pDEV0020900423

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

May 27, 1992

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

Hondo Oil & Gas Company
P.O. Box 2208
Roswell, New Mexico 88202

Attention: E.L. Buttross, Jr.

RE: Injection Pressure Increase
J.P. Dean SWD No. 1
Unit H, 35-15S-36E
Lea County, New Mexico

Dear Mr. Buttross:

Reference is made to your request dated May 5, 1992, to increase the surface injection pressure on J.P. Dean SWD No. 1. This request is based on a step rate test conducted on this well. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on the well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well:

WELL AND LOCATION	MAXIMUM INJECTION SURFACE PRESSURE
J.P. Dean SWD No. 1 1980' FNL & 660' FEL Unit H, 35-15S-36E	3492 PSIG

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

William J. LeMay
Director

WJL/DC/jc

cc: Oil Conservation Division - Hobbs
File: SWD-423
R. Brown

NO WAITING PERIOD

COMPANY: Hondo Oil & Gas Company
ADDRESS: P.O. Box 2208
CITY, STATE, ZIP: Roswell, New Mexico 88202
ATTENTION: E. L. Buttross, Jr.

Re: Injection Pressure Increase
J.P. Dean SWD No. 1
Unit H 35-15S-36E
Lea County, New Mexico

Dear Sir:

Reference is made to your request dated May 5, 1992, to increase the surface injection pressure on J.P. Dean SWD No. 1 THIS. This request is based on step rate test~~s~~ conducted on ~~these~~ well~~s~~ April 27, 1992. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these well~~s~~ is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following wells:

Well & Location	Maximum Injection Surface Pressure
J.P. Dean SWD No. 1 1980' FNL & 660' FEL Unit H 35-15S-36E	3492 PSIG

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

xc: T. ~~GALLEGOS~~ D. CATANACH FILE-SWD-423 OCD-Hobbs
R. BROWN

Hondo Oil & Gas Company
Box 2208
Roswell, New Mexico 88202
(505)625-8700

May 5, 1992

State of New Mexico
Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504

RE: J. P. Dean SWD #1 (formerly Lea 396 State #5)
Order #SWD-423
Unit H, Sec. 35, T15S, R36E
Lea County, New Mexico

Gentlemen:

Hondo Oil & Gas Company respectfully requests that the maximum wellhead pressure on the above referenced injection well be increased from 2084 psi to 3500 psi. Per the attached step rate test, the formation parting pressure with produced water was determined to be 3542 psi surface pressure. This test was witnessed by Buddy Hill of your Hobbs office.

If you have any questions or need further information, please give me a call at 505/625-6732.

Very truly yours,

E. L. Buttross, Jr.

E. L. Buttross, Jr.
Operations Engineer

ELB/lb

xc: B. Stubbs
J. Handley
File

TECHNICAL LOGGING SERVICES INC.

"Production Logging Specialist"

Office (505) 396-3158
Res. (505) 396-4819
P.O. Box 726
Lovington, N.M. 88260

HONDO OIL & GAS
LEA 396 STATE SWD #5 (J. P. DEAN SWD #1)
LEA, NEW MEXICO
04/27/92

DATA

START IN HOLE 7:45

DEPTH	TIME	PRESSURE
1000'	7:53	166.75
2000'	7:58	530.89
3000'	8:04	988.42
4000'	8:10	1444.15
5000'	8:15	1899.38
6000'	8:21	2354.46
7000'	8:26	2813.18
8000'	8:33	3266.16
9000'	8:37	3722.30
10000'	8:41	4177.00
11000'	8:46	4637.39
11104'	8:48	4681.15

GRADIENT .447 #/FT

FLUID LEVEL 627'

STATIC 4963.49 @ 11,104'

STEP #	TIME	RATE	BHP	SURF PSI
1	9:30	0 bpd	4619.87	Vacuum
2	9:50	200	4647.10	Vacuum
3	10:10	600	4775.84	Vacuum
4	10:30	1000	4972.59	Vacuum
5	10:50	1400	5256.38	65 psi
6	11:10	1800	5602.19	510
7	11:30	2200	5994.56	975
8	11:50	2600	6420.40	1450
9	12:10	3000	6858.22	1925
10	12:30	3400	7301.15	2475
*NOTE				
11	15:20	3400	7301.15	2500
12	15:40	3800	7786.42	3050
13	16:00	4200	8279.44	3650
14	16:20	4600	8622.00	4100
15	16:40	5000	8842.31	4350

*NOTE: Pump was at maxium rate and pressure, continued to pump 2 bbls/min until larger pump was able to continue pumping.

