

SUPERIOR TESTERS

368 West Second, Hoisington, Kansas

COMPANY Thunderbird Drilling STATE Kansas COUNTY Lane

LEASE & WELL NO. Richards # 2 ELEVATION 2759 KB. DATE 9/19/83 FORMATION TESTED Lansing

SEC. 20 TWP. 16 RANGE 29 INTERVAL TESTED 3932 TO 3976 TOTAL DEPTH 3976

TEST NO. # 1 O.K. yes TOP PACKER DEPTH 3932 FT. BOTTOM PACKER DEPTH ---- FT. PACKER SIZE 6 & 3/4

STRADDLE no CONV yes TOOL SIZE 5 1/2 OD. TOOL JOINT SIZE 4 1/2 FH. ANCHOR LENGTH 44 FT.

HOLE SIZE 7 & 7/8 EXTRA EQUIPMENT none SURFACE CHOKE SIZE 1/2 IN. BOTTOM CHOKE SIZE 1/2 IN.

REVERSED OUT no VISCOSITY 52 WEIGHT 9.5 DUAL PACKERS no DID PACKER HOLD yes DID TOOL PLUG no

DRILLING CONTRACTOR T-Bird # 1

TOOL JOINT SIZE 4 1/2 FH. IN. LENGTH DRILL PIPE 3380 FT. I.D. DRILL PIPE 3.80 IN.

TOOL JOINT SIZE 4 1/2 XH. IN. LENGTH WEIGHT PIPE 563 FT. I.D. WEIGHT PIPE 2.75 IN.

TOOL JOINT SIZE ---- IN. LENGTH DRILL COLLARS ---- FT. I.D. DRILL COLLARS ---- IN.

TOOL OPEN I.F.P. FROM 3:45 p. m to 4:15 p. m Hr. 30 min From (B) 53 P.S.I. to (C) 138 P.S.I.

TOOL CLOSED I.C.I.P. FROM 4:15 p. m to 5:00 p. m Hr. 45 min (D) 982 P.S.I.

TOOL OPEN F.F.P. FROM 5:00 p. m to 6:00 p. m Hr. 60 min From (E) 170 P.S.I. to (F) 297 P.S.I.

TOOL CLOSED F.C.I.P. FROM 6:00 p. m to 6:45 p. m Hr. 45 min (G) 929 P.S.I.

INITIAL HYDROSTATIC PRESSURE (A) 2109 P.S.I. FINAL HYDROSTATIC PRESSURE (H) 2098 MAXIMUM TEMPERATURE 98 °F

BLOW Good blow off bottom of bucket in 25 minutes 1st opening.

Good blow off bottom of bucket in 34 minutes 2nd opening.

RECOVERY - TOTAL FEET 600

RECOVERED 600 FEET OF Muddy water, with few Oil spots on top.

RECOVERED _____ FEET OF _____

RECOVERED _____ FEET OF _____

RECOVERED _____ FEET OF _____

RECOVERED _____ FEET OF _____

RECOVERED _____ FEET OF _____

RECOVERED _____ FEET OF _____

RECOVERED _____ FEET OF _____

RECOVERED _____ FEET OF _____

RECOVERED _____ FEET OF _____

RECOVERED _____ FEET OF _____

RECOVERED _____ FEET OF _____

RECOVERED _____ FEET OF _____

REMARKS None.

TICKET NO. 7796

WITNESSED BY: Stanton Cox TOOL OPERATOR: Ivan Suppes

SUPERIOR TESTERS

RR #1, Box 295B, Great Bend, Kansas

Date 9-19-83 Location 20 16° 29" Elevation 2759 K.B County lane
 Company Thunderbird Drilling, Inc. Number of Copies _____
 Address P.O. Box 18407 Wichita, Kansas 67218
 Charts Mailed to P.O. Box 18407 Wichita, Kansas 67218
 Invoice Mailed to P.O. Box 18407 Wichita, Kansas 67218
 Lease Richards Well No. #2 Formation Tested Lansing Test No. #1
 Depth 3976' Tested from 3932' to 3976' Packer Size 6 3/4" Anchor Length 44'
 Top Packer Depth 3932' ft. Bottom Packer Depth None ft. Dual Packers No
 Tool Joint Size 4 1/2 F.H. Tool Size 5 1/2 O.D. Hole Size 7 7/8" Did Packer Hold yes
 Drilling Contractor T. Bird Rig #1
 Length Drill Pipe 3380' I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2 F.H.
 Length Weight Pipe 563' I.D. Weight Pipe 2.75 Tool Joint Size 4 1/2 x .H
 Length Drill Collars None I.D. Drill Collars _____ Tool Joint Size _____
 Tool Open I.F.P. from 3:45 P.m to 4:15 P.m 30 min
 Tool Closed I.C.I.P. from 4:15 P.m to 5:00 P.m 45 min
 Tool Open F.F.P. from 5:00 P.m to 6:00 P.m 60 min
 Tool Closed F.C.I.P. from 6:00 P.m to 6:45 P.m 45 min
 Initial Hydrostatic Pressure [A] 2109 P.S.I. Final Hydrostatic Pressure [H] 2098 P.S.I. Maximum Temp 98 °F
 Initial Blow Good Blow - off Bottom of Bucket in 25 minutes
 Final Blow Good Blow - off Bottom of Bucket in 34 minutes
 Gas to Surface None Min. Oil to Surface None Min. Mut Weight 9.8 Viscosity 52
 Gas Guaged None

from [B] <u>53</u>	P.S.I. to [C] <u>138</u>	P.S.I.
[D] <u>982</u>		P.S.I.
from [E] <u>170</u>	P.S.I. to [F] <u>297</u>	P.S.I.
[G] <u>929</u>		P.S.I.

Recovery 600' Muddy water (with a few oil spots on top)

Remarks _____

Extra Equipment-Jars None Safety Joint None Extra Packer None Straddle None Hook Wall None

Top Recorder No. 3815 Clock no. 27440 Depth 3965' Ctr. Sub _____ Sampler None

Bottom Recorder No. 2186 Clock No. 27440 Depth 3968' Chlorides - plts 10000 D.S.T. 73000

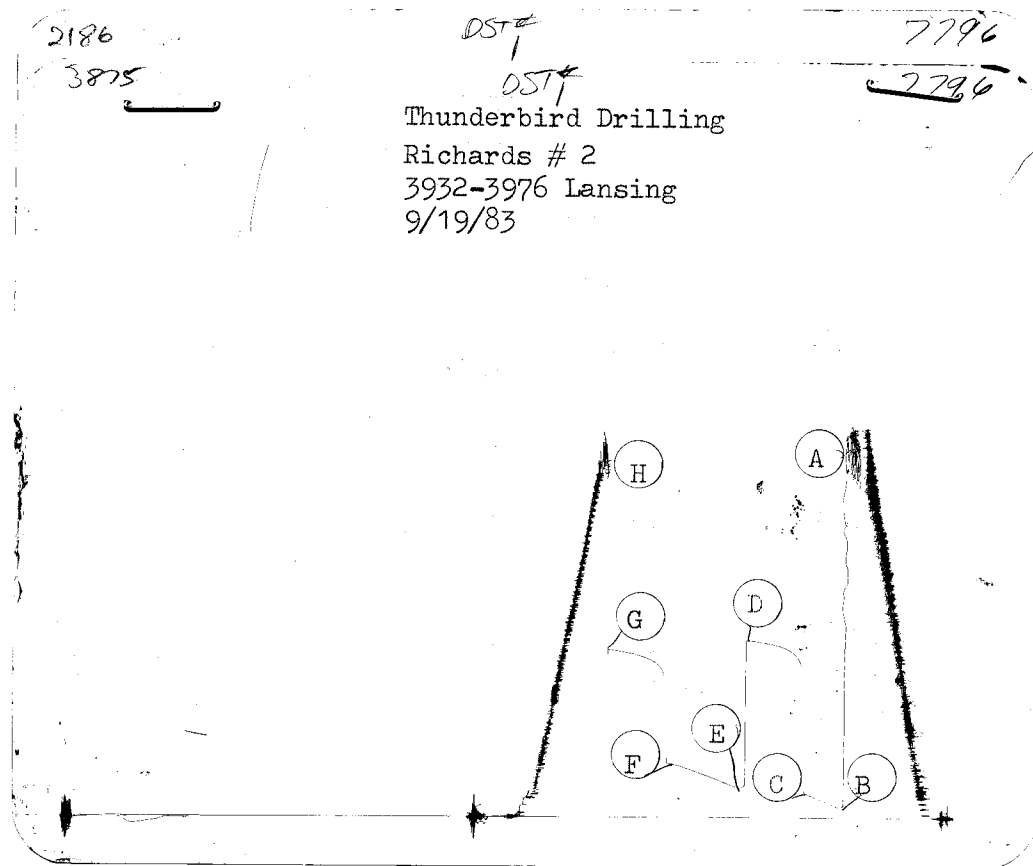
Price of Job \$550.00

Tool Operator Swamp Digger

Approved By Stanley Cox

SUPERIOR TESTERS, INC. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND TO THE PROPERTY OR PERSONEL OF THE ONE FOR WHOM A TEST IS MADE, OF FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Ticket N° 7796



This is actual recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	2109	2046	P.S.I.
(B) First Initial Flow Pressure	53	53	P.S.I.
(C) First Final Flow Pressure	131	138	P.S.I.
(D) Initial Closed-in Pressure	982	982	P.S.I.
(E) Second Initial Flow Pressure	170	165	P.S.I.
(F) Second Final Flow Pressure	297	297	P.S.I.
(G) Final Closed-in Pressure	929	935	P.S.I.
(H) Final Hydrostatic Mud	2098	1972	P.S.I.

