FLUID SAMPLE DATA

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.		
Recovery Mud Filtrate	_____ @ _____ °F.		_____ ppm
Mud Pit Sample	_____ @ _____ °F.		
Mud Pit Sample Filtrate	_____ @ _____ °F.		_____ ppm
Mud Weight	9.9	vis 42	cp

Date 8-30-72 Ticket Number 435684
Kind of Job OPEN HOLE Halliburton District GREAT BEND
Tester L. MOORE Witness JERRY JESPERSON
Drilling Contractor C. & G. DRILLING COMPANY DR

EQUIPMENT & HOLE DATA

Formation Tested Marmaton
Elevation _____ Ft.
Net Productive Interval _____ Ft.
All Depths Measured From Kelly Bushing
Total Depth 4110' Ft.
Main Hole/Casing Size 7 7/8"
Drill ~~Collar~~ WGHT PIPE Length 899' I.D. 2.764"
Drill Pipe Length 3169' I.D. 3.826"
Packer Depth(s) 4058'-4063' Ft.
Depth Tester Valve 4046' Ft.

Cushion TYPE _____ AMOUNT _____ Ft. Depth Back Pres. Valve _____ Surface Choke 1/4" Bottom Choke 3/4"

Recovered 20 Feet of drilling mud
Recovered Feet of
Recovered Feet of
Recovered Feet of
Recovered Feet of

Mea. From Tester Valve

Remarks SEE PRODUCTION TEST DATA SHEET

TEMPERATURE	Gauge No. 684	Gauge No. 528	Gauge No.	TIME
	Depth: 4051' Ft.	Depth: 4105' Ft.	Depth: Ft.	
	12 Hour Clock	12 Hour Clock	Hour Clock	Tool ~~AM~~
Est. 110 °F.	Blanked Off NO	Blanked Off YES	Blanked Off	Opened 10:10 P.M.
4104'@ Actual 110 °F.	Pressures	Pressures	Pressures	Tool A.M. Closed 12:40 ~~P.M.~~

		Field	Office	Field	Office	Field	Office	Reported Minutes	Computed Minutes
Initial Hydrostatic			2112	2126	2141				
First Period Flow	Initial		11	43	43			———	———
	Final		13	52	45			30	
	Closed in		43	69	71			30	
Second Period Flow	Initial		16	43	55			———	———
	Final		17	52	56			60	
	Closed in		24	52	52			30	
Third Period Flow	Initial							———	———
	Final								
	Closed in								
Final Hydrostatic			2012	2091	2128			———	———

Legal Location Sec. - Twp. - Rng. NW-NE. 19-18-23
Lease Name D. G. HANSEN TRUST Bondurant
Well No. 1
Test No. 1
Tested Interval 4063'-4110'
Field Area WILD CAT
County NESS
State KANSAS
Lease Owner/Company Name D. G. HANSEN

