

ORIGINAL

CORRECTED REPORT

SIDE ONE

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

Operator: License # 9262

Name: Lowry Exploration, Inc.

Address Box 1847

City/State/Zip Liberal, KS 67905-1847

Purchaser: Panhandle Eastern Pipeline Co.

Operator Contact Person: Ned Lowry

Phone (316) 624-8141

Contractor Name: Gabbert & Jones

License: 5842

Wellsite Geologist: \_\_\_\_\_

Designate Type of Completion

New Well  Re-Entry  Workover

Oil  SWD  Temp. Abd.

Gas  Inj  Delayed Comp.

Dry  Other (Core, Water Supply, etc.)

If OASD: old well info as follows:

Operator: \_\_\_\_\_

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

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

Drilling Method:

Mud Rotary  Air Rotary  Cable

10/17/90 10/20/90 11/29/90

Spud Date Date Reached TD Completion Date

API NO. 15- 189-21,451-00-00

County Stevens

NE SW NE Sec. 20 Twp. 34 Rge. 37  East  West

3890 Ft. North from Southeast Corner of Section

1390 Ft. West from Southeast Corner of Section

(NOTE: Locate well in section plat below.)

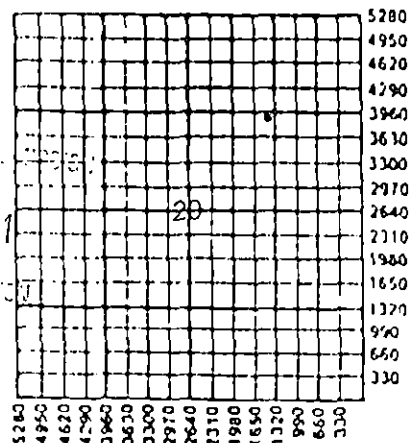
Lease Name Dunne-Hoffmann Well # J-2

Field Name Ptarmigan

Producing Formation Chase series

Elevation: Ground 3169' KB \_\_\_\_\_

Total Depth 3061' PSTD 3016'



Amount of Surface Pipe Set and Cemented at 709.70' Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set N/A Feet

If Alternate II completion, cement circulated from N/A

feet depth to \_\_\_\_\_ w/ \_\_\_\_\_ 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 this 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.

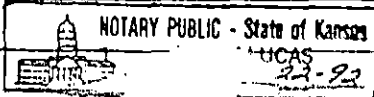
Signature Ned E. Lowry Ned E. Lowry

Title Pres. Date 2/8/91

Subscribed and sworn to before me this 8th day of February, 19 91.

Notary Public V. Kay Lucas

Date Commission Expires \_\_\_\_\_



K.C.C. OFFICE USE ONLY

F  Letter of Confidentiality Attached

C  Wireline Log Received

C  Drillers Time Log Received

✓ Distribution

KCC  SWD/Rep  NGPA

KGS  Plug  Other (Specify)

PI

SIDE TWO

Operator Name Lowry Exploration, Inc. Lessee Name Dunné-Hoffmann Well # J-2

Sec. 20 Twp. 34S Rge. 37  East  West  
 County Stevens

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	Formation Description <input checked="" type="checkbox"/> Log <input type="checkbox"/> Sample <table border="1"> <thead> <tr> <th>Name</th> <th>Top</th> <th>Bottom</th> </tr> </thead> <tbody> <tr> <td>Herrington</td> <td>2702</td> <td>2720</td> </tr> <tr> <td>Krider</td> <td>2732</td> <td>2780</td> </tr> <tr> <td>Winfield</td> <td>2793</td> <td>2825</td> </tr> <tr> <td>Towanda</td> <td>2853</td> <td>2902</td> </tr> <tr> <td>Ft. Riley</td> <td>2912</td> <td>2948</td> </tr> </tbody> </table>	Name	Top	Bottom	Herrington	2702	2720	Krider	2732	2780	Winfield	2793	2825	Towanda	2853	2902	Ft. Riley	2912	2948
Name	Top		Bottom																	
Herrington	2702		2720																	
Krider	2732		2780																	
Winfield	2793	2825																		
Towanda	2853	2902																		
Ft. Riley	2912	2948																		
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																			
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																			
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																			

CASING RECORD <input checked="" type="checkbox"/> New <input 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
Surface Casing	12 1/4"	8 5/8"	24#	709.70'	PremPlus	325	2%CC, 1/4# floccle
Long String	7 7/8"	5 1/2"	15.5#	3060'	PremPlus Lite	195	1/4# floccle
					Prem Plus	155	2%CC, 1/4# floccle
PERFORATION RECORD				Acid, Fracture, Shot, Cement Spacers Record (Amount and Kind of Material Used) Depth			
Shots Per Foot	Specify Footage of Each Interval Perforated						
3	Herrington 2704-18'			2000 gal acid			
3	Krider 2734-78'			1800 gal. 7 1/2% acid			
3	Winfield 2795-2823'						
3	Towanda 2855-2900'			112,000 gal. TWL-30 water			
3	Ft. Riley 2914-46'			320,000# 10-20 sand			
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No			
Date of First Production	Producing Method <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)						
1/22/91							
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Water	Bbls.	Gas-Oil Ratio Gravity
			1100				

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

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

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

WELL NAME: DUNNE-HOFFMAN, J-2  
SEC. 20-34S-37W  
STEVENS COUNTY, KS. ORIGINAL

COMMENCED: 10-17-90  
COMPLETED: 10-20-90  
OPERATOR: HOFFMAN OIL CO.

