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

Company Allison & Black Lease & Well No. Legleiter # 1

Elevation 2047 Kelly Bushing Formation Topeka Effective Pay _____ Ft. Ticket No. 11757

Date 11-17-68 Sec. 23 Twp. 16s Range 18w County Rush State Kansas

Test Approved by R. B. Jinkins Western Representative Kenneth Cheney

Formation Test No. 1 O.K. x Misrun _____ Interval Tested From 3000' to 3030' Total Depth 3030'

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

top Packer Depth 2995 Ft. Size 6 3/4 Packer Depth 3000 Ft. Size 6 3/4

Straddle _____ Yes _____ No x Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____

Tool Size 5½"OD Tool Jt. Size 4½"FH Anchor Length 30 Ft. Size 5½"OD

RECORDERS Depth 3023 Ft. Clock No. 9103 Depth 3025 Ft. Clock No. 8378

Top Make Kuster Cap. 4150 No. 2608 ~~Inside~~ ~~Outside~~ Bottom Make Kuster Cap. 4150 No. 1558 ~~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 1:34 AM

Tool Open I.F.P. From 1:35 M. to 1:45A M. _____ Hr. 10 Min. From (B) 79 P.S.I. To (C) 68 P.S.I.

Tool Closed I.C.I.P. From 1:45 M. to 2:15A M. _____ Hr. 30 Min. (D) 399 P.S.I.

Tool Open F.F.P. From 2:15 M. to ~~x#~~ 3:15 M. 1 Hr. - Min. From (E) 66 P.S.I. To (F) 66 P.S.I.

Tool Closed F.C.I.P. From 3:15 M. to 3:45A M. _____ Hr. 30 Min. (G) 770 P.S.I.

Initial Hydrostatic Pressure (A) 1791 P.S.I. Final Hydrostatic Pressure (H) 1743 P.S.I.

SURFACE INFORMATION Size Choke 3/8 In. Max. Press. P.S.I. Time Description of Flow

_____ _____ _____ M. _____

_____ _____ _____ M. _____

_____ _____ _____ M. _____

BLOW Strong Bottom Choke Size 3/4 In.

Did Well Flow _____ Yes x No Recovery Total Ft. 1550 feet gas in pipe -- 60 feet gas cut mud

Reversed Out _____ Yes x No Mud Type starch Viscosity 40 Weight 10.4 Water Loss 9.0 cc. Maximum Temp. 97 °F

Type Circ. Sub. plug Did Tool Plug? no Jars: Size _____ Make _____ Ser. No. _____

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where? _____

Length Drill Pipe 2110 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool 50 ft.

Remarks

Home Office: Great Bend, Kansas

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

Company _____ Lease & Well No. _____

Elevation _____ Formation _____ Effective Pay _____ Ft. Total Depth _____

Date _____ Sec. _____ Twp. _____ Range _____ County _____ State _____

Tool Approved by _____ Western Representative _____

Formation Test No. _____ Interval Tested From _____ to _____ Total Depth _____

Size Main Hole _____ Size Drill Collar _____ B.T. _____ Damaged _____ Yes _____ No Conv. _____ D.T. _____ Damaged _____ No

Packer Depth _____ Ft. Size _____ Packer Depth _____ Ft. Size _____

Anchor Length _____ Ft. Size _____

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) _____ P.S.I.

Max. Press. P.S.I. _____ Time _____ Description of Flow

M.

M.

M.

Bottom Choke Size _____ in.

Did Well Flow _____ Yes _____ No Recovery Total Ft. _____

Reversed Out _____ Yes _____ No Mud Type _____ Viscosity _____ Weight _____ Water Loss _____ cc. Maximum Temp. _____ °F

Type Circ. Sub _____ Did Tool Plug? _____ Jars: Size _____ Make _____ Ser. No. _____

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

Length Drill Pipe _____ ft. I.D. Drill Pipe _____ in. Length Weight Pipe _____ ft. I.D. Weight Pipe _____ in. Length Drill Collars _____ ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool _____ ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 11-17-68 Test Ticket No. 11757

Recorder No. 2608 Capacity 4150 Location 3023 Ft.

Clock No. 9103 Elevation 2047 Kelly Bushing Well Temperature 97 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1791	P.S.I.
B	First Initial Flow Pressure	79	P.S.I.
C	First Final Flow Pressure	68	P.S.I.
D	Initial Closed-in Pressure	399	P.S.I.
E	Second Initial Flow Pressure	66	P.S.I.
F	Second Final Flow Pressure	66	P.S.I.
G	Final Closed-in Pressure	770	P.S.I.
H	Final Hydrostatic Mud	1743	P.S.I.

	Time Given	Time Computed
Opened Tool	1:34A M	
First Flow Pressure	10 Mins.	10 Mins.
Initial Closed-in Pressure	30 Mins.	30 Mins.
Second Flow Pressure	60 Mins.	57 Mins.
Final Closed-in Pressure	30 Mins.	30 Mins.

PRESSURE BREAKDOWN

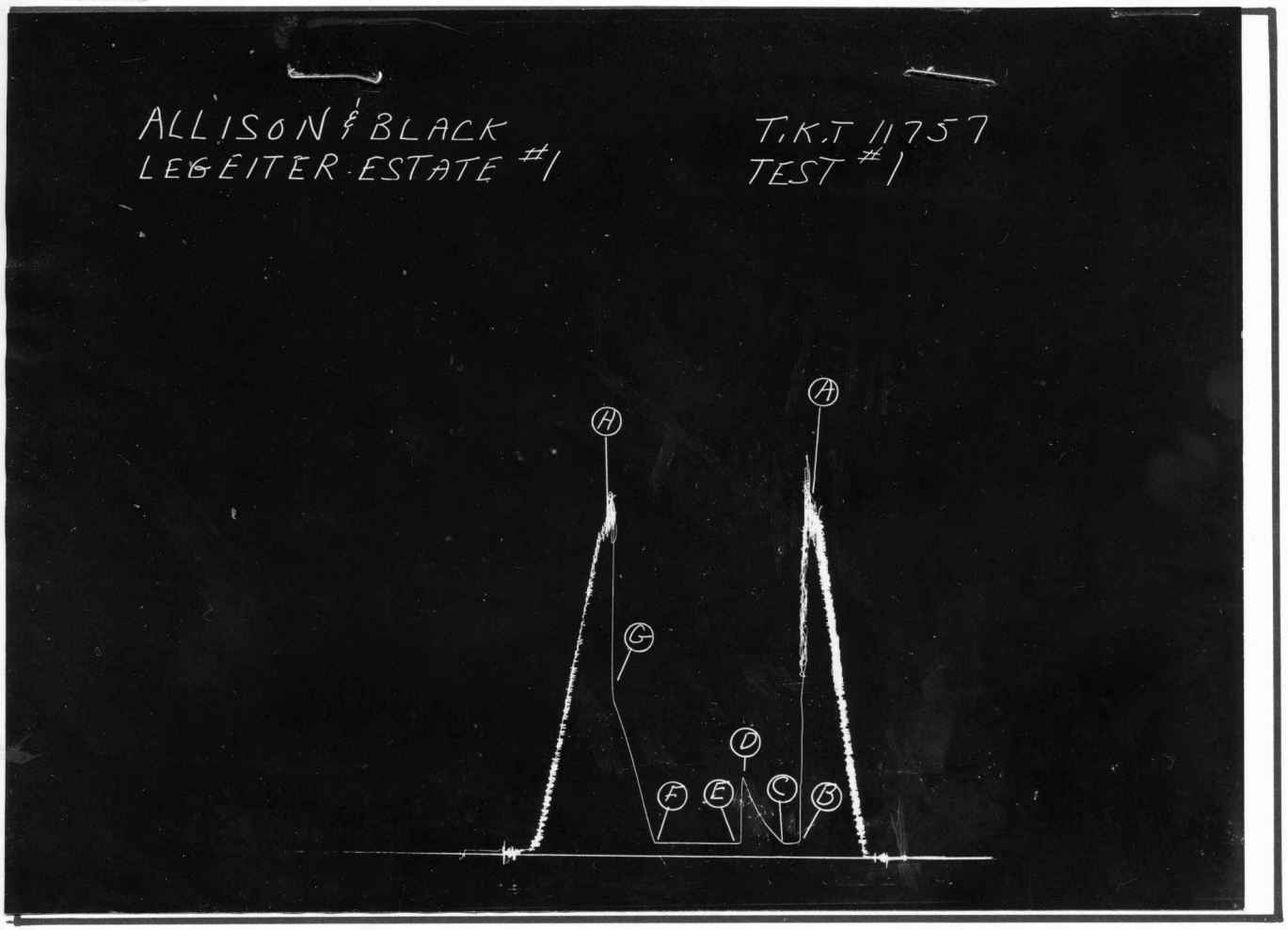
First Flow Press. Breakdown: 2 Inc. of 5 mins. and a final inc. of ____ Min.

Initial Shut-In Breakdown: 10 Inc. of 3 mins. and a final inc. of ____ Min.

Second Flow Pressure Breakdown: 11 Inc. of 5 mins. and a final inc. of ____ Min.

Final Shut-In Breakdown: 10 Inc. of 3 mins. and a final inc. of ____ Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	79	0	68	0	66	0	66
P 2 5	72	3	79	5	66	3	131
P 3 10	68	6	99	10	66	6	199
P 4		9	124	15	66	9	284
P 5		12	151	20	66	12	374
P 6		15	178	25	66	15	454
P 7		18	218	30	66	18	518
P 8		21	253	35	66	21	590
P 9		24	301	40	66	24	662
P10		27	351	45	66	27	721
P11		30	399	50	66	30	770
P12				55	66		
P13				57	66		
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	PRESSURE Office Reading	
(A)	Initial Hydrostatic Mud	1847	1791	PSI
(B)	First Initial Flow Pressure	68	79	PSI
(C)	First Final Flow Pressure	62	68	PSI
(D)	Initial Closed-in Pressure	395	399	PSI
(E)	Second Initial Flow Pressure	64	66	PSI
(F)	Second Final Flow Pressure	64	66	PSI
(G)	Final Closed-in Pressure	778	770	PSI
(H)	Final Hydrostatic Mud	1784	1743	PSI

COMPANY Allison & Black LEASE AND WELL NO. Legleiter # 1 SEC. 23 TWP. 16s RGE. 18w TEST NO. 1 DATE 11-17-68

TIGHT HOLE

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

Company Allison & Black Lease & Well No. Legleiter Estate # 1

Elevation 2047 Kelly Bushing Formation Toranto Effective Pay _____ Ft. Ticket No. 11831

Date 11-18-68 Sec. 23 Twp. 16s Range 18w County Rush State Kansas

Test Approved by R. B. Jinkins Western Representative Gerrell Veatch

Formation Test No. 2 O.K. x Misrun _____ Interval Tested From 3245' to 3275' Total Depth 3275'

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

top Packer Depth 3241 Ft. Size 6 3/4 Packer Depth 3245 Ft. Size 6 3/4

Straddle _____ Yes _____ No x Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____

Tool Size 5½"OD Tool Jt. Size 4½"FH Anchor Length 30 Ft. Size 5½"OD

RECORDERS Depth 3267 Ft. Clock No. 6894 Depth 3271 Ft. Clock No. 6860

Top Make Kuster Cap. 4150 No. 2607 Inside ~~Outside~~ Bottom Make Kuster Cap. 4150 No. 969 ~~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 5:22 PM

Tool Open I.F.P. From 5:25 M. to 5:40P M. _____ Hr. 15 Min. From (B) 12 P.S.I. To (C) 12 P.S.I.

