

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 # 8793  
Name James Dillie  
Address 4469 So. Winona Ct.  
City/State/Zip Denver, Colo. 80236

Purchaser Koch Oil Co.

Operator Contact Person James Dillie  
Phone 303-337-4800

Contractor: License # 6033  
Name Murfin Drilling Co.

Wellsite Geologist James Dillie  
Phone 303-337-4800

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

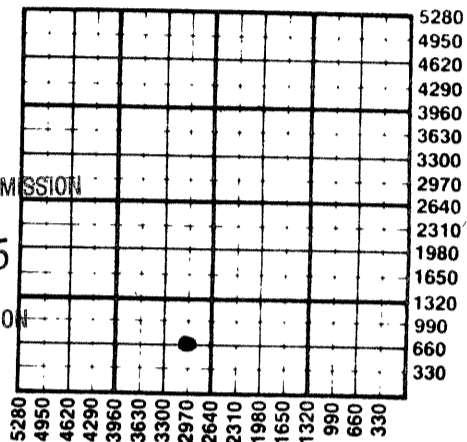
If OWMO: old well info as follows:  
Operator  
Well Name  
Comp. Date Old Total Depth

WELL HISTORY

Drilling Method:  
 Mud Rotary  Air Rotary  Cable  
2/1/85 2/8/85 2/18/85  
Spud Date Date Reached TD Completion Date  
4720' 4710'  
Total Depth PBTD  
Amount of Surface Pipe Set and Cemented at 296' feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set 3138' feet  
If alternate 2 completion, cement circulated from 3138' feet depth to surface w/ 550 SX cmt

API NO. 15-153-20,594-00-00  
County Rawlins  
E/2 SE/4 SW/4 Sec. 20 Twp. 3S Rge. 36  East  West  
660 Ft North from Southeast Corner of Section  
2970 Ft West from Southeast Corner of Section  
(Note: Locate well in section plat below)  
Lease Name Henry Cahoj Well # 1-D  
Field Name Wildcat Celia  
Producing Formation Cherokee  
Elevation: Ground 3304 KB. 3309

Section Plat



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MAY 03 1985  
STATE CORPORATION COMMISSION  
CONSERVATION DIVISION  
Wichita, Kansas  
4-3-85

WATER SUPPLY INFORMATION

Disposition of Produced Water:  Disposal  Repressuring  
Docket #

Questions on this portion of the ACO-1 call:  
Water Resources Board (913) 296-3717

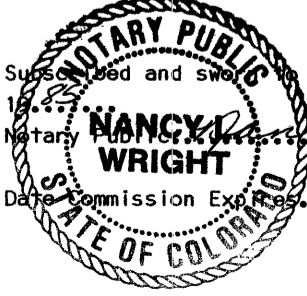
Source of Water:  
Division of Water Resources Permit #  
 Groundwater.....Ft North from Southeast Corner (Well) .....Ft West from Southeast Corner of Sec Twp Rge  East  West  
 Surface Water.....Ft North from Southeast Corner (Stream, pond etc).....Ft West from Southeast Corner Sec Twp Rge  East  West  
 Other (explain) Purchased from Henry Cahoj (purchased from city, R.W.D. #)

INSTRUCTIONS: This form shall be completed in duplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 90 days after completion or recompletion of any well. Rule 82-3-130 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 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 James Dillie  
Title Operator Date 4/30/85

Subscribed and sworn to before me this 30<sup>th</sup> day of April  
Notary Public Nancy L. Wright  
Date Commission Expires 12-12-88



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)

Sec 20 Twp 3S Rge 36 W

SIDE TWO

Operator Name James Dillie Lease Name Henry Cahoj Well # 1-D

Sec. 20 Twp. 3S Rge. 36  East  West County Rawlins

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

DST #1 4223-4278  
 Times 30-60-45-90  
 Recovered 65' oil spotted mud  
 IHP 2196 FHP 2078  
 IFP 50-50 FFP 60-60  
 ISIP 1078 FSIP 1059

