

ORIGINAL

SIDE ONE

89?

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

API NO. 15- 075-20,424-0000

County Hamilton

C 104 Sec. 22 Twp. 24S Rge. 41W East West

3960 Ft. North from Southeast Corner of Section

3960 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)

Lease Name HCU Well # 2241-B

Field Name Bradshaw

Producing Formation Winfield

Elevation: Ground 3270 KB _____

Total Depth 2320 PBDT 2302

Operator: License # 04680

Name: American Exploration Company

Address 2100 NCNB Center

Houston, Texas 77002

City/State/Zip Houston, Texas 77002

Purchaser: KN Energy

Operator Contact Person: Marty B. McClanahan

Phone (713) 220-8251

Contractor: Name: Cheyenne Drilling Co.

License: 5382

Wellsite Geologist: Gary Oliver

Designate Type of Completion
 New Well _____ Re-Entry _____ Workover

_____ Oil _____ SWD _____ Temp. Abd.
 Gas SI _____ Inj _____ Delayed Comp.
 _____ Dry _____ Other (Core, Water Supply, etc.)

If **OWNO**: old well info as follows:
 Operator: _____

Well Name: _____

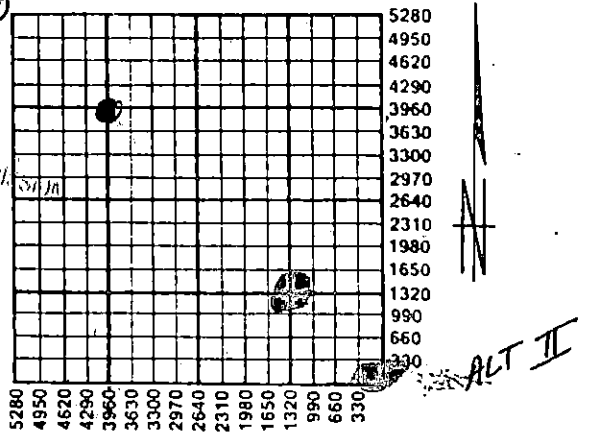
Comp. Date _____ Old Total Depth _____

Drilling Method:
 _____ Mud Rotary Air Rotary _____ Cable

1/02/90 1/05/90 3/16/90

Spud Date Date Reached TD Completion Date

6-28-90
 RECEIVED
 STATE CORPORATION COMMISSION
 JUN 28 1990
 CONSERVATION DIVISION
 Wichita, Kansas



Amount of Surface Pipe Set and Cemented at 306' Feet

Multiple Stage Cementing Collar Used? _____ Yes No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from 306

feet depth to Surface w/ 250 sx cmt.

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.

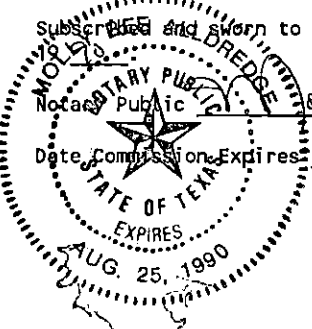
Signature Marty B. McClanahan

Title Sr. Production Analyst Date 6/20/90

Subscribed and sworn to before me this 20th day of June

Jeffrey B. Alldredy

Date Commission Expires _____



K.C.C. OFFICE USE ONLY

Letter of Confidentiality Attached
 Wireline Log Received
 Drillers Timelog Received

Distribution

KCC _____ SWD/Rep _____ NGPA
 KGS _____ Plug _____ Other _____
 (Specify)

PI

JAN 1990

SIDE TWO

Operator Name American Exploration Company Lease Name HCU Well # 2241-B

Sec. 22 Twp. 24S Rge. 41W East West
County Hamilton

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

Name	Formation Description	
	Top	Bottom
Herrington	2200	
Krider	2708	
Winfield	2753	

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	20#	306	Class C	250	2% CaCl & 1/4# floccle per sx.
Production	8-3/4	4-1/2	9.5#	2302	Howco Lt	.600	

Shots Per Foot	Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
	2302-2320	50 gals. 15% FE acid w/ additives	

