

FLUID SAMPLE DATA				Date 5-13-81		Ticket Number 047527	
Sampler Pressure _____ P.S.I.G. at Surface Recovery: Cu. Ft. Gas _____ cc. Oil _____ cc. Water _____ cc. Mud _____ Tot. Liquid cc. _____ Gravity _____ ° API @ 60 ° F. Gas/Oil Ratio _____ cu. ft./bbl.				Kind of D.S.T. OPEN HOLE		Halliburton Location NESS CITY	
				Tester MR. THOMPSON		Witness MR. TOTTEN	
				Drilling Contractor MR. CROSSWHITE			
				ABERCROMBIE #8		IC	
EQUIPMENT & HOLE DATA							
				Formation Tested Fort Scott			
				Elevation 2234' KB		Ft.	
				Net Productive Interval -		Ft.	
				All Depths Measured From Kelly Bushing			
				Total Depth 4221'		Ft.	
				Main Hole/Casing Size 7 7/8"			
				Drill Collar Length -		I.D. -	
				Drill Pipe Length 4169'		I.D. 3.826"	
				Packer Depth(s) 4192'-4198'		Ft.	
				Depth Tester Valve 4180'		Ft.	
TYPE		AMOUNT		Depth Back Pres. Valve		Surface Choke	
Cushion				Ft.		.25"	
						Bottom Choke .75"	
Recovered	124	Feet of Slightly oil cut mud (24%mud, 2%water, 20%gas, 54%oil)					
Recovered	155	Feet of Heavy oil cut mud (56%oil, 4%water, 40%mud)					
Recovered	2	Feet of Water					
Recovered		Feet of					
Recovered		Feet of					
Remarks SEE PRODUCTION TEST DATA SHEET.							
TEMPERATURE		Gauge No. 684		Gauge No. 228		Gauge No.	
		Depth: 4182' Ft.		Depth: 4218' Ft.		Depth: Ft.	
		12 Hour Clock		12 Hour Clock		Hour Clock	
Est. 108 °F.		Blanked Off NO		Blanked Off YES		Blanked Off	
Actual °F.		Pressures		Pressures		Pressures	
		Field	Office	Field	Office	Field	Office
Initial Hydrostatic		-	2234.8	2247	2262.8		
First Period	Flow Initial	-	9.8	41	33.5		
	Flow Final	-	63.3	81	83.6		
	Closed in	-	665.3	684	685.1		
Second Period	Flow Initial	-	75.9	81	103.4		
	Flow Final	-	123.2	142	142.6		
	Closed in	-	655.6	668	674.6		
Third Period	Flow Initial	*See attached incremental reading sheets.					
	Flow Final						
	Closed in						
Final Hydrostatic		-	2193.4	2207	2222.6		

Legal Location Sec. - Twp. - Rng. 7 - 18 - 21
 Lease Name
 Well No. 1
 Test No. 1
 Tested Interval 4198' - 4221'
 County NESS
 State KANSAS

ROTH "B"
 K. & E. DRILLING INCORPORATED
 Lease Owner/Company Name

Casing perms. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 047527
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

[illegible]

K. & E. DRILLING INCORPORATED
Lease Owner/Company Name

047527
Ticket Number

B.T. 684

B.T. 228

B.T.

Depth 4182'-12 Hr.

Depth 4218'-12 Hr.

Depth

Minutes	Log $\frac{t + ()}{()}$	PSIG Temp. Corr.	Minutes	Log $\frac{t + ()}{()}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + ()}{()}$	PSIG Temp. Corr.
First Flow....			First Flow...					
0		9.8	0		33.5			
6		24.3	6		46.5			
12		35.1	12		54.9			
18		40.4	18		58.9			
24		45.2	24		64.5			
30		51.5	30		70.7			
36		56.6	36		75.6			
42		62.6	42		82.4			
44.4		63.3	45.1		83.6			
Initial CIP...			Initial CIP...					
0		63.3	0		83.6			
3		120.4	3		139.3			
6		226.5	6		242.7			
9		403.2	9		435.2			
12		549.0	12		569.5			
15		601.7	15		614.3			
18		622.2	18		633.9			
21		633.5	21		648.9			
24		641.3	24		658.3			
27		646.9	27		667.3			
30		651.1	30		669.7			
33		654.8	33		674.0			
36		657.9	36		678.2			
39		660.4	39		680.4			
42		663.1	42		682.5			
45.8		665.3	45.8		685.1			
Second Flow...			Second Flow...					
0		75.9	0		103.4			
10		81.7	10		99.6			
20		89.7	20		108.6			
30		96.8	30		116.3			
40		102.9	40		122.6			
50		109.5	50		129.4			
60		116.1	60		135.5			
71.4		123.2	71.9		142.6			
Second CIP...			Second CIP...					
0		123.2	0		142.6			
5		319.1	5		329.0			
10		519.4	10		534.8			
15		584.1	15		599.8			

Remarks:

K. & E. DRILLING INCORPORATED
Lease Owner/Company Name

047527
Ticket Number PAGE #2

B.T. 684

B.T. 228

B.T. _____

Depth 4182'-12 Hr.

Depth 4218'-12 Hr.