SUPERIOR TESTERS

368 West Second, Hoisington, Kansas

COMPANY Thunderbird Drilling STATE Kansas COUNTY Lane

LEASE & WELL NO. Richards # 2 ELEVATION 2759 KB. DATE 9/20/83 FORMATION TESTED Lansing

SEC 20 TWP 16 RANGE 29 INTERVAL TESTED 4034- TO 4130 TOTAL DEPTH 4130

TEST NO. # 2 O.K. yes TOP PACKER DEPTH 4034 FT. BOTTOM PACKER DEPTH ---- FT. PACKER SIZE 6 & 3/4

STRADDLE no CONV. yes TOOL SIZE 5 1/2 OD. TOOL JOINT SIZE 4 1/2 FH. ANCHOR LENGTH 96 FT.

HOLE SIZE 7 & 7/8 EXTRA EQUIPMENT none SURFACE CHOKE SIZE 1/2 IN. BOTTOM CHOKE SIZE 1/2 IN.

REVERSED OUT no VISCOSITY 59 WEIGHT 9.7 DUAL PACKERS no DID PACKER HOLD yes DID TOOL PLUG no

DRILLING CONTRACTOR T-Bird # 1

TOOL JOINT SIZE <u>4 1/2 FH.</u> IN.	LENGTH DRILL PIPE <u>3519</u> FT.	I.D. DRILL PIPE <u>3.80</u> IN.
TOOL JOINT SIZE <u>4 1/2 XH.</u> IN.	LENGTH WEIGHT PIPE <u>563</u> FT.	I.D. WEIGHT PIPE <u>2.75</u> IN.
TOOL JOINT SIZE <u>-----</u> IN.	LENGTH DRILL COLLARS <u>-----</u> FT.	I.D. DRILL COLLARS <u>-----</u> IN.

TOOL OPEN I.F.P. FROM 7:45 p. m to 8:15 p. m Hr. 30 min From (B) 85 P.S.I. to (C) 170 P.S.I.

TOOL CLOSED I.C.I.P. FROM 8:15 p. m to 9:00 p. m Hr. 45 min (D) 961 P.S.I.

TOOL OPEN F.F.P. FROM 9:00 p. m to 10:00 p. m Hr. 60 min From (E) 202 P.S.I. to (F) 308 P.S.I.

TOOL CLOSED F.C.I.P. FROM 10:00 p. m to 10:45 p. m Hr. 45 min (G) 897 P.S.I.

INITIAL HYDROSTATIC PRESSURE (A) 2172 P.S.I. FINAL HYDROSTATIC PRESSURE (H) 2151 MAXIMUM TEMPERATURE 99 °F

BLOW Good blow off bottom of bucket in 21 minutes 1st opening.

Good blow off bottom of bucket in 45 minutes 2nd opening.

RECOVERY - TOTAL FEET 553

RECOVERED <u>3</u>	FEET OF <u>Clean Oil.</u>
RECOVERED <u>550</u>	FEET OF <u>Muddy water, with few spots of Oil.</u>
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____
RECOVERED _____	FEET OF _____

REMARKS None.

TICKET NO. 7797

WITNESSED BY: Stanton Cox TOOL OPERATOR: Ivan Suppes

SUPERIOR TESTERS
RR #1, Box 295B, Great Bend, Kansas

Date 9-20-83 Location 20 16° 29' N Elevation 2759 AS County Lane
Company Thunderbird Drilling, Inc. Number of Copies _____
Address P.O. Box 18407 Wichita, Kansas 67218
Charts Mailed to P.O. Box 18407 Wichita, Kansas 67218
Invoice Mailed to P.O. Box 18407 Wichita, Kansas 67218
Lease Richards Well No. #2 Formation Tested Lansing Test No. #2
Depth 4130' Tested from 4034' to 4130' Packer Size 6 3/4" Anchor Length 96'
Top Packer Depth 4034' ft. Bottom Packer Depth None ft. Dual Packers No
Tool Joint Size 4 1/2 F.H. Tool Size 5 1/2 D.D. Hole Size 7 1/2" Did Packer Hold yes
Drilling Contractor T-Bird Rig #1
Length Drill Pipe 3519' I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2 F.H.
Length Weight Pipe 563' I.D. Weight Pipe 2.75 Tool Joint Size 4 1/2 X H
Length Drill Collars None I.D. Drill Collars None Tool Joint Size None
Tool Open I.F.P. from 7:45 A.m to 8:15 P.m 30 min
Tool Closed I.C.I.P. from 8:15 A.m to 9:00 P.m 45 min
Tool Open F.F.P. from 9:00 P.m to 10:00 P.m 60 min
Tool Closed F.C.I.P. from 10:00 P.m to 10:45 P.m 45 min
Initial Hydrostatic Pressure [A] 2172 P.S.I. Final Hydrostatic Pressure [H] 2151 P.S.I. Maximum Temp 99 °F
Initial Blow Good Blow - off Bottom of Bucket in 21 minutes
Final Blow Good Blow - off Bottom of Bucket in 45 minutes
Gas to Surface None Min. Oil to Surface None Min. Mut Weight 9 1/2 Viscosity 59
Gas Guaged None

from [B] <u>85</u> P.S.I. to [C] <u>170</u> P.S.I.
[D] <u>961</u> P.S.I.
from [E] <u>202</u> P.S.I. to [F] <u>308</u> P.S.I.
[G] <u>897</u> P.S.I.

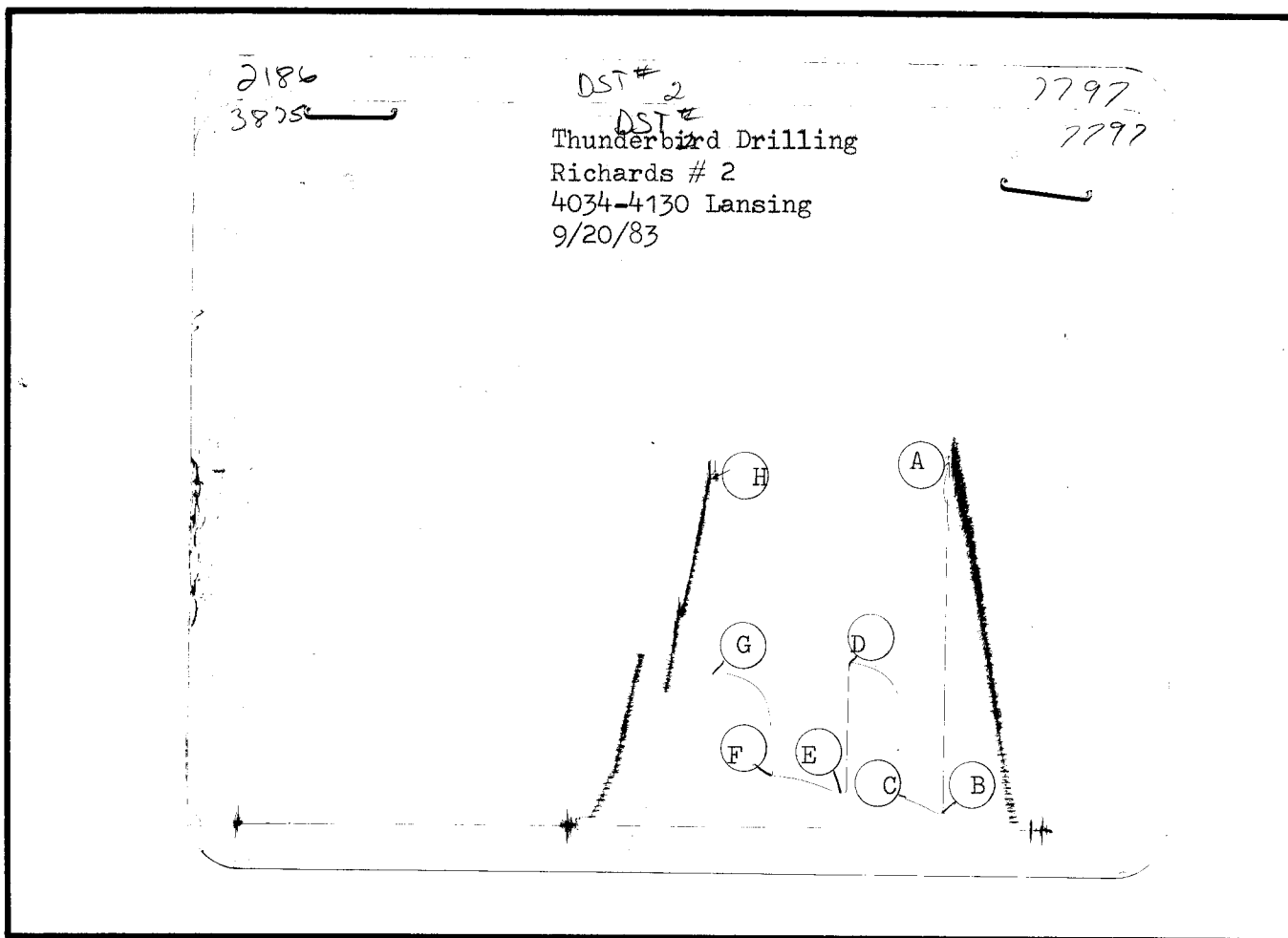
Recovery 3' of Clean Oil
550' Muddy water (with a few spots of oil)

