

Intent ☐ As Drilled ☒

API # 30-015-45169		
Operator Name: COG OPERATING, LLC	Property Name: LITTLEFIELD 33 FEDERAL COM	Well Number 808H

Kick Off Point (KOP)

UL 9	Section 33	Township 26S	Range 29E	Lot	Feet 84	From N/S SOUTH	Feet 651	From E/W WEST	County EDDY
Latitude 32.000346					Longitude -103.996101			NAD 83	

First Take Point (FTP)

UL 9	Section 33	Township 26S	Range 29E	Lot	Feet 352	From N/S SOUTH	Feet 674	From E/W WEST	County EDDY
Latitude 32.001080					Longitude -103.996019			NAD 83	

Last Take Point (LTP)

UL D	Section 28	Township 26S	Range 29E	Lot	Feet 312	From N/S NORTH	Feet 659	From E/W WEST	County EDDY
Latitude 32.020309					Longitude -103.995793			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit? ☐ No

Is this well an infill well? ☐ Yes

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API # 30-015-45163		
Operator Name: COG Operating LLC	Property Name: Littlefield 33 Federal Com	Well Number 706H

KZ 06/29/2018

From Bottom to Top	Stage 1	Distance Between Perfs	Shots	Stage 2	Distance Between Perfs	Shots	Stage 3	Distance Between Perfs	Shots	Stage 4	Distance Between Perfs	Shots	Stage 5	Distance Between Perfs	Shots
	17,895	22	6	17,679	62	6	17,516	49	6	17,349	41	6	17,180	35	6
	17,873	22	6	17,663	16	6	17,505	15	6	17,335	15	6	17,168	20	6
	17,851	22	5	17,647	17	5	17,490	12	5	17,320	18	5	17,148	22	5
	17,829	22	5	17,630	16	5	17,478	19	5	17,302	22	5	17,126	22	5
	17,807	22	4	17,614	16	4	17,459		4	17,280	22	4	17,104	22	4
	17,785	22	4	17,598	16	4	17,434	21	4	17,258	22	4	17,082	22	4
	17,763	22	3	17,582	17	3	17,413	23	3	17,236	21	3	17,060	22	3
	17,741		3	17,565		3	17,390		3	17,215		3	17,038		3
	Plug to Plug	91	36	Plug to Plug	59	36	Plug to Plug	48	36	Plug to Plug	57	36	Plug to Plug	-17126	36
	Frac Plug	17,920	Total Shots	Frac Plug	17,689	Total Shots	Frac Plug	17,526	Total Shots	Frac Plug	17,359	Total Shots	Frac Plug		Total Shots

From Bottom to Top	Stage 6	Distance Between Perfs	Shots	Stage 7	Distance Between Perfs	Shots	Stage 8	Distance Between Perfs	Shots	Stage 9	Distance Between Perfs	Shots	Stage 10	Distance Between Perfs	Shots
	17,002	36	6	16,821	41	6	16,652	35	6	16,475	36	6	16,306	30	6
	16,994	22	6	16,806	10	6	16,635	14	6	16,466	21	6	16,284	15	6
	16,972	22	5	16,796	22	5	16,621	22	5	16,445	22	5	16,269	20	5
	16,950	19	5	16,774	22	5	16,599	22	5	16,423	22	5	16,249	24	5
	16,931	25	4	16,752	22	4	16,577	22	4	16,401	21	4	16,225	21	4
	16,906	25	4	16,730	21	4	16,555	22	4	16,380	23	4	16,204	23	4
	16,881	19	3	16,709	22	3	16,533	22	3	16,357	21	3	16,181	21	3
	16,862		3	16,687		3	16,511		3	16,336		3	16,160		3
	Plug to Plug	68	36	Plug to Plug	57	36	Plug to Plug	63	36	Plug to Plug	62	36	Plug to Plug	67	36
	Frac Plug	17,018	Total Shots	Frac Plug	16,831	Total Shots	Frac Plug	16,662	Total Shots	Frac Plug	16,485	Total Shots	Frac Plug	16,316	Total Shots

