

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9-9-83
CUSTOMER: RAINS & WILLIAMSON
WELL: 2 TEST: 1
ELEVATION (KB): 0 FORMATION: TORON-LANS "A"
SECTION: 30 TOWNSHIP: 11S
RANGE: 14W COUNTY: RUSSELL STATE: KS.
GAUGE SN #1560 RANGE: 4500 CLOCK: 12

INTERVAL TEST FROM: 2970 FT TO: 3038 FT TOTAL DEPTH: 3038 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2965 FT SIZE: 6 5/8 IN PACKER DEPTH: 2970 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: R & W DRILLING
MUD TYPE: STARCH VISCOSITY: 43
WEIGHT: 9.7 WATER LOSS (CC): 11.4
CHLORIDES (P.P.M.): 61000

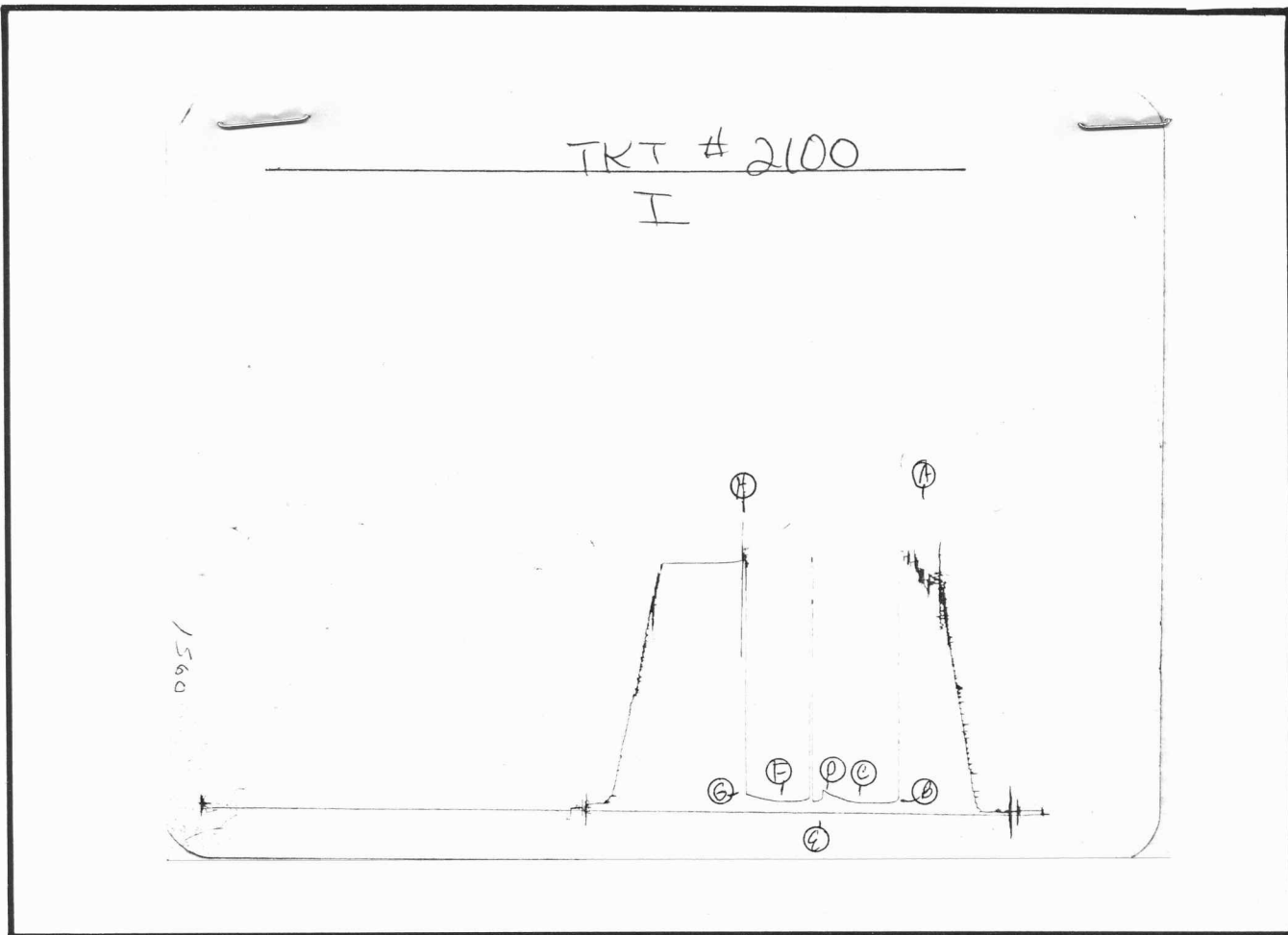
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 90 FT I.D.: 2.2 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2856 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 24 FT TOOL SIZE: 5 1/2 IN
ANCHOR LENGTH: 68 FT SIZE: 5 1/2 IN
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 1/2 XH IN

