

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

API NO. 15- 109-20571-00 **ORIGINAL**

County Logan
NE. SE. SE. Sec. 16 Twp. 12S Rge. 33 ^E_X ^W

990 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 Thorn Well # 1

Field Name Unnamed

Producing Formation Cherokee (Johnson Zone)

Elevation: Ground 3084 KB 3089

Total Depth 4735' PBSD

Amount of Surface Pipe Set and Cemented at 345.90 Feet

Multiple Stage Cementing Collar Used? X Yes No

If yes, show depth set 1737 Feet

If Alternate II completion, cement circulated from 1737

feet depth to Surface w/ 450 sx cmt.

Drilling Fluid Management Plan ALT 2 29K 10-31-95
(Data must be collected from the Reserve Pit)

Chloride content 21,000 ppm Fluid volume 1100 bbls

Dewatering method used Evaporation

Location of fluid disposal if hauled offsite:

Operator Name

Lease Name License No.

Quarter Sec. Twp. S Rng. E/W

County Docket No.

Operator: License # 5393

Name: A. L. ABERCROMBIE INC.

Address 150 N. Main

Suite 301

City/State/Zip Wichita, Ks. 67202

Purchaser: KOCH

Operator Contact Person: Jerry Langrehr

Phone (316) 262-1841

Contractor: Name: Abercrombie RTD, Inc.

License: 30684

Wellsite Geologist: Tom Funk

Designate Type of Completion
 New Well Re-Entry Workover

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

If Workover:

Operator: N/A

Well Name:

Comp. Date Old Total Depth

Deepening Re-perf. Conv. to Inj/SWD
 Plug Back PBSD

Commingled Docket No.
 Dual Completion Docket No.
 Other (SWD or Inj?) Docket No.

10-09-94 10-20-94 01-06-95
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 Joshua K. Wharton
Title Vice President Date 01-18-95

Subscribed and sworn to before me this 18 day of January, 19 95.

Notary Public Sandra C. McCaig

Date Commission Expires 1-31-98

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)

SANDRA C. McCAIG
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. 1-31-98

Form ACO-1 (7-91)
JAN 23 1995
01-23-1995
CONSERVATION DIVISION
WICHITA, KANSAS

SIDE TWO

Operator Name A. L. Abercrombie Inc. Lease Name Thorn Well # 1
 Sec. 16 Twp. 12 Rge. 33 East County Logan
 West

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

Drill Stem Tests Taken (Attach Additional Sheets.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datums	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
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:	<u>DUAL INDUCTION</u>			
(See Attached)	<u>COMPENSATED DENSITY</u>			

CASING RECORD <input 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
Surface	12 1/4"	8 5/8"	23#	345.9	60/40posmix	225	2%gel, 3%CC
Production	7 7/8"	4 1/2"	10 1/2#	4724.98	Common 60/40posmix	200	3/401% CFR 2%gel, 7#gilsonite
		D. V. Tool		1737'	Allied lte	450	

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	4594 to 4597	3'	500 gal, 15% INS.

TUBING RECORD	Size <u>2 3/8</u>	Set At <u>4633</u>	Packer At <u>None</u>	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or Inj.	<u>January 6, 1995</u>			
Producing Method	<input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
Estimated Production Per 24 Hours	Oil <u>77</u> Bbls.	Gas <u>5</u> Mcf	Water <u>5</u> Bbls.	Gas-Oil Ratio <u>5</u> Gravity

Disposition of Gas: **METHOD OF COMPLETION** Production Interval
 Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled 4594 to 4597
 (If vented, submit ACO-18.) Other (Specify) _____

ORIGINAL

API #15-109-20571-00-00

THORN #1
NE-SE-SE
Sec. 16-12S-33W
LOGAN CO., KS

DST #1 (Toronto) 3992'-4028'

30-45-30-30
Recovered 30' mud
IFP 29-29 ISIP 1086
FFP 49-49 FSIP 986

DST #2 "A" Zone 4028'-4050'

30-45-60-45
Recovered 190' muddy water
Chlorides 75,000
IFP 29-49 ISIP 1106
FFP 78-108 FSIP 1006

DST #3 - "B" Zone 4054'-4080'

30-45-60-45
Recovered 5' clean oil, 62' mud
Chlorides 84,000
IFS 68-88 ISIP 1116
FFP 118-147 FSIP 1076

DST #4 - E/F. Zone 4100'-4123'

30-45-60-45
Recovered 62' MCO, 80% oil
62' OCM, 20% oil
62' SOCMW, 5% oil, 60% water, 35% mud
186' SW 54,000 chlorides
IFS 29-78 ISIP 1106
FFP 98-167 FSIP 1016

DST #5 - "H" Zone 4176'-4210'

30-45-60-45
Recovered 62' CO
62' OCGM, 10% gas, 10% oil
62' OCGM, 15% gas, 5% oil
62' SOWCM, 3% oil, 10% water
IFS 39-68 ISIP 561
FFP 88-108 FSIP 501

