

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9/1/93 TICKET #15780
CUSTOMER: ABERCROMBIE DRILLING INC. LEASE: "B" SPLITTER
WELL: 2 TEST: 1 GEOLOGIST: ?
ELEVATION (KB): 2798 FORMATION: LANSING
SECTION: 35 TOWNSHIP: 18S
RANGE: 29W COUNTY: LANE STATE: KANSAS
GAUGE SN #1566 RANGE: 4300 CLOCK: 12

INTERVAL TEST FROM: 4065 FT TO: 4095 FT TOTAL DEPTH: 4126 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4065 FT SIZE: 6 5/8 IN PACKER DEPTH: 4095 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

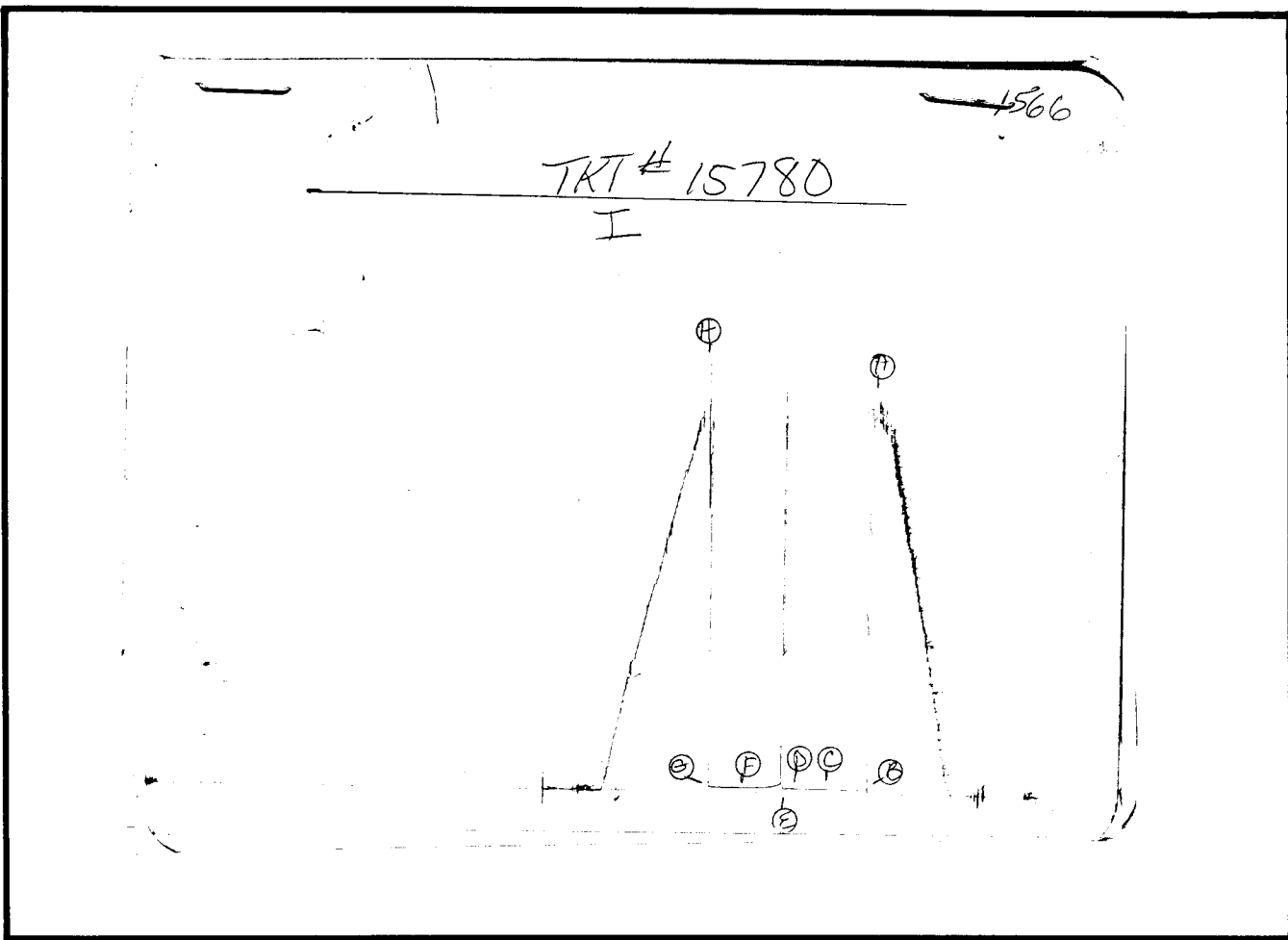
DRILLING CONTRACTOR: ABERCROMBIE
MUD TYPE: STARCH VISCOSITY: 35
WEIGHT: 9.6 WATER LOSS (CC): 13.6
CHLORIDES (P.P.M.): 67000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: FT I.D.: IN
WEIGHT PIPE LENGTH: 585 FT I.D.: 3.2 IN
DRILL PIPE LENGTH: 3464 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 16 FT TOOL SIZE: 5 1/2 IN
ANCHOR LENGTH: 30 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 IN

