

Flow Time	1st 30 Min.	2nd 30 Min.	Date	2-29-68	Ticket Number	480491
Closed In Press. Time	1st 60 Min.	2nd 60 Min.	Kind of Job	OPEN HOLE	Halliburton District	LIBERAL
Pressure Readings	Field	Office Corrected	Tester	B.J. BOBBITT	Witness	J. ARMSTRONG
Depth Top Gauge	2550 Ft.	no Blanked Off	Drilling Contractor	BAKER & TAYLOR DRILLING COMPANY	LC	
BT. P.R.D. No.	538	12 Hour Clock	Elevation	2763' KB	Top Packer	2565'
Initial Hydro Mud Pressure	1183	1182	Total Depth	2620'	Bottom Packer	2570'
Initial Closed in Pres.	100	90	Interval Tested	2570' - 2620'	Formation Tested	Krider
Initial Flow Pres.	0 1 7	33 2 48	Casing or Hole Size	7 7/8"	Casing Perfs.	Top Bot.
Final Flow Pres.	33 1 32	50 2 52	Surface Choke	1"	Bottom Choke	3/4"
Final Closed in Pres.	100	93	Size & Kind Drill Pipe	4 1/2" FH	Drill Collars Above Tester	I.D. - LENGTH 2 1/4" - 420'
Final Hydro Mud Pressure	1183	1175	Mud Weight	8.8	Mud Viscosity	24
Depth Cen. Gauge		Blanked Off	Temperature	92	Anchor Size & Length	ID 2.875" OD 5.00" X 50'
BT. P.R.D. No.		Hour Clock	Depths Mea. From	Kelly Bushing	Depth of Tester Valve	2549 Ft.
Initial Hydro Mud Pres.			Cushion	-	Depth Back Pres. Valve	-
Initial Closed in Pres.			Recovered	97	Feet of mud	- no show.
Initial Flow Pres.	1		Recovered		Feet of	
Final Flow Pres.	1		Recovered		Feet of	
Final Closed in Pres.			Recovered		Feet of	
Final Hydro Mud Pres.			Oil A.P.I. Gravity		Water Spec. Gravity	
Depth Bot. Gauge	2617 Ft.	yes Blanked Off	Gas Gravity		Surface Pressure	psi
BT. P.R.D. No.	536	12 Hour Clock	Tool Opened	1:15 A.M.	A.M. P.M. Tool Closed	3:15 A.M. P.M.
Initial Hydro Mud Pres.	1185	1211	Remarks	Opened tool for a 30 minute initial flow		
Initial Closed in Pres.	133	121	with very weak blow - dead in 25 minutes. Took a			
Initial Flow Pres.	33 1 36	66 2 79	60 minute initial closed in pressure. Reopened			
Final Flow Pres.	66 1 65	99 2 84	tool for a 30 minute final flow with weak blow -			
Final Closed in Pres.	133	127	died in 13 minutes. Closed tool for a 60 minute			
Final Hydro Mud Pres.	1185	1205	final closed in pressure.			

FORMATION TEST DATA

MC VEY

1

1

YUCCA PETROLEUM COMPANY

AMARILLO

Lease Name

Well No.

Test No.

Lease Owner/Company Name

Owner's District

Legal Location C SE NW 16 33S 31W

Field Area

WINDCAT

County

SOWARD

State

KANSAS

Mea. From Tester Valve

PRESSURE
↓

480491-538

TIME
→

480491-536

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

Flow Time	1st Min. 15	2nd Min. 60	Date	2-29-68	Ticket Number	407519 - S
Closed In Press. Time	1st Min. 60	2nd Min. 60	Kind of Job	OPEN HOLE	Halliburton District	LIBERAL
Pressure Readings	Field	Office Corrected	Tester	MR. REECE	Witness	MR. VAUGHAN
Depth Top Gauge	2688 Ft.	Blanked Off NO	Drilling Contractor	BAKER & TAYLOR	IC	
BT. P.R.D. No.	699	12 Hour Clock	Elevation	2763' K.B.	Top Packer	2673'
Initial Hydro Mud Pressure	1215	1232	Total Depth	2724'	Bottom Packer	2677'
Initial Closed in Pres.	488	502	Interval Tested	2677' - 2724'	Formation Tested	WINFIELD
Initial Flow Pres.	48 1 91 2	31 105	Casing or Hole Size	7 7/8"	Casing Perfs. } Top Bot.	-
Final Flow Pres.	122 1 168 2	96 207	Surface Choke	1"	Bottom Choke	1/2"
Final Closed in Pres.	457	473	Size & Kind Drill Pipe	4 1/2" F.H.	Drill Collars Above Tester	I.D. - LENGTH 2 1/4" x 675'
Final Hydro Mud Pressure	1215	1227	Mud Weight	8.7	Mud Viscosity	36
Depth Cen. Gauge	Ft.	Blanked Off	Temperature	- °F Est. 101 °F Actual	Anchor Size ID & Length OD	2.8" X 22' 5.0"
BT. P.R.D. No.		Hour Clock	Depths Mea. From	KELLY BUSHINGS	Depth of Tester Valve	2655' Ft.
Initial Hydro Mud Pres.			TYPE AMOUNT		Depth Back Pres. Valve	2650' Ft.
Initial Closed in Pres.			Cushion	-		
Initial Flow Pres.	1		Recovered	Feet of	LOST RECOVERY COMING	
Final Flow Pres.	2		Recovered	Feet of	OUT OF THE HOLE. TOTAL	
Final Flow Pres.	1		Recovered	Feet of	RECOVERY UNKNOWN	
Final Closed in Pres.			Recovered	Feet of		
Final Hydro Mud Pres.			Oil A.P.I. Gravity	-	Water Spec. Gravity	-
Depth Bot. Gauge	2720 Ft.	Blanked Off YES	Gas Gravity	-	Surface Pressure	- psi
BT. P.R.D. No.	196	12 Hour Clock	Tool Opened	8:30 PM	A.M. P.M. Tool Closed	10:45 PM A.M. P.M.
Initial Hydro Mud Pres.	1223	1257	Remarks	Opened tool for 15 minute 1st flow with a		
Initial Closed in Pres.	524	524	weak blow increasing to good blow. Closed tool for			
Initial Flow Pres.	45 1 90 2	57 127	60 minute initial closed in pressure. Reopened tool			
Final Flow Pres.	120 1 180 2	115 229	for 60 minute 2nd flow with a weak blow increasing			
Final Closed in Pres.	494	496	to good and decreasing to fair at end of test.			
Final Hydro Mud Pres.	1223	1251	Closed tool for 60 minute final closed in pressure.			

