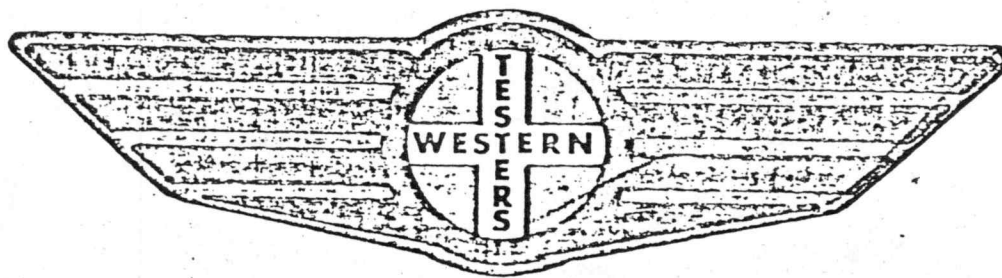


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company KAINES & WILLIAMSON OIL
Lease and Well No. #3 ZIEGLER
Sec. 3
Twp. 10S
Rge. 26W
Test No. 1
Date 3/10/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 3/10/85 TICKET #6955
 CUSTOMER: RAINS & WILLIAMSON OIL CO INC LEASE: ZIEGLER
 WELL: 3 TEST: 1 GEOLOGIST: HAGEMEIER
 ELEVATION (KB): 2593 FORMATION: TORONTO
 SECTION: 3 TOWNSHIP: 10S
 RANGE: 26W COUNTY: SHERIDAN STATE: KANSAS
 GAUGE SN #11018 RANGE: 4425 CLOCK: 12

INTERVAL TEST FROM: 3813 FT TO: 3848 FT TOTAL DEPTH: 3848 FT
 DEPTH OF SELECTIVE ZONE: FT
 PACKER DEPTH: 3808 FT SIZE: 6 5/8 IN PACKER DEPTH: 3813 FT SIZE: 6 5/8 IN
 PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RAINS & WILLIAMSON
 MUD TYPE: CHEMICAL VISCOSITY: 36
 WEIGHT: 9.2 WATER LOSS (CC): 14.4
 CHLORIDES (P.P.M.): 10000
 JARS - MAKE: SERIAL NUMBER:
 DID WELL FLOW? REVERSED OUT?
 DRILL COLLAR LENGTH: FT I.D.: IN
 WEIGHT PIPE LENGTH: FT I.D.: IN
 DRILL PIPE LENGTH: 3793 FT I.D.: 3.8 IN
 TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
 ANCHOR LENGTH: 35 FT SIZE: 5 1/2 OD 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;
 DECREASING SLIGHTLY. FINAL FLOW
 PERIOD NO BLOW. FLUSHED TOOL;
 GOOD SURGE; NO BLOW.

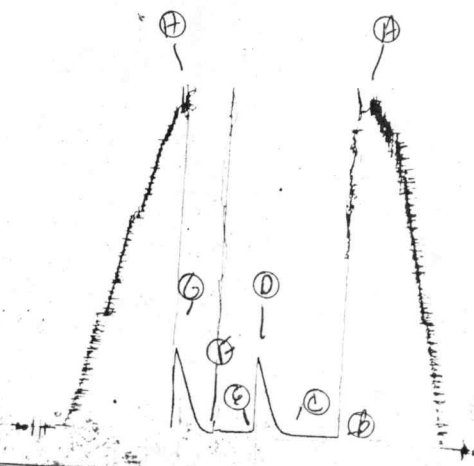
RECOVERED: 12 FT OF: OIL SPECKED MUD (LESS THAN 1% OIL).
 RECOVERED: FT OF: (GOOD SHOW OF OIL IN TOP OF TOOLS).
 RECOVERED: FT OF: CHLORIDES 10000 PPM.
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:

REMARKS: SLID 8 FEET TO BOTTOM.

TIME SET PACKER(S): 2:25 AM TIME STARTED OFF BOTTOM: 4:25 AM
 WELL TEMPERATURE: 118 °F
 INITIAL HYDROSTATIC PRESSURE: (A) 1956 PSI
 INITIAL FLOW PERIOD MIN: 30 (B) 29 PSI TO (C) 29 PSI
 INITIAL CLOSED IN PERIOD MIN: 33 (D) 462 PSI
 FINAL FLOW PERIOD MIN: 30 (E) 29 PSI TO (F) 16 PSI
 FINAL CLOSED IN PERIOD MIN: 30 (G) 484 PSI
 FINAL HYDROSTATIC PRESSURE (H) 1933 PSI

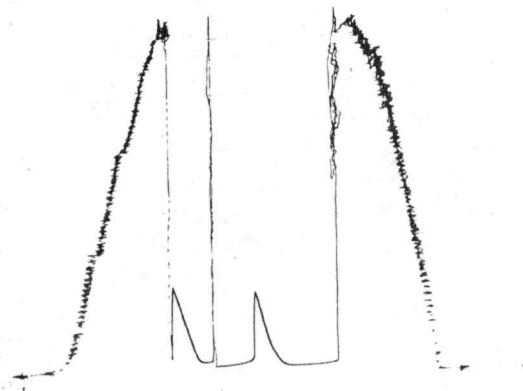
SKT #16955

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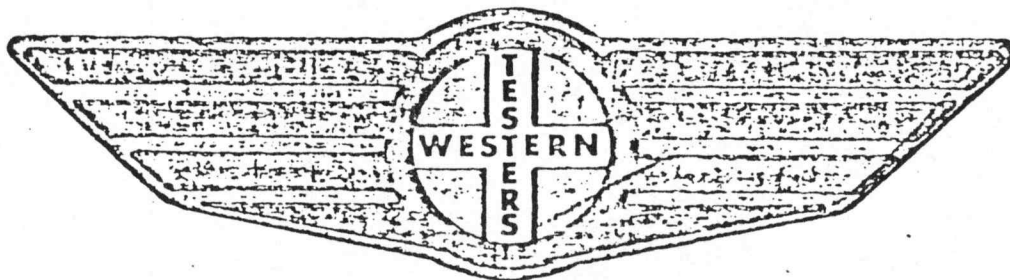
11018

