

15-065-20058



36-9s-21w

Home Office: Great Bend, Kansas  
P. O. Box 793 SWift 3-7903

Company Allison & Black Lease & Well No. Lambert #1  
Elevation 2276 Ground Level Formation Kansas City Ticket Number 8638  
Date July 5, 1967 Sec. 36 Twp. 9 Range 21w County Graham State Kansas  
Test Approved by Thomas E. Black Western Representative Gerrell Veatch

Formation Test No. 3 O.K.  Misrun  Interval Tested From 3614' 3755' Total Depth 3755'  
Size Main Hole 7 7/8 Rat Hole  Conv.  B.T.  Damaged Yes  No Conv.  B.T.  Damaged Yes  No  
Top Packer Depth 3610 Ft. Size 6 3/4 Packer Depth 3614 Ft. Size 6 3/4  
Straddle Yes  No  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 41 Ft. Size 5 1/2 OD  
RECORDERS Depth 3747 Ft. Clock No. 6895 Depth 3751 Ft. Clock No. 8376  
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 8:57A M  
Tool Open I.F.P. From 9:00 M to 9:30 M Hr. 30 Min. From (B) 40 P.S.I. To (C) 71 P.S.I.  
Tool Closed I.C.I.P. From 9:30 M. to 10:00 M. Hr. 30 Min. (D) 1315 P.S.I.  
Tool Open F.F.P. From 10:00 M. to 10:30 M. Hr. 30 Min. From (E) 105 P.S.I. To (F) 135 P.S.I.  
Tool Closed F.C.I.P. From 10:30 M. to 11:00 M. Hr. 30 Min. (G) 1284 P.S.I.  
Initial Hydrostatic Pressure (A) 1949 P.S.I. Final Hydrostatic Pressure (H) 1932 P.S.I.

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

BLOW Strong Bottom Choke Size 3/4 In.

Did Well Flow Yes  No  Recovery Total Ft. 300' gas in pipe; 310' clean oil and gassy;  
125' muddy oil (29' gravity) Mud

Reversed Out Yes  No  Mud Type gel. Viscosity 39 Weight 10 Maximum Temp. 109 °F

EXTRA EQUIPMENT: Dual Packers yes Safety Joint no Jars: Size \_\_\_\_\_ Make \_\_\_\_\_ Ser. No. \_\_\_\_\_

Type Circ. Sub. plug Did Tool Plug? no Where? \_\_\_\_\_ Did Packer Hold? yes

Length Drill Pipe 3694 ft. I.D. Drill Pipe 3.8 in Length Weight Pipe \_\_\_\_\_ ft. I.D. Weight Pipe \_\_\_\_\_ in. Length Drill Collars \_\_\_\_\_ ft.

I. D. Drill Collars \_\_\_\_\_ in. Length D.S.T. Tool 61 ft.

Remarks



## Liquid Production

B.T. Gauge Numbers			2607	Ticket Number		8638
Initial Hydrostatic			1949	Elevation		GL 2276 ft.
Final Hydrostatic			1932	Indicated Production		1st Flow 136 bbls. day
1st Flow	Initial	Time ----- 40	71	Total Flow		129 bbls. day
	Final	28		Drill Collar Length		ft.
Initial Closed In Pressure			30	1315		Drill Collar I.D. in.
2nd Flow	Initial	----- 105	135	Drill Pipe Factor		.0142 bbls. ft.
	Final	28		Hole Size		7 7/8 in.
Final Closed In Pressure			30	1284		Footage Tested 41 ft.
Extrapolated Static Pressure	Initial		1395	Mud Weight		10.0 lbs. gal.
	Final		1370	Viscosity, Oil or Water		4.7 cp
Slope psi/cycle	Initial		290	Oil API Gravity		25.8°@60°F
	Final		290	Water Specific Gravity		-

Remarks:

SUMMARY		Gauge No. Depth	INITIAL	FINAL	Units
Product	Equation				
Production	$Q = \frac{1440 R}{t}$		136	123	bbls. day.
Transmissibility	$\frac{Kh}{\mu} = \frac{162.6 Q}{m}$		76.1	68.9	md. ft. cp
Indicated Flow Capacity	$Kh = \frac{Kh}{\mu} \mu$		357.7	323.8	md. ft.
Average Effective Permeability	$K = \frac{Kh}{h}$		8.7	7.8	md.
	$K_i = \frac{Kh}{h_i}$				md.
Damage Ratio	$DR = .183 \frac{P_s - P_f}{m}$		0.78	0.78	-
Theoretical Potential w/Damage Removed	$Q_i = Q DR$		136	123	bbls. day
Apprx. Radius of Investigation	$b \approx \sqrt{Kt}$ or $\sqrt{Kt_0}$		15.6	14.7	ft
	$b_i \approx \sqrt{K_i t}$ or $\sqrt{K_i t_0}$				ft
Potentiometric Surface	$Pot. = EI - GD + 2.319 Ps$	GL	1764	1706	ft