FORMATION TEST DATA

MC VEY

1

2

YUCCA PETROLEUM COMPANY

KANSAS

5

Gauge No. 699		Depth 2688'		Clock 12 hour		Ticket No. 407519				
First Flow Period			Initial Closed In Pressure			Second Flow Period		Final Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
P ₀	.000	31	.000		96	.000	105	.000		207
P ₁	.0212	61	.0404		256	.0672	136	.0407		355
P ₂	.0424	78	.0808		372	.1344	159	.0814		395
P ₃	.0636	85	.1212		425	.2016	177	.1221		418
P ₄	.0848	91	.1616		451	.2688	189	.1628		431
P ₅	.1060	96	.2020		468	.3360	198	.2035		444
P ₆			.2424		480	.4030	207	.2442		451
P ₇			.2828		488			.2849		459
P ₈			.3232		494			.3256		463
P ₉			.3636		498			.3663		468
P ₁₀			.4040		502			.4070		473

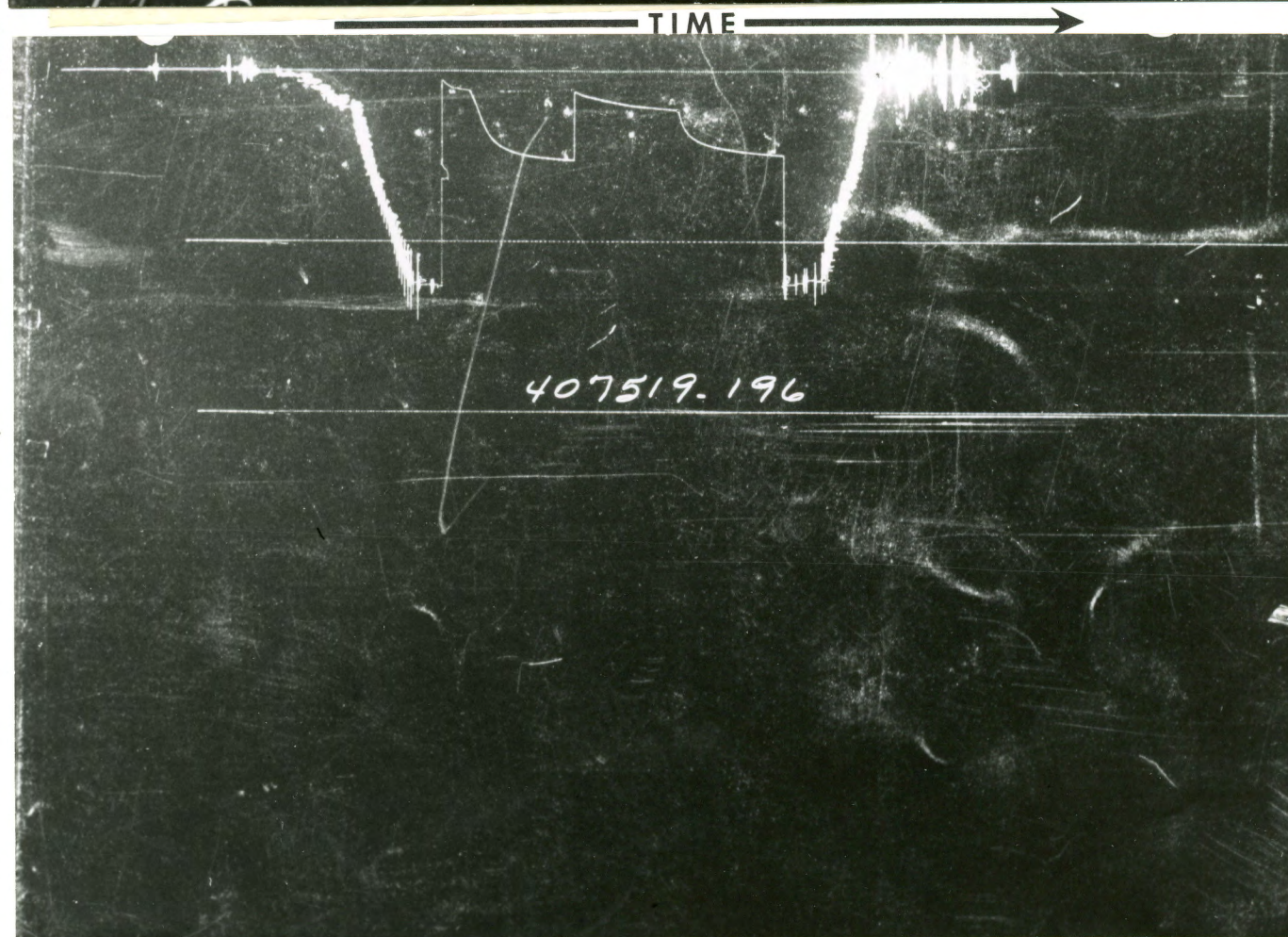
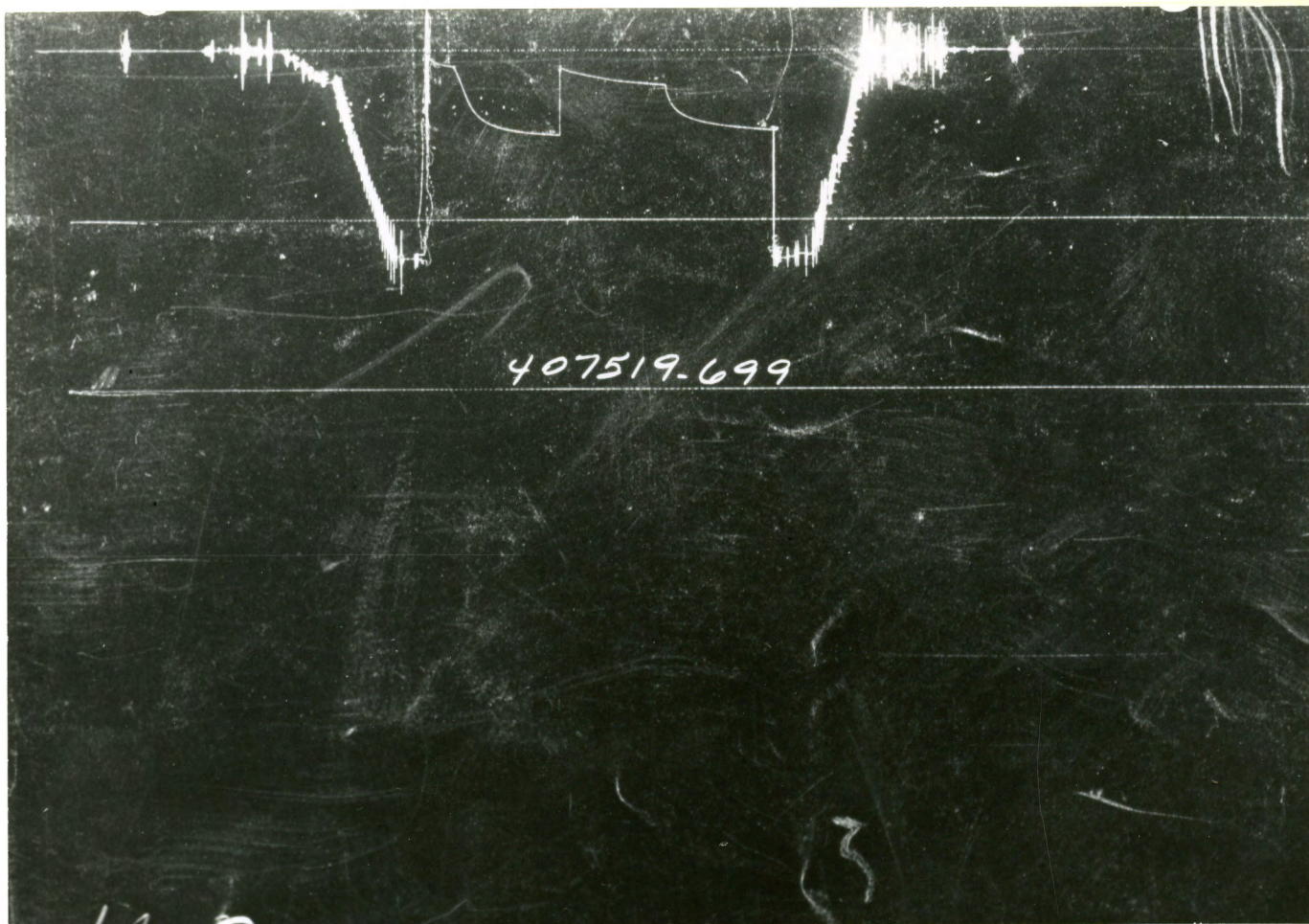
Gauge No. 196		Depth 2720'		Clock 12 hour	
P ₀	.000	57	.000		115
P ₁	.022	81	.0406		268
P ₂	.044	99	.0812		389
P ₃	.066	103	.1218		445
P ₄	.088	109	.1624		473
P ₅	.110	115	.2030		493
P ₆			.2436		503
P ₇			.2842		510
P ₈			.3248		516
P ₉			.3654		521
P ₁₀			.4060		524

Reading Interval 3	6	10	6	Minutes
REMARKS:				

