

Operator	Cub Creek Energy, LLC
Well	Litzenberger #19
API	05-123-42776
Formation	Niobrara
Date	



Stage	TotalClean	TotalSlurry	PumpDownVol	F_ISIP	F_5Min	F_FG	TotallbsWeight Prop	40/70 White Actual Weight	20/40 White Actual Weight	AvePSI	AveRate	MaxRate	MaxHHP	StartFrac	EndFrac
1	4848	5191	635	3801	3564	0.975	279810	116000	163810	7163	79.6	80.9	14680	2/18/18 9:45	2/18/18 10:59
2	4667	4999	313	4278	4066	1.042	280360	116180	164180	7304	79.5	80.4	14563	2/18/18 18:02	2/18/18 19:20
3	4651	4996	349	4397	3963	1.059	280050	115970	164080	7175	80.0	80.6	14837	2/19/18 2:04	2/19/18 3:21
4	4710	5050	443	4195	3961	1.030	279850	115840	164010	7304	80.0	81.5	15171	2/19/18 10:42	2/19/18 12:07
5	4855	5192	323	4283	3990	1.041	280090	116020	164070	7421	78.9	88.6	16113	2/19/18 20:23	2/19/18 21:43
6	4605	4945	316	4241	4157	1.035	279660	115980	163680	7317	79.7	81.9	15303	2/20/18 10:45	2/20/18 12:18
7	4881	5236	389	4456	4180	1.064	279920	116100	163820	7349	80.1	80.8	14982	2/20/18 21:29	2/20/18 23:01
8	4587	4921	305	4252	4025	1.033	280250	115960	164290	7762	79.9	80.9	15808	2/21/18 6:12	2/21/18 7:29
9	4598	4938	276	4290	4075	1.036	280050	115950	164100	7502	79.9	81.1	15905	2/21/18 14:55	2/21/18 16:12
10	4818	5156	304	4326	4127	1.039	279870	115890	163980	7014	80.2	81.1	15580	2/22/18 0:43	2/22/18 2:06
11	4600	4944	293	4301	4152	1.034	280300	116320	163980	7169	80.0	81.0	15871	2/22/18 11:37	2/22/18 12:52
12	4712	5054	266	4409	4166	1.050	279840	115670	164170	7135	80.4	81.2	15872	2/22/18 18:10	2/22/18 19:28
13	4530	4870	171	4469	4236	1.059	279710	115990	163720	7128	79.9	81.5	14824	2/23/18 2:25	2/23/18 3:42
14	4557	4909	196	4316	4094	1.038	281470	116830	164640	7015	79.7	80.7	15475	2/23/18 10:22	2/23/18 11:46
15	4486	4816	142	4297	4198	1.037	279120	115480	163640	6910	80.2	81.4	14755	2/23/18 19:13	2/23/18 20:30
16	4485	4823	142	4376	4215	1.048	279900	115840	164060	6930	79.7	80.3	15200	2/24/18 4:17	2/24/18 5:32
17	4507	4857	210	4452	4287	1.059	279720	115940	163780	6891	79.8	80.8	14731	2/24/18 9:07	2/24/18 10:23
18	4526	4871	213	4535	4312	1.071	280180	116330	163850	6907	79.9	80.7	13982	2/24/18 15:10	2/24/18 16:27
19	4439	4749	120	4436	4184	1.058	279950	115600	164350	7086	80.0	81.4	14912	2/24/18 21:30	2/24/18 22:46
20	4398	4726	105	4432	4134	1.057	280360	116660	163700	6726	79.4	81.2	13928	2/25/18 2:48	2/25/18 4:03
21	4580	4907	188	4273	4004	1.035	279360	115440	163920	6988	80.2	80.9	16023	2/25/18 8:45	2/25/18 10:02
22	4468	4813	174	4143	3980	1.017	280620	116180	164440	6830	80.6	81.6	15484	2/25/18 17:01	2/25/18 18:18
23	4470	4807	168	4162	3838	1.020	279510	115900	163610	6694	80.4	81.2	15015	2/25/18 23:15	2/26/18 0:31
24	4560	4901	241	4165	3899	1.021	280220	115820	164400	6320	79.7	81.0	13604	2/26/18 4:45	2/26/18 6:01
25	4435	4752	157	4133	3892	1.016	280000	116050	163950	6508	80.1	81.0	14949	2/26/18 10:49	2/26/18 12:03
26	4442	4770	154	4285	3840	1.036	280280	116370	163910	6389	79.9	80.9	14222	2/26/18 19:05	2/26/18 20:20
27	4408	4751	146	4076	3956	1.005	278660	115130	163530	6274	79.9	80.7	13415	2/27/18 6:12	2/27/18 7:29
28	4407	4748	132	4064	3845	1.002	280210	115990	164220	6098	79.8	81.4	13337	2/27/18 12:46	2/27/18 14:12

