

RECEIVED:	REVIEWER:	TYPE:	APP NO:
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ABOVE THE TABLE FOR OGD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: Forty Acres Energy **OGRID Number:** 371416
Well Name: West Eumont Unit # 211 **API:** 30-025-44207
Pool: Eumont; Yates - 7 RVS - Queen **Pool Code:** 22800

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

1) TYPE OF APPLICATION: Check those which apply for [A]

A. Location - Spacing Unit - Simultaneous Dedication

☐ NSL

☐ NSP (PROJECT AREA)

☐ NSP (PRODUCTION UNIT)

☐ SD

B. Check one only for [I] or [II]

[I] Commingling - Storage - Measurement

☐ DHC

☐ CTB

☐ PLC

☐ PC

☐ OLS

☐ OLM

[II] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX

☐ PMX

☐ SWD

☒ IPI

☐ EOR

☐ PPR

2) NOTIFICATION REQUIRED TO: Check those which apply.

A. ☐ Offset operators or lease holders

B. ☐ Royalty, overriding royalty owners, revenue owners

C. ☐ Application requires published notice

D. ☐ Notification and/or concurrent approval by SLO

E. ☐ Notification and/or concurrent approval by BLM

F. ☐ Surface owner

G. ☐ For all of the above, proof of notification or publication is attached, and/or.

H. ☐ No notice required

FOR OCD ONLY

☐ Notice Complete

☐ Application
Content
Complete

3) CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Garret Johnson

Print or Type Name

Garret Johnson

Signature

Jan 14th, 2020
Date

832-706-0056
Phone Number

garret@faenergyus.com
e-mail Address

forty acres energy

February 12, 2020

Energy Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis drive
Santa Fe, New Mexico 87505

Attention: Mr. Dean McClure
Petroleum Specialist

Re: Injection Pressure Increase Application
Forty Acres Energy, LLC
West Eumont Unit #211
Pool: Yates-& 7 Rivers
Lea County, New Mexico

Dear Mr. McClure,

Forty Acres Energy, LLC ("Forty Acres"; OGRID No. 371416), as current operator of the Wes Eumont Unit Waterflood Project, hereby requests administrative approval to increase the surface injection pressure for the West Eumont Unit #211, API # 30-025-44207. (WEU #211)

On Jan 31, 2020, Forty Acres conducted a step rate injection test on the WEU #211. The performed step rate test indicates a surface fracture pressure of 1840 psi. Attached for your review is the Capitan Wireline report of the step rate test performed on the WEU #211. Based on the results of the step rate test, Forty Acres, hereby requests authority to increase maximum surface injection pressure of 1700 psi for the WEU #211.

