

Woll Kilo

REGISTRO DE GRADIENTE FLUYENTE

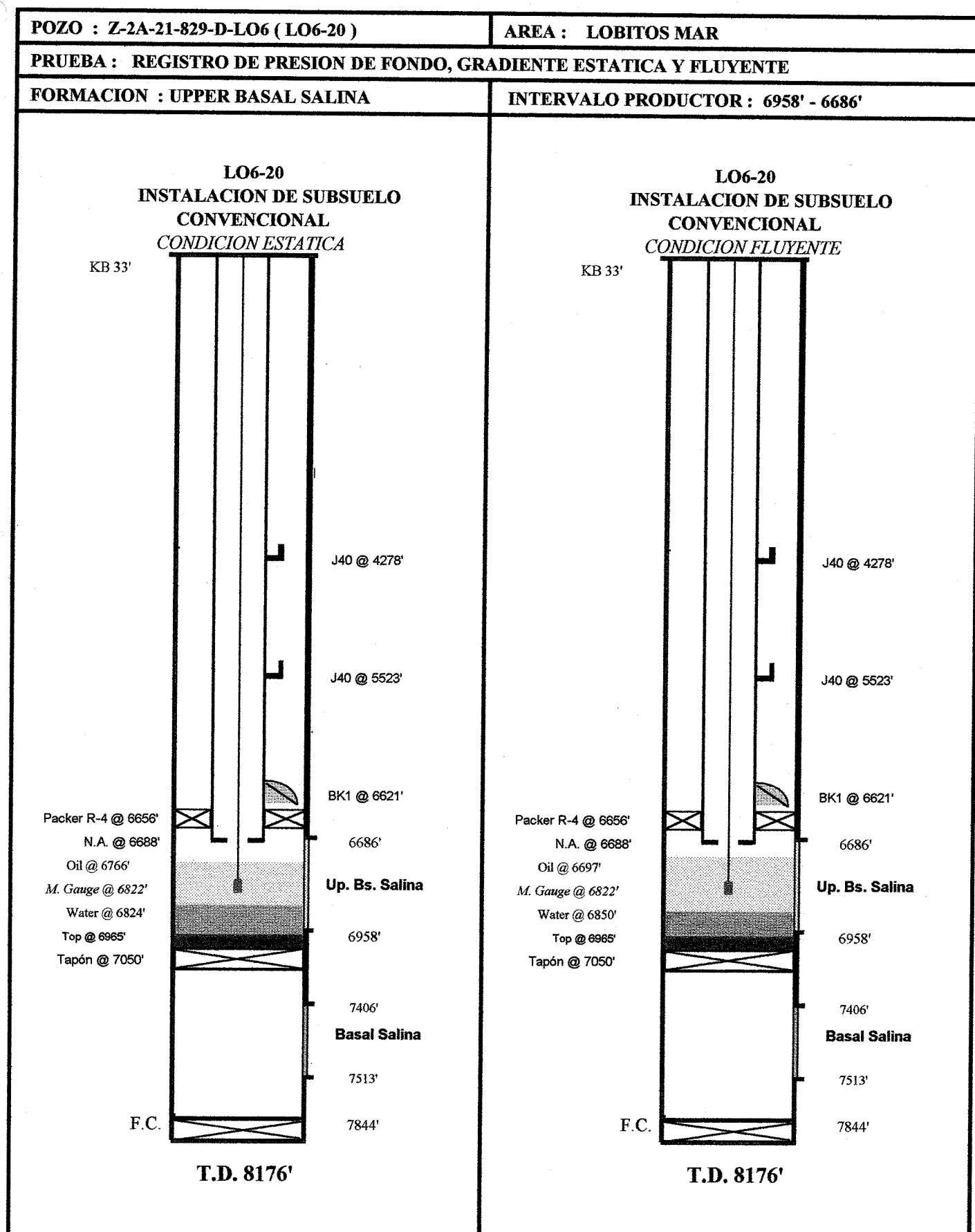
**PETRO-TECH PERUANA S.A.
POZO LO6-20
LOBITOS MAR
TALARA - PERU**

GEOSCIEN ES
Central
<i>July 17, 2002</i>
DATE

01 DE MARZO 2001

**REPORTE ELABORADO
POR
RICARDO AGUIRRE PARDO**

INFORMACION GENERAL



INFORMACION GENERAL

POZO : Z-2A-21-829-D-LO6 (LO6-20)		AREA : LOBITOS MAR	
PRUEBA : REGISTRO DE PRESION DE FONDO, GRADIENTE ESTATICA Y FLUYENTE			
FORMACION : UPPER BASAL SALINA		INTERVALO PRODUCTOR : 6958' - 6686'	
LO6-20 INSTALACION DE SUBSUELO CONVENCIONAL CONDICION FLUYENTE KB 33' J40 @ 4278' J40 @ 5523' BK1 @ 6621' 6686' Up. Bs. Salina 6958' 7406' Basal Salina 7513' F.C. 7844' T.D. 8176'		FECHA	DATOS DEL POZO
		01/03/2001	Instalación Actual : Convencional 2 7/8" Producción : 5 x 2 Bls (Enero 01). GOR : 6479 Acumulado : 309595 Bls. (Enero 01). Estado del pozo: Productor. Niple de Asiento : 6688 PM.
		DESARROLLO DE LA PRUEBA	
		30/01/2001 08:00:00 09:00:00 11:00:00 11:30:00	Llegada del personal. Armando equipo Wireline en pozo 20. Se instala BOP. Se baja pescante, recupera Std. Valve a 6678' WLM. Pozo queda cerrado. WHP = 50 psig.
		01/03/2001 08:30:00 09:50:00 11:08:00 11:28:10 16:17:00	Armando equipo Wireline en pozo 20. Se bajan registradores Memory Gauge con el pozo cerrado, paradas a : 1000', 2000', 3000', 3500', 4000', 4300', 4600', 4900', 5200', 5500', 5800', 6000', 6200', 6300', 6400', 6500', 6600', 6700', 6800', 6900', 6950' Se suben registradores a 6822'. Registra presión estática x 20 minutos. WHP = 150 psig. Se abre pozo al separador (Q = 0 Bls.) Registra presión fluyente x 05 horas. Se toma Gradiente Fluyente con paradas a: 6950', 6900', 6800', 6700', 6600', 6500', 6400', 6300', 6200', 6000', 5800', 5500', 5200', 4800', 4400', 4000', 3500', 3000', 2000', 1000', 0'. Presión final en cabeza: 10 psig.
		17:30:00 17:45:00 18:00:00	Se instala Standing Valve. Se desarma equipo. Pozo queda abierto a producción.
		OBSERVACIONES :	
		Los datos fueron obtenidos del registrador No 50007. De la Gradiente Estática se determinó crudo y agua. Gradiente del crudo: 0.210 psi/ft @ 6766 PM (6048 PV). Presión Estática : 212.6 psia @ 6822 PM (6096 PV). Temperatura : 118.2°F @ 6822 PM (6096 PV). De la Gradiente Fluyente se determinó crudo y agua. Gradiente del crudo: 0.233 psi/ft @ 6697 PM (5989 PV). Presión Fluyente : 201.4 psia @ 6822 PM (6096 PV).	

