

ORIGINAL

SIDE ONE

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

Operator: License # 5422
Name: Abercrombie Drilling, Inc.
Address 150 N. Main, Suite 801

City/State/Zip Wichita, KS 67202
Purchaser: _____
Operator Contact Person: Jerry A. Langrehr
Phone (316) 262-1841

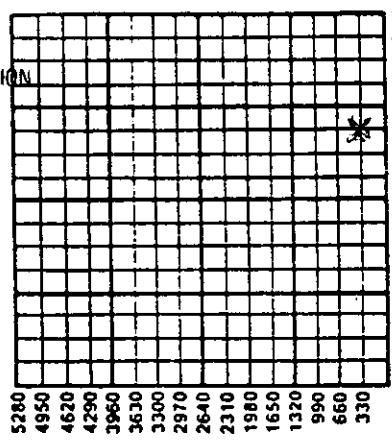
Contractor: Name: Abercrombie RTD, Inc.
License: 30684
Wellsite Geologist: Steve Frankamp

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD Temp. Abd.
 Gas Inj Delayed Comp.
 Dry Other (Core, Water Supply, etc.)

If **OWMO**: old well info as follows:
Operator: N/A
Well Name: _____
Comp. Date _____ Old Total Depth _____

Drilling Method:
 Mud Rotary Air Rotary Cable
7-23-91 7-30-91
Spud Date Date Reached TD Completion Date

API NO. 15- 165-21,584
County Rush
NE SE NE Sec. 31 Twp. 18S Rge. 17 East West
3630' FSL ✓ Ft. North from Southeast Corner of Section
330' FSL ✓ Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)
Lease Name Tammen Well # 1
Field Name unknown
Producing Formation Arbuckle
Elevation: Ground 2073' KB 2078'
Total Depth 3882' PBDT _____



5280
4950
4620
4290
3960
3630
3300
2970
2640
2310
1980
1650
1320
990
660
330
N
A/I/Dra

Amount of Surface Pipe Set and Cemented at 1213.47' 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.

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 Jack Wharton
Title Vice Pres Date 8-30-91
Subscribed and sworn to before me this 30th day of August, 19 91.
Notary Public Angela Woodard
Date Commission Expires March 20, 1993

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)

ANGELA WOODARD
State of Kansas
My Appt. Exp. Mar. 20, 1993

ANGELA WOODARD
State of Kansas

SIDE TWO

Operator Name Abercrombie RTD, Inc. Lease Name Tammen Well # 1
 Sec. 31 Twp. 18S Rge. 17 East West
 County Rush

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 3786'-3838' DST #3 3838'-3845' (Arbuckle)
 Packer failure 30-30-30-30
 DST #2 3727'-3838' Rec. 5' mud
 30-45-30-45 IFPs 43-43 ISIP 910
 Rec. 10' mud, no show FFPS 43-43 FSIP 616
 IFPs Not Valid ISIP Not Valid
 FFPS 106-106 FSIP 159
 (Tool was plugging 1st open period)

Formation Description

Log Sample

| Name | Top | Bottom |
|----------------|-------|----------|
| Anhydrite | 1195' | (+883') |
| Base Anhydrite | 1223' | (+855') |
| Heebner | 3418' | (-1340') |
| Toronto | 3433' | (-1355') |
| Lansing | 3466' | (-1388') |
| 'B' Zone O | 3491' | (-1413') |
| EKC | 3731' | (-1653') |
| Ero Arbuckle | 3824' | (-1746') |
| RTD | 3882' | (-1804') |
| LTD | 3883' | (-1805') |

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" | 28# | 1213.47' | 60-40 portmix | 400 | 2% gel 3% cc |
| | | | | | | | |
| | | | | | | | |

| PERFORATION RECORD | Acid, Fracture, Shot, Cement Squeeze Record |
|---|---|
| Shots Per Foot | (Amount and Kind of Material Used) |
| Specify Footage of Each Interval Perforated | Depth |
| | |
| | |
| | |
| | |
| | |
| | |

