

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505



OIL CONSERVATION DIVISION



February 8, 1995

Texaco Exploration and Production, Inc.
P. O. Box 730
Hobbs, New Mexico 88241-0730

Attention: Terry L. Frazier

**RE: Injection Pressure Increase
 Vacuum Grayburg San Andres Unit
 Pressure Maintenance Project
 Lea County, New Mexico**

Dear Mr. Frazier:

Reference is made to your request dated January 12, 1995, to increase the surface injection pressure on three wells within the Vacuum Grayburg San Andres Unit Pressure Maintenance Project. This request is based on step rate tests conducted on these wells during November, 1995. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

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

Well and Location	Maximum Injection Surface Pressure
VGSAU No. 148 Unit D, Section 1, Township 18 South, Range 34 East, NMPM;	1650 PSIG
VGSAU No. 149 Unit C, Section 1, Township 18 South, Range 34 East, NMPM;	1845 PSIG

VILLAGRA BUILDING - 408 Galisteo
Forestry and Resources Conservation Division
P.O. Box 1948 87504-1948
827-5830
Park and Recreation Division
P.O. Box 1147 87504-1147
827-7465

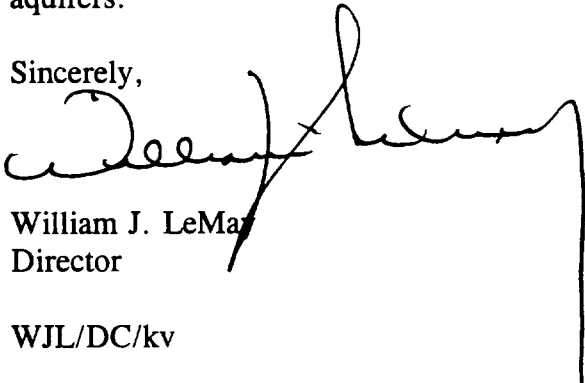
2040 South Pacheco
Office of the Secretary
827-5950
Administrative Services
827-5925
Energy Conservation & Management
827-5900
Mining and Minerals
827-5970
Oil Conservation
827-7131

*Injection Pressure Increase
Texaco Exploration and Production, Inc.
February 8, 1995
Page 2*

Well and Location	Maximum Injection Surface Pressure
VGSAU No. 150 Unit G, Section 1, Township 18 South, Range 34 East, NMPM.	1610 PSIG
All wells located in Lea County, New Mexico.	

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/kv

cc: Oil Conservation Division - Hobbs
File: PMX-167
R. Brown
D. Catanach



JIM BACA
COMMISSIONER

State of New Mexico
OFFICE OF THE
Commissioner of Public Lands
Santa Fe

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

February 21, 1992

Texaco, USA
P. O. Box 730
Hobbs, New Mexico 88240

Attn: Mr. J. A. Head

PMK-167

Re: Vacuum Grayburg San Andres Unit
Application for Authorization to Inject
VGSAU Well Nos. 148, 149 & 150
Sec. 1-18S-34E, Lea County, New Mexico

Dear Mr. Head:

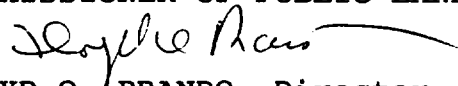
This office is in receipt of your letter of notice dated January 21, 1992. Your letter advises that you have applied to the New Mexico Oil Conservation Division to convert the above captioned wells to water injection for expansion of your pressure maintenance project within the Vacuum Grayburg San Andres Unit.

Please be advised that the Commissioner of Public Lands has no objections to your proposed request.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

JIM BACA
COMMISSIONER OF PUBLIC LANDS

BY: 
FLOYD O. PRANDO, Director
Oil/Gas and Minerals Division
(505) 827-5744
JB/FOP/pm
encls.

cc: Reader File
OCD-Santa Fe

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies
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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

FILE

Form C-105
Revised 1-1-89

WELL AP NO. 30-025-30799
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEB <input type="checkbox"/>
6. State Oil & Gas Lease No. 857948
7. Lease Name or Unit Agreement Name VACUUM GRAYBURG SAN ANDRES UNIT
8. Well No. 148
9. Pool name or Wildcat VACUUM GRAYBURG SAN ANDRES