COMENTARIOS

En el pozo **LO6-20** del Area Lobitos Mar se realizó un registro de Gradiente Fluyente para determinar la presión existente en el fondo y los niveles de los fluidos existentes.

Previamente se pescó el Standing Valve a la profundidad de 6678' WLM. Seguidamente se determinó el tope de arena a la profundidad de 6965'. Con el pozo cerrado por un tiempo de 30 días, se bajó el registrador de presión Memory Gauge con paradas de 03 minutos según programa (con el pozo cerrado). La presión en cabeza llegó a 150 psig; luego se dejó el registrador a la profundidad de 6822' por un tiempo de 20 minutos. Seguidamente se abrió el pozo al separador por un tiempo aproximado de 05 horas (no se registró producción); la presión en cabeza del pozo cayó a 10 psig .

Luego de este tiempo, se sube el registrador con paradas de 03 minutos según programa establecido, hasta superficie.

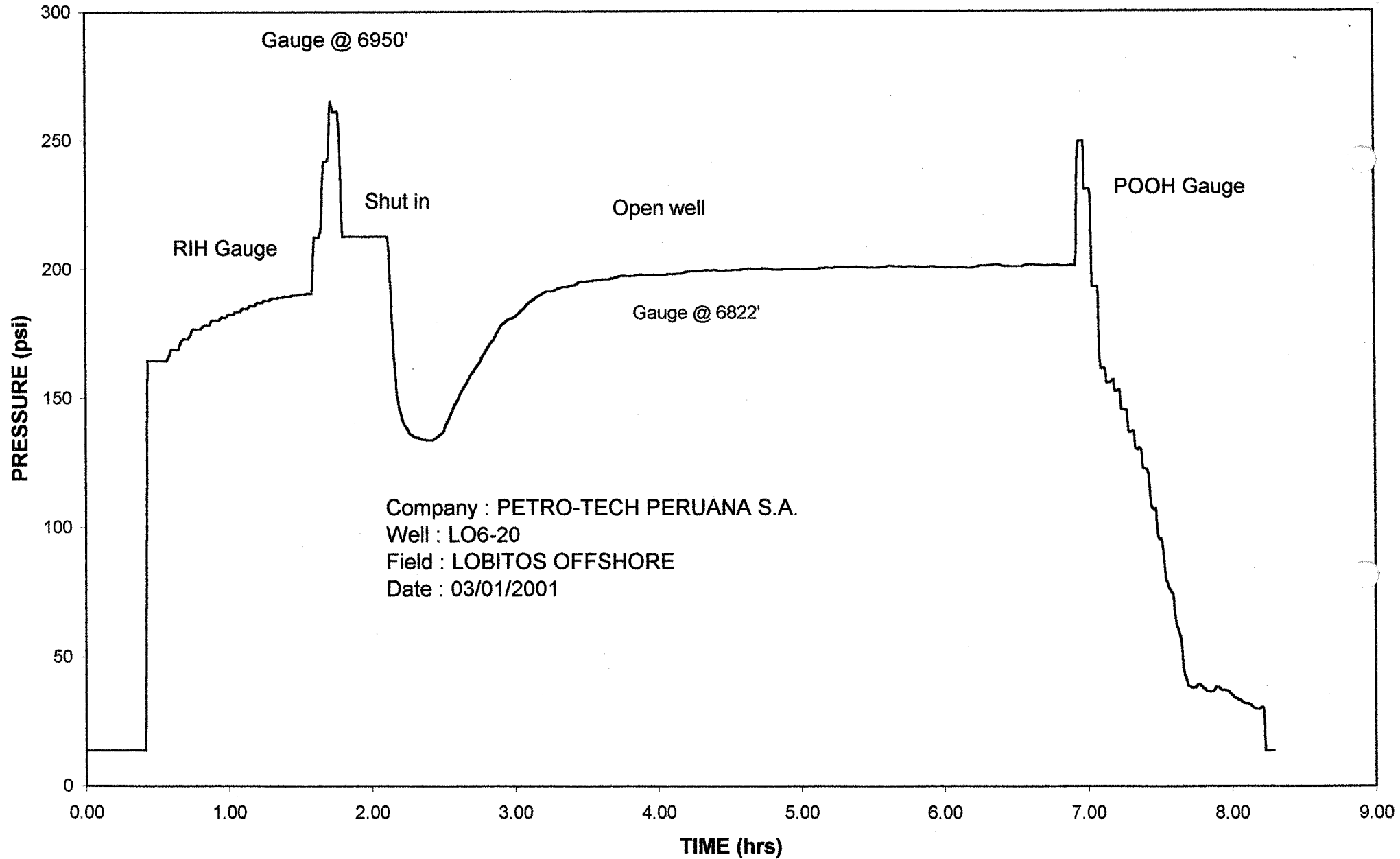
Los datos obtenidos fueron:

Presión estática @ 6822 PM (6096 PV) :	212.6 psi
Temperatura estática	: 118.2 °F
Gradiente del crudo	: 0.210 psi/ft @ 6766 PM (6048 PV).
Gradiente del agua	: 0.448 psi/ft @ 6824 PM (6098 PV).
Gradiente de formación	: 0.034 psi/ft @ 6822 PM (6096 PV).

Presión fluyente @ 6822 PM (6096 PV) :	201.4 psi
Temperatura fluyente	: 118.2 °F
Gradiente del crudo	: 0.233 psi/ft @ 6697 PM (5989 PV).

Intervalo productor : 6958' - 6686' (Fm. Upper Basal Salina).