BLOW: INITIAL FLOW PERIOD VERY WEAK BLOW DIED IN 17 MINUTES.
FINAL FLOW PERIOD NO BLOW; FLUSHED TOOL; NO HELP.

RECOVERED: 10 FT OF: MUD W/SLIGHT SHOW OF OIL TOP OF TOOL.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
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RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 8:30 PM TIME STARTED OFF BOTTOM: 10:30 PM
WELL TEMPERATURE: 104 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1540 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 67 PSI TO (C) 67 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 141 PSI
FINAL FLOW PERIOD MIN: 30 (E) 89 PSI TO (F) 74 PSI
FINAL CLOSED IN PERIOD MIN: 27 (G) 112 PSI
FINAL HYDROSTATIC PRESSURE (H) 1536 PSI



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1590	1540	PSI
(B) First Initial Flow Pressure	46	67	PSI
(C) First Final Flow Pressure	46	67	PSI
(D) Initial Closed-in Pressure	115	141	PSI
(E) Second Initial Flow Pressure	46	89	PSI
(F) Second Final Flow Pressure	57	74	PSI
(G) Final Closed-in Pressure	92	112	PSI
(H) Final Hydrostatic Mud	1590	1536	PSI

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9-10-83
CUSTOMER: RAINS & WILLIAMSON
WELL: 2 TEST: 2
ELEVATION (KB): 1811 FORMATION: LANSING ZONE 30+50'
SECTION: 30 TOWNSHIP: 11S
RANGE: 14W COUNTY: RUSSELL STATE: KS.
GAUGE SN #1560 RANGE: 4500 CLOCK: 12

INTERVAL TEST FROM: 3036 FT TO: 3076 FT TOTAL DEPTH: 3076 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3031 FT SIZE: 6 5/8 IN PACKER DEPTH: 3036 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: R & W DRILLING
MUD TYPE: STARCH VISCOSITY: 42
WEIGHT: 9.8 WATER LOSS (CC): 13
CHLORIDES (P.P.M.): 57000

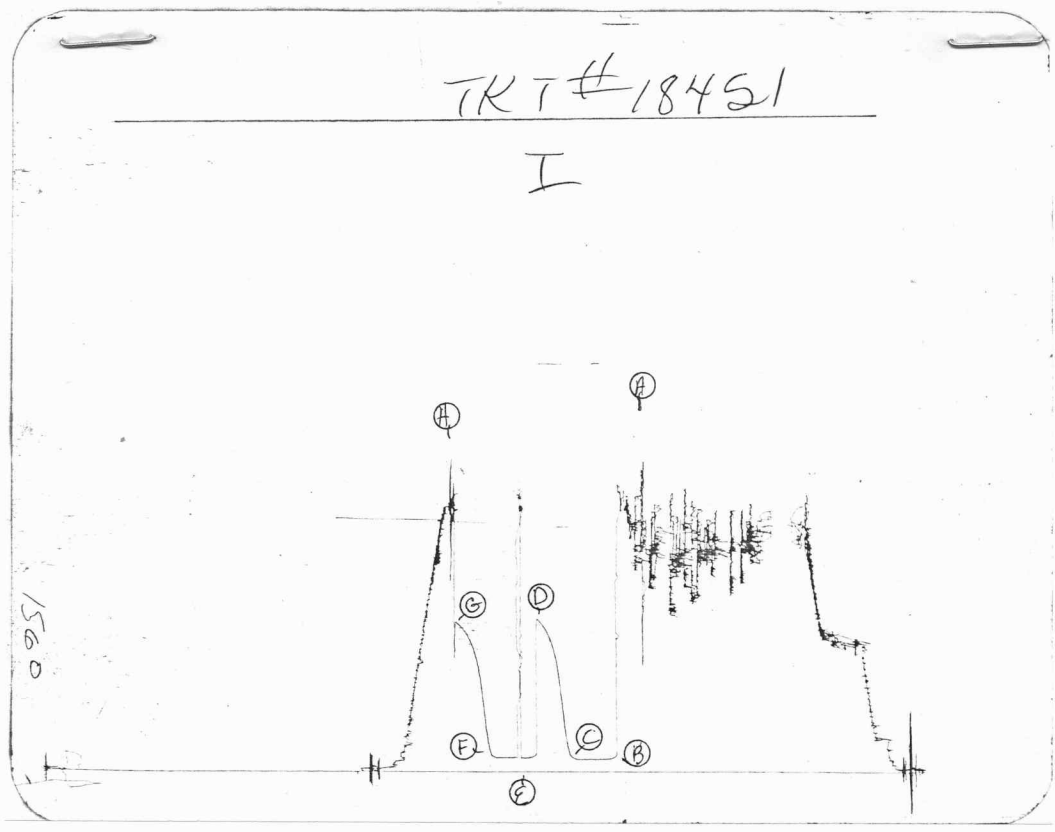
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 120 FT I.D.: 2.2 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2892 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 24 FT TOOL SIZE: 5 1/2 IN
ANCHOR LENGTH: 40 FT SIZE: 5 1/2 IN
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 1/2 XH IN

