

DATE 07/27/13	SUSPENSE	ENGINEER P6	LOGGED IN 07/30/2013	TYPE IPI	APP NO. 241132116263
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- 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

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

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

☐ WFX ☐ PMX ☐ SWD ☒ IPI ☐ EOR ☐ PPR

[D] Other: Specify

SWD-1380-A

OGRID
 API #
 Well
 Located

873
 30-015-41009
 Washington 34 state SWD#2
 N-34-178-28E

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **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.

Fatima Vasquez

Print or Type Name

Signature

Regulatory Tech II

Title

07/24/2013

Date

Fatima.Vasquez@apachecorp.com

e-mail Address



07/24/2013

Mr. Phillip Goetze
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Washington 34 State SWD #2

Mr. Phillip Goetze,

Based on the order SWD 1380-A issued on May 30, 2013 for Washington 34 State SWD #2, the maximum surface injection pressure is 1480 psi. Apache Corporation respectfully requests to increase the injection pressure. Step rate tests have been performed and the results are summarized below. More detailed information in regards to the test and wellbore are enclosed.

Well	API	Fracture Pressure	Requested Inj. Pressure Limit	SRT Date
Washington 34 State SWD #2	30-015-41009	2120	2050	07/23/2013

Please feel free to contact the engineer, Mark Thomas, at (432) 818-1071 or myself should you have any questions or need any other information. Thank you for your time and consideration.

Regards,

Fatima Vasquez
Regulatory Tech II
Apache Corporation
Fatima.Vasquez@apachecorp.com
(432) 818-1015

$$\frac{2050 \text{ psi}}{7702'} = 0.277 \text{ psi/ft}$$

0.28 psi/ft

RECEIVED OOD
2013 JUL 29 P 2:51

Apache Corp.
Current

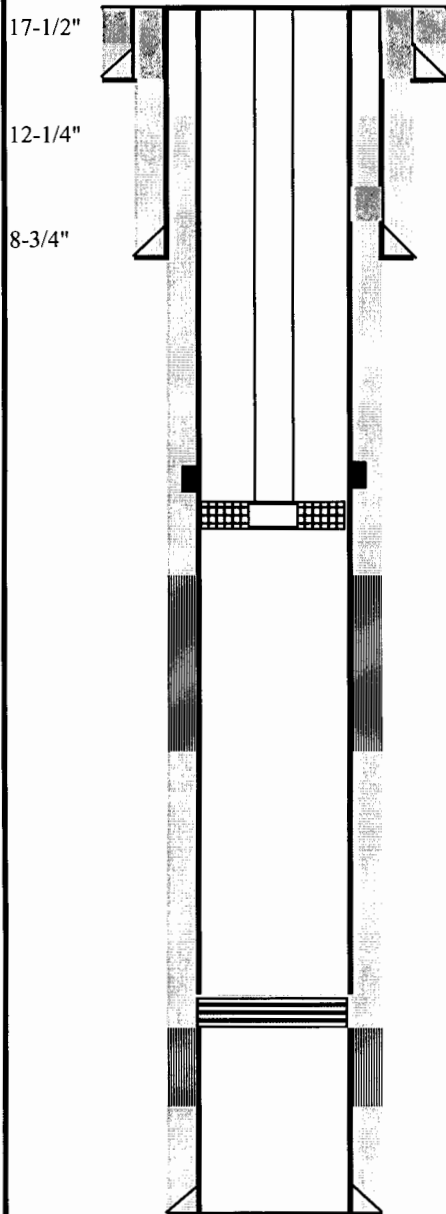
GROUP:	Permian North	DATE:	Jul. 24, 2013
FIELD:	Artesia	BY:	HJG
LEASE/UNIT:	Washington 34 State SWD	WELL:	#2
COUNTY:	Eddy	STATE:	New Mexico
API NUMBER:	30-015-41009		

Spud: 2/24/13

KB = 3686'

Rig Release: 3/25/13

GL = 3662'



