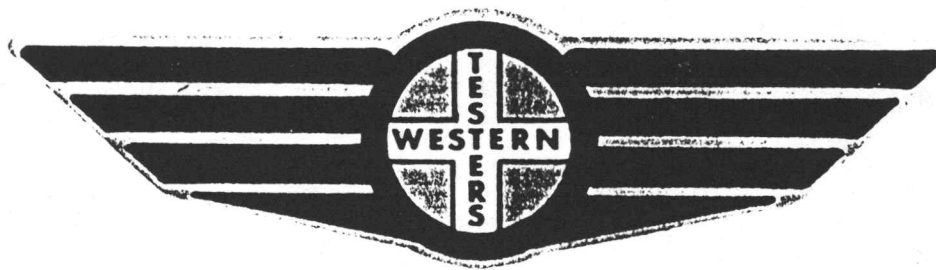


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY CASTLE-ROCK PRODUCTION, INC. LEASE & WELL NO. LYDA-WEB A-1 SEC. 10 TWP. 19S RGE. 20W TEST NO. 1 DATE 7/25/88

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 7/25/88 TICKET : 12765
CUSTOMER : CASTLE-ROCK PRODUCTION INC. LEASE : LYDA-WEB
WELL : A-1 TEST: 1 GEOLOGIST : OATSDEAN?
ELEVATION : 2178 GL FORMATION : CHEROKEE SD
SECTION : 10 TOWNSHIP : 19S
RANGE : 20W COUNTY : RUSH STATE : KANSAS
GAUGE SN# : 1566 RANGE : 4300 CLOCK : 12

INTERVAL FROM : 4167 TO : 4205 TOTAL DEPTH : 4205
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4162 SIZE : 6.75
PACKER DEPTH : 4167 SIZE : 6.75
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : LOBO DRLG
MUD TYPE : CHEMICAL VISCOSITY : 43
WEIGHT : 9.4 WATER LOSS (CC) : 14.
CHLORIDES (PPM) : 19000
JARS-MAKE : WTC SERIAL NUMBER : 408
DID WELL FLOW ? : NO REVERSED OUT ? :

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 514 FT I.D. inch : 2.70
DRILL PIPE LENGTH : 3624 FT I.D. inch : 3.80
TEST TOOL LENGTH : 29 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 38 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5XH

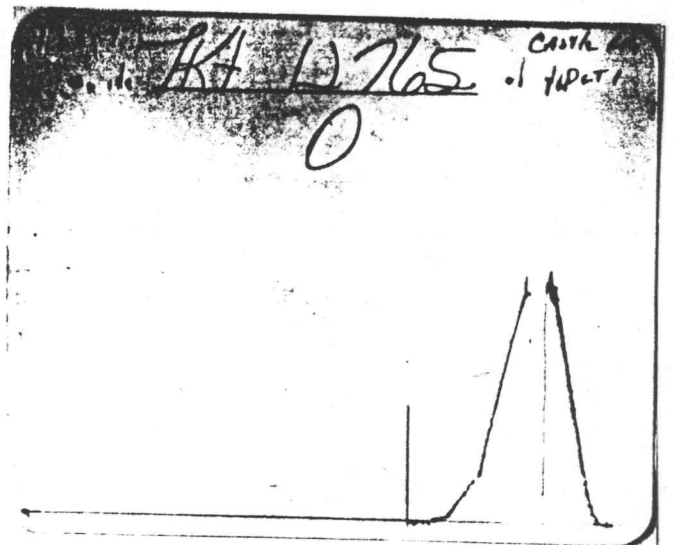
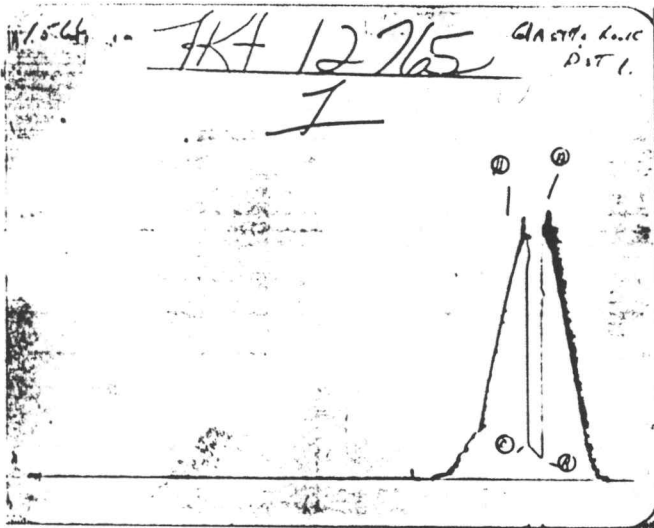
BLOW COMMENT #1 : INITIAL FLOW PERIOD STRONG BLOW - BOTTOM OF
BLOW COMMENT #2 : BUCKET IN 2 MINUTES.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 220 FT OF: FREE GASSY OIL
 RECOVERED : 0 FT OF: 38 GRAVITY @ 96 DEGREES F 35 CORRECTED
 RECOVERED : 360 FT OF: SLIGHTLY MUDDY GASSY OIL
 RECOVERED : 0 FT OF: 10% MUD; 5% WATER; 10% GAS; 75% OIL
 RECOVERED : 120 FT OF: OIL CUT WATERY MUD
 RECOVERED : 0 FT OF: 60% MUD; 30% WATER; 10% OIL

Total Barrels Fluid = 6.25
 Total Fluid Prod Rate = 599.87 BFPD
 Indicated Oil Rate = 430.19 BOPD
 Indicated Wtr Rate = 46.28 BWPD

REMARK 1 :
 REMARK 2 : CHLORIDES 23000 PPM
 REMARK 3 :
 REMARK 4 :

SET PACKER(S) : 3:55 PM TIME STARTED OFF BOTTOM : 4:10 PM
 WELL TEMPERATURE : 118
 INITIAL HYDROSTATIC PRESSURE (A) 2200
 INITIAL FLOW PERIOD MIN: 15 (B) 193 PSI TO (C) : 296
 INITIAL CLOSED IN PERIOD MIN: 0 (D) 0
 FINAL FLOW PERIOD MIN: 0 (E) 0 PSI TO (F) : 0
 FINAL CLOSED IN PERIOD MIN: 0 (G) 0
 FINAL HYDROSTATIC PRESSURE (H) 2121



WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : CASTLE-ROCK PRODUCTION INC.
RIG : RUSH-KANSAS
FIELD : LYDA-WEB
WELL : A-1
DATE : 7/25/88
GAUGE NO : 1566

OPERATIONAL COMMENTS

CHLORIDES 23000 PPM

COMPANY : CASTLE-ROCK PRODUCTION INC.
WELL : A-1
GAUGE # : 1566
DATE : 25/ 7/88

FIELD : LYDA-WEB
JOB # : 12765
DEPTH : 4205
TEST :

| DATA No. | REAL TIME HR:MN:SS | ELAPSE TIME DELTA HOURS | PRESSURE PSIG | TEMP DEG F | DELTA P Pi-P(i-1) |
|---------------------|-----------------------|----------------------------|------------------|---------------|----------------------|
| 1 | 3:55: 0 | 0.000 | 193.000 | 118.00 | 0.000 |
| INITIAL FLOW PERIOD | | | | | |
| 2 | 3:59:59 | 0.083 | 215.000 | 118.00 | 22.000 |
| 3 | 4: 5: 0 | 0.167 | 255.000 | 118.00 | 40.000 |
| 4 | 4:10: 0 | 0.250 | 296.000 | 118.00 | 41.000 |

WESTERN TESTING CO. INC.