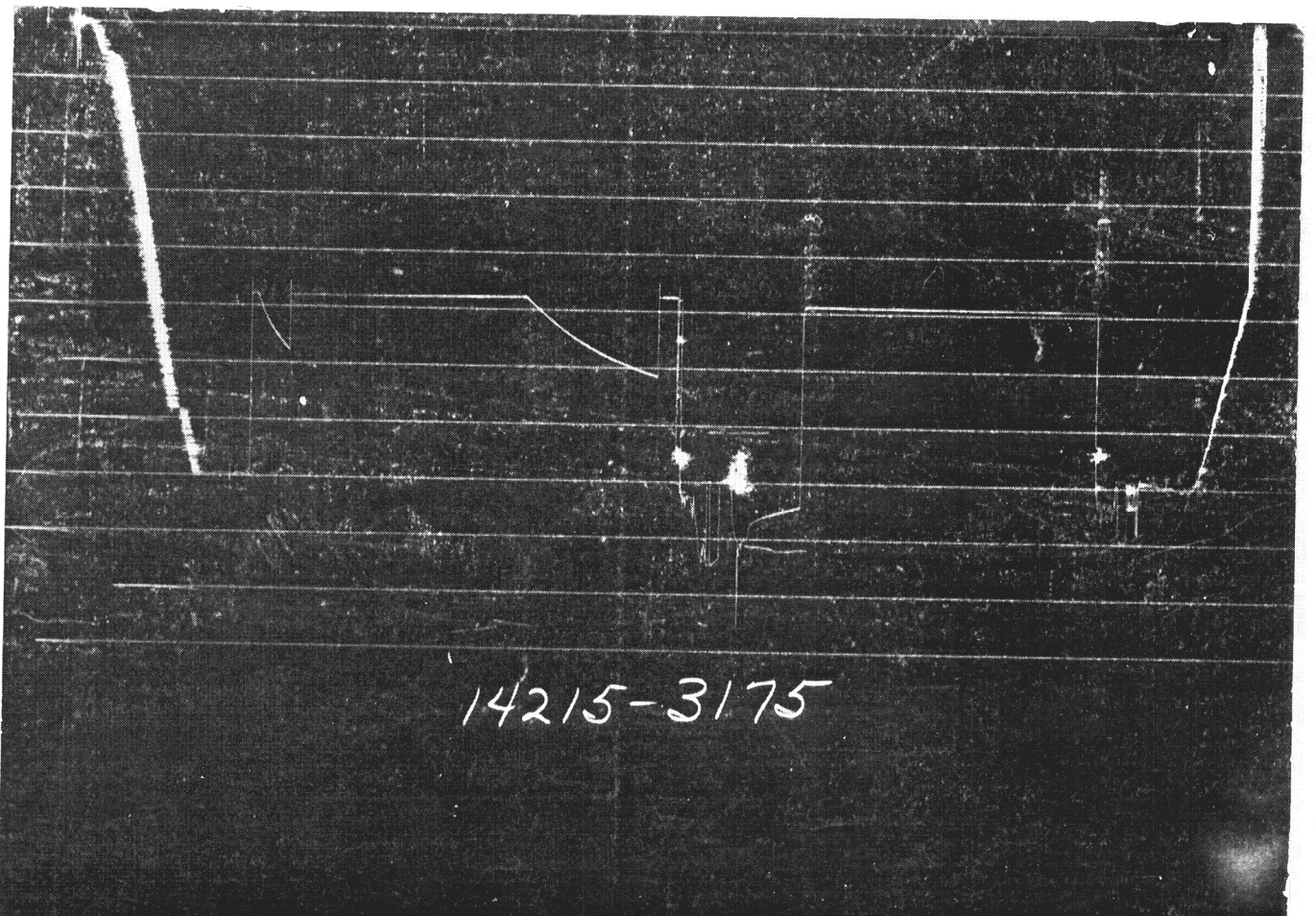


Each Horizontal Line Equal to 1000 p.s.i.



