



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

HOBBS DISTRICT OFFICE

April 6, 1992

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Yates Drilling Company	Cactus Queen Unit	#1-K	27-12-31
Operator	Lease & Well No.	Unit	S-T-R

(Request on attached C-103)

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO.	30-005-21037
5. Indicate Type of Lease	STATE ☒ FEE ☐
6. State Oil & Gas Lease No.	LH-1648
7. Lease Name or Unit Agreement Name	Cactus Queen Unit
8. Well No.	1
9. Pool name or Wildcat	SE Chaves On Gas Area Assoc.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:
OIL WELL ☐ GAS WELL ☐ OTHER ☒ Water Injection Well

2. Name of Operator
Yates Drilling Company

3. Address of Operator
105 South 4th Street, Artesia, NM 88210

4. Well Location
Unit Letter K : 1650 Feet From The South Line and 2310 Feet From The West Lin

Section 27 Township 12S Range 31E NMPM Chaves County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)
4438' GL

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	ALTERING CASING ☐
PULL OR ALTER CASING ☐	COMMENCE DRILLING OPNS. ☐
OTHER: Request increase in Allowable Injection Pressure ☒	PLUG AND ABANDONMENT ☐
	CASING TEST AND CEMENT JOB ☐
	OTHER: ☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

We recently authorized a step-rate test to be conducted on the subject well by John West Engineering Company of Hobbs, NM. This test was witnessed by Charlie Perrin of NMOCD. The results of this test are attached. We are requesting that our maximum allowed injection pressure be raised to a level justified by the test.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

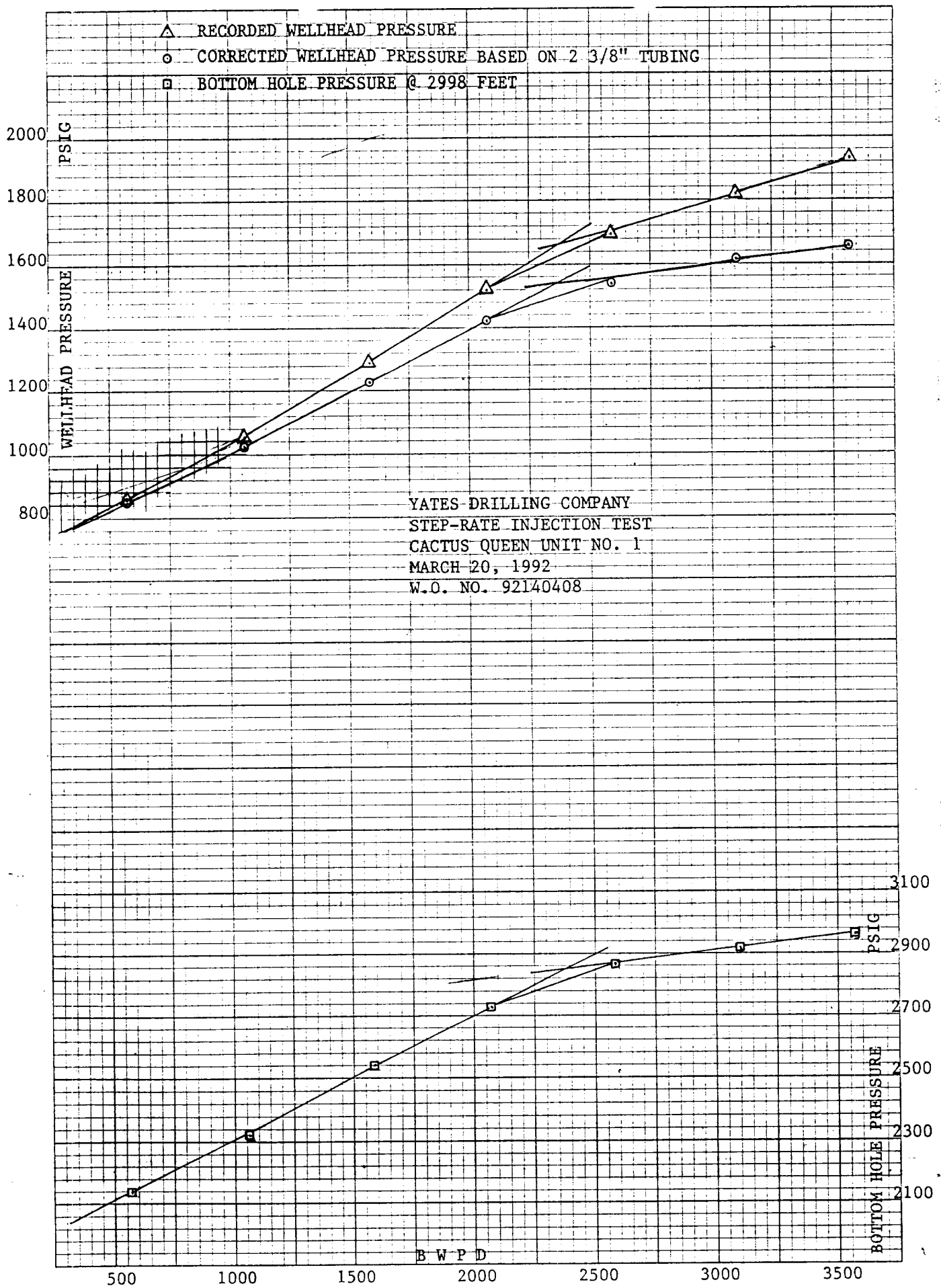
SIGNATURE John West TITLE Petroleum Engineer DATE 4-1-92