DST #2 4655-4680  
 Times 30-60-60-120  
 Recovered 370' gas plus 425' oil and MCO  
 IHP 2403 FHP 2344  
 IFP 40-80 FFP 130-200  
 ISIP 1254 FSIP 1244

Name	Top	Bottom
Lansing-Kansas City	4190	4476
Marmaton	4489	4542
Pawnee	4542	4588
Ft. Scott	4588	4610
Cherokee	4610	TD

CASING RECORD <input checked="" 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.....	...296!...	...Pozmix..	...275...	.....
...Production...	...7.7/8"!!	...5.1/2"!!	...14.....	...4708!...	...Pozmix..	...265...	.....
.....	.....	.....	.....	.....	...Lite....	...550...	.....
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used)		Depth	
...4.....	...4663-4671.....			...800.gallons.mud.acid.....		.....	
...4.....	...4663-4671.....			...4000.gallons.SG&A.....		...4000gallons.pad.....	
.....	.....			.....		.....	
.....	.....			.....		.....	
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Size		Set At		Packer at			
2 3/8"		4644'					
Date of First Production		Producing Method					
2/18/85		<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	
150		Bbls	?	MCF	0 Bbls	CFRB	

METHOD OF COMPLETION

Production Interval

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

4663-4671

*James Dillie*

OIL AND GAS VENTURES

4469 SOUTH WINONA COURT

DENVER, COLORADO 80236

~~303-692-8892~~ 337-4800

February 21, 1985

Geologic Report

1. Well name - Henry Cahoj 1-D
2. Location - E/2 SE/4 SW/4 Section 20-3S-36W  
Rawlins County, Kansas
3. Operator - James Dillie
4. Contractor - Murfin Drilling Co.; Rig 24
5. Commenced - February 1, 1985  
TD'd - February 8, 1985 at 4720' Driller; 4722' Logger
6. Elevation - 3304' GL; 3309' KB
7. Drillstem tests - Two; Cheney Testing Co.
8. Electric logs - Great Guns
9. Casing record - Surface; 8 5/8" set at 296'. Cemented to surface with 275 sacks of 60/40 Pozmix. Production; 5 1/2", 14# set at 4708'. Cemented with 265 sacks 60/40 Pozmix. Port collar at 3138'. Cemented from port collar to surface with 550 sacks of Sun lite weight cement.

Formation Tops  
(from Kelly Bushing)

	Henry Cahoj 1-D	Hubbard C-1
Topeka	4001 -692	3966 -699
Deer Creek	4063 -754	4030 -763
Oread	4106 -797	4074 -807
Douglas	4154 -845	4120 -853
L-KC	4190 -881	4160 -893
Base L-KC	4476 -1167	4445 -1178
Marmaton	4489 -1180	4460 -1193
Pawnee	4542 -1233	4514 -1247
Ft. Scott	4588 -1279	4556 -1289
Cherokee	4610 -1301	4580 -1313
"Pay"	4663 -1354	4632 -1365

Zones of Interest (log and/or samples)

L-KC "B" zone  
4242-44 Limestone, brown, oolitic, fair-excellent vuggy porosity, excellent show of live oil. Covered by DST #1. Test before abandoning well.

Cherokee "Pay"  
4663-68 Limestone, variegated, VFXTLN-fossiliferous, few with very good vuggy porosity with excellent show of live oil (seen very few samples with porosity). Covered by DST #2. Run pipe and test.

DST #1 L-KC "B" zone; Test interval - 4223'-4278'  
Times: 30-60-45-90  
Had a weak blow (1 1/4") on initial opening and no blow on second opening.  
Recovered 65' of oil spotted mud with puddle of oil on top of tool joint.

IHP 2196, FHP 2078, IFP 50-50, FFP 60-60, ISIP 1078, ~~STIP 1078~~ RECEIVED STATE COMMISSION

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DST #2 Cherokee "Pay"; Test interval 4655'-4680'

Times: 30-60-60-120

Had strong blow (bottom of bucket in 27 minutes) on initial opening.

Had strong blow (bottom of bucket in 30 minutes) on second opening.

Recovered 370' of gas, 425' of fluid, 300' OCM (75% oil) plus 125' of clean gassey oil.