JK #6955
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13361

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company RAINES & WILLIAMSON OIL Lease and Well No. #3 ZIEGLER Sec. 3 Twp. 10S Rge. 26W Test No. 2 Date 3/10/

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 3/10/85
 CUSTOMER: RAINS & WILLIAMSON OIL CO INC
 WELL: 3 TEST: 2
 ELEVATION (KB): 2593 FORMATION:
 SECTION: 3 TOWNSHIP: 10S
 RANGE: 26W COUNTY: SHERIDAN STATE: KANSAS
 GAUGE SN #11018 RANGE: 4425 CLOCK: 12

INTERVAL TEST FROM: 3843 FT TO: 3868 FT TOTAL DEPTH: 3868 FT
 DEPTH OF SELECTIVE ZONE: FT
 PACKER DEPTH: 3838 FT SIZE: 6 5/8 IN PACKER DEPTH: 3843 FT SIZE: 6 5/8 IN
 PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RAINS & WILLIAMSON
 MUD TYPE: CHEMICAL VISCOSITY: 41
 WEIGHT: 9.6 WATER LOSS (CC): 11.6
 CHLORIDES (P.P.M.): 10000
 JARS - MAKE: SERIAL NUMBER:
 DID WELL FLOW? REVERSED OUT?
 DRILL COLLAR LENGTH: FT I.D.: IN
 WEIGHT PIPE LENGTH: FT I.D.: IN
 DRILL PIPE LENGTH: 3820 FT I.D.: 3.8 IN
 TEST TOOL LENGTH: 23 FT TOOL SIZE: 5 1/2 OD IN
 ANCHOR LENGTH: 25 FT SIZE: 5 1/2 OD 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

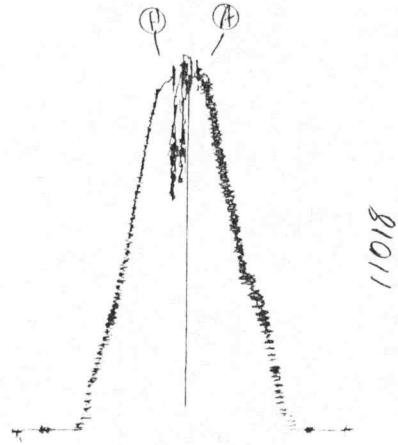
BLOW:

RECOVERED: 150 FT OF: MUD.
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:

REMARKS: MISRUN. NO PACKER SEAT.

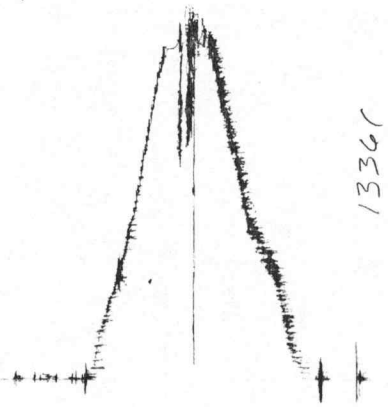
TIME SET PACKER(S): TIME STARTED OFF BOTTOM:
 WELL TEMPERATURE: 0 °F
 INITIAL HYDROSTATIC PRESSURE: (A) 2020 PSI
 INITIAL FLOW PERIOD MIN: 0 (B) 0 PSI TO (C) 0 PSI
 INITIAL CLOSED IN PERIOD MIN: 0 (D) 0 PSI
 FINAL FLOW PERIOD MIN: 0 (E) 0 PSI TO (F) 0 PSI
 FINAL CLOSED IN PERIOD MIN: 0 (G) 0 PSI
 FINAL HYDROSTATIC PRESSURE (H) 1998 PSI

JK #6956
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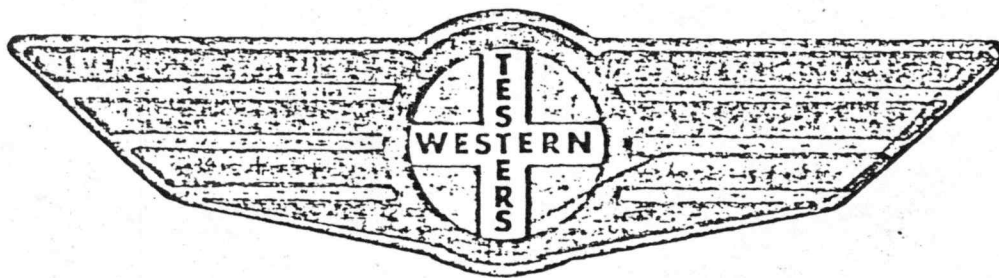
Inside Recorder

JK #6956
O



Outside Recorder

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 3/11/85
CUSTOMER: RAINS & WILLIAMSON OIL CO INC
WELL: 3 TEST: 3
ELEVATION (KB): 2593 FORMATION: LANSING "A"
SECTION: 3 TOWNSHIP: 10S
RANGE: 26W COUNTY: SHERIDAN STATE: KANSAS
GAUGE SN #11018 RANGE: 4425 CLOCK: 12

TICKET #6957
LEASE: ZIEGLER
GEOLOGIST: HAGEMEIER

INTERVAL TEST FROM: 3810 FT TO: 3868 FT TOTAL DEPTH: 3868 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3805 FT SIZE: 6 5/8 IN PAKER DEPTH: 3810 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RAINS & WILLIAMSON
MUD TYPE: CHEMICAL VISCOSITY: 41
WEIGHT: 9.6 WATER LOSS (CC): 11.6
CHLORIDES (P.P.M.): 10000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? REVERSED OUT?

DRILL COLLAR LENGTH: FT I.D.: IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3787 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 23 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 58 FT SIZE: 5 1/2 OD 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.
STARTED APPROXIMATELY AT 1" AND
STABILIZED AT 2" BLOW. FINAL FLOW
PERIOD WEAK SURFACE BLOW.

