

Legal Location
Sec. - Twp. - Rng. 25 - 22 - 21Field Area
WILDCAT

County

HODGEMAN

State
KANSAS

FLUID SAMPLER DATA				Date 4-1-70		Ticket Number 277662	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of Job OPEN HOLE		Halliburton District GREAT BEND	
Recovery: Cu. Ft. Gas _____				Tester NUTTING		Witness MUELLER	
cc. Oil _____				Drilling Contractor GABBERT AND JONES, INC. # 1 NM S			
cc. Water _____				EQUIPMENT & HOLE DATA			
cc. Mud _____				Formation Tested MISSISSIPPI			
Tot. Liquid cc. _____				Elevation 2280' K.B. _____ Ft.			
Gravity _____ ° API @ _____ °F.				Net Productive Interval 30' _____ Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.				All Depths Measured From Kelly Bushing			
RESISTIVITY _____ CHLORIDE CONTENT _____				Total Depth 4530' _____ Ft.			
Recovery Water _____ @ _____ °F. _____ ppm				Main Hole/Casing Size 7 7/8"			
Recovery Mud _____ @ _____ °F. _____ ppm				Drill Collar Length 150' I.D. 2.37"			
Recovery Mud Filtrate _____ @ _____ °F. _____ ppm				Drill Pipe Length 4327' I.D. 3.86"			
Mud Pit Sample _____ @ _____ °F. _____ ppm				Packer Depth(s) 4500' _____ Ft.			
Mud Pit Sample Filtrate 11 @ _____ °F. _____ ppm				Depth Tester Valve 4487' _____ Ft.			
Mud Weight 9.9 vis 42 cp							
TYPE NONE		AMOUNT		Depth Back Pres. Valve NONE		Surface Choke 1" Bottom Choke 3/4"	
Cushion							
Recovered 65'		Feet of		mud - slightly gas cut - slight show of oil			
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks Packer set; tool opened @ 5:53 AM with a weak blow for a 30 minute first flow. Rotated tool for a 31 minute first closed in pressure. Tool re-opened for a 28 minute second flow with a weak blow - dead in 12 minutes. Took a 31 minute second closed in pressure. Off bottom @ 7:53...							
TEMPERATURE		Gauge No. 684		Gauge No. 528		Gauge No.	
Depth:		4496' Ft.		4526' Ft.		Ft.	
12 Hour Clock		12 Hour Clock		Hour Clock		TIME	
Est. 112 °F.		Blanked Off NO		Blanked Off YES		Blanked Off	
Actual °F.		Pressures		Pressures		Pressures	
		Field Office		Field Office		Field Office	
Initial Hydrostatic		-		2462		2502 2465	
Flow Initial		-		11		34 36	
Flow Final		-		19		43 40	
Closed in		-		1069		1107 1081	
Second Period Flow Initial		-		25		43 51	
Flow Final		-		32		51 53	
Closed in		-		935		961 953	
Third Period Flow Initial		-					
Flow Final		-					
Closed in		-					
Final Hydrostatic		-		2357		2502 2376	

Gauge No. 684			Depth		4496'		Clock No. ???		12 hour		Ticket No. 277662	
First Flow Period			Closed In Pressure		Second Flow Period		Closed In Pressure		Third Flow Period		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"	$\log \frac{t+\theta}{\theta}$
0 .000	11		.000	19	.000	25	.000	32				
1 .033	11		.0209	47	.0352	25	.0205	59				
2 .066	13		.0418	118	.0704	27	.0410	113				
3 .099	15		.0627	298	.1056	29	.0615	225				
4 .132	17		.0836	516	.1408	30	.0820	382				
5 .165	18		.1045	680	.1760	32	.1025	526				
6 .198	19		.1254	799	.197	32**	.1230	644				
7			.1463	884			.1435	736				
8			.1672	954			.1640	811				
9			.1881	1008			.1845	873				
10			.216	1069*			.212	935*				
11												
12												
13												
14												
15												

