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	TOP	.62	@ 60	°F.	95,361 ppm
Recovery Mud			@	°F.	ppm
Recovery Mud Filtrate	BOTTOM	.68	@ 60	°F.	94,815 ppm
Mud Pit Sample			@	°F.	ppm
Mud Pit Sample Filtrate			@	°F.	ppm

Mud Weight 9.3 vis 33 sec.

Date 8-13-80 Ticket Number 768093
Kind of D.S.T. OPEN HOLE Halliburton Location LIBERAL
Tester MR. AUSTIN Witness MR. ARMSTRONG
Drilling Contractor THUNDER BIRD DRILLING COMPANY RIG#2

EQUIPMENT & HOLE DATA

bc

Formation Tested Chase
Elevation 2874' Ft.
Net Productive Interval 10' Ft.
All Depths Measured From Kelly Bushing
Total Depth 2760' Ft.
Main Hole/Casing Size 7 7/8"
Drill Collar Length 291' I.D. 2.25"
Drill Pipe Length 2368' I.D. 3.826"
Packer Depth(s) 2680' - 2686' Ft.
Depth Tester Valve 2671' Ft.

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

Recovered 85 Feet of Mud
Recovered Feet of
Recovered Feet of
Recovered Feet of
Recovered Feet of

Mea. From Tester Valve

Remarks SEE PRODUCTION TEST DATA SHEET.

Q = Questionable

TEMPERATURE	Gauge No. 7352 Depth: 2676' Ft.	Gauge No. 7351 Depth: 2757' Ft.	Gauge No. Depth: Ft.	TIME (00:00-24:00 hrs.)
	12 Hour Clock	12 Hour Clock	Hour Clock	Tool Opened 0507
Est. °F.	Blanked Off No	Blanked Off Yes	Blanked Off	Opened Bypass 0907
2755' Actual 92 °F.	Pressures	Pressures	Pressures	

	Field	Office	Field	Office	Field	Office	Reported Minutes	Computed Minutes
Initial Hydrostatic	1362.4	1370.2		1416.4				
First Period Flow Initial	3.2	6.3		54.1			___	___
First Period Flow Final	25.4	34.8		81.2			30	32
First Period Closed in	436.8	431.9		480.9			90	86
Second Period Flow Initial	25.4	237.3-Q		289.8-Q			___	___
Second Period Flow Final	44.4	56.9		109.8			30	30
Second Period Closed in	420.9	420.8		477.7			90	90
Third Period Flow Initial							___	___
Third Period Flow Final								
Third Period Closed in								
Final Hydrostatic	1362.4	1363.9		1422.7			___	___

Legal Location Sec. - Twp. - Rng. 17 - 24 - 30
Lease Name WERNER
Well No. 1
Test No. 1
Tested Interval 2686' - 2760'
Field Area
County GRAY
State KANSAS
Lease Owner/Company Name BEREN CORPORATION

FORM 181-R2 — PRINTED IN U.S.A.

FORMATION TEST DATA

LITTLE'S 111033 75C 2/80

10

768093

Casing perfs.____ Bottom choke____ Surf. temp____ °F Ticket No.____

Gas gravity____ Oil gravity____ GOR____

Spec. gravity____ Chlorides____ ppm Res.____ @____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED____

Date Time a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
2100					Called out
NOW					Time requested on location
0020					On location
					Rigged up drill pipe
0030					Started out of hole with drill pipe for ~~Test #1~~
0220					Out of hole with drill pipe
0223					Washed floor
0230					Picked up bottom ½ of tool
0245					Picked up top ½ of tool
0300					Tightened up tool
0314					Ready for drill pipe
0342					STarted in hole with drill pipe
0454					Hooked up head, one joint off bottom
0504					Put head on, set tool
0507					Tool opened with a weak blow in bucket ~~No gas~~
0537					Closed tool
0707					Opened tool with a weak blow, no gas
0737					Closed tool, blow died off to zero
0907					Pulled tool off bottom
0909					Took of head
0919					Started off bottom with tool
1017					Tool at rotary table
1055					Loaded out tool
1115					Job completed