TUBING RECORD Size Set At Packer At Liner Run Yes No

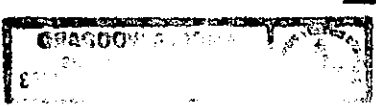
Date of First Production _____ Producing Method Flowing Pumping Gas Lift Other (Explain) _____

| 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 _____



15-165-21584-0000

A. L. ABERCROMBIE, Inc.

PIPE TALLY

DATE 7-23 1971

| No. Pcs. | LENGTH | | LENGTH | | LENGTH | | LENGTH | | LENGTH | |
|----------|--------|------|--------|------|---------------------------|------|--------|-------|--------|------|
| | Ft. | Ins. | Ft. | Ins. | Ft. | Ins. | Ft. | Ins. | Ft. | Ins. |
| 1 | 41 | 03 | 36 | 24 | Tally through 12 19.22 | | | | | |
| 2 | 41 | 05 | 34 | 47 | | | | | | |
| 3 | 37 | 61 | 36 | 93 | | | | | | |
| 4 | 32 | 71 | 39 | 29 | | | | | | |
| 5 | 37 | 20 | 37 | 16 | | | | | | |
| 6 | 43 | 58 | 36 | 77 | | | | | | |
| 7 | 39 | 11 | 41 | 19 | | | | | | |
| 8 | 40 | 99 | 40 | 52 | | | 12 | 11.40 | | |
| 9 | 35 | 16 | 42 | 54 | | | - | 6.00 | | |
| 10 | 39 | 65 | 37 | 21 | | | 12 | 05.40 | Tally | |
| 11 | 41 | 02 | 40 | 04 | | | 8 | - | Length | |
| 12 | 41 | 73 | | | | | 12 | 13.40 | 3470 | |
| 13 | 43 | 90 | | | | | 2 | - | Length | |
| 14 | 38 | 02 | | | | | 12 | 11.40 | RTD | |
| 15 | 40 | 97 | | | | | | | | |
| 16 | 40 | 58 | | | | | | | | |
| 17 | 40 | 83 | | | | | | | | |
| 18 | 35 | 52 | | | | | | | | |
| 19 | 37 | 86 | | | | | | | | |
| 20 | 40 | 65 | | | | | | | | |
| Total | 789 | 11 | 422 | 36 | | | | | | |

RECEIVED
STATE CORPORATION COMMISSION
SEP 06 1991

Col. No. _____

Stock of A & W Supply

Weight 28 ²¹ Size 8

Grade Wood Coupling _____ Thd 2 1/2

From End Stock

Sent To Tanner

Total 12 11 47 T. G. H.

Remarks _____

No. Joints 31 Car No. _____ B/L No. _____

Tallied By Martin

JUL 26 1991

REPORT OF RUNNING AND CEMENTING CASING

A. L. ABERCROMBIE, INC.

ABERCROMBIE DRILLING, INC.

Date 7-23-91

Lease Name Tammen Well No. #1
 Lease Owner/Operator A.L. Abercrombie
 Drilling Contractor Abercrombie RTD, Inc. Rig No. 8
 Location NE - SE - NE Sec. 31 Twp 18S Rge 17W County Rush,
 Casing Received From: (Supply) ATW Supply Inv. No. _____
 Casing Charged To: (Company) A.L. Abercrombie Inc.
 Casing Trucked By: Our Trucks
 Amount Of Casing Received 31 Jts. 1219.22 (Threads on) Ft.
 Amount Of Casing Left Over _____ Jts. _____ Ft.
 Disposition Of Casing Left Over _____

Rotary Bushing T.D. 12 15 Ft. Size Of Hole 12 1/4 In.
 Casing Set At: (R.B. To Bottom Of Shoe) 31 Jts. 1213.47 (Threads off)
 Size 8 5/8 Weight 28 Thread 8 RD
 Range 3 Grade USRB Make _____
 Shoe (Type—Make) Texas Slice Float Collar (Type—Make) _____
 Stage Collar (Make—Set At) _____
 Centralizers (Set At) _____

RECEIVED
 STATE CORPORATION COMMISSION
 SEP 06 1991
 9-6-91
 DIVISION

Cemented With 400 Sacks Of 60/40 102 2% gel 3% CC Cement
 Cemented By Allied Plug To: 1193.47 Ft.
 Plugs (Number—Type) 1x 8 5/8 Rubber
 Longstring—R.B. To Top Of Braden Head 7' Ft.
 Surface String—R.B. To Top Of Collar 8' Ft.