Depth _____

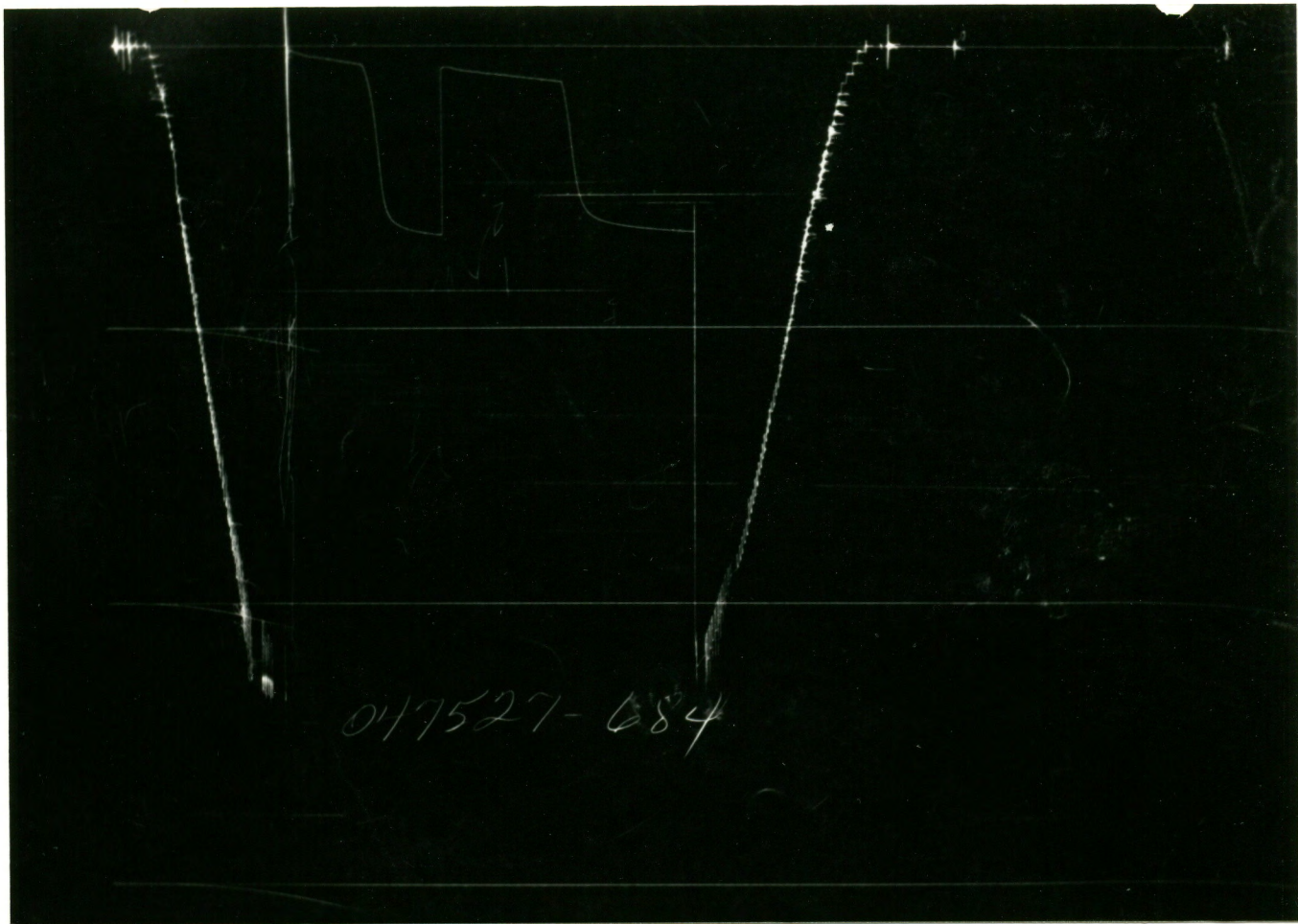
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Remarks: _____

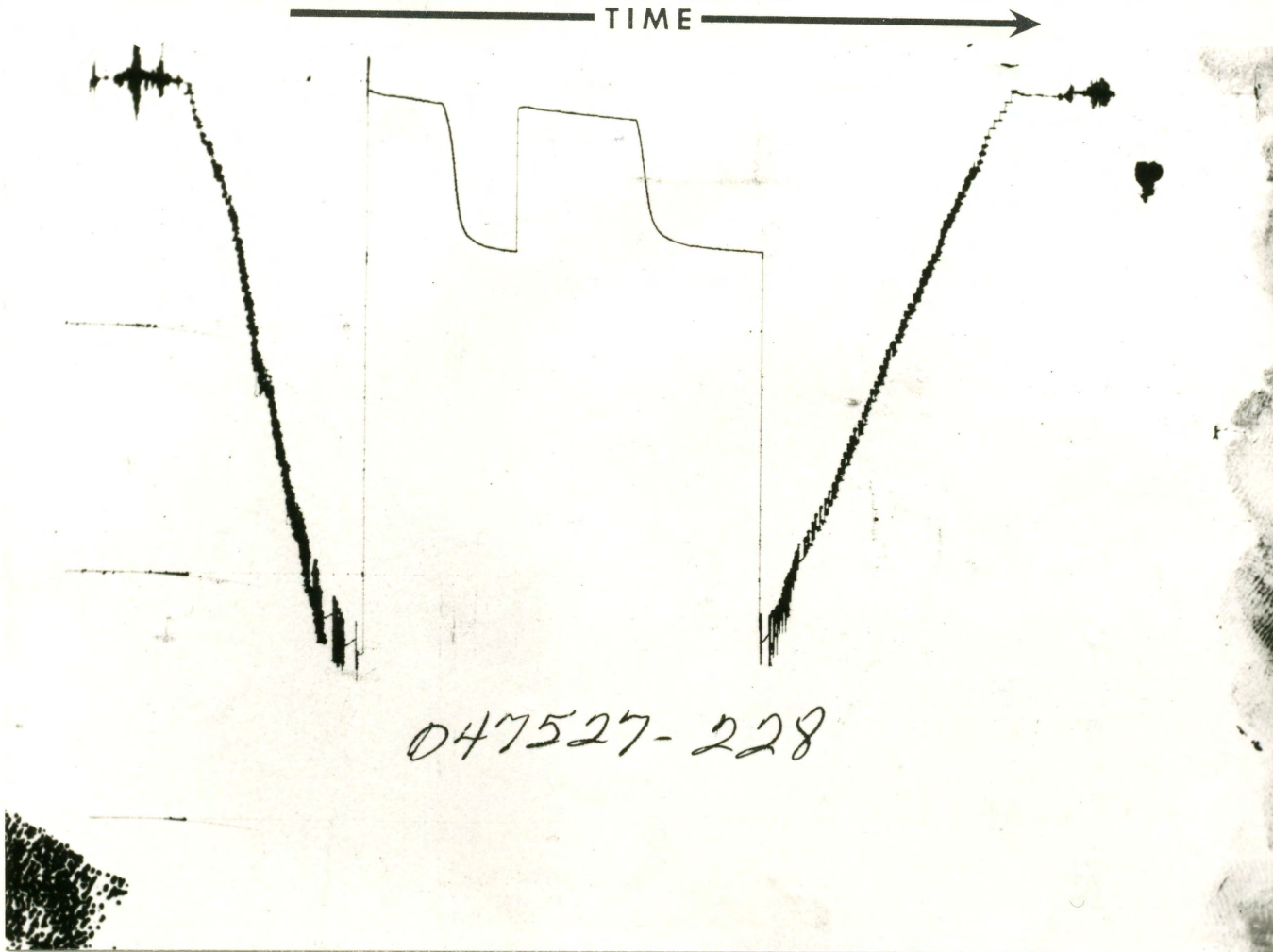
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	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub	5.75"	3"	1'	3921'
Water Cushion Valve				
Drill Pipe	4.5"	3.826"	4169'	
Drill Collars				
Handling Sub & Choke Assembly	5"	3"	1'	
Dual CIP Valve	5"	.87"	6'	4170'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4180'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4182'
Hydraulic Jar				
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	6'	4192'
Distributor				
Packer Assembly	6.75"	1.53"	6'	4198'
Flush Joint Anchor				
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	5"	3.84"	17'	
Blanked-Off B.T. Running Case	5"	2.44"	4'	4218'
Total Depth				4221'