CARTESIAN (P vs DT)



Company: PETRO-TECH PERUANA S.A.
Well: LO6-20
Field: LOBITOS OFFSHORE

County: TALARA
State: PERU

Engineer: Ricardo Aguirre
Gauge Type: Electronic
Serial No.: 50007
Gauge Range: 0-6000
Gauge Depth: 6822 ft

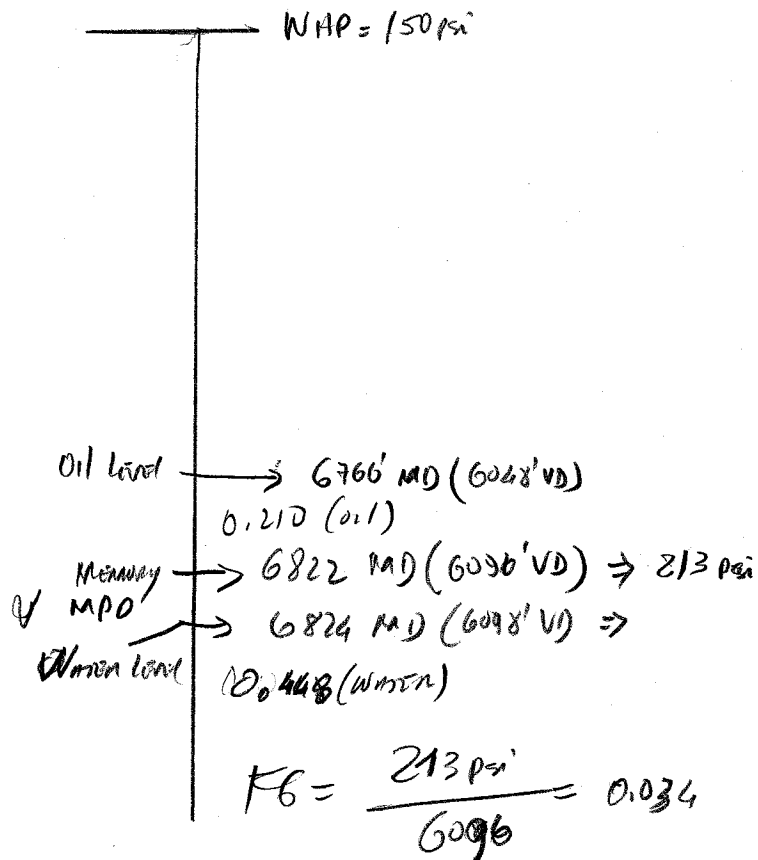
Date: 03/01/2001
Well API: 35
Well Type: Conventional
Test Type: Static Gradient
Well Status: Producer

Produced Time 5 hrs

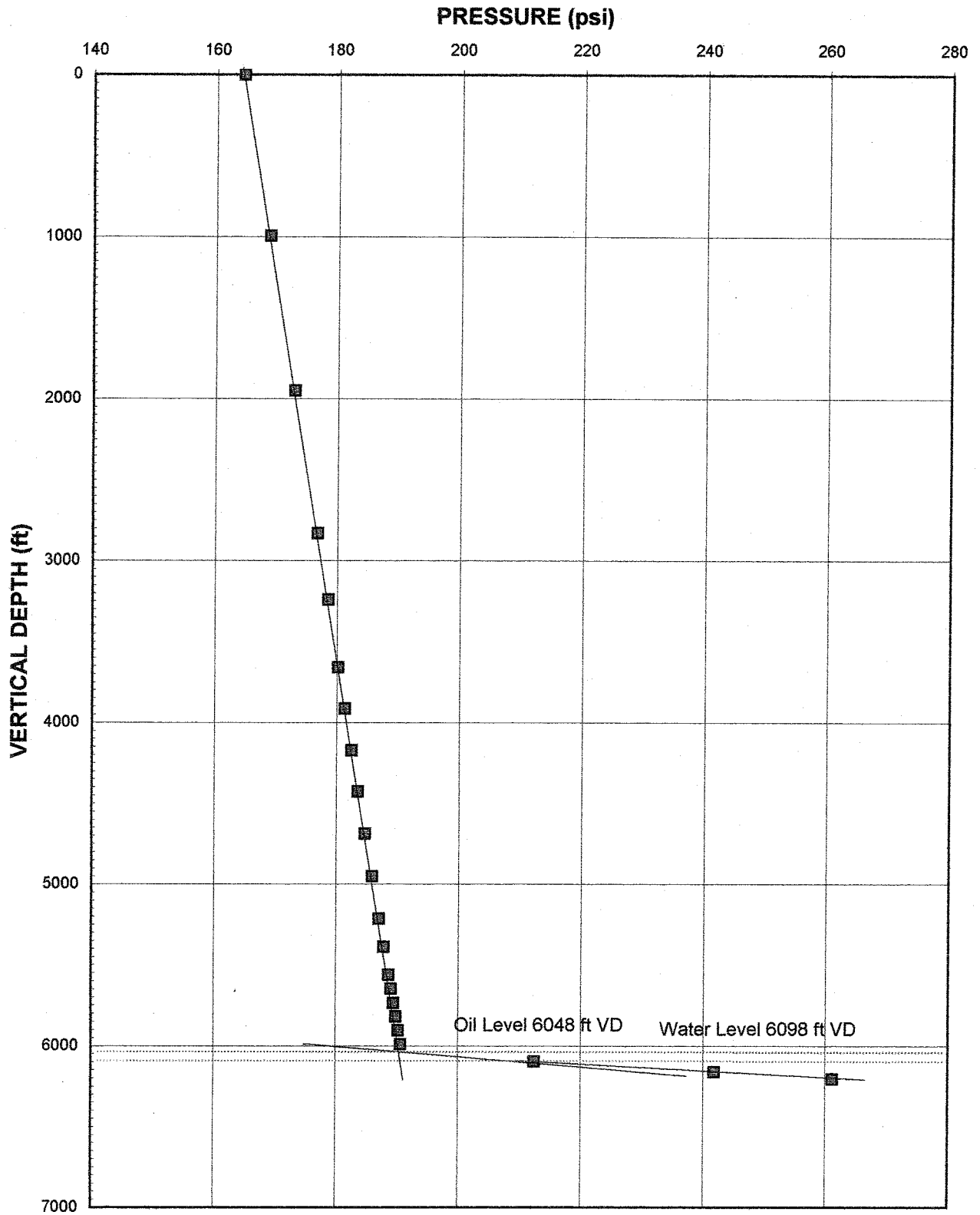
[GRADIENT DATA]

#	MD	TVD	PRESSURE	PSI/ft
1	0	0	164.50	
2	1000	995	168.80	0.004
3	2000	1951	172.90	0.004
4	3000	2831	176.70	0.004
5	3500	3241	178.50	0.004
6	4000	3660	180.20	0.004
7	4300	3915	181.30	0.004
8	4600	4171	182.40	0.004
9	4900	4428	183.50	0.004
10	5200	4687	184.70	0.005
11	5500	4951	185.90	0.005
12	5800	5213	187.00	0.004
13	6000	5388	187.80	0.005
14	6200	5562	188.60	0.005
15	6300	5649	189.00	0.005
16	6400	5735	189.40	0.005
17	6500	5820	189.80	0.005
18	6600	5906	190.20	0.005
19	6700	5992	190.60	0.005
20	6822	6096	212.40	0.210
21	6900	6162	241.80	0.445
22	6950	6205	261.10	0.449

Remarks: 22 Data Points.
Memory Gauges @ 6822'.
Well shut in.



