

11/5/2004 DATE IN	11/5/2004 SUSPENSE	DLC ENGINEER	11/3/05 LOGGED IN	IPI TYPE	P.D.C. 0500338195 APP NO.
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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 _____

[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.

_____ Print or Type Name	_____ Signature	_____ Title	_____ Date
_____ e-mail Address			



POGO PRODUCING COMPANY

November 2, 2004

New Mexico Oil Conservation Division
Attn: Mr. David Catanach
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Sand Dunes 28 Federal #1 SWD
Step-Rate Test

SWD-515
30-015-26194
1980 FOL-1980 FEL
J-28, 23P, 31E
Eddy Co.
2004 NOV 5 PM 4 27

Gentlemen:

Pogo Producing Company respectfully requests an increase in the maximum allowable surface injection pressure from the current 859 PSI to 1700 PSI.

This is based on a step-rate test performed on October 20, 2004 by Cardinal Surveys Company. A copy of the test results is attached.

If you have any questions, please contact me at (432)685-8100.

Thank you,

POGO PRODUCING COMPANY

Barrett L. Smith
Division Operations Engineer

Attachment

Step Rate Test



Cardinal Surveys Company

10/25/04

Pogo Producing Company
Sand Dunes 28-1 SWD

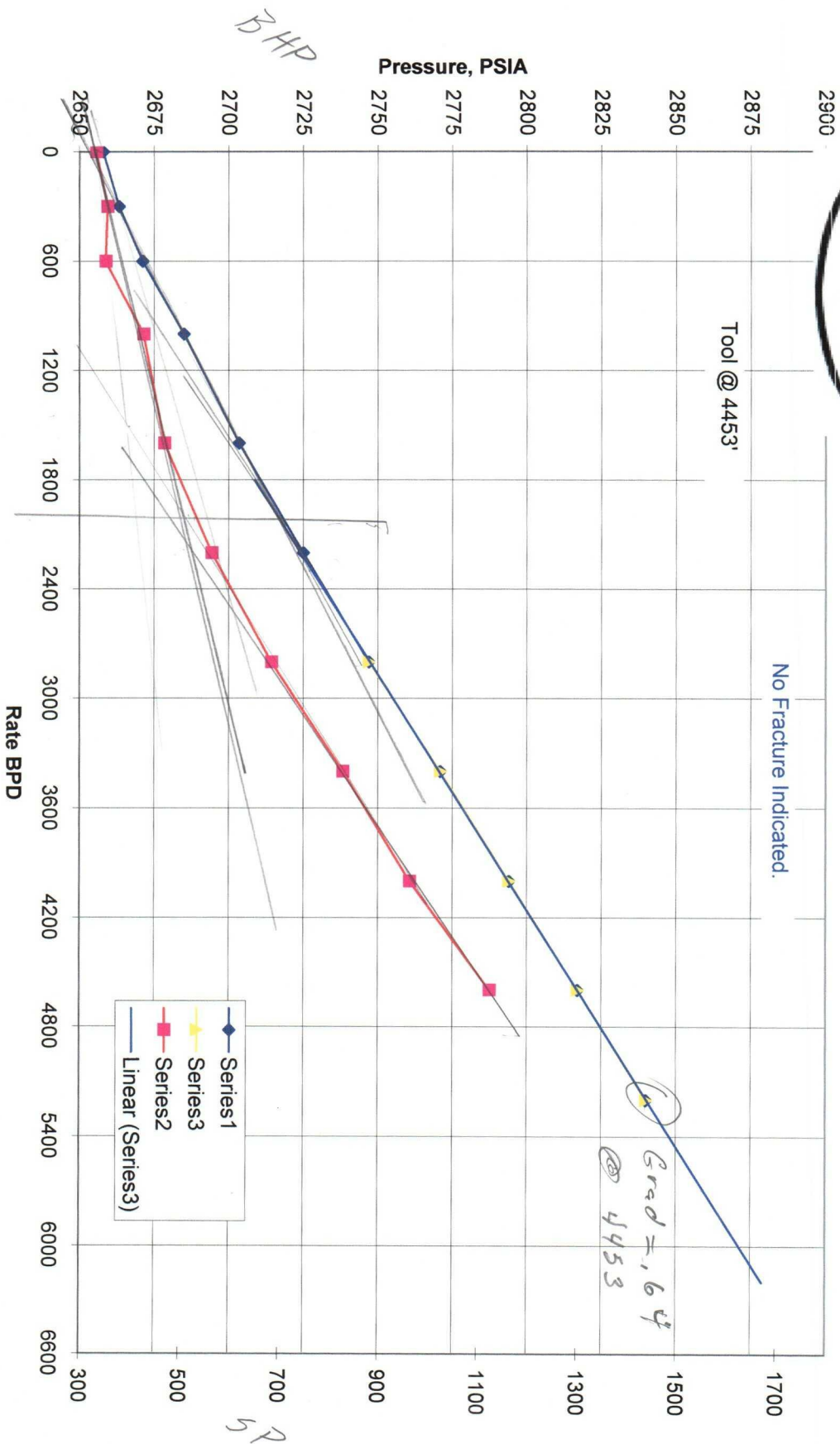
Tool @ 4453'