↑ PRESSURE ↓



TIME →



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

ROTH B

Lease Name

1

Well No.

2

Test No.

4264-4311'

Tested Interval

K & E PETROLEUM INCORPORATED

Lease Owner/Company Name

FLUID SAMPLE DATA				Date 5-14-81		Ticket Number 047528	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of D.S.T. OPEN HOLE		Halliburton Location NESS CITY	
Recovery: Cu. Ft. Gas _____				Tester CROSSWHITE		Witness MR. TOTTON	
cc. Oil _____				Drilling Contractor ABERCROMBIE RIG # 8		DR	
cc. Water _____				EQUIPMENT & HOLE DATA			
cc. Mud _____				Formation Tested Mississippiab			
Tot. Liquid cc. _____				Elevation 2234' _____ Ft.			
Gravity _____ ° API @ _____ °F.				Net Productive Interval _____ Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.				All Depths Measured From Kelly Bushing			
RESISTIVITY _____ CHLORIDE CONTENT _____				Total Depth 4311' _____ Ft.			
Recovery Water _____ @ _____ °F. _____ ppm				Main Hole/Casing Size 7 7/8"			
Recovery Mud _____ @ _____ °F. _____ ppm				Drill Collar Length _____ I.D. _____			
Recovery Mud Filtrate _____ @ _____ °F. _____ ppm				Drill Pipe Length 4288' _____ I.D. 3.826"			
Mud Pit Sample _____ @ _____ °F. _____ ppm				Packer Depth(s) 4258-4264' _____ Ft.			
Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm				Depth Tester Valve 4246' _____ Ft.			
Mud Weight 9.8 vis 51 sec.							
TYPE	AMOUNT	Depth Back Pres. Valve	Surface Choke	Bottom Choke			
Cushion		Ft.	.25"	.75"			
Recovered	15	Feet of mud with spotted oil (2% oil-98% mud)					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks See production test data sheet							
TEMPERATURE		Gauge No. 684	Gauge No. 228	Gauge No.	TIME		
Depth: 4248 Ft.		Depth: 4308 Ft.	Depth: _____ Ft.	(00:00-24:00 hrs.)			
Est. 118 °F.		12 Hour Clock	12 Hour Clock	Hour Clock		Tool	
Blanked Off No		Blanked Off Yes	Blanked Off		Opened 19:55		
Actual °F.		Pressures		Pressures		Opened	
		Pressures		Pressures		Bypass 21:55	
	Field	Office	Field	Office	Field	Office	Reported
							Minutes
Initial Hydrostatic		2281.0	2326	2372.5			Minutes
First Period	Flow Initial	8.8	61	69.1			
	Flow Final	8.8	61	53.8			
	Closed in	38.7	81	76.2			30
Second Period	Flow Initial	15.8	61	68.0			
	Flow Final	11.4	57	51.8			30
	Closed in	20.2	61	63.0			30
Third Period	Flow Initial						
	Flow Final						
	Closed in						
Final Hydrostatic		2227.8	2267	2266.9			

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Casing perfs. _____ Bottom choke _____ Surf. temp _____ °F Ticket No. 047528
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

