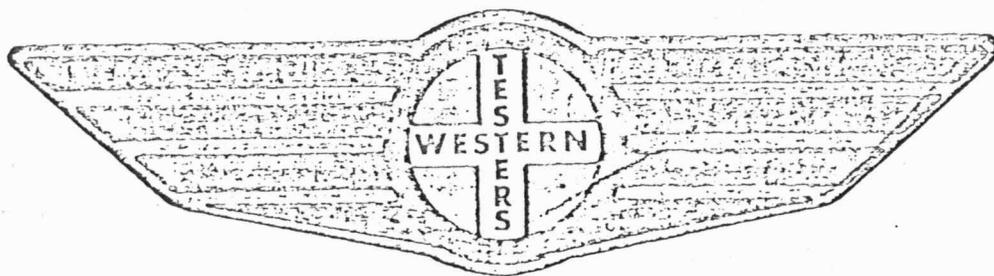


# FORMATION

# TEST

# REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING COMPANY INC.  
SUBSURFACE PRESSURE SURVEY

DATE: 2/22/84  
CUSTOMER: RAINS & WILLIAMSON OIL CO INC  
WELL: 2 TEST: 1  
ELEVATION (KB): 1623 FORMATION: LANSING  
SECTION: 17 TOWNSHIP: 12S  
RANGE: 14W COUNTY: RUSSELL STATE: KANSAS  
GAUGE SN #3659 RANGE: 4000 CLOCK: 12

TICKET #4443  
LEASE: "E" STECKEL  
GEOLOGIST: KINDLER

INTERVAL TEST FROM: 2794 FT TO: 2822 FT TOTAL DEPTH: 2822 FT  
DEPTH OF SELECTIVE ZONE: FT  
PACKER DEPTH: 2789 FT SIZE: 6 5/8 IN PACKER DEPTH: 2794 FT SIZE: 6 5/8 IN  
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: COTOOL  
MUD TYPE: STARCH VISCOSITY: 40  
WEIGHT: 10.0 WATER LOSS (CC): 12.8  
CHLORIDES (P.P.M.): 62000  
JARS - MAKE: NO SERIAL NUMBER:  
DID WELL FLOW? NO REVERSED OUT? NO  
DRILL COLLAR LENGTH: 89 FT I.D.: 2.25 IN  
WEIGHT PIPE LENGTH: FT I.D.: IN  
DRILL PIPE LENGTH: 2684 FT I.D.: 3.8 IN  
TEST TOOL LENGTH: 21 FT TOOL SIZE: 4 1/2 O.D. IN  
ANCHOR LENGTH: 28 FT SIZE: 5 1/2 O.D. IN  
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN  
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 1/2 XH IN

BLOW: STRONG BLOW THROUGHOUT FLOW PERIODS.

RECOVERED: 70 FT OF: 45% MUD; 45% OIL; 10% GAS.  
RECOVERED: 120 FT OF: 35% MUD; 5% WTR; 30% OIL; 30% GAS.  
RECOVERED: FT OF:  
RECOVERED: FT OF:

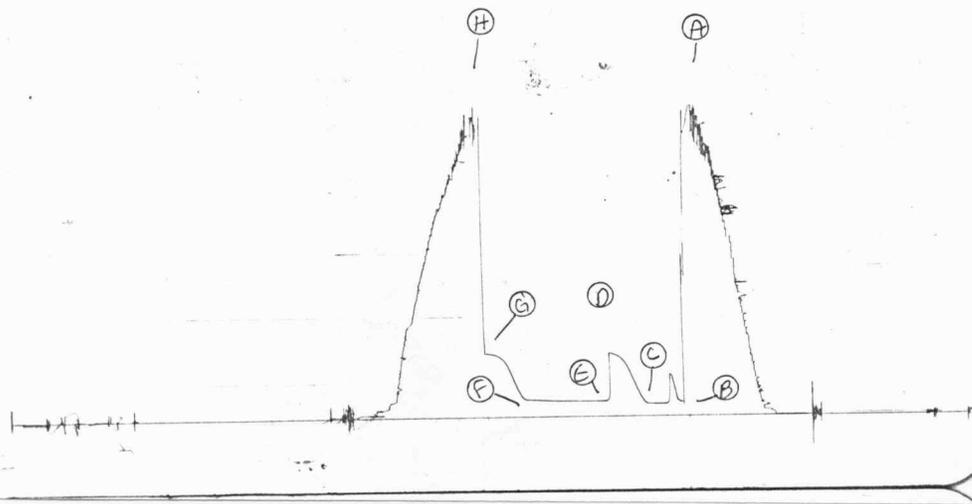
REMARKS: TOOL SLID 4' TO 5' TO BOTTOM.