Tool Closed I.C.I.P. From 5:40 M. to 6:10P M. _____ Hr. 30 Min. (D) 69 P.S.I.

Tool Open F.F.P. From 6:10 M. to 6:40P M. _____ Hr. 30 Min. From (E) 21 P.S.I. To (F) 21 P.S.I.

Tool Closed F.C.I.P. From 6:40 M. to 7:10P M. _____ Hr. 30 Min. (G) 37 P.S.I.

Initial Hydrostatic Pressure (A) 1909 P.S.I. Final Hydrostatic Pressure (H) 1892 P.S.I.

SURFACE INFORMATION Size Choke 3/8 In. Max. Press. P.S.I. Time Description of Flow

_____ _____ _____ M. _____

_____ _____ _____ M. _____

_____ _____ _____ M. _____

BLOW Weak blow for 12 minutes Bottom Choke Size ~~27~~ 3/4 in.

Did Well Flow _____ Yes x No Recovery Total Ft. 5 feet mud

Reversed Out _____ Yes x No Mud Type gel Viscosity 45 Weight 10.7 Water Loss 9.6 cc. Maximum Temp. 97 °F

Type Circ. Sub. plug Did Tool Plug? no Jars: Size _____ Make _____ Ser. No. _____

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where? _____

Length Drill Pipe 2355 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 ft. I.D. Weight Pipe 2.8 in. Length Drill Collars _____ ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool 50 ft.

Remarks

Home Office: Great Bend, Kansas

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

WESTERN TESTING CO., INC.
Pressure Data

ate 11-18-68 Test Ticket No. 11831

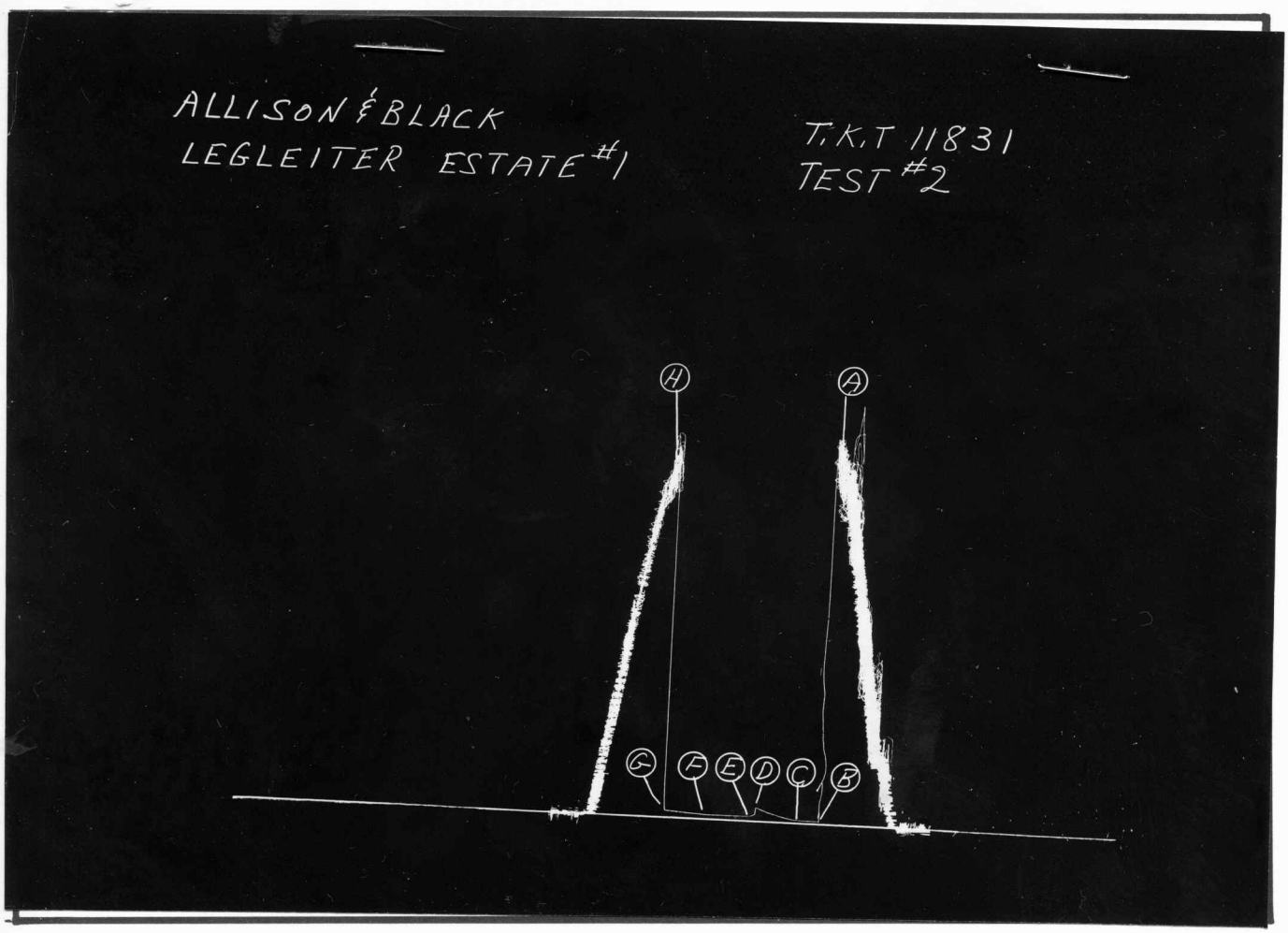
ecorder No. 2607 Capacity 4150 Location 3267 Ft.

lock No. 6894 Elevation 2047 Kelly Bushing Well Temperature 97 °F

oint	Pressure			Time Given	Time Computed
Initial Hydrostatic Mud	1909	P.S.I.	Opened Tool	5:22P M	
First Initial Flow Pressure	12	P.S.I.	First Flow Pressure	15 Mins.	15 Mins.
First Final Flow Pressure	12	P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	69	P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
Second Initial Flow Pressure	21	P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
Second Final Flow Pressure	21	P.S.I.			
Final Closed-in Pressure	37	P.S.I.			
Final Hydrostatic Mud	1892	P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 3 Inc.		Breakdown: 10 Inc.		Breakdown: 6 Inc.		Breakdown: 10 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.	
oint ins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
1 0	12	0	12	0	21	0	21
2 5	~~22~~ 12	3	12	5	21	3	21
3 10	12	6	18	10	21	6	21
4 15	12	9	25	15	21	9	23
5		12	30	20	21	12	25
6		15	35	25	21	15	27
7		18	42	30	21	18	29
8		21	48			21	31
9		24	54			24	33
0		27	63			27	35
1		30	69			30	37
2							
3							
4							
5							
6							
7							
8							
9							
0							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	PRESSURE Office Reading	
(A)	Initial Hydrostatic Mud	1920	1909	PSI
(B)	First Initial Flow Pressure	14	12	PSI
(C)	First Final Flow Pressure	18	12	PSI
(D)	Initial Closed-in Pressure	73	69	PSI
(E)	Second Initial Flow Pressure	23	21	PSI
(F)	Second Final Flow Pressure	23	21	PSI
(G)	Final Closed-in Pressure	42	37	PSI
(H)	Final Hydrostatic Mud	1910	1892	PSI

COMPANY Allison & Black LEASE AND WELL NO. Legleiter # 1 SEC. 23 TWP. 16s RGE. 18w TEST NO. 2 DATE 11-18-68

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

Company Allison & Black Lease & Well No. Legleiter Estate # 1

Elevation 2047 Kelly Bushing Formation Kansas City Effective Pay _____ Ft. Ticket No. 11832

Date 11-19-68 Sec. 23 Twp. 16s Range 18w County Rush State Kansas

Test Approved by R. B. Jinkins Western Representative Gerrell Veatch

Formation Test No. 3 O.K. x Misrun _____ Interval Tested From 3278' to 3310' Total Depth 3310'

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

top Packer Depth 3274 Ft. Size 6 3/4 Packer Depth 3278 Ft. Size 6 3/4

Straddle _____ Yes _____ No x Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____

Tool Size 5½"OD Tool Jt. Size 4½"FH Anchor Length 32 Ft. Size 5½"OD

RECORDERS Depth 3302 Ft. Clock No. 6894 Depth 3306 Ft. Clock No. 6860

Top Make Kuster Cap. 4150 No. 2607 ~~Inside~~ Outside Bottom Make Kuster Cap. 4150 No. 969 ~~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 4:22 AM

Tool Open I.F.P. From 4:25 M. to 4:30A M. _____ Hr. 5 Min. From (B) 40 P.S.I. To (C) 40 P.S.I.

Tool Closed I.C.I.P. From 4:30 M. to 5:00A M. _____ Hr. 30 Min. (D) 1096 P.S.I.

Tool Open F.F.P. From 5:00 M. to 6:00A M. _____ Hr. 60 Min. From (E) 37 P.S.I. To (F) 72 P.S.I.

Tool Closed F.C.I.P. From 6:00 M. to 6:30A M. _____ Hr. 30 Min. (G) 1095 P.S.I.

Initial Hydrostatic Pressure (A) 1836 P.S.I. Final Hydrostatic Pressure (H) 1825 P.S.I.

SURFACE INFORMATION Size Choke 3/8 In. Max. Press. P.S.I. Time Description of Flow

_____ _____ _____ M. _____

_____ _____ _____ M. _____

_____ _____ _____ M. _____

BLOW Strong (gas to surface in 60 minutes) Bottom Choke Size 3/4 In.

