

Well Plugging Report

Kansas Department of Health and Environment
Bureau of Water Protection

(Authorized by K.S.A. 65-171d)

- A. Name of Company Amoco Production Company Well No. Salt Cavity Storage Well #10
 Surface Elevation 3134.72
 Company Address 2225 W. Oklahoma Ave Date well put into service June 1964
Ulysses, KS 67880 Permit No. N/A
- B. Type of well LPG Storage Well
 Surface pipe seat depth: 540 Feet
 Production casing seat depth: 1660 Feet
 Depth of well: 1730 Feet
- C. Reason for abandonment and plugging No longer needed in
production processes.
- D. Well Location:
NW 1/4 SW 1/4 NE 1/4 Sec. 5 Twp 29 S
 Range 38 (~~BOX~~ (W) Grant County
 Co-ordinate footage location 1510 ENI and 2126 EPI
- E. Has all of the tubing been removed from the well from the
 base of the production casing to the surface? yes
 If no, give explanation and indicate to what depth the
 production casing is clear of tubing and other obstructions.

Revised 1/88

(Over)

F. Describe the plugging procedure: Product was removed from the cavity by displacing it with brine. The tubing and packer were pulled and a mechanical bridge plug set and tested. A 50 feet thick thixotropic cement plug was placed above the bridge plug and tagged after setting for 24 hours. Cement was pumped from the plug to surface utilizing coiled tubing. After ensuring cement to surface, wellhead equipment was removed and a well identifier cap and monument established. Plugging was performed in accordance with the Plugging and Abandonment Plan submitted to the KDHE January 18, 1993 and subsequently approved by them. KDHE representatives witnessed many aspects of the plugging operation.

G. Plugging contractor: Barbo Well Service/Flint Engineering/Halliburton
Plugging supervisor: Joe P. Eudey, Operations Specialist
Date plugging commenced: 3-25-93
Date plugging completed: 4-26-93

H. Has a copy of the cementing report been submitted to the Department for this plugging operation? Yes, attached

I hereby certify that the statements herein are true and correct to the best of my knowledge and belief.