CONCLUSION

Procedure: step rate was started at 200 bbls/day for 20 min steps, incrementing 400 bbls/day each step. *NOTE during step 10 & 11 pump was unable to maintain pump rate and pressure, dropped rate back to 2800 bbls/day to maintain pressure until larger pump was acquired. Continued steps accordingly thereafter.

Was unable to get 3 points past break due to reaching maxium pressure on surface.

Formation fracture was determined to be 8505 psi bhp @ 11,104'
Formation fracture was determined to be 3542 psi surface pressure plus friction pressure.

FRICTION PRESSURE

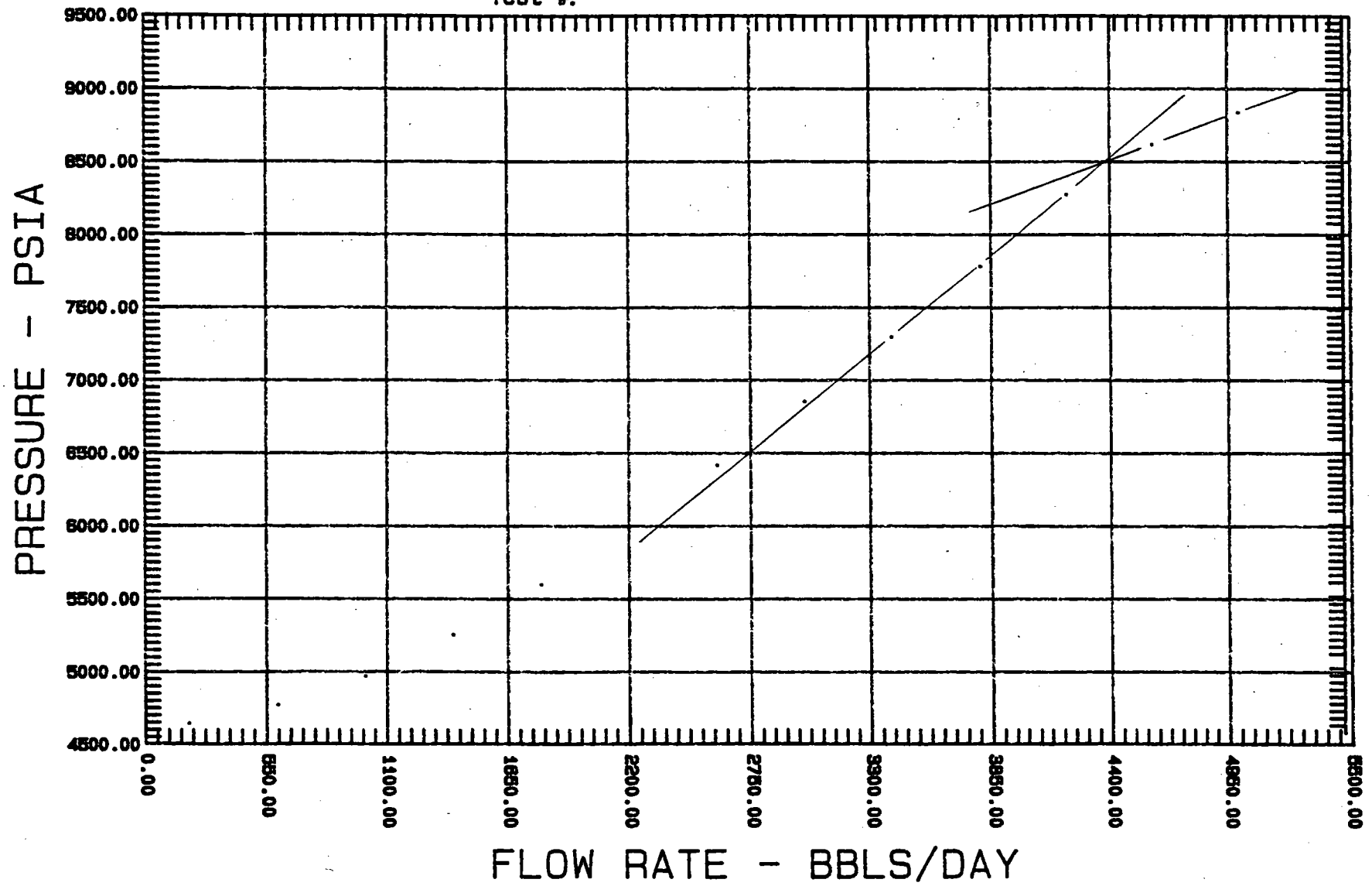
RATE	SURF PSI	FRIC PSI
2600 bpd	1450	7 psi
3400 bpd	2500	162
4200 bpd	3650	263

