

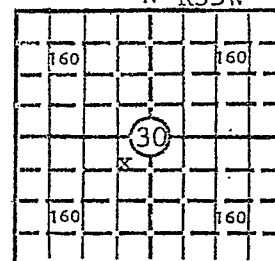
## KANSAS DRILLERS LOG

API No. 15 — 067 — 20371  
County Number

S. 30 T. 27S R. 35 W

Loc. 2490' FSL, 2340' FWL S

County Grant

640 Acres  
N R35W

Locate well correctly

Elev.: Gr. 3113'

DF 3120' KB 3121'

Operator

Cities Service Oil Company

Address

3545 N. W. 58th Street, Oklahoma City, Okla. 73112

Well No.

3

Lease Name

Adams N

Footage Location

2490 feet from (S) line 2340 feet from (W) line of SW/4

Principal Contractor

E. F. Wakefield

Geologist

Spud Date

3-9-76

Total Depth

3110'

P.B.T.D.

3080'

Date Completed

8-27-76

Oil Purchaser

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## CASING RECORD

Report of all strings set—surface, intermediate, production, etc.

| Purpose of string | Size hole drilled | Size casing set (in O.D.) | Weight lbs/ft. | Setting depth | Type cement | Sacks | Type and percent additives                                                                                                                                                                                                                   |
|-------------------|-------------------|---------------------------|----------------|---------------|-------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Surface           | 12-1/4"           | 8-5/8"                    | 24#            | 808'          | Class H     | 340   | Cemented w/200 s Howco Lite w/2% CaCl & 1/4# Flocele followed by 175 sx Class H w/2% CaCl, 1/4# Flocele. Cement circulated: 35 sx.                                                                                                           |
| Production        | 7-7/8"            | 4-1/2"                    | 10.5#          | 3109          | Class H     | 225   | Cemented w/125 s Howco Lite w/1/4# Flocele per sx & 8/10 of 1% CFR-2 followed by 100 sx 50/50 Pozmix w/10% salt & 1/4# Flocele per sx & 8/10 of 1% CFR-2 followed by 100 sx 50/50 Pozmix w/10% salt & 1/4# Flocele per sx & 8/10 of 1% CFR-2 |

LINER RECORD

PERFORATION RECORD

| Top, ft.      | Bottom, ft.   | Sacks cement  | Shots per ft. | Size & type | Depth interval |
|---------------|---------------|---------------|---------------|-------------|----------------|
| -----         | ---           | -----         | 2             | 0.57 S.D.J. | 2902-2906'     |
| TUBING RECORD |               |               |               |             | 2915-2919'     |
|               |               |               |               |             | 2924-2928'     |
| Size          | Setting depth | Packer set at |               |             | 2933-2940'     |
| 1 1/2"        | 3007'         | ---           |               |             | 2959-2972'     |

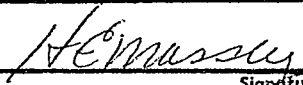
## ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

| Amount and kind of material used                                                                                                                                                                                                                                                                                                                                                                  | Depth interval treated |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Halliburton fractured Council Grove 2902-72' dn csg w/2500 gal of 15% Spearhead acid followed by 6000 gals 1% KCLW pad containing 12 gals FR-26L, 6 gals Howco Suds, 3 gals Adocide, followed by 70,000 gals of 1% KCLW & 70,000 20/40 Sd containing 140 gals FR-26L, 70 gals Howco Suds, 34 gals Adocide & had blender problems. Flushed w/48 bbls 1% KCLW containing 4 gals FR-26L. Pumped 6000 | 2902-2972'             |

## INITIAL PRODUCTION (Over)

|                                                    |             |                                                     |                        |               |      |
|----------------------------------------------------|-------------|-----------------------------------------------------|------------------------|---------------|------|
| Date of first production                           |             | Producing method (flowing, pumping, gas lift, etc.) |                        |               |      |
| 8-27-76                                            |             | Flowing                                             |                        |               |      |
| RATE OF PRODUCTION<br>PER 24 HOURS                 | Oil<br>---- | Gas<br>CAOF                                         | Water                  | Gas-oil ratio |      |
|                                                    | bbls.       | 2260                                                | MCF                    | bbls.         | CFPB |
| Disposition of gas (vented, used on lease or sold) |             |                                                     | Producing interval (s) |               |      |
| To be sold to PEPL                                 |             |                                                     | 2902-2972'             |               |      |