Did Well Flow _____ Yes x No Recovery Total Ft. 20 feet drilling mud

Reversed Out _____ Yes x No Mud Type gel Viscosity 45 Weight 10.1 Water Loss 9.3 cc. Maximum Temp. 98 °F

Type Circ. Sub. plug Did Tool Plug? no Jars: Size _____ Make _____ Ser. No. _____

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where? _____

Length Drill Pipe 2388 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 ft. I.D. Weight Pipe 2.8 in. Length Drill Collars _____ ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool 52 ft.

Remarks

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

Company _____ Lease & Well No. _____

Elevation _____ Formation _____ Effective Pay _____ Ft. Ticket No. _____

Date _____ Sec. _____ Twp. _____ Range _____ County _____ State _____

Test Approved by _____ Western Representative _____

Formation Test No. _____ Interval Tested From _____ To _____ Total Depth _____

Size Main Hole _____ Size Drill Pipe _____ Size Drill Collars _____ Mud Type _____ Viscosity _____ Weight _____ Water Loss _____ cc. Maximum Temp. _____ °F

Type Cushion _____ Amount _____ Did Tool Plug? _____ Did Packer Hold? _____ Where? _____

Reversed Out _____ Yes _____ No Mud Type _____ Viscosity _____ Weight _____ Water Loss _____ cc. Maximum Temp. _____ °F

Type Cushion _____ Amount _____ Did Tool Plug? _____ Jars: Size _____ Make _____ Ser. No. _____

BOTTOM HOLE EQUIPMENT: Dual Packers _____ Safety Joint _____ Did Packer Hold? _____ Where? _____

Length Drill Pipe _____ ft. I.D. Drill Pipe _____ in. Length Weight Pipe _____ ft. I.D. Weight Pipe _____ in. Length Drill Collars _____ ft.

I.D. Drill Collars _____ in. Length D.S.T. Tool _____ ft.

Remarks _____

Tool Size _____ Tool Jt. Size _____ Anchor Length _____ Ft. Size _____

BLOWERS: Depth _____ Ft. Clock No. _____ Depth _____ Ft. Clock No. _____

Top Make _____ Cap _____ No. _____ Inside / Outside Bottom Make _____ Cap _____ No. _____ 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 F.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) _____ P.S.I.

SURFACE INFORMATION: Size Choke _____ In. Max. Press. P.S.I. Time Description of Flow

_____ M.

_____ M.

_____ M.

BLOW: _____ (Give so many feet in 50 intervals) Bottom Choke Size _____ In.

Did Well Flow _____ Yes _____ No Recovery Total Ft. _____

WESTERN TESTING CO., INC.
Pressure Data

Date 11-19-68 Test Ticket No. 11832

Recorder No. 2607 Capacity 4150 Location 3302 Ft.

Clock No. 6894 Elevation 2047 Kelly Bushing Well Temperature 98 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1836	P.S.I.
B	First Initial Flow Pressure	40	P.S.I.
C	First Final Flow Pressure	40	P.S.I.
D	Initial Closed-in Pressure	1096	P.S.I.
E	Second Initial Flow Pressure	37	P.S.I.
F	Second Final Flow Pressure	72	P.S.I.
G	Final Closed-in Pressure	1095	P.S.I.
H	Final Hydrostatic Mud	1825	P.S.I.

	Time Given	Time Computed
Opened Tool	4:22A M	
First Flow Pressure	5 Mins.	5 Mins.
Initial Closed-in Pressure	30 Mins.	30 Mins.
Second Flow Pressure	60 Mins.	59 Mins. 59
Final Closed-in Pressure	30 Mins.	30 Mins.

PRESSURE BREAKDOWN

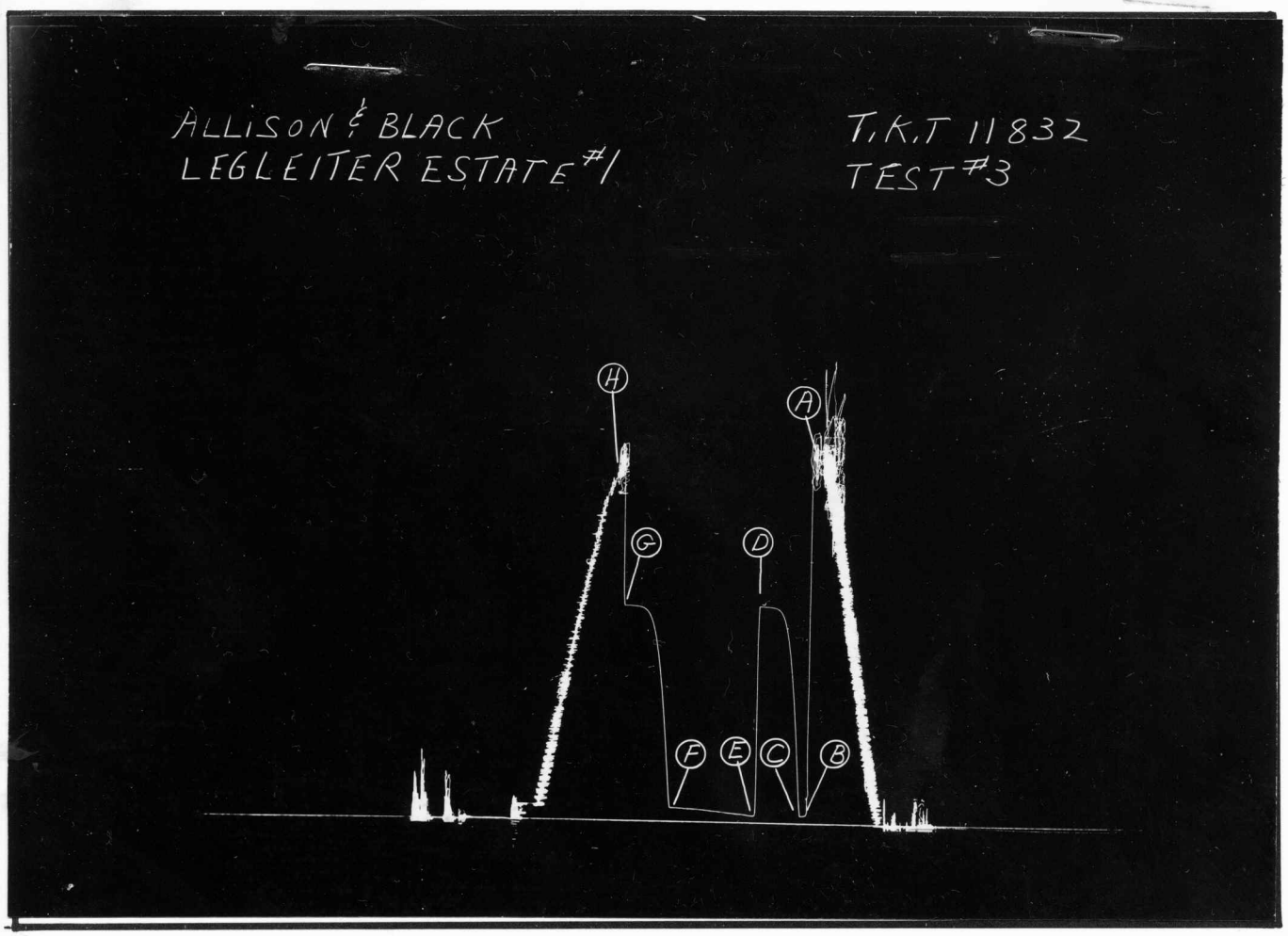
First Flow Press.
Breakdown: 1 Inc. of 5 mins. and a final inc. of ____ Min.

Initial Shut-In
Breakdown: 10 Inc. of 3 mins. and a final inc. of ____ Min.

Second Flow Pressure
Breakdown: 11 Inc. of 5 mins. and a final inc. of ____ Min.

Final Shut-In
Breakdown: 10 Inc. of 3 mins. and a final inc. of ____ Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	40	0	40	0	37	0	72
P 2 5	40	3	447	5	40	3	379
P 3		6	757	10	44	6	633
P 4		9	920	15	48	9	843
P 5		12	1031	20	52	12	974
P 6		15	1079	25	54	15	1052
P 7		18	1089	30	58	18	1077
P 8		21	1094	35	63	21	1087
P 9		24	1096	40	65	24	1091
P10		27	1096	45	67	27	1093
P11		30	1096	50	69	30	1095
P12				55	71		
P13				59	72		
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	PRESSURE Office Reading	
(A)	Initial Hydrostatic Mud	1900	1836	PSI
(B)	First Initial Flow Pressure	42	40	PSI
(C)	First Final Flow Pressure	42	40	PSI
(D)	Initial Closed-in Pressure	1091	1096	PSI
(E)	Second Initial Flow Pressure	42	37	PSI
(F)	Second Final Flow Pressure	71	72	PSI
(G)	Final Closed-in Pressure	1091	1095	PSI
(H)	Final Hydrostatic Mud	1890	1825	PSI

COMPANY Allison & Black LEASE AND WELL No. Legleiter # 1 SEC. 23 TWP. 16s RGE. 18w TEST NO. 3 DATE 11-19-68

TIGHT HOLE

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

Company Allison & Black Lease & Well No. Legleiter Estate # 1

Elevation 2047 Kelly Bushing Formation Kansas City Effective Pay _____ Ft. Ticket No. 11833

Date 11-19-68 Sec. 23 Twp. 16s Range 18w County Rush State Kansas

Test Approved by R. B. Jinkins Western Representative Gerrell Veatch

Formation Test No. 4 O.K. x Misrun _____ Interval Tested From 3310' to 3330' Total Depth 3330'

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

top Packer Depth 3306 Ft. Size 6 3/4 Packer Depth 3310 Ft. Size 6 3/4

Straddle _____ Yes _____ No x Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____

Tool Size 5½"OD Tool Jt. Size 4½"FH Anchor Length 20 Ft. Size 5½"OD

RECORDERS Depth 3322 Ft. Clock No. 6894 Depth 3326 Ft. Clock No. 6860

Top Make Kuster Cap. 4150 No. 2607 ~~Inside~~ Outside Bottom Make Kuster Cap. 4150 No. 969 ~~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 6:08 PM

Tool Open I.F.P. From 6:11 M. to 6:15P M. Hr. 4 Min. From (B) 370 P.S.I. To (C) 366 P.S.I.

Tool Closed I.C.I.P. From 6:15 M. to 6:45P M. Hr. 30 Min. (D) 1091 P.S.I.

