

15-171-20082

36-18s-33w

FLUID SAMPLE DATA				Date 9-27-75		Ticket Number 110308	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of Job OPEN HOLE TEST		Halliburton District LIBERAL	
Recovery: Cu. Ft. Gas _____				Tester SPOHN & HOWELL		Witness E. DONNELLY	
cc. Oil _____				Drilling Contractor SAGE DRILLING COMPANY RIG# 1 TH			
cc. Water _____				EQUIPMENT & HOLE DATA			
cc. Mud _____				Formation Tested Krider			
Tot. Liquid cc. _____				Elevation 2937' K.B. Ft.			
Gravity _____ ° API @ _____ ° F.				Net Productive Interval 10' Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.				All Depths Measured From Kelly Bushing			
RESISTIVITY _____ CHLORIDE CONTENT _____				Total Depth 2775' Ft.			
Recovery Water @ _____ ° F. _____ ppm				Main Hole/Casing Size 7 7/8" - 8 5/8"			
Recovery Mud @ _____ ° F. _____ ppm				Drill Collar Length & WP 325' - 940' I.D. 2.25" - 2.764"			
Recovery Mud Filtrate @ _____ ° F. _____ ppm				Drill Pipe Length 1510' I.D. 3.826"			
Mud Pit Sample @ _____ ° F. _____ ppm				Packer Depth(s) 2718' Ft.			
Mud Pit Sample Filtrate @ _____ ° F. _____ ppm				Depth Tester Valve 2702' Ft.			
Mud Weight 9.2 vis 34 cp							
TYPE		AMOUNT		Depth Back Surface		Bottom	
Cushion				Ft. Pres. Valve		Choke 1/4" Choke 3/4"	
Recovered 2		Feet of drilling mud.					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks Opened tool for 45 minute first flow period with a very weak blow to no blow. Closed tool for 45 minute first closed in pressure. Reopened tool for 45 minute second flow period with no blow. Closed tool for 45 minute second closed in pressure.							
TEMPERATURE		Gauge No. 1606		Gauge No. 1605		Gauge No.	
Depth: 2706 Ft.		Depth: 2771 Ft.		Depth: _____ Ft.		TIME	
12 Hour Clock		12 Hour Clock		Hour Clock		Tool A.M.	
Blanked Off NO		Blanked Off YES		Blanked Off		Opened 0345 P.M.	
2770						Opened A.M.	
Actual 108 ° F.		Pressures		Pressures		Bypass 0645 P.M.	
		Field Office		Field Office		Reported Computed	
Initial Hydrostatic		1363 1413 1397				Minutes Minutes	
First Period Flow Initial		8 33 45				45	
Final		10 50 45				45	
Closed in		17 50 53				45	
Second Period Flow Initial		10 33 45				45	
Final		10 33 45				45	
Closed in		13 50 50				45	
Third Period Flow Initial							
Final							
Closed in							
Final Hydrostatic		1340 1380 1372					

STEEL
Lease Name

Well No.

Test No.

2718' - 2775'
Tested IntervalTHE MAURICE L. BROWN COMPANY
Lease Owner/Company NameLegal Location
Sec. - Twp. - Rng. C 512 NE

36 - 18s - 33w

Field Area
WILDCAT

County

SCOTT

State
KANSAS

FORM 107-R1-PRINTED IN U.S.A.

110308-1606

PRESSURE

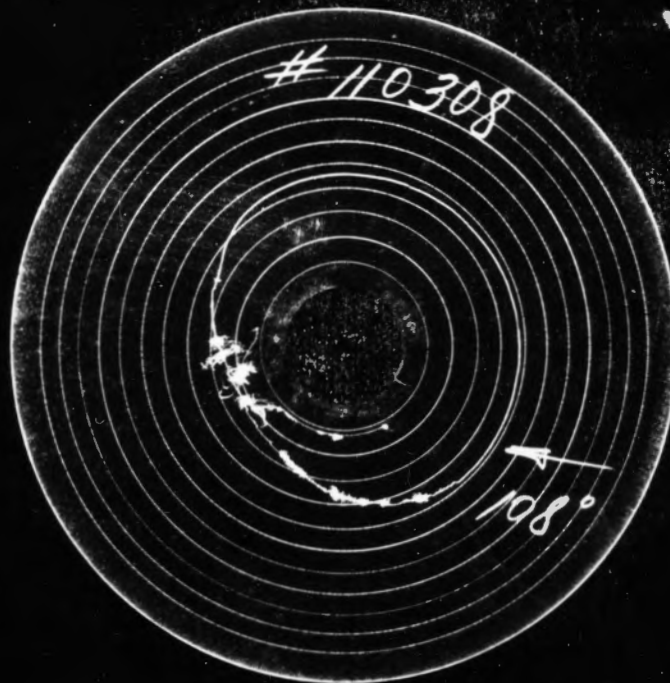
TIME

110308-1605

1605

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

TEMPERATURE RECORDER CHART



10° each circle

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.

Casing perms. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 163061
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F
 INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED _____

