

REGISTRO DE PRESION INICIAL

Handwritten:
Dato Rec
Lobitos a
Historia Petrolera
VRC

**PETRO-TECH PERUANA S.A.
LOBITOS MAR LO16-23
TALARA - PERU**

12 DE ENERO 1998

**REPORTE PREPARADO
POR
MARCIAL CACERES B.**

POZO : LO16-23		AREA : LOBITOS MAR	
PRUEBA : REGISTRO DE PRESION INICIAL			
FORMACION : LOWER BASAL SALINA		INTERVALOS : 9444' - 9392' / 8968' - 8890'	
LO16-23 INSTALACION DE SUBSUELO CASING 5 1/2" CHF 33' OIL			

COMENTARIOS

En el pozo LO16-23 del Area Lobitos Mar, se programó un Registro de Presión Inicial con el fin de determinar la presión luego de los trabajos de baleo en los intervalos 9444' - 9392' y 8968' - 8890' , correspondientes a la formación Lower Basal Salina.

Con tal fin, se bajaron los registradores Memory Gauge a la profundidad de 9418' (punto medio del primer intervalo baleado), quedando estacionados por 02 horas. La presión en la cabeza del pozo antes de bajar los registradores era 590 psi aproximadamente. Luego de este tiempo, se subieron los registradores a superficie con paradas de 4' en cada estación, con una presión final en cabeza de alrededor de 1920 psi.

De la prueba de gradiente estática se determinó presencia de crudo, con una gradiente promedia de 0.289 psi/ft hasta superficie.

Las presiones en la cabeza del pozo fueron:

<u>Hora</u>	<u>Presión (psi)</u>
05:30	1000
06:00	1500
06:30	1750
07:00	1880
08:00	1900
08:30	1920

Presión Estática : 4142.9 @ 9418 PM (7703 PV).

Temperatura : 134.2 °F

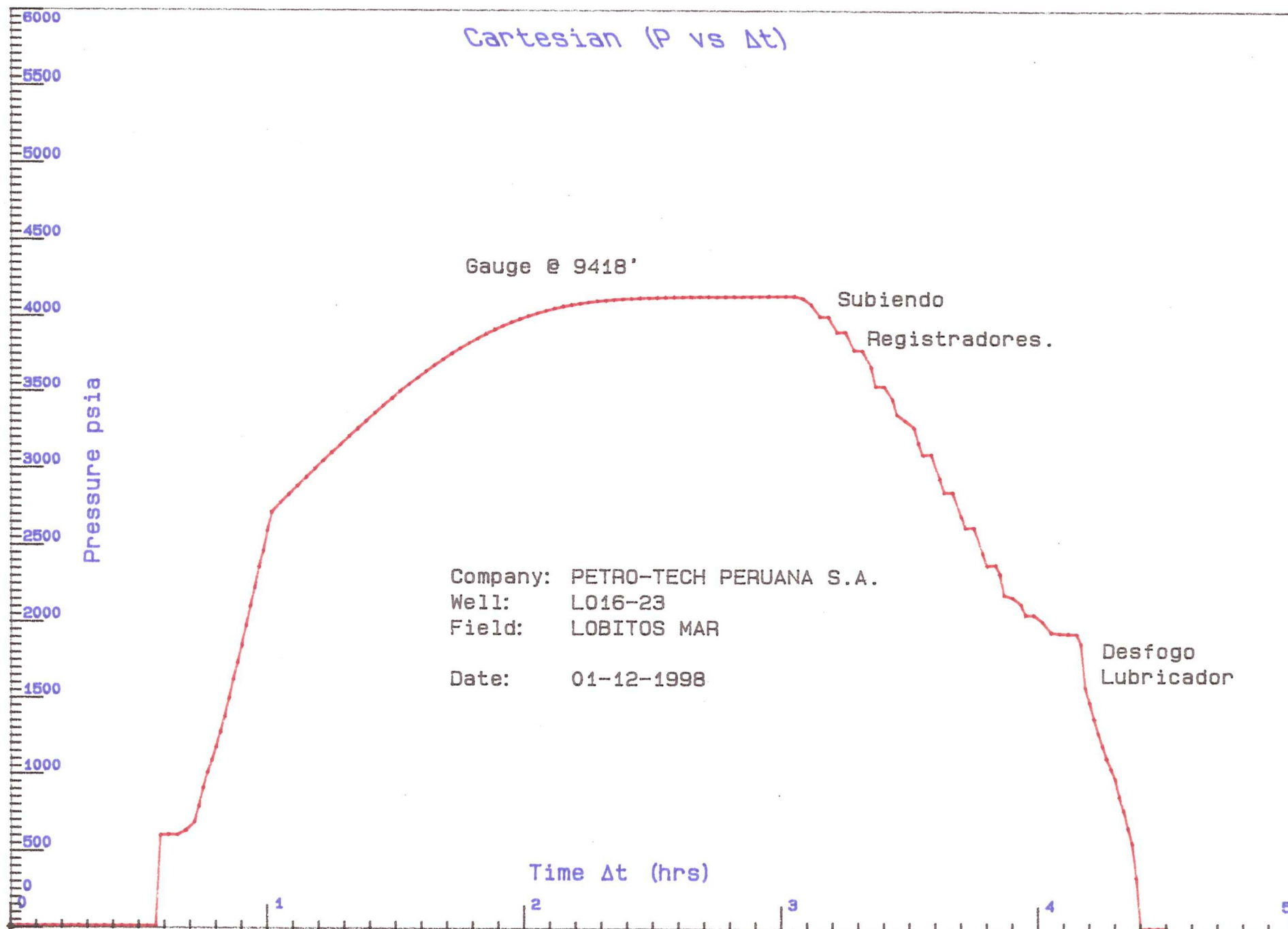
Presión Inicial en cabeza : 590 psi.