IHP 2403, FHP 2344, IFP 40-80, FFP 130-200, ISIP 1254, FSIP 1244

This well was under geologic supervision from 3900'-TD. Wet samples were examined from 4000'-TD. Other than those noted above, there were no oil shows in the samples. Based on the DST results and the logs, casing was run for further testing of the Cherokee "Pay" zone.

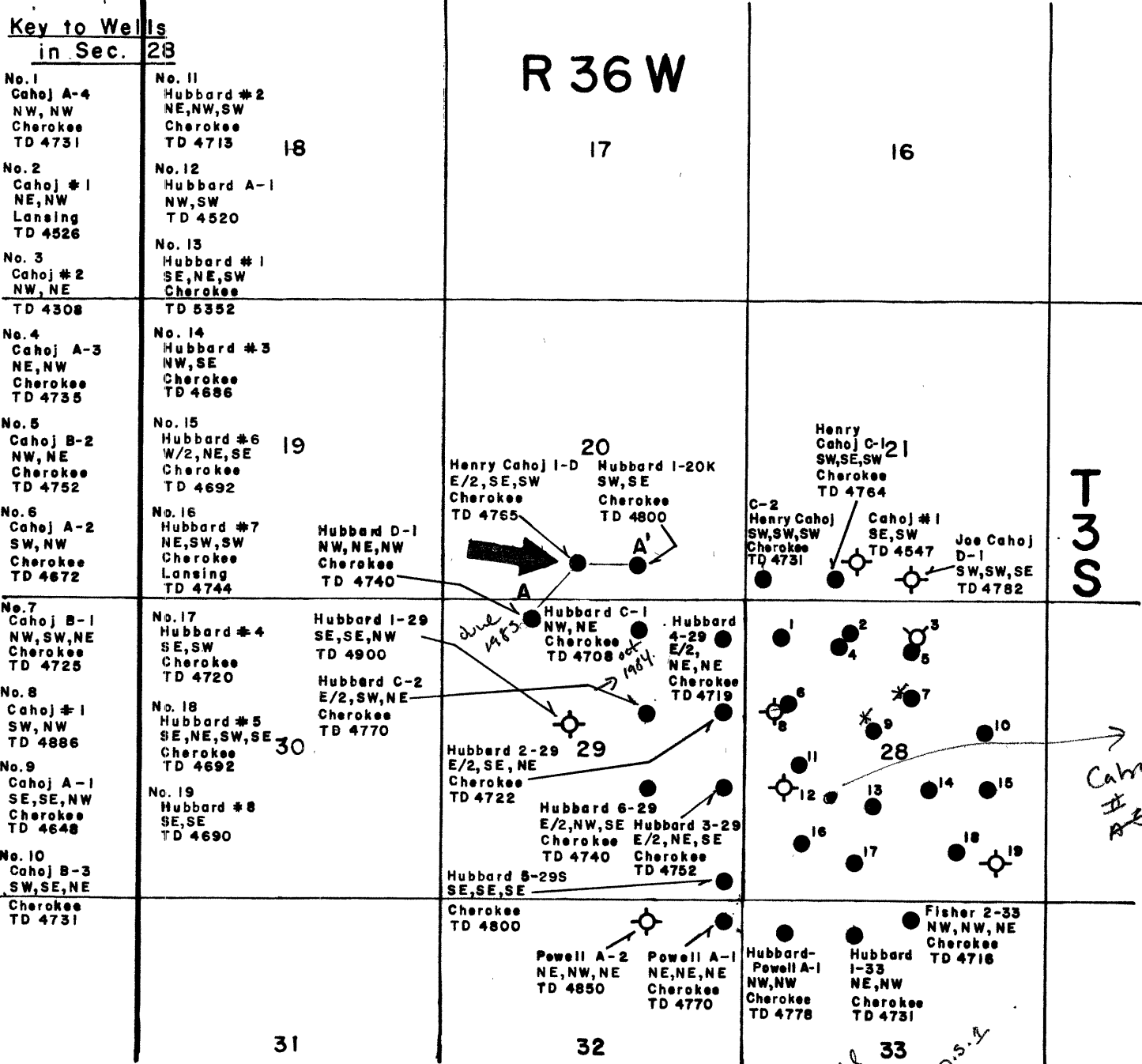


James Dillie  
Operator

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CONSERVATION DIVISIO  
Wichita, Kansas