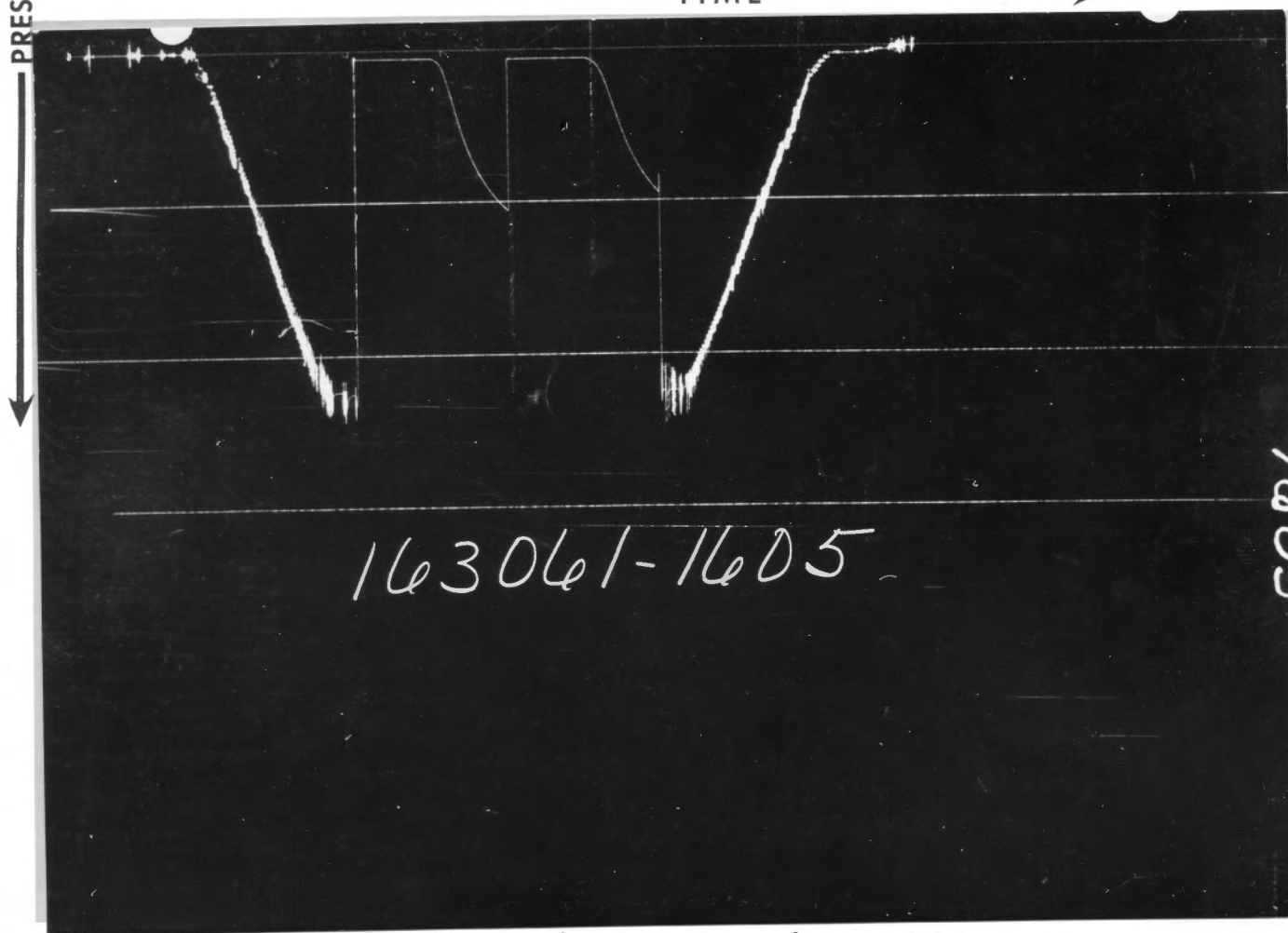
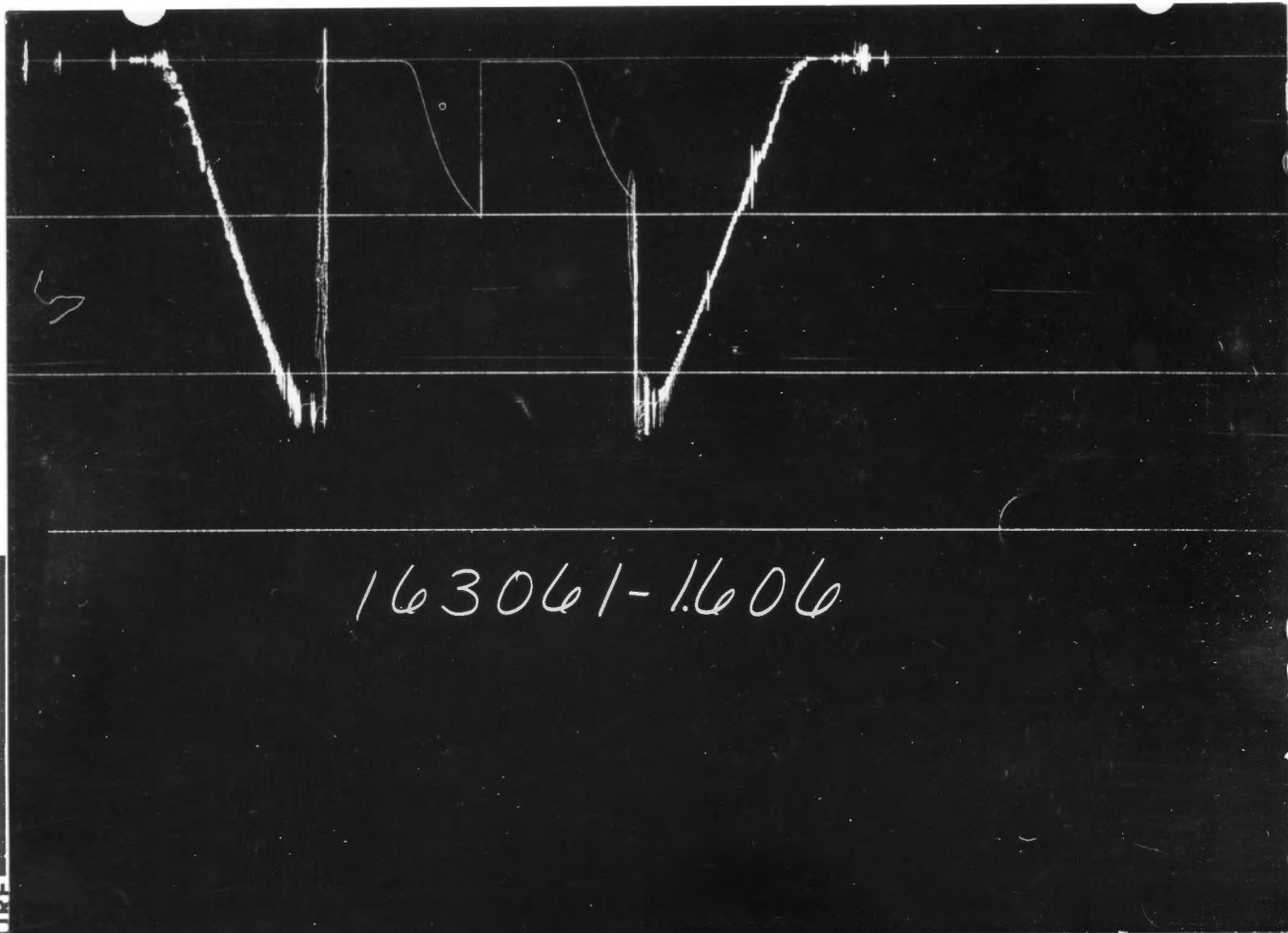
[illegible]