Gauge No.	7352		Depth	2676'		Clock No.	10432		12 hour	Ticket No.	768093			
	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 $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	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.
0	.0000	6.3	.0000		34.8	.0000	237.3-Q	.0000		56.9					
1	.0274	9.4	.0404		270.5	.0335	39.5	.0400		292.7					
2	.0548	15.8	.0808		352.8	.0670	44.3	.0800		352.8					
3	.0821	20.5	.1212		381.3	.1005	47.4	.1200		376.5					
4	.1095	22.1	.1616		397.1	.1340	50.6	.1600		389.2					
5	.1369	26.8	.2020		406.6	.1675	53.7	.2000		398.7					
6	.1643	31.6	.2424		412.9	.2010	56.9	.2400		403.4					
7	.1916	33.2	.2828		417.7			.2800		406.6					
8	.2190	34.8	.3232		422.4			.3200		411.3					
9			.3636		424.0			.3600		412.9					
10			.4040		425.6			.4000		414.5					
11			.4443		427.2			.4400		416.1					
12			.4847		428.8			.4800		417.7					
13			.5251		430.3			.5200		419.3					
14			.5790		431.9*			.5600		420.8					
15								.6000		420.8					

Gauge No.	7351		Depth	2757'		Clock No.	17059		12 hour					
0	.0000	54.1	.0000		81.2	.0000	289.8-Q	.0000		109.8					
1	.0270	57.3	.0401		320.0	.0333	93.9	.0399		348.7					
2	.0540	62.1	.0802		399.6	.0667	97.1	.0799		406.0					
3	.0810	65.2	.1203		428.3	.1000	100.3	.1198		429.9					
4	.1080	68.4	.1605		444.2	.1333	103.5	.1597		442.6					
5	.1350	73.2	.2006		453.8	.1667	106.6	.1997		450.6					
6	.1620	76.4	.2407		460.2	.2000	109.8	.2396		455.4					
7	.1890	78.0	.2808		466.5			.2795		460.2					
8	.2160	81.2	.3209		468.1			.3195		463.3					
9			.3610		471.3			.3594		466.5					
10			.4012		474.5			.3993		468.1					
11			.4413		477.7			.4393		469.7					
12			.4814		479.3			.4792		472.9					
13			.5215		479.3			.5191		474.5					
14			.5750		480.9*			.5591		476.1					
15								.5990		477.7					
Reading Interval	4		6			5		6							Minutes

REMARKS: *Interval = 8 minutes
Q = Questionable

FORM 183-R1—PRINTED IN U.S.A.

