

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

API NO. 15- 033-20963-0000 **ORIGINAL**
County COMANCHE CO., KANSAS

SW - SW - SW - Sec. 13 Twp. 31 Rge. 18 XX W
480 Feet from SN (circle one) Line of Section
330 Feet from EW (circle one) Line of Section

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

Lease Name PYLE Well # 4-13

Field Name WILMORE

Producing Formation MISS / CHAT

Elevation: Ground 2047' KB 2060'

Total Depth 5720' PBDT 5627'

Amount of Surface Pipe Set and Cemented at 553.30' Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set Feet

If Alternate II completion, cement circulated from
feet depth to w/ sx cmt.

Drilling Fluid Management Plan A.H.I. 11-19-98 W.C.
(Data must be collected from the Reserve Pit)

Chloride content 72,000 ppm Fluid volume 358 bbls

Dewatering method used HAULED & EVAPORATED

Location of fluid disposal if hauled offsite:

Operator Name RICHARDSON OIL OPERATION

Lease Name UNRUH License No. 5414

 Quarter Sec. 15 Twp. 30 S Rng. 18 E/W

County KIOWA Docket No. D-25237

Operator: License # 4548

Name: ONEOK Resources Company

Address P.O. Box 871

City/State/Zip Tulsa, Ok 74102-0871

Purchaser: One Oak Gas Marketing

Operator Contact Person: DARYL DUVALL

Phone (918) 588-7711

Contractor: Name: DUKE DRILLING CO., INC.

License: 5929

Wellsite Geologist: HAROLD TRAPP

Designate Type of Completion

X New Well Re-Entry Workover

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

If Workover:

Operator:

Well Name:

Comp. Date Old Total Depth

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

6/25/98 7/4/98 10/20/98
Spud Date Date Reached TD Completion Date

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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

Signature Daryl K. Duvall

Title DISTRICT ENGINEER Date 10/21/98

Subscribed and sworn to before me this 21st day of October, 19 98.

Notary Public Sheresa Drelton

Date Commission Expires 12-18-01

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Geologist Report Received

Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other
(Specify)

Operator Name ONEOK RESOURCES COMPANY Lease Name PYLE Well # 4-13

Sec. 13 Twp. 31 Rge. 18 East West
 County COMANCHE CO., KANSAS

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datums <input type="checkbox"/> Sample <table border="0"> <tr> <td>Name</td> <td>Top</td> <td>Datum</td> </tr> <tr> <td>HEEBNER</td> <td>4154</td> <td>-2094</td> </tr> <tr> <td>TORONTO</td> <td>4168</td> <td>-2108</td> </tr> <tr> <td>LANSING</td> <td>4340</td> <td>-2280</td> </tr> <tr> <td>BASE KC</td> <td>4766</td> <td>-2706</td> </tr> <tr> <td>MARMATON</td> <td>4824</td> <td>-2764</td> </tr> <tr> <td>PAWNEE</td> <td>4870</td> <td>-2810</td> </tr> <tr> <td>FT. SCOTT</td> <td>4898</td> <td>-2838</td> </tr> <tr> <td>MISSISSIPPI</td> <td>4966</td> <td>-2906</td> </tr> <tr> <td>VIOLA</td> <td>5460</td> <td>-3400</td> </tr> <tr> <td>SIMPSON</td> <td>5626</td> <td>-3566</td> </tr> </table>	Name	Top	Datum	HEEBNER	4154	-2094	TORONTO	4168	-2108	LANSING	4340	-2280	BASE KC	4766	-2706	MARMATON	4824	-2764	PAWNEE	4870	-2810	FT. SCOTT	4898	-2838	MISSISSIPPI	4966	-2906	VIOLA	5460	-3400	SIMPSON	5626	-3566
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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: FOCUSED LOG RESOLUTION,
 COMPENSATED Z-DESILOG, NEUTRON LOG, MINI LOG G.R.,
 CEMENT BOND LOG
Geologist Report

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		20"		45'			
SURFACE	12 1/4"	8 5/8"	24#	553.30'	65/35 Class A	200 100	6%GEL 3%CC 2% GEL 2% CC
PRODUCTION	7 7/8"	5 1/2"	15.5#	5687'	EZ-2	265	10%salt 5%seal

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	4966-4992

TUBING RECORD	Size 2 3/8	Set At 4958	Packer At None	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or Inj.		Producing Method <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)		
Estimated Production Per 24 Hours	Oil Bbls. 0	Gas Mcf 590	Water Bbls. 0	Gas-Oil Ratio Gravity

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

METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval: _____

Date 6-25-78 District Med-Lodge Ticket No. 9630
 Company Duke Drilling Rig 7-17
 Lease 1st Well No. 4-13
 County Comanche State Ks.
 Location Wilmore ks. W/side Field 13-35-18W
Norcross tracks 1/4

CASING DATA: PTA Squeeze
 Surface Intermediate Production Liner
 Size 8 1/2 Type _____ Weight 24 Collar _____

Casing Depths: Top KB Bottom 533

Drill Pipe: Size _____ Weight _____ Collars _____
 Open Hole: Size 10 1/4 T.D. 560 ft. P.B. to _____ ft.