Legal Location: Sec. - Twp. - Rng. -----  
 Lease Name: 2/4  
 Well No.: 7X  
 Test No.: 4  
 Field Area: TORFIELD  
 County: NORTH SEA  
 State: NORWAY  
 Lease Owner/Company Name: PHILLIPS PETROLEUM COMPANY  
 10,638' - 10,940'  
 PERFORATIONS 10,650' - 10,697'

<b>FLUID SAMPLER DATA</b>		Date	9-20-71	Ticket Number	14215
Sampler Pressure _____ P.S.I.G. at Surface	Recovery: Cu. Ft. Gas _____	Kind of Job	HOOK WALL	Halliburton District	TANANGER
cc. Oil _____	cc. Water _____	Tester	MR. WISIAN	Witness	MR. KUSACK
cc. Mud _____	Tot. Liquid cc. _____	Drilling Contractor	ZAPATA "MAERSK EXPLORER"	BC S	
Gravity _____ ° API @ _____ °F.	Gas/Oil Ratio _____ cu. ft./bbl.	<b>EQUIPMENT &amp; HOLE DATA</b>			
		Formation Tested	Danian		
		Elevation	112.5'	Sea Level -	337.5' Sea Floor Ft.
		Net Productive Interval	37'		Ft.
		All Depths Measured From	Kelly Bushings		
		Total Depth	10,940'	PBD	Ft.
		Main Hole/Casing Size	7"	29# Liner	
		Drill Collar Length	712.97'	I.D.	2.00"
		Drill Pipe Length	9871.63'	I.D.	2.99"
		Packer Depth(s)	10,638.44'		Ft.
		Depth Tester Valve	None Ft.		

TYPE	AMOUNT	Depth Back	Surface	Bottom
Cushion	Fresh water full	Ft. Pres. Valve	Choke 2"	Choke None

Recovered	15	<del>XXXX</del> Feet of	bbls. Water Cushion	Meas. From Tester Valve
Recovered	12	<del>XXXX</del> Feet of	bbls. Acid	
Recovered	57	<del>XXXX</del> Feet of	bbls. Spent Acid	
Recovered		Feet of		
Recovered		Feet of		
Recovered		Feet of		

Remarks SEE ATTACHED SHEET.

UNABLE TO PERFORM CALCULATION SERVICE DUE TO INSUFFICIENT CLOSURE OF THE BUILDUP CURVES.

TEMPERATURE	Gauge No. 2626		Gauge No. 3108		Gauge No. 3175		TIME	
	Depth:	10671' Ft.	Depth:	10676' Ft.	Depth:	10680' Ft.		
Est. °F.	72 Hour Clock		72 Hour Clock		72 Hour Clock		Tool 9-17-71 A.M.	
	Blanked Off Yes		Blanked Off Yes		Blanked Off Yes		Opened 10:03 P.M.	
Actual 265 °F.	SEE ATTACHED SPECIAL PRESSURE DATA SHEETS.						Tool 9-19-71 A.M.	
	Pressures		Pressures		Pressures		Closed 12:15 P.M.	
	Field	Office	Field	Office	Field	Office	Reported	Computed
Initial Hydrostatic	7987	7952	7707	7950	7727	7960	Minutes	Minutes
First Period	Flow Initial	4746	4564		4609			
	Flow Final	4746	4564		4609			
	Closed in	5754	5570		5567			
Second Period	Flow Initial	4746	4564		4609			
	Flow Final	4769	4564		4609			
	Closed in	6105	5932		5914			
Third Period	Flow Initial	4769	-		-			
	Flow Final	4769	-		-			
	Closed in			CLOCK STOPPED				
Final Hydrostatic	7899	7952			7747	7960		

PHILLIPS PETROLEUM COMPANY

2/4/7X DRILL STEM TEST NUMBER 4

TICKET #14215 DATED 9-20-71

	REPORTED MINUTES	COMPUTED MINUTES
INITIAL FLOW	15	20
INITIAL CLOSED IN PRESSURE	<u>120</u>	114
CLEAN UP FLOW	810	820
CLOSED IN PRESSURE	480	469
FLOWING TIME	60	69
REVERSED OUT AND ACIDIZING	270	258
CLOSED IN AFTER ACIDIZING	165	180
FLOWING TIME	1042	1032