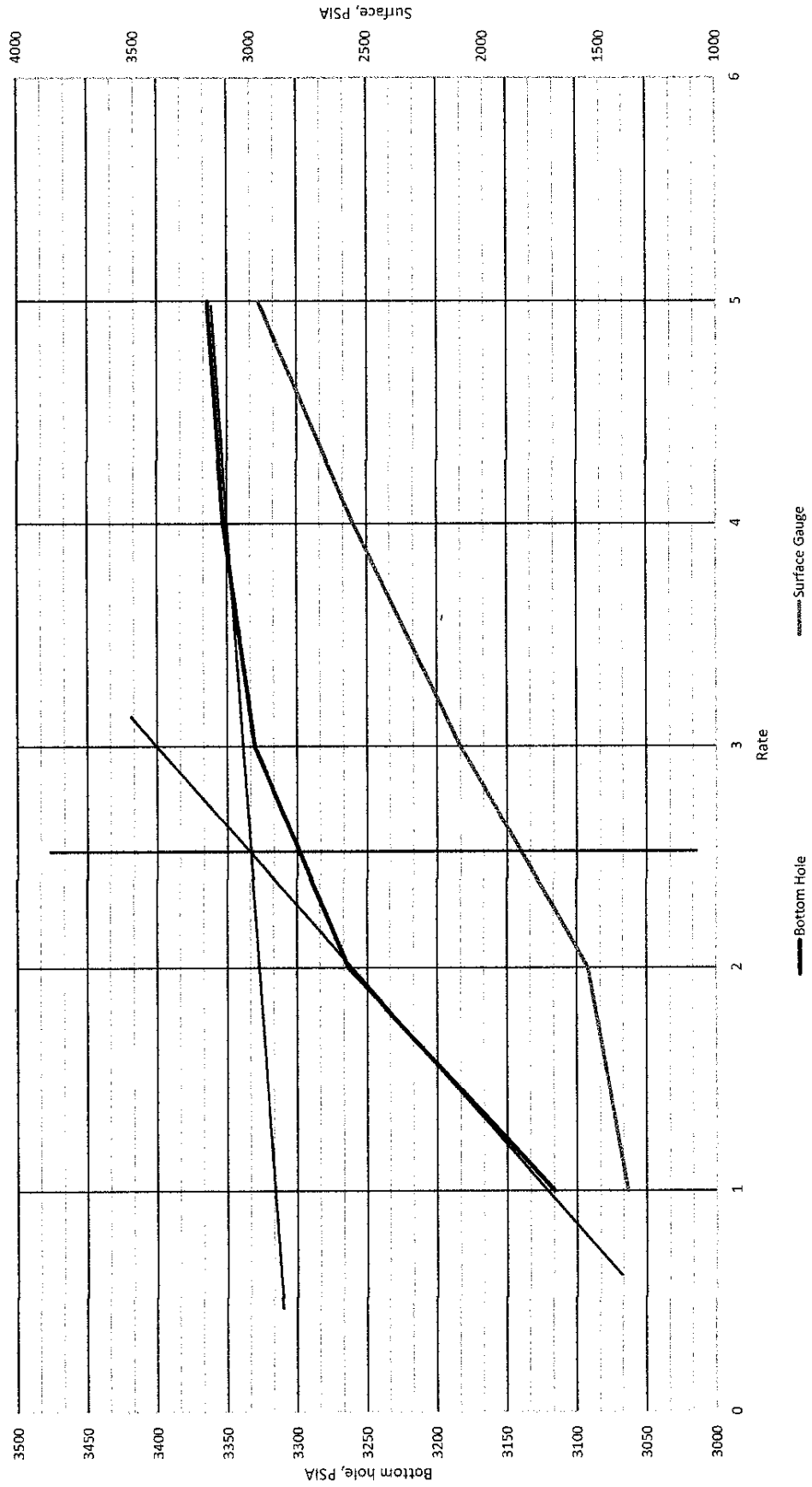
In addition to increasing injection pressure of the WEU #211, Forty Acres is requesting that the step rate test performed on the WEU #211 will effectively represent surface fracture pressure for the adjacent injection wells in the area: West Eumont Unit #212 (API # 30-025-44208), West Eumont Unit #213 (API # 30-025-44209), West Eumont Unit #214 (API # 30-025-44210), and the West Eumont Unit #218 (API # 30-025-45484). The aforementioned wells will not take a sufficient volume of fluid at the current pressure limit and the approval of the proposed pressure increase will allow Forty Acres to conduct secondary recovery operations in a more efficient manner.

Please feel free to reach out with any questions of concerns.

