

DATE IN 08/24/2014	SUSPENSE	ENGINEER PRG	LOGGED IN 9/12/2014	TYPE IPI	APP NO P M M M / 4 2 5554013
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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 _____

- IPI
 - Memorial Production
 Operating, LLC
 303900
 well
 - Fikes #1
 30-015-00269

[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

Pool
 - SWD, Glom, etc
 96106

[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.

Adonya Dryden
 Print or Type Name

Adonya Dryden
 Signature

Agent
 Title

8/21/14
 Date

adonya.dryden@brammer.com
 e-mail Address



August 21, 2014

Oil Conservation Division
New Mexico EMNRD
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Attention: Mr. Phillip Goetze

Re: Request for Maximum Injection Pressure
Increase
Fikes #1 API No. 30-015-00269
Eddy County, New Mexico

Mr. Goetze,

Memorial Production Operating, LLC. Respectfully requests a maximum surface pressure increase for the referenced water injection well to a surface injection pressure of 750 psia.

Attached is a step rate test for the referenced well indicating the following:

Bottom Hole Parting Pressure: 2352.5 psia

Surface Injection Pressure at Parting Pressure: 800 psia

Injection Rate: 1111.7 BPD

0.8 bpm

Additionally attached please find a wellbore sketch for the referenced well.

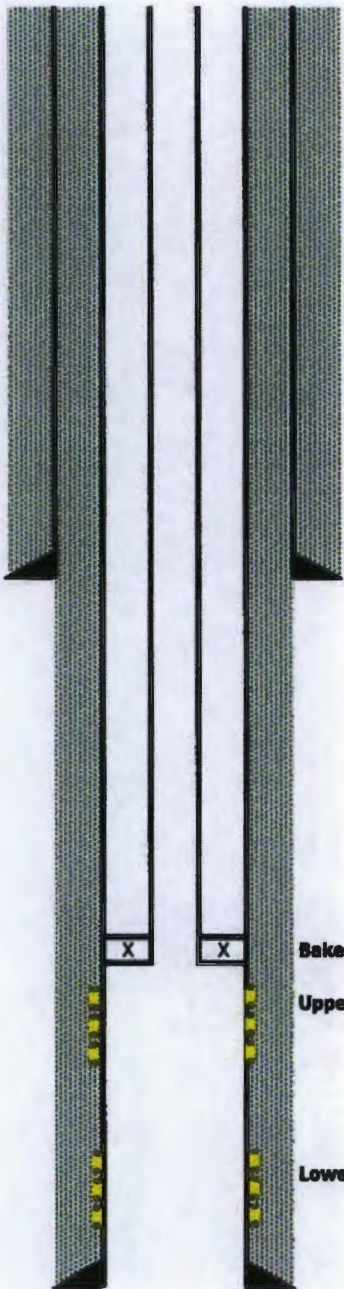
If you need any additional information to evaluate this request, please do not hesitate to call me at (832) 408-8604.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andrew Kobelan', with a horizontal line extending to the right.

Andrew Kobelan

$$\frac{800 \text{ psi}}{2820 \text{ ft}} = 0.28 \text{ psi/ft}$$



WELL NAME:	Fikes #1	FIELD:	Atoka
LOCATION:	Sec 35 C, 18-26	API #:	30-015-00269
COUNTY:	Eddy	ST:	NM
KB:	3320	GL:	3315
TD:	3615	PBTD:	3668
SPUD DATE:	09/01/82		
LAST UPDATED:	03/14/12	BY:	S Panthaky

Injector

CASING DETAILS

PURPOSE	SIZE	WEIGHT	GRADE	SET DEPTH
SURFACE	8 5/8"	?	?	900
INTERMEDIATE				
PRODUCTION	5 1/2"	15.5/17		3708
LINER				

TUBING DETAILS

DESCRIPTION	SIZE	WEIGHT	GRADE	SET DEPTH
82 2 7/8" Plastic Ctd				
Baker Model R	5 1/2"			2,722.00