Gauge No. 1606		Depth 4384'		Clock No. 3230		12 hour		Ticket No. 163061	
First Flow Period		First Closed In Pressure		Second Flow Period		Second Closed In Pressure		Third Flow Period	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0 .0000	13	.0000	15	.0000	20	.0000	20		
1 .3090	15	.0394	79*	.3120	20	.0264	38		
2		.0657	213			.0529	86		
3		.0919	365			.0794	188		
4		.1182	507			.1058	315		
5		.1444	623			.1323	446		
6		.1707	724			.1587	561		
7		.1970	807			.1852	657		
8		.2232	872			.2116	738		
9		.2495	928			.2381	807		
10		.2757	975			.2645	864		
11		.3020	1020			.2910	910		
12									
13									
14									
15									

Gauge No. 1605		Depth 4466'		Clock No. 2596		12 hour	
First Flow Period		First Closed In Pressure		Second Flow Period		Second Closed In Pressure	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0 .0000	58	.0000	58	.0000	63	.0000	63
1 .3070	58	.0403	104*	.3070	63	.0271	79
2		.0672	227			.0542	121
3		.0940	379			.0813	214
4		.1209	534			.1084	343
5		.1478	663			.1355	470
6		.1746	761			.1625	590
7		.2015	845			.1896	694
8		.2284	912			.2167	778
9		.2553	971			.2438	845
10		.2821	1020			.2709	902
11		.3090	1059			.2980	949
12							
13							
14							
15							

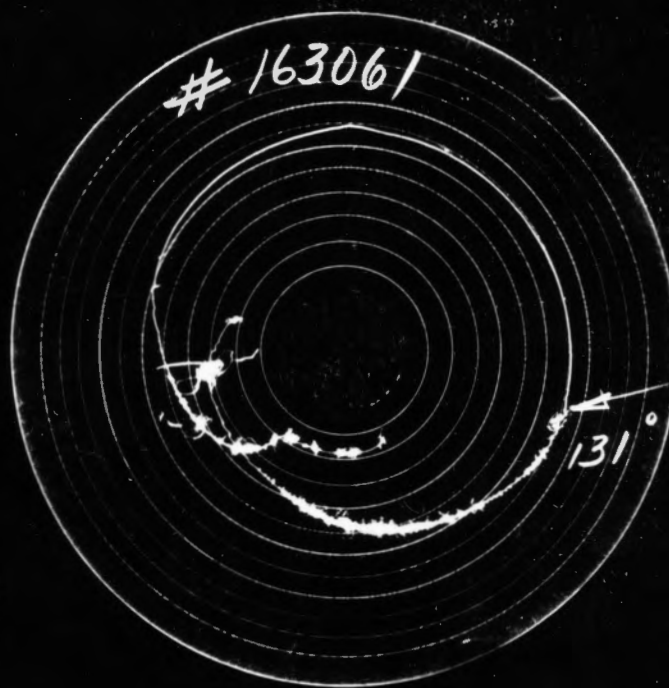
Reading Interval		4		4		Minutes	
REMARKS:		*Interval = 6 minutes					

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	5 3/4"	2.50"	1'	
Water Cushion Valve . Drill pipe ..	4 1/2"	3.826"	3105'	
Drill Pipe	4 1/2" WP	2.764"	940'	
Drill Collars	6"	2.25"	327'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.85"	5'	4375'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4380'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4384'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly				
Distributor				
Packer Assembly NR.....	6 3/4"	1.53"	6'	4399'
Flush Joint Anchor	5"	2.37"	14'	
Pressure Equalizing Tube				
Change over	5 3/4"	2.50"	1'	
Blanked-Off B.T. Running Case				
Drill Collars	6"	2.25"	28'	
Anchor Pipe Safety Joint				
Change over	5 3/4"	2.50"	1'	
Flush joint anchor	5"	2.37"	20'	
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
HT-500	5"	2.44"	1.50'	
Flush Joint Anchor				
Blanked-Off B.T. Running Case	5"	2.44"	4'	4466'
Total Depth				4470'



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

TEMPERATURE RECORDER CHART



10° each circle

- 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.