SPECIAL PRESSURE DATA

5

PRESSURE



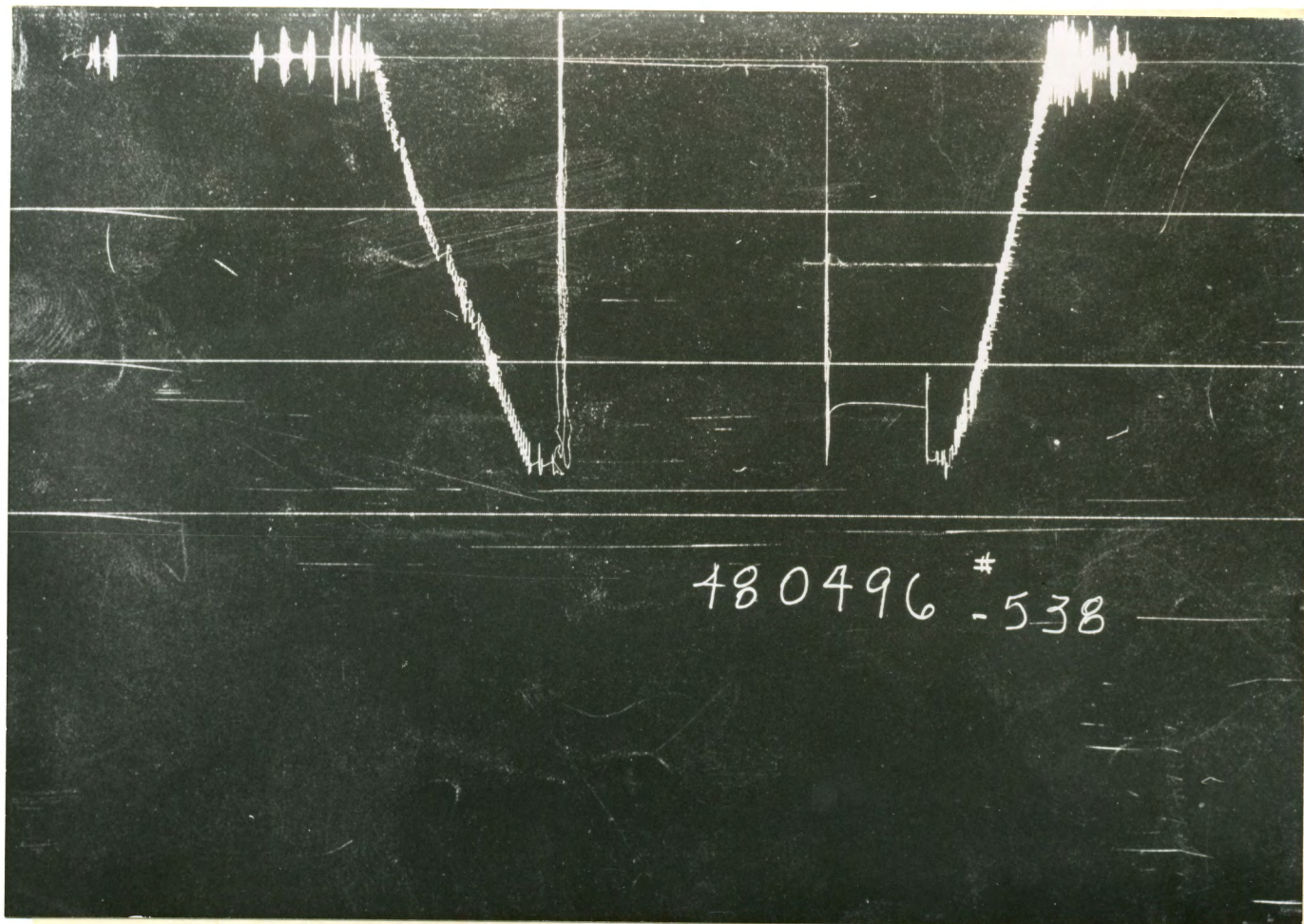
Each Horizontal Line Equal to 1000 p.s.i.