TIME SET PACKER(S): 11:40 P.M. TIME STARTED OFF BOTTOM: 2:10 A.M.  
WELL TEMPERATURE: 105 °F  
INITIAL HYDROSTATIC PRESSURE: (A) 1551 PSI  
INITIAL FLOW PERIOD MIN: 30 (B) 63 PSI TO (C) 63 PSI  
INITIAL CLOSED IN PERIOD MIN: 30 (D) 330 PSI  
FINAL FLOW PERIOD MIN: 60 (E) 79 PSI TO (F) 88 PSI  
FINAL CLOSED IN PERIOD MIN: 30 (G) 332 PSI  
FINAL HYDROSTATIC PRESSURE (H) 1514 PSI



TCK# 4443 3659-1

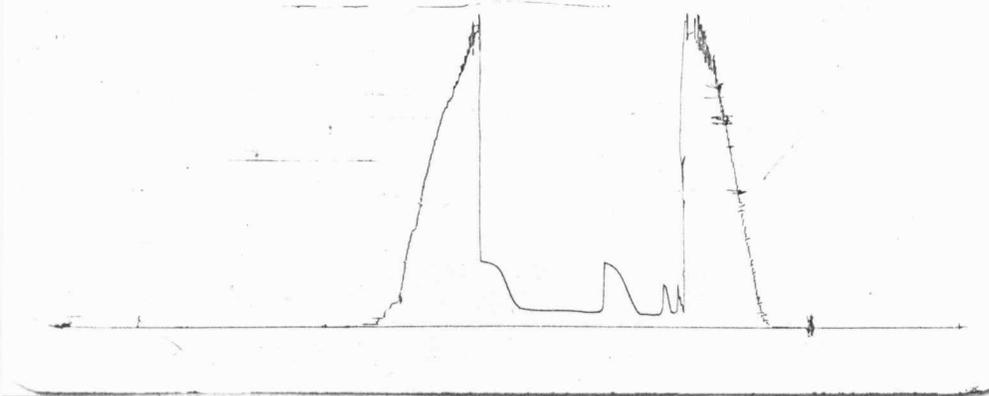
I



Inside Recorder

TCK# 4443 3351-1

O

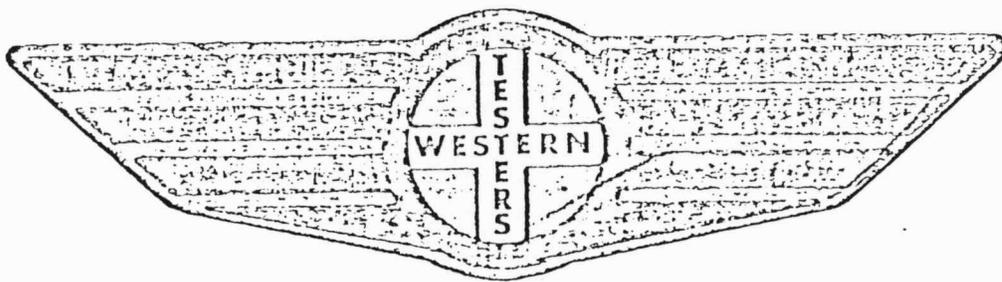


Outside Recorder

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company \_\_\_\_\_ RAINS & WILLIAMSON OIL CO., INC. Lease and Well No. #2 "E" STECKEL Sec. 17 Twp. 12S Rge. 14W Test No. 2 Date 2/23/8

WESTERN TESTING COMPANY INC.  
SUBSURFACE PRESSURE SURVEY

DATE: 2/23/84  
 CUSTOMER: RAINS & WILLIAMSON OIL CO INC  
 WELL: 2 TEST: 2  
 ELEVATION (KB): 1623 FORMATION: LANSING  
 SECTION: 17 TOWNSHIP: 12S  
 RANGE: 14W COUNTY: RUSSELL STATE: KANSAS  
 GAUGE SN #3659 RANGE: 4000 CLOCK: 12

TICKET #4444  
 LEASE: "E" STECKEL  
 GEOLOGIST: KINDLE

INTERVAL TEST FROM: 2825 FT TO: 2835 FT TOTAL DEPTH: 2835 FT  
 DEPTH OF SELECTIVE ZONE: FT  
 PACKER DEPTH: 2820 FT SIZE: 6 5/8 IN PACKER DEPTH: 2825 FT SIZE: 6 5/8 IN  
 PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: COTOOL  
 MUD TYPE: STARCH VISCOSITY: 40  
 WEIGHT: 10.0 WATER LOSS (CC): 12.8  
 CHLORIDES (P.P.M.): 62000  
 JARS - MAKE: NO SERIAL NUMBER:  
 DID WELL FLOW? NO REVERSED OUT? NO  
 DRILL COLLAR LENGTH: 89 FT I.D.: 2.25 IN  
 WEIGHT PIPE LENGTH: FT I.D.: IN  
 DRILL PIPE LENGTH: 2715 FT I.D.: 3.8 IN  
 TEST TOOL LENGTH: 21 FT TOOL SIZE: 4 1/2 O.D. IN  
 ANCHOR LENGTH: 10 FT SIZE: 5 1/2 O.D. IN  
 SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN  
 MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 1/2 XH IN