FLUID SAMPLE DATA				Date 10-4-75		Ticket Number 163062	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of Job OPEN HOLE TEST		Halliburton District LIBERAL	
Recovery: Cu. Ft. Gas _____ cc. Oil _____ cc. Water _____ cc. Mud _____ Tot. Liquid cc. _____				Tester MR. SPOHN		Witness MR. DONNELLY	
Gravity _____ ° API @ _____ ° F.				Drilling Contractor SAGE DRILLING COMPANY RIG #1 PW S			
Gas/Oil Ratio _____ cu. ft./bbl.				EQUIPMENT & HOLE DATA			
RESISTIVITY _____ CHLORIDE CONTENT _____				Formation Tested Mississippi			
				Elevation 2937' Ft.			
				Net Productive Interval 8' Ft.			
Recovery Water @ _____ ° F. ppm				All Depths Measured From Kelly Bushing			
Recovery Mud @ _____ ° F. ppm				Total Depth 4755' Ft.			
Recovery Mud Filtrate @ _____ ° F. ppm				Main Hole/Casing Size 7 7/8" - 8 5/8"			
Mud Pit Sample @ _____ ° F. ppm				Drill Collar Length 353' I.D. 2.25"			
Mud Pit Sample Filtrate @ _____ ° F. ppm				Drill Pipe Length 940' WP - 3403' I.D. 2.764" WP - 3.826"			
Mud Weight 9.6 vis 41 cp				Packer Depth(s) 4725' Ft.			
				Depth Tester Valve 4706' Ft.			
TYPE		AMOUNT		Depth Back Pres. Valve		Surface Choke Bottom Choke	
Cushion				Ft.		1/4"	3/4"
Recovered	3	Feet of	Drilling mud.				
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks Opened tool for a 47 minute first flow period with a very weak blow, decreasing to no blow in 15 minutes. Closed tool for a 42 minute initial closed in pressure period. Reopened tool for a 47 minute second flow period with no blow. Closed tool for a 42 minute final closed in pressure period.							
TEMPERATURE		Gauge No. 1606	Gauge No. 1605	Gauge No.	TIME		
Depth:		4710' Ft.	4752' Ft.	Depth:	Hour Clock		
Est. ° F.		Blanked Off NO	Blanked Off YES	Blanked Off	Tool = A-A-A		
Actual 138 ° F.		Pressures	Pressures	Pressures	Opened 19:15 P.M.		
		Field Office	Field Office	Field Office	Bypass 22:15 P.M.		
					Reported Computed		
					Minutes Minutes		
First Period Flow	Initial	2398	2400	2428			
	Final	12	33	33			
	Closed in	13	50	35			
Second Period Flow	Initial	639	758	763			
	Final	23	50	43			
	Closed in	17	50	36			
Third Period Flow	Initial	476	530	497			
	Final						
	Closed in						
Final Hydrostatic		2382	2433	2423			

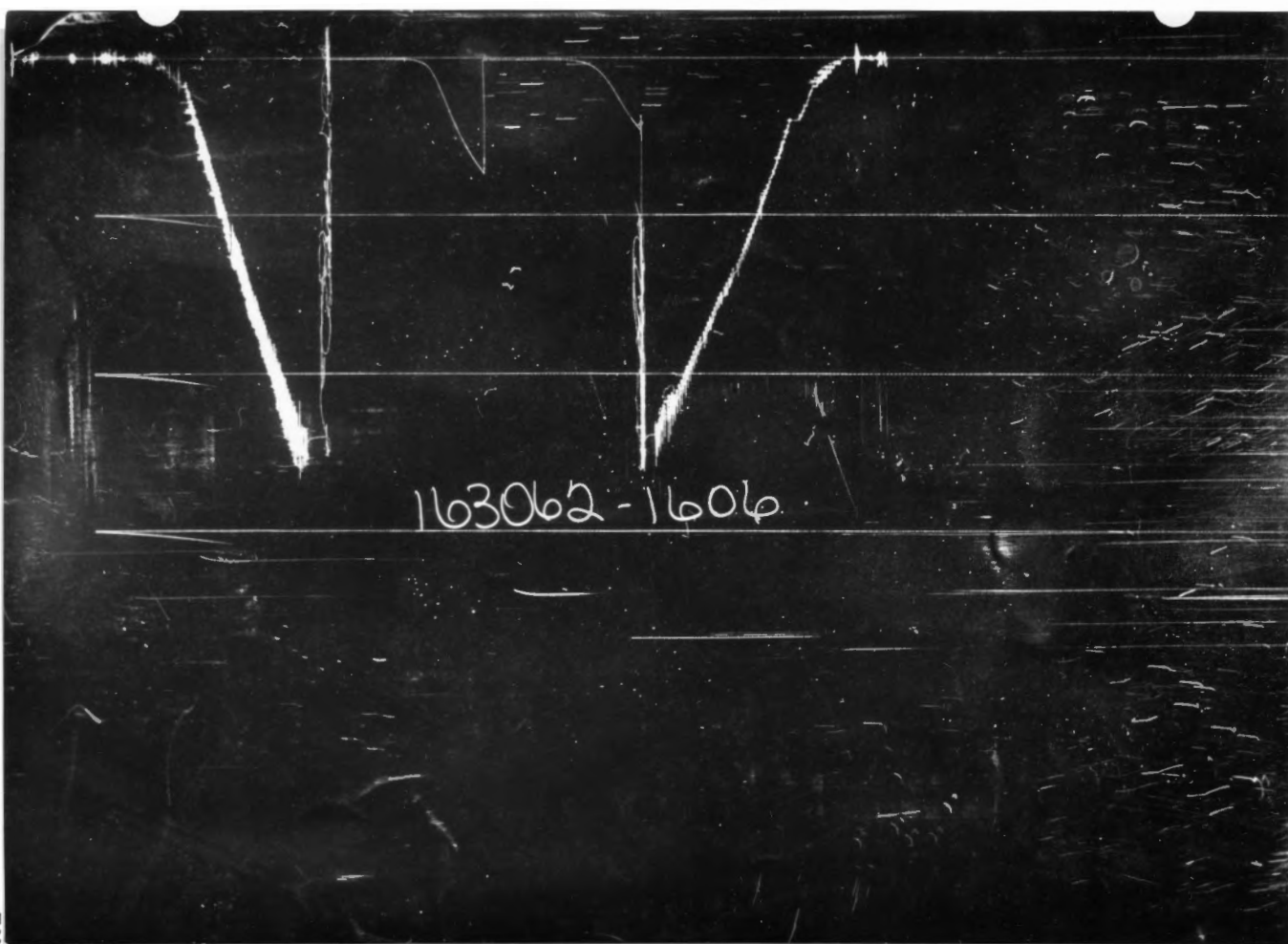
Gauge No. 1606		Depth 4710'		Clock No. 3230		12 hour		Ticket No. 163062	
First Flow Period		First Closed In Pressure		Second Flow Period		Second Closed In Pressure		Third Flow Period	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.
0 .000	12	.000		.000	23	.000			
1 .300	13	.0149*		.312	17	.0274			
2		.0446				.0547			
3		.0743				.0821			
4		.1040				.1094			
5		.1337				.1368			
6		.1634				.1642			
7		.1931				.1915			
8		.2228				.2189			
9		.2525				.2462			
10		.2823				.2736			
11		.3120				.3010			
12									
13									
14									
15									