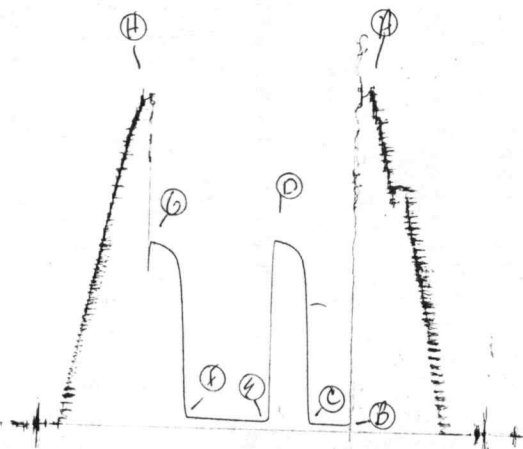
RECOVERED: 63 FT OF: VERY SLIGHTLY OIL SCUM MUD.
RECOVERED: FT OF: (SOME OIL IN TOP OF TOOL).
RECOVERED: FT OF: CHLORIDES 12500 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 6:08 AM TIME STARTED OFF BOTTOM: 8:38 AM
WELL TEMPERATURE: 116 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1955 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 38 PSI TO (C) 40 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 1081 PSI
FINAL FLOW PERIOD MIN: 60 (E) 47 PSI TO (F) 58 PSI
FINAL CLOSED IN PERIOD MIN: 30 (G) 1057 PSI
FINAL HYDROSTATIC PRESSURE (H) 1898 PSI

SK #16957

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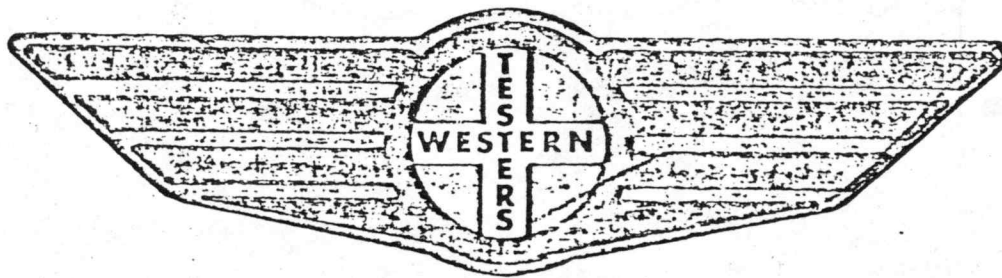
81011

SKA #6957
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13361

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING COMPANY INC.
SUBSURFACE PRESSURE SURVEY

DATE: 3/11/85 TICKET #6958
 CUSTOMER: RAINS & WILLAMSON OIL CO. INC. LEASE: ZIEGLER
 WELL: 3 TEST: 4 GEOLOGIST: HARGIS
 ELEVATION (KB): 2593 FORMATION: LANSING B
 SECTION: 3 TOWNSHIP: 10S
 RANGE: 26W COUNTY: SHERIDAN STATE: KS
 GAUGE SN #11018 RANGE: 4425 CLOCK: 12

INTERVAL TEST FROM: 3873 FT TO: 3895 FT TOTAL DEPTH: 3895 FT
 DEPTH OF SELECTIVE ZONE: FT
 PACKER DEPTH: 3868 FT SIZE: 6 5/8 IN PACKER DEPTH: 3873 FT SIZE: 6 5/8 IN
 PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: CO. TOOLS
 MUD TYPE: CHEMICAL VISCOSITY: 44
 WEIGHT: 9.0 WATER LOSS (CC): 10.4
 CHLORIDES (P.P.M.): 10000
 JARS - MAKE: SERIAL NUMBER:
 DID WELL FLOW? REVERSED OUT?
 DRILL COLLAR LENGTH: FT I.D.: IN
 WEIGHT PIPE LENGTH: FT I.D.: IN
 DRILL PIPE LENGTH: 3850 FT I.D.: 3.8 IN
 TEST TOOL LENGTH: 23 FT TOOL SIZE: 5 1/2 OD IN
 ANCHOR LENGTH: 22 FT SIZE: 5 1/2 OD 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 STRONG BLOW; STARTED 1/2"
 SLOW BUILDING TO 7".
 FINAL FLOW PERIOD STRONG BLOW; STARTED AS A
 SURFACE BLOW BUILT TO 7".

RECOVERED: 200 FT OF: GAS ABOVE FLUID
 RECOVERED: 8 FT OF: FREE SLIGHTLY GASSY OIL; GRAVITY 37
 RECOVERED: 64 FT OF: OIL & WATER CUT MUD (90% MUD; 5% OIL; 5% WATER)
 RECOVERED: 63 FT OF: MUD & OIL CUT WATER (25% MUD; 5% OIL; 70% WATER)

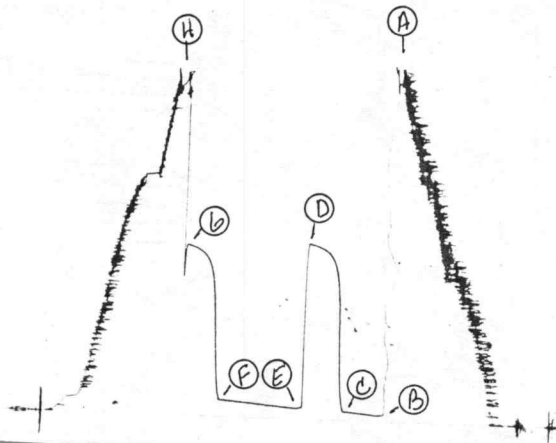
RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:

REMARKS: CHLORIDES 70000 P.P.M.