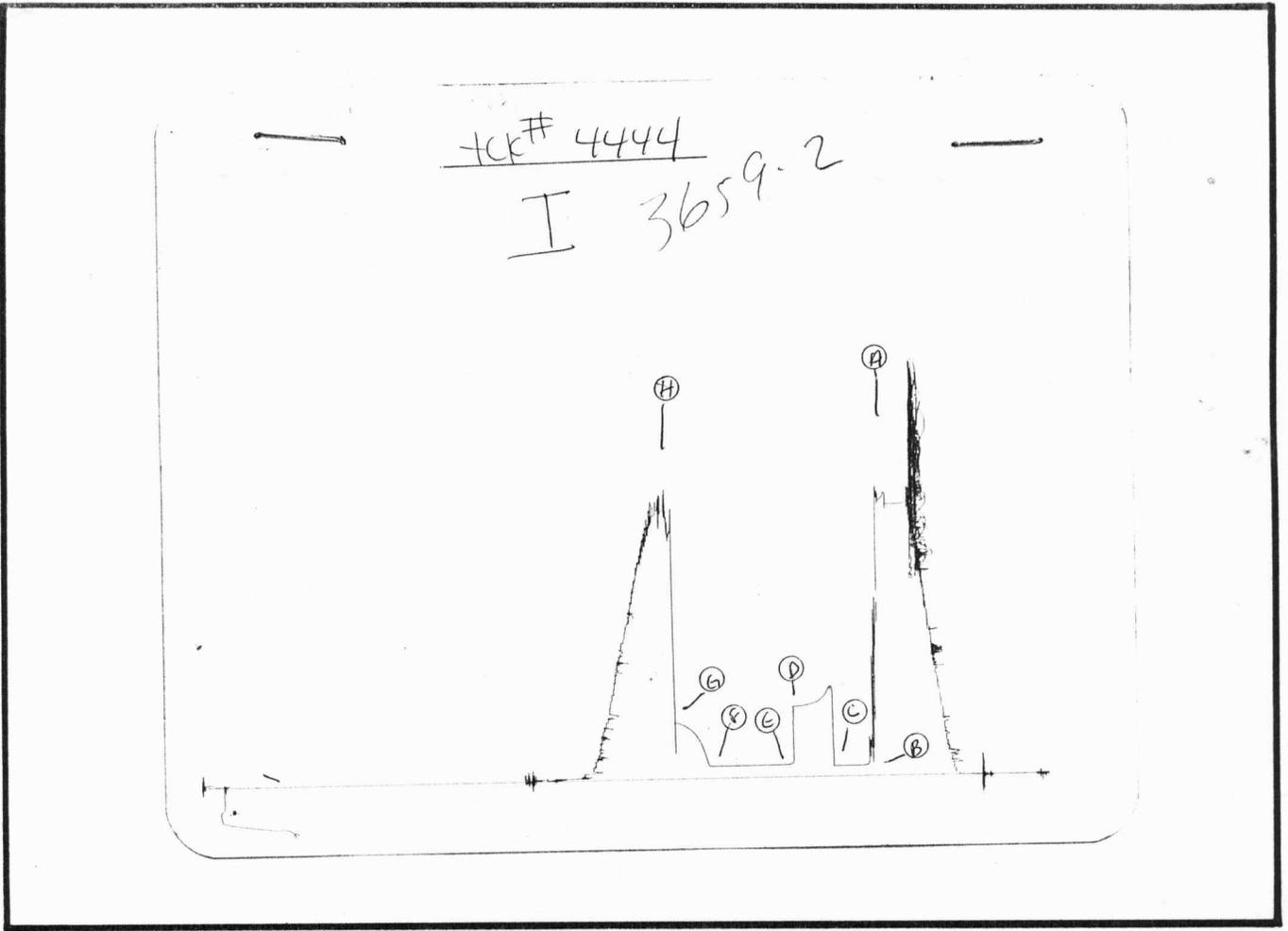
BLOW: FAIR BLOWS THROUGHOUT FLOW PERIODS.

RECOVERED: 60 FT OF: GAS ABOVE FLUID.  
 RECOVERED: 60 FT OF: MUD WITH FEW OIL SPOTS.  
 RECOVERED: FT OF:  
 RECOVERED: FT OF:

