

ORIGINAL

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

API NO. 033-20858-0000
County Comanche
SW-SW Sec. 10 Twp. 32 Rge. 19 X E W

Operator: License # 3613
Name: Hallwood Petroleum, Inc.

660 Feet from SN (circle one) Line of Section
4620 Feet from EW (circle one) Line of Section

Address 4582 So. Ulster Street Parkway
Suite 1700

RELEASED

FEB 4 1994

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

City/State/Zip Denver, CO 80237

FROM CONFIDENTIAL

Lease Name Bird Well # 2
Field Name W. Coldwater

Purchaser: to be determined

Producing Formation Mississippian

Operator Contact Person: George Hutton
Phone (316) 792-2756

DEC 9 1993

CONFIDENTIAL

Elevation: Ground 2045 KB 205 8.5

Contractor: Name: Allen Drilling Company
License: 5418

Total Depth 6250' PBTB 5695

Wellsite Geologist: James Spellman/Jim Musgrove

Amount of Surface Pipe Set and Cemented at 664 Feet

Designate Type of Completion
 New Well Re-Entry Workover

Multiple Stage Cementing Collar Used? Yes No

Oil SWD S1OW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from _____

feet depth to _____ w/ _____ sx cmt.

If Workover:

Drilling Fluid Management Plan ALT 1 12-21-92 RD
(Data must be collected from the Reserve Pit)

Operator: _____

Chloride content 19,000 ppm Fluid volume 960 bbls

Well Name: _____

Dewatering method used Hauled Offsite

Comp. Date _____ Old Total Depth _____

Location of fluid disposal if hauled offsite: _____

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

Operator Name KBW Oil & Gas

Lease Name Harmon SWD License No. 5993

8/11/92 8/29/92 9/30/92
Spud Date Date Reached TD Completion Date

NW Quarter Sec. 11 Twp. 33 S Rng. 20 EW

County Comanche Docket No. CD-98329 D-22,304

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 Murray Ball
Title In. Eng. Tech. Date 12/8/92
Subscribed and sworn to before me this 8th day of December
1992
Notary Public Ada M. Christian
Date Commission Expires 9/1/93

RECEIVED

KANSAS CORPORATION COMMISSION

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

DEC 10 1992
12-10-92
CONSERVATION DIVISION
WICHITA, KS

Form ACO-1 (7-91)

P1

SIDE TWO

Operator Name Hallwood Petroleum, Inc. Lease Name Bird Well # 2-

Sec. 10 Twp. 32 Rge. 19 East West County Comanche

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 Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input 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 List All E.Logs Run: Coral SDL/DSN CSL DIL Micro	<input checked="" type="checkbox"/> Log <input type="checkbox"/> Sample Formation (Top), Depth and Datums <table border="0" style="width:100%"> <tr> <td>Name</td> <td>Top</td> <td>Datum</td> </tr> <tr> <td>Pennsylvanian</td> <td>3413</td> <td>-1356</td> </tr> <tr> <td>Topeka</td> <td>3738</td> <td>-1680</td> </tr> <tr> <td>Toronto</td> <td>4300</td> <td>-2242</td> </tr> <tr> <td>Douglas</td> <td>4384</td> <td>-2326</td> </tr> <tr> <td>Lansing</td> <td>4458</td> <td>-2400</td> </tr> <tr> <td>Mississippian</td> <td>5140</td> <td>-3082</td> </tr> <tr> <td>Kinderhook</td> <td>5692</td> <td>-3634</td> </tr> <tr> <td>Viola</td> <td>5776</td> <td>-3718</td> </tr> <tr> <td>Simpson Shale</td> <td>6018</td> <td>-3960</td> </tr> <tr> <td>Arbuckle</td> <td>6096</td> <td>-4038</td> </tr> </table>	Name	Top	Datum	Pennsylvanian	3413	-1356	Topeka	3738	-1680	Toronto	4300	-2242	Douglas	4384	-2326	Lansing	4458	-2400	Mississippian	5140	-3082	Kinderhook	5692	-3634	Viola	5776	-3718	Simpson Shale	6018	-3960	Arbuckle	6096	-4038
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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
Conductor	17 1/2	13 3/8	48#	137'	60/40 poz	200	2% gel 3% cc
Surface	12 1/4	8 5/8	28#	664'	60/40 poz	350	2% gel 3% cc 1/4 lb/sk Flocele
Production	7 7/8	5 1/2	15.5#	6246'	standard	290	5% EA2, 10% salt, 0.75% Halid 322, last - 1/5#/sk gilsonite 125 sx & 1/4#/sk flocele

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	
4	6166-7, 6133-4, 6117-8, 6098-9	13,300 gals., 28% foamed acid	
4	5778-80	13,330 gals., 20% foamed acid	
2	5198-5202, 5176-90, 5162-72	1500 gals, 15% FE	5148-202
2	5148-57		

TUBING RECORD	Size 2 7/8	Set At 5124	Packer At 5129	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or Inj. SI WOPL		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 15 Bbls.	Gas 0	Water 19 Bbls.	Gas-Oil Ratio 0 Gravity

Disposition of Gas: **METHOD OF COMPLETION** Production Interval

Vented Sold Used on Lease (If vented, submit ACO-18.) Open Hole Perf. Dually Comp. Commingled 5148-5202
 Other (Specify) _____



WORK ORDER CONTRACT AND PRE-TREATMENT DATA

FORM 1908 R-7 **ATTACH TO INVOICE & TICKET NO. 253800**

DISTRICT Pratt KS DATE 8-12-92

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

WELL NO. 2 LEASE BIRD SEC. 10 TWP. 32 RANGE 19W
FIELD _____ COUNTY COMANCHE STATE KS OWNED BY SAME

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME RELEASED TYPE _____
FORMATION THICKNESS _____ FROM _____ TO _____
PACKER: TYPE FEB 4 1994 SET AT _____
TOTAL DEPTH _____ MUD WEIGHT _____
BORE HOLE FROM CONFIDENTIAL DEC 9 1995
INITIAL PROD: OIL _____ BPD, H₂O _____ BPD, GAS _____ MCF _____
PRESENT PROD: OIL _____ BPD, H₂O _____ BPD, GAS _____ MCF _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING	N	28	8 5/8	KB	663	
LINER						
TUBING						
OPEN HOLE			12 1/4	663	64	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

PREVIOUS TREATMENT: DATE _____ TYPE _____ MATERIALS _____
TREATMENT INSTRUCTIONS: TREAT THRU TUBING ANNULUS CASING TUBING/ANNULUS HYDRAULIC HORSEPOWER ORDERED
Set 663' 8 5/8" w/ 225 SKS H.L. 1/4" Floctite 270CC
AND 150 SKS 40/60 for 370CC, 1/4" Floctite 100/SK

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 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 result from pollution, subsurface pressure, losing control of the well and/or a well blowout or the use of radioactive material.

The defense, indemnity, release and hold harmless obligations of Customer provided for in this Section b) and Section c) below shall apply to claims or liability even if caused or contributed to by Halliburton negligence, strict liability, or the unseaworthiness of any vessel owned, operated, or furnished by Halliburton or any defect in the data, products, supplies, materials, or equipment of Halliburton whether the preparation, design, manufacture, distribution, or marketing thereof, or from a failure to warn any person of such defect. Such defense, indemnity, release and hold harmless obligations of Customer 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 division 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 a 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 repair and Halliburton shall be liable for the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing unit returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.
 - 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.

CONSERVATION DIVISION WICHITA, KS

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED [Signature] CUSTOMER
8-12-92



JOB SUMMARY

HALLIBURTON DIVISION
HALLIBURTON LOCATION

ADDRESS
PRAIRIE KS

BILLED ON TICKET NO. 253.800

CUSTOMER: HALLIBURTON LEASE
WELL NO.:
JOB TYPE:
DATE: 8-12-92

WELL DATA

FIELD: _____ SEC. 10 TWP. 32 RANG. 19W COUNTY Comanche STATE KS

FORMATION NAME	TYPE	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING		N	28	8 5/8	KB	663	
LINER							
TUBING							
OPEN HOLE				12 1/4	663	664	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 _____

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS	3	Howco
BOTTOM PLUG		
TOP PLUG	1	
HEAD	1	
PACKER		
OTHER Baskets	2	

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

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

BREAKER TYPE _____ GAL.-LB. _____ IN

BLOCKING AGENT TYPE _____ GAL.-LB. _____ IN

PERFPAC BALLS TYPE _____ QTY. _____

OTHER _____

OTHER _____

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 8-12	DATE 8-12	DATE 8-12	DATE 8-12
TIME 0630	TIME 0900	TIME	TIME

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
74221 McDuff	38003 A4	25555
B2663 Mousor	4410 RLM	"
C8239 Giocabatti	Bulk	"

RELEASED

FEB 4 1994

FROM CONFIDENTIAL

DEPARTMENT _____

DESCRIPTION OF JOB
Set 663 8 5/8's

JOB DONE THRU: TUBING CASING ANNULUS TSG/ANN.

