

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

**ORIGINAL**

Operator: License # 4894

Name: Horseshoe Operating, Inc.

Address 500 W. Texas, Suite 1190

City/State/Zip Midland, Tx 79701

Purchaser:

Operator Contact Person: S. L. Burns

Phone (915) 683-1448

Contractor: Name: Cheyenne Drilling

License:

Wellsite Geologist:

Designate Type of Completion

New Well  Re-Entry  Workover

Oil  SWD  SLOW  Temp. Abd.  
 Gas  ENHR  SIGW  
 Dry  Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Reentry: Old Well Info as follows:

Operator:

Well Name:

Comp. Date Old Total Depth

Deepening  Re-perf.  Conv. to Inj/SWD  
 Plug Back  PBTB  
 Commingled Docket No.  
 Dual Completion Docket No.  
 Other (SWD or Inj?) Docket No. D27498

11-17-97 11-18-97 11-26-97  
Spud Date Date Reached TD Completion Date

API NO. 15- 075-206620000

County Hamilton

SE/4 -NW/4 -NE/4 - Sec. 23 Twp. 21 Rge. 41  E

4030 Feet from  N (circle one) Line of Section

1350 Feet from  W (circle one) Line of Section

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

Lease Name Lesser Well # SWD

Field Name Bradshaw

*Disposal*  
Producing Formation Glorieta

Elevation: Ground 3619' KB 3631

Total Depth 1647' PBTB 1635

Amount of Surface Pipe Set and Cemented at 6 jts 258 Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set          Feet

If Alternate II completion, cement circulated from 1647

feet depth to surface w/ 375 sx cmt.

Drilling Fluid Management Plan Att. 2, 5-13-98 U.C.  
(Data must be collected from the Reserve Pit) *OK'd by Dist. 1.*

Chloride content ppm Fluid volume bbls

Dewatering method used

Location of fluid disposal if hauled offsite:

Operator Name

Lease Name License No.

Quarter Sec. Twp. S Rng. E/W

County Docket No.

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, 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.

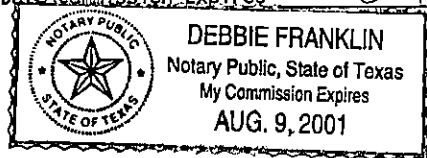
Signature Shipp & Burns

Title Vice-President Date 1/30/98

Subscribed and sworn to before me this 30 day of January, 19 98.

Notary Public Debbie Franklin

Date Commission Expires 8-9-2001



STATE CORPORATION COMMISSION OFFICE USE ONLY  
F  Letter of Confidentiality Attached  
C  Wireline Log Received  
C  Geologist Report Received  
  
Distribution:  
 KCC (Conservation Division) SWD/Rep  
 KGS Wichita, Kansas Plug  NGPA  
Other (Specify)

SIDE TWO

Operator Name Horseshoe Operating, Inc. Lease Name Lesser Well # SWD

Sec. 23 Twp. 21 Rge. 41  
 East County Hamilton  
 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:  
 Dual Spaced Cement Bond Log

Log Formation (Top), Depth and Datums  Sample  
 Name Top Datum

ORIGINAL

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
Surface	12-1/4	8-5/8"	28#	258	"C"	175	3%cc 1/4 floeal
Production	7-7/8	4-1/2"	10.5	1648'		375	8% gel 1/3 floeal

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth
2	1440-44; 52-56; 78-84; 1500-04; 14-20; 26-32; 40-50; 86-90; 1604-12; 18-22	5000 gal 7-1/2% HCL

TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	2-3/8	1345'	1345'	
Date of First, Resumed Production, SWD or Inj.	Producing Method <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
1/30/98				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

Disposition of Gas: METHOD OF COMPLETION *Disposal* Production Interval  
 Vented  Sold  Used on Lease  Open Hole  Perf.  Dually Comp.  Commingled  
 (If vented, submit ACO-18.)  Other (Specify) \_\_\_\_\_

FEB 2 1998

W.D. DIVISION



HALLIBURTON®

HALLIBURTON ENERGY SERVICES

1906-Q

CHARGE TO

Horseshoe Operating

ADDRESS

CITY, STATE, ZIP CODE

TICKET

No.