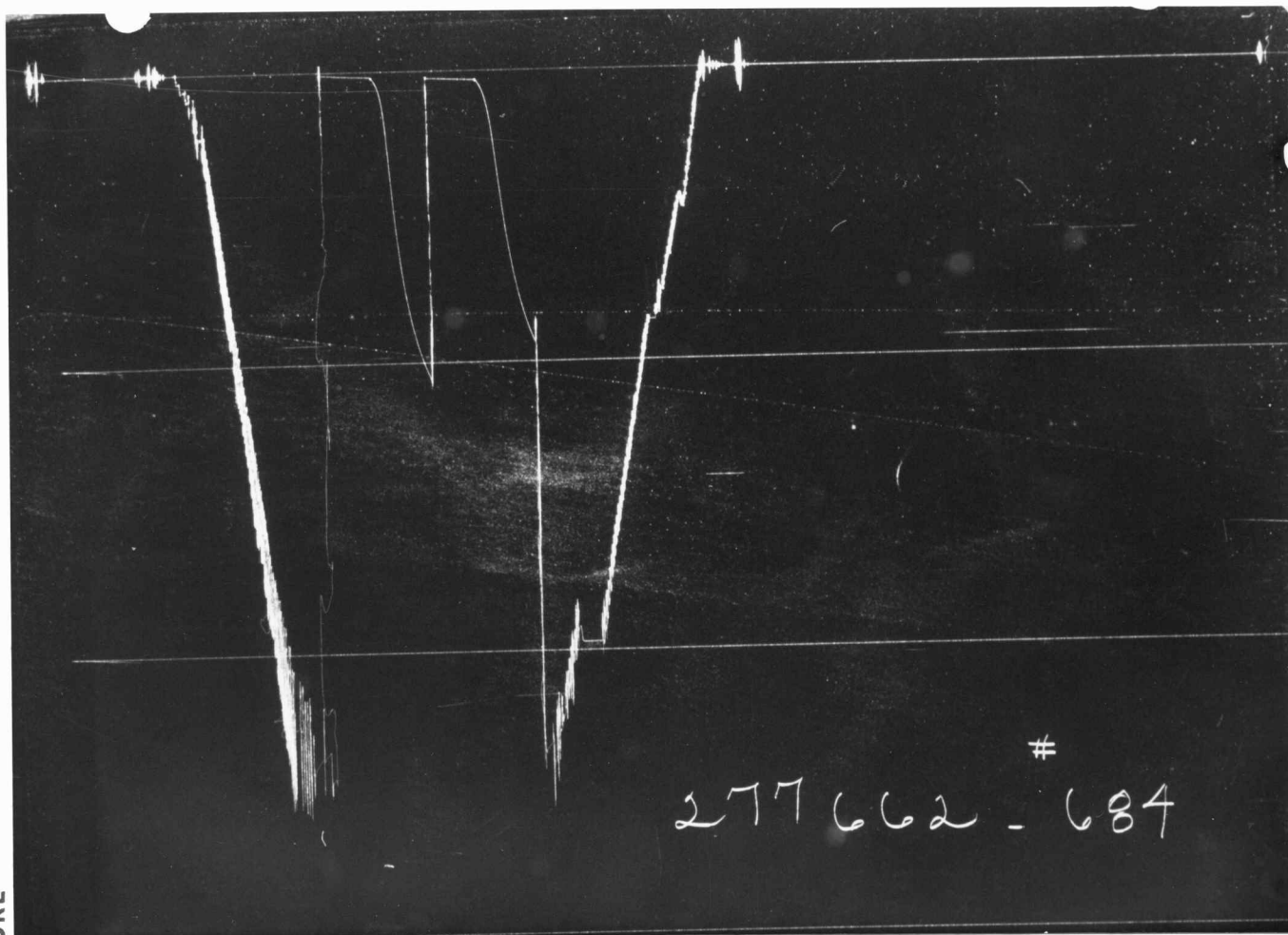
Gauge No. 528			Depth		4526'		Clock No. ???		hour		12	
First Flow Period			Closed In Pressure		Second Flow Period		Closed In Pressure		Third Flow Period		Closed In Pressure	
Time Defl. .000"	PSIG Temp. Corr.		Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$
0 .000	36		.000	40	.000	51	.000	53				
1 .0342	35		.0209	66	.0354	47	.0207	82				
2 .0684	37		.0418	130	.0708	49	.0414	146				
3 .1026	39		.0627	276	.1062	50	.0621	259				
4 .1368	39		.0836	491	.1416	51	.0828	417				
5 .1710	39		.1045	672	.1770	52	.1035	562				
6 .205	40		.1254	803	.198	53**	.1242	672				
7			.1463	896			.1449	767				
8			.1672	965			.1656	839				
9			.1881	1023			.1863	897				
10			.216	1081*			.214	953*				
11												
12												
13												
14												
15												
Reading Interval 5			3		5		3				Minutes	