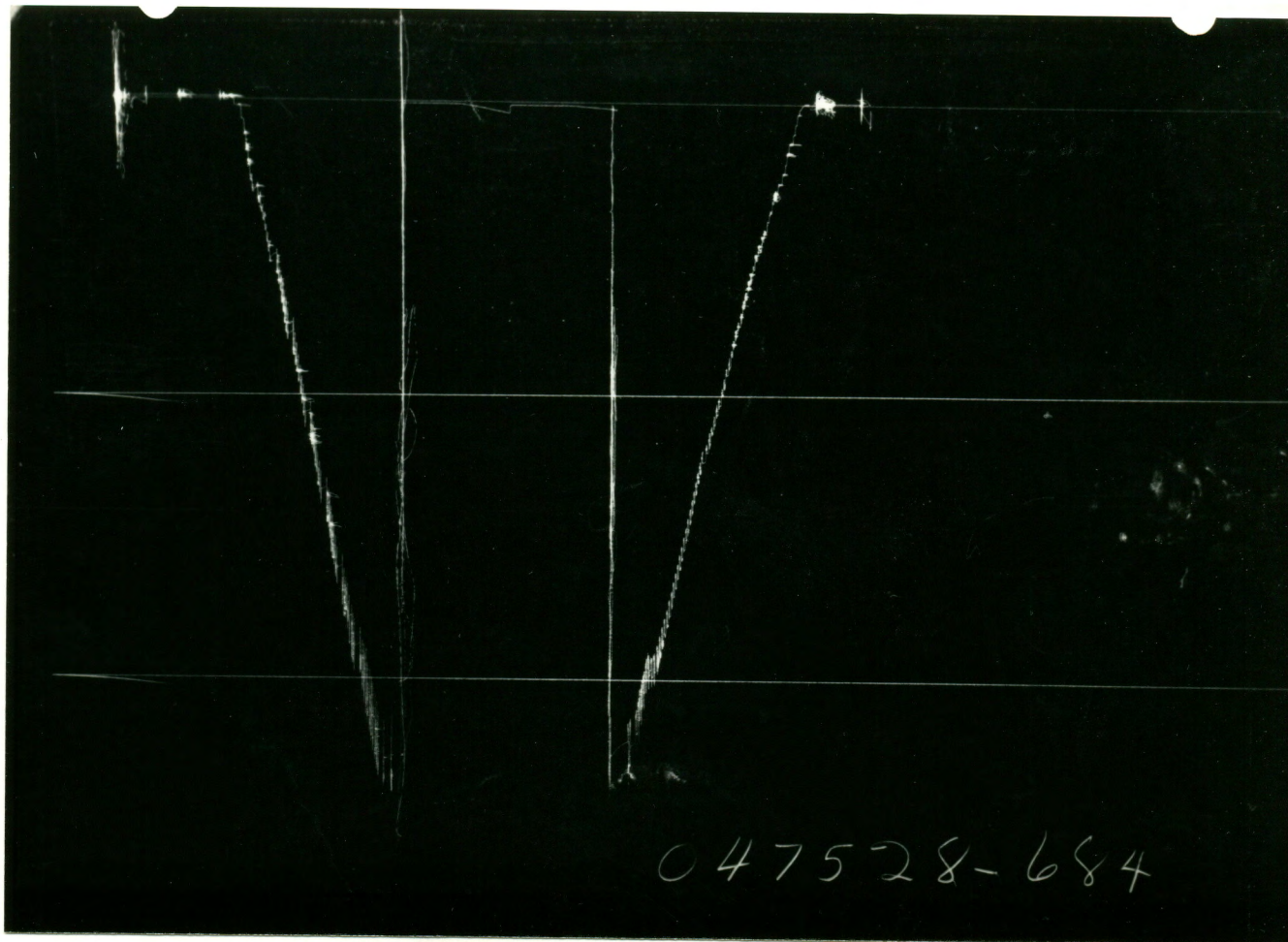
INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

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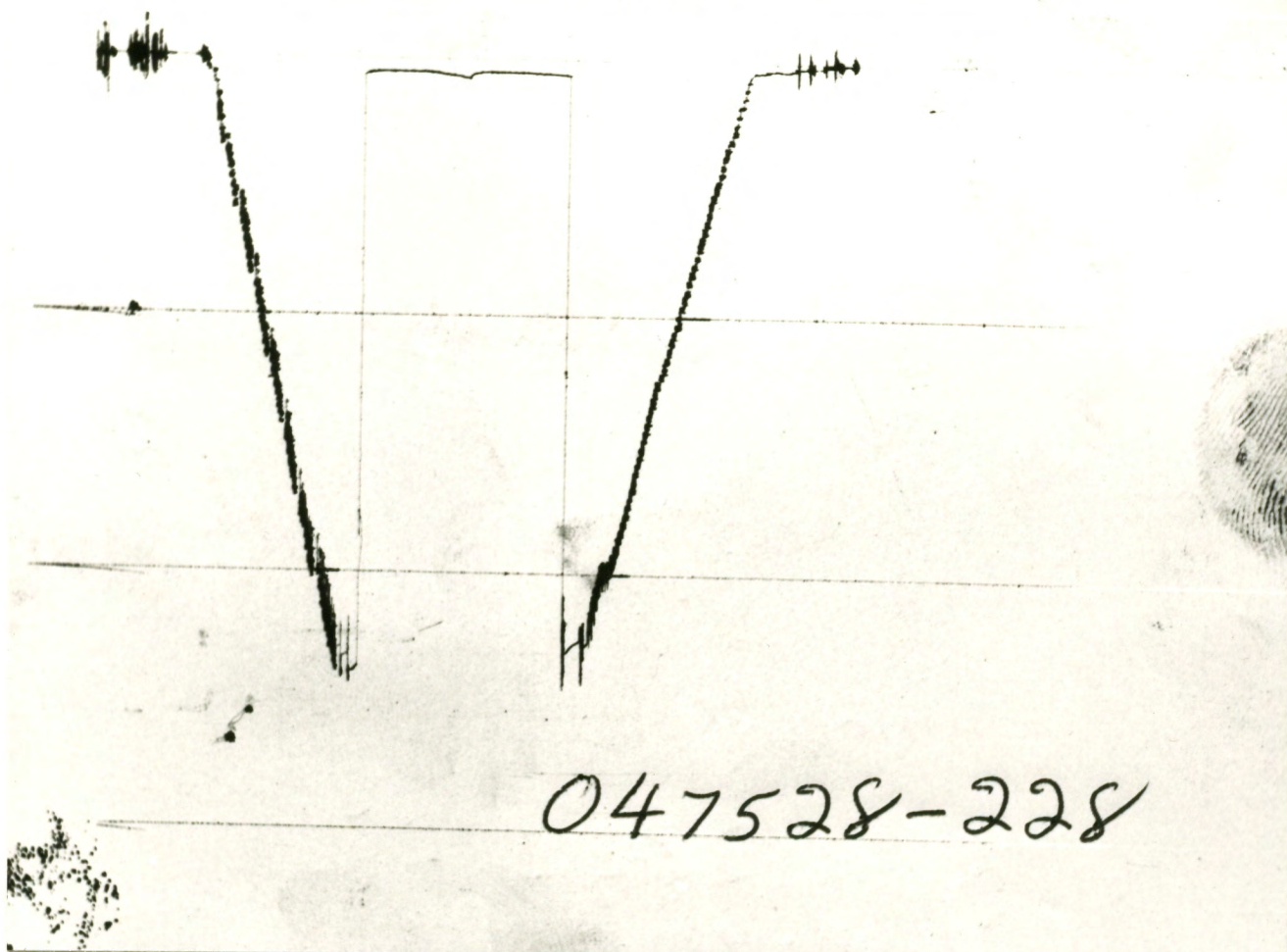