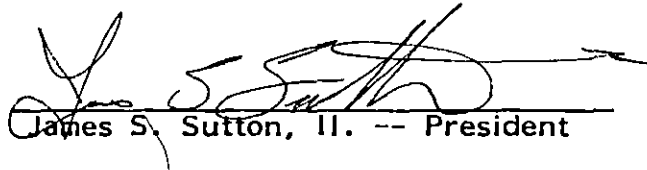
Depth		Formation	Remarks
From	To		
0	95	Sand	
95	970	Sand-Redbed	Ran 16 jts of 24# 8 5/8" csg set @ 709 w/200 sks
970	1206	Redbed	Premium Plus Lite -
1206	1408	Glorietta Sand	2% CC - 1/4# CF
1408	2060	Redbed	125 sks Premium Plus
2060	2260	Redbed-Shale	2% CC - 1/4# CF
2260	3061	Shale	PD @ 12:30 AM 10-18-90
	3061 TD		Ran 70 jts of 15 1/2# 5 1/2" csg set @ 3059' w/195 sks Halcolite Premium Plus 1/4# FS - 155 sks 50/50 Posmix Premium w/Thickset Additives - 2% CC - 1/4# FS PD @ 5:00 PM 10-20-90 RR @ 6:00 PM 10-20-90

MADE  
FEB 11 1991

STATE OF KANSAS  
COUNTY OF SEDGWICK

) I, the undersigned, being duly sworn on oath,  
) state that the above Drillers' Well Log is true  
) and correct to the best of my knowledge and  
belief and according to the records of this office.

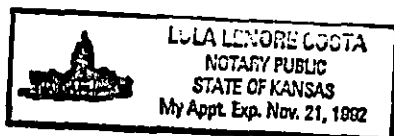
GABBERT-JONES, INC.

  
James S. Sutton, II. -- President

Subscribed & sworn to before me this  
23rd day of October, 1990

  
Lola Lenore Costa

My commission expires Nov. 21, 1992



DAILY DRILLING REPORT

CONTRACTOR: **GABBERT & JONES INC**  
 DATE: **10-17-90**  
 COMPANY: **Lowery Exp Co**  
 LEASE: **DUNNE HOFFMAN**  
 WELL NO.: **G-2**  
 RIG NO.: **411**  
 DISTRICT: **HUGOTON**  
 COUNTY: **STEVENS**  
 STATE: **KANSAS**  
 D. P. STRING NO.: **1**  
 SIZE: **4 1/2**

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.	NAME	HRS.
						DM Duane Hitchcock	8
						EM Ronnie Rist Jr	8
						H Herbert Morton	8
SLOPE TEST		ACCIDENT: - (GIVE NAME)				H	
@	FT.	Rig Down				H	
DEG. OFF						DRLR	Benny [unclear]

BIT AND COREHEAD RECORD		MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.		WEIGHT		DRILLING		SIZE D. P.	
SIZE		VISC.		EMER	1	SIZE COLL.	
MAKE		WTR. LOSS-C.C.		OTHER		JTS. D. P.	FT.
SERIAL NO.		FILTER CAKE		REPAIRS		KELLY DOWN	FT.
DEPTH IN		PH.		TRIP		COLLARS	FT.
HOURS RUN		MTL. ADDED (REMARKS)		Rig Down	7	TOTAL	FT.

REMARKS: 1100 - 7:00 Rig Down & DIG CLEAN @ DUNNE-HOFFMAN 1-2

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.	NAME	HRS.
0	95	Sand	120	ALL	800	DM Johnnie Pineda	8
						EM Kim [unclear]	8
						H Artemio Olivas	8
SLOPE TEST		ACCIDENT: - (GIVE NAME)				H	
@	FT.					H	
DEG. OFF						DRLR	Subil [unclear]

BIT AND COREHEAD RECORD		MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.		WEIGHT		DRILLING	3/4	SIZE D. P.	
SIZE	1 1/4	VISC.		CORING		SIZE COLL.	
MAKE	HTC RT	WTR. LOSS-C.C.		OTHER		JTS. D. P.	FT.
SERIAL NO.	BT 3102	FILTER CAKE		REPAIRS		KELLY DOWN	FT.
DEPTH IN	0	PH.		TRIP		COLLARS	FT.
HOURS RUN	3/4	MTL. ADDED (REMARKS)		Rig up	7/4	TOTAL	FT.

REMARKS: 7:00 TO 2:15 Rig down - Move - Rig up drill bathole 2:15 TO 3:00 Only.

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.	NAME	HRS.
95	710	Sand & Red Bed	120'	5-15	800	DM Roy Beer	12
						EM Charles Stephens	12
						H Lonnie Marquis	12
SLOPE TEST		ACCIDENT: - (GIVE NAME)				H	
@	FT.	Gel-30 Lime-2 Huls-10				H	
DEG. OFF		Mud Cost 292.50				DRLR	Kevin CLIFFY

BIT AND COREHEAD RECORD		MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.		WEIGHT		DRILLING	5 1/2	SIZE D. P.	
SIZE	1 1/2	VISC.		CORING	1/2	SIZE COLL.	
MAKE	HTC RT	WTR. LOSS-C.C.		OTHER	3 1/4	JTS. D. P.	FT.
SERIAL NO.	BT 3102	FILTER CAKE		REPAIRS		KELLY DOWN	FT.
DEPTH IN	0	PH.		TRIP	1 1/4	COLLARS	FT.
HOURS RUN	1 1/4	MTL. ADDED (REMARKS)		SP/6	1/4	TOTAL	FT.

REMARKS: 11:00 - 2:15 Rig Up 2:15 - 3:00 Only 3:00 - 5:00 - Drly w 1/2 hr Rig Serv & Circ. 5:00 - 5:30 T.O.H.P. Plugged Bit & Jet 5:30 - 9:30 Drly 9:30 - 9:45 CIR. - 9:45 - 10:30 T.O.H. - 10:30 - 11:00 Rig-up + RAN CSE.