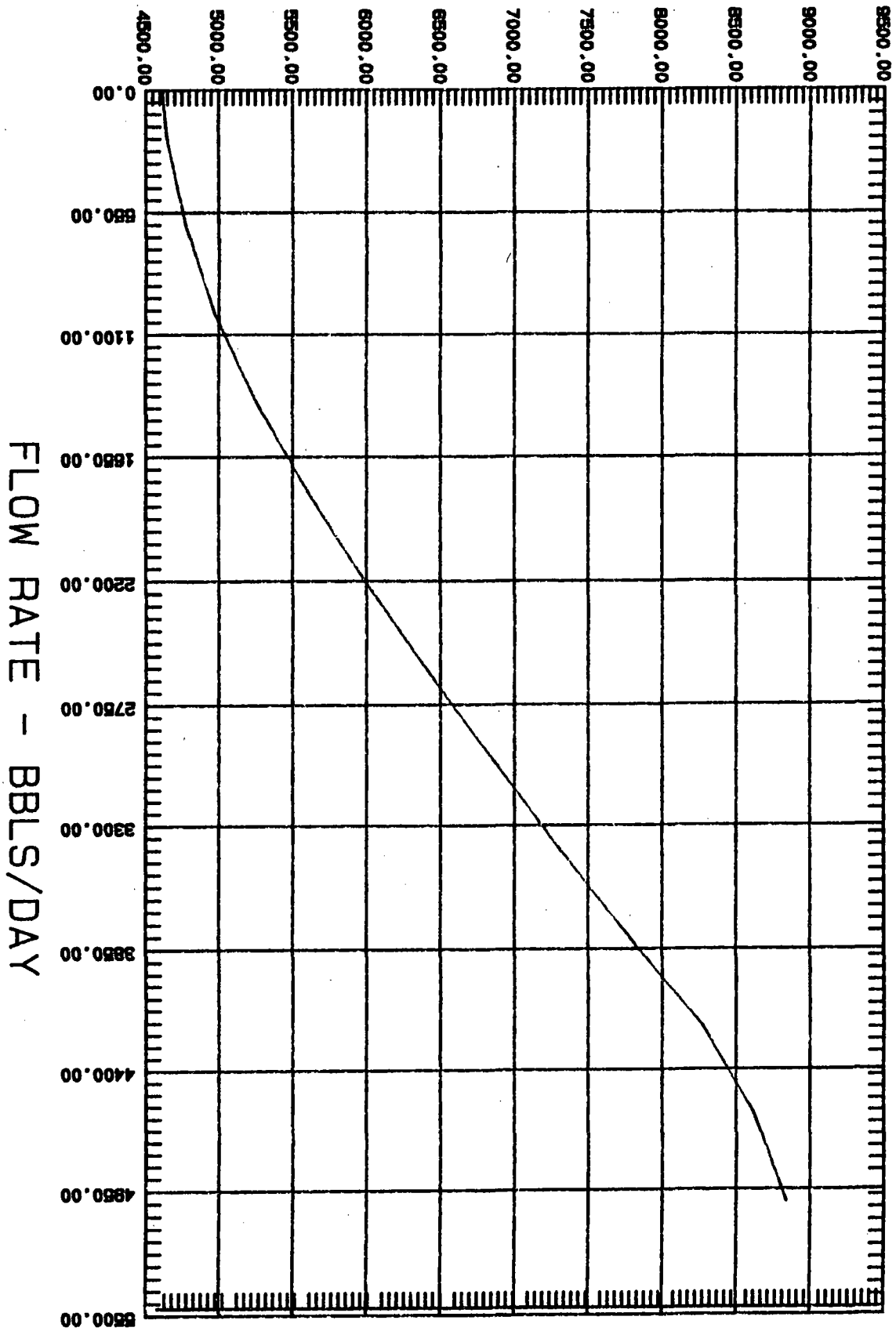
ISIP 8811.79
15 min shut in 8182.02 bhp

Plot starting date: 4/27/92
time: 9:30: 0
Gauge S/N

Company: TECHNICAL LOGGING
Client: HONDO OIL & GAS
Well name: LEA 396 STATE SWD
Well #: 5
Test #:

Location:
Operator: EVANS
Comments: STEP RATE TEST
BHP GAUGE @ 11104'




PRESSURE - PSIA
4500.00
5000.00
5500.00
6000.00
6500.00
7000.00
7500.00
8000.00
8500.00
9000.00
9500.00
FLOW RATE - BBLS/DAY
0.00
550.00
1100.00
1650.00
2200.00
2750.00
3300.00
3850.00
4400.00
4950.00
5500.00