REMARKS:

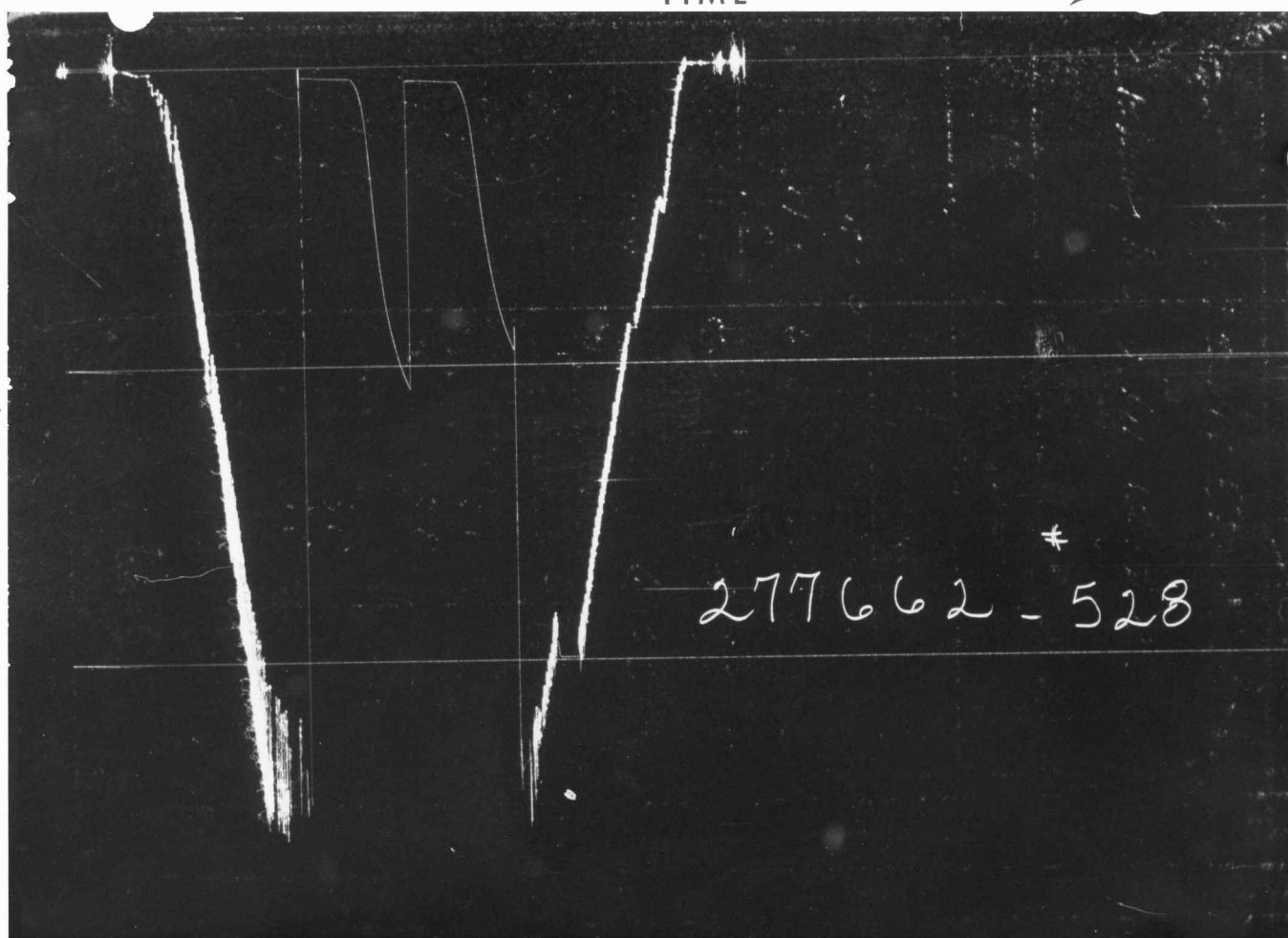
* INTERVAL = 4 MINUTES. ** INTERVAL = 3 MINUTES.