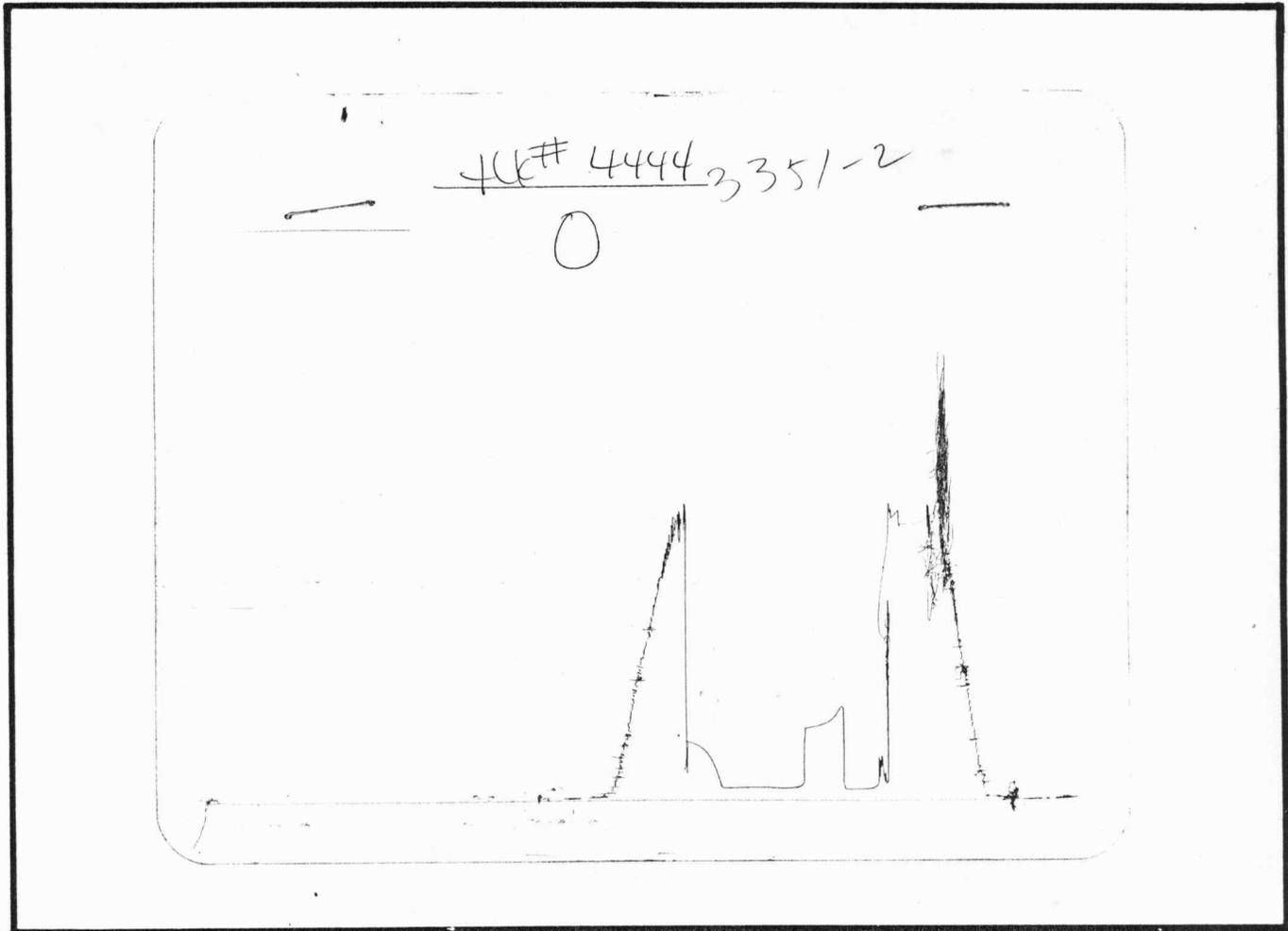
REMARKS: SLID TOOL 6' TO 8' TO BOTTOM.

TIME SET PACKER(S): 11:35 A.M. TIME STARTED OFF BOTTOM: 2:20 P.M.  
 WELL TEMPERATURE: 103 °F  
 INITIAL HYDROSTATIC PRESSURE: (A) 1555 PSI  
 INITIAL FLOW PERIOD MIN: 30 (B) 56 PSI TO (C) 56 PSI  
 INITIAL CLOSED IN PERIOD MIN: 30 (D) 387 PSI  
 FINAL FLOW PERIOD MIN: 60 (E) 65 PSI TO (F) 65 PSI  
 FINAL CLOSED IN PERIOD MIN: 27 (G) 305 PSI  
 FINAL HYDROSTATIC PRESSURE (H) 1474 PSI





Inside Recorder

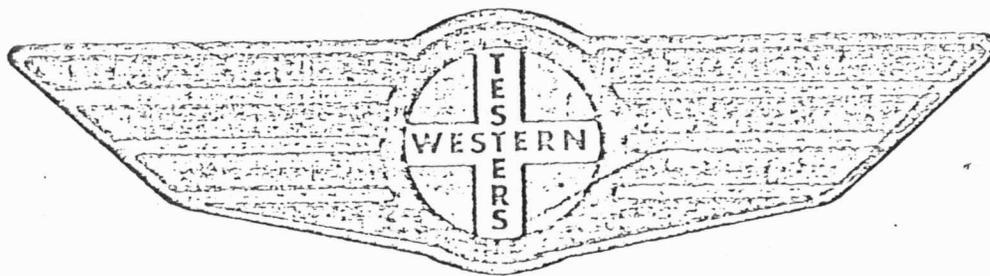


Outside Recorder

# FORMATION

# TEST

# REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

mpany  
RAINS & WILLIAMSON OIL CO., INC. and Well No. #2 "E" STECKEL  
Sec. 17 Twp. 12S Rge. 14W Test No. 3 Date 2/24/84

WESTRN TESTING COMPANY INC.  
SUBSURFACE PRESSURE SURVEY

DATE: 2/24/84 TICKET #4445  
CUSTOMER: RAINS & WILLIAMSON OIL CO INC LEASE: "E" STECKEL  
WELL: 2 TEST: 3 GEOLOGIST: KINDLER  
ELEVATION (KB): 1623 FORMATION: LANSING  
SECTION: 17 TOWNSHIP: 12S  
RANGE: 14W COUNTY: RUSSELL STATE: KANSAS  
GAUGE SN #3659 RANGE: 4000 CLOCK: 12