	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub	5.75"	3"	1'	3987'
Water Cushion Valve				
Drill Pipe	4.5"	3.826 "	4288'	
Drill Collars				
Handling Sub & Choke Assembly	5.75 "	3"	1'	
Dual CIP Valve	5"	.87"	6'	4236'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4246'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4248'
Hydraulic Jar				
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53 "	6'	4258'
Distributor				
Packer Assembly	6.75"	1.53"	6'	4264'
Flush Joint Anchor				
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	5"	3.84"	41'	
Blanked-Off B.T. Running Case	5"	2.44"	4'	4308'
Total Depth				4311'

PRESSURE



TIME



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

FLUID SAMPLE DATA				Date 5-15-81		Ticket Number 047529	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of D.S.T. OPEN HOLE		Halliburton Location NESS CITY	
Recovery: Cu. Ft. Gas _____				Tester B. CROSSWHITE		Witness M. TOTEN	
cc. Oil _____				Drilling Contractor ABERCROMBIE RIG # 8 DR			
cc. Water _____				EQUIPMENT & HOLE DATA			
cc. Mud _____				Formation Tested Mississippi			
Tot. Liquid cc. _____				Elevation 2234' _____ Ft.			
Gravity _____ ° API @ _____ °F.				Net Productive Interval _____ Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.				All Depths Measured From Kelly Bushing			
RESISTIVITY CHLORIDE CONTENT				Total Depth 4318' _____ Ft.			
Recovery Water _____ @ _____ °F. _____ ppm				Main Hole/Casing Size 7 7/8"			
Recovery Mud _____ @ _____ °F. _____ ppm				Drill Collar Length ? I.D. ?			
Recovery Mud Filtrate _____ @ _____ °F. _____ ppm				Drill Pipe Length 3989' I.D. 3.826"			
Mud Pit Sample _____ @ _____ °F. _____ ppm				Packer Depth(s) 4265' _____ Ft.			
Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm				Depth Tester Valve 4247' _____ Ft.			
Mud Weight 10 vis 50 sec.							
TYPE		AMOUNT		Depth Back Pres. Valve		Surface Choke	
Cushion				Ft.		Bottom Choke .75"	
Recovered 1214		Feet of drilling mud					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks Unsuccessful test. Charts indicate plugging throughout test and apparent leakage around packers. Hydrostatics are only reliable pressures.							
TEMPERATURE							
Gauge No. 684		Gauge No. 228		Gauge No. _____		TIME (00:00-24:00 hrs.)	
Depth: 4249' Ft.		Depth: 4315 Ft.		Depth: _____ Ft.			
Calc. 12 Hour Clock		Calc. 12 Hour Clock		Hour Clock		Tool	
Est. 110 °F.		Blanked Off NO		Blanked Off YES		Blanked Off	
Actual _____ °F.		Pressures		Pressures		Pressures	
		Field Office		Field Office		Field Office	
Initial Hydrostatic		2271.2		2312.7			
First Period	Flow Initial					Reported Minutes	
	Flow Final					Computed Minutes	
	Closed in						
Second Period	Flow Initial					45	
	Flow Final					45	
	Closed in					30	
Third Period	Flow Initial					30	
	Flow Final						
	Closed in						
Final Hydrostatic		2245.5		2338.0			