Regards,


Garret Johnson
Operations Engineer

West Eumont Unit #211 Step Rate Test 01-31-2020



WEU #211

1185' FNL, 1345' FEL, Sec 02

T21S, R35E Lea Co., NM

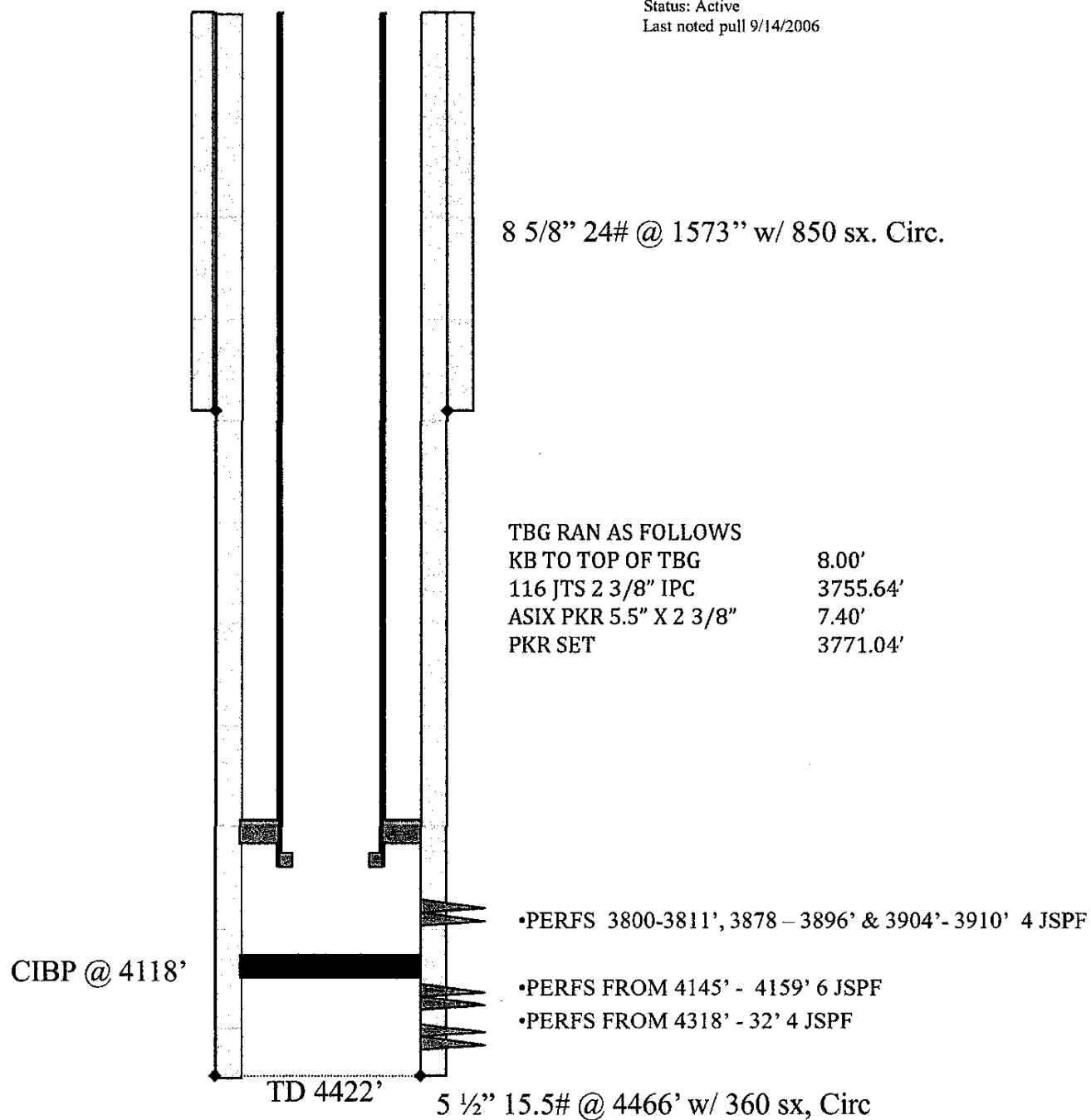
Eumont Field completion Date: 03/21/2018

KB 12'

