SIDE ONE API NO. 15- 193-20,656-00-00 FORM MUST BE TYPED STATE CORPORATION COMMISSION OF KANSAS OIL & EAS COMSERVATION DIVISION County Thomas WELL COMPLETION FORM ACO-1 WELL HISTORY W/2. W/2 NE-\_\_\_ sec. 11 Twp. 6 Rge. 33W V DESCRIPTION OF WELL AND LEASE \_\_\_\_ Feet from S/# /fircle one) Line of Section Operator: License # 4767 1320 Feet from the (circle one) Line of Section 2310 Name: Ritchie Exploration, Inc. Address 8100 E. 22nd N. #700 Footages Calculated from Nearest Outside Section Corner: NE. SE, NW or SW (circle one) Lease Name Franklin Well # 1 City/State/Zip Wichita, KS 67226 Finid Name \_\_\_\_ Purchaser: Koch Oil Producing Formation - Pawnee, L/KC Operator Contact Person: Lisa Thimmesch 3095 xa 3105 Elevation: Ground Phone ( 316 - 691-9500 Total Depth 4580 \_\_\_\_\_ рето \_4508 Contractor: Mame: \_\_\_ White & Ellis Amount of Surface Pipe Set and Camented at 287 Feet License: \_\_\_ 5420 Multiple Stage Cementing Collar Used? X Yes Wellsite Seelogist: J. Christian If yes, show depth set \_\_\_2679 Ossignate Type of Completion If Alternate II completion, cement circulated from 2679 \_\_\_ New Well \_\_\_\_ Re-Entry \_\_\_\_ Workover feet depth to surface \_ \$104 \_\_\_\_ \_\_\_\_ Temp. Abd. Xoil \_\_\_\_ SWU \_\_ SIGN Other (Core, WSW, Expl., Cathodic, etc) Drilling Fluid Management Plan Alt. 2 If Workover/Re-Entry: old well info as follows: RELEASED at a must be collected from the 5-18-99 18 popularide content 4500 ppm Fluid volume 698 bbls Operator: \_\_\_\_\_ Dewatering method used \_evaporation Well Name: \_\_\_ Old Total FROM CONFIDENTION of fluid disposal if hauled offsite: \_\_ Re-perf. \_\_\_\_\_ Conv. to Inj/SWD \_\_\_Deepening \_\_\_ Opening THIS PSTD Plug Back \_\_ W. GRMATION Docket No. Commingled Docket No. Dual Completion Other (SWD or Inj?) Docket No. 12-21-96 2-6-97 Docket Hold Date Reached TD Completion Date County . Soud Date INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission. 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. SUSAit 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. K.C.C. OFFICE USE ONLY Signature etter of Confidentiality Attached President Wireline Log Received
Geologist Report Received Subscribed and sworn to before se this 2 Distribution \_ KCC SW0/Rep MEPA KGS Plua Other (Specify) Date Commission Expires LISA THIMMESCH NOTARY PUBLIC - -- Form ACO-1 (7-91) --- ---STATE OF KANSAS My Appt. Exp. 8-28-99

ec. 11 100 6		oloration, In C <sub>East</sub> C <sub>West</sub>	County	Frankli Thomas	n	Veil #	1	-
nterval tested, tim	e tool open a , bottom hole	and base of formatind closed, flowing temperature, fluid roppy of log.	and shut-in pre-	ssures, whet	her shut-in pre	ssure rea	ched statio	c level
ill Stem—Tests Take (Attach Additional		X Yes Ac	∑ Log	Formatio	on (Top), Depth	and Datum	,	ampla
mples Sent to Sepic		X Yes Ao	Name		Тор		Datum	
res Taken	,	☐ Yes ☑ No	-					
ectric Log Run (Submit Copy.)		X Yes	See	attache	d sheet			
Compensated :	Neutron C	ow Focused L ompensated P a Ray Correl	hoto-Densi	ty Log.	-			
	Report a	CASING RECORD	ں نکا ہوں نا		production, et	- c.		in in the second of the second
urpose of String	Size Hole	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Satting Depth	Type of Cement	# Sacks Used	Type and Addition	
surface	12¼"	8 5/8"		287	60/40 poz	165	2%gel	4%C
production	7 7/8"	4½" ·	10.5#	4574'	ASC	235	10%sal	
		·						Gil
		AKCITICGA	L CEMENTING/SQUE	EZE RECORD		· · · · · · · · · · · · · · · · · · ·		
urpose:	Depth Top Bottom	Type of Cement	#Sacks Used		Type and Percen	t Additi…e	•	
Perforate Protect Casing	3975-412	4 Common	100				Pire	
Plug Back TD Plug Off Zone			_					
Shots Per Foot		# RECORD - Bridge Pl ge of Each Interval		•	Fracture, Shot, d Kind of Mater		Des	
3 .	4346'-52	' Pawnee		1000 ga	1 15% NE		Pawn	ee
3	4145'-54	' L/KC J	13,0°5	1000 ga	1 15% NE	-	J zo	ne
3	4060'-40	62' L/KC F		:	15% NE, w.	/fe	F zo	ne
TUBING RECORD  2 3	\$ize /8"	Set At 4444	Packer At -	Liner Run	□ <sub>7••</sub> □	oK		
ate of First, Result $2-7-97$			ucing Method	lowing X Pu	aping Gas L		her (Explai	n)
Estimated Production Per 24 Hours		351s.   64s	Mcf Wate	r 851s. 30 BW	Gas-Oil	Ratio	§r:	vity 
isposition of Gas:  Vented Sold  (If vented, sui	Used on t	HE Open	Hale Perf.		Comp. 🔀 Comm		Production 1	interva

# RITCHIE EXPLORATION, INC.

125 N. Market - Suite 1000 Wichita, Kansas 67202-1775 316-267-4375 FAX 316-267-3026

# ORIGINAL

RELEASED

MAY 18 1999

FROM CONFIDENTIAL

# CONFIDENTIAL

API# 15-193-20,656 White & Ellis Rig #9

Section 11-6S-33W Thomas County, Kansas

#1 Franklin W/2 W/2 NE

Elevation: 3095' GL 3105' KB (Elevation raised 2' per tool pusher)

I	og Tops		
Anhydrite	2700'(+405)		
B/Anhy	2734'(+371)		
Topeka	3718'(- 613)		
Heebner	3945'(- 840)		
Toronto	3976'(- 871)		
Lansing	3990'(- 885)		
Stark	4164'(-1059)		
B/KC	4224'(-1119)	PLEASE SEEP THIS CONFIDENTIAL	
Marmaton	4236'(-1131)	INFORMEP THIS	
Pawnee	4344'(-1239)	CONFIDENTIAL	
Fort Scott	4407'(-1302)	PENTIAL	APR 2 2
Cher Sh	4425'(-1320)	- s <sub>400</sub> ;	CONFIDENTIAL
Cher Lm	4443'(-1338)		MI
Mississippi	4548'(-1443)		
LTD	4574'(-1469)		

DST #1 from 3942' to 4006' (Toronto and L/KC "A" zone). Recovered 90' of mud and 1221' of water.

> IFP:104-387#/30"; ISIP:1243#/30"; FFP:460-617#/30"; FSIP:1233#/30".

DST #2 from 4007' to 4026' (L/KC "C" zone). Recovered 1' of mud.

IFP:10-10#/30"; ISIP:10#/30"; FFP:10-10#/30"; FSIP:20#/30".

DST #3 from 4022' to 4040' (L/KC "D" zone). Recovered 30' of mud and 488' water.

IFP:52-115#/30"; ISIP:1285#/30"; FFP:198-240#/30"; FSIP:1254#/30".

DST #4 from 4039' to 4070' (L/KC "F" zone). Recovered 180' of gas in pipe, 65' of oil, 61' of mud cut oil (80% oil, 20% mud), and 122' of mud cut oil (75% oil, 25% mud). Total fluid 248'.

> IFP:31-41#/30"; ISIP:1181#/45"; FFP:73-83#/45"; FSIP:1150#/60".

#1 Franklin Page 2

14.1

# CONFIDENTIAL

ORIGINAL

<u>DST #5</u> from 4118' to 4170' (L/KC "J" zone). Recovered 90' of mud cut oil (50% oil, 50% mud), 150' heavy oil cut mud (35% oil, 65% mud), and 30' muddy water (60% water, 40% mud). Total fluid 270' (36% oil, 57% mud, 7% water).

IFP:52-73#/45"; ISIP:188#/60"; FFP:125-135#/45"; FSIP:188#/60".

RELEASED

<u>DST #6</u> from 4282' to 4373' (Pawnee). Recovered 5' of mud. IFP:20-20#/30"; ISIP:83#/45"; FFP:20-20#/30"; FSIP:73#/45".

MAY 18 1999

FROM CONFIDENTIA:

reve

APR 2 2

CONCIDENTIAL

PLEASE KEEP THIS INFORMATION CONFIDENTIAL

# ALLIED CEMENTING CO., INC. 5253

REMIT TO P.O. BOX 31 RUSSELL, KANSAS 67665	IGINAL	SERV	TICE POINT:	klas
SEC. TWP. 4 RANGE 2 C	ALLED OUT	ON LOCATION	JOB START 4 200	JOB FINISH
DATE 18-10-96 11 6 33		ON LOCATION 5:15	COUNTY	STATE
LEASE Franklin WELL# LOCATION Colby	10N-4E.	5.5,	Thomas	Kan
OLD OR NEW (Circle one)	CUVI	EINENTINI		
CONTRACTOR White + Ellis Del 49	OWNER		Same	
TYPE OF JOB Sur Face			CEMENT	
HOLE SIZE 12/4 T.D. 288	AN COUNTRY OF	DEDED 1/5	- 40/s	_
CASING SIZE 8% DEPTH 287  TUBING SIZE DEPTH	AMOUNT OR	DERED <u>/65</u> CC ~ 2% (c)	515 0740	P02
DRILL PIPE DEPTH		2000		
TOOL DEPTH				- \$
PRES. MAX MINIMUM	COMMON	99 sks	_@_ <u>720</u> _	7/2 30
MEAS. LINE SHOE JOINT	POZMIX	66 Sks	@ 315 @ <b>95</b> 0	207 <del>1</del> 28 <del>5</del> 0
CEMENT LEFT IN CSG. 15' RELEAS	EGEL	3 5K5 5 5K5	_@ <u>_930</u> _@_28 <u>00</u>	14000
EQUIPMENT MAY 18	1333		_@	***************************************
EROM CONF	IDENTIAL		_@	
PUMP TRUCK CEMENTER Walt	DENTIAL		_@ @	
# 102 HELPER Walt	HANDLING	165 sks	@ 105	17325
BULK TRUCK	MILEAGE	4 per 5k/	wile :	231 20
# 218 DRIVER Dean BULK TRUCK				1 1
# DRIVER			TOTAL	1,49345
	APR 2 2		5 2 2	* * * · ·
REMARKS:	COVERE	TIAI SERVI	CE "	
	COM	: 8-4 8		A Comment
<u>,                                    </u>	DEPTH OF JC	)B	1.7	
		K CHARGE	(L, r, )	445 00
	EXTRA FOOT		_@	
1500:		35- milies		4500
Coment Did Circ		8 SurFace		
Tale Pin-			_	
	***************************************			
<b>A.</b> 4			TOTAL	589 75
CHARGE TO: Ritchie Explorations, Inc	-			
STREET 125 N. Maubet #1000		FLOAT EQU	IPMENT	
CITY Wichita STATE Kinson ZIP 67202				
CITY STATE COMPASS ZIP 6(202	10 / 10 / 10 / 10 / 10 / 10 / 10 / 10 /		@	
			_@	····
			@	
			TOTAL	
			IOIAL	
To Allied Cementing Co., Inc.	TAX	***************************************	_	
You are hereby requested to rent cementing equipment	TOTAL CHAP	RGE		
and furnish cementer and helper to assist owner or	DISCOUNT		IF PAT	D IN 30 DAYS
contractor to do work as is listed. The above work was	DISCOUNT =		II I'II	D 11 ( 30 D/11 )
done to satisfaction and supervision of owner agent or				
contractor. I have read & understand the "TERMS AND				
CONDITIONS" listed on the reverse side.				
CICNATURE X) .11c Alam Do #10				
SIGNATURE Donald Ci. 10. one Right 7				

# **GENERAL TERMS AND CONDITIONS**

DEFINITIONS: In these terms and conditions, "Allied" shall mean Allied Cementing Co., Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

