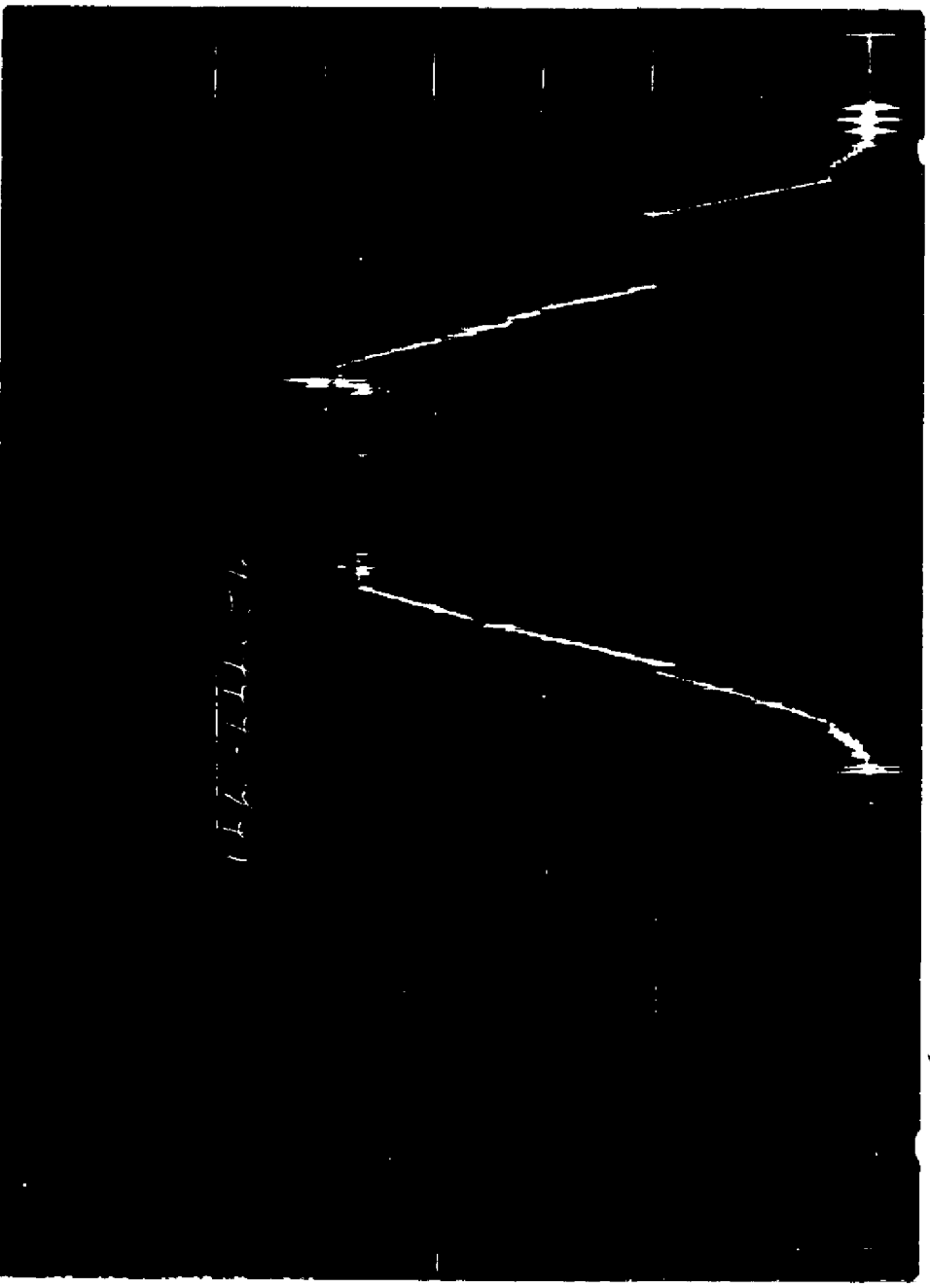