Tool Open F.F.P. From 6:45 M. to 7:45P M. Hr. 60 Min. From (E) 336 P.S.I. To (F) 300 P.S.I.

Tool Closed F.C.I.P. From 7:45 M. to 8:15P M. Hr. 30 Min. (G) 1068 P.S.I.

Initial Hydrostatic Pressure (A) 1947 P.S.I. Final Hydrostatic Pressure (H) 1936 P.S.I.

SURFACE INFORMATION Size Choke 2 In. Max. Press. P.S.I. Time Description of Flow

2 2"I.D. Impack 1/8" tube 7# 6:50P M. 1,930,000

2"I.D. Impack 1/8" tube 9# 7:00P M. 2,190,000

2"I.D. impack1/8 " tube 9# 7:45p M. 2,190,000

BLOW Gas to surface in 3 minutes (will burn) Bottom Choke Size 3/4 In.

Did Well Flow _____ Yes x No Recovery Total Ft. 5 feet drilling mud

Reversed Out _____ Yes x No Mud Type gel Viscosity 44 Weight 10.6 Water Loss 9.0 cc. Maximum Temp. 98 °F

Type Circ. Sub. plug Did Tool Plug? no Jars: Size _____ Make _____ Ser. No. _____

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where? _____

Length Drill Pipe 2420 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 ft. I.D. Weight Pipe 2.8 in. Length Drill Collars _____ ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool 40 ft.

Remarks

Home Office: Great Bend, Kansas

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

WESTERN TESTING CO., INC.
Pressure Data

Date 11-19-68 Test Ticket No. 11833

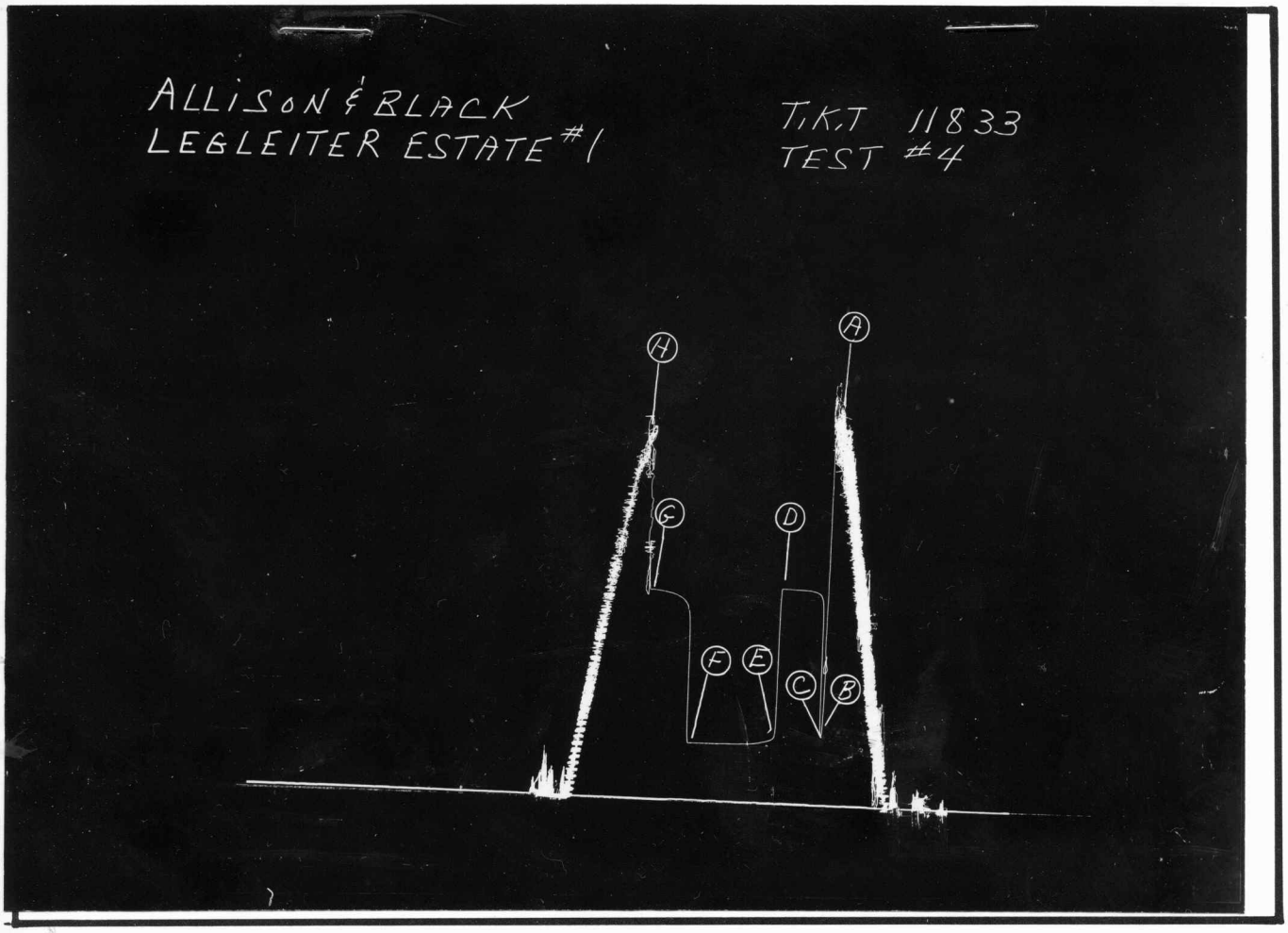
Recorder No. 2607 Capacity 4150 Location 3322 Ft.

Clock No. 6894 Elevation 2047 Kelly Bushing Well Temperature 98 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1947	P.S.I.	Opened Tool	6:08P M	
B	First Initial Flow Pressure	370	P.S.I.	First Flow Pressure	4 Mins.	4 Mins.
C	First Final Flow Pressure	366	P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1091	P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	336	P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	300	P.S.I.			
G	Final Closed-in Pressure	1068	P.S.I.			
H	Final Hydrostatic Mud	1936	P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 1 Inc. of 4 mins. and a final inc. of ____ Min.		Breakdown: 10 Inc. of 3 mins. and a final inc. of ____ Min.		Breakdown: 12 Inc. of 5 mins. and a final inc. of ____ Min.		Breakdown: 10 Inc. of 3 mins. and a final inc. of ____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	370	0	366	0	336	0	300
P 2 4	366	3	1068	5	324	3	974
P 3		6	1077	10	313	6	1020
P 4		9	1083	15	307	9	1035
P 5		12	1087	20	304	12	1048
P 6		15	1091	25	301	15	1054
P 7		18	1091	30	301	18	1058
P 8		21	1091	35	301	21	1062
P 9		24	1091	40	300	24	1064
P10		27	1091	45	300	27	1066
P11		30	1091	50	300	30	1068
P12				55	300		
P13				60	300		
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	PRESSURE Office Reading	
(A)	Initial Hydrostatic Mud	1960	1947	PSI
(B)	First Initial Flow Pressure	360	370	PSI
(C)	First Final Flow Pressure	360	366	PSI
(D)	Initial Closed-in Pressure	1087	1091	PSI
(E)	Second Initial Flow Pressure	317	336	PSI
(F)	Second Final Flow Pressure	296	300	PSI
(G)	Final Closed-in Pressure	1077	1068	PSI
(H)	Final Hydrostatic Mud	1950	1936	PSI

COMPANY Allison & Black LEASE AND WELL NO. Legleiter # 1 SEC. 23 TWP. 16s RGE. 18w TEST NO. 4 DATE 11-19-68

TIGHT HOLE

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

Company Allison & Black Lease & Well No. Legleiter Estate # 1

Elevation 2047 Kelly Bushing Formation Kansas City Effective Pay _____ Ft. Ticket No. 11834

Date 11-20-68 Sec. 23 Twp. 16s Range 18w County Rush State Kansas

Test Approved by R. B. Jinkins Western Representative Gerrell Veatch

Formation Test No. 5 O.K. x Misrun _____ Interval Tested From 3333' to 3350' Total Depth 3350'

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

top Packer Depth 3329 Ft. Size 6 3/4 Packer Depth 3333 Ft. Size 6 3/4

Straddle _____ Yes _____ No x Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____

Tool Size 5½"OD Tool Jt. Size 4½"FH Anchor Length 17 Ft. Size 5½"OD

RECORDERS Depth 3342 Ft. Clock No. 6894 Depth 3346 Ft. Clock No. 6860

Top Make Kuster Cap. 4150 No. 2607 Inside ~~Outside~~ Bottom Make Kuster Cap. 4150 No. 969 ~~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 4:32 AM

Tool Open I.F.P. From 4:35 M. to 4:45A M. _____ Hr. 10 Min. From (B) 27 P.S.I. To (C) 27 P.S.I.

Tool Closed I.C.I.P. From 4:45 M. to 5:15A M. _____ Hr. 30 Min. (D) 512 P.S.I.

Tool Open F.F.P. From 5:15 M. to 6:15A M. _____ Hr. 60 Min. From (E) 37 P.S.I. To (F) 52 P.S.I.

Tool Closed F.C.I.P. From 6:15 M. to 6:45A M. _____ Hr. 30 Min. (G) 351 P.S.I.

Initial Hydrostatic Pressure (A) 1861 P.S.I. Final Hydrostatic Pressure (H) 1857 P.S.I.

SURFACE INFORMATION Size Choke 3/8 In. Max. Press. P.S.I. Time Description of Flow

_____ _____ _____ M. _____

_____ _____ _____ M. _____

_____ _____ _____ M. _____

BLOW Strong Bottom Choke Size _____ In.

Did Well Flow _____ Yes x No Recovery Total Ft. 1800 feet gas in pipe--100 feet muddy water

Reversed Out _____ Yes x No Mud Type gel Viscosity 44 Weight 10.6 Water Loss 9.0 cc. Maximum Temp. 99 °F

Type Circ. Sub. plug Did Tool Plug? no Jars: Size _____ Make _____ Ser. No. _____

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where? _____

Length Drill Pipe 2443 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 ft. I.D. Weight Pipe 2.8 in. Length Drill Collars _____ ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool 37 ft.