BLOW: INITIAL FLOW PERIOD WEAK BLOW -
DEAD IN 18 MINUTES.
FINAL FLOW PERIOD DEAD - FLUSHED
TOOL.

RECOVERED: 10 FT OF: DRILLING 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: TAIL PIPE LENGTH 31 FT.

TIME SET PACKER(S): 11:00 AM TIME STARTED OFF BOTTOM: 1:00 PM
WELL TEMPERATURE: 119 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2188 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 21 PSI TO (C) 21 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 25 PSI
FINAL FLOW PERIOD MIN: 30 (E) 21 PSI TO (F) 28 PSI
FINAL CLOSED IN PERIOD MIN: 30 (G) 28 PSI
FINAL HYDROSTATIC PRESSURE (H) 2143 PSI



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2156	2188	PSI
(B) First Initial Flow Pressure	20	21	PSI
(C) First Final Flow Pressure	20	21	PSI
(D) Initial Closed-in Pressure	20	25	PSI
(E) Second Initial Flow Pressure	20	21	PSI
(F) Second Final Flow Pressure	30	28	PSI
(G) Final Closed-in Pressure	30	28	PSI
(H) Final Hydrostatic Mud	2156	2143	PSI

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9-2-83 TICKET #15781
 CUSTOMER: ABERCROMBIE DRILLING INC. LEASE: "B" SPLITTER
 WELL: 2 TEST: 2 GEOLOGIST: ?
 ELEVATION (KB): 2798 FORMATION: KANSAS CITY
 SECTION: 35 TOWNSHIP: 18S
 RANGE: 29W COUNTY: LANE STATE: KS.
 GAUGE SN #1566 RANGE: 4300 CLOCK: 12

INTERVAL TEST FROM: 4195 FT TO: 4225 FT TOTAL DEPTH: 4225 FT
 DEPTH OF SELECTIVE ZONE: FT
 PACKER DEPTH: 4190 FT SIZE: 6 5/8 IN PACKER DEPTH: 4195 FT SIZE: 6 5/8 IN
 PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