**JAMES DILLIE**  
**GEOLOGICAL ENGINEER**

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**McDONALD PROSPECT**  
*Rawlins County, Kansas*  
**WELL DATA BASE MAP**

Henry Cahoj I-D E/2, SE, SW  
 Sec. 20 - 3S-36W

Scale: 2" = 1 Mile June 30, 1985

James Dillie

OIL AND GAS VENTURES

4469 SOUTH WINONA COURT  
DENVER, COLORADO 80236303-692-8892  
XXXXXX 337-4800

February 21, 1985

Completion Report  
Henry Cahoj 1-D

- 2/12/85 Ran Bond and CCl log. Could not get below 4659' (PBSD at 4698').
- 2/13/85 Moved in and rigged up Poe W.O. rig (had to use cat to position rig). Hauled in tubing and rods from Heble 1-27. Brought in 20 jts of new tubing. Ran tubing and port collar tool to 3138'. Tagged port collar. Hooked up wellhead equipment. Rigged up Sun Cementers. Started second stage cement job after opening port collar and establishing circulation up back side. Cemented to surface with 550 sacks of Sun lite weight cement. Closed port collar and pressure tested. Held OK. Reverse circulated excess cement after adding one jt of tubing. Pressure tested again. Held OK. Port collar is closed. Rigged down and moved off Sun Cementers. SDFN.
- 2/14/85 Ran tubing to 4660' and tried to circulate to bottom with water truck. Made a few feet (to 4675'). Called out Service Acid pump truck to circulate to bottom. Cleaned out to 4680' (KB). Hit solid cement at 4680'. Pulled tubing and port collar tool. Rigged up to casing swab. Swabbed down to 4280'. Rigged up Great Guns. Perforated the Cherokee "Pay" from 4663'-4671' with 4 shots per foot. Tagged TD at 4675'. SDFN.
- 2/15/85 Ran tubing and RTTS to 4629'. Set packer. Ran in with tubing swab. Tagged fluid at 4000'. Had 300' of fillup overnight. Swabbed down to seating nipple. Had good show of oil. Unset RTTS. Added one jt of tubing. Spotted one bbl of mud acid. Pulled one jt of tubing and reset RTTS. Acidized with 800 gallons of mud acid at 2 1/2 - 4 1/2 BPM. Pressure went from 250 psi, at 2 1/2 BPM, to 500 psi at 4 1/2 BPM. Pressure decreased to 300 psi, at 4 1/2 BPM, after 3 bbls in formation. Used 45 ball sealers. No noticeable ball action. Flushed with 21 bbls of KCL water (overflushed 3 bbls). Used 39 bbls total load. Swabbed back most of load (36 bbls) in one hour. Started hourly swab tests. Swabbed 11 bbls first hour (3 bbls of load, 8 bbls of oil), 7 bbls second hour (100% oil) and 8 bbls the third hour (100% oil). SDFN.
- 2/16/85 Ran in with tubing swab. Tagged fluid at 1200'. Had 3429' of fillup overnight (16 hours). Swabbed hole down and started retreat. Retreated Cherokee perf's at 4663-71 with 4000 gallons of gelled pad and 4000 gallons of SGA plus 36 bbls of KCL water as follows: 2000 gallons of gelled pad followed by 2000 gallons of SGA followed by 2000 gallons of gelled pad followed by 2000 gallons of SGA and flushed with 36 bbls of KCL water. Started job at 6 1/4 BPM at 1150 psi. Maintained 6 1/4 BPM to the KCL flush then went to 4 1/4 BPM. Pressure went to 1100 psi after 30 bbls, to 1000 psi after 48 bbls to 950 psi after 144 bbls back up to 1100 psi after 174 bbls then to 1300 psi for the remainder of the 228 bbl job. ISIP 300 psi down to 100 psi in 15 minutes. Let set for one hour. Started swabbing to the pits at 11:20AM. Started seeing some oil staining after 2 hours. Went to the swab tank after 3 hours. Had to go back to the pits when the swab tank was filled (6 runs). Unset RTTS and made 4 runs to clean out the fluid on the back side. Swabbing 82% oil at 19 bbls per hour at end of day. SDFN.