Ralf Shilling
Applicant Or Duly Authorized Agent

Subscribed and sworn to before me this 26th day of April 19 93

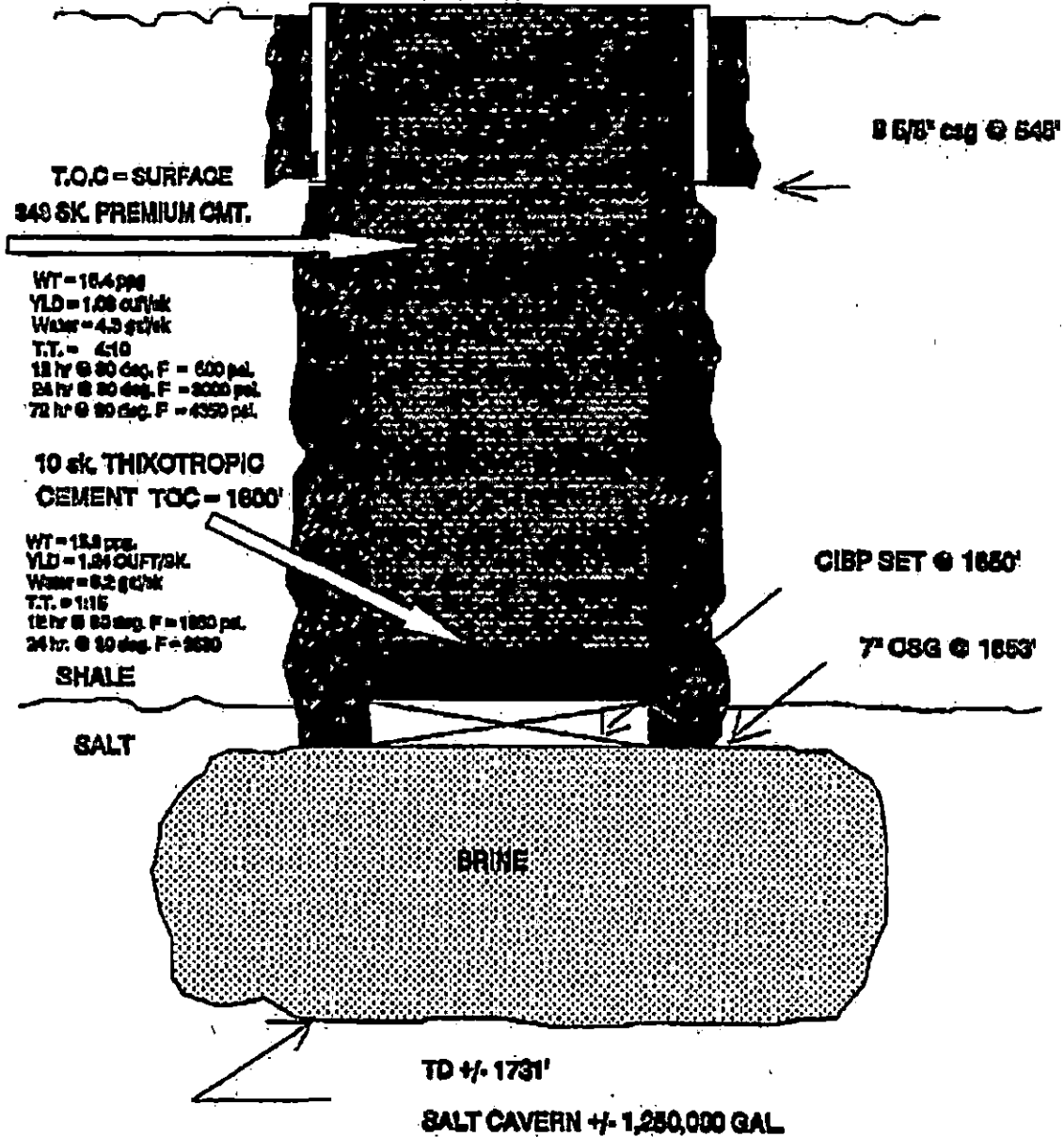


Annette Shilling
Notary Public

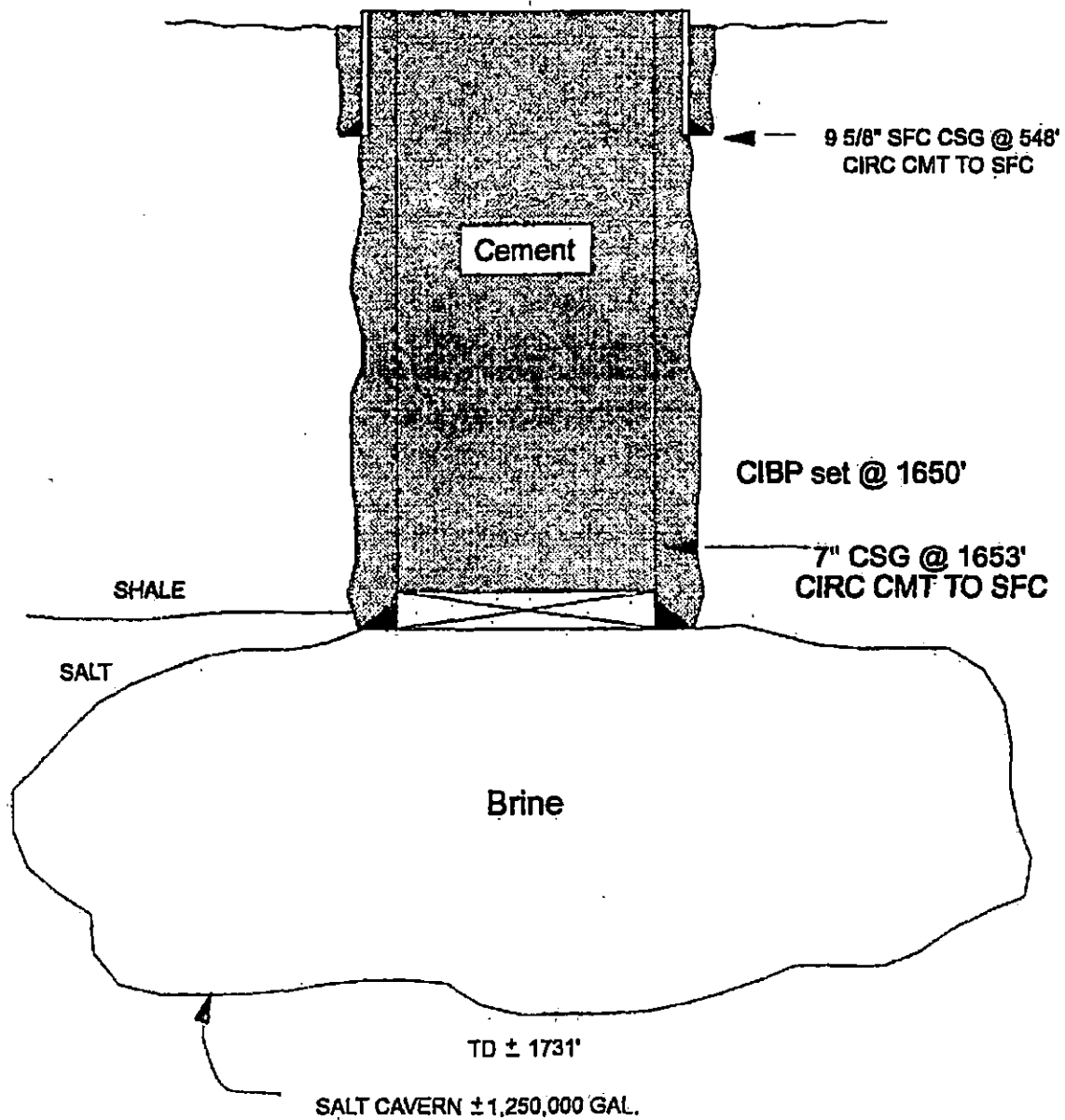
My Commission Expires February 22, 1997

EXHIBIT #5

Salt Cavity Storage Well #10 P&A Wellbore Diagram



Salt Cavity Storage Well #10 P&A Wellbore Diagram



December 1, 1992

File: DWB- -400.1

**Proposed Plugging and Abandonment Procedure
Salt Cavity Storage Well No. 10
Amoco Ulysses Gasoline Plant
Grant County, Kansas**

Below is the proposed plugging and abandonment procedure for the subject well.

1. MIRUSU.
2. Pull any tubing in well.
3. Set a CIBP at 1650' feet, cap with 2 sks cement.
4. Pressure test to 300 psi for 5 min.
5. Upon successful CIBP test, fill remaining casing volume with thixotropic cement.
6. Cut off casing and weld on cap approximately one foot above ground level.
7. Restore location.

A wellbore sketch is attached for your reference. Please contact Kyle True with any questions at (303) 830-5241.

Attachment

INVOICE

RECEIVED
BARBO WELL SERVICE, INC.
 SERVICE UNIT CONTRACTORS

052020 AP 30 93
 P.O. Box 159 Ulysses, Kansas 67880

54 - ULYSSES

Rig # 2

INVOICE B-2251

SOLD TO

Date 4-27-93

Amoco Production Co.
 Ulysses Operations Center
 2225 West Oklahoma
 Ulysses, Kansas 67880

