

ORIGINAL

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

Operator: License # 5952
Name: Amoco Production Company
Address P.O. Box 800, Room 2072
City/State/Zip Denver, CO 80201

Purchaser: _____
Operator Contact Person: Craig Carley
Phone (303) 830-4601
Contractor: Name: Cheyenne Drilling
License: 5382
Wellsite Geologist: None *KCC JH*

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD SIOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc.)

If Workover/Re-entry: old well info as follows:

Operator: N/A
Well Name: _____
Comp. Date _____ Old Total Depth _____
 Deepening Re-perf. Conv. to Inj/SWD
 Plug Back _____ PBDT
 Commingled Docket No. _____
 Dual Completion Docket No. _____
 Other (SWD or Inj?) Docket No. _____
7/28/93 7/31/93 Delayed
Spud Date Date Reached TD Completion Date

API No. 15 - 093-21269-0000
County Kearny
NW - SE - SW - SW Sec. 16 Twp. 24 Rge. 37 East West
1250 Feet from S (circle one) Line of Section
3950 Feet from E (circle one) Line of Section
Footages Calculated from Nearest Outside Section Corner:
NE, E NW, or SW (circle one)
Lease Name Vernon G. Kropp G.U. Well # 3HI
Field Name Hugoton
Producing Formation Chase
Elevation: Ground 3274 KB 3285
Total Depth 2860 PBDT 2815
Amount of Surface Pipe Set and Cemented at 721 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.
Drilling Fluid Management Plan ALT 1 *JH* 2-17-94
(Data must be collected from the Reserve Pit)

Chloride content 5800 ppm Fluid Volume 2140 bbls
Dewatering method used Drilled and filled
Location of fluid disposal if hauled off site: _____

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KANSAS CORPORATION COMMISSION

Operator Name _____
Lease Name NOV 29 1993 License No. _____
Quarter _____ Sec. _____ Twp. _____ S.Rng. _____ EW
County WICHITA, KS Docket No. _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 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 geologist well report 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.

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 to the best of my knowledge.

Signature Craig Carley
Title Business Analyst Date 11/24/93
Subscribed and sworn to before me this 24th day of November
Notary Public [Signature]
Date Commission Expires December 26, 1994

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)

Operator Name Amoco Production Company Lease Name Vernon G. Kropp GU Well # 3HI

County Kearny

Sec. 16 Twp. 24 Rge. 37
 East
 West

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.

Drill Stem Tests Taken (Attach Additional Sheets.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datums	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Chase	2522	763
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Council Grove	2808	477
List All E. Logs Run:	SPECTRAL SUBTERRANEAN GAMMA SPECTRAL DENSITY NEUTRON MSFL LOG LONG SPACED SONIC INDUCTION			

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#	721	Class 'C'	350	
Production	7-7/8"	5-1/2"	15.5#	2860	Class 'C'	550	

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated		Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)		Depth
	Top	Bottom	Amount	Kind	
2	2810	2818	Acidize 2/750 Gal. of 20%		2810-2818
4	2726	2762, 2672-2714, 2634-2654	HLC Acid		
4	2578	2606	Frac 2/228920# 10/20 sand		2578-2762
	CIBP @ 2806' <i>RCC JAH</i>		& 52948 Borate gel.		

TUBING RECORD Size N/A Set At Packer At Liner Run Yes No

Date of First, Resumed Production, SWD or Inj Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours: Oil Bbls. Gas Mcf Water Bbls. Gas-Oil Ratio Gravity

Disposition of Gas: Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled

(If vented, submit ACO-18) Other (Specify)

METHOD OF COMPLETION Production Interval 2762'
2578' - 2762'

ORIGINAL

DRILLERS LOG

API# 15-093-21269-0000

AMOCO PRODUCTION COMPANY
VERNON C. KROPP GU NO. 3 H1
SECTION 16-T24S-R37W
KEARNY COUNTY, KANSAS

COMMENCED: 07-28-93
COMPLETED: 07-31-93

SURFACE CASING: 721' OF 8 5/8"
CMTD W/200 SX LT. "C", 2% C.C.,
1/4#/SX FLO-CELE; TAILED IN W/
150 SX "C", 2% C.C., 1/4#/SX FLO-CELE.

FORMATION	DEPTH
SURFACE HOLE	0- 745
RED BED	745- 878
RED BED & ANHYDRITE	878-1970
LIME & SHALE	1970-2497
SHALE & LIME	2497-2860 RTD

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KANSAS CORPORATION COMMISSION

NOV 2 9 1993

CONSERVATION DIVISION
WICHITA, KS

I DO HEREBY CERTIFY THAT THE FOREGOING STATEMENTS ARE TRUE AND CORRECT
TO THE BEST OF MY KNOWLEDGE AND BELIEF.