STATIC GRADIENT SURVEY



Company: PETRO-TECH PERUANA S.A.
Well: LO6-20
Field: LOBITOS OFFSHORE

County: TALARA
State: PERU

Engineer: Ricardo Aguirre
Gauge Type: Electronic
Serial No.: 50007
Gauge Range: 0-6000
Gauge Depth: 6822 ft

Date: 03/01/2001
Well API: 35
Well Type: Conventional
Test Type: Flowing Gradient
Well Status: Producer

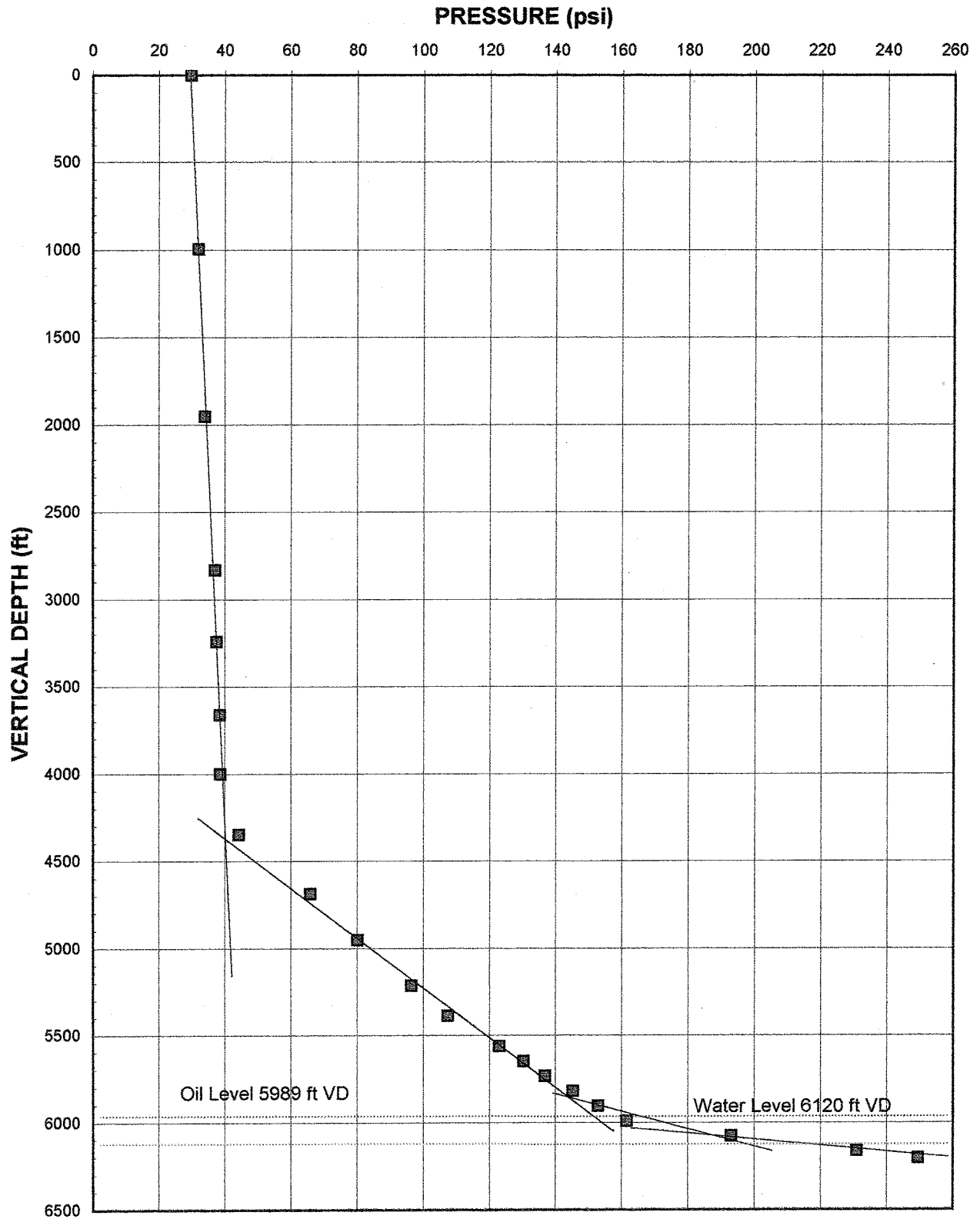
Produced Time 5 hrs

[GRADIENT DATA]

#	MD	TVD	PRESSURE	PSI/ft
1	0	0	29.80	
2	1000	995	32.00	0.002
3	2000	1951	34.00	0.002
4	3000	2831	37.10	0.004
5	3500	3241	37.50	0.001
6	4000	3660	38.50	0.002
7	4400	4000	38.60	0.000
8	4800	4348	44.40	0.017
9	5200	4687	66.00	0.064
10	5500	4951	80.20	0.054
11	5800	5213	96.50	0.062
12	6000	5388	107.50	0.063
13	6200	5562	123.00	0.089
14	6300	5649	130.30	0.084
15	6400	5735	136.80	0.076
16	6500	5820	145.20	0.099
17	6600	5906	152.90	0.090
18	6700	5992	161.50	0.100
19	6800	6078	193.10	0.367
20	6900	6162	231.00	0.451
21	6950	6205	249.50	0.430

Remarks: 21 Data Points.
Memory Gauges @ 6822'.
Well open.
Flowing Gradient.