PHILLIPS PETROLEUM COMPANY

2/4/7X DRILL STEM TEST NUMBER 4

TICKET #14215 DATED 9-20-71

NO.	I.D.	O.D.	DESCRIPTION	LENGTH	DEPTH
1	-	-	BAKER TEST HEAD	-	-
1	2.68"	10.24"	LT-20 SWIVEL ASSEMBLY	4.02'	-25.75'
1	2.58"	6.25"	SUB-3½" IF BOX X 4" IF PIN	0.83'	-21.73'
1	2.87"	7.38"	EMSCO VALVE	3.50'	-20.90'
1	2.75"	6.25"	SUB-4" IF BOX X 3½" EUE PIN	0.87'	-17.40'
-	2.99"	3.50"	3½" EUE 8rd TUBING	9871.63'	-16.53'
1	2.10"	4.30"	SUB-3½" EUE BOX X 2 7/8" IF PIN	0.85'	9855.95'
3	2.00"	4.38"	SLIP JOINTS (OPEN)	59.85'	9915.80'
24	2.00"	4.125"	DRILL COLLARS	712.97'	10628.77'
1	2.10"	4.10"	SUB-2 7/8" IF BOX X 2 7/8" EUE PIN	0.71'	10629.48'
1	2.44"	4.62"	RTTS CIRCULATING VALVE	2.84'	10632.32'
1	2.44"	5.00"	RTTS CIRCULATING VALVE	3.31'	10635.63'
1	2.18"	5.75"	7" RTTS PACKER BODY	4.31'	10639.94'
1	2.12"	3.75"	SUB 2 7/8" EUE PIN X 3½" EUE PIN	0.43'	10640.37'
1	2.99"	3.50"	PERFORATED JOINT 3½" EUE TUBING	30.82'	10671.19'
1	2.15"	4.50"	SUB 3½" EUE BOX X 3 1/8" PIN	0.96'	10672.15'
1	3.50"	3.75"	B.T. RECORDER #2626 - 72 HOUR	4.12'	10676.27'
1	3.50"	3.75"	B.T. RECORDER #3108 - 72 HOUR	4.12'	10680.39'
1	1.62"	3.75"	SUB 3 1/8" BOX X 2 3/8" IF PIN	0.92'	10681.31'
1	2.50"	3.75"	B.T. RECORDER #3175 - 72 HOUR	4.12'	10685.43'

Casing perms. 10660' - 10697' Bottom choke \_\_\_\_\_ Surf. temp \_\_\_\_\_ °F Ticket No. 14215  
 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
	12:01						PICKED UP RTTS TOOL, STARTED IN HOLE
	6:50						ON BOTTOM, TESTED LINES AND SURFACE
	8:51						EQUIPMENT, STARTED DISPLACING TUBING
	10:03			3300#			SET PACKER, OPENED ON SURFACE
							DIFFERENTIAL PSI TO 0 PSI, WEAK FLOW.
	10:18			0			CLOSED AT SURFACE
	10:23			110#			
	10:35			415#			
	11:00			872#			
	12:01			995#			
	12:19						OPENED AT SURFACE WITH VERY WEAK FLOW, CONTINUED FLOWING WELL APPROXIMATELY 5.5 GALLON PER HOUR
9-18-71	2:00			0			CLOSED AT SURFACE
	3:00			383#			
	4:00			515#			
	7:00			1066#			
	8:00			1198#			
	9:00			1316#			
	10:00						OPENED WELL AT SURFACE, VERY WEAK FLOW.
	11:00						CLOSED IN AT SURFACE
	11:09						OPENED CIRCULATING VALVE, REVERSED
							TEST SAMPLED WATER CUSHION WITH VERY SMALL AMOUNT OF GAS.
	14:22						STARTED DISPLACING WITH PRE-FLUSH AND ACID.

