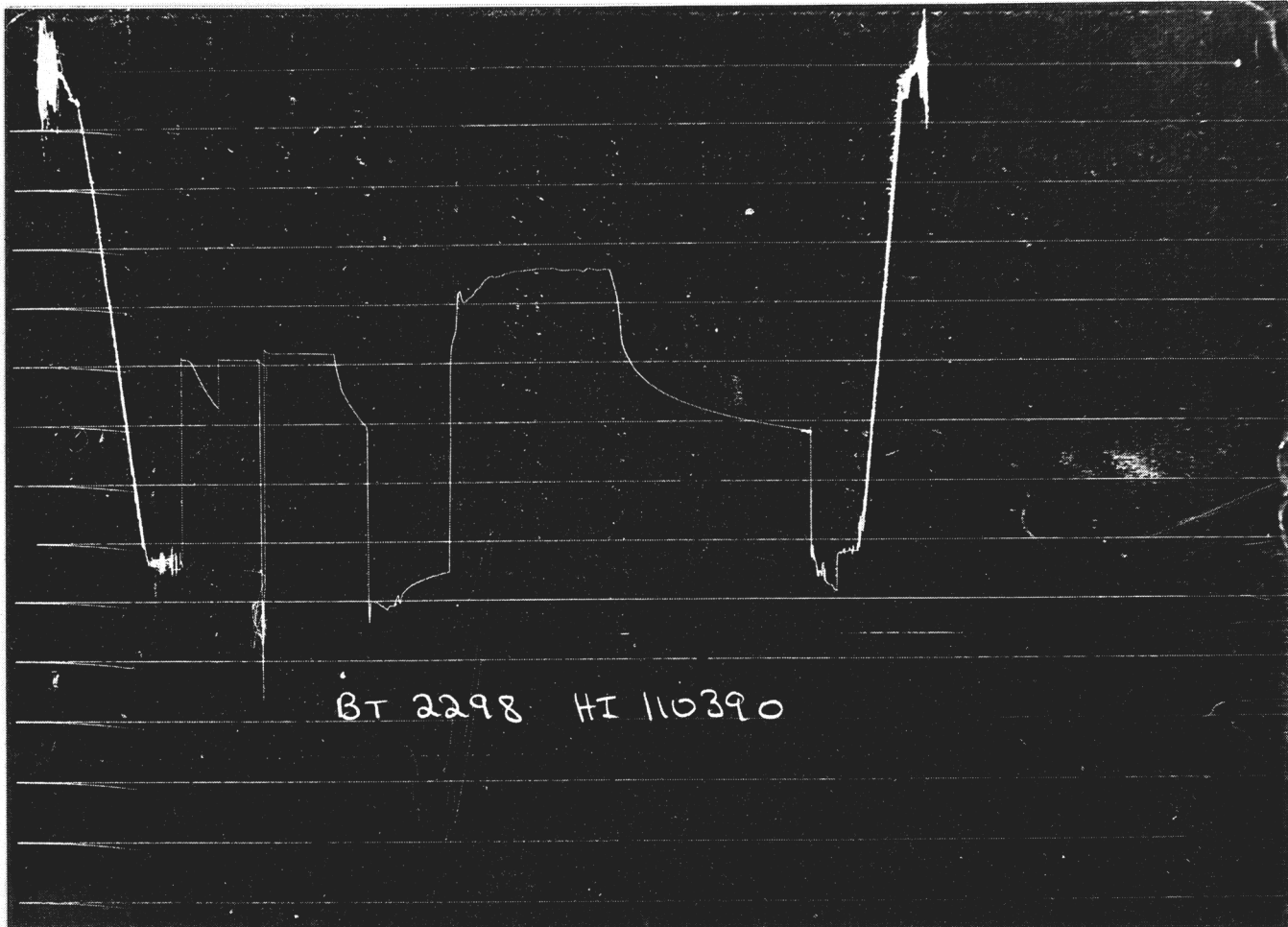
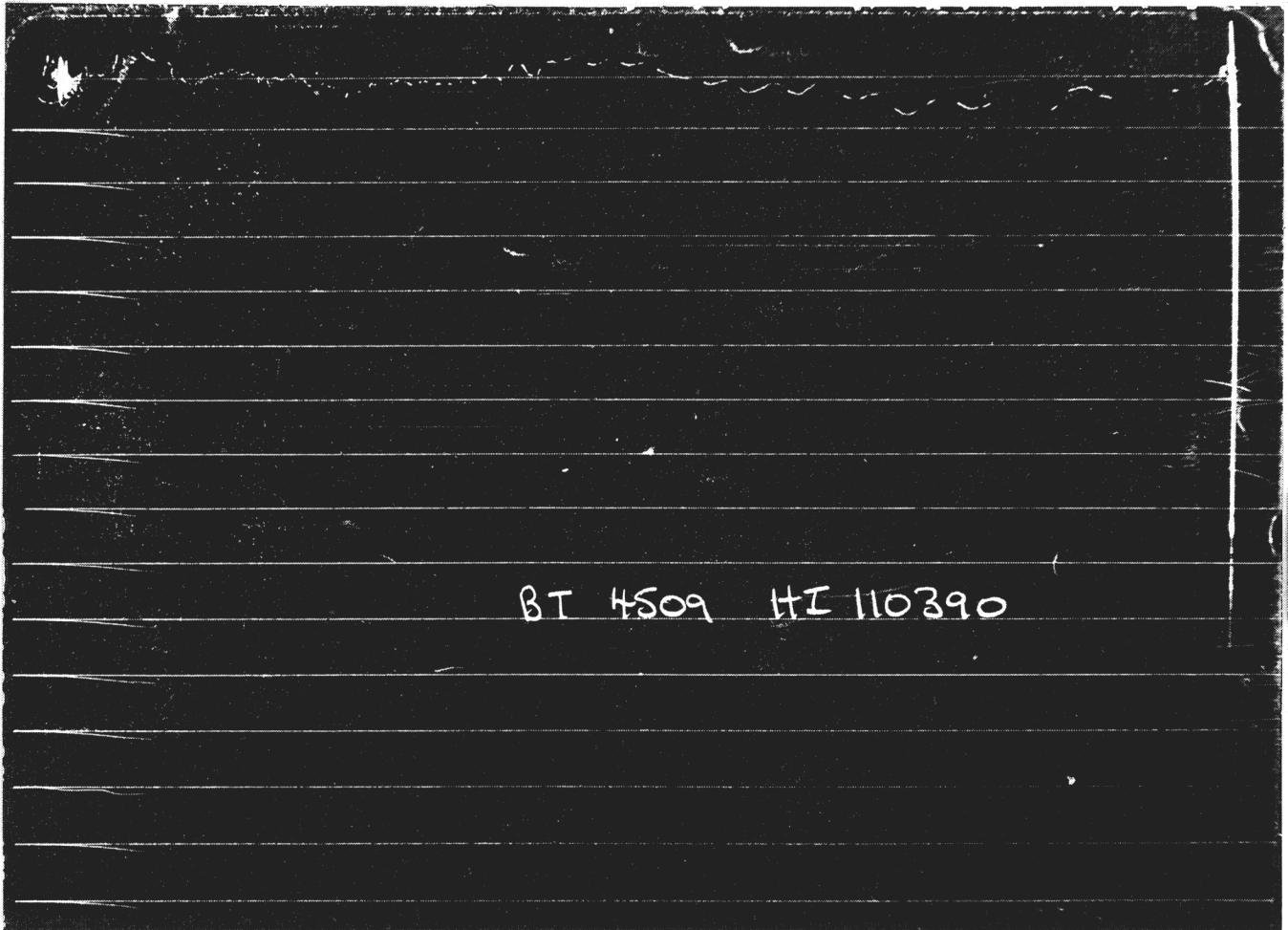
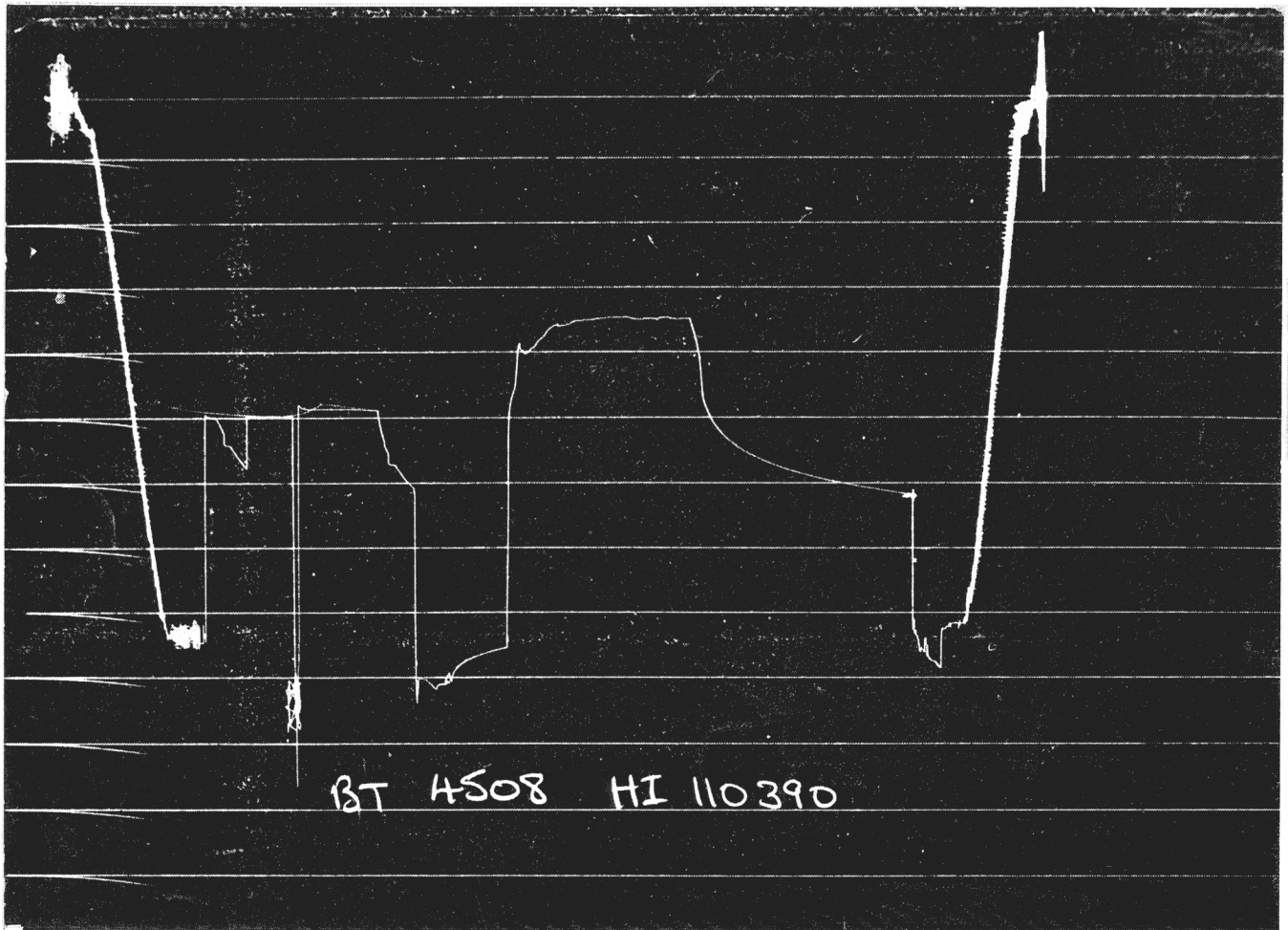