TUBING RECORD Size 2-3/8 Set At 2302 Packer At 2194 Liner Run Yes No

Date of First Production 1/12/90 Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	0	121	85	----	----

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)
METHOD OF COMPLETION: Open Hole Perforation Dually Completed Commingled
 Other (Specify) Well is shutin pending pipeline connection to KN Energy

CASING & CEMENTING REPORT

ORIGINAL

Well Name 22-41-B Location _____
 Casing SURFACE Date 1-2-76

Jts. On	m On	Size	Wt.					Jts. Depth	m Run
Locat.	Locat.	mm	kg/m	Cr.	Rge.	THD	T&C	Make	Run Landed
<u>7</u>		<u>8 5/8</u>	<u>26</u>		<u>3</u>	<u>8</u>			<u>7 306</u> m
									m
									m
									m

Shoe Make M Type Guide Length 13" m 1.5
 Collar Make _____ Type _____ Length _____ m
 Landing Jt. (When Used) Length _____ m
 Overall Length of Casing String _____ m
 m Up From K.B. (subtract) _____ m
 Setting Depth By Driller _____ m By Tally _____ m

CENTRALIZERS

SCRATCHERS

Make & No. Hall's - 2 Make & No. NONE
 Position _____ Position _____
 Remarks (Thread Lock, Weld, Mill) Thread ALL CONNECTIONS

Hole Size 12 1/4 mm Casing In Hole Size 8 5/8 mm
 Depth _____ m Setting Depth _____ m
 Mud Type 9% CL CHEM. Wt. 9.0 kg/m Visc. 38 S/LWL N.C. cm³
 BOP's _____
 Power Tong Co N.I.C. Torque Max. _____ Min. _____
 Casing String Wt. 6120 daN Remarks SURFACE CASING

Cementing Co. HALLIBURTON Operator _____

TYPES & QUANTITIES OF CEMENT

Date _____

Filler Volume Amount _____ m³ Type _____ Wt. _____ kg/m³
 Additives _____
 Tail In Volume Amount 250 SKS m³ Type STANDARD Wt. 156 kg/m³
 Additives 2% CC
 HT. Cemented SURFACE Water Ahead 5 66.4 m³ Start Mix 1:45 m³
 Finish Mix 1500 m³ Pumping Press 100 kPa Bump Press 200 kPa
 Float Held 3.5 Cement Returns 5 B.B.L. m³
 Plug Down 3:00 P.M. Date 1-2-76
 Wt. Landed in Slips _____ daN Make of Bowl _____
 Size _____ mm Series _____ Slip & Seal Esembly _____
 Remarks (Wellhead - Make, Type, Size)

Co. Rep. HAWK

CUSTOMER: HALLIBURTON LEASE WELLS: 24118 JOB TYPE: CEMENT DATE: 1-2-90

WELL DATA

FIELD _____ SEC. 22 TWP. 24S RNG. 4W COUNTY HAMILTON STATE Ks

FORMATION NAME _____ TYPE _____

FORMATION THICKNESS _____ FROM _____ TO _____

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

PRESENT PROD: OIL _____ SPD. WATER _____ SPD. 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	<input checked="" type="checkbox"/>	24	8 3/4	KB	319	
LINER						
TUBING						
OPEN HOLE			12 1/4	GL	321	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

ORIGINAL

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
TYPE AND SIZE <u>8 3/4</u>		
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE <u>Type M</u>	<u>1</u>	<u>Howco</u>
CENTRALIZERS <u>15-4</u>	<u>2</u>	<u>Howco</u>
BOTTOM PLUG		
TOP PLUG <u>WOODEN</u>	<u>1</u>	<u>Howco</u>
HEAD <u>FULL FALL</u>	<u>1</u>	<u>Howco</u>
PACKER		
OTHER		

JOB DATA

CALLED OUT DATE	ON LOCATION DATE	JOB STARTED DATE	JOB COMPLETED DATE
<u>1-2-90</u>	<u>1-2-90</u>	<u>1-2-90</u>	<u>1-2-90</u>
TIME <u>0530</u>	TIME <u>0900</u>	TIME <u>1330</u>	TIME <u>1407</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 _____

