 4,500	14842 448 18509	550 4000 1090	Surf Circ Surf Circ	9312-18403	[96473] PIERCE CROSSING; BONE SPRING, EAST
62	30-015-43290	OXY USA INC	CEDAR CANYON 23 FEDERAL	003H	Oil	Active	2540	S	200	E	I	22	24S	29E	10/26/2016	9010	14,750 9,875 6,750	5,500 7,625 5,500	482 8221 8962	382 1185	Surf Circ Surf Circ	9016-16282	[96473] PIERCE CROSSING; BONE SPRING, EAST
63	30-015-43601	OXY USA INC	CEDAR CANYON 29 FEDERAL	021H	Oil	Active	1989	N	150	E	H	29	24S	29E	12/24/2016	8526	14,750	5,500	665	610	Surf Circ	8719-13274	[50371] PIERCE CROSSING; BONE SPRING

54	30-015-43642	OXY USA INC	CEDAR CANYON 22 FEDERAL	021H	Oil	Active	2540	S	230	E	I	22	24S	29E	10/25/2016	8817	9.875 6.750	7.625 4.500	8096 13470	2020 550	Surf Circ	Circ Circ	8887-13471	[96473] PIERCE CROSSING; BONE SPRING, EAST
55	30-015-43645	OXY USA INC	CEDAR CANYON 28 27 FEDERAL COM	005H	Oil	Active	1990	N	180	E	H	29	24S	29E	12/21/2016	8733	9.875 6.750	7.625 4.500	8096 13610	2020 830	Surf Circ	Circ Circ	8626-18482	[96473] PIERCE CROSSING; BONE SPRING, EAST
56	30-015-43673	OXY USA INC	CEDAR CANYON 27 STATE COM	010H	Gas	Active	1154	N	121	W	D	27	24S	29E	5/28/2016	10125	9.875 6.750	7.625 5.500	500 10189	530 590	Surf Circ	Circ Circ	10136-14712	[98220] PURPLE SAGE; WOLFCAMP (GAS) 5.5" to 4.5" cross over at 10189 ft
57	30-015-43758	OXY USA INC	CEDAR CANYON 22 FEDERAL COM	005H	Oil	Active	1120	S	207	W	M	22	24S	29E	8/6/2016	8819	9.875 6.750	7.625 4.500	7650 14870	3500 590	Surf Circ	Circ Circ	8939-13358	[96238] CORRAL DRAW; BONE SPRING
58	30-015-43808	OXY USA INC	CEDAR CANYON 22 15 FEE	032H	Oil	Active	1108	N	1633	W	C	22	24S	29E	7/16/2016	9926	9.875 6.750	7.625 4.500	9277 16053	3130 470	Surf Circ	Circ Circ	9994-15862	[96473] PIERCE CROSSING; BONE SPRING, EAST 5.5" to 4.5" cross over at 15898 ft
59	30-015-43809	OXY USA INC	CEDAR CANYON 22 15 FEE	031H	Oil	Active	1108	N	1603	W	C	22	24S	29E	7/16/2016	9906	9.875 6.750	7.625 5.500	9188 16031	1915 470	Surf Circ	Circ Circ	10004-15872	[96473] PIERCE CROSSING; BONE SPRING, EAST
70	30-015-43819	OXY USA INC	CEDAR CANYON 28 FEDERAL COM	008H	Oil	Active	170	N	319	E	A	29	24S	29E	10/20/2016	8712	9.875 6.750	7.625 5.500	405 8744	467 0	Surf Circ	Circ Circ	13292-8756	[96473] PIERCE CROSSING; BONE SPRING, EAST 5.5" to 4.5" cross over at 8724 ft
71	30-015-43843	OXY USA INC	CEDAR CANYON 16 STATE	034H	Gas	Active	402	N	1083	E	A	16	24S	29E	10/22/2016	10038	9.875 6.750	7.625 4.500	9995 14526	2325 510	Surf Circ	Circ Circ	10125-14360	[98220] PURPLE SAGE; WOLFCAMP (GAS)
72	30-015-43844	OXY USA INC	CEDAR CANYON 16 STATE	033H	Gas	Active	402	N	1123	E	A	16	24S	29E	10/12/2016	10034	9.875 6.750	7.625 4.500	9962 15044	2514 8841	Surf Circ	Circ Circ	10100-14518	[98220] PURPLE SAGE; WOLFCAMP (GAS) Liner top at 9841
73	30-015-43849	OXY USA INC	CYPRESS 34 FEDERAL	012H	Gas	Active	180	N	1167	E	A	3	24S	29E	10/29/2016	10256	12.250 8.500	9.625 5.500	3233 15094	920 3190	Surf Circ	Circ Circ	10366-14917	[98220] PURPLE SAGE; WOLFCAMP (GAS)
74	30-015-43906	OXY USA INC	CEDAR CANYON 22 FEDERAL COM	006Y	Oil	Active	1040	S	207	W	M	22	24S	29E	9/27/2016	8850	9.875 6.750	7.625 4.500	8163 13397	1300 540	Surf Circ	Circ Circ	8610-13196	[96238] CORRAL DRAW; BONE SPRING
75	30-015-43915	OXY USA INC	CEDAR CANYON 22 15 FEE	033H	Gas	Active	1107	N	1052	E	A	22	24S	29E	3/6/2017	10090	9.875 6.750	7.625 4.500	9516 9383	2540 670	Surf Circ	Circ Circ	10252-16170	[98220] PURPLE SAGE; WOLFCAMP (GAS) Top of 4.5" liner 9383
78	30-015-44016	OXY USA INC	CEDAR CANYON 28 FEDERAL	009H	Oil	Active	1990	N	120	E	H	29	24S	29E	1/15/2017	8708	9.875 6.750	7.625 4.500	7960 13822	2140 550	Surf Circ	Circ Circ	9079-13637	[96473] PIERCE CROSSING; BONE SPRING, EAST
77	30-015-44055	OXY USA INC	CEDAR CANYON 22 15 FEDERAL COM	034H	Oil	Active	1107	N	1022	E	A	22	24S	29E	3/8/2017	9970	9.875 6.750	7.625 4.500	9481 16091	1350 660	Surf Circ	Circ Circ	9980-15931	[96473] PIERCE CROSSING; BONE SPRING, EAST Top of 4.5" liner 9355
78	30-015-44074	OXY USA INC	CEDAR CANYON 23 FEDERAL COM	033H	Gas	Active	2344	S	1199	E	I	22	24S	29E	4/29/2017	10329	9.875 6.750	7.625 4.500	9737 12915	1370 765	Surf Circ	Circ Circ	10521-17749	[98220] PURPLE SAGE; WOLFCAMP (GAS) Top of 4.5" liner 9468
79	30-015-44095	OXY USA INC	CEDAR CANYON 23 FEDERAL COM	006H	Oil	Active	2329	S	1173	E	I	22	24S	29E	4/30/2017	8974	9.875 6.750	7.625 4.500	8348 17341	1870 500	Surf Circ	Circ Circ	8946-17187	[96473] PIERCE CROSSING; BONE SPRING, EAST
80	30-015-44133	OXY USA INC	CEDAR CANYON 21 22 FEDERAL COM	033H	Oil	Active	1754	S	374	W	L	21	24S	29E	5/10/2017	10002	12.250 8.500	9.625 5.500	9183 19842	2235 1730	Surf Circ	Circ Circ	9908-19667	[96473] PIERCE CROSSING; BONE SPRING, EAST Top of 5.5" liner 8918
81	30-015-44134	OXY USA INC	CEDAR CANYON 21 22 FEDERAL COM	034H	Oil	Active	1737	S	399	W	L	21	24S	29E	5/9/2017	9997	12.250 8.500	9.625 5.500	9242 19968	2335 1735	Surf Circ	Circ Circ	9978-19797	[96473] PIERCE CROSSING; BONE SPRING, EAST Top of 5.5" liner 9115
82	30-015-44176	OXY USA INC	CEDAR CANYON 21 22 FEDERAL COM	032H	Gas	Active	1794	N	141	W	E	21	24S	29E	8/9/2017	9979	12.250 8.500	9.625 5.500	9678 19936	2619 500	Surf Circ	Circ Circ	9920-19771	[96473] PIERCE CROSSING; BONE SPRING, EAST 5.5" to 4.5" cross over at 9878 ft
83	30-015-44176	OXY USA INC	CEDAR CANYON 23 24 FEDERAL COM	034H	Oil	Active	319	S	88	W	M	23	24S	29E	7/5/2017	10119	9.875 6.750	7.625 4.500	9377 17572	1656 1028	Surf Circ	Circ Circ	10188-17410	[96473] PIERCE CROSSING; BONE SPRING, EAST 5.5" frac string, Top of 4.5" liner 9233
84	30-015-44179	OXY USA INC	CEDAR CANYON 23 24 FEDERAL	031H	Oil	Active	491	N	177	E	A	22	24S	29E	6/18/2017	10160	9.875 6.750	7.625 4.500	9364 17727	1365 815	Surf Circ	Circ Circ	10330-17558	[96473] PIERCE CROSSING; BONE SPRING, EAST 5.5" frac string, Top of 4.5" liner 9181
85	30-015-44180	OXY USA INC	CEDAR CANYON 23 24 FEDERAL	032H	Oil	Active	520	N	172	E	A	22	24S	29E	6/19/2017	10169	9.875 6.750	7.625 4.500	9495 17650	1600 790	Surf Circ	Circ Circ	10240-17475	[96473] PIERCE CROSSING; BONE SPRING, EAST 5.5" frac string, Top of 4.5" liner 9244
86	30-015-44182	OXY USA INC	CEDAR CANYON 21 FEDERAL COM	031H	Gas	Active	339	N	368	E	A	21	24S	29E	7/31/2017	9950	9.875 6.750	7.625 4.500	9295 14724	1773 713	Surf Circ	Circ Circ	9966-14562	[98220] PURPLE SAGE; WOLFCAMP (GAS)
87	30-015-44191	OXY USA INC	CEDAR CANYON 21 FEDERAL COM	023H	Oil	Active	1824	N	141	W	E	21	24S	29E	8/11/2017	8708	9.875 6.750	7.625 4.500	9368 13347	1814 660	Surf Circ	Circ Circ	8569-13200	[96238] CORRAL DRAW; BONE SPRING
88	30-015-44435	OXY USA INC	CEDAR CANYON 27 28 FEDERAL	042H	Oil	Active	956	N	325	W	D	28	24S	29E	8/5/2018	9982	9.875 6.750	7.625 5.500	9362 20122	817 864	Surf Circ	Circ Circ	9934-20031	[96473] PIERCE CROSSING; BONE SPRING, EAST
89	30-015-44437	OXY USA INC	CEDAR CANYON 27 28 FEDERAL	043H	Gas	Active	1275	S	465	E	P	29	24S	29E	9/28/2017	10097	12.250 8.500	9.625 5.500	9485 20257	3387 2312	Surf Circ	Circ Circ	10286-20110	[98220] PURPLE SAGE; WOLFCAMP (GAS)
90	30-015-44438	OXY USA INC	CEDAR CANYON 27 28 FEDERAL	044H	Gas	Active	1245	S	465	E	P	29	24S	29E	9/27/2017	10106	12.250 8.500	9.625 5.500	9354 20275	3096 2286	Surf Circ	Circ Circ	10303-20127	[98220] PURPLE SAGE; WOLFCAMP (GAS)
91	30-015-44439	OXY USA INC	CEDAR CANYON 28 FEDERAL COM	041H	Gas	Active	934	N	305	E	D	28	24S	29E	8/6/2018	10051	9.875 6.750	7.625 4.500	9368 14755	1814 0	Surf Circ	Circ Circ	10582-14546	[98220] PURPLE SAGE; WOLFCAMP (GAS) 5.5" to 4.5" cross over at 10006 ft
92	30-015-44519	OXY USA INC	CEDAR CANYON 20 FEDERAL COM	025H	Oil	Active	110	N	1390	E	B	29	24S	29E	5/17/2018	8671	9.875 6.750	7.625 5.500	8034 8557	1547 845	Surf Circ	Circ Circ	8605-16042	[50371] PIERCE CROSSING; BONE SPRING 5.5" to 4.5" cross over at 8557 ft
93	30-015-44520	OXY USA INC	CEDAR CANYON 20 FEDERAL COM	026H	Oil	Active	110	N	1360	E	B	29	24S	29E	5/20/2018	8662	9.875 6.750	7.625 5.500	8066 16188	1582 0	Surf Circ	Circ Circ	8662-16213	[50371] PIERCE CROSSING; BONE SPRING 5.5" to 4.5" cross over at 8626 ft
94	30-015-44521	OXY USA INC	CEDAR CANYON 29 FEDERAL COM	024H	Oil	Active	1670	N	420	W	L	29	24S	29E	11/11/2017	8600	9.875 6.750	7.625 4.500	8626 16353	957 0	Surf Circ	Circ Circ	8623-13221	[50371] PIERCE CROSSING; BONE SPRING