temperature recorder chart



10° EACH CIRCLE





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

FLUID SAMPLE DATA				Date April 2nd, 1974.		Ticket Number HI 110390	
Sampler Pressure _____ P.S.I.G. at Surface		Kind of Job Production Test		Hailiburton District Norway			
Recovery: Cu. Ft. Gas _____		Tester Walt Fenrick		Witness John Beall			
cc. Oil _____		Drilling Contractor ZAPATA EXPLORER		Jim Cusack			
cc. Water _____		EQUIPMENT & HOLE DATA					
cc. Mud _____		Formation Tested _____					
Tot. Liquid cc. _____		Elevation _____ Sea level _____ Ft.					
Gravity _____ ° API @ _____ °F.		Net Productive Interval _____ 10,320 - 10,370 _____ Ft.					
Gas/Oil Ratio _____ cu. ft./bbl.		All Depths Measured From _____ R.K.B. _____					
RESISTIVITY		CHLORIDE CONTENT		Total Depth _____ Plug back 10,420 _____ Ft.			
				Main Hole/Casing Size _____ 7" Casing _____			
Recovery Water _____ @ _____ °F. _____ ppm		Drill Collar Length _____ 540.56' I.D. 2.25"		Drill Pipe Length _____ 9608.44' I.D. 2.276"			
Recovery Mud _____ @ _____ °F. _____ ppm		Packer Depth(s) _____ 10,173.31' _____ Ft.		Depth Tester Valve _____ _____ Ft.			
Recovery Mud Filtrate _____ @ _____ °F. _____ ppm							
Mud Pit Sample _____ @ _____ °F. _____ ppm							
Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm							
Mud Weight _____ vis _____ cp							
TYPE		AMOUNT		Depth Back Pres. Valve		Surface Choke	
Cushion Water		10,173		Ft.		2"	
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks Pumped into formation after initial second flow. Acidized in same period with short shut in while rigging to acidize.							
TEMPERATURE		Gauge No. 2298		Gauge No. 4508		Gauge No. 4509	
Depth: 10,336.62 Ft.		Depth: 10,340.65 Ft.		Depth: 10,344.68 Ft.		TIME	
72 Hour Clock		72 Hour Clock		72 Hour Clock		Tool _____ A.M.	
Est. °F. Blanked Off top		Blanked Off centre		Blanked Off bottom		Opened 11.55 P.M.	
Actual 256 °F.		Pressures		Pressures		Tool _____ P.M.	
		Field Office		Field Office		Reported Computed	
Initial Hydrostatic		8285 8399		8271 8314		Minutes Minutes	
Flow Initial		4861 4861		4906 4931		_____	
Flow Final		4861 4865		4923 4948		15 19	
Closed in		5651 5680		5692 5730		120 116	
Flow Initial		4870 4861		4905 4927		_____	
Flow Final		4777 4781		4829 4845		CLOCK RAN 425	
Closed in		5970 5995		6017 6038		AWAY 252 118	
Flow Initial		3745 8079		3812 8174		_____	
Flow Final		3385 3389		3427 3437		610 588	
Closed in		6096 6121		6136 6141		790 727	
Final Hydrostatic		8143 8172		8093 8123		_____	

Lead Location Sec - Twp. - Rng

Field Area **EKOPISK**

County OFFSHORE

State **NORWAY**

Lessee Name

Well No.

Test No.