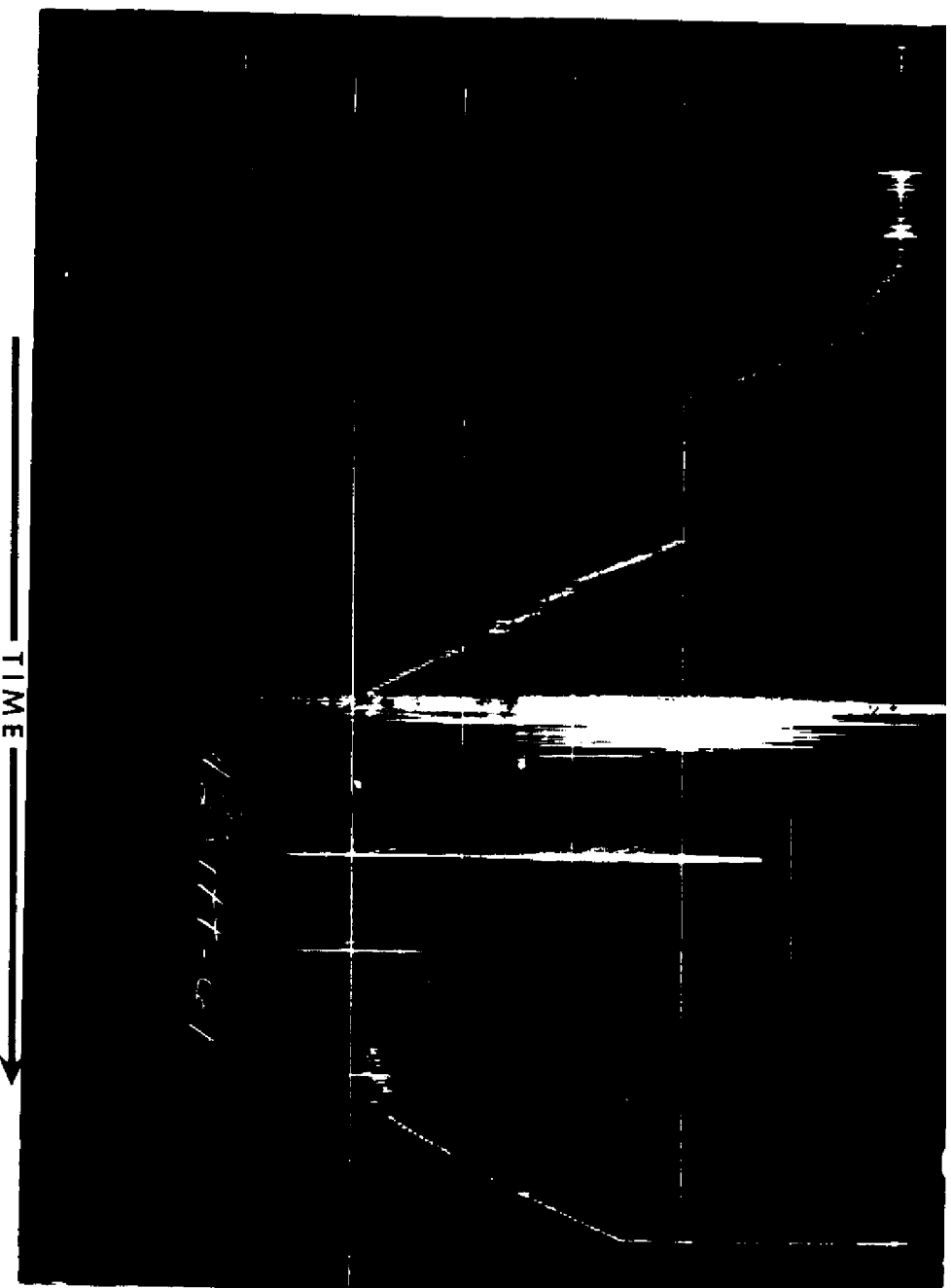


