15-057-20010

10-25s-22w

Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Strata Drilling Co. Lease & Well No. Hornung #1

Elevation 2411 Derrick Floor Formation Kansas City Effective Pay Ft. Ticket No. 10820

Date 5-18-68 Sec. 10 Twp. 25 Range 22 County Ford State Kansas

Test Approved by Doug Marden Western Representative Leon Elmore

Formation Test No. 1 O.K. X Misrun Interval Tested From 4169' to 4180' Total Depth 4180'

Size Main Hole 7 7/8 Hole Conv. X B.T. Damaged Yes X No Conv. X B.T. Damaged Yes X No

Packer Depth 4162 Ft. Size 6 3/4 Packer Depth 4169 Ft. Size 6 3/4

Straddle Yes No X Conv. B.T. Damaged Yes No

Packer Depth Ft. Size

Tool Size 5 1/2"OD Tool Jt. Size 4 1/2"FH-XH Anchor Length 11 Ft. Size 5 1/2OD

RECORDERS Depth 4173 Ft. Clock No. 6799 Depth 4176 Ft. Clock No. 6897

Top Make Kuster Cap. 4500 No. 3085 Inside Outside Bottom Make Kuster Cap. 4400 No. 2603 Inside Outside

Below Straddle: Depth Clock No. Inside Outside Depth Ft. Clock No. Inside Outside

Top Make Cap. No. Inside Outside Bottom Make Cap. No. Inside Outside

Time Set Packer M

Tool Open I.F.P. From 6:16 M. to 6:26 P.M. Hr. 10 Min. From (B) 43 P.S.I. To (C) 112 P.S.I.

Tool Closed I.C.I.P. From 6:26 M. to 7:11 P.M. Hr. 45 Min. (D) 1349 P.S.I.

Tool Open F.F.P. From 7:11 M. to 8:11 P.M. 1 Hr. Min. From (E) 143 P.S.I. To (F) 430 P.S.I.

Tool Closed F.C.I.P. From 8:11 M. to 8:56 P.M. Hr. 45 Min. (G) 1286 P.S.I.

Initial Hydrostatic Pressure (A) 2184 P.S.I. Final Hydrostatic Pressure (H) 2160 P.S.I.

SURFACE INFORMATION	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
	3/4 In.		M.	
			M.	
			M.	

BLOW Good - thur out Bottom Choke Size 3/4 In.

Did Well Flow Yes X No Recovery Total Ft. 820 feet total: 190 feet muddy water;
630 feet salt water.

Reversed Out Yes X No Mud Type Starch Viscosity 43 Weight 10 Water Loss 14 cc. Maximum Temp. 109 °F

Type Circ. Sub. Plug Did Tool Plug? No Jars: Size 4 1/2OD Make WTC Ser. No. 408

EXTRA EQUIPMENT: Dual Packers Yes Safety Joint Yes Did Packer Hold? Yes Where?

Length Drill Pipe 3113 I.D. Drill Pipe 3.8 in. Length Weight Pipe 815 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars 210 ft.

I. D. Drill Collars 2 1/4 in. Length D.S.T. Tool 42 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 5-18-68 Test Ticket No. 10820

Recorder No. 3085 Capacity 4500 Location 4173 Ft.

