

ORIGINAL

CONFIDENTIAL RELEASED

SIDE ONE

STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
ACO-1 WELL HISTORY  
DESCRIPTION OF WELL AND LEASE

API NO. 15- 007-22,293-00-00 APR 3 0 1991

County Barber FROM CONFIDENTIAL  
C E/2 NW SW Sec. 4 Twp. 34 Rge. 13  East  
West

Operator: License # 5171

1980 Ft. North from Southeast Corner of Section

Name: TXO Production Corp.

4290 Ft. West from Southeast Corner of Section

Address 1660 Lincoln Street

(NOTE: Locate well in section plat below.)

Suite 1800

Lease Name Falen Well # 2

City/State/Zip Denver, CO 80246

Field Name Aetna

Purchaser: Kansas Natural

Producing Formation Mississippian

Operator Contact Person: Cory West

Elevation: Ground 1861' KB 1869'

Phone (303) 861-4246

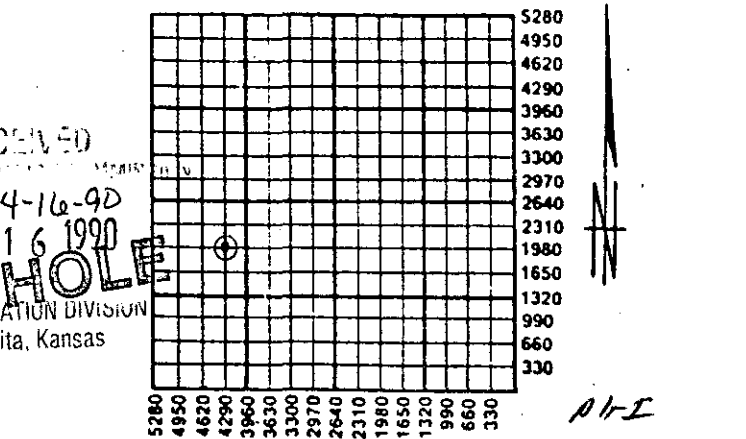
Total Depth 5100' PBDT 5064'

Contractor: Name: Lobo Drilling Company

License: 5864

Wellsite Geologist: Ken LeBlanc

Designate Type of Completion  
 New Well  Re-Entry  Workover  
 Oil  SWD  Temp. Abdn  
 Gas  Inj  Delayed Completion  
 Dry  Other (Core, Water Supply, etc.)



Amount of Surface Pipe Set and Cemented at 370 Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from \_\_\_\_\_

feet depth to \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

If OWM: old well info as follows:  
Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Comp. Date \_\_\_\_\_ Old Total Depth \_\_\_\_\_

Drilling Method:  
 Mud Rotary  Air Rotary  Cable

2-20-90 3-1-90 3-22-90  
Spud Date Date Reached TD Completion Date

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months. One copy of all wireline logs and drillers time log shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature [Signature]

Title Drilling & Production Engineer Date \_\_\_\_\_

Subscribed and sworn to before me this 11 day of April, 19 90

Notary Public [Signature]

Date Commission Expires 11-03-92

K.C.C. OFFICE USE ONLY  
F  Letter of Confidentiality Attached  
C  Wireline Log Received  
C  Drillers Timelog Received  
Distribution  
 KCC  SWD/Rep  NGPA  
 KGS  Plug  Other  
(Specify)

CONSERVATION DIVISION  
Wichita, Kansas

**SIDE TWO**

Operator Name TXO Production Corporation Lease Name Falen Well # 2  
 Sec. 4 Twp. 34 Rge. 14  East  West  
 County Barber

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

**RELEASED**

Drill Stem Tests Taken  Yes  No  
 (Attach Additional Sheets.)  
 Samples Sent to Geological Survey  Yes  No  
 Cores Taken  Yes  No  
 Electric Log Run  Yes  No  
 (Submit Copy.)

