

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

ORIGINAL

API NO. 15- 175-207440001

County Seward

SE - SE - SE Sec. 14 Twp. 33S Rge. 32 X <sup>E</sup> <sub>W</sub>

330 Feet from S (circle one) Line of Section

330 Feet from E (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:  
NE, S, NW or SW (circle one)

Lease Name City of Liberal Well # 1-14

Field Name Arkalon

Producing Formation None

Elevation: Ground 2756 KB 2766

Total Depth 3258 PBTD 3212

Amount of Surface Pipe Set and Cemented at 1520 Feet

Multiple Stage Cementing Collar Used? Yes X No

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

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

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

Drilling Fluid Management Plan UNSUCCESSFUL REENTRY  
(Data must be collected from the Reserve Pit) JH 1-22-97

Chloride content 45000 ppm Fluid Volume \_\_\_\_\_ bbls

Dewatering method used Evaporation

Location of fluid disposal if hauled offsite \_\_\_\_\_

Operator Name \_\_\_\_\_

Lease Name \_\_\_\_\_ License No. \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S Rng. \_\_\_\_\_ E/W

County \_\_\_\_\_ Docket No. \_\_\_\_\_

Operator: License # 7457

Name: ELDER & VAUGHN, INC.

Address P. O. Box 18938

Oklahoma City, OK 73154

City/State/Zip \_\_\_\_\_

Purchaser: None

Operator Contact Person: Jack H. Vaughn

Phone (405) 842-8877

Contractor: Name: Cheyenne Drlg., Inc.

License: \_\_\_\_\_

Wellsite Geologist: None

Designate Type of Completion  
\_\_\_\_\_ New Well X Re-Entry \_\_\_\_\_ Workover

\_\_\_\_\_ Oil \_\_\_\_\_ SWD \_\_\_\_\_ SIOU XXX Temp. Abd.  
\_\_\_\_\_ Gas \_\_\_\_\_ ENHR \_\_\_\_\_ SIGW  
X Dry \_\_\_\_\_ Other (Core, WSW, Expl., Cathodic, etc)

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

Operator: TXO Production Corp.

Well Name: City of Liberal

Comp. Date 6/6/84 Old Total Depth 5910

\_\_\_\_\_ Deepening \_\_\_\_\_ Re-perf. \_\_\_\_\_ Conv. to Inj/SWD  
\_\_\_\_\_ Plug Back \_\_\_\_\_ PBTD  
\_\_\_\_\_ Commingled \_\_\_\_\_ Docket No. \_\_\_\_\_  
\_\_\_\_\_ Dual Completion \_\_\_\_\_ Docket No. \_\_\_\_\_  
\_\_\_\_\_ Other (SWD or Inj?) \_\_\_\_\_ Docket No. \_\_\_\_\_

5/28/96 5/29/96 6/14/96  
Date OF REENTRY Date Reached TD Completion Date

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 and correct to the best of my knowledge.

Signature Jack H. Vaughn  
Jack H. Vaughn  
Vice President Date 9/16/96

Subscribed and sworn to before me this 16 day of September,  
1996  
IN AND FOR  
Notary Public  
Carolyn Rorup  
Date Commission Expires 1/16/98

K.C.C. OFFICE USE ONLY  
F \_\_\_\_\_ Letter of Confidentiality Attached  
C \_\_\_\_\_ Wireline Log Received  
C \_\_\_\_\_ Geologist Report Received  
Distribution  
✓ KCC \_\_\_\_\_ SWD/Rep \_\_\_\_\_ NGPA  
\_\_\_\_\_ KGS \_\_\_\_\_ Plug \_\_\_\_\_ Other  
(Specify)

Operator Name Elder & Vaughn, Inc. Lease Name City of Liberal Well # 1-14  
 Sec. 14 Twp. 33S Rge. 32  East County Seward  
 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  Yes  No  
 (Attach Additional Sheets.)  
 Samples Sent to Geological Survey  Yes  No  
 Cores Taken  Yes  No  
 Electric Log Run  Yes  No  
 (Submit Copy.)  
 List All E.Logs Run: None