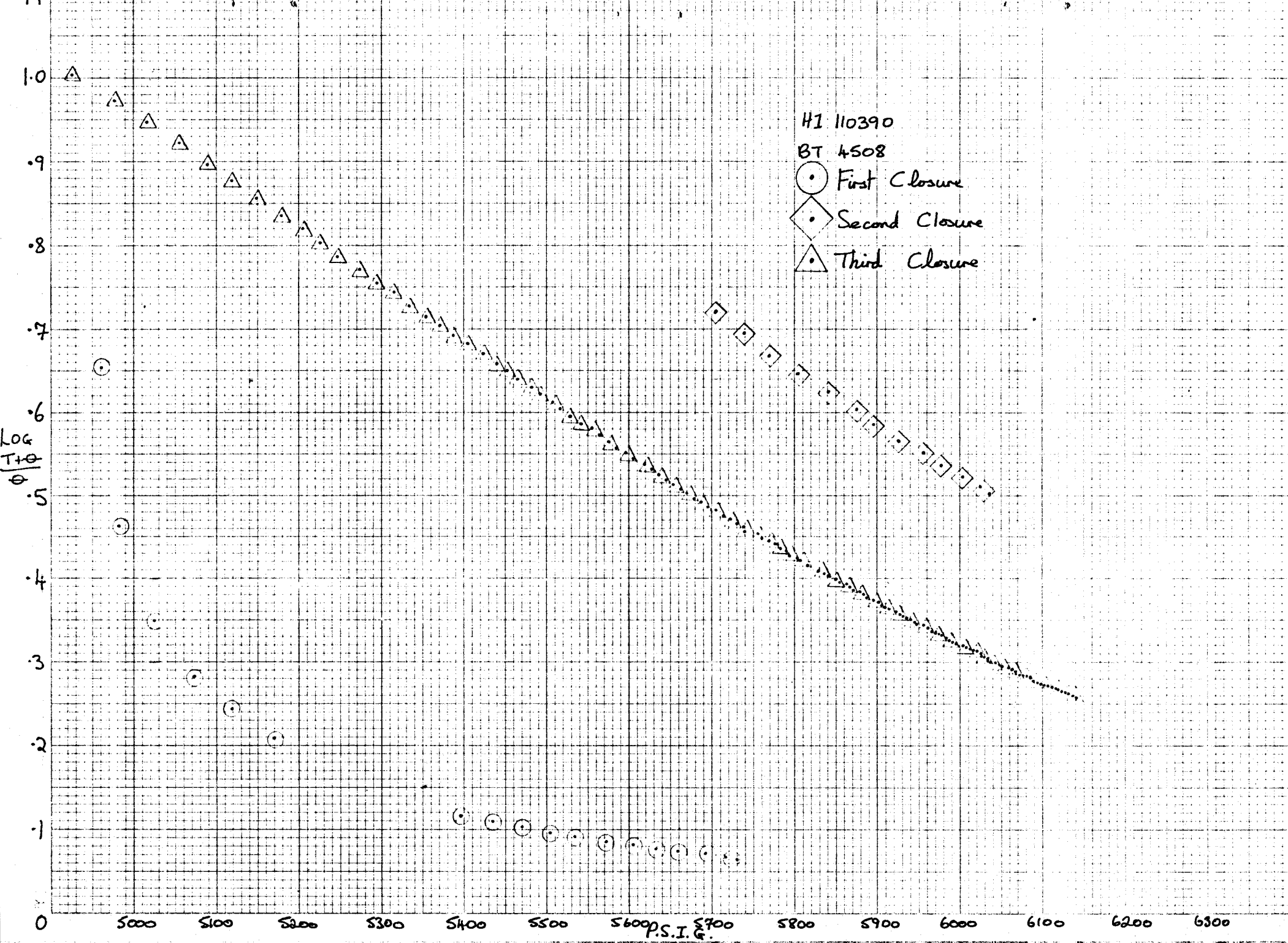
Tested Interval

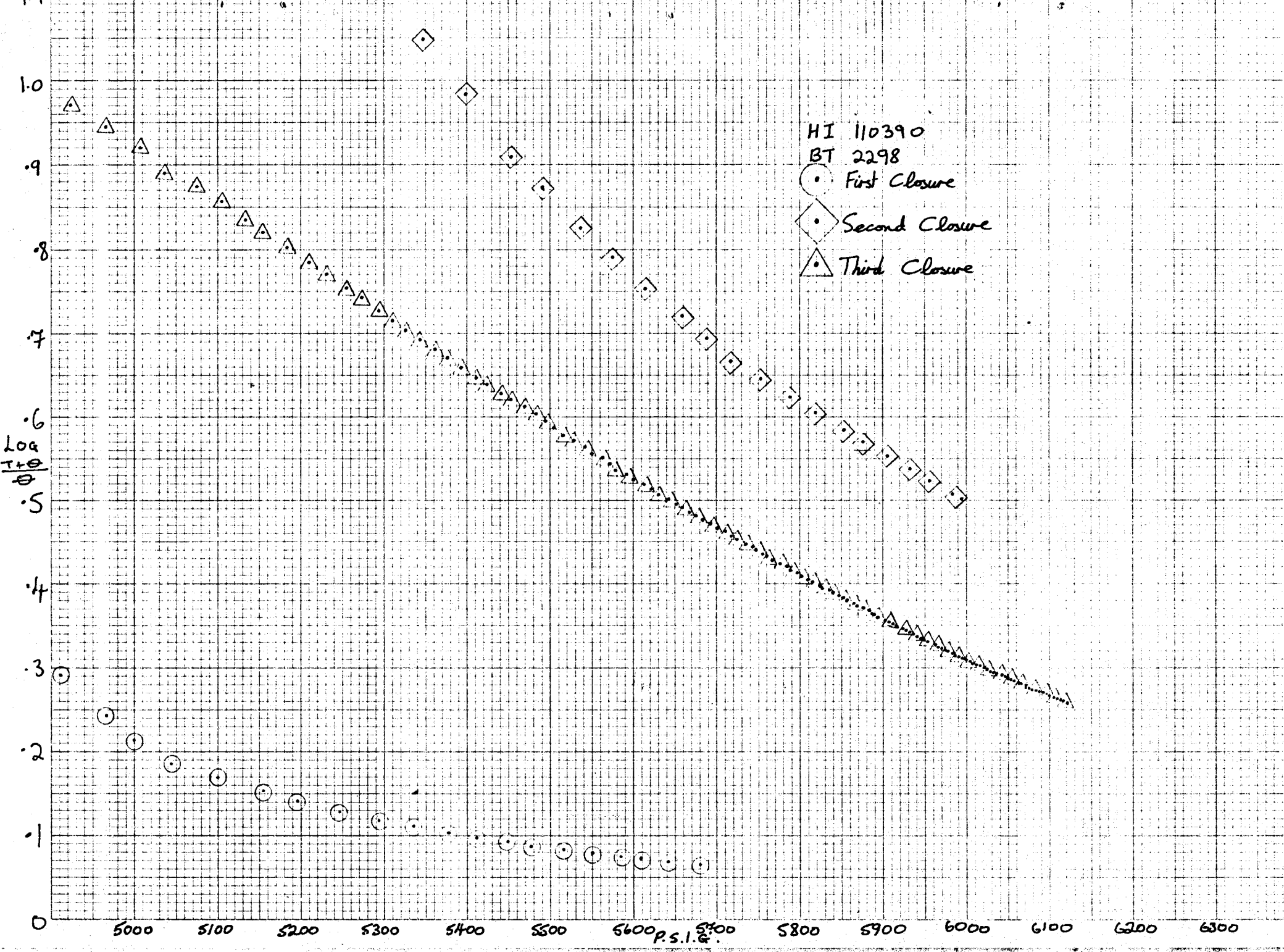
PHILLIPS EXPLORATION NORWAY
Lease Owner/Company Name

10,320' -
 Casing perf. 10,370' Bottom choke 2" Surf. temp. 45 °F Ticket No. H1110390
 Gas gravity 1.055 Oil gravity 39.9 GOR 118
 Spec. gravity Chlorides ppm Res. @ °F

Date Time	a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
April 2nd/74						
04.00						Start in hole with RTTS
10.00						On bottom rig test tree. Close B.V. tester and test Drill Pipe. and surface equipment to 5700 psi.
11.45						Finished displacing drill pipe w/70 bbls. of water.
11.53			3530			Set packer.
11.55		2"	3530			Open well to flow.
12.10			0			Shut well in.
14.10		2"	832			Open well to flow.
16.28			0			Shut in to pump into well. Pumped 12 bbls. into well. Broke at 5800 psi rate 2 BPM at 4800 psi.
16.57		2"	4110			Open well to flow.
21.15			0			Shut in for acidizing.
April 3rd/74						
01.10						Finished acidizing.
04.15		2"	3817			Open well to flow.
14.05		2"	+30	37.13	315	Shut well in.
April 4th/74						
02.10			2527			Open by-pass and reverse out. Condition mud and pull out of hole.

	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub				
Water Cushion Valve				
Drill Pipe	3.50"	2.764"	9200.00'	
Drill Collars	4.75"	2.25"	540.56'	
Handling Sub & Choke Assembly				
Dual CIP Valve				
Dual CIP Sampler				
Hydro-Spring Tester				
Multiple CIP Sampler				
Extension Joint				
AP Running Case				
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly				
Distributor				
Packer Assembly				
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Packer Assembly ... RTTS				10173.31'
Anchor Pipe Safety Joint				
Side Wall Anchor				
HT-500 Temp. Recorder	3.75"	3"	1.43'	10332.59'
Drill Collars				
Flush Joint Anchor				10336.62'
				10340.65'
Blanked-Off B.T. Running Case	3.875"	3"	4.03'	10344.68'





COMPANY: PHILLIPS PET. CO. NORWAY
TICKET NO: H110390
GAUGE NO: 2298

FIRST FLOW

3, 5 MINUTE INTERVALS. LAST INTERVAL= 4 MINS.
TOTAL 19 MINUTES

	TIME		PRESSURE		
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	DELTA P
P0	0	.000	1.164	4861	0
P1	5	.006	1.165	4865	4
P2	10	.011	1.165	4865	0
P3	15	.017	1.165	4865	0
P4	19	.021	1.165	4865	0

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 2298

FIRST CIP ----- 22, 5 MINUTE INTERVALS. LAST INTERVAL= 6 MINS.
 ----- TOTAL 116 MINUTES

	TIME		PRESSURE		DELTA P	LOG T+0/O
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG		
P0	0	.000	1.165	4865	0	
P1	5	.006	1.166	4869	4	.6532
P2	10	.011	1.167	4873	4	.4638
P3	15	.017	1.171	4890	17	.3493
P4	20	.022	1.176	4911	21	.2910
P5	25	.028	1.187	4957	46	.2430
P6	30	.033	1.197	5000	43	.2139
P7	35	.039	1.210	5054	54	.1871
P8	40	.044	1.221	5100	46	.1695
P9	45	.050	1.234	5155	55	.1523
P10	50	.055	1.244	5197	42	.1405
P11	55	.061	1.256	5247	50	.1285
P12	60	.067	1.267	5294	47	.1184
P13	65	.072	1.277	5336	42	.1112
P14	70	.078	1.287	5378	42	.1035
P15	75	.083	1.295	5411	33	.0980
P16	80	.089	1.304	5449	38	.0920
P17	85	.094	1.311	5478	29	.0876
P18	90	.100	1.320	5516	38	.0828
P19	95	.105	1.328	5550	34	.0792
P20	100	.111	1.336	5584	34	.0753
P21	105	.116	1.342	5609	25	.0723
P22	110	.122	1.350	5642	33	.0690
P23	116	.129	1.359	5680	38	.0655

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 2298

SECOND FLOW

29, 5 MINUTE INTERVALS. LAST INTERVAL= 6 MINS.
 TOTAL 151 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	1.164	4861	0
P1	5	.006	1.164	4861	0
P2	10	.011	1.165	4865	4
P3	15	.017	1.165	4865	0
P4	20	.022	1.165	4865	0
P5	25	.028	1.165	4865	0
P6	30	.033	1.165	4865	0
P7	35	.039	1.165	4865	0
P8	40	.044	1.165	4865	0
P9	45	.050	1.165	4865	0
P10	50	.055	1.165	4865	0
P11	55	.061	1.165	4865	0
P12	60	.067	1.165	4865	0
P13	65	.072	1.165	4865	0
P14	70	.078	1.165	4865	0
P15	75	.083	1.165	4865	0
P16	80	.089	1.165	4865	0
P17	85	.094	1.165	4865	0
P18	90	.100	1.166	4869	4
P19	95	.105	1.166	4869	0
P20	100	.111	1.166	4869	0
P21	105	.116	1.166	4869	0
P22	110	.122	1.166	4869	0
P23	115	.128	1.166	4869	0
P24	120	.133	1.166	4869	0
P25	125	.139	1.166	4869	0
P26	130	.144	1.166	4869	0
P27	135	.150	1.166	4869	0
P28	140	.155	1.166	4869	0
P29	145	.161	1.168	4878	9
P30	151	.167	1.165	4865	13

COMPANY: PHILLIPS PET. CO. NORWAY
TICKET NO: H110390
GAUGE NO: 2298

PUMPING PERIOD ----- 2, 5 MINUTE INTERVALS. LAST INTERVAL= 7 MINS.
TOTAL 17 MINUTES

	TIME		PRESSURE		
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	DELTA P
P0	0	.000	1.165	4865	0
P1	5	.006	1.165	4865	0
P2	10	.011	2.163	9062	4197
P3	17	.019	2.173	9104	42

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 2298

SECOND FLOW CONTD. 50, 5 MINUTE INTERVALS. LAST INTERVAL= 7 MINS.