Min	4,398	4,726	105	3,801	3,564	1	278,660	115,130	163,530	6,098	79	80	13,337	2/18/2018	2/18/2018
Max	4,881	5,236	635	4,535	4,312	1	281,470	116,830	164,640	7,762	81	89	16,113	2/27/2018	2/27/2018
Average	4,580	4,918	245	4,280	4,048	1	279,976	115,980	163,996	6,975	80	81	14,948		
Totals	128,230	137,692	6,871	119,843	113,340	29	7,839,320	3,247,430	4,591,890	195,307	2,238	2,277	418,541		

Actual Flush	Treated Water Vol	LibertyFR Vol	22# Justice Vol	23# Justice Vol	Frac&PD_HCL-15	Frac&PD_FRP-E3-8	Frac&PD_Aquacur 714	Frac&PD_SFT-82	Frac&PD_CSA-23	Frac&PD_LGA-3J	Frac&PD_SAFE-BFH	Frac&PD_XLB-88	Frac&PD_BHL-68W
318	666	672	3180	312	724	21	41	261	172	808	88	261	145
295	394	650		3606	728	24	39	268	179	887	98	281	148
293	387	642		3605	729	22	41	268	178	858	98	286	151
293	475	646		3572	724	20	40	266	177	856	98	281	150
284	367	639		3832	741	20	39	277	188	919	106	299	160
293	354	647		3587	724	20	39	269	178	864	99	282	151
288	582	668		3614	724	21	39	262	180	867	96	281	154
296	345	645		3580	724	19	34	274	179	863	99	283	155
282	307	638		3636	706	18	38	262	181	870	100	287	154
280	351	637		3813	724	22	38	250	191	911	113	300	160
267	319	616		3648	724	22	36	264	185	881	98	286	158
268	303	635		3757	724	17	40	270	193	864	108	294	160
265	219	620		3674	709	20	34	257	184	864	102	283	154
257	235	639		3666	724	21	38	266	183	887	98	285	154
256	166	613		3690	724	22	42	265	186	863	104	285	160
249	180	605		3683	724	18	40	271	184	906	105	285	156
247	240	603		3647	724	22	39	276	186	878	103	284	159
235	232	599		3678	724	18	43	282	186	862	107	283	157
244	148	597		3676	723	21	39	271	182	904	93	280	155
235	136	592		3653	724	19	36	267	184	851	106	281	152
234	218	582		3763	724	18	37	263	184	887	103	290	161
225	201	581		3669	724	19	37	266	186	849	104	283	159
225	203	578		3671	724	20	36	263	178	916	100	280	155
214	281	566		3696	724	17	37	273	178	897	107	280	154
221	194	566		3658	724	20	35	271	181	861	102	275	155
220	188	573		3663	715	18	21	261	181	874	104	276	152
213	188	562		3641	724	16	37	261	175	915	98	280	157
216	171	570		3649	724	18	37	268	178	860	100	281	155

213	136	562	3,180	312	706	16	21	250	172	808	88	261	145
318	666	672	3,180	3,832	741	24	43	282	193	919	113	300	161
258	287	614	3,180	3,548	723	20	38	267	182	876	101	283	155
7,211	8,049	17,180	3,180	99,338	20,255	553	1,052	7,472	5,097	24,522	2,837	7,932	4,341