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FORMATION TEST DATA

LITTLE'S

5

Casing perfs. _____ Bottom choke 3/4" Surf. temp _____ °F Ticket No. 435684

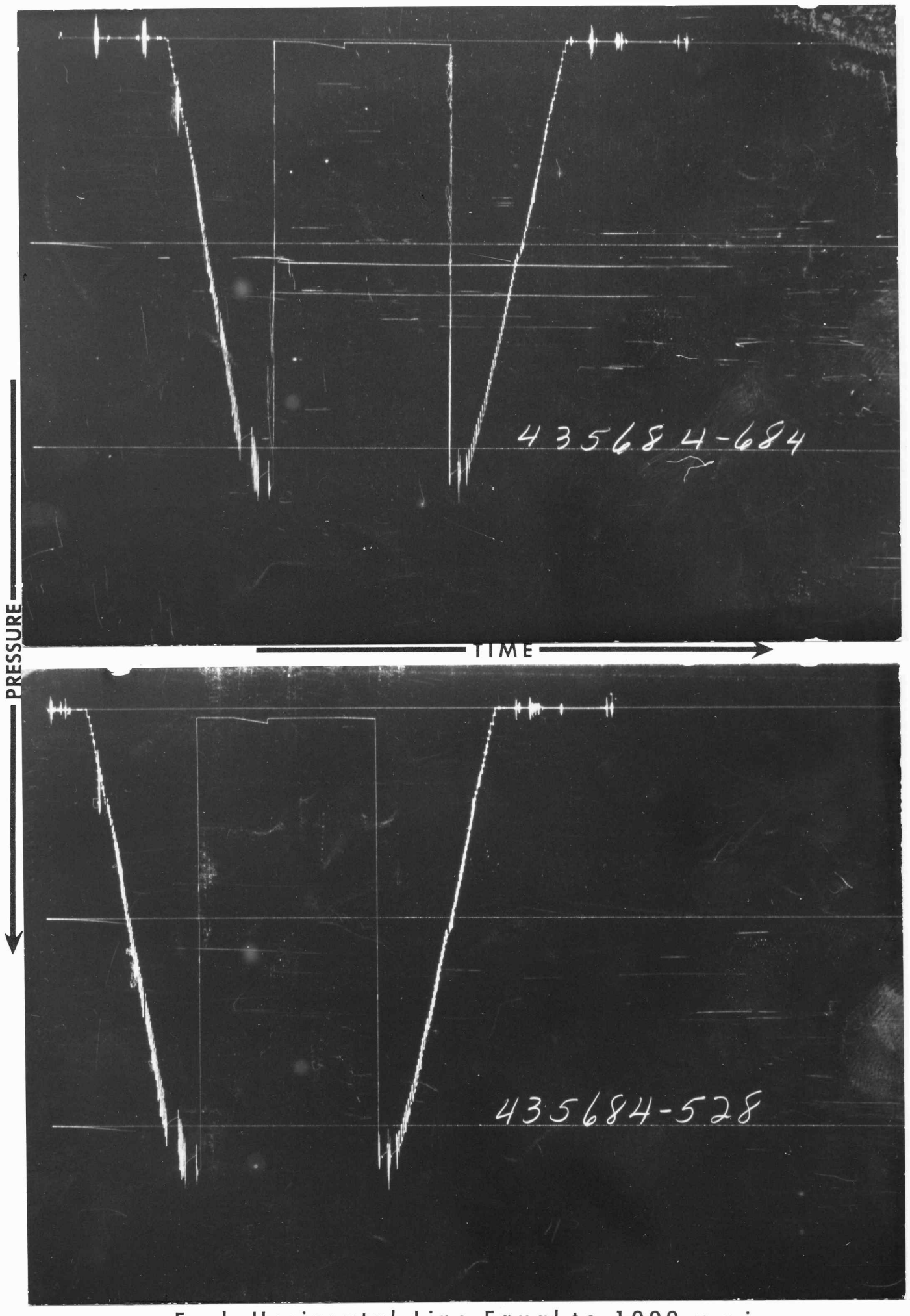
Gas gravity _____ Oil gravity _____ GOR _____

Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

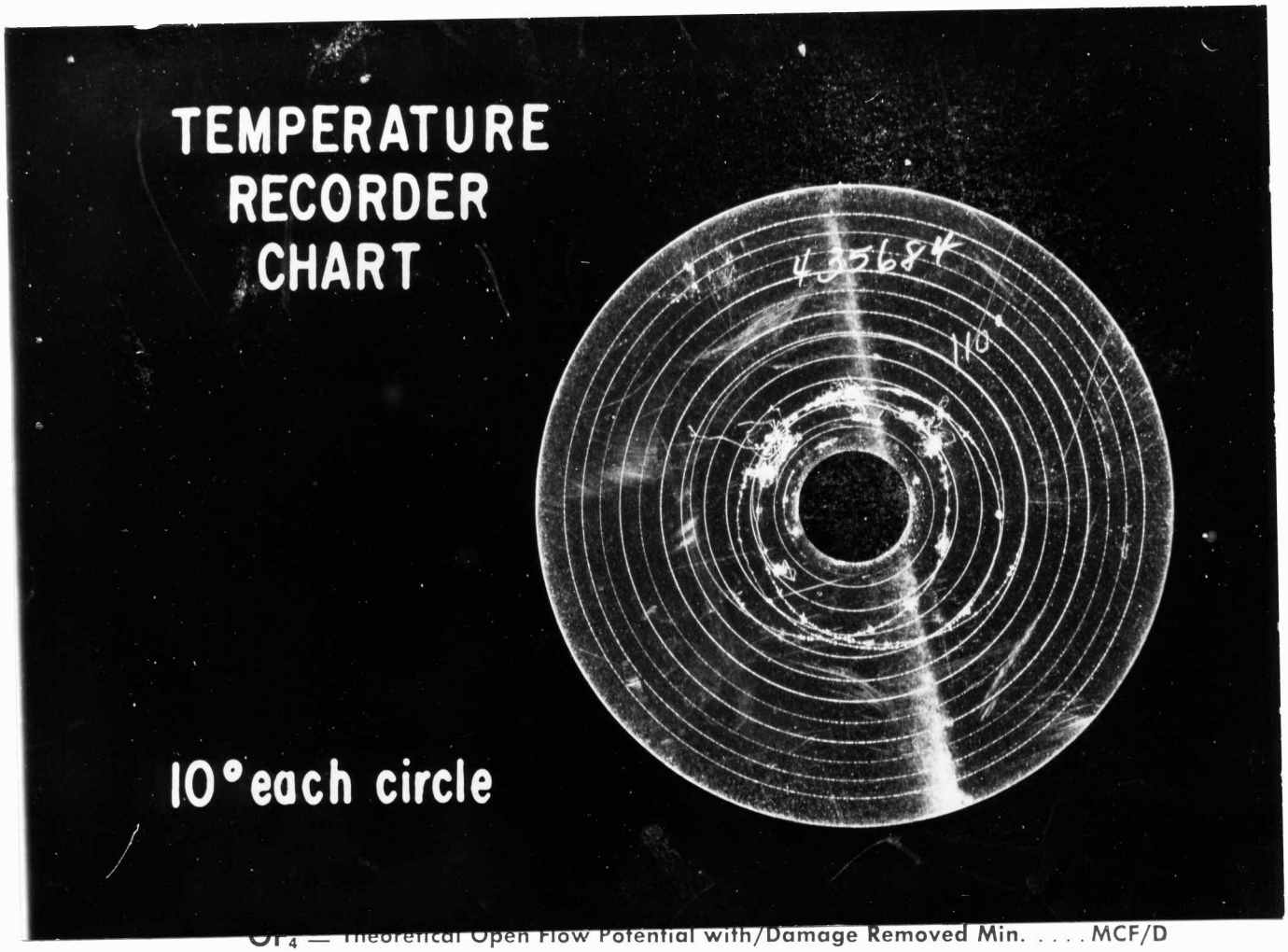
Date Time a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
10:10					Open 30 minutes with a weak blow
					Slight decrease.
10:40					Closed tool for 30 minutes.
11:10					Open tool for 60 minutes with no blow.
12:10					Closed tool for 30 minutes
12:40					Come off Bottom

435684

	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub	5.75"	2.75"	12"	
Water Cushion Valve				
Drill Pipe	4 1/2"	3.826"	3169'	
Drill ~~Collars~~ XXXXX WGHT PIPE	4 1/2"	2.764"	899'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	60.92"	
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	60.21"	4046'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	49.63"	4051'
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.53"	48.89"	4058'
Distributor				
Packer Assembly	6 3/4"	1.53"	48.89"	4063'
Flush Joint Anchor	5"	2.37"	39'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5"	3.06"	61.63"	4105'
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				