Log Formation (Top), Depth and Datums  Sample  
 Name Top Datum  
Old Well Re-Entry

CASING RECORD <input type="checkbox"/> New <input checked="" type="checkbox"/> 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
Production	7 7/8	5 1/2	14, 15.5 & 17	3249	50/50 Pozmix	230	10% Salt 12.5# Gilsomite /sk 0.75% CFR-3

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 checked="" type="checkbox"/> Plug Off Zone	2663-69	Premium Reg.	75	None	

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type		Acid, Fracture, Shot, Cement Squeeze Record	
	Specify Footage of Each Interval Perforated		(Amount and Kind of Material Used)	Depth
2	2663-69		1000 Gals. 15% acid	2663-69
2	2625-31		1500 Gals. 15% acid	2625-31

TUBING RECORD Size None 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 (If vented, submit ACO-18.) METHOD OF COMPLETION  Open Hole  Perf.  Dually Comp.  Commingled  Other (Specify) Production Interval None



**HALLIBURTON ENERGY SERVICES**

HAL-1906-N

CHARGE TO: **ELDER AND YAUGHN**  
 ADDRESS:  
 CITY, STATE, ZIP CODE:

CUSTOMER COPY

TICKET

No. **920331 - 1**

PAGE 1 OF 2

SERVICE LOCATIONS 1. <b>LIBERAL KS</b>	WELL/PROJECT NO. <b>1-K</b>	LEASE <b>CITY OF LIBERAL</b>	COUNTY/PARISH <b>SEWARD</b>	STATE <b>KS</b>	CITY/OFFSHORE LOCATION <b>LAND</b>	DATE <b>5-29-96</b>	OWNER
2. <b>Hickman KS</b>	TICKET TYPE <input checked="" type="checkbox"/> SERVICE	NITROGEN JOB? <input checked="" type="checkbox"/> YES	CONTRACTOR	RIG NAME/NO. <b>CHEYENNE 4</b>	SHIPPED VIA <b>CV</b>	DELIVERED TO <b>LOCATION</b>	ORDER NO.
3.	WELL TYPE	WELL CATEGORY	JOB PURPOSE <b>035</b>	WELL PERMIT NO.	WELL LOCATION		
4.	REFERRAL LOCATION	INVOICE INSTRUCTIONS <b>CEMENT 5 1/2" PRODUCTION CASING</b>					

PRICE REFERENCE	SECONDARY REFERENCE/PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
		LOC.	ACCT.	DF.							
000-117					MILEAGE R.C.M.	32	MI	1EA		285	91 20
000-119					CREW MILEAGE	32	MI	1EA		150	48 00
001-016					DEPTH CHARGE	3242	FT	1EA		1500 00	1500 00
030-016					5 1/2" TOP PLUG	1	EA	1EA		60 00	60 00

**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.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

**X** *[Signature]*  
 DATE SIGNED: \_\_\_\_\_ TIME SIGNED: \_\_\_\_\_  
 A.M.  P.M.

do  do not require IPC (Instrument Protection).  Not offered

SUB SURFACE SAFETY VALVE WAS:  
 PULLED & RETURN  PULLED  RUN

TYPE LOCK \_\_\_\_\_ DEPTH \_\_\_\_\_

BEAN SIZE \_\_\_\_\_ SPACERS \_\_\_\_\_

TYPE OF EQUALIZING SUB. \_\_\_\_\_ CASING PRESSURE \_\_\_\_\_

TUBING SIZE \_\_\_\_\_ TUBING PRESSURE \_\_\_\_\_ WELL DEPTH \_\_\_\_\_

TREE CONNECTION \_\_\_\_\_ TYPE VALVE \_\_\_\_\_

**SURVEY**  AGREE  UN-DECIDED  DIS-AGREE

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?

WE UNDERSTOOD AND MET YOUR NEEDS?

OUR SERVICE WAS PERFORMED WITHOUT DELAY?

WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?

ARE YOU SATISFIED WITH OUR SERVICE?  
 YES  NO

CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL	1699	20
FROM CONTINUATION PAGE(S)	5029	30
SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE	6728	60

**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) <i>[Signature]</i>	HALLIBURTON OPERATOR/ENGINEER <b>MERN ALLISON</b>	EMP # <b>62275</b>	HALLIBURTON APPROVAL
---------------------------------------------	----------------------------------------------------------------	------------------------------------------------------	-----------------------	----------------------



JOB LOG HAL-2013-C

CUSTOMER		WELL NO.		LEASE		JOB TYPE		TICKET NO.	
ELDER AND VAUGHN		1-14		CITY OF LIBERAL		5 1/2 LONGSTRING		920331	
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS	
				T	C	TUBING	CASING		
	1200							CALL OUT	
	1300							ON LOCATION	
	1330							SAFETY MEETING ORIGINAL	
	1800							HOOK TO CASING	
	1815							CIRCULATE w/ RTH PUMP	
	1903	5	22			300		20 BBL H <sub>2</sub> O AHEAD	
	1905	5	62.67			320		MIX 230 s <sub>w</sub> 50/50 FORTMEX A w/ 10% SALT - 12% GEL - 3/4" CER-3 13.6% H <sub>2</sub> O - 1.53" H <sub>2</sub> O - 6.23" GPM	
	1921							WASH PUMP LENSES	
	1924							DROP TOP PLUG	
	1927	4.5						START DISPLACEMENT	
			77.7						
	1950		76.9			1000		BUMP PLUG	
	1951							CHECK FLOAT NO HOLD	
	1953					1002		RE-PRESSURE PLUG	
	1954					✓		CHECK FLOAT	
								1.25 BPM! RATE BEFORE PLUG BUMPED	
								492 P.S.I! PRESSURE BEFORE PLUG BUMPED	

THANK YOU  
KEVIN S. REINHARDT (VAUGHN)

RECEIVED  
KAS/SAS/DOT/P/00MM  
1996 SEP 18 P 2:15

**WELL DATA**

FIELD \_\_\_\_\_ SEC \_\_\_\_\_ TWP \_\_\_\_\_ RNG \_\_\_\_\_ COUNTY **SEWARD** STATE **KANSAS**

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	17 1/2	6 1/2	0	1100	
LINER CAS	U	14 3/4	"	1100	3242	
TUBING						
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

**ORIGINAL**

**JOB DATA**

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <b>5-29-96</b>	DATE <b>5-29-96</b>	DATE <b>5-29-96</b>	DATE <b>5-29-96</b>
TIME <b>1:00</b>	TIME <b>1:00</b>	TIME <b>1:00</b>	TIME <b>1:56</b>

**TOOLS AND ACCESSORIES**

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD <b>PLUG CONTAINER</b>	<b>1</b>	<b>HOWCO</b>
PACKER		
OTHER		

**COMP**

**PERSONNEL AND SERVICE UNITS**

NAME	UNIT NO. & TYPE	LOCATION
<b>MERN ALLISON</b>	<b>38242</b>	<b>DUNCAN</b>
<b>62275</b>	<b>PIU</b>	<b>OKLA</b>
<b>RICHARD BRITTON</b>	<b>2276-7131</b>	<b>DUNCAN</b>
<b>E-1054</b>	<b>R.G.M.</b>	<b>OKLA</b>
<b>CALVIN LAY</b>	<b>50137-6610</b>	<b>HUGOTON</b>
<b>D-9259</b>	<b>BULK</b>	<b>KANSAS</b>

**MATERIALS**

TREAT. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. °API  
 DISPL. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. °API  
 PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.  
 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 \_\_\_\_\_