Remarks: Spudded @ 12 15 PM 7-23-91 Ran for used 8 5/8 x 28
Casing Tally 1205.47 Set @ 1213.47 7 400s 60/40 102 2% gel
3% CC By Allied Cement Did Circ. RTD Survey is (1 1/4)
WOC 12 hrs. Plug Down @ 11.45 7-24-91 Drill Plug @ 11.45 7-24-91
Water. East Moose RTD Box 94 Rush Center, KS. 67575 600⁰⁰

NOTE: All measurements to be made in feet and hundredths.
 All casing to be ran in numerical order of tally.
 Attach tally to back of casing report.

Anthony Marts
 Company Representative

Phone 913-483-2627, Russell, Kansas

Phone 316-793-5861, Great Bend, Kansas

Phone Plainville 913-434-2812

Phone Ness City 913-798-3843

ORIGINAL

JUL 26 1991

NOV 1999

ALLIED CEMENTING CO., INC.

Home Office P. O. Box 31

Russell, Kansas 67665

New

15-165-2584-0000

| | | | | | | | | | | | | | | | |
|-------|---------|----------|-----|----------|-----------------------|-------|----|------------|----------|-------------|----------|-----------|-----------|--------|-----------|
| Date | 7-24-91 | Sec. | 31 | Fwp. | 18 | Range | 17 | Called Out | 5:00A.M. | On Location | 6:30A.M. | Job Start | 11:00A.M. | Finish | 11:45A.M. |
| Lease | TAMMEN | Well No. | # 1 | Location | Timken, 3W, 1/2S, W/S | | | Country | RUSH | State | KS | | | | |

| | | |
|---------------------|--------------------|------------------|
| Contractor | Abercrombie Rig #8 | |
| Type Job | Surface | |
| Hole Size | 12 1/2 | T.D. 1215' |
| Csg. | 8 5/8 | Depth 1213' |
| Tbg. Size | | Depth |
| Drill Pipe | | Depth |
| Tool | | Depth |
| Cement Left in Csg. | 20' | Shoe Joint |
| Press Max. | | Minimum |
| Meas Line | | Displace 75 bbl. |
| Perf. | | |

Owner Same
 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 A.L. Abercrombie Inc,
 Street
 City State
 The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No.
 X Anthony Mart

CEMENT
 Amount Ordered 400SKS 69/40 3% CC, 2% Gel,

EQUIPMENT

| | | | |
|---------|-----|----------|-------|
| # | No. | Cementor | Tim |
| Pumptrk | 181 | Helper | Cary |
| | No. | Cementor | |
| Pumptrk | | Helper | |
| # | | Driver | Jacks |
| Bulktrk | 179 | | |
| Bulktrk | | Driver | |

| | |
|---------------|--|
| Consisting of | |
| Common | |
| Poz. Mix | |
| Gel. | |
| Chloride | |
| Quickset | |
| Sales Tax | |
| Handling | |

DEPTH of Job

| | | |
|------------|-------------------|---|
| Reference: | Pumptrk Charge | RECEIVED STATE CORPORATION COMMISSION SEP 06 1991 9-6-91 |
| | Pumptrk Mileage | |
| 1 | 8 5/8 Rubber Plug | |
| | Sub Total | |
| | Tax | |
| | Total | |

| | |
|--------------------|--|
| Sub Total | |
| Total | |
| Floating Equipment | |

Remarks: Cement Did Circulate

* 101-3250

Allied Cementing
 By Tim Dickson

Thanks
 S

Rig #8
 9/10

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.