

15-051-24845-00-00

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- 051-24,845

CONFIDENTIAL

County Ellis

appr - NE - NW - SW Sec. 8 Twp. 11 Rge. 17 X^E W

Operator: License # 3613

Name: HALLWOOD PETROLEUM, INC.

Address 4582 S. Ulster St. Pkwy #1700

P.O. Box 378111

City/State/Zip Denver, CO 80237

Purchaser:

Operator Contact Person:

Phone ()

Contractor: Name: ALLEN DRILLING COMPANY

License: 5418

Wellsite Geologist:

Designate Type of Completion

New Well Re-Entry Workover

Oil SWD S10W Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

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

Operator: N/A

Well Name:

Comp. Date Old Total Depth

Deepening Re-perf. Conv. to Inj/SWD
 Plug Back PBTB
 Commingled Docket No.
 Dual Completion Docket No.
 Other (SWD or Inj?) Docket No. 8-12-93

7/13/93 7/20/93 8/12/93
Spud Date Date Reached TD Completion Date

2310 Feet from S/W (circle one) Line of Section

4390 Feet from E/W (circle one) Line of Section

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

Lease Name CARMICHAEL Well # D-7

Field Name Bemis-Shutts

Producing Formation

Elevation: Ground 1863' KB 1868'

Total Depth 3526' PBTB --

Amount of Surface Pipe Set and Cemented at 1113 Feet

Multiple Stage Cementing? Collar Used? Yes No

If yes, show depth set Feet

If Alternate II completion, cement circulated from

feet depth to w/ sx cmt.

Drilling Fluid Management Plan 3-10-94
(Data must be collected from the Reserve Pit)

Chloride content 10,000 ppm Fluid volume bbls

Dewatering method used EVAPORATION

Location of fluid disposal if hauled offsite:

Operator Name RELEASED

Lease Name License No.

4PR 4 1994 Quarter Sec. Twp. S Rng. E/W

County FROM CONFIDENTIAL Docket No.

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Bruce Hoffman

Title SR Tech Date 1-11-94

Subscribed and sworn to before me this 11th day of Jan. 1994.

Notary Public Ma M. Christian

Date Commission Expires 9/11/97

K.C.C. OFFICE USE ONLY
 Letter of Confidentiality Attached
 Wireline Log Received
 Geologist Report Received
STATE CORPORATION COMMISSION
JAN 3 1994
KGS SVD/Rep NGPA
Plug Other (Specify)
CONSERVATION DIVISION
Wichita, Kansas

Operator Name ALLEN DRILLING COMPANY Lease Name CARMICHAEL Well # D

Sec. 8 Twp. 11 Rge. 17 East West County Ellis

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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Anhydrite	1109	+ 759
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Howard	2795	- 927
List All E.Logs Run:		Severy	2809	- 941
		Topeka	2821	- 953
		Heebner	3050	-1182
		Toronto	3070	-1202
		Lansing	3093	-1225
		Base Kansas City	3323	-1455
		Conglomerate	3340	-1472
		Conglomerate Chert	3349	-1481 con't...

CASING RECORD <input 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	12-1/4"	8-5/8"	25#	1113'	40/60	490	3%cc 1/4#flo/sk
Production	7-7/8"	5-1/2"	14#	2523'	common	225	

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		Acid, Fracture, Shot, Cement Squeeze Record	
	Specify Footage of Each Interval Perforated		(Amount and Kind of Material Used)	Depth

TUBING RECORD		Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No
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)		
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 _____

CONFIDENTIAL

API#15-051-24845

Hallwood Petroleum

Attachment to ACO-1 for Carmichael D-7

"Continuation of formation tops"

ORIGINAL

<u>Name</u>	<u>Top</u>	<u>Datum</u>
Simpson Shale	3369	-1501
1st Simpson Dolomite	3383	-1515
2nd Simpson Dolomite	3389	-1521
Simson Sand	3409	-1541
Arbuckle	3412	-1544
Rotary Total Depth	3526	-1658
Log Total Depth	3527	-1659

RELEASED

APR 4 1994

FROM CONFIDENTIAL

RECEIVED
STATE CORPORATION COMMISSION

JAN 13 1994

CONSERVATION DIVISION
Wichita, Kansas

ORIGINAL

Hallwood Petroleum Companies
Attn: Mr. Bruce Hoffman
P.O. Box 378111
Denver Colorado 80237
March 11, 1994

Re: Confidentiality of Information on
Carmichael D-7
A.P.I. 15051248450000
Sec. 08 - Twn. 11 S. - Rng. 17 W.
Ellis County, Kansas

RELEASED

APR 4 1994

FROM CONFIDENTIAL

Dear Mr. Hoffman:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection (d) of that regulation states that "all rights to confidentiality shall be lost if the filings are not timely."

The above-referenced well was spud July 13, 1993 and the ACO-1 was received on January 13, 1994 (not within the 120 days timely requirement). Therefore, your request for confidential treatment of this information cannot be granted.

If you should have any questions, please do not hesitate to contact me at (316) 263-3238.

Sincerely,

David P. Williams
Production Supervisor

Hallwood Energy Companies

4582 South Ulster Street Parkway • Stanford Place III • Suite 1700 • Post Office Box 378111
Denver, Colorado 80237 • (303) 850-7373

January 11, 1994

ORIGINAL

State of Kansas
State Corporation Commission
200 Colorado Derby Bldg.
202 West First
Wichita, KS 67202-1286

RE: Carmichael D-7
8-11-17W
Ellis County, KS

D.W.
LATE
spud 7/13/93
want held for more
testing?
CB.

Dear KCC:

Please find enclosed an ACO-1 and all necessary related documents for the above-referenced well.

Also, please hold all information on this well confidential for the maximum allowable period of time.

Should you have any questions call me at (303) 850-6257.

Sincerely,

HALLWOOD PETROLEUM, INC.

Bruce Hoffman

Bruce Hoffman
Sr. Engineering Technician

RELEASED

APR 4 1994

FROM CONFIDENTIAL

BH:ic
ltrs3/0002.bh

Enclosure

RECEIVED
STATE CORPORATION COMMISSION

JAN 13 1994

CONSERVATION DIVISION
Wichita, Kansas

TRILOBITE TESTING, L.L.C.

CONFIDENTIAL

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

API# 15-051-24845

Well Name #D-7 CARMICHAEL Test No. 1 Date 7/19/93
 Company HALLWOOD PETROLEUM INC. Zone SIMPSON
 Address P.O. BOX 378111 DENVER CO 80237-8111 Elevation 1863
 Co. Rep./Geo. JIM MUSGROVE Cont. ALLEN RIG #3 Est. Ft. of Pay _____
 Location: Sec. 8 Twp. 11S Rge. 17W Co. ELLIS State KS

Interval Tested 3326-3414
 Anchor Length 88
 Top Packer Depth 3321
 Bottom Packer Depth 3326
 Total Depth 3414

Drill Pipe Size 4.5" XH
 Wt. Pipe I.D. - 2.7 Ft. Run ORIGINAL
 Drill Collar - 2.25 Ft. Run _____
 Mud Wt. 9.4 lb/Gal.
 Viscosity 42 Filtrate 8.8

RELEASED

Tool Open @ 9:33 PM Initial Blow 1/2" BLOW BUILDING TO 2"
 APR 4 1994

Final Blow SURFACE BLOW BUILDING TO 3/4"
 FROM CONFIDENTIAL

Recovery - Total Feet 60 Flush Tool? NO

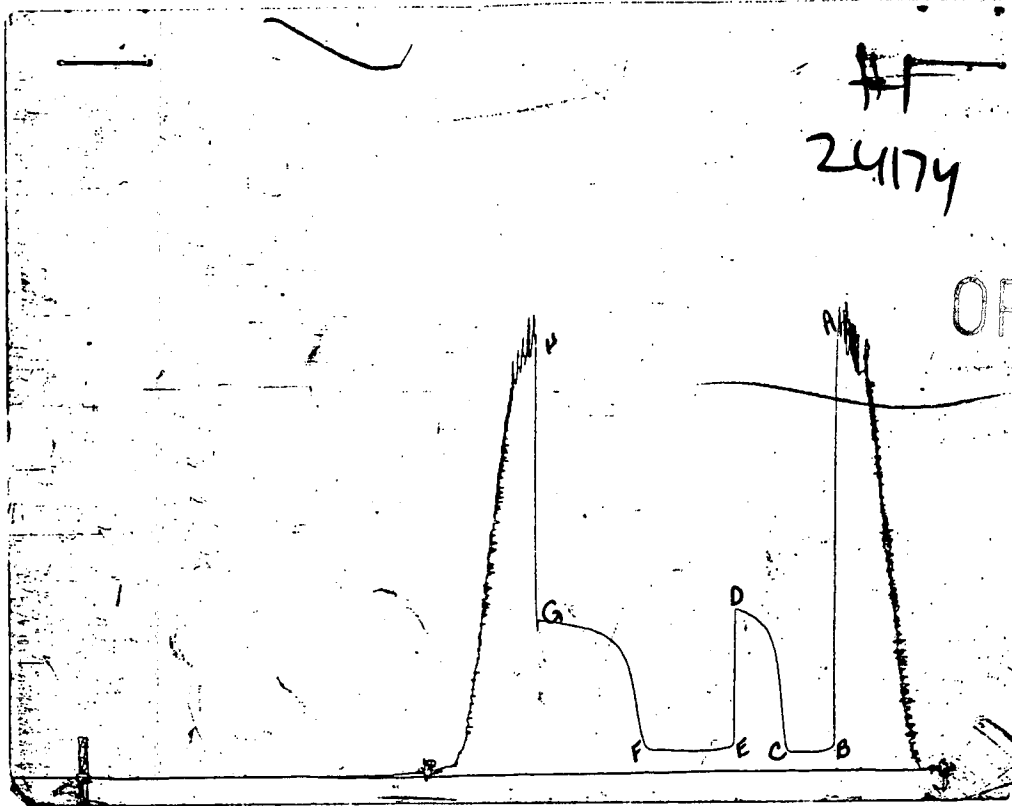
Rec. 30 Feet of CLEAN OIL
 Rec. 30 Feet of MUD CUT OIL-5% GAS/ 50% OIL / 45% MUD
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____