155	30-015-54048	OXY USA INC	TIME CC 6 7 FEDERAL COM	071H	Oil	Active	450	N	2270	W	C	6	24S	29E	8/11/2023	8847	14.75 9.875 6.75	10.750 7.625 5.500	432 8927 18990	645 1906 798	Surf Surf Surf	Circ Circ Calc	9396 - 18873	[50371] PIERCE CROSSING; BONE SPRING
156	30-015-24292	CHEVRON U S A INC	QUEEN LAKE 19 FEDERAL	001	Oil	Plugged, Site Released	1950	N	1980	E	G	19	24S	29E		13500	17.500 12.250 8.500 6.125	13.375 9.625 7.000 4.500	530 2630 11190 13500	810 1890 1275 400	Surf Surf Surf Surf	Circ Circ Circ Circ		
157	30-015-25237	CHEVRON U S A INC	FORT 18 COM	001	Gas	Plugged, Site Released	1980	N	895	W	E	18	24S	29E	3/23/1985	13058	17.5 9.625 7.000	13.375 9.625 7.000	600 2610 10650	550 1550 1400	Surf Surf Surf	Circ Circ Circ		
158	30-015-44637	CHEVRON U S A INC	CB SE 5 32 FEDERAL COM	011H	Gas	Active	370	S	1300	E	P	5	24S	29E	3/15/2018	10063	17.500 12.250 8.500 6.75	13.375 9.625 7.625 5.500	462 6785 9471 9643	325 2235 250 1634	Surf Surf Surf Surf	Circ Circ Circ Circ		[98220] PURPLE SAGE; WOLF CAMP (GAS)
159	30-015-44638	CHEVRON U S A INC	CB SE 5 32 FEDERAL COM	012H	Gas	Active	380	S	1275	E	P	5	24S	29E	3/16/2018	10093	17.500 12.250 8.500 6.750	13.375 9.625 7.628 5.000	422 6725 9439 20129	485 2408 250 1738	Surf Surf Surf Surf	Circ Circ Circ Calc	10230 - 19443	[98220] PURPLE SAGE; WOLF CAMP (GAS)
160	30-015-44639	CHEVRON U S A INC	CB SE 5 32 FEDERAL COM	013H	Gas	Active	380	S	1250	E	P	5	24S	29E	3/18/2018	10096	17.500 12.250 8.500 6.75	13.375 9.625 7.625 5.000	451 6807 9530 9199	325 1927 270 1741	Surf Surf Surf Surf	Circ Circ Circ Circ	10257 - 19461	[98220] PURPLE SAGE; WOLF CAMP (GAS)
161	30-015-44974	CHEVRON U S A INC	CB SE 5 32 FEDERAL COM 3	001H	Gas	Active	295	S	1542	W	N	5	24S	29E	7/11/2018	10011	17.500 12.250 8.500	13.375 9.625 5.500	384 9438 20240	297 2470 3591	Surf Surf Surf	Circ Circ Circ	10269 - 20069	[98220] PURPLE SAGE; WOLF CAMP (GAS)
162	30-015-44975	CHEVRON U S A INC	CB SE 5 32 FEDERAL COM 3	002H	Gas	Active	295	S	1567	W	N	5	24S	29E	7/13/2018	9950	17.500 12.250 8.500	13.375 9.625 5.500	395 9240 20039	297 2466 3560	Surf Surf Surf	Circ Circ Circ	9995 - 20039	[98220] PURPLE SAGE; WOLF CAMP (GAS)
163	30-015-44976	CHEVRON U S A INC	CB SE 5 32 FEDERAL COM 3	003H	Gas	Active	295	S	1592	W	N	5	24S	29E	7/13/2018	10062	17.500 12.250 8.500	13.375 9.625 5.500	384 9412 20288	297 2470 3591	Surf Surf Surf	Circ Circ Circ	10236 - 20137	[98220] PURPLE SAGE; WOLF CAMP (GAS)
164	30-015-45833	COG OPERATING LLC	HOWITZER FEDERAL COM	605H	Gas	Active	2125	N	300	E	H	12	24S	28E	5/13/2019	9803	26.000 17.500 12.250 8.500	20.000 13.375 9.625 5.500	312 2715 9295 20069	1000 2150 1825 4500	Surf Surf Surf Surf	Circ Circ Circ Circ	10118 - 20009	[98220] PURPLE SAGE; WOLF CAMP (GAS)
165	30-015-45834	COG OPERATING LLC	HOWITZER FEDERAL COM	606H	Gas	Active	2155	N	300	E	H	12	24S	28E	5/19/2019	9502	26.000 17.500 12.250 8.500	20.000 13.375 9.625 5.500	312 2713 9050 19899	1000 2125 1750 4475	Surf Surf Surf Surf	Circ Circ Circ Circ	9925 - 19839	[98220] PURPLE SAGE; WOLF CAMP (GAS)
166	30-015-26954	DEVON ENERGY PRODUCTION COMPANY, LP	HARROUN TRUST 31 FEDERAL COM	001	Gas	Plugged, Not Released	1980	S	660	W	L	31	23S	29E	3/18/1992	12185	17.5 9.625 7.000 7.000	13.375 9.625 7.000 7.000	645 2718 10458 12185	800 1950 850 999	Surf Surf Surf Surf	Circ Circ Circ Circ		
167	30-015-28930	DEVON ENERGY PRODUCTION COMPANY, LP	ORE IDA 14 FEDERAL	002	Oil	Plugged, Site Released	1980	N	330	W	E	14	24S	29E	2/20/1997	8350	17.5 8.625 5.500	13.375 8.625 5.500	375 3069 8350	705 1220 500	Surf Surf Surf	Circ Circ Circ		
168	30-015-29290	DEVON ENERGY PRODUCTION COMPANY, LP	ORE IDA 14 FEDERAL	010	Salt Water Disposal	Active	1780	S	860	E	I	14	24S	29E	1/28/1997	8354	17.5 8.625 7.875	13.375 8.625 7.875	376 3124 8354	525 1275 1000	Surf Surf Surf	Circ Circ Circ	3210-3618	[96769] SWD; BELL CANYON
169	30-015-44755	DEVON ENERGY PRODUCTION COMPANY, LP	SPUD MUFFIN 31 30	736H	Gas	Active	335	S	485	E	P	31	23S	29E	11/8/2019	10737	17.500 8.875 7.875	13.375 8.625 5.500	389 9687 20770	395 545 2755	Surf Surf Surf	Circ Calc Circ	10857 - 20666	[98220] PURPLE SAGE; WOLF CAMP (GAS)
170	30-015-44757	DEVON ENERGY PRODUCTION COMPANY, LP	SPUD MUFFIN 31 30	738H	Gas	Active	335	S	455	E	P	31	23S	29E	3/25/2019	10919	17.500 12.250 8.750	13.375 9.625 5.500	360 9565 21084	570 1580 6590	Surf Surf Surf	Circ Circ Circ	11012 - 20910	[98220] PURPLE SAGE; WOLF CAMP (GAS)
171	30-015-45266	DEVON ENERGY PRODUCTION COMPANY, LP	SPUD MUFFIN 31 30 COM	622H	Gas	Active	625	S	2375	W	N	31	23S	29E	1/20/2019	9830	17.500 9.875 7.875	13.375 8.625 5.500	361 9212 20106	632 676 2302	Surf Surf Surf	Circ Circ Circ	10020 - 19951	[98220] PURPLE SAGE; WOLF CAMP (GAS)
172	30-015-45267	DEVON ENERGY PRODUCTION COMPANY, LP	SPUD MUFFIN 31 30	623H	Gas	Active	625	S	2435	W	N	31	23S	29E	1/22/2019	9930	17.500 9.875 7.875	13.375 8.625 5.500	363 9250 20770	632 976 2755	Surf Surf Surf	Circ Circ Circ	10071 - 19983	[98220] PURPLE SAGE; WOLF CAMP (GAS)
173	30-015-45302	DEVON ENERGY PRODUCTION COMPANY, LP	SPUD MUFFIN 31 30	332H	Oil	Active	625	S	2405	W	N	31	23S	29E	1/21/2019	9695	17.500 9.875 7.875	13.375 8.625 5.500	364 9017 19931	632 843 1951	Surf Surf Surf	Circ Circ Circ	9834 - 19769	[11520] CEDAR CANYON; BONE SPRING
174	30-015-45459	DEVON ENERGY PRODUCTION COMPANY, LP	SPUD MUFFIN 31 30 FEDERAL COM	331H	Oil	Active	270	S	1275	W	M	31	23S	29E	1/17/2019	9674	17.500 9.875 7.875	13.375 8.625 5.500	377 8944 19928	346 995 2435	Surf Surf Surf	Circ Circ Circ	9782 - 19767	[11520] CEDAR CANYON; BONE SPRING
175	30-015-45460	DEVON ENERGY PRODUCTION COMPANY, LP	SPUD MUFFIN 31 30 FEDERAL COM	621H	Gas	Active	270	S	1245	W	M	31	23S	29E	1/20/2019	9793	17.500 10.625 7.875	13.375 8.625 5.500	415 9241 20238	720 1270 2635	Surf Surf Surf	Circ Circ Circ	10079 - 20063	[98220] PURPLE SAGE; WOLF CAMP (GAS)
176	30-015-28127	EOG RESOURCES INC	KNOLL AOK FEDERAL	001	Oil	Active	1980	N	1980	E	G	3	24S	29E	10/25/1994	8250	20.000 17.5 8.625	20.000 13.375 8.625	40 700 3003	999 600 850	Surf Surf Surf	Circ Circ Circ	7922 - 7939	[11520] CEDAR CANYON; BONE SPRING
177	30-015-40754	EOG RESOURCES INC	JUNIPER BIP FEDERAL COM	012H	Oil	Active	1296	N	587	E	A	8	24S	29E	1/12/2013	8782	17.500 12.250 8.500	13.375 9.625 5.500	627 2874 13434	0 0 0	Surf Surf Surf	Circ Circ Circ	9062 - 13302	[11520] CEDAR CANYON; BONE SPRING
178	30-015-25658	KAISER-FRANCIS OIL CO	FORT 7 COM	001	Oil	Plugged, Not Released	660	S	2310	E	O	7	24S	29E	10/22/1986	12311	17.5 8.5 6.125	13.375 7 4.5	600 10600 12300	550 1400 250	Surf Surf Surf	Circ Circ Calc		
179	30-015-27996	MARALO LLC	COCHITI 5 FEDERAL	001	Gas	Plugged, Site Released	660	S	1980	W	N	5	24S	29E	12/18/1994	12268	23.375 9.625 8.750	23.375 9.625 8.750	650 2700 10660	900 1250 2160	Surf Surf Surf	Circ Circ Circ		
180	30-015-26542	MATADOR PRODUCTION COMPANY	AMETHYST STATE COM	001	Gas	Plugged, Not Released	1880	N	990	W	E	32	24S	29E	12/1/1990	13489	17.500 12.250 7.875	13.375 9.625 5.500	600 2808 10645	850 1225 950	Surf Surf Surf	Circ Circ Circ		
181	30-015-43654	MATADOR PRODUCTION COMPANY	ZACH MCCORMICK FEDERAL COM 18 24S 29E	001	Gas	Active	716	N	380	W	D	18	24S	29E	3/24/2016		12.25 8.75	13.375 7.000	629 11189	557 1052	Surf Surf	Circ Circ	10070 - 10520	[98220] PURPLE SAGE; WOLF CAMP (GAS)

:06	30-015-44054	NGL WATER SOLUTIONS PERMIAN, LLC	CEDAR CANYON SWD	001	Salt Water Disposal	Active	1310	S	1153	E	P	8	24S	29E	2/12/2017	15764	17,500	13,375	2823	1990	Surf	Circ	14686 - 15764	[96101] SWD; DEVONIAN
																	12,250	9,625	10204	2400	Surf	Circ		
																	8,500	7,875	14905	475	Surf	Circ		
:07	30-015-26797	OWL SWD OPERATING, LLC	RUBY 30 STATE	001	Gas	Plugged, Site Released	990	S	1980	E	O	30	24S	29E	11/20/1996	13400	17,500	13,375	2399	1910	Surf	Circ	6432-6672	[11540] CEDAR CANYON; DELAWARE
																	12,250	9,625	9980	2000	Surf	Circ		
																	9,875	7,625	14686	410	Surf	Circ		
:08	30-015-29277	SHACKELFORD OIL CO	ORE IDA 14 FEDERAL	008	Oil	Active	760	S	1830	E	O	14	24S	29E	1/9/1997	8340	17,500	13,375	355	750	Surf	Circ	7923-8098	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	12,250	8,625	3127	1250	Surf	Circ		
																	7,875	5,500	8340	1180	Surf	Calc		
:09	30-015-29278	SHACKELFORD OIL CO	ORE IDA 14 FEDERAL	009	Oil	Active	560	S	760	E	P	14	24S	29E	4/6/1997	8350	17.5	13.375	357	535	Surf	Circ	7815-7899	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	8.625	8.625	3134	1220	Surf	Circ		
																	5.500	5.500	8350	610	Surf	Circ		
:10	30-015-29291	SHACKELFORD OIL CO	ORE IDA 14 FEDERAL	012	Oil	Active	1880	S	2480	W	K	14	24S	29E	3/17/1997	8332	17.5	13.375	377	425	Surf	Circ	7841-8019	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	8.625	8.625	3075	800	Surf	Circ		
																	5.500	5.500	8335	1150	Surf	Circ		
:11	30-015-29417	SHACKELFORD OIL CO	ORE IDA 14 FEDERAL	013	Oil	Active	660	S	1980	W	N	14	24S	29E	4/6/1997	8350	17.5	13.375	354	185	Surf	Circ	7522 - 7532	[50371] PIERCE CROSSING; BONE SPRING
																	8.625	8.625	3066	300	Surf	Circ		
																	5.500	5.500	8350	910	Surf	Circ		
:12	30-015-29829	SMC OIL & GAS, INC.	QUEEN LAKE 20 FEDERAL	001	Oil	Active	1750	N	660	W	E	20	24S	29E	11/30/1987	12390	11,750	11,750	577	1567	Surf	Circ	7751-10603	[50371] PIERCE CROSSING; BONE SPRING
																	8,625	8,625	2758	880	Surf	Circ		
																	5,500	5,500	11268	1050	Surf	Circ		
:13	30-015-96444	SMC OIL & GAS, INC.	QUEEN LAKE 20 FEDERAL	002H	Oil	Active	350	S	1650	E	O	20	24S	29E	8/20/2008	10802	17,500	13,375	655	765	Surf	Circ	9361-20555	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	12,250	9,625	2800	1305	Surf	Circ		
																	8,500	5,500	10802	1850	Surf	Calc		
:14	30-015-25766	TAP ROCK OPERATING, LLC	H. B. 3 FEDERAL	001	Gas	Plugged, Site Released	1980	S	1980	E	J	3	24S	29E	7/22/1987	13933	17.5	13.375	714	750	Surf	Circ	9546-20737	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	12.25	9.625	3062	2300	Surf	Circ		
																	8.5	7	10385	800	Unknown	NA		
215	30-015-23757	TEXACO EXPLORATION & PRODUCTION INC	MALAGA HARROUN 6	001	Gas	Plugged, Site Released	1980	N	1880	W	F	6	24S	29E	13300	20,000	20,000	20,000	461	1600	Surf	Circ	9283-20476	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	17.5	13.375	2762	2491	Surf	Circ		
																	9,625	9,625	10400	3490	Surf	Circ		
216	30-015-44631	OXY USA INC	CORRAL CANYON 36 25 FEDERAL COM	021H	Oil	Active	381	N	1493	W	C	1	25S	29E	2/20/2018	9101	17.5	13.375	553	650	Surf	Circ	9546-20737	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	12.25	9.625	8621	3138	Surf	Circ		
																	8.5	5.5	20716	2474	Surf	Calc		
217	30-015-44632	OXY USA INC	CORRAL CANYON 36 25 FEDERAL COM	022H	Oil	Active	381	N	1528	W	C	1	25S	29E	2/20/2018	9117	17.5	13.375	533	650	Surf	Circ	9283-20476	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	9.875	7.625	8588	2149	Surf	Circ		
																	6.75	5.5	20880	775	Surf	CBL		
218	30-015-44633	OXY USA INC	CORRAL CANYON 36 25 FEDERAL COM	023H	Oil	Active	381	N	1563	W	C	1	25S	29E	2/21/2018	9138	17.5	13.375	554	685	Surf	Circ	9358-19234	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	9.875	7.625	8579	1986	Surf	Circ		
																	6.75	5.5	20635	923	Surf	CBL		
219	30-015-44683	OXY USA INC	CORRAL FLY 35 26 FEDERAL COM	025H	Oil	Active	314	N	1277	E	A	2	25S	29E	3/23/2018	9084	14.75	10.75	436	490	Surf	Circ	9243-19169	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	9.875	7.625	8355	1511	Surf	Circ		
																	6.75	5.5	19363	807	Surf	CBL		
220	30-015-44684	OXY USA INC	CORRAL FLY 35 26 FEDERAL COM	026H	Oil	Active	314	N	1247	E	A	2	25S	29E	3/24/2018	9050	14.75	10.75	444	490	Surf	Circ	9509-19389	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	9.875	7.625	8454	1846	Surf	Circ		
																	6.75	5.5	19303	821	Surf	Calc		
221	30-015-44702	OXY USA INC	CORRAL FLY 35 26 FEDERAL COM	021H	Oil	Active	694	N	1248	W	D	2	25S	29E	3/31/2018	8928	14.75	10.75	412	418	Surf	Circ	9373-19248	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	9.875	7.625	8188	1865	Surf	Circ		
																	6.75	5.5	19519	846	Surf	Calc		
222	30-015-44703	OXY USA INC	CORRAL FLY 35 26 FEDERAL COM	022H	Oil	Active	694	N	1278	E	D	2	25S	29E	3/31/2018	8930	14.75	10.75	382	836	Surf	Circ	9463-19338	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	9.875	7.625	8302	1869	Surf	Circ		
																	6.75	5.5	19394	882	Surf	Calc		
223	30-015-44704	OXY USA INC	CORRAL FLY 35 26 FEDERAL COM	023H	Oil	Active	694	N	1308	W	D	2	25S	29E	4/1/2018	8949	14.75	10.75	400	418	Surf	Circ	9643-19519	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	9.875	7.625	8405	1737	Surf	Circ		
																	6.75	5.5	19470	850	Surf	Calc		
224	30-015-44705	OXY USA INC	CORRAL FLY 35 26 FEDERAL COM	024H	Oil	Active	314	N	1307	E	A	2	25S	29E	3/22/2018	9056	14.75	10.75	442	490	Surf	Circ	9373-19248	[96473] PIERCE CROSSING; BONE SPRING, EAST
																	9.875	7.625	8381	1841	Surf	Circ		
																	6.75	5.5	19651	821	Surf	Calc		

AOR ID 21

Plugged Wellbore
RIVERBEND 10 FEDERAL #2
30-015-20756-0000
Eddy

String 1
OD 13.375 in
TD 657 ft
TOC 0 ft



PERF'D @ 790. SQZD 335SX CL C TO SURFACE.