TYPE OR PRINT NAME: TELEPHONE NO.

(This space for State Use)

APPROVED BY: TITLE: DATE:

CONDITIONS OF APPROVAL, IF ANY:



JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: Yates Drilling Company

DATE: March 20, 1982

WELL NAME: Cactus Queen Unit 1
Chaves County, New Mexico

WO#: 92140408

PERFS = 2992 - 3000

PACKER DEPTH =

BHP GAUGE DEPTH = 2995 (MID-PERFS.)

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMMULATIVE VOL. INJECTED (bbbls)	(3) INJECTION RATE (bbbls/day)	(4) FRICTION HEAD LOSS (psi)	(5) CORRECTED TUBING PRESS. (psi) (1)-(4)	(6) INJECTION RATE (gpm) (2)/34.2857	(7) MEASURED BHP (psi)
1	7:35	714.7				714.7		2012
	7:40	775.5	2.1	604.8	10.201	765.3	17.64	2066
	7:45	816.1	4.0	547.2	8.477	807.6	15.96	2105
	7:50	846.6	5.9	547.2	8.477	838.1	15.96	2140
				566.4				
2	7:55	931.1	9.6	1065.6	29.089	902.0	31.08	2214
	8:00	984.5	13.3	1065.6	29.089	955.4	31.08	2273
	8:05	1051.7	16.9	1036.8	27.651	1024.0	30.24	2321
3				1056.0				
	8:10	1161.9	22.4	1584.0	60.565	1101.3	46.20	2412
	8:15	1230.3	27.9	1584.0	60.565	1169.7	46.20	2481
	8:20	1289.9	33.4	1584.0	60.565	1229.3	46.20	2540
4				1584.0				
	8:25	1406.4	40.6	2073.6	99.682	1306.7	60.48	2623
	8:30	1468.5	47.8	2073.6	99.682	1368.8	60.48	2683
	8:35	1520.4	55.0	2073.6	99.682	1420.7	60.48	2734
5				2073.6				
	8:40	1638.2	63.9	2563.2	147.545	1490.7	74.76	2802
	8:45	1676.2	72.9	2592.0	150.626	1525.6	75.60	2839
	8:50	1695.3	81.9	2592.0	150.626	1544.7	75.60	2863
6				2592.0				
	8:55	1794.1	92.7	3110.4	211.051	1583.0	90.72	2895
	9:00	1804.3	103.5	3110.4	211.051	1593.2	90.72	2908
	9:05	1812.0	114.2	3081.6	207.450	1604.6	89.88	2916
7				3100.8				
	9:10	1909.5	126.5	3542.4	268.458	1641.0	103.32	2945
	9:15	1922.2	139.0	3600.0	276.590	1645.6	105.00	2959
	9:20	1929.9	151.4	3571.2	272.510	1657.4	104.16	2967
				3571.2				

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