CUSTOMER REPRESENTATIVE _____

HALLIBURTON OPERATOR _____

COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./BK.	MIXED LBS./GAL.
	225	HL	35/65	B	1/2 FLOE	1.69	13.1
	150	POZ	40/60	B	1/2 FLOE	1.57	14.3

PRESSURES IN PSI

CIRCULATING _____ DISPLACEMENT _____

BREAKDOWN _____ MAXIMUM _____

AVERAGE _____ FRACTURE GRADIENT _____

SHUT-IN: INSTANT _____ 5-MIN. _____ 15-MIN. _____

HYDRAULIC HORSEPOWER _____

ORDERED _____ AVAILABLE _____ USED _____

AVERAGE RATES IN BPM _____

TREATING _____ DISPL. _____ OVERALL _____

CEMENT LEFT IN PIPE _____

FEET _____ REASON _____

VOLUMES

TREATMENT: BBL-GAL _____

CEMENT: BBL-GAL _____

TOTAL VOLUME: BBL-GAL _____

REMARKS

67.72 + 33.92 = 101.64

DECEMBER 10 1992

CONSERVATION DIVISION WICHITA, KS

RECEIVED

KANSAS CORPORATION COMMISSION

CONSERVATION DIVISION WICHITA, KS

HALLIBURTON SERVICES

JOB LOG

ORIGINAL

WELL NO. 2 LEASE BIRD TICKET NO. 253800

CUSTOMER HALLWOOD PET INC PAGE NO. _____

JOB TYPE GRS DATE 8-12-92

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								Called out on loc
								RELEASED
								FEB 4 1994
								FROM CONFIDENTIAL
								Break Circ
	1412	7 1/2	-				200	START MIXING H.L. @
	1423	7 1/2	67.72				200	START MIXING P02 @
	1427	7 1/2	10.64				150	Finish MIXING
	1430		-					RELEASE PLUG
	1434	7	-				225	START DIS/D
	1741		11.46					PLUG DOWN BY LINE
	1741							CHECK GOOD CONT TO PIT
	1755						250	CLOSE IN
	1600							JOB Complete
								THANK YOU
								JAMES BILL JAKE
								RECEIVED KANSAS CORPORATION COMMISSION
								DEC 10 1992
								CONSERVATION DIVISION WICHITA, KS

RM 1908 R-7

A Division of Halliburton Company

STRICT FRAT KS

DATE 8-1-92

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

WELL NO. 2 LEASE BIAD SEC. 10 TWP. 32 RANGE 19W

COUNTY COMANCHE STATE KS OWNED BY SAME

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME _____ TYPE _____ THICKNESS _____ FROM _____ TO _____ CACKER: TYPE _____ GET AT _____ TOTAL DEPTH _____ MUD WEIGHT _____ CONFIDENTIAL CORE HOLE _____ INITIAL PROD: OIL _____ BPD, H2O _____ BPD, GAS _____ MCF RESENT PROD: OIL _____ BPD, H2O _____ BPD, GAS _____ MCF

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING	N	48	13 3/8	KB	136	
LINER						
TUBING						
OPEN HOLE				136	39	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

PREVIOUS TREATMENT: DATE _____ TYPE _____ MATERIALS _____

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ANNULUS CASING TUBING/ANNULUS HYDRAULIC HORSEPOWER ORDERED Set 136' 13 3/8's w/ 200 SKS 40/60 102 270 Gal 370 CC

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 division, 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 product supplies or materials, nor the results of any treatment or service, nor the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be liable for and Customer shall indemnify Halliburton against any damages arising from the use of such information.
 - 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 occurs at any time after delivery to Customer at the landing or 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.

KANSAS CORPORATION COMMISSION

WICHITA, KS

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 8-1-92

HALLIBURTON SERVICES

JOB SUMMARY

HALLIBURTON DIVISION
HALLIBURTON LOCATION

PRATT KS ORIGINAL
BILLING ON TICKET NO. 253799

WELL DATA

FIELD _____ SEC 10 TWP. 32 RANG 19W COUNTY COMANCHE STATE KS

FORMATION NAME _____ TYPE _____

FORMATION THICKNESS _____ FROM _____ TO _____

INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCF/D _____

PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCF/D _____

COMPLETION DATE _____ MUD TYPE _____ MUD WT. _____

PACKER TYPE _____ SET AT FEB 4 AT 1994

BOTTOM HOLE TEMP. _____ PRESSURE _____

MISC. DATA _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	N	48	1378	KB	136	
LINER						
TUBING						
OPEN HOLE			17 1/2	136	39	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

FROM CONFIDENTIAL JOB DATA

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
SLIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG	1	Howco
HEAD		
PACKER		
OTHER		

CALLLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 8-11	DATE 8-11	DATE 8-11	DATE 8-11
TIME 1030	TIME 1330	TIME	TIME

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
74221 MULLIFF	39603 7/4	25555
32663 MAUSOLF	4410 RCM	"
28259 GIOGABETHI	50808 Bulk	"

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 cust

DESCRIPTION OF JOB 1398'S

JOB DONE THRU: TUBING CASING ANNULUS TRG/ANN.

CUSTOMER REPRESENTATIVE [Signature]

HALLIBURTON OPERATOR [Signature] COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	000	POZ	40/60	B	370CC 270GOL	1.27	14.2

PRESSURES IN PSI

CIRCULATING _____ DISPLACEMENT _____

BREAKDOWN _____ MAXIMUM _____

AVERAGE _____ FRACTURE GRADIENT _____

SHUT-IN INSTANT _____ 5-MIN. _____ 10-MIN. _____

HYDRAULIC HORSEPOWER _____

ORDERED _____ AVAILABLE _____ USED _____

AVERAGE RATES IN BPM _____

TREATING _____ DISPL. _____ OVERALL _____

CEMENT LEFT IN PIPES _____

FEET _____ REASON _____

VOLUMES

TREATMENT: BBL. GAL. _____

CEMENT: BBL. GAL. _____

TOTAL VOLUME: BBL. GAL. _____

DISPL. BBL. GAL. 19.6

REMARKS

RECEIVED
KANSAS CORPORATION
DEC 10 1992
CONSERVATION DIVISION
WICHITA, KS

CUSTOMER: HALLIBURTON
LEASE: B.R.A.D.
WELL NO: 2
JOB TYPE: 1398'S
DATE: 8-11-92

STRICT Pratt, Ks

DATE 8-30-92

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

WELL NO. 2 LEASE Bird SEC. 10 TWP. 32 S RANGE 19 W

ELD _____ COUNTY Comanche STATE Ks OWNED BY Same

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME RELEASED
FORMATION THICKNESS FROM _____ TO _____
ACKER: TYPE FEB 4 1994
TOTAL DEPTH 6250' MUD WEIGHT 7 3/8 FROM CONFIDENTIAL
INITIAL PROD: OIL _____ BPD, H2O _____ BPD, GAS _____ MCF
PRESENT PROD: OIL _____ BPD, H2O _____ BPD, GAS DEC 9 1993 MCF
PREVIOUS TREATMENT: DATE _____ TYPE _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING	N	15.5	5 1/2	KB	6250	
LINER						
TUBING						
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ANNULUS CASING TUBING/ANNULUS HYDRAULIC HORSEPOWER ORDERED
Cement pad casing as directed

RECEIVED
KANSAS COMMISSION
DEC 10 1992

CONSERVATION DIVISION
WICHITA, KS

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 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 "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 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 which 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 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 persons 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 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, or 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 occurs at any time after delivery to Customer at the landing returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.
 - 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 George Hutton CUSTOMER
8-30-92