**Formation Description**

Log  Sample

APR 30 1991

**FROM CONFIDENTIAL**

Name	Top	Bottom
Kanwaka Sh	3934'	2065'
Heebner	4136'	2267'
LKC	4306'	2437'
Swope	4722'	2853'
Miss	4877'	3008'

**CASING RECORD**  New  Used  
 Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12 1/4"	8-5/8"	24#	370'	Lite	200	2% gel 3% cc
Production	7-7/8"	4 1/2"	11.6#	5099'	Class "H" Thixotropic	75 150	

Shots Per Foot	PERFORATION RECORD Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
	Holes @ 4900, 01, 02, 05, 17	Acidized w/ 1800 gals 15% HCL	
	19, 73, 75, 77, 83, 85, 87, 93		

**TUBING RECORD** Size 2-3/8" Set At 4824' Packer At - Liner Run  Yes  No

Date of First Production \_\_\_\_\_ Producing Method  Flowing  Pumping  Gas Lift  Other (Explain) \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
Approx.	-	1000	3		

Disposition of Gas:  Vented  Sold  Used on Lease (If vented, submit ACO-18.)

**METHOD OF COMPLETION**  Open Hole  Perforation  Dually Completed  Commingled  Other (Specify) \_\_\_\_\_

Production Interval \_\_\_\_\_



P.O. Box 4442  
Houston, Tx. 77210

DISTRICT COPY

**CONFIDENTIAL**

**SERVICE OPERATIONS CONTRACT**  
TERMS NET 30 DAYS FROM DATE OF CONTRACT

REMIT TO: P.O. Box 100806, Houston, Tx. 77212

DATE: 3-1-90  
SERVICE CONTRACT NO. 610601

CUSTOMER ACCOUNT NO.	DIST. NAME MED. LOOSE	NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/>	WELL TYPE G	JOB NUMBER 500220
CUSTOMER TKO PRODUCTION CO. INC.	DIST. NUMBER 3350	WELL NO. 2	LEASE NAME & FEDERAL OFFSHORE LEASE NO. TALON	
ADDRESS P.O. Box 125 E	COUNTY BARBER	CODE C07	STATE KS	CODE 14
CITY MEDICINE LOOSE	STATE KANSAS	ZIP 67104	FIELD NAME	CITY CODE
AUTHORIZED BY: FRANK FEANNEN 97EL	ORDER NO.	WELL OWNER TKO TRU. CO. INC.	MTA CODE	

STAGE NO.	JOB CODE 0106	WORKING DEPTH 5100 FT	PUMPING EQUIPMENT	TIME (A OR P) 6:30 P	DATE 03/01/90
TOTAL PREV. GALS.	1 SURFACE <input type="checkbox"/> 2 INTERMEDIATE <input type="checkbox"/> 3 PRODUCTION <input checked="" type="checkbox"/> 4 REMEDIAL <input type="checkbox"/>	TRUCK CALLED	ARRIVED AT JOB 2:00 P 03/01/90		
TOTAL MEAS. DEPTH	SIZE HOLE 7 7/8" DEPTH 5100 FT	START OPERATION	FINISH OPERATION 9:00 A 03/01/90		
FT.	SIZE & WT. CASING 4 1/2" 11.6# DEPTH 5100 FT	TIME RELEASED	SALESMAN NUMBER		
AVG. PSI. 1300	PACKER DEPTH	FLUID PUMBED	MILES FROM STATION TO WELL 37		

MAX. BPM 6	1492	APR 3 0 1991	206332	269332
S/S EMPLOYEE NUMBER 666454	FROM CONFIDENTIAL			

PRICE BOOK REF.	PART NO.	U/M	QTY.	PART NO.	U/M	QTY.	PART NO.	U/M	QTY.

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered)  
The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of BJ SERVICES.

PRICE BOOK 0.7  
SIGNED: [Signature]  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

PRICE BOOK REF. NO.	QUANTITY	DESCRIPTION	UNIT PRICE	U/M	PRICE EXTENSION
1011010330	1	5,000' - 7,000'	1075.00	F	1075.00
1011010335	1	TUB PER 100' FEET 2,000'	12.00	F	12.00
10110109005	36	MIXTURE RT	1.10	E	39.60
1041105104	150	CLASS A	5.30	Q	795.00
1043301030	8.46	A-10 STATE CORP.	14.60	U	123.52
1043301043	.5	A-9 APR 16 1990	22.00	U	11.00
1041150149	141	A-7	.32	L	45.12
104301145	1.41	EJ CONSERVATION Division Wichita, Kansas	6.75	U	9.52
1041150132	9.0	Koi Seal	33.00	U	297.00
104322005	33	MELLOLAKE	1.27	L	43.26

SERVICE REPRESENTATIVE: [Signature]  
THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: [Signature]  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

CHECK IF CONTINUATION IS USED

CUSTOMER: This is not an invoice - This Service Operations Contract is subject to review and correction by our Accounting Department.