TIME SET PACKER(S): 8:00 PM TIME STARTED OFF BOTTOM: 10:30 PM
 WELL TEMPERATURE: 119 °F
 INITIAL HYDROSTATIC PRESSURE: (A) 2011 PSI
 INITIAL FLOW PERIOD MIN: 30 (B) 36 PSI TO (C) 52 PSI
 INITIAL CLOSED IN PERIOD MIN: 30 (D) 1003 PSI
 FINAL FLOW PERIOD MIN: 60 (E) 66 PSI TO (F) 96 PSI
 FINAL CLOSED IN PERIOD MIN: 27 (G) 976 PSI
 FINAL HYDROSTATIC PRESSURE (H) 1964 PSI

TKT # 6958

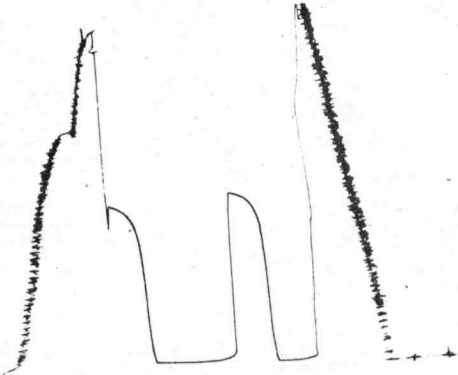
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81011

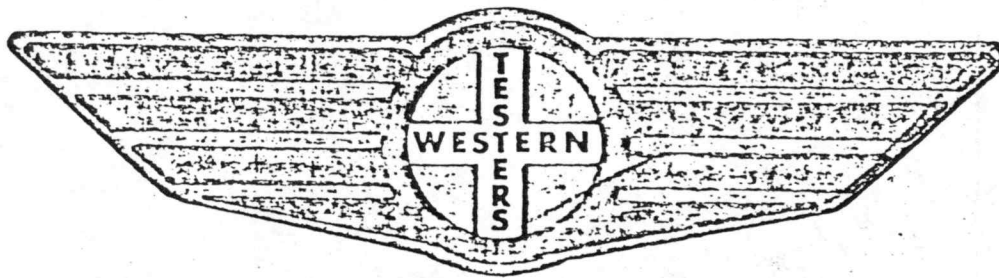
TKT # 6958

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13361

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY RAINS & WILLIAMSON OIL CO. INCREASE and Well No. #3 ZIEGLER
Sec. 3 Twp. 10S Rge. 26W Test No. 5 Date 3/12/85

WESTERN TESTING COMPANY INC.
SUBSURFACE PRESSURE SURVEY

DATE: 3/12/85 TICKET #6959
 CUSTOMER: RAINS & WILLAMSON OIL CO. INC. LEASE: ZIEGLER
 WELL: 3 TEST: 5 GEOLOGIST: HARGIS
 ELEVATION (KB): 2593 FORMATION: LANSING D
 SECTION: 3 TOWNSHIP: 10S
 RANGE: 26W COUNTY: SHERIDON STATE: KS
 GAUGE SN #11018 RANGE: 4425 CLOCK: 12

INTERVAL TEST FROM: 3890 FT TO: 3910 FT TOTAL DEPTH: 3910 FT
 DEPTH OF SELECTIVE ZONE: FT
 PACKER DEPTH: 3885 FT SIZE: 6 5/8 IN PACKER DEPTH: 3890 FT SIZE: 6 5/8 IN
 PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: CO. TOOLS
 MUD TYPE: CHEMICAL VISCOSITY: 52
 WEIGHT: 9.4 WATER LOSS (CC): 9.2
 CHLORIDES (P.P.M.): 9000
 JARS - MAKE: SERIAL NUMBER:
 DID WELL FLOW? REVERSED OUT?
 DRILL COLLAR LENGTH: FT I.D.: IN
 WEIGHT PIPE LENGTH: FT I.D.: IN
 DRILL PIPE LENGTH: 3867 FT I.D.: 3.8 IN
 TEST TOOL LENGTH: 23 FT TOOL SIZE: 5 1/2 OD IN
 ANCHOR LENGTH: 20 FT SIZE: 5 1/2 OD 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 STRONG BLOW; STARTED @ SURFACE
 BUILT TO 8".
 FINAL FLOW PERIOD STRONG BLOW; STARTED @ SURFACE
 BUILT TO 8".

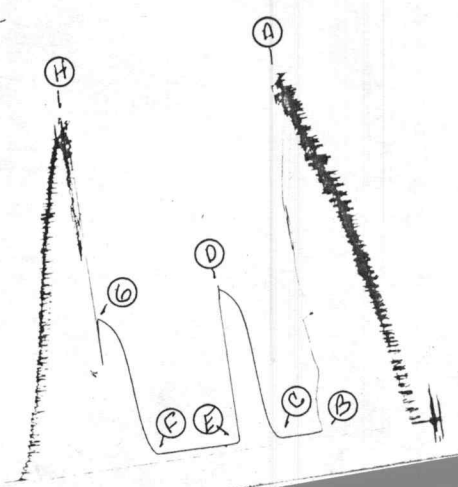
RECOVERED: 150 FT OF: GAS ABOVE FLUID
 RECOVERED: 40 FT OF: SLIGHTLY GASSY OIL; GRAVITY 36
 RECOVERED: 20 FT OF: OIL CUT MUD (90% MUD; 10% OIL)
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:

REMARKS: CHLORIDES 12000 P.P.M.

TIME SET PACKER(S): 9:00 AM TIME STARTED OFF BOTTOM: 11:30 AM
 WELL TEMPERATURE: 119 'F
 INITIAL HYDROSTATIC PRESSURE: (A) 2033 PSI
 INITIAL FLOW PERIOD MIN: 30 (B) 35 PSI TO (C) 36 PSI
 INITIAL CLOSED IN PERIOD MIN: 30 (D) 925 PSI
 FINAL FLOW PERIOD MIN: 60 (E) 42 PSI TO (F) 47 PSI
 FINAL CLOSED IN PERIOD MIN: 30 (G) 860 PSI
 FINAL HYDROSTATIC PRESSURE (H) 1988 PSI