DEC-09-92 WED 11:35

JOB SUMMARY

DIVISION W. 45, UT
HALLIBURTON LOCATION Ness Co, KS

ORIGINAL
BILLED ON TICKET NO. 246000

WELL DATA

FIELD _____ SEC. 10 TWP. 32S RNG. RW COUNTY Comanche STATE KS

FORMATION NAME _____ TYPE _____
 FORMATION THICKNESS _____ FROM _____ TO _____
 INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD
 PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD
 COMPLETION DATE _____ MUD TYPE FEB A 1992 WT. _____
 PACKER TYPE _____ SET AT _____
 BOTTOM HOLE TEMP. _____ FROM _____ TO _____
 MISC. DATA _____ TOTAL DEPTH _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING		<u>N 15.5</u>	<u>5 1/2</u>	<u>KB</u>	<u>6248</u>	
LINER						
TUBING						
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR <u>Insert + Auto Fill</u>	<u>1</u>	<u>Howco</u>
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS <u>5-11</u>	<u>10</u>	
BOTTOM PLUG		
TOP PLUG <u>5W</u>	<u>1</u>	
HEAD <u>5 1/2</u>	<u>1</u>	
PACKER		
OTHER <u>Cement Basket</u>	<u>3</u>	

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>8-30</u>	DATE <u>8-30</u>	DATE <u>8-30</u>	DATE <u>8-30</u>
TIME <u>1100</u>	TIME <u>1610</u>	TIME <u>1800</u>	TIME <u>2400</u>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>D. LAMMAN</u>	<u>2593</u>	
<u>B. Crosswhite</u>	<u>Combo</u>	<u>Ness Co, KS</u>
<u>R. Parker</u>	<u>3739</u>	
	<u>B-Trk</u>	<u>Pratt, KS</u>
<u>B. Mouser</u>	<u>35909</u>	
	<u>Wireline</u>	<u>Pratt, KS</u>

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 TYPR. _____ 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 40 BBI Salt flush
 OTHER 12 BBI Super flush

RECEIVED
KANSAS CORPORATION COMMISSION

DEC 10 1992

CONSERVATION DIVISION
WICHITA, KS

DEPARTMENT Cement
DESCRIPTION OF JOB Cement gravel casing

JOB DONE THRU: TUBING CASING ANNULUS TBC/ANN.

CUSTOMER REPRESENTATIVE X J. Payne Sutton

HALLIBURTON OPERATOR D. Lamman COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS/GAL
	<u>290</u>	<u>Std EA-2 A</u>	<u>B</u>		<u>10% salt 3/4% Haled 322, 5% Colseal, 10 #/sc Gilsonite</u>	<u>1.46</u>	<u>14.8</u>

PRESSURES IN PSI

SUMMARY

VOLUMES

CIRCULATING _____ DISPLACEMENT _____
 BREAKDOWN _____ MAXIMUM _____
 AVERAGE _____ FRACTURE GRADIENT _____
 SHUT-IN: INSTANT _____ 3-MIN. _____ 15-MIN. _____
 HYDRAULIC HORSEPOWER _____
 ORDERED _____ AVAILABLE _____ USED _____
 AVERAGE RATES IN BPM _____
 TREATING _____ DISPL. _____ OVERALL _____
 CEMENT LEFT IN PIPE _____
 FEET 42.30 REASON Shoe Joint

PRESLUSH: BBL-GAL. _____ TYPE _____
 LOAD & SKON: BBL-GAL. _____ PAD: BBL-GAL. _____
 TREATMENT: BBL-GAL. _____ DISPL. BBL-GAL. 148
 CEMENT SLURRY: BBL-GAL. 75
 TOTAL VOLUME: BBL-GAL. _____

REMARKS

CUSTOMER: Halliburton
LEASE: Pratt, KS
WELL NO.: 246000
JOB TYPE: Cement
DATE: 12-10-92

HALLIBURTON SERVICES
JOB LOG

WELL NO. 2 LEASE Bird TICKET NO. 246010
 CUSTOMER Hallwood Petroleum PAGE NO. 1
 JOB TYPE Cement Logging DATE 8-30-92

FORM 2043 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1610							ORIGINAL
	1800							
								ON location - Rig putting on B-Hone
								Start 5" casing - Texas pattern
								Guide Shoe - Co-furnished -
								Insert Float Valve w/ Auto - Fill 1st
								Cent on collars (middle # 1), 4, 7, 10, 13, 16, 19
								22, 27, & 32 - Baskets on (11-22-33)
								Casing on Bottom - (Drop ball 10 sts off Bottom)
	2100							Rig cir casing
	2110							Fin cir casing - Hook to Hone
	2120							Pump 40 BBL Salt flush
	2130		40					Pump 2 BBL H ₂ O
			2					Pump 12 BBL Super-Flush
			12					Pump 2 BBL H ₂ O
			2					Pump 3 BBL Gel note
			3					Start 290 sts EA-2 cement - Plug RH 1
			75					Finish cement
								Wash out pump lines
								Release 54 Top Plug Start Displ.
								Follow plug with wire line
			95			400		Caught press - Gate slowing down
	2247		148			1300		Plug down - Casing hold
								Tag Plug @ 16220'
								Spool up 200' of wire line
								Release press - Insert Hold.
								Wash up & Rack up
	2400							Job Complete

RELEASED

FEB 4 1993

RECEIVED

CORPORATION COMMISSION

FROM CONFIDENTIAL DEC 10 1992

CONSERVATION DIVISION
WICHITA, KS

DEC 9 1993
CONFIDENTIAL

Handwritten:
 D. Leaman 71218
 B. Crosswhite 88513
 L.R. Parker 71254
 B. Mauer
 #2593 P
 #3734 P

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

CONFIDENTIAL

Drill-Stem Test Data

Well Name BIRD #2 Test No. 1 Date 8/20/92
 Company HALLWOOD PETROLEUM INC. Zone MARM/PAWNEE
 Address P.O. BOX 378111 DENVER CO 80237 Elevation 2057
 Co. Rep./Geo. JIM SPELLMAN Cont. ALLEN RIG #5 Est. Ft. of Pay 10
 Location: Sec. 10 Twp. 32S Rge. 19W Co. COMANCHE State KS

Interval Tested 4930-5054 Drill Pipe Size 4.5 XH
 Anchor Length 124 Wt. Pipe I.D. - 2.7 Ft. Run RELEASED
 Top Packer Depth 4925 Drill Collar - 2.25 Ft. Run 123.68
 Bottom Packer Depth 4930 Mud Wt. 9.2 lb/Gal. FEB 4 1994
 Total Depth 5054 Viscosity 44 Filtrate 11.2

Tool Open @ 4:40 AM Initial Blow STRONG-BOTTOM OF BUCKET IN 1 1/2 MIN
GAS TO SURFACE IN 25 MINUTES-GAUGED
 Final Blow STRONG-BOTTOM OF BUCKET IN 20 SECONDS

RECEIVED
 KANSAS CORPORATION COMMISSION
 DEC 10 1992

Recovery - Total Feet 180 Flush Tool? NO

CONSERVATION DIVISION
 WICHITA, KS

Rec. 180 Feet of DRILLING MUD
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____