- —TERMS: Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "ALLIED" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing, in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "ALLIED," refunded directly to "CUSTOMER." For purposes of this paragraph, ALLIED and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.
- —ATTORNEY FEES: In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the terms of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limited to, a reasonable sum as and for attorney's fees.
- —PRICES AND TAXES: All merchandise listed in "ALLIED'S" current price schedule are F.O.B. ALLIED'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by ALLIED shall be added to the quoted prices charged to CUSTOMER.
- —TOWING CHARGES: ALLIED will make a reasonable attempt to get to and from each job site using its own equipment. Should ALLIED be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by ALLIED, will be charged to and paid by CUSTOMER.
- —PREPARATION CHARGES: If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay ALLIED for the expenses incurred by ALLIED as a result of the cancellation.
- —DEADHAUL, CHARGES: Unless otherwise specified on the front of this Contract, a deadhaul charge as set forth in ALLIED'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.
- —SERVICE CONDITIONS AND LIABILITIES: 1. ALLIED carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond ALLIED'S control, ALLIED shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless ALLIED, its officers, agents and employees, from and against any and all claims or suits for:
- (A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:
- (B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with ALLIED'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of ALLIED or its employees.
- 2. With respect to any of ALLIED'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to ALLIED at the landing, CUSTOMER shall either-recover the lost item without cost to ALLIED or reimburse ALLIED the current replacement cost of the item unless the loss or damage results from the sole negligence of ALLIED or its employees.
- 3. ALLIED does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.
- WARRANTIES: 1. ALLIED warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. ALLIED'S obligation under this warranty is expressly limited to repair, replacement, or allowance for credit, at its option, for any merchandise which is determined by ALLIED to be defective. THIS IS THE SOLE WARRANTY OF ALLIED AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and ALLIED shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.
  - 2. More specifically:
- (A) Nothing in this contract shall be construed as a warranty by ALLIED of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.
- (B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by ALLIED or any interpretation of tests, meter readings, chart information, analysis of research, or recommendations made by ALLIED, unless the inaccuracy or incorrectness is caused by the wilful misconduct or gross negligence of ALLIED or its employees in the preparation or furnishing of such facts, information or data.
- (C) Work done by ALLIED shall be under the direct supervision and control of the CUSTOMER or his agent and ALLIED will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

# · ALLIED CEMENTING CO., INC. 51

REMIT TO P.O. BOX 31 **SERVICE POINT:** ORIGINAL **RUSSELL, KANSAS 67665** BAKLEY RANGE W CALLED OUT ON LOCATION JOB START JOB FINISH DATE 12-22-96 8:15 AM 12:00 AM 730 AM LOCATION COLDY 10N-4E-5.5. LEASE FRANKLIW WELL# OLD OR NEW (Circle one) WHITEYELLIS SAMS **CONTRACTOR OWNER** TYPE OF JOB PRODUCTION STRING **CEMENT HOLE SIZE** 4580 T.D. **CASING SIZE** AMOUNT ORDERED 2505Ks ASC 10% SALT **DEPTH TUBING SIZE** 5 WERSK GILSOWITE , 500 GAL WER-2 DEPTH DRILL PIPE **DEPTH** TOOK PORT PRES. MAX **MINIMUM** COMMON MEAS. LINE **SHOE JOINT** POZMIX CEMENT LEFT IN CSG. GEL. RELEASED **CHLORIDE** ASC. MAY 18 1999 500 gal - WFR-2 **EQUIPMENT** <u>500 ºº</u> <u>- 1175</u># 481 TEROM CONFIDEN **PUMP TRUCK** CEMENTER @ 102 **HELPER** HANDLING 250 SKS 26250 @ **BULK TRUCK** MILEAGE 4 per SK/in/e 218 **DRIVER** LONNIE **BULK TRUCK** 14 -1 **DRIVER** APR 22 **REMARKS: SERVICE** CONFIDENTIAL DISPLACEMENT 72.6 BBL 4574 DEPTH OF JOB MIX MUD Flush Followed BY 2355x5 PUMP TRUCK CHARGE ASC 10% SALT 5 GILSONITE, DESPLACE **EXTRA FOOTAGE** LAND PLUL AT 1200 PSZ. INSERT HELD MILEAGE PLUG 41/2 RubbER THANK YOU @ TOTAL \_ CHARGE TO: RITCHIE EXPLORATION, INC. STREET 125 N Market # 1000 FLOAT EQUIPMENT CITY Wiehita STATE Kan ZIP 67202 - GUIDE SHOE PORT COLLAR TURNO 6- CENTRALIZERS **@** 2- BASKETS @ TOTAL 3, 381-TAX\_ To Allied Cementing Co., Inc. TOTAL CHARGE \_\_\_\_\_ You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or **DISCOUNT** -— IF PAID IN 30 DAYS contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS rlisted on the reverse side.

SIGNATURE

# GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "Allied" shall mean Allied Cementing Co., Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

- —TERMS: Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "ALLIED" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing, in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "ALLIED," refunded directly to "CUSTOMER." For purposes of this paragraph, ALLIED and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.
- —ATTORNEY FEES: In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the terms of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limited to, a reasonable sum as and for attorney's fees.
- —PRICES AND TAXES: All merchandise listed in "ALLIED'S" current price schedule are F.O.B. ALLIED'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by ALLIED shall be added to the quoted prices charged to CUSTOMER.
- —TOWING CHARGES: ALLIED will make a reasonable attempt to get to and from each job site using its own equipment. Should ALLIED be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by ALLIED, will be charged to and paid by CUSTOMER.
- —PREPARATION CHARGES: If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay ALLIED for the expenses incurred by ALLIED as a result of the cancellation.
- —DEADHAUL, CHARGES: Unless otherwise specified on the front of this Contract, a deadhaul charge as set forth in ALLIED'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.
- —SERVICE CONDITIONS AND LIABILITIES: 1. ALLIED carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond ALLIED'S control, ALLIED shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless ALLIED, its officers, agents and employees, from and against any and all claims or suits for:
- (A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:
- (B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with ALLIED'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of ALLIED or its employees.
- 2. With respect to any of ALLIED'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to ALLIED at the landing, CUSTOMER shall either recover the lost item without cost to ALLIED or reimburse ALLIED the current replacement cost of the item unless the loss or damage results from the sole negligence of ALLIED or its employees.
- 3. ALLIED does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.
- WARRANTIES: 1. ALLIED warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. ALLIED'S obligation under this warranty is expressly limited to repair, replacement, or allowance for credit, at its option, for any merchandise which is determined by ALLIED to be defective. THIS IS THE SOLE WARRANTY OF ALLIED AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and ALLIED shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.
  - 2. More specifically:
- (A) Nothing in this contract shall be construed as a warranty by ALLIED of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.
- (B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by ALLIED or any interpretation of tests, meter readings, chart information, analysis of research, or recommendations made by ALLIED, unless the inaccuracy or incorrectness is caused by the wilful misconduct or gross negligence of ALLIED or its employees in the preparation or furnishing of such facts, information or data.
- (C) Work done by ALLIED shall be under the direct supervision and control of the CUSTOMER or his agent and ALLIED will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

# ALLIED CEMENTING CO., INC. 5163

REMIT TO P.O. BOX 31 RUSSELL, KANSAS 67665	ORIGINAL	SERVICE POINT:
DATE 12-27-94 11 6 RANGE 33		OCATION JOB START JOB FINISH 3:00
		COUNTY STATE
OLD OR NEW Circle one)	x 10N-4/46-	S.S. Thames Kan
CONTRACTOR Express Well	OWNER	Same
TYPE OF JOB Port Colland HOLE SIZE T.D.	MILITEN	CEMENT
HOLE SIZE T.D.  CASING SIZE 4 /2 DEPTH	AMOUNT ORDEREI	1-700 sks 50/50 Da
TUBING SIZE 21 DEPTH 2680	_ 6% Ge . 1/2	#Flo-Sacl
DRILL PIPE DEPTH		
PRES. MAX DEPTH 2680' MINIMUM	COMMON_ <i>350</i>	sks @ 220 2,52000
MEAS. LINE SHOE JOINT	POZMIX 350	sks @ 315 1.10250
CEMENT LEFT IN CSG. RELEASE		5ks @ 950 "34200
PERFS. MAY 1 8 19	CHLORIDE	$\frac{@}{\#} = \frac{@}{0} \frac{1.5}{201^{25}} = \frac{201^{25}}{201^{25}}$
EQUIPMENT	v v	@ @
PUMP TRUCK CEMENTER LIC IN-	ENTAL	@
# 19/ HELPER Walt	HANDING CO.	sks @ 105 735 00
BULK TRUCK	HANDLING <u>700</u> MILEAGE 44	5K5 @ 105 73500 Der5Klunda 98000
# 2/8 DRIVER Dean BULK TRUCK	1100 <u>44</u>	150
# 303 DRIVER Lounce		TOTAL <u>5,880<sup>75</sup></u>
	APR 2 2	•
REMARKS:	COMERCALIA	SERVICE
Test Casing to 1200 ps, Hold	DEPTH OF JOB	
	PUMP TRUCK CHAR	.182
Dartial returnes Displaced 96 BBI		mules @ 285 99 75
down Tuling, Shut tool, Test 2	PLUG	
1200 poly Held washed out		@ 3 150
Casing, Il lo		
		20075
CHARGE TO: Ritchie Explorations		TOTAL <u>649 2</u>
STREET 125 N. Marbet # 1000	FLC	AT EQUIPMENT
CITY William STATE Kenson ZIP 67202		
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		TOTAL
	TAX	
To Allied Cementing Co., Inc.		
You are hereby requested to rent cementing equipment	TOTAL CHARGE	
and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was	DISCOUNT ———	IF PAID IN 30 DAYS
done to satisfaction and supervision of owner agent or		
contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.		

# **GENERAL TERMS AND CONDITIONS**

DEFINITIONS: In these terms and conditions, "Allied" shall mean Allied Cementing Co., Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

- —TERMS: Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "ALLIED" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing, in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "ALLIED," refunded directly to "CUSTOMER." For purposes of this paragraph, ALLIED and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.
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- (A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:
- (B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with ALLIED'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of ALLIED or its employees.
- 2. With respect to any of ALLIED'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to ALLIED at the landing, CUSTOMER shall either recover the lost item without cost to ALLIED or reimburse ALLIED the current replacement cost of the item unless the loss or damage results from the sole negligence of ALLIED or its employees.
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- (C) Work done by ALLIED shall be under the direct supervision and control of the CUSTOMER or his agent and ALLIED will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

# ALLIED CEMENTING CO., INC. 6760

REMIT TO P.O. BOX 31
RUSSELL KANSAS 67665

1. "

SIGNATURE

ORIGINIAI SERVICE POINT:

Ross	LLL, IX	NSAS UTU	05	ONIC	JINA	L		
DATE 1-9-97	SEC.	TWP.	RANGE	CALLED OUT		CATION	JOB START	JOB FINISH
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CONTRACTOR				OWNER.	mer i promp stage o			\ 
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TUBING SIZE		DE	PTH					
DRILL PIPE			PTH					
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# 218	DRIVER		Joseph	8 % ***			ŢĄŢOT	, 161200
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			menting equipment					
done to satisfacti	work as is on and su gread &	s listed. T ipervision understan	he above work was of owner agent or d the "TERMS AN	<b>S</b>	Γ		IF PA	ID IN 30 DAYS

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# 

REMIT TO P.O.					SERV	VICE POINT:	
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OLD OK NEW (C	ircle one)						
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BULK TRUCK				MILEAGE		- 5	14000
# 212 BULK TRUCK	DRIVER		Dean		· · · · · · · · · · · · · · · · · · ·	teen	*
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# CONFIDENTIAL:

# ORIGINAL

#### DST REPORT

TICKET

RELEASED

CONFIGURAL

GENERAL INFORMATION

MAY 18 1999

15-193-20656

: 12/15/96 DATE

21847

CUSTOMER: RITCHIE EXPLORATION INC

: FRANKLIN LEASE

TESTROM CONFIDEN

GEOLOGIST: CHRISTIAN

FORMATION: TORONTO-L KANS. CITY

WELL : #1
ELEVATION: 3105 KB
SECTION : 11
RANGE : 33W

COUNTY: THOMAS

TOWNSHIP: 6S : KS

GAUGE SN#: 13551

RANGE : 4150

STATE CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:

3942.00 ft TO:

4006.00 ft TVD: 4006.0 ft

DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL 3948.0 ft

DEPTH OF RECORDERS: 3945.0 ft 112.0

TEMPERATURE:

I.D.:

DRILL COLLAR LENGTH: WEIGHT PIPE LENGTH :

0.0 ft ŏ.ŏ Ēt 0.000 in 0.000 in

DRILL PIPE LENGTH : 3919.0 ft

I.D.:

TEST TOOL LENGTH

I.D.:

3.800 in

23.0 ft TOOL SIZE

5.500 in

ANCHOR LENGTH

64.0 ft

ANCHOR SIZE:

5.500 in

SURFACE CHOKE SIZE

BOTTOM CHOKE SIZE: TOOL JOINT SIZE : 0.750 in

MAIN HOLE SIZE

: 0.750 in : 7.875 in

SIZE:

4.5XH

PACKER DEPTH:

3937.0 ft

6.750 in 6.750 in

PACKER DEPTH:

3942.0 ft SIZE: 0.0 ft SIZE:

0.000 in

PACKER DEPTH: PACKER DEPTH:

0.0 ft

SIZE:

0.000 in

MUD INFORMATION

DRILLING CON. : WHITE & ELLIS

MUD TYPE

**VISCOSITY:** 

46.00 cp

WEIGHT

: CHEMICAL

8.000 cc

8.900 ppg 1600 ppm

WATER LOSS:

CHLORIDES

SERIAL NUMBER:

JARS-MAKE DID WELL FLOW?: NO

REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW - BOTTOM OF BUCKET IN 3 MINUTES. FINAL FLOW PERIOD STRONG BLOW -

BOTTOM OF BUCKET IN 6 MINUTES.