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



Q_{f_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

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.		
Recovery Mud Filtrate	_____ @ _____	°F.	_____	ppm
Mud Pit Sample	_____ @ _____	°F.		
Mud Pit Sample Filtrate	_____ @ _____	°F.	_____	ppm
Mud Weight	9.7	vis 40		cp

Date 9-1-72 Ticket Number 435685
Kind of Job OPEN HOLE Halliburton District GREAT BEND
Tester L. MOORE Witness JERRY JESPERSON
Drilling Contractor C & G DRILLING COMPANY SM

EQUIPMENT & HOLE DATA

Formation Tested Fort Scott
Elevation - Ft.
Net Productive Interval - Ft.
All Depths Measured From Kelly bushing
Total Depth 4258' Ft.
Main Hole/Casing Size 7 7/8 "
Drill Collar Length 899' I.D. 2.764" WP
Drill Pipe Length 3334' I.D. 3.826"
Packer Depth(s) 4237- 4242' Ft.
Depth Tester Valve 4225' Ft.

Cushion TYPE AMOUNT Ft. Depth Back Pres. Valve
Surface Choke 1/4" Bottom Choke 3/4"

Recovered 5 Feet of thin mud with trace of oil
Recovered Feet of
Recovered Feet of
Recovered Feet of
Recovered Feet of

Meas. From Tester Valve

Remarks Tool opened for 30 minute first flow with very weak blow for 20 minutes and died. Closed for 30 minute first closed in pressure. Tool reopened for 30 minute second flow with no blow. Closed tool for 30 minute second closed in pressure.

TEMPERATURE	Gauge No. 684	Gauge No. 528	Gauge No.	TIME
	Depth: 4230 Ft.	Depth: 4253 Ft.	Depth: Ft.	
	12 Hour Clock	12 Hour Clock	Hour Clock	Tool Opened 6:25 P.M.
Est. °F.	Blanked Off no	Blanked Off yes	Blanked Off	
Actual 101 °F. (4252')	Pressures	Pressures	Pressures	Tool Closed 8:25 P.M.

		Field	Office	Field	Office	Field	Office	Reported Minutes	Computed Minutes
Initial Hydrostatic		-	2169	2196	2179				
First Period	Flow Initial	-	6	17	21			___	___
	Flow Final	-	6	17	21			30	
	Closed in	-	48	60	59			30	
Second Period	Flow Initial	-	9	17	27			___	___
	Flow Final	-	9	17	23			30	
	Closed in	-	24	43	36			30	
Third Period	Flow Initial							___	___
	Flow Final								
	Closed in								
Final Hydrostatic		-	2146	2187	2156			___	___

Legal Location Sec. - Twp. - Rng. 19 18 23
Lease Name BUNDUKANI
Well No. 1
Test No. 2
Field Area WILDCAT
Tested Interval 4242 - 4258'
County NESS
State KANSAS
Lease Owner/Company Name D. G. HANSEN TRUST