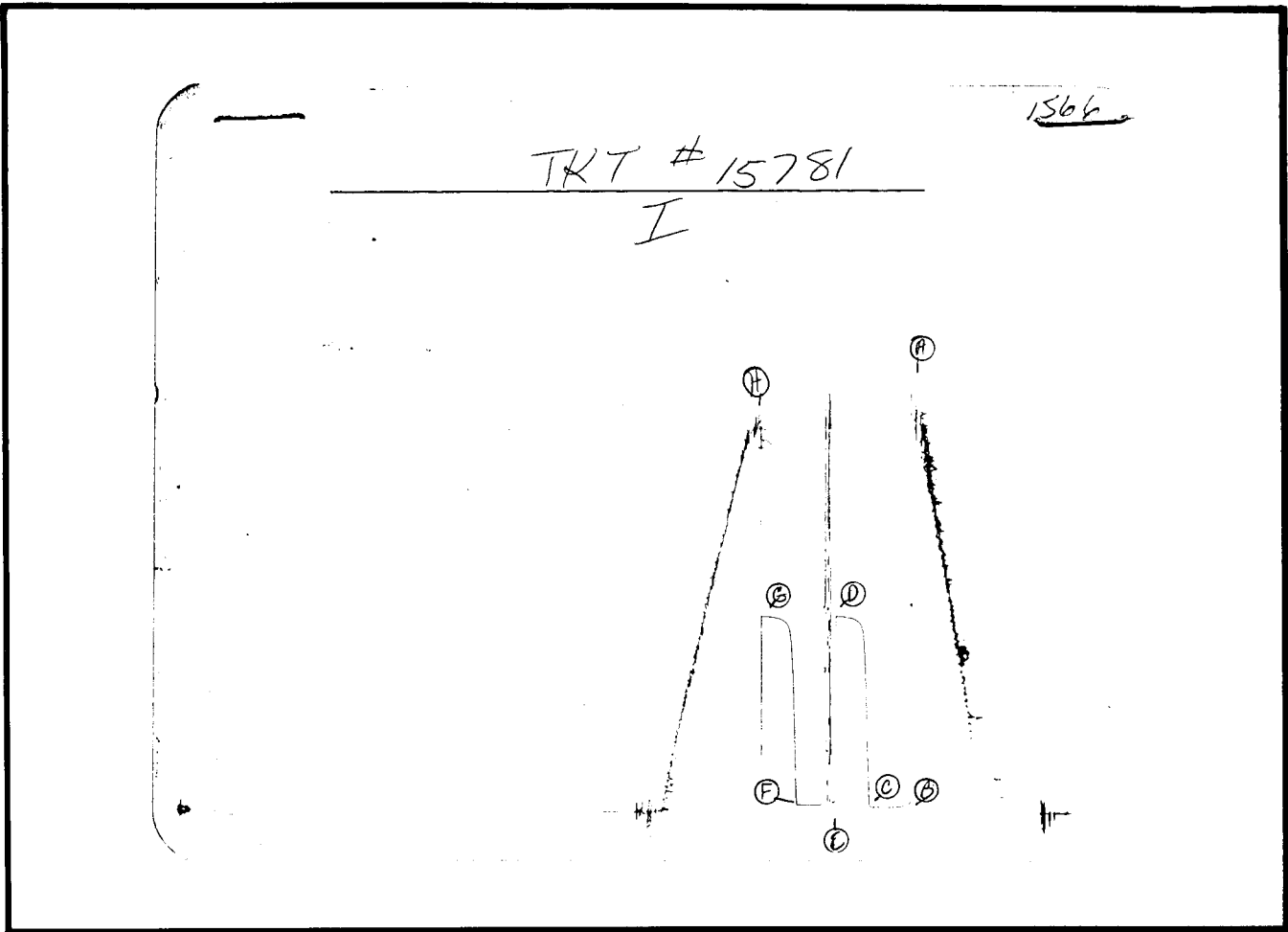
DRILLING CONTRACTOR: ABERCROMBIE
 MUD TYPE: STARCH VISCOSITY: 44
 WEIGHT: 9.7 WATER LOSS (CC): 11.2
 CHLORIDES (P.P.M.): 69000
 JARS - MAKE: SERIAL NUMBER:
 DID WELL FLOW? NO REVERSED OUT? NO
 DRILL COLLAR LENGTH: FT I.D.: IN
 WEIGHT PIPE LENGTH: 585 FT I.D.: 3.2 IN
 DRILL PIPE LENGTH: 3589 FT I.D.: 3.8 IN
 TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 IN
 ANCHOR LENGTH: 30 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 IN

BLOW: INITIAL FLOW PERIOD WEAK DEAD IN 22 MINUTES.
 FINAL FLOW PERIOD DEAD.