#### DST REPORT (CONTINUED)

	FLUID	RECOVERY				
Feet Flu		% Oil	% Gas	% Water ———	% Mud 	Comments
12	90.0 221.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 100.0 0.0	100.0 0.0 0.0	MUD WATER CHLORIDES 34000 PPM

### RATE INFORMATION

OIL VOLUME: 0.0000 STB
GAS VOLUME: 0.0000 SCF
MUD VOLUME: 1.2624 STB
WATER VOLUME: 17.1262 STB
TOTAL FLUID: 18.3886 STB

TOTAL FLUID: 0.0000 Min.
AVERAGE OIL RATE: 0.0000 STB/D
AVERAGE WATER RATE: 411.0283 STB/D

### FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1905.00

Description	Duration	p1	p End
INITIAL FLOW INITIAL SHUT-IN FINAL FLOW FINAL SHUT-IN	30.00 30.00 30.00 30.00	104.00	387.00 1243.00 617.00 1233.00

FINAL HYDROSTATIC PRESSURE: 1884.00

# OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1900.00

Description	Duration	p1	p End
INITIAL FLOW INITIAL SHUT-IN FINAL FLOW FINAL SHUT-IN	30.00 30.00 30.00 30.00	101.90 445.93	376.26 1226.24 598.35 1227.11

FINAL HYDROSTATIC PRESSURE: 1887.00

# FLUID SAMPLE REPORT

### GENERAL INFORMATION

: 12/15/96 DATE

CUSTOMER: RITCHIE EXPLORATION INC

WELL : #1

ELEVATION: 3105 KB

SECTION : 11

RANGE : 33W GAUGE SN#: 13551 TEST: 1

COUNTY: THOMAS **RANGE** : 4150

TICKET

: 21847

LEASE : FRANKLIN GEOLOGIST: CHRISTIAN

FORMATION: TORONTO-L KANS. CITY

TOWNSHIP: 6S

STATE : KS CLOCK : 12

### SAMPLE INFORMATION

PRESSURE IN SAMPLER:

300.00 PSIG

BHT: 112.0 DEG F

TOTAL VOLUME OF SAMPLER: 3150.00 cc TOTAL VOLUME OF SAMPLE: 3150.00 cc

OIL: 0.00 cc

3150.00 cc WATER:

MUD: 0.00 cc GAS: 0.00 cc OTHER: 0.00 cc

### RESISTIVITY

DRILLING MUD: .22 @ 65 DEGREES F MUD PIT SAMPLE: 2.0 @ 65 DEGREES F

CHLORIDE CONTENT: CHLORIDE CONTENT:

**GRAVITY:** 

34000.00 ppm 1600.00 ppm

GAS/OIL RATIO:

WHERE WAS SAMPLE DRAINED:

REMARKS:

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21847 DST 1

[Sunday: Dec. 15, 1996] Page 1

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
1 5 14 23 32 41 59 68 77 86 90 113 123 131 149 158 167 185 194 203 221 230 223 239 248 257	000000000000000000000000000000000000000	START FLG 17:35:36 17:36: 5 17:37: 9 17:38:14 17:39:19 17:40:24 17:41:28 17:42:33 17:42:33 17:45:47 17:46:52 17:47:57 17:49: 6 17:51:11 17:53:21 17:55:30 17:55:30 17:55:35 17:57:40 17:58:49 18: 1:59 18: 15: 13 18: 18: 15: 13 18: 18: 15: 13 18: 18: 18: 18: 18: 18: 18: 18: 18: 18:	0.3317 0.3497 0.3677 0.3857 0.4037 0.4216 0.4396 0.4576 0.4756 0.4936 0.5116	101.90 101.90 98.42 98.42 99.29 102.77 110.61 118.45 126.29 135.87 149.81 160.26 174.19 187.26 199.45 216.09 228.64 249.97 263.65 272.66 272.6
265 265 275 284 293 311 329 3347 3565 374 383 410 419 428 437 446	0		UTIN 1 0.5276 0.5296 0.5476 0.5555 0.6015 0.6015 0.6375 0.6555 0.6555 0.6734 0.6914 0.7094 0.7094 0.7274 0.7454 0.7634 0.7634 0.7634 0.7634 0.7634 0.7634 0.7634 0.7813	405.00 526.93 1109.15 1134.30 1148.18 1156.85 1165.53 1173.33 1180.27 1185.47 1188.94 1193.28 1196.75 1200.22 1201.95 1204.56 1207.16 1208.89 1210.63 1212.36 1214.10 1215.83

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21847 DST 1 [Sunday: Dec. 15, 1996] Page 2

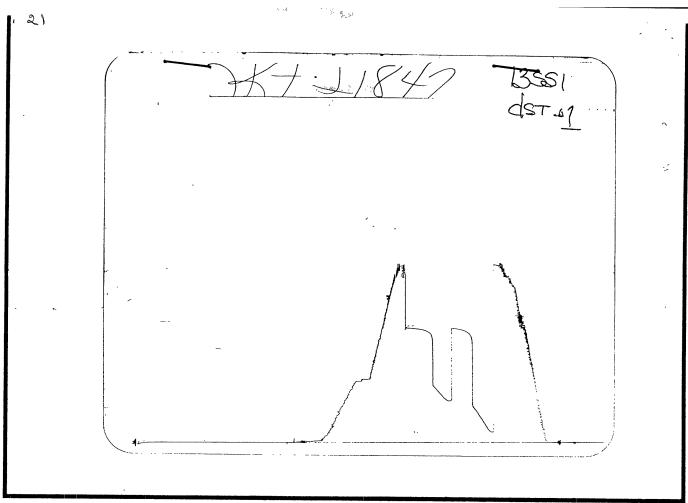
母: 薛八八日

-		11/1	2104 <i>1</i> DS.	L .L.		
	REC #	DAY	REAL TIME	D'I HH)	r RS)	BHP (PSIA)
	455 464 473 482 491 500 509 518 527	0 0 0 0 0 0 0	18:30: 2 18:31: 7 18:32:12 18:33:16 18:34:21 18:35:26 18:36:31 18:37:35 18:38:40 END SHUTIN	1	0.9073 0.9252 0.9432 0.9612 0.9792 0.9972 1.0152 1.0331 1.0511	1217.57 1218.43 1220.17 1221.03 1221.90 1223.64 1224.50 1225.37 1226.24
	536545432109876555555555556666666666777234321756	000000000000000000000000000000000000000	START FLOW  18:39:23  18:39:45  18:40:50  18:41:54  18:42:59  18:44: 4  18:45: 9  18:46:13  18:47:18  18:49:27  18:50:32  18:51:37  18:52:42  18:53:46  18:55:56  18:57: 1  18:55:56  18:59:10  19: 0:15  19: 0:15  19: 1:20  19: 2:24  19: 3:29  19: 4:34  19: 5:39  19: 6:43	2	1.0631 1.0691 1.0871 1.1051 1.1231 1.1410 1.1590 1.1770 1.1950 1.2130 1.2310 1.2490 1.2670 1.2849 1.3029 1.3389 1.3569 1.3749 1.3928 1.4108 1.4288 1.4468 1.4648 1.4648 1.4648 1.4648 1.5008 1.5187	445.93 445.93 439.84 437.22 437.22 437.22 439.84 443.32 448.55 454.64 460.74 468.58 476.42 485.13 493.84 503.42 511.25 519.96 528.67 537.38 555.67 564.38 573.09 589.64 598.35
	766 7779 788 797 806 815 824 833 842 869 878 887	000000000000000000000000000000000000000	END FLOW 2 START SHUT 19: 7:19 19: 7:48 19: 8:53 19: 9:58 19:11: 2 19:12: 7 19:13:12 19:14:17 19:15:21 19:16:26 19:17:31 19:18:36 19:19:40 19:20:45 19:21:50	IN 2	1.5287 1.5367 1.5547 1.5727 1.5907 1.6087 1.6266 1.6446 1.6626 1.6806 1.6986 1.7166 1.7346 1.7525 1.7705	930.19 1100.48 1135.17 1153.38 1164.66 1171.60 1178.54 1183.74 1187.21 1191.55 1195.01 1198.48 1200.22 1202.82 1204.56

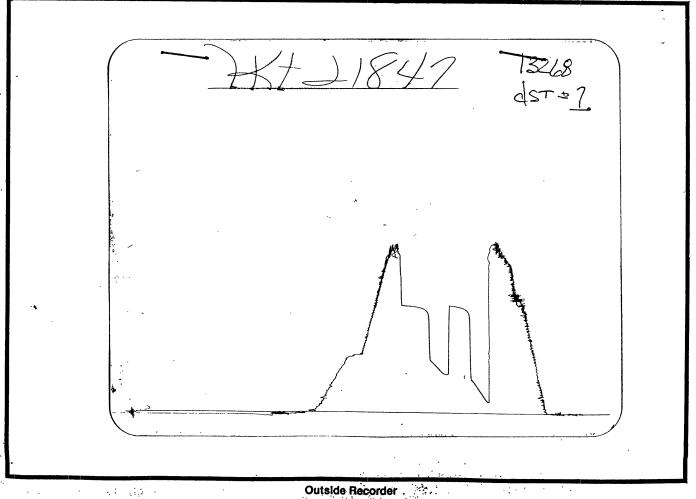
Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21847 DST 1

[Sunday: Dec. 15, 1996] Page 3

REC	DAY	REAL	DT	BHP
#		TIME	(HRS)	(PSIA)
8905 914 923 932 941 959 968 9958 9978 9904 1013 1022 10340 1049 10676 1094 1103		19:22:55 19:23:59 19:25: 4 19:26: 9 19:27:14 19:28:18 19:29:23 19:30:28 19:31:33 19:32:37 19:33:42 19:34:47 19:35:52 19:36:56 19:38: 1 19:39: 6 19:41:15 19:42:20 19:43:25 19:44:30 19:45:34 19:46:39 19:47:44	1.7885 1.8065 1.8245 1.8425 1.8605 1.8784 1.8964 1.9144 1.9324 1.9504 1.9684 1.9864 2.0043 2.0223 2.0403 2.0583 2.0763 2.0763 2.1122 2.1302 2.1482 2.1662 2.1842 2.2022	1206.29 1208.89 1209.76 1210.63 1212.36 1214.10 1214.96 1215.83 1215.83 1216.70 1217.57 1218.43 1220.17 1220.17 1221.03 1222.77 1222.77 1222.77 1222.77 1222.77 1222.77 1222.77 1222.77 1222.77



Inside Recorder



Outside Recorder .

#### DST REPORT

#### GENERAL INFORMATION

TICKET : 21848 LEASE : FRANKLIN : 12/16/96 CUSTOMER : RITCHIE EXPLORATION INC GEOLOGIST: CHRISTIAN

TEST: 2 WELL : #1 FORMATION: L KANSAS CITY C ELEVATION: 3105 KB

TOWNSHIP : 6S STATE : KS SECTION : 11 RANGE : 33W COUNTY: THOMAS : 12 RANGE : 4150 CLOCK GAUGE SN#: 13551

#### WELL INFORMATION

PERFORATION INTERVAL FROM: 4007.00 ft TO: 4026.00 ft TVD: 4026.0 ft PERFORATION INTERVAL ...

DEPTH OF SELECTIVE ZONE:

DEPTH OF RECORDERS: 4010.0 ft 4013.0 ft

TEMPERATURE: 112.0

TEST TYPE: OIL

DRILL COLLAR LENGTH: 0.0 ft WEIGHT PIPE LENGTH: 0.0 ft DRILL PIPE LENGTH: 3984.0 ft 0.000 in I.D.: 0.000 in I.D.: DRILL PIPE LENGTH : 3304.0 TEST TOOL LENGTH : 23.0 ft
ANGUOR LENGTH : 19.0 ft 3.800 in I.D.: 5.500 in TOOL SIZE : ANCHOR SIZE: BOTTOM CHOKE SIZE: 5.500 in 0.750 in SURFACE CHOKE SIZE : 0.750 in MAIN HOLE SIZE : 7.875 in TOOL JOINT SIZE : 4.5XH 4002.0 ft 6.750 in PACKER DEPTH: SIZE: 6.750 in 4007.0 ft 0.0 ft 0.0 ft SIZE: PACKER DEPTH: 0.000 in PACKER DEPTH: SIZE: 0.000 in SIZE: PACKER DEPTH:

#### MUD INFORMATION

DRILLING CON. : WHITE & ELLIS

VISCOSITY: 45.00 cp MUD TYPE : CHEMICAL WATER LOSS: 8.000 cc : 9.000 ppg WEIGHT

3800 ppm CHLORIDES

SERIAL NUMBER: JARS-MAKE REVERSED OUT?: NO DID WELL FLOW?: NO

#### COMMENTS

#### Comment

INITIAL FLOW PERIOD VERY WEAK SURFACE BLOW. FINAL FLOW PERIOD NO BLOW.