PERF'D @ 3052'. SQZD 135 SX CL C CMT. TAGGED TOC @ 2690'

Sqzd Perfs 4126'-36', 3526'-90', 3712'-18'



PUMPED 25 SX CL C CMT 4157'. TAGGED TOC @ 3780'.

PUMPED 25 SX CL C CMT 5179'-4906'

PUMPED 25 SX CL H CMT 6817'-6544'

SET CIBP @ 7784'. PUMPED 25SX CL C. TAGGED TOC @ 7515'

Bone Spring Perfs 7834'-7866'

CIBP 8500'

BOTTOM OF PROPOSED INJECTION INTERVAL 9615' (BONE SPRING)

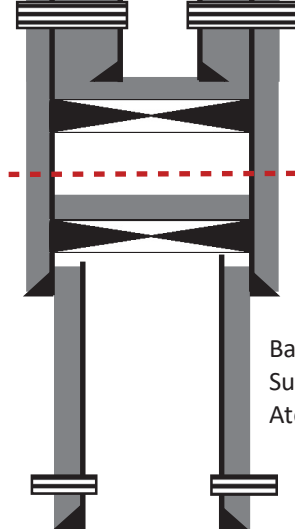
CIBP 10600 w/ 20 sx cmt

String 2
OD 9.625 in
TD 7398 ft
TOC 3540 ft

String 3
OD 4.5 in
TD 8455 ft
TOC 3150 ft

Liner 1
OD 7.625 in
7141 ft - 10937 ft
TOC 7141 ft

Liner 2
OD 5 in
10634 ft - 13859 ft
TOC 10634 ft



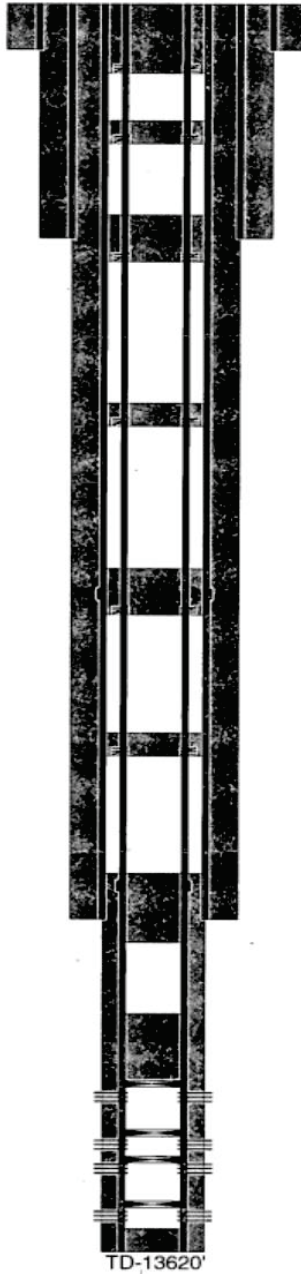
Bad casing encountered around 3/25/80. Sundry mentions unable to recomplete Atokae due to bad casing.

Morrow Perfs 13074'-13707'

OXY USA Inc.
Double Dale Fee Com #1
API No. 30-015-35539

AOR ID 41

30 sx @ 430' to surface



Perf @ 430'

17-1/2" hole @ 380'
13-3/8" csg @ 380'
w/ 400sx-TOC-Surf-Circ

35 sx @ 1660' to 1172' WOC TAG

Perf @ 1660'

12-1/4" hole @ 2610'
9-5/8" csg @ 2610'
w/ 1125sx-TOC-Surf-Circ

55 sx @ 2785 to 2115' WOC TAG

Perf @ 2785'

35 sx @ 4695'

Perf @ 4695'

55 sx @ 6725 to 6032', WOC TAG

Perf @ 6725'

900 sxs, 8330' to 7188' WOC TAG

Perf @ 8330'

45 sx @ 10182' to 9782' WOC TAG

8-3/4" hole @ 10150
7" csg @ 10132'
w/ 1550sx-TOC-Surf-Circ
DVT @ 6673'

CIBP @ 12000' w/ 20 sx to 11738'

6-1/8" hole @ 13620'
4-1/2" csg @ 13593'
w/ 280sx-TOC-9885'
DVT @ 9887'

CIBP @ 12650' w/ 35' cmt to 12615'

Perfs @ 12102-12314'

CIBP @ 12925' w/ 15' cmt to 12910'

Perfs @ 12691-12827'

CIBP @ 13290' w/ 15' cmt to 13275'

Perfs @ 12958-12965'

Perfs @ 13362-13377'

TD-13620'

AOR ID 157

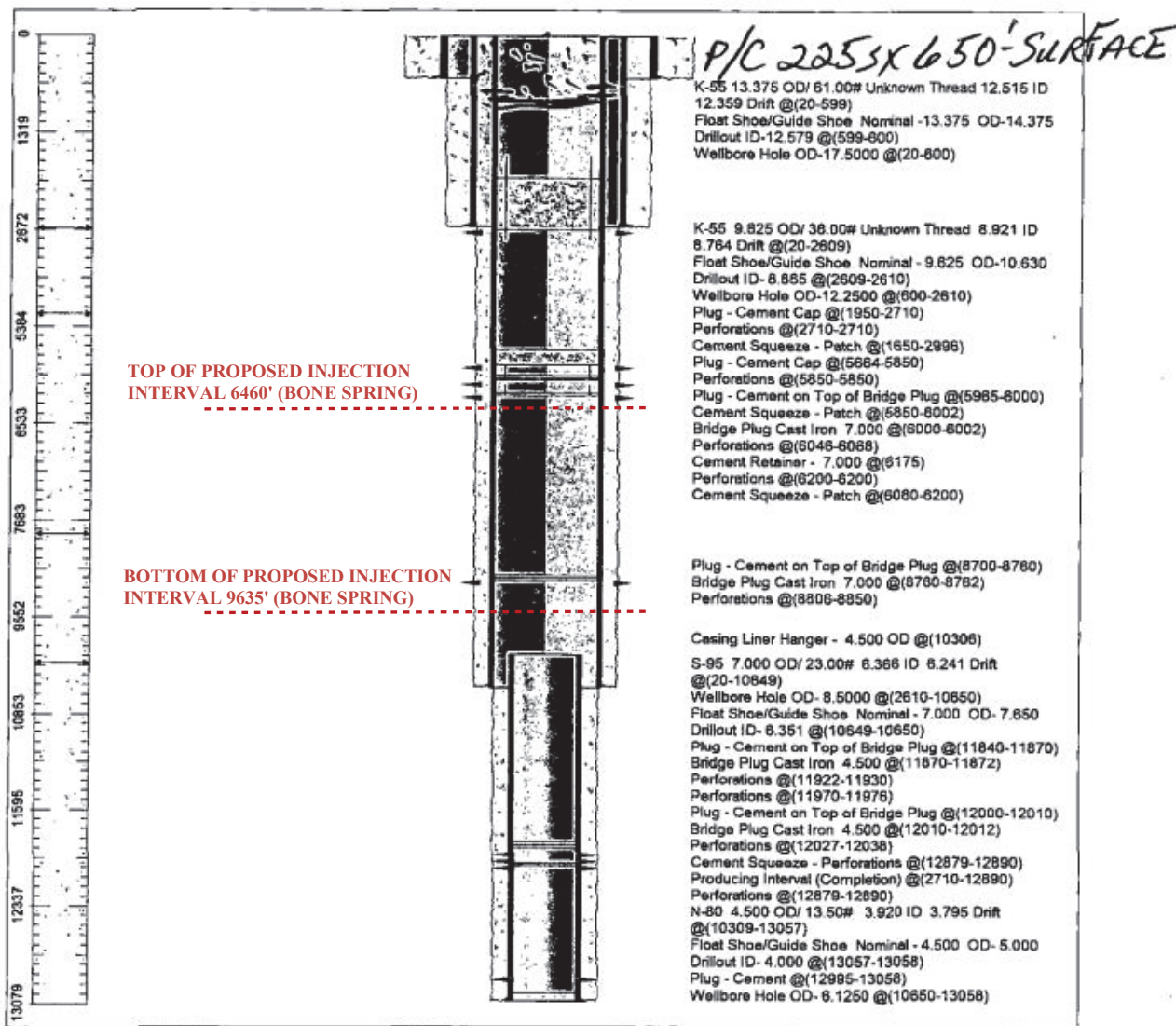
P/A

Chevron U.S.A. Inc. Wellbore Diagram : FORT 18 C 1

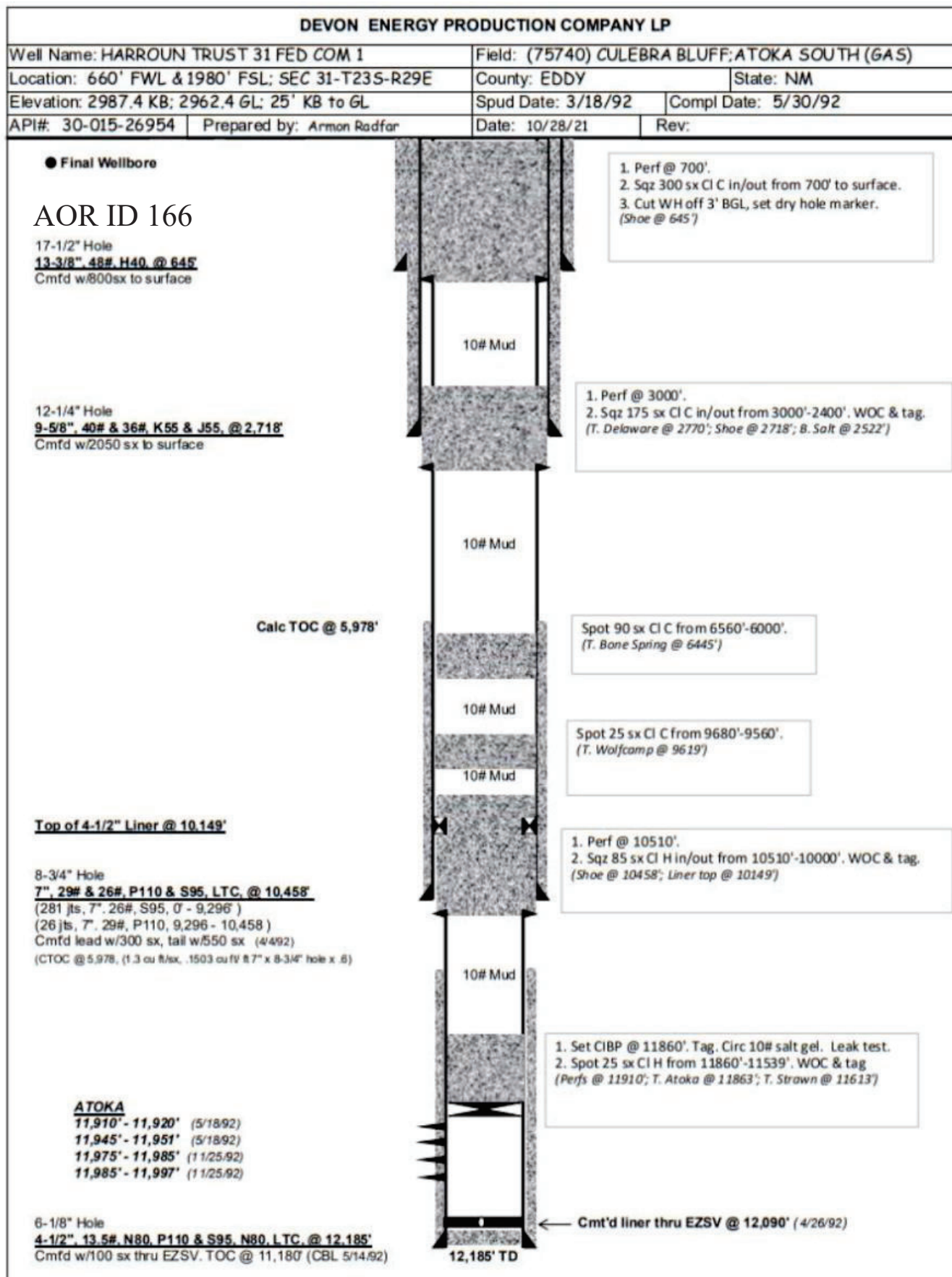


30-015-25237

[Lease] OHO HOBBS FMT [Well No.] FORT 18 COM 1 1 [Field] PIERCE CROSSING
 [Location] 1980FNL895FWL [Sec.] N/A [Blk] _____ [Survey] N/A
 [County] Eddy [St.] New Mexico [Refno] ID8574 [API] 3001525237 [Cost Center] UCRH30100
 [Section] E029 [Township] 18 [Range] S024
 [Current Status] ACTIVE [Dead Man Anchors Test Date] NONE
 [Directions] _____

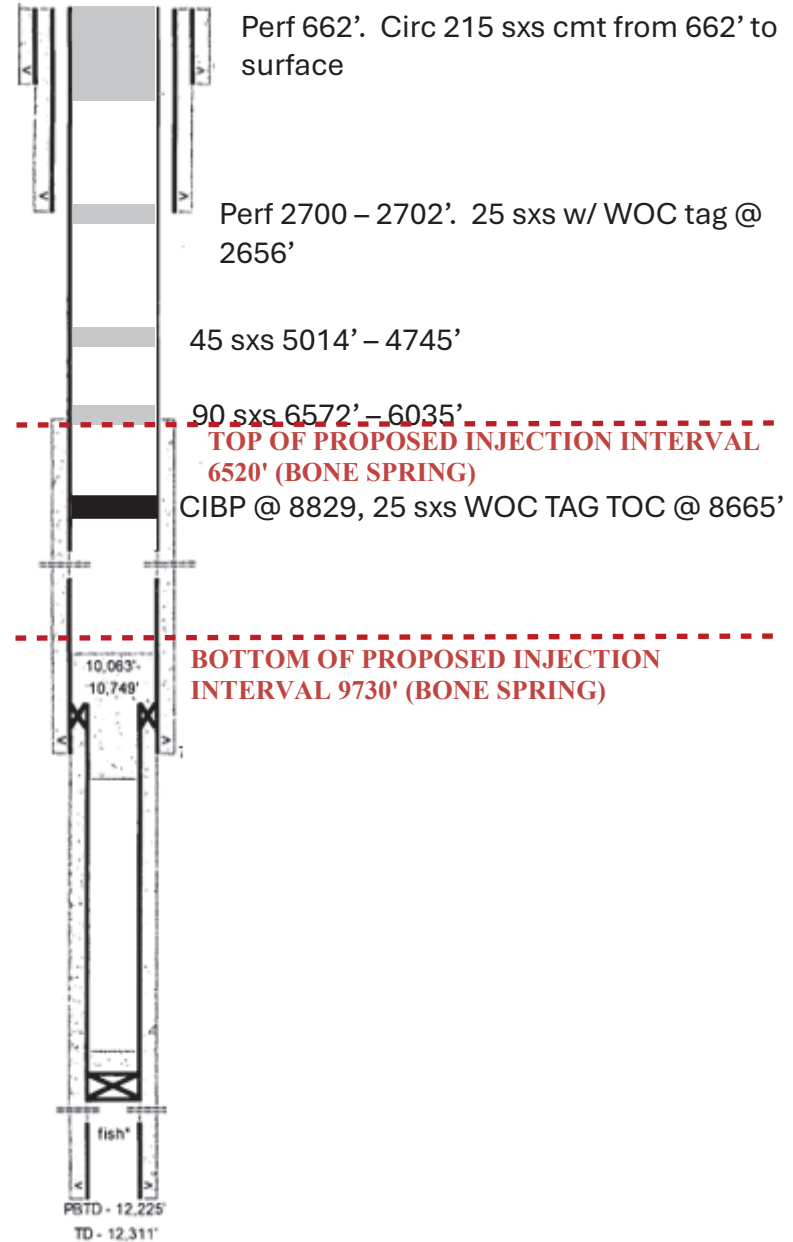


[Ground Elevation (MSL)] 2955.80 [Spud Date] 03/23/1985 [Compl. Date] 01/01/1800
 [Well Depth Datum] Kelly Bushing [Elevation (MSL)] 2976.00 [Correction Factor] 20.20
 [Last Updated by] keli [Date] 06/17/2015
 [null] null [null] null