Remarks _____

Extra Equipment-Jars None Safety Joint None Extra Packer None Straddle None Hook Wall None
Top Recorder No. 3875 Clock no. 27440 Depth 4124' Ctr. Sub _____ Sampler None
Bottom Recorder No. 2180 Clock No. 27442 Depth 4127' Chlorides - plts 10,000 D.S.T. 27,000
Price of Job \$595.00
Tool Operator Don Simpson
Approved By Shanley Cox

SUPERIOR TESTERS, INC. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND TO THE PROPERTY OR PERSONEL OF THE ONE FOR WHOM A TEST IS MADE, OF FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Ticket N^o 7797



This is actual recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	2172	2130	P.S.I.
(B) First Initial Flow Pressure	85	91	P.S.I.
(C) First Final Flow Pressure	170	170	P.S.I.
(D) Initial Closed-in Pressure	961	965	P.S.I.
(E) Second Initial Flow Pressure	202	206	P.S.I.
(F) Second Final Flow Pressure	308	308	P.S.I.
(G) Final Closed-in Pressure	897	907	P.S.I.
(H) Final Hydrostatic Mud	2151	2088	P.S.I.

SUPERIOR TESTERS

368 West Second, Hoisington, Kansas

COMPANY Thunderbird Drilling STATE Kansas COUNTY Lane
 LEASE & WELL NO. Richards # 2 ELEVATION 2759 KB. DATE 9/21/83 FORMATION TESTED Lansing
 SEC 29 TWP 16 RANGE 29 INTERVAL TESTED 4134 TO 4155 TOTAL DEPTH 4155
 TEST NO. #3 O.K. no TOP PACKER DEPTH 4134 FT. BOTTOM PACKER DEPTH ---- FT. PACKER SIZE 6 & 3/4
 STRADDLE no CONVEY yes TOOL SIZE 5 1/2 OD. TOOL JOINT SIZE 4 1/2 FH. ANCHOR LENGTH 21 FT.
 HOLE SIZE 7 & 7/8 EXTRA EQUIPMENT none SURFACE CHOKE SIZE 1/2 IN. BOTTOM CHOKE SIZE 1/2 IN.
 REVERSED OUT no VISCOSITY 59 WEIGHT 9.7 DUAL PACKERS no DID PACKER HOLD no DID TOOL PLUG no
 DRILLING CONTRACTOR T-Bird # 1
 TOOL JOINT SIZE 4 1/2 FH. IN. LENGTH DRILL PIPE 3555 FT. I.D. DRILL PIPE 3.80 IN.
 TOOL JOINT SIZE 4 1/2 XH. IN. LENGTH WEIGHT PIPE 563 FT. I.D. WEIGHT PIPE 2.75 IN.
 TOOL JOINT SIZE ---- IN. LENGTH DRILL COLLARS ---- FT. I.D. DRILL COLLARS ---- IN.
 TOOL OPEN I.F.P. FROM _____ m to _____ m _____ Hr. _____ min From (B) _____ P.S.I. to (C) _____ P.S.I.
 TOOL CLOSED I.C.I.P. FROM _____ m to _____ m _____ Hr. _____ min (D) _____ P.S.I.
 TOOL OPEN F.F.P. FROM _____ m to _____ m _____ Hr. _____ min From (E) _____ P.S.I. to (F) _____ P.S.I.
 TOOL CLOSED F.C.I.P. FROM _____ m to _____ m _____ Hr. _____ min (G) _____ P.S.I.
 INITIAL HYDROSTATIC PRESSURE (A) _____ P.S.I. FINAL HYDROSTATIC PRESSURE (H) _____ MAXIMUM TEMPERATURE _____ °F
 BLOW Missrun

RECOVERY - TOTAL FEET Missrun
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____

REMARKS Missrun Packer failure, bridged off several times going in hole,
left packer in hole.

TICKET NO. 7798
 WITNESSED BY: Stanton Cox TOOL OPERATOR: Ivan Suppes

SUPERIOR TESTERS
RR #1, Box 295B, Great Bend, Kansas

Date 9-21-83 Location 20 16^s 29^w Elevation 2759 KB County Lane
Company Thunderbird Drilling, Inc. Number of Copies _____
Address P.O. Box 18407 Wichita, Kansas 67218
Charts Mailed to P.O. Box 18407 Wichita, Kansas 67218
Invoice Mailed to P.O. Box 18407 Wichita, Kansas 67218
Lease Richards Well No. #2 Formation Tested Lansing Test No. #3
Depth 4155' Tested from 4134' to 4155' Packer Size 6 3/4 Anchor Length 21'
Top Packer Depth 4134' ft. Bottom Packer Depth None ft. Dual Packers None
Tool Joint Size 4 1/2 F.H. Tool Size 5 1/2 D10 Hole Size 7 3/8 Did Packer Hold _____
Drilling Contractor T-Bird Drilling Rig #1
Length Drill Pipe 3555' I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2 F.H.
Length Weight Pipe 563' I.D. Weight Pipe 2.75 Tool Joint Size 4 1/2 F.H.
Length Drill Collars None I.D. Drill Collars _____ Tool Joint Size _____

Tool Open I.F.P. from Am to Am min
Tool Closed I.C.I.P. from Am to Am min
Tool Open F.F.P. from Am to Am min
Tool Closed F.C.I.P. from Am to Am min

from [B] _____ P.S.I. to [C] _____ P.S.I.
[D] _____ P.S.I.
from [E] _____ P.S.I. to [F] _____ P.S.I.
[G] _____ P.S.I.

Initial Hydrostatic Pressure [A] _____ P.S.I. Final Hydrostatic Pressure [H] _____ P.S.I. Maximum Temp _____ °F

Initial Blow _____

Final Blow _____

Gas to Surface _____ Min. Oil to Surface _____ Min. Mut Weight 97 Viscosity 59

Gas Guaged _____

Recovery _____

Remarks Missed Failure
Packet
Bridged off several times going hole
Left Packer in Hole

Extra Equipment-Jars None Safety Joint None Extra Packer None Straddle None Hook Wall None

Top Recorder No. 3875 Clock no. 27470 Depth 4149' Ctr. Sub _____ Sampler None

Bottom Recorder No. 2126 Clock No. 27472 Depth 4152' Chlorides - plts _____ D.S.T. _____