 TOTAL 257 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	1.128	4710	0
P1	5	.006	1.131	4722	12
P2	10	.011	1.135	4739	17
P3	15	.017	1.138	4752	13
P4	20	.022	1.140	4760	8
P5	25	.028	1.141	4764	4
P6	30	.033	1.141	4764	0
P7	35	.039	1.141	4764	0
P8	40	.044	1.141	4764	0
P9	45	.050	1.141	4764	0
P10	50	.055	1.141	4764	0
P11	55	.061	1.141	4764	0
P12	60	.067	1.141	4764	0
P13	65	.072	1.141	4764	0
P14	70	.078	1.141	4764	0
P15	75	.083	1.141	4764	0
P16	80	.089	1.141	4764	0
P17	85	.094	1.141	4764	0
P18	90	.100	1.141	4764	0
P19	95	.105	1.141	4764	0
P20	100	.111	1.141	4764	0
P21	105	.116	1.141	4764	0
P22	110	.122	1.141	4764	0
P23	115	.128	1.141	4764	0
P24	120	.133	1.141	4764	0
P25	125	.139	1.141	4764	0
P26	130	.144	1.141	4764	0
P27	135	.150	1.141	4764	0
P28	140	.155	1.141	4764	0
P29	145	.161	1.142	4768	4
P30	150	.166	1.142	4768	0
P31	155	.172	1.142	4768	0
P32	160	.177	1.142	4768	0
P33	165	.183	1.142	4768	0
P34	170	.189	1.142	4768	0
P35	175	.194	1.143	4773	5
P36	180	.200	1.143	4773	0
P37	185	.205	1.143	4773	0
P38	190	.211	1.143	4773	0
P39	195	.216	1.143	4773	0
P40	200	.222	1.143	4773	0
P41	205	.227	1.143	4773	0
P42	210	.233	1.144	4777	4

COMPANY: PHILLIPS PET. CO. NORWAY
TICKET NO: H11039C
GAUGE NO: 2298

SECOND FLOW CONTD. CONTINUED

	TIME		PRESSURE		
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	DELTA P
P43	215	.239	1.144	4777	0
P44	220	.244	1.144	4777	0
P45	225	.250	1.145	4781	4
P46	230	.255	1.145	4781	0
P47	235	.261	1.145	4781	0
P48	240	.266	1.145	4781	0
P49	245	.272	1.145	4781	0
P50	250	.277	1.145	4781	0
P51	257	.285	1.145	4781	0

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 2298

SECOND CIP

23, 5 MINUTE INTERVALS. LAST INTERVAL= 3 MINS.
 TOTAL 118 MINUTES

	TIME		PRESSURE		DELTA P	LOG T+0/0
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG		
P0	0	.000	1.145	4781	0	
P1	5	.006	1.180	4928	147	1.6857
P2	10	.011	1.205	5033	105	1.4299
P3	15	.017	1.232	5147	114	1.2496
P4	20	.022	1.249	5218	71	1.1447
P5	25	.028	1.280	5348	130	1.0484
P6	30	.033	1.292	5399	51	.9339
P7	35	.039	1.305	5453	54	.9195
P8	40	.044	1.314	5491	38	.8737
P9	45	.050	1.325	5537	46	.8261
P10	50	.055	1.334	5575	38	.7911
P11	55	.061	1.343	5613	38	.7537
P12	60	.067	1.354	5659	46	.7205
P13	65	.072	1.361	5689	30	.6953
P14	70	.078	1.368	5718	29	.6678
P15	75	.083	1.376	5752	34	.6468
P16	80	.089	1.385	5789	37	.6235
P17	85	.094	1.392	5819	30	.6055
P18	90	.100	1.400	5852	33	.5855
P19	95	.105	1.406	5878	26	.5699
P20	100	.111	1.413	5907	29	.5524
P21	105	.116	1.419	5932	25	.5387
P22	110	.122	1.425	5957	25	.5232
P23	115	.128	1.431	5983	26	.5087
P24	118	.131	1.434	5995	12	.5018

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 2298

ACID JOB ----- 23, 5 MINUTE INTERVALS. LAST INTERVAL= 6 MINS.
 ----- TOTAL 121 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	1.434	5995	0
P1	5	.006	2.152	9016	3021
P2	10	.011	2.182	9141	125
P3	15	.017	2.139	8962	179
P4	20	.022	2.139	8962	0
P5	25	.028	2.142	8974	12
P6	30	.033	2.143	8978	4
P7	35	.039	2.140	8966	12
P8	40	.044	2.148	9000	34
P9	45	.050	2.150	9008	8
P10	50	.055	2.156	9033	25
P11	55	.061	2.159	9045	12
P12	60	.067	2.163	9062	17
P13	65	.072	2.166	9075	13
P14	70	.078	2.172	9100	25
P15	75	.083	2.168	9083	17
P16	80	.089	2.159	9045	38
P17	85	.094	2.157	9037	8
P18	90	.100	2.157	9037	0
P19	95	.105	2.157	9037	0
P20	100	.111	2.157	9037	0
P21	105	.116	2.136	8949	88
P22	110	.122	2.121	8886	63
P23	115	.128	2.128	8915	29
P24	121	.134	2.147	8995	80

COMPANY: PHILLIPS PET. CO. NORWAY

TICKET NO: H110390

GAUGE NO: 2298

BLEED OFF ----- 35, 5 MINUTE INTERVALS. LAST INTERVAL= 6 MINS.
 TOTAL 181 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	2.147	8995	0
P1	5	.006	2.115	8861	134
P2	10	.011	2.105	8819	42
P3	15	.017	2.096	8781	38
P4	20	.022	2.091	8760	21
P5	25	.028	2.085	8735	25
P6	30	.033	2.082	8722	13
P7	35	.039	2.077	8701	21
P8	40	.044	2.074	8689	12
P9	45	.050	2.070	8672	17
P10	50	.055	2.067	8659	13
P11	55	.061	2.064	8647	12
P12	60	.067	2.061	8634	13
P13	65	.072	2.059	8626	8
P14	70	.078	2.057	8617	9
P15	75	.083	2.054	8605	12
P16	80	.089	2.052	8596	9
P17	85	.094	2.050	8588	8
P18	90	.100	2.048	8579	9
P19	95	.105	2.046	8571	8
P20	100	.111	2.044	8563	8
P21	105	.116	2.042	8554	9
P22	110	.122	2.040	8546	8
P23	115	.128	2.038	8537	9
P24	120	.133	2.037	8533	4
P25	125	.139	2.035	8525	8
P26	130	.144	2.034	8521	4
P27	135	.150	2.032	8512	9
P28	140	.155	2.031	8508	4
P29	145	.161	2.029	8500	8
P30	150	.166	2.028	8495	5
P31	155	.172	2.027	8491	4
P32	160	.177	2.025	8483	8
P33	165	.183	2.204	9233	750
P34	170	.189	2.023	8474	759
P35	175	.194	2.021	8466	8
P36	181	.201	2.020	8462	4

COMPANY: PHILLIPS PET. CO. NORWAY

TICKET NO: H110390

GAUGE NO: 2298

THIRD FLOW 117, 5 MINUTE INTERVALS. LAST INTERVAL= 3 MINS.
 TOTAL 588 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	1.929	8079	0
P1	5	.006	1.583	6621	1458
P2	10	.011	1.135	4739	1882
P3	15	.017	1.101	4596	143
P4	20	.022	1.084	4525	71
P5	25	.028	1.064	4441	84
P6	30	.033	1.011	4218	223
P7	35	.039	.916	3820	398
P8	40	.044	.901	3757	63
P9	45	.050	.909	3790	33
P10	50	.055	.930	3878	88
P11	55	.061	.941	3924	46
P12	60	.067	.940	3920	4
P13	65	.072	.937	3907	13
P14	70	.078	.931	3882	25
P15	75	.083	.925	3857	25
P16	80	.089	.921	3841	16
P17	85	.094	.918	3828	13
P18	90	.100	.911	3799	29
P19	95	.105	.905	3774	25
P20	100	.111	.896	3736	38
P21	105	.116	.890	3711	25
P22	110	.122	.886	3694	17
P23	115	.128	.881	3673	21
P24	120	.133	.875	3648	25
P25	125	.139	.865	3606	42
P26	130	.144	.856	3569	37
P27	135	.150	.850	3543	26
P28	140	.155	.845	3523	20
P29	145	.161	.842	3510	13
P30	150	.166	.840	3502	8
P31	155	.172	.837	3489	13
P32	160	.177	.835	3481	8
P33	165	.183	.840	3502	21
P34	170	.189	.841	3506	4
P35	175	.194	.840	3502	4
P36	180	.200	.838	3493	9
P37	185	.205	.838	3493	0
P38	190	.211	.835	3481	12
P39	195	.216	.835	3481	0
P40	200	.222	.833	3472	9
P41	205	.227	.830	3460	12
P42	210	.233	.827	3447	13