Kaiser-Francis Oil Company		Fort 7 Com #1	
Location: Section 7-24S-29E	API: 30-015-25658		
Field: Malaga	Spud Date: 10/22/86		
County: Eddy	Completed: 11/86		
State: New Mexico	Diagram Updated: 9/23/19		
Elevation: KB - 2972' GL - 2949'			
Work History:			
<p>11/86- Drilled by HNG oil company to TD of 12,311'. Mid deviation. 11/86- RIH w/ workstring. Tagged TOC at 10,065'. Drilled stringers to 10,140'. Solid cement from there to liner top. C/O to 12,225. Tested liner to top to 2000#. Dressed off PBR. 11/86- Perf'd Atoka 12,125-139' (15 holes) through tubing. BD perfs w/ trtd w water at 5700# & 3.5 BPM. 11/86- Az Atoka 12,125-139' w/ 2500 gal 7.5% HCl + add @ 2.5 bpm & 6600#. ISIP-6400. 15-6000. Well IP'd 1100 mcf/d @ 550# FTP. 9/01- Located EOT @ 10,350'. Sw abbed. 11/01- RIH w/ CT to 12,225'. Cleaned out some scale bridges. Acidized well w/ 500 gal 15% NeFe. Flush w/ 3 bbls 2% jetted w/ N2. 8/04- Sw abbed. Lost tools in hole (see detail below) 10/04- Sw abbed. Rec 1 1/4 bbl. 6/06- Sw abbed. Rec 8 BW 2/07- Sw abbed. Rec 9 BW. 5/07- Sw abbed. Rec 10 black, nasty water 10/07- Ran 1 1/4" CT string in well. Jetted w ell in. Well w ould not make enough gas to keep compressor running. 1/08- tie onto CT-TAG TD @ 12,175'. Jet w/ N2 and recovered 15 BW. 3/08- POOH w/ CT. 4/08- Flushed w/ 2%. Sw abbed back. 5/08- Sw abbed. Rec 5 BW. 7/08- Sw abbed. Rec 3 BW. 9/08- PU on tbg- couldn't get seal assembly out of PBR. Cut tubing at 10,304'. RIH and jarred free-LD seal assembly. Ran 3 7/8" bit and scraper to 12,122'. Re-perfed 12,129-134 (10 holes). Set pkr at 12,020'. Az Atoka w/ 3000 gal foamed 15% HCl + 750 gal MetOH. AIP-3876#. Flow ed back for 2 hrs and died. Sw abbed back load-very little gas production post job. 11/08- Sw abbed. Line parted. POOH w/ tbg and pkr. Retrieved tools and reran tubing open-ended to 12,020'. 5/09- Sw abbed. Rec 30 BW. Last three runs 80% Oil. Opened both sides to sales. 5/14- Scan tbg out of hole: 329 yellow, 54 blue, 14 green, 3 red. Set CIBP @ 12,080'. Test to 2000#. Dump-bal 35' cmt on plug. Ran CBL on 7" csg f/ 10,350' to 8000'. Good bond throughout. TIH to 10,749'. Spot 80 sx Class H cmt plug. PU and reverse clean. Tagged top of cement plug at 10,063'. 5/14- Perforate 2nd Bone Springs Sand: 8868-72, 8886-92, 8912-14, 8924-36 (52 holes) w/ 4" csg gun (0.41" X 43.5") 120 degrees phasing. Ran 3 1/2", 10.2# CS frac string w/ 10K PLT packer testing string to 10,000#. Landed string w/ 28K and tested backside to 1500#. BD Bone Springs perfs 8868-8936' OA w/ 12 bbls 2% KCl. Formation broke @ 3725#. Pumping in @ 3.5 bpm and 2562#. ISIP-2290#. 15-2130#. 6/14- Imposed 1500# on annulus and Frac'd 2nd Bone Springs 8868-8936' OA down 3 1/2" tbg w/ 3486 gal 7.5% HCl, 2900 bbls 30# borate XL carrying 143,751# 20/40 Ottawa a and 92,949# 20/40 CRC (1-5#/gal). Flushed w/ 73 bbls linear gel. AP-6606# AR-33.8, MR-35.5 MP-7974#. ISIP-2759#. 15-2646#. 6/14- Pulled 3 1/2" frac string. Ran 2 3/8" tbg. Put well on pump. 5/19- Pulled rods and tubing-scanning LD red. RBIH w/ pkr.</p>			
<p>13 3/8", 54.5/48# K-55/H-40 @ 608'. Cmt'd w/ 550 sx. Circ.</p> <p>9 5/8", 36# K-55 ST&C @ 2650'. Cmt'd w/ 1550 sx. Circ.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p style="text-align: center;">Rod Detail</p> </div> <p>AS-1X @ 8770' w/ 20K compression</p> <p>2nd Bone Springs: 8868-8936 OA</p> <p>10,063'- 10,749'</p> <p>TOL 10,335'</p> <p>7" 23# GR-95 and S-95 csg @ 10,700'. Cmt'd w/ 1200 sx</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p style="text-align: center;">Tubing Detail (string landed w/ 20K comp)</p> <p>283 js 2 3/8" L/N 80 1.875" ID X-nipple 1 # 2 3/8" N-80 2 3/8" X 2 7/8" XO 2 7/8" X 7" AS1-X Pkr @ 8770'</p> </div> <p>CIBP @ 12,080' w/ 35' cmt on top</p> <p>Atoka perfs 12,125-139</p> <p>fish*</p> <p>4-1/2" 13.5# N-80 LT&C @ 10,335'-12,311'. Cmt'd w/ 300 sx Class H + add.</p> <p>PSTD - 12,225' TD - 12,311'</p>			
<p>*fish consists of sw ab mandrel w/ 2 cups, 1 1/4" X 4' jars, 1 1/4" X 25' w eight bar, 1 1/4" OD swivel (half) 7/8" pin looking up. TOF 12,150'</p>			

AOR ID 178 P&A WBD



AOR ID 179

Maralo LLC
Cochiti 5 Federal 001
API Well 30-015-27996
Eddy County, NM

10 sxs 30' - surf

25 sxs 704-700' calc TOC 554'

25 sxs 2752 - 2592 WOC TAG

CIBP + 10 sxs CMT, WOC TAG 4772'

CIBP + 35' CMT 6480'

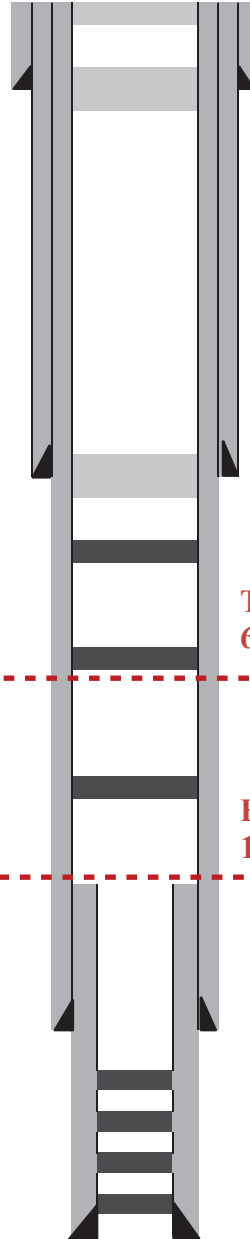
CIBP + 35' CMT 9145'

PKR + 35' CMT 11,200'

CIBP + 35' CMT 11,860'

PKr + 35' CMT 11860'

CIBP @ 12,220'



*Note- Diagram not to scale

13-3/8" csg @ 650'
900 sxs cmt circ to surf

9-5/8" csg @ 2700'
1250sxs cmt circ to surf

**TOP OF PROPOSED INJECTION INTERVAL
6614' (BONE SPRING)**

**BOTTOM OF PROPOSED INJECTION INTERVAL
10108' (BONE SPRING)**

7" csg @ 10,600'
2150 sxs in 2 stgs. DV @ 6014', cmt circ to surf

PERFS 11460'-11568'

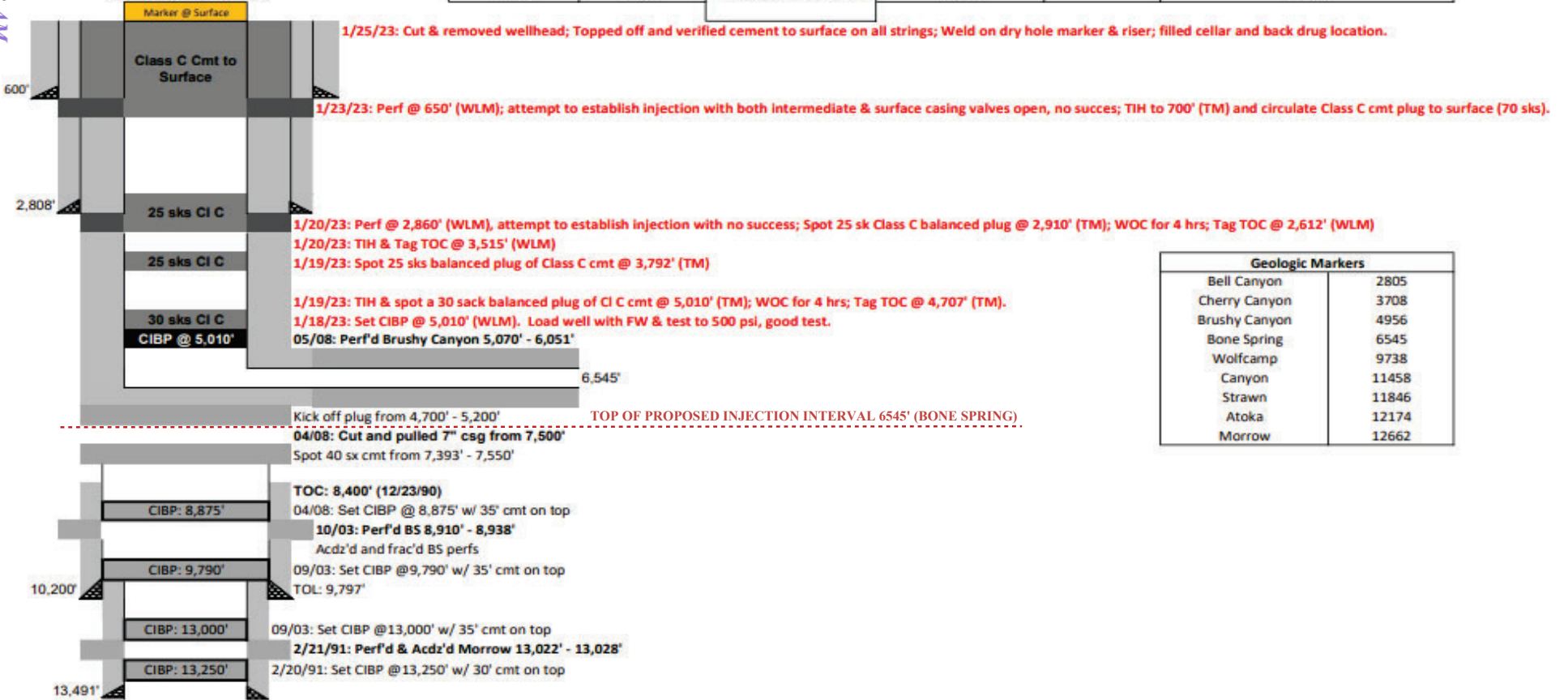
4.5" Liner 10,156 - 12,245'
250 sxs

Received by OCD: 1/25/2023 3:14:32 PM

AOR ID 180

Amethyst State Com #1
1880' FNL 990' FWL Sec. 32-E-245-R29E
Eddy County, NM
API: 30-015-26542
CURRENT WELLBORE SCHEMATIC
Spudded: 12/01/1990

Casing Information					
Casing String	Casing Size	Weight lb/ft	Depth Set	Hole Size	Cementing Record
Surface	13 3/8"	48# K-55	600'	17 1/2"	650 sx, circulated to surface
Intermediate	9 5/8"	40# K-55	2,808'	12 1/4"	1225 sx, circulated to surface
Production	5 1/2"	17#	6,545'	7 7/8"	990 sx, circulated to surface
Liner	4 1/2"	11.6-13.5# N-80 & S-95	13,491'		450 sx



Geologic Markers	
Bell Canyon	2805
Cherry Canyon	3708
Brushy Canyon	4956
Bone Spring	6545
Wolfcamp	9738
Canyon	11458
Strawn	11846
Atoka	12174
Morrow	12662