DEPARTMENT **CEMENT (500)**  
 DESCRIPTION OF JOB **CEMENT 5/2 PRODUCTION CASING**

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

CUSTOMER REPRESENTATIVE **X [Signature]**  
 HALLIBURTON OPERATOR **MERN ALLISON**  
 COPIES REQUESTED \_\_\_\_\_

**CEMENT DATA**

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
<b>1</b>	<b>230</b>	<b>SUPER H</b>		<b>B</b>	<b>10% SACT - 12 1/2% GILLUMITE - 3 1/4% CFR-3</b>	<b>1.53</b>	<b>13.6</b>

**PRESSURES IN PSI**

**SUMMARY**

**VOLUMES**

CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_ PRESLUSH: BBL. **10** TYPE **H<sub>2</sub>O**  
 BREAKDOWN \_\_\_\_\_ MAXIMUM \_\_\_\_\_ LOAD & BKDN: BBL.-GAL. \_\_\_\_\_ PAD: BBL.-GAL. \_\_\_\_\_  
 AVERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_ TREATMENT: BBL.-GAL. \_\_\_\_\_ DISPL: BBL.-GAL. **77**  
 SHUT-IN: INSTANT \_\_\_\_\_ 5-MIN \_\_\_\_\_ 15-MIN \_\_\_\_\_ CEMENT SLURRY: BBL.-GAL. **62.6**  
 HYDRAULIC HORSEPOWER \_\_\_\_\_ TOTAL VOLUME: BBL.-GAL. **149.6**  
 ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_  
 AVERAGE RATES IN BPM \_\_\_\_\_  
 TREATING \_\_\_\_\_ DISPL. \_\_\_\_\_ OVERALL \_\_\_\_\_  
 CEMENT LEFT IN PIPE \_\_\_\_\_  
 FEET **35** REASON **SLIDE JOINT**

**REMARKS**

**SEE JOB LOG**

CUSTOMER

CUSTOMER: **CLDOR AND VALUAM**  
 LEASE: **1111 5th Street**  
 WELL NO.: **141**  
 JOB TYPE: **5/2 PRODUCTION**  
 DATE: **5-29-96**



HALLIBURTON

HALLIBURTON ENERGY SERVICES

TICKET CONTINUATION

CUSTOMER COPY

TICKET No. 920331

FORM 1911 R-10

CUSTOMER mg Elder and Vaughn  
 WELL City of Liberal 1-14  
 DATE 05-29-96  
 PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	WELL		DATE	PAGE	OF		
		LOC	ACCT	DF		QTY.	U/M				QTY.	U/M
504-131					50/50 Premium Pozmix Cement	230	stk				8.77	2017.10
507-153	516.00161				OPR-3 .75%/ 230	145	lb				4.85	703.25
508-291	516.00337				Gilsonite 12.5%/ 230	2875	lb				40	1150.00
509-968	516.00355				Granulated Salt 10%/ 230	1194	lb				15	1791.10
RECEIVED KANSAS CORP COMM 1996 SEP 18 P 12:15												
ORIGINAL												
500-207					SERVICE CHARGE	CUBIC FEET					1.35	411.75
500-306					MILEAGE CHARGE	TOTAL WEIGHT	LOADED MILES	TON MILES			.95	568.10
						23920	50	598				

No. B 341815

CONTINUATION TOTAL

5029.30



HALLIBURTON

TICKET CONTINUATION

CUSTOMER COPY

TICKET No. 919 277

HALLIBURTON ENERGY SERVICES

FORM 1911 R-10

CUSTOMER Elder & Vaughn	WELL Sity of Liberal #1	DATE 06-11-96	PAGE OF
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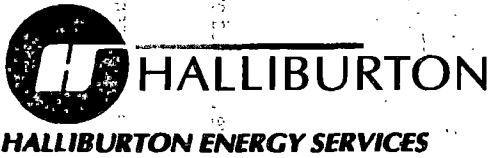
PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
504-043	516.00272				Premium Cement	75	sk			11.08	831.00
500-207					SERVICE CHARGE			CUBIC FEET			
500-306					MILEAGE CHARGE	TOTAL WEIGHT	LOADED MILES	TON MILES			
						7050	45	158.625			
									75	1.35	101.25
										.95	150.69