Legal Location Sec. - Twp. - Range. **7-18-21**

Lease Name **ROTH "B"**

Well No. **1**

Test No. **3**

Tested Interval **4265-4318'**

County **NESS**

State **KANSAS**

Lease Owner/Company Name **K & E PETROLEUM INCORPORATED**

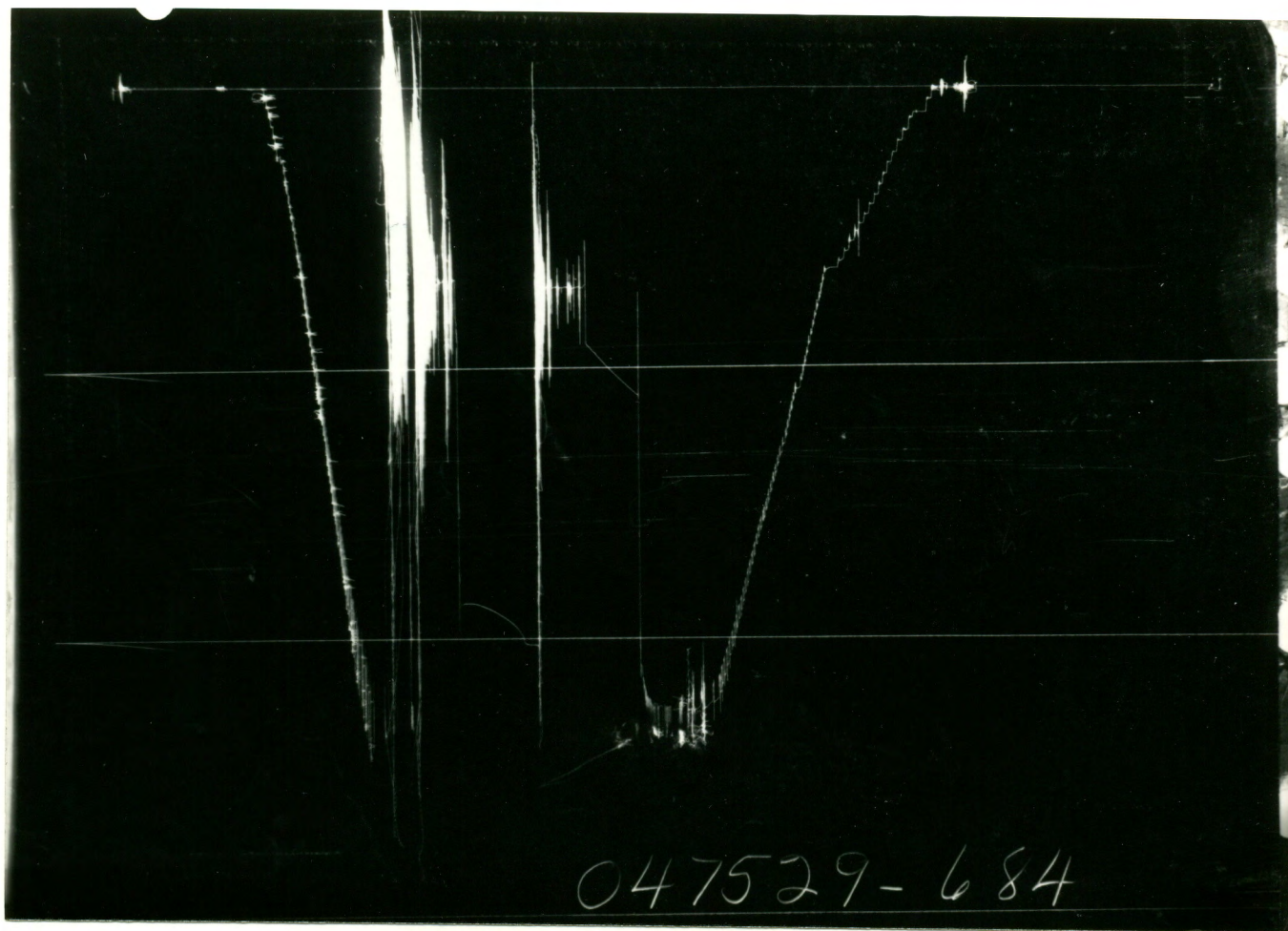
INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

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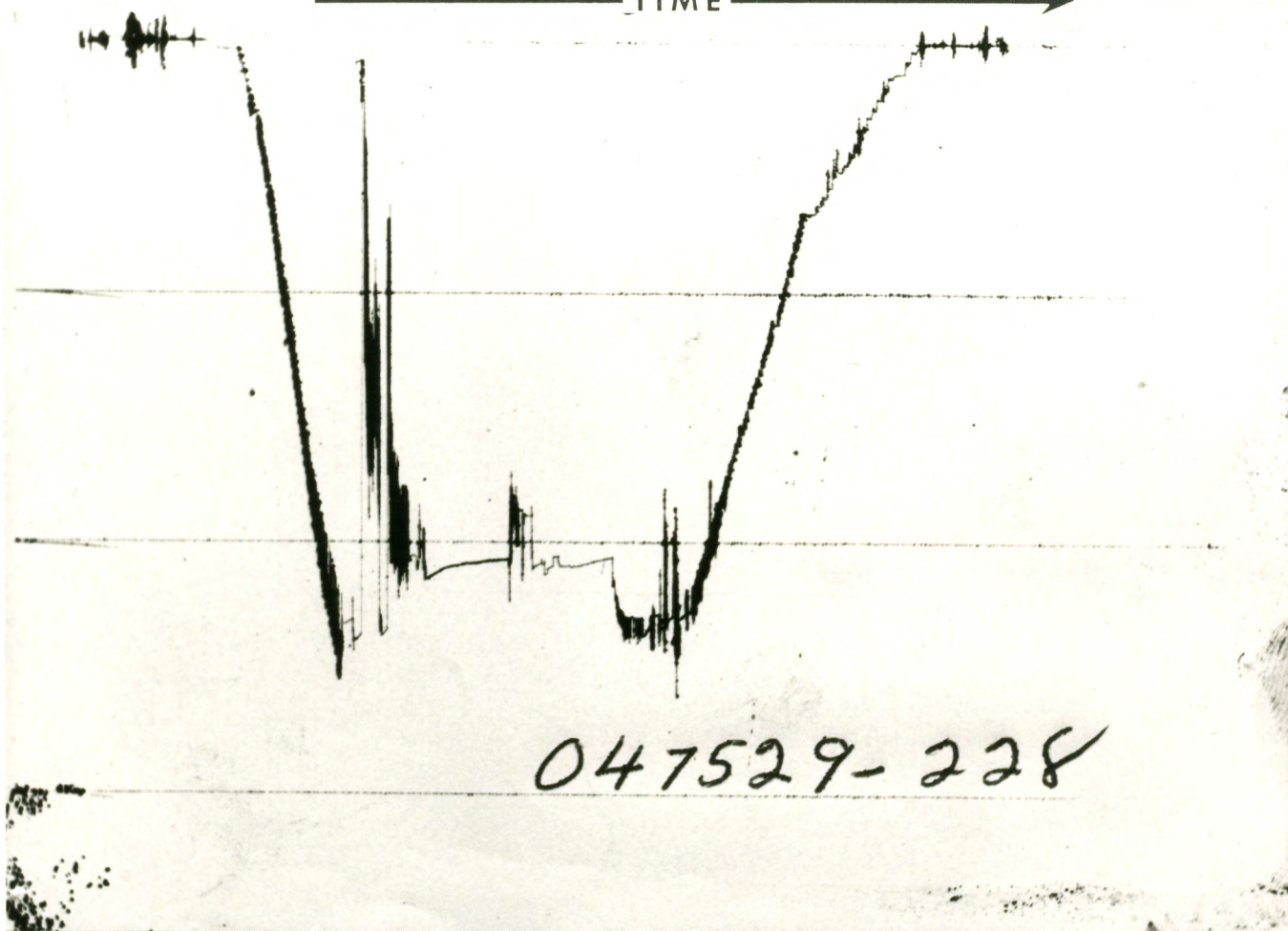