INSTRUCTIONS: As provided in KCC Rule 82-2-125, within 90 days after completion of a well, one completed copy of this Drillers Log shall be transmitted to the State Geological Survey of Kansas, 4150 Monroe Street, Wichita, Kansas 67209. Copies of this form are available from the Conservation Division, State Corporation Commission, 3830 So. Meridian (P.O. Box 17027), Wichita, Kansas 66217. Phone AC 316-522-2206. If confidential custody is desired, please note Rule 82-2-125. Drillers Logs will be on open file in the Oil and Gas Division, State Geological Survey of Kansas, Lawrence, Kansas 66044.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                             |                                                                         |                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Operator<br>Cities Service Oil Company                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                             | DESIGNATE TYPE OF COMP.: OIL, GAS,<br>DRY HOLE, SWDW, ETC.:             |                                                                                |
| Well No.<br>3                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Lease Name<br>Adams N                                                                                                                                                                                                                                                                                                                                                                       | Gas                                                                     |                                                                                |
| S 30 T 27S R 35 <sup>KX</sup> <sub>W</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                             |                                                                         |                                                                                |
| <b>WELL LOG</b><br>Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                             | SHOW GEOLOGICAL MARKERS, LOGS RUN,<br>OR OTHER DESCRIPTIVE INFORMATION. |                                                                                |
| FORMATION DESCRIPTION, CONTENTS, ETC.                                                                                                                                                                                                                                                                                                                                                                                                                                                    | TOP                                                                                                                                                                                                                                                                                                                                                                                         | BOTTOM                                                                  | NAME                                                                           |
| DEPTH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                             |                                                                         |                                                                                |
| Soil, Sand & Clay                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0                                                                                                                                                                                                                                                                                                                                                                                           | 758                                                                     | Ran GR-Neutron Cement Bond<br>& CC Log to 3080'. Found<br>top cement at 2026'. |
| Red Bed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 758                                                                                                                                                                                                                                                                                                                                                                                         | 875                                                                     |                                                                                |
| Red Bed & Anhydrite                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 875                                                                                                                                                                                                                                                                                                                                                                                         | 1460                                                                    |                                                                                |
| Sand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1460                                                                                                                                                                                                                                                                                                                                                                                        | 1630                                                                    |                                                                                |
| Red Bed & Shells                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1630                                                                                                                                                                                                                                                                                                                                                                                        | 1857                                                                    |                                                                                |
| Shale                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1857                                                                                                                                                                                                                                                                                                                                                                                        | 2172                                                                    |                                                                                |
| Shale & Shells                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2172                                                                                                                                                                                                                                                                                                                                                                                        | 2380                                                                    |                                                                                |
| Shale                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 2380                                                                                                                                                                                                                                                                                                                                                                                        | 2580                                                                    |                                                                                |
| Shale & Lime                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2580                                                                                                                                                                                                                                                                                                                                                                                        | 2704                                                                    |                                                                                |
| Lime & Shale                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2704                                                                                                                                                                                                                                                                                                                                                                                        | 2980                                                                    |                                                                                |
| Lime                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2980                                                                                                                                                                                                                                                                                                                                                                                        | 3110                                                                    |                                                                                |
| T.D.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                             | 3110                                                                    |                                                                                |
| P.B.T.D.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                             | 3080                                                                    |                                                                                |
| gals pad followed by 70,000 gals 1% KCLW & 70,000# 20/40 Sd.<br>containing same additives. Flushed w/48 bbls 1% KCLW<br>containing 4 gals FR-26L.                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                             |                                                                         |                                                                                |
| Halliburton acidized Council Grove 2902-72' w/2000 gals 5%<br>HCL acid containing 10 gals Morflo, 10 gals HC-2 2 gals HA-50<br>& 10 gals FE-1A. Flushed w/48 bbls 1% KCLW containing 5 gals<br>HC-2. Halliburton reacidized w/4000 gals 5% acid containing 20 gals Morflo & 20 gals HC-2<br>& 100# TLC-88 blocking materials in 3 stages as follows: 1000 gals 5% acid, 50# TLC-80<br>in 200 gals of 5% acid, 1800 gals 5% acid, 50# TLC-80 in 200 gals of 5% acid, 800 gals<br>5% acid. |                                                                                                                                                                                                                                                                                                                                                                                             |                                                                         |                                                                                |
| USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                             |                                                                         |                                                                                |
| Date Received                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <div style="text-align: right;"> <br/>           H. E. Massey<br/>           Signature         </div> <div style="text-align: center;">           Operations Manager<br/>           Title         </div> <div style="text-align: center;">           August 31, 1976<br/>           Date         </div> |                                                                         |                                                                                |