CHEYENNE DRILLING, INC.

Claude E. Norwood
CLAUDE E. NORWOOD

STATE OF KANSAS :ss:

SUBSCRIBED AND SWORN TO BEFORE ME THIS 2ND DAY OF AUGUST, 1993.

BECKY J. WHETSTONE
NOTARY PUBLIC
STATE OF KANSAS
MY APPT. EXPIRES 4/29/95

Becky J. Whetstone
BECKY J. WHETSTONE, NOTARY PUBLIC

JOB LOG FORM 2013 R-3

CUSTOMER <i>Anco Pool</i>	WELL NO. <i>3 HE</i>	LEASE <i>Venon G Krapp GU</i>	JOB TYPE <i>S/L Pool Stay</i>	TICKET NO. <i>507187</i>
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CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0700							ORIGINAL
	0700							
	0545							
								Start Pump casing
	1010							Casing in hole
	1011							Hook up to circulate casing
	1020							Circulate casing w/ 1/2" pump
	1022							Circulate 11' hole to ground level
	1040							Hook up to Pump Track
	1043							300 Start Mix Cement
	1120	5.4	200.84					250 Finish 1" Mix Cement
	1121							150 Shut Pump Pump Plug wash Pumps & Lines
	1125	6						0/15 Start Disp.
		4.4 @ 67°						
	1140							900 1/4" Pkg Pump Float Held Circulate Cement to the P.I.T
								25 BBL = 65 ^{sc}
								Avg Rate Mix Cement 5.4 BPM Disp Pl 4.4 BPM
								P. Press 900 PSI + 500 disp.
								Avg Press Mix Cement 275 PSI
								Thanks For Calling Halliburton
								<i>[Signature]</i> Crew

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KANSAS CORPORATION COMMISSION

NOV 29 1993

CONSERVATION DIVISION
WICHITA, KS

ORIGINAL

CUSTOMER Amco Prod
LEASE Amco's Lease
WELL NO. 3 NE
JOB TYPE 5 1/2" Prod Stg
DATE 7-31-93

WELL DATA

FIELD _____ SEC. 16 TWP. 24^s RNG. 37W COUNTY Leavenworth STATE Ks

FORMATION NAME	TYPE	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING				<u>5 1/2"</u>	<u>KB</u>	<u>2860</u>	
LINER							
TUBING							
OPEN HOLE				<u>7 1/2"</u>		<u>2860</u>	SHOTS/FT.
PERFORATIONS							
PERFORATIONS							
PERFORATIONS							

FORMATION THICKNESS _____ FROM _____ TO _____

INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD _____

PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD _____

COMPLETION DATE _____ MUD TYPE _____ MUD WT. _____

PACKER TYPE _____ SET AT _____

BOTTOM HOLE TEMP. _____ PRESSURE _____

MISC. DATA _____ TOTAL DEPTH _____

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR <u>Insert Float</u>	<u>1</u>	<u>Houco</u>
FLOAT SHOE <u>Full Leg</u>	<u>1</u>	
GUIDE SHOE <u>T Key</u>	<u>1</u>	
CENTRALIZERS	<u>5</u>	
BOTTOM PLUG		
TOP PLUG	<u>1</u>	
HEAD	<u>1</u>	
PACKER		
OTHER <u>Houco weld A</u>	<u>143</u>	

MATERIALS

TREAT. FLUID _____ DENSITY _____ LB./GAL. °API _____

DISPL. FLUID _____ DENSITY _____ LB./GAL. °API _____

PROP. TYPE _____ SIZE _____ LB. _____

PROP. TYPE _____ SIZE _____ LB. _____

ACID TYPE _____ GAL. _____ % _____

ACID TYPE _____ GAL. _____ % _____

ACID TYPE _____ GAL. _____ % _____

SURFACTANT TYPE _____ GAL. _____ IN _____

NE AGENT TYPE _____ GAL. _____ IN _____

FLUID LOSS ADD. TYPE _____ GAL.-LB. _____ IN _____

GELLING AGENT TYPE _____ GAL.-LB. _____ IN _____

FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN _____

BREAKER TYPE _____ GAL.-LB. _____ IN _____

BLOCKING AGENT TYPE _____ GAL.-LB. _____

PERFPAC BALLS TYPE _____ QTY. _____

OTHER _____

OTHER _____

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>7-31</u>	DATE <u>7-31</u>	DATE <u>7-31</u>	DATE <u>7-31</u>
TIME <u>0200</u>	TIME <u>05:45</u>	TIME <u>1010</u>	TIME <u>1140</u>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>Dore</u>	<u>59179</u>	<u>Liberal Ks</u>
<u>N Nicholas</u>	<u>41525</u>	<u>"</u>
<u>K Myers</u>	<u>59018</u>	<u>Horton Ks</u>
<u>W Thomas</u>	<u>4461</u>	<u>"</u>
	<u>FS951</u>	<u>47314</u>

DEPARTMENT Cement

DESCRIPTION OF JOB 5 1/2" Prod Stg

JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN.