ELECTRIC LOG TOPS

HEBNER	3993' (-904)
TORONTO	4020' (-931')
LANSING	4035' (-946')
MUNCIE	4183' (-1094')
STARK	4262' (-1178')
MARMATON	4373' (-1284')
PAWNEE	4466' (-1377')
CHEROKEE SHALE	4553' (-1464')
JOHNSON	4597' (-1508')

STATE CORPORATION COMMISSION
JAN 23 1995
CONCESSION DIVISION
WICHITA, KANSAS

ORIGINAL

API #15. 109-20571-00-00

Page 2

THORN #1
NE-SE-SE
Sec. 16-12S-33W
LOGAN CO., KS

DST #6 "J" Zone 4245'-4266'

30-45-60-45
Recovered 1240' GIP
496' CGO, 20% gas, 80% oil, 38°
124' OCGM, 40% gas, 5% oil, 5% water
IFP 98-1779 ISIP 246
FFP 196-226 FSIP 265

DST #7 "K" Zone 4265'-4289'

30-45-60-45
Recovered 30' OSM, 248' SW
Chlorides 55,000
IFP 29-68 ISIP 492
FFP 98-127 FSIP 472

DST #8 - Ft. Scott 4493'-4545"

30-45-60-45
Weak blow thru out
Recovered 140' drlg mud w/oil spots
60' mud cut water, 70% water
IFS 41-62 ISIP 769
FFP 104-124 FSIP 669

DST #9 - Johnson Zone 4571'-4605"

30-45-60-45
Fair blow increasing to strong & then dying to 4" in bucket (surging)
Gas to surface during 2nd open period
Recovered 1465' clean gassy oil, gravity 29.3
150' slightly gas & oil cut mud, 10% gas, 35% oil
60' water cut mud, 30% water
IFS 104-259 ISIP 1060
FFP 353-579 FSIP 1060

DST #10 Lansing Zone 4208'-4240' (Straddle Packers)

30-45-30-45
Fair blow 1st open
Weak blow 2nd open
Recovered 180' mud
IFS 72-83 ISIP 280
FFP 93-93 FSIP 280

RECEIVED
STATE CORPORATION COMMISSION

JAN 23 1995

CONSERVATION DIVISION
WICHITA, KANSAS

15-109-20571-00-00

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

Phone 913-625-5516, Hays, KS
Phone 913-672-3471, Oakley, KS

Phone 316-886-5926, Medicine Lodge, KS
Phone 913-798-3843, Ness City, KS

ALLIED CEMENTING CO., INC. 0007374

Home Office P. O. Box 31

Russell, Kansas 67665

ORIGINAL

New

Date	10-9-94	Sec.	16	Twp.	12S	Range	33W	Called Out	2:00 PM	On Location	3:40 PM	Job Start	4:00 PM	Finish	
Lease	THORNE	Well No.	#1	Location				OAKLEY 6W-6S-1W-1S	County	LOGAN	State	KS			

Contractor	ABERCROMBIE RTO RIG #8	
Type Job	SURFACE	
Hole Size	12 1/4	T.D. 350'
Csg.	8 5/8	Depth 345'
Tbg. Size		Depth
Drill Pipe		Depth
Tool		Depth
Cement Left in Csg.	15'	Shoe Joint 15'
Press Max.		Minimum
Meas Line		Displace 21 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	ABERCROMBIE DRILLING INC.
Street	
City	State
The above was done to satisfaction and supervision of owner agent or contractor.	
Purchase Order No.	
X	<i>Anthony Ward</i>
CEMENT	
Amount Ordered	225560/40 P2 39CC 2966L

EQUIPMENT

Pumptrk	No.	Cementer	TERRY WAYNE
	191	Helper	
Pumptrk	No.	Cementer	P.G.
		Helper	
Bulktrk		Driver	
	218	Driver	

Consisting of	
Common	
Poz. Mix	
Gel.	
Chloride	
Quickset	
Sales Tax	
Handling	
Mileage	
Sub Total	
Total	

DEPTH of Job	
Reference:	Pump TRUCK
	8 5/8 SURFACE PLUG
	2.25 PER W/LE
	394 P2 P2 300' Tax
	Sub Total
	Total

Remarks:

CEMENT DTD CIRC.

Floating Equipment

JAN 23 1995

15-109-20571-00-00

Phone 913-433-2627, Russell, KS
Phone 316-793-5861, Great Bend, KS

Phone 913-625-5516, Hays, KS
Phone 913-672-3471, Oakley, KS

Phone 316-886-5926, Medicine Lodge, KS
Phone 913-798-3843, Ness City, KS

ALLIED CEMENTING CO., INC.