# DST REPORT (CONTINUED)

FLII	TD	RECOVERY
LIIO	エレ	KECOVEKI

Feet of Fluid	% Oil	~~~ % Gas	% Water	% Mud	Comments
1.0	0.0	0.0	0.0	100.0	MUD .

#### RATE INFORMATION

OIL VOLUME: 0.0000 STB GAS VOLUME: 0.0000 SCF TOTAL FLOW TIME: 60.0000 min. MUD VOLUME: 0.0140 STB AVERAGE OIL RATE: 0.0000 STB/D WATER VOLUME: 0.0000 STB AVERAGE WATER RATE: 0.0000 STB/D TOTAL FLUID : 0.0140 STB

#### FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1946.00

Description	Duration	p1	p End
INITIAL FLOW INITIAL SHUT-IN FINAL FLOW FINAL SHUT-IN	30.00 30.00 30.00 30.00	10.00	10.00 10.00 10.00 20.00

FINAL HYDROSTATIC PRESSURE: 1905.00

### OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1959.00

Description	Duration	p1	p End
INITIAL FLOW INITIAL SHUT-IN FINAL FLOW FINAL SHUT-IN	30.00 30.00 30.00 30.00	5.23 7.84	7.84 8.71 9.58 21.77

FINAL HYDROSTATIC PRESSURE: 1938.00

# FLUID SAMPLE REPORT

#### GENERAL INFORMATION

: 12/16/96 DATE

CUSTOMER : RITCHIE EXPLORATION INC

: #1 WELL

ELEVATION: 3105 KB

: 11 SECTION

: 33W RANGE GAUGE SN#: 13551

TEST: 2

COUNTY: THOMAS RANGE: 4150

TICKET

: 21848

: FRANKLIN LEASE

GEOLOGIST: CHRISTIAN FORMATION: L KANSAS CITY C

TOWNSHIP : 6S

: KS

STATE : 12 CLOCK

# SAMPLE INFORMATION

PRESSURE IN SAMPLER:

10.00 PSIG

BHT:

112.0 DEG F

TOTAL VOLUME OF SAMPLER: 3150.00 cc 3150.00 cc TOTAL VOLUME OF SAMPLE: 0.00 cc OIL:

WATER: 0.00 cc 3150.00 cc MUD: 0.00 cc GAS:

OTHER: 0.00 cc

### RESISTIVITY

DRILLING MUD:

MUD PIT SAMPLE: GAS/OIL RATIO:

WHERE WAS SAMPLE DRAINED:

**REMARKS:** 

CHLORIDE CONTENT:

CHLORIDE CONTENT:

0.00 ppm mqq 00.0

**GRAVITY:** 

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21848 DST 2 [Monday: Dec. 16, 1996] Page 1

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
165432109876543211159876543212223109	000000000000000000000000000000000000000		0.0000 0.0100 0.0280 0.0460 0.0639 0.0819 0.0999 0.1179 0.1359 0.1719 0.1899 0.2078 0.2258 0.2438 0.2618 0.2798 0.3157 0.3337 0.3517 0.3697 0.4057 0.4236 0.4416 0.4596 0.4776 0.4956	5.23 5.10 6.10 6.10 6.10 6.10 6.10 6.10 6.10 6
2587 2587 2587 2676 2676 2676 2789 2789 2789 2789 2789 2789 2789 2789	0	START SHU 9:41: 18 9:41:18 9:42:22 9:43:27 9:44:32 9:45:37 9:46:41 9:47:46 9:49:56 9:51: 0 9:52: 5 9:53:10 9:54:15 9:55:19 9:56:24 9:57:29 9:58:34 9:59:38 10: 1:48 10: 2:53 10: 3:57	0.5096 0.5136 0.5316 0.5495 0.5675 0.5855 0.6035 0.6215 0.6395 0.6575 0.6754 0.7114 0.7294 0.7474 0.7654 0.7833 0.8013 0.8193 0.8553 0.8913	7.84 7.84 7.84 7.84 8.71 8.71 8.71 8.71 8.71 8.71 8.71 8.71

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21848 DST 2 [Monday: Dec. 16, 1996] Page 2

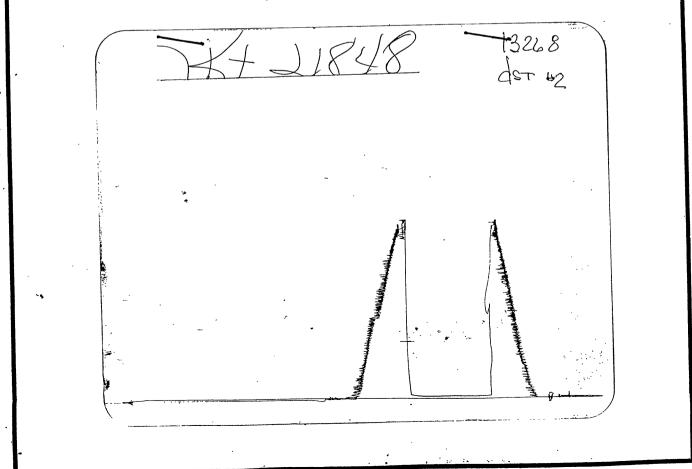
REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
456 465 474 483 492 501 510	0 0 0 0 0 0	10: 5: 2 10: 6: 7 10: 7:12 10: 8:16 10: 9:21 10:10:26 10:11:31 10:12:35 END SHUTI		8.71 8.71 8.71 8.71 8.71 8.71 8.71 8.71
5376543210987654321098777777778 55765432109877654321098777777777777777777777777777777777777	000000000000000000000000000000000000000		1.1191 1.1371 1.1550 1.1730 1.1910 1.2090 1.2270 1.2450 1.2629 1.2809 1.3169 1.3349 1.3529 1.3709 1.3888 1.4068 1.4248 1.4248 1.428 1.4508 1.4788 1.4968 1.5147 1.5327 1.5507 1.5687 1.5867 1.6047 1.6227	7.844 7.884 7.884 7.884 7.77 7.888 8.77 7.7555 5.555 5.555
782 789 798 807 816 825 834 843 852 861 879 888 897	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	START SHU 10:48:55 10:50:0 10:51:5 10:52:9 10:53:14 10:54:19 10:55:24 10:56:28 10:57:33 10:58:38 10:59:43 11:0:47 11:1:52	1.6266 1.6406 1.6586 1.6766 1.6946 1.7126 1.7306 1.7485 1.7665 1.7845 1.8025 1.8205 1.8385	9.58 9.58 9.58 9.58 9.58 9.58 9.58 10.45 11.32 12.19 13.06

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21848 DST 2 [Monday: Dec. 16, 1996] Page 3

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
906 915 924 933 942 951 960 969	0 0 0 0 0 0	11: 2:57 11: 4: 2 11: 5: 6 11: 6:11 11: 7:16 11: 8:20 11: 9:25 11:10:30	1.8744 1.8924 1.9104 1.9284 1.9464 1.9644 1.9823 2.0003	13.94 14.81 15.68 16.55 17.42 19.16 20.90 21.77

HT 21848 T3521
days 12

Inside Recorder



Outelde Booorder

#### DST REPORT

#### GENERAL INFORMATION

. 21 .

TICKET : 21849 LEASE : FRANKLIN DATE : 12/16/96 CUSTOMER: RITCHIE EXPLORATION INC WELL : #1 TEST: 3 GEOLOGIST: CHRISTIAN

FORMATION: L KANSAS CITY D ELEVATION: 3105 KB SECTION: 11 TOWNSHIP: 6S

: 33W COUNTY: THOMAS : KS RANGE STATE GAUGE SN#: 13551 RANGE : 4150 CLOCK

#### WELL INFORMATION

PERFORATION INTERVAL FROM: 4022.00 ft TO: 4040.00 ft TVD: 4040.0 ft

DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL

DEPTH OF RECORDERS: 4025.0 ft 4028.0 ft

TEMPERATURE: 112.0

DRILL COLLAR LENGTH: 0.0 ft WEIGHT PIPE LENGTH: 0.0 ft I.D.: 0.000 in I.D.: 0.000 in DRILL PIPE LENGTH : 3999.0 ft I.D.: 3.800 in MAIN HOLE SIZE : 7.875 in PACKER DEPTH: 4017.0 ft PACKER DEPTH: 4022.0 ft PACKER DEPTH: 0.0 ft PACKER DEPTH: 0.0 ft 4.5XH 6.750 in SIZE:

0.000 in 0.000 in SIZE: SIZE:

#### MUD INFORMATION

DRILLING CON. : WHITE & ELLIS

VISCOSITY : WATER LOSS: MUD TYPE : CHEMICAL 45.00 cp : 9.000 ppg : 3800 ppm WEIGHT 8.000 cc

CHLORIDES JARS-MAKE SERIAL NUMBER:

REVERSED OUT?: NO DID WELL FLOW?: NO

#### COMMENTS

### Comment

INITIAL FLOW PERIOD STRONG BLOW - BOTTOM OF BUCKET IN 9 MINUTES. FINAL FLOW PERIOD STRONG BLOW -BOTTOM OF BUCKET IN 11 MINUTES.

# DST REPORT (CONTINUED)

	FLUID	RECOVERY				
Feet Flu		% Oil	% Gas	% Water	% Mud	Comments
4	30.0 488.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 100.0 0.0	100.0 0.0 0.0	MUD WATER CHLORIDES 28000 PPM

# RATE INFORMATION

OIL VOLUME: 0.0000 STB
GAS VOLUME: 0.0000 SCF
MUD VOLUME: 0.4208 STB
WATER VOLUME: 6.8449 STB
TOTAL FLUID: 7.2657 STB

TOTAL FLUID: 0.0000 STB/D
AVERAGE VATER RATE: 164.2767 STB/D

# FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1936.00

Description	Duration	p1	p End
INITIAL FLOW INITIAL SHUT-IN FINAL FLOW FINAL SHUT-IN	30.00 30.00 30.00 30.00	52.00 198.00	115.00 1285.00 240.00 1254.00

FINAL HYDROSTATIC PRESSURE: 1915.00

# OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1921.00

Description	Duration	p1	p End
INITIAL FLOW INITIAL SHUT-IN FINAL FLOW FINAL SHUT-IN	30.00 30.00 30.00 30.00	58.53 199.08	134.30 1289.94 268.81 1288.58

FINAL HYDROSTATIC PRESSURE: 1916.00

### FLUID SAMPLE REPORT

### GENERAL INFORMATION

DATE : 12/16/96

TICKET : 21849 CUSTOMER: RITCHIE EXPLORATION INC LEASE : FRANKLIN WELL : #1 ELEVATION: 3105 KB WELL TEST: 3 GEOLOGIST: CHRISTIAN

SECTION

3) '

FORMATION: L KANSAS CITY D : 11 : 33W TOWNSHIP : 6S RANGE COUNTY: THOMAS RANGE: 4150 STATE : KS GAUGE SN#: 13551 CLOCK : 12

# SAMPLE INFORMATION

PRESSURE IN SAMPLER: 100.00 PSIG BHT: 112.0 DEG F

TOTAL VOLUME OF SAMPLER: 3150.00 cc TOTAL VOLUME OF SAMPLE:

3150.00 cc OIL: 0.00 cc WATER:

3150.00 cc 0.00 cc 0.00 cc 0.00 cc MUD: GAS: OTHER:

# RESISTIVITY

DRILLING MUD: .2 @ 62 DEGREES F MUD PIT SAMPLE: 2.1 @ 62 DEGREES F CHLORIDE CONTENT: CHLORIDE CONTENT: 28000.00 ppm 3800.00 ppm GAS/OIL RATIO: GRAVITY:

WHERE WAS SAMPLE DRAINED:

REMARKS:

Company: RITCHIE EXPLORATION INC

[Monday: Dec. 16, 1996] #1 FRANKLIN Well: TKT 21849 DST 3 Page Field: DT BHP (HRS) (PSIA REAL TIME REC DAY (PSIA)

1 0 10 0 19 0 28 0 37 0 46 0 55 0 64 0 0 64 0 0:35: 0 73 0 0:35: 0 0 0:36: 5 0 0:37: 9 0 0:38:14 0 0:39:18 0 0:40:22 0 0:41:27 82 91 100 109 118 127 0 136 89.21 0.2872 0:43:36 145 0 92.76 98.05 0.3051 0:44:40 0 154 