231818 - 1

PAGE 1 OF 1

1. SERVICE LOCATIONS Liberal ks.	WELL/PROJECT NO. 1 SWD	LEASE Lesser	COUNTY/PARISH Hamilton	STATE ks	CITY/OFFSHORE LOCATION	DATE 11-18-97	OWNER
2. TICKET TYPE <input checked="" type="checkbox"/> SERVICE JOB? <input type="checkbox"/> YES <input type="checkbox"/> SALES <input checked="" type="checkbox"/> NO	NITROGEN <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CONTRACTOR Cheyenne	RIG NAME/NO. # 8	SHIPPED VIA	DELIVERED TO loc.	ORDER NO.	
3. WELL TYPE 02	WELL CATEGORY 02	JOB PURPOSE 035	WELL PERMIT NO.	WELL LOCATION Synagogue ks.			
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

JOB JRPOSE	PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
			LOC	ACCT	DF							
035	000-119		1		33	MILEAGE	14K	120	mi	3.00	384.00	
	000-119		1		1	crew mileage	14K	120	mi	1.95	234.00	
	001-014		1		1	Pump change		1650	ft		1523.00	
	<del>030-014</del>					<del>5-w plug</del>		4 1/2	in		<del>50.00</del>	
	045-050		1			85% Data Acquisition	11500				660.00	

ORIGINAL

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.

X Skipper L. Burns  
DATE SIGNED 11-18-97 TIME SIGNED 14:00  A.M.  P.M.  
 do  do not require IPC (Instrument Protection)  Not offered

TYPE LOCK	SUB SURFACE SAFETY VALVE WAS: <input type="checkbox"/> PULLED & RETURN <input type="checkbox"/> PULLED <input type="checkbox"/> RUN		PAGE TOTAL	2801.00
BEAN SIZE	TYPE OF EQUALIZING SUB.	CASING PRESSURE	FROM CONTINUATION PAGE(S)	790384
DEPTH	TUBING SIZE	TUBING PRESSURE	WELL DEPTH	10704.80
SPACERS	TREE CONNECTION	TYPE VALVE	SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE	6829.00

**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) Skipper L. Burns	CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE) X Skipper L. Burns	HALLIBURTON OPERATOR/ENGINEER Dennis Sims	EMP # 76653	HALLIBURTON APPROVAL Tye Davy *
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Halliburton Energy Services

ORIGINAL

DATE:11-18-1997

TIME:11:23:38

SERVICE TICKET: 231818

HUGOTON-25535

BULK TICKET ONLY: 800754

JOB PURPOSE:LONG STRING

COMPANY TRUCK::N DRIVER: C.ASHLEY

CUSTOMER: HORSEHOE OPERATING

LEASE & WELL#:LESSER #1SWD

504-050	PREMIUM PLUS CEMENT	375	SKS.	14.01	5253.75
507-277	8 % ADDED GEL	19	SKS.	21.40	406.60
509-968	W/W SALT	700	LBS.	0.17	119.00
507-210	FLOCCULE	63	LBS.	1.90	119.70
500-207	SERVICE CHARGES	428	CU FT	1.55	663.40
				TOTAL	6562.45
500-306	WEIGHT: 37893	MILES: 60	TON MILES: 1136.79	1.18	1341.41
				TOTAL BOOK PRICE OF BULK TICKET:	\$ 7903.86

500-225 RETURN SERVICE CHARGES \_\_\_\_\_ 20% COST OF RET. MATERIALS 1.55

500-306 WEIGHT: \_\_\_\_\_ RETURN MILES: 60 TON MILES: \_\_\_\_\_ 1.18

RECEIVED STATE CORPORATION COMMISSION

FEB 2 1998

STATE CORPORATION COMMISSION Kansas



**JOB SUMMARY** 4239 1

TICKET #	231818	TICKET DATE	11-18-97
REGION	North America	BDA / STATE	KS
NWA/COUNTRY	mid. con	COUNTY	Hamilton
MBU ID / EMP #	76653	PSL DEPARTMENT	Cement
EMPLOYEE NAME	Dennis Sims	CUSTOMER REP / PHONE	Skippie Barnes
LOCATION	Liberal KS	COMPANY	Horsehoe ops.
TICKET AMOUNT		WELL TYPE	02
API / UWI #		DEPARTMENT	Cement
JOB PURPOSE CODE			035

WELL LOCATION	Syracuse KS	SEC / TWP / RNG	23/21S/41W
LEASE / WELL #	Lesser #1 SWD		

HES EMP NAME/EMP#/(EXPOSURE HOURS)   HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)   HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)   HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)   HRS
Sims 76653 9	Donald H9288 9	McIntyre H12328 9	ASBRY 44061 9

**ORIGINAL**

HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES
420505	120						
54033-75416							
50502-75505							
59134-177031							

