

ORIGINAL

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

API NO. 15- 065-22,578 -00-00

County Graham
NE SW NE Sec. 20 Twp. 9 Rge. 22 East West

Operator: License # 5533

Name: Arrowhead Petroleum, Inc.

Address P.O. Box 8287 - Munger Station

City/State/Zip Wichita, KS 67208

Purchaser: _____

Operator Contact Person: Todd Seymour

Phone (316) 681-3921

Contractor: Name: Duke Drilling Co., Inc.

License: 5929

Wellsite Geologist: _____

Designate Type of Completion

New Well Re-Entry Workover

Oil SWD Temp. Abd.

Gas Inj Delayed Comp.

Dry Other (Core, Water Supply)

If OWMO: old well info as follows:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

Drilling Method:

Mud Rotary Air Rotary Cable

05-23-90 05-30-90

Spud Date _____ Date Reached TD _____ Completion Date _____

3630 Ft. North from Southeast Corner of Section

1650 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)

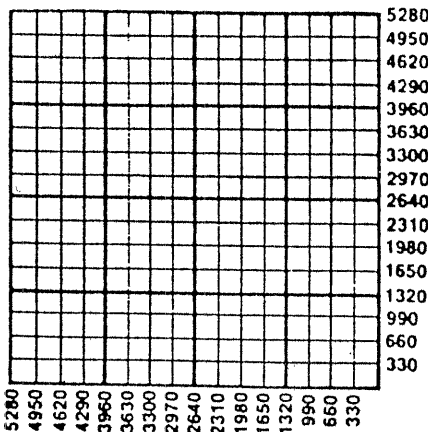
Lease Name Denning Well # 1

Field Name _____

Producing Formation _____

Elevation: Ground 2355 KB 2364

Total Depth 3840' PBDT _____



Amount of Surface Pipe Set and Cemented at 265 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.

RECEIVED
STATE CORPORATION COMMISSION
JUN 14 1990
OIL & GAS CONSERVATION DIVISION
Wichita, Kansas

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 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 drillers time log 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. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

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 Todd Seymour
Title President Date 6/13/90

Subscribed and sworn to before me this 13th day of June, 19 90.

Notary Public Ruth M. Bassett

Date Commission Expires May 30, 1991

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

NOTARY PUBLIC
RUTH M. BASSETT
State of Kansas
My Appt. Exp 5/30/91

SIDE TWO

Operator Name Arrowhead Petroleum, Inc.

Lease Name Denning

Well # 1

Sec. 20 Twp. 9 Rge. 22
 East
 West

County Graham

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

Drill Stem Tests Taken Yes No
(Attach Additional Sheets.)

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No
(Submit Copy.)

DST#1 3691-3703 Misrun
See attached sheet for continued
DST # 2 # 3 # 4 # 5

Formation Description

Log Sample

Name	Top	Bottom
Heebner	3568	(-1204)
Lansing	3606	(-1242)
B K C	3833	(-1469)

CASING RECORD

New Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12 1/4"	8-5/8"	20#	265'	60/40poz	150	2% gel 3% cc.

PERFORATION RECORD

Shots Per Foot Specify Footage of Each Interval Perforated

Acid, Fracture, Shot, Cement Squeeze Record

(Amount and Kind of Material Used) Depth

TUBING RECORD

Size Set At Packer At

Liner Run Yes No

Date of First Production Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

Disposition of Gas:

Vented Sold Used on Lease
(If vented, submit ACO-18.)

METHOD OF COMPLETION

Open Hole Perforation Dually Completed Commingled
 Other (Specify) _____

Production Interval

ARROWHEAD PETROLEUM, INC.