Casing perms. 10660' - 10697' Bottom choke \_\_\_\_\_ Surf. temp \_\_\_\_\_ °F Ticket No. 14215  
 Gas gravity \_\_\_\_\_ Oil gravity \_\_\_\_\_ GOR \_\_\_\_\_  
 Spec. gravity \_\_\_\_\_ Chlorides \_\_\_\_\_ ppm Res. \_\_\_\_\_ @ \_\_\_\_\_ °F Page 2

Date Time	a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
14:51			5485			CLOSED CIRCULATING VALVE
15:42						ACID TO FORMATION, LAST PUMPING RATE
						7.6 BBLs./MINUTE
15:47			5400			
16:00			3900			SHUT DOWN
19:00			3595			OPENED WELL AT SURFACE, NO CHOKE,
24:00						GOOD FLOW, GRADUALLY DIMINISHING
						APPROXIMATELY 250 BARRELS/DAY
9-19-71 24:01						85 BARRELS/DAY
03:00						64 BARRELS/DAY
06:00						40 BARRELS/DAY - TOTAL RECOVERY,
						APPROXIMATELY 68 BARRELS
12:15			0			CLOSED IN AT SURFACE, VERY SLOW FLOW.
12:19						OPENED CIRCULATING VALVE, STARTED
						REVERSING SAMPLES
						REVERSED THE FOLLOWING:
						15 BARRELS WATER CUSHION
						12 BARRELS ACID
						57 BARRELS SPENT ACID, CHLORIDE 38,000 ppm, RESISTIVITY .109 AT 71 to 75 DEGREES ph 6

PHILLIPS PETROLEUM COMPANY

TICKET NUMBER 14215

B.T. #2626  
DEPTH: 10,671'

B.T. #3108  
DEPTH: 10,676'

B.T. #3175  
DEPTH: 10,680'

	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.
	FIRST FLOW:								
0.	.0000		4798	.0000		4784	.0000		4776
1.	.0230		4798	.0210		4784	.0230		4776
	FIRST CLOSED IN PRESSURE								
0.	.0000		4798	.0000		4784	.0000		4776
1.	.0056		4842	.0160		4946	.0057		4830
2.	.0112		4921	.0330		5141	.0113		4906
3.	.0168		4991	.0490		5290	.0170		4978
4.	.0225		5061	.0650		5415	.0226		5045
5.	.0281		5127	.0820		5527	.0283		5108
6.	.0337		5180	.1000		5627	.0340		5166
7.	.0393		5228	.1110		5672	.0396		5215
8.	.0449		5276	.1270		5763	.0453		5260
9.	.0505		5320	READ AT STAIR STEPS...			.0509		5305
10.	.0562		5360				.0566		5350
11.	.0618		5399				.0623		5390
12.	.0674		5439				.0679		5422
13.	.0730		5478				.0736		5462
14.	.0786		5513				.0792		5498
15.	.0842		5548				.0849		5529
16.	.0898		5579				.0906		5570
17.	.0955		5610				.0962		5601
18.	.1011		5645				.1019		5628
19.	.1067		5667				.1075		5659
20.	.1123		5697				.1132		5686
21.	.1179		5724				.1189		5713
22.	.1235		5743				.1245		5740
23.	.1280		5768*				.1290		5758*
	SECOND FLOW								
0.	.0000		4807	.0000		4788	.0000		4745
1.	.9170		4776	.9240		4759	.9320		4762
	SECOND CLOSED IN PRESSURE								
0.	.0000		4776	.0000		4759	.0000		4762
1.	.0056		4785	.0058		4805	.0057		4767
2.	.0112		4798	.0116		4809	.0114		4745
3.	.0169		4816	.0174		4813	.0170		4803
4.	.0225		4842	.0232		4817	.0227		4825
5.	.0281		4864	.0290		4817	.0284		4830
6.	.0337		4890	.0348		4871	.0341		4874

REMARKS: READINGS EQUAL TO 5 MINUTES EACH  
\*INTERVAL =4 MINUTES

PHILLIPS PETROLEUM COMPANY

TICKET NUMBER 14215

B.T. #2626  
DEPTH: 10,671'

B.T. #3108  
DEPTH: 10,676'

B.T. #3175  
DEPTH: 10,680'