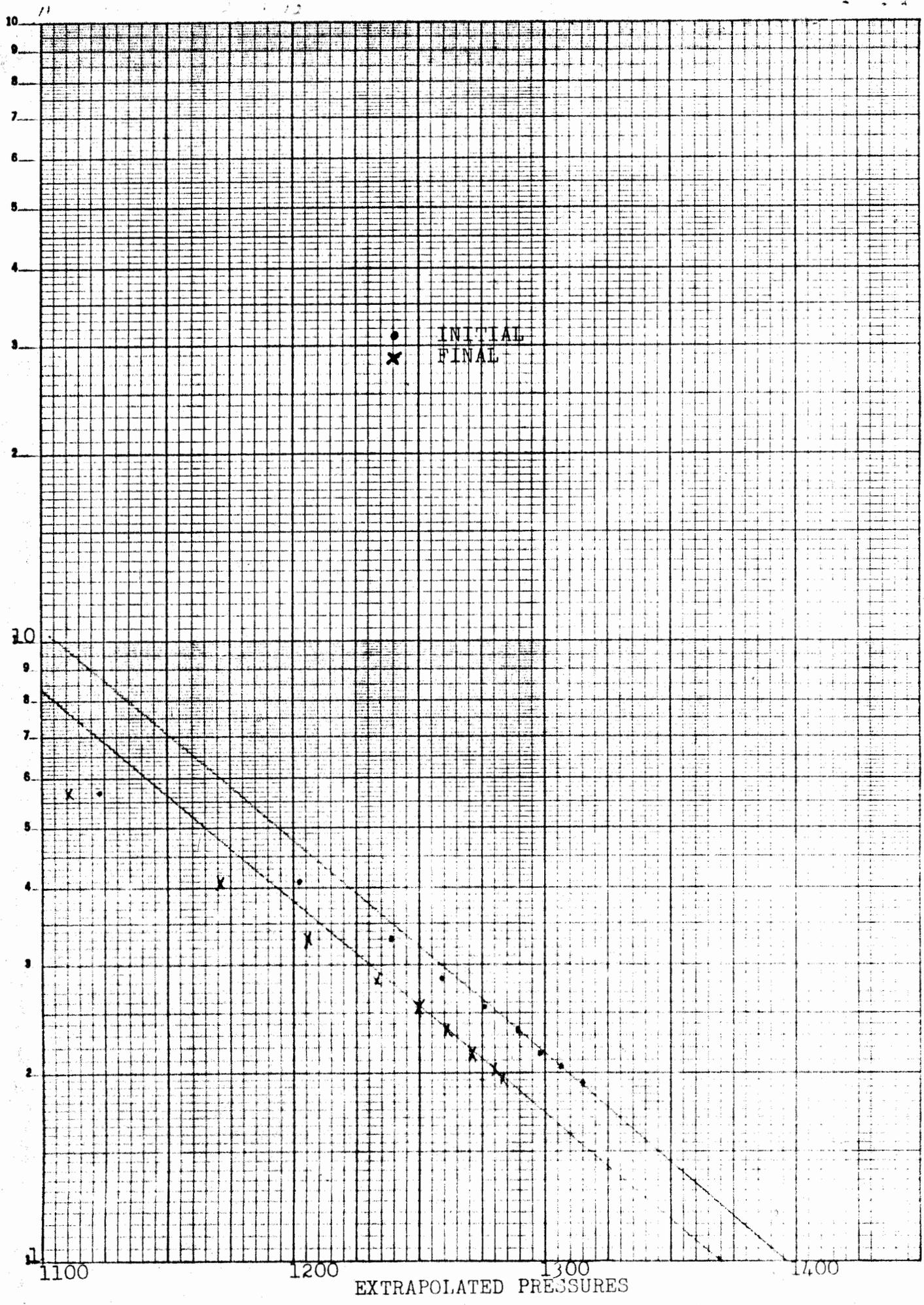
**NOTICE:**

These calculations are based upon information furnished by you and taken from Drill Stem Test pressure charts, and are furnished you for your information. In furnishing such calculations and elevations based thereon, Western Testing Co., Inc. is merely expressing its opinion. You agree that Western Testing Co., Inc. makes no warranty express or implied as to the accuracy of such calculations or opinions, and that Western Testing Co., Inc. shall not be liable for any loss or damage, whether due to negligence or otherwise, in connection with such calculations and opinions.

## INTERPRETATIONS AND CALCULATIONS

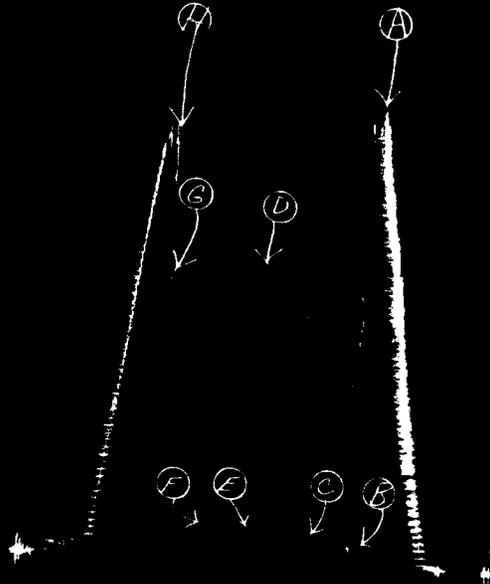
K&E SEMI-LOGARITHMIC 359-61  
KEUFFEL & ESSER CO. MANHATTAN, N.Y.  
2 CYCLES X 70 DIVISIONS

$$\frac{T + \theta}{\theta}$$



Allison & Black  
Lambert #1

TKT-8638  
Test #3



This is an actual photograph of recorder chart.

POINT	PRESSURE
(A) Initial Hydrostatic Mud .....	1949 PSI
(B) First Initial Flow Pressure .....	40 PSI
(C) First Final Flow Pressure .....	71 PSI
(D) Initial Closed-in Pressure .....	1315 PSI
(E) Second Initial Flow Pressure .....	105 PSI
(F) Second Final Flow Pressure .....	135 PSI
(G) Final Closed-in Pressure .....	1284 PSI
(H) Final Hydrostatic Mud .....	1932 PSI