DAILY DRILLING REPORT  
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CONTRACTOR

GABBERT & JONES

DATE

THURSDAY

10/18/90

COMPANY

LOWERY EXP. INC.

LEASE

DUNN - HOFFMAN

WELL NO.

J-2

RIG NO.

11

DISTRICT

HUGOTON

COUNTY

STEVENS

STATE

KANSAS

D. P. STRING NO.

11

SIZE

1 1/2

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.	NAME	HRS.
710	W.O.C.					BARRY ENMAN	18
						DUANE HITCHCOCK	8
						HERBERT WORTON	8
SLOPE TEST		ACCIDENT: (GIVE NAME)					
@	FT.						
DEG. OFF						PAUL YORK	18

BIT AND COREHEAD RECORD		MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.		WEIGHT		DRILLING		SIZE D. P.	
SIZE	7 7/8	VISC.		CORING		SIZE COLL.	
MAKE	SEC-58SF	WTR. LOSS-C.C.		OTHER C.	1 1/2	JTS. D. P.	FT.
SERIAL NO.	522388	FILTER CAKE		REPAIRS		KELLY DOWN	FT.
DEPTH IN	710	PH.		TRIP		COLLARS	FT.
HOURS RUN	2	MTL. ADDED (REMARKS)	W.O.C.		6 1/2	TOTAL	702.70

REMARKS: 11:00 - 11:30 Rig up + RAN 16 JTS 2 1/2" 8 5/8" C.C. SITE 709.70  
 11:30 - CIR. - CEED. W/200SKS. PREMIUM PLUS LITE W/12% C.C. + 1/4" SK. CELLOR.  
 FLAWE - TAN. W/125SKS. PREMIUM PLUS W/12% C.C. 1 1/4" SK. CELLOR. TAN. -

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.	NAME	HRS.
710	720	HAACO	70	20/25	1000	Johani Pineda	8
						Kim Enman	8
						Antemio Olivas	8
SLOPE TEST		ACCIDENT: (GIVE NAME)					
@	FT.	20 gal. 1 line					
DEG. OFF						Sublet Paula G	18

BIT AND COREHEAD RECORD		MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.		WEIGHT	W	DRILLING	2 1/4	SIZE D. P.	
SIZE	7 7/8	VISC.	A	CORING		SIZE COLL.	
MAKE	SEC-58SF	WTR. LOSS-C.C.	1	OTHER C.	5 1/2	JTS. D. P.	FT.
SERIAL NO.	522388	FILTER CAKE	E	REPAIRS		KELLY DOWN	FT.
DEPTH IN	710	PH.	R	TRIP		COLLARS	FT.
HOURS RUN	2 1/4	MTL. ADDED (REMARKS)			Daily Plug 1/4	TOTAL	

REMARKS: 7:00 TO 12:30 W.O.C. • Rig up 6:30 AM. • Repack swivel  
 12:30 TO 12:45 Daily Plug 12:45 TO 3:00 Daily  
 "Cut 45' Daily line"

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.	NAME	HRS.
720	1040	Red Bed	70	25	1000	Roy Beer	8
						Charles Stephens	8
		G. SAND 1206'-1408'				Lennie Marquis	8
SLOPE TEST		ACCIDENT: (GIVE NAME)					
@	FT.	Gel/25 - lime/1 - Hull/35					
DEG. OFF		Mod Cast # 506-53				Kevin Clift	18

BIT AND COREHEAD RECORD		MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.	1	WEIGHT	58 1/2	DRILLING	7	SIZE D. P.	
SIZE	7 7/8	VISC.	33 3/4	CORING	Rig Serv 1/4	SIZE COLL.	
MAKE	585	WTR. LOSS-C.C.		OTHER C.	1/4	JTS. D. P.	FT.
SERIAL NO.	522388	FILTER CAKE		REPAIRS		KELLY DOWN	FT.
DEPTH IN	711	PH.	2 CM 6 1/4	TRIP	1/2	COLLARS	FT.
HOURS RUN	9 1/4	MTL. ADDED (REMARKS)				TOTAL	90

REMARKS: 3:00-11:00 Daily w/ 1 hr Rig Serv. Jet & SURVEY

OCT 22 1990

FRI

DAILY DRILLING REPORT  
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CONTRACTOR *Habbett & Jones* DATE *10/19/90*  
 COMPANY *Lowrey Exp- INC* LEASE *Dunne & Hoffman* WELL NO. *J-2* RIG NO. *11*  
 DISTRICT *Hugoton* COUNTY *Stevens* STATE *Kansas* D. P. STRING NO. *1* SIZE *4 1/2*

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.	NAME	HRG.
1640	2060	Red Bed	70/15	30	1000	BARRY INMAN	18
						Dwaine Hitchcock	18
						Herbert Motton	18

BLOPE TEST @ *2093* FT. DEG. OFF. *3/4*

ACCIDENT: (GIVE NAME) *FEB 11 1991*

DRLR *Paul York* 18

BIT AND COREHEAD RECORD		MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.	<i>1</i>	WEIGHT	<i>9.0</i>	DRILLING	<i>7/16</i>	SIZE D. P.	
SIZE	<i>7/16</i>	VISC.		CORING	<i>1/4</i>	SIZE COLL.	
MAKE	<i>Sec 585F</i>	WTR. LOSS-C.C.		REPAIRS	<i>1/4</i>	JTS. D. P.	FT.
SERIAL NO.	<i>522388</i>	FILTER CAKE		TRIP	<i>1/4</i>	KELLY DOWN	FT.
DEPTH IN	<i>760</i>	PH. LCM				COLLARS	FT.
HOURS RUN	<i>16 3/4</i>	MTL. ADDED (REMARKS)				TOTAL	FT.