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 2298

THIRD FLOW CONTINUED

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P43	215	.239	.826	3443	4
P44	220	.244	.826	3443	0
P45	225	.250	.824	3435	8
P46	230	.255	.822	3426	9
P47	235	.261	.821	3422	4
P48	240	.266	.819	3414	8
P49	245	.272	.818	3410	4
P50	250	.277	.818	3410	0
P51	255	.283	.818	3410	0
P52	260	.288	.818	3410	0
P53	265	.294	.817	3405	5
P54	270	.300	.817	3405	0
P55	275	.305	.817	3405	0
P56	280	.311	.815	3397	8
P57	285	.316	.814	3393	4
P58	290	.322	.813	3389	4
P59	295	.327	.813	3389	0
P60	300	.333	.813	3389	0
P61	305	.338	.812	3384	5
P62	310	.344	.811	3380	4
P63	315	.349	.810	3376	4
P64	320	.355	.810	3376	0
P65	325	.361	.809	3372	4
P66	330	.366	.809	3372	0
P67	335	.372	.810	3376	4
P68	340	.377	.809	3372	4
P69	345	.383	.808	3368	4
P70	350	.388	.808	3368	0
P71	355	.394	.808	3368	0
P72	360	.399	.808	3368	0
P73	365	.405	.809	3372	4
P74	370	.410	.808	3368	4
P75	375	.416	.807	3364	4
P76	380	.422	.806	3359	5
P77	385	.427	.807	3364	5
P78	390	.433	.809	3372	8
P79	395	.438	.811	3380	8
P80	400	.444	.812	3384	4
P81	405	.449	.814	3393	9
P82	410	.455	.816	3401	8
P83	415	.460	.816	3401	0
P84	420	.466	.817	3405	4
P85	425	.471	.817	3405	0

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 2298

THIRD FLOW CONTINUED

	TIME		PRESSURE		
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	DELTA P
P86	430	.477	.816	3401	4
P87	435	.483	.816	3401	0
P88	440	.488	.815	3397	4
P89	445	.494	.814	3393	4
P90	450	.499	.814	3393	0
P91	455	.505	.814	3393	0
P92	460	.510	.813	3389	4
P93	465	.516	.813	3389	0
P94	470	.521	.815	3397	8
P95	475	.527	.814	3393	4
P96	480	.532	.814	3393	0
P97	485	.538	.820	3418	25
P98	490	.544	.822	3426	8
P99	495	.549	.820	3418	8
P100	500	.555	.815	3397	21
P101	505	.560	.812	3384	13
P102	510	.566	.810	3376	8
P103	515	.571	.809	3372	4
P104	520	.577	.811	3380	8
P105	525	.582	.812	3384	4
P106	530	.588	.814	3393	9
P107	535	.594	.814	3393	0
P108	540	.599	.815	3397	4
P109	545	.605	.817	3405	8
P110	550	.610	.816	3401	4
P111	555	.616	.815	3397	4
P112	560	.621	.814	3393	4
P113	565	.627	.814	3393	0
P114	570	.632	.813	3389	4
P115	575	.638	.814	3393	4
P116	580	.643	.814	3393	0
P117	585	.649	.813	3389	4
P118	588	.652	.813	3389	0

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 2298

THIRD CIP 144, 5 MINUTE INTERVALS. LAST INTERVAL= 7 MINS.
 TOTAL 727 MINUTES

	TIME		PRESSURE		DELTA P	LOG T+0/0
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG		
P0	0	.000	.813	3389	0	
P1	5	.006	.831	3464	75	2.0401
P2	10	.011	.848	3535	71	1.7801
P3	15	.017	.870	3627	92	1.5950
P4	20	.022	.890	3711	84	1.4862
P5	25	.028	.916	3820	109	1.3854
P6	30	.033	.945	3941	121	1.3172
P7	35	.039	.992	4138	197	1.2484
P8	40	.044	1.060	4424	286	1.1992
P9	45	.050	1.109	4630	206	1.1474
P10	50	.055	1.127	4705	75	1.1091
P11	55	.061	1.143	4773	68	1.0678
P12	60	.067	1.157	4831	58	1.0307
P13	65	.072	1.168	4878	47	1.0024
P14	70	.078	1.179	4924	46	.9712
P15	75	.083	1.189	4966	42	.9472
P16	80	.089	1.199	5008	42	.9204
P17	85	.094	1.206	5037	29	.8996
P18	90	.100	1.215	5075	38	.8762
P19	95	.105	1.222	5105	30	.8579
P20	100	.111	1.229	5134	29	.8372
P21	105	.116	1.234	5155	21	.8209
P22	110	.122	1.241	5184	29	.8024
P23	115	.128	1.247	5210	26	.7849
P24	120	.133	1.252	5231	21	.7710
P25	125	.139	1.258	5256	25	.7552
P26	130	.144	1.262	5273	17	.7426
P27	135	.150	1.267	5294	21	.7281
P28	140	.155	1.271	5310	16	.7165
P29	145	.161	1.275	5327	17	.7033
P30	150	.166	1.279	5344	17	.6926
P31	155	.172	1.283	5361	17	.6804
P32	160	.177	1.287	5378	17	.6706
P33	165	.183	1.291	5394	16	.6592
P34	170	.189	1.295	5411	17	.6483
P35	175	.194	1.298	5424	13	.6396
P36	180	.200	1.302	5441	17	.6294
P37	185	.205	1.305	5453	12	.6212
P38	190	.211	1.309	5470	17	.6117
P39	195	.216	1.312	5483	13	.6041
P40	200	.222	1.315	5495	12	.5952
P41	205	.227	1.317	5504	9	.5880
P42	210	.233	1.320	5516	12	.5796

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 2298

THIRD CIP CONTINUED

	TIME		PRESSURE		DELTA P	LOG T+0/0
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG		
P43	215	.239	1.323	5529	13	.5715
P44	220	.244	1.326	5542	13	.5649
P45	225	.250	1.328	5550	8	.5573
P46	230	.255	1.331	5563	13	.5511
P47	235	.261	1.333	5571	8	.5438
P48	240	.266	1.335	5579	8	.5380
P49	245	.272	1.338	5592	13	.5311
P50	250	.277	1.340	5600	8	.5255
P51	255	.283	1.343	5613	13	.5190
P52	260	.288	1.345	5621	8	.5137
P53	265	.294	1.347	5630	9	.5075
P54	270	.300	1.350	5642	12	.5015
P55	275	.305	1.352	5651	9	.4966
P56	280	.311	1.354	5659	8	.4909
P57	285	.316	1.356	5668	9	.4862
P58	290	.322	1.358	5676	8	.4807
P59	295	.327	1.360	5684	8	.4762
P60	300	.333	1.362	5693	9	.4710
P61	305	.338	1.364	5701	8	.4667
P62	310	.344	1.366	5710	9	.4617
P63	315	.349	1.368	5718	8	.4576
P64	320	.355	1.370	5726	8	.4528
P65	325	.361	1.372	5735	9	.4481
P66	330	.366	1.374	5743	8	.4443
P67	335	.372	1.375	5747	4	.4398
P68	340	.377	1.377	5756	9	.4361
P69	345	.383	1.378	5760	4	.4317
P70	350	.388	1.380	5768	8	.4282
P71	355	.394	1.382	5777	9	.4240
P72	360	.399	1.384	5785	8	.4206
P73	365	.405	1.385	5789	4	.4166
P74	370	.410	1.387	5798	9	.4133
P75	375	.416	1.388	5802	4	.4095
P76	380	.422	1.390	5810	8	.4057
P77	385	.427	1.391	5815	5	.4026
P78	390	.433	1.393	5823	8	.3989
P79	395	.438	1.394	5827	4	.3960
P80	400	.444	1.396	5836	9	.3924
P81	405	.449	1.397	5840	4	.3895
P82	410	.455	1.399	5848	8	.3861
P83	415	.460	1.400	5852	4	.3833
P84	420	.466	1.401	5857	5	.3801
P85	425	.471	1.403	5865	8	.3774