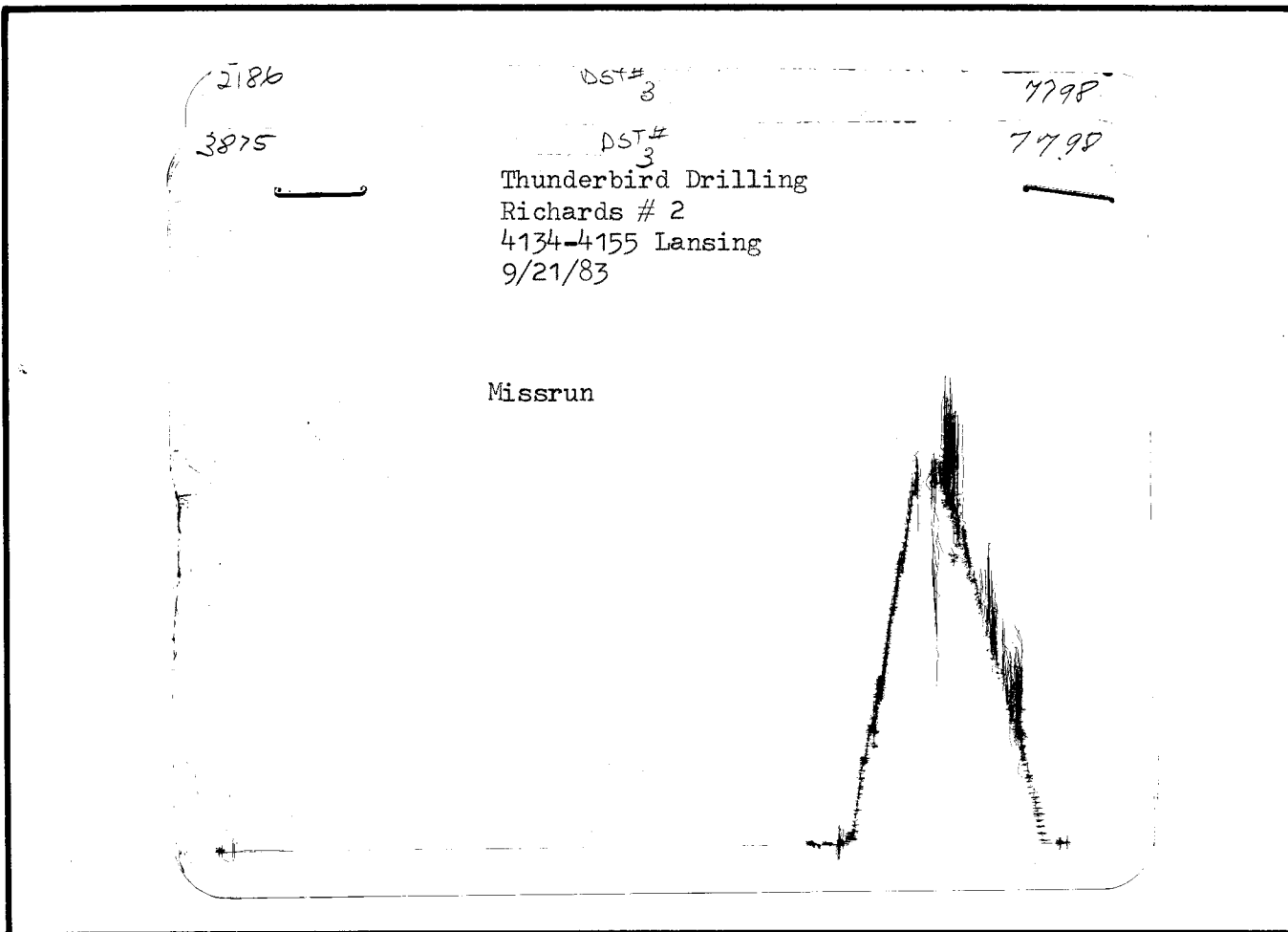
Price of Job \$300

Tool Operator John Supp

Approved By Stanley Cox

SUPERIOR TESTERS, INC. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND TO THE PROPERTY OR PERSONEL OF THE ONE FOR WHOM A TEST IS MADE, OF FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Ticket N^o 7798



This is actual recorder chart.

POINT	PRESSURE		P.S.I.
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	Missrun	No Readings	P.S.I.
(B) First Initial Flow Pressure	_____	_____	P.S.I.
(C) First Final Flow Pressure	_____	_____	P.S.I.
(D) Initial Closed-in Pressure	_____	_____	P.S.I.
(E) Second Initial Flow Pressure	_____	_____	P.S.I.
(F) Second Final Flow Pressure	_____	_____	P.S.I.
(G) Final Closed-in Pressure	_____	_____	P.S.I.
(H) Final Hydrostatic Mud	_____	_____	P.S.I.

SUPERIOR TESTERS

368 West Second, Holsington, Kansas

COMPANY Thunderbird Drilling STATE Kansas COUNTY Lane
 LEASE & WELL NO. Richards # 2 ELEVATION 2759 KB. DATE 9/21/83 FORMATION TESTED Lansing
 SEC 20 TWP 16 RANGE 29 INTERVAL TESTED 4120 TO 4155 TOTAL DEPTH 4155
 TEST NO. # 4 O.K. yes TOP PACKER DEPTH 4120 FT. BOTTOM PACKER DEPTH ----- FT. PACKER SIZE 6 & 3/4
 STRADDLE no CONV. yes TOOL SIZE 5 1/2 OD. TOOL JOINT SIZE 4 1/2 FH. ANCHOR LENGTH 35' FT.
 HOLE SIZE 7 & 7/8 EXTRA EQUIPMENT none SURFACE CHOKE SIZE 1/2 IN. BOTTOM CHOKE SIZE 1/2 IN.
 REVERSED OUT no VISCOSITY 46 WEIGHT 9.7 DUAL PACKERS no DID PACKER HOLD yes DID TOOL PLUG no
 DRILLING CONTRACTOR T-Bird # 1
 TOOL JOINT SIZE 4 1/2 FH. IN. LENGTH DRILL PIPE 3593 FT. I.D. DRILL PIPE 3.80 IN.
 TOOL JOINT SIZE 4 1/2 XH. IN. LENGTH WEIGHT PIPE 563 FT. I.D. WEIGHT PIPE 2.75 IN.
 TOOL JOINT SIZE ----- IN. LENGTH DRILL COLLARS ----- FT. I.D. DRILL COLLARS ----- IN.
 TOOL OPEN I.F.P. FROM 1:30 p. m to 2:00 p. m Hr. 30 min From (B) 42 P.S.I. to (C) 53 P.S.I.
 TOOL CLOSED I.C.I.P. FROM 2:00 p. m to 2:45 p. Hr. 45 min (D) 939 P.S.I.
 TOOL OPEN F.F.P. FROM 2:45 p. m to 3:45 p. m Hr. 60 min From (E) 63 P.S.I. to (F) 74 P.S.I.
 TOOL CLOSED F.C.I.P. FROM 3:45 p. m to 4:30 p. m Hr. 45 min (G) 843 P.S.I.
 INITIAL HYDROSTATIC PRESSURE 2256 P.S.I. FINAL HYDROSTATIC PRESSURE (H) 2235 MAXIMUM TEMPERATURE 104 °F
 BLOW Weak blow building 3" into water 1st opening.
Weak blow building 4" into water 2nd opening,
 RECOVERY - TOTAL FEET 120
 RECOVERED 60 FEET OF Gas & Oil cut mud. (4%gas, 42%Oil, 15%water, 39%mud.)
 RECOVERED 60 FEET OF Oil & gas cut muddy water. (4%gas, 5%Oil, 51%water, 40%mud)
 RECOVERED 90 FEET OF Gas in the pipe.
 RECOVERED ----- FEET OF -----
 RECOVERED ----- FEET OF -----
 RECOVERED ----- FEET OF -----
 RECOVERED ----- FEET OF -----
 RECOVERED ----- FEET OF -----
 RECOVERED ----- FEET OF -----
 RECOVERED ----- FEET OF -----
 RECOVERED ----- FEET OF -----
 RECOVERED ----- FEET OF -----
 RECOVERED ----- FEET OF -----
 REMARKS None.

TICKET NO. 7799
 WITNESSED BY: Stanton Cox TOOL OPERATOR: Ivan Suppes

SUPERIOR TESTERS
RR #1, Box 295B, Great Bend, Kansas

Date 9-21-83 Location 20 16^S 29^N Elevation 2759 K.B. County Lane
Company Thunderbird Drilling Inc. Number of Copies _____
Address P.O. Box 18407 Wichita, Kansas 67218
Charts Mailed to P.O. Box 18407 Wichita, Kansas 67218
Invoice Mailed to P.O. Box 18407 Wichita, Kansas 67218
Lease Richards Well No. #2 Formation Tested Lansing Test No. #4
Depth 4155' Tested from 4120' to 4155' Packer Size 6 3/4" Anchor Length 35'
Top Packer Depth 4120' ft. Bottom Packer Depth NONE ft. Dual Packers No
Tool Joint Size 4 1/2 F.H. Tool Size 5 1/2 O.D. Hole Size 7 7/8" Did Packer Hold yes
Drilling Contractor T-Bird Rig #1
Length Drill Pipe _____ I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2 F.H.
Length Weight Pipe 563' I.D. Weight Pipe 2.75 Tool Joint Size 4 1/2 F.H.
Length Drill Collars NONE I.D. Drill Collars _____ Tool Joint Size _____
Tool Open I.F.P. from 1:30 P.m to 2:00 P.m 30 min
Tool Closed I.C.I.P. from 2:00 P.m to 2:45 P.m 45 min
Tool Open F.F.P. from 2:45 P.m to 3:45 P.m 60 min
Tool Closed F.C.I.P. from 3:45 P.m to 4:30 P.m 45 min
Initial Hydrostatic Pressure [A] 2256 P.S.I. Final Hydrostatic Pressure [H] 2235 P.S.I. Maximum Temp 104 °F
Initial Blow Weak Blow - Building 3" into Water
Final Blow Weak Blow - Building 4" into Water
Gas to Surface None Min. Oil to Surface None Min. Mut Weight 97 Viscosity 46
Gas Guaged None

from [B]	<u>42</u>	P.S.I. to [C]	<u>53</u>	P.S.I.
[D]	<u>939</u>			P.S.I.
from [E]	<u>63</u>	P.S.I. to [F]	<u>77</u>	P.S.I.
[G]	<u>843</u>			P.S.I.

