

SIDE ONE

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

Operator: License # 5131
Name Thunderbird Drilling, Inc.
Address Box 780407
City/State/Zip Wichita, KS 67278

Purchaser Clear Creek

Operator Contact Person Burke Krueger
Phone (316) 685-1441

Contractor: License # 5422
Name Abercrombie Drilling, Inc.

Wellsite Geologist Crail L. Caulk
Phone (316) 265-9501

Designate Type of Completion
 New Well Re-Entry Workover

Oil Gas Dry
 SWD Inj Other (Core, Water Supply etc.)
 Temp Abd Delayed Comp.

If OWWO: old well info as follows:
Operator
Well Name
Comp. Date
Old Total Depth

WELL HISTORY

Drilling Method:
 Mud Rotary Air Rotary Cable

8-16-88 8-25-88 8/31/88
Spud Date Date Reached TD Completion Date

3962' Total Depth PBDT

Amount of Surface Pipe Set and Cemented at 248 feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set
If alternate 2 completion, cement circulated 520
from 0 feet depth to 248 w/ 180 SX cmt
Cement Company Name Allied Cementing
Invoice # 52305 614150 Halliburton
10-10-88

API NO. 15-065-22,460
County Graham
NE SW SW Sec 18 Twp 10S Rge 24 East
X West

990 Ft North from Southeast Corner of Section
4290 Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

Lease Name Ruder "A" Well # 1

Field Name WE High Hill, west

Producing Formation Lansing-Kansas City

Elevation: Ground 2407' KB 2412'

Section Plat

Section Plat grid with coordinates 5280, 4950, 4620, 4290, 3960, 3630, 3300, 2970, 2640, 2310, 1980, 1650, 1320, 990, 660, 330

RECEIVED

9-13-1988
SEP 13 1988

CONSERVATION DIVISION
Wichita, Kansas

WATER SUPPLY INFORMATION

Disposition of Produced Water: Disposal
Docket # Repressuring

Questions on this portion of the ACO-1 call:

Water Resources Board (913) 296-3717

Source of Water:
Division of Water Resources Permit #

Groundwater.....Ft North from Southeast Corner
(Well)Ft West from Southeast Corner of
Sec Twp Rge East West

Surface Water.....Ft North from Southeast Corner
(Stream, pond etc).....Ft West from Southeast Corner
Sec Twp Rge East West

X Other (explain) Wayne Ruder (Pond)
(purchased from city, R.W.D. #)

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. 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 Burke B. Krueger
Title Vice-President Date 9/12/88

Subscribed and sworn to before me this 12th day of September 1988
Notary Public Gloria DeJesus
Date Commission Expires 3-25-92

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)
9-13-88

GLORIA DE JESUS
NOTARY PUBLIC
STATE OF KANSAS
MY APPT. EXP.

Sec 18 Twp 10 Rge 24 E

SIDE TWO

Operator Name Thunderbird Drilling, Inc. Lease Name..... Ruder "A" Well #..... 1.....

Sec..... 18 Twp..... 10S Rge..... 24 East West County..... Graham

WELL LOG

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
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No

Formation Description
 Log Sample

	Name	Top	Bottom
DST #1, 3683-3741/30-45-30-45, rec. 10' ocm (25% oil, 75% mud) 60'socm, IFP 32-43#, FFP 64-75#, SIP 776-733#	Anhydrite	2077+	335
	B/Anhydrite	2114+	298
DST #2, 3738-3760/45-60-45-60, rec. 640' gip, 80' co, 180' mco, IFP 32-75#, FFP 86-129#, SIP 926-894#	Topeka	3472-	1060
	Heebner	3682-	1270
	Lansing-KC	3722-	1310
DST #3, 3761-3784/30-60-30-60, rec. 2170' cgo, IFP 162-411#, FFP 508-615#, SIP 1044-1044#	LTD	3959-	1457
	RTD	3962-	1550
DST #4, 3784-3803/45-60-45-60, rec. 130' mw, IFP 0-21#, FFP 64-75#, SIP 883-883#			
DST #5, 3832-3890/30-30-30-30, rec. 1' mud, ALL fp 21#, SIP 32-32#			
DST #6, 3832-3910/30-30-30-30, rec. 3' mud, ALL FP 21#, SIP 43-43#			
DST #7, 3903-3930/30-30-30-30, rec. 10' mud, IFP 32-32#, FFP 32-43#, SIP 1077-980#			

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 1/2"	8 5/8"	20#	248'	60/40 posmix	180	3% cc, 2% gel
Production	7 7/8"	4 1/2"	10 1/2#	3855'	econolite	525	
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used)		Depth	
2	3762-70 & 3751-56			1000 Gal. mud acid & 37 ball sealers		3751-3770 OA	
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Date of First Production		Size Set At		Packer at			
8/31/88		2 3/8" 3741'					
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 Gas Water Gas-Oil Ratio Gravity			
102 Bbls				None MCF Bbls CFPB			

METHOD OF COMPLETION

Production Interval

Disposition of gas: Vented Sold Used on Lease Open Hole Perforation Other (Specify) 3741-3770 OA... Dually Completed Commingled

CUSTOMER COPY
INVOICE
 INVOICE



A DIVISION OF HALLIBURTON COMPANY

REMIT TO:
 P.O. BOX 651046
 DALLAS, TX 75265
 15-065-22460-00-00

INVOICE NO:	DATE
614150	08/25/1988

WELL LEASE NO.		WELL LOCATION		STATE	WELL OWNER
ORDER A 1		GRAHAM		KS	THUNDERBIRD
SERVICE LOCATION	CONTRACTOR	JOB PURPOSE			TICKET DATE
BERLIN	ABERCROMBIE 4	CEMENT PRODUCTION CASING			08/25/1988
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
89807	JARTA			COMPANY TRUCK	53770