SPECIAL PRESSURE DATA

LITTLE'S 96673 75C 8/74

TICKET NO. 768093

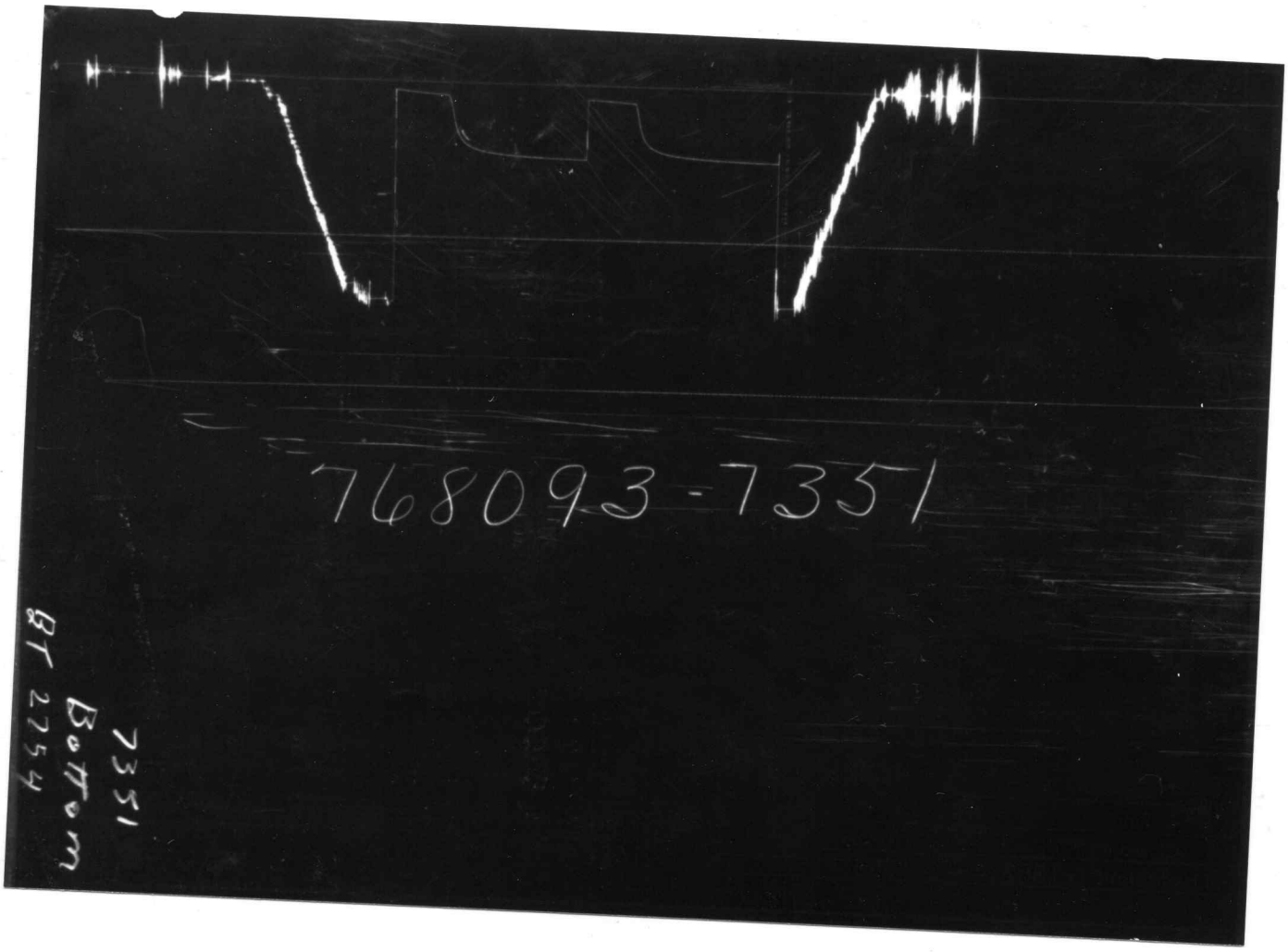
	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub				
Water Cushion Valve				
Drill Pipe	4½"	3.826"	2368'	
Drill Collars	6¼"	2.25"	291'	
Handling Sub & Choke Assembly	4½"	3.826"	5'	
Dual CIP Valve				
Dual CIP Sampler	5"	.75"	7'	2664'
Hydro-Spring Tester	5"	.75"	5'	2671'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.06"	4'	2676'
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.53"	6'	2680'
Distributor				
Packer Assembly	6 3/4"	1.53"	6'	2686'
Flush Joint Anchor	5"	2.37"	15'	
Pressure Equalizing Tube				
X over	6"	2.25"	1'	
Blanked-Off B.T. Running Case				
Drill Collars Weight pipe	4½"	2.764"	31'	
Anchor Pipe Safety Joint				
X over	6"	2.25"	1'	
X over	6"	2.25"	1'	
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor	5"	2.37"	18'	
HT-500	5"	-	1'	2756'
Blanked-Off B.T. Running Case	5"	2.44"	4'	2757'
Total Depth				2760'