FLOWING GRADIENT SURVEY



REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
1	0	9:22:25	0.0000	13.81	80.27
2	0	9:22:30	0.0014	13.82	80.30
3	0	9:22:35	0.0028	13.81	80.32
4	0	9:22:40	0.0042	13.83	80.32
5	0	9:22:45	0.0056	13.84	80.32
6	0	9:22:50	0.0069	13.85	80.33
7	0	9:22:55	0.0083	13.85	80.33
8	0	9:23: 0	0.0097	13.84	80.34
9	0	9:24: 0	0.0264	13.85	80.33
10	0	9:25: 0	0.0431	13.81	80.65
11	0	9:26: 0	0.0597	13.80	80.99
12	0	9:27: 0	0.0764	13.83	80.85
13	0	9:28: 0	0.0931	13.85	80.68
14	0	9:29: 0	0.1097	13.85	80.35
15	0	9:30: 0	0.1264	13.83	79.98
16	0	9:31: 0	0.1431	13.83	79.63
17	0	9:32: 0	0.1597	13.87	79.33
18	0	9:33: 0	0.1764	13.85	79.05
19	0	9:34: 0	0.1931	13.89	78.96
20	0	9:35: 0	0.2097	13.88	78.94
21	0	9:36: 0	0.2264	13.88	78.92
22	0	9:37: 0	0.2431	13.88	78.87
23	0	9:38: 0	0.2597	13.88	78.83
24	0	9:39: 0	0.2764	13.87	78.81
25	0	9:40: 0	0.2931	13.86	78.80
26	0	9:41: 0	0.3097	13.86	78.77
27	0	9:42: 0	0.3264	13.87	78.75
28	0	9:43: 0	0.3431	13.87	78.73
29	0	9:44: 0	0.3597	13.86	78.72
30	0	9:45: 0	0.3764	13.87	78.70
31	0	9:46: 0	0.3931	13.85	78.70
32	0	9:47: 0	0.4097	13.86	78.67
Presuriza lubricador.					
33	0	9:48: 0	0.4264	164.41	79.33
34	0	9:49: 0	0.4431	164.49	79.78
35	0	9:50: 0	0.4597	164.50	79.85
36	0	9:51: 0	0.4764	164.51	79.88
37	0	9:52: 0	0.4931	164.52	79.89
38	0	9:53: 0	0.5097	164.53	79.90
39	0	9:54: 0	0.5264	164.55	79.89
40	0	9:55: 0	0.5431	164.54	79.87
Se bajan registradores.					
Pozo cerrado.					
41	0	9:56: 0	0.5597	164.56	79.86
42	0	9:57: 0	0.5764	166.39	78.38
Parada @ 1000'.					
43	0	9:58: 0	0.5931	168.84	73.42
44	0	9:59: 0	0.6097	168.88	72.07
45	0	10: 0: 0	0.6264	168.88	71.72
46	0	10: 1: 0	0.6431	168.90	71.46

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
		Parada @ 2000'.			
47	0	10: 2: 0	0.6597	171.28	70.80
48	0	10: 3: 0	0.6764	172.93	71.78
49	0	10: 4: 0	0.6931	172.95	72.26
50	0	10: 5: 0	0.7097	172.95	72.53
51	0	10: 6: 0	0.7264	174.56	73.57
		Parada @ 3000'.			
52	0	10: 7: 0	0.7431	176.67	76.89
53	0	10: 8: 0	0.7597	176.76	78.81
54	0	10: 9: 0	0.7764	176.78	79.49
55	0	10:10: 0	0.7931	176.77	80.05
		Parada @ 3500'.			
56	0	10:11: 0	0.8097	177.53	80.92
57	0	10:12: 0	0.8264	178.45	83.62
58	0	10:13: 0	0.8431	178.51	84.36
59	0	10:14: 0	0.8597	178.51	84.82
		Parada @ 4000'.			
60	0	10:15: 0	0.8764	180.01	86.46
61	0	10:16: 0	0.8931	180.27	88.43
62	0	10:17: 0	0.9097	180.29	88.97
		Parada @ 4300'.			
63	0	10:18: 0	0.9264	180.29	89.41
64	0	10:19: 0	0.9431	181.35	90.80
65	0	10:20: 0	0.9597	181.35	91.69
		Parada @ 4600'.			
66	0	10:21: 0	0.9764	181.37	92.13
67	0	10:22: 0	0.9931	182.42	93.66
68	0	10:23: 0	1.0097	182.48	94.31
		Parada @ 4900'.			
69	0	10:24: 0	1.0264	182.49	94.67
70	0	10:25: 0	1.0431	183.53	96.07
71	0	10:26: 0	1.0597	183.58	96.71
		Parada @ 5200'.			
72	0	10:27: 0	1.0764	183.60	97.04
73	0	10:28: 0	1.0931	184.71	98.39
74	0	10:29: 0	1.1097	184.72	99.00
		Parada @ 5500'.			
75	0	10:30: 0	1.1264	184.74	99.31
76	0	10:31: 0	1.1431	185.85	100.51
77	0	10:32: 0	1.1597	185.90	101.16
		Parada @ 5800'.			
78	0	10:33: 0	1.1764	185.92	101.49
79	0	10:34: 0	1.1931	187.02	102.96
80	0	10:35: 0	1.2097	187.05	103.64
		Parada @ 6000'.			
81	0	10:36: 0	1.2264	187.07	104.04
82	0	10:37: 0	1.2431	187.82	105.19
83	0	10:38: 0	1.2597	187.84	105.72
		Parada @ 6200'.			
84	0	10:39: 0	1.2764	187.87	106.07

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
85	0	10:40: 0	1.2931	188.61	107.16
86	0	10:41: 0	1.3097	188.64	107.64
		Parada @ 6300'.			
87	0	10:42: 0	1.3264	188.66	107.96
88	0	10:43: 0	1.3431	189.01	108.62
89	0	10:44: 0	1.3597	189.04	108.95
		Parada @ 6400'.			
90	0	10:45: 0	1.3764	189.05	109.21
91	0	10:46: 0	1.3931	189.41	109.78
92	0	10:47: 0	1.4097	189.43	110.04
		Parada @ 6500'.			
93	0	10:48: 0	1.4264	189.45	110.27
94	0	10:49: 0	1.4431	189.78	110.72
95	0	10:50: 0	1.4597	189.80	110.99
		Parada @ 6600'.			
96	0	10:51: 0	1.4764	189.94	111.18
97	0	10:52: 0	1.4931	190.18	111.40
98	0	10:53: 0	1.5097	190.20	111.49
		Parada @ 6700'.			
99	0	10:54: 0	1.5264	190.23	111.59
100	0	10:55: 0	1.5431	190.55	111.69
101	0	10:56: 0	1.5597	190.58	111.85
		Parada @ 6822'.			
102	0	10:57: 0	1.5764	190.59	112.01
103	0	10:58: 0	1.5931	212.22	114.51
104	0	10:59: 0	1.6097	212.35	116.52
105	0	11: 0: 0	1.6264	212.38	117.25
		Parada @ 6900'.			
106	0	11: 1: 0	1.6431	216.85	117.60
107	0	11: 2: 0	1.6597	241.78	118.59
108	0	11: 3: 0	1.6764	241.84	118.99
109	0	11: 4: 0	1.6931	243.30	119.17
		Parada @ 6950'.			
110	0	11: 5: 0	1.7097	264.72	119.61
111	0	11: 6: 0	1.7264	261.19	119.80
112	0	11: 7: 0	1.7431	261.13	119.85
		Se suben registradores.			
113	0	11: 8: 0	1.7597	261.14	119.89
114	0	11: 9: 0	1.7764	246.16	119.90
		Registradores @ 6822'.			
		Pozo cerrado.			
		Registra presion estatica x 20 min.			
115	0	11:10: 0	1.7931	212.73	119.18
116	0	11:11: 0	1.8097	212.68	118.67
117	0	11:12: 0	1.8264	212.65	118.46
118	0	11:13: 0	1.8431	212.65	118.38
119	0	11:14: 0	1.8597	212.66	118.34
120	0	11:15: 0	1.8764	212.67	118.32
121	0	11:16: 0	1.8931	212.66	118.31
122	0	11:17: 0	1.9097	212.66	118.30