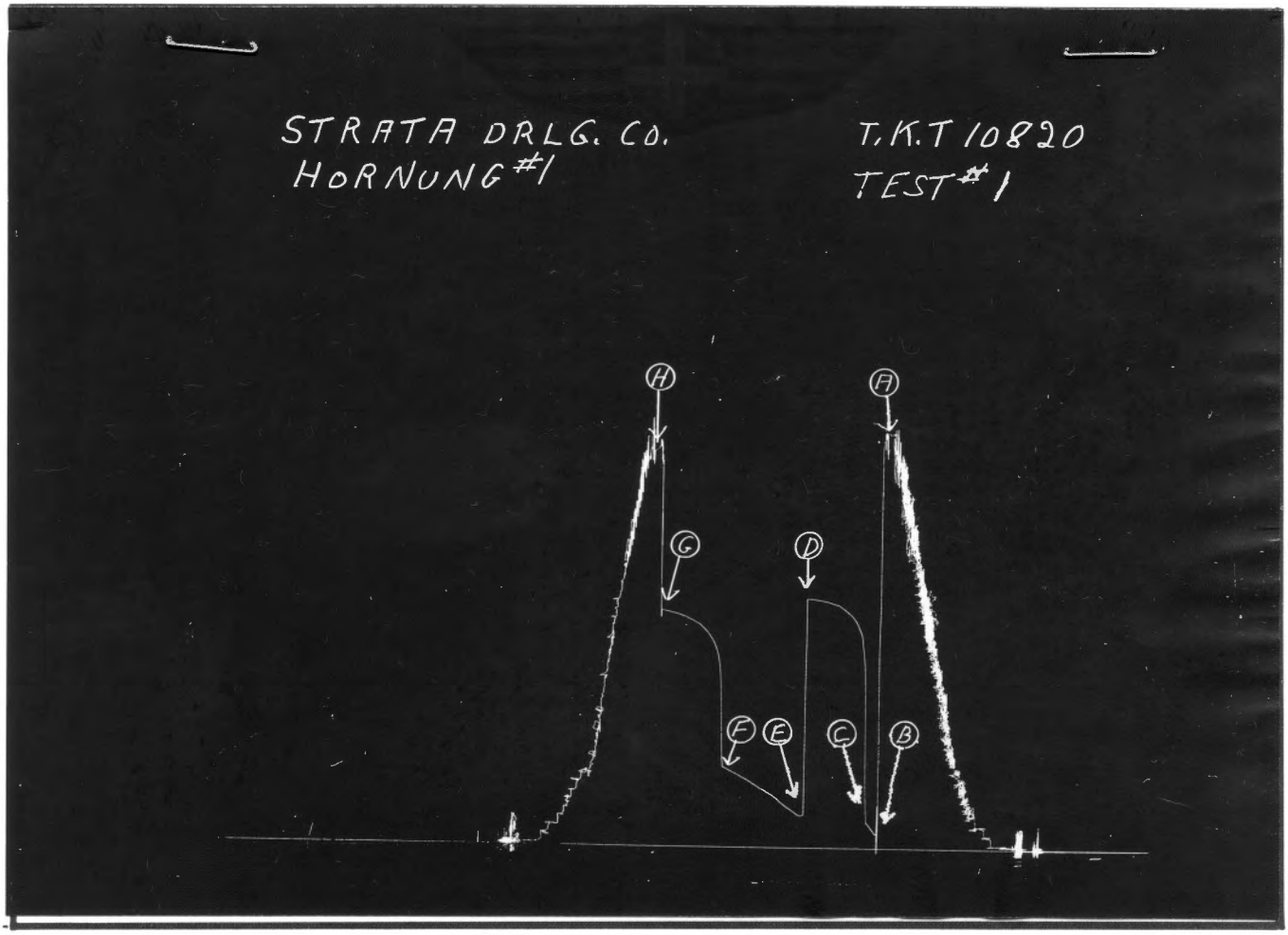
Clock No. 6799 Elevation 2411 Derrick Floor Well Temperature 109 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2184 P.S.I.		Opened Tool	6:16 P.M	
B	First Initial Flow Pressure	43 P.S.I.		First Flow Pressure	10 Mins.	10 Mins.
C	First Final Flow Pressure	112 P.S.I.		Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	1349 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	143 P.S.I.		Final Closed-in Pressure	45 Mins.	45 Mins.
F	Second Final Flow Pressure	430 P.S.I.				
G	Final Closed-in Pressure	1286 P.S.I.				
H	Final Hydrostatic Mud	2160 P.S.I.				

PRESSURE BREAKDOWN

First Flow Press.	Initial Shut-In	Second Flow Pressure	Final Shut-In
Breakdown: 2 Inc.	Breakdown: 15 Inc.	Breakdown: 12 Inc.	Breakdown: 15 Inc.
of 5 mins. and a	of 3 mins. and a	of 5 mins. and a	of 3 mins. and a
final inc. of ____ Min.	final inc. of ____ Min.	final inc. of ____ Min.	final inc. of ____ Min.

Point	Mins.	Press.	Point	Minutes	Press.	Point	Minutes	Press.	Point	Minutes	Press.
P 1	0	43		0	112		0	143		0	430
P 2	5	76		3	1048		5	150		3	937
P 3	10	112		6	1159		10	184		6	1060
P 4				9	1215		15	217		9	1117
P 5				12	1252		20	246		12	1152
P 6				15	1273		25	275		15	1180
P 7				18	1291		30	298		18	1201
P 8				21	1302		35	322		21	1215
P 9				24	1314		40	351		24	1228
P10				27	1321		45	375		27	1243
P11				30	1326		50	399		30	1251
P12				33	1330		55	413		33	1259
P13				36	1335		60	430		36	1265
P14				39	1339					39	1270
P15				42	1344					42	1277
P16				45	1349					45	1286
P17											
P18											
P19											
P20											



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2303	2184	PSI
(B)	First Initial Flow Pressure	47	43	PSI
(C)	First Final Flow Pressure	113	112	PSI
(D)	Initial Closed-in Pressure	1349	1349	PSI
(E)	Second Initial Flow Pressure	143	143	PSI
(F)	Second Final Flow Pressure	430	430	PSI
(G)	Final Closed-in Pressure	1291	1286	PSI
(H)	Final Hydrostatic Mud	2189	2160	PSI