CUSTOMER REPRESENTATIVE X San Coronado Co. Rep.

HALLIBURTON OPERATOR Dore COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	<u>1450</u>	<u>Prem Prod</u>	<u>LTWT</u>		<u>6% Hall 322 15% Salt 1/4" # Flocc</u>	<u>2.15</u>	<u>12.6</u>
	<u>100</u>	<u>Prem Prod</u>			<u>10% FA2 1% CC - 6% Hall 322 15% Salt 1/4" # Flocc</u>	<u>1.58</u>	<u>14.8</u>

SUMMARY

CIRCULATING _____ DISPLACEMENT _____ PRES FLUSH: BBL.-GAL. _____ TYPE _____

BREAKDOWN _____ MAXIMUM _____ LOAD & BRDN: BBL.-GAL. _____ PAD: BBL.-GAL. _____

AVERAGE _____ FRACTURE GRADIENT _____ TREATMENT: BBL.-GAL. _____ DISPL: BBL.-GAL. 67.0

SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____ CEMENT SLURRY: BBL.-GAL. 200.84

HYDRAULIC HORSEPOWER _____ TOTAL VOLUME: BBL.-GAL. _____

ORDERED _____ AVAILABLE _____ USED _____

AVERAGE RATES IN BPM _____

TREATING _____ DISPL. _____ OVERALL _____

CEMENT LEFT IN PIPE _____

FEET 472 REASON Spec. Job

RAMARKS

NOV 29 1993

CONSERVATION DIVISION
WICHITA, KS



CHARGE TO: Amoco Production
 ADDRESS: Amoco Production
 CITY, STATE, ZIP CODE: _____

COPY

TICKET

No. 507187 - X

FORM 1906 R-12

15-093-21269-0000

PAGE 1 OF 2

1. <u>25540</u>	WELL/PROJECT NO. <u>3 NI</u>	LEASE <u>Verdon 6 Kropp 6U</u>	COUNTY/PARISH <u>KEARNY</u>	STATE <u>Ks</u>	CITY/OFFSHORE LOCATION	DATE <u>7-31-93</u>	OWNER <u>Amoco Prod.</u>
2. <u>25535</u>	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	NITROGEN JOB? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CONTRACTOR <u>Verdon 6 Kropp</u>	RIG NAME/NO. <u>Shelby 3#</u>	SHIPPED VIA <u>Loc</u>	DELIVERED TO	ORDER NO.
3.	WELL TYPE	WELL CATEGORY	JOB PURPOSE	WELL PERMIT NO.	WELL LOCATION		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS <u>0203</u>						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF			QTY.	U/M	QTY.	U/M		
<u>000-117</u>		<u>1</u>				<u>MILEAGE</u>	<u>30</u>	<u>miles</u>			<u>2.75</u>	<u>82.50</u>
<u>001-016</u>		<u>1</u>				<u>Pump charge</u>	<u>2860</u>	<u>FT</u>				<u>1225.00</u>
<u>030-018</u>		<u>1</u>				<u>5wd Top Pkg</u>	<u>1</u>	<u>Excl</u>			<u>60.00</u>	<u>60.00</u>
<u>12A</u>	<u>825-205</u>	<u>1</u>				<u>Guide shoe</u>	<u>1</u>	<u>Excl</u>	<u>5 1/2</u>		<u>121.00</u>	<u>121.00</u>
<u>24A</u>	<u>815-19251</u>	<u>1</u>				<u>Insert Plant</u>	<u>1</u>				<u>110.00</u>	<u>110.00</u>
<u>27</u>	<u>815-19311</u>	<u>1</u>				<u>Fillup</u>	<u>1</u>				<u>55.00</u>	<u>55.00</u>
<u>40</u>	<u>807-93022</u>	<u>1</u>				<u>Centralizers</u>	<u>5</u>				<u>44.00</u>	<u>220.00</u>
<u>350</u>	<u>890-10802</u>	<u>1</u>				<u>Howco weld A</u>	<u>1</u>	<u>LB</u>			<u>14.50</u>	<u>14.50</u>