INTERVAL TEST FROM: 2848 FT TO: 2889 FT TOTAL DEPTH: 2889 FT  
DEPTH OF SELECTIVE ZONE: FT  
PACKER DEPTH: 2843 FT SIZE: 6 5/8 IN PACKER DEPTH: 2848 FT SIZE: 6 5/8 IN  
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: COTOOL  
MUD TYPE: STARCH VISCOSITY: 33  
WEIGHT: 9.7 WATER LOSS (CC): 18.4  
CHLORIDES (P.P.M.): 56000  
JARS - MAKE: SERIAL NUMBER:  
DID WELL FLOW? REVERSED OUT?  
DRILL COLLAR LENGTH: 89 FT I.D.: 2.25 IN  
WEIGHT PIPE LENGTH: FT I.D.: IN  
DRILL PIPE LENGTH: 2738 FT I.D.: 3.8 IN  
TEST TOOL LENGTH: 21 FT TOOL SIZE: 4 1/2 O.D. IN  
ANCHOR LENGTH: 41 FT SIZE: 5 1/2 O.D. IN  
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN  
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 1/2 XH IN

BLOW: INITIAL FLOW PERIOD FAIR BLOW.  
FINAL FLOW PERIOD STRONG BLOW.

RECOVERED: 60 FT OF: GAS ABOVE FLUID.  
RECOVERED: 36 FT OF: 32% MUD; 40% OIL; 1% WTR; 27% GAS.  
RECOVERED: 150 FT OF: 35% MUD; 2% WTR; 60% OIL; 3% GAS.  
RECOVERED: FT OF:  
RECOVERED: FT OF:

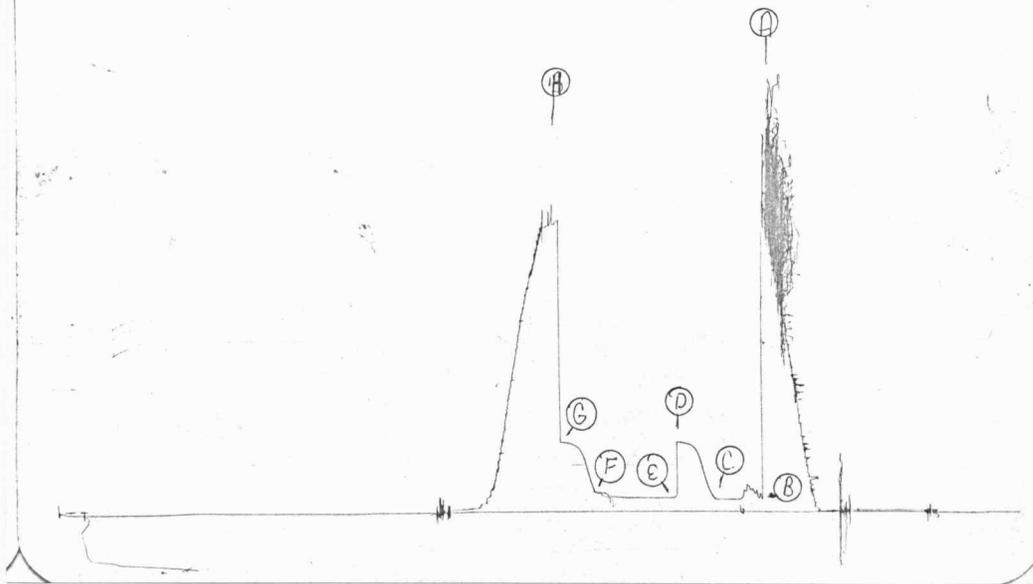
REMARKS:

TIME SET PACKER(S): 4:20 A.M. TIME STARTED OFF BOTTOM: 6:50 A.M.  
WELL TEMPERATURE: 104 °F  
INITIAL HYDROSTATIC PRESSURE: (A) 1596 PSI  
INITIAL FLOW PERIOD MIN: 30 (B) 62 PSI TO (C) 62 PSI  
INITIAL CLOSED IN PERIOD MIN: 33 (D) 361 PSI  
FINAL FLOW PERIOD MIN: 60 (E) 71 PSI TO (F) 78 PSI  
FINAL CLOSED IN PERIOD MIN: 30 (G) 361 PSI  
FINAL HYDROSTATIC PRESSURE (H) 1494 PSI