Gauge No. 1605		Depth 4752'		Clock No. 2596		12 hour	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$
0 .000	33	.000		.000	43	.000	
1 .324	35	.0138*		.320	36	.0271	
2		.0412				.0542	
3		.0688				.0813	
4		.0963				.1084	
5		.1238				.1355	
6		.1514				.1625	
7		.1789				.1896	
8		.2064				.2167	
9		.2339				.2438	
10		.2614				.2709	
11		.2890				.2980	
12							
13							
14							
15							

Reading Interval		4		4		Minutes	
REMARKS:		* = 2 minutes					

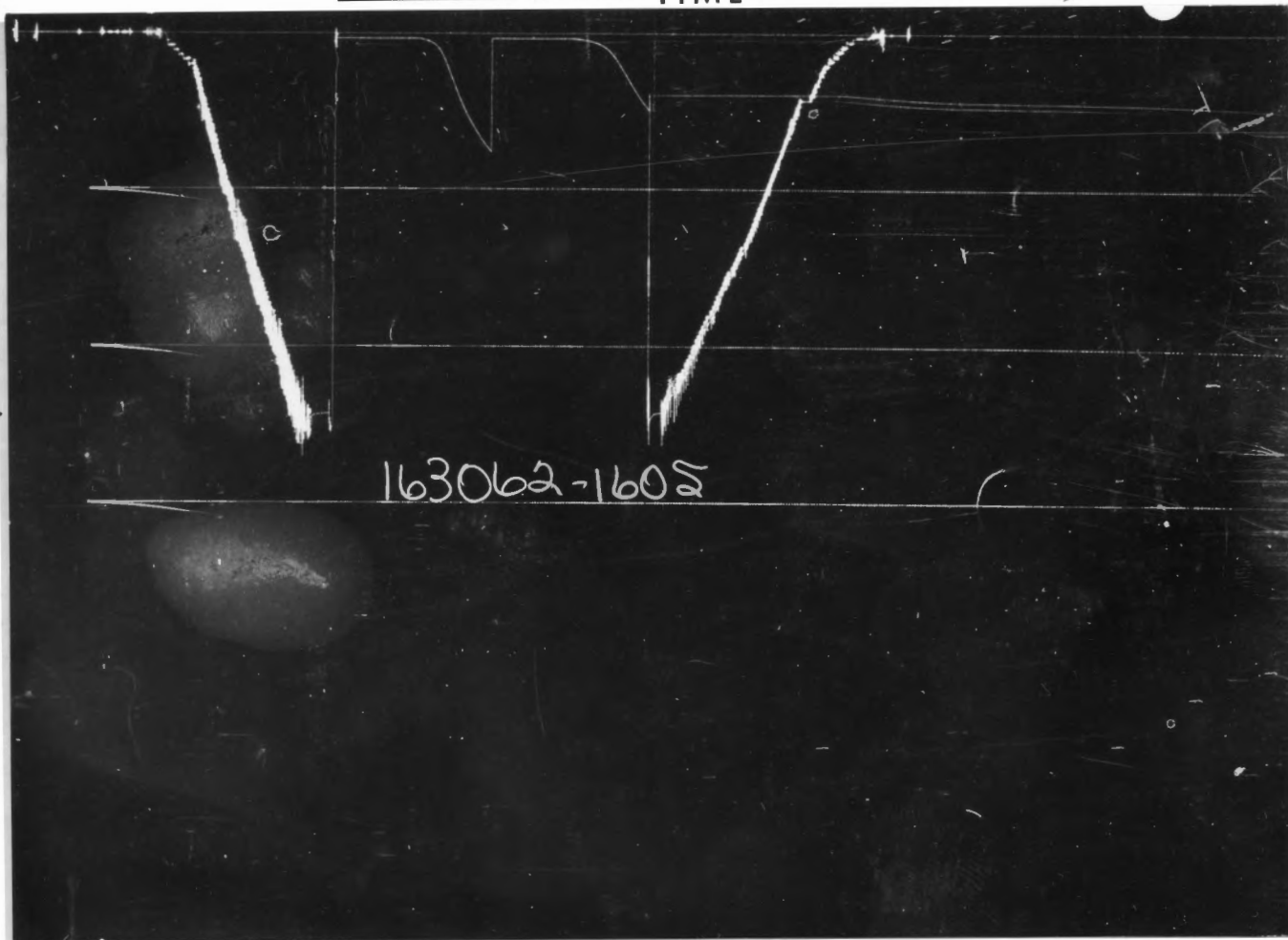
	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	5 3/4"	2.50"	1'	
~~Water Cushion Valve~~ Weight Pipe	4 1/2"	2.764"	940'	
Drill Pipe	4 1/2"	3.826"	3403'	
Drill Collars	6"	2.25"	353'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.85"	5'	4701'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4706'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4710'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1.00"	3'	
Pressure Equalizing Crossover				
Packer Assembly				
Distributor				
Packer Assembly	6 3/4"	1.53"	6'	4725'
Flush Joint Anchor	5"	2.37"	23'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor HT 500	5"	2.44"	1.50'	
Blanked-Off B.T. Running Case	5"	2.44"	4'	4752'
Total Depth				4755'

PRESSURE
↓



163062-1606

TIME
→



163062-1605

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

TEMPERATURE RECORDER CHART



10° each circle

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.