NOMENCLATURE

b	= Approximate Radius of Investigation	Feet
b_1	= Approximate Radius of Investigation (Net Pay Zone h_1)	Feet
$D.R.$	= Damage Ratio	—
EI	= 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/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_o	= 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 60°F.



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

TIGHT HOLE

FLUID SAMPLE DATA				Date 10-14-72		Ticket Number 458444	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of Job OPEN HOLE		Halliburton District FARMINGTON	
Recovery: Cu. Ft. Gas _____				Tester MR. DAVIS		Witness MR. POOL	
cc. Oil _____				Drilling Contractor LOFFLAND #232 IC			
cc. Water _____				EQUIPMENT & HOLE DATA			
cc. Mud _____				Formation Tested Upper Mississippi			
Tot. Liquid cc. _____				Elevation _____ Ft.			
Gravity _____ ° API @ _____ °F.				Net Productive Interval 40' _____ Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.				All Depths Measured From Rotary Kelly Bushing			
RESISTIVITY _____ CHLORIDE CONTENT _____				Total Depth 9320' _____ Ft.			
Recovery Water _____ @ _____ °F. _____ ppm				Main Hole/Casing Size 7 7/8"			
Recovery Mud _____ @ _____ °F. _____ ppm				Drill Collar Length 631' I.D. 2 1/2"			
Recovery Mud Filtrate _____ @ _____ °F. _____ ppm				Drill Pipe Length 8615' I.D. 3.826"			
Mud Pit Sample _____ @ _____ °F. _____ ppm				Packer Depth(s) 9275' - 9280' _____ Ft.			
Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm				Depth Tester Valve 9251' _____ Ft.			
Mud Weight 9.7 vis 43 cp							
TYPE CUSHION		AMOUNT 3700' WATER		Depth Back Ft. Pres. Valve		Surface Choke 3/4" ADJ. Bottom Choke 3/4"	
Recovered 180		Feet of Heavy mud					
Recovered 3700		Feet of Water cushion					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks Opened tool with a weak blow. Had to slide tool 10' to bottom. Took 10 minutes for tool to slide to bottom. Opened tool for 30 minutes. Closed tool for 60 minute initial closed in pressure. Reopened tool for 60 minute second flow with no blow. Closed tool for 60 minute second closed in pressure. ANCHOR PERFORATIONS PLUGGING THROUGHOUT TEST...MISRUN (Blow was getting weaker at end of first flow period.)							
TEMPERATURE		Gauge No. 64		Gauge No. 991		Gauge No. _____	
Depth:		9255' Ft.		9316' Ft.		Ft.	
Est. °F.		12 Hour Clock		24 Hour Clock		Hour Clock	
Blanked Off NO		Blanked Off YES		Blanked Off		Tool A.M.	
Actual °F.		Pressures		Pressures		Pressures	
Field		Office		Field		Office	
Initial Hydrostatic -		4799		-		4844	
Flow Initial		NO		Flow Initial		NO	
Flow Final		READINGS...		Flow Final		READINGS...	
Closed in		PLUGGING		Closed in		PLUGGING	
First Period				First Period			
Flow Initial				Flow Initial			
Flow Final				Flow Final			
Closed in				Closed in			
Second Period				Second Period			
Flow Initial				Flow Initial			
Flow Final				Flow Final			
Closed in				Closed in			
Third Period				Third Period			
Flow Initial				Flow Initial			
Flow Final				Flow Final			
Closed in				Closed in			
Final Hydrostatic -		4748		Final Hydrostatic -		4802	

Legal Location Sec. - Twp. - Rng. 10 - 22N - 14W

Lease Name NAVAJO

Well No. 1-10

Test No. 1

9280' - 9320'

County SAN JUAN

State NEW MEXICO

H. A. CHAPMAN

Lease Owner/Company Name

458444

	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub	5 3/4"	2 1/2"	1'	
Water Cushion Valve				
Drill Pipe	4 1/2"	3.826"	8615'	
Drill Collars	6"	2 1/2"	631'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	1"	5'	
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	4'	9251'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"		4'	9255'
Hydraulic Jar	5"	1"	5'	
VR Safety Joint	5"	1"	2'	
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.3"	5'	9275'
Distributor				
Packer Assembly	6 3/4"	1.3"	5'	9280'
Flush Joint Anchor	5 3/4"	2 1/2"	36'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
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	5 3/4"		4'	9316'