TKT # 6959

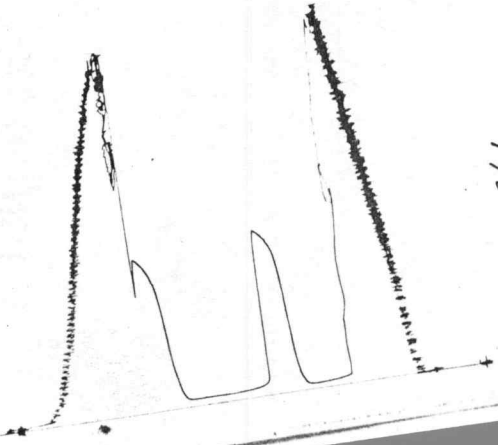
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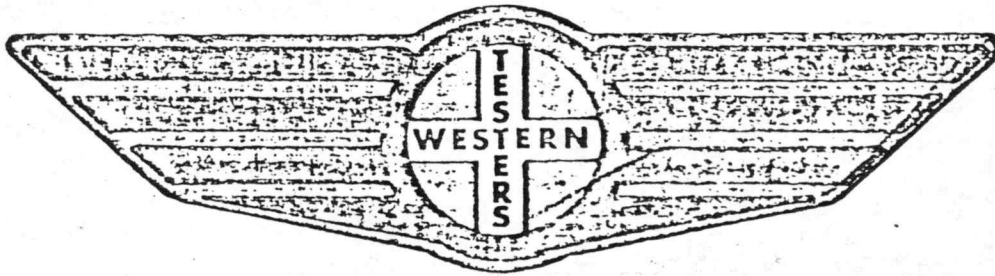
TKT # 10959

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13361

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company RAINES & WILLIAMSON OIL CO. INC. Lease and Well No. #3 ZEIGLER Sec. 3 Twp. 10S Rge. 26W Test No. 6 Date 3/13/85

WESTERN TESTING COMPANY INC.
SUBSURFACE PRESSURE SURVEY

DATE: 3/13/85
CUSTOMER: RAINS & WILLAMSON OIL CO. INC.
WELL: 3 TEST: 6
ELEVATION (KB): 2593 FORMATION:
SECTION: 3 TOWNSHIP: 10S
RANGE: 26W COUNTY: SHERIDAN STATE: KS
GAUGE SN #11018 RANGE: 4425 CLOCK: 12

TICKET #6960
LEASE: ZIEGLER
GEOLOGIST: HARGIS

INTERVAL TEST FROM: 3915 FT TO: 3954 FT TOTAL DEPTH: 3954 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3910 FT SIZE: 6 5/8 IN PACKER DEPTH: 3915 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: CO. TOOLS
MUD TYPE: CHEMICAL VISCOSITY: 52
WEIGHT: 9.4 WATER LOSS (CC): 9.2
CHLORIDES (P.P.M.): 9000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? REVERSED OUT? YES
DRILL COLLAR LENGTH: FT I.D.: IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3892 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 23 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 39 FT SIZE: 5 1/2 OD 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

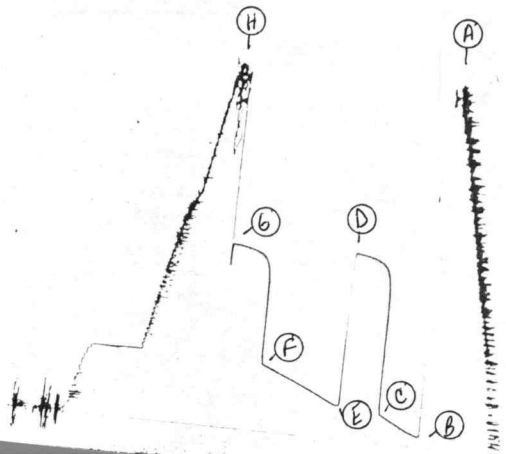
BLOW: INITIAL FLOW PERIOD STRONG BLOW BOTTOM OF
BUCKET IN 10 MINUTES.
FINAL FLOW PERIOD STRONG BLOW BOTTOM OF BUCKET
IN 12 MINUTES.

RECOVERED: 1140 FT OF: MUDDY WATER
RECOVERED: 10 FT OF: HEAVY MUD ON BOTTOM
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: CHLORIDES 45000 P.P.M.

TIME SET PACKER(S): 2:00 AM TIME STARTED OFF BOTTOM: 4:30 AM
WELL TEMPERATURE: 122 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2006 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 62 PSI TO (C) 166 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 1070 PSI
FINAL FLOW PERIOD MIN: 60 (E) 196 PSI TO (F) 386 PSI
FINAL CLOSED IN PERIOD MIN: 30 (G) 1052 PSI
FINAL HYDROSTATIC PRESSURE (H) 1981 PSI

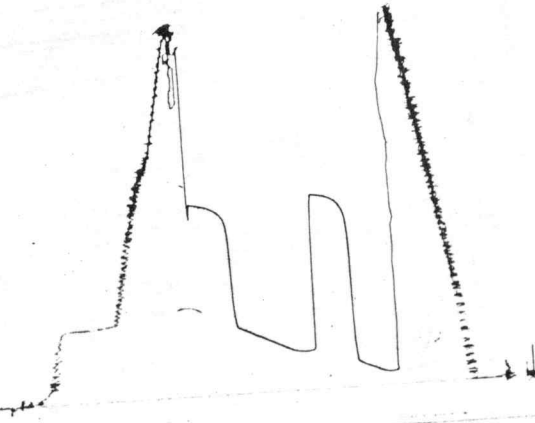
TKT # 69600
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81011

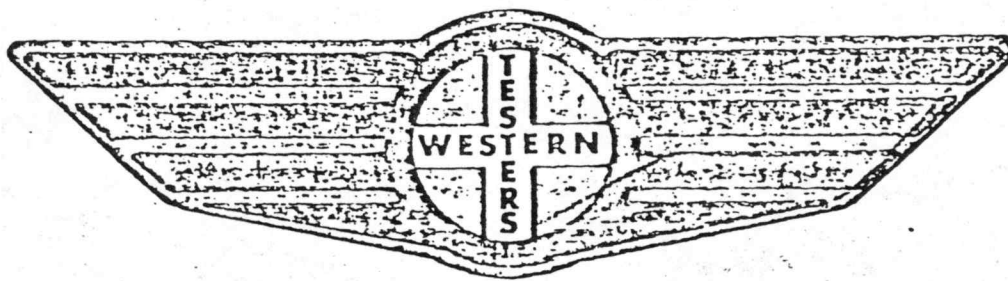
TKT#6960

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13361

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 3/13/85 TICKET #6961
 CUSTOMER: RAINS & WILLIAMSON OIL CO INC LEASE: ZIEGLER
 WELL: 3 TEST: 7 GEOLOGIST: HARGIS
 ELEVATION (KB): 2593 FORMATION: LANSING
 SECTION: 3 TOWNSHIP: 10S
 RANGE: 26W COUNTY: SHERIDAN STATE: KANSAS
 GAUGE SN #11018 RANGE: 4425 CLOCK: 12