REMARKS: *Drly 11:00 to 7:00 w/1/4 hr pump Repair 1/4 hr. Rig ser 1/4 hr. Det*

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.	NAME	HRG.
2060	2260	Red Bed & shale	70/15	35 <sup>000</sup>	1000	Johnnie Pineda	18
						Kevin Clift	18
						Artemio Olivas	18

BLOPE TEST @ *2093* FT. DEG. OFF. *3/4*

ACCIDENT: (GIVE NAME) *FEB 11 1991*

DRLR *Salbil Daily* 18

BIT AND COREHEAD RECORD		MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.	<i>1</i>	WEIGHT	<i>9.0</i>	DRILLING	<i>5/16</i>	SIZE D. P.	
SIZE	<i>7/16</i>	VISC.	<i>31</i>	CORING	<i>1/4</i>	SIZE COLL.	
MAKE	<i>Sec 585F</i>	WTR. LOSS-C.C.		REPAIRS	<i>1/4</i>	JTS. D. P.	FT.
SERIAL NO.	<i>522388</i>	FILTER CAKE		TRIP	<i>1/4</i>	KELLY DOWN	FT.
DEPTH IN	<i>710</i>	PH. LCM	<i>4H</i>			COLLARS	FT.
HOURS RUN	<i>20</i>	MTL. ADDED (REMARKS)				TOTAL	FT.

REMARKS: *7:00 TO 7:30 Drly. W / (1/4) Rig - 1/4 HR. SURVEY*  
*7:30-11:15 GC TRIP PUMP - TRIP CLT CK. F/HOLE IN PIPE - LAYED*  
*WT. DOWN - TRIP IN HOLE - 11:15 - 3:00 DRIG.*

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.	NAME	HRG.
2260	2610	Shale	70/15	35 <sup>000</sup>	1000	Roy Beer	18
						Charles Stephens	18
						Lonnie Marquis	18

BLOPE TEST @ *2523* FT. DEG. OFF. *1/2*

ACCIDENT: (GIVE NAME) *Get 600 S/Rch-2 Halls-15*

DRLR *Kevin Clift* 18

BIT AND COREHEAD RECORD		MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.	<i>1</i>	WEIGHT		DRILLING	<i>4/6</i>	SIZE D. P.	
SIZE	<i>7/16</i>	VISC.		CORING		SIZE COLL.	
MAKE	<i>Sec 585F</i>	WTR. LOSS-C.C.		REPAIRS	<i>1/4</i>	JTS. D. P.	FT.
SERIAL NO.	<i>522388</i>	FILTER CAKE		TRIP	<i>1/4</i>	KELLY DOWN	FT.
DEPTH IN	<i>710</i>	PH. LCM				COLLARS	FT.
HOURS RUN	<i>25</i>	MTL. ADDED (REMARKS)				TOTAL	FT.

REMARKS: *3:00-7:30 Drly w/1/4 hr Rig Serv. Jet 7:30-8:00 Survey Jet*  
*8:00-9:45 Drly 9:45-10:45 Work on Pump 10:45-11:00*  
*Drly*

CONTRACTOR: Gabbett + Jones DATE: 10/20/90  
 COMPANY: Lowrey Exp. INC LEASE: Dunnet Hoffman WELL NO.: J-2 RIG NO.: 11  
 DISTRICT: Hugoton COUNTY: Stevens STATE: Kansas D. P. STRING NO.: 1 SIZE: 4 1/2

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.	NAME	HRB.
2610	2875	Shale	79 175	38 1000	1000	Roy Beer	8
						Charles Stephens	8
						Herkert Matton	8
SLOPE TEST		ACCIDENT:- (GIVE NAME)					
@	FT.	Bel-25 S. Ash-1 - HULLS 20					
	DEG. OFF	Total Cost 37358				DRLR Paul York 8	

BIT AND COREHEAD RECORD		MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.	1	WEIGHT	9.0	DRILLING	7 1/2	SIZE D. P.	
SIZE	7 7/8	VISC.	33	CORING	1/4	SIZE COLL.	
MAKE	Sec 585F	WTR. LOSS-C.C.	5"	OTHER	1/4	JTB. D. P.	FT.
SERIAL NO.	52388	FILTER CAKE		REPAIRS		KELLY DOWN	FT.
DEPTH IN	710	PH.		TRIP		COLLARS	FT.
HOURS RUN	33 1/2	MTL. ADDED (REMARKS)				TOTAL	FT.

REMARKS: 11:00 - 7:00 Daily w/ 1/4 hr. Rig Ser 1/4 hr. Jet Mill Tour.  
 CEM w/195SKS. HAKC LIFE PREMIUM PLUS w/1/4 H/SK. FLOCCEL - TAIL w/155SKS.  
 50/50 Poz. Premium Plus w/THINSET ADDITIVES - 1% C.C. w/1/4 H/SK. FLOCCEL

PHUG DOWN @ 5:00 P.M. BY HAN

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.	NAME	HRB.
2875	3061	Shale	75	35/40	1000	Johnnie Pineda	14
						Kim Inman	14
						Artemis Olivas	14
SLOPE TEST		ACCIDENT:- (GIVE NAME)					
@	FT.	2 SKS. LIGNITE - 1 SK. DARK POC				Circ TD - 3/4	
	DEG. OFF	231.42				Line 1752 1/4	

1/2" DEG. OFF  
 Wait on Rig Release - 1 1/2 hrs. Diluted Tardis 4-1/4

BIT AND COREHEAD RECORD		MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.	1	WEIGHT	9.0	DRILLING	11 1/4	SIZE D. P.	
SIZE	7 7/8	VISC.	35	CORING		SIZE COLL.	
MAKE	Sec 585F	WTR. LOSS-C.C.		OTHER	3/4	JTB. D. P.	FT.
SERIAL NO.	52388	FILTER CAKE		REPAIRS		KELLY DOWN	FT.
DEPTH IN	710	PH.	6"	TRIP	1/4	COLLARS	FT.
HOURS RUN	37 1/4	MTL. ADDED (REMARKS)			1/4	TOTAL	FT.

