

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OFFICE FOR NUMBER  
OF COPIES REC'D  
(Other Instructions on reverse side)

Modified Form No.  
NM60-3160-4

C/S

SUNDRY NOTICES AND REPORTS ON WELLS RECEIVED

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		NOV 19 '90	
2. NAME OF OPERATOR Union Texas Petroleum Corp.		3a. Area Code & Phone No. 713/968-3654	
3. ADDRESS OF OPERATOR P. O. Box 2120, Houston, Tx 77252-2120		ARTESIA, OFFICE	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 660' FSL & 1980' FEL		5. LEASE DESIGNATION AND SERIAL NO. NM 0 334702	
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
		7. UNIT AGREEMENT NAME	
		8. FARM OR LEASE NAME Federal 5	
		9. WELL NO. 4	
		10. FIELD AND POOL, OR WILDCAT N. Shugart Bone Spring	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 5 - 18S - 31E	
14. PERMIT NO.		15. ELEVATIONS (Show whether DF, RT, GR, etc.) 3710' GR	12. COUNTY OR PARISH Eddy
			13. STATE NM

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input checked="" type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	(Other)	<input type="checkbox"/>
(Other)	<input type="checkbox"/>	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	<input type="checkbox"/>

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) \*

EWO procedure attached.

RECEIVED  
NOV 8 11 33 AM '90  
CAB AREA  
FOR

18. I hereby certify that the foregoing is true and correct

SIGNED <u>[Signature]</u>	TITLE <u>Regulatory Permit Coord</u>	DATE <u>11/2/90</u>
(This space for Federal or State office use)		
APPROVED BY <u>[Signature]</u>	TITLE <u>PERMITTING OFFICER</u>	DATE <u>11-16-90</u>
CONDITIONS OF APPROVAL, IF ANY:		

\*See Instructions on Reverse Side

# FEDERAL NO. 4

## TEST "E" CARBONATE ZONE 7645' - 7723'

### Well Data:

Casing: 0' - 2418' 5-1/2" 17# K-55  
2418' - 8695' 5-1/2" 17# L-80

Tubing: 8503' 2-7/8" 6.5# J-55  
MA - 8537'?  
SN at 8506'  
TAC at 7686'

Rods: 2225' 1" Axelson S-87  
2375' 7/8" Axelson S-87  
3825' 3/4" Axelson S-87  
2-1/2" x 1-1/2" x 24' RHBC Pump

1. Hot oil well the day prior to rigging up to remove paraffin.
2. MIRUSU. Unseat pump. Hot oil down tubing to remove paraffin. POH with rods and pump.
3. Release TAC at 7686', install BOP's and POH with tubing.
4. Pick up 4-3/4" bit and casing scraper and TIH with tubing to 8500'. POH with tubing.
5. Rig up wireline company. Perforate the Bone Spring "E" Carbonate utilizing a 4' hollow steel carrier with 1 JSPF (180° Phasing) as shown below. Use packoff when perforating. Correlate to corrected collars prior to perforating. Collars were lowered 3' to get on depth with Welex Density-Neutron Log dated 12/16/87.

7645' - 60	(16 holes)
7680' - 84'	( 5 holes)
7718' - 23'	( 6 holes)
TOTAL	(27 holes)

### Corrected Collars

7383'	7541'	7711'+
7421'	7584'	7747'
7462'	7621'+	7793'
7503'	7666'	7836'