AOR ID 214

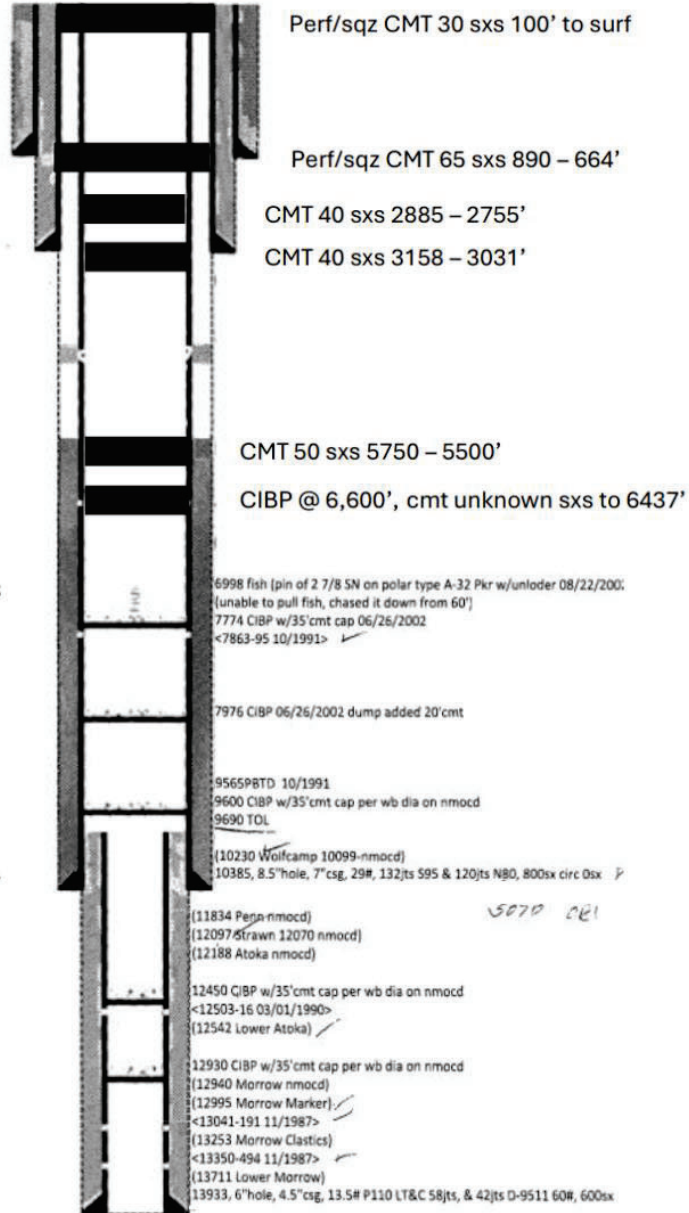
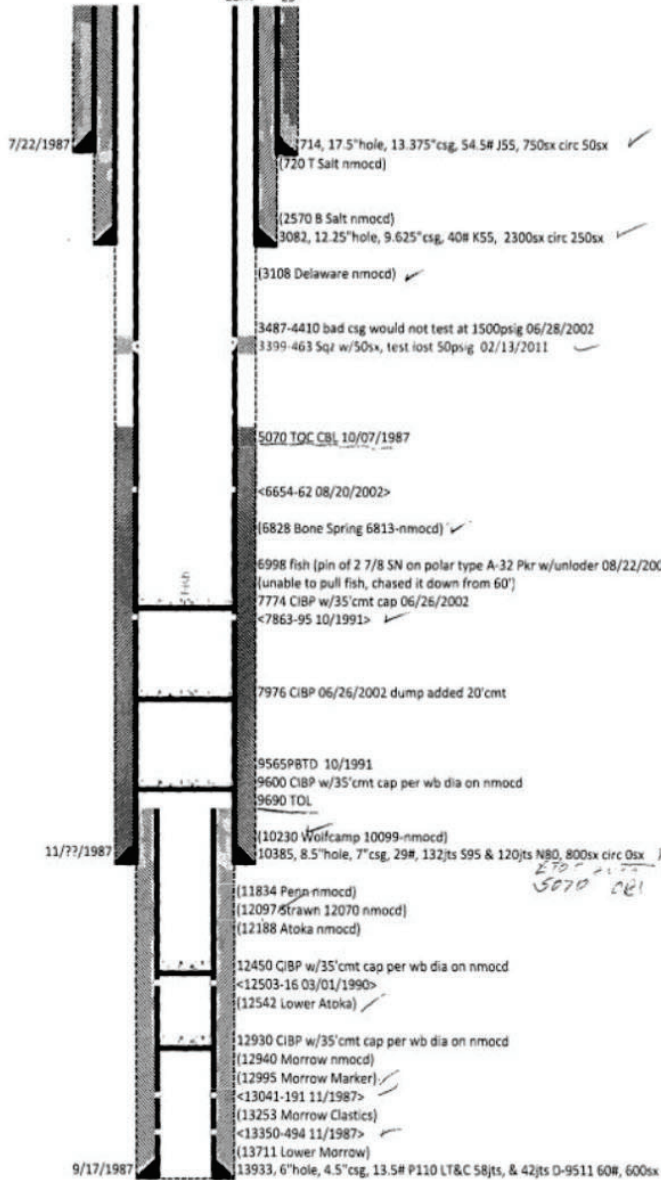
Operator: Unit Petroleum Company
Surface Lease No: NM59385
Producing Lease No: NM59385
Unit or CA No: N. A.

Well: HB3 Federal - 01
API: 3001525766
@ Srfce: T24S-R29E, Sec 03, 1980FSL & 1980FEL
@ MTD: N. A.

P&A WBD

Subsurface Concerns for Casing Designs: R111P, K, .
Well Status: POW
Spud date: 7/22/1987
Admn Order, date: -
Inj Dsp Interval: -
Max Inj psig: -
Last WK insp: -
Inspc Tbg psig: no gauge
Inspc Csg psig: no gauge

KB: 3077
GL: 3052
Corr: 25



gram last updated: 06/08/2012

AOR ID 215

Texaco Exploration and Production Co
Malaga Harroun 6 #1
API # 30-015-23757
Eddy County, NM

35 sxs cmt 100' to surf

Spot 50 sxs cmt 561 to 412 + tag

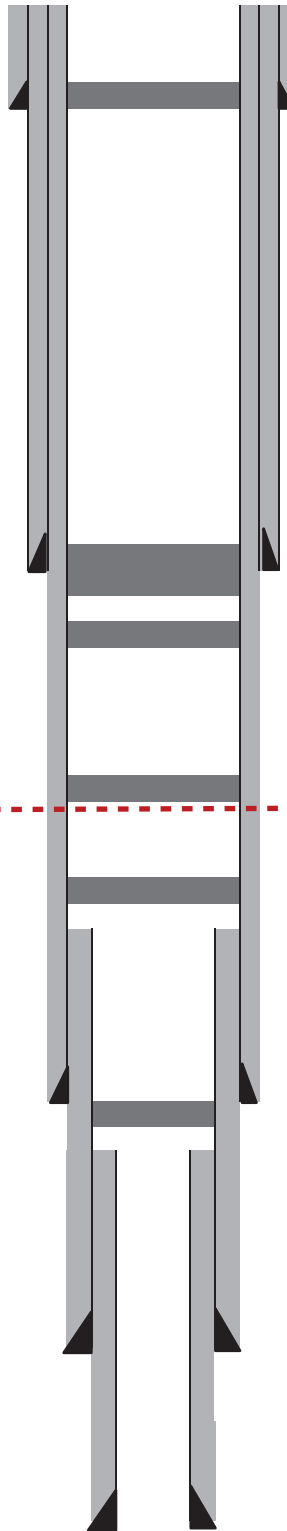
Spot 50 sxs cmt 2808 to 2700 + tag

CIBP 3360' + cmt to 2350

CIBP + 35' CMT 6330'

CIBP + 35' CMT 10,085'

CIBP 11840'



*Note- Diagram not to scale

20" csg to 461'
1300 sx circ to surf

13-3/8" csg to 2762'
2270 sxs circ to surf

**TOP OF PROPOSED INJECTION
INTERVAL 6490' (BONE SPRING)**

9-5/8" csg to 10,400'
3450 sx cmt, circ to surf

7" liner from 10,100 to 12,571
575 sxs cmt

5" Liner from 12,300 to 13,300'
235 sxs cmt



NOVEMBER 2024

CLOSED LOOP GAS CAPTURE PILOT PROJECT (CLGC)

CEDAR CANYON 2024

GEOLOGY



CEDAR CANYON AREA, 2ND BONE SPRING STORAGE ZONE AND PERMEABILITY BARRIERS

Proposed Storage Zone

2nd Bone Spring Sand

- The reservoir is comprised of tight siltstone. Core data indicates that the grain sizes range from coarse siltstone to very-fine-grained subarkose sandstone. Samples show evidence of moderate compaction. Minor amounts of illite and smectite clays are found throughout the samples ranging from 5% to 15%. Cements are Fe-calcite, Fe-dolomite, pore-bridging illite and some quartz overgrowths. Minor amounts of pyrite (<1%) are present. The resulting reservoir rock has a porosity between 8-18% with an average porosity of 9.7%. Permeability measured by injection fall-off tests conducted within the reservoir ranges from 10 millidarcies to 0.003 millidarcies.

Adjacent Oil & Gas Production Zones

1st Bone Spring Sand

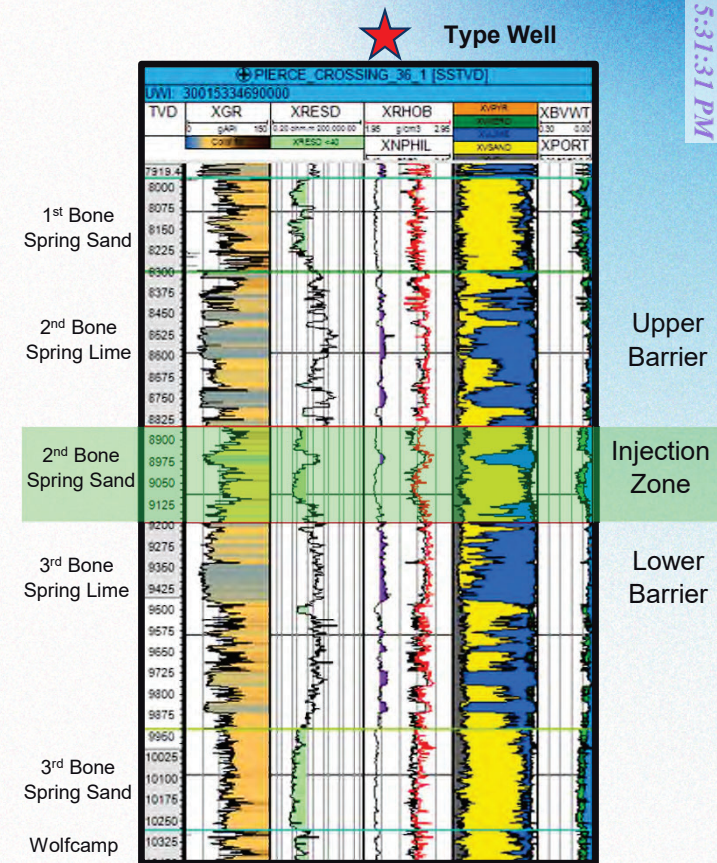
- The reservoir is comprised of tight siltstone. Core data indicates that the grain sizes range from coarse siltstone to very-fine-grained subarkose sandstone. Samples show evidence of moderate compaction. Minor amounts of illite and smectite clays are found throughout the samples ranging from 5% to 15%. Cements are Fe-calcite, Fe-dolomite, and some quartz overgrowths. Minor amounts of pyrite (<1%) are present. The resulting reservoir rock has a porosity between 8-18% with an average porosity of 11.7%. Permeability measured by injection fall-off tests conducted within the reservoir ranges from .02 millidarcies to 0.001 millidarcies. Siliceous mudstone with natural permeability is in the nan-darcy range.

3rd Bone Spring Sand

- The reservoir is comprised of tight siltstone. Core data indicates that the grain sizes range from coarse siltstone to very-fine-grained subarkose sandstone. Samples show evidence of moderate compaction. Minor amounts of illite and smectite clays are found throughout the samples ranging from 5% to 15%. Cements are Fe-calcite, Fe-dolomite, and some quartz overgrowths. Minor amounts of pyrite (<1%) are present. The resulting reservoir rock has a porosity between 8-18% with an average porosity of 11.7%. Permeability measured by injection fall-off tests conducted within the reservoir ranges from .02 millidarcies to 0.001 millidarcies. Siliceous mudstone with natural permeability is in the nan-darcy range.

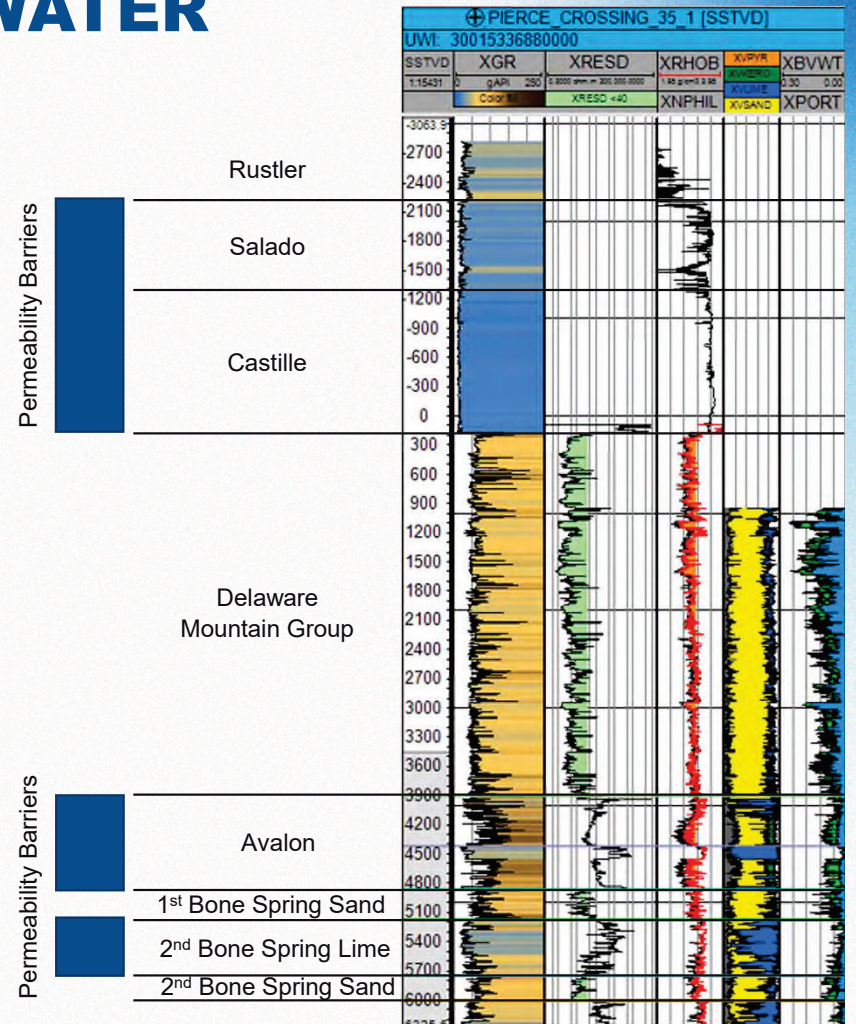
Confining Layers

- Low-permeability barriers act as seals above and below the reservoir. These barriers consist of carbonate mudstone, dolomudstone, and shales that are ~970 ft. thick above and ~570 ft. thick below. Laterally, the injection will be primarily contained by the reservoir volume that has been previously and partially depleted by the adjacent producing wells.
- 2nd Bone Spring Limestone is the upper permeability barrier between the 2nd Bone Spring Sand storage zone and the adjacent 1st Bone Spring Sand. The barrier is comprised of tight dolomudstones and shales.
- 3rd Bone Spring Limestone is the lower permeability barrier between the 2nd Bone Spring Sand storage zone and the adjacent 3rd Bone Spring Sand. The barrier is comprised of tight dolomudstones and shales.



CEDAR CANYON AREA FRESHWATER AQUIFERS

- The top of the Bone Spring Formation is at ~6,950 ft. (true vertical depth) with over 1,400 ft. of carbonate mudstones and shales acting as additional permeability barriers to upward migration of injected gas.
- Above that the Delaware Mountain Group consists of connate water bearing and hydrocarbon-bearing sands, with minor limestone and shale intervals and is over 3,700 ft. thick.
- Above that is the Castile Formation consisting of very low permeability anhydrite, gypsum, and calcite that acts as another 1,500 ft. thick barrier to upward movement of fluids.
- The Salado overlies the Castile and forms a 1,000 ft. thick barrier of salt. The top of the Salado is at 892 ft. and the deep aquifers found just above the Salado at the base of the Rustler are saline water.
- The top of Rustler Formation is at about 210 ft. The Rustler top is a continuous anhydrite layer that acts as another permeability barrier creating a perched aquifer above it that is the lowest level where fresh water is known in the area. Because of the thickness of multiple impermeable rock layers above the injection reservoir there is no possible path for migration upward into freshwater aquifers where they exist.
- An investigation of existing shallow water wells has not found any freshwater wells within a two-mile radius of these injectors.