REMARKS: 7:00 to 11:45 Daily w/ (1/4) Rig (1/4) Jet - 11:45-12:30 CIR  
 12:30 - 3:00 L.D.D.P. + D.C.'s (CIR. 1/4 HR. @ 1752) REMARK WORK - 300-500  
 RIG UP + RAN 70 JTS NEW 15.5" 5 1/2 CSE. TALL 305 1/2 SET 305 1/2 CEM ABOVE - MOLE + HIG

5:00

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.	NAME	HRB.
		SAND - RED BED				Roy Beer	8
						Charles Stephens	8
						Lonnie Marquis	8
SLOPE TEST		ACCIDENT:- (GIVE NAME)					
@	FT.						
	DEG. OFF					DRLR Kevin Cliff 8	

BIT AND COREHEAD RECORD		MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.		WEIGHT		DRILLING		SIZE D. P.	
SIZE		VISC.		CORING		SIZE COLL.	
MAKE		WTR. LOSS-C.C.		OTHER		JTB. D. P.	FT.
SERIAL NO.		FILTER CAKE		REPAIRS		KELLY DOWN	FT.
DEPTH IN		PH.		TRIP		COLLARS	FT.
HOURS RUN		MTL. ADDED (REMARKS)				TOTAL	FT.

REMARKS: Dig Cellar & Ditches Rig Down Move to Dunne Hoffman #H-2

**HALLIBURTON SERVICES**

Duncan, Oklahoma 73109

A Division of Halliburton Company

TICKET

NO. 042817-5

ORIGINAL

FORM 1900 H-11

WELL NO. - FARM OR LEASE NAME <i>D HOEFMAN 1-2</i>		COUNTY <i>SEVEN</i>	STATE <i>K</i>	CITY / OFFSHORE LOCATION	DATE <i>10-17-70</i>
CHARGE TO <i>Lease Management</i>		OWNER <i>SAME</i>	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 <i>SHARON LONES</i>	LOCATION <i>1 LUBIAN</i>		CODE <i>25546</i>
CITY, STATE, ZIP		SHIPPED VIA <i>TRUCK</i>	FREIGHT CHARGES <input type="checkbox"/> PPD <input type="checkbox"/> COLLECT	LOCATION <i>2 Houston</i>	CODE <i>25535</i>
WELL TYPE <i>02</i>	WELL CATEGORY <i>01</i>	WELL PERMIT NO.	DELIVERED TO <i>LOCATION</i>	LOCATION <i>3</i>	CODE
TYPE AND PURPOSE OF JOB <i>010</i>		ORDER NO. <b>B- 857270</b>	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 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, in 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		
020-117		1		MILEAGE	27	mi			2.35	29 35
001-016				PERMANENT SERVICE	8	HL	739	'		630 00
030-016				5-1/2 Top Plus	1	EA	85	"		92 00
244	815-19502			ASSET FINIT	1	EA	85	"		171 00
40	807-43059			VENTILATORS	2	EA	85	"	53 00	106 00
27	815-19414			FILLING	1	EA	85	"		24 00
59	807-4011			WIRE SCISSORS	6	EA			22 50	135 00
<p>7000 (S) 135</p> <p>AMOUNT</p> <p>NOT</p> <p>FEB 11 1901</p>										

AS PER ATTACHED BULK MATERIAL DELIVERY TICKET NO.

**B- 857270**

2874 27

HAS JOB SATISFACTORILY COMPLETED?  
 HAS OPERATION OF EQUIPMENT SATISFACTORY?  
 HAS PERFORMANCE OF PERSONNEL SATISFACTORY?  
 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.

*[Signature]*  
HALLIBURTON OPERATOR

HALLIBURTON APPROVED  
CUSTOMER

SUB TOTAL *4266 62*  
APPLICABLE TAXES WILL BE ADDED ON INVOICE.





# JOB SUMMARY

HALLIBURTON DIVISION  
HALLIBURTON LOCATION

Wellhead City  
Laramie, WY

BILLED ON TICKET NO. 012917

## WELL DATA

FIELD \_\_\_\_\_ SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RNG. \_\_\_\_\_ COUNTY Stroves STATE WY

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 710

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	N	24	2 1/2	13	709	
LINER						
TUBING						
OPEN HOLE			12 1/2	13	710	SHOTS/FT
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

## JOB DATA

### TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY	MAKE
FLOAT COLLAR		
FLOAT SHOE	1	Union
GUIDE SHOE		
CENTRALIZERS C-1	2	
BOTTOM PLUG		
TOP PLUG	1	
HEAD		
PACKER		
OTHER		

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 12-17	DATE 12-17	DATE 12-17	DATE 12-17
TIME 1430	TIME 2115	TIME 2240	TIME 2400

### PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
Anderson	21313	Laramie
	4910	"
Piper	43120	"
	51284	"
Phillips	63478	Laramie
	5622	"

### 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

FRC. RED. AGENT TYPE \_\_\_\_\_ GAL-LB \_\_\_\_\_ IN

BREAKER TYPE \_\_\_\_\_ GAL-LB \_\_\_\_\_ IN

BLOCKING AGENT TYPE \_\_\_\_\_ GAL-LB \_\_\_\_\_ IN

PERFPAC BALLS TYPE \_\_\_\_\_ QTY \_\_\_\_\_

OTHER \_\_\_\_\_

OTHER \_\_\_\_\_

DEPARTMENT Operations

DESCRIPTION OF JOB 2 1/2" DBL PRODUCTION PUMP SITE W/ 2 1/2" DBL PRODUCTION - 125°C PRODUCTION PUMP W/ 2 1/2" DBL PRODUCTION

JOB DONE THRU: TUBING  CASING  ANNULUS  TBQ/ANN

CUSTOMER REPRESENTATIVE X M. J. ...