	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.
	2nd C.I.P. CONTINUED								
7.	.0393		4912	.0406		4880	.0398		4901
8.	.0450		4939	.0464		4884	.0454		4924
9.	.0506		4961	.0522		4938	.0511		4946
10.	.0562		4987	.0580		4950	.0568		4969
11.	.0618		5009	.0638		4954	.0625		4991
12.	.0674		5035	.0696		5008	.0682		5018
13.	.0731		5061	.0754		5012	.0738		5045
14.	.0787		5079	.0812		5071	.0795		5063
15.	.0843		5101	.0870		5079	.0852		5090
16.	.0899		5123	.0928		5083	.0909		5108
17.	.0955		5145	.0986		5129	.0966		5130
18.	.1012		5167	.1044		5133	.1022		5152
19.	.1068		5189	.1102		5178	.1079		5170
20.	.1124		5206	.1160		5191	.1136		5193
21.	.1180		5228	.1218		5195	.1193		5211
22.	.1236		5246	.1276		5237	.1250		5233
23.	.1293		5268	.1334		5245	.1306		5251
24.	.1349		5285	.1392		5278	.1363		5269
25.	.1405		5307	.1450		5990	.1420		5291
26.	.1461		5325	.1508		5290	.1477		5309
27.	.1517		5342	.1566		5332	.1534		5327
28.	.1574		5355	.1624		5336	.1590		5345
29.	.1630		5377	.1682		5378	.1647		5363
30.	.1686		5395	.1740		5386	.1704		5381
31.	.1742		5417	.1798		5390	.1761		5399
32.	.1798		5434	.1856		5427	.1818		5417
33.	.1855		5447	.1914		5432	.1874		5430
34.	.1911		5465	.1972		5444	.1931		5448
35.	.1967		5482	.2030		5477	.1988		5466
36.	.2023		5496	.2088		5490	.2045		5480
37.	.2079		5513	.2146		5494	.2102		5498
38.	.2136		5531	.2204		5527	.2158		5516
39.	.2192		5548	.2262		5535	.2215		5529
40.	.2248		5561	.2320		5535	.2272		5547
41.	.2304		5575	.2378		5568	.2329		5565
42.	.2360		5592	.2436		5573	.2386		5578
43.	.2417		5605	.2494		5598	.2442		5592
44.	.2473		5623	.2552		5610	.2499		5605
45.	.2529		5632	.2610		5614	.2556		5623
46.	.2585		5649	.2668		5643	.2613		5637
47.	.2641		5662	.2726		5647	.2670		5655
48.	.2698		5675	.2784		5656	.2726		5664

REMARKS: READINGS EQUAL TO 5 MINUTES EACH

SPECIAL PRESSURE DATA



PHILLIPS PETROLEUM COMPANY

TICKET NUMBER 14215

B.T. #2626  
DEPTH: 10,671'

B.T. #3108  
DEPTH: 10,676'

B.T. #3175  
DEPTH: 10,680'

	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
	2nd C.I. P. CONTINUED								
49.	.2754		5689	.2842		5681	.2783		5677
50.	.2810		5697	.2900		5689	.2840		5691
51.	.2866		5715	.2958		5714	.2897		5704
52.	.2922		5728	.3016		5722	.2954		5717
53.	.2979		5741	.3074		5722	.3010		5731
54.	.3035		5754	.3132		5755	.3067		5740
55.	.3091		5763	.3190		5759	.3124		5753
56.	.3147		5776	.3248		5776	.3181		5767
57.	.3203		5789	.3306		5784	.3238		5776
58.	.3260		5803	.3364		5793	.3294		5789
59.	.3316		5811	.3422		5813	.3351		5803
60.	.3372		5829	.3480		5817	.3408		5816
61.	.3428		5838	.3538		5838	.3465		5825
62.	.3484		5846	.3596		5842	.3522		5839
63.	.3541		5860	.3654		5846	.3578		5852
64.	.3597		5868	.3712		5867	.3635		5857
65.	.3653		5882	.3770		5876	.3692		5870
66.	.3709		5895	.3828		5880	.3749		5879
67.	.3765		5904	.3886		5900	.3806		5888
68.	.3822		5912	.3944		5905	.3862		5901
69.	.3878		5921	.4002		5921	.3919		5910
70.	.3934		5934	.4060		5929	.3976		5919
71.	.3990		5943	.4118		5934	.4033		5928
72.	.4046		5952	.4176		5950	.4090		5937
73.	.4103		5965	.4234		5954	.4146		5946
74.	.4159		5974	.4292		5971	.4203		5955
75.	.4215		5982	.4350		5979	.4260		5969
76.	.4271		5991	.4408		5983	.4317		5978
77.	.4327		6004	.4466		5996	.4374		5987
78.	.4384		6009	.4524		6004	.4430		6000
79.	.4440		6022	.4582		6037	.4487		6004
80.	.4496		6031	.4640		6050	.4544		6013
81.	.4552		6039	.4698		6054	.4601		6022
82.	.4608		6048	.4756		6054	.4658		6036
83.	.4665		6052	.4814		6054	.4714		6040
84.	.4721		6057	.4872		6054	.4771		6054
85.	.4777		6070	.4930		6095	.4828		6063
86.	.4833		6079	.4988		6100	.4885		6067
87.	.4889		6087	.5046		6104	.4942		6076
88.	.4946		6096	.5104		6108	.4998		6085
89.	.5002		6104	.5162		6108	.5055		6094
90.	.5058		6109	.5220		6112	.5112		6103