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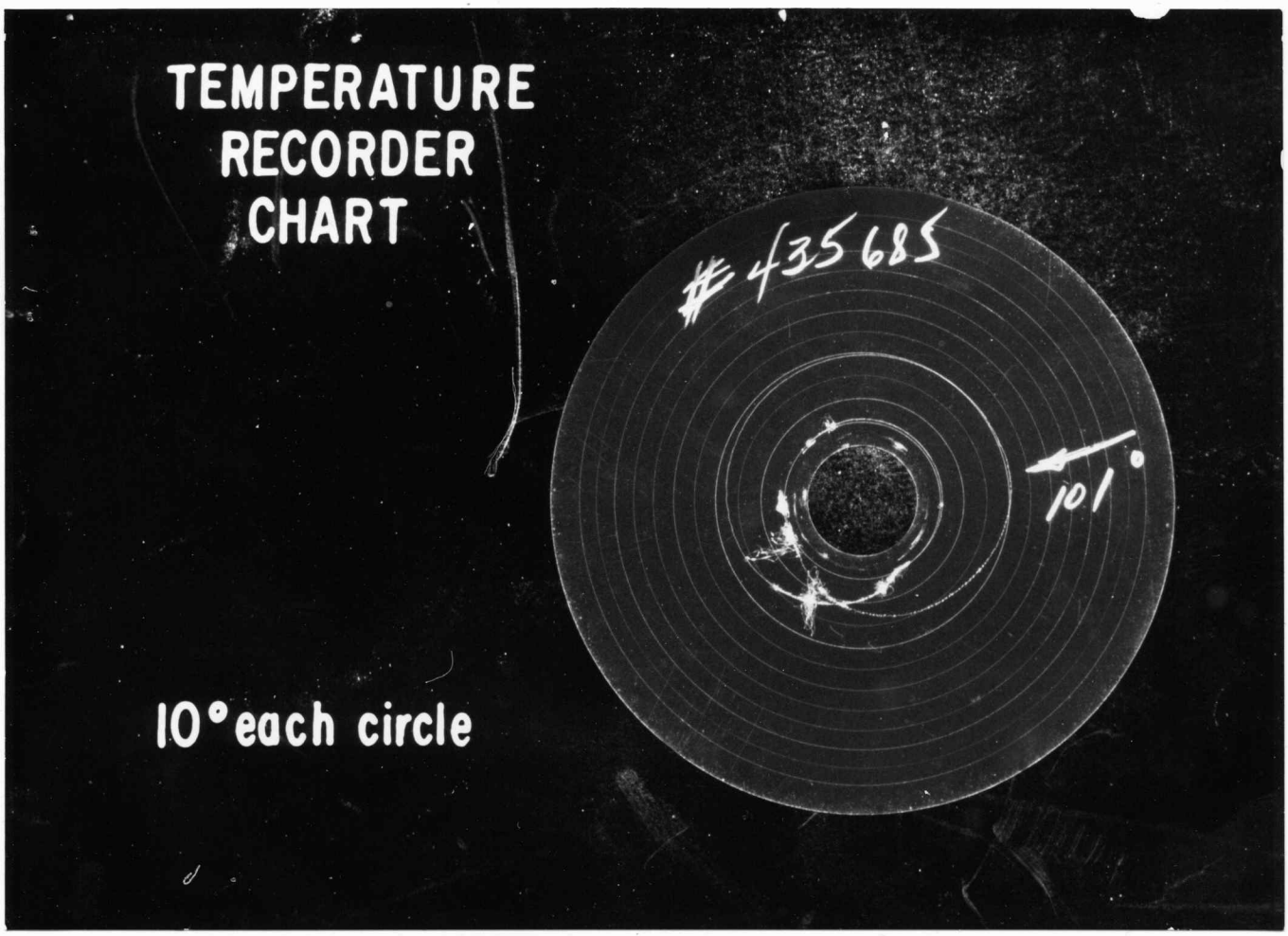
