DISTRICT 1
P. O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
811 South First St., Artesia, NM 88210-2835

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410-1693

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107-A
New 3-12-96

APPROVAL PROCESS:
___ Administrative X Hearing

EXISTING WELLBORE
X YES ___ NO

Enron Oil & Gas Company	P. O. Box 2267, Midland, TX 79702		
Operator	Address		
Sand Tank "6" Federal	No. 1	G-6-18S-30E	Eddy
Lease	Well No.	Unit Ltr. - Sec - Twp - Rge	County

OGRID NO. 7377 Property Code 18967 API NO. 30-015-28983 Spacing Unit Lease Types: (check 1 or more) Federal X , State ___ , (and/or) Fee ___

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Sand Tank (Atoka)		Sand Tank (Morrow) 84872
2. Top and Bottom of Pay Section (Perforations)	10,763'-788'		11,334'-344'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	(Current) a. 1,300	a.	a. 2,500 SI; 1,000 flowing
	(Original) b. 4,300	b.	b. 4,489
6. Oil Gravity (°API) or Gas BTU Content	1,217		1,144
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	Yes		Expected to be
* If Shut-In, give data and oil/gas/ water rates of last production	Date:	Date:	Date:

BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico

Case No. 11748 Exhibit No. 4

Submitted by: Enron Oil & Gas Company

Hearing Date: May 15, 1997

ENRON OIL & GAS COMPANY

APPLICATION FOR DOWNHOLE COMMINGLING
SAND TANK "6" FEDERAL NO. 1

RULE 303.D STATEMENTS

7(b). The Atoka sand is nearly depleted with only 29 MMCFG remaining. The Morrow production has been declining at a high rate due to a high water cut and requires gas lift to maximize recovery of reserves. Downhole commingling of the production streams has caused the Atoka gas to lift the Morrow. EOG plans to begin gas injection down the casing annulus within 2 to 3 months.

Downhole commingling authority will allow EOG to use the existing wellbore mechanical set up to recover approximately another 0.5 BCFG

9. The allocation formula will vary according to operating conditions and will be reviewed with the District Supervisor for approval or as the Division so chooses.

5/13/97
m:\cate\kp120rc6.doc

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
		Sand Tank Strawn/Morrow

4 Property Code	5 Property Name	6 Well Number
	SAND TANK "6" FEDERAL	1

7 OGRID No.	8 Operator Name	9 Elevation
7377	ENRON OIL & GAS COMPANY	3554'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	6	18-S	30-E		1980	NORTH	1650	EAST	EDDY

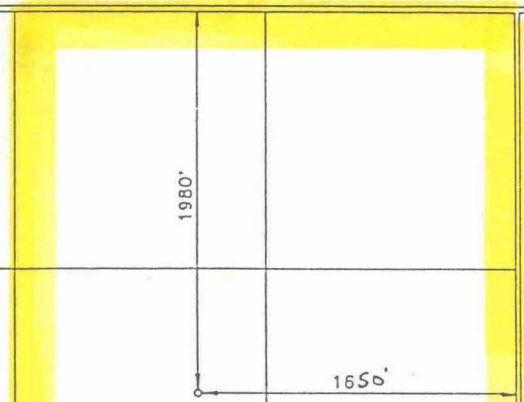
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
320 E½			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



17 OPERATOR CERTIFICATION

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

Signature

Betty Gildon
Printed Name

Regulatory Analyst
Title

1/30/96
Date

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to best of my belief.