 0.3230
 98.05

 0.3409
 102.48

 0.3588
 106.90

 0.3767
 111.32

 0.3946
 115.74

 0.4125
 120.16

 0.4304
 124.58

 0.4483
 129.00

 0.4661
 134.30

 0.3230 0:45:45 0 163 0:46:49 172 0 0.3588 0:47:53 0 181 0.3767 0 0:48:58 190 0:50: 2 0:51: 7 199 0 208 0 0:52:11 0 217 0:53:16 226 0 0:54:20 235 0 END FLOW 1 START SHUTIN 1 0.4802 234.51 243 0 0:55:11 1082.53 0.4836 0:55:23 253 0 1186.68 0.5016 0:56:28 0 263 0.5191 1210.16 0:57:31 0 272 0.5368 1224.97 0:58:34 281 0 1235.44 0.5546 0:59:38 0 290 1242.45 0.5724 0 1: 0:43 299 0.5903 1249.45 1: 1:47 308 0 1253.86 1: 2:51 1: 3:56 1: 5: 0 0.6082 0 317 1258.26 0.6260 0 326 0.6440 1261.80 0 335 1: 6: 5 1: 7: 9 1: 8:14 1: 9:18 1:10:23 1266.20 0.6619 0 344 1269.73 0.6798 0 353 0.6977 1272.40 362 0 9:18 1:10:23 0 1:11:28 0 1:12:32 0 1:13:37 0 1:14:42 0.7157 1274.20 371 1275.14 0.7336 380 1276.94 0.7516 389 1278.74 0.7695 0.7875 398 1279.67 407 1281.47 0.8055 416 1282.41 0.8234 425 1283.34 0.8414 434 1284.27 0.8594 1:17:56 0 443 0.8773 1286.08 1:19: 0 0 452 0.8953 1286.14 1:20: 5 461

Company: RITCHIE EXPLORATION INC.
Well: #1 FRANKLIN
Field: TKT 21849 DST 3 [Monday: Dec. 16, 1996] Page 2

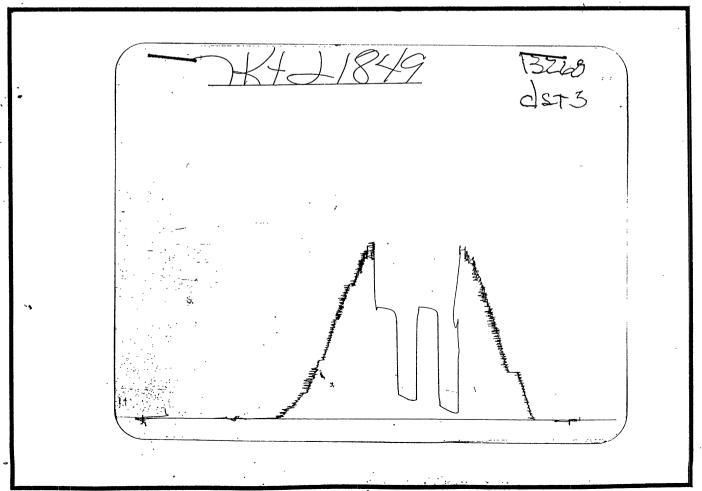
Field:	TKT	21849 DS1		
REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
470 479 488 497 506	0 0 0 0 0		0.9133 0.9312 0.9492 0.9672 0.9851	1287.08 1288.01 1288.94 1289.88 1289.94
5154 523 5533 5569 5589 5589 56123 56123 56123 56123 5713 5713 5713 5713 5713 5713 5713 571	000000000000000000000000000000000000000	1:27:50 1:28:55 1:30: 0 1:31: 5 1:32: 9 1:33:14 1:34:19 1:35:23 1:36:28 1:37:33 1:38:37 1:39:42 1:40:46 1:41:51 1:42:55 1:44: 0 1:45: 4 1:46: 9 1:46: 9 1:47:13 1:48:18 1:49:22 1:50:27 1:51:31 1:52:35 1:53:40 1:55:49 1:56:53 END FLOW 2	1.0244 1.0424 1.0605 1.0785 1.0965 1.1145 1.1324 1.1504 1.1684 1.1863 1.2043 1.2222 1.2401 1.2580 1.2759 1.3296 1.3475 1.3655 1.3834 1.4013 1.4192 1.4371 1.4550 1.4729 1.5087	199.08 197.40 194.86 193.18 193.25 194.25 196.06 197.00 198.81 200.61 203.29 207.71 211.27 214.82 229.24 222.79 227.21 231.63 235.18 238.73 247.57 256.42 268.81
766 774 784 793 802 811 829 838 847 856 865 874 883		START SHUT: 1:57:45 1:57:53 1:58:56 1:59:59 2: 1: 3 2: 2: 6 2: 3:11 2: 4:15 2: 5:19 2: 6:24 2: 7:28 2: 8:33 2: 9:37 2:10:42 2:11:47 2:12:51 2:13:56 2:15: 0	1.5231 1.5254 1.5428 1.5428 1.5603 1.5780 1.5957 1.6135 1.6314 1.6493 1.6672 1.6851 1.7030 1.7209 1.7389 1.7568 1.7748 1.7748	351.61 1052.54 1182.71 1208.80 1224.48 1235.82 1244.56 1251.56 1256.83 1260.37 1264.77 1267.44 1270.11 1271.91 1273.71 1275.51 1277.31 1279.11

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21849 DST 3

[Monday: Dec. 16, 1996] Page 3

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
928 937 946 955 964 973 982 991	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2:16: 5 2:17:10 2:18:14 2:19:19 2:20:24 2:21:29 2:22:33 2:23:38 2:24:43	1.8287 1.8466 1.8646 1.8826 1.9005 1.9185 1.9365 1.9544	1279.18 1280.11 1282.78 1282.85 1283.78 1284.71 1285.65 1286.58
1009 1018	ŏ	2:25:47 2:26:52	1.9904	1287.58 1287.65
1027	ŏ	2:27:57	2.0263	1288.58

Inside Recorder



Outside Recorder

#### DST REPORT

# GENERAL INFORMATION

DATE : 12/17/96 CUSTOMER : RITCHIE EXPLORATION INC

TEST: 4 : #1 WELL

ELEVATION: 3105 KB SECTION: 11

: 33W RANGE GAUGE SN#: 13551

COUNTY: THOMAS RANGE : 4150

TICKET : 21850 LEASE : FRANK

: FRANKLIN GEOLOGIST: CHRISTIAN

FORMATION: L KANSAS CITY F

TOWNSHIP : 6S STATE : KS : 12 CLOCK

WELL INFORMATION

PERFORATION INTERVAL FROM: 4039.00 ft TO: 4070.00 ft TVD: 4070.0 ft TEST TYPE: OIL

DEPTH OF SELECTIVE ZONE:
DEPTH OF RECORDERS: 4042.0 ft 4045.0 ft

TEMPERATURE: 117.0

0.000 in DRILL COLLAR LENGTH: 0.0 ft WEIGHT PIPE LENGTH: 0.0 ft I.D.: 0.000 in I.D.: 3.800 in DRILL PIPE LENGTH : 4016.0 ft I.D.: 5.500 in TOOL SIZE : TEST TOOL LENGTH : 23.0 ft 5.500 in ANCHOR LENGTH : 31.0 ft SURFACE CHOKE SIZE : 0.750 in MAIN HOLE SIZE : 7.875 in ANCHOR SIZE: BOTTOM CHOKE SIZE: 0.750 in 4.5XH TOOL JOINT SIZE : MAIN HOLE SIZE : 6.750 in

SIZE: PACKER DEPTH: 4034.0 ft 6.750 in 4039.0 ft SIZE: PACKER DEPTH: 0.000 in 0.0 ft SIZE: PACKER DEPTH: PACKER DEPTH: 0.000 in SIZE: 0.0 ft

MUD INFORMATION DRILLING CON. : WHITE & ELLIS

MUD TYPE WEIGHT : CHEMICAL : 9.100 ppg

CHLORIDES 3500 ppm

JARS-MAKE DID WELL FLOW?: NO VISCOSITY : WATER LOSS:

47.00 cp 8.800 CC

SERIAL NUMBER: REVERSED OUT?: NO

#### COMMENTS

#### Comment

INITIAL FLOW PERIOD STRONG BLOW - BOTTOM OF BUCKET IN 18 MINUTES. FINAL FLOW PERIOD STRONG BLOW -BOTTOM OF BUCKET IN 20 MINUTES.

## DST REPORT (CONTINUED)

FLUID	RECOVERY				
t of uid	% Oil	% Gas	% Water	% Mud	Comments
0.0 65.0 61.0 122.0	0.0 100.0 80.0 75.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 20.0 25.0	180 FT GAS ABOVE FLUID OIL 39 GRAVITY @ 60 DEG F MUD CUT OIL MUD CUT OIL

## RATE INFORMATION

OIL VOLUME: 2.8796 STB
GAS VOLUME: 0.0000 SCF TOTAL FLOW TIME: 75.0000 min.
MUD VOLUME: 0.5989 STB AVERAGE OIL RATE: 66.7879 STB/D
WATER VOLUME: 0.0000 STB AVERAGE WATER RATE: 0.0000 STB/D
TOTAL FLUID: 3.4785 STB

## FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1946.00

Description	Duration	p1	p End
INITIAL FLOW INITIAL SHUT-IN FINAL FLOW FINAL SHUT-IN	30.00 45.00 45.00 60.00	31.00 73.00	41.00 1181.00 83.00 1150.00

FINAL HYDROSTATIC PRESSURE: 1946.00

OFFICE	TIME	۶	PRESSURE	INFORMATION
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INITIAL HYDROSTATIC PRESSURE: 1945.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	33.97	44.26
INITIAL SHUT-IN	45.00		1186.66
FINAL FLOW	45.00	75.29	87.71
FLNAL SHUT-IN	60.00		1145.25

FINAL HYDROSTATIC PRESSURE: 1936.00

## FLUID SAMPLE REPORT

#### GENERAL INFORMATION

: 12/17/96 DATE

TICKET : 21850 CUSTOMER: RITCHIE EXPLORATION INC LEASE : FRANKLIN GEOLOGIST: CHRISTIAN : #1 TEST: 4 FORMATION: L KANSAS CITY F

ELEVATION: 3105 KB

: 11 SECTION

TOWNSHIP : 6S : 33W RANGE COUNTY: THOMAS STATE : KS GAUGE SN#: 13551 RANGE : 4150 CLOCK : 12

## SAMPLE INFORMATION

PRESSURE IN SAMPLER: 150.00 PSIG BHT: 0.0 DEG F

TOTAL VOLUME OF SAMPLER: 3150.00 cc TOTAL VOLUME OF SAMPLE: 2600.00 cc

OIL: 2600.00 cc WATER: 0.00 cc MUD: 0.00 cc GAS: 2.60 cc

0.00 cc OTHER:

#### RESISTIVITY

DRILLING MUD: CHLORIDE CONTENT: 0.00 ppm 0.00 ppm MUD PIT SAMPLE: CHLORIDE CONTENT:

GAS/OIL RATIO: **GRAVITY:** 

WHERE WAS SAMPLE DRAINED:

REMARKS:

. 39 .