IKT #4445 3659-3

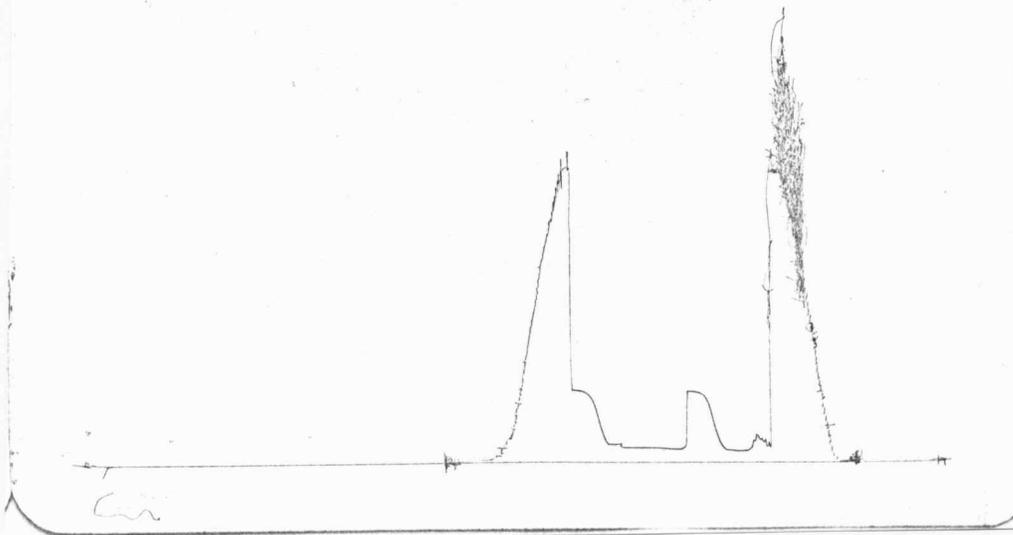
I



Inside Recorder

IKT # 4445 3357-3

O

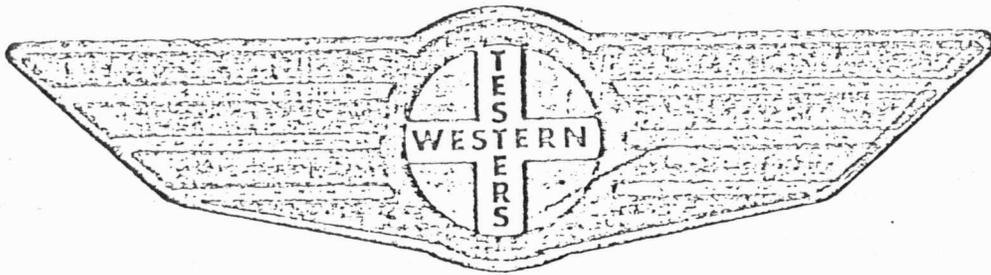


Outside Recorder

# FORMATION

# TEST

# REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING COMPANY INC.  
SUBSURFACE PRESSURE SURVEY

DATE: 2/24/84 TICKET #4446  
CUSTOMER: RAINS & WILLIAMSON OIL CO INC LEASE: "E" STECKEL  
WELL: 2 TEST: 4 GEOLOGIST: KINDLER  
ELEVATION (KB): 1623 FORMATION: LANSING  
SECTION: 17 TOWNSHIP: 12S  
RANGE: 14W COUNTY: RUSSELL STATE: KANSAS  
GAUGE SN #3659 RANGE: 4000 CLOCK: 12

INTERVAL TEST FROM: 2945 FT TO: 2968 FT TOTAL DEPTH: 2968 FT  
DEPTH OF SELECTIVE ZONE: FT  
PACKER DEPTH: 2940 FT SIZE: 6 5/8 IN PACKER DEPTH: 2945 FT SIZE: 6 5/8 IN  
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: COTOOL  
MUD TYPE: STARCH VISCOSITY: 40  
WEIGHT: 9.7 WATER LOSS (CC): 18.4  
CHLORIDES (P.P.M.): 50000  
JARS - MAKE: NO SERIAL NUMBER:  
DID WELL FLOW? REVERSED OUT?  
DRILL COLLAR LENGTH: 89 FT I.D.: 2.25 IN  
WEIGHT PIPE LENGTH: FT I.D.: IN  
DRILL PIPE LENGTH: 2834 FT I.D.: 3.8 IN  
TEST TOOL LENGTH: 21 FT TOOL SIZE: 4 1/2 O.D. IN  
ANCHOR LENGTH: 23 FT SIZE: 5 1/2 O.D. IN  
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN  
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 1/2 XH IN

BLOW: INITIAL FLOW PERIOD FAIR BLOW.  
FINAL FLOW PERIOD WEAK BLOW.

RECOVERED: 20 FT OF: MUD.  
RECOVERED: FT OF:  
RECOVERED: FT OF:

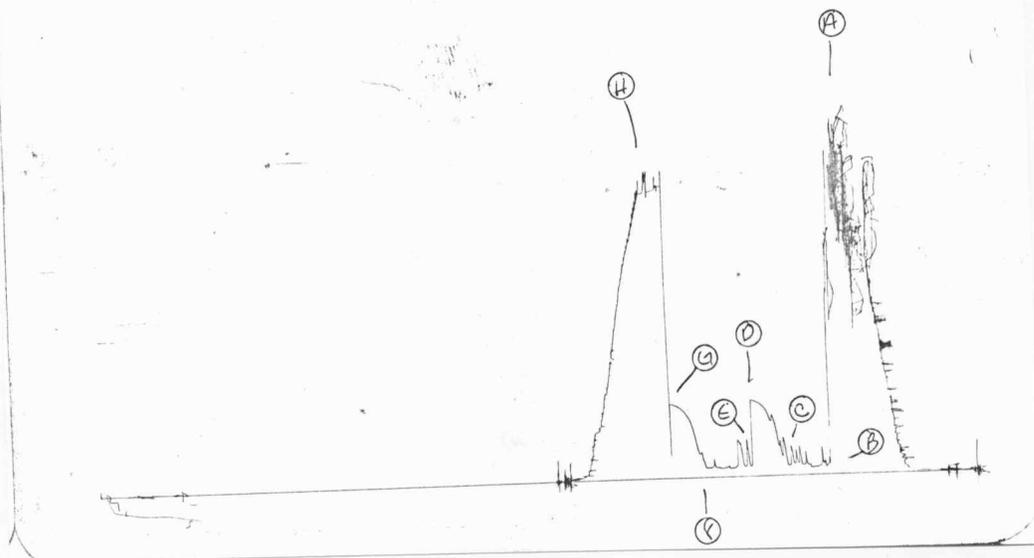
REMARKS: SLID TOOL 6' TO 10' TO BOTTOM.