	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub	5.75"	2.75"	1'	
Water Cushion Valve				4302'
Drill Pipe	4.5"	3.86"	4327'	
Drill Collars	6"	2.37"	150	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	5'	
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4487'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4496'
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	5'	4500'
Distributor				
Packer Assembly				
Flush Joint Anchor	5"	2.37"	30'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5"	3.06"	4'	4526'
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				

PRESSURE



TIME



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

FLUID SAMPLER DATA				Date <u>4-2-70</u>		Ticket Number <u>277663</u>	
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.				Kind of Job <u>OPEN HOLE</u>		Halliburton District <u>GREAT BEND</u>	
				Tester <u>C. L. NUTTING</u>		Witness <u>MR. MUELER</u>	
				Drilling Contractor <u>GABBERT & JONES</u>		<u>SM S</u>	
EQUIPMENT & HOLE DATA							
				Formation Tested <u>Mississippi</u>			
				Elevation <u>2280'</u> KB _____ Ft.			
				Net Productive Interval <u>10'</u> _____ Ft.			
				All Depths Measured From <u>Kelly bushing</u>			
				Total Depth <u>4540'</u> _____ Ft.			
				Main Hole/Casing Size <u>7 7/8"</u>			
				Drill Collar Length <u>150'</u>		I.D. <u>2.37"</u>	
				Drill Pipe Length <u>4356'</u>		I.D. <u>3.826"</u>	
				Packer Depth(s) <u>4530'</u> _____ Ft.			
				Depth Tester Valve <u>4518'</u> _____ Ft.			
TYPE		AMOUNT		Depth Back Pres. Valve		Surface Choke	
Cushion						<u>1"</u>	
						Bottom Choke <u>3/4"</u>	
Recovered	<u>100</u>	Feet of <u>thin watery mud</u>					
Recovered	<u>60</u>	Feet of <u>mud</u>					
Recovered		Feet of _____					
Recovered		Feet of _____					
Recovered		Feet of _____					
Remarks <u>Tool opened with a weak blow for 4 minutes. Closed in after 30 minutes</u>							
<u>for a 30 minute first closed in pressure. Tool reopened for a 31 minute</u>							
<u>second flow - dead. Took a 29 minute second closed in pressure. CHARTS</u>							
<u>INDICATE PARTIAL PLUGGING OF ANCHOR PERFORATIONS DURING FIRST FLOW PERIOD.</u>							
TEMPERATURE		Gauge No. <u>684</u>		Gauge No. <u>528</u>		Gauge No. _____	
		Depth: <u>4527</u> Ft.		Depth: <u>4536</u> Ft.		Depth: _____ Ft.	
		<u>12</u> Hour Clock		<u>12</u> Hour Clock		Hour Clock	
Est.	<u>112</u> °F.	Blanked Off <u>no</u>		Blanked Off <u>yes</u>		Blanked Off _____	
Actual	°F.	Pressures		Pressures		Pressures	
		Field	Office	Field	Office	Field	Office
Initial Hydrostatic		-	<u>2337</u>	<u>2502</u>	<u>2347</u>		
First Period Flow	Initial	-	<u>UTR</u>	-	<u>1077*</u>		
	Final	-	<u>82</u>	-	<u>94</u>		
	Closed in	-	<u>1316</u>	<u>1348</u>	<u>1323</u>		
Second Period Flow	Initial	-	<u>80</u>	<u>77</u>	<u>97</u>		
	Final	-	<u>82</u>	<u>94</u>	<u>92</u>		
	Closed in	-	<u>1180</u>	<u>1184</u>	<u>1188</u>		
Third Period Flow	Initial	-	-	-	-		
	Final	-	-	-	-		
	Closed in	-	-	-	-		
Final Hydrostatic		-	<u>2334</u>	<u>2502</u>	<u>2344</u>		
<u>UTR-Unable to read. (*Questionable)</u>							