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
123	0	11:18: 0	1.9264	212.65	118.30
124	0	11:19: 0	1.9431	212.65	118.30
125	0	11:20: 0	1.9597	212.64	118.29
126	0	11:21: 0	1.9764	212.64	118.30
127	0	11:22: 0	1.9931	212.65	118.29
128	0	11:23: 0	2.0097	212.66	118.30
129	0	11:24: 0	2.0264	212.64	118.29
130	0	11:25: 0	2.0431	212.64	118.29
131	0	11:26: 0	2.0597	212.66	118.29
132	0	11:27: 0	2.0764	212.64	118.29
133	0	11:28: 0	2.0931	212.65	118.29
Se abre pozo al separador.					
Registra presion fluyente x 05 hrs.					
134	0	11:29: 0	2.1097	212.03	118.29
135	0	11:30: 0	2.1264	194.01	118.29
136	0	11:31: 0	2.1431	175.59	118.31
137	0	11:32: 0	2.1597	159.00	118.31
138	0	11:33: 0	2.1764	149.51	118.32
139	0	11:34: 0	2.1931	145.05	118.31
140	0	11:35: 0	2.2097	141.79	118.30
141	0	11:36: 0	2.2264	139.37	118.29
142	0	11:37: 0	2.2431	137.92	118.29
143	0	11:38: 0	2.2597	136.42	118.27
144	0	11:39: 0	2.2764	135.68	118.28
145	0	11:40: 0	2.2931	135.08	118.29
146	0	11:41: 0	2.3097	134.86	118.28
147	0	11:42: 0	2.3264	134.56	118.28
148	0	11:43: 0	2.3431	134.21	118.28
149	0	11:44: 0	2.3597	134.02	118.28
150	0	11:45: 0	2.3764	133.92	118.28
152	0	11:47: 0	2.4097	133.74	118.29
154	0	11:49: 0	2.4431	134.66	118.27
156	0	11:51: 0	2.4764	136.18	118.27
158	0	11:53: 0	2.5097	139.21	118.28
160	0	11:55: 0	2.5431	143.27	118.27
162	0	11:57: 0	2.5764	147.54	118.26
164	0	11:59: 0	2.6097	151.00	118.26
166	0	12: 1: 0	2.6431	154.61	118.25
168	0	12: 3: 0	2.6764	157.62	118.25
170	0	12: 5: 0	2.7097	160.88	118.25
172	0	12: 7: 0	2.7431	163.42	118.25
174	0	12: 9: 0	2.7764	166.76	118.25
176	0	12:11: 0	2.8097	169.74	118.24
178	0	12:13: 0	2.8431	172.25	118.24
180	0	12:15: 0	2.8764	175.71	118.23
182	0	12:17: 0	2.9097	178.67	118.23
184	0	12:19: 0	2.9431	180.18	118.21
186	0	12:21: 0	2.9764	181.02	118.21
188	0	12:23: 0	3.0097	182.23	118.21
190	0	12:25: 0	3.0431	183.90	118.20

Company: PETRO-TECH PERUANA S.A.

Well: LO6-20

Field: LOBITOS MAR

[Thursday: Mar. 1, 2001]

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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
192	0	12:27: 0	3.0764	185.93	118.20
194	0	12:29: 0	3.1097	187.51	118.19
196	0	12:31: 0	3.1431	188.82	118.19
198	0	12:33: 0	3.1764	189.95	118.18
200	0	12:35: 0	3.2097	191.27	118.18
202	0	12:37: 0	3.2431	191.36	118.18
204	0	12:39: 0	3.2764	191.96	118.18
206	0	12:41: 0	3.3097	192.67	118.19
208	0	12:43: 0	3.3431	193.03	118.19
210	0	12:45: 0	3.3764	193.37	118.19
212	0	12:47: 0	3.4097	193.63	118.19
214	0	12:49: 0	3.4431	194.95	118.19
216	0	12:51: 0	3.4764	195.12	118.19
218	0	12:53: 0	3.5097	195.35	118.19
220	0	12:55: 0	3.5431	195.52	118.19
222	0	12:57: 0	3.5764	195.82	118.19
224	0	12:59: 0	3.6097	196.03	118.18
226	0	13: 1: 0	3.6431	196.03	118.20
228	0	13: 3: 0	3.6764	196.45	118.20
230	0	13: 5: 0	3.7097	196.94	118.19
232	0	13: 7: 0	3.7431	197.35	118.20
234	0	13: 9: 0	3.7764	197.35	118.20
236	0	13:11: 0	3.8097	197.34	118.19
238	0	13:13: 0	3.8431	197.53	118.20
240	0	13:15: 0	3.8764	197.85	118.20
242	0	13:17: 0	3.9097	197.58	118.19
244	0	13:19: 0	3.9431	197.60	118.19
246	0	13:21: 0	3.9764	197.70	118.21
248	0	13:23: 0	4.0097	197.76	118.20
250	0	13:25: 0	4.0431	197.80	118.21
253	0	13:28: 0	4.0931	197.97	118.20
256	0	13:31: 0	4.1431	198.10	118.19
259	0	13:34: 0	4.1931	198.85	118.21
262	0	13:37: 0	4.2431	199.19	118.20
265	0	13:40: 0	4.2931	199.18	118.21
268	0	13:43: 0	4.3431	199.55	118.20
271	0	13:46: 0	4.3931	199.59	118.21
274	0	13:49: 0	4.4431	199.30	118.22
277	0	13:52: 0	4.4931	199.43	118.22
280	0	13:55: 0	4.5431	199.51	118.21
283	0	13:58: 0	4.5931	199.94	118.21
286	0	14: 1: 0	4.6431	200.15	118.21
289	0	14: 4: 0	4.6931	199.99	118.21
292	0	14: 7: 0	4.7431	200.27	118.22
295	0	14:10: 0	4.7931	200.00	118.22
298	0	14:13: 0	4.8431	199.74	118.22
301	0	14:16: 0	4.8931	199.83	118.21
304	0	14:19: 0	4.9431	200.06	118.21
307	0	14:22: 0	4.9931	199.92	118.21
310	0	14:25: 0	5.0431	199.96	118.23

(K & C Services S.A.C.)

Company: PETRO-TECH PERUANA S.A.