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 2298

THIRD CIP CONTINUED

	TIME		PRESSURE		DELTA P	LOG T+0/0
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG		
P86	430	.477	1.404	5869	4	.3742
P87	435	.483	1.406	5878	9	.3710
P88	440	.488	1.407	5882	4	.3685
P89	445	.494	1.408	5886	4	.3655
P90	450	.499	1.409	5890	4	.3630
P91	455	.505	1.410	5894	4	.3600
P92	460	.510	1.412	5903	9	.3576
P93	465	.516	1.413	5907	4	.3548
P94	470	.521	1.414	5911	4	.3525
P95	475	.527	1.415	5915	4	.3497
P96	480	.532	1.417	5924	9	.3474
P97	485	.538	1.418	5928	4	.3448
P98	490	.544	1.419	5932	4	.3421
P99	495	.549	1.420	5936	4	.3400
P100	500	.555	1.421	5941	5	.3374
P101	505	.560	1.422	5945	4	.3353
P102	510	.566	1.423	5949	4	.3328
P103	515	.571	1.424	5953	4	.3308
P104	520	.577	1.426	5962	9	.3284
P105	525	.582	1.427	5966	4	.3264
P106	530	.588	1.428	5970	4	.3240
P107	535	.594	1.429	5974	4	.3217
P108	540	.599	1.430	5978	4	.3198
P109	545	.605	1.431	5983	5	.3176
P110	550	.610	1.432	5987	4	.3157
P111	555	.616	1.433	5991	4	.3135
P112	560	.621	1.434	5995	4	.3117
P113	565	.627	1.435	6000	5	.3096
P114	570	.632	1.436	6004	4	.3078
P115	575	.638	1.437	6008	4	.3058
P116	580	.643	1.438	6012	4	.3041
P117	585	.649	1.439	6016	4	.3020
P118	590	.655	1.440	6021	5	.3000
P119	595	.660	1.441	6025	4	.2984
P120	600	.666	1.442	6029	4	.2964
P121	605	.671	1.443	6033	4	.2948
P122	610	.677	1.444	6037	4	.2929
P123	615	.682	1.445	6042	5	.2914
P124	620	.688	1.446	6046	4	.2895
P125	625	.693	1.447	6050	4	.2880
P126	630	.699	1.448	6054	4	.2862
P127	635	.704	1.449	6058	4	.2847
P128	640	.710	1.450	6063	5	.2829

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 2298

THIRD CIP CONTINUED

	TIME		PRESSURE		LOG T+0/0	
MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	DELTA P		
P129	645	.716	1.451	6067	4	.2812
P130	650	.721	1.452	6071	4	.2797
P131	655	.727	1.452	6071	0	.2780
P132	660	.732	1.453	6075	4	.2766
P133	665	.738	1.454	6079	4	.2750
P134	670	.743	1.455	6084	5	.2736
P135	675	.749	1.456	6088	4	.2720
P136	680	.754	1.457	6092	4	.2706
P137	685	.760	1.458	6096	4	.2690
P138	690	.765	1.459	6100	4	.2677
P139	695	.771	1.460	6105	5	.2662
P140	700	.777	1.461	6109	4	.2646
P141	705	.782	1.461	6109	0	.2633
P142	710	.788	1.462	6113	4	.2618
P143	715	.793	1.463	6117	4	.2606
P144	720	.799	1.463	6117	0	.2591
P145	727	.807	1.464	6121	4	.2572

COMPANY: PHILLIPS PET. CO. NORWAY
TICKET NO: H110390
GAUGE NO: 4508

FIRST FLOW

3, 5 MINUTE INTERVALS. LAST INTERVAL= 4 MINS.
TOTAL 19 MINUTES

	TIME		PRESSURE		
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	DELTA P
P0	0	.000	1.143	4931	0
P1	5	.006	1.146	4944	13
P2	10	.011	1.147	4948	4
P3	15	.017	1.147	4948	0
P4	19	.021	1.147	4948	0

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 4508

FIRST CIP ----- 22, 5 MINUTE INTERVALS. LAST INTERVAL= 6 MINS.
 ----- TOTAL 116 MINUTES

	TIME		PRESSURE		LOG T+0/0	
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	DELTA P	
P0	0	.000	1.147	4948	0	
P1	5	.006	1.150	4961	13	.6532
P2	10	.011	1.155	4982	21	.4638
P3	15	.017	1.165	5025	43	.3493
P4	20	.023	1.176	5072	47	.2817
P5	25	.028	1.187	5119	47	.2430
P6	30	.034	1.199	5170	51	.2089
P7	35	.039				
P8	40	.045				
P9	45	.051				
P10	50	.056				
P11	55	.062				
P12	60	.068	1.252	5397	0	.1169
P13	65	.073	1.261	5435	38	.1098
P14	70	.079	1.269	5470	35	.1024
P15	75	.084	1.277	5504	34	.0969
P16	80	.090	1.284	5534	30	.0911
P17	85	.096	1.293	5572	38	.0859
P18	90	.101	1.301	5606	34	.0820
P19	95	.107	1.307	5632	26	.0778
P20	100	.113	1.313	5658	26	.0740
P21	105	.118	1.321	5692	34	.0711
P22	110	.124	1.327	5717	25	.0679
P23	116	.131	1.330	5730	13	.0646

GAUGE JUMPING
NO ACCURATE READINGS POSSIBLE

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 4508

SECOND FLOW

29, 5 MINUTE INTERVALS. LAST INTERVAL= 6 MINS.
 TOTAL 151 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	1.142	4927	0
P1	5	.006	1.143	4931	4
P2	10	.011	1.143	4931	0
P3	15	.017	1.143	4931	0
P4	20	.023	1.143	4931	0
P5	25	.028	1.143	4931	0
P6	30	.034	1.143	4931	0
P7	35	.039	1.143	4931	0
P8	40	.045	1.143	4931	0
P9	45	.051	1.143	4931	0
P10	50	.056	1.143	4931	0
P11	55	.062	1.143	4931	0
P12	60	.068	1.143	4931	0
P13	65	.073	1.143	4931	0
P14	70	.079	1.143	4931	0
P15	75	.084	1.143	4931	0
P16	80	.090	1.143	4931	0
P17	85	.096	1.143	4931	0
P18	90	.101	1.143	4931	0
P19	95	.107	1.143	4931	0
P20	100	.113	1.143	4931	0
P21	105	.118	1.143	4931	0
P22	110	.124	1.143	4931	0
P23	115	.129	1.143	4931	0
P24	120	.135	1.143	4931	0
P25	125	.141	1.143	4931	0
P26	130	.146	1.143	4931	0
P27	135	.152	1.144	4935	4
P28	140	.158	1.144	4935	0
P29	145	.163	1.145	4939	4
P30	151	.170	1.142	4927	12

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 4508

PUMPING PERIOD ----- 2, 5 MINUTE INTERVALS. LAST INTERVAL= 7 MINS.
 TOTAL 17 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	1.142	4927	0
P1	5	.006	1.142	4927	0
P2	10	.011	NO READING POSSIBLE		
P3	17	.019	2.041	8765	0

COMPANY: PHILLIPS PET. CO. NORWAY

TICKET NO: H110390

GAUGE NO: 4508

SECOND FLOW CONTD. 50, 5 MINUTE INTERVALS. LAST INTERVAL= 7 MINS.

 TOTAL 257 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	1.111	4793	0
P1	5	.006	1.108	4781	12
P2	10	.011	1.113	4802	21
P3	15	.017	1.116	4815	13
P4	20	.023	1.117	4819	4
P5	25	.028	1.118	4824	5
P6	30	.034	1.119	4828	4
P7	35	.039	1.119	4828	0
P8	40	.045	1.119	4828	0
P9	45	.051	1.119	4828	0
P10	50	.056	1.119	4828	0
P11	55	.062	1.119	4828	0
P12	60	.068	1.119	4828	0
P13	65	.073	1.119	4828	0
P14	70	.079	1.119	4828	0
P15	75	.084	1.119	4828	0
P16	80	.090	1.119	4828	0
P17	85	.096	1.119	4828	0
P18	90	.101	1.119	4828	0
P19	95	.107	1.119	4828	0
P20	100	.113	1.119	4828	0
P21	105	.118	1.119	4828	0
P22	110	.124	1.119	4828	0
P23	115	.129	1.119	4828	0
P24	120	.135	1.119	4828	0
P25	125	.141	1.119	4828	0
P26	130	.146	1.119	4828	0
P27	135	.152	1.119	4828	0
P28	140	.158	1.119	4828	0
P29	145	.163	1.119	4828	0
P30	150	.169	1.119	4828	0
P31	155	.174	1.119	4828	0
P32	160	.180	1.119	4828	0
P33	165	.186	1.119	4828	0
P34	170	.191	1.119	4828	0
P35	175	.197	1.119	4828	0
P36	180	.203	1.120	4832	4
P37	185	.208	1.120	4832	0
P38	190	.214	1.120	4832	0
P39	195	.219	1.120	4832	0
P40	200	.225	1.120	4832	0
P41	205	.231	1.121	4836	4
P42	210	.236	1.121	4836	0

COMPANY: PHILLIPS PET. CO. NORWAY

TICKET NO: H110390

GAUGE NO: 4508

SECOND FLOW CONTD. CONTINUED

	TIME		PRESSURE		
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	DELTA P
P43	215	.242	1.121	4836	0
P44	220	.248	1.121	4836	0
P45	225	.253	1.121	4836	0
P46	230	.259	1.122	4841	5
P47	235	.264	1.122	4841	0
P48	240	.270	1.122	4841	0
P49	245	.276	1.123	4845	4
P50	250	.281	1.123	4845	0
P51	257	.289	1.123	4845	0