REMARKS: READINGS EQUAL TO 5 MINUTES

SPECIAL PRESSURE DATA

12

PHILLIPS PETROLEUM COMPANY

TICKET NUMBER 14215

B.T. #2626  
DEPTH: 10,671'

B.T. #3108  
DEPTH: 10,676'

B.T. #3175  
DEPTH: 10,680'

	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.
	2nd C.I.P. CONTINUED								
91.	.5114		6118	.5278		6120	.5169		6108
92.	.5170		6126	.5336		6120	.5226		6117
93.	.5227		6135	.5394		6120	.5282		6126
94.	.5270		6140*	.5440		6120*	.5330		6130*
	3rd FLOW								
0.	.0000		4750	.0000		4730	.0000		4740
1.	.0780		4750	.0810		4817	.0790		4740
	3rd C.I.P. - ACIDIZING								
0.	.0000		4750	.0000		4817	.0000		4740
1.	.0058		5316	.0079		6100	.0057		4789
2.	.0116		8219	.0159		7515	.0114		4776
3.	.0174		8281	.0238		8240	.0171		4771
4.	.0232		8259	.0317		8120	.0228		7942
5.	.0291		8246	.0396		8149	.0285		8300
6.	.0349		8281	.0476		8174	.0342		8291
7.	.0407		8237	.0555		8186	.0399		8345
8.	.0465		8254	.0634		8773	.0456		8242
9.	.0523		8390	.0713		8781	.0513		8220
10.	.0582		8405	.0793		8781	.0570		8242
11.	.0640		8482	.0872		8172	.0627		8309
12.	.0698		8680	.0951		7975	.0684		8408
13.	.0756		8846	.1030		7954	.0741		8206
14.	.0814		9130	.1110		9443	.0798		8570
15.	.0872		9326	.1189		9410	.0855		8709
16.	.0930		9357	.1268		9385	.0912		8883
17.	.0989		9217	.1347		9361	.0969		9205
18.	.1047		9174	.1427		9357	.1026		9321
19.	.1105		9235	.1506		9357	.1083		9402
20.	.1163		7974	.1585		9357	.1140		9254
21.	.1221		7961	.1664		7946	.1197		9129
22.	.1279		9452	.1744		7938	.1254		9353
23.	.1337		9435	.1823		7934	.1311		7982
24.	.1396		9413	.1902		7934	.1368		7964
25.	.1454		9391	.1981		7950	.1425		7960
26.	.1512		9370	.2061		7959	.1482		9451
27.	.1570		9348	.2140		7934	.1539		9424
28.	.1628		9326	.2219		7938	.1596		9402
29.	.1686		7956	.2298		7929	.1653		9384
30.	.1745		7947	.2378		7917	.1710		9357
31.	.1803		7943	.2457		8884	.1767		9335

REMARKS: READINGS EQUAL TO 5 MINUTES  
\*INTERVAL = 4 MINUTES

SPECIAL PRESSURE DATA

PHILLIPS PETROLEUM COMPANY

TICKET NUMBER 14215

B.T. #2626  
DEPTH: 10,671'

B.T. #3108  
DEPTH: 10,676'