Remarks

Home Office: Great Bend, Kansas

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

Company Allison & Black Lease & Well No. Leopleiter Estate # 1

Elevation 2042 Kelly Bushing Formation Kansas City Effective Pay Ft. Ticket No. 12874

Date 11-20-68 Sec. 23 Twp. 10S Range 18W County Ness State Kansas

Tool Approved by E. E. Hinkins Western Representative George D. Yeaton

Formation Test No. 5 OK X Miss. Interval Tested From 3333' to 3350' Total Depth 3350'

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

Top Packer Depth 3329 Ft. Size 6 3/4 Packer Depth 3333 Ft. Size 6 3/4

Middle 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 Anchor Length 17 Ft. Size 5 1/2" OD

RECORDERS Depth 3342 Ft. Clock No. 6924 Depth 3346 Ft. Clock No. 6860

Top Make Kuster Cap. 4150 No. 2607 Inside / Outside Bottom Make Kuster Cap. 4150 No. 969 Inside / Outside

Below Shoulder 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 4:32 AM

Tool Open I.F.P. From 4:35 M. to 4:45 M Hr. 10 Min. From (B) 27 P.S.I. To (C) 37 P.S.I.

Tool Closed I.C.I.P. From 4:45 M. to 5:15 M Hr. 30 Min. (D) 312 P.S.I.

Tool Open F.F.P. From 5:15 M. to 6:15 M Hr. 60 Min. From (E) 37 P.S.I. To (F) 52 P.S.I.

Tool Closed F.C.I.P. From 6:15 M. to 6:45 M Hr. 30 Min. (G) 351 P.S.I.

Initial Hydrostatic Pressure (A) 1651 P.S.I. Final Hydrostatic Pressure (H) 1652 P.S.I.

SURFACE Size Choke 7/8 in. Max. Press. P.S.I. Time Description of Flow

INFORMATION M.

M.

M.

BLOW Strong Bottom Choke Size in.

Did Well Flow Yes X No Recovery Total Ft. 1800 Feet gas in pipe--100 feet muddy water

Reversed Out Yes X No Mud Type gel Viscosity 44 Weight 10.6 Water Loss 9.0 cc. Maximum Temp 99 °F

Type Circ. Sub Hole Did Tool Plug? no Jars: Size Make Ser. No.

EXTRA EQUIPMENT: Dual Packers Yes Safety Joint No Did Packer Hold? Yes Where?

Length Drill Pipe 2443 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 270 ft. I.D. Weight 19.5 in. Length Drill Collars ft.

I.D. Drill Collars in. Length D.S.T. Tool 37 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date ~~xxx~~ 11-20-68 Test Ticket No. 11834

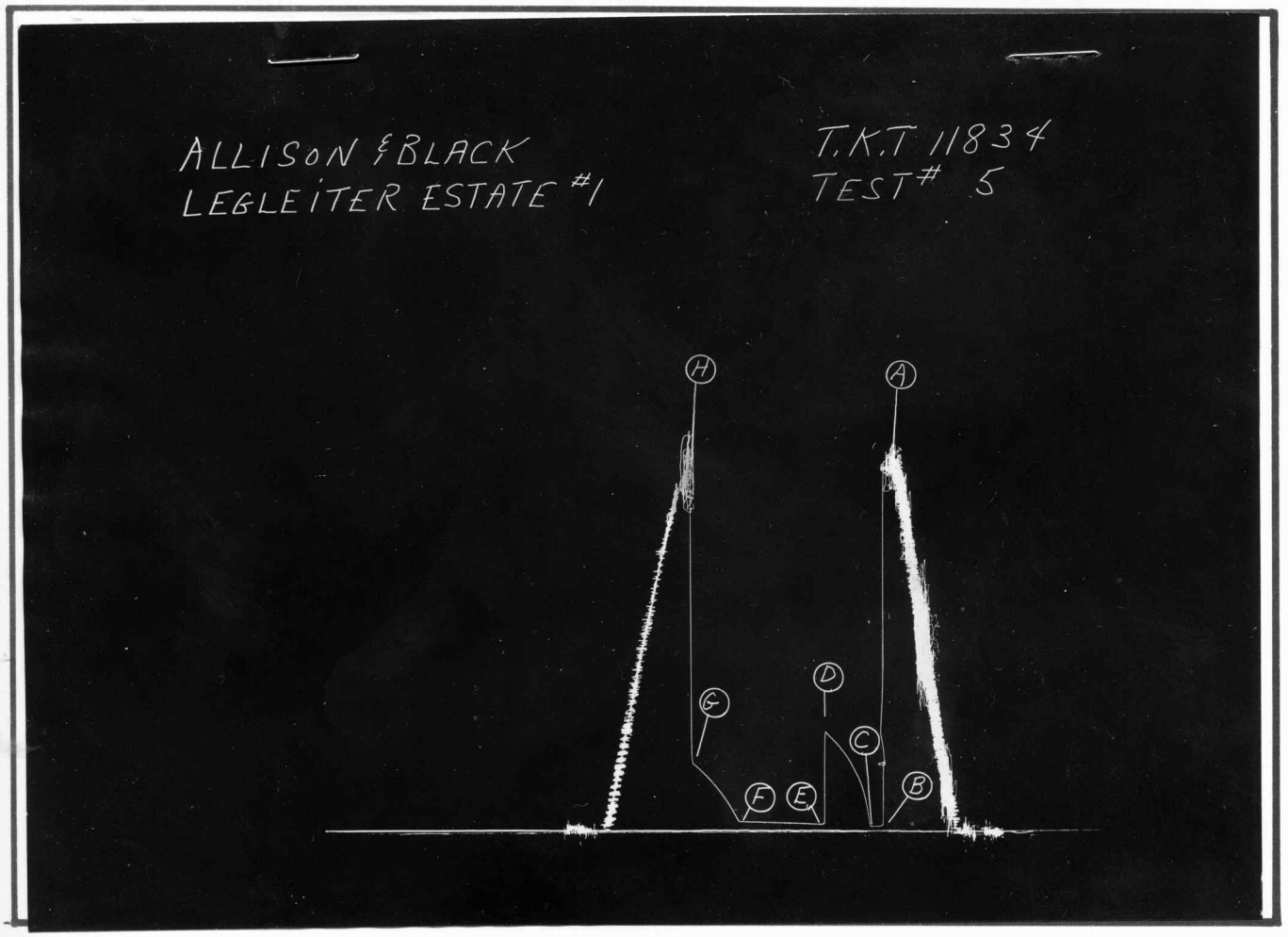
Recorder No. 2607 Capacity 4150 Location 3342 Ft.

Clock No. 6894 Elevation 2047 Kelly Bushing Well Temperature 99 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1861 P.S.I.		Opened Tool	4:32A M	
B	First Initial Flow Pressure	27 P.S.I.		First Flow Pressure	10 Mins.	10 Mins.
C	First Final Flow Pressure	27 P.S.I.		Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	512 P.S.I.		Second Flow Pressure	60 Mins.	58 Mins.
E	Second Initial Flow Pressure	37 P.S.I.		Final Closed-in Pressure	30 Mins.	31 Mins.
F	Second Final Flow Pressure	52 P.S.I.				
G	Final Closed-in Pressure	351 P.S.I.				
H	Final Hydrostatic Mud	1857 P.S.I.				

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 2 Inc.		Breakdown: 10 Inc.		Breakdown: 11 Inc.		Breakdown: 10 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 3 Min.		final inc. of 1 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	27	0	27	0	37	0	52
P 2 5	27	3	148	5	37	3	88
P 3 10	27	6	239	10	37	6	126
P 4		9	288	15	39	9	162
P 5		12	332	20	41	12	194
P 6		15	372	25	43	15	226
P 7		18	405	30	46	18	254
P 8		21	434	35	48	21	279
P 9		24	459	40	49	24	300
P10		27	480	45	50	27	321
P11		30	512	50	51	30	343
P12				55	52	31	351
P13				58	52		
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	PRESSURE Office Reading	
(A)	Initial Hydrostatic Mud	1865	1861	PSI
(B)	First Initial Flow Pressure	29	27	PSI
(C)	First Final Flow Pressure	29	27	PSI
(D)	Initial Closed-in Pressure	518	512	PSI
(E)	Second Initial Flow Pressure	37	37	PSI
(F)	Second Final Flow Pressure	56	52	PSI
(G)	Final Closed-in Pressure	349	351	PSI
(H)	Final Hydrostatic Mud	1855	1857	PSI

COMPANY Allison & Black LEASE AND WELL NO. Legleiter # 1 SEC. 23 TWP. 16s RGE. 18w TEST NO. 5 DATE 11-20-68

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

Company Allison & Black Lease & Well No. Legleiter Estate # 1

Elevation 2047 Kelly Bushing Formation Kansas City Effective Pay _____ Ft. Ticket No. 11835

Date 11-20-68 Sec. 23 Twp. 16 Range 18w County Rush State Kansas

Test Approved by R. B. Jinkins Western Representative Gerrell Veatch

Formation Test No. 6 O.K. x Misrun _____ Interval Tested From 3350' to 3372' Total Depth 3372'

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

top Packer Depth 3346 Ft. Size 6 3/4 Packer Depth 3350 Ft. Size 6 3/4

Straddle _____ Yes _____ No x Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____

Tool Size 5½"OD Tool Jt. Size 4½"FH Anchor Length 22 Ft. Size 5½"OD

RECORDERS Depth 3364 Ft. Clock No. 68 94 Depth 3368 Ft. Clock No. 6860

Top Make Kuster Cap. 4150 No. 2607 ~~Outside~~ Inside Bottom Make Kuster Cap. 4150 No. 969 ~~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 2:47 PM

Tool Open I.F.P. From 2:50 M. to 3:00P M. Hr. 10 Min. From (B) 17 P.S.I. To (C) 23 P.S.I.

Tool Closed I.C.I.P. From 3:00 M. to 3:30P M. Hr. 30 Min. (D) 1068 P.S.I.

Tool Open F.F.P. From 3:30 M. to 4:30P M. Hr. 60 Min. From (E) 40 P.S.I. To (F) 95 P.S.I.

Tool Closed F.C.I.P. From 4:30 M. to 5:00P M. Hr. 30 Min. (G) 935 P.S.I.

Initial Hydrostatic Pressure (A) ~~1950~~ 1914 P.S.I. Final Hydrostatic Pressure (H) 1907 P.S.I.

SURFACE INFORMATION Size Choke 3/8 In. Max. Press. P.S.I. Time Description of Flow

_____ _____ _____ M. _____

_____ _____ _____ M. _____

_____ _____ _____ M. _____

BLOW Fair Bottom Choke Size 3/4 In.

Did Well Flow _____ Yes x No Recovery Total Ft. 175 feet muddy salt water

Reversed Out _____ Yes x No Mud Type gel Viscosity 44 Weight 10.1 Water Loss 8.8 cc. Maximum Temp. 99 °F

Type Circ. Sub. plug Did Tool Plug? no Jars: Size _____ Make _____ Ser. No. _____

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where? _____

Length Drill Pipe 2460 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 ft. I.D. Weight Pipe 2.8 in. Length Drill Collars _____ ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool 42 ft.