DEC 9 1993
 CONFIDENTIAL

BHT 130 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 8000 ppm System

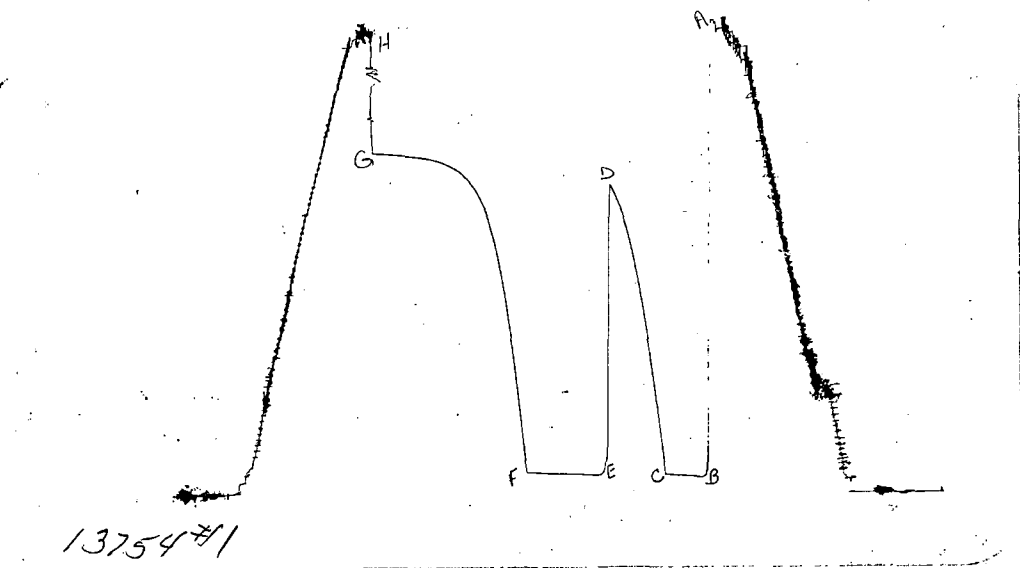
(A) Initial Hydrostatic Mud 2460.9 PSI AK1 Recorder No. 13754 Range 4000
 (B) First Initial Flow Pressure 81.2 PSI @ (depth) 4924 w / Clock No. 27567
 (C) First Final Flow Pressure 104.6 PSI AK1 Recorder No. 7437 Range 4200
 (D) Initial Shut-in Pressure 1607.8 PSI @ (depth) 5050 w / Clock No. 26199
 (E) Second Initial Flow Pressure 102.4 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 110.6 PSI @ (depth) _____ w / Clock No. _____
 (G) Final Shut-in Pressure 1760.8 PSI Initial Opening 30 Final Flow 60
 (H) Final Hydrostatic Mud 2411.5 PSI Initial Shut-in 45 Final Shut-in 120

Our Representative DAN BANGLE

RELEASED

FEB 4 1994

FROM CONFIDENTIAL



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2451	2460.9
(B) FIRST INITIAL FLOW PRESSURE	78	81.2
(C) FIRST FINAL FLOW PRESSURE	98	104.6
(D) INITIAL CLOSED-IN PRESSURE	1596	1607.8
(E) SECOND INITIAL FLOW PRESSURE	98	102.4
(F) SECOND FINAL FLOW PRESSURE	108	110.6
(G) FINAL CLOSED-IN PRESSURE	1766	1760.8
(H) FINAL HYDROSTATIC MUD	2410	2411.5

GAS VOLUME REPORT

RELEASED

HALLWOOD PETROLEUM INC.

FEB 4 1994

BIRD #2

DST # FROM CONFIDENTIAL

MIN	PSIG	ORIFICE	MCF/D	MIN	PSIG	ORIFICE	MCF/D
0				0			
5				5	24	0.75	69.5
10				10	15	0.75	55.2
15				15	0	0.75	
20				20	35	0.5	36.5
25	24	0.75	69.5	25	44	0.5	41.6
30	24	0.75	69.5	30	46	0.5	42.5
				35	48	0.5	43.4
				40	48	0.5	43.4
				45	50	0.5	44.3
				50	50	0.5	44.3
				55	50	0.5	44.3
				60	50	0.5	44.3

Remarks:

GAS TO SURFACE IN 25 MINUTES INTO INITIAL FLOW

TRILOBITE TESTING L.L.C. RELEASED

P.O. Box 362 • Hays, Kansas 67601

FEB 4 1994

Test Ticket

FROM CONFIDENTIAL No 5402

Well Name & No. <u>Bird #2</u>	Test No. <u>1</u>	Date <u>8-20-92</u>
Company <u>Hallwood Petro. Inc.</u>	Zone Tested <u>Marm/Pawnee</u>	
Address <u>Box 37811, Denver, Colo. 80237</u>	Elevation <u>2057 K.B.</u>	
Co. Rep./Geo. <u>Tim Spellman</u>	Cont. <u>Allen #5</u>	Est. Ft. of Pay <u>10</u>
Location: Sec. <u>10</u>	Twp. <u>32</u>	Rge. <u>19</u>
	Co. <u>Comanche</u>	State <u>Ks.</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____
Turnkey _____	Yes _____ No _____	Evaluation _____

Interval Tested <u>4930 - 5054</u>	Drill Pipe Size <u>4.5 X 14</u>
Anchor Length <u>124</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>4925</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4930</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>5054</u>	Drill Collar — 2.25 Ft. Run <u>123.68</u>
Mud Wt. <u>9.2</u> lb/gal.	Viscosity <u>44</u> Filtrate <u>11.2</u>
Tool Open @ <u>4:40 a.m.</u> Initial Blow <u>Strong - B.O.B. in 1 1/2 min.</u>	
<u>(G.T.S. in 25 min. Gauged)</u>	
Final Blow <u>Strong - B.O.B. in 20 sec.</u>	

ORIGINAL

Recovery — Total Feet <u>180</u>	Feet of Gas in Pipe <u>G.T.S.</u>	Flush Tool? _____
Rec. <u>180</u> Feet Of <u>D.M.</u>	% gas _____ % oil _____	% water <u>100</u> % 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 130 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 8000 ppm System

(A) Initial Hydrostatic Mud <u>2451</u>	PSI Ak1 Recorder No. <u>13754</u>	Range <u>4000</u>
(B) First Initial Flow Pressure <u>78</u>	PSI @ (depth) <u>4924</u>	w/Clock No. <u>27567</u>
(C) First Final Flow Pressure <u>28</u>	PSI AK1 Recorder No. <u>7437</u>	Range <u>4200</u>
(D) Initial Shut-In Pressure <u>1596</u>	PSI @ (depth) <u>5050</u>	w/Clock No. <u>26199</u>
(E) Second Initial Flow Pressure <u>98</u>	PSI AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>108</u>	PSI @ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>1766</u>	PSI Initial Opening <u>30</u>	Test <u>650⁰⁰</u>
(H) Final Hydrostatic Mud <u>2410</u>	PSI Initial Shut-In <u>45</u>	Jars X <u>200⁰⁰</u>

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>60</u>	Safety Joint X <u>50⁰⁰</u>
Final Shut-In <u>120</u>	Straddle _____
	Circ. Sub _____
	Sampler _____
	Extra Packer _____
	Other _____

Approved By Tim Spellman

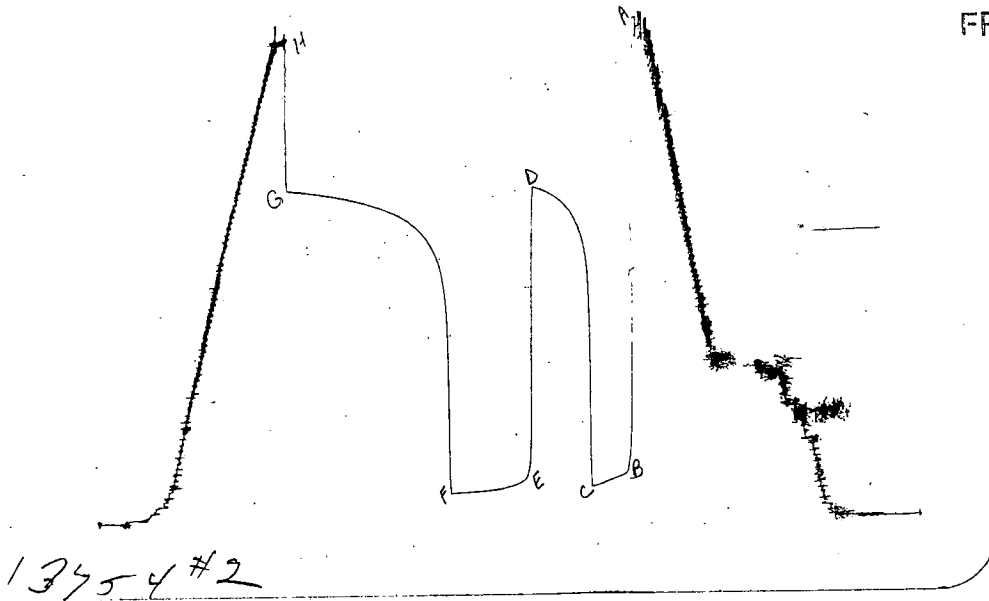
Our Representative Don Ruffe

TOTAL PRICE \$ _____

RELEASED

FEB 4 1994

FROM CONFIDENTIAL



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2603	2610.3
(B) FIRST INITIAL FLOW PRESSURE	216	228.2
(C) FIRST FINAL FLOW PRESSURE	157	165.1
(D) INITIAL CLOSED-IN PRESSURE	1696	1706.4
(E) SECOND INITIAL FLOW PRESSURE	285	212.8
(F) SECOND FINAL FLOW PRESSURE	127	131.9
(G) FINAL CLOSED-IN PRESSURE	1706	1703.5
(H) FINAL HYDROSTATIC MUD	2522	2530.1

ORIGINAL

COMPUTER EVALUATION BY TRILOBITE TESTING, L.L.C.