FLUID SAMPLE DATA						Date	10-6-75	Ticket Number	110312
Sampler Pressure _____ P.S.I.G. at Surface						Kind of Job	OPEN HOLE	Halliburton District	LIBERAL
Recovery: Cu. Ft. Gas _____ cc. Oil _____ cc. Water _____ cc. Mud _____ Tot. Liquid cc. _____						Tester	MR. HOWELL	Witness	MR. DONNELLY
Gravity _____ ° API @ _____ ° F.						Drilling Contractor	SAGE DRILLING COMPANY RIG #1 BC S		
Gas/Oil Ratio _____ cu. ft./bbl.						EQUIPMENT & HOLE DATA			
RESISTIVITY _____ CHLORIDE CONTENT _____						Formation Tested	Spergen		
Recovery Water @ _____ ° F. ppm						Elevation	2937'	Ft.	
Recovery Mud @ _____ ° F. ppm						Net Productive Interval	8'	Ft.	
Recovery Mud Filtrate @ _____ ° F. ppm						All Depths Measured From	Kelly Bushing		
Mud Pit Sample @ _____ ° F. ppm						Total Depth	4980'	Ft.	
Mud Pit Sample Filtrate @ _____ ° F. ppm						Main Hole/Casing Size	7 7/8"		
Mud Weight 9.7 vis 44 cp						Drill Collar Length	353'	I.D. 2.25"	
						Drill Pipe Length	940' WP - 3649'	I.D. 2.764" - 3.826"	
						Packer Depth(s)	4959'	Ft.	
						Depth Tester Valve	4946'	Ft.	
TYPE AMOUNT						Surface Choke	1/4"	Bottom Choke	3/4"
Cushion						Depth Back Pres. Valve			
Recovered	5 Feet of	Drilling fluid							
Recovered	Feet of								
Recovered	Feet of								
Recovered	Feet of								
Recovered	Feet of								
Remarks	See production test data sheet....								
TEMPERATURE	Gauge No. 1606 Depth: 4947' Ft.	Gauge No. 1605 Depth: 4976' Ft.	Gauge No. Depth: Ft.	TIME					
Est. °F.	12 Hour Clock Blanked Off NO	12 Hour Clock Blanked Off YES	Hour Clock Blanked Off	Tool A.M. Opened 1830 P.M. Opened A.M. Bypass 2130 P.M.					
Actual 139 °F.	Pressures		Pressures	Pressures		Reported Minutes Computed Minutes			
	Field Office	Field Office	Field Office						
Initial Hydrostatic		2530	2564 2554						
First Period Flow	Initial	7	33 28						
	Final	10	33 28						
	Closed in	1215	1249 1233						
Second Period Flow	Initial	10	33 31						
	Final	10	33 31						
	Closed in	1055	1085 1077						
Third Period Flow	Initial								
	Final								
	Closed in								
Final Hydrostatic		2505	2564 2536						

Casing perms. _____ Bottom choke _____ Surf. temp _____ °F Ticket No. 110312
Gas gravity _____ Oil gravity _____ GOR _____
Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F
INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED _____

[illegible]

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	6"	2.25"	1'	
Water Cushion Valve .. Weight pipe	4½"	2.764"	940'	
Drill Pipe	4½"	3.826"	3649'	
Drill Collars	6"	2.25"	353'	
Handling Sub & Choke Assembly	4½"	-	4'	
Dual CIP Valve	5"	.87"	5'	4941'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4946'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4947'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6 3/4" NR	1.53"	6'	4959'
Distributor				
Packer Assembly				
Flush Joint Anchor	5"	2.37"	14'	
Pressure Equalizing Tube				
HT-500	5"	3.06"	1.5'	
Blanked-Off B.T. Running Case	5"	2.44"	4'	4976'
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor				
Blanked-Off B.T. Running Case				
Total Depth				4980'

PRESSURE



110312-1606

110312-1605

1605

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

TEMPERATURE RECORDER CHART



10° each circle

- 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.

FLUID SAMPLE DATA				Date 10-10-75		Ticket Number 808891	
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. _____ ppm Recovery Mud Filtrate _____ @ _____ °F. _____ ppm Mud Pit Sample _____ @ _____ °F. _____ ppm Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm Mud Weight 9.7 vis 69 cp				Kind of Job STRADDLE OPEN HOLE TEST Tester MR. HUGHES Witness MR. DONNELLY Drilling Contractor SAGE DRILLING COMPANY RIG I PW-DR/S		Halliburton District HAYS MR. HAZEHORST MR. DONNELLY	
EQUIPMENT & HOLE DATA							
Formation Tested Morrow Sand				Elevation 2937' K.B. _____ Ft.			
Net Productive Interval 10' _____ Ft.				All Depths Measured From Kelly Bushing			
Total Depth 5144' _____ Ft.				Main Hole/Casing Size 7 7/8"			
Drill Collar Length 324.46' I.D. 2.25"				Drill Pipe Length 3386' - 899.35' WP I.D. 3.826" - 2.764" WP			
Packer Depth(s) 4635' - 4696' _____ Ft.				Depth Tester Valve 4615' _____ Ft.			
Cushion		TYPE	AMOUNT	Depth Back Pres. Valve	Surface Choke	Bottom Choke	
					1/4"	3/4"	
Recovered		120	Feet of	Muddy water.			
Recovered			Feet of				
Recovered			Feet of				
Recovered			Feet of				
Recovered			Feet of				
Remarks Opened tool for a 45 minute first flow period with a very weak to weak blow. Closed tool for a 46 minute initial closed in pressure period. Reopened tool for a 89 minute second flow period with a very weak blow in 5 minutes. Closed tool for a 90 minute final closed in pressure period.							
TEMPERATURE		Gauge No. 536		Gauge No. 5575		Gauge No. 5579	
Depth:		4621' _____ Ft.		4638' _____ Ft.		4718' _____ Ft.	
Est. _____ °F.		12 Hour Clock		12 Hour Clock		12 Hour Clock	
Blanked Off No		Blanked Off No		Blanked Off No		Blanked Off Yes	
Actual 4692' _____ °F.		Pressures		Pressures		Pressures	
		Field	Office	Field	Office	Field	Office
Initial Hydrostatic			2423	2402	2431	2453	2574
First Period	Flow Initial		9	32	24		
	Flow Final		34	49	45	HYDROSTATIC	
Closed in			987	1003	997	RELEASE: 2086	
Second Period	Flow Initial		37	49	51		
	Flow Final		70	82	81		
Closed in			812	817	821		
Third Period	Flow Initial						
	Flow Final						
Closed in							
Final Hydrostatic			2398	2370	2404	2453	2486