RECOVERED: 15 FT OF: DRILLING 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:

TIME SET PACKER(S): 8:00 AM TIME STARTED OFF BOTTOM: 10:00 AM
 WELL TEMPERATURE: 124 °F
 INITIAL HYDROSTATIC PRESSURE: (A) 2264 PSI
 INITIAL FLOW PERIOD MIN: 30 (B) 56 PSI TO (C) 34 PSI
 INITIAL CLOSED IN PERIOD MIN: 30 (D) 1128 PSI
 FINAL FLOW PERIOD MIN: 30 (E) 75 PSI TO (F) 43 PSI
 FINAL CLOSED IN PERIOD MIN: 30 (G) 1126 PSI
 FINAL HYDROSTATIC PRESSURE (H) 2249 PSI



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2264	2264	PSI
(B) First Initial Flow Pressure	54	56	PSI
(C) First Final Flow Pressure	43	34	PSI
(D) Initial Closed-in Pressure	1130	1128	PSI
(E) Second Initial Flow Pressure	86	75	PSI
(F) Second Final Flow Pressure	54	43	PSI
(G) Final Closed-in Pressure	1130	1126	PSI
(H) Final Hydrostatic Mud	2264	2249	PSI

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9/3/83 TICKET #15782
CUSTOMER: ABERCROMBIE DRILLING INC. LEASE: "B" SPLITTER
WELL: 2 TEST: 3 GEOLOGIST: ?
ELEVATION (KB): 2798 FORMATION: KANSAS CITY
SECTION: 35 TOWNSHIP: 18S
RANGE: 29W COUNTY: LANE STATE: KANSAS
GAUGE SN #3086 RANGE: 4500 CLOCK: 12

INTERVAL TEST FROM: 4297 FT TO: 4308 FT TOTAL DEPTH: 4308 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4292 FT SIZE: 6 5/8 IN PACKER DEPTH: 4297 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

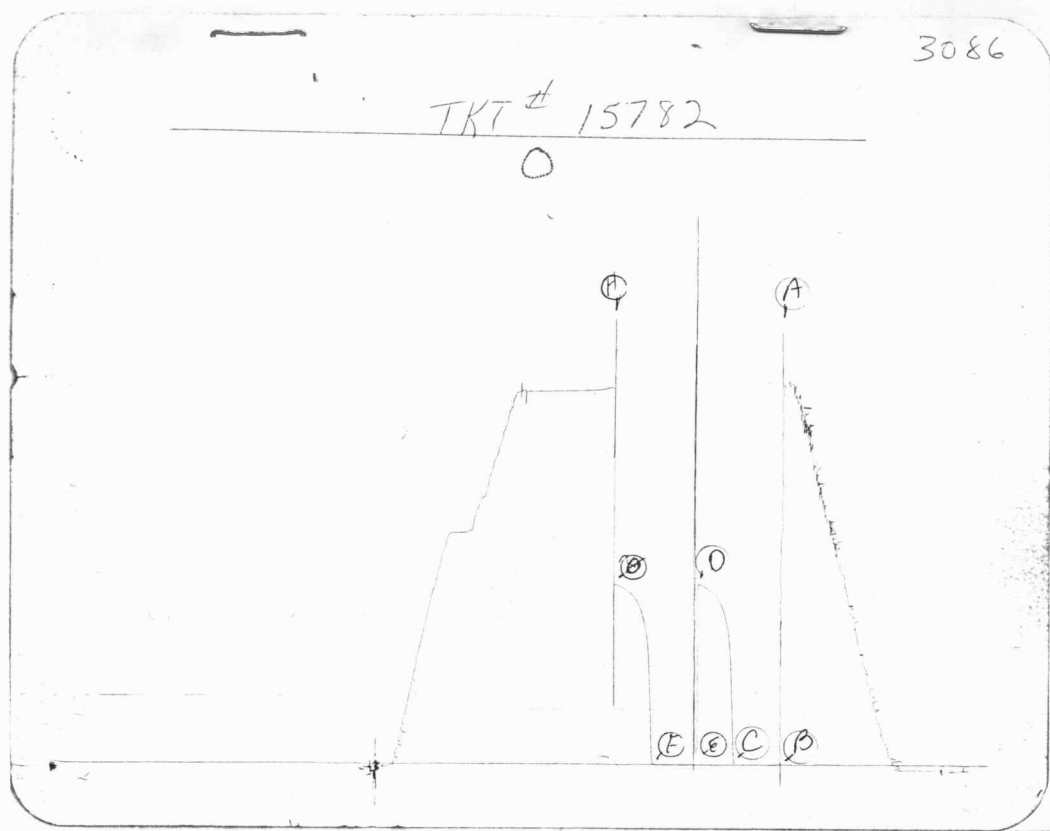
DRILLING CONTRACTOR: ABERCROMBIE
MUD TYPE: STARCH VISCOSITY: 46
WEIGHT: 9.8 WATER LOSS (CC): 10.1
CHLORIDES (P.P.M.): 62000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: FT I.D.: IN
WEIGHT PIPE LENGTH: 585 FT I.D.: 3.2 IN
DRILL PIPE LENGTH: 3690 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 IN
ANCHOR LENGTH: 11 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 IN