BHT 104 °F Gravity 32 °API @ 80 °F Corrected Gravity 30 °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1740.8 PSI AK1 Recorder No. 22150 Range 3925
 (B) First Initial Flow Pressure 81.6 PSI @ (depth) 3382 w / Clock No. 25814
 (C) First Final Flow Pressure 75.7 PSI AK1 Recorder No. 24174 Range 3050
 (D) Initial Shut-in Pressure 629.0 PSI @ (depth) 3407 w / Clock No. 30401
 (E) Second Initial Flow Pressure 99.6 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 89.9 PSI @ (depth) _____ w / Clock No. _____
 (G) Final Shut-in Pressure 593.9 PSI Initial Opening 30 Final Flow 60
 (H) Final Hydrostatic Mud 1674.6 PSI Initial Shut-in 45 Final Shut-in _____

Our Representative PAUL SIMPSON

RECEIVED
 CONSERVATION DIVISION
 WICHITA, KANSAS
 JAN 13 1994
 RECEIVED
 CONSERVATION DIVISION
 WICHITA, KANSAS
 JAN 13 1994



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1773	1740.8
(B) FIRST INITIAL FLOW PRESSURE	59	81.6
(C) FIRST FINAL FLOW PRESSURE	67	75.7
(D) INITIAL CLOSED-IN PRESSURE	621	629
(E) SECOND INITIAL FLOW PRESSURE	74	99.6
(F) SECOND FINAL FLOW PRESSURE	89	89.9
(G) FINAL CLOSED-IN PRESSURE	591	593.9
(H) FINAL HYDROSTATIC MUD	1659	1674.6

RECEIVED
STATE CORPORATION COMMISSION
JAN 13 1964
CORPORATION COMMISSION
Wichita, Kansas

CONFIDENTIAL

CALCULATED RECOVERY ANALYSIS DRILL PIPE
DST # 1 TICKET 6015

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
1	30	0	0	100	30	0	0	0	0
2	30	5	1.5	50	15	0	0	45	13.5
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	60	2.5	1.5	75	45	0	0	22.5	13.5

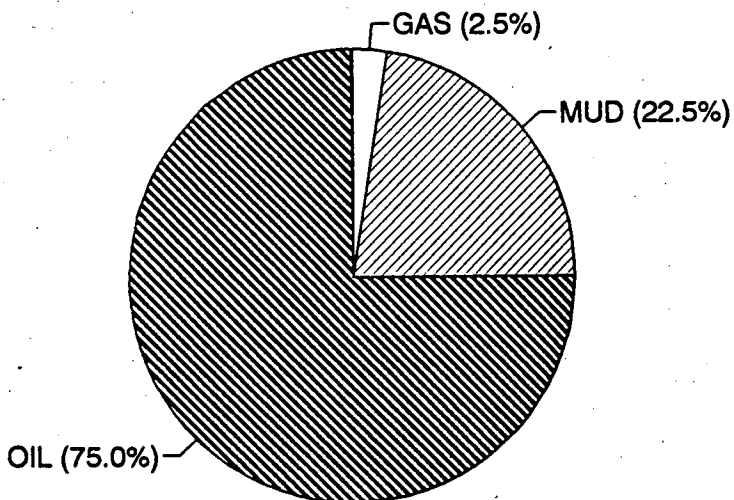
ORIGINAL

			HRS	BBL/DAY
BBL OIL=	0.6399	*	1.5	10.238
BBL WATER=	0	*		0
BBL MUD=	0.19197			
BBL GAS	0.02133			

RELEASED

APR 4 1994

FROM CONFIDENTIAL



INITIAL FLOW

CONFIDENTIAL

RECORDER 24174

DST # 1

TIME(MIN) PRESSURE <> PRESSURE

ORIGINAL

0	81.6	81.6
3	77.9	-3.7
6	74.9	-3.0
9	74.2	-0.7
12	74.2	0.0
15	74.2	0.0
18	74.2	0.0
21	74.9	0.7
24	75.7	0.8
27	75.7	0.0
30	75.7	0.0

RELEASED

APR 4 1994

FINAL FLOW

FROM CONFIDENTIAL

RECORDER 24174

DST # 1

TIME(MIN) PRESSURE <> PRESSURE

0	99.6	99.6
3	92.8	-6.8
6	90.6	-2.2
9	88.4	-2.2
12	87.6	-0.8
15	86.1	-1.5
18	84.6	-1.5
21	83.1	-1.5
24	82.4	-0.7
27	81.6	-0.8
30	81.6	0.0
33	82.4	0.8
36	83.1	0.7
39	83.9	0.8
42	84.6	0.7
45	85.4	0.8
48	86.1	0.7
51	86.9	0.8
54	87.6	0.7
57	88.4	0.8
60	89.1	0.7
63	89.9	0.8

#D-7 CARMICHAEL
INITIAL

DST #1
SHUTIN

30 INITIAL FLOW TIME

SLOPE
P*

PSI/CYCLE
PSI

CONFIDENTIAL

TIME(MIN) Pws (psi)

Log <>
Horn T PRESSURE

Horn T

TIME(MIN)	Pws (psi)	Horn T	PRESSURE	Horn T
3	100.3	1.041	100.3	11
6	334.9	0.778	234.6	6
9	468.5	0.637	133.6	4
12	512.8	0.544	44.3	4
15	544.9	0.477	32.1	3
18	564.0	0.426	19.1	3
21	580.9	0.385	16.9	2
24	592.3	0.352	11.4	2
27	602.3	0.325	10.0	2
30	611.4	0.301	9.1	2
33	617.5	0.281	6.1	2
36	623.6	0.263	6.1	2
39	629.0	0.248	5.4	2

ORIGINAL

RELEASED

APR 4 1994

#D-7 CARMICHAEL
FINAL

DST #1
SHUTIN

90 TOTAL FLOW TIME

SLOPE
P*

PSI/CYCLE
PSI

FROM CONFIDENTIAL

Pws (psi)

Log <>
Horn T PRESSURE

Horn T

6	121.3	1.204	121.3	16
12	328.8	0.929	207.5	9
18	443.3	0.778	114.5	6
24	493.0	0.677	49.7	5
30	519.0	0.602	26.0	4
36	539.6	0.544	20.6	4
42	551.1	0.497	11.5	3
48	560.2	0.459	9.1	3
54	567.1	0.426	6.9	3
60	574.0	0.398	6.9	3
66	580.1	0.374	6.1	2
72	584.7	0.352	4.6	2
78	590.0	0.333	5.3	2
84	593.9	0.316	3.9	2

TRILOBITE TESTING L.L.C.

CONFIDENTIAL

P.O. Box 362 • Hays, Kansas 67601

API #15-051-24845

ORIGINAL Test Ticket

№ 6015

Well Name & No. <u>Cornicheal D-7</u>	Test No. <u>1</u>	Date <u>7-18-93</u>
Company <u>Hallwood Petroleum, Inc</u>	Zone Tested <u>Simpson</u>	
Address _____	Elevation <u>1849</u>	
Co. Rep./Geo. <u>Jim Musgrove</u>	cont. <u>Allen #3</u>	Est. Ft. of Pay _____
Location: Sec. <u>8</u>	Twp. <u>11s</u>	Rge. <u>17w</u>
	co. <u>Ellis</u>	State <u>Ks</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____
Turnkey _____	Yes _____ No _____	Evaluation _____

Interval Tested <u>3326 - 3414</u>	Drill Pipe Size <u>4 1/2 XH</u>
Anchor Length <u>88</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>3326</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>3326</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>3414</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.4</u> lb/gal.	Viscosity <u>42</u> Filtrate <u>8.8</u>
Tool Open @ <u>9:33 AM</u>	Initial Blow <u>1/2" blow building to 2"</u>
Final Blow <u>surface blow building to 3/4"</u>	

RELEASED

APR 4 1994

Recovery — Total Feet <u>60</u>	Feet of Gas In Pipe _____	FROM CONFIDENTIAL
Rec. <u>30</u> Feet Of <u>oil</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. <u>30</u> Feet Of <u>MCO</u>	<u>5</u> %gas <u>50</u> %oil _____ %water <u>45</u> %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT 104 °F Gravity 32 °API @ 80 °F Corrected Gravity 30 °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud <u>1773</u>	PSI	AK1 Recorder No. <u>22150</u>	Range <u>3925</u>
(B) First Initial Flow Pressure <u>59</u>	PSI	@ (depth) <u>3382</u>	w/Clock No. <u>25814</u>
(C) First Final Flow Pressure <u>67</u>	PSI	AK1 Recorder No. <u>24174</u>	Range <u>3050</u>
(D) Initial Shut-in Pressure <u>621</u>	PSI	@ (depth) <u>3407</u>	w/Clock No. <u>30401</u>
(E) Second Initial Flow Pressure <u>74</u>	PSI	AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>89</u>	PSI	@ (depth) _____	w/Clock No. _____
(G) Final Shut-in Pressure <u>591</u>	PSI	Initial Opening <u>30</u>	Test _____
(H) Final Hydrostatic Mud <u>1689</u>	PSI	Initial Shut-in <u>45</u>	Jars _____