INTERVAL TEST FROM: 3969 FT TO: 3995 FT TOTAL DEPTH: 3995 FT
 DEPTH OF SELECTIVE ZONE: FT
 PACKER DEPTH: 3964 FT SIZE: 6 5/8 IN PACKER DEPTH: 3969 FT SIZE: 6 5/8 IN
 PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RAINS & WILLIAMSON
 MUD TYPE: CHEMICAL VISCOSITY: 47
 WEIGHT: 9.7 WATER LOSS (CC): 7.8
 CHLORIDES (P.P.M.): 8000
 JARS - MAKE: SERIAL NUMBER:
 DID WELL FLOW? REVERSED OUT?
 DRILL COLLAR LENGTH: FT I.D.: IN
 WEIGHT PIPE LENGTH: FT I.D.: IN
 DRILL PIPE LENGTH: 3946 FT I.D.: 3.8 IN
 TEST TOOL LENGTH: 23 FT TOOL SIZE: 5 1/2 OD IN
 ANCHOR LENGTH: 26 FT SIZE: 5 1/2 OD 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

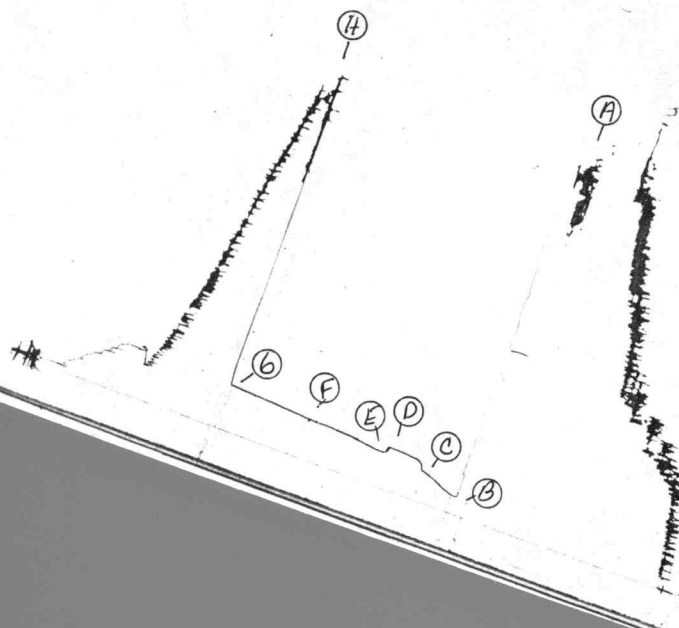
BLOW: INITIAL FLOW PERIOD STRONG BLOW. BOTTOM OF BUCKET IN 1 MINUTE.
 FINAL FLOW PERIOD STRONG BLOW. GAS TO SURFACE IN 45 MINUTES.
 TOO SMALL TO MEASURE.

RECOVERED: 381 FT OF: CLEAN GASSY OIL (42 GRAVITY).
 RECOVERED: 10 FT OF: OIL & GAS CUT MUD (55% MUD; 30% GAS; 15% OIL).
 RECOVERED: 62 FT OF: OIL & GAS CUT MUD (40% MUD; 45% GAS; 15% OIL).
 RECOVERED: 63 FT OF: OIL & GAS CUT MUD (50% MUD; 5% GAS; 45% OIL).
 RECOVERED: FT OF: CHLORIDES 3000 PPM.
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:
 RECOVERED: FT OF:

REMARKS: STRONG BLOW ON BOTH SHUT-INS.

TIME SET PACKER(S): 6:47 PM TIME STARTED OFF BOTTOM: 9:47 PM
 WELL TEMPERATURE: 121 °F
 INITIAL HYDROSTATIC PRESSURE: (A) 2122 PSI
 INITIAL FLOW PERIOD MIN: 30 (B) 99 PSI TO (C) 176 PSI
 INITIAL CLOSED IN PERIOD MIN: 30 (D) 233 PSI
 FINAL FLOW PERIOD MIN: 60 (E) 196 PSI TO (F) 229 PSI
 FINAL CLOSED IN PERIOD MIN: 60 (G) 255 PSI
 FINAL HYDROSTATIC PRESSURE (H) 2100 PSI