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21850 DST 4

[Tuesday: Dec. 17, 1996] Page 1

REC	DAY	REAL	DT	BHP
#		TIME	(HRS)	(PSIA)
161161223344616616616116116116161616161616161616	0 0		0.0000 0.0100 0.0200 0.0300 0.0400 0.0500 0.0600 0.0700 0.0800 0.1009 0.11099 0.11299 0.1299 0.1499 0.1599 0.1699 0.1799 0.1899 0.22998 0.22598 0.22598 0.22598 0.22598 0.22598 0.33597 0.33597 0.33597 0.33597 0.3496 0.4296	33.99 33.99 33.99 31.68 29.77 31.69 29.77 29.88 29.77 29.88 29.88 29.88 20.77 20.55 31.67 31.67 31.65 31
219	0 0 0 0	20: 6:42	0.4354	66.05
221		20: 6:55	0.4391	98.28
226		20: 7:27	0.4478	239.39
232		20: 8: 0	0.4570	564.27
237		20: 8:31	0.4657	718.45
242		20: 9: 4	0.4748	812.53
247		20: 9:39	0.4844	858.71
252		20:10:14	0.4941	890.95

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21850 DST 4 [Tuesday: Dec. 17, 1996] Page 2

rieia.	11/1	21050 L	751 <del>4</del>	
REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
222222223333333333333333333334444444444	000000000000000000000000000000000000000	20:10:49 20:11:24 20:11:24 20:12:35 20:12:35 20:13:47 20:13:47 20:14:53 20:14:53 20:16:45 20:16:45 20:16:21 20:17:53 20:18:32 20:19:44 20:20:22 20:22:43 20:22:43 20:22:43 20:22:43 20:22:23:23 20:22:23:23 20:22:23:23 20:22:25:26:23 20:22:25:26:23 20:22:25:26:23 20:22:25:26:23 20:22:25:25 20:22:25:25 20:22:25	0.5039 0.5137 0.5236 0.5335 0.5433 0.55331 0.55631 0.559329 0.61227 0.6227 0.6426 0.6525 0.66725 0.6923 0.77223 0.77223 0.77223 0.77521 0.77521 0.88119 0.88117 0.88117 0.88117 0.88117 0.99316 0.88117 0.99316 0.99316 0.99316 0.99316 0.99316 0.99316 0.99311 0.99316 0.9931	917.59 941.59 941.59 952.84 963.30 975.58 994.82 1008.64 10126.01 1032.35 1047.79 1057.36 1066.12 1076.49 1084.33 1084.67 1076.49 1088.67 1099.61 1112.83 11127.99 1128.89 1137.159 1148.89 1159.49

Company: RITCHIE EXPLORATION INC.
Well: #1 FRANKLIN
Field: TKT 21850 DST 4

[Tuesday: Dec. 17, 1996] Page 3

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
532 537 542 5547 5557 562 567 577 582 587 597 6012 617 6227	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	20:43:39 20:44:15 20:44:51 20:45:27 20:46:39 20:46:39 20:47:51 20:49:39 20:49:39 20:50:51 20:50:51 20:52:38 20:53:14 20:53:50 20:55:23 20:55:23 20:55:23 20:55:23	1.0613 1.0712 1.0812 1.0912 1.1012 1.1112 1.1211 1.1311 1.1411 1.1511 1.1611 1.1711 1.1810 1.1910 1.2010 1.2110 1.2210 1.2309 1.2409	1163.80 1165.55 1167.30 1168.18 1169.93 1171.68 1172.57 1174.32 1175.20 1176.95 1177.84 1178.72 1179.61 1180.49 1181.37 1183.12 1184.01 1184.89 1185.78 1186.66
6350505050505050505050505050505050505050	000000000000000000000000000000000000000	20:57:38 20:58:15 20:58:51 20:59:27 21: 0: 3 21: 1:15 21: 1:5 21: 4:15 21: 4:5 21: 6: 3 21: 7:15 21: 7:5 21: 8:27 21: 10: 15 21: 10: 15 21: 11: 2 21: 12: 3 21: 12: 3 21: 12: 3 21: 12: 3	1.2946 1.3046 1.3146 1.3246 1.3346 1.3446 1.3546 1.3646 1.3746 1.3846 1.3946 1.4046 1.4145 1.4245 1.4445 1.4445 1.4545 1.4545 1.4545 1.4545 1.5544 1.5544 1.5544 1.5544 1.5544 1.5544 1.5544	75.371 75.371 76.4268.4557 770.1260 688.55737 665.890 665.9997 665.890 6677.887 777.788 677.788 677.777 71.356 688.777 71.356 71.37 72.33

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21850 DST 4

[Tuesday: Dec. 17, 1996] Page 4

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
7805050505050505050505050505050505050505	000000000000000000000000000000000000000	21:17:26 21:18:2 21:18:38 21:19:14 21:19:50 21:20:26 21:21:2 21:21:38 21:22:14 21:22:50 21:24:2 21:24:2 21:24:2 21:24:38 21:25:14 21:25:50 21:26:26 21:27:2 21:27:38 21:28:14 21:28:50 21:29:25 21:30:1 21:30:37 21:31:13 21:31:49 21:32:25 21:33:1 21:33:37 21:33:37 21:33:37 21:34:49 21:35:25 21:36:1 21:36:37 21:37:49 END FLOW	1.6143 1.6243 1.6343 1.6443 1.6543 1.6643 1.6743 1.6842 1.7042 1.7042 1.7142 1.7242 1.7342 1.7442 1.7542 1.7641 1.7741 1.8041 1.8141 1.8241 1.8340 1.8440 1.8540 1.8540 1.8640 1.8740 1.8740 1.8940 1.9040 1.9140 1.9239 1.9339 1.9439 1.9539	72.35 73.23 73.25 74.14 74.15 75.04 75.96 75.96 76.87 77.77 77.79 78.67 77.77 79.56 81.34 81.35 81.37 81.39 82.27 83.18 83.19 83.19 84.11 85.02 85.94 86.83 87.71
968 970 975 981 986 991 1006 1011 1016 1021 1026 1031 1046 1041	000000000000000000000000000000000000000	START SH 21:38:10 21:38:56 21:39:32 21:40: 2 21:40:36 21:41:10 21:41:46 21:42:21 21:42:56 21:42:43 21:44:43 21:45:18 21:45:54 21:46:30 21:47:5 21:47:41	2.1085	106.88 145.21 255.84 484.05 665.23 735.79 789.81 796.79 827.29 847.34 862.16 876.11 888.32 900.53 911.00 918.86 925.84 932.82

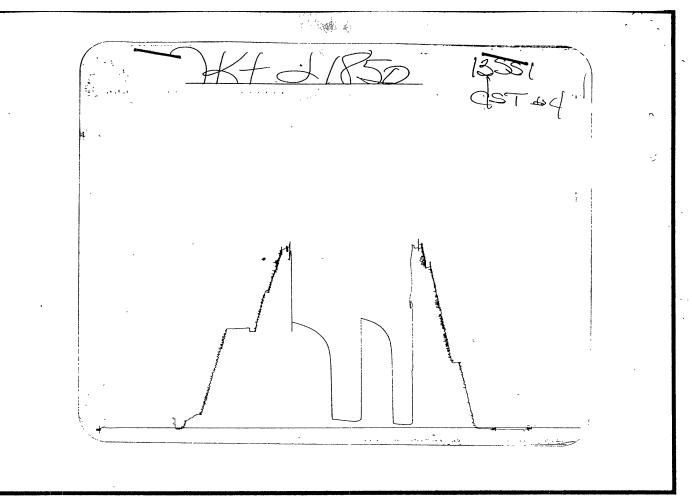
Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21850 DST 4 [Tuesday: Dec. 17, 1996] Page 5

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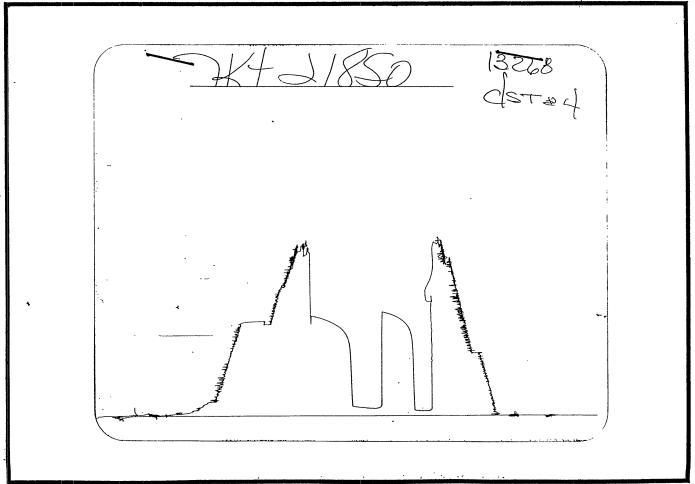
REC	DAY	REAL	DT	BHP
#		TIME	(HRS)	(PSIA)
		21:48:23 21:48:23 21:49:21:50 21:51:52:33 21:52:33 21:55:53:31 21:55:56:31 21:55:56:31 21:55:56:31 21:55:56:31 21:55:56:31 21:55:56:31 21:55:56:31 21:55:56:31 21:55:31 21:55:56:31 21:55:31 22:55:31	2.1284 2.1383 2.1482 2.15881 2.15881 2.19890 2.2217880 2.221778 2.221778 2.221778 2.221778 2.221779 2.221779 2.221779 2.221779 2.221779 2.221779 2.231774 2.331774 2.331774 2.331779 2.331771 2.331771 2.331771 2.4417	939.794 946.0286 957.2267 957.227.2964.375 997.2987.2699 997.205.665 997.205.665 100203.665 100203.665 100203.665 100203.665 100203.665 100203.665 100554.73 100554.73 100559.886 100777.5946 100777

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21850 DST 4 [Tuesday: Dec. 17, 1996] Page 6

REC	DAY	REAL	DT	BHP
#		TIME	(HRS)	(PSIA)
 1331 13341 1346 1356 13561 1376 13881 13996 1406 1416 14421 14431 14451 14451 14451 14451 14461 14461	000000000000000000000000000000000000000	22:21:10 22:21:46 22:22:22 22:22:58 22:23:34 22:24:10 22:24:46 22:25:57 22:26:33 22:27:45 22:28:21 22:28:57 22:28:57 22:29:33 22:30:45 22:31:57 22:31:57 22:32:33 22:33:44 22:34:56 22:35:32 22:36:44 22:37:20 22:37:56	2.6764 2.6864 2.6964 2.7064 2.7164 2.7263 2.7363 2.7463 2.7563 2.7662 2.7762 2.7862 2.7962 2.8062 2.8161 2.8260 2.9259 2.9259 2.9359 2.9359 2.9359 2.9359 2.9359 2.9359 2.9359 2.9359 2.9359	1108.36 1110.11 1112.73 1113.61 1114.49 1116.25 1117.13 1118.88 1119.76 1121.52 1123.27 1124.15 1125.03 1126.78 1127.67 1129.42 1131.17 1132.92 1133.81 1134.69 1136.44 1138.19 1138.21 1139.96 1140.84 1141.73 1142.61 1144.36 1145.25



Inside Recorder



Outside Recorder .

#### DST REPORT

#### GENERAL INFORMATION

DATE : 12/18/96 TICKET : 21751 CUSTOMER : RITCHIE EXPLORATION INC LEASE : FRANKLIN WELL : #1 TEST: 5 GEOLOGIST: CHRISTIAN

WELL : #1 TEST: 5 GEOLOGIST: CHRISTIAN
ELEVATION: 3105 KB FORMATION: L KANSAS CITY J

SECTION: 11 TOWNSHIP: 6S
RANGE: 33W COUNTY: THOMAS STATE: KS

RANGE : 33W COUNTY: THOMAS STATE : KS GAUGE SN#: 13551 RANGE : 4150 CLOCK : 12

## WELL INFORMATION

PERFORATION INTERVAL FROM: 4118.00 ft TO: 4170.00 ft TVD: 4170.0 ft

SIZE:

0.000 in

DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL

DEPTH OF RECORDERS: 4121.0 ft 4124.0 ft

TEMPERATURE: 119.0

DRILL COLLAR LENGTH: 0.0 ft 0'.000 in I.D.: WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in DRILL PIPE LENGTH : 4095.0 ft I.D.: 3.800 in TEST TOOL LENGTH : 23.0 ft TOOL SIZE : 5.500 in ANCHOR LENGTH 52.0 ft ANCHOR SIZE: 5.500 in SURFACE CHOKE SIZE : 0.750 in BOTTOM CHOKE SIZE: 0.750 in MAIN HOLE SIZE : 7.875 in PACKER DEPTH: 4113.0 ft PACKER DEPTH: 4118.0 ft TOOL JOINT SIZE : 4.5XH 6.750 in SIZE: 4118.0 ft 0.0 ft SIZE: 6.750 in PACKER DEPTH: SIZE: 0.000 in

## MUD INFORMATION

DRILLING CON. : WHITE & ELLIS

MUD TYPE : CHEMICAL VISCOSITY: 48.00 cp WEIGHT : 9.000 ppg WATER LOSS: 10.400 cc

CHLORIDES : 4000 ppm

JARS-MAKE : SERIAL NUMBER:
DID WELL FLOW?: NO REVERSED OUT?: NO

0.0 ft

#### COMMENTS

## Comment

PACKER DEPTH:

INITIAL FLOW PERIOD STRONG BLOW - BOTTOM OF BUCKET IN 20 MINUTES. FINAL FLOW PERIOD FAIR BLOW - 6 INCHES IN WATER.

Γ	FLUII	RECOVERY				
	Feet of Fluid	% Oil	- % Gas	% Water	% Mud 	Comments
	90.0 150.0 30.0 0.0	50.0 35.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 60.0 0.0	50.0 65.0 40.0 0.0	MUD CUT OIL OIL CUT MUD MUDDY WATER CHLORIDES 35000 PPM

## RATE INFORMATION

. 47.