API # 30 025 44207

Status: Active

Last noted pull 9/14/2006



Current

04/25/2019

PRESSURE SURVEY REPORT

**Forty Acres
WEU #211
30-025-44207**

Jan 31, 2020

The Wireline Group
PO Box 60018
432.561.9356


Capitan **API** **Cutters**
Division

Survey Information

Well Information:

Company Name	Forty Acres
Well Name	WEU #211
UWI	30-025-44207
Status	Vertical Water Well
Producing Through	Tubing
Tubing Depth	3755.00 ftKB
PBTD	4422.00 ftKB
Inner Tubing	2.38 in
Inner Casing	5.50 in
KB Elevation	12.00 ft

Test Information:

Test Type	Step Rate Pressure Test
Test Purpose	Other
H2S Present	No
Start Test Date	31-Jan-2020 10:50:05
Well Shut-In	31-Jan-2020 11:37:05
Final Test Date	31-Jan-2020 16:16:29

Perforation(s):

<u>Formation</u>	<u>Measured Depth (ftKB)</u>	<u>True Vertical Depth (ftKB)</u>
PERF 1	3878.00 - 3896.00	3878.00 - 3896.00
PERF 2	3916.00 - 3922.00	3916.00 - 3922.00
PERF 3	4145.00 - 4159.00	4145.00 - 4159.00
PERF 4	4318.00 - 4332.00	4318.00 - 4332.00

Gauge(s) Information:

	<u>Surface Gauge Gauge</u>	<u>Bottom Hole 2 Gauge</u>	<u>Bottom Hole Gauge</u>
Serial Number	WB6	V6N	V4R
Calibration Date	11-Jan-2019	30-Sep-2019	30-Sep-2019
Pressure Range	10014.00 psi(A)	10014.00 psi(A)	10014.00 psi(A)
Run Depth (LOG)	3862.00 ftKB	3862.00 ftKB	3862.00 ftKB
Run Depth (TVD)	3862.00 ftKB	3862.00 ftKB	3862.00 ftKB

Sequence of Events

Forty Acres
WEU #211
30-025-44207

Date Time dd-MMM-yyyy HH:mm:ss	TVD ftKB	Event	Press. psi(A)	Temp. °F
31-Jan-2020 10:50:05		Pressure Test	5167.15	39.09
31-Jan-2020 11:13:25	1012.00	SG 1	834.32	40.00
31-Jan-2020 11:25:25	2012.00	SG2	836.70	40.53
31-Jan-2020 11:37:05	3862.00	Middle Perfs	855.98	42.01
31-Jan-2020 11:44:45	3862.00	1 BPM	681.25	44.33
31-Jan-2020 12:10:45		2 BPM	1532.16	51.19
31-Jan-2020 12:40:00		3 BPM	1791.78	53.28
31-Jan-2020 13:12:14		4 BPM	2099.59	51.69
31-Jan-2020 13:40:05		5 BPM	2585.88	49.88
31-Jan-2020 14:11:05		6 BPM	2980.97	58.96
31-Jan-2020 14:41:05		7 BPM	3561.85	60.48
31-Jan-2020 14:43:20		Shut Off Pumps	4233.07	60.85
31-Jan-2020 15:13:45		POOH	1403.18	57.04

Comments:

PRESSURE SURVEY REPORT

Linear Data

Forty Acres

WEU #211

30-025-44207

Start Test Date: 31-Jan-2020 10:50:01

Final Test Date: 31-Jan-2020 16:20:14

#	Date Time/Event(s) yyyy/mm/dd hh:mm:ss	Elapsed Time Hours	Surface Gauge Pressure psi(A)	Surface Gauge Temp. °F	Bottom Hole 2 Pressure psi(A)	Bottom Hole 2 Temp. °F
Pressure Test						
1	2020/01/31 10:50:05	0.0000	5167.15	39.09	8.97	39.77
2	2020/01/31 10:53:36	0.0586	789.66	39.11	799.10	41.16
3	2020/01/31 10:57:07	0.1172	809.29	39.24	814.74	43.55
4	2020/01/31 11:00:38	0.1758	815.60	39.37	826.18	54.25
5	2020/01/31 11:04:09	0.2344	818.95	39.51	862.53	60.30
6	2020/01/31 11:07:40	0.2931	823.26	39.71	1000.97	62.53
7	2020/01/31 11:11:11	0.3517	828.95	39.90	1193.49	65.63
1012.00 ftKB						
8	2020/01/31 11:13:25	0.3889	834.32	40.00	1312.57	69.27
9	2020/01/31 11:14:42	0.4103	851.38	40.07	1303.30	70.36
10	2020/01/31 11:18:13	0.4689	838.62	40.14	1295.77	70.79
11	2020/01/31 11:21:44	0.5275	845.46	40.30	1504.24	73.44
12	2020/01/31 11:25:15	0.5861	836.18	40.52	1750.95	77.52
2012.00 ftKB						
13	2020/01/31 11:25:25	0.5889	836.70	40.53	1762.21	77.66
14	2020/01/31 11:28:46	0.6447	854.15	40.96	1790.49	78.89
15	2020/01/31 11:32:17	0.7033	836.93	41.49	2085.92	81.68
16	2020/01/31 11:35:48	0.7619	849.08	41.85	2395.54	84.43
3862.00 ftKB						
17	2020/01/31 11:37:05	0.7833	855.98	42.01	2510.68	85.58
18	2020/01/31 11:39:19	0.8206	878.53	42.55	2650.21	86.91
19	2020/01/31 11:42:50	0.8792	870.74	43.75	2625.58	87.39
1 BPM						
20	2020/01/31 11:44:45	0.9111	681.25	44.33	2956.61	87.46
21	2020/01/31 11:46:21	0.9378	1379.76	44.95	3116.32	87.10
22	2020/01/31 11:49:52	0.9964	1402.00	46.39	3135.46	86.38
23	2020/01/31 11:53:23	1.0550	1449.58	47.69	3166.07	85.05
24	2020/01/31 11:56:54	1.1136	1512.54	48.16	3190.54	84.04
25	2020/01/31 12:00:25	1.1722	1509.65	49.01	3208.68	83.21
26	2020/01/31 12:03:56	1.2308	1521.20	49.88	3227.79	82.53
27	2020/01/31 12:07:27	1.2894	1526.71	50.67	3241.03	81.74
2 BPM						
28	2020/01/31 12:10:45	1.3444	1532.16	51.19	3249.87	81.04
29	2020/01/31 12:10:58	1.3481	1554.02	51.21	3263.29	81.00
30	2020/01/31 12:14:29	1.4067	1765.83	51.94	3292.34	79.00
31	2020/01/31 12:18:00	1.4653	1773.07	52.31	3296.92	76.28
32	2020/01/31 12:21:31	1.5239	1782.44	53.04	3299.61	74.51
33	2020/01/31 12:25:02	1.5825	1779.21	53.30	3304.03	73.23