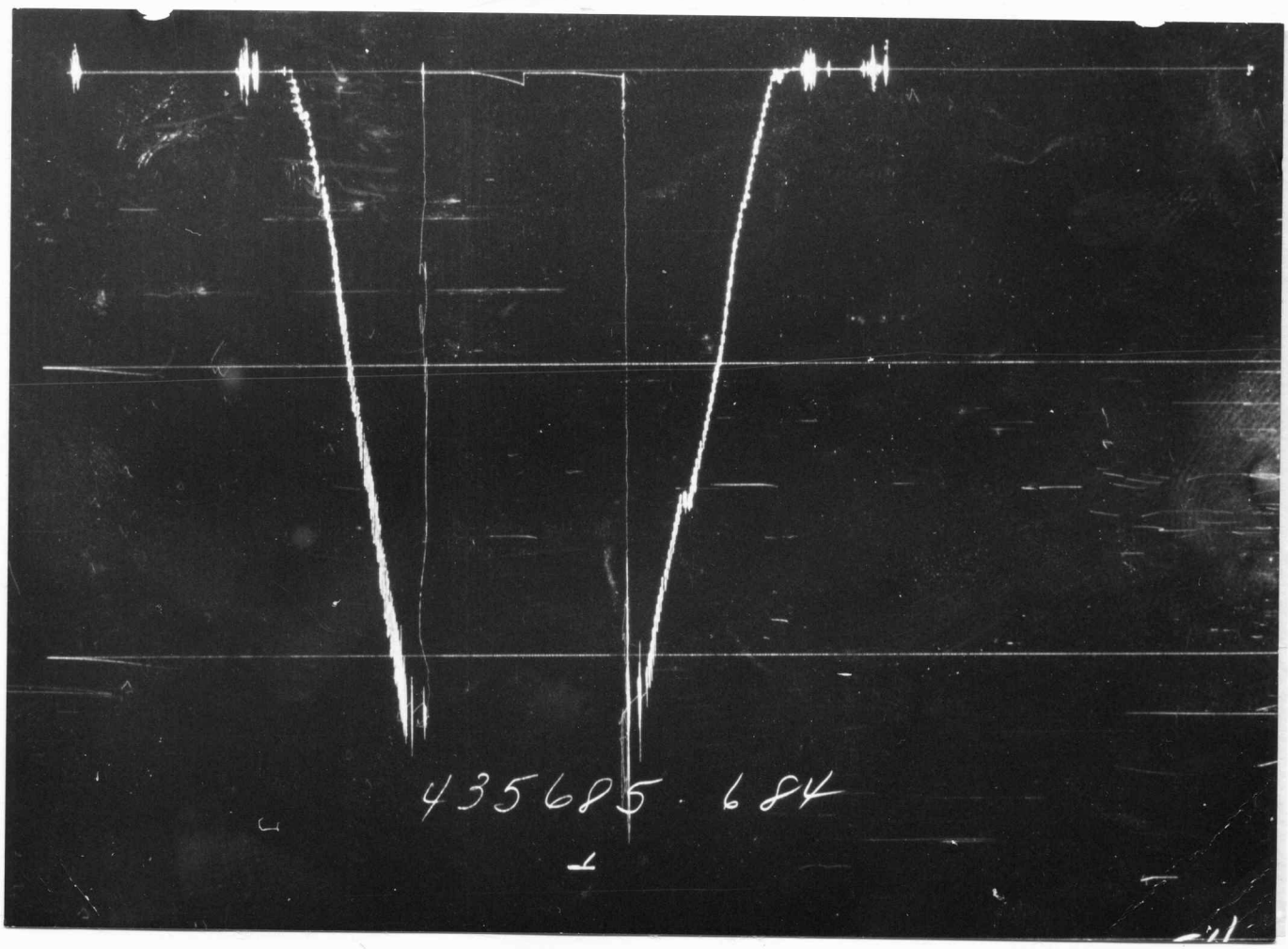
FORMATION TEST DATA