OIL VOLUME: 1.3676 STB
GAS VOLUME: 0.0000 SCF
MUD VOLUME: 2.1671 STB
WATER VOLUME: 0.2525 STB
TOTAL FLUID: 3.7871 STB

TOTAL FLOW TIME: 90.0000 min. AVERAGE OIL RATE: 53.8612 STB/D AVERAGE WATER RATE: 6.7327 STB/D

# FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1977.00

p1 p End Duration Description 52.00 73.00 45.00 INITIAL FLOW 188.00 INITIAL SHUT-IN 60.00 125.00 135.00 45.00 FINAL FLOW 188.00 60.00 FINAL SHUT-IN

FINAL HYDROSTATIC PRESSURE: 1925.00

# OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1983.00

Description	Duration	p1	p End
INITIAL FLOW INITIAL SHUT-IN FINAL FLOW FINAL SHUT-IN	45.00 60.00 45.00 60.00	42.68	80.13 167.22 146.32 171.58

FINAL HYDROSTATIC PRESSURE: 1928.00

#### FLUID SAMPLE REPORT

: 21751

FORMATION: L KANSAS CITY J

## GENERAL INFORMATION

TICKET DATE : 12/18/96 CUSTOMER: RITCHIE EXPLORATION INC

: FRANKLIN LEASE GEOLOGIST: CHRISTIAN TEST: 5 WELL : #1

ELEVATION: 3105 KB

SECTION : 11

TOWNSHIP : 6S : 33W RANGE COUNTY: THOMAS STATE : KS GAUGE SN#: 13551 **RANGE**: 4150 CLOCK : 12

## SAMPLE INFORMATION

PRESSURE IN SAMPLER: 100.00 PSIG BHT: 119.0 DEG F

TOTAL VOLUME OF SAMPLER: 3150.00 cc TOTAL VOLUME OF SAMPLE: 0.00 cc OIL: 0.00 cc WATER: 2850.00 cc

0.00 cc MUD: 1.10 cc GAS: OTHER: 0.00 cc

#### RESISTIVITY

DRILLING MUD: .2 @ 64 DEGREES F MUD PIT SAMPLE: 2. @ 64 DEGREES F CHLORIDE CONTENT: 35000.00 ppm CHLORIDE CONTENT: 4000.00 ppm

GAS/OIL RATIO: **GRAVITY:** 

WHERE WAS SAMPLE DRAINED: RIG

REMARKS:

. 149 .

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21751 DST 5

[Wednesday: Dec 18

Medites	uay.	Dec.	ΤΟ,	T99
Page	1		•	

REC DAY	REAL	DT	BHP
	TIME	(HRS)	(PSIA)
6 116 122 334 45 556 677 889 901 1112 1131 1145 1156 1616 1616 1616 1616 1616 161	23:36:1 23:36:5 23:37:3 23:38:4 23:39:5 23:39:5 23:40:3 23:41:4 23:42:5 23:44:4 23:44:4 23:44:4 23:44:4 23:44:4 23:45:5 23:	5       0.0100         7       0.0200         7       0.0300         9       0.0500         9       0.0599         7       0.0699         7       0.0799         8       0.0999         9       0.1099         9       0.1199         9       0.1299         9       0.1499         9       0.1599         1       0.1798         1       0.1699         1       0.1798         1       0.1798         1       0.1699         1       0.1798         1       0.1898         1       0.2098         1       0.2298         1       0.2598         1       0.3297         1       0.3497         1       0.3497         1       0.3497         1       0.3497         1       0.3897         1       0.3897         2       0.3897         3       0.3897         4       0.3597         4       0.3597         4       0.3897	39.19 39.19 40.94 41.81 42.68 42.68 42.69 45.29 45.29 47.90 47.90 47.90 47.90 52.26 53.13 54.00 55.74
206 211 216 221 226	1 0: 0:1 1 0: 0:5 1 0: 1:3 1 0: 2: 1 0: 2:4 1 0: 3:1	54 0.4097 80 0.4197 6 0.4296 42 0.4396 18 0.4496	58.35 59.23 59.23 60.10 60.97
231	1 0: 3:5	54     0.4596       30     0.4696       6     0.4796       42     0.4896       18     0.4996       54     0.5096	62.71
236	1 0: 4:3		62.71
241	1 0: 5:4		64.45
246	1 0: 6:1		66.19
251	1 0: 6:5		66.19
256	1 0: 7:3		67.06

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21751 DST 5 [Thursday: Dec. 19, 1996] Page 2

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
266 271 276 281 286 291 306 311 316 321 333 341	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0: 8: 6 0: 8:42 0: 9:17 0: 9:53 0:10:29 0:11: 5 0:11:41 0:12:17 0:12:53 0:13:29 0:14: 5 0:14:41 0:15:17 0:15:53 0:16:29 0:17: 5 END FLOW	0.5296 0.5396 0.5396 0.5595 0.5595 0.5695 0.5995 0.6095 0.6295 0.6295 0.6395 0.6395 0.6495 0.6594 0.6694 0.6794	67.94 68.81 70.55 71.42 71.42 72.29 74.03 74.90 75.77 76.64 77.52 78.39 79.26 80.13 80.13
3556161616161616161616161616161616161616	111111111111111111111111111111111111111	START SHU 0:17:41 0:18:53 0:19:29 0:20:41 0:21:53 0:22:29 0:22:29 0:23:41 0:24:17 0:24:53 0:25:29 0:26:41 0:27:17 0:27:53 0:28:29 0:29:40 0:30:52 0:31:28 0:32:40 0:32:40 0:33:52 0:34:28 0:35:40 0:35:40 0:36:52 0:36:52 0:36:52 0:36:52	0.6894 0.6994 0.7094 0.7194 0.7294 0.7394 0.7594 0.77594 0.77693 0.7893 0.8093 0.8193 0.8293 0.8293 0.8493 0.8593 0.8693 0.8693 0.8793 0.88992 0.91992 0.91992 0.9290 0.93992 1.0191 1.0291 1.0391	102.77 114.10 121.93 126.29 131.52 135.87 140.22 143.45 148.06 149.81 155.52 1553.29 1555.97 1557.64 158.52 1558.52 1559.39 161.13 161.13 161.13 162.00 162.00 162.00 162.87 162.87

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21751 DST 5

[Thursday: Dec. 19, 1996] Page 3

riela:	TKT	Z1/51 DS	51 5	
REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
53344616161616161616161616161616161616161	111111111111111111111111111111111111111	0:41:40 0:41:1528 0:41:42:528 0:42:528 0:42:528 0:44:45:528 0:44:45:528 0:44:45:528 0:45:528 0:45:528 0:45:528 0:46:1528 0:47:468:273951:528 0:47:468:273951:528 0:47:488:273951:528 0:47:488:273951:528 0:47:488:273951:528 0:47:488:273951:528 0:47:488:273951:528 0:47:488:273951:528 0:47:488:273951:528 0:47:488:273951:528 0:47:488:273951:528 0:47:488:273951:528 0:47:488:273951:528 0:488:288 0:49:508 0:508	1.0591 1.0691 1.0791 1.0891 1.10991 1.1191 1.1291 1.1391 1.1590 1.1590 1.1590 1.1690 1.12290 1.2290 1.2290 1.22889 1.23889 1.33189 1.33289 1.33289 1.3488 1.35889 1.35889 1.35888 1.4488 1.4488 1.4488 1.4488 1.4488 1.4588 1.4588 1.4588 1.4588 1.4588 1.4588 1.4588 1.5587	162.87 162.87 162.87 162.87 162.87 162.87 162.87 163.74 163.74 163.74 163.74 163.74 163.74 163.74 163.74 163.74 163.74 164.61 164.61 164.61 164.65 165.48 166.33 167.22 16

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21751 DST 5 [Thursday: Dec. 19, 1996] Page 4

rieia:	IVI	21/51 DS	DI D	
REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
806 811 816 821 826 831 836 841 846 851	1 1 1 1 1 1 1 1	1:12:50 1:13:26 1:14: 2 1:14:38 1:15:14 1:15:50 1:16:26 1:17: 2 1:17:38 1:18:14 END SHUTIN		167.22 167.22 167.22 167.22 167.22 167.22 167.22 167.22 167.22
888889991505050505050505050505050505050505050	111111111111111111111111111111111111111	TART:53951:139511:223:421539511:223:231:224:2311:225:339511:225:339511:225:339511:225:339511:225:339511:335:335:336:338:339:331:335:336:338:339:331:335:336:338:339:331:335:336:338:339:331:335:336:338:339:331:335:336:338:339:331:335:336:338:339:331:335:336:338:339:331:335:336:338:339:331:335:336:338:339:331:335:336:338:339:331:335:336:338:339:331:335:338:339:331:335:338:339:331:335:338:339:331:335:338:339:339	1.7605 1.7705 1.7805 1.7805 1.805 1.8105 1.8205 1.8305 1.8405 1.8505 1.8604 1.8704 1.9904 1.9904 1.9904 1.99304 1.99404 1.99504 1.99504 1.9903 2.0103 2.0203 2.0203 2.0203 2.0303 2.0403 2.0503 2.0503 2.0703 2.0803 2.0903 2.1102 2.1102 2.1102 2.1102 2.1102 2.1102 2.1102 2.1102 2.1102 2.1102 2.1102 2.1102 2.1102 2.1102 2.1102	122.81 122.81 121.93 121.06 120.19 120.19 120.32 119.32 119.32 119.32 119.32 119.32 119.32 119.32 119.32 119.32 119.32 119.32 119.32 119.32 119.33 121.93 121.93 121.93 122.81 122.81 122.81 122.81 122.81 123.124.55 124.55 124.55 124.55 124.55 124.55 124.55 124.55 124.55 125.29 127.16 127.16 128.03

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21751 DST 5

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[Thursday: Dec. 19, 1996] Page 5

rieia:	TKT	21751	טאר ס		
REC #	DAY	REAL TIME	(	DT HRS)	BHP (PSIA)
1070 1075 1085 10995 1100 11120 11120 11135 11145 11155 11165 11177 11189 1120 11210 11220 11220 11220 11220 11220 11220 11220 11220 11220 11220 11220	111111111111111111111111111111111111111	2: 0: 2: 1: 2: 2: 2: 3: 2: 3: 2: 4: 2: 5: 2: 6: 2: 6:	2063840627395173951739517395173950W	2.1902 2.2002 2.2102 2.2201 2.2301 2.2401 2.2501 2.2701 2.2801 2.31001 2.33001 2.33000 2.34000 2.3500 2.3700 2.3800 2.3800 2.34000 2.44000 2.44000 2.44509 2.44699 2.4500 2.46699 2.6669 2.	128.90 128.90 129.77 131.52 131.52 131.52 133.26 133.26 133.26 133.26 133.26 134.13 135.00 135.00 135.87 137.61 137.61 137.61 137.61 137.61 139.35 139.35 140.22 140.22 140.22 140.22 140.22 141.10 142.84 146.32
1231 1235 1240 1245 1250 1255 1260 1265 1270 1275 1280 1295 1300 1315 1310 1315 1320 1325	1 1 1 1 1 1 1 1 1 1 1 1 1 1	2: 8:	31 7 43 19 55 13 13 13 14 15 15 15 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	2.5119 2.5199 2.5199 2.5299 2.5399 2.5599 2.5599 2.5699 2.5798 2.6098 2.6198 2.6298 2.6398 2.6498 2.6598 2.6698 2.6698 2.6698	146.32 148.06 150.68 153.29 155.03 157.64 158.52 160.26 161.13 162.00 163.74 164.61 165.48 166.35 166.35 166.35 166.35

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21751 DST 5 [Thursday: Dec. 19, 1996] Page 6

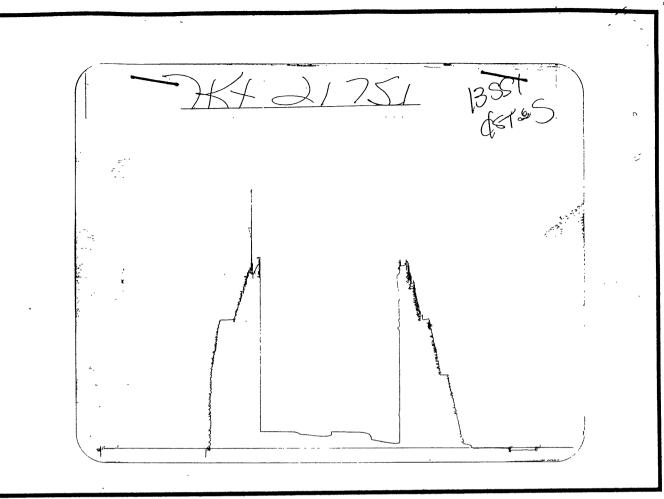
rieta:	TKT	21/51 DS	01 5	F
REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
13345050505050505050505050505050505050505	111111111111111111111111111111111111111	2:190:115306223:121:1339511739	2.7097 2.7197 2.7297 2.7397 2.7397 2.7497 2.7597 2.77997 2.78997 2.8196 2.8296 2.8396 2.8496 2.8596 2.8596 2.9196 2.9299 2.93995 2.93999 2.93999 3.01994 3.02993 3.02993 3.03994 3.11994 3.1294 3.12996 3.1296 3.12996 3.12996 3.12996 3.12996 3.12996 3.12996 3.12996 3.12996	167.22 167.22 167.22 168.10 168.97 168.97 168.97 168.97 168.97 168.97 168.97 168.97 168.97 168.97 168.97 168.97 168.97 168.97 168.97 168.97 169.84 169.84 169.84 169.84 170.71

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21751 DST 5

, 55.