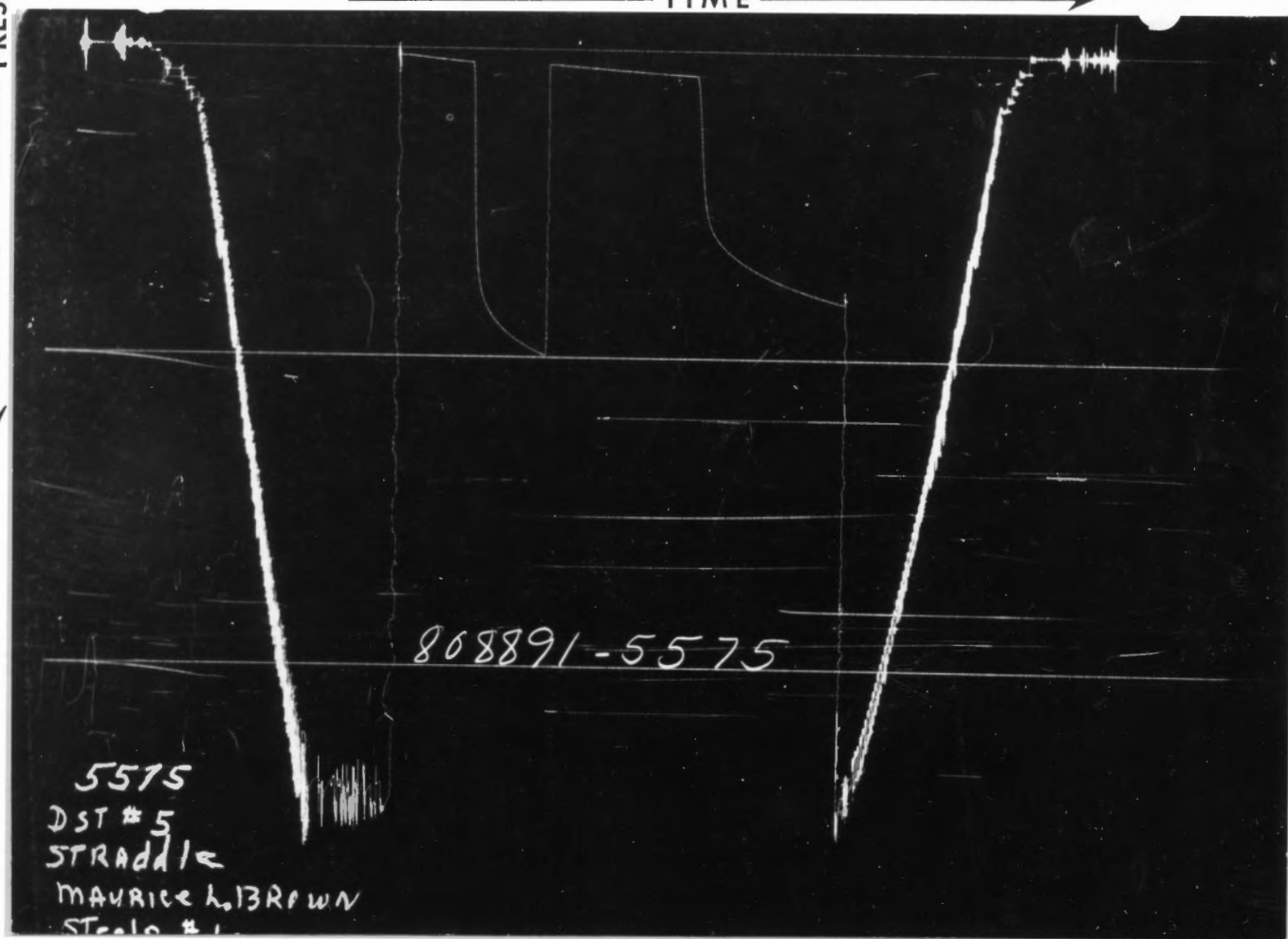
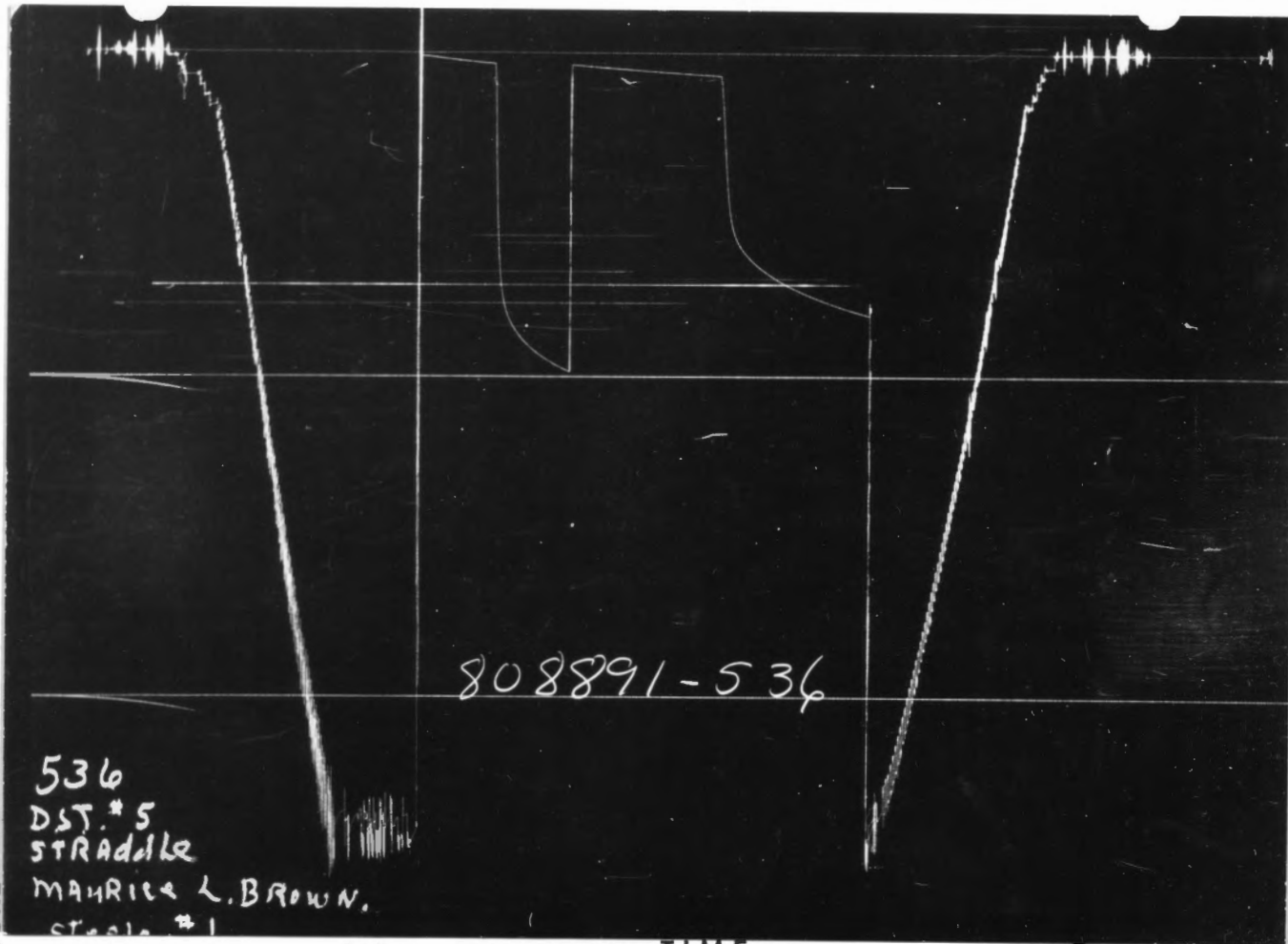
Legal Location 36 - 18 - 33 C-S12-NE
 Lease Name STEELE
 Well No. 1
 Test No. 5
 Field Area WILDCAT
 Tested Interval 4635' - 4696'
 County SCOTT
 State KANSAS
 Lease Owner/Company Name THE MAURICE L. BROWN COMPANY