From Bottom to Top	Stage 11	Distance Between Perfs	Shots	Stage 12	Distance Between Perfs	Shots	Stage 13	Distance Between Perfs	Shots	Stage 14	Distance Between Perfs	Shots	Stage 15	Distance Between Perfs	Shots
	16,128	32	6	15,952	31	6	15,777	31	6	15,600	32	6	15,421	35	6
	16,115	22	6	15,932	17	6	15,764	22	6	15,588	22	6	15,405	20	6
	16,093	22	5	15,915	19	5	15,742	22	5	15,566	22	5	15,385	17	5
	16,071	22	5	15,896	22	5	15,720	22	5	15,544	22	5	15,368	17	5
	16,049	22	4	15,874	21	4	15,698	22	4	15,522	22	4	15,351	27	4
	16,027	22	4	15,853	23	4	15,676	22	4	15,500	22	4	15,324	21	4
	16,005	22	3	15,830	22	3	15,654	22	3	15,478	22	3	15,303	23	3
	15,983		3	15,808		3	15,632		3	15,456		3	15,280		3
	Plug to Plug	67	36	Plug to Plug	66	36	Plug to Plug	67	36	Plug to Plug	66	36	Plug to Plug	63	36
	Frac Plug	16,138	Total Shots	Frac Plug	15,962	Total Shots	Frac Plug	15,787	Total Shots	Frac Plug	15,610	Total Shots	Frac Plug	15,431	Total Shots

From Bottom to Top	Stage 16	Distance Between Perfs	Shots	Stage 17	Distance Between Perfs	Shots	Stage 18	Distance Between Perfs	Shots	Stage 19	Distance Between Perfs	Shots	Stage 20	Distance Between Perfs	Shots
	15,238	42	6	15,060	45	6	14,890	39	6	14,716	37	6	14,528	49	6
	15,225	15	6	15,050	16	6	14,880	17	6	14,705	18	6	14,515	15	6
	15,210	18	5	15,034	17	5	14,863	22	5	14,687	20	5	14,500	15	5
	15,192	20	5	15,017	27	5	14,841	22	5	14,667	24	5	14,485	18	5
	15,172	24	4	14,990	17	4	14,819	22	4	14,643	25	4	14,467	22	4
	15,148	21	4	14,973	26	4	14,797	22	4	14,618	19	4	14,445	22	4
	15,127	22	3	14,947	18	3	14,775	22	3	14,599	22	3	14,423	22	3
	15,105		3	14,929		3	14,753		3	14,577		3	14,401		3
	Plug to Plug	56	36	Plug to Plug	53	36	Plug to Plug	59	36	Plug to Plug	59	36	Plug to Plug	53	36
	Frac Plug	15,248	Total Shots	Frac Plug	15,070	Total Shots	Frac Plug	14,900	Total Shots	Frac Plug	14,726	Total Shots	Frac Plug	14,538	Total Shots

From Bottom to Top	Stage 21	Distance Between Perfs	Shots	Stage 22	Distance Between Perfs	Shots	Stage 23	Distance Between Perfs	Shots	Stage 24	Distance Between Perfs	Shots	Stage 25	Distance Between Perfs	Shots
	14,370	31	6	14,185	41	6	14,020	30	6	13,832	42	6	13,667	39	6
	14,350	20	6	14,170	10	6	14,002	18	6	13,815	18	6	13,650	18	6
	14,330	20	5	14,160	22	5	13,984	22	5	13,797	22	5	13,632	18	5
	14,310	18	5	14,138	22	5	13,962	22	5	13,775	16	5	13,614	26	5
	14,292	22	4	14,116	22	4	13,940	22	4	13,759	19	4	13,588	21	4
	14,270	22	4	14,094	22	4	13,918	22	4	13,740	20	4	13,567	22	4
	14,248	22	3	14,072	22	3	13,896	22	3	13,720	14	3	13,545	22	3
	14,226		3	14,050		3	13,874		3	13,706		3	13,523		3
	Plug to Plug	70	36	Plug to Plug	62	36	Plug to Plug	68	36	Plug to Plug	75	36	Plug to Plug	63	36
	Frac Plug	14,380	Total Shots	Frac Plug	14,200	Total Shots	Frac Plug	14,030	Total Shots	Frac Plug	13,850	Total Shots	Frac Plug	13,677	Total Shots

From Bottom to Top	Stage 26	Distance Between Perfs	Shots	Stage 27	Distance Between Perfs	Shots	Stage 28	Distance Between Perfs	Shots	Stage 29	Distance Between Perfs	Shots	Stage 30	Distance Between Perfs	Shots
	13,490	33	6	13,314	33	6	13,129	42	6	12,959	36	6	12,788	31	6
	13,479	22	6	13,303	22	6	13,115	18	6	12,943	14	6	12,776	22	6
	13,457	22	5	13,281	22	5	13,097	22	5	12,929	22	5	12,754	22	5
	13,435	22	5	13,259	22	5	13,075	12	5	12,907	22	5	12,732	22	5
	13,413	22	4	13,237	22	4	13,063	24	4	12,885	22	4	12,710	22	4
	13,391	22	4	13,215	26	4	13,039	22	4	12,863	22	4	12,688	23	4
	13,369	22	3	13,189	18	3	13,017	22	3	12,841	22	3	12,665	21	3
	13,347		3	13,171		3	12,995		3	12,819		3	12,644		3
	Plug to Plug	65	36	Plug to Plug	65	36	Plug to Plug	64	36	Plug to Plug	67	36	Plug to Plug	66	36
	Frac Plug	13,500	Total Shots	Frac Plug	13,324	Total Shots	Frac Plug	13,139	Total Shots	Frac Plug	12,974	Total Shots	Frac Plug	12,798	Total Shots