7832

Home Office P. O. Box 31

Russell, Kansas 67665

ORIGINAL

new

Date	10-20-94	Sec.	16	Fwp.	12	Range	33	Called Out		On Location	4:30 AM	Job Start		Finish	10:45 ^{AM}
Lease	Thorn	Well No.		Location	Oakley SW-65-1W-16S-W5			County	Logan	State	Kan				
Contractor	Abecarrabie RTD #8														
Type Job	Production String Bottom														
Hole Size	7 7/8		T.D.	4735'											
Csg.	4 1/2 10.5#		Depth	4725'											
Tbg. Size															
Drill Pipe															
Tool	Baker D-V		Depth	1737'											
Cement Left in Csg.	22.33		Shoe Joint	22.33											
Press Max.															
Meas Line	Displace <input checked="" type="checkbox"/>														
Perf.															

Owner
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. Abecarrabie, Inc
Street: 801 Union Center
City: Wichita State: Kan 67202

The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No.
X *Walt Terry*

EQUIPMENT

Pumptrk	No.	Cementer	Walt
	300	Helper	
Pumptrk	No.	Cementer	Wayne
		Helper	
Bulktrk	309	Driver	R.B.
Bulktrk	303	Driver	

Amount Ordered	200 SKS COM, 1.7# BA-29		
Consisting of	75 SKS 5 1/2" 500# 7 1/2" Gilsante, 3/4" #1 CFR.		
Common	288 SKS @	6.35	1,630.30
Poz. Mix	37 SKS @	3.00	111.00
Gel.	2 SKS @	9.00	18.00
Gravel	BA-29 340# @	10.24	3,481.60
Gravel	Gilsante 563# @	39.00	219.57
CFR-2	48# @	4.25	204.00
500 gal mud sweep	@	1.80	900.00
Handling	1.00 per SK		275.00
Mileage	4¢ per SK/mile		154.00
14 mil.			
Sub Total			6,993.47
Total			

DEPTH of Job

Reference:	Pumptruck	980.00
	2.25 per mile	31.50
Sub Total		
Tax		
Total		1,011.50

Remarks: #1 - Guide Shoe, insert on top, cont Baskets on #1, 11, 75, 103*
Turbo Cent on #3, 7, 11, 15, 19, 22*
Scratchers on 3, 4, 5, 12, 13, 14, 15, 16, 19, 20
Float held

Floating Equipment 4 1/2

1- Guide Shoe - 109.00
1- AFU insert - 169.00
6- Turbo Centralizers - 318.00
34 Reciprocating Scratchers - 850.00
1- D-V Tool - 2,740.00
Total = 4,186.00

Walt Terry

15-109-20571-00-00

Phone 483-2627, Russell, KS
Phone 316-793-5861, Great Bend, KS

Phone 913-625-5516, Hays, KS
Phone 913-672-3471, Oakley, KS

Phone 316-886-5926, Medicine Lodge, KS
Phone 913-798-3843, Ness City, KS

ALLIED CEMENTING CO., INC.

7833

Home Office P. O. Box 31

Russell, Kansas 67665

ORIGINAL

New

Date	10-20-94	Sec.	16	Twp.	12 ^S	Range	33 ^W	Called Out		On Location	4:30 am	Job Start		Finish	12:00 PM
Lease	Thorn	Well No.	1	Location	Oakley 80-65-1W-65-1S			County	Logan	State	Kan				
Contractor	Abecrambie R.T.D. #2					Owner	Same								
Type Job	Production string Top					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	7 7/8	T.D.	4735'												
Csg.	4 1/2	10.5	Depth	4725'											
Tbg. Size			Depth												
Drill Pipe			Depth												
Tool	Baker D.V		Depth	1737'											
Cement Left in Csg.	22.33'		Shoe Joint	22.33'											
Press Max.			Minimum												
Meas Line			Displace	✓											
Perf.															

EQUIPMENT

Pumptrk	No.	Cementer	Walt
	300	Helper	
Pumptrk	No.	Cementer	Wayne
		Helper	
Bulktrk	309	Driver	Wayne
Bulktrk	303	Driver	Bob

DEPTH of Job

Reference:	Pumptruck	525 ⁰⁰
	Sub Total	
	Tax	
	Total	525 ⁰⁰

Remarks: Cement Del Cinc

Charge To	A.L. Abecrambie Inc		
Street	801 Union Center		
City	Wichita	State	Kan 67202
The above was done to satisfaction and supervision of owner agent or contractor.			
Purchase Order No.	Creston Martz		
Amount Ordered	used 410 sks	CEMENT	
	450 sks	Lite	
Consisting of	Common Lite 410 sks @ 25 ⁸⁵ = 2,398 ⁵⁰		
Poz. Mix			
Gel.			
Chloride			
Quickset			
Handling	1 ⁰⁰ per sk		410 ⁰⁰
Mileage	4¢ per sld mile	14 mile	229 ⁶⁰
			Sub Total
			3,038 ¹⁰
			Total

Floating Equipment

STATE COMPTROLLER COMMISSIONER

JAN 23 1995

WICHITA, KANSAS

[Signature]