Presión final en cabeza : 1910 psi.

Gradiente de formación : 0.538 psi/ft @ 9418 PM (7703 PV).

Intervalos baleados : 9444' - 9392' (Lower Bs. Salina)

8968' - 8890' (Lower Bs. Salina)



SPC

Company: PETRO-TECH PERUANA S.A.

Well: LO16-23

Field: LOBITOS MAR

County: PERU

State: TALARA

Engineer: M.Caceres

Gauge Type: Memory Gauge

Serial No.: 20602

Gauge Range: 0-6014

Gauge Depth: 9418 ft

Date: 01/12/1998

Well API: 35

Well Type: Casing

Test Type: Static Gradient

Well Status: New

[GRADIENT DATA]

#	MD	TVD	PRESSURE	PSI/ft
1	0	0	1933.00	
2	500	500	2050.00	0.234
3	1000	1000	2169.00	0.238
4	2000	1993	2380.00	0.212
5	3000	2768	2623.00	0.314
6	4000	3495	2851.00	0.314
7	5000	4270	3094.40	0.314
8	6000	4997	3316.00	0.305
9	7000	5726	3541.00	0.309
10	8000	6510	3780.00	0.305
11	8500	6924	3904.30	0.300
12	8900	7259	4004.50	0.299
13	9200	7513	4085.00	0.317
14	9418	7703	4142.90	0.305

Remarks: 14 Data Points.

Memory Gauge @ 9418'.

Fluid Level — At Surface (Fluid Gradient = Oil = 0.289 psi / ft)