Remarks

Home Office: Great Bend, Kansas

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

Company Lease & Well No.

Operation Formation Effective Pay Ft. Ticket No.

Date Sec. Twp. Range County State

Test Approved by Western Representative

Formation Test No. O.K. Mission Interval Tested From To Total Depth

Size Main Hole Ran Hole Conv. B.T. Damaged Yes No Conv. B.T. Damaged Yes No

Drill Pipe Packer Depth Ft. Size Packer Depth Ft. Size

Standing Valve Yes No Conv. B.T. Damaged Yes No

Packer Depth Ft. Size

Tool Size Tool Jt. Size Anchor Length Ft. Size

RECORDERS Depth Ft. Clock No. Depth Ft. Clock No.

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

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

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

Time Set Packer: P.M.

Tool Open I.F.P. From M. to M. Min. From (B) Hr. Min. To (C) P.S.I.

Tool Closed I.C.I.P. From M. to M. Min. (D) Hr. P.S.I.

Tool Open F.F.P. From M. to M. Min. From (E) Hr. P.S.I. To (F) P.S.I.

Tool Closed F.C.I.P. From M. to M. Min. (G) Hr. P.S.I.

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

SURFACE Size Choke in. Max. Press. P.S.I. Time Description of Flow

INTERMEDIATE M.

M.

M.

FLOW Bottom Choke Size in.

Did Well Flow Yes No Recovery Total Ft.

Reversed Out Yes No Mud Type Viscosity Weight Water Loss cc. Maximum Temp. °F

Type Circ. Sub Did Tool Plug? Jam Size Make Ser. No.

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

Length Drill Pipe in. I.D. Drill Pipe in. Length Weight Pipe in. I.D. Weight Pipe in. Length Drill Collars ft.

I. D. Drill Collars in. Length D.S.T. Tool ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 11-20-68 Test Ticket No. 11835

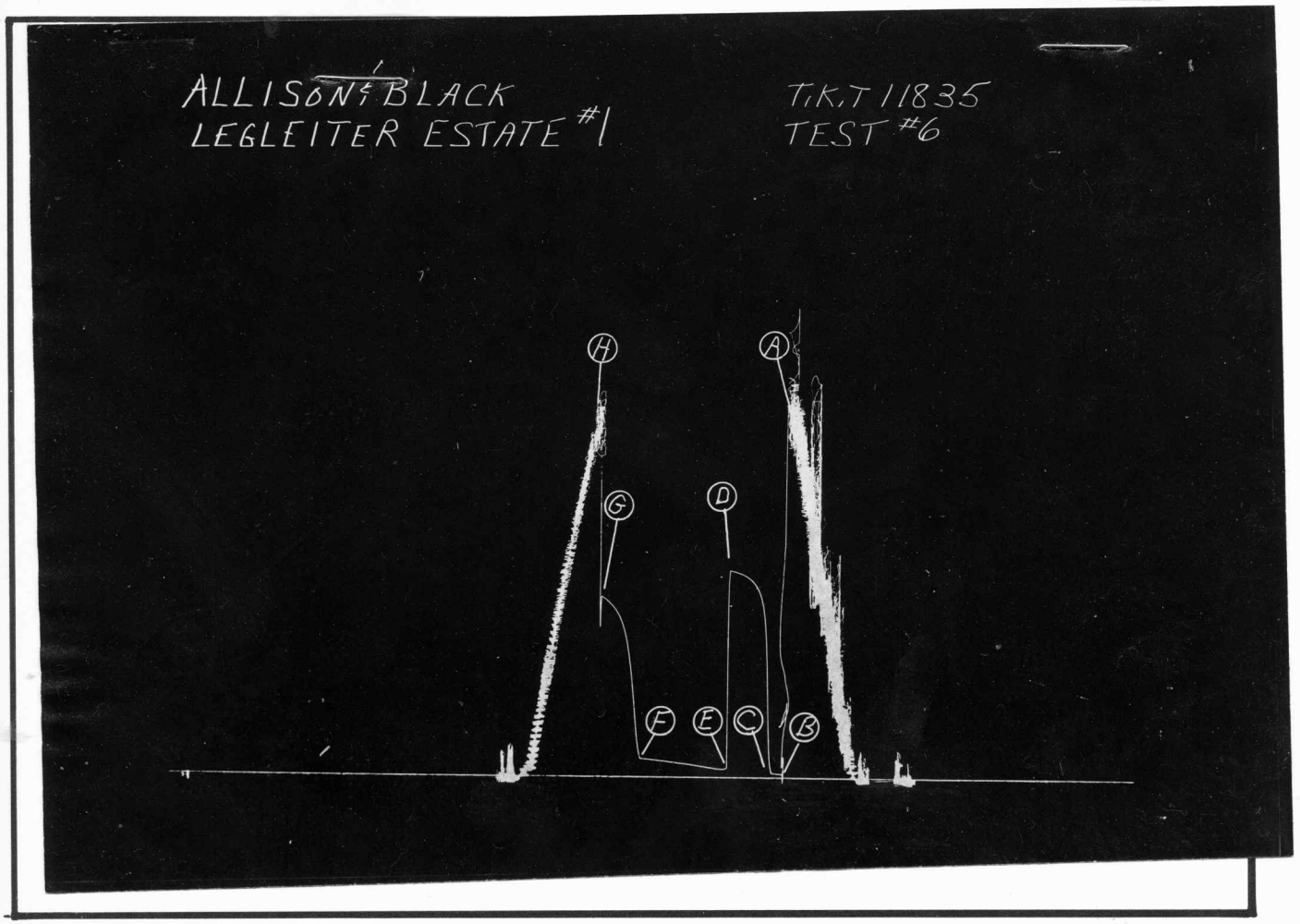
Recorder No. 2607 Capacity _____ Location 3364 Ft.

Clock No. 6894 Elevation 2047 Kelly Bushing Well Temperature 99 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1914	P.S.I.	Opened Tool	2:50P M	
B	First Initial Flow Pressure	17	P.S.I.	First Flow Pressure	10 Mins.	9 Mins.
C	First Final Flow Pressure	23	P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1068	P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	40	P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	95	P.S.I.			
G	Final Closed-in Pressure	935	P.S.I.			
H	Final Hydrostatic Mud	1907	P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 1 Inc.		Breakdown: 10 Inc.		Breakdown: 12 Inc.		Breakdown: 10 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 4 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	17	0	23	0	40	0	95
P 2 5	21	3	290	5	43	3	234
P 3 9	23	6	756	10	48	6	423
P 4		9	929	15	52	9	645
P 5		12	977	20	57	12	758
P 6		15	1012	25	63	15	821
P 7		18	1033	30	69	18	864
P 8		21	1043	35	74	21	889
P 9		24	1054	40	79	24	912
P10		27	1062	45	84	27	924
P11		30	1068	50	89	30	935
P12				55	92		
P13				60	95		
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	PRESSURE Office Reading	
(A)	Initial Hydrostatic Mud	1950	1914	PSI
(B)	First Initial Flow Pressure	18	17	PSI
(C)	First Final Flow Pressure	29	23	PSI
(D)	Initial Closed-in Pressure	1073	1068	PSI
(E)	Second Initial Flow Pressure	40	40	PSI
(F)	Second Final Flow Pressure	82	95	PSI
(G)	Final Closed-in Pressure	924	935	PSI
(H)	Final Hydrostatic Mud	1940	1907	PSI

COMPANY Allison & Black LEASE AND WELL NO. Legleiter Estate # 1 SEC. 23 TWP. 16 RGE. 18w TEST NO. 6 DATE 11-20-68

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

Company Allison & Black Lease & Well No. Legleiter Estate # 1

Elevation 2047 Kelly Bushing Formation Kansas City Effective Pay _____ Ft. Ticket No. 11836

Date 11-21-68 Sec. 23 Twp. 16 Range 18w County Rush State Kansas

Test Approved by R. B. Jinkins Western Representative Gerrall Heatch

Formation Test No. 7 O.K. x Misrun _____ Interval Tested From 3371' to 3400' Total Depth 3400'

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

top Packer Depth 3367 Ft. Size 6 3/4 Packer Depth 3371 Ft. Size 6 3/4

Straddle _____ Yes _____ No x Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____

Tool Size 5½"OD Tool Jt. Size 4½"FH Anchor Length _____ Ft. Size 5½"OD

RECORDERS Depth 3392 Ft. Clock No. 6894 Depth 3396 Ft. Clock No. 6860

Top Make Kuster Cap. 4150 No. 2607 Inside ~~Outside~~ Bottom Make Kuster Cap. 4150 No. 969 ~~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 1:57A M

Tool Open I.F.P. From 2:00 M. to 2:15A M. Hr. 15 Min. From (B) 25 P.S.I. To (C) 27 P.S.I.

Tool Closed I.C.I.P. From 2:15 M. to 2:45A M. Hr. 30 Min. (D) 379 P.S.I.

Tool Open F.F.P. From 2:45 M. to 3:30A M. Hr. 45 Min. From (E) 33 P.S.I. To (F) 37 P.S.I.

Tool Closed F.C.I.P. From 3:30 M. to 4:00A M. Hr. 30 Min. (G) 82 P.S.I.

Initial Hydrostatic Pressure (A) 1897 P.S.I. Final Hydrostatic Pressure (H) 1884 P.S.I.

SURFACE INFORMATION Size Choke 3/8 In. Max. Press. P.S.I. Time Description of Flow

_____ _____ _____ M. _____

_____ _____ _____ M. _____

_____ _____ _____ M. _____

BLOW Very weak blow for 30 minutes Bottom Choke Size 3/4 In.

Did Well Flow _____ Yes x No Recovery Total Ft. 20 feet drilling mud with spots oil

Reversed Out _____ Yes x No Mud Type gel Viscosity 44 Weight 10.2 Water Loss 8.2 cc. Maximum Temp. 99 °F

Type Circ. Sub. plug Did Tool Plug? _____ Jars: Size _____ Make _____ Ser. No. _____

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Did Packer Hold? yes Where? _____

Length Drill Pipe 2481 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 ft. I.D. Weight Pipe 2.8 in. Length Drill Collars _____ ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool 49 ft.