HALLWOOD PETROLUUM INC

BIRD #2

DST #2

10 32S 19W

COMANCHE

KS

ELEVATION:	2057 KB	EST. PAY:	14 FT.
DATUM:	-3094	ZONE TESTED:	MISSISSIPPI
TEST INTERVAL:	5146-5190	TIME INTERVALS:	30-45-60-120
RECORDER DEPTH:	5150	VISCOSITY:	0.01488 CP
BOTTOM HOLE TEMP:	128	HOLE SIZE:	7.875 IN
COMPRESSIBILITY:	0.998	GAS GRAVITY:	0.6118

TEMPERATURE RANKINE:	588.00	&
TRANSMISSIBILITY:	4169.57	Kh/ft
THEORITICAL FLOW CAPICITY:	62.04	Kh
AVERAGE EFFECTIVE PERMEABILITY:	4.43	K(md.)
RADIUS OF INVESTIGATION:	19.97	FT.
DAMAGE RATIO:	1.96	
ABSOLUTE OPEN FLOW(MAX)	1041.77	MCFD
ABSOLUTE OPEN FLOW(MIN)	1038.88	MCFD
THEORITICAL OPEN FLOW(MAX)	2038.77	MCFD
THEORITICAL OPEN FLOW(MIN)	2033.11	MCFD
POTENTIOMETRIC SURFACE	0.00	(FT.)

INITIAL SHUT-IN VALUES:

SLOPE	243864.97
THEORETICAL STATIC PRESSURE	1776

FINAL SHUT-IN VALUES:

SLOPE	238685.18
THEORETICAL STATIC PRESSURE	1772

DRAWDOWN FACTOR: 0.24 (%)

ORIGINAL

BIRD #2
INITIAL

DST #2
SHUTIN
30 FLOW TIME

Slope 243864.97 psi/cycle
P * 1776 psi

TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
0.2	654.4	2.179	654.4	151
0.4	906.1	1.881	251.7	76
0.6	1061.1	1.708	155.0	51
1.9	1237.8	1.225	176.7	17
2.1	1341.5	1.184	103.7	15
4.1	1428.1	0.920	86.6	8
6.6	1488.6	0.744	60.5	6
9	1558.1	0.637	69.5	4
14.9	1623.1	0.479	65.0	3
X 20.6	1657.1	0.390	34.0	2
25.4	1669.4	0.339	12.3	2
31.2	1683.0	0.293	13.6	2
37.4	1695.1	0.256	12.1	2
X 43.2	1706.4	0.229	11.3	2

BIRD #2
FINAL

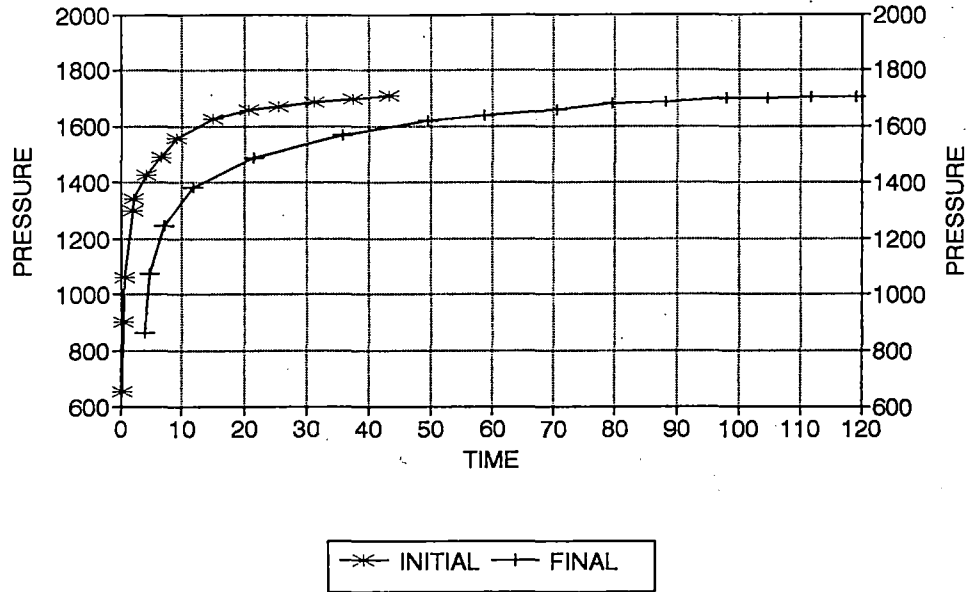
DST #2
SHUTIN
90 TOTAL FLOW TIME

Slope 238685.18 psi/cycle
P * 1772 psi

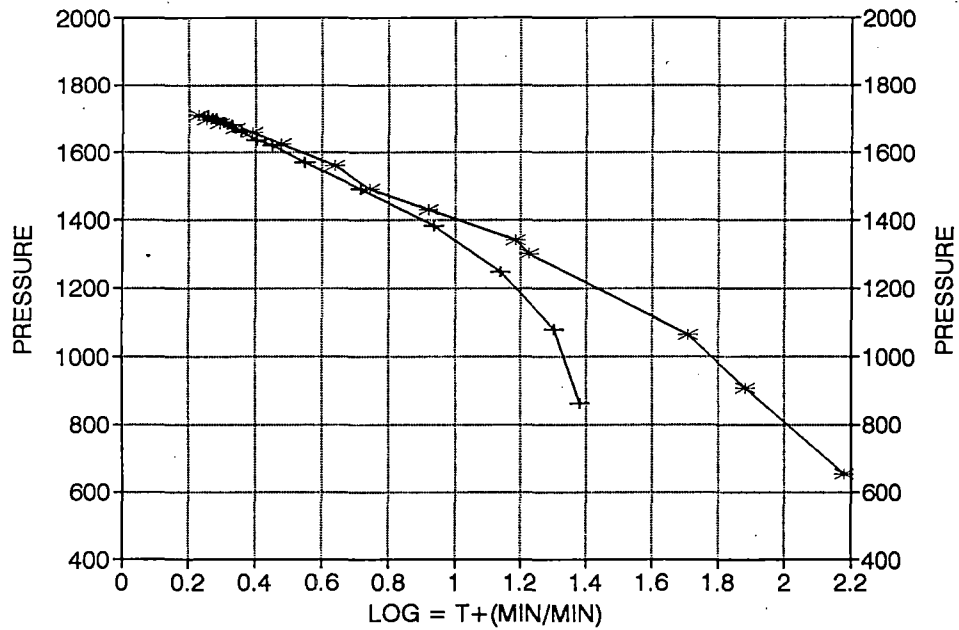
TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
3.9	862.9	1.382	862.9	24
4.7	1077.6	1.304	214.7	20
7.1	1246.1	1.136	168.5	14
11.8	1382.2	0.936	136.1	9
21.4	1488.5	0.716	106.3	5
35.7	1569.1	0.547	80.6	4
49.4	1618.8	0.451	49.7	3
58.6	1635.3	0.404	16.5	3
70.5	1659.3	0.357	24.0	2
79.5	1679.8	0.329	20.5	2
88.1	1685.4	0.306	5.6	2
X 98.1	1697.7	0.283	12.3	2
104.7	1698.7	0.269	1.0	2
111.8	1703.3	0.256	4.6	2
X 119.1	1703.5	0.244	0.2	2

ORIGINAL

BIRD #2 / DST #2 DELTA T DELTA P



HORNER PLOT



GAS VOLUME REPORT

ORIGINAL

HALLWOOD PETROLEUM INC.