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>G.D. Moore</u>	<u>33670</u>	<u>Lamar, Co</u>
<u>R. Taylor</u>	<u>0959</u>	<u>Lamar, Co</u>
<u>M. DeSham</u>	<u>3801</u>	<u>Lamar, Co</u>
	<u>5070</u>	<u>Lamar, Co</u>

DEPARTMENT Cement

DESCRIPTION OF JOB Cement 8 3/4 SURFACE
W/ 250 SKS STANDARD 2 1/2 CS
1/4 1/2 SK FLOCC

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

CUSTOMER REPRESENTATIVE X David Wolter

HALLIBURTON OPERATOR A. D. Myron COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
<u>1</u>	<u>250</u>	<u>STD</u>	<u>STD</u>	<u>ideal</u>	<u>R</u>	<u>2% CC 1/2# Flocc</u>	<u>1.18</u>	<u>15.6</u>

PRESSURES IN PSI

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

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

AVERAGE _____ FRACTURE GRADIENT _____ TREATMENT: BBL.-GAL. _____ DISPL: BBL.-GAL. 19

SHUT-IN: INSTANT _____ 5-MIN. _____ 15-MIN. _____ CEMENT SLURRY: BBL.-GAL. 52.5

HYDRAULIC HORSEPOWER

ORDERED _____ AVAILABLE _____ USED _____ TOTAL VOLUME: BBL.-GAL. 21.5

AVERAGE RATES IN BPM _____ REMARKS

TREATING _____ DISPL. _____ OVERALL _____

CEMENT LEFT IN PIPE _____

FEET 20 REASON Shoe Joint

THANK YOU FOR CALLING HALLIBURTON



**BULK MATERIALS DELIVERY
AND
TICKET CONTINUATION**

15-075-20424-0000

HALLIBURTON SERVICES
Duncan, Oklahoma 73558
A Division of Halliburton Company

FOR INVOICE AND
TICKET NO. _____

DATE 1-2-90	CUSTOMER ORDER NO.	WELL NO. AND FARM 24-41 B HCU	COUNTY Hamilton	STATE KS
CHARGE TO American Exploration		OWNER Same	CONTRACTOR Chrysanne	
MAILING ADDRESS		DELIVERED FROM Duncan	LOCATION CODE 50415	PREPARED BY McIntyre
CITY & STATE		DELIVERED TO	TRUCK NO. 3801-5070	RECEIVED BY

No. **B814988**

PRICE REFERENCE	SECONDARY REF. OR PART NO.	CODE		DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT	
		L	D		QTY.	MEAS.	QTY.	MEAS.			
504-308				Standard Cement	250	Sks			5.90	1475 00	
509-406				Calcium Chloride 2% w/all	6	Sks			29.50	177 00	
507-210				Flocals 1/4# w/all	60	#			1.27	76 20	
THIS IS NOT AN INVOICE ORIGINAL											
		Returned Mileage Charge	TOTAL WEIGHT		LOADED MILES		TON MILES				
		SERVICE CHARGE ON MATERIALS RETURNED							CU. FEET		
500-207		SERVICE CHARGE				CU. FEET		265	95	788 90	
500-306		Mileage Charge	23856	TOTAL WEIGHT	50	LOADED MILES	59890	TON MILES	170	419 23	
No. B 814988		CARRY FORWARD TO INVOICE							SUB-TOTAL		2396 33
2447 18											

CUSTOMER

DISTRICT Liberal

DATE 1-2-90

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

WELL NO. 24416 LEASE NOU SEC. 22 TWP. 24S RANGE 41W

FIELD _____ COUNTY Haskell STATE KS OWNED BY American Expl

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME _____ TYPE _____
FORMATION THICKNESS _____ FROM _____ TO _____
PACKER: TYPE _____ SET AT _____
TOTAL DEPTH _____ MUD WEIGHT _____
BORE HOLE _____
INITIAL PROD: OIL _____ BPD, H₂O _____ BPD, GAS _____ MCF
PRESENT PROD: OIL _____ BPD, H₂O _____ BPD, GAS _____ MCF

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING	N	24	8 5/8	KB	319	
LINER						
TUBING						
OPEN HOLE			12 1/4	BL	321	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

PREVIOUS TREATMENT: DATE _____ TYPE _____ MATERIALS _____

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ANNULUS CASING TUBING/ANNULUS HYDRAULIC HORSEPOWER ORDERED _____
Cement 11 3/8 S.S. 12/250 SK Standard 2 3/4" O.C.
11 3/8 Fluoride

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. Upon Customer's default 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 attorneys 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.
- 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. The "well owner" shall include working and royalty interest owners.
 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 result from pollution, subsurface pressure, losing control of the well and/or a well blowout or the use of radioactive material.