Form Name \_\_\_\_\_ Type: \_\_\_\_\_  
 Form Thickness \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_  
 Packer Type \_\_\_\_\_ Set At \_\_\_\_\_  
 Bottom Hole Temp. \_\_\_\_\_ Pressure \_\_\_\_\_  
 Misc. Data \_\_\_\_\_ Total Depth \_\_\_\_\_

	CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE	11-18-97	11-18-97	11-18-97	11-18-97
TIME	09:00	13:00	17:33	18:03

**TOOLS AND ACCESSORIES**

TYPE AND SIZE	QTY	MAKE
Float Collar		
Float Shoe		
Guide Shoe	1	Comp
Centralizers		
Bottom Plug		
Top Plug		
Head		
Packer		
Other		

**WELL DATA**

	NEW/USED	WEIGHT	SIZE	FROM	TO	MAX ALLOW
Casing	N	10.5	2 1/2	0	1650	
Liner						
Liner						
Tbg/D.P.						
Tbg/D.P.						
Open Hole						SHOTS/FT.
Perforations						
Perforations						
Perforations						

**MATERIALS**

Treat Fluid	Density	Lb/Gal
Disp. Fluid	Density	Lb/Gal
Prop. Type	Size	Lb.
Prop. Type	Size	Lb.
Acid Type	Gal.	%
Acid Type	Gal.	%
Surfactant	Gal.	In
NE Agent	Gal.	In
Fluid Loss	Gal/Lb	In
Gelling Agent	Gal/Lb	In
Fric. Red.	Gal/Lb	In
Breaker	Gal/Lb	In
Blocking Agent	Gal/Lb	
Perpac Balls	Qty.	
Other		
Other		
Other		
Other		

HOURS ON LOCATION		OPERATING HOURS		DESCRIPTION OF JOB
DATE	HOURS	DATE	HOURS	
11-18	5	11-18	1/2	035
TOTAL	5	TOTAL	1/2	

**HYDRAULIC HORSEPOWER**  
 ORDERED Avail. \_\_\_\_\_ Used \_\_\_\_\_  
**AVERAGE RATES IN BPM**  
 TREATED Disp. \_\_\_\_\_ Overall \_\_\_\_\_  
**CEMENT LEFT IN PIPE**  
 FEET Reason: \_\_\_\_\_

**CEMENT DATA**

STAGE	SACKS	CEMENT	BULK/SKS	ADDITIVES	YIELD	LBS/GAL
1	250	Prem + c	✓	80% Gal 1/4" floccul	2.14	12.6
2	125	" "	✓	10% Salt	1.40	14.8

Circulating _____	Displacement _____	Prelush: Gal (BBI) <input checked="" type="checkbox"/>	Type <u>A20</u>
Breakdown _____	Maximum _____	Load & Bkdn Gal - BBI	Pad. BBI - Gal
Average _____	Frac Gradient _____	Treatment Gal - BBI	Disp. (BBI) Gal <u>25.5</u>
Shut In. Instant _____	5 Min _____ 15 Min _____	Cement Slurr Gal (BBI) <u>75.3</u>	<u>31.6</u>
		Total Volume Gal - BBI	

Frac Ring #1 \_\_\_\_\_ Frac Ring #2 \_\_\_\_\_ Frac Ring #3 \_\_\_\_\_ Frac Ring #4 \_\_\_\_\_  
 THE INFORMATION STATED HEREIN IS CORRECT  
 CUSTOMER'S REPRESENTATIVE SIGNATURE: Skippie Barnes



**JOB LOG** 4239-5

TICKET #	TICKET DATE
BDA / STATE	COUNTY
PSL DEPARTMENT	
CUSTOMER REP / PHONE	
API / UWI #	
JOB PURPOSE CODE	

REGION North America	NWA/COUNTRY
MBU ID / EMP #	EMPLOYEE NAME
LOCATION	COMPANY
TICKET AMOUNT	WELL TYPE
WELL LOCATION	DEPARTMENT
LEASE / WELL #	SEC / TWP / RNG

HES EMP NAME/EMP#/(EXPOSURE HOURS)   HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)   HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)   HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)   HRS

**ORIGINAL**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS		PRESS. (psi)		JOB DESCRIPTION / REMARKS
				T	C	Tbg	Csg	
1	13:30							PT on loc.
	15:31	5	96			200		mix + pump Lead cont
	17:48	3	31.6			200		mix + pump Tail cont
	17:54							Wash lines + Drop plug
	17:56	6	26.1			150		start Disp
	18:03					600		land plug
	18:03					1400		set plug S/D
	18:07							Release pressure
								float Holding

Thank

STATE DEPARTMENT OF REVENUE  
 FEB 2 1998  
 CONFIDENTIAL