BIRD #2

DST # 2

MIN	PSIG	ORIFICE	MCF/D	MIN	PSIG	ORIFICE	MCF/D
0				0		1.5	
5	6	1.5	953	5	7	1.5	1036
10	7	1.5	1036	10	7	1.5	1036
15	7	1.5	1036	15	7	1.5	1036
20	7	1.5	1036	20	7	1.5	1036
25	7	1.5	1036	25	7	1.5	1036
30	7	1.5	1036	30	7	1.5	1036
				35	7	1.5	1036
				40	7	1.5	1036
				45	7	1.5	1036
				50	7	1.5	1036
				55	7	1.5	1036
				60	7	1.5	1036

Remarks: GAS TO SURFACE IN 2 MINUTES - GAUGED - GAS SAMPLE TAKEN

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5403

Well Name & No. <u>Bird #2</u>	Test No. <u>2</u>	Date <u>8-21-92</u>
Company <u>Hallwood Petro. Inc.</u>	Zone Tested <u>Miss</u>	
Address _____	Elevation <u>2057 K.B.</u>	
Co. Rep./Geo. <u>Jim Spellman</u>	Cont. <u>Allen #5</u>	Est. Ft. of Pay <u>14</u>
Location: Sec. <u>10</u>	Twp. <u>32</u>	Rge. <u>19</u>
Co. <u>Comanche</u>		State <u>Ks.</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____
Turnkey _____		Yes _____ No _____
Evaluation _____		

Interval Tested <u>5146-5190</u>	Drill Pipe Size <u>4.5 XH</u>
Anchor Length <u>44</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>5141</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>5146</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>5190</u>	Drill Collar — 2.25 Ft. Run <u>123.68</u>
Mud Wt. <u>9</u> lb/gal.	Viscosity <u>54</u> Filtrate <u>11.2</u>
Tool Open @ <u>9:00 a.m.</u> Initial Blow <u>Strong - B.O.B. in 20 sec.</u>	
<u>(G.T.S. in 2 min - Gauged)</u>	
Final Blow <u>Strong - B.O.B. in 5 sec.</u>	

Recovery — Total Feet <u>180</u>	Feet of Gas in Pipe <u>G.T.S.</u>	Flush Tool? _____
Rec. <u>180</u> Feet Of <u>D.M.</u>	% gas _____ % Oil _____	% water <u>100</u> % 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 128 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F. Chlorides _____ ppm Recovery Chlorides 8,000 ppm System

(A) Initial Hydrostatic Mud <u>2603</u> PSI	Ak1 Recorder No. <u>13754</u>	Range <u>4000</u>
(B) First Initial Flow Pressure <u>216</u> PSI	@ (depth) <u>5150</u>	w/Clock No. <u>27567</u>
(C) First Final Flow Pressure <u>157</u> PSI	Ak1 Recorder No. <u>7437</u>	Range <u>4200</u>
(D) Initial Shut-In Pressure <u>1696</u> PSI	@ (depth) <u>5186</u>	w/Clock No. <u>26199</u>
(E) Second Initial Flow Pressure <u>285</u> PSI	Ak1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>127</u> PSI	@ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>1706</u> PSI	Initial Opening <u>30</u>	Test <u>650.00</u>
(H) Final Hydrostatic Mud <u>2522</u> PSI	Initial Shut-In <u>45</u>	Jars <u>X</u> <u>200.00</u>

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>60</u>	Safety Joint <u>X</u> <u>50.00</u>
Final Shut-In <u>120</u>	Straddle _____
	Circ. Sub _____
	Sampler _____
	Extra Packer _____
	Other <u>eval -</u>

Approved By Jim Spellman

Our Representative Don Rangle

TOTAL PRICE \$ 900.00

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

0121

Drill-Stem Test Data

Well Name BIRD #2 Test No. 3 Date 8/25/92
Company HALLWOOD PETROLEUM INC. Zone VIOLA
Address P.O. BOX 378111 DENVER CO 80237 Elevation 2058
Co. Rep./Geo. JIM SPELLMAN Cont. ALLEN RIG #5 Est. Ft. of Pay _____
Location: Sec. 10 Twp. 32S Rge. 19W Co. COMANCHE State KS

Interval Tested 5773-5785 Drill Pipe Size 4.5 XH
Anchor Length 12 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 5768 Drill Collar - 2.25 Ft. Run 185.86
Bottom Packer Depth 5773 Mud Wt. 8.9 lb/Gal.
Total Depth 5785 Viscosity 55 Filtrate 9.6

Tool Open @ 8:43 AM Initial Blow WEAK-DIED IN 15 MINUTES
HIT TIGHT SPOT AT 1150'
Final Blow NO BLOW

Recovery - Total Feet 62 Flush Tool? YES

Rec. 62 Feet of DRILLING MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 128 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 10000 ppm System

(A) Initial Hydrostatic Mud 3006.9 PSI AK1 Recorder No. 13754 Range 4000

(B) First Initial Flow Pressure 35.2 PSI @ (depth) 5777 w / Clock No. 25828

(C) First Final Flow Pressure 35.2 PSI AK1 Recorder No. 7437 Range 4200

(D) Initial Shut-in Pressure 1960.7 PSI @ (depth) 5781 w / Clock No. 27567

(E) Second Initial Flow Pressure 65.8 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 65.8 PSI @ (depth) _____ w / Clock No. _____

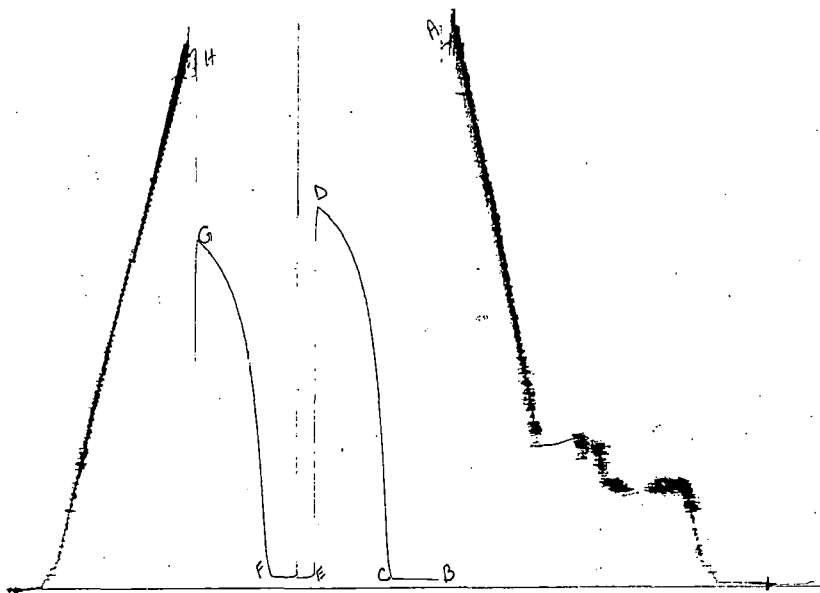
(G) Final Shut-in Pressure 1811.9 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2911.4 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative DAN BANGLE

CHART PAGE

ORIGINAL



73754#3

This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	3003	3006.9
(B) FIRST INITIAL FLOW PRESSURE	33	35.2
(C) FIRST FINAL FLOW PRESSURE	33	35.2
(D) INITIAL CLOSED-IN PRESSURE	1957	1960.7
(E) SECOND INITIAL FLOW PRESSURE	66	65.8
(F) SECOND FINAL FLOW PRESSURE	66	65.8
(G) FINAL CLOSED-IN PRESSURE	1810	1811.9
(H) FINAL HYDROSTATIC MUD	2909	2911.4

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

ORIGINAL

Test Ticket

No 5404

Well Name & No. Bird #2 Test No. 3 Date 8-25-92
 Company Hallwood Petre, Inc. Zone Tested Viola
 Address _____ Elevation 2058 H.B.
 Co. Rep./Geo. Jim Spellman Cont. Allen #5 Est. Ft. of Pay _____
 Location: Sec. 10 Twp. 32 Rge. 19 Co. Comanche State Ks.
 No. of Copies 5 Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 5773 - 5785 Drill Pipe Size 4.5 XH
 Anchor Length 12 Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 5768 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 5773 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 5785 Drill Collar — 2.25 Ft. Run 185.86
 Mud Wt. 8.9 lb/gal. Viscosity 55 Filtrate 9.6
 Tool Open @ 8:43 a.m. Initial Blow Weak - Died in 15 min.
HIT TIGHT SPOT AT 1150'
 Final Blow No blow