TIME SET PACKER(S): 10:20 P.M. TIME STARTED OFF BOTTOM: 12:20 A.M.  
WELL TEMPERATURE: 104 °F  
INITIAL HYDROSTATIC PRESSURE: (A) 1542 PSI  
INITIAL FLOW PERIOD MIN: 30 (B) 54 PSI TO (C) 54 PSI  
INITIAL CLOSED IN PERIOD MIN: 27 (D) 398 PSI  
FINAL FLOW PERIOD MIN: 30 (E) 48 PSI TO (F) 48 PSI  
FINAL CLOSED IN PERIOD MIN: 30 (G) 388 PSI  
FINAL HYDROSTATIC PRESSURE (H) 1518 PSI



TCC# 3659-4  
4446

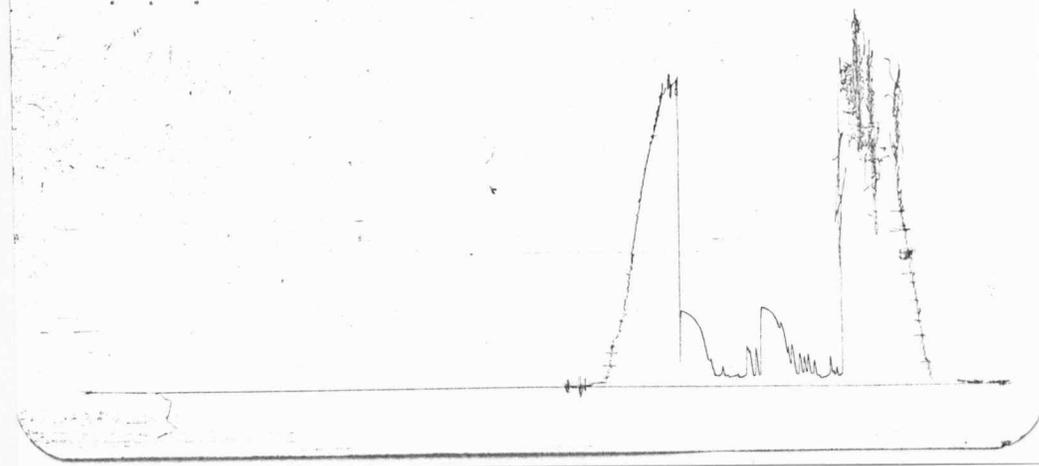
I



Inside Recorder

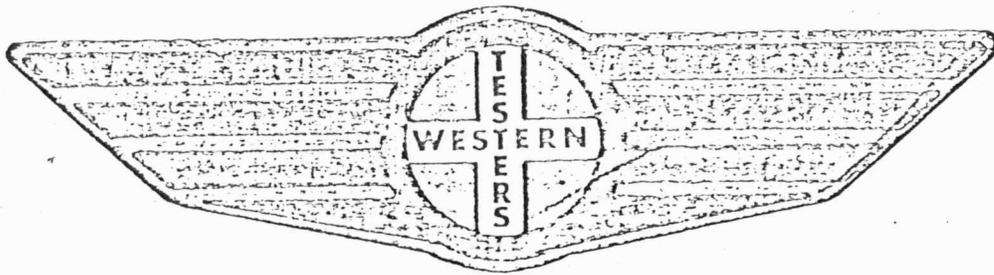
TCC# 4446

03351-4



Outside Recorder

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company \_\_\_\_\_ RAINS & WILLIAMSON OIL CO., INC. Lease and Well No. \_\_\_\_\_ #2 "E" STECKEL \_\_\_\_\_ Sec. 17 Twp. 12S Rge. 14W Test No. 5 Date 2/25/84

WESTERN TESTING COMPANY INC.  
SUBSURFACE PRESSURE SURVEY

DATE: 2/25/84  
CUSTOMER: RAINS & WILLIAMSON OIL CO INC  
WELL: 2 TEST: 5  
ELEVATION (KB): 1623 FORMATION: LANSING  
SECTION: 17 TOWNSHIP: 12S  
RANGE: 14W COUNTY: RUSSELL STATE: KANSAS  
GAUGE SN #3659 RANGE: 4000 CLOCK: 12

TICKET #4447

LEASE: "E" STECKEL

GEOLOGIST: KINDLER

INTERVAL TEST FROM: 2968 FT TO: 2990 FT TOTAL DEPTH: 2990 FT  
DEPTH OF SELECTIVE ZONE: FT  
PACKER DEPTH: 2963 FT SIZE: 6 5/8 IN PAKER DEPTH: 2968 FT SIZE: 6 5/8 IN  
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: COTOOL

MUD TYPE: STARCH

VISCOSITY: 45

WEIGHT: 9.8

WATER LOSS (CC): 11.2

CHLORIDES (P.P.M.): 50000

JARS - MAKE: NO

SERIAL NUMBER:

DID WELL FLOW? NO

REVERSED OUT? NO

DRILL COLLAR LENGTH: 89

FT I.D.: 2.25 IN

WEIGHT PIPE LENGTH:

FT I.D.: IN

DRILL PIPE LENGTH: 2858

FT I.D.: 3.8 IN

TEST TOOL LENGTH: 21

FT TOOL SIZE: 4 1/2 O.D. IN

ANCHOR LENGTH: 22

FT SIZE: 5 1/2 O.D. IN

SURFACE CHOKE SIZE: 3/4

IN BOTTOM CHOKE SIZE: 3/4 IN

MAIN HOLE SIZE: 7 7/8

IN TOOL JOINT SIZE: 4 1/2 XH IN

BLOW: INITIAL FLOW PERIOD WEAK BLOW.  
FINAL FLOW PERIOD NO BLOW.

RECOVERED: 10 FT OF: MUD.  
RECOVERED: FT OF:  
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 10:00 P.M.

TIME STARTED OFF BOTTOM: 12:00 A.M.

WELL TEMPERATURE: 105 °F

INITIAL HYDROSTATIC PRESSURE:

(A) 1545 PSI

INITIAL FLOW PERIOD MIN: 30

(B) 51 PSI TO (C) 51 PSI

INITIAL CLOSED IN PERIOD MIN: 30

(D) 64 PSI

FINAL FLOW PERIOD MIN: 30

(E) 53 PSI TO (F) 53 PSI

FINAL CLOSED IN PERIOD MIN: 30

(G) 58 PSI

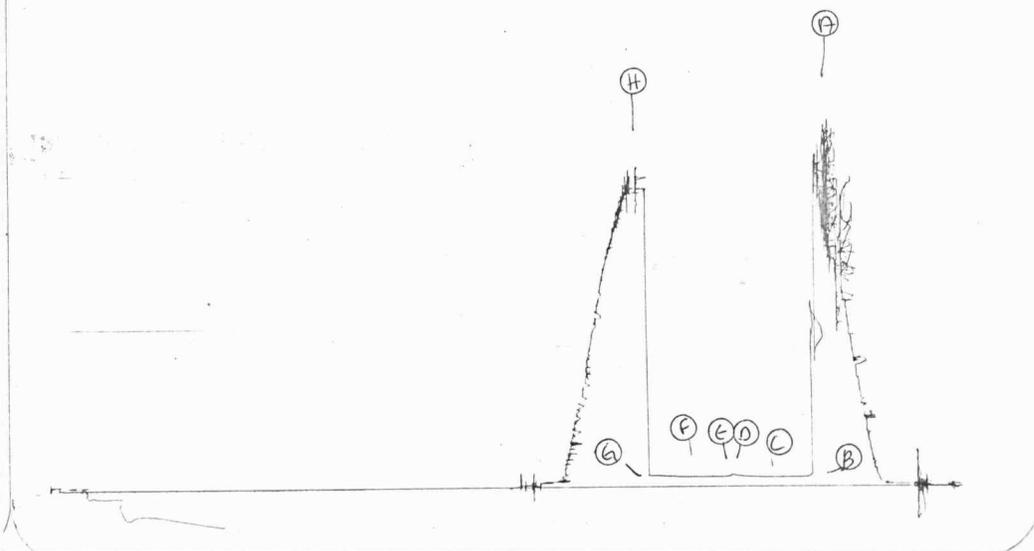
FINAL HYDROSTATIC PRESSURE

(H) 1509 PSI



ICK# 4447 3659-5

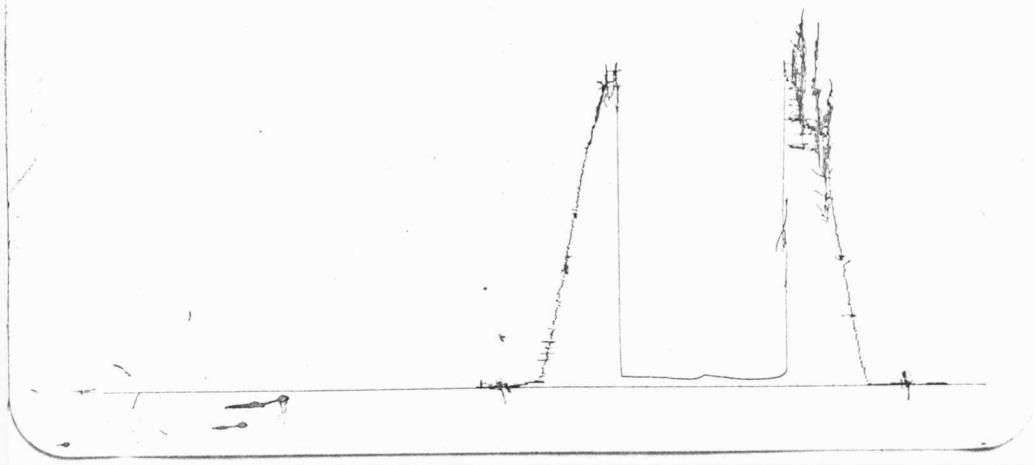
I



Inside Recorder

ICK# 4447 3351-5

O



Outside Recorder