Flow Time	1st 30 Min.	2nd 60 Min.	Date	3-10-68	Ticket Number	480496	Legal Location Sec. - Twp. - Rng.	MO VEX	1	Well No.	5	Test No.	Field Area	WILD CAT	County	SEWARD	Lease Name	YUCCA PETROLEUM COMPANY	Owner's District	AMARILLO, TEXAS
Closed In Press. Time	1st 60 Min.	2nd 60 Min.	Kind of Job	OPEN HOLE	Halliburton District	LIBERAL														
Pressure Readings	Field	Office Corrected	Tester	BOBBITT	Witness	ARMSTRONG														
Depth Top Gauge	5579' Ft.	NO Blanked Off	Drilling Contractor	BAKER AND TAYLOR DRILLING COMPANY																
BT. P.R.D. No.	538	12 Hour Clock	Elevation	2763' K.B.	Top Packer	5594'														
Initial Hydro Mud Pressure	2671	2730	Total Depth	5666'	Bottom Packer	5599'														
Initial Closed in Pres.	50	48	Interval Tested	(NET PAY 30') 5599' - 5666'	Formation Tested	ST. GEN														
Initial Flow Pres.	0 1 15 16.7 2 47		Casing or Hole Size	7 7/8"	Casing Perfs. Top Bot.	-														
Final Flow Pres.	33.3 1 22 33.3 2 47		Surface Choke	1"	Bottom Choke	3/4"														
Final Closed in Pres.	MISSED	-	Size & Kind Drill Pipe	4 1/2" F.H.	Drill Collars Above Tester	I.D. - LENGTH 2 1/2" x 270'														
Final Hydro Mud Pressure	2637.5	2631	Mud Weight	9.1	Mud Viscosity	48														
Depth Cen. Gauge		Blanked Off	Temperature	C-100	Anchor Size ID OD	2.875" X 5" 67'														
BT. P.R.D. No.		Hour Clock	Depths Mea. From	KELLY BUSHING	Depth of Tester Valve	5577' Ft.														
Initial Hydro Mud Pres.			Cushion	NONE	Depth Back Pres. Valve	NONE														
Initial Closed in Pres.			Recovered	77' Feet of	mud - no show															
Initial Flow Pres.	1 2		Recovered	Feet of																
Final Flow Pres.	1 2		Recovered	Feet of																
Final Closed in Pres.			Recovered	Feet of																
Final Hydro Mud Pres.			Oil A.P.I. Gravity		Water Spec. Gravity															
Depth Bot. Gauge	5663' Ft.	YES Blanked Off	Gas Gravity		Surface Pressure	psi														
BT. P.R.D. No.	536	12 Hour Clock	Tool Opened	11:30 PM A.M. P.M.	Tool Closed	2:00 AM P.M.														
Initial Hydro Mud Pres.	2709.1	2755	Remarks	Tool opened @ 11:30 PM for a 30 minute																
Initial Closed in Pres.	99.3	93	first flow with a very weak blow - died in 12 minutes																	
Initial Flow Pres.	66.2 1 65 82.8 2 88		Tool closed @ 12:00 AM for a 60 minute initial closed																	
Final Flow Pres.	82.8 1 68 82.8 2 88		in pressure. Tool reopened @ 1:00 AM with a few																	
Final Closed in Pres.	MISSED	-	bubbles and died. Tool closed @ 2:00 for a 60 minute																	
Final Hydro Mud Pres.	2692.7	2673	final closed in pressure. Off bottom @ 3:00 AM....																	