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow 60 Safety Joint _____

Final Shut-in 90 Straddle _____

Approved By James C. Musgrove

Our Representative Paul Simpson

Circ. Sub _____

Sampler _____

Extra Packer _____

Other _____

RECEIVED

APR 13 1994

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

CONFIDENTIAL
ORIGINAL

Well Name #D-7 CARMICHAEL Test No. 2 Date 7/19/93
Company HALLWOOD PETROLEUM INC. Zone ARBUCKLE
Address P.O. BOX 378111 DENVER CO 80237-8111 Elevation 1863
Co. Rep./Geo. JIM MUSGROVE Cont. ALLEN RIG #3 Est. Ft. of Pay _____
Location: Sec. 8 Twp. 11S Rge. 17W Co. ELLIS State KS

Interval Tested 3415-3420
Anchor Length 5
Top Packer Depth 3410
Bottom Packer Depth 3415
Total Depth 3420

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____
Mud Wt. 9.3 lb/Gal.
Viscosity 50 Filtrate 9.6

Tool Open @ 10:15 AM Initial Blow WEAK 1/2" BLOW THROUGHOUT OPENING

Final Blow NO BLOW

Recovery - Total Feet 30 Flush Tool? YES

Rec. 30 Feet of THIN MUD WITH OIL SPECKS
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

RELEASED

APR 4 1994

FROM CONFIDENTIAL

BHT N/A °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1745.4 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 36.2 PSI @ (depth) 3406 w / Clock No. 30401

(C) First Final Flow Pressure 32.5 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 1045.3 PSI @ (depth) 3417 w / Clock No. 25814

(E) Second Initial Flow Pressure 36.4 PSI AK1 Recorder No. _____ Range _____

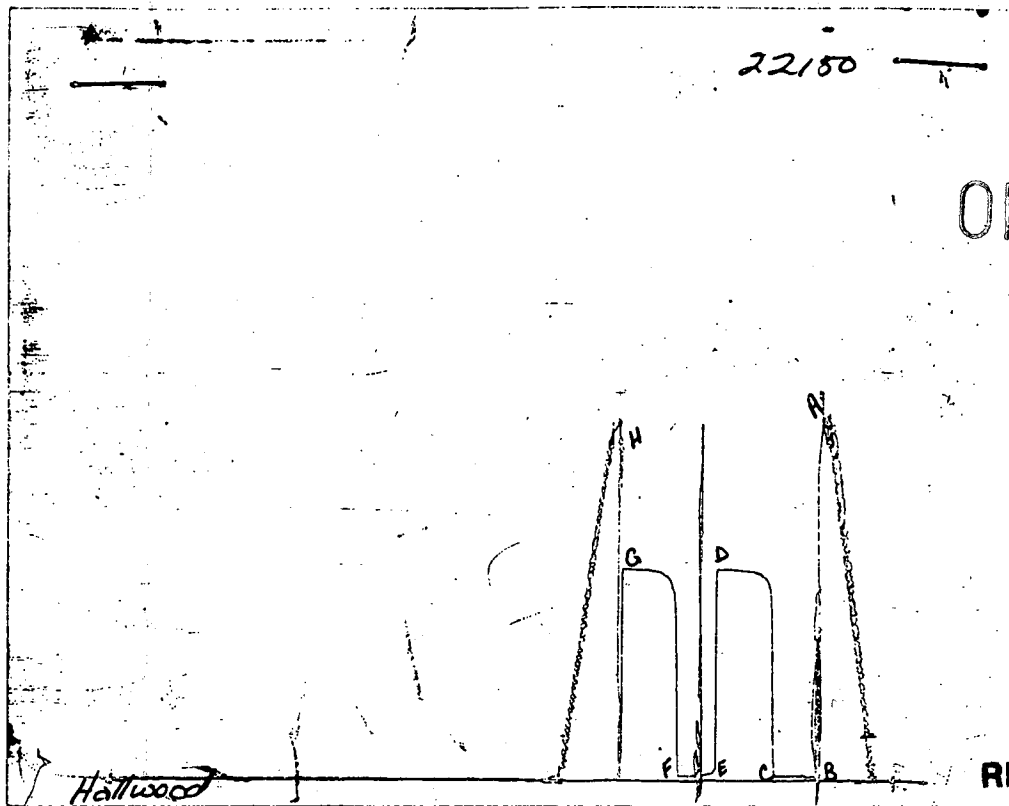
(F) Second Final Flow Pressure 22.9 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1052.8 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1740.1 PSI Initial Shut-in 45 Final Shut-in 45

Our Representative PAUL SIMPSON

CHART PAGE



RELEASED

APR 4 1994

This is an actual photograph of recorder chart

FROM CONFIDENTIAL

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1773	1745.4
(B) FIRST INITIAL FLOW PRESSURE	30	36.2
(C) FIRST FINAL FLOW PRESSURE	36	32.5
(D) INITIAL CLOSED-IN PRESSURE	1039	1045.3
(E) SECOND INITIAL FLOW PRESSURE	36	36.4
(F) SECOND FINAL FLOW PRESSURE	36	22.9
(G) FINAL CLOSED-IN PRESSURE	1046	1052.8
(H) FINAL HYDROSTATIC MUD	1735	1740.1

CONFIDENTIAL

INITIAL FLOW

RECORDER 24174

DST # 2

ORIGINAL

TIME(MIN) PRESSURE <> PRESSURE

TIME(MIN)	PRESSURE	<> PRESSURE
0	36.2	36.2
3	34.7	-1.5
6	33.3	-1.4
9	30.3	-3.0
12	29.6	-0.7
15	29.6	0.0
18	30.3	0.7
21	31.0	0.7
24	31.0	0.0
27	31.8	0.8
30	32.5	0.7

RELEASED

APR 4 1994

FINAL FLOW

FROM CONFIDENTIAL

RECORDER 22150

DST # 2

TIME(MIN) PRESSURE <> PRESSURE

TIME(MIN)	PRESSURE	<> PRESSURE
0	36.4	36.4
3	32.5	-3.9
6	28.7	-3.8
9	26.8	-1.9
12	24.9	-1.9
15	22.9	-2.0
18	21.9	-1.0
21	20.5	-1.4
24	21.0	0.5
27	21.9	0.9
30	22.9	1.0

#D-7 CARMICHAEL DST #2
INITIAL SHUTIN

30 INITIAL FLOW TIME

SLOPE
P*

PSI/CYCLE
PSI

CONFIDENTIAL

Log <>

TIME(MIN)	Pws (psi)	Horn T	PRESSURE	Horn T
3	1006.7	1.041	1006.7	11
6	1021.8	0.778	15.1	6
9	1030.9	0.637	9.1	4
12	1035.5	0.544	4.6	4
15	1038.5	0.477	3.0	3
18	1039.2	0.426	0.7	3
21	1040.0	0.385	0.8	2
24	1040.7	0.352	0.7	2
27	1041.5	0.325	0.8	2
30	1042.3	0.301	0.8	2
33	1043.0	0.281	0.7	2
36	1043.8	0.263	0.8	2
39	1044.5	0.248	0.7	2
42	1045.3	0.234	0.8	2

ORIGINAL

RELEASED

APR 4 1994

#D-7 CARMICHAEL DST #2
FINAL SHUTIN

60 TOTAL FLOW TIME

SLOPE
P*

PSI/CYCLE
PSI

FROM CONFIDENTIAL

Log <>

Pws (psi)	Horn T	PRESSURE	Horn T	
3	997.6	1.322	997.6	21
6	1016.5	1.041	18.9	11
9	1027.1	0.885	10.6	8
12	1034.7	0.778	7.6	6
15	1040.7	0.699	6.0	5
18	1044.5	0.637	3.8	4
21	1046.0	0.586	1.5	4
24	1047.5	0.544	1.5	4
27	1048.3	0.508	0.8	3
30	1049.8	0.477	1.5	3
33	1051.3	0.450	1.5	3
36	1052.1	0.426	0.8	3
39	1052.8	0.405	0.7	3

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

CONFIDENTIAL

API # 15-051-24845

Test Ticket

No 6016

ORIGINAL

Well Name & No. Carmichael D-D Test No. 2 Date 7-19-93
 Company Hallwood Petroleum, Inc Zone Tested Arbuckle
 Address _____ Elevation 1863 - is right
 Co. Rep./Geo. Jim Musgrove cont. Alba #3 Est. Ft. of Pay _____
 Location: Sec. 8 Twp. 11s Rge. 17w Co. Ellis State Ks
 No. of Copies _____ Distribution Sheet _____ Yes _____ No Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 3415-3420 Drill Pipe Size 4 1/2 XT
 Anchor Length 5 Top Choke - 1" _____ Bottom Choke - 3/4" _____
 Top Packer Depth 3410 Hole Size - 77/8" _____ Rubber Size - 6 3/4" _____
 Bottom Packer Depth 3415 Wt. Pipe I.D. - 2.7 Ft. Run _____
 Total Depth 3420 Drill Collar - 2.25 Ft. Run _____
 Mud Wt. 9.3 lb/gal. Viscosity 50 Filtrate 9.6
 Tool Open @ 10:15 AM Initial Blow Weak 1/2" blow throughout opening