13-3/8" 48# H-40 Set @ 461'
CMT W/ 900 SX (CIRC/SURF)

9-5/8" 40# J-55 Set @ 4527'
CMT W/ 1650 SX (CIRC/SURF)

5-1/2" 26# L-80 Set @ 12,656'
CMT W/ 1540 SX; TOC @ 688'

DVT @ 6,995'

Wolfcamp/Cisco (7/10/13) '
7,402-9,136' (86 holes)

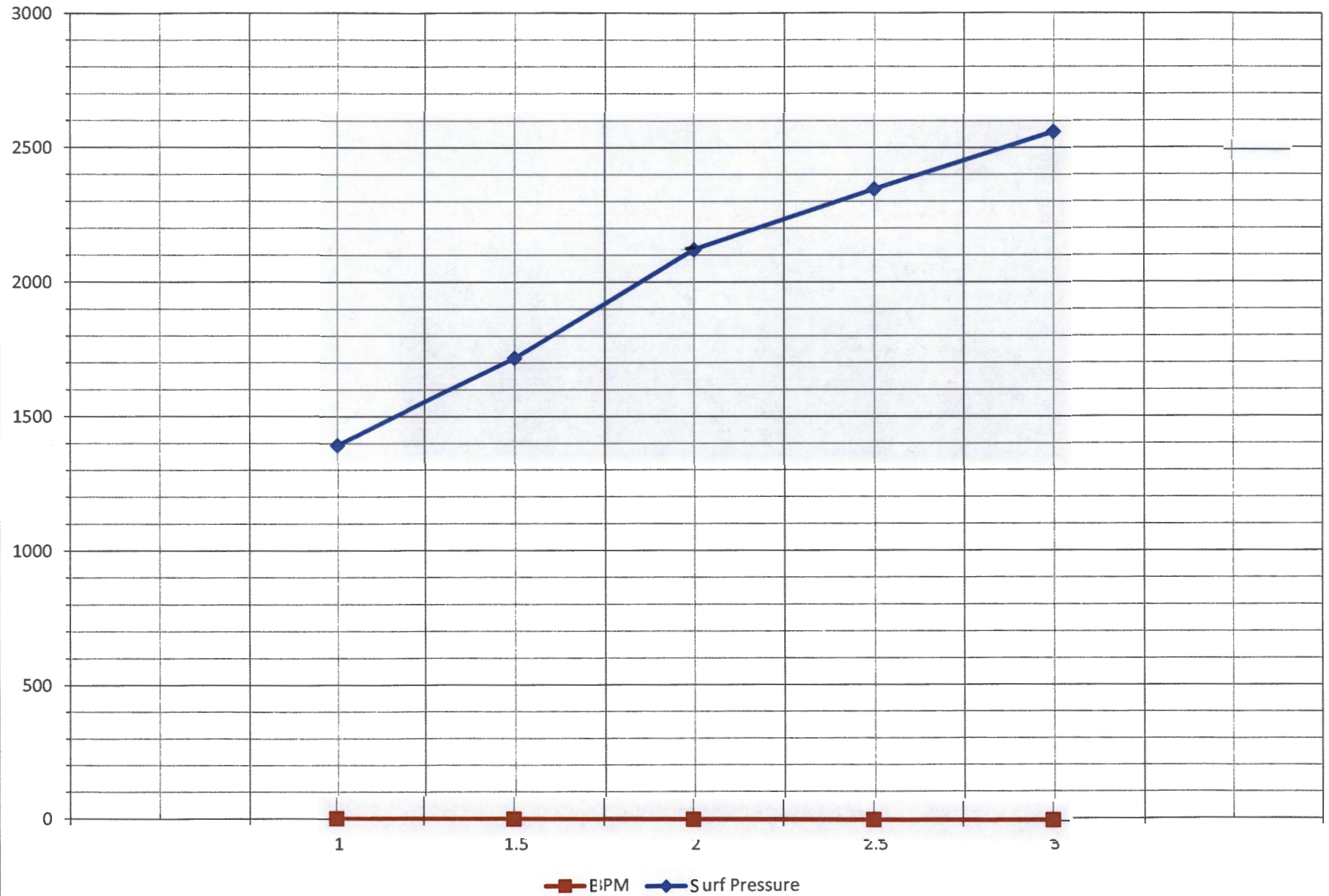
4/4/13: Set CIBP @ 12,210' w/50' CMT

Simpson/Ellenburger (4/3/13)
12,254-236', 298-308', 332-336' (4 SPF, 184 holes)