90' Gas in Pipe
Recovery 60' Oil cut Mud 4% Gas; 42% Oil; 15% Water; 39% mud
60' Oil & Gas cut Muddy Water 4% Gas; 5% Oil; 51% Water; 40% mud

Remarks _____

Extra Equipment-Jars None Safety Joint None Extra Packer None Straddle None Hook Wall None

Top Recorder No. 3825 Clock no. 22440 Depth 4149' Ctr. Sub _____ Sampler None

Bottom Recorder No. 2186 Clock No. 22442 Depth 4152' Chlorides - plts 10,000 D.S.T. 16,000

Price of Job 7,550.00

Tool Operator Juan Sampedro

Approved By Stanley Cox

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Ticket No 7799

2184

3875

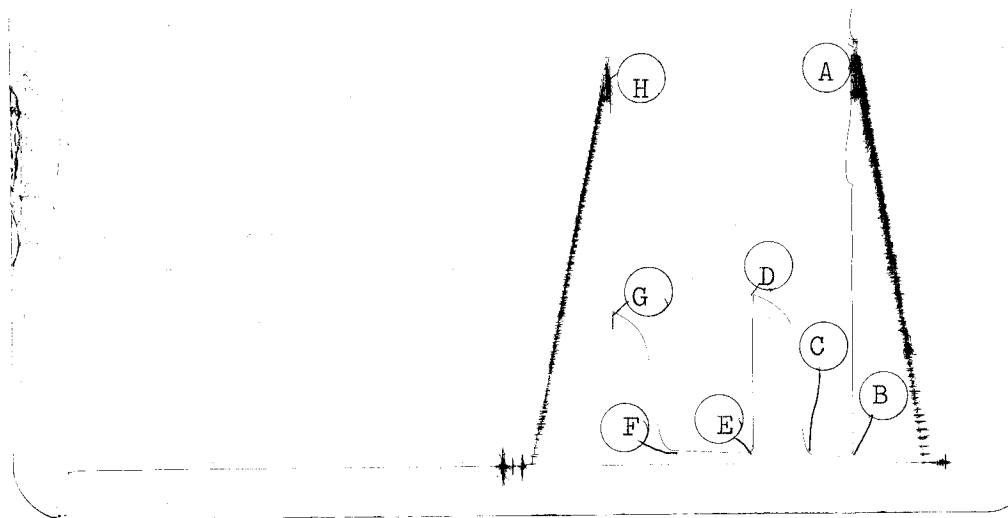
OST

OST

7794

7799

Thunderbird Drilling
Richards # 2
4120-4155 Lansing
9/21/83



This is actual recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	2256	2203	P.S.I.
(B) First Initial Flow Pressure	42	42	P.S.I.
(C) First Final Flow Pressure	53	51	P.S.I.
(D) Initial Closed-in Pressure	939	939	P.S.I.
(E) Second Initial Flow Pressure	63	63	P.S.I.
(F) Second Final Flow Pressure	74	80	P.S.I.
(G) Final Closed-in Pressure	843	854	P.S.I.
(H) Final Hydrostatic Mud	2235	2161	P.S.I.

368 West Second, Hoisington, Kansas

WITNESSED BY: Stanton Cox TOOL OPERATOR: Ivan Suppes

SUPERIOR TESTERS
RR #1, Box 295B, Great Bend, Kansas

Date 9-22-83 Location 20-16⁵-39^W Elevation 2759 County Larn
Company Thunderbird Drilling, Inc. Number of Copies _____
Address P.O. Box 18407 Wichita, Kansas 67210
Charts Mailed to P.O. Box 18407 Wichita, Kansas 67210
Invoice Mailed to P.O. Box 18407 Wichita, Kansas 67210
Lease Richards Well No. #1 Formation Tested Lansing Test No. #5
Depth 4195' Tested from 4150' to 4195' Packer Size 6 3/4 Anchor Length 45'
Top Packer Depth 4150' ft. Bottom Packer Depth None ft. Dual Packers NO
Tool Joint Size 4 1/2 F.H. Tool Size 5 1/2 O.A. Hole Size 2 7/8 Did Packer Hold yes
Drilling Contractor T-Bird Rig #1
Length Drill Pipe 3575' I.D. Drill Pipe 3.85 Tool Joint Size 4 1/2 F.H.
Length Weight Pipe 563' I.D. Weight Pipe 2.70 Tool Joint Size 4 1/2 F.H.
Length Drill Collars None I.D. Drill Collars _____ Tool Joint Size _____

Tool Open I.F.P. from 5:15 Am to 5:45 Am 30 min
Tool Closed I.C.I.P. from 5:45 Am to 6:30 Am 45 min
Tool Open F.F.P. from 6:30 Am to 7:30 Am 60 min
Tool Closed F.C.I.P. from 7:30 Am to 8:15 Am 45 min

from [B] 95 P.S.I. to [C] 510 P.S.I.
[D] 854 P.S.I.
from [E] 553 P.S.I. to [F] 703 P.S.I.
[G] 832 P.S.I.

Initial Hydrostatic Pressure [A] 2235 P.S.I. Final Hydrostatic Pressure [H] 2224 P.S.I. Maximum Temp 104 °F
Initial Blow Strong Blow - off Bottom of Bucket in 2 minutes
Final Blow Strong Blow - off Bottom of Bucket in 6 minutes
Gas to Surface None Min. Oil to Surface None Min. Mut Weight 9 1/2 Viscosity 46
Gas Guaged None

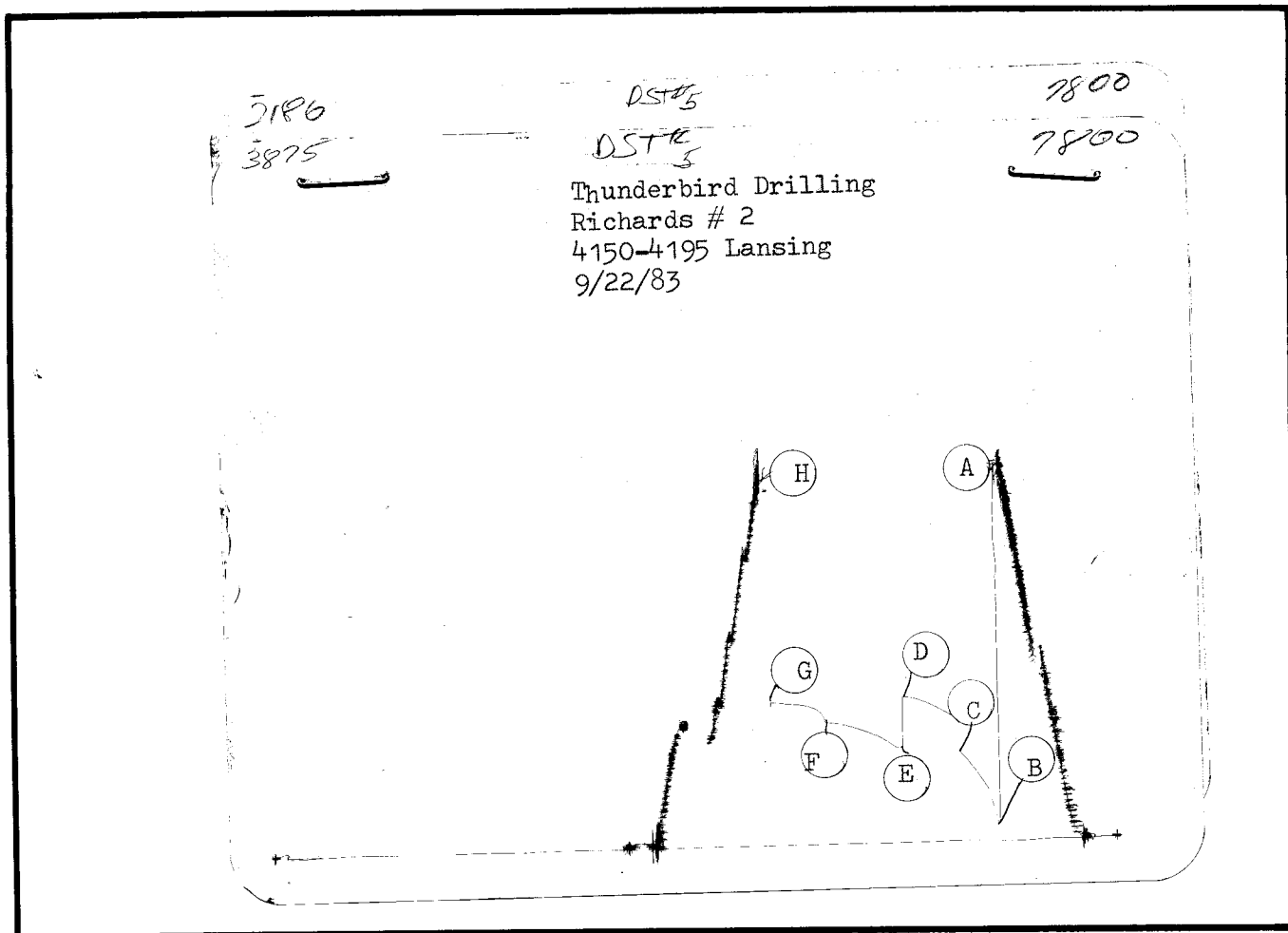
60' Gas in Pipe
Recovery 1550' Oil Spotted slightly Muddy water

Remarks _____

Extra Equipment-Jars None Safety Joint None Extra Packer None Straddle None Hook Wall None
Top Recorder No. 3875 Clock no. 27440 Depth 4189' Ctr. Sub 35.09 Sampler None
Bottom Recorder No. 2196 Clock No. 27442 Depth 4192' Chlorides - ppts _____ D.S.T. _____
Price of Job 630.00
Tool Operator John J. Super
Approved By _____

SUPERIOR TESTERS, INC. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND TO THE PROPERTY OR PERSONEL OF THE ONE FOR WHOM A TEST IS MADE, OF FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Ticket No. 7800



This is actual recorder chart.