BLOW: INITIAL FLOW PERIOD VERY WEAK BLOW DIED IN 20
MINUTES.
FINAL FLOW PERIOD NO BLOW; FLUSHED TOOL; NO HELP.

RECOVERED: 65 FT OF: MUD
RECOVERED: FT OF:
RECOVERED: FT OF:
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RECOVERED: FT OF:

REMARKS: HIT BRIDGE 8 STANDS (APPROX. 480') OFF BOTTOM
OPENED TOOL SLID THROUGH; WENT ON TO BOTTOM.

TIME SET PACKER(S): 11:20 AM TIME STARTED OFF BOTTOM: 1:20 PM
WELL TEMPERATURE: 104 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1610 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 76 PSI TO (C) 76 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 896 PSI
FINAL FLOW PERIOD MIN: 30 (E) 106 PSI TO (F) 87 PSI
FINAL CLOSED IN PERIOD MIN: 30 (G) 882 PSI
FINAL HYDROSTATIC PRESSURE (H) 1599 PSI



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1668	1610	PSI
(B) First Initial Flow Pressure	69	76	PSI
(C) First Final Flow Pressure	69	76	PSI
(D) Initial Closed-in Pressure	891	896	PSI
(E) Second Initial Flow Pressure	81	106	PSI
(F) Second Final Flow Pressure	81	87	PSI
(G) Final Closed-in Pressure	880	882	PSI
(H) Final Hydrostatic Mud	1668	1599	PSI

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9-11-83
CUSTOMER: RAINS & WILLIAMSON
WELL: 2 TEST: 3
ELEVATION (KB): 1811 FORMATION: LANSING 160' ZONE
SECTION: 30 TOWNSHIP: 11S
RANGE: 14W COUNTY: RUSSELL STATE: KS.
GAUGE SN #1560 RANGE: 4500 CLOCK: 12

INTERVAL TEST FROM: 3176 FT TO: 3199 FT TOTAL DEPTH: 3199 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3171 FT SIZE: 6 5/8 IN PACKER DEPTH: 3176 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: R & W DRILLING
MUD TYPE: STARCH VISCOSITY: 49
WEIGHT: 9.8 WATER LOSS (CC): 13.8
CHLORIDES (P.P.M.): 54000