Well: LO6-20

Field: LOBITOS MAR

[Thursday: Mar. 1, 2001]

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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
313	0	14:28: 0	5.0931	200.00	118.22
316	0	14:31: 0	5.1431	200.42	118.23
319	0	14:34: 0	5.1931	200.46	118.21
322	0	14:37: 0	5.2431	200.84	118.22
325	0	14:40: 0	5.2931	200.89	118.22
328	0	14:43: 0	5.3431	200.76	118.22
331	0	14:46: 0	5.3931	200.83	118.23
334	0	14:49: 0	5.4431	200.54	118.22
337	0	14:52: 0	5.4931	200.50	118.24
340	0	14:55: 0	5.5431	200.57	118.23
343	0	14:58: 0	5.5931	201.03	118.24
346	0	15: 1: 0	5.6431	201.17	118.23
349	0	15: 4: 0	5.6931	200.98	118.23
352	0	15: 7: 0	5.7431	200.93	118.24
355	0	15:10: 0	5.7931	201.01	118.23
358	0	15:13: 0	5.8431	200.65	118.24
361	0	15:16: 0	5.8931	201.02	118.23
364	0	15:19: 0	5.9431	200.86	118.24
367	0	15:22: 0	5.9931	200.64	118.24
370	0	15:24: 0	6.0264	200.65	118.23
373	0	15:25:30	6.0514	200.63	118.22
376	0	15:27: 0	6.0764	200.58	118.23
379	0	15:28:30	6.1014	200.64	118.23
382	0	15:30: 0	6.1264	200.64	118.24
385	0	15:31:30	6.1514	200.60	118.24
388	0	15:33: 0	6.1764	200.47	118.24
391	0	15:34:30	6.2014	200.70	118.24
394	0	15:36: 0	6.2264	201.01	118.24
397	0	15:37:30	6.2514	201.29	118.24
400	0	15:39: 0	6.2764	201.30	118.24
404	0	15:41: 0	6.3097	201.40	118.23
408	0	15:43: 0	6.3431	201.70	118.24
412	0	15:45: 0	6.3764	201.63	118.24
416	0	15:47: 0	6.4097	201.19	118.24
420	0	15:49: 0	6.4431	201.07	118.24
424	0	15:51: 0	6.4764	201.03	118.23
428	0	15:53: 0	6.5097	200.93	118.23
432	0	15:55: 0	6.5431	201.14	118.25
436	0	15:57: 0	6.5764	201.65	118.25
440	0	15:59: 0	6.6097	201.67	118.25
444	0	16: 1: 0	6.6431	201.53	118.23
448	0	16: 3: 0	6.6764	201.36	118.23
452	0	16: 5: 0	6.7097	201.27	118.24
456	0	16: 7: 0	6.7431	201.42	118.25
460	0	16: 9: 0	6.7764	201.53	118.25
464	0	16:11: 0	6.8097	201.34	118.23
468	0	16:13: 0	6.8431	201.23	118.23
470	0	16:14: 0	6.8597	201.31	118.24
471	0	16:14:30	6.8681	201.44	118.24
472	0	16:15: 0	6.8764	201.46	118.23

(K & C Services S.A.C.)

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
473	0	16:15:30	6.8847	201.50	118.25
474	0	16:16: 0	6.8931	201.48	118.24
475	0	16:16:30	6.9014	201.46	118.24
476	0	16:17: 0	6.9097	201.42	118.24
Se bajan registradores.					
477	0	16:17:30	6.9181	205.41	118.24
Parada @ 6950'.					
478	0	16:18: 0	6.9264	240.79	118.49
479	0	16:18:30	6.9347	249.32	119.12
480	0	16:19: 0	6.9431	249.43	119.40
481	0	16:19:30	6.9514	249.46	119.55
482	0	16:20: 0	6.9597	249.45	119.62
483	0	16:20:30	6.9681	249.44	119.68
Parada @ 6900'.					
484	0	16:21: 0	6.9764	230.98	119.73
485	0	16:21:30	6.9847	230.97	119.66
486	0	16:22: 0	6.9931	231.00	119.63
487	0	16:22:30	7.0014	230.98	119.59
488	0	16:23: 0	7.0097	230.96	119.57
489	0	16:23:30	7.0181	228.86	119.56
Parada @ 6800'.					
490	0	16:24: 0	7.0264	194.03	119.39
491	0	16:24:30	7.0347	193.07	118.83
492	0	16:25: 0	7.0431	193.08	118.51
493	0	16:25:30	7.0514	193.08	118.34
494	0	16:26: 0	7.0597	193.09	118.23
495	0	16:26:30	7.0681	193.09	118.14
Parada @ 6700'.					
496	0	16:27: 0	7.0764	170.53	117.96
497	0	16:27:30	7.0847	161.57	117.48
498	0	16:28: 0	7.0931	161.59	117.03
499	0	16:28:30	7.1014	161.55	116.75
500	0	16:29: 0	7.1097	161.51	116.58
501	0	16:29:30	7.1181	160.65	116.48
502	0	16:30: 0	7.1264	155.96	116.38
503	0	16:30:30	7.1347	156.09	116.27
504	0	16:31: 0	7.1431	156.13	116.19
505	0	16:31:30	7.1514	156.28	116.14
506	0	16:32: 0	7.1597	156.46	116.10
507	0	16:32:30	7.1681	156.49	116.08
508	0	16:33: 0	7.1764	157.13	116.06
Parada @ 6600'.					
509	0	16:33:30	7.1847	152.78	116.04
510	0	16:34: 0	7.1931	152.79	115.89
511	0	16:34:30	7.2014	152.85	115.78
512	0	16:35: 0	7.2097	153.20	115.68
513	0	16:35:30	7.2181	153.24	115.61
Parada @ 6500'.					
514	0	16:36: 0	7.2264	146.90	115.54
515	0	16:36:30	7.2347	145.68	115.28

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
516	0	16:37: 0	7.2431	145.68	115.01
517	0	16:37:30	7.2514	145.58	114.82
518	0	16:38: 0	7.2597	145.55	114.71
519	0	16:38:30	7.2681	145.04	114.62
		Parada @ 6400'.			
520	0	16:39: 0	7.2764	138.01	114.49
521	0	16:39:30	7.2847	136.88	114.28
522	0	16:40: 0	7.2931	136.82	114.07
523	0	16:40:30	7.3014	137.21	113.95
524	0	16:41: 0	7.3097	137.40	113.86
525	0	16:41:30	7.3181	136.77	113.81
		Parada @ 6300'.			
526	0	16:42: 0	7.3264	130.85	113.70
527	0	16:42:30	7.3347	130.43	113.51
528	0	16:43: 0	7.3431	130.03	113.35
529	0	16:43:30	7.3514	130.77	113.24
530	0	16:44: 0	7.3597	130.79	113.18
		Parada @ 6200'.			
531	0	16:44:30	7.3681	129.46	113.14
532	0	16:45: 0	7.3764	123.66	113.03
533	0	16:45:30	7.3847	123.09	112.86
534	0	16:46: 0	7.3931	122.75	112.69
535	0	16:46:30	7.4014	122.55	112.57
536	0	16:47: 0	7.4097	122.00	112.49
537	0	16:47:30	7.4181	120.44	112.46
		Parada @ 6000'.			
538	0	16:48: 0	7.4264	112.72	112.34
539	0	16:48:30	7.4347	109.31	112.05
540	0	16:49: 0	7.4431	107.30	111.78
541	0	16:49:30	7.4514	107.32	111.51
542	0	16:50: 0	7.4597	106.62	111.32
543	0	16:50:30	7.4681	107.14	111.20
		Parada @ 5800'.			
544	0	16:51: 0	7.4764	100.11	111.06
545	0	16:51:30	7.4847	96.45	110.76
546	0	16:52: 0	7.4931	95.18	110.45
547	0	16:52:30	7.5014	95.70	110.13
548	0	16:53: 0	7.5097	94.65	109.90
549	0	16:53:30	7.5181	91.11	109.74
		Parada @ 5500'.			
550	0	16:54: 0	7.5264	84.66	109.53
551	0	16:54:30	7.5347	80.29	109.05
552	0	16:55: 0	7.5431	79.25	108.52
553	0	16:55:30	7.5514	77.16	108.10
554	0	16:56: 0	7.5597	76.07	107.76
555	0	16:56:30	7.5681	75.90	107.45
556	0	16:57: 0	7.5764	74.92	107.22
557	0	16:57:30	7.5847	74.18	107.05
		Parada @ 5200'.			
558	0	16:58: 0	7.5931	68.69	106.83