WESTERN TESTERS

Home Office: Great Bend, Kansas

P. O. Box 793 (316) 793-7903

Company Strata Drilling Company Lease & Well No. Horning #1

Elevation 2411 Derrick Floor Formation Mississippian Effective Pay Ft. Ticket No. 10824

Date 5-23-68 Sec. 10 Twp. 25 Range 22 County Ford State Kansas

Test Approved by Doug Harden Western Representative Leon Elmore

Formation Test No. 2 O.K. X Misrun Interval Tested From 4758' to 4806' Total Depth 4806'

Size Main Hole 7 7/8 Rat Hole Conv. X B.T. Damaged Yes X No Conv. X B.T. Damaged Yes X No

Packer Depth 4753 Ft. Size 6 3/4 Packer Depth 4758 Ft. Size 6 3/4

Straddle Yes No X Conv. B.T. Damaged Yes No

Packer Depth Ft. Size

Tool Size 5 1/2" OD Tool Jt. Size 4 1/2"FH-XH Anchor Length 50 Ft. Size 31' D.P. 19'-5 1/2"

RECORDERS Depth 4799 Ft. Clock No. 6897 Depth 4802 Ft. Clock No. 6799

Top Make Kuster Cap. 4500 No. 3085 Inside Outside Bottom Make Kuster Cap. 4400 No. 2603 Inside Outside

Below Straddle: Depth Clock No. Inside Outside Depth Ft. Clock No. Inside Outside

Top Make Cap. No. Inside Outside Bottom Make Cap. No. Inside Outside

Time Set Packer 2:15 A. M

Tool Open I.F.P. From 2:18 M. to 2:38 A.M. Hr. 20 Min. From (B) 33 P.S.I. To (C) 33 P.S.I.

Tool Closed I.C.I.P. From 2:38 M. to 3:23 A.M. Hr. 45 Min. (D) 857 P.S.I.

Tool Open F.F.P. From 3:23 M. to 3:53A. M. Hr. 30 Min. From (E) 50 P.S.I. To (F) 59 P.S.I.

Tool Closed F.C.I.P. From 3:53 M. to 4:53A. M. 1 Hr. Min. (G) 697 P.S.I.

Initial Hydrostatic Pressure (A) 2712 P.S.I. Final Hydrostatic Pressure (H) 2657 P.S.I.

SURFACE INFORMATION	Size Choke 3/4 In.	Max. Press. P.S.I.	Time	Description of Flow
			M.	
			M.	
			M.	

BLOW Weak for 20 minutes Bottom Choke Size 3/4 In.

Did Well Flow Yes X No Recovery Total Ft. 15 feet mud

Reversed Out Yes X No Mud Type Starch Viscosity 48 Weight 10.1 Water Loss 19 cc. Maximum Temp. 117 °F

Type Circ. Sub Plug Did Tool Plug? No Jars: Size 4 1/2OH Make WTC Ser. No. 408

EXTRA EQUIPMENT: Dual Packers Yes Safety Joint Yes Did Packer Hold? Yes Where?

Length Drill Pipe 3736 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 815 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars 210 ft.

I. D. Drill Collars 2 1/4 in. Length D.S.T. Tool 48 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 5-23-68 Test Ticket No. 10824

Recorder No. 3085 Capacity 4500 Location 4799 Ft.

Clock No. 6897 Elevation 2411 Well Temperature 117 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2712 P.S.I.	Opened Tool	2:15 A. M	
B	First Initial Flow Pressure	33 P.S.I.	First Flow Pressure	20 Mins.	20 Mins.
C	First Final Flow Pressure	33 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	857 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E	Second Initial Flow Pressure	50 P.S.I.	Final Closed-in Pressure	60 Mins.	59 Mins.
F	Second Final Flow Pressure	50 P.S.I.			
G	Final Closed-in Pressure	697 P.S.I.			
H	Final Hydrostatic Mud	2667 P.S.I.			