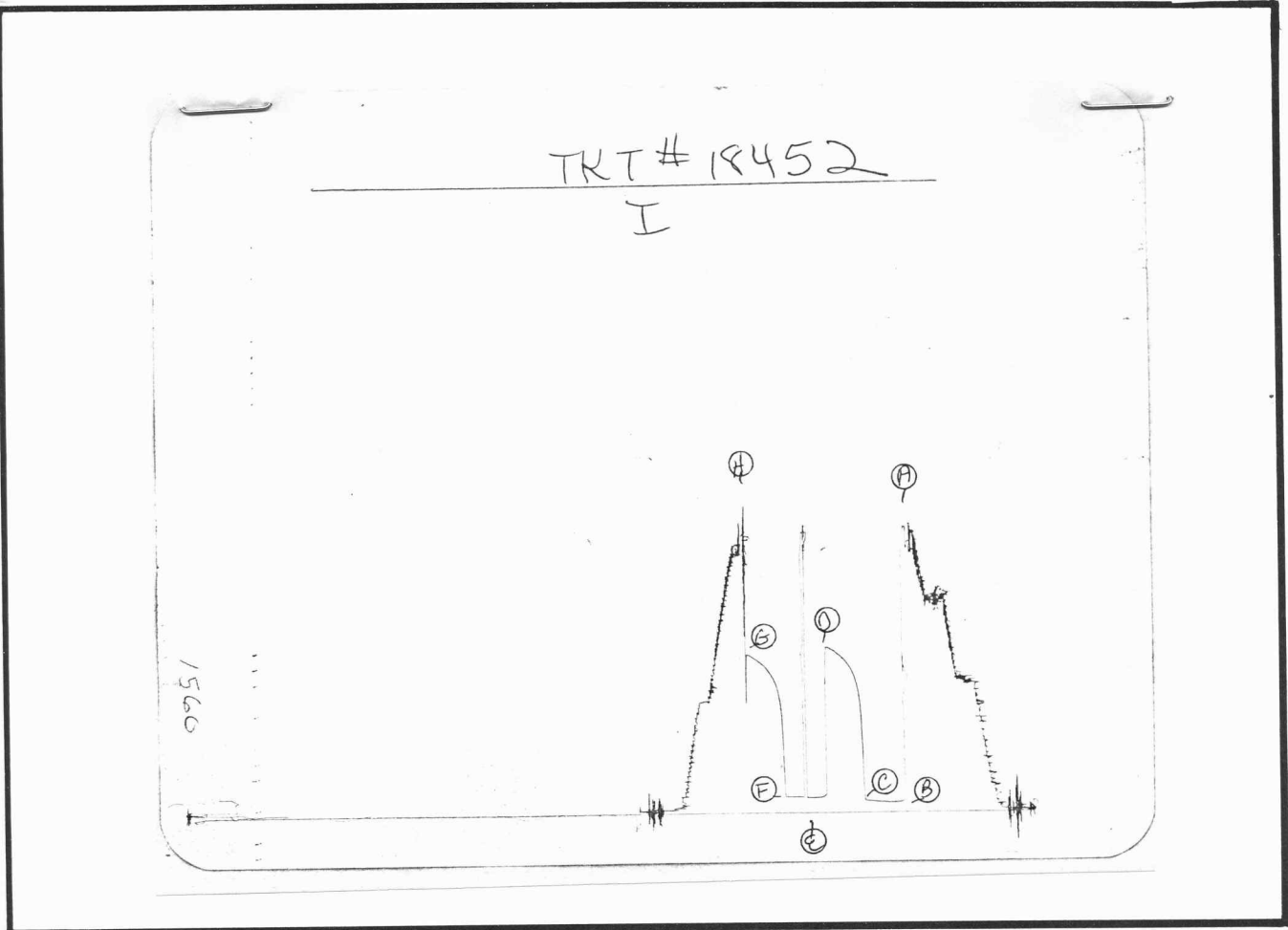
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 120 FT I.D.: 2.2 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3032 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 24 FT TOOL SIZE: 5 1/2 IN
ANCHOR LENGTH: 23 FT SIZE: 5 1/2 IN
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 1/2 XH IN

BLOW: INITIAL FLOW PERIOD VERY WEAK BLOW THROUGHOUT.
FINAL FLOW PERIOD NO BLOW- FLUSHED TOOL- VERY
WEAK BLOW DIED IN 6 MINUTES.

RECOVERED: 70 FT OF: THIN MUD.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
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RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: CHLORIDES 55000 PPM

TIME SET PACKER(S): 12:25 PM TIME STARTED OFF BOTTOM: 2:25 PM
WELL TEMPERATURE: 106 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1745 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 74 PSI TO (C) 76 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 1018 PSI
FINAL FLOW PERIOD MIN: 30 (E) 111 PSI TO (F) 101 PSI
FINAL CLOSED IN PERIOD MIN: 30 (G) 977 PSI
FINAL HYDROSTATIC PRESSURE (H) 1727 PSI



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1747	1745	PSI
(B) First Initial Flow Pressure	57	74	PSI
(C) First Final Flow Pressure	69	76	PSI
(D) Initial Closed-in Pressure	1004	1018	PSI
(E) Second Initial Flow Pressure	92	111	PSI
(F) Second Final Flow Pressure	92	101	PSI
(G) Final Closed-in Pressure	970	977	PSI
(H) Final Hydrostatic Mud	1747	1727	PSI