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 4508

SECOND CIP 23, 5 MINUTE INTERVALS. LAST INTERVAL= 3 MINS.
 ----- TOTAL 118 MINUTES

	TIME		PRESSURE		DELTA P	LOG T+0/O
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG		
P0	0	.000	1.123	4845	0	
P1	5	.006	1.160	5004	159	1.6917
P2	10	.011	1.186	5115	111	1.4357
P3	15	.017	1.210	5217	102	1.2553
P4	20	.023	1.230	5303	86	1.1324
P5	25	.028				
P6	30	.034				
P7	35	.039				
P8	40	.045				
P9	45	.051				
P10	50	.056				
P11	55	.062				
P12	60	.068	1.324	5705	0	.7202
P13	65	.073	1.332	5739	34	.6954
P14	70	.079	1.339	5769	30	.6682
P15	75	.084	1.347	5803	34	.6474
P16	80	.090	1.356	5841	38	.6244
P17	85	.096	1.364	5876	35	.6032
P18	90	.101	1.369	5897	21	.5867
P19	95	.107	1.376	5927	30	.5683
P20	100	.113	1.383	5957	30	.5511
P21	105	.118	1.388	5978	21	.5377
P22	110	.124	1.394	6004	26	.5225
P23	115	.129	1.399	6025	21	.5106
P24	118	.133	1.402	6038	13	.5015

GAUGE JUMPING
NO ACCURATE READINGS POSSIBLE

COMPANY: PHILLIPS PET. CO. NORWAY

TICKET NO: H110390

GAUGE NO: 4508

ACID JOB ----- 23, 5 MINUTE INTERVALS. LAST INTERVAL= 6 MINS.
 ----- TOTAL 121 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	1.402	6038	0
P1	5	.006	2.092	8982	2944
P2	10	.011	2.137	9172	190
P3	15	.017	2.091	8978	194
P4	20	.023	2.089	8970	8
P5	25	.028	2.090	8974	4
P6	30	.034	2.093	8987	13
P7	35	.039	2.092	8982	5
P8	40	.045	2.099	9012	30
P9	45	.051	2.103	9029	17
P10	50	.056	2.108	9050	21
P11	55	.062	2.112	9067	17
P12	60	.068	2.119	9097	30
P13	65	.073	2.123	9113	16
P14	70	.079	2.126	9126	13
P15	75	.084	2.116	9084	42
P16	80	.090	2.112	9067	17
P17	85	.096	2.110	9059	8
P18	90	.101	2.110	9059	0
P19	95	.107	2.110	9059	0
P20	100	.113	2.110	9059	0
P21	105	.118	2.087	8961	98
P22	110	.124	2.075	8910	51
P23	115	.129	2.080	8931	21
P24	121	.136	2.098	9008	77

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 4508

BLEED OFF ----- 35, 5 MINUTE INTERVALS. LAST INTERVAL= 6 MINS.
 TOTAL 181 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	2.098	9008	0
P1	5	.006	2.071	8893	115
P2	10	.011	2.061	8851	42
P3	15	.017	2.053	8817	34
P4	20	.023	2.046	8787	30
P5	25	.028	2.042	8770	17
P6	30	.034	2.038	8753	17
P7	35	.039	2.034	8736	17
P8	40	.045	2.030	8719	17
P9	45	.051	2.026	8702	17
P10	50	.056	2.023	8689	13
P11	55	.062	2.021	8680	9
P12	60	.068	2.018	8668	12
P13	65	.073	2.016	8659	9
P14	70	.079	2.014	8651	8
P15	75	.084	2.012	8642	9
P16	80	.090	2.009	8629	13
P17	85	.096	2.007	8621	8
P18	90	.101	2.006	8617	4
P19	95	.107	2.004	8608	9
P20	100	.113	2.001	8595	13
P21	105	.118	2.000	8591	4
P22	110	.124	1.999	8587	4
P23	115	.129	1.997	8578	9
P24	120	.135	1.995	8570	8
P25	125	.141	1.993	8561	9
P26	130	.146	1.991	8553	8
P27	135	.152	1.990	8548	5
P28	140	.158	1.988	8540	8
P29	145	.163	1.987	8536	4
P30	150	.169	1.985	8527	9
P31	155	.174	1.984	8523	4
P32	160	.180	1.983	8519	4
P33	165	.186	1.981	8510	9
P34	170	.191	1.980	8506	4
P35	175	.197	1.979	8502	4
P36	181	.204	1.977	8493	9

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 4508

THIRD FLOW 117, 5 MINUTE INTERVALS. LAST INTERVAL= 3 MINS.
 ----- TOTAL 588 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	1.902	8174	0
P1	5	.006	1.509	6495	1679
P2	10	.011	1.126	4858	1637
P3	15	.017	1.090	4703	155
P4	20	.023	1.068	4609	94
P5	25	.028	1.053	4545	64
P6	30	.034	1.019	4399	146
P7	35	.039	.956	4128	271
P8	40	.045	.894	3862	266
P9	45	.051	.908	3922	60
P10	50	.056	.910	3931	9
P11	55	.062	.917	3961	30
P12	60	.068	.923	3987	26
P13	65	.073	.921	3978	9
P14	70	.079	.916	3957	21
P15	75	.084	.911	3935	22
P16	80	.090	.906	3914	21
P17	85	.096	.902	3896	18
P18	90	.101	.898	3879	17
P19	95	.107	.891	3849	30
P20	100	.113	.882	3811	38
P21	105	.118	.876	3785	26
P22	110	.124	.871	3763	22
P23	115	.129	.867	3746	17
P24	120	.135	.862	3725	21
P25	125	.141	.854	3690	35
P26	130	.146	.845	3652	38
P27	135	.152	.837	3618	34
P28	140	.158	.831	3592	26
P29	145	.163	.828	3579	13
P30	150	.169	.824	3562	17
P31	155	.174	.821	3549	13
P32	160	.180	.820	3545	4
P33	165	.186	.820	3545	0
P34	170	.191	.823	3557	12
P35	175	.197	.823	3557	0
P36	180	.203	.821	3549	8
P37	185	.208	.821	3549	0
P38	190	.214	.819	3540	9
P39	195	.219	.818	3536	4
P40	200	.225	.817	3532	4
P41	205	.231	.814	3519	13
P42	210	.236	.811	3506	13

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 4508

THIRD FLOW CONTINUED

	TIME		PRESSURE		
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	DELTA P
P43	215	.242	.809	3497	9
P44	220	.248	.806	3484	13
P45	225	.253	.805	3480	4
P46	230	.259	.804	3476	4
P47	235	.264	.804	3476	0
P48	240	.270	.803	3472	4
P49	245	.276	.802	3467	5
P50	250	.281	.802	3467	0
P51	255	.287	.802	3467	0
P52	260	.293	.801	3463	4
P53	265	.298	.801	3463	0
P54	270	.304	.800	3459	4
P55	275	.309	.800	3459	0
P56	280	.315	.800	3459	0
P57	285	.321	.798	3450	9
P58	290	.326	.797	3446	4
P59	295	.332	.797	3446	0
P60	300	.338	.796	3442	4
P61	305	.343	.796	3442	0
P62	310	.349	.795	3437	5
P63	315	.354	.794	3433	4
P64	320	.360	.793	3429	4
P65	325	.366	.793	3429	0
P66	330	.371	.792	3424	5
P67	335	.377	.793	3429	5
P68	340	.383	.792	3424	5
P69	345	.388	.792	3424	0
P70	350	.394	.791	3420	4
P71	355	.399	.791	3420	0
P72	360	.405	.792	3424	4
P73	365	.411	.792	3424	0
P74	370	.416	.792	3424	0
P75	375	.422	.792	3424	0
P76	380	.428	.791	3420	4
P77	385	.433	.790	3416	4
P78	390	.439	.791	3420	4
P79	395	.444	.792	3424	4
P80	400	.450	.794	3433	9
P81	405	.456	.796	3442	9
P82	410	.461	.797	3446	4
P83	415	.467	.798	3450	4
P84	420	.473	.798	3450	0
P85	425	.473	.798	3450	0

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 4508

THIRD FLOW CONTINUED

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P86	430	.484	.798	3450	0
P87	435	.489	.798	3450	0
P88	440	.495	.798	3450	0
P89	445	.501	.797	3446	4
P90	450	.506	.797	3446	0
P91	455	.512	.796	3442	4
P92	460	.518	.796	3442	0
P93	465	.523	.796	3442	0
P94	470	.529	.796	3442	0
P95	475	.534	.797	3446	4
P96	480	.540	.797	3446	0
P97	485	.546	.800	3459	13
P98	490	.551	.797	3446	13
P99	495	.557	.793	3429	17
P100	500	.563	.793	3429	0
P101	505	.568	.793	3429	0
P102	510	.574	.793	3429	0
P103	515	.579	.792	3424	5
P104	520	.585	.792	3424	0
P105	525	.591	.794	3433	9
P106	530	.596	.794	3433	0
P107	535	.602	.796	3442	9
P108	540	.608	.795	3437	5
P109	545	.613	.798	3450	13
P110	550	.619	.799	3454	4
P111	555	.624	.798	3450	4
P112	560	.630	.797	3446	4
P113	565	.636	.796	3442	4
P114	570	.641	.796	3442	0
P115	575	.647	.796	3442	0
P116	580	.653	.797	3446	4
P117	585	.658	.796	3442	4
P118	588	.662	.795	3437	5