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____	7. Lease Name or Unit Agreement Name VACUUM GRAYBURG SAN ANDRES UNIT			
b. Type of Completion: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR <input type="checkbox"/> OTHER _____				
2. Name of Operator TEXACO PRODUCING INC.	8. Well No. 148			
3. Address of Operator P. O. Box 3109, Midland, Texas 79702	9. Pool name or Wildcat VACUUM GRAYBURG SAN ANDRES			
4. Well Location Unit Letter <u>D</u> : <u>1330</u> Feet From The <u>NORTH</u> Line and <u>660</u> Feet From The <u>WEST</u> Line Section <u>1</u> Township <u>18-S</u> Range <u>34-E</u> NMPM LEA County				
10. Date Spudded 05-14-90	11. Date T.D. Reached 05-20-90	12. Date Compl. (Ready to Prod.) 06-23-90	13. Elevations (DF& RKB, RT, GR, etc.) GR-3997, KB-4010	14. Elev. Casinghead 3997'
15. Total Depth 5000'	16. Plug Back T.D. 4728'	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By Rotary Tools 0-5000'	Cable Tools
19. Producing Interval(s), of this completion - Top, Bottom, Name 4320'-4690'; GRAYBURG-SAN ANDRES				20. Was Directional Survey Made YES
21. Type Electric and Other Logs Run GR-DLL-MSFL, GR-CNL-ZDL-CAL				22. Was Well Cored NO

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8	36#	1553'	12 1/4	CL-H 1000 SX CIR. 218 SX	
7	26#	5000'	8 3/4	CL-H 1050 SX CIR. 120 SX	

24. LINER RECORD				25. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 7/8	4628'	

26. Perforation record (interval, size, and number) 4320-4332, 4336-4341, 4352-4356, 4360-4364, 4372-4378, 4397-4404, 4408-4416, 4446-4460, 2 JSPF, 120 HOLES. 4497-4510, 4524-30, 4539-46, 4592-4615, 4674-90, 2 JSPF, 130 HOLES.	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL 4320'-4460' 4497'-4690' AMOUNT AND KIND MATERIAL USED ACID-5000 GALS., 15% NEFE ACID-4900 GALS., 15% NEFE
--	--

28. PRODUCTION							
Date First Production 05-30-90		Production Method (Flowing, gas lift, pumping - Size and type pump) 4 IN. SUB-PUMP				Well Status (Prod. or Shut-in) PROD.	
Date of Test 06-30-90	Hours Tested 24	Choke Size	Prod'n For Test Period	Oil - Bbl. 19	Gas - MCF 58	Water - Bbl. 468	Gas - Oil Ratio 3052.6
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.) 36.8	

29. Disposition of Gas (Sold, used for fuel, vented, etc.) SOLD	Test Witnessed By KIRBY LOCKLAR
--	------------------------------------

30. List Attachments
DEVIATION SURVEY

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature C.P. Basham Printed Name C.P. BASHAM Title DRLG. SUPT. Date 07-17-90

Send to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

WELL FILE

PDH

Form C-105
Revised 1-1-89

WELL API NO. 30-025-30847
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. 857948

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/>	7. Lease Name or Unit Agreement Name VACUUM GRAYBURG SAN ANDRES UNIT
b. Type of Completion: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DEEP RESER. <input type="checkbox"/> OTHER <input type="checkbox"/>	
2. Name of Operator TEXACO PRODUCING INC.	8. Well No. 149
3. Address of Operator P. O. Box 3109, Midland, Texas 79702	9. Pool name or Wildcat VACUUM GRAYBURG SAN ANDRES

4. Well Location Unit Letter C : 1330 Feet From The NORTH Line and 1980 Feet From The WEST Line Section 1 Township 18-SOUTH Range 34-EAST NMPM LEA County

10. Date Spudded 09-21-90	11. Date T.D. Reached 10-01-90	12. Date Compl. (Ready to Prod.) 10-18-90	13. Elevations (DF & RKB, RT, GR, etc.) GR-3993, KB-4006	14. Elev. Casinghead 3993'
15. Total Depth 5000'	16. Plug Back T.D. 4810'	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By Rotary Tools 0-5000'	Cable Tools
19. Producing Interval(s), of this completion - Top, Bottom, Name 4132' - 4590'; GRAYBURG-SAN ANDRES				20. Was Directional Survey Made YES
21. Type Electric and Other Logs Run GR-DLL-MSFL, GR-CNL-LDT				22. Was Well Cored NO

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	48 & 64.5#	1550'	17 1/2	CL-H 1700 SX, CIR. 200 SX	
9 5/8	36#	2800'	12 1/4	CL-H 1670 SX, CIR. 245 SX	
				D.V. TOOL @ 1581'	
7	26#	5000'	8 3/4	CL-H 950 SX, CIR. 135 SX	