The defense, indemnity, release and hold harmless obligations of Customer provided for in this Section b) and Section c) below shall apply to claims or liability even if caused or contributed to by Halliburton negligence, strict liability, or the unseaworthiness of any vessel owned, operated, or furnished by Halliburton or any defect in the data, products, materials, or equipment of Halliburton whether the preparation, design, manufacture, distribution, or marketing thereof, or from a failure to warn any person of such defect. Such defense, indemnity, release and hold harmless obligations of Customer's not apply where the claims or liability are caused by the gross negligence or willful misconduct of Halliburton. The term "Halliburton" as used in said Sections b) and c) shall mean Halliburton, its divisions, subsidiaries, parent and affiliated companies, and the officers, directors, employees, agents and servants of all of them.
- 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. 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 against any damages arising from the use of such information.
- 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. Halliburton's liability and Customer's exclusive remedy in cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect punitive or consequential damages.
- 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. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing returned to the landing, unless such loss or damage is caused by 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 Donald J. [Signature] CUSTOMER

DATE 1-2-90

TIME 0700 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.

CUSTOMER

HALLIBURTON SERVICES
Duncan, Oklahoma 73838

A Division of Halliburton Company

15-075-20424-0000 TICKET
NO. **910329**

FORM 1908 R-11

WELL NO. -- FARM OR LEASE NAME 2441B HCU		COUNTY HAMILTON	STATE KS	CITY / OFFSHORE LOCATION	DATE 1-2-90
CHARGE TO AMERICAN EXPLORATION		OWNER AMERICAN EXPL.	TICKET TYPE (CHECK ONE) SERVICE <input checked="" type="checkbox"/> SALES <input type="checkbox"/>		NITROGEN JOB YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
ADDRESS		CONTRACTOR CHEYENNE	LOCATION 1 / Lamar, Co		CODE 50415
CITY, STATE, ZIP		SHIPPED VIA Co TRK	FREIGHT CHARGES <input type="checkbox"/> PPD <input type="checkbox"/> COLLECT		LOCATION 2
WELL TYPE	WELL CATEGORY	WELL PERMIT NO.	DELIVERED TO S. SYRACUSE, KS	LOCATION 3	CODE
TYPE AND PURPOSE OF JOB B- 814988		ORDER NO.	REFERRAL LOCATION ORIGINAL		

As consideration, the above-named Customer agrees to pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists. 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. These terms and conditions shall be governed by the law of the state where services are performed or equipment or materials are furnished.

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 FOR A PARTICULAR PURPOSE OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and customer's exclusive remedy in any cause of action (whether in contract, tort, product liability, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.

PRICE REFERENCE	SECONDARY REF OR PART NO.	L O C.	ACCOUNT	DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT
					QTY	MEAS	QTY	MEAS		
000-117				MILEAGE	50	Mi			2120	110 00
001-016				Pump Charge	319	FT		2 HRS		402 60
030-503				Wooden Plug	1	EA		1/2 IN		58 00
4D	807.39059			CENTRALIZERS	2	EA		5/8 IN	53.00	106 00
16A	830.2171			Type M shoe	1	CM		3/4 IN		161 00
35D	830.10802			Halliburton Weld A	3	EA				83 00
<p>THIS IS AN ORIGINAL</p> <p>NOTE</p>										

AS PER ATTACHED BULK MATERIAL DELIVERY TICKET NO.