SERVICE OPERATIONS CONTRACT CONTINUATION

ORIGINAL

CONTRACT NO. 610601

DATE OF JOB: 03 01 90 DISTRICT: MED LODGE DIST. NO. 3350 AUTHORIZED BY: FRANK FANNITTEL  
 CUSTOMER: TXC PRODUCTION CORP.

CONFIDENTIAL

PRICE BOOK 017

PRICE BOOK REF. NO.	QUANTITY	DESCRIPTION	UNIT PRICE	U/M	PRICE EXTENSION
103301001	150	MIXING SERVICE	.95	Q	142.50
109401115	145.3	DRAINAGE 8.1 X 13	.70	E	102.06
104096100	1	4 1/2" GUIDE SHOE - R	104.00	E	104.00
104096100	1	4 1/2" INSERT - R	161.00	E	161.00
104096100	1	4 1/2" STOP RING - R	16.00	E	16.00
104096100	6	4 1/2" CENTRALIZERS - A	41.75	E	250.50
104096100	7	4 1/2" BASKETS - R	120.00	E	840.00
10430503	1	4 1/2" TOP PLATE PLUG	40.00	E	40.00
		BOOK PRICE		#	3512.08
		LESS			622.17
		TOTAL		#	2379.94

RECEIVED  
 STATE CO. REP. I  
 APR 16 1990  
 CONSERVATION DIVISION  
 Wichita, Kansas

SERVICE REPRESENTATIVE: J. RANGKOT THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: [Signature]

CHECK IF CONTINUATION IS USED (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)  
 CUSTOMER: This is not an invoice - This Service Operations Contract is subject to review and correction by our Accounting Department.

# BJ-TITAN SERVICES

P.O. BOX 4442 HOUSTON, TX 77210

# CEMENTING LOG

**CONFIDENTIAL**  
STAGE NO.

**ORIGINAL**

Date 3-7-90 District MED. LOUIS Ticket No. 616601  
 Company TYC PROD. CORP. Rig 6020 #1  
 Lease FHLN Well No. 2  
 County TANER State KANSAS  
 Location 4-340-12 Field UNION HAREL, W. TO D.F., 1/5S, 1/5E, 1/4E

CASING DATA: PTA  Squeeze   
 Surface  Intermediate  Production  Liner   
 Size 4 1/2" Type HE Weight 11.6# Collar CTC

Casing Depths: Top KB Bottom 5100'  
348" 61-370'

Drill Pipe: Size \_\_\_\_\_ Weight \_\_\_\_\_ Collars \_\_\_\_\_  
 Open Hole: Size 7 7/8" T.D. 5100 ft. P.B. to \_\_\_\_\_ ft.

CAPACITY FACTORS:  
 Casing: Bbls/Lin. ft. .0155 Lin. ft./Bbl. 64.32  
 Open Holes: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Drill Pipe: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Annulus: Bbls/Lin. ft. .0406 Lin. ft./Bbl. 24.6474  
 Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Perforations: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Amt. \_\_\_\_\_

CEMENT DATA:  
 Spacer Type: 210 GAIS. 2% KCL WATER  
 Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

LEAD: Pump Time \_\_\_\_\_ hrs. Type \_\_\_\_\_  
 Excess \_\_\_\_\_

Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

TAIL: Pump Time \_\_\_\_\_ hrs. Type WIRE FILL  
6# KCL-SEAL, 1/4" FINE FLAKE Excess \_\_\_\_\_

Amt. 150 Sks Yield 1.44 ft<sup>3</sup>/sk Density 15.0 PPG

WATER: Lead \_\_\_\_\_ gals/sk Tail 6.2 gals/sk Total 22 Bbls.

Pump Trucks Used 1492 CARRY D.  
 Bulk Equip. 290 - 643 MAX L.