B.T. #3175  
DEPTH: 10,680'

	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.
	3rd C.I.P. CONTINUED								
	ACIDIZING..								
32.	.1861		7939	.2536		8818	.1824		7969
33.	.1919		7939	.2615		8773	.1881		7955
34.	.1977		7939	.2695		UTR	.1938		7946
35.	.2035		7939	.2774		UTR	.1995		7942
36.	.2093		8136	.2853		UTR	.2052		7942
37.	.2152		8189	.2932		UTR	.2109		7937
38.	.2210		UTR	.3012		UTR	.2166		7937
39.	.2268		UTR	.3091		UTR	.2223		7937
40.	.2326		UTR	.3170		UTR	.2280		8161
41.	.2384		UTR	.3249		UTR	.2337		8700
42.	.2442		UTR	.3329		7925	.2394		8865
43.	.2500		UTR	.3408		9754	.2451		8978
44.	.2559		UTR	.3487		9758	.2508		9018
45.	.2617		UTR	.3566		9766	.2565		9170
46.	.2675		9100	.3646		9766	.2622		9067
47.	.2733		9174	.3725		9094	.2679		9085
48.	.2791		9052	.3804		9172	.2736		9022
49.	.2849		9035	.3883		9025	.2793		9000
50.	.2908		9044	.3963		9016	.2850		8996
51.	.2966		9000	.4042		8955	.2907		8960
52.	.3000		8974*	.4120		8926*	.2940		8942*
	3rd C.I.P.								
	AFTER ACIDIZING.....								
0.	.0000		8851	.0000		8955	.0000		8816
1.	.0056		8785	.0056		8649	.0057		8735
2.	.0112		8746	.0112		8636	.0114		8704
3.	.0168		8724	.0168		8624	.0171		8682
4.	.0224		8702	.0223		8616	.0228		8664
5.	.0281		8684	.0279		8612	.0285		8641
6.	.0337		8671	.0335		8612	.0342		8632
7.	.0393		8654	.0391		8612	.0399		8619
8.	.0449		8640	.0447		8612	.0456		8605
9.	.0505		8632	.0503		8612	.0513		8595
10.	.0561		8618	.0559		8595	.0570		8587
11.	.0617		8610	.0614		8595	.0626		8574
12.	.0673		8601	.0670		8574	.0683		8570
13.	.0729		8592	.0726		8566	.0740		8561
14.	.0785		8583	.0782		8562	.0797		8552
15.	.0842		8575	.0838		8554	.0854		8543
16.	.0898		8566	.0894		8550	.0911		8538

REMARKS: ALL READINGS EQUAL TO 5 MINUTES UTR = UNABLE TO READ  
 \*INTERVAL = 3 minutes  
 CLOCK RUNNING ERRATICALLY ON B.T. #3108 DURING 3rd CLOSED IN PRESSURE  
 WHILE ACIDIZING.