TD = 12,656'

PBTD = 12,160'

Washington 34 State #2 - Step-Rate Injectivity - Surface Pressure



Treatment Report

page 1

Customer: **APACHE**
Well Name & No.: **WASHINGTON 34 STATE #2**
County: **EDDY**
State: **NM**

Ticket # **65687**
Formation: **0.00**
Date: **July 23, 2013**
Well type: **Disposal. Old / Stim.**

Customer Information

Address: **0.00**
City, State: **0.00**
Zip Code: **0**

Customer Representative: **DAVID PEDROZA**



Remarks

Arrive on Location: **6:00 AM**
Depart Location: **10:00 AM**
Total Hours: **4.00**

	Depth	O.D	Weight	I.D	Volume	Bbls/linear ft.
Tubing 1 length ft.:	N/A		0	0.000	0.00 BBLs.	0.00000
Tubing 2 length ft.:					0.00 BBLs.	0.00000
Casing 1 length ft.:	N/A	5 1/2	0.00	0.000	##### BBLs.	0.00000
Casing 2 length ft.:					0.00 BBLs.	0.00000
Open Hole length ft.:		N/A	N/A		0.00 BBLs.	0.00000
Combined Depth ft.:	#VALUE!				Annular Vol.: BBLs.	0.00000

Top Perf/Open Hole:	Depth: N/A	Vol. #VALUE!	Maximum Pressure:	4125	ISIP:	3470
Bottom Perf/Open Hole:	Depth: N/A	Vol. #VALUE!	Average Pressure:	3532	5 min:	2981
Number of Perfs:	N/A		Maximum Rate:	9.0	10 min:	2614
Perf Size:	0.31 in.		Average Rate:	6.3	15 min:	2256
Packer Depth:	N/A ft.		Fluid to Recover:	482.9	Proppant Total:	

Time	STP	Casing	Rate	Stage	Total	Comments
6:00:09 AM	0					SAFETY MEETING
7:20:20 AM	4932	0.0	0.0		1.2	PRESSURE TESTED LINES
7:22:13 AM	576	21.0	0.8		0.1	ON WATER STEP RATE .8BPM
7:35:07 AM	1074	20.0	0.8		10.0	10 BBLS
7:48:16 AM	1141	18.0	0.8		20.0	20 BBLS
7:54:58 AM	1152	17.0	0.7		25.0	25 BBLS
7:56:22 AM	1210	17.0	1.0		26.0	1 BPM
8:06:07 AM	1342	16.0	1.0		36.0	10 BBLS
8:15:56 AM	1381	15.0	1.0		46.0	20 BBLS
8:21:01 AM	1393	15.0	1.0		51.0	25 BBLS
8:27:11 AM	1282	14.0	1.5		57.9	1.5 BPM
8:34:19 AM	1636	13.0	1.5		67.9	10 BBLS
8:41:05 AM	1696	12.0	1.4		77.9	20 BBLS
8:44:37 AM	1717	13.0	1.4		82.9	25 BBLS
8:45:37 AM	1854	12.0	2.0		84.4	2 BPM
8:50:24 AM	2008	12.0	2.0		94.4	10 BBLS
8:55:36 AM	2093	12.0	2.0		104.4	20 BBLS
8:57:55 AM	2120	12.0	2.0		109.4	25 BBLS
8:58:33 AM	2178	12.0	2.5		110.3	2.5 BPM
9:02:52 AM	2279	12.0	2.5		120.3	10 BBLS
9:06:27 AM	2317	12.0	2.5		130.5	20 BBLS
9:08:50 AM	2345	11.0	2.5		135.3	25 BBLS
9:09:35 AM	2417	11.0	3.0		137.5	3 BPM
9:12:42 AM	2505	11.0	3.0		147.5	10 BBLS
9:16:05 AM	2555	11.0	3.0		157.5	20 BBLS
9:17:44 AM	2559	11.0	3.0		162.5	25 BBLS
9:18:23 AM	2646	11.0	3.5		164.0	3.5 BPM
9:21:03 AM	2666	11.0	3.5		174.0	10 BBLS
9:23:57 AM	2737	11.0	3.5		184.0	20 BBLS
9:25:24 AM	2746	11.0	3.5		189.0	25 BBLS
9:26:12 AM	2825	11.0	4.0		191.8	4 BPM