Floater Equip. Manufacturer FAKER  
 Shoe: Type CEMENT Depth 5100  
 Floater Type AFL Depth 5065  
 Centralizers: Quantity 6 Plugs Top ALLIANCE Btm. \_\_\_\_\_  
 Stage Collars \_\_\_\_\_  
 Special Equip. 2 BASKETS  
 Disp. Fluid Type FRESH H-2O Amt. 35 Bbls. Weight 3.50 PPG  
 Mud Type \_\_\_\_\_ Weight \_\_\_\_\_ PPG

COMPANY REPRESENTATIVE FRANK FANNENCIEL

CEMENTER KEVIN ERINGARDT

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min	
7:00						ON LOCATION 1500 LB JOB SAFETY THROUGHPUT
						RUN 4 1/2" CASING, LINEAR (3) ROTATING GOING IN HOLE
						ROTATE PUMPING WHILE CIRCULATING
8:50	200				5	HOOK UP TO CEMENT PUMP
	200		5	5	6	START KCL FLUSH
	300		43 1/2	33 1/2		KCL FLUSH IN - START CEMENT
						CEMENT IN - STOP PUMP
						CHANGE VALVES - FLUSH PUMP (2) IN
						CHANGE VALVES - RELEASE PLUG
	50				2	START INCREASING RATE
	100		45 1/2	2	6	INCREASING RATE
			30 1/2	3.5	6	KCL TURNS OFF
			8 1/2	5	3	CEMENT TURNS OFF - STOP PUMP
	700				3	GRADUAL PRESSURE INCREASE
	900		16 1/2	2.8	3	STOP ROTATING PUMP - STOP CEMENT
9:00	1200		12 1/2	1.6		STOP PUMP - ROTATE (LEAKING) / TRIGGER BLEED OFF 1" PLUG / RELEASE PRESSURE - HOLD FIELD
						WATER LEAKING THROUGH ROTATING PLUG TO SHELL OFF

FINAL DISP. PRESS: 900 PSI BUMP PLUG TO 1200 PSI BLEEDBACK 1 1/2 BBLs. **THANK YOU**

Form No. SR 0502 (Rev. 7/85)  
 Note: Must accompany job ticket.



P.O. Box 4442, Houston, Tx. 77210  
REMIT TO: P.O. Box 200416, Houston, Tx. 77216

ORIGINAL

DATE: 11/11/90 SERVICE CONTRACT NO. 551702

CUSTOMER ACCOUNT NO. DIST NUMBER NEW WELL OLD WELL WELL TYPE JOB NUMBER

CUSTOMER TXD ADDRESS K.A. 125 B CITY Medicine Lodge STATE Kas ZIP 67104

WELL NO. LEASE CODE STATE CODE FIELD NAME

AUTHORIZED BY Gerald Vetch ORDER NO. WELL OWNER

CONFIDENTIAL

STAGE NO. TYPE JOB WORKING DEPTH PUMPING EQUIPMENT TIME (A OR P) DATE

TOTAL PREV. GALS. SURFACE INTERMEDIATE PRODUCTION REMEDIAL TRUCK CALLED

TOTAL MEAS. DEPTH SIZE HOLE DEPTH START OPERATION

SIZE & WT. CASING DEPTH FINISH OPERATION

SIZE & WT. DRILL PIPE OR TUBING DEPTH TIME RELEASED

PACKER DEPTH FLUID PUMPED SALESMAN NUMBER

REVENUE EQUIPMENT (UNIT NUMBERS) EMPLOYEES ON JOB (EMPLOYEE NUMBER)

MAX. BPM 10497 850490 842901

S/S EMPLOYEE NUMBER 642757 878760

FROM CONFIDENTIAL

BLENDS L 7r CEMENT FRAC ACID SAND CONTROL

Table with columns: PRICE BOOK REF., PART NO., U/M, QTY., PART NO., U/M, QTY., PART NO., U/M, QTY.

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered)

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document.