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2/17/85 SDFS.

2/18/85 Pulled tubing and RTTS. Ran 147 jts of 2 3/8" tubing with seating nipple on top of 17.15' mud anchor. Set at 4644' GL. Seating nipple at 4627'. Ran 183-3/4" rods with 1 1/2" insert pump with 2' rod sub on top. Spaced out with 1-8', 1-6', 1-4' and 1-2' pony rods. Hooked up 22' polish rod and liner. Hooked up wellhead. Long stroked with good bubble action. Rigged down and moved off Poe W.O. unit. Built pump pad after leveling location. Set Sentry 114 pumping unit. Hooked up Gemini propane engine and propane tank. Moved 72 bbls of oil from swab tank to gun barrel. Set 3-200 bbl stock tanks, 1-210 bbl gun barrel and 1-100 bbl salt water tank after building pad. Layed 2700' of 2 7/8" flow line. Hooked up flow line to wellhead and started pumping unit. Pumping at 14 SPM with a 54" stroke. Well pumped up in 34 minutes. Had oil to the tanks 90 minutes later. Final report.

*James Dillie*

James Dillie  
Operator

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CONSERVATION DIVISION  
Wichita, Kansas

15-153-20594-00-00

# CHENEY TESTING CO.

## DRILL STEM TEST REPORT

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Wichita, Kansas



## NOMENCLATURE

<b>b</b>	<b>= Approximate Radius of Investigation</b>	<b>Feet</b>
<b>b<sup>1</sup></b>	<b>= Approximate Radius of Investigation (Net Pay Zone h<sup>1</sup>)</b>	<b>Feet</b>
<b>D.R.</b>	<b>= Damage Ratio</b>	<b>—</b>
<b>EI</b>	<b>= Elevation</b>	<b>Feet</b>
<b>GD</b>	<b>= B.T. Gauge Depth (From Surface Reference)</b>	<b>Feet</b>
<b>h</b>	<b>= Interval Tested</b>	<b>Feet</b>
<b>h<sup>1</sup></b>	<b>= Net Pay Thickness</b>	<b>Feet</b>
<b>K</b>	<b>= Permeability</b>	<b>md</b>
<b>K<sup>1</sup></b>	<b>= Permeability (From Net Pay Zone h<sup>1</sup>)</b>	<b>md</b>
<b>m</b>	<b>= Slope Extrapolated Pressure Plot (Psi<sup>2</sup>/cycle Gas)</b>	<b>psi/cycle</b>
<b>OF<sup>1</sup></b>	<b>= Maximum Indicated Flow Rate</b>	<b>MCF/D</b>
<b>OF<sup>2</sup></b>	<b>= Minimum Indicated Flow Rate</b>	<b>MCF/D</b>
<b>OF<sup>3</sup></b>	<b>= Theoretical Open Flow Potential with/Damage Removed Max.</b>	<b>MCF/D</b>
<b>OF<sup>4</sup></b>	<b>= Theoretical Open Flow Potential with/Damage Removed Min.</b>	<b>MCF/D</b>
<b>P<sup>S</sup></b>	<b>= Extrapolated Static Pressure</b>	<b>Psig.</b>
<b>P<sup>F</sup></b>	<b>= Final Flow Pressure</b>	<b>Psig.</b>
<b>P<sup>DT</sup></b>	<b>= Potentiometric Surface (Fresh Water*)</b>	<b>Feet</b>
<b>Q</b>	<b>= Average Adjusted Production Rate During Test</b>	<b>bbls/day</b>
<b>Q<sup>1</sup></b>	<b>= Theoretical Production w/Damage Removed</b>	<b>bbls/day</b>
<b>Q<sup>P</sup></b>	<b>= Measured Gas Production Rate</b>	<b>MCF/D</b>
<b>R</b>	<b>= Corrected Recovery</b>	<b>bbls</b>
<b>r<sup>w</sup></b>	<b>= Radius of Well Bore</b>	<b>Feet</b>
<b>t</b>	<b>= Flow Time</b>	<b>Minutes</b>
<b>t<sup>o</sup></b>	<b>= Total Flow Time</b>	<b>Minutes</b>
<b>T</b>	<b>= Temperature Rankine</b>	<b>°R</b>
<b>Z</b>	<b>= Compressibility Factor</b>	<b>—</b>
<b>u</b>	<b>= Viscosity Gas or Liquid</b>	<b>CP</b>
<b>Log</b>	<b>= Common Log</b>	

\* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.

# CHENEY TESTING COMPANY, INC.

P. O. Box 367 HILL CITY, KANSAS 67642

## DRILL-STEM TEST DATA

Company Henry Cahoj & Jim Dillie	Test No. 2
Well Name & Number Henry Cahoj #1=D	Zone Tested Cherokee
Company Address 44695 S. Winona Denver, Co.	Date 2/8/85
Company Rep. Jim Dillie	Tester Mike Finnesy
Contractor Murfin Drilling Company	Elevation 3309 KB
Location: Sec. 20 Twp. 3s Rge. 36w Co. Rawlin State Ks.	Est. Feet of Pay

Recorder No. 13276 Type AK-1 Range 4000 PSI  
 Recorder Depth 4677 Clock # 22345  
 (A) Initial Hydrostatic Mud 2403 PSI  
 (B) First Initial Flow Pressure 40 PSI  
 (C) First Final Flow Pressure 80 PSI  
 (D) Initial Shut-in Pressure 1254 PSI  
 (E) Second Initial Flow Pressure 130 PSI  
 (F) Second Final Flow Pressure 200 PSI  
 (G) Final Shut-in Pressure 1244 PSI  
 (H) Final Hydrostatic Mud 2344 PSI  
 Temperature 132  
 Mud Weight 9.3 Viscosity 53  
 Fluid Loss 6.2  
 Interval Tested 4657-4680  
 Anchor Length 23  
 Top Packer Depth 4650  
 Bottom Packer Depth 4655  
 Total Depth 4680  
 Drill Pipe Size 4 1/2 XH  
 Wt. Pipe I. D. \_\_\_\_\_ Ft. Run \_\_\_\_\_  
 Recovery-Total Feet 420  
 Recovered 370 Feet Of Gas in pipe.  
 Recovered 120 Feet Of Oil cut mud; 25% mud & 75% oil.  
 Recovered 120 Feet Of Clean gassy oil: 29 Gravity API Corrected.  
 Recovered 180 Feet Of Mud cut oil: 25% mud & 75% oil.  
 Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_  
 Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Recorder No. 13275 Type AK-1 Range 3950 PSI  
 Recorder Depth 4672 Clock # 26195  
 Tool Open Before I.S.I. 30 Mins.  
 Initial Shut-in 60 Mins.  
 Flow Period 60 Mins.  
 Final Shut-in 120 Mins.  
 Top Choke Size 1" Hole Size 7 7/8"  
 Bottom Choke Size 3/4" Rubber Size 6 3/4"  
 Tool Open @ 3:30 AM  
 Blow Remarks 1st open: Strong blow, off  
bottom of bucket in 27 minutes.  
2nd open: Strong blow, off bottom of buc-  
ket in 30 minutes.  
 \_\_\_\_\_  
Pit Mud Chlorides; 5,500 ppm.  
Resistivity 1.34 ohms @ 58.2 °F.  
 \_\_\_\_\_  
Drill Collars I.D. 2.25 Ft. run 310.  
 \_\_\_\_\_

Extra Equipment Bowen Jars, Safety JOint, Down Hole Insur- Price of Job \$960.00  
ance.

INITIAL SHUT-IN

=====

RECORDER NO: 13275 DEPTH: 4680 FT.  
 INITIAL FLOW TIME (T): 30 MIN.