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.		SUB SURFACE SAFETY VALVE WAS: <input type="checkbox"/> PULLED & RETURN <input type="checkbox"/> PULLED <input checked="" type="checkbox"/> RUN		SURVEY		<input type="checkbox"/> AGREE	<input type="checkbox"/> UN-DECIDED	<input type="checkbox"/> DIS-AGREE	PAGE TOTAL	<u>1888.00</u>
CUSTOMER OR CUSTOMER'S AGENT SIGNATURE X		TYPE LOCK DEPTH		BEAN SIZE SPACERS		TYPE OF EQUALIZING SUB. CASING PRESSURE		OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	FROM CONTINUATION PAGE(S)	
DATE SIGNED		TIME SIGNED <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.		TUBING SIZE TUBING PRESSURE WELL DEPTH		TREE CONNECTION TYPE VALVE		WE UNDERSTOOD AND MET YOUR NEEDS?	<u>9515.71</u>	
<input type="checkbox"/> do <input type="checkbox"/> do not require IPC (Instrument Protection). <input type="checkbox"/> Not offered		<input type="checkbox"/> A.M. <input type="checkbox"/> P.M.		<input type="checkbox"/> YES <input type="checkbox"/> NO		<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND		OUR SERVICE WAS PERFORMED WITHOUT DELAY?	SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE	
<input type="checkbox"/> do <input type="checkbox"/> do not require IPC (Instrument Protection). <input type="checkbox"/> Not offered		<input type="checkbox"/> A.M. <input type="checkbox"/> P.M.		<input type="checkbox"/> YES <input type="checkbox"/> NO		<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND		WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?	<u>11,403.71</u>	
<input type="checkbox"/> do <input type="checkbox"/> do not require IPC (Instrument Protection). <input type="checkbox"/> Not offered		<input type="checkbox"/> A.M. <input type="checkbox"/> P.M.		<input type="checkbox"/> YES <input type="checkbox"/> NO		<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND		ARE YOU SATISFIED WITH OUR SERVICE?		

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.			
CUSTOMER OR CUSTOMER'S AGENT (PLEASE PRINT)	CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE)	HALLIBURTON OPERATOR/ENGINEER	HALLIBURTON APPROVAL
<u>X 6 Pas</u>	<u>Sam Corcoran</u>	<u>D6000</u>	<u>disc \$ 7184.34</u>

RECEIVED
 NOV 29 1993
 MISSOURI CORPORATION COMMISSION

TERMS AND CONDITIONS

For good and valuable consideration received, Customer (as identified on the face of this document) and Halliburton Energy Services, a division of Halliburton Company (hereinafter "Halliburton") agree as follows:

A. CUSTOMER REPRESENTATION - Customer warrants that the well is in proper condition to receive the services, equipment, products, and materials to be supplied by Halliburton.

B. PRICE AND PAYMENT - The services, equipment, products, and/or materials to be supplied hereunder are priced in accordance with Halliburton's current price list. All prices are exclusive of taxes. If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If Customer has an approved open account, invoices are payable on the twentieth day after the date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.

C. RELEASE AND INDEMNITY - CUSTOMER AGREES TO RELEASE HALLIBURTON GROUP FROM ANY AND ALL LIABILITY FOR ANY AND ALL DAMAGES WHATSOEVER TO PROPERTY OF ANY KIND OWNED BY, IN THE POSSESSION OF, OR LEASED BY CUSTOMER AND THOSE PERSONS AND ENTITIES CUSTOMER HAS THE ABILITY TO BIND BY CONTRACT. CUSTOMER ALSO AGREES TO DEFEND, INDEMNIFY, AND HOLD HALLIBURTON GROUP HARMLESS FROM AND AGAINST ANY AND ALL LIABILITY, CLAIMS, COSTS, EXPENSES, ATTORNEY FEES AND DAMAGES WHATSOEVER FOR PERSONAL INJURY, ILLNESS, DEATH, PROPERTY DAMAGE AND LOSS RESULTING FROM:

LOSS OF WELL CONTROL; SERVICES TO CONTROL A WILD WELL WHETHER UNDERGROUND OR ABOVE THE SURFACE; RESERVOIR OR UNDERGROUND DAMAGE, INCLUDING LOSS OF OIL, GAS, OTHER MINERAL SUBSTANCES OR WATER; SURFACE DAMAGE ARISING FROM UNDERGROUND DAMAGE; DAMAGE TO OR LOSS OF THE WELL BORE; SUBSURFACE TRESPASS OR ANY ACTION IN THE NATURE THEREOF; FIRE; EXPLOSION; SUBSURFACE PRESSURE; RADIOACTIVITY; AND POLLUTION AND ITS CLEANUP AND CONTROL.

CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS OBLIGATIONS WILL APPLY EVEN IF THE LIABILITY AND CLAIMS ARE CAUSED BY THE SOLE, CONCURRENT, ACTIVE OR PASSIVE NEGLIGENCE, FAULT, OR STRICT LIABILITY OF ONE OR MORE MEMBERS OF THE HALLIBURTON GROUP, THE UNSEAWORTHINESS OF ANY VESSEL OR ANY DEFECT IN THE DATA, PRODUCTS, SUPPLIES, MATERIALS OR EQUIPMENT FURNISHED BY HALLIBURTON GROUP WHETHER IN THE DESIGN, MANUFACTURE, MAINTENANCE OR MARKETING THEREOF OR FROM A FAILURE TO WARN OF SUCH DEFECT. "HALLIBURTON GROUP" IS DEFINED AS HALLIBURTON, ITS PARENT, SUBSIDIARY, AND AFFILIATED COMPANIES AND ITS/THEIR OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS. CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS OBLIGATIONS APPLY WHETHER THE PERSONAL INJURY, ILLNESS, DEATH, PROPERTY DAMAGE OR LOSS IS SUFFERED BY ONE OR MORE MEMBERS OF THE HALLIBURTON GROUP, CUSTOMER, OR ANY OTHER PERSON OR ENTITY AND THE CUSTOMER WILL SUPPORT SUCH OBLIGATIONS ASSUMED HEREIN WITH LIABILITY INSURANCE TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW.

D. EQUIPMENT LIABILITY - Customer shall at its risk and expense attempt to recover any Halliburton equipment lost or lodged in the well. If the equipment is recovered and repairable, Customer shall pay the repair costs, unless caused by Halliburton's sole negligence. If the equipment is not recovered or is irreparable, Customer shall pay the replacement cost, unless caused by Halliburton's sole negligence. If a radioactive source becomes lost or lodged in the well, Customer shall meet all requirements of Section 39.15(a) of the Nuclear Regulatory Commission regulations and any other applicable laws or regulations concerning retrieval or abandonment and shall permit Halliburton to monitor the recovery or abandonment efforts all at no risk or liability to Halliburton. Customer shall be responsible for damage to or loss of Halliburton equipment, products, and materials while in transit aboard Customer-supplied transportation, even if such is arranged by Halliburton at Customer's request, and during loading and unloading from such transport. Customer will also pay for the repair or replacement of Halliburton equipment damaged by corrosion or abrasion due to well effluents.

E. LIMITED WARRANTY - Halliburton warrants only title to the equipment, products, and materials supplied under this agreement and that same are free from defects in workmanship and materials for one year from date of delivery. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's sole liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale, lease or use of any equipment, products, or materials is expressly limited to the replacement of such on their return to Halliburton or, at Halliburton's option, to the allowance to Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, consequential, or punitive damages. 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 EQUIPMENT, MATERIALS, OR SERVICE, NOR THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HALLIBURTON. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be liable for and CUSTOMER SHALL INDEMNIFY HALLIBURTON GROUP AGAINST ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION, even if such is contributed to by Halliburton's negligence or fault. Halliburton also does not warrant the accuracy of data transmitted by electronic process, and Halliburton will not be responsible for accidental or intentional interception of such data by third parties.

F. GOVERNING LAW - The validity, interpretation and construction of this agreement shall be determined by the laws of the jurisdiction where the services are performed or the equipment or materials are delivered.

G. WAIVER - Customer agrees to waive the provisions of the Texas Deceptive Trade Practices-Consumer Protection Act or any similar federal or state statute to the extent permitted by law.

H. MODIFICATIONS - Customer agrees that Halliburton shall not be bound by any modifications to this agreement, except where such modification is made in writing by a duly authorized executive officer of Halliburton. Requests for modifications should be directed to the Vice President - Legal, 5151 San Felipe, Houston, Texas 77056.

JOB LOG FORM 2013 R-3

DATE: 7-28-93 PAGE NO.