PRICE BOOK 07 SIGNED: (Signature) (WELL OWNER, OPERATOR, CONTRACT OR AGENT)

Table with columns: PRICE BOOK REF. NO., QUANTITY, DESCRIPTION, UNIT PRICE, U/M, PRICE EXTENSION

SERVICE REPRESENTATIVE THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY:

CHECK IF CONTINUATION IS USED (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

CUSTOMER: This is not an invoice - This Service Operations Contract is subject to review and correction by our Accounting Department.



# BJ-TITAN SERVICES ORIGINAL CEMENTING LOG

P.O. BOX 4442 HOUSTON TX 77210

STAGE NO. \_\_\_\_\_

Date 2-21-90 District Medicine Lodge Ticket No. 551702  
 Company TXO Rig Lobo  
 Lease Falen Well No. 2  
 County Barber State KS  
 Location \_\_\_\_\_ Field \_\_\_\_\_

**CEMENT DATA:**

Spacer Type: \_\_\_\_\_ Amt. \_\_\_\_\_ Sk's Yield \_\_\_\_\_ **CONFIDENTIAL** ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG \_\_\_\_\_

CASING DATA\* PTA  Squeeze   
 Surface  Intermediate  Production  Liner   
 Size 8 7/8 Type \_\_\_\_\_ Weight 24 Collar \_\_\_\_\_

LEAD: Pump Time \_\_\_\_\_ hrs. Type L17 38CC  
 Excess \_\_\_\_\_

Amt 200 Sk's Yield 1.84 ft<sup>3</sup>/sk Density 12.8 PPG \_\_\_\_\_

TAIL Pump Time \_\_\_\_\_ hrs. Type CLASS 286cl  
38CC Excess \_\_\_\_\_

Amt 75 Sk's Yield 1.344 ft<sup>3</sup>/sk Density 15.1 PPG \_\_\_\_\_

WATER Lead \_\_\_\_\_ gals/sk Tail \_\_\_\_\_ gals/sk Total \_\_\_\_\_ Bbls \_\_\_\_\_

Casing Depths Top \_\_\_\_\_ Bottom \_\_\_\_\_

Pump Trucks Used \_\_\_\_\_

Bulk Equip \_\_\_\_\_

Drill Pipe: Size \_\_\_\_\_ Weight \_\_\_\_\_ Collars \_\_\_\_\_

Float Equip Manufacturer \_\_\_\_\_

Open Hole Size \_\_\_\_\_ T.D. \_\_\_\_\_ ft P.B. to \_\_\_\_\_ ft.

Shoe Type \_\_\_\_\_ Depth \_\_\_\_\_

**CAPACITY FACTORS:**

Casing: Bbls/Lin ft 10637 Lin. ft/Bbl \_\_\_\_\_

Float Type \_\_\_\_\_ Depth \_\_\_\_\_

Open Holes Bbls/Lin ft \_\_\_\_\_ Lin. ft/Bbl \_\_\_\_\_

Centralizers: Quantity \_\_\_\_\_ Plugs Top \_\_\_\_\_ Btm. \_\_\_\_\_

Drill Pipe: Bbls/Lin ft \_\_\_\_\_ Lin. ft/Bbl \_\_\_\_\_

Stage Collars \_\_\_\_\_

Annulus Bbls/Lin ft \_\_\_\_\_ Lin. ft/Bbl \_\_\_\_\_

Special Equip \_\_\_\_\_

Bbls/Lin ft \_\_\_\_\_ Lin. ft/Bbl \_\_\_\_\_

Disp Fluid Type H<sub>2</sub>O Amt. 224 Bbls Weight 8.4 PPG \_\_\_\_\_

Perforations From \_\_\_\_\_ ft to \_\_\_\_\_ ft Amt \_\_\_\_\_

Mud Type \_\_\_\_\_ Weight \_\_\_\_\_ PPG \_\_\_\_\_

COMPANY REPRESENTATIVE \_\_\_\_\_

CEMENTER Fog

TIME		PRESSURES PSI		FLUID PUMPED DATA			REMARKS
AM/PM	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Total Percol	RATE Bbls Min		
8:00	am						On Location & Setup Ticks Recess Safety markings
8:20	am				5%		Mix Lead & Tail Cements Release plug & Displace to within 20ft from Bottom Plg Down Cement did Circulated
8:45	am						Circulated 15 Bbls Cement into Pipe

*[Handwritten Signature]*