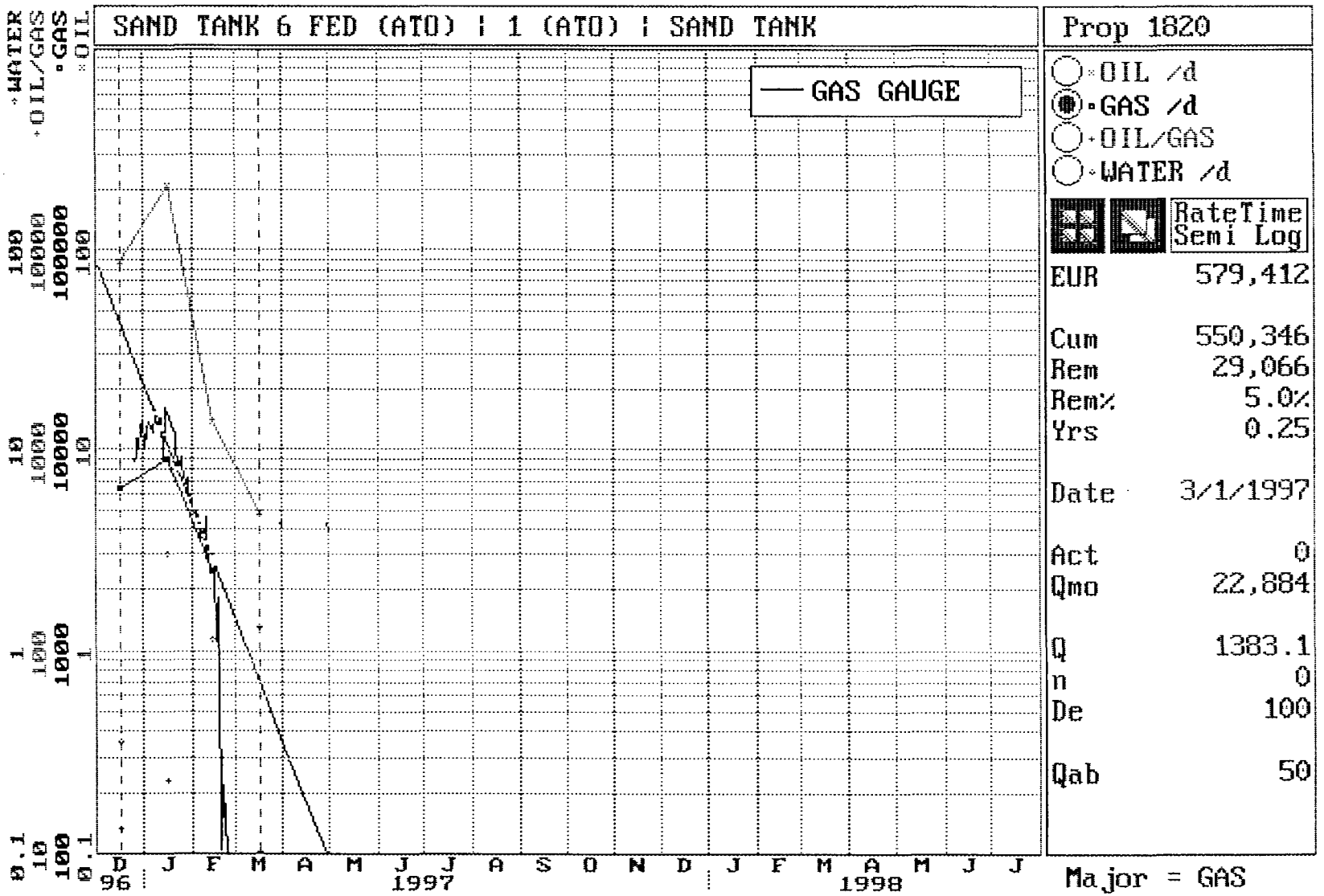
JANUARY 15, 1996
Date of Survey

Signature and Seal of Professional Surveyor:

EARL FOOTE
NEW MEXICO
8278
REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate Number 8278


SAND TANK 6 FED ¦ 1 (MOR) ¦ SAND TANK
GAS GAUGE
WATER
OIL/GAS
GAS
OIL
1000000
100000
10000
1000
100
10
1
0.1
S O N D J F M A M J J A S O N D J F M A
1996
1997
1998
Prop 1811
OIL /d
GAS /d
OIL/GAS
WATER /d
RateTime
Semi Log
EUR 654,537
Cum 481,139
Rem 173,398
Rem% 26.5%
Yrs 1.33
Date 3/1/1997
Act 32,940
Qmo 36,241
Q 1302.1
n 0
De 92.464
Qab 50
Major = GAS