BLOW: INITIAL FLOW PERIOD WEAK BLOW -
DEAD IN 10 MINUTES.
FINAL FLOW PERIOD DEAD - FLUSHED
TOOL.

RECOVERED: 5 FT OF: DRILLING MUD 2/ 1 OR 2 OIL SPECKS
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: READ OUTSIDE CHART BECAUSE CLOCKED
STOPPED ON FINAL SHUT-IN.

TIME SET PACKER(S): 4:00 AM TIME STARTED OFF BOTTOM: 6:00 AM
WELL TEMPERATURE: 124 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2288 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 2 PSI TO (C) 2 PSI
INITIAL CLOSED IN PERIOD MIN: 27 (D) 1092 PSI
FINAL FLOW PERIOD MIN: 30 (E) 75 PSI TO (F) 2 PSI
FINAL CLOSED IN PERIOD MIN: 30 (G) 1090 PSI
FINAL HYDROSTATIC PRESSURE (H) 2261 PSI



This is an actual photograph of recorder chart.

POINT	PRESSURE		PSI
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2264	2288	PSI
(B) First Initial Flow Pressure	21	2	PSI
(C) First Final Flow Pressure	21	2	PSI
(D) Initial Closed-in Pressure	1141	1092	PSI
(E) Second Initial Flow Pressure	10	75	PSI
(F) Second Final Flow Pressure	10	2	PSI
(G) Final Closed-in Pressure	1141	1090	PSI
(H) Final Hydrostatic Mud	2261	2261	PSI

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9/4/83 TICKET #15783
CUSTOMER: ABERCROMBIE DRILLING INC. LEASE: "B" SPLITTER
WELL: 2 TEST: 4 GEOLOGIST: ?
ELEVATION (KB): 2798 FORMATION: MARMATON
SECTION: 35 TOWNSHIP: 18S
RANGE: 29W COUNTY: LANE STATE: KANSAS
GAUGE SN #1566 RANGE: 4300 CLOCK: 12

INTERVAL TEST FROM: 4410 FT TO: 4436 FT TOTAL DEPTH: 4436 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4405 FT SIZE: 6 5/8 IN PACKER DEPTH: 4410 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