POINT	PRESSURE		P.S.I.
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	2235	2266	P.S.I.
(B) First Initial Flow Pressure	95	102	P.S.I.
(C) First Final Flow Pressure	510	521	P.S.I.
(D) Initial Closed-in Pressure	854	854	P.S.I.
(E) Second Initial Flow Pressure	553	553	P.S.I.
(F) Second Final Flow Pressure	703	714	P.S.I.
(G) Final Closed-in Pressure	832	843	P.S.I.
(H) Final Hydrostatic Mud	2224	2140	P.S.I.

368 West Second, Hoisington, Kansas

TICKET NO. 7876

WITNESSED BY: Stanton Cox TOOL OPERATOR: Pat Stevenson

SUPERIOR TESTERS

RR #1, Box 295B, Great Bend, Kansas

Date 9-23-83 Location 20-16^S-29^W Elevation 2759 County LANE

Company Thunderbird Drilling, Inc. Number of Copies

Address PO Box 18407 WICHITA, KANSAS 67208

Charts Mailed to PO Box 18407 WICHITA, KANSAS 67208

Invoice Mailed to PO Box 18407 WICHITA, KANSAS 67208

Lease Richards Well No. #1 Formation Tested Marmaton Test No. 6

Depth 4330 Tested from 4201 to 4330 Packer Size 6 3/4 Anchor Length 129'

Top Packer Depth 4201 ft. Bottom Packer Depth ft. Dual Packers NO

Tool Joint Size 4 1/2 FH Tool Size 5 1/2 OD Hole Size 7 3/8 Did Packer Hold yes

Drilling Contractor T. Bird Rig #1

Length Drill Pipe 3675 I.D. Drill Pipe 3.85 Tool Joint Size 4 1/2 FH

Length Weight Pipe 563 I.D. Weight Pipe 270 Tool Joint Size 4 1/2 XH

Length Drill Collars NONE I.D. Drill Collars Tool Joint Size

Tool Open I.F.P. from 745 A.m. to 815 A.m. 30 min

Tool Closed I.C.I.P. from 815 A.m. to 900 A.m. 45 min

Tool Open F.F.P. from 900 A.m. to 10:00 A.m. 60 min

Tool Closed F.C.I.P. from 10:00 A.m. to 1045 A.m. 45 min

from [B]	<u>106</u>	P.S.I. to [C]	<u>127</u>	P.S.I.
[D]	<u>1046</u>			P.S.I.
from [E]	<u>148</u>	P.S.I. to [F]	<u>191</u>	P.S.I.
[G]	<u>1004</u>			P.S.I.

Initial Hydrostatic Pressure [A] 2319 P.S.I. Final Hydrostatic Pressure [H] 2298 P.S.I. Maximum Temp 108° °F

Initial Blow WEAK blow building 5" INTO WATER

Final Blow WEAK blow building 4" INTO WATER

Gas to Surface Min. Oil to Surface Min. Mut Weight 9.4 Viscosity 40

Gas Guaged

Recovery 240' MUDDY WATER (WITH A FEW SPOTS OF OIL ON TOP.)

Remarks

Extra Equipment-Jars Safety Joint Extra Packer Straddle Hook Wall

Top Recorder No. 3875 Clock no. 27440 Depth 3324 Clr. Sub Sampler

Bottom Recorder No. 2186 Clock No. 27442 Depth 3327 Chlorides - plts 19,000 D.S.T.

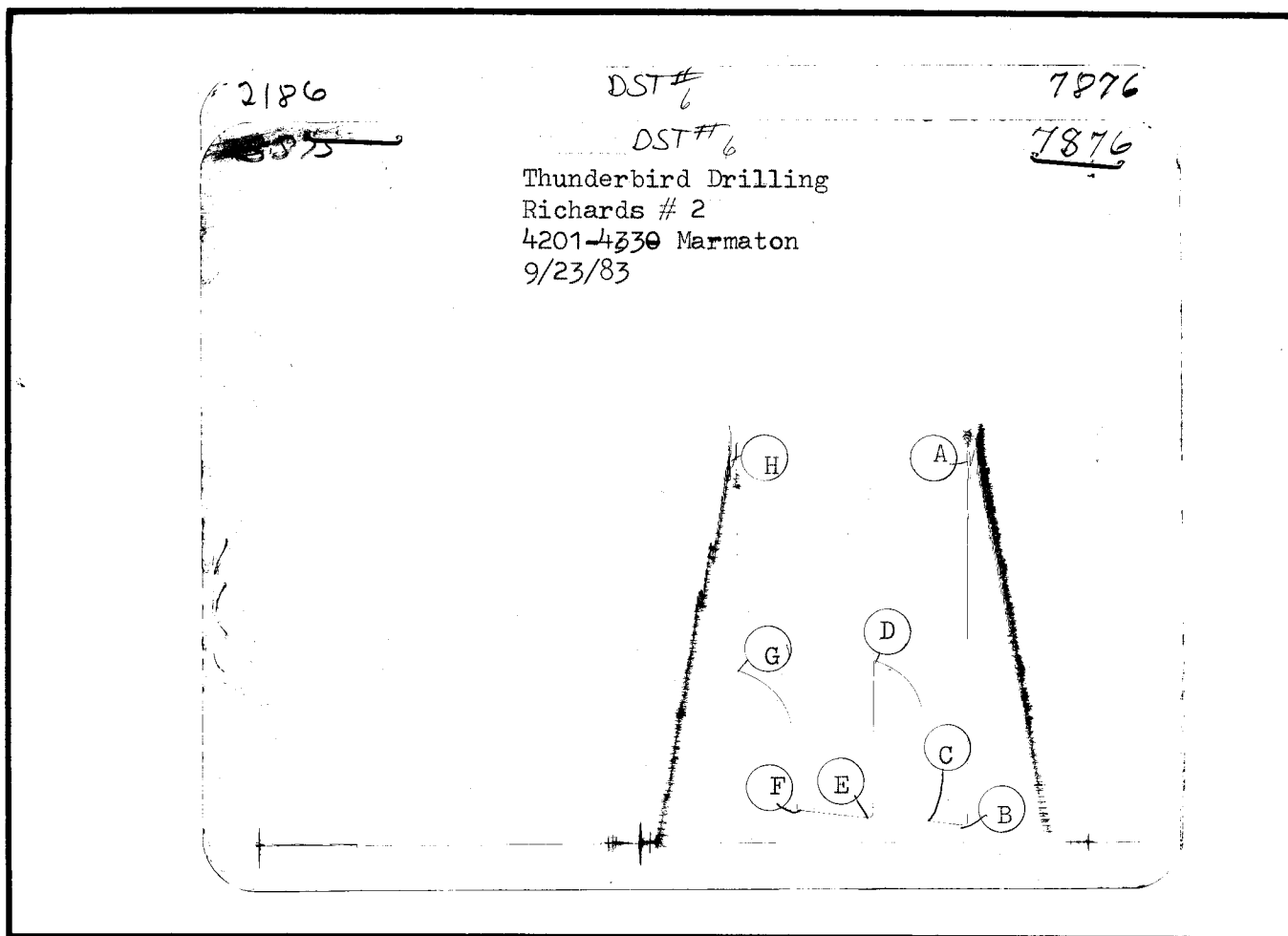
Price of Job \$595.00

Tool Operator Pat Stevenson

Approved By Stanton Cox

SUPERIOR TESTERS, INC. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND TO THE PROPERTY OR PERSONEL OF THE ONE FOR WHOM A TEST IS MADE, OF FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Ticket N° 7876



This is actual recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	2319	2277	P.S.I.
(B) First Initial Flow Pressure	106	106	P.S.I.
(C) First Final Flow Pressure	127	125	P.S.I.
(D) Initial Closed-in Pressure	1046	1056	P.S.I.
(E) Second Initial Flow Pressure	148	148	P.S.I.
(F) Second Final Flow Pressure	191	191	P.S.I.
(G) Final Closed-in Pressure	1004	1008	P.S.I.
(H) Final Hydrostatic Mud	2298	2193	P.S.I.