Recovery — Total Feet	Feet of Gas in Pipe	Flush Tool?
<u>62</u>		<u>yes</u>
Rec. <u>62</u> Feet Of <u>D.M.</u>	% 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 128 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 10,000 ppm System

(A) Initial Hydrostatic Mud 3003 PSI Ak1 Recorder No. 13754 Range 4000
 (B) First Initial Flow Pressure 33 PSI @ (depth) 5777 w/Clock No. 25828
 (C) First Final Flow Pressure 33 PSI AK1 Recorder No. 7437 Range 4200
 (D) Initial Shut-In Pressure 1957 PSI @ (depth) 5781 w/Clock No. 27567
 (E) Second Initial Flow Pressure 66 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 66 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 1810 PSI Initial Opening 30 Test 650⁰⁰
 (H) Final Hydrostatic Mud 2909 PSI Initial Shut-In 60 Jars X 200⁰⁰

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 30 Safety Joint X 50⁰⁰
 Final Shut-In 60 Straddle _____
 Circ. Sub _____
 Sampler _____

Approved By James W. Spellman

Our Representative Dan Rangle

Extra Packer _____

Other _____

TOTAL PRICE \$ 900⁰⁰

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

01-15-92

Drill-Stem Test Data

Well Name BIRD #2 Test No. 4 Date 8/27/92
Company HALLWOOD PETROLEUM INC. Zone ARBUCKLE
Address P.O. BOX 378111 DENVER CO 80237 Elevation _____
Co. Rep./Geo. JIM SPELLMAN Cont. ALLEN RIG #5 Est. Ft. of Pay _____
Location: Sec. 10 Twp. 32S Rge. 19W Co. COMANCHE State KS

Interval Tested 6108-6135 Drill Pipe Size 4.5 XH
Anchor Length 27 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 6103 Drill Collar - 2.25 Ft. Run 185.86
Bottom Packer Depth 6108 Mud Wt. _____
Total Depth 6135 Viscosity 51 Filtrate 8.8 lb/Gal.

Tool Open @ 4:43 PM Initial Blow STRONG-BOTTOM OF BUCKET IN 1 1/2 MINUTES

Final Blow STRONG-BOTTOM OF BUCKET IN 20 SECONDS

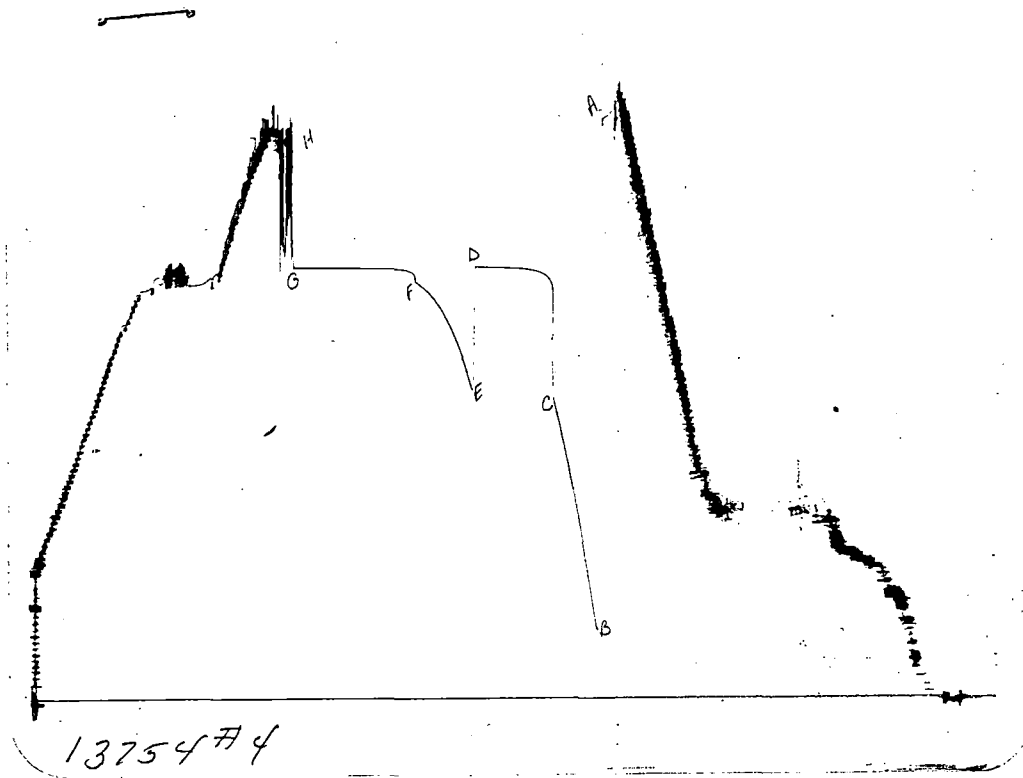
Recovery - Total Feet 4570 Flush Tool? NO

Rec. 4570 Feet of WATER
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 132 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.18 @ _____ °F Chlorides 54000 ppm Recovery Chlorides 11000 ppm System

(A) Initial Hydrostatic Mud 3165.9 PSI AK1 Recorder No. 13754 Range 4000
(B) First Initial Flow Pressure 325.6 PSI @ (depth) 6112 w / Clock No. 25828
(C) First Final Flow Pressure 1540.7 PSI AK1 Recorder No. 7437 Range 4200
(D) Initial Shut-in Pressure 2210.4 PSI @ (depth) 6131 w / Clock No. 27567
(E) Second Initial Flow Pressure 1588.6 PSI AK1 Recorder No. _____ Range _____
(F) Second Final Flow Pressure 2131.4 PSI @ (depth) _____ w / Clock No. _____
(G) Final Shut-in Pressure 2222.6 PSI Initial Opening 30 Final Flow 45
(H) Final Hydrostatic Mud 2890.4 PSI Initial Shut-in 60 Final Shut-in 90

Our Representative DAN BANGLE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	3160	3165.9
(B) FIRST INITIAL FLOW PRESSURE	324	325.6
(C) FIRST FINAL FLOW PRESSURE	1536	1540.7
(D) INITIAL CLOSED-IN PRESSURE	2208	2210.4
(E) SECOND INITIAL FLOW PRESSURE	1586	1588.6
(F) SECOND FINAL FLOW PRESSURE	2127	2131.4
(G) FINAL CLOSED-IN PRESSURE	2218	2222.6
(H) FINAL HYDROSTATIC MUD	2989	2890.4

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

CONFIDENTIAL

Drill-Stem Test Data

Well Name BIRD #2 Test No. 5 Date 8/28/92
Company HALLWOOD PETROLEUM INC. Zone ARBUCKLE
Address P.O. BOX 378111 DENVER CO 80237 Elevation 2058
Co. Rep./Geo. JIM SPELLMAN Cont. ALLEN RIG #5 Est. Ft. of Pay _____
Location: Sec. 10 Twp. 32S Rge. 19W Co. COMANCHE State KS

Interval Tested 6140-6180 Drill Pipe Size 4.5 XH
Anchor Length 40 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 6135 Drill Collar - 2.25 Ft. Run 185.86
Bottom Packer Depth 6140 Mud Wt. 9.1 lb/Gal.
Total Depth 6180 Viscosity 66 Filtrate 12.8