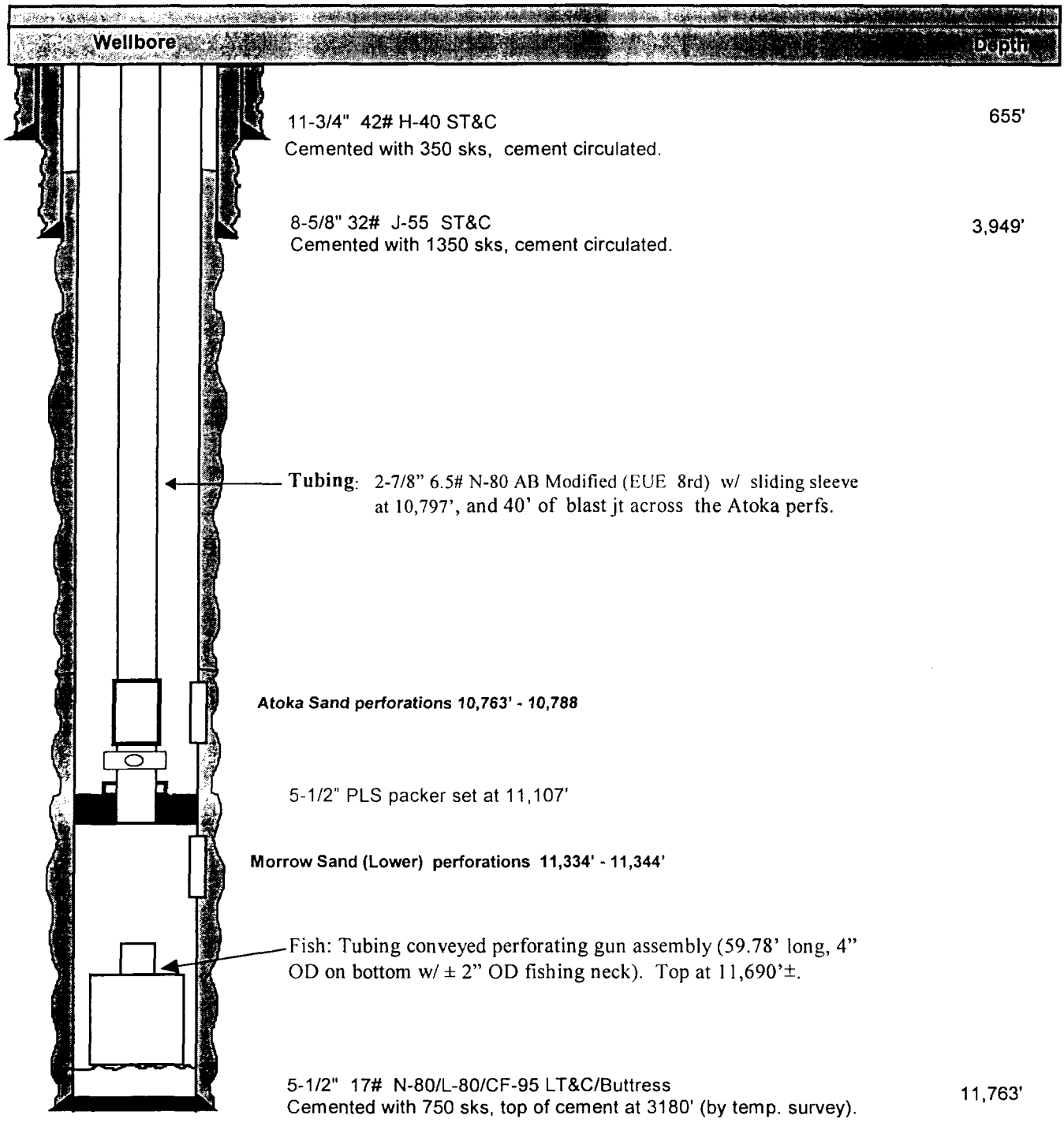

SAND TANK 6 FED (ATO) | 1 (ATO) | SAND TANK
GAS GAUGE
WATER
OIL/GAS
GAS
OIL
100
100000
100000
10
10000
10000
1
1000
1000
0.1
10
100
D J F M A M J J A S O N D J F M A M J J
96
1997
1998
Prop 1820
OIL /d
GAS /d
OIL/GAS
WATER /d
RateTime
Semi Log
EUR 579,412
Cum 550,346
Rem 29,066
Rem% 5.0%
Yrs 0.25
Date 3/1/1997
Act 0
Qmo 22,884
Q 1383.1
n 0
De 100
Qab 50
Major = GAS

ENRON OIL & GAS COMPANY

SAND TANK "6" FED COM NO. 1

EDDY COUNTY, NEW MEXICO
DECEMBER 29, 1996

WELL SCHEMATIC



P. O. BOX 1468
MONAHANS, TEXAS 79756
PH 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

LABORATORY NO. 197203
SAMPLE RECEIVED 1-31-97
RESULTS REPORTED 1-31-97

TO Mr. Jerry Ball
P. O. Box 2267, Midland, TX 79702

COMPANY Enron Oil & Gas Company LEASE Sand Tank #6-1
FIELD OR POOL
SECTION BLOCK SURVEY COUNTY Eddy STATE NM
SOURCE OF SAMPLE AND DATE TAKEN:
NO. 1 Produced (Atoka) water - taken from Sand Tank #6-1.
NO. 2 Produced (Morrow) water - taken from Sand Tank #6-1.
NO. 3
NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F	1.0040	1.0247		
pH When Sampled				
pH When Received	6.24	6.65		
Bicarbonate as HCO_3	329	891		
Supersaturation as $CaCO_3$	0	120		
Undersaturation as $CaCO_3$	--	--		
Total Hardness as $CaCO_3$	170	2,450		
Calcium as Ca	48	760		
Magnesium as Mg	12	134		
Sodium and/or Potassium	1,293	12,278		
Sulfate as SO_4	104	366		
Chloride as Cl	1,846	19,880		
Iron as Fe	137	32.8		
Barium as Ba	0			
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	3,632	34,308		
Temperature °F				
Carbon Dioxide, Calculated	361	365		
Dissolved Oxygen				
Hydrogen Sulfide	0.0	0.0		
Resistivity, ohms/m at 77° F	1.61	0.232		
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks: The objective herein is to evaluate compatibility between these two waters. A careful study has revealed no evidence of any potential scaling or precipitation that would be expected to result from mixing these waters in any proportions; therefore, we clearly consider them compatible.

Form No. 3

By Waylan C. Martin, M.A.