Remarks

Home Office: Great Bend, Kansas

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

Company Lease & Well No. Regulator Station # 1

Division Formation Run as OIL Effective Pay Ft. Ticket No. 11939

Date 11-21-69 Sec. 23 Twp. 16 Range 19W County Ness State Kansas

Test Approved by F. J. McKinney Western Representative Darrell Westcott

Formation Test No. 1 O.K. X Misrun Interval Tested From 3711' to 3800' Total Depth 3800'

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

Top Packer Depth 3707 Ft. Size 5 3/4" Bottom Packer Depth 3711 Ft. Size 5 3/4"

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

Packer Depth Ft. Size

Tool Size 5 3/8" Tool Jt. Size 4 1/2 FH Anchor Length Ft. Size 5 3/8"

RECORDER Depth 3792 Ft. Clock No. 6294 Depth 3776 Ft. Clock No. 8660

Top Maker Metter Cap 4150 No. 2027 Inside Outside Bottom Maker Metter Cap 4150 No. 2952 Inside Outside

Relay Shoulder Depth Clock No. Inside Outside Depth Ft. Clock No. Inside Outside

Top Maker Cap No. Inside Outside Bottom Maker Cap No. Inside Outside

Time Set Packer 1:57A M.

Tool Open I.F.P. From 2:00 M. to 2:15A M. Hr. 15 Min. From (B) 25 P.S.I. To (C) 27 P.S.I.

Tool Closed I.C.I.P. From 2:15 M. to 2:45A M. Hr. 30 Min. (D) 279 P.S.I.

Tool Open F.F.P. From 2:45 M. to 3:20A M. Hr. 45 Min. From (E) 33 P.S.I. To (F) 37 P.S.I.

Tool Closed F.C.I.P. From 3:20 M. to 4:00A M. Hr. 30 Min. (G) 62 P.S.I.

Initial Hydrostatic Pressure (A) 1827 P.S.I. Final Hydrostatic Pressure (H) 1824 P.S.I.

SURFACE INFORMATION Size Choke 3/8 in. Max. Press. P.S.I. Time Description of Flow

M.

M.

M.

BLOW Very weak blow for 20 minutes

Did Well Flow Yes X No Recovery Total Ft. 20 feet of fluid and with specks oil

Reversed Out Yes X No Mud Type Gel Viscosity 41 Weight 10.2 Water Loss 8.2 cc. Maximum Temp. 99 °F

Type Circ. Sub Fluid Did Tool Plug? Jars: Size Make Ser. No.

EXTRA EQUIPMENT: Dual Packers Yes Safety Joint No Did Packer Hold? Yes Where

Length Drill Pipe 2841 ft. I.D. Drill Pipe 3.5 in. Length Weight Pipe 270 ft. I.D. Weight Pipe 2.2 in. Length Drill Collars ft.

I. D. Drill Collars in. Length D.S.T. Tool 45 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 11-21-68 Test Ticket No. 11836

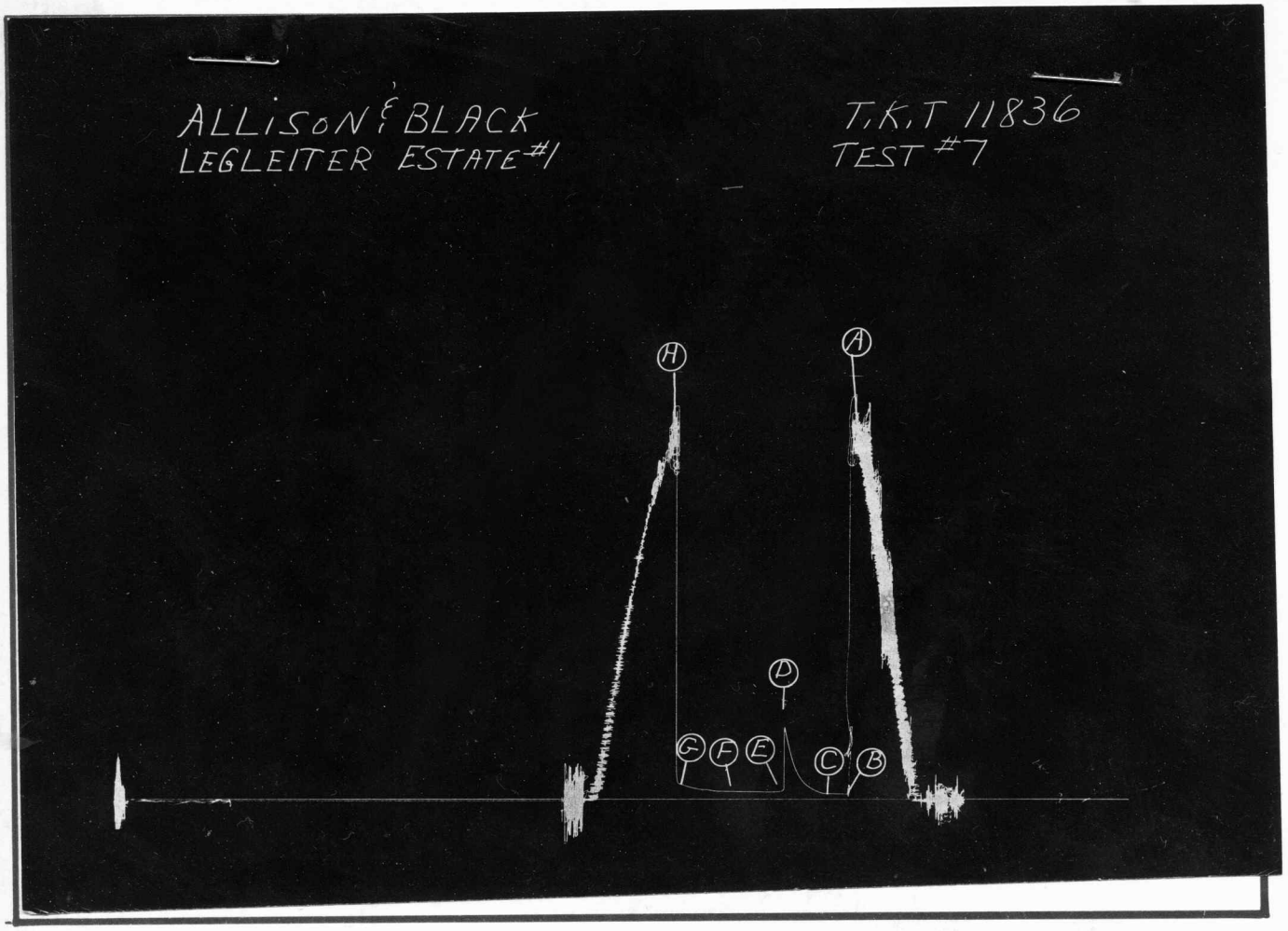
Recorder No. 2607 Capacity 4150 Location 3392 Ft.

Clock No. 6894 Elevation 2047 Kelly Bushing Well Temperature 99 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1897 P.S.I.		Opened Tool	2:00A M	
B	First Initial Flow Pressure	25 P.S.I.		First Flow Pressure	15 Mins.	15 Mins.
C	First Final Flow Pressure	27 P.S.I.		Initial Closed-in Pressure	30 Mins.	29 Mins.
D	Initial Closed-in Pressure	379 P.S.I.		Second Flow Pressure	45 Mins.	45 Mins.
E	Second Initial Flow Pressure	33 P.S.I.		Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	37 P.S.I.				
G	Final Closed-in Pressure	82 P.S.I.				
H	Final Hydrostatic Mud	1884 P.S.I.				

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 3 Inc.		Breakdown: 9 Inc.		Breakdown: 9 Inc.		Breakdown: 10 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 2 Min.		final inc. of ____ Min.		final inc. of ____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	25	0	25	0	33	0	37
P 2 5	25	3	36	5	33	3	37
P 3 10	27	6	44	10	33	6	41
P 4 15	27	9	56	15	35	9	44
P 5		12	69	20	35	12	47
P 6		15	91	25	35	15	50
P 7		18	123	30	37	18	55
P 8		21	175	35	37	21	61
P 9		24	264	40	37	24	67
P10		27	332	45	37	27	76
P11		29	379			30	82
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	PRESSURE Office Reading	
(A)	Initial Hydrostatic Mud	1890	1897	PSI
(B)	First Initial Flow Pressure	29	25	PSI
(C)	First Final Flow Pressure	33	27	PSI
(D)	Initial Closed-in Pressure	370	379	PSI
(E)	Second Initial Flow Pressure	35	33	PSI
(F)	Second Final Flow Pressure	35	37	PSI
(G)	Final Closed-in Pressure	73	82	PSI
(H)	Final Hydrostatic Mud	1880	1884	PSI

COMPANY Allison & Black LEASE AND WELL NO. Legleiter Estate # 1 SEC. 23 TWP. 16 RGE. 18W TEST NO. 7 DATE 11-21-68

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

Company Allison & Black Lease & Well No. Legleiter Estate # 1

Elevation 2047 Kelly Bushing Formation Kansas City Effective Pay _____ Ft. Ticket No. 11837

Date 11-21-68 Sec. 23 Twp. 16 Range 18w County Rush State Kansas

Test Approved by R. B. Jinkins Western Representative Gerrell Veatch

Formation Test No. 8 O.K. x Misrun _____ Interval Tested From 3310' to 3330' Total Depth 3330'

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

Packer Depth 3310 Ft. Size 6 3/4 Packer Depth _____ Ft. Size _____

Straddle _____ Yes x No _____ Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____

Tool Size 5½"OD Tool Jt. Size 4½"FH Anchor Length 20 Ft. Size 5½"OD

RECORDERS Depth 3315 Ft. Clock No. 6894 Depth 3319 Ft. Clock No. 6860

Top Make Kuster Cap. 4150 No. 2607 Inside ~~Outside~~ Bottom Make Kuster Cap. 4150 No. 969 ~~Inside~~ Outside

Below Straddle: Depth 3336 Clock No. 147 Inside Outside Depth 3340 Ft. Clock No. 104 Inside Outside

Top Make WTC Cap. 4000 No. 26 ~~Inside~~ Outside Bottom Make WTC Cap. 4000 No. 52 ~~Inside~~ Outside

Time Set Packer 7:30 AM

Tool Open I.F.P. From 7:35 M. to 7:45A M. _____ Hr. 10 Min. From (B) 387 P.S.I. To (C) 345 P.S.I.

Tool Closed I.C.I.P. From 7:45 M. to 8:15A M. _____ Hr. 30 Min. (D) 1087 P.S.I.

Tool Open F.F.P. From 8:15 M. to 10:15A M. 2 Hr. - Min. From (E) 349 P.S.I. To (F) 307 P.S.I.