SUPERIOR TESTERS

368 West Second, Hoisington, Kansas

COMPANY Thunderbird Drilling STATE Kansas COUNTY Lane
 LEASE & WELL NO. Richards # 2 ELEVATION 2759 KB. DATE 9/24/83 FORMATION TESTED Arbuckle
 SEC 20 TWP 16 RANGE 29 INTERVAL TESTED 4325 TO 4390 TOTAL DEPTH 4390
 TEST NO. #7 O.K. yes TOP PACKER DEPTH 4325 FT. BOTTOM PACKER DEPTH --- FT. PACKER SIZE 6 & 3/4
 STRADDLE no CONV yes TOOL SIZE 5 1/2 OD. TOOL JOINT SIZE 4 1/2 FH. ANCHOR LENGTH 65 FT.
 HOLE SIZE 7 & 7/8 EXTRA EQUIPMENT none SURFACE CHOKE SIZE 1/2 IN. BOTTOM CHOKE SIZE 1/2 IN.
 REVERSED OUT no VISCOSITY 50 WEIGHT 9.6 DUAL PACKERS no DID PACKER HOLD yes DID TOOL PLUG no
 DRILLING CONTRACTOR T-Bird # 1

TOOL JOINT SIZE 4 1/2 FH. IN. LENGTH DRILL PIPE 3727 FT. I.D. DRILL PIPE 3.80 IN.
 TOOL JOINT SIZE 4 1/2 XH. IN. LENGTH WEIGHT PIPE 563 FT. I.D. WEIGHT PIPE 2.75 IN.
 TOOL JOINT SIZE ---- IN. LENGTH DRILL COLLARS --- FT. I.D. DRILL COLLARS ---- IN.
 TOOL OPEN I.F.P. FROM 2:45 a. m to 3:15 a. m Hr. 30 min From (B) 42 P.S.I. to (C) 42 P.S.I.
 TOOL CLOSED I.C.I.P. FROM 3:15 a. m to 3:45 a. m Hr. 30 min (D) 234 P.S.I.
 TOOL OPEN F.F.P. FROM 3:45 a. m to 4:15 a. m Hr. 30 min From (E) 42 P.S.I. to (F) 42 P.S.I.
 TOOL CLOSED F.C.I.P. FROM 4:15 a. m to 4:45 a. m Hr. 30 min (G) 180 P.S.I.
 INITIAL HYDROSTATIC PRESSURE (A) 22351 P.S.I. FINAL HYDROSTATIC PRESSURE (H) 2161 MAXIMUM TEMPERATURE 108 °F

BLOW Weak blow died in 10 minutes 1st opening, 1/4" in bucket.
Weak off top of bucket died in 8 minutes 2nd opening.

RECOVERY - TOTAL FEET 5
 RECOVERED 5 FEET OF Mud.
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
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 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____
 RECOVERED _____ FEET OF _____

REMARKS None.

TICKET NO. 7877
 WITNESSED BY: Stanton Cox TOOL OPERATOR: Pat Stevenson

SUPERIOR TESTERS

RR #1, Box 295B, Great Bend, Kansas

Date 9 24 83 Location 20-16^S-29^W Elevation 2759^{KB} County LANE

Company Thunderbird Drilling Inc Number of Copies _____

Address Po. Box 18407 Wichita, KS 67208

Charts Mailed to Po Box 18407 Wichita, KS 67208

Invoice Mailed to Po Box 18407 Wichita, KS 67208

Lease Richards Well No. ~~2500~~ 1 Formation Tested _____ Test No. 7

Depth 4390 Tested from 4325 to 4390 Packer Size 6 3/4 Anchor Length 65'

Top Packer Depth 4325 ft. Bottom Packer Depth _____ ft. Dual Packers ONE

Tool Joint Size 4 1/2 FH Tool Size 5 1/2 OD Hole Size 7 3/8 Did Packer Hold YES

Drilling Contractor T Bird Drilling Rig #1

Length Drill Pipe 3227 I.D. Drill Pipe 385 Tool Joint Size 4 1/2 FH

Length Weight Pipe 563 I.D. Weight Pipe 270 Tool Joint Size 4 1/2 XH

Length Drill Collars _____ I.D. Drill Collars _____ Tool Joint Size _____

Tool Open I.F.P. from 3:05 Am to 3:35 Am 30 min

Tool Closed I.C.I.P. from 3:15 Am to 3:45 Am 30 min

Tool Open F.F.P. from 3:45 Am to 4:15 Am 30 min

Tool Closed F.C.I.P. from 4:15 Am to 4:45 Am 30 min

from [B]	<u>42</u>	P.S.I. to [C]	<u>42</u>	P.S.I.
[D]	<u>234</u>			P.S.I.
from [E]	<u>42</u>	P.S.I. to [F]	<u>42</u>	P.S.I.
[G]	<u>180</u>			P.S.I.

Initial Hydrostatic Pressure [A] 2235 P.S.I. Final Hydrostatic Pressure [H] 2161 P.S.I. Maximum Temp 108 °F

Initial Blow WEAK Blow Died 10⁴ 1/4" in Bucket

Final Blow WEAK OFF Top of Bucket Died 8⁴.

Gas to Surface _____ Min. Oil to Surface _____ Min. Mut Weight 9.6 Viscosity 50

Gas Guaged _____

Recovery 5' MUD

Remarks _____

Extra Equipment-Jars _____ Safety Joint _____ Extra Packer _____ Straddle _____ Hook Wall _____

Top Recorder No. 3875 Clock no. 27440 Depth 4384 Ctr. Sub _____ Sampler _____

Bottom Recorder No. 2186 Clock No. 27442 Depth 4387 Chlorides - pits 10,000 D.S.T. _____

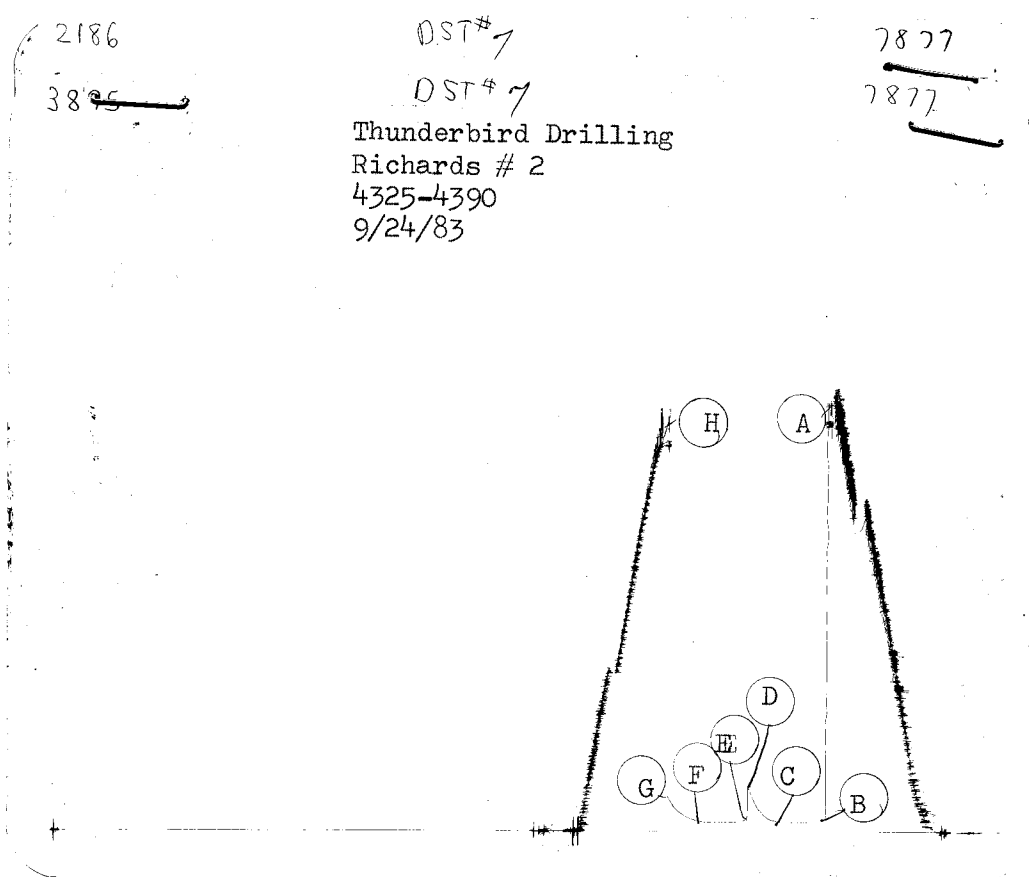
Price of Job \$595⁰⁰

Tool Operator Pat H. Stevenson

Approved By [Signature]

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Ticket No 7877



This is actual recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	2235	2266	P.S.I.
(B) First Initial Flow Pressure	42	48	P.S.I.
(C) First Final Flow Pressure	42	48	P.S.I.
(D) Initial Closed-in Pressure	234	244	P.S.I.
(E) Second Initial Flow Pressure	42	53	P.S.I.
(F) Second Final Flow Pressure	42	53	P.S.I.
(G) Final Closed-in Pressure	180	191	P.S.I.
(H) Final Hydrostatic Mud	2161	2193	P.S.I.