B- 814988

2396 33

3266 93

VAS JOB SATISFACTORILY COMPLETED? _____

VAS OPERATION OF EQUIPMENT SATISFACTORY? _____

VAS PERFORMANCE OF PERSONNEL SATISFACTORY? _____

David DeWitt
CUSTOMER OR HIS AGENT (PLEASE PRINT)

CUSTOMER OR HIS AGENT (SIGNATURE)

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.

A. D. [Signature]
HALLIBURTON OPERATOR

HALLIBURTON APPROVAL

CUSTOMER

SUB TOTAL

APPLICABLE TAXES WILL BE ADDED ON INVOICE.

JOB LOG

WELL NO. 22-41B LEASE HCU TICKET NO. 910329
 CUSTOMER American Exploration PAGE NO. 1
 JOB TYPE 4 1/2 SURFACE DATE 1-2-90

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL / GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0530							Called out
	0900							Request call
	0900							call on Rig killing @ 130 ST
	1330							START Circulate w/pig
	1345						100	START Mix Cement
	1400	3.5	52.5				0	Finish Mix Cement
	1401							Drop Plug
	1402						0	START Displacement
	1406		14				200	Cement Circulating
	1407	3.8	19				200	Finish Displacement
	1420							Jobs Complete

ORIGINAL

Thank you
 Steve Richard
 Mark

CASING & CEMENTING REPORT

ORIGINAL

Well Name 22-41-13
Casing Production

Location Sec 22 245-41W
Date 1-4-90

Jts. On	m On	Size	Wt.	Jts. Depth	m Run
Locat.	Locat.	mm	kg/m Cr.	Run	Landed
56		4 1/2	9.5	3	2302

Shoe Make 500¹¹ Type _____ Length 12¹¹ m
Collar Make 1000¹² Type _____ Length _____ m

Landing Jt. (When Used) Length _____ m
Overall Length of Casing String _____ m
m Up From K.B. (subtract) _____ m

Setting Depth By Driller 2302 m By Tally 2302 m 2291 G.L.

CENTRALIZERS

SCRATCHERS

Make & No. Halliburton - 5 Make & No. NONE
Position 1st OFT BOTTOM 2-46-8 Position _____
Remarks (Thread Lock, Weld, Mill) None 26000 FIRST 10
Collars

Hole Size 7 7/8 mm Casing In Hole Size 2302 mm B mm
Depth 2302 m Setting Depth 2302 m K-13 m
Mud Type FRASH Chem. Wt. 91 kg/m Visc. 40 S/LWL cm
BOP's ANGLER
Power Tong Co FRANCIS Torque Max. 1400 Min. 800
Casing String Wt. 21869 daN Remarks _____

Cementing Co. Halliburton Operator HSHLEY

TYPES & QUANTITIES OF CEMENT

Date 1-4-89

Filler Volume Amount 600 SX m³ Type Halliburton Wt. 12.16 kg/m³
Additives Flocc 1/2 SX
Tail In Volume Amount 100 SX m³ Type Standard Wt. 15.6 kg/m³
Additives Flocc 1/2 SX
HT. Cemented _____ Water Ahead 15 BBL m³ Start Mix 7:00 A.M. m³
Finish Mix 8:00 A.M. m³ Pumping Press 200 kPa Bump Press 1500 kPa
Float Held Yes Cement Returns Yes m³
Plug Down 8:15 A.M. Date 1-4-90
Wt. Landed in Slips 25000 daN Make of Bowl Hercules
Size 5 7/8-4 1/2 mm Series _____ Slip & Seal Esembly _____
Remarks (Wellhead - Make, Type, Size) _____