MUNGER STATION

POST OFFICE BOX 8287

WICHITA, KANSAS 67208

Continued: Drill Stem
Denning Lease
Graham Co., Kansas

#2 DST 3682-3707
30" 30" 30" 30"
IFP 36-29
ICIP 384
FFP 36-29
FLIP 355 Rec. 5' Mud

#3 DST 3788-3812
30" 30" 30" 30"
IFP 14-14
ICIP 21
FFP 14-14
FCIP 14 Rec. 2' Mud

#4 DST 3810-40
Misrun

#5 DST 3788-3840
30" 30" 30" 30"
IFP 50-43
ICIP 391
FFP 50-43
FCIP 347
Rec. 30' Mud
With no show of Oil or gas

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Wichita, Kansas

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Wichita, Kansas

Phone 913-483-2627, Russell, Kansas

Phone Plainville 913-434-2812

Phone 316-793-5861, Great Bend, Kansas

Phone Ness City 913-798-3843

ALLIED CEMENTING CO., INC. No. 9752

Home Office P. O. Box 31

Russell, Kansas 67665

Date	Sec.	Twp.	Range	Called Out	On Location	Job Start	Finish
5-29-70	20	9	22	9:30 PM	1:45 AM	2:15 AM	4:45 AM
Lease	Well No.	Location		County	State		
Denning	#1	Hill City T&S 33E		Graham	Kansas		

Contractor	Owner
Duke Dalg	Same
Type Job	To Allied Cementing Co., Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Hole Size	T.D.
7 7/8"	3840'
Csg.	Depth
8 3/4"	265'
Tbg. Size	Depth
Drill Pipe	Depth
Tool	Depth
Cement Left in Csg.	Shoe Joint
Press Max.	Minimum
Meas' Line	Displace
Perf.	

Charge To	Street
Arrowhead Petroleum Inc.	
City	State
The above was done to satisfaction and supervision of owner agent or contractor.	
Purchase Order No.	
X	
CEMENT	
Amount Ordered	
190 SKS 60/40 Poz. 6% Gr	2 SKS F10-3071

EQUIPMENT

#177 No.	Cementor	M. KAUFMAN
Pumptrk	Helper	Glenn G.
No.	Cementor	
Pumptrk	Helper	
#155	Driver	JIM Q
Bulktrk	Driver	

Consisting of	
Common	
Poz. Mix	
Gel.	
Chloride	
Quickset	
Sales Tax	

DEPTH of Job

Reference:	
#	DUMP TRK
	7-3/4" P119
	1.00 Per Mile
	Sub Total
	Tax
	Total

Handling	
Mileage	
Sub Total	
Total	
Floating Equipment	

Remarks:

25	SKS @ 1910'
100	SKS @ 1100'
40	SKS @ 310'
10	SK @ 40'
15	SKS IN RT Hole

J. KAUFMAN

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 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.

Phone 913-483-2627, Russell, Kansas
 Phone 316-793-5861, Great Bend, Kansas

Phone Plainville 913-434-2812
 Phone Ness City 913-798-3843

ALLIED CEMENTING CO., INC. N^o 10022

Home Office P. O. Box 31 Russell, Kansas 67665

Date	2-27-90	Sec.	20	Twp.	75	Range	22 W	Called Out	On Location	Job Start	Finish
Lease	Dancing	Well No.	1	Location	Hill City 28 3/4 E			County	Green	State	KS

Contractor		Duke Jorg #4	
Type Job		Surface	
Hole Size	12 1/4	T.D.	265
Csg.	28	Depth	265
Tbg. Size		Depth	
Drill Pipe		Depth	
Tool		Depth	
Cement Left in Csg.	10 1/2	Shoe Joint	
Press Max.		Minimum	
Meas Line		Displace	
Perf.			

Owner	LS
To Allied Cementing Co., Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.	
Charge To	Arrowhead Petroleum Inc.
Street	
City	State
The above was done to satisfaction and supervision of owner agent or contractor.	
Purchase Order No.	
X	

EQUIPMENT		
No.	Cementer	
Pumptrk 173	Helper	Dave
	Helper	David
Pumptrk	Cementer	
	Helper	
Bulktrk 150	Driver	Mark
Bulktrk	Driver	

Amount Ordered	130 @ 14.00 = 2320.00
CEMENT	
Consisting of	
Common	
Poz. Mix	
Gel.	
Chloride	
Quickset	
	Sales Tax

DEPTH of Job	
Reference:	Pump hole 9
	10 1/2 ft
	10 1/2 ft
	10 1/2 ft
	Sub Total
	Tax
	Total

Handling	
Mileage	
	Sub Total
	Total
Floating Equipment	

Remarks: Cement Air

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