0.5 hr
17m
12m
10m
8m

Treatment Report Cont./APACHE-WASHINGTON 34 STATE #2

7/23/2013

Page 2

Time	STP		Rate	Stage	Total	Comments
9:28:37 AM	2883	11	4		201.8	10 BBLS
9:31:06 AM	2907	11	4		211.8	20 BBLS
9:32:21 AM	2949	11	4		216.8	25 BBLS
9:33:05 AM	2993	11	4.5		219.6	4.5 BPM
9:35:12 AM	3058	11	4.5		229.6	10 BBLS
9:37:27 AM	3082	11	4.5		239.6	20 BBLS
9:38:32 AM	3065	11	4.5		244.6	25 BBLS
9:39:09 AM	3180	11	5		247.2	5 BPM
9:41:04 AM	3180	11	5		257.2	10 BBLS
9:43:01 AM	3225	11	5		267.2	20 BBLS
9:44:01 AM	3241	11	5		272.2	25 BBLS
9:44:37 AM	3309	11	5.5		274.7	5.5 BPM
9:46:21 AM	3311	11	5.5		284.7	10 BBLS
9:48:08 AM	3384	11	5.5		294.7	20 BBLS
9:49:04 AM	3359	11	5.5		299.7	25 BBLS
9:49:31 AM	3423	11	6		301.5	6 BPM
9:51:02 AM	3449	11	6		311.5	10 BBLS
9:52:44 AM	3470	11	6		321.5	20 BBLS
9:53:34 AM	3460	11	6		326.5	25 BBLS
9:53:58 AM	3512	11	6.5		328.4	6.5 BPM
9:55:24 AM	3560	11	6.5		338.4	10 BBLS
9:57:00 AM	3584	11	6.5		348.4	20 BBLS
9:57:42 AM	3598	11	6.5		353.4	25 BBLS
9:58:49 AM	3649	11	7		359.7	7 BPM
10:00:10 AM	3662	11	7		369.4	10 BBLS
10:01:29 AM	3710	11	7		379.7	20 BBLS
10:02:12 AM	3700	11	7		384.7	25 BBLS
10:03:03 AM	3775	11	7.5		389.5	7.5 BPM
10:04:18 AM	3797	11	7.5		399.5	10 BBLS
10:05:40 AM	3804	11	7.5		409.5	20 BBLS
10:06:19 AM	3801	11	7.5		414.5	25 BBLS
10:06:51 AM	3921	11	8		418.0	8 BPM
10:08:00 AM	3916	11	8		428.0	10 BBLS
10:09:17 AM	3945	11	8		438.0	20 BBLS
10:09:50 AM	4002	11	8		443.0	25 BBLS
10:10:19 AM	4046	11	8.5		446.0	8.5 BPM
10:11:21 AM	4043	11	8.5		456.0	10 BBLS
10:12:29 AM	4102	11	8.5		466.0	20 BBLS
10:13:01 AM	4116	11	8.5		471.0	25 BBLS
10:13:57 AM	4125	11	9		438.0	9 BPM
10:16:37 AM	3500	11	0		482.9	SHUT DOWN

5 min

3 min