	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub	5.75"	3"	1'	3989'
Water Cushion Valve				
Drill Pipe	4.5"	3.826"	3430'	
Drill Collars	?	?	?	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	6'	4237'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75'	5'	4247'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4249'
Hydraulic Jar				
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	6'	4259'
Distributor				
Packer Assembly	6.75"	1.53"	6'	4265'
	5"	3"	2' 1 set sub	
Flush Joint Anchor	5"	3.84"	45'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5"	2.44"	4'	4315'
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				4318'

PRESSURE



TIME



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

FLUID SAMPLE DATA				Date 5-16-81		Ticket Number 047530	
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 D.S.T. OPEN HOLE		Halliburton Location NESS CITY	
				Tester CROSSWHITE		Witness TOTTEN	
				Drilling Contractor ABERCROMBIE RIG # 8		sm	
EQUIPMENT & HOLE DATA							
				Formation Tested Mississippi			
				Elevation 2234' Ft.			
				Net Productive Interval - Ft.			
				All Depths Measured From Kelly bushing			
				Total Depth 4318' Ft.			
				Main Hole/Casing Size 7 7/8"			
				Drill Collar Length ? I.D.			
				Drill Pipe Length 3395' I.D. 3.826"			
				Packer Depth(s) 4224' Ft.			
				Depth Tester Valve 4212' Ft.			
TYPE		AMOUNT		Depth Back Ft.		Surface Choke	
Cushion				Pres. Valve		Bottom Choke	
		93		Feet of drilling mud		.25" .75"	
Recovered				Feet of			
Recovered				Feet of			
Recovered				Feet of			
Recovered				Feet of			
Recovered				Feet of			
Remarks							
SEE PRODUCTION TEST DATA SHEET							
TEMPERATURE		Gauge No. 684		Gauge No. 228		Gauge No.	
		Depth: 4214 Ft.		Depth: 4315 Ft.		Depth: Ft.	
		12 Hour Clock		12 Hour Clock		Hour Clock	
Est. C 100 °F.		Blanked Off no		Blanked Off yes		Blanked Off	
Actual °F.		Pressures		Pressures		Pressures	
		Field	Office	Field	Office	Field	Office
Initial Hydrostatic			2257.3	2267	2325.1		
First Period	Flow	Initial	25.6	87	92.4		
		Final	40.1	101	102.0		
		Closed in	1026.4	1068	1081.9		
Second Period	Flow	Initial	52.6	101	131.5		
		Final	64.9	122	133.6		
		Closed in	1007.5	1028	1063.9		
Third Period	Flow	Initial	*See special reading sheet				
		Final					
		Closed in					
Final Hydrostatic			2242.7	2257	2331.6		

 Legal Location
 Sec. - Twp. - Rng.

Lease Name

ROTH "B"

Well No.

1

Test No.

4

Tested Interval

4224 - 4318'

Field Area

Mea. From Tester Valve

County

NESS

State

KANSAS

Lessee Owner/Company Name

K & E PETROLEUM INCORPORATED

Casing perfs. _____ Bottom choke _____ Surf. temp _____ °F Ticket No. 047530
Gas gravity _____ Oil gravity _____ GOR _____
Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

[illegible]

K & E PETROLEUM INCORPORATED
Lease Owner/Company Name

047530
Ticket Number

B.T. 684

B.T. 228

B.T. _____

Depth 4214'

Depth 4315'

