

15-153-20802-00-00

FORM MUST BE TYPED

SIDE ONE

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

API NO. 15- 153-20,802-00-00 ORIGINAL

County Rawlins

130'S S $\frac{1}{2}$ - NW $\frac{1}{2}$ - NW $\frac{1}{2}$ Sec. 8 Twp. 2S Rge. 31 X W

1285' Feet from S(N) (circle one) Line of Section

660' Feet from E(W) (circle one) Line of Section

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

Lease Name SOLKO 'B' Well # 1

Field Name Wildcat

Producing Formation Lansing KC

Elevation: Ground 2691' KB 2696'

Total Depth 3920' PBDT _____

Amount of Surface Pipe Set and Cemented at 316.14' Feet

Multiple Stage Cementing Collar Used? _____ Yes X No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from _____

feet depth to _____ w/ _____ sx cmt.

Drilling Fluid Management Plan ALT 1 JH 1-30-97
(Data must be collected from the Reserve Pft)

Chloride content 2500 ppm Fluid volume 700 bbls

Dewatering method used _____

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 # 5131

Name: Thunderbird Drilling, Inc.

Address P.O. Box 780407

City/State/Zip Wichita, KS. 67278-0407

Purchaser: _____

Operator Contact Person: Burke B. Krueger

Phone (316) 685-1441

Contractor: Name: Abercrombie RTD, Inc.

License: 30684

Wellsite Geologist: Todd Aikins

Designate Type of Completion

XX New Well _____ Re-Entry _____ Workover _____

XX Oil _____ SWD _____ SLOW _____ Temp. Abd.
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. _____

6-14-95 _____ 6-20-95 _____ 6-20-95
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 [Signature]
Title Vice President Date 7-20-95

Subscribed and sworn to before me this 20th day of July, 19 95.

Notary Public [Signature]

Date Commission Expires _____

GLENDIA FUNK
Notary Public - State of Kansas
My Appt. Expires 4-16-98

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)

Form ACO-1 (7-91) RECEIVED
STATE CORPORATION COMMISSION
7-24-95
JUL 24 1995

SIDE TWO

Operator Name Thunderbird Drilling, Inc. Lease Name SOLKO 'B' Well # #1
 Sec. 8 Twp. 2S Rge. 31 East West
 County Rawlins

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	See attached		
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
List All E.Logs Run:				
Neutron/Density Porosity				
R A Guard				
Sonic Cement Bond				

CASING RECORD <input type="checkbox"/> New <input checked="" 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"	28#	316.14'	60/40 posmix	225	2% gel, 4% CC
Production		4 1/2"		3915'	EA-2 50/50 Poz	150 20	HALAD-322 5% CAL SEAL 60 6% gel

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	3818-3822	500 gal MA & 2,000 gal 15% NE	

TUBING RECORD	Size 2 3/8"	Set At 3798	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or Inj. 7-15-95	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 10 Bbls.	Gas Mcf	Water 0 Bbls.	Gas-Oil Ratio Gravity 39

Disposition of Gas: **METHOD OF COMPLETION** Production Interval

Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled 3818'-3822'
 (If vented, submit ACO-18.) Other (Specify) _____



Thunderbird Drilling Inc.

ORIGINAL

7701 EAST KELLOGG, SUITE 780
POST OFFICE BOX 780407
WICHITA, KANSAS 67278-0407
(316) 685-1441

DAILY DRILLING REPORT

API#15-153-20802

#1 SOLKO "B"
130' S. S $\frac{1}{2}$ NW $\frac{1}{4}$
Section 8-2S-31W
Rawlins County, KS

Elevation: GR 2691
KB 2696

TOPS:	Sample	Log
Anhydrite	2453 + 243	2450 + 246
B/Ahydrite	2488 + 208	2483 + 213
Topeka	3431 - 735	3438 - 742
Heebner	3599 - 903	3603 - 907
LKC	3636 - 940	3636 -940
BKC		3896 -1200
TD		3920 -1224