Final Blow NO blow **RELEASED**

Recovery - Total Feet 30 Feet of Gas In Pipe APR 4 1994 Flush Tool? yes

Rec.	Feet Of	% gas	% oil	% water	% mud
<u>30</u>	<u>thin mud w/ oil spots</u>				

BHT N/A °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

- (A) Initial Hydrostatic Mud 1773 PSI AK1 Recorder No. 22150 Range 3925
- (B) First Initial Flow Pressure 30 PSI @ (depth) 3406 w/Clock No. 30401
- (C) First Final Flow Pressure 36 PSI AK1 Recorder No. 24174 Range 3050
- (D) Initial Shut-in Pressure 1039 PSI @ (depth) 3417 w/Clock No. 25814
- (E) Second Initial Flow Pressure 36 PSI AK1 Recorder No. _____ Range _____
- (F) Second Final Flow Pressure 36 PSI @ (depth) _____ w/Clock No. _____
- (G) Final Shut-in Pressure 1046 PSI Initial Opening 30 Test _____
- (H) Final Hydrostatic Mud 1735 PSI Initial Shut-in 45 Jars _____

Final Flow 36 Safety Joint _____
 Final Shut-in 45 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____

Approved By Jim Musgrove
 Our Representative Paul Simpson

TOTAL PRICE \$ _____

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

RECEIVED
 KANSAS OIL FIELD COMMISSION

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

CONFIDENTIAL

ORIGINAL

Drill-Stem Test Data

Well Name #D-7 CARMICHAEL Test No. 3 Date 7/19/93
Company HALLWOOD PETROLEUM INC. Zone ARBUCKLE
Address P.O. BOX 378111 DENVER CO 80237-8111 Elevation 1863
Co. Rep./Geo. JIM MUSGROVE Cont. ALLEN RIG #3 Est. Ft. of Pay _____
Location: Sec. 8 Twp. 11S Rge. 17W Co. ELLIS State KS

Interval Tested 3420-3425
Anchor Length 5
Top Packer Depth 3415
Bottom Packer Depth 3420
Total Depth 3425

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____
Mud Wt. 9.2 lb/Gal.
Viscosity 54 Filtrate 9.6

Tool Open @ 7:48 PM Initial Blow WEAK 1/2" BLOW DIED IN 15 MINUTES
FLUSHED TOOL
Final Blow NO BLOW - PULLED TOOL

Recovery - Total Feet 5

Flush Tool? YES

Rec. 5 Feet of MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

RELEASED

ADD 4-1994!

FROM CONFIDENTIAL

BHT N/A °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1815.9 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 19.6 PSI @ (depth) 3411 w / Clock No. 30401

(C) First Final Flow Pressure 24.2 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 1087.9 PSI @ (depth) 3423 w / Clock No. 25814

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

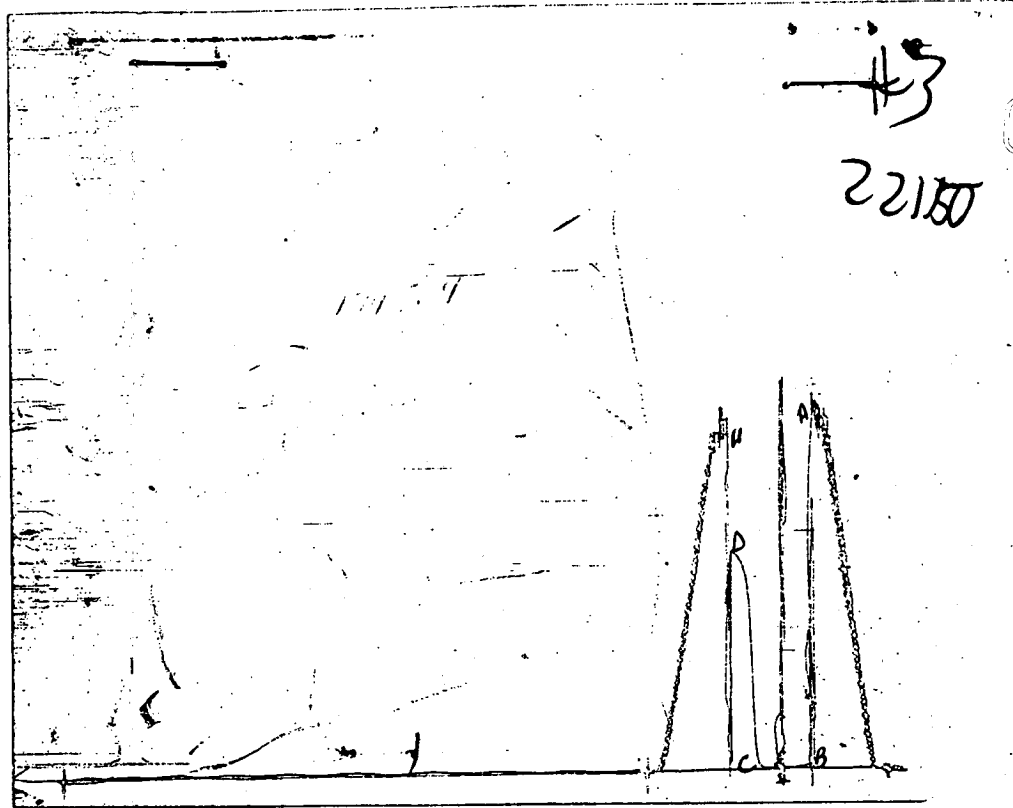
(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 30 Final Flow _____

(H) Final Hydrostatic Mud 1779.3 PSI Initial Shut-in 30 Final Shut-in _____

Our Representative PAUL SIMPSON

CHART PAGE



ORIGINAL

RELEASED

This is an actual photograph of recorder chart

APR 4 1994

FROM CONFIDENTIAL

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1811	1815.9
(B) FIRST INITIAL FLOW PRESSURE	22	19.6
(C) FIRST FINAL FLOW PRESSURE	22	24.2
(D) INITIAL CLOSED-IN PRESSURE	1084	1087.9
(E) SECOND INITIAL FLOW PRESSURE		
(F) SECOND FINAL FLOW PRESSURE		
(G) FINAL CLOSED-IN PRESSURE		
(H) FINAL HYDROSTATIC MUD	1780	1779.3

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

CONFIDENTIAL

Test Ticket

ORIGINAL No 6017

Well Name & No. Carmichael D-1 Test No. 3 Date 7-19-93
 Company Hallwood Petroleum, Inc Zone Tested Arb
 Address _____ Elevation 1863
 Co. Rep./Geo. Jim Musgrove cont. Allen #3 Est. Ft. of Pay _____
 Location: Sec. 8 Twp. 11s Rge. 12w Co. Ellis State KS
 No. of Copies _____ Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 3420-3425 Drill Pipe Size 4 1/2 KH
 Anchor Length 5 Top Choke — 1" _____ Bottom Choke — 1/4" _____
 Top Packer Depth 3415 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 3420 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 3425 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. 9.2 lb/gal. Viscosity 54 Filtrate 9.6
 Tool Open @ 7:14 PM Initial Blow weak 1/2" blow died in 15 min
flush tool
 Final Blow no blow - pulled tool **RELEASED**

Recovery — Total Feet 5 Feet of Gas in Pipe APR 4 1994 Flush Tool? Y
 Rec. 5 Feet Of Mud %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System
 (A) Initial Hydrostatic Mud 1811 PSI Ak1 Recorder No. 22150 Range 3925
 (B) First Initial Flow Pressure 22 PSI @ (depth) 3411 w/Clock No. 30401
 (C) First Final Flow Pressure 22 PSI AK1 Recorder No. 24174 Range 3050
 (D) Initial Shut-In Pressure 1084 PSI @ (depth) 3423 w/Clock No. 25814
 (E) Second Initial Flow Pressure - PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure - PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure - PSI Initial Opening 30 Test _____
 (H) Final Hydrostatic Mud 1780 PSI Initial Shut-in 50 Jars _____

Final Flow _____ Safety Joint _____
 Final Shut-in _____ Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____

Approved By [Signature]
 Our Representative [Signature]

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

CONFIDENTIAL

ORIGINAL

Well Name #D-7 CARMICHAEL Test No. 4 Date 7/20/93
Company HALLWOOD PETROLEUM INC. Zone ARBUCKLE
Address P.O. BOX 378111 DENVER CO 80237-8111 Elevation 1863
Co. Rep./Geo. JIM MUSGROVE Cont. ALLEN RIG #3 Est. Ft. of Pay _____
Location: Sec. 8 Twp. 11S Rge. 17W Co. ELLIS State KS

Interval Tested 3425-3435
Anchor Length 10
Top Packer Depth 3420
Bottom Packer Depth 3425
Total Depth 3435

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____
Mud Wt. _____ lb/Gal.
Viscosity _____ Filtrate _____

Tool Open @ 4:37 AM Initial Blow VERY STRONG BLOW-BOTTOM OF BUCKET IN 20 SECONDS

RELEASED

Final Blow SURFACE BLOW BUILDING TO 2"