Depth _____

12 Hour

12 Hour

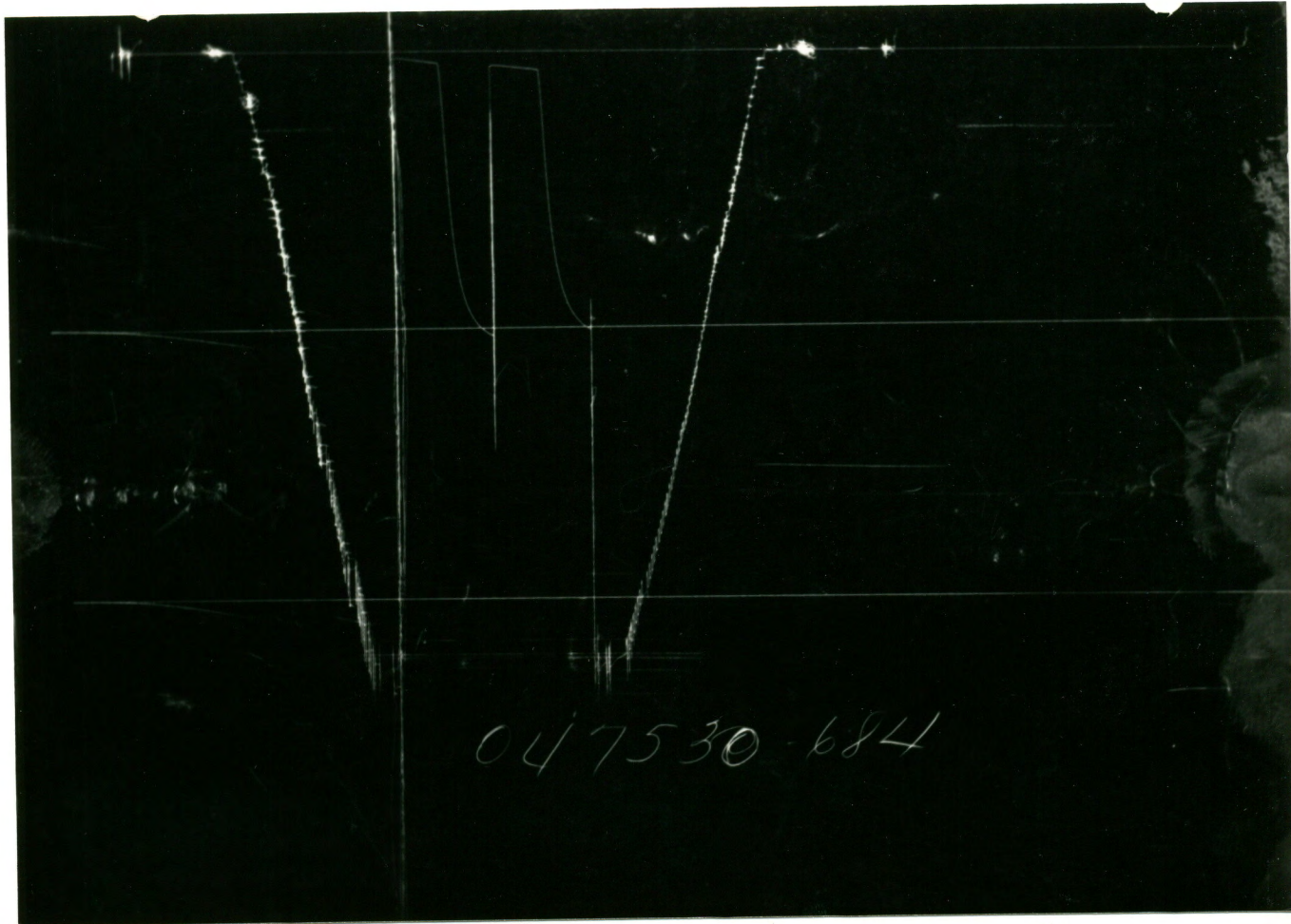
Minutes	$\text{Log} \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Minutes	$\text{Log} \frac{t + \theta}{\theta}$	PSIG Temp. Corr.		$\text{Log} \frac{t + \theta}{\theta}$	PSIG Temp. Corr.
FIRST FLOW PERIOD			FIRST FLOW PERIOD					
0		25.6	0		92.4			
5		23.8	5		90.9			
10		26.6	10		94.0			
15		30.4	15		97.6			
20		33.5	20		99.4			
25		37.4	25		102.0			
28.4		40.1	26.7		102.0			
FIRST CIP PERIOD			FIRST CIP PERIOD					
0		40.1	0		102.0			
3		290.5	3		369.3			
6		560.6	6		622.4			
9		728.9	9		793.1			
12		837.3	12		890.4			
15		903.2	15		956.4			
18		946.1	18		1003.1			
21		973.8	21		1032.4			
24		995.6	24		1056.4			
27		1011.3	27		1071.9			
31.6		1026.4	30.3		1081.9			
SECOND FLOW PERIOD			SECOND FLOW PERIOD					
0		52.6	0		131.5			
5		49.0	5		119.3			
10		52.1	10		121.5			
15		55.5	15		123.4			
20		58.1	20		126.4			
25		61.8	25		130.0			
29.5		64.9	29.0		133.6			
SECOND CIP PERIOD			SECOND CIP PERIOD					
0		64.9	0		133.6			
3		326.1	3		400.3			
6		576.8	6		649.4			
9		733.4	9		804.8			
12		827.8	12		894.6			
15		886.6	15		956.5			
18		929.4	18		995.0			
21		956.7	21		1021.4			
24		978.0	24		1041.8			
27		993.9	27		1058.0			
30.6		1007.5	28.7		1063.9			

Remarks: _____

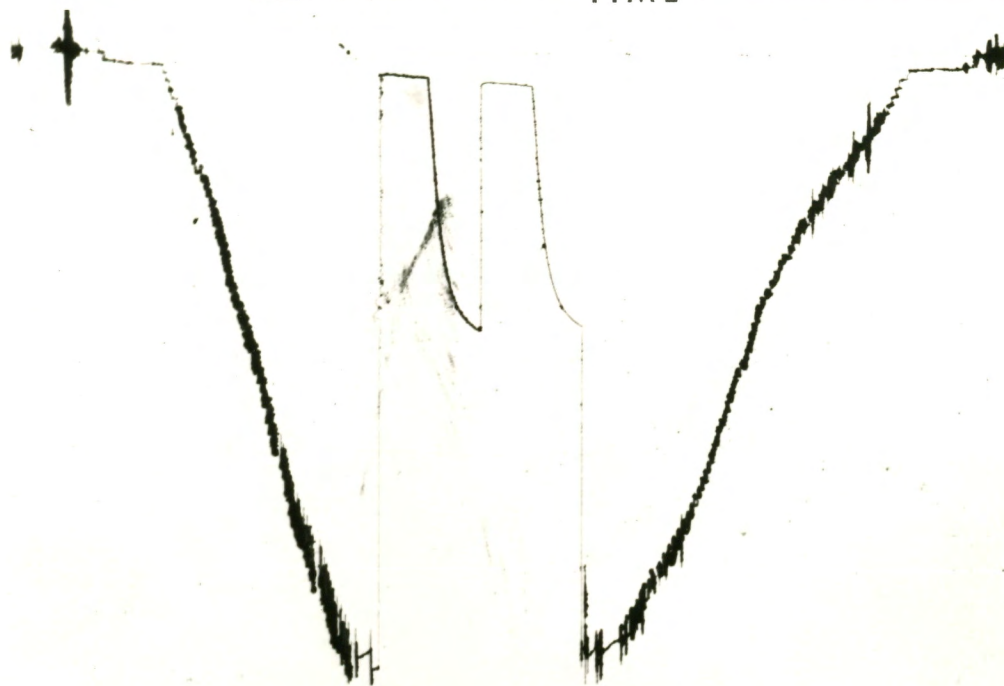


	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub	5.75"	3"	1'	3953'
Water Cushion Valve				
Drill Pipe	4.5"	3.826"	3395'	
Drill Collars	?	?	?	
Handling Sub & Choke Assembly 1 set sub	5"	3"	2'	
Dual CIP Valve	5"	.87"	6'	4202'
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	4212'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	4214'
Hydraulic Jar	5"	1"	3'	
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	6.75"	1.53"	6'	4224'
Distributor				
Packer Assembly				
Flush Joint Anchor				
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 1 set sub	5"	3"	2'	
Drill Collars				
Flush Joint Anchor	5"	3.84"	86'	
Blanked-Off B.T. Running Case	5"	2.44"	4'	4315'
Total Depth				4318'

PRESSURE



TIME



047530. 228

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