HALLIBURTON OPERATOR L. ... COPIES REQUESTED \_\_\_\_\_

## CEMENT DATA

STAGE	NUMBER OF BAGS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU FT / SK	MIXED LBS / GAL
1	200	Pima Plus Lite		B	2 bags of 48 lbs	2.06	12.3
2	125	Pima Plus		B	2 bags of 48 lbs + 1 bag of 29.5	1.32	14.1

### PRESSURES IN PSI

### SUMMARY

### VOLUMES

CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_

BREAKDOWN \_\_\_\_\_ MAXIMUM \_\_\_\_\_

AVERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_

GHUT-IN: INSTANT \_\_\_\_\_ 5-MIN. \_\_\_\_\_ 15-MIN. \_\_\_\_\_

HYDRAULIC HORSEPOWER \_\_\_\_\_

ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_

AVERAGE RATES IN BPM \_\_\_\_\_

TREATING \_\_\_\_\_ DISPL. \_\_\_\_\_ OVERALL \_\_\_\_\_

CEMENT LEFT IN PIPE \_\_\_\_\_

FEET 43.80 REASON Shut In

PRESLUSH: DBL-GAL \_\_\_\_\_ TYPE \_\_\_\_\_

LOAD & BKDN. DBL-GAL \_\_\_\_\_ PAD: DBL-GAL \_\_\_\_\_

TREATMENT: DBL-GAL \_\_\_\_\_ DISPL. DBL-GAL. 12

CEMENT SLURRY: DBL-GAL. 103

TOTAL VOLUME: DBL-GAL. \_\_\_\_\_

### REMARKS

\* 1st attempt to cement

WORK ORDER CONTRACT  
AND PRE-TREATMENT DATA

DISTRICT LIBERAL

DATE 10-17-90

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

WELL NO. 1-2 LEASE D. HOFFMAN SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RANGE \_\_\_\_\_

FIELD \_\_\_\_\_ COUNTY SPRING STATE KS OWNED BY LOWRY LEASE MANAGEMENT

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 \_\_\_\_\_  
USUAL PROD: OIL \_\_\_\_\_ BPD, H<sub>2</sub>O \_\_\_\_\_ BPD, GAS \_\_\_\_\_ MCF  
PRESENT PROD: OIL \_\_\_\_\_ BPD, H<sub>2</sub>O \_\_\_\_\_ BPD, GAS \_\_\_\_\_ MCF

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING	N	24	8 5/8	KB	709	
LINER						
TUBING						
OPEN HOLE			12 1/4	KB	710	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

PREVIOUS TREATMENT: DATE \_\_\_\_\_ TYPE \_\_\_\_\_ MATERIALS \_\_\_\_\_

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

LOWRY 8 5/8 (56. W) 200 SCS PREMIUM PLUS LITE W/ 29% LL, 1/4" FLOCCLE - 125 SCS  
PREMIUM PLUS W/ 29% LL, 1/4" FLOCCLE - DISPLACE W/ H<sub>2</sub>O

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
- To pay Halliburton in accord with the rates and terms stated in Halliburton's current price list. Invoices are payable NET by the 10th 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, not 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.
  - To defend, indemnify, release and hold harmless Halliburton, its divisions, subsidiaries, parent and affiliated companies and the officers, directors, employees, agents and servants of all of them from and against any claims, liability, expenses, attorneys fees, and costs of defense to the extent permitted by law for:
    - Damage to property owned by, in the possession of, or leased by Customer, and/or the well owner (if different from Customer), including, but not limited to, surface and subsurface damage. The term "well owner" shall include working and royalty interest owners.
    - Reservoir, formation, or well loss or damage, subsurface trespass or any action in the nature thereof.
    - 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 of 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.
  - 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.
  - 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.
  - 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 mining 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 occur at any time after delivery to Customer at the landing until returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.
  - To waive the provisions of the Deceptive Trade Practices - Consumer Protection Act, to the extent permitted by law.
  - That this contract shall be governed by the law of the state where services are performed or materials are furnished.
  - 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 [Signature] CUSTOMER

DATE 10-17-90

Verify that the Fair Labor Standards Act of 1968, as amended, has been read and/or with respect to services furnished by this contract.

**HALLIBURTON SERVICES**  
**JOB LOG**

WELL NO. 1-2 LEAS. D. HOFFMAN TICKET NO. 042817  
 CUSTOMER Lowey Leake Management PAGE NO. 1  
 JOB TYPE 8 3/8 SURFACE DATE 10-17-90

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1930							ORIGIN
	2110							CALLER
	2200							ON LOCATION - DRILL
	2246							STAND DRILL PIPE
	2347							RUN 8 3/8 OSL
	2353							HOOK UP TO CIRC MUD - 1/2" IN.
	2355	5	10		✓		200	PUMP TO REG HO
	2357	6	73		✓		200	PUMP LEAD SURELY MIXED @ 12.3 PPG
	0029	6	29		✓		150	PUMP TAIL SURVEY MIXED @ 14.8 PPG
	0017							SHUT DOWN TO DRIP PUL
	0019	6			✓		50	START DISPLACEMENT
	0025	2	33		✓		250	SLOW RATE
	0030		43		✓		500/0	PULS DOWN - FIRST HILL
								* CEMENT TO SURFACE