APR 4 1994

Recovery - Total Feet 2570

Flush Tool? NO

FROM CONFIDENTIAL

Rec. 20 Feet of CLEAN OIL
Rec. 240 Feet of SLTLY OIL CUT MUDDY WTR-5% OIL/ 85% WTR/ 10% MUD
Rec. 810 Feet of SLTLY OIL CUT WATER- 2% OIL / 98% WTR
Rec. 1500 Feet of SALT WATER WITH FEW OIL SPOTS
Rec. _____ Feet of _____

BHT N/A °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.2 @ 65 °F Chlorides 40000 ppm Recovery Chlorides 6000 ppm System

(A) Initial Hydrostatic Mud 1734.0 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 441.0 PSI @ (depth) 3428 w / Clock No. 31154

(C) First Final Flow Pressure 1097.4 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 1130.6 PSI @ (depth) 3431 w / Clock No. 25814

(E) Second Initial Flow Pressure 1131.4 PSI AK1 Recorder No. _____ Range _____

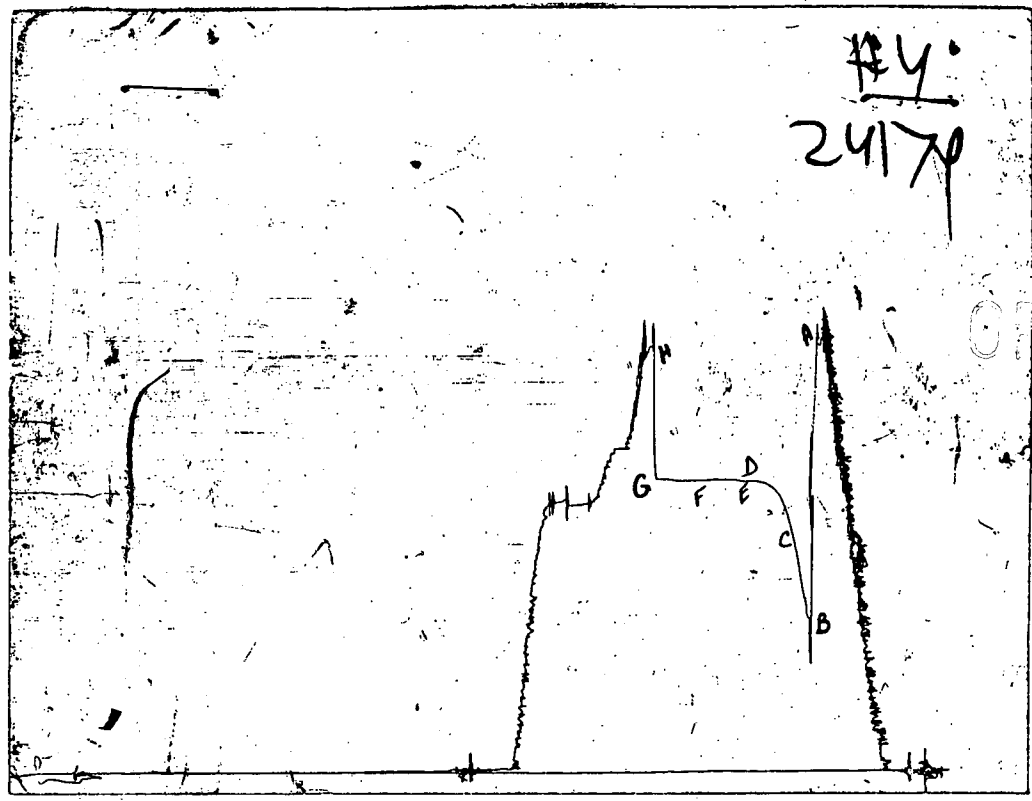
(F) Second Final Flow Pressure 1129.9 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1135.1 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1730.0 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative PAUL SIMPSON

CHART PAGE



RELEASED

This is an actual photograph of recorder chart

APR 4 1994

FROM CONFIDENTIAL

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1773	1734
(B) FIRST INITIAL FLOW PRESSURE	454	441
(C) FIRST FINAL FLOW PRESSURE	1114	1097.4
(D) INITIAL CLOSED-IN PRESSURE	1137	1130.6
(E) SECOND INITIAL FLOW PRESSURE	1137	1131.4
(F) SECOND FINAL FLOW PRESSURE	1137	1129.9
(G) FINAL CLOSED-IN PRESSURE	1137	1135.1
(H) FINAL HYDROSTATIC MUD	1727	1730

CONFIDENTIAL

CALCULATED RECOVERY ANALYSIS DRILL PIPE
TICKET 6018
DST # 4

ORIGINAL

SAMPLE #	TOTAL FEET	GAS %	OIL		WATER		MUD		
			FEET	%	FEET	%	FEET	%	FEET
1	20	0	0	100	20	0	0	0	0
2	240	0	0	5	12	85	204	10	24
3	810	0	0	2	16.2	98	793.8	0	0
4	1500	0	0	0	0	100	1500	0	0
5			0		0		0		0
TOTAL	2570	0	0	1.88	48.2	97.190661	2497.8	0.93	24

HRS BBL/DAY

BBL OIL= 0.685404 * 1 16.45

BBL WATER= 35.518716 * 852.45

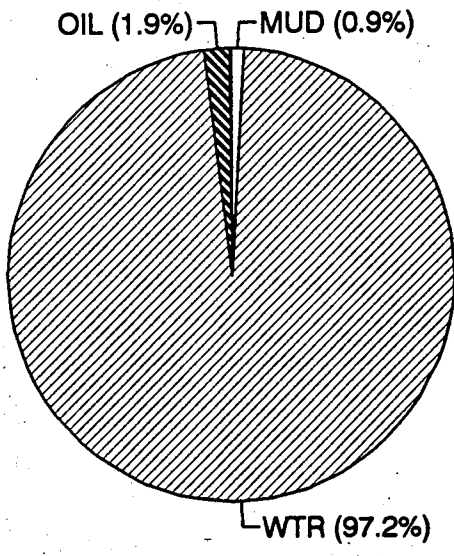
BBL MUD= 0.34128

BBL GAS 0

RELEASED

APR 4 1994

FROM CONFIDENTIAL



CONFIDENTIAL

INITIAL FLOW

RECORDER 24174

DST # 4

ORIGINAL

TIME(MIN)	PRESSURE	<> PRESSURE
0	441.0	441.0
3	600.0	159.0
6	677.1	77.1
9	758.6	81.5
12	849.1	90.5
15	918.1	69.0
18	975.7	57.6
21	1025.6	49.9
24	1056.6	31.0
27	1079.3	22.7
30	1097.4	18.1

RELEASED

APR 4 1994

FINAL FLOW

FROM CONFIDENTIAL

RECORDER 24174

DST # 4

TIME(MIN)	PRESSURE	<> PRESSURE
0	1131.4	1131.4
3	1132.1	0.7
6	1132.1	0.0
9	1132.1	0.0
12	1132.1	0.0
15	1132.1	0.0
18	1132.1	0.0
21	1131.4	-0.7
24	1130.6	-0.8
27	1129.9	-0.7

#D-7 CARMICHAEL
INITIAL

DST #4
SHUTIN

30 INITIAL FLOW TIME

SLOPE
P*

PSI/CYCLE
PSI

CONFIDENTIAL

Log <>

TIME(MIN)	Pws (psi)	Horn T	PRESSURE	Horn T
3	1097.4	1.041	1097.4	11
6	1115.5	0.778	18.1	6
9	1119.3	0.637	3.8	4
12	1123.8	0.544	4.5	4
15	1125.3	0.477	1.5	3
18	1126.8	0.426	1.5	3
21	1125.3	0.385	-1.5	2
24	1126.1	0.352	0.8	2
27	1127.6	0.325	1.5	2
30	1130.6	0.301	3.0	2