LINER RECORD				TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET
					2 7/8	4708'

26. Perforation record (interval, size, and number) 4132-40, 4216-20, 4226-34, 4247-58, 2 JSPF, 62 HOLES. 4292-4304, 4360-64, 4376-81, 4411-24, 2 JSPF, 68 HOLES. 4454-68, 4502-07, 4581-90, 2 JSPF, 56 HOLES.	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 4132'-4258' ACID-4300 GALS, 15% NEFE 4292'-4424' ACID-4300 GALS, 15% NEFE 4454'-4590' ACID-4300 GALS, 15% NEFE
---	---

28. PRODUCTION Date First Production 10-11-90		Production Method (Flowing, gas lift, pumping - Size and type pump) 4 IN. SUB-PUMP		Well Status (Prod. or Shut-in) PROD.			
Date of Test 10-24-90	Hours Tested 24	Choke Size	Prod'n For Test Period	Oil - Bbl. 27	Gas - MCF 15	Water - Bbl. 862	Gas - Oil Ratio 1555.6
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.) 39	

29. Disposition of Gas (Sold, used for fuel, vented, etc.) SOLD	Test Witnessed By BRUCE WARD
30. List Attachments DEVIATION SURVEY	Received NOV 1990 Texas Area

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature C.P. Basham Printed Name C.P. BASHAM Title DRLG. SUPT. Date 11-06-90

Submit to Appropriate District Office
Surface Lease - 6 copies
Fee Lease - 5 copies
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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

WELL FILE

Form C-105
Revised 1-1-89

WELL API NO.

30-025-30917

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

857948

7. Lease Name or Unit Agreement Name

VACUUM GRAYBURG SAN ANDRES UNIT

8. Well No.

150

9. Pool name or Wildcat

VACUUM GRAYBURG SAN ANDRES

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:

OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐

b. Type of Completion:

NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DEEP RESER ☐ OTHER ☐

2. Name of Operator

TEXACO PRODUCING INC.

3. Address of Operator

P. O. Box 3109, Midland, Texas 79702

4. Well Location

Unit Letter G : 1390 Feet From The NORTH Line and 1980 Feet From The EAST Line

Section 1 Township 18-S Range 34-E NMPM LEA County

10. Date Spudded

08-03-90

11. Date T.D. Reached

08-17-90

12. Date Compl. (Ready to Prod.)

08-30-90

13. Elevations (DF& RKB, RT, GR, etc.)

GR-3991, KB-4004

14. Elev. Casinghead

3991'

15. Total Depth

5000'

16. Plug Back T.D.

4798'

17. If Multiple Compl. How Many Zones?

18. Intervals Drilled By

Rotary Tools

Cable Tools

0-5000'

19. Producing Interval(s), of this completion - Top, Bottom, Name

4137' - 4682'; GRAYBURG-SAN ANDRES

20. Was Directional Survey Made

YES

21. Type Electric and Other Logs Run

GR-DLL-MSFL, GR-ZDL-CNL-CAL

22. Was Well Cored

NO

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	54.5, 48#	1550'	17 1/2	CL-H 1700 SX-CIR. 250 SX	
9 5/8	36#	2800'	12 1/4	CL-H 1570 SX-CIR. 270 SX	
				-D.V. TOOL @ 1597'	
7	26#	5000'	8 3/4	CL-H 850 SX-CIR. 36 SX	

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 7/8	4676'	

25. TUBING RECORD

26. Perforation record (interval, size, and number)

4137-4254, 2 JSPF, 64 HOLES. 4289-4462, 2 JSPF, 98 HOLES. 4479-4682, 2 JSPF, 116 HOLES. * SEE ATTACHED SUNDRY FOR DETAIL.

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
4137' - 4254'	ACID - 4100 GAL, 15% NEFE
4289' - 4462'	ACID - 5200 GAL, 15% NEFE
4479' - 4682'	ACID - 7000 GAL, 15% NEFE

28. PRODUCTION

Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
08-29-90		SUB-PUMP				PROD.	
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
09-06-90	24			24	2324	671	1333.3
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)	
						32	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

SOLD

Test Witnessed By

MIKE LOVE

30. List Attachments

DEVIATION SURVEY

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature

C.P. Basham / JCH

Printed Name

C.P. BASHAM

Title DRLG. SUPT.

Date 09-17-90