PRESSURE BREAKDOWN

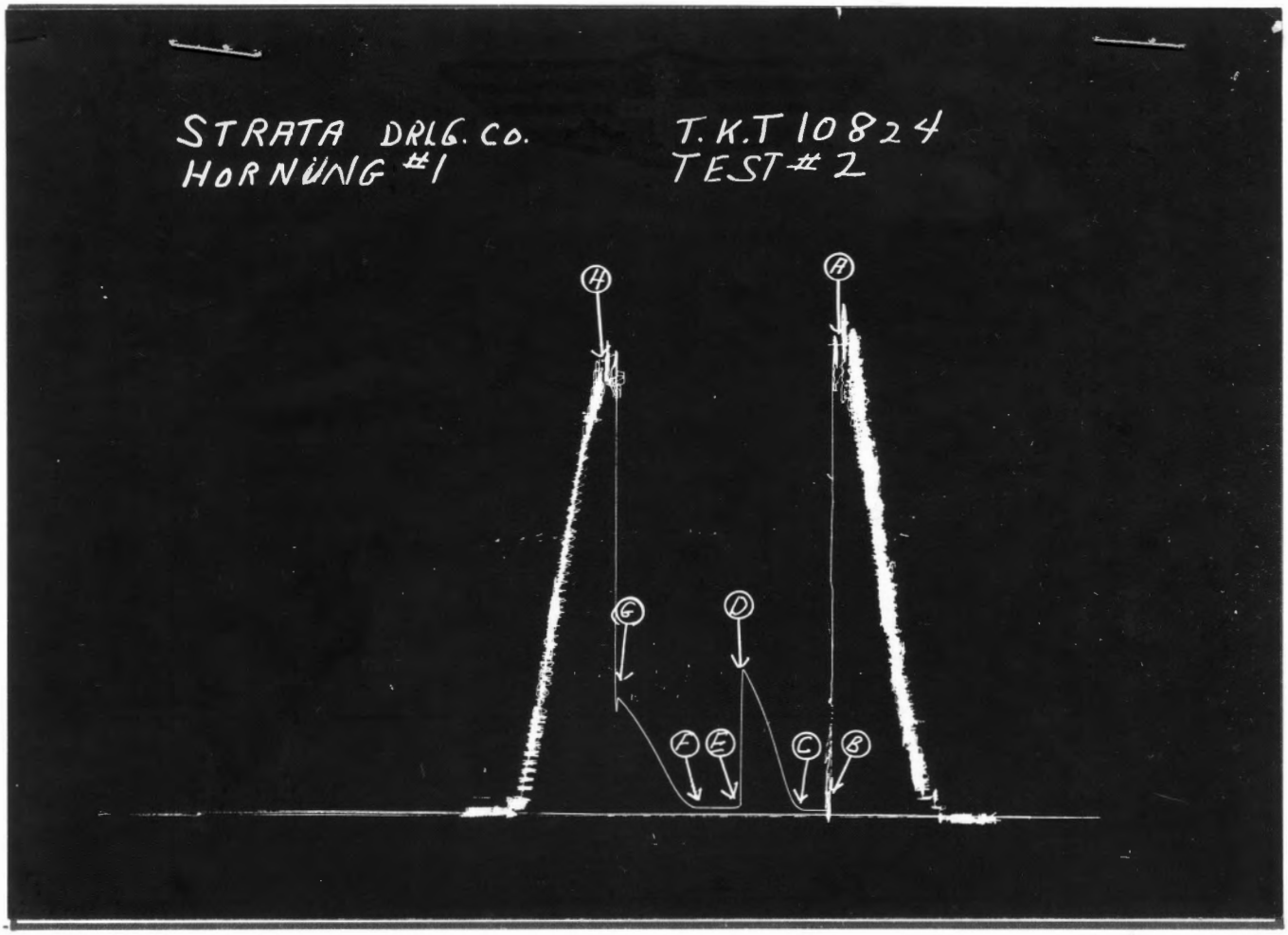
First Flow Press.
Breakdown: 4 Inc. of 5 mins. and a final inc. of ____ Min.

Initial Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of ____ Min.

Second Flow Pressure
Breakdown: 6 Inc. of 5 mins. and a final inc. of ____ Min.

Final Shut-In
Breakdown: 19 Inc. of 3 mins. and a final inc. of 2 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	33	0	33	0	50	0	50
P 2 5	33	3	50	5	50	3	54
P 3 10	33	6	71	10	50	6	69
P 4 15	33	9	124	15	50	9	88
P 5 20	33	12	179	20	50	12	119
P 6		15	258	25	50	15	155
P 7		18	346	30	50	18	195
P 8		21	428	35		21	236
P 9		24	500	40		24	291
P10		27	560	45		27	341
P11		30	627	50		30	380
P12		33	683	55		33	437
P13		36	746			36	471
P14		39	797			39	509
P15		42	836			42	555
P16		45	857			45	588
P17						48	620
P18						51	653
P19						54	685
P20						57	687
						59	697



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2716	2712	PSI
(B)	First Initial Flow Pressure	35	33	PSI
(C)	First Final Flow Pressure	35	33	PSI
(D)	Initial Closed-in Pressure	862	857	PSI
(E)	Second Initial Flow Pressure	47	50	PSI
(F)	Second Final Flow Pressure	47	50	PSI
(G)	Final Closed-in Pressure	699	697	PSI
(H)	Final Hydrostatic Mud	2668	2657	PSI