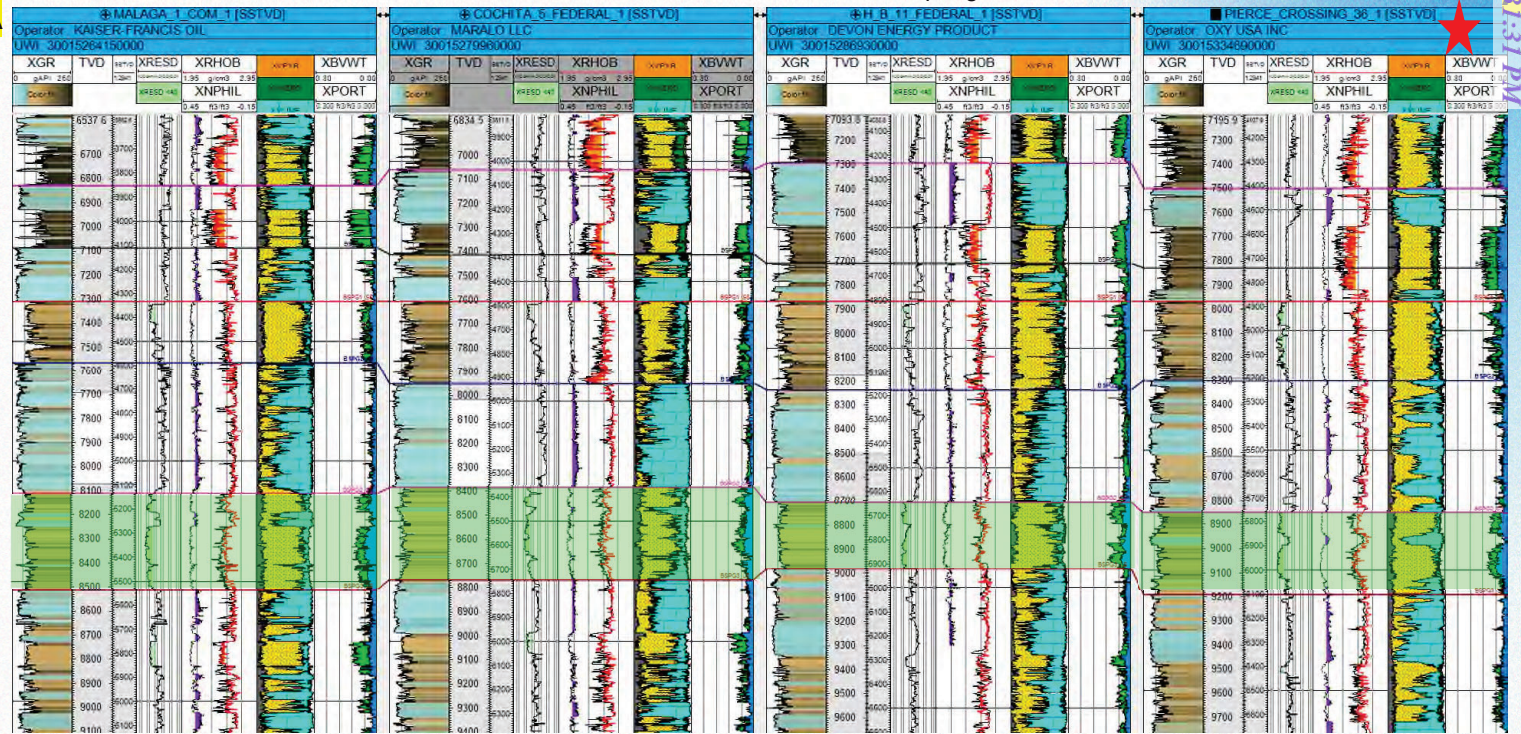
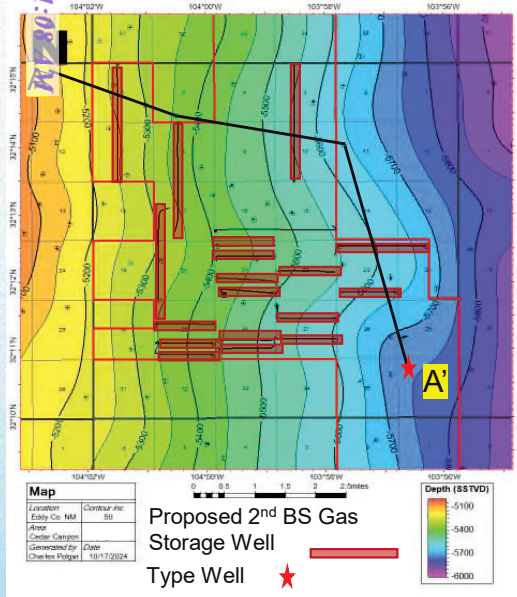


2ND BONE SPRING SAND STRUCTURAL CROSS-SECTION

Flattened on 1st Bone Spring Sand

Cross Section Location

A



Cedar Canyon CLGC Candidates

API	Well Name	Status
30015399680000	MORGAN FEE COM 001H	2024 Candidate
30015411940000	CEDAR CANYON 23 002H	2024 Candidate
30015429930000	CEDAR CANYON 29 FEDERAL 003H	2024 Candidate
30015432320000	CEDAR CANYON 27 FEDERAL 006H	2024 Candidate
30015432340000	CEDAR CANYON 28 FEDERAL 006H	2024 Candidate
30015432380000	CEDAR CANYON 28 FEDERAL 007H	2024 Candidate

Cedar Canyon CLGC Candidates

API	Well Name	Status
30015432820000	CEDAR CANYON 23 FEDERAL 005H	2024 Candidate
30015437080000	CEDAR CANYON 22 FEDERAL COM 004H	2024 Candidate
30015437490000	CEDAR CANYON 21 FEDERAL 005H	2024 Candidate
30015437750000	CEDAR CANYON 27 FEDERAL 005H	2024 Candidate
30015441810000	CEDAR CANYON 21 FEDERAL 021H	2024 Candidate
30015441900000	CEDAR CANYON 21 FEDERAL 022H	2024 Candidate

Cedar Canyon CLGC Candidates

API	Well Name	Status
30015445220000	CEDAR CANYON 29 FED COM 25H	2024 Candidate
30015445230000	CEDAR CANYON 29 FED COM 26H	2024 Candidate
30015449450000	SALT RIDGE CC 20-17 FEDERAL COM 021H	2024 Candidate
30015455510000	LENGTH CC 6 7 FEDERAL COM 23H	2024 Candidate
30015479570000	TAILS CC 10 3 FEDERAL COM 22H	2024 Candidate
30015479750000	VAGABOND CC 8 17 FEDERAL COM 23H	2024 Candidate

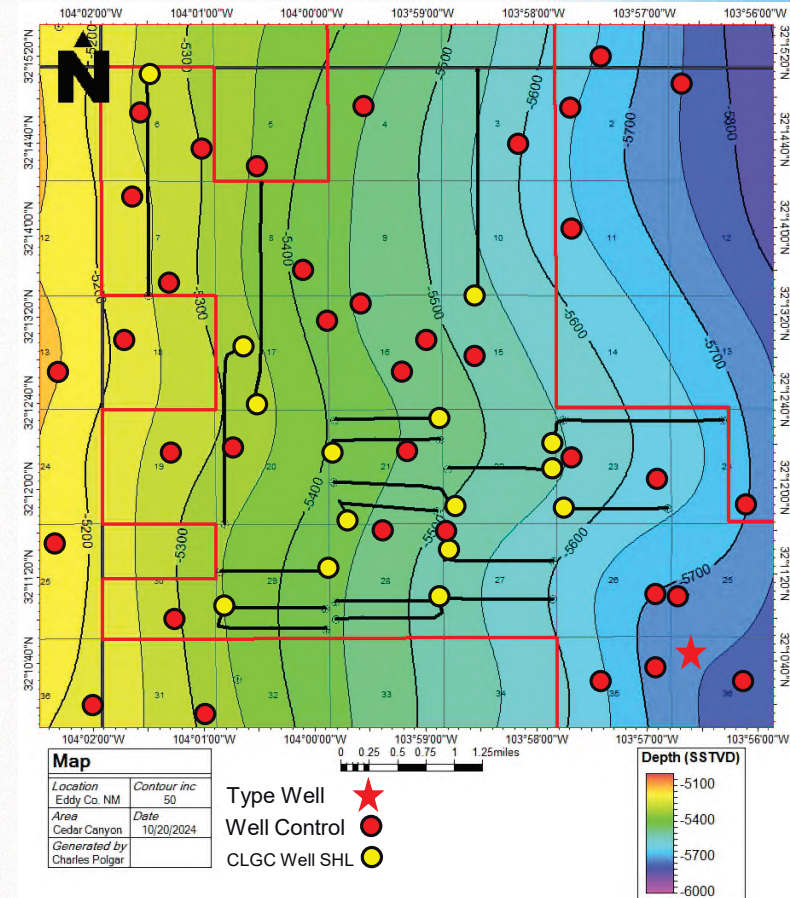
2ND BONE SPRING SAND CROSS-SECTION



2ND BONE SPRING SAND TOP STRUCTURE MAP

- Sections highlighted include CLGC candidate sections all operated by OXY, 3, 6, 7, 8, 10, 15, 17, 20, 21, 22, 23, 27, 28, 29, and adjacent sections within T24S R29E
- Posted depths show top of 2nd Bone Spring Sand reservoir in SSTVD units
- Structural well control highlighted by red circles
- Surface hole locations of CLGC candidates highlighted by yellow circles

2nd Bone Spring Sand Structure Map

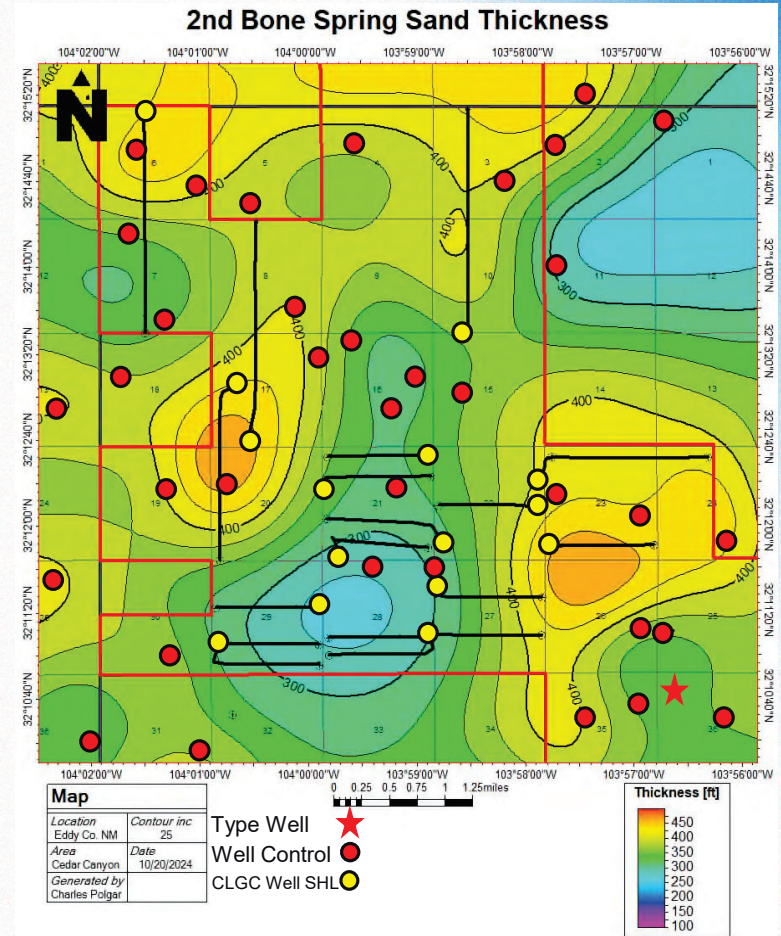


2ND BONE SPRING SAND STRUCTURE MAP



2ND BONE SPRING ISOCHORE MAP

- Sections highlighted include CLGC candidate sections all operated by OXY, 3, 6, 7, 8, 10, 15, 17, 20, 21, 22, 23, 27, 28, 29, and adjacent sections within T24S R29E
- Posted values show 2nd Bone Spring Sand reservoir thickness in feet
- Isochore well control highlighted by red circles
- Surface hole locations of CLGC candidates highlighted by yellow circles





NOVEMBER 2024

CLOSED LOOP GAS CAPTURE PILOT PROJECT (CLGC)

CEDAR CANYON 2024

RESERVOIR



Closed Loop Gas Capture (CLGC) Project

Affirmative Statement 1

The operator examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the disposal zone and any underground source of drinking water.



Charles Polgar, Geologist

10/23/24

Date



Rahul Joshi, Reservoir Engineer

10/31/2024

Date

2021 Reservoir Analysis Recap

- Reservoir Simulation Model was built and history-matched with 2017 high pressure (4200 psi) gas EOR pilot project in Cedar Canyon 16-7H.
- For this project, multiple low-pressure (1200-1300 psi) gas storage scenarios were simulated.
- Results
 - Minor increase in gas saturation and reservoir pressure within the fracture network. Gas storage impacts the fracture network no more than 100 ft from the wellbore.
 - Forecast initial injection rate of 3000 MSCFPD for a 10,000 ft lateral at 1200 psi surface injection pressure.
 - Anticipate no impact on oil or gas production of gas storage well. This is due to small volumes and low pressure of gas storage events.
 - Anticipate no impact on oil or gas production of offset wells.



2023 Reservoir Analysis Updates

- Previous model results are still applicable due to similar project scope.
 - Theoretical vs. actual gas storage injection rates confirmed accuracy of model.
 - Increase in the MASP from 1200 psi to 1300 psi results in increased injection rate but does not impact the reservoir model results on reservoir gas saturation or reservoir pressure profile.
- Oil production rates before and after a gas storage event are similar.
- Gas storage capacity and SRV values are included for new candidate wells.
- Actual injection volumes are a lot less than the gas storage capacity of the fracture network.
- For the longest storage event of 5 days, storage gas from each well was recovered after 1-3 months.