ORIGINAL

RELEASED

APR 4 1994

FROM CONFIDENTIAL

#D-7 CARMICHAEL
FINAL

DST #4
SHUTIN

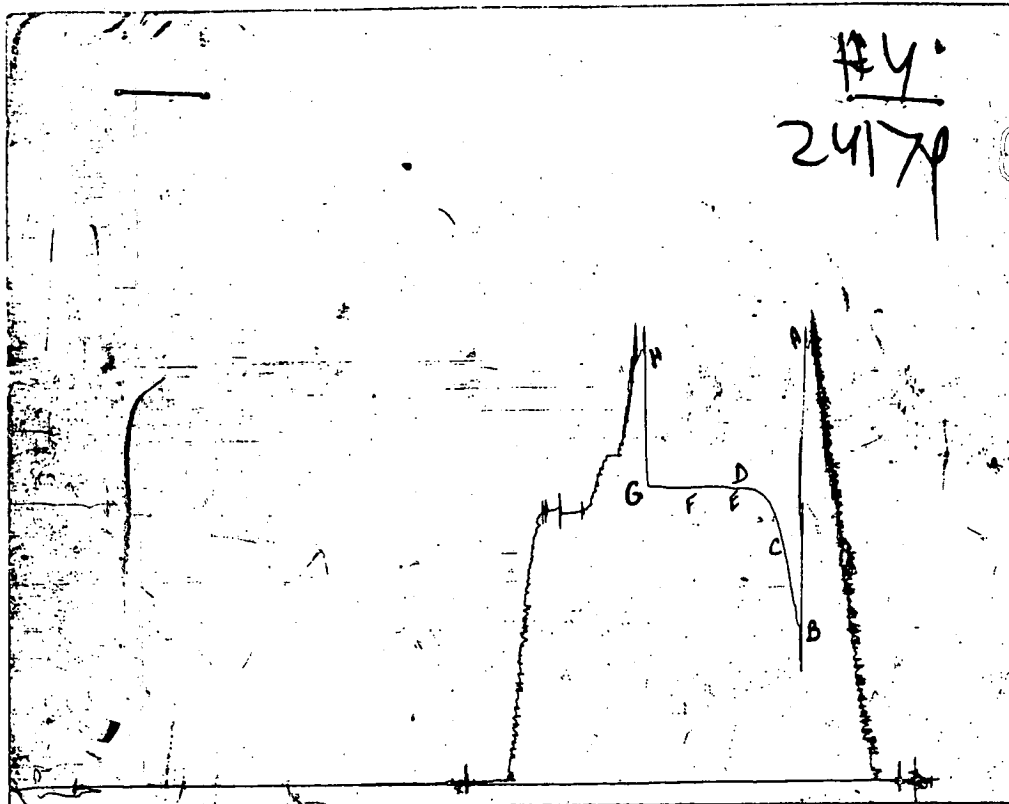
60 TOTAL FLOW TIME

SLOPE
P*

PSI/CYCLE
PSI

Log <>

Pws (psi)	Horn T	PRESSURE	Horn T
3	1130.6	1.322	21
6	1130.6	1.041	11
9	1129.9	0.885	8
12	1129.1	0.778	6
15	1128.4	0.699	5
18	1130.6	0.637	4
21	1132.9	0.586	4
24	1135.1	0.544	4
27	1135.1	0.508	3
30	1135.1	0.477	3



This is an actual photograph of recorder chart

RELEASED

APR 4 1994

FROM CONFIDENTIAL
OFFICE
READING

	FIELD READING	FROM CONFIDENTIAL OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1773	1734
(B) FIRST INITIAL FLOW PRESSURE	454	441
(C) FIRST FINAL FLOW PRESSURE	1114	1097.4
(D) INITIAL CLOSED-IN PRESSURE	1137	1130.6
(E) SECOND INITIAL FLOW PRESSURE	1137	1131.4
(F) SECOND FINAL FLOW PRESSURE	1137	1129.9
(G) FINAL CLOSED-IN PRESSURE	1137	1135.1
(H) FINAL HYDROSTATIC MUD	1727	1730

TRILOBITE TESTING L.L.C.

CONFIDENTIAL

P.O. Box 362 • Hays, Kansas 67601

API #15-051-24845

Test Ticket

№ 6018

Well Name & No. <u>Carmichael D-7</u>	Test No. <u>9</u>	Date <u>7-20-93</u>
Company <u>Hallwood Petroleum Inc</u>	Zone Tested <u>Arb</u>	
Address _____	Elevation <u>1563</u>	ORIGINAL
Co. Rep./Geo. <u>Jim Mygane</u>	Cont. <u>Allen #3</u>	Est. Ft. of Pay _____
Location: Sec. <u>8</u> Twp. <u>11s</u> Rge. <u>12w</u>	Co. <u>E113</u>	State <u>Ks</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>3425-3435</u>	Drill Pipe Size <u>4 1/2 XH</u>
Anchor Length <u>10</u>	Top Choke — 1" _____ Bottom Choke — 1/4" _____
Top Packer Depth <u>3420</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>3425</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>3435</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. _____ lb/gal.	Viscosity _____ Filtrate _____
Tool Open @ <u>4:13 AM</u>	Initial Blow <u>very strong blow - bottom of bucket</u>
<u>in 20 seconds</u>	
Final Blow <u>surface blow building to 2"</u>	

RELEASED

Recovery — Total Feet	Feet of Gas In Pipe	Flush Tool?
Rec. <u>20</u> Feet Of <u>cl oil</u>	%gas _____ %oil _____	ADD <u>4</u> 1994 %mud
Rec. <u>240</u> Feet Of <u>SOC MW</u>	%gas <u>5</u> %oil _____	%water <u>85</u> %mud <u>10</u>
Rec. <u>510</u> Feet Of <u>SOC W</u>	%gas <u>2</u> %oil _____	%water <u>98</u> %mud _____
Rec. <u>1500</u> Feet Of <u>salt water w/ few oil</u>	%gas _____ %oil _____	%water _____ %mud _____
Rec. _____ Feet Of <u>(reused) spot</u>	%gas _____ %oil _____	%water _____ %mud _____

BHT _____ °F Gravity _____	°API @ _____	°F Corrected Gravity _____	°API _____
RW <u>2</u> @ <u>65</u> °F	Chlorides <u>40,000</u> ppm	Recovery Chlorides <u>6000</u> ppm	System _____
(A) Initial Hydrostatic Mud <u>1773</u> PSI	AK1 Recorder No. <u>22150</u>	Range <u>3925</u>	
(B) First Initial Flow Pressure <u>434</u> PSI	@ (depth) <u>3428</u>	w/Clock No. <u>3154</u>	
(C) First Final Flow Pressure <u>1114</u> PSI	AK1 Recorder No. <u>24174</u>	Range <u>3050</u>	
(D) Initial Shut-In Pressure <u>1137</u> PSI	@ (depth) <u>3431</u>	w/Clock No. <u>25814</u>	
(E) Second Initial Flow Pressure <u>1137</u> PSI	AK1 Recorder No. _____	Range _____	
(F) Second Final Flow Pressure <u>1137</u> PSI	@ (depth) _____	w/Clock No. _____	
(G) Final Shut-In Pressure <u>1137</u> PSI	Initial Opening <u>30</u>	Test <u>X</u>	
(H) Final Hydrostatic Mud <u>1727</u> PSI	Initial Shut-In <u>30</u>	Jars _____	

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow <u>30</u>	Safety Joint _____
Final Shut-In <u>30</u>	Straddle _____
	Circ. Sub <u>X</u>
	Sampler _____
	Extra Packer _____
	Other _____

Approved By Jim Mygane

Our Representative Paul Simpson

ORIGINAL

INVOICE

JUL 19 1993



HALLIBURTON ENERGY SERVICES

CONFIDENTIAL

51020

REMIT TO: P.O. BOX 951046 50087 DALLAS, TX 75395-1046

INVOICE NO.	DATE
512129	07/14/1993

WELL LEASE NO./PROJECT		WELL/PROJECT LOCATION		STATE	OWNER
ARMICHAEL D-7		ELLIS		KS	SAME
SERVICE LOCATION		CONTRACTOR	JOB PURPOSE		TICKET DATE
1775		ADCO	CEMENT SURFACE CASING		07/14/1993
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
255880	AVEN WEAVERLING			COMPANY TRUCK	53401

HALLWOOD PETROLEUM, INC.
P.O. BOX 404
PLAINVILLE, KS 67663-0404

ORIGINAL

DIRECT CORRESPONDENCE TO:
FIRST OKLAHOMA TOWER
210 WEST PARK AVENUE
SUITE 2050
OKLAHOMA CITY, OK 73102-5601

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
000-117	PRICING AREA - MID CONTINENT MILEAGE	14	MI	2.75	38.50
001-016	CEMENTING CASING	1113	FT	945.00	945.00
030-503	CMTG PLUG LA-11, CP-1, CP-3, TO	8	5/8 IN	95.00	95.00
40	CENTRALIZER 8-5/8" X 12.25"	3	EA	72.00	216.00
807.93059					
504-316	CEMENT - HALL. LIGHT STANDAR	360	SK	6.30	2,268.00
504-308	CEMENT - STANDARD	78	SK	6.76	527.28
506-105	POZMIX A	3536	LB	.054	190.94
509-406	ANHYDROUS CALCIUM CHLORIDE	11	SK	28.25	310.75
507-210	FLOCELE	90	LB	1.40	126.00
500-207	BULK SERVICE CHARGE	512	CFT	1.25	640.00
500-306	MILEAGE CMTG MAT DEL OR RETU	309.666	TMI	.85	263.22

INVOICE SUBTOTAL

RELEASED

5,620.69

DISCOUNT - (BID)
INVOICE BID AMOUNT

APR 4 1994

1,124.12
4,496.57

*-KANSAS STATE PROPERTY TAX
*-HAYS CITY SALES TAX

FROM CONFIDENTIAL

178.07
36.35

Prop # 11188.000

AFE # 3122284

ACCOUNT 800.040 RECEIVED

Signature & DATE

2nd APPR

INVOICE TOTAL - PLEASE PAY & DATE AMOUNT

\$4,710.99



CHARGE TO: Hallwood Pet

ADDRESS: _____

CITY, STATE, ZIP CODE: _____

CONFIDENTIAL

TICKET

No. 512129-

PAGE 1 OF 1

FORM 1908 R-12

SERVICE LOCATIONS 1. <u>Hous. IS</u>	WELL/PROJECT NO. <u>D-7</u>	LEASE <u>Carmichael</u>	COUNTY/PARISH <u>Ellis</u>	STATE <u>KS</u>	CITY/OFFSHORE LOCATION	DATE <u>7-14-93</u>	OWNER <u>Same</u>
2.	TICKET TYPE <input checked="" type="checkbox"/> SERVICE	NITROGEN JOB? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CONTRACTOR <u>ADCO</u>	RIG NAME/NO.	SHIPPED VIA <u>LOC</u>	DELIVERED TO	ORDER NO.
3.	WELL TYPE <u>01</u>	WELL CATEGORY <u>01</u>	JOB PURPOSE <u>010</u>	WELL PERMIT NO.	WELL LOCATION		
4.	REFERRAL LOCATION	INVOICE INSTRUCTIONS <u>20</u>					

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF								
<u>000-117</u>						MILEAGE	<u>14</u>	<u>mi</u>	<u>1</u>	<u></u>	<u>2.75</u>	<u>38</u>
<u>001-016</u>						Pump Charge	<u>1113</u>	<u>ft</u>	<u>1 EA</u>	<u></u>	<u></u>	<u>945</u>
<u>030-503</u>	<u>401.4221</u>					Top Plug	<u>1</u>	<u>EA</u>	<u>8 1/2 IN</u>	<u></u>	<u>95.00</u>	<u>95</u>
<u>40</u>	<u>807.93059</u>					Centralizer	<u>3</u>	<u>EA</u>	<u></u>	<u></u>	<u>72.00</u>	<u>216</u>

FROM CONFIDENTIAL
 RECEIVED
 APR 4 1994
 RELEASED

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.