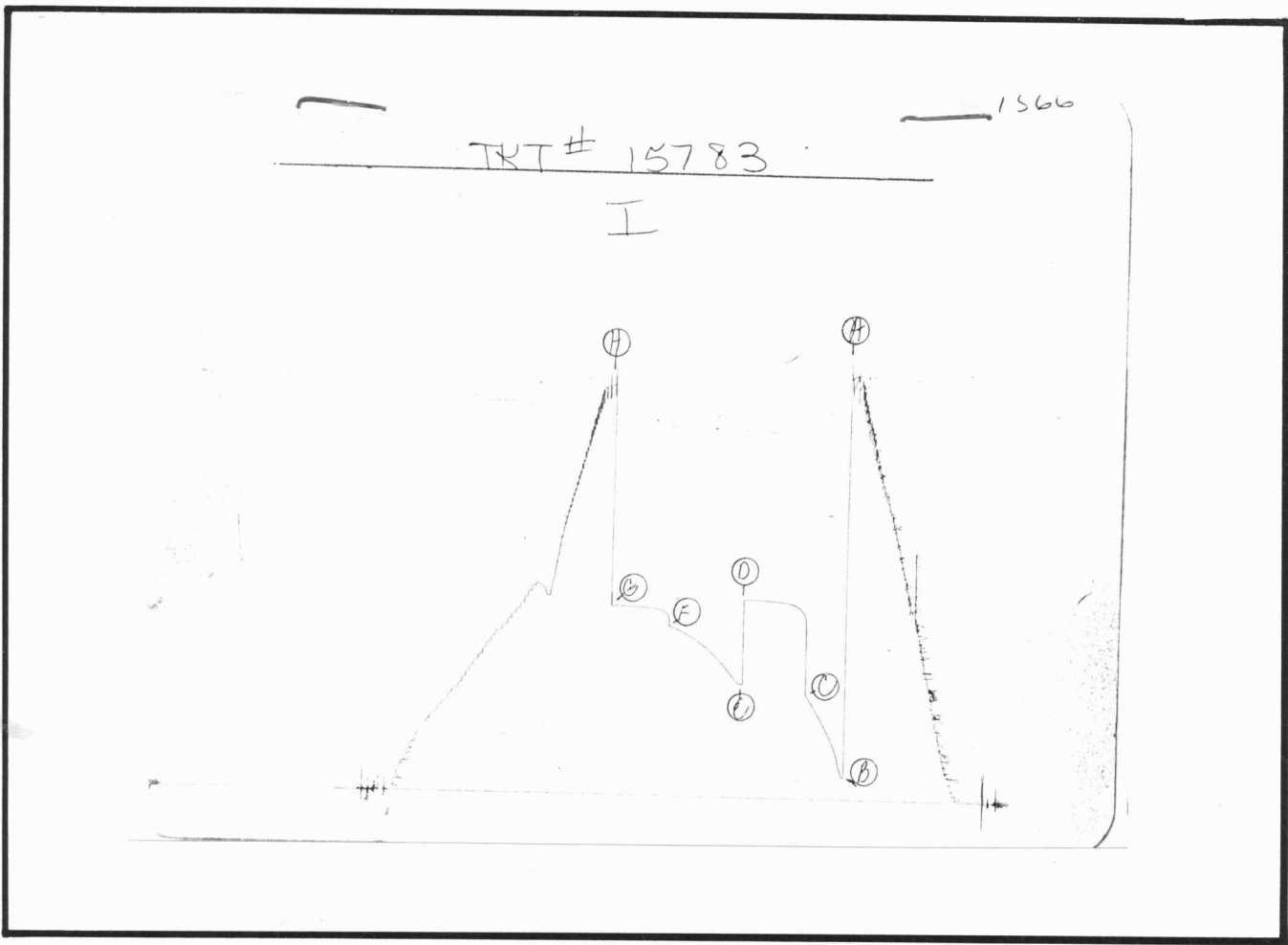
DRILLING CONTRACTOR: ABERCROMBIE
MUD TYPE: STARCH VISCOSITY: 47
WEIGHT: 9.9 WATER LOSS (CC): 9.4
CHLORIDES (P.P.M.): 59000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: FT I.D.: IN
WEIGHT PIPE LENGTH: 585 FT I.D.: 3.2 IN
DRILL PIPE LENGTH: 3804 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 IN
ANCHOR LENGTH: 26 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 IN

BLOW: SIX INCH BLOW BUILDING TO STRONG.