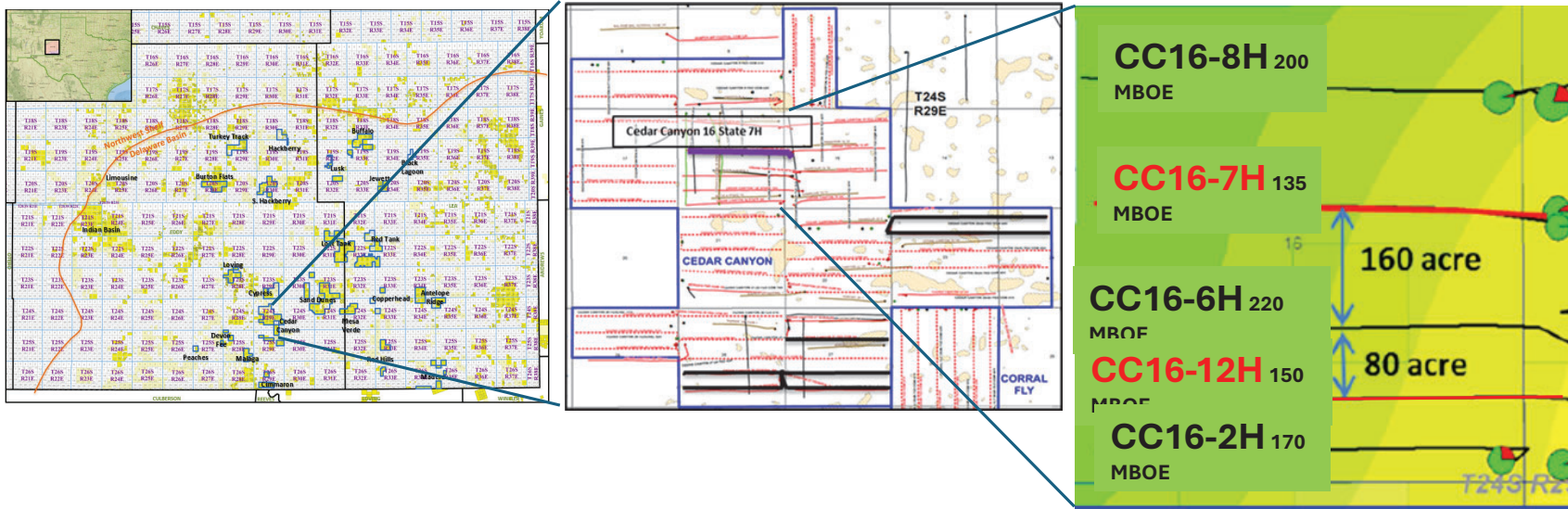
Project Overview – Avogato, Taco Cat & Red Tank

- Closed loop gas capture project (CLGC) IN Oxy’s NM assets
- Produced gas injection into productive formation in NM (Avalon, 1BS, 2BS, Harkey)
- Gas injection into horizontal wells of 10,000 ft lateral length
- Purpose of Modeling
 - > Review potential effects on wells adjacent to the CLGC area
 - > Quantify movement of the injected gas
 - > Utilize data from Cedar Canyon Huff and Puff Projects



Model Set-up

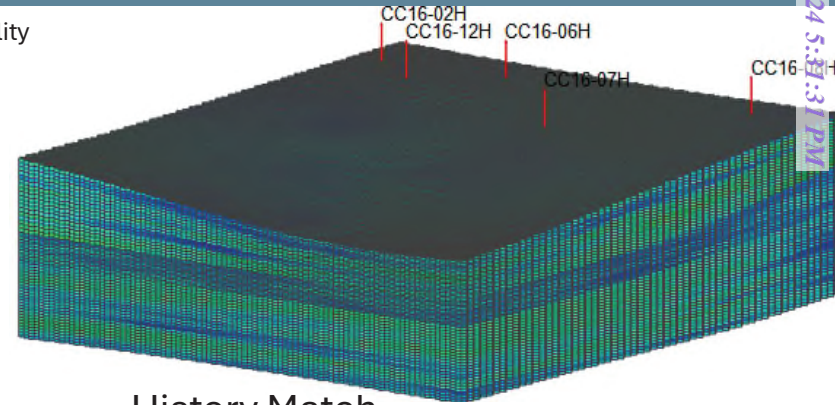
- Uses Cedar Canyon Sec 16 2nd BSS (as shown in layout below)
- Gas Injection pilot (EOR) was implemented in CC16-7H well in 2017
- Reservoir model is history matched for primary production and gas injection pilot
- Model is also tuned to capture injection gas breakthrough in offset wells that was observed during pilot period
- Gas injection pilot wells are 4 wells per section; model is adjusted to simulate the effect of closer wells (6 wps)



Cedar Canyon Section-16 Reservoir Model

Location: Lea County, NM
 Model Acreage: 640
 Day Horizon: 2nd Bone Springs Sand
 Lithology: Sandstone interbedded with Limestone
 Trap Type: Stratigraphic
 Nominal Depth: 8400 ft
 Gas Cap (at discovery): No
 Primary Drive Mechanism: Solution Gas Drive

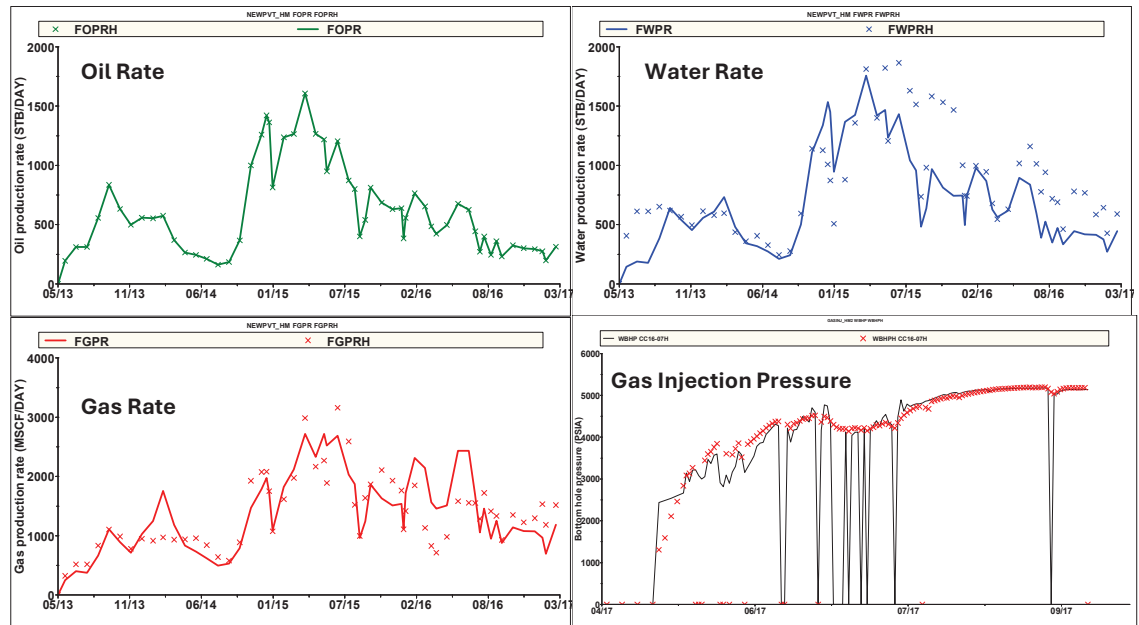
Structure & Permeability
 1,177,400 Grids
 56 Layers



History Match

Gross Pay:	320 ft
Net Pay:	320 ft
Avg Porosity:	6.8%
Initial Sw:	50%
Permeability:	0.0003md (matrix)
Initial Reservoir Pressure:	4500 psi
Reservoir Temperature:	150 F
Oil Gravity:	42 API
Boi:	1.63 RB/STB
Rsi:	1480 SCF/STB
Original Oil in Place:	28 MMSTB

Model Inputs

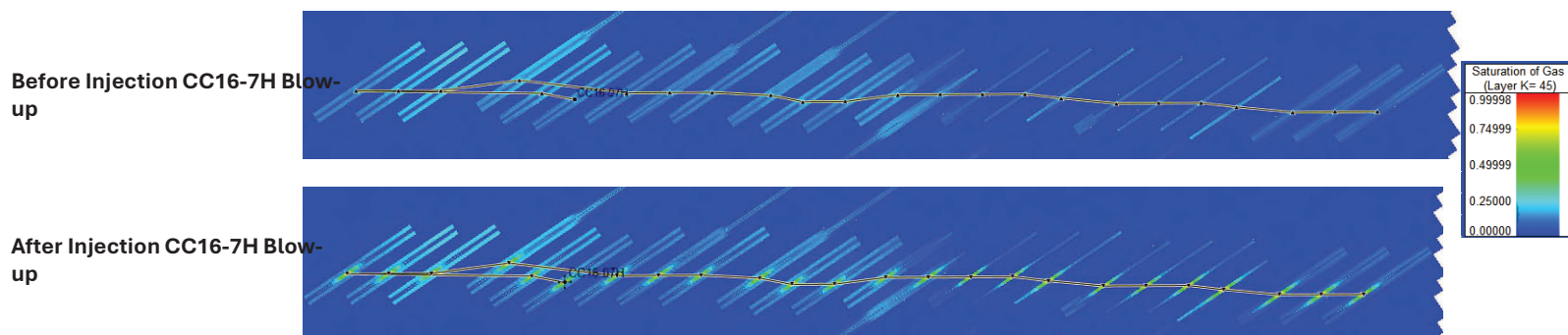
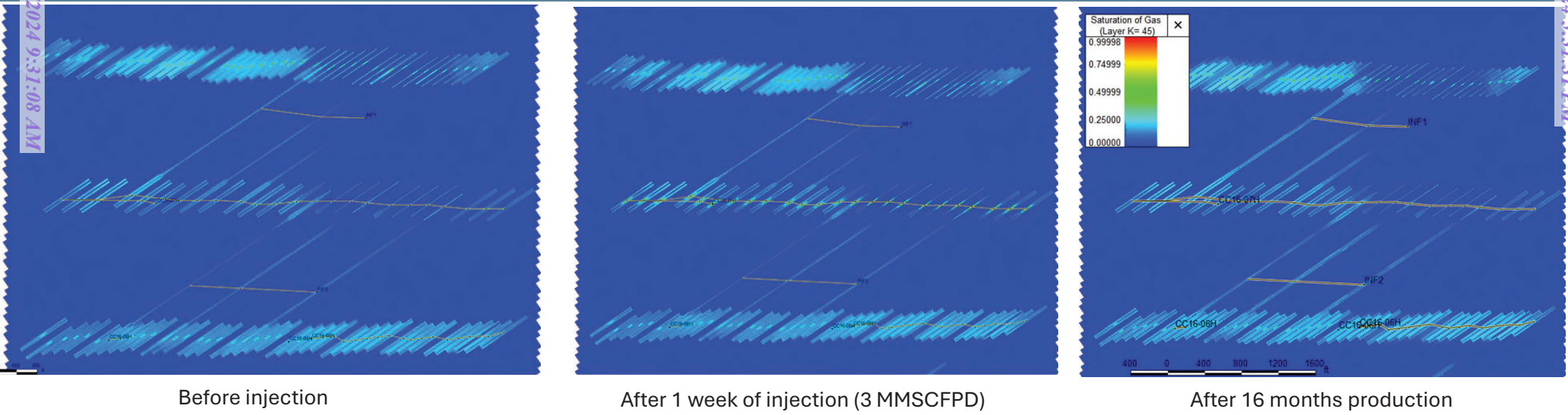


Gas Storage Simulation Process

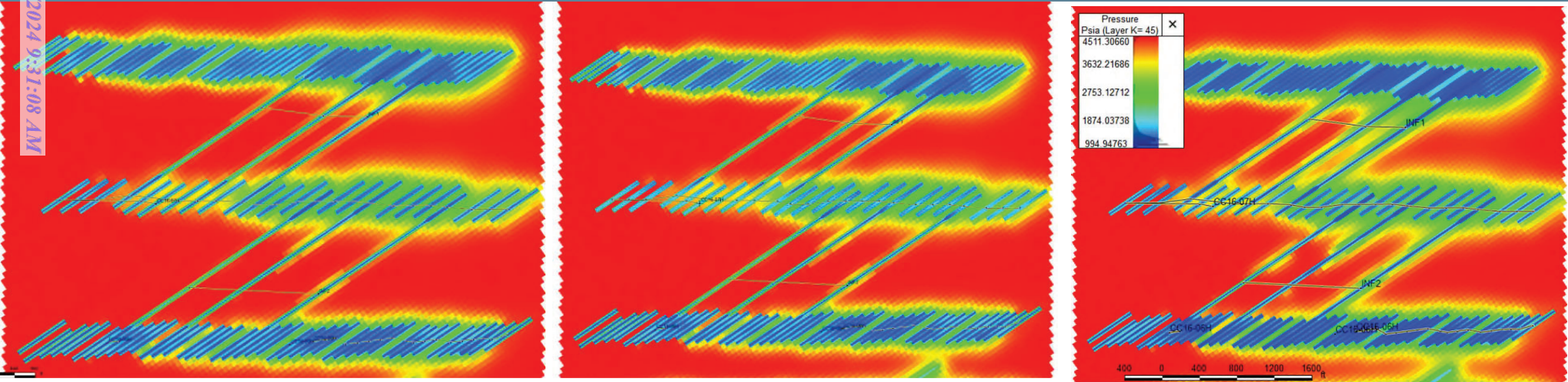
- Run primary production for all wells for additional period (post history match) – Base Case
- Inject gas in injection well at 2MMSCFPD for 7 days
- Produce the injection well post injection – Injection Case
- Observe the effect on oil, gas rate/recovery in injection well and offset wells by comparing Base and Injection cases



Gas Injection Profile (1 week Injection)



Pressure Profile (1 week injection)

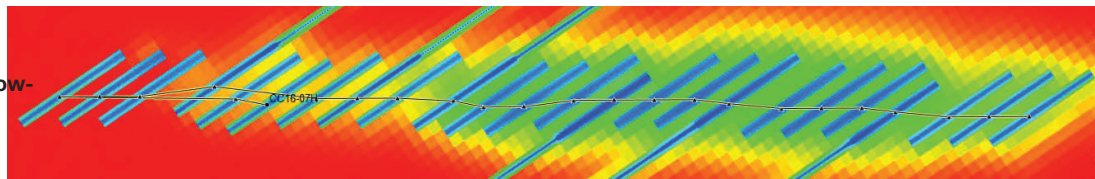


Before injection

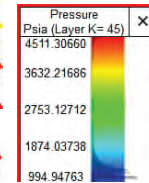
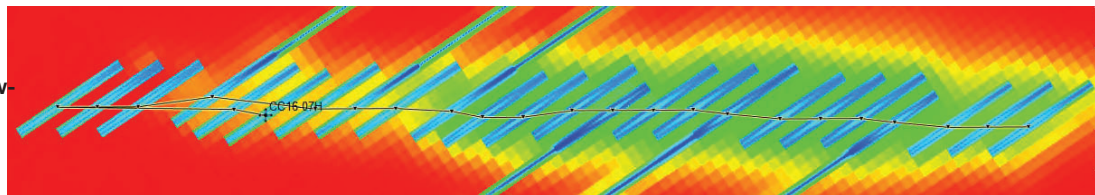
After 1 week of injection (3 MMSCFPD)

After 16 months production

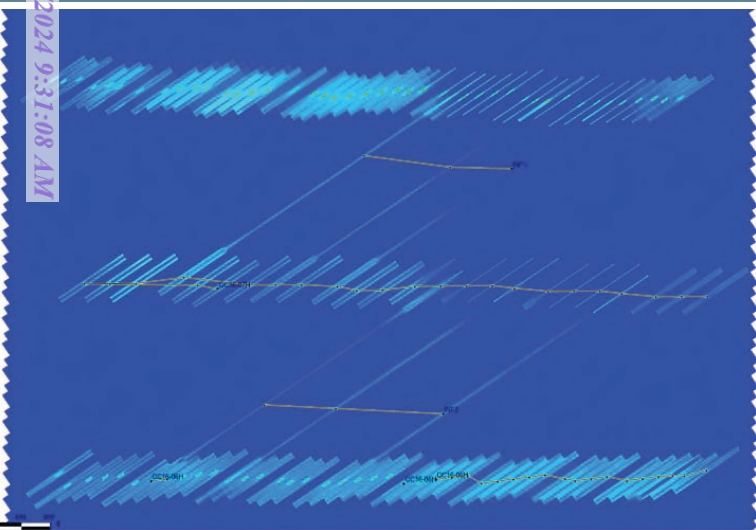
Before Injection CC16-7H Blow-up



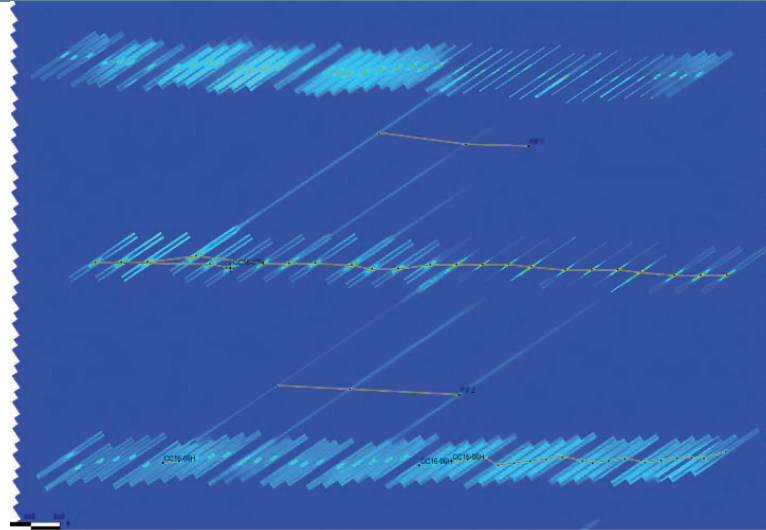
After Injection CC16-7H Blow-up



Gas Injection Profile (3 weeks Injection)