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
559	0	16:58:30	7.6014	65.63	106.35
560	0	16:59: 0	7.6097	62.56	105.86
561	0	16:59:30	7.6181	60.77	105.47
562	0	17: 0: 0	7.6264	59.29	105.17
563	0	17: 0:30	7.6347	58.00	104.93
564	0	17: 1: 0	7.6431	54.16	104.70
Parada @ 4800'.					
565	0	17: 1:30	7.6514	48.42	104.27
566	0	17: 2: 0	7.6597	44.48	103.67
567	0	17: 2:30	7.6681	42.87	103.14
568	0	17: 3: 0	7.6764	41.17	102.75
569	0	17: 3:30	7.6847	39.48	102.41
570	0	17: 4: 0	7.6931	38.83	102.16
571	0	17: 4:30	7.7014	38.56	102.02
572	0	17: 5: 0	7.7097	38.26	101.92
Parada @ 4400'.					
573	0	17: 5:30	7.7181	38.04	101.78
574	0	17: 6: 0	7.7264	38.09	101.63
575	0	17: 6:30	7.7347	38.18	101.47
576	0	17: 7: 0	7.7431	38.46	101.31
577	0	17: 7:30	7.7514	38.97	101.16
578	0	17: 8: 0	7.7597	39.50	101.02
579	0	17: 8:30	7.7681	39.54	100.88
580	0	17: 9: 0	7.7764	39.18	100.78
Parada @ 4000'.					
581	0	17: 9:30	7.7847	38.58	100.64
582	0	17:10: 0	7.7931	38.16	100.39
583	0	17:10:30	7.8014	37.80	100.06
584	0	17:11: 0	7.8097	37.41	99.74
585	0	17:11:30	7.8181	36.95	99.48
586	0	17:12: 0	7.8264	36.86	99.26
587	0	17:12:30	7.8347	36.84	99.05
588	0	17:13: 0	7.8431	36.63	98.88
Parada @ 3500'.					
589	0	17:13:30	7.8514	36.52	98.67
590	0	17:14: 0	7.8597	36.71	98.35
591	0	17:14:30	7.8681	37.17	97.91
592	0	17:15: 0	7.8764	37.84	97.47
593	0	17:15:30	7.8847	38.38	97.07
594	0	17:16: 0	7.8931	38.46	96.72
595	0	17:16:30	7.9014	38.48	96.40
596	0	17:17: 0	7.9097	38.06	96.12
597	0	17:17:30	7.9181	37.48	95.85
Parada @ 3000'.					
598	0	17:18: 0	7.9264	37.16	95.50
599	0	17:18:30	7.9347	37.18	95.01
600	0	17:19: 0	7.9431	37.23	94.50
601	0	17:19:30	7.9514	37.13	94.03
602	0	17:20: 0	7.9597	36.95	93.58
603	0	17:20:30	7.9681	36.80	93.19

Company: PETRO-TECH PERUANA S.A.

Well: LO6-20

Field: LOBITOS MAR

[Thursday: Mar. 1, 2001]

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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
604	0	17:21: 0	7.9764	36.40	92.81
605	0	17:21:30	7.9847	35.91	92.41
606	0	17:22: 0	7.9931	35.44	91.83
607	0	17:22:30	8.0014	34.98	91.08
		Parada @ 2000'.			
608	0	17:23: 0	8.0097	34.50	90.20
609	0	17:23:30	8.0181	34.20	89.15
610	0	17:24: 0	8.0264	33.98	88.15
611	0	17:24:30	8.0347	33.76	87.25
612	0	17:25: 0	8.0431	33.53	86.44
613	0	17:25:30	8.0514	33.32	85.73
614	0	17:26: 0	8.0597	32.92	85.11
615	0	17:26:30	8.0681	32.57	84.37
616	0	17:27: 0	8.0764	32.30	83.61
		Parada @ 1000'.			
617	0	17:27:30	8.0847	32.11	82.89
618	0	17:28: 0	8.0931	32.02	81.84
619	0	17:28:30	8.1014	32.02	80.67
620	0	17:29: 0	8.1097	31.94	79.59
621	0	17:29:30	8.1181	31.80	78.60
622	0	17:30: 0	8.1264	31.51	77.74
623	0	17:30:30	8.1347	30.97	77.00
624	0	17:31: 0	8.1431	30.57	76.28
625	0	17:31:30	8.1514	30.19	75.50
626	0	17:32: 0	8.1597	29.96	74.63
		Parada @ 0'.			
627	0	17:32:30	8.1681	29.84	73.89
628	0	17:33: 0	8.1764	29.84	73.44
629	0	17:33:30	8.1847	29.84	73.18
630	0	17:34: 0	8.1931	30.37	73.10
631	0	17:34:30	8.2014	30.71	73.10
632	0	17:35: 0	8.2097	30.41	73.12
633	0	17:35:30	8.2181	26.09	73.16
		Desfoga lubricador.			
634	0	17:36: 0	8.2264	13.81	73.17
635	0	17:36:30	8.2347	13.77	73.26
636	0	17:37: 0	8.2431	13.77	73.33
637	0	17:37:30	8.2514	13.73	73.61
638	0	17:38: 0	8.2597	13.78	73.87
639	0	17:38:30	8.2681	13.78	74.21
640	0	17:39: 0	8.2764	13.82	74.61
		Desconecta bateria.			
641	0	17:39:30	8.2847	13.80	75.11

(K & C Services S.A.C.)