Tool Open @ _____ Initial Blow HIT BRIDGE AT 850' - WOULD NOT GO

Final Blow _____

Recovery - Total Feet _____ Flush Tool? NO

Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

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

(A) Initial Hydrostatic Mud 399.6 PSI AK1 Recorder No. 13754 Range 4000

(B) First Initial Flow Pressure _____ PSI @ (depth) 6144 w / Clock No. 27567

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. 13849 Range 4250

(D) Initial Shut-in Pressure _____ PSI @ (depth) 6176 w / Clock No. 25828

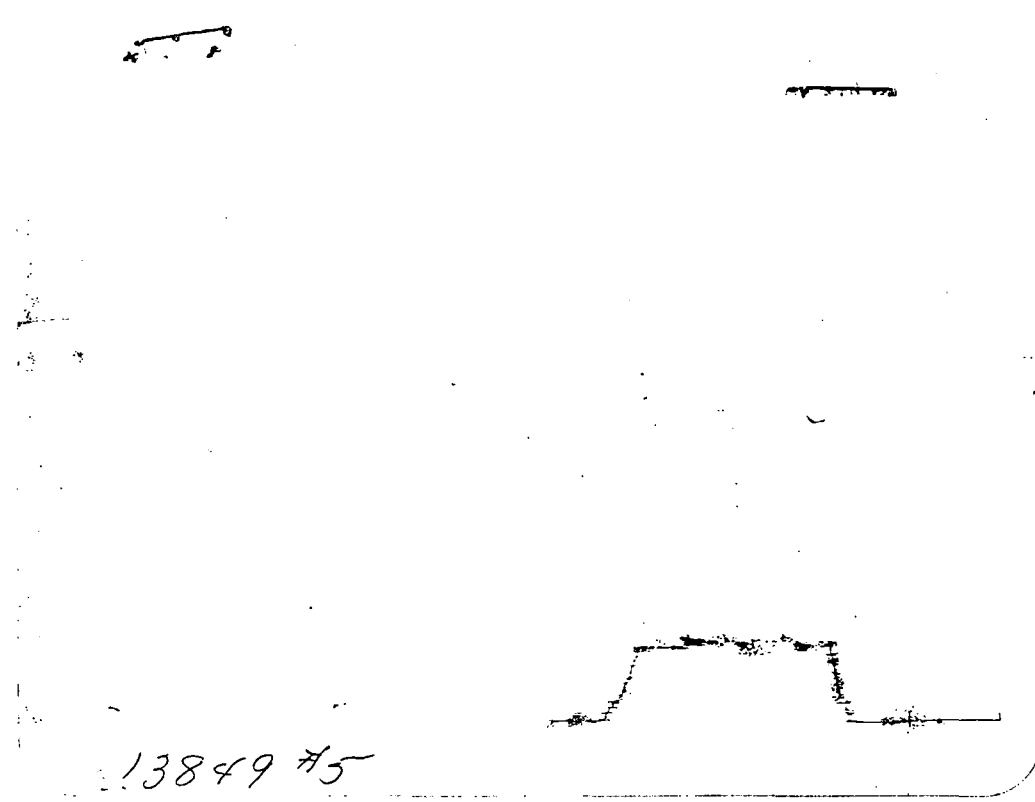
(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

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

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

(H) Final Hydrostatic Mud 388.6 PSI Initial Shut-in _____ Final Shut-in _____

Our Representative DAN BANGLE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	393	399.6
(B) FIRST INITIAL FLOW PRESSURE		
(C) FIRST FINAL FLOW PRESSURE		
(D) INITIAL CLOSED-IN PRESSURE		
(E) SECOND INITIAL FLOW PRESSURE		
(F) SECOND FINAL FLOW PRESSURE		
(G) FINAL CLOSED-IN PRESSURE		
(H) FINAL HYDROSTATIC MUD	383	388.6

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

ORIGINAL

Test Ticket

No 5406

Well Name & No. Bind #2 Test No. 5 Date 8-28-92
 Company Hallwood Petro. Inc. Zone Tested Arbuckle
 Address _____ Elevation 2058 K.F.
 Co. Rep./Geo. Jim Musgrave Cont. Allen #5 Est. Ft. of Pay _____
 Location: Sec. 10 Twp. 32 Rge. 19 Co. Comanche State Ks.
 No. of Copies _____ Distribution Sheet _____ Yes _____ No Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 6140-6180 Drill Pipe Size 4.5 X H
 Anchor Length 40 Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 6135 Hole Size — 77/8" _____ Rubber Size — 63/4" _____
 Bottom Packer Depth 6140 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 6180 Drill Collar — 2.25 Ft. Run 185.86
 Mud Wt. 9.1 lb/gal. Viscosity 66 Filtrate 12.8
 Tool Open @ _____ Initial Blow HIT bridge at 850' - would not go
 Final Blow _____

Recovery — Total Feet	Feet of Gas in Pipe	Flush Tool?
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 _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 16,000 ppm System

(A) Initial Hydrostatic Mud 393 PSI Ak1 Recorder No. 13754 Range 4000
 (B) First Initial Flow Pressure _____ PSI @ (depth) 6144 w/Clock No. 27567
 (C) First Final Flow Pressure _____ PSI AK1 Recorder No. 13849 Range 4250
 (D) Initial Shut-In Pressure _____ PSI @ (depth) 6176 w/Clock No. 25828
 (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 _____ Test 600 00
 (H) Final Hydrostatic Mud 383 PSI Initial Shut-In _____ Jars X 200 00

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 _____ Safety Joint X 50 00
 Final Shut-In _____ Straddle _____
 Circ. Sub _____
 Sampler _____

Approved By Jim Musgrave

Our Representative Don Blum

Printcraft Printers - Hays, KS

Extra Packer _____
 Other Misrun
 TOTAL PRICE \$ 850 00

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

ORIGINAL

Test Ticket

No 5405

Well Name & No. <u>Bird #2</u>	Test No. <u>4</u>	Date <u>8-27-92</u>
Company <u>Hallwood Petro. Inc.</u>	Zone Tested <u>Arbuckle</u>	
Address _____	Elevation <u>2058 K.B.</u>	
Co. Rep./Geo. <u>Jim Spellman</u>	Cont. <u>Allen #5</u>	Est. Ft. of Pay _____
Location: Sec. <u>10</u>	Twp. <u>32</u>	Rge. <u>19</u>
	Co. <u>Comanche</u>	State <u>Ks.</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____
	Turnkey _____	Yes _____ No _____
		Evaluation _____

Interval Tested <u>6108 - 6135</u>	Drill Pipe Size <u>4.5 XH</u>
Anchor Length <u>27</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>6103</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>6108</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>6135</u>	Drill Collar — 2.25 Ft. Run <u>185.86</u>
Mud Wt. <u>9.1</u> lb/gal.	Viscosity <u>51</u> Filtrate <u>8.8</u>
Tool Open @ <u>4:43 P.M.</u>	Initial Blow <u>Strong - B.O.B. in 1 1/2 min.</u>

Final Blow Strong - B.O.B. in 20 sec.

Recovery — Total Feet	Feet of Gas in Pipe	Flush Tool?			
<u>4570</u>	_____	%gas	%oil	%water	%mud
Rec. <u>4570</u> Feet Of <u>WTR.</u>	_____	_____	_____	_____	_____
Rec. _____ Feet Of _____	_____	_____	_____	_____	_____
Rec. _____ Feet Of _____	_____	_____	_____	_____	_____
Rec. _____ Feet Of _____	_____	_____	_____	_____	_____
Rec. _____ Feet Of _____	_____	_____	_____	_____	_____

BHT 132 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW .18 @ 62.5 °F Chlorides 54,000 ppm Recovery Chlorides 11,000 ppm System

(A) Initial Hydrostatic Mud <u>3160</u> PSI	Ak1 Recorder No. <u>13754</u>	Range <u>4000</u>
(B) First Initial Flow Pressure <u>324</u> PSI	@ (depth) <u>6112</u>	w/Clock No. <u>25828</u>
(C) First Final Flow Pressure <u>1536</u> PSI	Ak1 Recorder No. <u>7437</u>	Range <u>4200</u>
(D) Initial Shut-In Pressure <u>2208</u> PSI	@ (depth) <u>6131</u>	w/Clock No. <u>27567</u>
(E) Second Initial Flow Pressure <u>1586</u> PSI	Ak1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>2127</u> PSI	@ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>2218</u> PSI	Initial Opening <u>30</u>	Test <u>750⁰⁰</u>
(H) Final Hydrostatic Mud <u>2989</u> PSI	Initial Shut-In <u>60</u>	Jars X <u>200⁰⁰</u>

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Approved By Jim W. Spellman

Our Representative Dan Bonafant

Final Flow <u>45</u>	Safety Joint X <u>50⁰⁰</u>
Final Shut-In <u>90</u>	Straddle _____
	Circ. Sub X <u>35⁰⁰</u>
	Sampler _____
	Extra Packer _____
	Other _____