DT(MIN)	LOG((T+DT)/DT)	PRESSURE(P SIG)
0	0.000	82.3
5	0.845	588.7
10	0.602	1124.8
15	0.477	1192.2
20	0.398	1247.1
25	0.342	1231.9
30	0.301	1235.3
35	0.269	1244.1
40	0.243	1249.1
45	0.222	1254.0
50	0.204	1257.9
55	0.189	1260.9
60	0.176	1262.8

FINAL SHUT-IN

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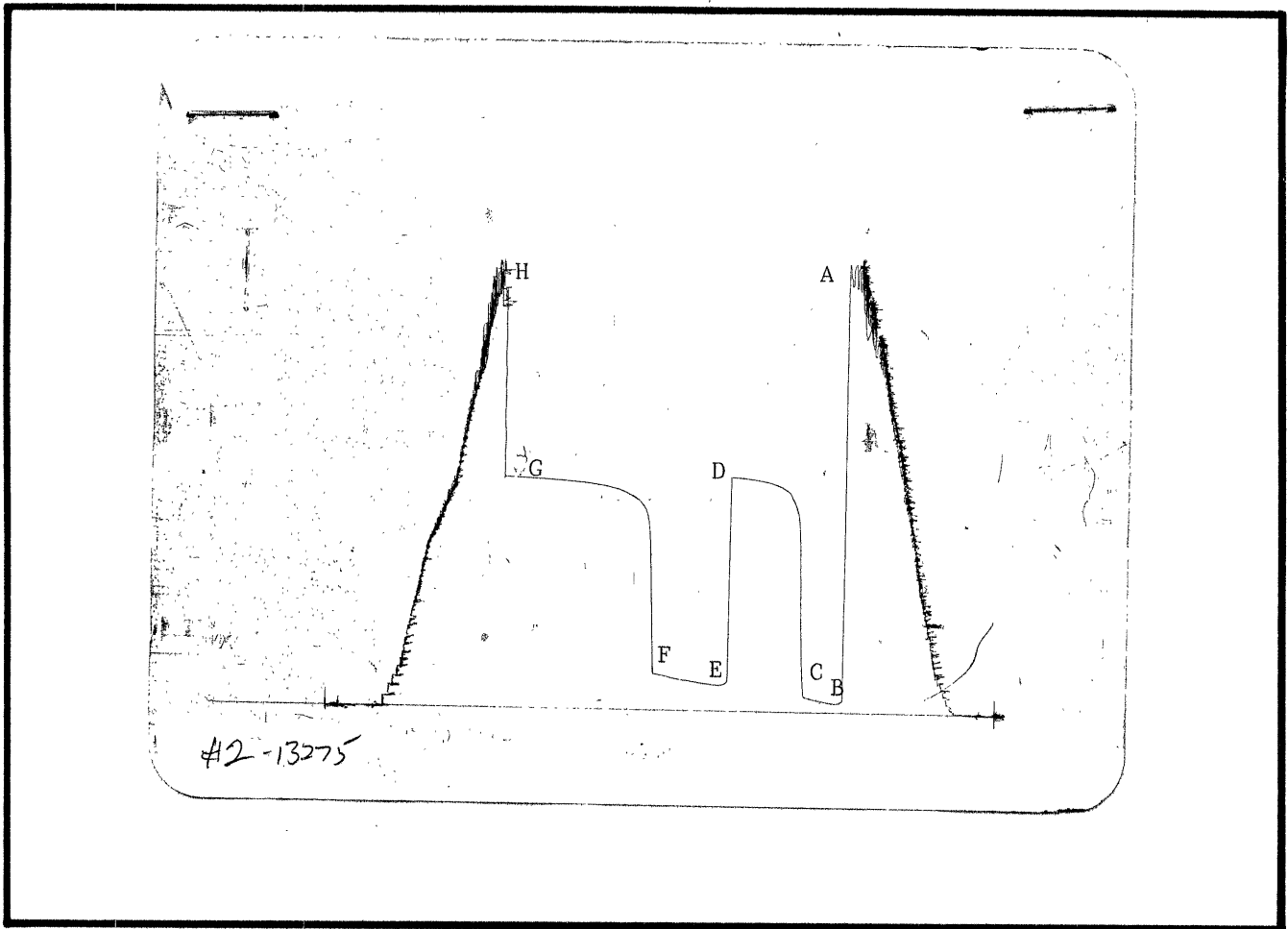
RECORDER NO: 13275 DEPTH: 4680 FT.  
 TOTAL FLOW TIME: 90 MIN.