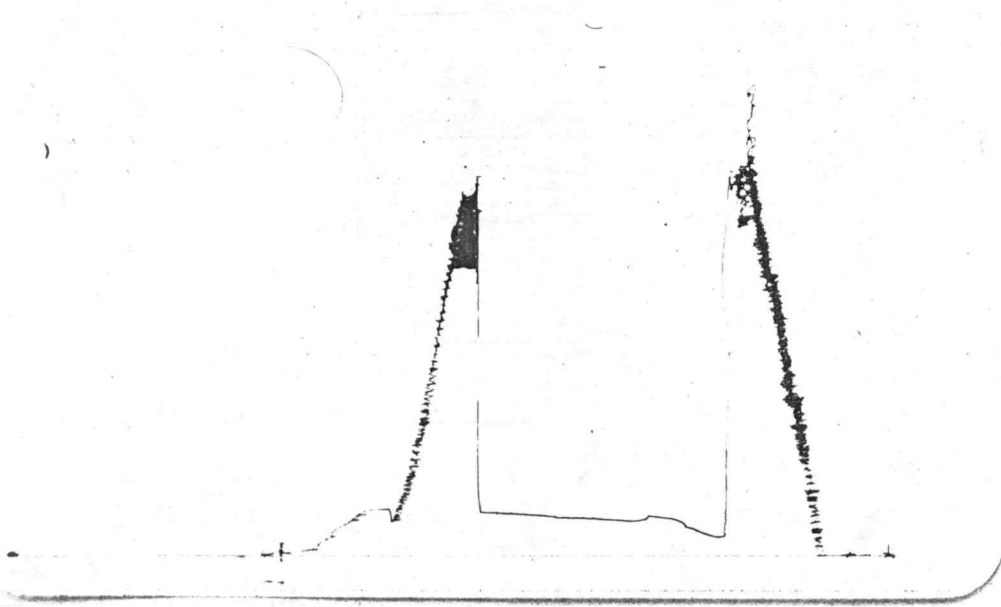
TKT # 609661
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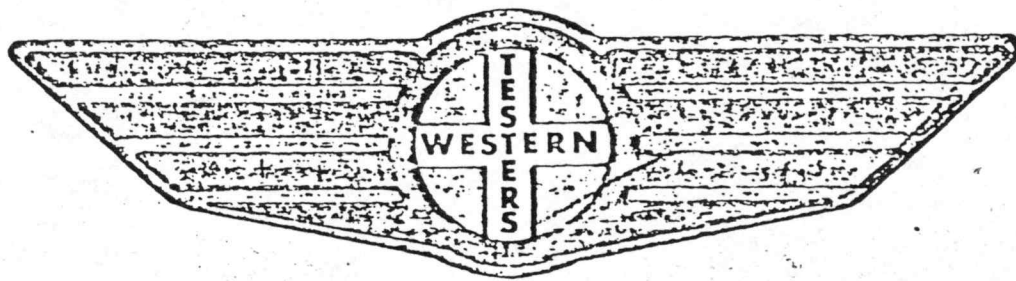
81011

TKT # 69601

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 3/14/85	TICKET #6962
CUSTOMER: RAINS & WILLIAMSON OIL CO INC	LEASE: ZIEGLER
WELL: 3 TEST: 8	GEOLOGIST: HARGIS
ELEVATION (KB): 2593	FORMATION: LANSING "H-180"
SECTION: 3	TOWNSHIP: 10S
RANGE: 26W	COUNTY: SHERIDAN STATE: KANSAS
GAUGE SN #11018	RANGE: 4425 CLOCK: 12

INTERVAL TEST FROM: 4018 FT TO: 4042 FT TOTAL DEPTH: 4042 FT
 DEPTH OF SELECTIVE ZONE: FT
 PACKER DEPTH: 4013 FT SIZE: 6 5/8 IN PACKER DEPTH: 4018 FT SIZE: 6 5/8 IN
 PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RAINS & WILLIAMSON
 MUD TYPE: CHEMICAL VISCOSITY: 45
 WEIGHT: 9.4 WATER LOSS (CC): 8.6
 CHLORIDES (P.P.M.): 9000
 JARS - MAKE: SERIAL NUMBER:
 DID WELL FLOW? REVERSED OUT?
 DRILL COLLAR LENGTH: FT I.D.: IN
 WEIGHT PIPE LENGTH: FT I.D.: IN
 DRILL PIPE LENGTH: 3995 FT I.D.: 3.8 IN
 TEST TOOL LENGTH: 23 FT TOOL SIZE: 5 1/2 OD IN
 ANCHOR LENGTH: 24 FT SIZE: 5 1/2 OD 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 VERY WEAK SURFACE BLOW.
 FINAL FLOW PERIOD DIED IN LESS THAN 1 MINUTE.
 FLUSHED TOOL; GOOD SURGE; WEAK BLOW.
 DIED IN 10 MINUTES.

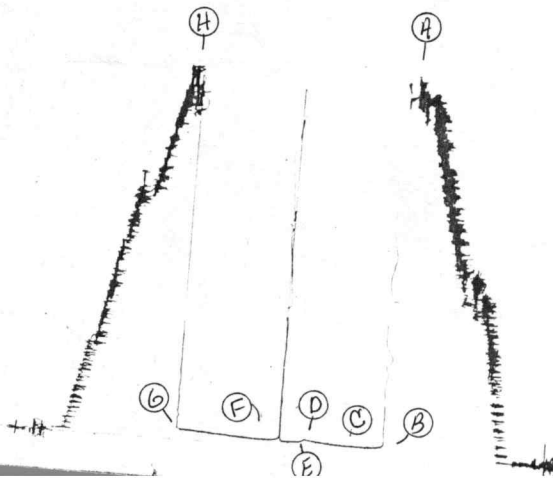
RECOVERED: 8	FT	OF: MUD WITH SLIGHT OIL SCUM (LESS THAN 1%).
RECOVERED:	FT	OF: CHLORIDES 12000 PPM.
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:

REMARKS:

TIME SET PACKER(S): 11:32 AM	TIME STARTED OFF BOTTOM: 2:00 PM
WELL TEMPERATURE: 121 °F	
INITIAL HYDROSTATIC PRESSURE:	(A) 2129 PSI
INITIAL FLOW PERIOD MIN: 30	(B) 32 PSI TO (C) 32 PSI
INITIAL CLOSED IN PERIOD MIN: 30	(D) 53 PSI
FINAL FLOW PERIOD MIN: 30	(E) 35 PSI TO (F) 38 PSI
FINAL CLOSED IN PERIOD MIN: 60	(G) 59 PSI
FINAL HYDROSTATIC PRESSURE	(H) 2122 PSI