Legal Location
Sec. - Twp. - Rng.

25 22 21

NICHOLS
Lease Name1
Well No.2
Test No.4530-4540'
Tested Interval25-22-21W
County

HODGEMAN

State KANSAS

NADEL & GUSSMAN
Lease Owner/Company Name

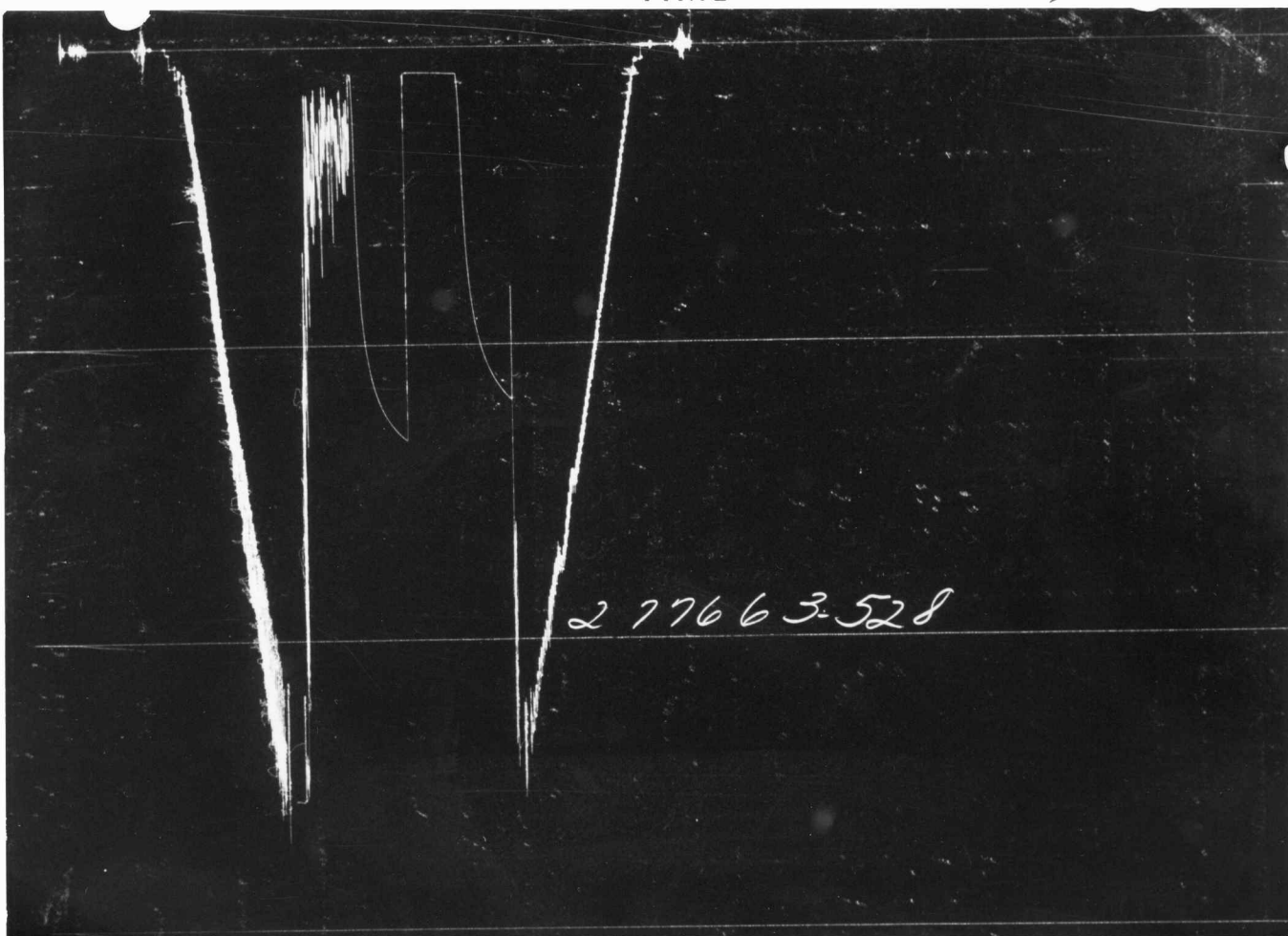
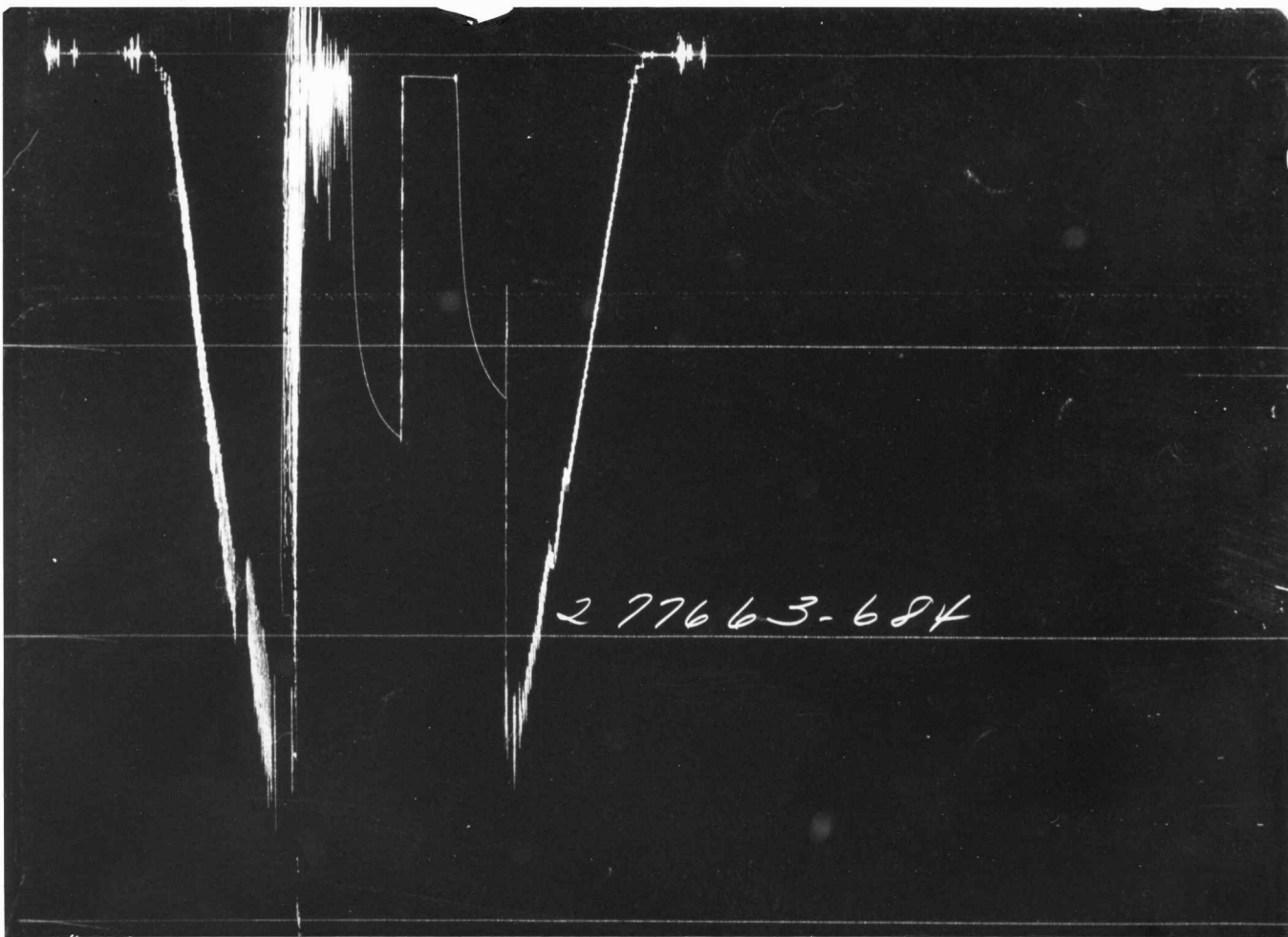
Gauge No.		684		Depth		4527'		Clock No.		??		12 hour		Ticket No.		277663	
First Flow Period		First Closed In Pressure		Second Flow Period		Second Closed In Pressure		Third Flow Period		Third Closed In Pressure		Third Flow Period		Third Closed In Pressure		Third Flow Period	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.
0	.000 UTR	.000		.000	80	.000		.000	82								
1	.215 82	.0203		.0342	76	.0206		.0412	816								
2		.0406		.0684	77	.0412		.0618	931								
3		.0609		.1026	77	.0618		.0824	1003								
4		.0812		.1368	78	.0824		.1030	1054								
5		.1015		.1710	80	.1030		.1236	1091								
6		.1218		.212*	82	.1236		.1442	1121								
7		.1421				.1442		.1648	1146								
8		.1624				.1648		.1854	1168								
9		.1827				.1854		.199**	1180								
10		.2030				.199**											
11																	
12																	
13																	
14																	
15																	