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 4508

THIRD CIP 144, 5 MINUTE INTERVALS. LAST INTERVAL= 7 MINS.
 TOTAL 727 MINUTES

	TIME		PRESSURE		DELTA P	LOG T+0/0
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG		
P0	0	.000	.796	3442	0	
P1	5	.006	.812	3510	68	2.0466
P2	10	.011	.829	3583	73	1.7866
P3	15	.017	.846	3656	73	1.6014
P4	20	.023	.869	3755	99	1.4740
P5	25	.028	.891	3849	94	1.3917
P6	30	.034	.924	3991	142	1.3111
P7	35	.039	.966	4171	180	1.2547
P8	40	.045	1.042	4497	326	1.1962
P9	45	.051	1.087	4690	193	1.1455
P10	50	.056	1.103	4759	69	1.1079
P11	55	.062	1.118	4824	65	1.0673
P12	60	.068	1.132	4884	60	1.0308
P13	65	.073	1.142	4927	43	1.0030
P14	70	.079	1.154	4978	51	.9722
P15	75	.084	1.163	5017	39	.9485
P16	80	.090	1.172	5055	38	.9220
P17	85	.096	1.180	5089	34	.8974
P18	90	.101	1.187	5119	30	.8782
P19	95	.107	1.194	5149	30	.8565
P20	100	.113	1.201	5179	30	.8362
P21	105	.118	1.207	5205	26	.8202
P22	110	.124	1.212	5226	21	.8020
P23	115	.129	1.217	5247	21	.7876
P24	120	.135	1.223	5273	26	.7711
P25	125	.141	1.228	5294	21	.7555
P26	130	.146	1.233	5316	22	.7431
P27	135	.152	1.237	5333	17	.7288
P28	140	.158	1.242	5354	21	.7152
P29	145	.163	1.246	5371	17	.7043
P30	150	.169	1.250	5388	17	.6917
P31	155	.174	1.254	5405	17	.6817
P32	160	.180	1.258	5423	18	.6700
P33	165	.186	1.262	5440	17	.6589
P34	170	.191	1.265	5452	12	.6499
P35	175	.197	1.268	5465	13	.6395
P36	180	.203	1.272	5482	17	.6295
P37	185	.208	1.274	5491	9	.6215
P38	190	.214	1.278	5508	17	.6121
P39	195	.219	1.280	5517	9	.6045
P40	200	.225	1.283	5529	12	.5957
P41	205	.231	1.286	5542	13	.5872
P42	210	.236	1.289	5555	13	.5804

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 4508

THIRD CIP CONTINUED

	TIME		PRESSURE		DELTA P	LOG T+0/0
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG		
P43	215	.242	1.291	5564	9	.5724
P44	220	.248	1.294	5576	12	.5646
P45	225	.253	1.296	5585	9	.5583
P46	230	.259	1.299	5598	13	.5510
P47	235	.264	1.301	5606	8	.5450
P48	240	.270	1.304	5619	13	.5381
P49	245	.276	1.306	5628	9	.5313
P50	250	.281	1.308	5636	8	.5258
P51	255	.287	1.310	5645	9	.5194
P52	260	.293	1.312	5653	8	.5131
P53	265	.298	1.314	5662	9	.5081
P54	270	.304	1.316	5670	8	.5021
P55	275	.309	1.318	5679	9	.4973
P56	280	.315	1.320	5688	9	.4916
P57	285	.321	1.322	5696	8	.4860
P58	290	.326	1.324	5705	9	.4815
P59	295	.332	1.326	5713	8	.4762
P60	300	.338	1.328	5722	9	.4711
P61	305	.343	1.330	5730	8	.4669
P62	310	.349	1.332	5739	9	.4619
P63	315	.354	1.332	5739	0	.4579
P64	320	.360	1.336	5756	17	.4531
P65	325	.366	1.337	5760	4	.4485
P66	330	.371	1.339	5769	9	.4447
P67	335	.377	1.341	5777	8	.4403
P68	340	.383	1.342	5782	5	.4359
P69	345	.388	1.344	5790	8	.4324
P70	350	.394	1.345	5794	4	.4282
P71	355	.399	1.347	5803	9	.4247
P72	360	.405	1.348	5807	4	.4207
P73	365	.411	1.350	5816	9	.4168
P74	370	.416	1.351	5820	4	.4135
P75	375	.422	1.353	5829	9	.4097
P76	380	.428	1.355	5837	8	.4060
P77	385	.433	1.356	5841	4	.4029
P78	390	.439	1.358	5850	9	.3993
P79	395	.444	1.359	5854	4	.3964
P80	400	.450	1.361	5863	9	.3929
P81	405	.456	1.362	5867	4	.3895
P82	410	.461	1.363	5871	4	.3867
P83	415	.467	1.365	5880	9	.3834
P84	420	.473	1.366	5884	4	.3801
P85	425	.478	1.367	5888	4	.3775

COMPANY: PHILLIPS PET. CO. NORWAY
 TICKET NO: H110390
 GAUGE NO: 4508

THIRD CIP CONTINUED

	TIME		PRESSURE		LOG T+0/0	
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	DELTA P	
P86	430	.484	1.369	5897	9	.3743
P87	435	.489	1.370	5901	4	.3718
P88	440	.495	1.371	5905	4	.3687
P89	445	.501	1.372	5910	5	.3657
P90	450	.506	1.373	5914	4	.3633
P91	455	.512	1.375	5923	9	.3604
P92	460	.518	1.376	5927	4	.3576
P93	465	.523	1.377	5931	4	.3552
P94	470	.529	1.378	5935	4	.3525
P95	475	.534	1.379	5940	5	.3502
P96	480	.540	1.380	5944	4	.3475
P97	485	.546	1.381	5948	4	.3449
P98	490	.551	1.383	5957	9	.3427
P99	495	.557	1.384	5961	4	.3401
P100	500	.563	1.385	5965	4	.3376
P101	505	.568	1.386	5970	5	.3356
P102	510	.574	1.387	5974	4	.3331
P103	515	.579	1.388	5978	4	.3311
P104	520	.585	1.389	5982	4	.3287
P105	525	.591	1.390	5987	5	.3264
P106	530	.596	1.391	5991	4	.3244
P107	535	.602	1.392	5995	4	.3222
P108	540	.608	1.394	6004	9	.3199
P109	545	.613	1.395	6008	4	.3180
P110	550	.619	1.396	6012	4	.3159
P111	555	.624	1.397	6017	5	.3141
P112	560	.630	1.398	6021	4	.3119
P113	565	.636	1.399	6025	4	.3098
P114	570	.641	1.399	6025	0	.3081
P115	575	.647	1.400	6029	4	.3060
P116	580	.653	1.401	6034	5	.3040
P117	585	.658	1.401	6034	0	.3023
P118	590	.664	1.402	6038	4	.3004
P119	595	.669	1.403	6042	4	.2988
P120	600	.675	1.404	6047	5	.2968
P121	605	.681	1.405	6051	4	.2949
P122	610	.686	1.407	6059	8	.2934
P123	615	.692	1.408	6064	5	.2915
P124	620	.698	1.409	6068	4	.2897
P125	625	.703	1.409	6068	0	.2882
P126	630	.709	1.410	6072	4	.2864
P127	635	.714	1.411	6076	4	.2849
P128	640	.720	1.412	6081	5	.2832

COMPANY: PHILLIPS PET. CO. NORWAY

TICKET NO: H110390

GAUGE NO: 4508

THIRD CIP CONTINUED

TIME		PRESSURE		LOG T+0/0		
MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	DELTA P		
P129	645	.726	1.413	6085	4	.2815
P130	650	.731	1.413	6085	0	.2800
P131	655	.737	1.414	6089	4	.2784
P132	660	.743	1.415	6094	5	.2767
P133	665	.748	1.416	6098	4	.2753
P134	670	.754	1.417	6102	4	.2737
P135	675	.759	1.418	6106	4	.2724
P136	680	.765	1.419	6111	5	.2708
P137	685	.771	1.420	6115	4	.2692
P138	690	.776	1.421	6119	4	.2679
P139	695	.782	1.421	6119	0	.2664
P140	700	.788	1.422	6123	4	.2648
P141	705	.793	1.423	6128	5	.2636
P142	710	.799	1.424	6132	4	.2621
P143	715	.804	1.424	6132	0	.2609
P144	720	.810	1.425	6136	4	.2594
P145	727	.818	1.426	6141	5	.2575

NOMENCLATURE

b	= Approximate Radius of Investigation	Feet
b₁	= Approximate Radius of Investigation (Net Pay Zone h ₁)	Feet
D.R.	= Damage Ratio	—
EI	= Elevation	Feet
GD	= B.T. Gauge Depth (From Surface Reference)	Feet
h	= Interval Tested	Feet
h₁	= Net Pay Thickness	Feet
K	= Permeability	md
K₁	= Permeability (From Net Pay Zone h ₁)	md
m	= Slope Extrapolated Pressure Plot (Psi ² /cycle Gas)	psi/cycle
OF₁	= Maximum Indicated Flow Rate	MCF/D
OF₂	= Minimum Indicated Flow Rate	MCF/D
OF₃	= Theoretical Open Flow Potential with/Damage Removed Max.	MCF/D
OF₄	= Theoretical Open Flow Potential with/Damage Removed Min.	MCF/D
P_s	= Extrapolated Static Pressure	Psig.
P_f	= Final Flow Pressure	Psig.
P_{or}	= Potentiometric Surface (Fresh Water *)	Feet
Q	= Average Adjusted Production Rate During Test	bbls/day
Q₁	= 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.