From Bottom to Top	Stage 31	Distance Between Perfs	Shots	Stage 32	Distance Between Perfs	Shots	Stage 33	Distance Between Perfs	Shots	Stage 34	Distance Between Perfs	Shots	Stage 35	Distance Between Perfs	Shots
	12,612	32	6	12,437	31	6	12,261	31	6	12,085	31	6	11,910	31	6
	12,600	22	6	12,424	22	6	12,248	22	6	12,071	21	6	11,895	20	6
	12,578	22	5	12,402	22	5	12,226	22	5	12,050	22	5	11,875	22	5
	12,556	22	5	12,380	22	5	12,204	22	5	12,028	21	5	11,853	22	5
	12,534	22	4	12,358	22	4	12,182	22	4	12,007	23	4	11,831	22	4
	12,512	22	4	12,336	22	4	12,160	22	4	11,984	21	4	11,809	22	4
	12,490	22	3	12,314	22	3	12,138	22	3	11,963	22	3	11,787	22	3
	12,468		3	12,292		3	12,116		3	11,941		3	11,765		3
	Plug to Plug	66	36	Plug to Plug	67	36	Plug to Plug	67	36	Plug to Plug	67	36	Plug to Plug	67	36
	Frac Plug	12,622	Total Shots	Frac Plug	12,447	Total Shots	Frac Plug	12,271	Total Shots	Frac Plug	12,095	Total Shots	Frac Plug	11,920	Total Shots

From Bottom to Top	Stage 36	Distance Between Perfs	Shots	Stage 37	Distance Between Perfs	Shots	Stage 38	Distance Between Perfs	Shots	Stage 39	Distance Between Perfs	Shots	Stage 40	Distance Between Perfs	Shots
	11,729	36	6	11,546	43	6	11,380	33	6	11,202	35	6	11,030	32	6
	11,715	16	6	11,532	12	6	11,365	18	6	11,190	18	6	11,015	20	6
	11,699	22	5	11,520	19	5	11,347	22	5	11,172	22	5	10,995	21	5
	11,677	22	5	11,501	22	5	11,325	22	5	11,150	16	5	10,974	22	5
	11,655	22	4	11,479	22	4	11,303	22	4	11,134	28	4	10,952	22	4
	11,633	22	4	11,457	23	4	11,281	22	4	11,106	20	4	10,930	22	4
	11,611	22	3	11,434	21	3	11,259	22	3	11,086	24	3	10,908	22	3
	11,589		3	11,413		3	11,237		3	11,062		3	10,886		3
	Plug to Plug	67	36	Plug to Plug	55	36	Plug to Plug	65	36	Plug to Plug	62	36	Plug to Plug	77	36
	Frac Plug	11,744	Total Shots	Frac Plug	11,556	Total Shots	Frac Plug	11,390	Total Shots	Frac Plug	11,212	Total Shots	Frac Plug	11,051	Total Shots

Littlefield 33 Federal Com #808H

<u>Perfs</u>	<u>7 1/2% Acid (Gal)</u>	<u>Sand (#)</u>	<u>Fluid (Gal)</u>
1	1512	335082	269052
2	4620	357086	472584
3	1512	373802	346542
4	1554	360047	371826
5	1512	347954	338688
6	1512	359995	328020
7	1512	365677	320544
8	1554	366577	331926
9	1554	359429	330288
10	1512	362124	341376
11	1554	360017	334320
12	1512	359992	312858
13	1512	360071	302904
14	1554	360243	306138
15	1512	360986	302106
16	1512	360340	298158
17	1512	333721	291984
18	1512	358975	300216
19	1512	359376	302568
20	1512	360395	293454
21	1512	356868	304038
22	1554	359262	354270
23	1512	359367	344610
24	1512	360364	309708
25	1512	363086	329112
26	1512	361228	323106
27	1512	362508	301182
28	1554	362798	317898
29	1512	361142	297780
30	1512	360473	330876
31	1554	359678	300342
32	1512	374097	321720
33	1554	368727	319872
34	1512	359848	321846
35	1512	361458	317730
36	1260	373111	327936
37	1512	360642	309162
38	1512	359446	315840
39	1512	359494	310128
40	3234	360908	296184
Totals	65,436	14,406,394	12,848,892