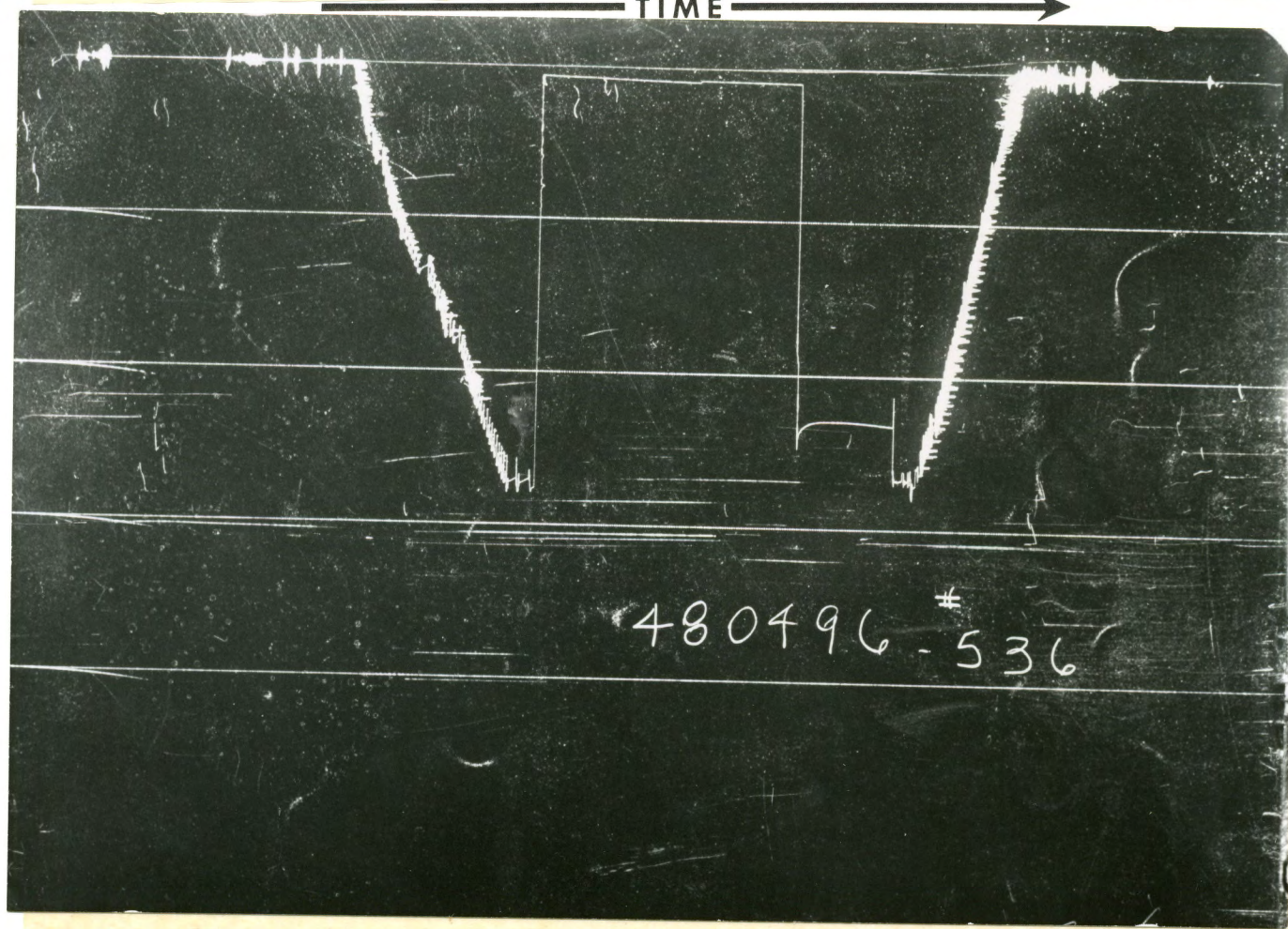
FORMATION TEST DATA

5

↓
PRESSURE
↓



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

Flow Time	1st 30 Min.	2nd 60 Min.	Date	3-13-68	Ticket Number	407525 - S	Legal Location Sec. - Twp. - Rng. 16 - 33 - 38 N
Closed In Press. Time	1st 60 Min.	2nd 120 Min.	Kind of Job	HOOK	Halliburton District	LIBERAL	
Pressure Readings	Field	Office Corrected	Tester	REECE	Witness	ARMSTRONG	
Depth Top Gauge	5720' Ft.	NO Blanked Off	Drilling Contractor	BAKER AND TAYLOR			
BT. P.R.D. No.	1605	12 Hour Clock	Elevation	2763' K.B.	Top Packer	5710' 5715'	Field Area
Initial Hydro Mud Pressure	2687	2829	Total Depth	6014'	Bottom Packer	5875'	
Initial Closed in Pres.	166	209	Interval Tested	5715'-5875'	Formation Tested	MISSISSIPPIAN	
Initial Flow Pres.	50 1 50	50 2 86	Casing or Hole Size	7 7/8"	Casing Perfs. { Top - Bot. -		
Final Flow Pres.	50 1 66	66 2 86	Surface Choke	1"	Bottom Choke	1/2"	Well No. 1
Final Closed in Pres.	133	161	Size & Kind Drill Pipe	4 1/2" F.H.	Drill Collars Above Tester	I.D. - LENGTH 3" x 273'	
Final Hydro Mud Pressure	2687	2829	Mud Weight	9.1	Mud Viscosity	48	
Depth Cen. Gauge	5760' Ft.	NO Blanked Off	Temperature	127 °F Est. °F Actual	Anchor Size & Length	ID 2.8" OD 5.0" x 52'	
BT. P.R.D. No.	699	12 Hour Clock	Depths Mea. From	KELLY BUSHTON	Depth of Tester Valve	5700' Ft.	Test No. 6
Initial Hydro Mud Pres.	2676	2845	TYPE AMOUNT Cushion	NONE	Depth Back Pres. Valve	5695' Ft.	
Initial Closed in Pres.	198	233	Recovered	140' Feet of drilling mud - very slightly oil cut			
Initial Flow Pres.	46 1 78	46 2 107	Recovered	Feet of			
Final Flow Pres.	61 1 91	76 2 113	Recovered	Feet of			S. PLAINS, KANSAS County
Final Closed in Pres.	137	189	Recovered	Feet of			
Final Hydro Mud Pres.	2676	2845	Oil A.P.I. Gravity		Water Spec. Gravity		
Depth Bot. Gauge	5886' Ft.	YES Blanked Off	Gas Gravity		Surface Pressure	psi	
BT. P.R.D. No.	196	12 Hour Clock	Tool Opened	6:30 PM A.M. P.M.	Tool Closed	9:00 PM A.M. P.M.	SEWARD
Initial Hydro Mud Pres.		2886	Remarks	Tool opened for a 30 minute first			
Initial Closed in Pres.		-		flow with a very weak blow - increased to a weak			
Initial Flow Pres.	1 2 -			blow. Rotated tool for a 60 minute initial closed			
Final Flow Pres.	1 2 -			in pressure. Tool reopened with a weak blow for			State KANSAS
Final Closed in Pres.	HYDROSTATIC RELEASE:	2152		21 minutes - then well was dead for the rest of the			
Final Hydro Mud Pres.		2886		test. Took a 120 minute final closed in pressure.			