Ordered By: JOE EUDEY
 Charged To: S C S W #10

REPAIR

County: GRANT
 State of Kansas

T2413 4-13-93 Move in Service Unit - Rigged up - run tubing - pumped cement - rigged down - moved off 6 Hours

6 Hours of Service Unit time @ \$40.00 per hr	\$240.00
6 Hours of Operators time @ \$19.00 per hr	114.00
12 Hours of Extra Labor @ \$17.50 per hr	210.00
1/2 Day Rental on Power Tongs @ \$75.00 per day	37.50
	<u>\$601.50</u>
5.9 Sales Tax	35.49
TOTAL	\$636.99

ULYSSES Ulysses Plant SUB FEA APPN# DOS OPCENTER In House Code H EG Charge to: <i>Ulysses Gas Plant</i>	
Used For: <i>P&A salt. Cryst. wells</i> <i>DRA Sect. 7646-18</i>	
Haul & Dispose Salt Water Expense Investment MPF PF Environment: Land Air Water Rep. (Form 5588) <input checked="" type="checkbox"/> P & A Incomplete <input type="checkbox"/> Recomplete Acct. Sub Fea Approved: J. P. Eudey 5GG <i>J P Eudey</i> Date	

ORIGINAL



P.O. BOX 951046
DALLAS, TX 75395-1046

HALLIBURTON SERVICES

INVOICE

A Halliburton Company

INVOICE NO. 34234 DATE 04/14/1993

WELL/LEASE NO./PLANT NAME	DEVELOPMENT LOCATION	STATE	WELL/PLANT OWNER
ALT CAVITY STORAGE WELL 10	GRANT	KS	SAME
SERVICE LOCATION	CONTRACTOR	JOB PURPOSE	TICKET/DATE
GENERAL	BARBO	54 - ULYSSES BACK	04/14/1993
ACCT. NO.	CUSTOMER/AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER
18939	N/A	76144B 03 4	
SHIPPED VIA			FILE NO.
COMPANY TRUCK			49560