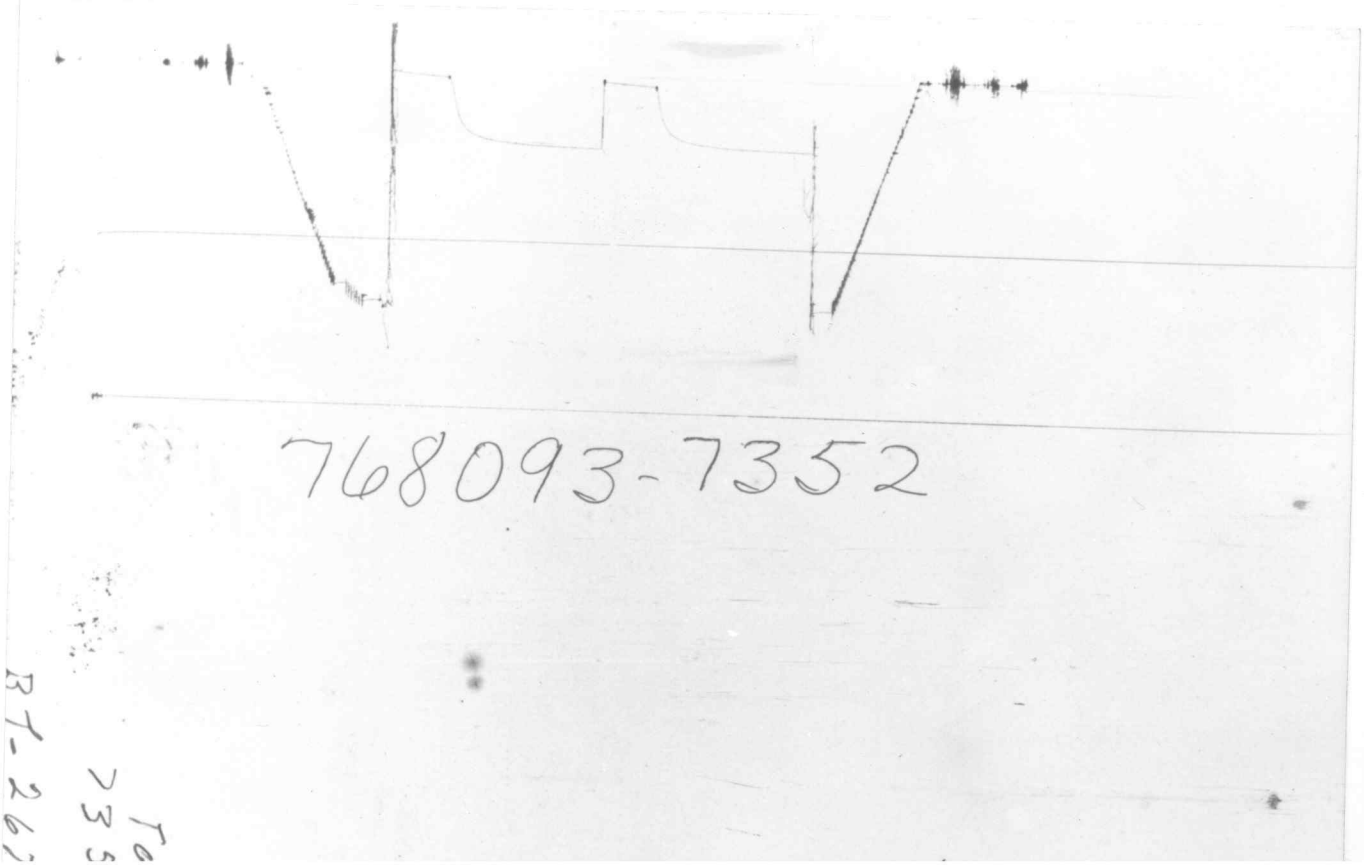
FORM 187—R2 — PRINTED IN U.S.A.