Gauge No.		536		Depth		4621'		Clock No. ???		12 hour		Ticket No.		808891	
First Flow Period		First Closed In Pressure		Second Flow Period		Second Closed In Pressure		Third Flow Period		Third Closed In Pressure					
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$
0 .000	9	.000		.000	37	.000		.000							
1 .0602	13	.0398		.0949	43**	.0602		.0602							
2 .1204	19	.0663		.1965	49	.1204		.1204							
3 .1806	24	.0928		.2981	55	.1806		.1806							
4 .2408	29	.1194		.3997	61	.2408		.2408							
5 .3010	34	.1459		.5014	66	.3010		.3010							
6		.1724		.6030	70	.3612		.3612							
7		.1989				.4214		.4214							
8		.2254				.4816		.4816							
9		.2520				.5418		.5418							
10		.2785				.6020		.6020							
11		.3050													
12															
13															
14															
15															

Gauge No.		5575		Depth		4638'		Clock No.		7105		12 hour			
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$
0 .000	24	.000		.000	51	.000		.000							
1 .0604	27	.0400		.0944	56**	.0605		.0605							
2 .1208	32	.0667		.1955	61	.1210		.1210							
3 .1812	37	.0934		.2966	67	.1815		.1815							
4 .2416	41	.1201		.3977	72	.2420		.2420							
5 .3020	45	.1468		.4989	77	.3025		.3025							
6		.1735		.6000	81	.3630		.3630							
7		.2002				.4235		.4235							
8		.2269				.4840		.4840							
9		.2536				.5445		.5445							
10		.2803				.6050		.6050							
11		.3070													
12															
13															
14															
15															
Reading Interval	9		4		15		9								Minutes

REMARKS: * = 6 minutes ** = 14 minutes

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	6"	2.25"	1.00'	
Reversing Sub				
Water Cushion Valve Weight Pipe	4 1/2"	2.764"	899.35'	
Drill Pipe	4 1/2"	3.826"	3386'	
Drill Collars	6.25"	2.25"	324.46'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.75"	5.55'	
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5.00'	4615'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4.00'	4621'
Hydraulic Jar Big John	5.00"	2.00"	5.00'	
VR Safety Joint	5.00"	1.00"	2.80'	
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.53"	3.50'	4635'
A.B. B.T. Case	5"	3.06"	1.50'	
Distributor Perforation Anchor	5"	2.37"	4.00'	4638'
X Over Sub	5.75"	2.50"	8.00'	
X Over Sub	5.75"	2.50"	.90'	
Packer Assembly Drill Collars	6.25"	2.25"	.80'	
X Over Sub	5.75"	2.50"	28.41'	
X Over Sub	5.75"	2.50"	.55'	
Flush Joint Anchor	5.00"	2.37"	.85'	
Pressure Equalizing Tube HT 500	5.00"	3.00"	10.00'	
Blank Off	5.00"		1.50'	4692'
Blanked-Off B.T. Running Case Lower Packer	6 3/4"	1.53"	.50'	
Drill Collars perforation Anchor	5.00"	2.37"	3.50'	4696'
Anchor Pipe Safety Joint Upper Hookwall	11 6"		14.00'	
Lower			2.00'	
Blanked off B.T.	5"	3.06"	3.40'	
Packer Assembly			4.00'	4718'
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor				
Blanked-Off B.T. Running Case				
Total Depth				5144'



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

808891-5579

5574
DST #5
STRADDLE
MAYRICE L BROWN
STEEL #1

TEMPERATURE RECORDER CHART



10° each circle

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_{or}	= 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.