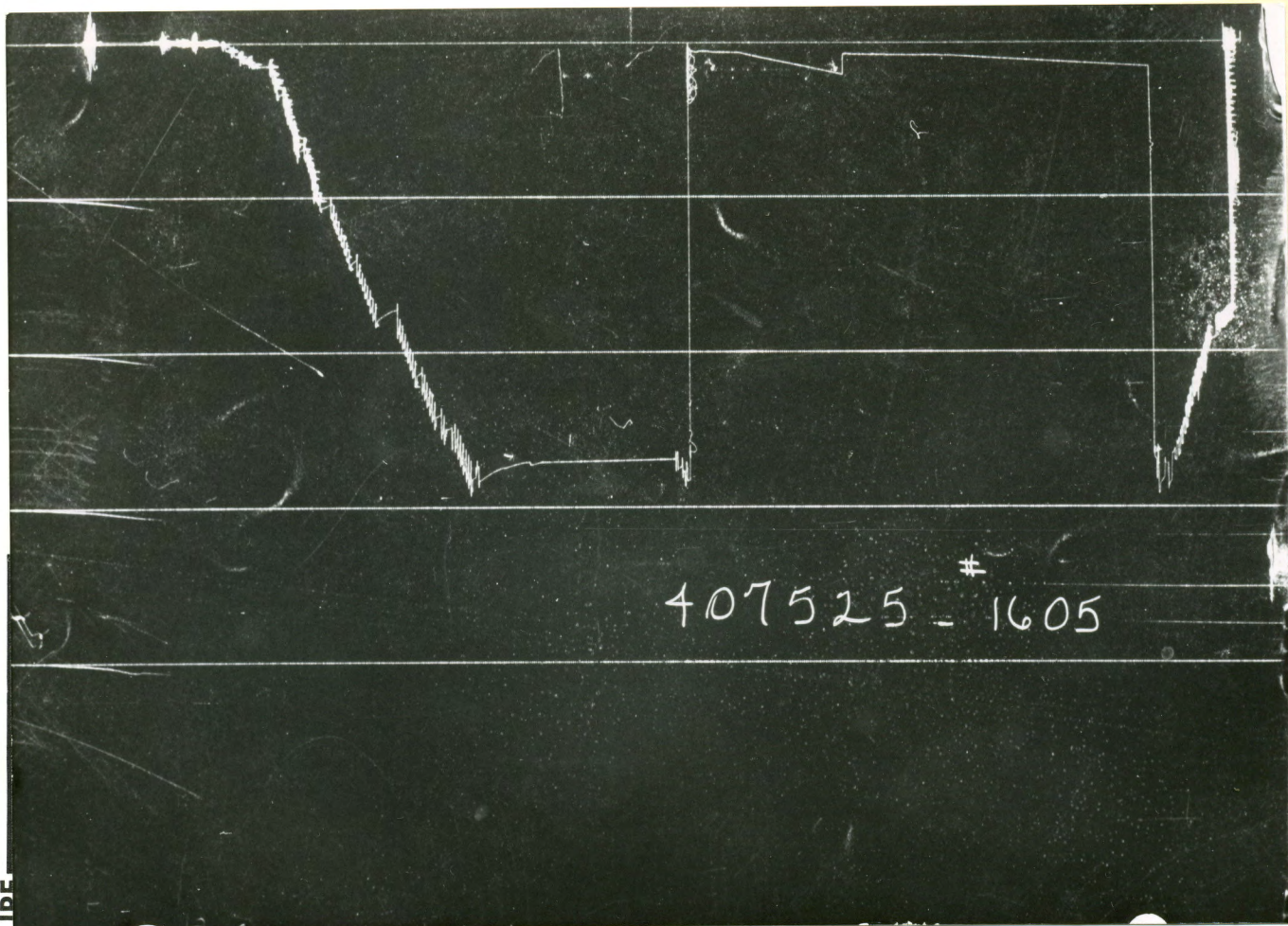
FORMATION TEST DATA

Gauge No.		1605		Depth		5720'		Clock		12 hour		Ticket No.		407525	
First Flow Period			Initial Closed In Pressure			Second Flow Period			Final Closed In Pressure						
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.					
P ₀	.000	50	.000		66	.000	86	.000		86					
P ₁	.203	66	.406		209	.423	86	.783		161					
P ₂															
P ₃															
P ₄															
P ₅															
P ₆															
P ₇															
P ₈															
P ₉															
P ₁₀															

Gauge No.		699		Depth		5760'		Clock		12 hour	
P ₀	.000	78	.000		91	.000	107	.000		113	
P ₁	.201	91	.403		233	.428	113	.775		189	
P ₂											
P ₃											
P ₄											
P ₅											
P ₆											
P ₇											
P ₈											
P ₉											
P ₁₀											

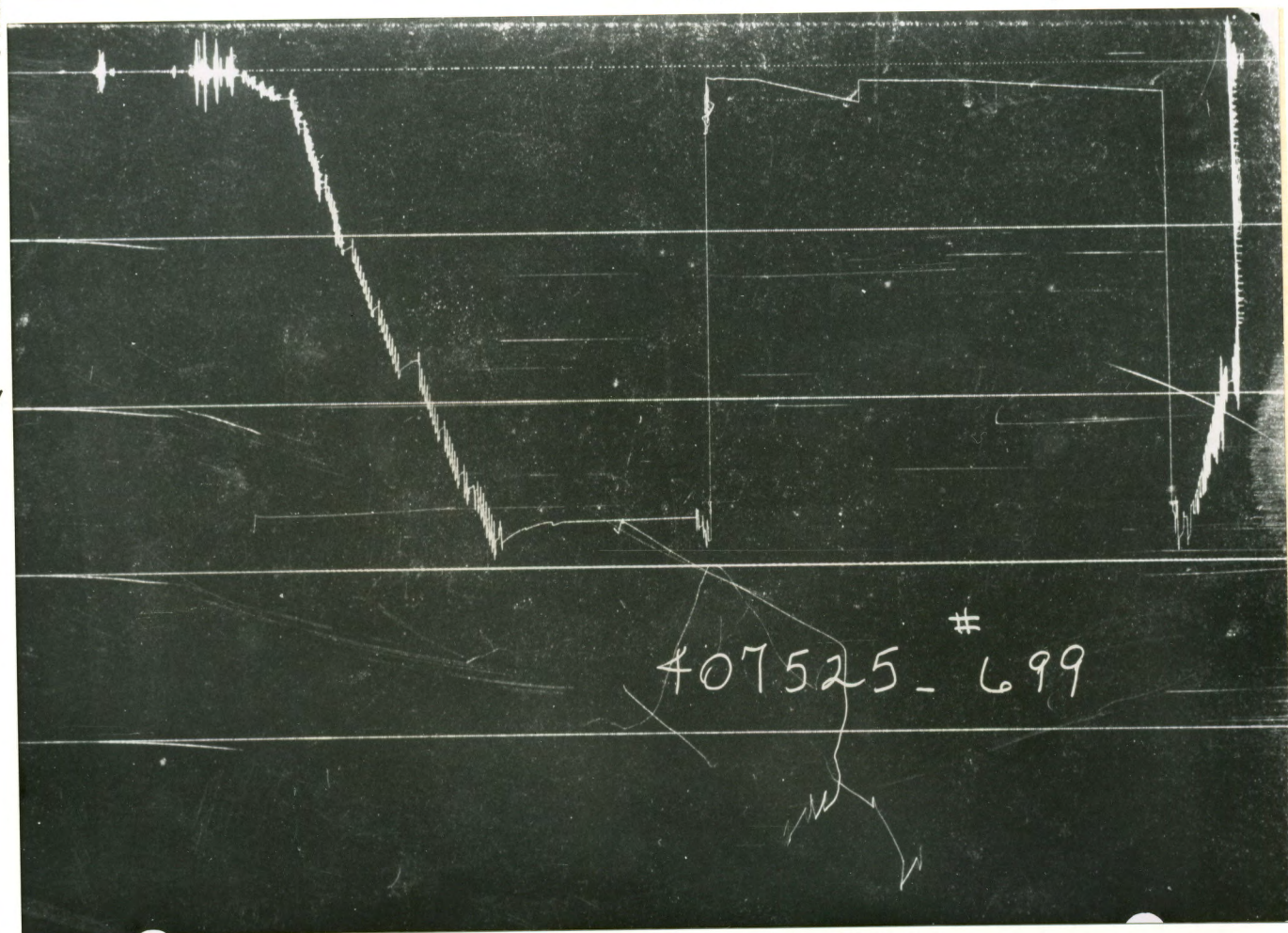
Reading Interval		Minutes	
REMARKS:			