RECOVERED: 520 FT OF: GAS
RECOVERED: 838 FT OF: OIL
RECOVERED: 86 FT OF: DRILLING MUD
RECOVERED: 1116 FT OF: WATER
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 6:00 AM TIME STARTED OFF BOTTOM: 9:00 AM
WELL TEMPERATURE: 130 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2410 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 129 PSI TO (C) 604 PSI
INITIAL CLOSED IN PERIOD MIN: 48 (D) 1145 PSI
FINAL FLOW PERIOD MIN: 60 (E) 658 PSI TO (F) 989 PSI
FINAL CLOSED IN PERIOD MIN: 45 (G) 1095 PSI
FINAL HYDROSTATIC PRESSURE (H) 2380 PSI



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2384	2410	PSI
(B) First Initial Flow Pressure	129	129	PSI
(C) First Final Flow Pressure	604	604	PSI
(D) Initial Closed-in Pressure	1141	1145	PSI
(E) Second Initial Flow Pressure	647	658	PSI
(F) Second Final Flow Pressure	980	989	PSI
(G) Final Closed-in Pressure	1087	1095	PSI
(H) Final Hydrostatic Mud	2373	2380	PSI

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9/6/83
CUSTOMER: ABERCROMBIE DRILLING INC.
WELL: 2 TEST: 5
ELEVATION (KB): 2798 FORMATION: KANSAS CITY
SECTION: 35 TOWNSHIP: 18S
RANGE: 29W COUNTY: LANE STATE: KANSAS
GAUGE SN #13240 RANGE: 4500 CLOCK: 12

TICKET #2272
LEASE: "B" SPLITTER
GEOLOGIST: W.W.

INTERVAL TEST FROM: 4264 FT TO: 4324 FT TOTAL DEPTH: 4670 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4259 FT SIZE: 6 5/8 IN PACKER DEPTH: 4264 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: 4324 FT SIZE: 6 5/8 IN

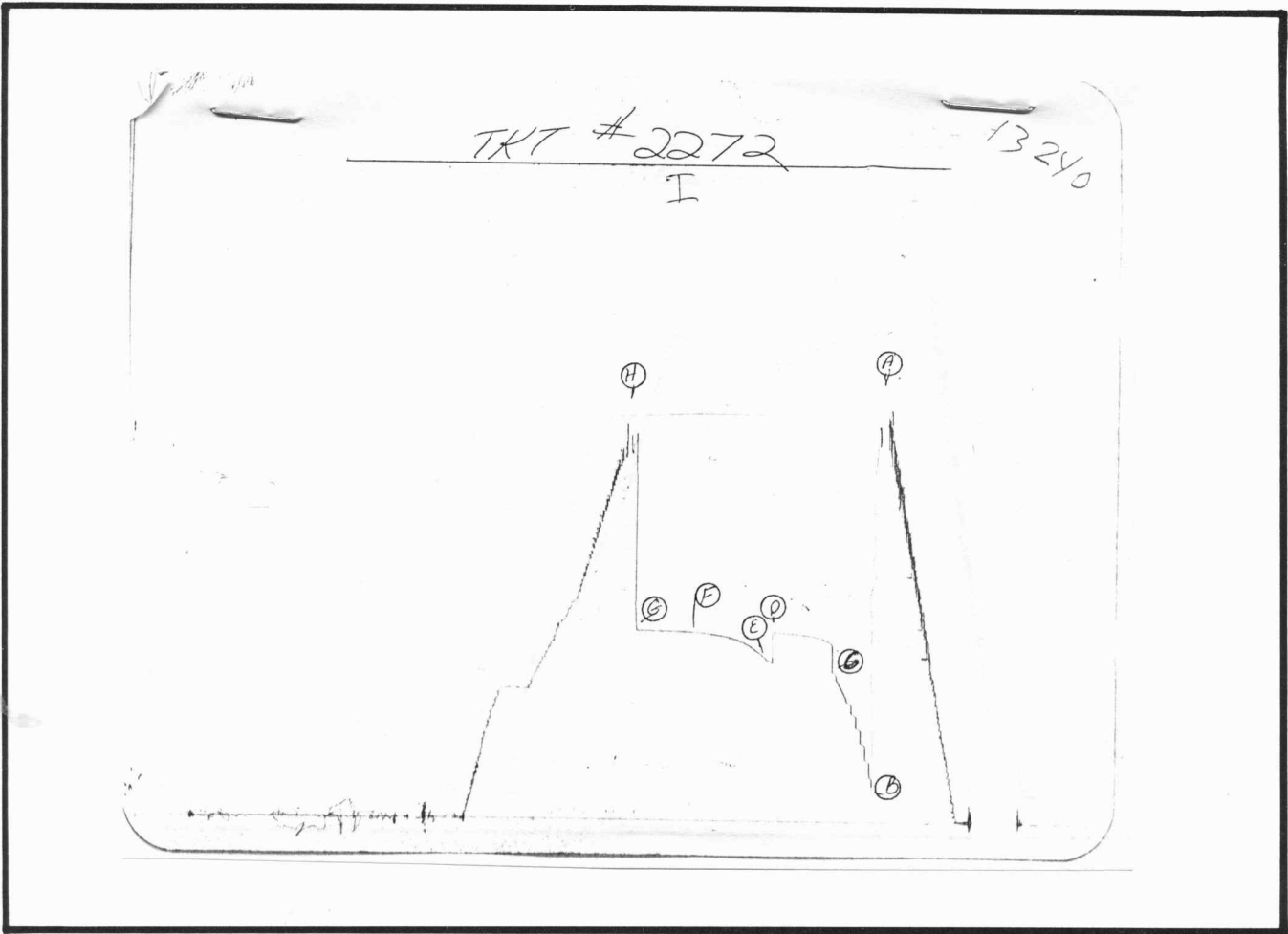
DRILLING CONTRACTOR: ABERCROMBIE #1
MUD TYPE: STARCH VISCOSITY: 47
WEIGHT: 9.9 WATER LOSS (CC): 12.8
CHLORIDES (P.P.M.): 50000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? YES
DRILL COLLAR LENGTH: FT I.D.: IN
WEIGHT PIPE LENGTH: 360 FT I.D.: 2.8 IN
DRILL PIPE LENGTH: 4229 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 O.D. IN
ANCHOR LENGTH: 60 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 X.H. IN