Clean 8' OFT BOTTOM AFTER
Running Pipe

Co. Rep. H Hunt



HALLIBURTON SERVICES
Duncan, Oklahoma 73536

A Division of Halliburton Company

15-075-20424-0000

TICKET

ORIGINAL NO. 910351-

PAGE 1 OF _____ PAGES

FORM 1906 R-11

WELL NO. - FARM OR LEASE NAME HCU 22-41 B		COUNTY HAMILTON	STATE KS	CITY/OFFSHORE LOCATION	DATE 1-4-91
CHARGE TO AMERICAN EXPLORATION		OWNER	TICKET TYPE (CHECK ONE) SERVICE <input checked="" type="checkbox"/> SALES <input type="checkbox"/>		NITROGEN JOB YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
ADDRESS		CONTRACTOR CSEYENNS LI	LOCATION 1 LAITANGL	CODE 5041	
CITY, STATE, ZIP		SHIPPED VIA	FREIGHT CHARGES <input type="checkbox"/> PPD <input type="checkbox"/> COLLECT	LOCATION 2	CODE
WELL TYPE 02	WELL CATEGORY 01	WELL PERMIT NO.	DELIVERED TO	LOCATION 3	CODE
TYPE AND PURPOSE OF JOB 035		B-	ORDER NO.	REFERRAL LOCATION	

As consideration, the above-named Customer agrees to pay Halliburton in accord with the rates and terms stated in Halliburton's current price list. 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. These terms and conditions shall be governed by the law of the state where services are performed or equipment or materials are furnished.

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 FOR A PARTICULAR PURPOSE OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and customer's exclusive remedy in any cause of action (whether in contract, tort, product liability, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.

PRICE REFERENCE	SECONDARY REF OR PART NO.	L O C.	ACCOUNT	DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT	
					QTY	MEAS	QTY	MEAS			
000-117				MILEAGE	50				2.20	110	00
001-014				PUMP CHANGE	2302					911	00
000-014				5 1/2 PLUG	1		4 1/2			32	00
26	847.6214			INSERT FLOAT SOLE	1					216	00
40	807.92004			CENT	5				41	205	00
66	807.64021			FAST GIR	1					9	60
350	890.10802			WELL	3					33	00
27	815.19111			FILL-UP	1					27	50

AS PER ATTACHED BULK MATERIAL DELIVERY TICKET NO.

B-814989

5785 9.

WAS JOB SATISFACTORILY COMPLETED? _____
 WAS OPERATION OF EQUIPMENT SATISFACTORY? _____
 WAS PERFORMANCE OF PERSONNEL SATISFACTORY? _____

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.

C. Ashless

7330 01

SUB TOTAL

15-075-20424-0000

11
T
11



HALLIBURTON SERVICES
Duncan, Oklahoma 73129

WORK ORDER CONTRACT
AND PRE-TREATMENT DATA

ORIGINAL

FORM 1908 R-7

A Division of Halliburton Company

ATTACH TO INVOICE & TICKET NO. 910351

DISTRICT LIBERAL KS

DATE 1-4-80

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

WELL NO. HCU 22-410 LEASE _____ SEC. 22 TWP. 24 RANGE 41

FIELD H.C.U. COUNTY HAMILTON STATE KS OWNED BY _____

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME	TYPE	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
FORMATION THICKNESS	FROM TO						
PACKER: TYPE	SET AT						
TOTAL DEPTH	MUD WEIGHT						
BORE HOLE							
INITIAL PROD: OIL _____ BPD, H ₂ O _____ BPD, GAS _____ MCF							
PRESENT PROD: OIL _____ BPD, H ₂ O _____ BPD, GAS _____ MCF							

PREVIOUS TREATMENT: DATE _____ TYPE _____ MATERIALS _____

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ANNULUS CASING TUBING/ANNULUS HYDRAULIC HORSEPOWER ORDERED _____

Cont 4 1/2 prod.

Disp with 37554 H2O

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. 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 attorneys 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.
- 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. The term "well owner" shall include working and royalty interest owners.
 - 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.

The defense, indemnity, release and hold harmless obligations of Customer provided for in this Section b) and Section c) below shall apply to claims or liability even if caused or contributed to by Halliburton's negligence, strict liability, or the unseaworthiness of any vessel owned, operated, or furnished by Halliburton or any defect in the data, products, supplies, materials, or equipment of Halliburton whether in the preparation, design, manufacture, distribution, or marketing thereof, or from a failure to warn any person of such defect. Such defense, indemnity, release and hold harmless obligations of Customer shall not apply where the claims or liability are caused by the gross negligence or willful misconduct of Halliburton. The term "Halliburton" as used in said Sections b) and c) shall mean Halliburton, its divisions, subsidiaries, parent and affiliated companies, and the officers, directors, employees, agents and servants of all of them.
- 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 product, 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. 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 against any damages arising from the use of such information.
- 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. Halliburton's 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 or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect punitive or consequential damages.
- 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. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing unit returned to the landing, unless such loss or damage is caused by 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 Daniel De Ross