STATE OF MISSISSIPPI  
 FEB 11 1991

P - 75496  
 P - 5622

CUSTOMER



**BULK MATERIALS DELIVERY  
AND  
TICKET CONTINUATION**

FOR INVOICE AND TICKET NO. **042817**

**ORIGINAL**

DATE <b>10-17-90</b>	CUSTOMER ORDER NO.	WELL NO. AND FARM <b>Duane Hoffman J-2</b>	COUNTY <b>Stevens</b>	STATE <b>KS</b>
CHARGE TO <b>Lowry Exploration</b>		OWNER <b>Same</b>	CONTRACTOR <b>No. B 857270</b>	
MAILING ADDRESS		DELIVERED FROM <b>Hugoton</b>	LOCATION CODE <b>25535</b>	PREPARED BY <b>Rick Rawlins</b>
CITY & STATE		DELIVERED TO <b>Loc. S/Hugoton, KS</b>	TRUCK NO. <b>51984-5622</b>	RECEIVED BY <b>KINSWEL</b>

PRICE REFERENCE	SECONDARY REF. OR PART NO.	CODE		DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT	
		L	D		QTY.	MEAS.	QTY.	MEAS.			
504-050	516.00265	2	B	Premium Plus Cement	125	sk			7.08	885 00	
504-120		2	B	Halliburton Light Cement	200	sk			6.29	1258 00	
507-210	890.50071	2	B	Floccle blended 1/2 lb/sk	81	lb			1.30	105 30	
509-406	890.50812	2	B	Calcium Chloride blended 27	6	sk			26.25	157 50	
					Returned Mileage Charge		TOTAL WEIGHT		LOADED MILES	FEB 11 1991	TON MILES
					SERVICE CHARGE ON MATERIALS RETURNED		CU. FEET				
500-207		2	B	SERVICE CHARGE			CU. FEET	342	1.10	376 20	
500-306		2	B	Mileage Charge	TOTAL WEIGHT 30755		LOADED MILES 8	123.02	.75	92 27	
No. <b>B 857270</b>							CARRY FORWARD TO INVOICE			SUB-TOTAL	<b>2874 27</b>

THIS IS NOT AN INVOICE

WORK ORDER CONTRACT  
AND PRE-TREATMENT DATA

ORIGINAL

ATTACH TO INVOICE & TICKET NO. 011342

FORM 1908 R-7

A Division of Halliburton Company

DISTRICT Liberal Ks

DATE 10-20-90

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

WELL NO. J-2 LEASE Dunn & Hoffman SEC. 20 TWP. 34S RANGE 37W

FIELD S Hugoton COUNTY Stevens STATE Ks OWNED BY Same

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.
CASING		N	15.5	5 1/2	0	3065	
LINER							
TUBING							
OPEN HOLE							SHOTS/FT.
PERFORATIONS							
PERFORATIONS							
PERFORATIONS							

PREVIOUS TREATMENT: DATE \_\_\_\_\_ TYPE \_\_\_\_\_ MATERIALS \_\_\_\_\_

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

Cement 5 1/2 Longstrings

FEB 11 1991

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
- 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.
  - To defend, indemnify, release and hold harmless Halliburton, its divisions, subsidiaries, parent and affiliated companies and the officers, directors, employees, agents and servants of all of them from and against any claims, liability, expenses, attorneys fees, and costs of defense to the extent permitted by law for:
    - Damage to property owned by, in the possession of, or leased by Customer, and/or the well owner (if different from Customer), including, but not limited to, surface and subsurface damage. The term "well owner" shall include working and royalty interest owners.
    - Reservoir formation or well loss or damage, subsurface trespass or any action in the nature thereof.
    - 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.
  - 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.
  - 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.
  - 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 occur at any time after delivery to Customer at the landing until returned to the lessee, unless such loss or damage is caused by the sole negligence of Halliburton.
  - To waive the provisions of the Deceptive Trade Practices - Consumer Protection Act, to the extent permitted by law.
  - That this contract shall be governed by the law of the state where services are performed or materials are furnished.
  - 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 Neil E. Lowery CUSTOMER

DATE 10-20-90

TIME 12:30 A.M. EW

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

CUSTOMER

1500 R-11

NO. - FARM OR LEASE NAME <i>2 Dunbar + Holliman</i>		COUNTY <i>Stephens</i>	STATE <i>Ks</i>	CITY / OFFSHORE LOCATION	DATE <i>10-20-90</i>
WELL TO <i>Waxy Expl. Twp</i>		OWNER <i>Same</i>	TICKET TYPE (CHECK ONE) SERVICE <input checked="" type="checkbox"/> SALES <input type="checkbox"/>		NITROGEN JOB YES <input type="checkbox"/> NO <input type="checkbox"/>
CONTRACTOR <i>G &amp; J #11</i>		SHIPPED VIA <i>Col Koh</i>	FREIGHT CHARGES <input type="checkbox"/> PPD <input type="checkbox"/> COLLECT	LOCATION <i>1 Liberal Ks</i>	CODE <i>25540</i>
WELL PERMIT NO. <i>B-857284</i>		DELIVERED TO <i>Loc</i>	ORDER NO.	LOCATION <i>2 Hucotun Ks</i>	CODE <i>25535</i>
WELL CATEGORY <i>W1</i>		REFERRAL LOCATION		LOCATION <i>3</i>	CODE

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, consequential or punitive damages.