DT(MIN)	LOG((T+DT)/DT)	PRESSURE(P SIG)
0	0.000	193.3
5	1.279	676.9
10	1.000	1094.1
15	0.845	1137.7
20	0.740	1161.5
25	0.663	1178.3
30	0.602	1193.2
35	0.553	1202.1
40	0.512	1211.1
45	0.477	1217.0
50	0.447	1222.0
55	0.421	1226.9
60	0.398	1229.9
65	0.377	1229.9
70	0.359	1235.8
75	0.342	1235.8
80	0.327	1235.3
85	0.314	1237.2
90	0.301	1239.2
95	0.289	1241.2
100	0.279	1243.1
105	0.269	1245.1
110	0.260	1246.1
115	0.251	1247.1
120	0.243	1248.1

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This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud .....	2403	2397	PSI
(B) First Initial Flow Pressure .....	40	47.6	PSI
(C) First Final Flow Pressure .....	80	82.3	PSI
(D) Initial Closed-in Pressure .....	1254	1262.8	PSI
(E) Second Initial Flow Pressure .....	130	132.8	PSI
(F) Second Final Flow Pressure .....	200	193.3	PSI
(G) Final Closed-in Pressure .....	1244	1248.1	PSI
(H) Final Hydrostatic Mud .....	2344	2339	PSI

CHENEY TESTING CO, INC.  
CALCULATION OF FORMATION CHARACTERISTICS  
FROM DST DATA

\*\*\*\*\*

FOR: HENRY CAHOJ & JIM DILLIE  
HENRY CAHOJ #1-D DST # 2  
SEC 20-3S-36W FORMATION: CHEROKEE  
RAWLINS COUNTY KANSAS ELEVATION: 3309 KB

\*\*\*\*\*

TEST PARAMETERS

TEST INTERVAL: 4657 - 4680	EST PAY: 10
TIME INTERVAL: 30 - 60 - 60 - 120	VISCOSITY OF FLUID: 6
INITIAL FLOW PRESS: 47.6- 82.3	HOLE SIZE: 7.875
FINAL FLOW PRESS: 132.8- 193.3	D.C. CAPACITY: 0.00492
SHUT-IN PRESS(I-F): 1262.8-1248.1	W.P. CAPACITY: 0.00000
BOTTOM HOLE TEMPERATURE: 132	D.P. CAPACITY: 0.01402
TOTAL FEET OF RECOVERY: 420	TOTAL BARRELS RECOVERY: 3.0660

\*\*\*\*\*

EXTRAPOLATED INITIAL SHUT-IN PRESSURE (PSI): 1296  
SLOPE (PSI-CYCLE): 186 POINTS USED: 6

EXTRAPOLATED FINAL SHUT-IN PRESSURE (PSI): 1275  
SLOPE (PSI-CYCLE): 112 POINTS USED: 6

\*\*\*\*\*

CALCULATIONS

AVERAGE PRODUCTION RATE (B/D)	: 49.06
TRANSMISSIBILITY (MD-FT/CP)	: 71.22
PERMEABILITY (MD)	: 42.73
PRODUCTIVITY INDEX (B/D/PSI)	: 0.0805
DAMAGE RATIO	: 1.574
APPROXIMATE RADIUS OF INVESTIGATION (FT)	: 62.0
DRAWDOWN FACTOR (%)	: 1.620
POTENTIOMETRIC SURFACE (FT)	: 1585.73

HORNER PLOT  
HENRY CAHOJ & JIM DILLIE  
HENRY CAHOJ #1-D  
DST # 2 DEPTH: 4680  
RECORDER NO. 13275  
INITIAL SHUT-IN:  $\diamond$   
FINAL SHUT-IN:  $\square$