15-075-20424-0000

SPEEDISERT MOORE BUSINESS FORMS, INC., WICHITA FALLS, TEX. - N 632252743

ORIGINAL



HALLIBURTON SERVICES

JOB SUMMARY

HALLIBURTON DIVISION

WICHITA FALLS

HALLIBURTON LOCATION

LAMAR CO

BILLED ON TICKET NO.

910371

WELL DATA
FIELD SEC. 22 TWP. 24H RNG. 41 COUNTY HAMILTON STATE 155

FORMATION NAME TYPE
FORMATION THICKNESS FROM TO
INITIAL PROD: OIL SPD. WATER SPD. GAS MCFD
PRESENT PROD: OIL SPD. WATER SPD. GAS MCFD
COMPLETION DATE MUD TYPE MUD WT.
PACKER TYPE SET AT
BOTTOM HOLE TEMP. PRESSURE
MISC. DATA TOTAL DEPTH

Table with columns: NEW USED, WEIGHT, SIZE, FROM, TO, MAXIMUM PSI ALLOWABLE. Rows: CASING, LINER, TUBING, OPEN HOLE, PERFORATIONS.

TOOLS AND ACCESSORIES
TYPE AND SIZE QTY. MAKE
FLOAT COLLAR
FLOAT SHOE
GUIDE SHOE
CENTRALIZERS 5-7 5
BOTTOM FLUG
TOP PLUG 5/8 1
HEAD FFKK
PACKER EAST OBI 3
OTHER WAKE 3

JOB DATA
CALLED OUT ON LOCATION JOB STARTED JOB COMPLETED
DATE 1-3-90 DATE 1-4-90 DATE 1-7-90 DATE 1-4-90
TIME 20:00 TIME :30 TIME 4:00 TIME 7:15

PERSONNEL AND SERVICE UNITS
NAME UNIT NO. & TYPE LOCATION
B. PALMER 2392 LAMAR
J. CARL FORT 1020
MARK 3801 DUNCAN
C. HISSLER 38479 LAMAR

MATERIALS
TREAT. FLUID DENSITY LB/GAL. API
DISPL. FLUID DENSITY LB/GAL. API
PROP. TYPE SIZE LD.
PROP. TYPE SIZE LB.
ACID TYPE GAL. %
ACID TYPE GAL. %
ACID TYPE GAL. %
SURFACTANT TYPE GAL. IN
WATER 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

DEPARTMENT
DESCRIPTION OF JOB

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

CUSTOMER REPRESENTATIVE
HALLIBURTON OPERATOR
COPIES REQUESTED

CEMENT DATA
STAGE NUMBER OF SACKS TYPE API CLASS BRAND BULK SACKED ADDITIVES YIELD CU.FT./SK. MIXED LBS./GAL.
1 600 H.G.C. 166, FL. 1.89 12.7
2 100 S.F.C. 1.16 15.6

PRESSURES IN PSI SUMMARY
CIRCULATING DISPLACEMENT
BREAKDOWN MAXIMUM
AVERAGE FRACTURE GRADIENT
SHUT-IN: INSTANT 1-MIN. 15-MIN.
HYDRAULIC HORSEPOWER
ORDERED AVAILABLE USED
AVERAGE RATES IN BPM
TREATING DISPL. OVERALL
CEMENT LEFT IN PIPE

VOLUMES
PRESLUSH: BBL. 15 TYPE H2O
LOAD & BKDN: BBL.-GAL. PAD: BBL.-GAL.
TREATMENT: BBL.-GAL. DISPL: BBL.-GAL. 37
CEMENT SLURRY: BBL. 217
TOTAL VOLUME: BBL.-GAL.
REMARKS

CUSTOMER AMERICAN EXPL. LEASE HCO 2241 B WELL NO. JOB TYPE DATE 1-7-