PRICE REFERENCE	SECONDARY REF OR PART NO.	L O C	ACCOUNT	DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT	
					QTY	MEAS	QTY	MEAS			
<i>1-117</i>				MILEAGE 7181	<i>8</i>	<i>MI</i>	<i>1</i>	<i>1-8</i>	<i>2.33</i>	<i>18</i>	<i>80</i>
<i>016</i>				Pump Chace	<i>3065</i>	<i>FT</i>	<i>8</i>	<i>4-5</i>		<i>1095</i>	<i>00</i>
<i>1-016</i>				Top Plug	<i>1</i>	<i>SC</i>	<i>5/8</i>	<i>3/4</i>		<i>47</i>	<i>00</i>
<i>12A</i>	<i>829 305</i>			Guide Shoe	<i>1</i>	<i>SC</i>				<i>104</i>	<i>00</i>
<i>34A</i>	<i>815.19231</i>			Insert Flange	<i>1</i>	<i>SC</i>				<i>83</i>	<i>00</i>
<i>27</i>	<i>815.19311</i>			Fill Tube	<i>1</i>	<i>SC</i>				<i>30</i>	<i>00</i>
<i>40</i>	<i>807.93022</i>			Centrifuges	<i>10</i>	<i>00</i>			<i>44</i>	<i>40</i>	<i>00</i>
<i>100</i>	<i>800.10002</i>			Welded	<i>1</i>	<i>SC</i>				<i>11</i>	<i>00</i>

THIS IS NOT AN INVOICE

FEB 11 1991

AS PER ATTACHED BULK MATERIAL DELIVERY TICKET NO. **B-857284**

*3708* *82*

IS SATISFACTORILY COMPLETED? \_\_\_\_\_  
 OPERATION OF EQUIPMENT SATISFACTORY? \_\_\_\_\_  
 PERFORMANCE OF PERSONNEL SATISFACTORY? \_\_\_\_\_  
 CUSTOMER OR HIS AGENT (PLEASE PRINT)  
*M. J. ...*  
 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.

HALLIBURTON OPERATOR  
*[Signature]*  
 HALLIBURTON APPROVAL  
 CUSTOMER

SUB TOTAL

APPLICABLE TAXES WILL BE ADDED ON INVOICE.

*3708.82*



**HALLIBURTON SERVICES**  
**JOB LOG**

WELL NO. J-2 LEASE Dunbar-Hoffman TICKET NO. 014322

CUSTOMER Lowery Expl Inc PAGE NO. 1

ORM 2013 R-2

JOB TYPE Cement Stimulation DATE 10-20-90

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0900							Called out ORIGINAL
	1130							on loc
	1445							Start casing
	1610							Heed on & circulating
	1628	5	10				400	Pump water
	1630	6	12				400	Pump Sealer Cement @ 10.5"
	1638	6	50				400	Pump 12.3" Cement
	1646	6					500	Pump Thick set Cement
	1648		36					Shut Down - wash pit - Release Plug
	1653	7					250	Start Displacement
	1657	6	36				400	Caught Cement - Slow Rate
	1702	3 1/2	62				800	Slow Rate
	1705		72				1400	Landed Plug
	1706							Release Pressure - Float - Hold
	1730							Job Complete

Thank you  
Larry Smith & crew

FEB 11 1991



# JOB SUMMARY

HALLIBURTON DIVISION OKC  
 HALLIBURTON LOCATION Liberal, KS

BILLED ON TICKET NO. 044342

## WELL DATA

FIELD S Hugoton SEC 20 TWP 34S RNG 37W COUNTY STAVENS STATE KS

FORMATION NAME	TYPE	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING		<input checked="" type="checkbox"/>	<u>11.5</u>	<u>5/2</u>	<u>0</u>	<u>306.5</u>	
LINER							
TUBING							
OPEN HOLE							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

## JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>10-20</u>	DATE <u>10-20</u>	DATE <u>10-20</u>	DATE <u>10-20</u>
TIME <u>0900</u>	TIME <u>1130</u>	TIME <u>1638</u>	TIME <u>1730</u>

## PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>W. Smith</u>	<u>40044</u>	<u>Liberal, KS</u>
<u>R. Taylor</u>	<u>2181 P</u>	<u>"</u>
<u>G. Evans</u>	<u>0925</u>	<u>"</u>
<u>L. 0233</u>	<u>60611</u>	<u>Hugoton, KS</u>

## TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR <u>Insert 5/2</u>	<u>1</u>	<u>Hawco</u>
FLOAT SHOE <u>Fill Tube</u>	<u>1</u>	
GUIDE SHOE	<u>1</u>	
CENTRALIZERS	<u>10</u>	
BOTTOM PLUG		
TOP PLUG	<u>1</u>	
HEAD	<u>1</u>	
PACKER <u>weld A</u>	<u>1</u>	
OTHER		

## 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 Cost STATE KS  
 DESCRIPTION OF JOB Cement 2 1/2" long...  
 FEB 11 1991

JOB DONE THRU: TUBING  CASING  ANNULUS  TBG/ANN.

CUSTOMER REPRESENTATIVE X Ned E. Power

HALLIBURTON OPERATOR Smith COPIES REQUESTED

## CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	<u>175</u>	<u>Premium Plus</u>	<u>HLC</u>	<u>B</u>	<u>1/4" Floccule</u>	<u>2.06</u>	<u>123</u>
	<u>155</u>	<u>2 1/2" Poz Premium Plus</u>	<u>HLC</u>	<u>B</u>	<u>27 cc, 1/4" Floccule</u>	<u>1.30</u>	<u>14</u>

## PRESSURES IN PSI

## SUMMARY

## VOLUMES

CIRCULATING DISPLACEMENT PRES LUSH: BBL-GAL. 10 TYPE W-400  
 BREAKDOWN MAXIMUM LOAD & BKDN: BBL-GAL. PAD: BBL-GAL.  
 AVERAGE FRACTURE GRADIENT TREATMENT: BBL-GAL. DISPL: BBL-GAL. 72  
 SHUT-IN: INSTANT 5-MIN. 15-MIN. CEMENT SLURRY: BBL-GAL. 12-50-36  
 HYDRAULIC HORSEPOWER TOTAL VOLUME: BBL-GAL. 180  
 ORDERED AVAILABLE USED REMARKS  
 AVERAGE RATES IN BPM  
 TREATING DISPL. OVERALL  
 CEMENT LEFT IN PIPE  
 FEET 44' REASON Shoe JT