BLOW: FIRST FLOW PERIOD - STRONG THROUGHOUT.
SECOND FLOW PERIOD - VERY GOOD DECREASING THROUGHOUT.

RECOVERED: 5 FT OF: CLEAN OIL
RECOVERED: 20 FT OF: OIL CUT MUDDY WATER
RECOVERED: ? FT OF: 25% OIL; 10% MUD; 65% WATER
RECOVERED: 180 FT OF: VERY SLI OIL & GAS CUT MUDDY WTR
RECOVERED: FT OF: 10% OIL; 10% MUD; 70% WATER
RECOVERED: 540 FT OF: VERY SLIGHT OIL & GAS CUT WATER
RECOVERED: FT OF: 27% OIL; 98% WATER
RECOVERED: 1655 FT OF: BLACK SULFUR WATER
RECOVERED: FT OF: CHLORIDES 42000 P.P.M.

REMARKS:

TIME SET PACKER(S): 2:03 P.M. TIME STARTED OFF BOTTOM: 5:05 P.M.
WELL TEMPERATURE: 124 'F
INITIAL HYDROSTATIC PRESSURE: (A) 2370 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 215 PSI TO (C) 906 PSI
INITIAL CLOSED IN PERIOD MIN: 45 (D) 1140 PSI
FINAL FLOW PERIOD MIN: 60 (E) 970 PSI TO (F) 1139 PSI
FINAL CLOSED IN PERIOD MIN: 45 (G) 1146 PSI
FINAL HYDROSTATIC PRESSURE (H) 2302 PSI



This is an actual photograph of recorder chart.

POINT	PRESSURE		PSI
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2302	2370	PSI
(B) First Initial Flow Pressure	215	215	PSI
(C) First Final Flow Pressure	909	906	PSI
(D) Initial Closed-in Pressure	1135	1140	PSI
(E) Second Initial Flow Pressure	954	970	PSI
(F) Second Final Flow Pressure	1123	1139	PSI
(G) Final Closed-in Pressure	1135	1146	PSI
(H) Final Hydrostatic Mud	2313	2302	PSI

TKT # 2272

Below Straddle

13401