6-13-95 Moving in and rigging up.
6-14 Spud 2 7: PM 6-13-95. Ran 8 jts. 8 5/8", 28# casing (308.14') set at 316.14 with 225 sks 60/40 pos. 2% gel, 4% cc. Plug down at 2 AM 6-14-95. Waiting on cement.
6-15 Drilling at 2316'
6-16 Drilling at 3,580'
6-17 DST #1 (Oread) 3557-3610/45-45-45-45. Rec. 80' mud, 124' muddy water, IFP 48-68, FFP 97-107, SIP 1171-1146. DST #2 (LKC "A" zone) 3600-3650'/45-45-45-45. Rec. 2' oil + 30" oil cut mud (10% oil) FIP 39-39, FFP 49-49, SIP 828-371.
6-18 DST #3 (LKC "D" zone) 3650-3691'/45-45-45-45. Rec. 5' oil, 30' oil cut mud (30% oil). IFP 29-29, FFP 29-29, SIP 126-78. DST #4 (LKC G&H zones) 3695-3780'/45-45-45-45. Rec. 30' oil cut mud (12% oil) IFP 34-34, FFP 34-34, SIP 125-87.
6-19 Drilling at 3887'
DST #5 (LKC "J" zone) 3780-3830'/30-60-45--60. Rec. 360' gas in pipe, 196' oil (39° API) 124' oil cut mud (25% oil) IFP 58-58, FFP 126-126, SIP 1053-926.
6-20 RTD 3920'. Log. Set 4 $\frac{1}{2}$ " casing @ 3915' w/150 sx EAZ. Plug down 1:00 AM 6-20-95
6-26 Ran correlation cement bond log. Perforated 3818-3822 w/4 sh/ft. Swabbed dry. Acidized with 500 gal. MA. Swabbed down 10 bbl. short of load. First hr recovered 3 barrels of oil, no water. Shut down for night.
6-27 Overnight fillup 500', all oil. Prepared to retreat with 2,000 gal. 15% NE.
7-15 Start well pumping 8:30 AM
1 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " x 54" SPM
7-16 47 BO, no water
7-17 10 BO, no water

RECEIVED
STATE CORPORATION COMMISSION
JUL 24 1995
CONSULTING ENGINEERS
WICHITA, KANSAS

15-153-20802-00-00



JOB LOG HAL-2013-C

DATE: 6-19-95 PAGE NO. 1

CUSTOMER: Thunderbird D.1g WELL NO.: B-1 LEASE: Solko JOB TYPE: Prod Csg TICKET NO.: 839614

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1430							Called out
	2130							On location w/ F/E
	2200							Rig installing Braden Head Start 4 1/2" 10.5#/ft Csg Guide Shoe, Insert float @ 3915' Centralizers: 3898, 3868, 3788, 3788, 3668, 3508, 3492 Pump Truck & Cement on location
	2325							Drop BALL FOR INSERT
	2340							Rig up to circulate
	2350							Ball Through INSERT
6/20								Circulate
	0015							plug RAT Hole
			5					20 sks 50/50 Pozmix A 6% Gel
	0020	6	18				200	Start 20% Clafix Water
	0025	6	5				200	Start Fresh water SPACER
	0030	6	12				200	Start Mud flush
	0035	6					300	Start mixing CEMENT
								150 sks EA-2 Cement 5% Calseal, 10% Salt 14% D-Air 4/10% H/rd - 322
			34				200	Cement mixed
								Wash out pump & line
								Release Plug
	0050	6					100	Start Displacement
	0100		63				1600	Plug Down
	0105							Release Pressure - Float Held
								wash up & Rack up
								Job completed
								Thank you,
								Dail Eldon
								RECEIVED CORPORATION COMMISSION
								Pump Time: 45 MINS
								JUL 24 1995

ORIGINAL

CUSTOMER

CONSTRUCTION WACHITA, KANSAS



JOB SUMMARY

HALLIBURTON DIVISION
HALLIBURTON LOCATIONMIDCONTINENT
HAY

BILLED ON TICKET NO. 837614

CUSTOMER: Thunderbird Dr-19
LEASE: 501KO
WELL NO.: B-1
JOB TYPE: PROD CAS
DATE: 6/19/95

WELL DATA

FIELD _____ SEC. 8 TWP. 2S RNG. 21W COUNTY Rawlins STATE Rawlins

FORMATION NAME _____ TYPE _____

FORMATION THICKNESS _____ FROM _____ TO _____

INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD

PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD

COMPLETION DATE _____ MUD TYPE _____ MUD WT. _____

PACKER TYPE _____ SET AT _____

BOTTOM HOLE TEMP. _____ PRESSURE _____

MISC. DATA _____ TOTAL DEPTH 3920

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	<u>v</u>	<u>10.5</u>	<u>4 1/2</u>	<u>0</u>	<u>3915</u>	
LINER					<u>3915</u>	
TUBING						
OPEN HOLE			<u>7 7/8</u>	<u>3919</u>	<u>3920</u>	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

ORIGINAL

JOB DATA

CALLLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>6-19</u>	DATE <u>6-19</u>	DATE <u>6-19</u>	DATE <u>6-20</u>
TIME <u>1430</u>	TIME <u>2030</u>	TIME <u>2330</u>	TIME <u>0130</u>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>G. Palmberg</u>	<u>41189</u>	<u>HAYS</u>
<u>E. Reynolds</u>	<u>51145</u>	<u>HAYS</u>
<u>T. Pfannstiel</u>	<u>76103</u>	<u>HAYS</u>
	<u>51252</u>	<u>HAYS</u>

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE <u>Insert + 4 1/2</u>	<u>1</u>	<u>HES</u>
GUIDE SHOE <u>CAT 4 1/2</u>	<u>1</u>	<u>HES</u>
CENTRALIZERS <u>S-4 4 1/2</u>	<u>7</u>	<u>HES</u>
BOTTOM PLUG		
TOP PLUG <u>S-10 4 1/2</u>	<u>1</u>	<u>HES</u>
HEAD		
PACKER		
OTHER		

MATERIALS

TREAT. FLUID _____ DENSITY _____ LB/GAL. °API

DISPL. FLUID _____ DENSITY _____ LB/GAL. °API

PROP. TYPE _____ SIZE _____ LB.