Surface Gauge Gauge

Serial Number: WB6

Run Depth (TVD) : 3862.00 ftKB

Bottom Hole 2 Gauge

Serial Number: V6N

Run Depth (TVD) : 3862.00 ftKB

Print Filter: Every 211 points

Forty Acres

WEU #211

30-025-44207

Start Test Date: 31-Jan-2020 10:50:01

Final Test Date: 31-Jan-2020 16:20:14

#	Date Time/Event(s) yyyy/mm/dd hh:mm:ss	Elapsed Time Hours	Surface Gauge Pressure psi(A)	Surface Gauge Temp. °F	Bottom Hole 2 Pressure psi(A)	Bottom Hole 2 Temp. °F
34	2020/01/31 12:28:33	1.6411	1784.24	53.01	3307.82	72.18
35	2020/01/31 12:32:04	1.6997	1786.00	52.93	3309.52	71.24
36	2020/01/31 12:35:35	1.7583	1789.42	53.72	3310.62	70.41
37	2020/01/31 12:39:06	1.8169	1793.08	53.54	3311.63	69.67
3 BPM						
38	2020/01/31 12:40:00	1.8319	1791.78	53.28	3311.91	69.49
39	2020/01/31 12:42:37	1.8756	2099.45	52.72	3330.22	68.77
40	2020/01/31 12:46:08	1.9342	2111.86	52.53	3336.61	66.44
41	2020/01/31 12:49:39	1.9928	2112.16	52.82	3337.28	65.14
42	2020/01/31 12:53:10	2.0514	2077.35	52.82	3335.44	64.43
43	2020/01/31 12:56:41	2.1100	2048.97	52.28	3334.97	63.97
44	2020/01/31 13:00:12	2.1686	2076.30	52.25	3334.43	63.50
45	2020/01/31 13:03:43	2.2272	2092.17	52.23	3334.76	63.07
46	2020/01/31 13:07:14	2.2858	2104.07	52.02	3335.63	62.63
47	2020/01/31 13:10:45	2.3444	2109.83	51.67	3336.19	62.27
4 BPM						
48	2020/01/31 13:12:14	2.3692	2099.59	51.69	3339.82	62.15
49	2020/01/31 13:14:16	2.4031	2556.38	51.80	3352.47	61.64
50	2020/01/31 13:17:47	2.4617	2549.07	52.47	3355.35	60.81
51	2020/01/31 13:21:18	2.5203	2579.35	52.43	3357.58	60.44
52	2020/01/31 13:24:49	2.5789	2561.01	51.98	3357.43	60.19
53	2020/01/31 13:28:20	2.6375	2552.83	51.43	3356.12	60.01
54	2020/01/31 13:31:51	2.6961	2574.34	51.03	3356.21	59.85
55	2020/01/31 13:35:22	2.7547	2535.70	50.66	3355.17	59.71
56	2020/01/31 13:38:53	2.8133	2597.42	50.09	3356.18	59.53
5 BPM						
57	2020/01/31 13:40:05	2.8333	2585.88	49.88	3356.00	59.48
58	2020/01/31 13:42:24	2.8719	2965.59	49.70	3364.01	59.35
59	2020/01/31 13:45:55	2.9306	2993.58	51.24	3365.77	59.32
60	2020/01/31 13:49:26	2.9892	2977.18	53.26	3364.27	59.31
61	2020/01/31 13:52:57	3.0478	2906.74	55.88	3361.55	59.25
62	2020/01/31 13:56:28	3.1064	2914.84	57.55	3359.62	59.17
63	2020/01/31 13:59:59	3.1650	2927.48	57.66	3357.79	59.13
64	2020/01/31 14:03:30	3.2236	2878.24	57.85	3354.96	59.08
65	2020/01/31 14:07:01	3.2822	2938.90	58.48	3354.07	59.03
66	2020/01/31 14:10:32	3.3408	2968.65	58.90	3353.46	59.04
6 BPM						
67	2020/01/31 14:11:05	3.3500	2980.97	58.96	3353.33	59.04
68	2020/01/31 14:14:03	3.3994	3574.88	59.59	3363.70	59.33
Surface Gauge Gauge		Serial Number: WB6		Run Depth (TVD) : 3862.00 ftKB		
Bottom Hole 2 Gauge		Serial Number: V6N		Run Depth (TVD) : 3862.00 ftKB		
Print Filter: Every 211 points						