← Flu

MPP — 9167' MD ⇒ (7485' VD) = 4079 psi
GAUGE — 9418 MD ⇒ (7703' VD) = 4142 psi

$$F_{mGR4} = \frac{4079}{7485} = 0.545 \text{ psi y.}$$

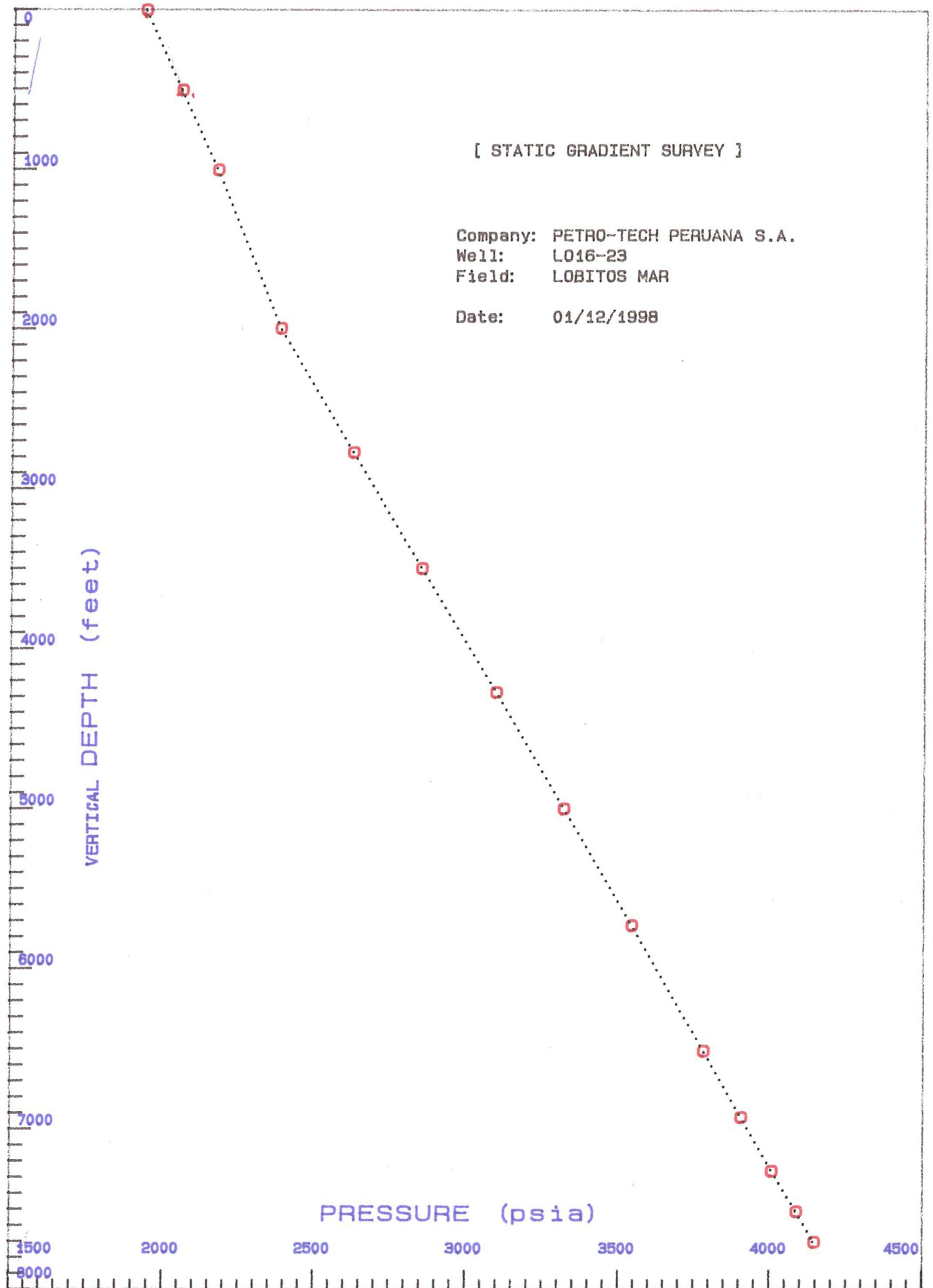
[STATIC GRADIENT SURVEY]

Company: PETRO-TECH PERUANA S.A.

Well: L016-23

Field: LOBITOS MAR

Date: 01/12/1998



SPC

Company: PETRO-TECH PERUANA S.A.

Well: LO16-23

Field: LOBITOS MAR

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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
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Registadores Electronicos Starburst Ultra II.

Tope : Inst # 20602.

Conecto Bateria : 04:25:55

1	0	4:25:55	0.0000	15.82	81.77
3	0	4:27:55	0.0333	14.85	81.49
5	0	4:29:55	0.0667	14.52	81.11
7	0	4:31:55	0.1000	14.51	80.58
9	0	4:33:55	0.1333	14.56	80.28
11	0	4:35:55	0.1667	14.67	79.94
13	0	4:37:55	0.2000	14.76	79.84
15	0	4:39:55	0.2333	14.67	79.96
17	0	4:41:55	0.2667	14.69	79.82
19	0	4:43:55	0.3000	14.75	79.45
21	0	4:45:55	0.3333	14.77	79.34
23	0	4:47:55	0.3667	14.80	79.33
25	0	4:49:55	0.4000	14.71	79.41
27	0	4:51:55	0.4333	14.62	79.36
29	0	4:53:55	0.4667	15.01	79.56
31	0	4:55:55	0.5000	14.79	79.85
33	0	4:57:55	0.5333	14.90	80.05
35	0	4:59:55	0.5667	15.15	80.32

Presuriza Lubricador.

36	0	5: 0:55	0.5833	604.71	80.65
39	0	5: 3:55	0.6333	609.81	84.85
40	0	5: 4:55	0.6500	609.36	85.61
41	0	5: 5:55	0.6667	623.80	86.36
42	0	5: 6:55	0.6833	637.02	86.64

Bajando Registradores.