6. TIH with RBP and treating packer testing tubing to 5000 psi. Set RBP at  $\pm 7775'$ . Set packer at  $\pm 7770'$ . Load hole with 2% KCl and test RBP to 1000 psi. Pull up hole to 7723'.
7. Rig up stimulation company. Spot 100 gallons of 15% NEFE HCl\* from 7723' to  $\pm 7623'$ . Pull up hole to 7500' and set packer. Pressure annulus to 500 psi. Breakdown perforations and establish rate. Acidize "E" Carbonate perforations 7645'-7723' with 3300 gallons 15% NEFE HCl at a desired rate of 4 BPM at an expected pressure of 2800 psi. Drop 1 ball sealer every 2 barrels (38 total). If ball out occurs, hold pressure for 15 minutes, surge balls and continue treatment. Displace with 50 barrels of 2% KCl water. Maximum pressure is 4500 psi.
8. Shut-in well 15 minutes. Open well to flow back load.
9. Swab well to determine fluid entry. Call Midland Office with results. If instructed. proceed to Supplementary 7500 gallon Foamed Acid Job Procedure (Attached).
10. Release packer and TIH to 7775'. Release RBP and POH. Lay down RBP and packer.
11. TIH with mud anchor, perforated nipple, seating nipple, 30 jts 2-7/8" tubing, TAC and remainder of 2-7/8" tubing (SN at 8506', TAC at  $\pm 7600'$ ). Remove BOP and set TAC.
12. Rerun pump and rods (as shown above). HWO. RDMOSU.

\* ACID ADDITIVES

3400 Gallons 15% NEFE HCl

1 gpt Corrosion Inhibitor  
1 gpt Non-Ionic Non Emulsifier  
10 gpt Citric Acid

(Attachment)

### SUPPLEMENTARY PROCEDURE

#### 7500 GALLON FOAMED ACID JOB

1. Acidize Bone Spring "E" Carbonate from 7645' - 7723' with 7500 gallons 15% NEFE HCl acid foamed to 65 quality with 2500 scf/bbl of N2 as follows:
  - A. Pressure annulus to 1000 psi.
  - B. Pump 7500 gallons of acid foamed to 65 quality with N2 at 7 BPM (total rate) at an estimated surface pressure of 4000 psi. Do Not Exceed 4500 psi. Drop 1 ball sealer every 9 barrels (20 total).
  - C. Flush with 50 barrels 2% KCl containing 800 scf/bbl.
  - D. Shut-in well 1 hr.
  - E. Flow and swab back load to determine entry.
  - F. Proceed to Step 10 of original procedure.

<u>TOTAL RATE</u> <u>BPM</u>	<u>LIQUID RATE</u> <u>BPM</u>	<u>N2 RATE</u> <u>SCF/MIN</u>
5.0	1.75	4375
5.5	1.93	4813
6.0	2.10	5250
6.5	2.28	5688
7.0	2.45	6125

#### ACID ADDITIVES

##### 7500 Gallons 15% NEFE HCl

1 gpt Corrosion Inhibitor  
1 gpt Non-Ionic Emulsifier  
10 gpt Citric Acid  
5 gpt Foaming Agent  
2 gpt Friction Reducer  
2500 scf/bbl Nitrogen

##### Flush 2% KCl

1 gpt Friction Reducer  
800 scf/bbl Nitrogen

# UNION TEXAS PETROLEUM

FIELD: NORTH SHUGART

LEASE: FEDERAL WELL NO. 4

DATE: 3/12/90 SPUDDED:        COMP. 1-17-88

ELEV: KB 3727 GL 3710

LOCATION: Unit Letter O 660' FSL to 1930' FEL

SECTION 5, T-18-S, R-31-E

EDDY COUNTY New Mexico

13 3/8 "        \* CSG. at        W/        SX.         
       " HOLE TOC       

8 5/8 "        \* CSG at 2498 W/        SX.       

12 1/4 " HOLE TOC       

E CARBONATE PERFS 7645-60 16 holes  
 7680-84 6 holes  
 7718-23 6 holes

BONE SPRING Upper D SAND PERFS  
 7820, 30, 40, 50, 55, 61, 69, 75, 80, 85, 90, 7900

BONE SPRING Lower D SAND PERFS  
 8155, 65, 75, 85, 99, 8210, 20, 25, 30, 60, 70, 80, 90  
 8322, 25, 58, 80, 90, 8400, 10, 45, 56, 80, 90

5 1/2 " 17 \* CSG. at 8695 W/ 1550 SX.         
7 7/8 " HOLE TOC 2750' TOC

TD 8695'  
 PBTD 8625'