Before injection

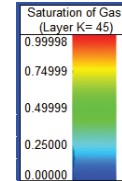
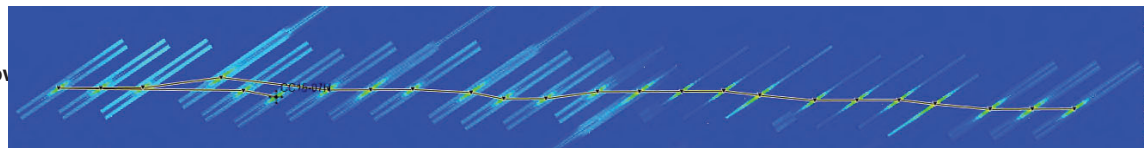


After 3 weeks of injection (@1200 psi THP)

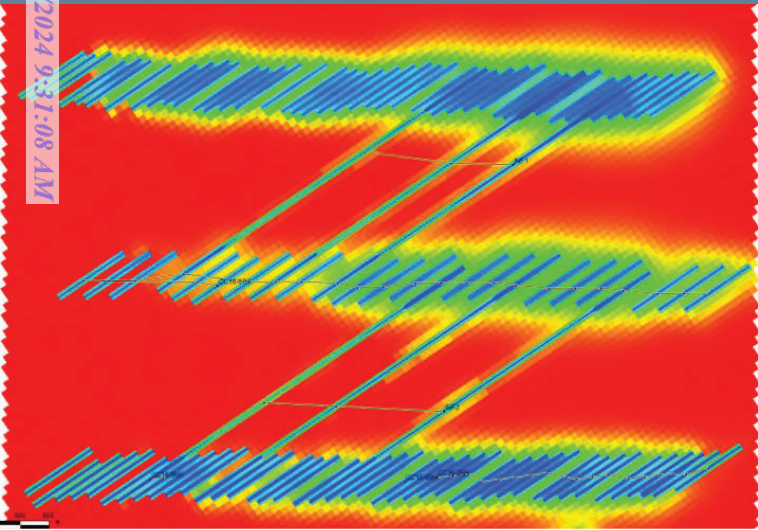
Before Injection CC16-7H Blow-up



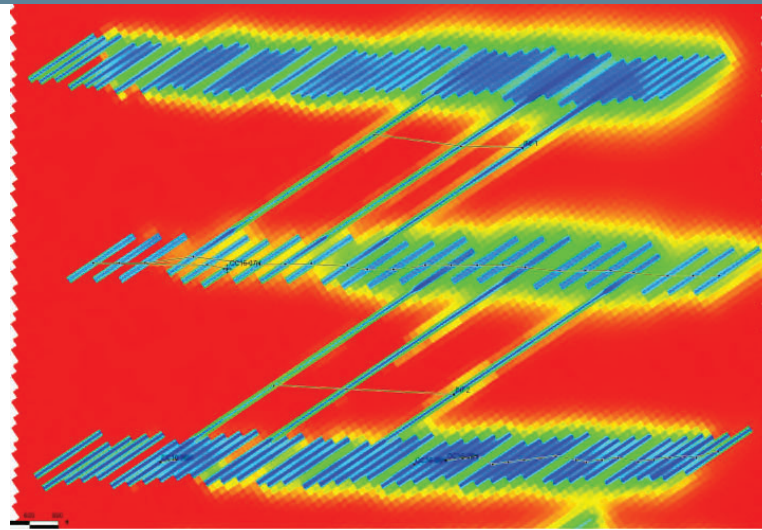
After Injection CC16-7H Blow-up



Pressure Profile (3 weeks Injection)

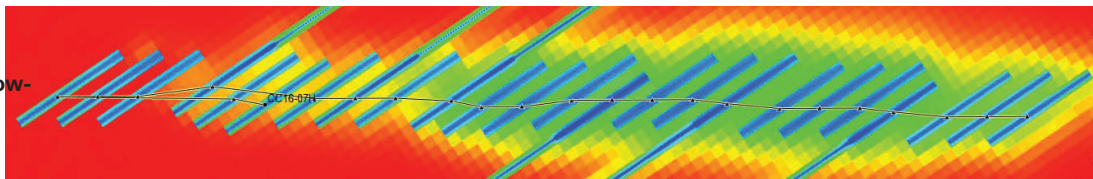


Before injection

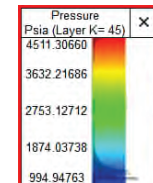
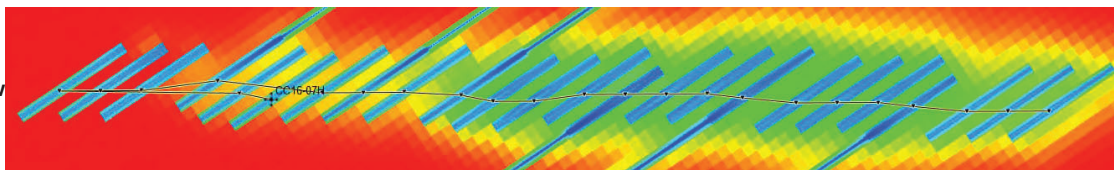


After 3 weeks of injection (@1200 psi THP)

Before Injection CC16-7H Blow-up



After Injection CC16-7H Blow-up



Summary of Cases

Case	Injection Description*	WPS	Oil recovery effect in injected well (MBO)	Oil recovery effect in offset wells (MBO)	Gas breakthrough in Offset well
1	Single Well	4	No change	No change	No
2	Single Well**	6	No change	No change	No
3	Single Well	8	No change	No change	No
4	Single Well (Multiple injection and production cycles)	6	No change	No change	No
5	Single well***	6	No change	No change	No
6	Multiple Adjacent Wells	4	No change	No change	No
7	Multiple Adjacent Wells	6	No change	No change	No
8	Multiple Adjacent Wells	8	No change	No change	No

*All injection at 2MMSCF/DAY for 7 days except cases 2 and 5

**Injection at 3MMSCF/DAY for 7 days

***Injection at constant surface pressure of 1200 psi for 21 days



Closed Loop Gas Capture (CLGC) Project

Affirmative Statement 2

The operator examined the available geologic and engineering data and determined 1) the total recoverable volume of hydrocarbons from the reservoir will not be adversely affected by the project and 2) the gas composition will not damage the reservoir.



Rahul Joshi, Reservoir Engineer

10/31/2024_____
Date

2024 Cedar Canyon Gas Storage- Notice List	
Party	Address
Agencies and Surface Owners	
Bureau of Land Mangment	301 Dinosaur Trail Santa Fe, NM 87508
B&D Holdings	36338 W 287th St. Paola KS, 66071
Oxy USA INC	5 Greenway Plaza, Suite 110, Houston TX, 77046
Offset Operators	
CHEVRON U S A INC	P.O. Box 1635 Houston, TX 77251
COG OPERATING LLC	600 W Illinois Ave Midland, TX 79701
DEVON ENERGY PRODUCTION COMPANY, LP	333 W Sheridan Oklahoma City, OK 73102
EOG RESOURCES INC	5509 Champions Drive Midland, TX 79706
JUDAH OIL LLC	P.O. Box 568 Artesia, NM 88211
MATADOR PRODUCTION COMPANY	One Lincoln Centre 5400 LBJ Freeway, Ste 1500 Dallas, TX 75240
MEWBOURNE OIL CO	P.O. Box 5270 Hobbs, NM 88241
Murchison Oil and Gas, LLC	7250 Dallas Parkway Suite 1400 Plano, TX 75024
NGL WATER SOLUTIONS PERMIAN, LLC	865 North Albion Street Suite 500 Denver, CO 80220
SHACKELFORD OIL CO	11417 W County Rd 33 Midland, TX 79707
SMC OIL & GAS, INC.	P.O. Box 50907 Midland, TX 79710
XTO ENERGY, INC.	6401 Holiday Hill Rd. Building #5 Midland, TX 79701
Other Affected Persons and Parties	
1 TIMOTHY 6 LLC	P O BOX 30598 EDMOND, OK 73003
APACHE CORPORATION	P O BOX 840133 DALLAS, TX 75284-0133
AVALANCHE ROYALTY PARTNERS LLC	100 SAINT PAUL ST STE 305 DENVER, CO 80206
AVANT OPERATING LLC	1515 WYNKOOP ST STE 700 DENVER, CO 80202
BALOG FAMILY TRUST	PO BOX 111890 ANCHORAGE AK 99504
BASIN OPERATING CO	#648 PETROLEUM BLDG ROSWELL NM 88201
BOB BLUNDELL JR	2924 COLFAX AVE PUEBLO, CO 81008
BRANEX RESOURCES INC	PO BOX 2990 RUIDOSO NM 88355-2990
CENTENNIAL	PO BOX 1837 ROSWELL NM 88202-1837
CENTENNIAL NM PTNRS	PO BOX 1837 ROSWELL NM 88201

CHEVRON USA INC	6301 DEAUVILLE MIDLAND TX 79706-2964
CIBOLO RESOURCES LLC	3600 BEE CAVE RD STE 216 WEST LAKE HILLS, TX 78746
CIVITAS DE BASIN RESOURCES LLC	555 17TH ST STE 3700 DENVER, CO 80202
COG OPERATING LLC	600 W ILLINOIS AVE MIDLAND TX 79701
CROWNROCK MINERALS LP	P O BOX 51933 MIDLAND, TX 79710
DEVON ENERGY CO LP	333 WEST SHERIDAN AVENUE OKLAHOMA CITY OK 73102
DEVON ENERGY PRODUCTION CO LP	P O BOX 843559 DALLAS, TX 75284-3559
DEVON ENERGY PRODUCTION COMPANY LP	333 W SHERIDAN AVE OKLAHOMA CITY OK 73102
DOUBLE CABIN MINERALS LLC	1515 WYNKOOP ST STE 700 DENVER, CO 80202
EASTLAND RESOURCE INC	PO DRAWER 3488 MIDLAND TX 79702-3488
ELEVEN SANDS EXPLORATION INC	P O BOX 31560 EDMOND, OK 73003
ELK OIL CO	PO BOX 310 ROSWELL NM 88202-0310
EMG OIL PROPERTIES INC	1000 W 4TH ST ROSWELL NM 88201-3038
ENERGEX CO	100 N PENNSYLVANIA ROSWELL NM 88201-4620
ENERSTAR RESOURCES O&G LLC	P O BOX 606 CARLSBAD, NM 88221
HEIDI C BARTON	2008 N VEGA CT HOBBS, NM 88240
HUTCHINGS OIL CO	PO BOX 1216 ALBUQUERQUE NM 87103-1216
KMK ENERGY LLC	4506 N WALBAUM RD GEARY, OK 73040
KONA LTD, A TEXAS LIMITED PARTNERSHIP	1302 WEST AVENUE AUSTIN, TX 78701
LEGION PRODUCTION PARTNERS LLC	1515 WYNKOOP ST STE 700 DENVER, CO 80202
LONSDALE RESOURCES LLC	2626 COLE AVE DALLAS, TX 75204
MAGNUM HUNTER PRODUCTION INC	840 GESSNER RD STE 1400 HOUSTON, TX 77024
MCMULLEN MINERALS II LP	PO BOX 470857 FORT WORTH, TX 76147
MESQUITE SWD INC	PO BOX 1479 CARLSBAD NM 88221-1479
MITCHELL EXPLORATION INC	200 W 1ST ST #648 ROSWELL NM 88201
MRC PERMIAN COMPANY	5400 LBJ FREEWAY STE 1500 DALLAS, TX 75240
MURPHY PETRO CORP	PO BOX 2545 ROSWELL NM 88202-2545
NOVO OIL & GAS NORTHERN DELAWARE LLC	1001 W WILSHIRE BLVD STE 206 OKLAHOMA CITY OK 73116
PABO OIL & GAS LLC	PO BOX 1675 ROSWELL NM 88202-1675
PALOMA BLANCA WELL SERVICE INC	PO BOX 6251 ROSWELL NM 88202
PEGASUS RESOURCES III LLC	P O BOX 470698 FORT WORTH, TX 76147
PERMIAN HUNTER CORP	215 W 100 S SALT LAKE UT 84101
PRIME ROCK RESOURCES ASSET CO LLC	203 W WALL ST MIDLAND, TX 79701
PXP PRODUCING CO LLC	717 TEXAS ST STE 2100 HOUSTON TX 77002-2753
RICHARD K BARR FAMILY TRUST, BEVERLY J BARR TRUSTEE	804 PARK VISTA CIRCLE SOUTHLAKE, TX 76092
SANTA ELENA MINERALS LP	PO BOX 732776 DALLAS, TX 75373-2776
SCOTT EXPLORATION INC	500 N KENTUCKY AVE ROSWELL NM 88201-4721
SCOTT INVESTMENT CORP	200 W 1ST ST STE 648 ROSWELL NM 88203-4677
SIETE OIL & GAS CORP	PO BOX 2523 ROSWELL NM 88202-2523
SLASH EXPLORATION LP	PO BOX 1973 ROSWELL NM 88202
SLASH FOUR ENTERPRISES INC	PO BOX 1433 ROSWELL NM 88202
STRATA PRODUCTION CO	1301 N SYCAMORE AVE ROSWELL NM 88201
T H MCELVAIN OIL & GAS LLLP	1819 DENVER WEST DRIVE LAKEWOOD, CO 80401
TOLES CO LLC (THE)	PO BOX 1300 ROSWELL NM 88202-1300
WALKER VALORIE TRST	PO BOX 102256 ANCHORAGE AK 99510-2256
WINCHESTER ENERGY LLC	PO BOX 13540 OKLAHOMA CITY, OK 73113
WORRALL INVESTMENT CORP	200 W 1ST ST STE 648 ROSWELL NM 88203-4677
WPX ENERGY PERMIAN LLC	333 WEST SHERIDAN AVE OKLAHOMA CITY, OK 73102
XTO DELAWARE BASIN LLC	6401 HOLIDAY HILL RD MIDLAND TX 79707-2156
XTO HOLDINGS LLC	PO BOX 840780 DALLAS, TX 75284-0780

Cedar Canyon 2024 Gas Storage Notice Map One Spring HSU

- Key**
- Oxy CLGC HSU
 - Project Area Outline
 - Oxy HSU
 - Devon HSU
 - EOG HSU
 - Matador HSU
 - Murchison HSU
 - Shackelford HSU
 - SMC HSU
 - Chevron
 - XTO
 - Mewbourne
 - No BS HSU