SPECIAL PRESSURE DATA

B. T. #2626  
DEPTH: 10,671'

B. T. #3108  
DEPTH: 10,676'

B. T. #3175  
DEPTH: 10,680'

	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
	3rd C. I.P. CONTINUED								
	AFTER ACIDIZING....								
17.	.0954		8557	.0949		8537	.0968		8529
18.	.1010		8548	.1005		8533	.1025		8520
19.	.1066		8544	.1061		8525	.1082		8511
20.	.1122		8535	.1117		8521	.1139		8507
21.	.1178		8522	.1173		8517	.1196		8502
22.	.1234		8518	.1229		8504	.1253		8493
23.	.1290		8513	.1285		8500	.1310		8484
24.	.1346		8504	.1340		8471	.1367		8480
25.	.1403		8496	.1396		8467	.1424		8475
26.	.1459		8491	.1452		8463	.1481		8466
27.	.1515		9478	.1508		8463	.1538		8462
28.	.1571		9474	.1564		8459	.1595		8453
29.	.1627		8469	.1620		8459	.1652		8444
30.	.1683		8461	.1676		8450	.1709		8439
31.	.1739		8456	.1731		8446	.1765		8435
32.	.1795		8447	.1787		8434	.1822		8426
33.	.1851		8443	.1843		8426	.1879		8422
34.	.1907		8434	.1899		8426	.1936		8413
35.	.1964		8430	.1955		8426	.1993		8408
36.	.2020		8417	.2010		8302	.2050		8399
	FOURTH FLOW...								
0.	.0000		4899	.0000		4884	.0000		4870
1.	.0672		4899	.0673		4888	.0682		4870
2.	.1344		4899	.1345		4888	.1363		4874
3.	.2016		4899	.2018		4896	.2045		4874
4.	.2688		4899	.2269		4896	.2726		4879
5.	.3360		4904	.3363		4900	.3408		4879
6.	.4032		4904	.4036		4900	.4090		4879
7.	.4704		4908	.4708		4900	.4771		4883
8.	.5376		4908	.5381		4905	.5453		4883
9.	.6048		4908	.6053		4905	.6134		4883
10.	.6720		4908	.6726		4905	.6816		4883
11.	.7392		4912	(.7290		C 4905)	.7498		4888
12.	.8064		4912	.7399		-	.8179		4888
13.	.8736		4917	.8071		-	.8861		4892
14.	.9408		4917	.8744		-	.9542		4892
15.	1.0080		4921	.9416		-	1.0224		4897
16.	1.0752		4921	1.0089		-	1.0910		4897
17.	1.1560		4921*	1.0762		-	1.1720		4897*
				1.1560		-			

REMARKS: 3rd CLOSED IN PRESSURE - AFTER ACIDIZING, READ IN 5 MINUTE INTERVALS.  
FOURTH FLOW READ IN 60 MINUTE INTERVALS \*INTERVAL = 72 MINUTES  
C = CLOCK STOPPED AFTER APPROXIMATELY 660 MINUTES

SPECIAL PRESSURE DATA

# NOMENCLATURE

<b>b</b>	= Approximate Radius of Investigation .....	Feet
<b>b<sub>1</sub></b>	= Approximate Radius of Investigation (Net Pay Zone h <sub>1</sub> ) .....	Feet
<b>D.R.</b>	= Damage Ratio .....	—
<b>EI</b>	= Elevation .....	Feet
<b>GD</b>	= B.T. Gauge Depth (From Surface Reference) .....	Feet
<b>h</b>	= Interval Tested .....	Feet
<b>h<sub>1</sub></b>	= Net Pay Thickness .....	Feet
<b>K</b>	= Permeability .....	md
<b>K<sub>1</sub></b>	= Permeability (From Net Pay Zone h <sub>1</sub> ) .....	md
<b>m</b>	= Slope Extrapolated Pressure Plot (Psi <sup>2</sup> /cycle Gas) .....	psi/cycle
<b>OF<sub>1</sub></b>	= Maximum Indicated Flow Rate .....	MCF/D
<b>OF<sub>2</sub></b>	= Minimum Indicated Flow Rate .....	MCF/D
<b>OF<sub>3</sub></b>	= Theoretical Open Flow Potential with/Damage Removed Max. ....	MCF/D
<b>OF<sub>4</sub></b>	= Theoretical Open Flow Potential with/Damage Removed Min. ....	MCF/D
<b>P<sub>s</sub></b>	= Extrapolated Static Pressure .....	Psig.
<b>P<sub>f</sub></b>	= Final Flow Pressure .....	Psig.
<b>P<sub>or</sub></b>	= Potentiometric Surface (Fresh Water *) .....	Feet
<b>Q</b>	= Average Adjusted Production Rate During Test .....	bbls/day
<b>Q<sub>1</sub></b>	= Theoretical Production w/Damage Removed .....	bbls/day
<b>Q<sub>g</sub></b>	= Measured Gas Production Rate .....	MCF/D
<b>R</b>	= Corrected Recovery .....	bbls
<b>r<sub>w</sub></b>	= Radius of Well Bore .....	Feet
<b>t</b>	= Flow Time .....	Minutes
<b>t<sub>o</sub></b>	= Total Flow Time .....	Minutes
<b>T</b>	= Temperature Rankine .....	°R
<b>Z</b>	= Compressibility Factor .....	—
<b>μ</b>	= Viscosity Gas or Liquid .....	CP
<b>Log</b>	= Common Log	

\* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.