Tool Closed F.C.I.P. From 10:15 M. to 11:15A M. 1 Hr. - Min. (G) 1074 P.S.I.

Initial Hydrostatic Pressure (A) 1798 P.S.I. Final Hydrostatic Pressure (H) 1783 P.S.I.

SURFACE INFORMATION

Size Choke 2 In.	Max. Press. P.S.I.	Time	Description of Flow
2 inch ID impack 1/8 inch tube		M.	
2" impack 1/8" tube	9	7:40A M.	2,190,000
2" impack 1/8" tube	10	10:15A M.	2.310,000

BLOW _____ Bottom Choke Size 3/4 In.

Did Well Flow _____ Yes x No Recovery Total Ft. gas to surface in 3 minutes-- 25 feet drilling mud

Reversed Out _____ Yes x No Mud Type gel Viscosity 44 Weight 10.2 Water Loss 8.4 cc. Maximum Temp. 98 °F

Type Circ. Sub. plug Did Tool Plug? no Jars: Size _____ Make _____ Ser. No. _____

EXTRA EQUIPMENT: Dual Packers 2 Safety Joint no Did Packer Hold? yes Where? _____

Length Drill Pipe 2379 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 870 ft. I.D. Weight Pipe 2.8 in. Length Drill Collars _____ ft.

I. D. Drill Collars _____ in. Length D.S.T. Tool 48 ft.

Remarks Reset packer

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

Company _____ Lease & Well No. _____

Elevation _____ Formation _____ Effective Pay _____ Ticket No. _____

Date _____ Sec. _____ Twp. _____ Range _____ County _____ State _____

Test Approved by _____ Western Representative _____

Formation Test No. _____ O.K. _____ Misrun _____ Interval Tested From _____ to _____ Total Depth _____

Size Main Hole _____ Conv. _____ B.T. _____ Damaged _____ Yes _____ No Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____ Packer Depth _____ Ft. Size _____

Standard _____ Yes _____ No _____ Conv. _____ B.T. _____ Damaged _____ Yes _____ No

Packer Depth _____ Ft. Size _____

Tool Size _____ Tool Jt. Size _____ Anchor Length _____ Ft. Size _____

RECORDERS Depth _____ Ft. Clock No. _____ Depth _____ Ft. Clock No. _____

Top Make	Cap.	No.	Inside / Outside	Bottom Make	Cap.	No.	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 _____ 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) _____ P.S.I.

SURFACE INFORMATION Size Choke _____ In. Max. Press. P.S.I. Time Description of Flow

		M.
		M.
		M.

DOWN HOLE Did Well Flow _____ Yes _____ No Recovery Total Ft. _____ Bottom Choke _____ In.

Reversed Out _____ Yes _____ No Mud Type _____ Viscosity _____ Weight _____ Water Loss _____ cc. Maximum Temp. _____

Type Circ. Sub _____ Did Tool Plug? _____ Jars: Size _____ Make _____ No. _____

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

Length Drill Pipe _____ Ft. I.D. Drill Pipe _____ In. Length Weight Pipe _____ Ft. I.D. Weight Pipe _____ In. Length Drill Collars _____ Ft.

I. D. Drill Collars _____ In. Length D.S.T. Tool _____ Ft.

Remarks _____

WESTERN TESTERS

P. O. BOX 793
GREAT BEND, KANSAS

COMPANY Allison & Black LEASE & WELL NO. Legleiter ~~Estate # 1~~

TEST NO. 8 INTERVAL TESTED FROM 3310' TO 3330'

TIME PRE-FLOW	MAX PRESS. P.S.I.	DESCRIPTION OF FLOW
5 minutes on pre flow	2,190,000	
5 minutes	2,190,000	
10 minutes	2,190,000	
15 minutes	2,310,000	
30 minutes	2,310,000	
45 minute	2,310,000	
60 minutes	2,310,000	
SECOND FLOW		
75 minutes	2,310,000	
90 minutes	2,310,000	
105 minutes	2,310,000	
120 minutes	2,310.000	

SIZE CHOKE _____ SURFACE _____ IN. _____ BOTTOM _____ IN. _____

REMARKS _____

WESTERN TESTING CO., INC.
Pressure Data

Date 11-21-68 Test Ticket No. 11837

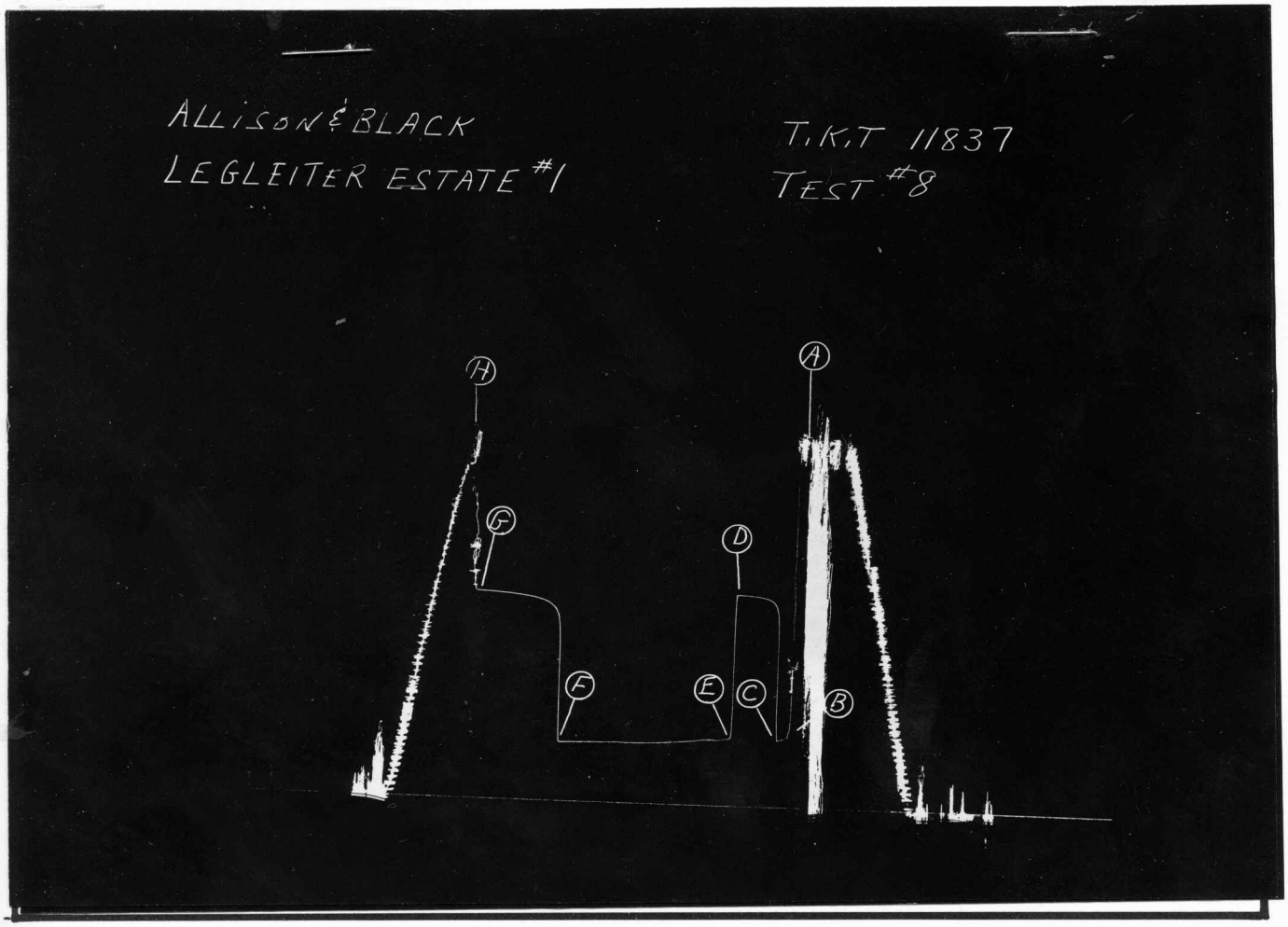
Recorder No. 2607 Capacity 4150 Location 3315 Ft.

Clock No. 6894 Elevation 2047 Kelly Bushing Well Temperature 98 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1798 P.S.I.		Opened Tool	7:30 A M	
B	First Initial Flow Pressure	387 P.S.I.		First Flow Pressure 10	10 Mins.	10 Mins.
C	First Final Flow Pressure	345 P.S.I.		Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1087 P.S.I.		Second Flow Pressure	120 Mins.	120 Mins.
E	Second Initial Flow Pressure	349 P.S.I.		Final Closed-in Pressure	60 Mins.	60 Mins.
F	Second Final Flow Pressure	307 P.S.I.				
G	Final Closed-in Pressure	1074 P.S.I.				
H	Final Hydrostatic Mud	1783 P.S.I.				

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 2 Inc.		Breakdown: 10 Inc.		Breakdown: 24 Inc.		Breakdown: 20 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	387	0	345	0	349	0	307
P 2 5	355	3	1021	5	247	3	949
P 3 10	345	6	1056	10	341	6	993
P 4		9	1067	15	341	9	1014
P 5		12	1075	20	340	12	1028
P 6		15	1079	25	335	15	1035
P 7		18	1081	30	330	18	1043
P 8		21	1083	35	327	21	1048
P 9		24	1085	40	325	24	1052
P10		27	1086	45	321	27	1055
P11		30	1087	50	319	30	1057
P12				55	317	33	1060
P13				60	315	36	1063
P14				65	314	39	1065
P15				70	313	42	1066
P16				75	313	45	1067
P17				80	313	48	1068
P18				85	313	51	1069
P19				90	131	54	1070
P20				95	312	57	1072
				100	311		
				105	310		
				110	309		
				115	308		
				120	307		



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	PRESSURE Office Reading	
(A)	Initial Hydrostatic Mud	1795	1798	PSI
(B)	First Initial Flow Pressure	360	387	PSI
(C)	First Final Flow Pressure	349	345	PSI
(D)	Initial Closed-in Pressure	1080	1087	PSI
(E)	Second Initial Flow Pressure	349	349	PSI
(F)	Second Final Flow Pressure	307	307	PSI
(G)	Final Closed-in Pressure	1077	1074	PSI
(H)	Final Hydrostatic Mud	1785	1783	PSI

COMPANY Allison & Black LEASE AND WELL NO. Legleiter # 1 SEC. 23 TWP. 16 RGE. 18W TEST NO. 8 DATE 11-21-68