THUNDERBIRD DRILLING INC
 P.O. BOX 18407
 WICHITA, KS 67218

DIRECT CORRESPONDENCE TO:
 SUITE 600
 COLORADO DERBY BUILDING
 WICHITA, KS 67202-0000

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	AMOUNT
000-117	MILEAGE	46	MI	2.20	101.20
001-016	CEMENTING CASING PUMP CHARGE	1	UNT		
		3860	FT	1,034.00	1,034.00
030-016	TYPE SW ALUMINUM PLUG-TOP	1	UNT		
		1/2	IN	31.00	31.00
018-317	SUPER FLUSH	500	GAL	1.50	750.00
02A	GUIDE SHOE - 4 1/2" 8RD THD.	1	EA	83.00	83.00
825.201					
04A	INSERT FLOAT VALVE - 4 1/2"	1	EA	69.00	69.00
815.19101					
07	FILL-UP UNIT 4 1/2"-5"	1	EA	27.50	27.50
815.19111					
00	CENTRALIZER 4-1/2" MODEL S-4	6	EA	41.00	246.00
807.93004					
820	CEMENT BASKET 4 1/2"	3	EA	85.00	255.00
800.8881					
04-308	STANDARD CEMENT	125	SK	5.45	681.25
08-127	CAL SEAL	6	SK	14.60	87.60
09-968	SALT	975	LB	.073	71.18
07-775	HALAD-322	47	LB	5.40	253.80
04-308	STANDARD CEMENT	260	SK	5.45	1,417.00
06-105	POZMIX A	140	SK	2.88	403.20
06-121	HALLIBURTON-GEL 2%	8	SK	.00	N/C
07-277	HALLIBURTON-GEL BENTONITE	8	%	.74	296.00
		400	SK		
07-285	ECONOLITE	696	LB	.80	556.80
07-210	FLOCELE	100	LB	1.21	121.00
00-207	BULK SERVICE CHARGE	547	CFT	.95	519.65
00-306	MILEAGE	1209.06	TMI	.70	846.34
INVOICE SUBTOTAL					7,350.52

BILLING COPY

***** CONTINUED ON NEXT PAGE *****

TERMS INVOICES PAYABLE NET, BY THE 20TH OF THE FOLLOWING MONTH AFTER DATE OF INVOICE. UPON CUSTOMER'S DEFAULT IN PAYMENT OF CUSTOMER'S ACCOUNT BY THE LAST DAY OF THE MONTH FOLLOWING THE MONTH IN WHICH THE INVOICE IS DATED. CUSTOMER AGREES TO PAY INTEREST THEREON AFTER DEFAULT AT THE HIGHEST LAWFUL CONTRACT RATE APPLICABLE BUT NEVER TO EXCEED 18% PER ANNUM. IN THE EVENT IT BECOMES NECESSARY TO EMPLOY AN ATTORNEY TO ENFORCE COLLECTION OF SAID ACCOUNT, CUSTOMER AGREES TO PAY ALL COLLECTION COSTS AND ATTORNEY FEES IN THE AMOUNT OF 20% OF THE AMOUNT OF THE UNPAID ACCOUNT.

**CUSTOMER COPY
INVOICE
INVOICE**



REMIT TO:
P.O. BOX 651046
DALLAS, TX 75265
15-065-22460-00-00

INVOICE NO.	DATE
614150	08/25/19

WELL LEASE NO.		WELL LOCATION		STATE	WELL OWNER
NUMBER A 1		GRAHAM		KS	THUNDERBIRD
SERVICE LOCATION		CONTRACTOR	JOB PURPOSE		TICKET DATE
BERLIN		ABERCROMBIE 4	CEMENT PRODUCTION CASING		08/25/19
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE
889807	BARTA			COMPANY TRUCK	8377

THUNDERBIRD DRILLING INC
P.O. BOX 18407
WICHITA, KS 67218

DIRECT CORRESPONDENCE TO:
SUITE 600
COLORADO DERBY BUILDING
WICHITA, KS 67202-0000

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	AMOUNT
	DISCOUNT - (BID)				1,575.52
	INVOICE BID AMOUNT				6,275.00
	*-KANSAS STATE SALES TAX				189.96
	*-DECATUR COUNTY SALES TAX				47.48
INVOICE TOTAL - PLEASE PAY THIS AMOUNT					\$6,512.44

TERMS INVOICES PAYABLE NET BY THE 20TH OF THE FOLLOWING MONTH AFTER DATE OF INVOICE. UPON CUSTOMER'S DEFAULT IN PAYMENT OF CUSTOMER'S ACCOUNT BY THE LAST DAY OF THE MONTH FOLLOWING THE MONTH IN WHICH THE INVOICE IS DATED, CUSTOMER AGREES TO PAY INTEREST THEREON AFTER DEFAULT AT THE HIGHEST LAWFUL CONTRACT RATE APPLICABLE BUT NEVER TO EXCEED 18% PER ANNUM. IN THE EVENT IT BECOMES NECESSARY TO EMPLOY AN ATTORNEY TO ENFORCE COLLECTION OF SAID ACCOUNT, CUSTOMER AGREES TO PAY ALL COLLECTION COSTS AND FEE OF THE ATTORNEY OF THE INRAID ACCOUNT.