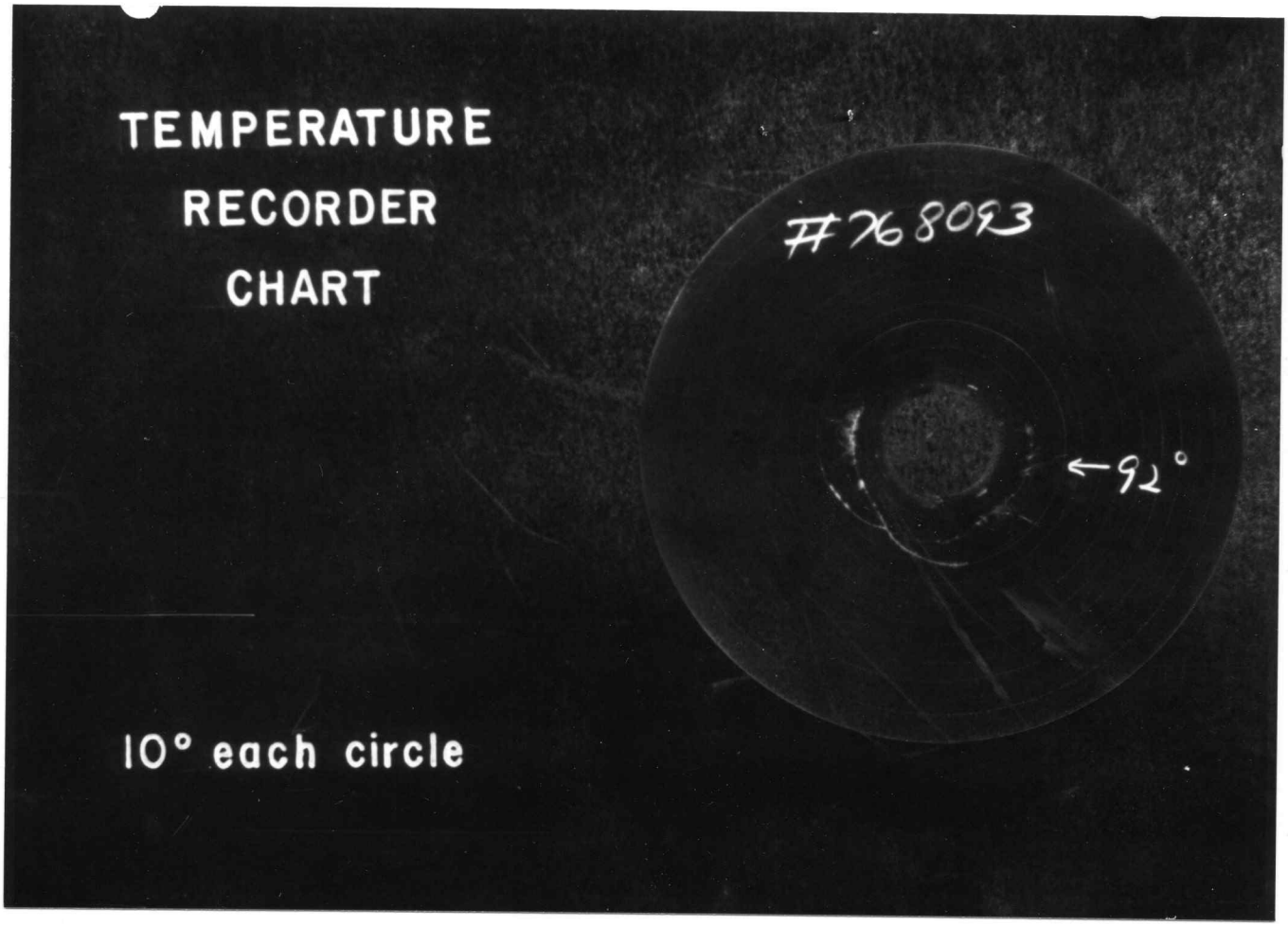
EQUIPMENT DATA

LITTLE'S 111036 75C 2/81

10


768093-7351
7351
Bottom
BT 2254


768093-7352


TEMPERATURE
RECORDER
CHART
#768093
←92°
10° each circle