Forty Acres

WEU #211

30-025-44207

Start Test Date: 31-Jan-2020 10:50:01

Final Test Date: 31-Jan-2020 16:20:14

#	Date Time/Event(s) yyyy/mm/dd hh:mm:ss	Elapsed Time Hours	Surface Gauge Pressure psi(A)	Surface Gauge Temp. °F	Bottom Hole 2 Pressure psi(A)	Bottom Hole 2 Temp. °F
69	2020/01/31 14:17:34	3.4581	3561.71	60.81	3363.87	59.71
70	2020/01/31 14:21:05	3.5167	3580.58	60.56	3364.66	59.72
71	2020/01/31 14:24:36	3.5753	3532.05	60.05	3364.01	59.76
72	2020/01/31 14:28:07	3.6339	3558.15	59.79	3362.49	59.78
73	2020/01/31 14:31:38	3.6925	3546.78	60.21	3361.79	59.80
74	2020/01/31 14:35:09	3.7511	3552.35	60.25	3360.21	59.85
75	2020/01/31 14:38:40	3.8097	3562.17	60.12	3358.51	59.86
7 BPM						
76	2020/01/31 14:41:05	3.8500	3561.85	60.48	3356.98	59.86
77	2020/01/31 14:42:11	3.8683	3561.13	60.72	3363.64	59.88
Shut Off Pumps						
78	2020/01/31 14:43:20	3.8875	4233.07	60.85	3365.95	60.17
79	2020/01/31 14:45:42	3.9269	1517.32	60.69	3302.41	60.73
80	2020/01/31 14:49:13	3.9856	1528.47	60.58	3082.58	62.72
81	2020/01/31 14:52:44	4.0442	1527.67	60.71	2727.44	61.80
82	2020/01/31 14:56:15	4.1028	1504.92	60.89	2407.36	60.67
83	2020/01/31 14:59:46	4.1614	1486.76	60.85	2065.71	59.03
84	2020/01/31 15:03:17	4.2200	1430.13	60.81	1988.83	58.58
85	2020/01/31 15:06:48	4.2786	1417.03	60.56	1960.81	58.48
86	2020/01/31 15:10:19	4.3372	1443.43	59.01	1629.21	57.26
POOH						
87	2020/01/31 15:13:45	4.3944	1403.18	57.04	1387.79	54.57
88	2020/01/31 15:13:50	4.3958	1407.12	57.01	1365.04	54.47
89	2020/01/31 15:17:21	4.4544	15.58	56.08	13.61	54.14
90	2020/01/31 15:20:52	4.5131	15.62	55.80	13.66	53.86
91	2020/01/31 15:24:23	4.5717	15.63	54.94	13.71	54.71
92	2020/01/31 15:27:54	4.6303	15.65	54.25	13.78	56.03
93	2020/01/31 15:31:25	4.6889	15.68	53.80	13.79	57.63
94	2020/01/31 15:34:56	4.7475	15.71	53.54	13.88	59.88
95	2020/01/31 15:38:27	4.8061	15.74	53.49	13.89	61.84
96	2020/01/31 15:41:58	4.8647	15.77	53.48	13.88	63.31
97	2020/01/31 15:45:29	4.9233	15.78	53.39	13.87	64.47
98	2020/01/31 15:49:00	4.9819	15.81	53.29	13.85	65.52
99	2020/01/31 15:52:31	5.0406	15.83	53.34	13.81	65.98
100	2020/01/31 15:56:02	5.0992	15.84	53.30	13.81	66.15
101	2020/01/31 15:59:33	5.1578	15.86	53.14	13.79	66.06
102	2020/01/31 16:03:04	5.2164	15.87	53.12	13.79	65.88
103	2020/01/31 16:06:35	5.2750	15.89	53.15	13.78	65.46
104	2020/01/31 16:10:06	5.3336	15.90	53.11	13.72	63.79

Surface Gauge Gauge

Serial Number: WB6

Run Depth (TVD) : 3862.00 ftKB

Bottom Hole 2 Gauge

Serial Number: V6N

Run Depth (TVD) : 3862.00 ftKB

Print Filter: Every 211 points

Forty Acres

Linear (WB6_Surface Gauge , V6N_Bottom Hole 2 , V4R_Bottom Hole)

WEU #211
30-025-44207

