FLUID SAMPLE DATA

Sampler Pressure _____ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas _____
cc. Oil _____
cc. Water _____
cc. Mud _____
Tot. Liquid cc. _____
Gravity _____ ° API @ _____ °F.
Gas/Oil Ratio _____ cu. ft./bbl.

		RESISTIVITY		CHLORIDE CONTENT
Recovery Water	_____ @	_____ °F.		_____ ppm
Recovery Mud	_____ @	_____ °F.		
Recovery Mud Filtrate	_____ @	_____ °F.		_____ ppm
Mud Pit Sample	_____ @	_____ °F.		
Mud Pit Sample Filtrate	_____ @	_____ °F.		_____ ppm
Mud Weight	9.9	vis 41	cp	

Date 5-29-72 Ticket Number 452006
Kind of Job OPEN HOLE Halliburton District WINFIELD
Tester DURHAM Witness LEWELLYN
Drilling Contractor GARVEY DRILLING COMPANY NM

EQUIPMENT & HOLE DATA

Formation Tested Kansas City Lime
Elevation 1951' K.B. Ft.
Net Productive Interval 5' Ft.
All Depths Measured From Kelly Bushing
Total Depth 3915' Ft.
Main Hole/Casing Size 7 7/8"
Drill Collar Length - I.D. -
Drill Pipe Length 3872' I.D. 3.826"
Packer Depth(s) 3890' - 3895' Ft.
Depth Tester Valve 3880' Ft.

Cushion TYPE NONE AMOUNT Ft. Depth Back Pres. Valve DC1P VALVE 3876' Surface Choke 1/4" Bottom Choke 3/4"

Recovered 15' Feet of drilling mud
Recovered Feet of
Recovered Feet of
Recovered Feet of
Recovered Feet of

Meas. From Tester Valve

Remarks Tool opened with a weak blow for a 15 minute first flow. Closed tool for a 60 minute first closed in pressure. Tool reopened for a 60 minute second flow with a weak blow, which continued throughout the test. Took a 90 minute second closed in pressure.

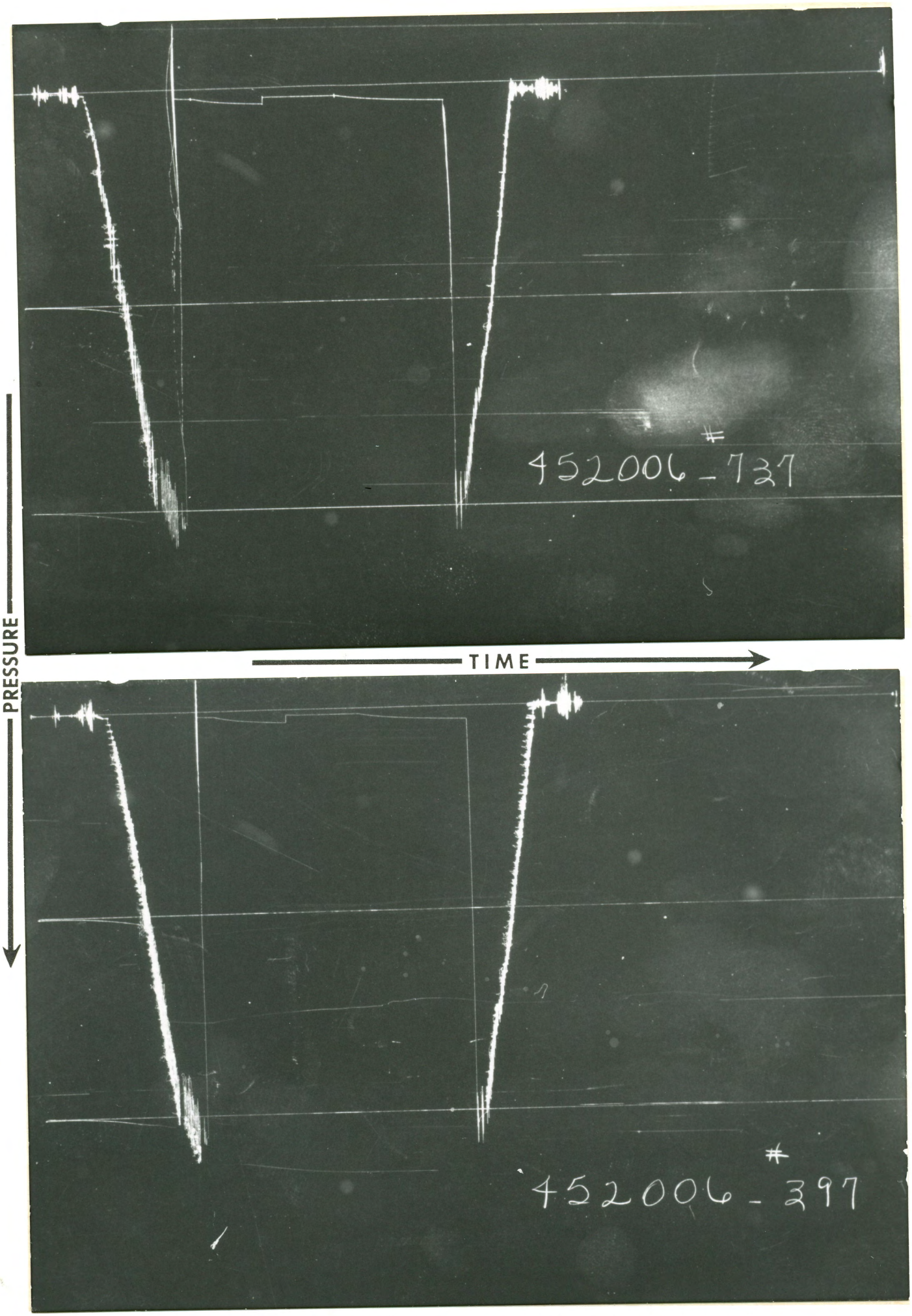
TEMPERATURE	Gauge No. 737	Gauge No. 397	Gauge No.	TIME
	Depth: 3884' Ft.	Depth: 3911' Ft.	Depth: Ft.	
	12 Hour Clock	12 Hour Clock	Hour Clock	Tool Opened 7:45 A.M. P.M.
Est. 115 °F.	Blanked Off NO	Blanked Off YES	Blanked Off	
Actual °F.	Pressures	Pressures	Pressures	Tool Closed 10:00 A.M. P.M.