CUSTOMER: Amoco Prod. WELL NO.: 3 HII LEASE: Wm G. Kropp JOB TYPE: 8 5/8" Surface TICKET NO.: 507371

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1400							Called out
	1630							On loc. Rig drilling AT 458 FT
	2000							start CSS
	2115							CSS on Bottom
	2120							circulate w- Rig
	2130							Hook Track
	2134	5	5				100	FW Spacer
	2136	6	73.3				150	mix lead
	2145	6	35.2				100	mix Tail
	2153						0	Drop Plug
	2155	6					100	start DISP
	2158	2	34				200	slow Rate
	2203	2	44.7				250	Bump Plug
	2204						350	Shut in No Float.
								Lead 100
								Average PSI Tail 100
								DISP 200
								Lead 6
								Average Rate Tail 5
								DISP 5
								Job Complete Thank you For calling
								Halliburton Energy Services
								Bill Jansen + Crews

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 CONSERVATION DIVISION
 WICHITA, KS

CUSTOMER
ANNUAL PRODUCTION
LEASE
VERNON G KROPP
WELL NO.
347
JOB TYPE
8 7/8 SURFACE CSG
DATE
7-28-93

WELL DATA

FIELD _____ SEC. 16 TWP. 21S RING. 37W COUNTY KEARNY STATE KS

FORMATION NAME _____ TYPE _____

FORMATION THICKNESS _____ FROM _____ TO _____

INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD

PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD

COMPLETION DATE _____ MUD TYPE _____ MUD WT. _____

PACKER TYPE _____ SET AT _____

BOTTOM HOLE TEMP. _____ PRESSURE _____

MISC. DATA _____ TOTAL DEPTH _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	<u>N</u>	<u>24"</u>	<u>8 7/8"</u>	<u>KB</u>	<u>095</u>	
LINER						
TUBING						
OPEN HOLE			<u>12 1/4"</u>	<u>KB</u>	<u>095</u>	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>7-28-93</u>	DATE <u>7-28-93</u>	DATE <u>7-28-93</u>	DATE <u>7-28-93</u>
TIME <u>1400</u>	TIME <u>11:30</u>	TIME <u>2130</u>	TIME <u>2300</u>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>SAUER 64751</u>	<u>40048</u>	<u>LIBERAL</u>
<u>BRADY 24604</u>	<u>52276</u>	<u>KS.</u>
<u>T. Davis F4550</u>	<u>75505</u>	<u>Husaton</u>

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR <u>8 7/8"</u>		
FLOAT SHOE <u>RAFFLE PLATE</u>	<u>1</u>	
GUIDE SHOE		
CENTRALIZERS <u>S-4</u>	<u>3</u>	
BOTTOM PLUG		
TOP PLUG <u>5W</u>	<u>1</u>	
HEAD		
PACKER		
OTHER <u>HUUCO WELDABLE</u>	<u>1</u>	

MATERIALS

TREAT. FLUID _____ DENSITY _____ LB/GAL. °API

DISPL. FLUID _____ DENSITY _____ LB/GAL. °API

PROP. TYPE _____ SIZE _____ LB.

PROP. TYPE _____ SIZE _____ LB.

ACID TYPE _____ GAL. _____ %

ACID TYPE _____ GAL. _____ %

ACID TYPE _____ GAL. _____ %

SURFACTANT TYPE _____ GAL. _____ IN

NE AGENT TYPE _____ GAL. _____ IN

FLUID LOSS ADD. TYPE _____ GAL.-LB. _____ IN

GELLING AGENT TYPE _____ GAL.-LB. _____ IN

FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN

BREAKER TYPE _____ GAL.-LB. _____ IN

BLOCKING AGENT TYPE _____ GAL.-LB. _____ IN

PERFPAC BALLS TYPE _____ QTY. _____

OTHER _____

OTHER _____

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DEPARTMENT CEMENT

DESCRIPTION OF JOB CAT 8 7/8 SURFACE CSG.

JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN.

CUSTOMER REPRESENTATIVE X

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
<u>1-</u>	<u>200</u>	<u>MEMPLUS T.</u>		<u>B</u>	<u>2% C.C. - 1/4" BX HUUCO</u>		
<u>150.</u>	<u>MEMPLUS</u>		<u>B</u>	<u>2% C.C.</u>		<u>2.00</u>	<u>12.3</u>
						<u>1.32</u>	<u>14.5</u>

PRESSURES IN PSI

SUMMARY

VOLUMES

CIRCULATING _____ DISPLACEMENT _____ PRESLUSH: BBL.-GAL. _____ TYPE _____

BREAKDOWN _____ MAXIMUM _____ LOAD & BKDN: BBL.-GAL. _____ PAD: BBL.-GAL. _____

AVERAGE _____ FRACTURE GRADIENT _____ TREATMENT: BBL.-GAL. _____ DISPL: BBL.-GAL. 44.7

SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN. _____ CEMENT SLURRY: BBL.-GAL. 1120

HYDRAULIC HORSEPOWER _____ TOTAL VOLUME: BBL.-GAL. _____

ORDERED _____ AVAILABLE _____ USED _____

AVERAGE RATES IN BPM _____

TREATING _____ DISPL. _____ OVERALL _____

CEMENT LEFT IN PIPE _____

FEET 42.2 REASON _____

RAMARKS

Executed 1 Barrel Cement to Pit

SHOE JT



CHARGE TO:
Amoco Production
 ADDRESS
 CITY, STATE, ZIP CODE

COPY

TICKET

No.