Downhole PSI Tool Ser. No. 75178
Surface PSI Gauge Ser. No. 10222

Start Time	End Time	Rate	Surf. Pressure	Bh Pressure
9:15 AM	9:25 AM	0	334	2658
9:25 AM	9:55 AM	300	356.4	2663.3
9:55 AM	10:25 AM	600	352.7	2671.5
10:25 AM	10:55 AM	1000	428.7	2685
10:55 AM	11:25 AM	1600	470.8	2703.5
11:25 AM	11:55 AM	2200	566.2	2725.2
11:55 AM	12:25 PM	2800	685.8	2747
12:25 PM	12:55 PM	3400	829.4	2771
12:55 PM	1:25 PM	4000	964.1	2794
1:25 PM	1:55 PM	4600	1124.6	2817
1:55 PM	2:25 PM	5200	1324.9	2840



Pogo Producing Co., Sand Dunes 28-1 SWD
Step Rate Test 10-25-04



Step Rate Test

Pogo Producing Co.
Sand Dunes 28-1 SWD

Eddy County, New Mexico



S Time	E Time	D Time	Last Rate	Step	Last BHP	Last Surf	Cum	Delta	Avg	Lower	upper
		Min	BPM	BPM	PSIA	PSIA	BBL	BBL	BPD		
1 9:15 AM	9:25 AM	0:10:00	0	0	2658	334	0.00	0.00	0.00		
2 9:25 AM	9:55 AM	0:30:00	300	300	2663.3	356.4	6.60	6.60	316.80		
3 9:55 AM	10:25 AM	0:30:00	600	300	2671.2	352.7	19.20	12.60	604.80		
4 10:25 AM	10:55 AM	0:30:00	1000	400	2685	428.7	39.30	20.10	964.80		
5 10:55 AM	11:25 AM	0:30:00	1600	600	2703.5	470.8	71.30	32.00	1536.00		
6 11:25 AM	11:55 AM	0:30:00	2200	600	2725	566.2	117.20	45.90	2203.20		
7 11:55 AM	12:25 PM	0:30:00	2800	600	2747	685.8	174.90	57.70	2769.60		2747
12:25 PM	12:55 PM	0:30:00	3400	600	2771	829.4	246.60	71.70	3441.60		2771
12:55 PM	1:25 PM	0:30:00	4000	600	2794	964.1	329.40	82.80	3974.40		2794
1:25 PM	1:55 PM	0:30:00	4600	600	2817	1124.6	425.70	96.30	4622.40		2817
1:55 PM	2:25 PM	0:30:00	5200	600	2840						2840

7200
6480



Pogo Producing Co., Sand Dunes 28-1 SWD
Step Rate Test Raw Data 10-25-04