RECEIVED KANSAS CORP JUN 18 1996 10 12:11

ORIGINAL

No. B 341886

CONTINUATION TOTAL 1582.94



CHARGE TO: ELDER + VAUGHN  
 ADDRESS:  
 CITY, STATE, ZIP CODE:

DUNCAN COPY

TICKET

No. 920277 - 6

PAGE 1 OF 2

HAL-1906-N

SERVICE LOCATIONS 1. 0255 40 LIBERAL 2. 0255 35 HUGOTON	WELL/PROJECT NO. 1.	LEASE CITY OF SEWARD	COUNTY/PARISH SEWARD	STATE KS	CITY/OFFSHORE LOCATION	DATE 6-11-96	OWNER SAME
3.	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	NITROGEN JOB? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CONTRACTOR PATRICK WILL SER.	RIG NAME/NO.	SHIPPED VIA CT	DELIVERED TO WELL SITE	ORDER NO.
4.	WELL TYPE 02 GAS	WELL CATEGORY 02 WORKOVER	JOB PURPOSE 075' SQUEEZE PERFORATIONS	WELL PERMIT NO.	WELL LOCATION LAND	REFERRAL LOCATION	

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
000-117		1			MILEAGE	92	m		RT	2.85	194.20
000-119		1			CREW MILEAGE	92	mi		RT	1.50	48.00
009-134		1			PUMP CHARGE	2648	FT			1535.00	1535.00
RECEIVED KANSAS CORP COMM 1996 SEP 18 10 12 16 ORIGINAL											

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MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

DATE SIGNED: [Signature] TIME SIGNED:  A.M.  P.M.  
 do  do not require IPC (Instrument Protection).  Not offered

SUB SURFACE SAFETY VALVE WAS:  
 PULLED & RETURN  PULLED  RUN

TYPE LOCK	DEPTH	
BEAN SIZE	SPACERS	
TYPE OF EQUALIZING SUB:	CASING PRESSURE	
TUBING SIZE	TUBING PRESSURE	WELL DEPTH
TREE CONNECTION	TYPE VALVE	

**SURVEY**  AGREE  UN-DECIDED  DIS-AGREE

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?  
 WE UNDERSTOOD AND MET YOUR NEEDS?  
 OUR SERVICE WAS PERFORMED WITHOUT DELAY?  
 WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?  
 ARE YOU SATISFIED WITH OUR SERVICE?  
 YES  NO  
 CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL  
 FROM CONTINUATION PAGE(S)  
 SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE

1082  
 1674 20  
 2757 19

**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) <u>[Signature]</u>	HALLIBURTON OPERATOR/ENGINEER <u>[Signature]</u>	EMP # 63573	HALLIBURTON APPROVAL
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# JOB SUMMARY

HALLIBURTON DIVISION  
HALLIBURTON LOCATION

MID CONTINENT  
LIBERAL, KS

BILLED ON TICKET NO. 920277

## WELL DATA

FIELD \_\_\_\_\_ SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RNG. \_\_\_\_\_ COUNTY SEWARD 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	11	15.5	5 1/2			
LINER						
TUBING	11	4.7	2 3/8	KB	2648	
OPEN HOLE						SHOTS/FT.
PERFORATIONS				2663	2669	2
PERFORATIONS						
PERFORATIONS						

## JOB DATA

### TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER		
OTHER		

CALLED OUT DATE	ON LOCATION DATE	JOB STARTED DATE	JOB COMPLETED DATE
6-11-96	6-11-96	6-11-96	6-11-96
TIME 1030	TIME	TIME 1518	TIME 1700

### PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
J. Woodrow		
D. McLANE	ORIGINAL	

### 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. \_\_\_\_\_

PERFFAC BALLS TYPE \_\_\_\_\_ QTY. \_\_\_\_\_

OTHER \_\_\_\_\_

OTHER \_\_\_\_\_

DEPARTMENT CEMENT

DESCRIPTION OF JOB SQUEEZE PERFORATIONS

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

CUSTOMER REPRESENTATIVE [Signature]