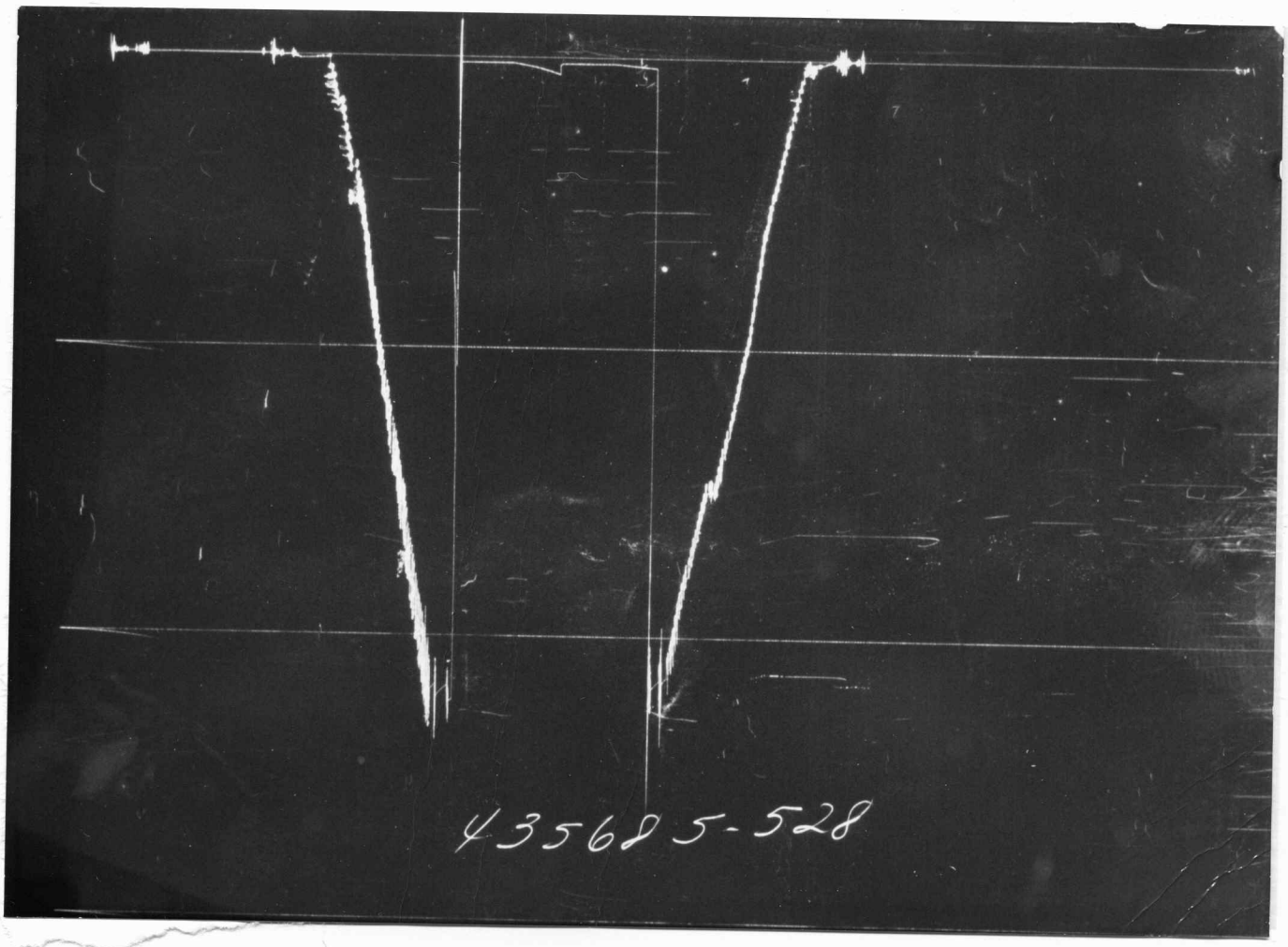
LITTLE'S

435685

	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub	5.75"	2.75"	12"	
Water Cushion Valve				
Drill Pipe	4½"	3.826"	3334'	
Drill Collars	4½"	2.764"	899' Weight Pipe	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	60.92"	
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	60.21"	4225'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	49.63"	4230'
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.53"	48.89"	4237'
Distributor				
Packer Assembly	6 3/4"	1.53"	48.89"	4242'
Flush Joint Anchor	5"	2.37"	8'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5"	3.06"	61.63"	4253'
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				


TEMPERATURE
RECORDER
CHART
#435685
101°
10° each circle


435685.684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