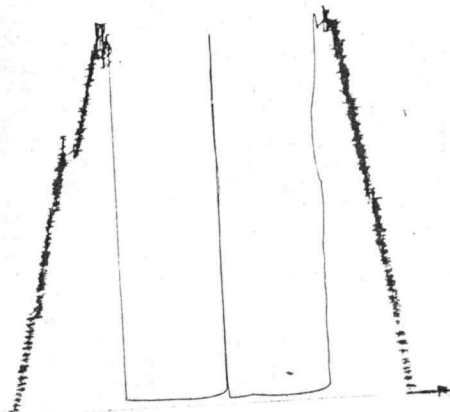
TKT # 6962

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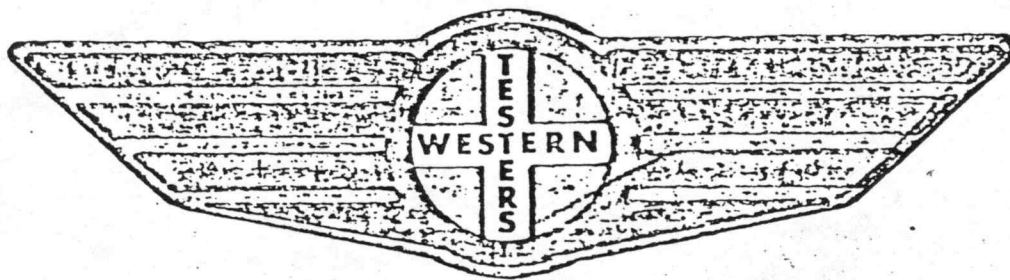
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TKT # 6962
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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company RAINS & WILLIAMSON OIL Lease and Well No. #3 ZIEGLER Sec. 3 Twp. 10S Rge. 26W Test No. 9 Date 3/15/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 3/15/85
CUSTOMER: RAINS & WILLIAMSON OIL CO INC
WELL: #3 TEST: 9
ELEVATION (KB): 2593 FORMATION:
SECTION: 3 TOWNSHIP: 10S
RANGE: 26W COUNTY: SHERIDAN STATE: KANSAS
GAUGE SN #11018 RANGE: 4425 CLOCK: 12

INTERVAL TEST FROM: 4040 FT TO: 4056 FT TOTAL DEPTH: 4056 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4035 FT SIZE: 6 5/8 IN PAKER DEPTH: 4040 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: CO. RIG #11
MUD TYPE: CHEMICAL VISCOSITY: 45
WEIGHT: 9.4 WATER LOSS (CC): 8.6
CHLORIDES (P.P.M.): 9000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? REVERSED OUT?
DRILL COLLAR LENGTH: FT I.D.: IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4017 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 23 FT TOOL SIZE: 5.5 IN
ANCHOR LENGTH: 16 FT SIZE: 5.5 IN
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4.5 XH IN

BLOW: STRONG BLOW OFF BOTTOM OF BUCKET IN 3 MINUTES
ON THE INITIAL FLOW PERIOD.
STRONG BLOW OFF BOTTOM OF BUCKET IN 3 MINUTES
ON THE FINAL FLOW PERIOD.

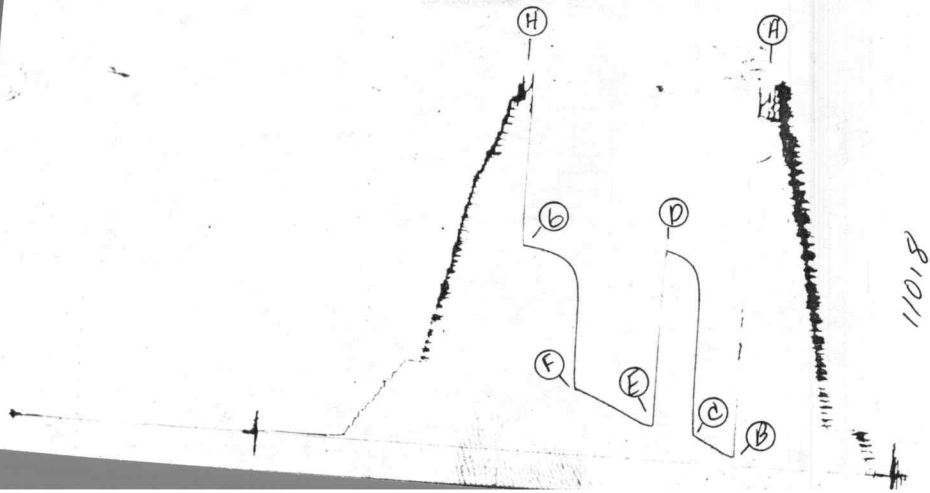
RECOVERED: 2000 FT OF: GAS ABOVE FLUID.
RECOVERED: 628 FT OF: CLEAN GASSY OIL; 80% OIL; 20% GAS (33 GRAVITY)
RECOVERED: 62 FT OF: WATER OIL & GAS CUT MUD; 80% MUD; 5% WATER;
RECOVERED: FT OF: 5% OIL; 10% GAS
RECOVERED: 62 FT OF: WATERY MUD; 75% MUD; 25% WATER; SCUM OF OIL.
RECOVERED: 124 FT OF: MUDDY WATER; 85% WATER; 15% MUD.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: CHLORIDES: 60000 PPM

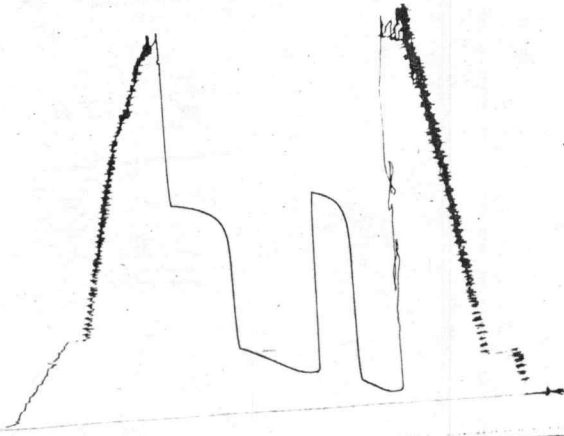
TIME SET PACKER(S): 12:20 AM TIME STARTED OFF BOTTOM: 3:05 AM
WELL TEMPERATURE: 123 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2155 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 50 PSI TO (C) 156 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 1196 PSI
FINAL FLOW PERIOD MIN: 60 (E) 193 PSI TO (F) 373 PSI
FINAL CLOSED IN PERIOD MIN: 45 (G) 1167 PSI
FINAL HYDROSTATIC PRESSURE (H) 2122 PSI

TKT # 6963

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TKT # 6963
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