Baker Model R set at 2722.8

Upper Yeso 2820-3232

Existing perms. from producer

Lower Yeso 3359-3612

Step Rate Test



Cardinal Surveys Company

08-7-143

Memorial Resource Development Corp.
Fikes # 1

Eddy County, New Mexico
File# 21849
Tool # CSCPSI 102

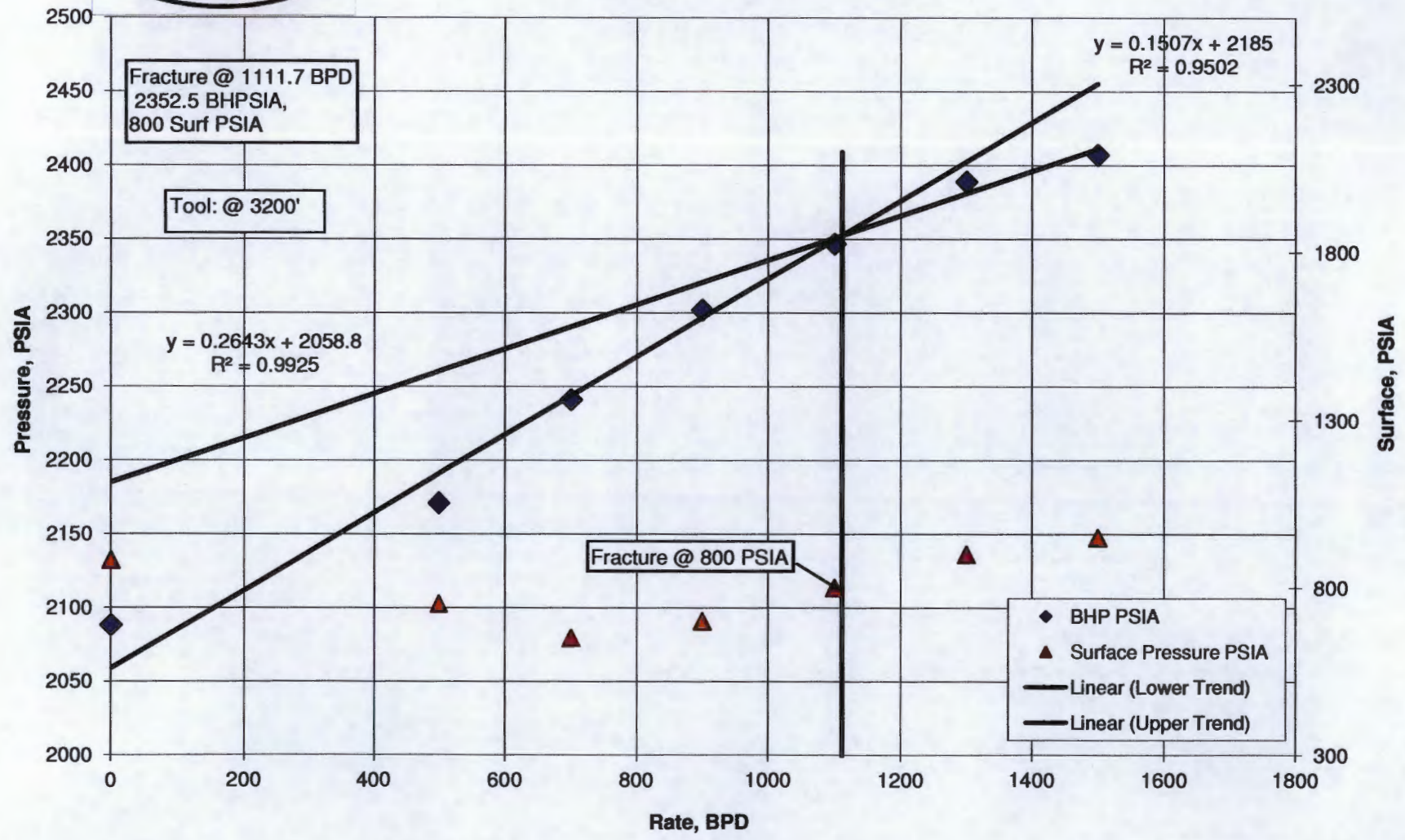
Fracture @ 1111.7 BPD
2352.5 BHPSIA,
800 Surf PSIA

Downhole PSI Tool Ser. No.
Surface PSI Gauge Ser. No.
Tool @ 3200 ✓

Start Time	End Time	Rate BPD	Comments
1	8:02 AM 9:30 AM		0 On Bottom ✓
2	9:30 AM 10:00 AM	500	
3	10:00 AM 10:30 AM	700	
4	10:30 AM 11:00 AM	900	
5	11:00 AM 11:30 AM	1100	
6	11:30 AM 12:00 PM	1300	
7	12:00 PM 12:30 PM	1500	
8	12:30 PM 12:45 PM		0 Fall Off



Memorial Resource Fikes # 1
Step Rate Test 08-7-143



Step Rate Test

Memorial Resource
Development Corp.
Fikes # 1

Eddy County , New Mexico



	S Time	E Time	D Time	Last Rate	Step	B. H. Pressure	Surf	Cum	Delta	Avg.	Lower Trend	Upper Trend
			Min	BPD	BPD	PSIA	PSIA	BBL	BBL	BPD		
1	8:02 AM	9:30 AM	88	0	0	2088.2	882	0	0	0		
2	9:30 AM	10:00 AM	30	500	500	2171	752	10.2	10.2	489.6		
3	10:00 AM	10:30 AM	30	700	200	2241.1	650	25	14.8	710.4	2241.1	
4	10:30 AM	11:00 AM	30	900	200	2301.9	700	44	19	912	2301.9	
5	11:00 AM	11:30 AM	30	1100	200	2346.8	800	68.6	24.6	1180.8	2346.8	2346.8
6	11:30 AM	12:00 PM	30	1300	200	2388.9	900	99.1	30.5	1464		2388.9
7	12:00 PM	12:30 PM	30	1500	200	2407.1	950	133	33.9	1627.2		2407.1
8	12:30 PM	12:45 PM	15	0	-1500	2287	200	133	0	0		

0.2643 2058.775

0.15075 2184.958

int point: 1111.747 BPD
2352.554 Psia



Memorial Resource Fikes # 1 Step Rate Test 08-7-143