PROP. TYPE _____ SIZE _____ LB.

ACID TYPE _____ GAL. _____ %

ACID TYPE _____ GAL. _____ %

ACID TYPE _____ GAL. _____ %

SURFACTANT TYPE _____ GAL. _____ IN

NE AGENT TYPE _____ GAL. _____ IN

FLUID LOSS ADD. TYPE _____ GAL.-LB. _____ IN

GELLING AGENT TYPE _____ GAL.-LB. _____ IN

FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN

BREAKER TYPE _____ GAL.-LB. _____ IN

BLOCKING AGENT TYPE _____ GAL.-LB. _____

PERFPAC BALLS TYPE _____ QTY. _____

OTHER _____

OTHER 93 JTS @ 3915

DEPARTMENT CEMENT

DESCRIPTION OF JOB CEMENT PROD CAS

JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN.

CUSTOMER REPRESENTATIVE X Claudi B. Baker

HALLIBURTON OPERATOR G. Palmberg COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	<u>20</u>	<u>Salsa Pozmix A</u>	<u>B</u>		<u>6% Gel RAT Hole</u>	<u>1.51</u>	<u>131</u>
	<u>150</u>	<u>EA-2</u>		<u>B</u>	<u>5% Calscat 10% Salt 0.25% D. Air 1 1/2% Hald-522</u>	<u>1.57</u>	<u>1.27</u>

PRESSURES IN PSI

CIRCULATING _____ DISPLACEMENT _____

BREAKDOWN _____ MAXIMUM _____

AVERAGE _____ FRACTURE GRADIENT _____

SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____

HYDRAULIC HORSEPOWER _____

SUMMARY

VOLUMES

PRESLUSH: BBL.-GAL. 18 TYPE Flush

LOAD & BKDN: BBL.-GAL. _____ PAD: BBL.-GAL. _____

TREATMENT: BBL.-GAL. _____ DISPL: BBL.-GAL. 62

CEMENT SLURRY: BBL.-GAL. 35 500/ Rat Hole

TOTAL VOLUME: BBL.-GAL. 136

REMARKS

ORDERED _____ AVAILABLE _____ USED _____

AVERAGE RATES IN BPM _____

TREATING _____ DISPL. _____ OVERALL _____

CEMENT LEFT IN PIPE _____

FEET 20 REASON SHOE JOINT

SEE JOB LOG

Thank you

Had clean 1 1/2

6/20/95

RECEIVED
STATE CORPORATION COMMISSION

JUL 2 1995

CORPORATION COMMISSION
WICHITA, KANSAS

ALLIED CEMENTING CO., INC. 0993

15-053-20802-00-00

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

SERVICE POINT: Oakley

DATE <u>6-13-95</u>	SEC. <u>8</u>	TWP. <u>2^s</u>	RANGE <u>31^w</u>	CALLED OUT	ON LOCATION <u>9:45 PM</u>	JOB START <u>1:30 AM</u>	JOB FINISH <u>2:00 AM</u>
LEASE <u>Salko</u>	WELL # <u>B-1</u>	LOCATION <u>Herndon 1/2N-34-1S-14E-4S</u>			COUNTY <u>Rawlins</u>	STATE <u>Kan</u>	

OLD OR NEW (Circle one)

CONTRACTOR Abacrambio RTD #8

TYPE OF JOB Sur Face

HOLE SIZE 12 1/4 T.D. 321'

CASING SIZE 8 5/8 DEPTH 316'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

OWNER Thunderbird Drilling

ORIGINAL

AMOUNT ORDERED 225 sks 6 1/2 doz
3% acc - 2% del

COMMON	@	
POZMIX	@	
GEL	@	
CHLORIDE	@	
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING	@	<u>1.05</u>
MILEAGE		<u>44 per sk/mile</u>

EQUIPMENT

PUMP TRUCK	CEMENTER	<u>Walt</u>
#	HELPER	<u>Wayne</u>
BULK TRUCK		
#	DRIVER	<u>Don</u>
BULK TRUCK		
#	DRIVER	

TOTAL _____

REMARKS:

SERVICE

DEPTH OF JOB		<u>316'</u>
PUMP TRUCK CHARGE		<u>445.00</u>
EXTRA FOOTAGE	@	
MILEAGE	@	<u>2.35</u>
PLUG	@	<u>8 5/8 wooden plug</u>
	@	<u>45.00</u>
	@	

TOTAL _____

CHARGE TO: _____

STREET _____

CITY _____ STATE _____ ZIP _____

FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	

RECEIVED
STATE CORPORATION COMMISSION
TOTAL
JUL 2 1995

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 is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TAX _____

TOTAL CHARGE _____

DISCOUNT _____ IF PAID IN 30 DAYS

SIGNATURE Walt