AMOCO PRODUCTION CO (USA)
ULYSSES OPERATIONS CENTER
2225 WEST OKLAHOMA AVENUE
ULYSSES, KS 67860

DIRECT CORRESPONDENCE TO:
FIRST OKLAHOMA TOWER
210 WEST PARK AVENUE
SUITE 2050
OKLAHOMA CITY, OK 73102-5601

PRICE REF. NO.	DESCRIPTION	QUANTITY	UOM	UNIT PRICE	AMOUNT
000-117	RELEASE AREA -- EASTERN AREA1	10	MI	2.75	27.50
009-019	PLUGGING BK SPOT CEMENT OR MUD	1630	FT	1,120.00	1,120.00
INVOICE SUBTOTAL					1,147.50
DISCOUNT-(BID)					286.87-
INVOICE BID AMOUNT					860.63
*-KANSAS STATE SALES TAX					42.17
*-SEWARD COUNTY SALES TAX					8.61
INVOICE TOTAL - PLEASE PAY THIS AMOUNT					1011.11

ULYSSES
 ___ Ulysses Plant ___ SUB ___ FEA
 APPN# ___ DOS ___ OP CENTER ___
 ___ In house Code ___ H ___ CG
 Charge to: Ulysses Plant
 Used For: PKA salt cavity wells
DRA Acct 7646-18
 ___ Haul & Dispose Salt Water
 ___ Expense ___ Investment ___ MPF ___ PF
 Environment: ___ Land ___ Air ___ Water
 ___ Rep. (Form 5588) ___ P & A
 ___ Incomplete ___ Recomplete
 Acct ___ Sub ___ Fea ___
 Approved: J. P. Eudey 5GG
 J.P. Eudey Date

FIX JOB TKT TERMS

INVOICES PAYABLE NET BY THE 20TH OF THE FOLLOWING MONTH AFTER DATE OF INVOICE UPON CUSTOMER'S DEFAULT IN PAYMENT OF CUSTOMER'S ACCOUNT BY THE LAST DAY OF THE MONTH FOLLOWING THE MONTH IN WHICH THE INVOICE IS DATED. CUSTOMER AGREES TO PAY INTEREST THEREON AFTER DEFAULT AT THE HIGHEST LAWFUL CONTRACT RATE APPLICABLE BUT NEVER TO EXCEED 18% PER ANNUM, IN THE EVENT IT BECOMES NECESSARY TO EMPLOY AN ATTORNEY TO ENFORCE COLLECTION OF SAID ACCOUNT, CUSTOMER AGREES TO PAY ALL COLLECTION COSTS AND ATTORNEY FEES IN THE AMOUNT OF 20% OF THE AMOUNT OF THE UNPAID ACCOUNT



WORK ORDER CONTRACT AND PRE-TREATMENT DATA

FORM 1908 R-7

A Division of Halliburton Company

ATTACH TO INVOICE & TICKET NO. 345234

DISTRICT: Lisenok, Ks

DATE: 4-14-93

YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO: Amoco Production (CUSTOMER) AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. 10# LEASE SALT COUNTRY STORAGE UNIT SEC. TWP. RANGE

FIELD COUNTY Geary STATE Ks OWNED BY Amoco Prod.

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME TYPE FROM TO SICKER: TYPE SET AT TOTAL DEPTH MUD WEIGHT CORE HOLE INITIAL PROD: OIL BPD, H2O BPD, GAS MCF REPRESENT PROD: OIL BPD, H2O BPD, GAS MCF

Table with columns: NEW USED, WEIGHT, SIZE, FROM, TO, MAX. ALLOW. P.S.I., SHOTS/FT. Rows include CASING (7", 1630), LINER, TUBING (2 3/8", 1630), OPEN HOLE, PERFORATIONS.

PREVIOUS TREATMENT: DATE TYPE MATERIALS

TREATMENT INSTRUCTIONS: TREAT THRU TUBING [X] ANNULUS [] CASING [X] TUBING/ANNULUS [] HYDRAULIC HORSEPOWER ORDERED. Pig Back 10 SC ThioTropic 10# Al Seal 4% Gel 2% CC

CUSTOMER OR HIS AGENT WARRANTS THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

As consideration, the above-named Customer agrees: THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED

- a) To pay Halliburton in accord with the rates and terms stated in Halliburton's current price list. Invoices are payable NET by the 20th of the following month after date of invoice.
b) To defend, indemnify, release and hold harmless Halliburton, its divisions, subsidiaries, parent and affiliated companies and the officers, directors, employees, agents and servants of all of them from and against any claims, liability, expenses, attorneys fees, and costs of defense to the extent permitted by law for:
1. Damage to property owned by, in the possession of, or leased by Customer, and/or the well owner (if different from Customer), including, but not limited to surface and subsurface damage.
2. Reservoir, formation, or well loss or damage, subsurface trespass or any action in the nature thereof.
3. Personal injury or death or property damage (including, but not limited to, damage to the reservoir, formation or well), or any damages whatsoever, growing out of or in any way connected with or resulting from pollution, subsurface pressure, losing control of the well and/or a well blowout or the use of radioactive material.
c) That because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others Halliburton is unable to guarantee the effectiveness of the products, supplies or materials, nor the results of any treatment or service, nor the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton.
d) That Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE.
e) That Customer shall, at its risk and expense attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered, Customer shall pay Halliburton its replacement cost unless such loss is due to the sole negligence of Halliburton.
f) To waive the provisions of the Deceptive Trade Practices - Consumer Protection Act, to the extent permitted by law.
g) That this contract shall be governed by the law of the state where services are performed or materials are furnished.
h) That Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED _____ CUSTOMER

DATE _____

TIME _____ A.M. P.M.

we certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to services furnished under this contract.



WORK ORDER CONTRACT AND PRE-TREATMENT DATA

FORM 1808 R-7

A Division of Halliburton Company

ATTACH TO INVOICE & TICKET NO. 345237

DISTRICT Lincoln, KS

DATE 4-16-93

YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO Amoco Production (CUSTOMER) AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. 10# LEASE SALT COUNTY STORAGE WEST SEC TWP. RANGE COUNTY GRANT STATE KS OWNED BY

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

Table with columns: INFORMATION NAME, TYPE, NEW USED, WEIGHT, SIZE, FROM, TO, MAX. ALLOW. P.S.I., SHOTS/FT. Rows include CASING (7" GL), LINER, TUBING (1" GL 1581), OPEN HOLE, PERFORATIONS.

PREVIOUS TREATMENT: DATE TYPE MATERIALS

TREATMENT INSTRUCTIONS: TREAT THRU TUBING [X] ANNULUS [] CASING [] TUBING/ANNULUS [] HYDRAULIC HORSEPOWER ORDERED Plug To Abandon w/ 343.5# Premium Top OFF Cement To Seal Well

CUSTOMER OR HIS AGENT WARRANTS THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

As consideration the above-named Customer agrees. THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED. a) To pay Halliburton in accord with the rates and terms stated in Halliburton's current price list. b) To defend, indemnify, release and hold harmless Halliburton, its divisions, subsidiaries, parent and affiliated companies and the officers, directors, employees, agents and servants of all of them from and against any claims liability, expenses, attorneys fees, and costs of defense to the extent permitted by law for Damage to property owned by, in the possession of, or leased by Customer and/or the well owner (if different from Customer) including but not limited to surface and subsurface damage. c) That because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished to, errors Halliburton is unable to warrant the efficiency of the products supplies or materials nor the results of any treatment or service, nor the accuracy of any chart interpretation, research analysis job recommendation or other data furnished by Halliburton. d) That Halliburton warrants only title to the products, supplies and materials and that the same are free from defects, contamination and materials. e) That Customer shall at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered Customer shall pay Halliburton the replacement cost unless such loss is due to the sole negligence of Halliburton. f) To waive the provisions of the Deceptive Trade Practices - Consumer Protection Act to the extent permitted by law. g) That this contract shall be governed by the law of the state where services are performed or materials are furnished. h) That Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton. I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT

SIGNED DATE TIME A.M. P.M. CUSTOMER

As certified that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to services furnished under this contract.

JOB LOG

WELL NO. _____

CUSTOMER Amoco Production PAGE NO. _____

JOB TYPE Plug To Abandon DATE 4-16-93

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								Run Cased Tubing in Hole Tag Plug 1581 FT
	1420							Hookup To Turb
	1424		2			2200		Start Injection Rate
	1428					2500		Start Mixing Cement
	1550	3/4 ^{OPM}	64 ^{TS}			2250		Finish Mixing Cement
	1552							Create Cement To Ground Level
	1553							Shut Down wash Pump & Lines To PPT
	1603							Hookup & Washup Turb
	1608							Shut Down Breakdown
								Move To 6 [#] Log Setup Truck