CAPACITY FACTORS:
 Casing: Bbbls/Lin. ft. 0.637 Lin. ft./Bbl. 15.70
 Open Holes: Bbbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Drill Pipe: Bbbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Annulus: Bbbls/Lin. ft. 0.735 Lin. ft./Bbl. 13.60
 Bbbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Perforations: From _____ ft. to _____ ft. Amt. _____

CEMENT DATA:
 Spacer Type: 5 Bbls Freshwater
 Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG _____

LEAD: Pump Time _____ hrs. Type 65:35:61.3%cc + 4 1/2 in seal Excess _____

Amt. 200 Sks Yield 1.97 ft³/sk Density 12.5 PPG

TAIL: Pump Time _____ hrs. Type CLASS A + 3%cc Excess _____

Amt. 100 Sks Yield 1.34 ft³/sk Density 15.7 PPG

WATER: Lead 10.9 gals/sk Tail 6.51 gals/sk Total 16 Bbls.

Pump Trucks Used 255-265 Shure Winson
 Bulk Equip. 259-314 John Kelly

Float Equip: Manufacturer Genoco
 Shoe: Type Cut Depth _____
 Float: Type RAFFLE Depth _____
 Centralizers: Quantity 2 Plugs Top Rubber Btm. SAS
 Stage Collars _____
 Special Equip. 1 Basket
 Disp. Fluid Type Freshwater Amt. 33 1/2 Bbls Weight 8.34 PPG
 Mud Type _____ Weight _____ PPG _____

COMPANY REPRESENTATIVE Ken McGuire

CEMENTER Carl Baldwin

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
10:00						ON location + Rig up
10:15 AM						Pipe on bottom break circulation w/ Rig pumps
10:45	51		5	5	5	Start U freshwater spacer
11:00	100		95	90	53	Mix + pump 200sx 65:35:61.3%cc + 1/2 fl-seal
12:00	250		98	23	6	Mix + pump 100sx CLASS A + 3%cc + 2% gel
12:10						Cement in stage pumps
12:25					2	Switch valves + Release plug
					4	Start Displacement
						Steady RATE
1:35	500		151 1/2	33 1/2		Displacement in, bump plug
	500					std pump

ALLIED CEMENTING CO., INC.

9630

Federal Tax I.D.# 48-0727860

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

ORIGINAL SERVICE POINT:
Medicine Lodge

DATE 6-25-98	SEC. 13	TWP. 31S	RANGE 18W	CALLED OUT 8:00 pm	ON LOCATION 10:00 pm	JOB START 1:05	JOB FINISH 1:35 AM
LEASE Plk	WELL# 4-13	LOCATION Wilmore Ks. west side 1 1/2 W. Ave into			COUNTY Pottawatomie	STATE Ks.	
OLD OR NEW (Circle one)							

CONTRACTOR Duke Rig 217
 TYPE OF JOB surface
 HOLE SIZE 11 1/4 T.D. 553
 CASING SIZE 8 1/2 x 24" DEPTH 553
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX 500 MINIMUM 50
 MEAS. LINE SHOE JOINT 45.21
 CEMENT LEFT IN CSG.
 PERFS.
 DISPLACEMENT 33.5

OWNER
 CEMENT
 AMOUNT ORDERED 200sx 45.35' + 32cc + 1/2 lb seal
 100sx class A + 32cc + 22 gel

COMMON @
 POZMIX @
 GEL @
 CHLORIDE @
 @
 @
 @
 @
 @
 HANDLING @
 MILEAGE @

EQUIPMENT
 PUMP TRUCK CEMENTER Carl Baldwin
 #255-265 HELPER Steve Winters
 BULK TRUCK
 #259-314 DRIVER John Kelly
 BULK TRUCK
 # DRIVER

TOTAL
 SERVICE
 DEPTH OF JOB 553
 PUMP TRUCK CHARGE
 EXTRA FOOTAGE @
 MILEAGE @
 PLUG Rubber @
 @
 @

REMARKS:

Ripe on bottom break circulation w/ rig
 pump 5 BBLs fresh water spacer amp
 200sx 45.35' + 32cc + 1/2 lb seal + 100sx
 class A + 32cc + 22 gel cement in stock dumps
 switch valves + Release plug. Displace
 with 335 BBLs fresh water. Pump plug
 * cement did circulate

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 KANSAS CORP. COMM.
 1998 OCT 26 P 11:00 AM

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 willful 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.

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