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?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND			

PAGE TOTAL	<u>1294</u>
FROM CONTINUATION PAGE(S)	<u>4326</u>
SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE	<u>5620</u>

CUSTOMER OR CUSTOMER'S AGENT SIGNATURE
X Aron Weverling

DATE SIGNED: 7-14-93 TIME SIGNED: 17:55 A.M. P.M.

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

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) <u>ARON WEVERLING</u>	CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE) <u>X Aron Weverling</u>	HALLIBURTON OPERATOR/ENGINEER <u>JRENO</u>	EMP #	HALLIBURTON APPROVAL <u>Ethelburg</u>
--	---	---	-------	--

WELL DATA

FIELD _____ SEC 8 TWP. 16 RNG. 17W COUNTY ELLIS STATE _____

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	4	25	8 7/8	0	1113	
LINER						
TUBING						
OPEN HOLE			12 1/4		1116	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 7-14	DATE 7-14	DATE 7-14	DATE 7-14
TIME 1400	TIME 1530	TIME 2000	TIME 2200

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS <u>S-4</u>	<u>3</u>	<u>HAYO</u>
BOTTOM PLUG		
TOP PLUG <u>LA</u>	<u>1</u>	<u>HAYO</u>
HEAD <u>Cement</u>	<u>1</u>	<u>HAYO</u>
PACKER		
OTHER		

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
J. Reno 49801	40029 P.U.	25525
G. Blessing 52110	3244 COMB	
R. Berens 57220	51292 Bulk	
A. Warr 8610	6518 Bulk	

RELEASED

APR 4 1994

FROM CONFIDENTIAL

DEPARTMENT _____
 DESCRIPTION OF JOB Surface

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

CUSTOMER REPRESENTATIVE X Over Weaving

HALLIBURTON OPERATOR Jim Reno COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
<u>L</u>	<u>360</u>	<u>HLC</u>		<u>B</u>	<u>1/4 # Flocc 37.0</u>	<u>1.83</u>	<u>12.4</u>
<u>T</u>	<u>130</u>	<u>4060</u>		<u>B</u>	<u>No Cem 27.0</u>	<u>1.00</u>	<u>15.3</u>

PRESSURES IN PSI

SUMMARY

VOLUMES

CIRCULATING _____ DISPLACEMENT _____
 BREAKDOWN _____ MAXIMUM _____
 AVERAGE _____ FRACTURE GRADIENT _____
 SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____
 ORDERED _____ AVAILABLE _____ USED _____
 AVERAGE RATES IN BPM _____
 TREATING _____ DISPL. _____ OVERALL _____
 CEMENT LEFT IN PIPE _____
 FEET 20 REASON Request 1093'

PRESLUSH: BBL.-GAL. 10 TYPE Fresh
 LOAD & BKDN: BBL.-GAL. _____ PAD: BBL.-GAL. _____
 TREATMENT: BBL.-GAL. _____
 CEMENT SLURRY: BBL.-GAL. 117.3 + 124.5 DISPL. BBL.-GAL. 69.5
 TOTAL VOLUME: BBL.-GAL. STATE _____

RAMARKS
 JAN 13 1994

CONSERVATION DIVISION
 Wichita, Kansas

CUSTOMER: Hallwood Petroleum
 LEASE: 25525
 WELL NO: D-7
 JOB TYPE: Surf
 DATE: 7-14-93

JOB LOG FORM 2013 R-3

CUSTOMER: Hallwood WELL NO.: D-7 LEASE: CARMICHAEL JOB TYPE: Surt TICKET NO.: S12129

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								ONLOC
								Safety Mtg ORIGINAL
								Break Circ.
	2037						100	St. Preflush
	2031		0				200	St. Cement RELEASED
	2103		140					Finish mixing APR 1 1994
	2103		/					Drop Plug FROM CONFIDENTIAL
	2103		0				100	St. Dsp
	2117		69.5				600	Plug Down 1093' - SCM
	2120		69.5				600	Close FN
								Circ. 3000 Cement to Pit
								Job Complete
								Thank You
								Jim Row

RECEIVED
STATE COMMISSION
JAN 13 1994
CONSERVATION DIVISION
Wichita, Kansas



HALLIBURTON
ENERGY SERVICES
CONFIDENTIAL

P.O. BOX 951046
DALLAS, TX 75395-1046

INVOICE

INVOICE NO.	DATE
512111	07/20/19

WELL LEASE NO./PROJECT		WELL/PROJECT LOCATION		STATE	OWNER
CARMICHAEL D-7		ELLIS		KS	SAME
SERVICE LOCATION	CONTRACTOR		JOB PURPOSE		TICKET DATE
HAYS	ALLEN DRLG.		CEMENT PRODUCTION CASING		07/20/19
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE
355880	AVEN WEAVERLING			COMPANY TRUCK	536

ORIGINAL

HALLWOOD PETROLEUM, INC.
P.O. BOX 404
PLAINVILLE, KS 67663-0404

DIRECT CORRESPONDENCE TO:
OKLAHOMA TOWER
210 WEST PARK AVENUE
SUITE 2000
OKLAHOMA CITY, OK 73102-5601

RELEASED

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
APR 4 1994					
FROM CONFIDENTIAL					
PRICING AREA - MID CONTINENT					
000-117	MILEAGE	14	MI	2.75	38.50
001-016	CEMENTING CASING	3526	FT	1,345.00	1,345.00
030-018	CEMENTING PLUG 5W, PLASTIC T	1	UNT		
12A	GUIDE SHOE 5 1/2" 8RD THD.	5.5	IN	65.00	65.00
825.205		1	EA	121.00	121.00
24A	INSERT FLOAT VALVE - 5 1/2"8	1	EA	110.00	110.00
815.19251					
40	CENTRALIZER 5-1/2" X 7 7/8"	10	EA	44.00	440.00
807.93022					
60	ROTO WALL CLEANER 2 1/8" SPI	9	EA	22.00	198.00
807.0007					
504-308	CEMENT - STANDARD	225	SK	6.76	1,521.00
509-968	SALT	2000	LB	.13	260.00
507-775	HALAD-322	159	LB	6.90	1,097.10
507-210	FLOCELE	25	LB	1.40	35.00
508-291	GILSONITE BULK	500	LB	.40	200.00
508-127	CAL SEAL 60	11	SK	20.70	227.70
500-207	BULK SERVICE CHARGE	280	CFT	1.25	350.00
500-306	MILEAGE CMTG MAT DEL OR RETU	174.538	TMI	.85	148.36

INVOICE SUBTOTAL 6,156.66

DISCOUNT-(BID) 1,108.18-

INVOICE BID AMOUNT 5,048.48

*-KANSAS STATE SALES TAX 181.34

*-HAYS CITY SALES TAX 37.01

INVOICE TOTAL - PLEASE PAY THIS AMOUNT 5,266.83

RECEIVED
STATE CORPORATION COMMISSION
JAN 13 1994
RECEIVED
STATE CORPORATION COMMISSION
CONSERVATION DIVISION
Wichita, Kansas
JAN 15 1994

AFFIX JOB TKT

TERMS: If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer



INVOICE

CONFIDENTIAL

INVOICE NO.	DATE
512196	08/08/1993

WELL LEASE NO./PROJECT		WELL/PROJECT LOCATION		STATE	OWNER
RMICHAEL C-11		ELLIS		KS	SAME
SERVICE LOCATION	CONTRACTOR		JOB PURPOSE		TICKET DATE
YS	ALLEN DRILLING CO		CEMENT PRODUCTION CASING		08/08/1993
CT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
5880	AVEN WEAVERLING			COMPANY TRUCK	54519

ORIGINAL

HALLWOOD PETROLEUM, INC.
 915 PATTON ROAD
 GREAT BEND, KS 67530

DIRECT CORRESPONDENCE TO:
 OKLAHOMA TOWER
 210 WEST PARK AVENUE
 SUITE 2000
 OKLAHOMA CITY, OK 73102-5601

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
	*-HAYS CITY SALES TAX				35.16

RELEASED
 APR 4 1994
 FROM CONFIDENTIAL

RECEIVED
 STATE CORPORATION COMMISSION

JAN 13 1994

CORPORATION DIVISION
 Wichita, Kansas

INVOICE TOTAL - PLEASE PAY THIS AMOUNT =====> \$5,030.38



CHARGE TO: Hollywood Petroleum
 ADDRESS: CONFIDENTIAL
 CITY, STATE, ZIP CODE:

No. 512196 - 3

PAGE 1 OF 2

FORM 1908 R-12

SERVICE LOCATIONS 1. <u>Hays, KS 67565</u>	WELL/PROJECT NO. <u>C-11</u>	LEASE <u>Carmichael</u>	COUNTY/PARISH <u>Ellis</u>	STATE <u>Ks</u>	CITY/OFFSHORE LOCATION	DATE <u>8-8-93</u>	OWNER <u>Samco</u>
2.	TICKET TYPE <input type="checkbox"/> SERVICE <input type="checkbox"/> SALES	NITROGEN JOB? <input type="checkbox"/> YES <input type="checkbox"/> NO	CONTRACTOR <u>Allan D. Co.</u>	RIG NAME/NO.	SHIPPED VIA <u>CT</u>	DELIVERED TO <u>Well Site</u>	ORDER NO.
3.	WELL TYPE <u>01</u>	WELL CATEGORY <u>01</u>	JOB PURPOSE <u>035</u>	WELL PERMIT NO.	WELL LOCATION <u>17-11-11</u>	RECEIVED STATE CORPORATION COMMISSION JAN 15 1994 INSPECTION DIVISION Wichita, Kansas	
4.	REFERRAL LOCATION	INVOICE INSTRUCTIONS <u>18%</u>					

PRICE REFERENCE	SECONDARY REFERENCE/PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
		LOC	ACCT	DF								
<u>000-117</u>						<u>MILEAGE en PT</u>	<u>15</u>	<u>mi</u>			<u>2.75</u>	<u>41.25</u>
<u>001-016</u>						<u>Pump Chg 2-8-93</u>	<u>3.99</u>	<u>hr</u>			<u>12.85</u>	<u>12.85</u>
<u>030-018</u>						<u>SW Top Plug</u>	<u>1</u>	<u>ea</u>	<u>5 1/2</u>		<u>65</u>	<u>65</u>
<u>12A 825.205</u>						<u>Cement Guide Shoe</u>	<u>1</u>	<u>ea</u>	<u>5 1/2</u>		<u>121</u>	<u>121</u>
<u>24A 815.19251</u>						<u>Insert Float Valve</u>	<u>1</u>	<u>ea</u>	<u>5 1/2</u>		<u>110</u>	<u>110</u>
<u>27 815.19311</u>						<u>Fill-up Unit</u>	<u>1</u>	<u>ea</u>			<u>55</u>	<u>55</u>
<u>40 807.93022</u>						<u>S-11 Centralizer</u>	<u>6</u>	<u>loc</u>	<u>5 1/2</u>		<u>41</u>	<u>246</u>
<u>60 507.0007</u>						<u>Retowall cleaner</u>	<u>1</u>	<u>ea</u>			<u>22</u>	<u>22</u>

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

CUSTOMER OR CUSTOMER'S AGENT SIGNATURE
X

DATE SIGNED: 2-8-93 TIME SIGNED: 10:30 A.M. P.M.

do not require IPC (Instrument Protection). Not offered

SUB SURFACE SAFETY VALVE WAS:
 PULLED & RETURN PULLED RUN

TYPE LOCK	DEPTH	SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL
BEAN SIZE	SPACERS		OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?			
TYPE OF EQUALIZING SUB.	CASING PRESSURE	WE UNDERSTOOD AND MET YOUR NEEDS?				FROM CONTINUATION PAGE(S) <u>39/18</u>
TUBING SIZE	TUBING PRESSURE	OUR SERVICE WAS PERFORMED WITHOUT DELAY?				SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE
WELL DEPTH		WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				
TREE CONNECTION	TYPE VALVE	ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO				
		<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND				

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

CUSTOMER OR CUSTOMER'S AGENT (PLEASE PRINT): X Anna W. [Signature]

CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE): [Signature]

HALLIBURTON OPERATOR/ENGINEER: [Signature] EMP # 41222

HALLIBURTON APPROVAL: [Signature]

CONFIDENTIAL

FORM 1911 R-8

 CUSTOMER
Hallwood Petroleum

 WELL
C-11 Carmichael

 DATE
8-8-93

 PAGE OF
102 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	WELL		UNIT PRICE	AMOUNT
		LOC	ACCT	DF			QTY.	U/M		
504-308	516.00261	1		B		Standard Cement	225		6.76	1,521.00
508-127	890.50131	1		B		Cal Seal Blended	11		20.70	227.70
507-775	516.00144	1		B		Halad-322 Blended	159	lb	6.90	1,097.10
509-968	516.00158	1		B		Salt Blended & on side	2,050	lb	13	266.50
508-291	516.00337	1		B		Gilsonite Blended	625	lb	40	250.00
507-210	890.50071	1		B		Flocele Blended	31	lb	1.40	43.40
						SERVICE CHARGE		CUBIC FEET		
500-207		1		B			282		1.25	352.50
						MILEAGE CHARGE	TOTAL WEIGHT	LOADED MILES		
500-306		1		B			25,115	15	85	160.11
								TON MILES		
								188.363		

ORIGINAL

RELEASED

APR 4 1994

FROM CONFIDENTIAL

 RECEIVED BY
 DEPARTMENT OF THE ARMY
 1005

JAN 1 5 1994

CONTINUATION TOTAL 3,918.31

WELL DATA
 WELL NO. 177 COUNTRY 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 []
 BOTTOM HOLE TEMP. [] PRESSURE []
 MISC. DATA [] TOTAL DEPTH []

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	12	74	5 1/2	0	3499	
LINER						
TUBING						
OPEN HOLE			7 1/2	3499	3500	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

TOOLS AND ACCESSORIES

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

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 8-8-93	DATE 8-8-93	DATE 8-8-93	DATE []
TIME 08:00	TIME 10:30	TIME 10:30	TIME []

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
J. Beck	H3002	Perm
D.A.J.	E1609	Hays Co.
M. Kalk	RT	"
	11601	"

MATERIALS

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

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

PROP. TYPE _____ SIZE _____ LB. _____

PROP. TYPE _____ SIZE _____ LB. _____

ACID TYPE _____ GAL. _____ % _____

ACID TYPE _____ GAL. _____ % _____

ACID TYPE _____ GAL. _____ % _____

SURFACTANT TYPE _____ GAL. _____ IN _____

NE AGENT TYPE _____ GAL. _____ IN _____

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

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

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

BREAKER TYPE _____ GAL.-LB. _____ IN _____

BLOCKING AGENT TYPE _____ GAL.-LB. _____

PERFPAC BALLS TYPE _____ QTY. _____

OTHER _____

OTHER _____

DEPARTMENT Perm

DESCRIPTION OF JOB Perm Bed

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

CUSTOMER REPRESENTATIVE X Owen W. []

HALLIBURTON OPERATOR J. Beck

COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./BK.	MIXED LBS./GAL.
	110	Standard		B	500 Cal Seal, 100 Seal, 300 H-307	1.34	15.4
	125	Standard		B	500 Cal Seal, 100 Seal, 300 H-307, 50 Seal, 40 Seal	1.49	15.4

PRESSURES IN PSI _____

CIRCULATING _____ DISPLACEMENT _____ PRESURISH: BBL-GAL _____ TYPE _____

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

AVERAGE _____ FRACTURE GRADIENT _____ TREATMENT: BBL-GAL _____ DISPL. BBL-GAL 84.9

SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____ CEMENT SLURRY: BBL-GAL 239

HYDRAULIC HORSEPOWER _____ TOTAL VOLUME: BBL-GAL _____

ORDERED _____ AVAILABLE _____ USED _____

AVERAGE RATES IN BPM _____

TREATING _____ DISPL _____ OVERALL _____

CEMENT LEFT IN PIPE _____

RAMARKS See Job Log

WELL NO. 177
 DATE 8-8-93
 JOB TYPE Cement
 LEASE Co. []
 CONTRACT []

JOB LOG FORM 2013 P-3

CUSTOMER: **Hartford Pet** WELL NO: **(C-1)** LEASE: **Cambridge** JOB TYPE: **Cont Prod Co** TICKET NO: **512196**

TIME	RATE (BPM)	DEPTH (FT)	WEIGHT (LBS)	DESCRIPTION OF OPERATION AND MATERIAL
08:00				Called Out
10:30				On Location
10:15				Spot, Set-up Equip - Discuss Job
12:05				Start 5 1/2" Csg in Hole
12:10				Csg in Hole
12:10				Hook up Rotating Head, PC, Man Fold
13:10				Break Circ / Rig Pump
13:10				Hook up PT
13:18	50		400	Start Pump Salt Flush - 50 BBL
13:31			500	Salt Flush in
13:40	50		650	Plug Rat Hole w/ 15sk Lead Cmt
13:42				Start Pump Cmt
13:57				100sk Com w/ 5" Cels, 1, 10" S. Ho 3/4" H-200
14:06				125sk Com w/ 5" Cels, 1, 10" S. Ho 3/4" H-200
14:06				5" Cels, 1, 10" S. Ho 3/4" H-200
14:06	85		350	Finish Mix Cmt
14:06				Release Plug & wire line
14:06				Wash Out Pump & lines
14:06			250	Start Displ
14:06			900	Finished Displ
14:06			1100	Plug Landed - Dog Plug w/ wire line
14:06			0	Release Pias - Float Held
14:06				Wash up & Rack up
14:06				Job Complete

FROM CONFIDENTIAL

*Thank You
 John J. [unclear]*