		Field	Office	Field	Office	Field	Office	Reported Minutes	Computed Minutes
Initial Hydrostatic		-	2051	-	2106				
First Period	Flow Initial	17.2	6	-	25			—	—
	Flow Final	17.2	10	-	27			15	
	Closed in	68.7	40	-	63			60	
Second Period	Flow Initial	17.2	9	-	27			—	—
	Flow Final	25.8	9	-	27			60	
	Closed in	51.5	40	-	63			90	
Third Period	Flow Initial							—	—
	Flow Final								
	Closed in								
Final Hydrostatic		-	2004	-	2054			—	—

Legal Location Sec. - Twp. - Rng. C - NW - SW 5 - 26S - 13W
Lease Name FRISBIE Well No. D-3 Test No. 1
Tested Interval 3895' - 3915'
Field Area -
County PRATT State KANSAS
Lease Owner/Company Name CLINTON OIL COMPANY

452006

	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub	5 3/4"	2½"	1'	
Water Cushion Valve				
Drill Pipe	4½"	3.826"	3872'	
Drill Collars	-			
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	3/4"	4'	
Duol CIP Sampler				
Hydro-Spring Tester	5"	3/4"	4'	3880'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	2½"	4'	3884'
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	2½"	4'	3890'
Distributor				
Packer Assembly	6 3/4"	2½"	4'	3895'
Flush Joint Anchor	5"	2½"	16'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5"	2½"	4'	3911'
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor				
Blanked-Off B.T. Running Case				



Each Horizontal Line Equal to 1000 p.s.i.

NOMENCLATURE

b	= Approximate Radius of Investigation	Feet
b_1	= Approximate Radius of Investigation (Net Pay Zone h_1)	Feet
D.R.	= Damage Ratio	——
El	= Elevation	Feet
GD	= B.T. Gauge Depth (From Surface Reference)	Feet
h	= Interval Tested	Feet
h_1	= Net Pay Thickness	Feet
K	= Permeability	md
K_1	= Permeability (From Net Pay Zone h_1)	md
m	= Slope Extrapolated Pressure Plot (Psi^2/cycle Gas)	psi/cycle
OF_1	= Maximum Indicated Flow Rate	MCF/D
OF_2	= Minimum Indicated Flow Rate	MCF/D
OF_3	= Theoretical Open Flow Potential with/Damage Removed Max.	MCF/D
OF_4	= Theoretical Open Flow Potential with/Damage Removed Min.	MCF/D
P_s	= Extrapolated Static Pressure	Psig.
P_F	= Final Flow Pressure	Psig.
P_{ot}	= Potentiometric Surface (Fresh Water *)	Feet
Q	= Average Adjusted Production Rate During Test	bbls/day
Q_1	= Theoretical Production w/Damage Removed	bbls/day
Q_g	= Measured Gas Production Rate	MCF/D
R	= Corrected Recovery	bbls
r_w	= Radius of Well Bore	Feet
t	= Flow Time	Minutes
t_o	= Total Flow Time	Minutes
T	= Temperature Rankine	°R
Z	= Compressibility Factor	——
μ	= Viscosity Gas or Liquid	CP
Log	= Common Log	

* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.