SPECIAL PRESSURE DATA

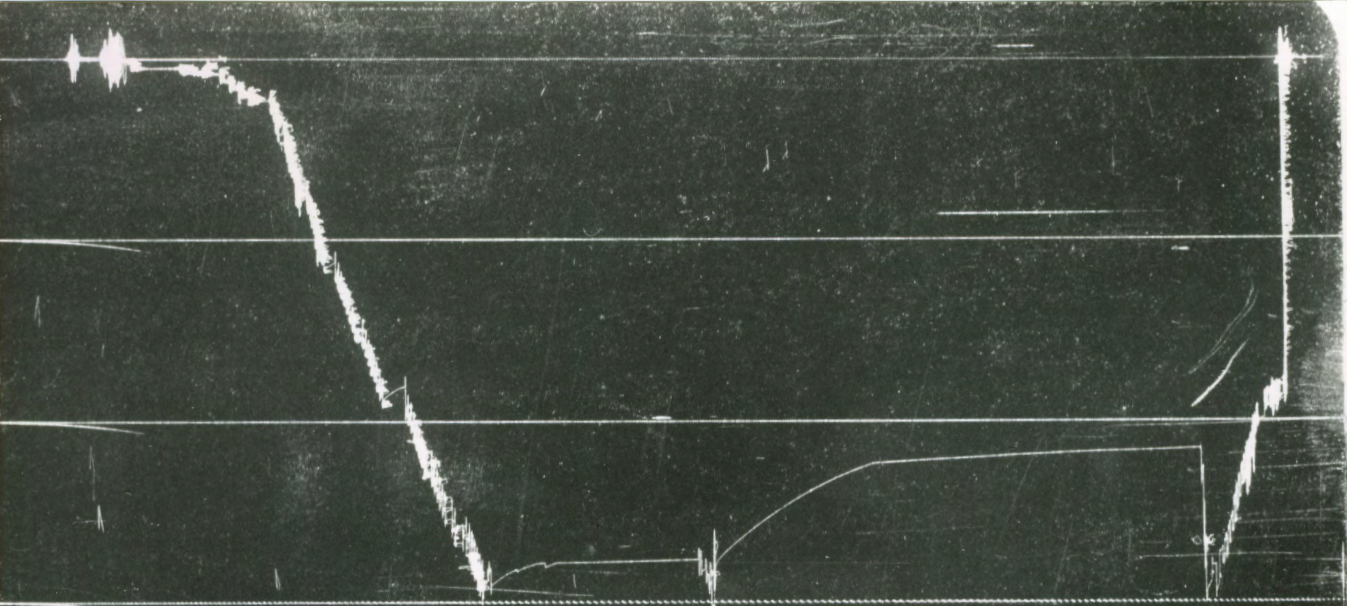


PRESSURE

TIME



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



407525 - # 196

NOMENCLATURE

b	= Approximate Radius of Investigation	Feet
b₁	= 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
h₁	= Net Pay Thickness	Feet
K	= Permeability	md
K₁	= Permeability (From Net Pay Zone h ₁)	md
m	= Slope Extrapolated Pressure Plot (Psi ² /cycle Gas)	psi/cycle
OF₁	= Maximum Indicated Flow Rate	MCF/D
OF₂	= Minimum Indicated Flow Rate	MCF/D
OF₃	= Theoretical Open Flow Potential with/Damage Removed Max.	MCF/D
OF₄	= 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
Q₁	= 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.