HALLIBURTON OPERATOR [Signature] COPIES REQUESTED \_\_\_\_\_

## CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	75	Premium	SOUTHWEST	B		1.18	15.6

### PRESSURES IN PSI

### SUMMARY

### VOLUMES

CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_ PRESLUSH: BBL.-GAL. \_\_\_\_\_ TYPE \_\_\_\_\_

BREAKDOWN \_\_\_\_\_ MAXIMUM 1000 LOAD & BKDN: BBL.-GAL. \_\_\_\_\_ PAD: BBL.-GAL. \_\_\_\_\_

AVERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_ TREATMENT: BBL.-GAL. \_\_\_\_\_ DISPL: BBL.-GAL. 10.2

SHUT-IN: INSTANT \_\_\_\_\_ 5-MIN \_\_\_\_\_ 15-MIN \_\_\_\_\_ CEMENT SLURRY: BBL.-GAL. 14

ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_ TOTAL VOLUME: BBL.-GAL. \_\_\_\_\_

TREATING \_\_\_\_\_ DISPL \_\_\_\_\_ OVERALL \_\_\_\_\_ REMARKS \_\_\_\_\_

FEET \_\_\_\_\_ REASON \_\_\_\_\_

HYDRAULIC HORSEPOWER

1986 SEP 18 10 10 AM

MASSACHUSETTS

RECEIVED

CEMENT LEFT IN PIPE

CUSTOMER FIELD + MARGINAL

LEASE City of Liberal

WELL NO. 1

JOB TYPE SQUEEZE

DATE 6-11-96

**JOB LOG** HAL-2013-C

CUSTOMER <i>ELDER &amp; VAUGHN</i>	WELL NO. <i>1</i>	LEASE <i>CITY OF LIBERAL</i>	JOB TYPE <i>SQUEEZE PREPARATION 920 276</i>	TICKET NO.
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CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1300							JOB READY
	1100							CALLED OUT FOR JOB
	1245							PUMP TRUCK ON LOCATION - RIG RUNNING IN BAKER PACKER + 2 7/8 TBC - SET UP PUMP TRUCK
	1330							TBC ON BOTTOM 2642' Tool joint
	1345							GOING TO GET STRAPPER HEAD: PACKER - SET 15' ABOVE PRRFS - WAIT ON WATER TRUCK
	0300							WATER TRUCK ON LOCATION -
	1518						800'	LOAD ANNULUS -
	1542	4				450		TAKE INJECTION RATE
	1546							START MIXING 75.5% GMT AT 16.4 <sup>CP</sup> GAL THROUGH MIXING GMT - SHUT DOWN
								WASH OUT PUMP + LINES
	1600						0'	OPEN SUMP - LET GO ON VACUUM 6.17%
			5.0					SBB'S OUT - TAKING FLUID AT 1 BPM
	1605						0'	SHUT SUMPS - WAIT 15 MIN
	1624		6.0				500'	OPEN SUMP - LET 1 BAR OUT ON VACUUM
	1625							CLOSE SUMP - WAIT 15 MIN
	1640							OPEN SUMP NOT ON VACUUM -
	1641						1000' 500'	MAINT GMT - PRESSURE UP TO 1000 <sup>PS</sup> HOLDING
	1643							RELEASE SQUEEZE - NO FLOW BACK
	1644						650'	PRESSURE BACK UP ON SQUEEZE
	1645		15.0					UNSEAT PACKER - REVERSE OUT
	1648							GET 4 BBL GMT BACK -
								SQUEEZED WITH 50 STS IN PERFORATIONS
	1700						1000' 500'	SET PACKER - PRESSURE BACK UP ON SQUEEZE
	1702							HOLDING
								TRIP OUT PACKER + TBC

RECEIVED  
 MANSAS-COOP COMM  
 SEP 18 12:19 PM '99

THANK YOU! CALL NOW!  
 WOODY DANNY