507371 - 7

FORM 1906 R-12

15-093-21269-0000

PAGE 1 OF 2

ORIGINAL

1. Liberal	WELL/PROJECT NO. 3 HI	LEASE Vernon G. Kropp	COUNTY/PARISH Kearny	STATE KS	CITY/OFFSHORE LOCATION	DATE 7-28-93	OWNER Same
2. Hugoton	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	NITROGEN JOB? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CONTRACTOR Cheyenne #3	RIG NAME/NO. Cheyenne #3	SHIPPED VIA Trk	DELIVERED TO Location	ORDER NO.
3.	WELL TYPE 02	WELL CATEGORY 01	JOB PURPOSE 010	WELL PERMIT NO.	WELL LOCATION		
4.	REFERRAL LOCATION	INVOICE INSTRUCTIONS					

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF								
000-117						MILEAGE ADC-TC-4		30	mi		2 ⁷⁵	82 50
001-016						Pump Charge	745		feet			735 00
030-018						TOP Plug 5-w	1		ea			130 00
597	825.1269					Baffle	1		ea			45 00
						Centralizer	3		ea		72 ⁰⁰	216 00
						Weld-A	1		Lb			14 50

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LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions. CUSTOMER OR CUSTOMER'S AGENT SIGNATURE X	SUB SURFACE SAFETY VALVE WAS: <input type="checkbox"/> PULLED & RETURN <input type="checkbox"/> PULLED <input type="checkbox"/> SUN		SURVEY		AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL 1223 00 FROM CONTINUATION PAGE(S) 4159 10 SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE
	TYPE LOCK	DEPTH	OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?					
	BEAN SIZE	SPACERS	WE UNDERSTOOD AND MET YOUR NEEDS?					
	TYPE OF EQUALIZING SUB.	CASING PRESSURE	OUR SERVICE WAS PERFORMED WITHOUT DELAY?					
DATE SIGNED 7-28-93	TIME SIGNED 1700	<input type="checkbox"/> A.M. <input type="checkbox"/> P.M.	TUBING SIZE	TUBING PRESSURE	WELL DEPTH	WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?		
<input type="checkbox"/> do <input type="checkbox"/> do not require IPC (Instrument Protection). <input type="checkbox"/> Not offered		TREE CONNECTION	TYPE VALVE		ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO		<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND	

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

CUSTOMER OR CUSTOMER'S AGENT (PLEASE PRINT) Richard Schmidt	CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE) X	HALLIBURTON OPERATOR/ENGINEER Bill Jauber	EMP # 64781	HALLIBURTON APPROVAL
--	---	--	----------------	----------------------

5380 16

TERMS AND CONDITIONS

For good and valuable consideration received, Customer (as identified on the face of this document) and Halliburton Energy Services, a division of Halliburton Company (hereinafter "Halliburton") agree as follows:

A. CUSTOMER REPRESENTATION - Customer warrants that the well is in proper condition to receive the services, equipment, products, and materials to be supplied by Halliburton.

B. PRICE AND PAYMENT - The services, equipment, products, and/or materials to be supplied hereunder are priced in accordance with Halliburton's current price list. All prices are exclusive of taxes. If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If Customer has an approved open account, invoices are payable on the twentieth day after the date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.

C. RELEASE AND INDEMNITY - CUSTOMER AGREES TO RELEASE HALLIBURTON GROUP FROM ANY AND ALL LIABILITY FOR ANY AND ALL DAMAGES WHATSOEVER TO PROPERTY OF ANY KIND OWNED BY, IN THE POSSESSION OF, OR LEASED BY CUSTOMER AND THOSE PERSONS AND ENTITIES CUSTOMER HAS THE ABILITY TO BIND BY CONTRACT. CUSTOMER ALSO AGREES TO DEFEND, INDEMNIFY, AND HOLD HALLIBURTON GROUP HARMLESS FROM AND AGAINST ANY AND ALL LIABILITY, CLAIMS, COSTS, EXPENSES, ATTORNEY FEES AND DAMAGES WHATSOEVER FOR PERSONAL INJURY, ILLNESS, DEATH, PROPERTY DAMAGE AND LOSS RESULTING FROM:

LOSS OF WELL CONTROL; SERVICES TO CONTROL A WILD WELL WHETHER UNDERGROUND OR ABOVE THE SURFACE; RESERVOIR OR UNDERGROUND DAMAGE, INCLUDING LOSS OF OIL, GAS, OTHER MINERAL SUBSTANCES OR WATER; SURFACE DAMAGE ARISING FROM UNDERGROUND DAMAGE; DAMAGE TO OR LOSS OF THE WELL BORE; SUBSURFACE TRESPASS OR ANY ACTION IN THE NATURE THEREOF; FIRE; EXPLOSION; SUBSURFACE PRESSURE; RADIOACTIVITY; AND POLLUTION AND ITS CLEANUP AND CONTROL.

CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS OBLIGATIONS WILL APPLY EVEN IF THE LIABILITY AND CLAIMS ARE CAUSED BY THE SOLE, CONCURRENT, ACTIVE OR PASSIVE NEGLIGENCE, FAULT, OR STRICT LIABILITY OF ONE OR MORE MEMBERS OF THE HALLIBURTON GROUP, THE UNSEAWORTHINESS OF ANY VESSEL OR ANY DEFECT IN THE DATA, PRODUCTS, SUPPLIES, MATERIALS OR EQUIPMENT FURNISHED BY HALLIBURTON GROUP WHETHER IN THE DESIGN, MANUFACTURE, MAINTENANCE OR MARKETING THEREOF OR FROM A FAILURE TO WARN OF SUCH DEFECT. "HALLIBURTON GROUP" IS DEFINED AS HALLIBURTON, ITS PARENT, SUBSIDIARY, AND AFFILIATED COMPANIES AND ITS/THEIR OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS. CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS OBLIGATIONS APPLY WHETHER THE PERSONAL INJURY, ILLNESS, DEATH, PROPERTY DAMAGE OR LOSS IS SUFFERED BY ONE OR MORE MEMBERS OF THE HALLIBURTON GROUP, CUSTOMER, OR ANY OTHER PERSON OR ENTITY AND THE CUSTOMER WILL SUPPORT SUCH OBLIGATIONS ASSUMED HEREIN WITH LIABILITY INSURANCE TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW.

D. EQUIPMENT LIABILITY - Customer shall at its risk and expense attempt to recover any Halliburton equipment lost or lodged in the well. If the equipment is recovered and repairable, Customer shall pay the repair costs, unless caused by Halliburton's sole negligence. If the equipment is not recovered or is irreparable, Customer shall pay the replacement cost, unless caused by Halliburton's sole negligence. If a radioactive source becomes lost or lodged in the well, Customer shall meet all requirements of Section 39.15(a) of the Nuclear Regulatory Commission regulations and any other applicable laws or regulations concerning retrieval or abandonment and shall permit Halliburton to monitor the recovery or abandonment efforts all at no risk or liability to Halliburton. Customer shall be responsible for damage to or loss of Halliburton equipment, products, and materials while in transit aboard Customer-supplied transportation, even if such is arranged by Halliburton at Customer's request, and during loading and unloading from such transport. Customer will also pay for the repair or replacement of Halliburton equipment damaged by corrosion or abrasion due to well effluents.

E. LIMITED WARRANTY - Halliburton warrants only title to the equipment, products, and materials supplied under this agreement and that same are free from defects in workmanship and materials for one year from date of delivery. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's sole liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale, lease or use of any equipment, products, or materials is expressly limited to the replacement of such on their return to Halliburton or, at Halliburton's option, to the allowance to Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, consequential, or punitive damages. 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 EQUIPMENT, MATERIALS, OR SERVICE, NOR THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HALLIBURTON. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be liable for and CUSTOMER SHALL INDEMNIFY HALLIBURTON GROUP AGAINST ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION, even if such is contributed to by Halliburton's negligence or fault. Halliburton also does not warrant the accuracy of data transmitted by electronic process, and Halliburton will not be responsible for accidental or intentional interception of such data by third parties.

F. GOVERNING LAW - The validity, interpretation and construction of this agreement shall be determined by the laws of the jurisdiction where the services are performed or the equipment or materials are delivered.

G. WAIVER - Customer agrees to waive the provisions of the Texas Deceptive Trade Practices-Consumer Protection Act or any similar federal or state statute to the extent permitted by law.

H. MODIFICATIONS - Customer agrees that Halliburton shall not be bound by any modifications to this agreement, except where such modification is made in writing by a duly authorized executive officer of Halliburton. Requests for modifications should be directed to the Vice President - Legal, 5151 San Felipe, Houston, Texas 77056.