Gauge No.		528		Depth		4536'		Clock No.		??		12 hour	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.
0	.000 1077*:**	.000		.000	97	.000		.000	92				
1	.205 94	.0204		.0339	87	.021		.042	789				
2		.0408		.0678	87	.042		.063	924				
3		.0612		.1017	88	.063		.084	1003				
4		.0816		.1356	88	.084		.105	1058				
5		.1020		.1695	90	.105		.126	1097				
6		.1224		.210*	92	.126		.147	1128				
7		.1428				.147		.168	1154				
8		.1632				.168		.189	1176				
9		.1836				.189		.203**	1188				
10		.2040				.203**							
11													
12													
13													
14													
15													

Reading Interval	-	3	5	3	Minutes
REMARKS:	*Last interval is equal to 6 minutes. **Last = 2 minutes. UTR - Unable to read. ***Questionable due to plugging.				

	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub	5.75"	2.75"	1'	
Water Cushion Valve				4356'
Drill Pipe	4.5"	3.86"	4356'	
Drill Collars	6"	2.37"	150'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	5'	
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4518'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.07"	4'	4527'
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	5'	4530'
Distributor				
Packer Assembly				
Flush Joint Anchor	5"	2.37"	10'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5"	3.07"	4'	4536'
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				

PRESSURE



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