SUPERIOR TESTERS

368 West Second, Holsington, Kansas

COMPANY Thunderbird Drilling STATE Kansas COUNTY Lane
 LEASE & WELL NO. Richards # 2 ELEVATION 2759 KB. DATE 9/24/83 FORMATION TESTED Arbuckle
 SEC 20 TWP 16 RANGE 29 INTERVAL TESTED 4380 TO 4420 TOTAL DEPTH 4420
 TEST NO. # 8 O.K. yes TOP PACKER DEPTH 4380 FT. BOTTOM PACKER DEPTH ----- FT. PACKER SIZE 6 & 3/4
 STRADDLE no CONV. yes TOOL SIZE 5 1/2 OD. TOOL JOINT SIZE 4 1/2 FH. ANCHOR LENGTH 40 FT.
 HOLE SIZE 7 & 7/8 EXTRA EQUIPMENT none SURFACE CHOKE SIZE 1/2 IN. BOTTOM CHOKE SIZE 1/2 IN.
 REVERSED OUT no VISCOSITY 53 WEIGHT 9.6 DUAL PACKERS no DID PACKER HOLD yes DID TOOL PLUG no
 DRILLING CONTRACTOR T-bird # 1
 TOOL JOINT SIZE 4 1/2 FH. IN. LENGTH DRILL PIPE 3777 FT. I.D. DRILL PIPE 3.80 IN.
 TOOL JOINT SIZE 4 1/2 XH. IN. LENGTH WEIGHT PIPE 563 FT. I.D. WEIGHT PIPE 2.75 IN.
 TOOL JOINT SIZE ----- IN. LENGTH DRILL COLLARS --- FT. I.D. DRILL COLLARS ----- IN.
 TOOL OPEN I.F.P. FROM 5:30 p. m to 6:00 p. m Hr. 30 min From (B) 42 P.S.I. to (C) 42 P.S.I.
 TOOL CLOSED I.C.I.P. FROM 6:00 p. m to 6:30 p. m Hr. 30 min (D) 170 P.S.I.
 TOOL OPEN F.F.P. FROM 6:30 p. m to 7:00 p. m Hr. 30 min From (E) 42 P.S.I. to (F) 42 P.S.I.
 TOOL CLOSED F.C.I.P. FROM 7:00 p. m to 7:30 p. m Hr. 30 min (G) 63 P.S.I.
 INITIAL HYDROSTATIC PRESSURE (A) 2277 P.S.I. FINAL HYDROSTATIC PRESSURE (H) 2161 MAXIMUM TEMPERATURE 104 °F
 BLOW Weak blow died in 9 minutes 1st opening.
No blow 2nd opening.
 RECOVERY - TOTAL FEET 5
 RECOVERED 5 FEET OF Mud, with traces of Oil on top.
 RECOVERED FEET OF
 RECOVERED FEET OF
 RECOVERED FEET OF
 RECOVERED FEET OF
 RECOVERED FEET OF
 RECOVERED FEET OF
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 RECOVERED FEET OF
 RECOVERED FEET OF
 RECOVERED FEET OF
 REMARKS None.

TICKET NO. 7878
 WITNESSED BY: Stanton Cox TOOL OPERATOR: Pat Stevenson

SUPERIOR TESTERS

RR #1, Box 295B, Great Bend, Kansas

Date 9-24-83 Location 20-16^S-29^W Elevation 2759 County LANE
 Company Thunderbird Drilling INC. Number of Copies _____
 Address PO Box 18407 WICHITA, KS 67208
 Charts Mailed to PO Box 18407 WICHITA, KS 67208
 Invoice Mailed to PO Box 18407 WICHITA, KS 67208
 Lease RICHARDS Well No. 1 Formation Tested _____ Test No. 8
 Depth 4420 Tested from 4380 to 4420 Packer Size 6 3/4 Anchor Length 40
 Top Packer Depth 4380 ft. Bottom Packer Depth _____ ft. Dual Packers ONE
 Tool Joint Size 4 1/2 FH Tool Size 5 1/2 OD Hole Size 2 7/8 Did Packer Hold YES
 Drilling Contractor T Bird Drilling Rig #1
 Length Drill Pipe 3777 I.D. Drill Pipe 3.85 Tool Joint Size 4 1/2 FH
 Length Weight Pipe 563 I.D. Weight Pipe 2.70 Tool Joint Size 4 1/2 XH
 Length Drill Collars _____ I.D. Drill Collars _____ Tool Joint Size _____

Tool Open I.F.P. from 530 P.m to 600 P.m 30 min
 Tool Closed I.C.I.P. from 600 P.m to 630 P.m 30 min
 Tool Open F.F.P. from 630 P.m to 200 P.m 30 min
 Tool Closed F.C.I.P. from 200 P.m to 230 P.m 30 min

from [B] <u>42</u> P.S.I. to [C] <u>42</u> P.S.I.
[D] <u>170</u> P.S.I.
from [E] <u>42</u> P.S.I. to [F] <u>42</u> P.S.I.
[G] <u>63</u> P.S.I.

Initial Hydrostatic Pressure [A] 2277 P.S.I. Final Hydrostatic Pressure [H] 2161 P.S.I. Maximum Temp 104 °F

Initial Blow WEAK BLOW Died 9 1/2

Final Blow (NO BLOW)

Gas to Surface _____ Min. Oil to Surface _____ Min. Mut Weight 9.6' Viscosity 53

Gas Guaged _____

Recovery 5' mud with Traces of oil on Top

Remarks _____

Extra Equipment-Jars _____ Safety Joint _____ Extra Packer _____ Straddle _____ Hook Wall _____

Top Recorder No. 3875 Clock no. 27440 Depth 4414 Clr. Sub _____ Sampler _____

Bottom Recorder No. 3186 Clock No. 27442 Depth 4417 Chlorides - plts 10000 D.S.T. _____

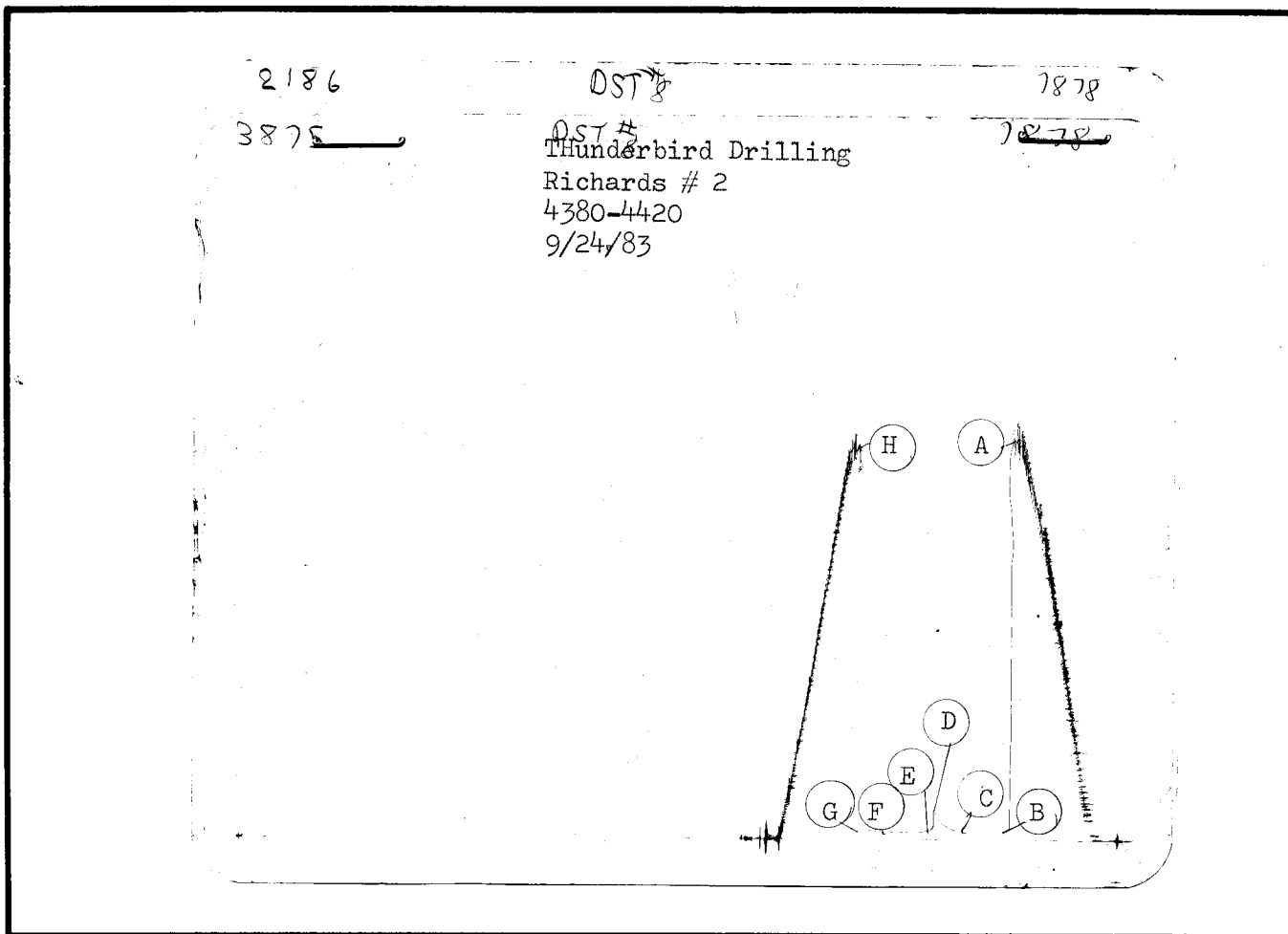
Price of Job \$595.00

Tool Operator Pat D. Stevens

Approved By [Signature]

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Ticket No 7878



This is actual recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	2277	2287	P.S.I.
(B) First Initial Flow Pressure	42	42	P.S.I.
(C) First Final Flow Pressure	42	42	P.S.I.
(D) Initial Closed-in Pressure	170	170	P.S.I.
(E) Second Initial Flow Pressure	42	46	P.S.I.
(F) Second Final Flow Pressure	42	46	P.S.I.
(G) Final Closed-in Pressure	63	63	P.S.I.
(H) Final Hydrostatic Mud	2161	2235	P.S.I.