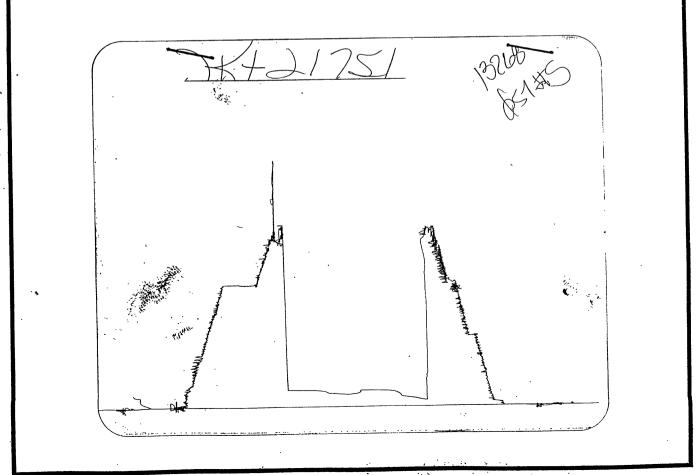
[Thursday: Dec. 19, 1996] Page 7

REC	DAY	REAL	DT	BHP
#		TIME	(HRS)	(PSIA)
1610 1615 1620 1620 1630 1645 16655 16677 16688 16699 17715 1710 1725		2:51:53 2:52:29 2:53:40 2:54:16 2:54:52 2:55:28 2:56:40 2:57:16 2:57:58:28 2:59:40 2:59:40 3:16:32 3:16:33:33:33:33:33:33:33:33:33:33:33:33:33	3.2593 3.2693 3.2793 3.2893 3.2992 3.3192 3.3292 3.3392 3.3592 3.3592 3.3592 3.3692 3.3692 3.41991 3.4291 3.44591 3.44591 3.44591 3.44691 3.44891	170.71 170.71 170.71 170.71 170.71 170.71 170.71 171.58 171.58 171.58 171.58 171.58 171.58 171.58 171.58 171.58 171.58 171.58 171.58 171.58 171.58



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Inside Recorder



Outside Recorder

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#### DST REPORT

#### GENERAL INFORMATION

TICKET : 21752 LEASE : FRANKLIN DATE : 12/20/96 CUSTOMER: RITCHIE EXPLORATION INC GEOLOGIST: CHRISTIAN FORMATION: PAWNEE

WELL: #1 TEST: 6
ELEVATION: 3105 KB
SECTION: 11
RANGE: 33W COUNTY: THOMAS
GAUGE SN#: 13551 RANGE: 4150 TOWNSHIP : 6S STATE : KS CLOCK : 12

#### WELL INFORMATION

PERFORATION INTERVAL FROM: 4282.00 ft TO: 4373.00 ft TVD: 4373.0 ft

DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL

DEPTH OF RECORDERS: 4285.0 ft 4288.0 ft

TEMPERATURE: 122.0

DRILL COLLAR LENGTH: 0.0 ft WEIGHT PIPE LENGTH: 0.0 ft I.D.: I.D.: 0.000 in 0.000 in DRILL PIPE LENGTH: 0.0 ft
DRILL PIPE LENGTH: 4259.0 ft
TEST TOOL LENGTH: 23.0 ft
ANCHOR LENGTH: 91.0 ft
SURFACE CHOKE SIZE: 0.750 in
MAIN HOLE SIZE: 7.875 in
PACKER DEPTH: 4277.0 ft
PACKER DEPTH: 4282.0 ft I.D.: 3.800 in TOOL SIZE : TOOL SIZE: 5.500 in
ANCHOR SIZE: 5.500 in
BOTTOM CHOKE SIZE: 0.750 in 5.500 in TOOL JOINT SIZE : 4.5XH 6.750 in 6.750 in 0.000 in SIZE: SIZE: 0.0 ft PACKER DEPTH: SIZE: PACKER DEPTH: 0.0 ft SIZE: 0.000 in

## MUD INFORMATION

DRILLING CON. : WHITE & ELLIS

VISCOSITY: 47.00 cp MUD TYPE : CHEMICAL 9.200 ppg 5000 ppm WEIGHT WATER LOSS: 10.400 cc

: CHLORIDES

JARS-MAKE SERIAL NUMBER: DID WELL FLOW?: NO REVERSED OUT?: NO

#### COMMENTS

#### Comment

INITIAL FLOW PERIOD WEAK BLOW - 1 1/2 INCHES IN FINAL FLOW PERIOD VERY WEAK SURFACE BLOW.

# DST REPORT (CONTINUED)

	FLUID	RECOVERY				
Feet Flu	of id	% Oil	% Gas	% Water	% Mud	Comments
4	5.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME: 0.0000 STB
GAS VOLUME: 0.0000 SCF
MUD VOLUME: 0.0701 STB
WATER VOLUME: 0.0000 STB
TOTAL FLUID: 0.0701 STB

TOTAL FLOW TIME: 60.0000 min. AVERAGE OIL RATE: 0.0000 STB/D AVERAGE WATER RATE: 0.0000 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2122.00

p End p1 Duration Description 20.00 20.00 30.00 INITIAL FLOW 83.00 45.00 INITIAL SHUT-IN 20.00 20.00 30.00 FINAL FLOW 73.00 45.00 FINAL SHUT-IN

FINAL HYDROSTATIC PRESSURE: 2112.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2130.00

p End Duration p1 Description 50.15 30.00 49.43 INITIAL FLOW 101.88 45.00 INITIAL SHUT-IN 36.10 36.25 30.00 FINAL FLOW 90.30 45.00 FINAL SHUT-IN

FINAL HYDROSTATIC PRESSURE: 2118.00

#### FLUID SAMPLE REPORT

# GENERAL INFORMATION

DATE : 12/20/96

CUSTOMER: RITCHIE EXPLORATION INC TEST: 6

WELL : #1

ELEVATION: 3105 KB

SECTION : 11

RANGE : 33W

GAUGE SN#: 13551

COUNTY: THOMAS

**RANGE** : 4150

TICKET

: 21752

LEASE : FRANKLIN

GEOLOGIST: CHRISTIAN FORMATION: PAWNEE

TOWNSHIP : 6S STATE : KS

CLOCK : 12

## SAMPLE INFORMATION

PRESSURE IN SAMPLER:

10.00 PSIG

BHT:

122.0 DEG F

TOTAL VOLUME OF SAMPLER: TOTAL VOLUME OF SAMPLE:

3150.00 cc 0.00 cc

OIL:

0.00 cc

WATER:

0.00 cc

MUD:

3150.00 cc

GAS:

2.60 cc

OTHER:

0.00 cc

# RESISTIVITY

DRILLING MUD:

MUD PIT SAMPLE: GAS/OIL RATIO:

WHERE WAS SAMPLE DRAINED:

REMARKS:

CHLORIDE CONTENT:

0.00 ppm 0.00 ppm

CHLORIDE CONTENT:

**GRAVITY:** 

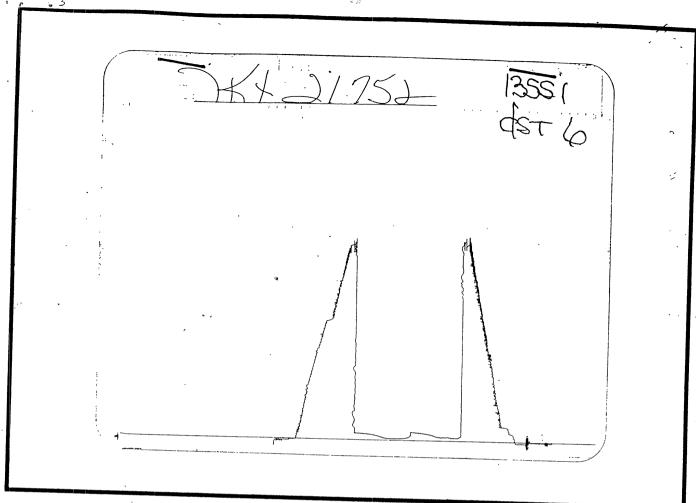
Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21752 DST 6 [Friday: Dec. 20, 1996] Page 1

Fiera:	TKT	21752 DS	1 6	rage	<b></b>
REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	
1 3 12 30 39 48 56 75 84 90 1120 1120 1120 1131 1150 1150 1165 1165 1165 1165 1165 116	000000000000000000000000000000000000000	START FLOW 11:40:52 11:41: 7 11:42:11 11:43:16 11:44:21 11:45:25 11:46:30 11:47:35 11:48:40 11:49:44 11:50:49 11:51:54 11:55:59 11:55:13 11:55:13 11:55:13 11:57:18 11:57:18 11:58:22 11:59:27 12: 0:32 12: 1:37 12: 2:41 12: 3:46 12: 4:51 12: 5:56 12: 7: 0 12: 8: 5 12: 9:10 12: 10:15 END FLOW	0.0000 0.0040 0.0219 0.0399 0.0579 0.0759 0.0939 0.1118 0.1298 0.1478 0.1658 0.2018 0.2018 0.2198 0.2378 0.2558 0.2738 0.2917 0.3097 0.3277 0.3637 0.3637 0.3817 0.3997 0.4176 0.4536 0.4716 0.4896	47.78 47.75 47.71 47.67 47.64 48.47	
255 255 264 273 281 290 309 312 335 335 3399 4126 435 444	000000000000000000000000000000000000000	START SHUT 12:11: 5 12:11:20 12:12:24 12:13:29 12:14:34 12:15:39 12:16:44 12:17:48 12:18:53 12:21: 3 12:22: 8 12:23:13 12:22: 8 12:23:13 12:24:17 12:25:22 12:26:27 12:27:32 12:28:37 12:29:41 12:30:46 12:31:51 12:32:56 12:34: 1	0.5036 0.5076 0.5256 0.5436 0.5616 0.5796 0.6597 0.66517 0.6697 0.6697 0.7057 0.7237 0.7237 0.77597 0.77597 0.77597 0.8137 0.8497 0.8857	51.01 51.85 52.68 53.51 56.09 58.67 62.11 64.69 68.14 70.71 72.42 74.99 76.70 77.53 79.24 80.94 82.65 83.48 86.89 86.89 86.86	

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21752 DST 6 [Friday: Dec. 20, 1996] Page 2

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
453 4621 489 4907 55125 5510 5510 5510 5510 5510 5510 551	000000000000000000000000000000000000000	12:35: 5 12:36:10 12:37:15 12:38:20 12:39:25 12:40:29 12:41:34 12:42:39 12:43:44 12:44:49 12:45:53 12:46:58 12:48: 3 12:49: 8 12:50:12 12:51:17 12:52:22 12:53:27 END SHUTING		90.27 91.97 91.94 93.64 94.48 94.44 95.27 96.11 96.94 97.78 98.61 99.45 99.41 100.24 101.08 101.84 101.88
6017663646566666666666666666666666666666666	000000000000000000000000000000000000000	START FLOW 13: 1:12 13: 2:16 13: 3:21 13: 4:26 13: 5:31 13: 6:35 13: 7:40 13: 8:45 13: 9:49 13:10:54 13:11:59 13:13: 4 13:14: 8 13:15:13 13:16:18 13:15:13 13:16:18 13:17:23 13:19:32 13:21:42 13:22:46 13:23:51 13:24:56 13:24:56 13:24:56 13:27: 5 13:28:10 13:27: 5 13:28:10 13:27: 5 13:28:10 13:27: 5 13:28:10 13:27: 5 13:28:50 13:27: 5 13:28:50 13:27: 5 13:28:50 13:27: 5 13:28:50 13:27: 5 13:28:50 13:27: 5 13:28:50 13:27: 5 13:28:50 13:27: 5 13:28:50 13:27: 5 13:28:50 13:27: 5 13:28:50 13:27: 5 13:28:50 13:27: 5 13:28:50 13:27: 5 13:28:50 13:28:50 13:28:50 13:28:50 13:25 END FLOW 2 START SHUT	1.3388 1.3567 1.3747 1.3927 1.4107 1.4286 1.4646 1.4826 1.5006 1.5185 1.5725 1.5905 1.6264 1.6624 1.6624 1.6984 1.7164 1.7704 1.7883 1.8063 1.8243 1.8423	36.34 34.40 31.64 31.664 31.664 31.77 31.664 31.77 31.664 31.77 31.665 31.32 3
865 869 878 887	0 0 0	13:32: 1 13:32:29 13:33:34 13:34:39	1.8523 1.8603 1.8783 1.8964	36.95 36.93 38.64 40.34

Company: RITCHIE EXPLORATION INC Well: #1 FRANKLIN Field: TKT 21752 DST 6 [Friday: Dec. 20, 1996] Page 3



Inside Recorder