43	0	5: 7:55	0.7000	650.74	86.93
44	0	5: 8:55	0.7167	690.10	87.16
45	0	5: 9:55	0.7333	794.28	87.88
46	0	5:10:55	0.7500	911.45	89.35
47	0	5:11:55	0.7667	1010.52	91.11
48	0	5:12:55	0.7833	1093.24	93.06
49	0	5:13:55	0.8000	1180.45	95.23
50	0	5:14:55	0.8167	1276.60	97.30
51	0	5:15:55	0.8333	1382.06	99.35
52	0	5:16:55	0.8500	1500.27	101.50
53	0	5:17:55	0.8667	1623.18	103.81
54	0	5:18:55	0.8833	1734.72	106.03
55	0	5:19:55	0.9000	1851.75	108.36
56	0	5:20:55	0.9167	1978.47	110.69
57	0	5:21:55	0.9333	2106.93	112.93
58	0	5:22:55	0.9500	2229.43	115.07
59	0	5:23:55	0.9667	2360.99	117.03
60	0	5:24:55	0.9833	2464.82	118.81

Registradores @ 9418'.

Registrando presion estatica x 02 horas.

62	0	5:26:55	1.0167	2718.71	121.78
64	0	5:28:55	1.0500	2778.49	124.54

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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
66	0	5:30:55	1.0833	2833.42	126.78
68	0	5:32:55	1.1167	2886.81	128.50
70	0	5:34:55	1.1500	2941.97	129.73
72	0	5:36:55	1.1833	2996.14	130.89
74	0	5:38:55	1.2167	3050.14	131.56
76	0	5:40:55	1.2500	3103.66	132.30
78	0	5:42:55	1.2833	3156.52	132.61
80	0	5:44:55	1.3167	3209.17	133.23
82	0	5:46:55	1.3500	3260.62	133.54
84	0	5:48:55	1.3833	3311.20	133.74
86	0	5:50:55	1.4167	3361.62	133.91
88	0	5:52:55	1.4500	3411.19	133.78
90	0	5:54:55	1.4833	3459.44	133.96
92	0	5:56:55	1.5167	3506.83	134.10
94	0	5:58:55	1.5500	3552.65	134.20
96	0	6: 0:55	1.5833	3597.14	134.28
98	0	6: 2:55	1.6167	3639.34	134.35
100	0	6: 4:55	1.6500	3681.29	134.41
103	0	6: 7:55	1.7000	3739.73	134.51
106	0	6:10:55	1.7500	3794.26	134.58
109	0	6:13:55	1.8000	3844.21	134.65
112	0	6:16:55	1.8500	3888.81	134.70
115	0	6:19:55	1.9000	3930.09	134.75
118	0	6:22:55	1.9500	3966.77	134.78
121	0	6:25:55	2.0000	3998.62	134.80
124	0	6:28:55	2.0500	4026.49	134.82
127	0	6:31:55	2.1000	4050.91	134.83
130	0	6:34:55	2.1500	4071.22	134.84
133	0	6:37:55	2.2000	4087.91	134.84
136	0	6:40:55	2.2500	4100.71	134.84
139	0	6:43:55	2.3000	4109.99	134.84
142	0	6:46:55	2.3500	4117.71	134.83
145	0	6:49:55	2.4000	4122.83	134.81
148	0	6:52:55	2.4500	4127.21	134.80
151	0	6:55:55	2.5000	4130.26	134.78
154	0	6:58:55	2.5500	4132.71	134.74
157	0	7: 1:55	2.6000	4134.79	134.70
160	0	7: 4:55	2.6500	4136.44	134.66
163	0	7: 7:55	2.7000	4137.51	134.61
166	0	7:10:55	2.7500	4137.89	134.55
169	0	7:13:55	2.8000	4138.91	134.51
172	0	7:16:55	2.8500	4139.77	134.43
175	0	7:19:55	2.9000	4140.82	134.38
178	0	7:22:55	2.9500	4141.54	134.32
180	0	7:24:55	2.9833	4142.07	134.26
181	0	7:25:55	3.0000	4142.17	134.21
182	0	7:26:55	3.0167	4142.44	134.15
183	0	7:27:55	3.0333	4142.72	134.07
184	0	7:28:55	3.0500	4142.88	133.98
185	0	7:29:55	3.0667	4142.91	134.24

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Well: LO16-23

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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
Subiendo Registradores a superficie.					
186	0	7:30:55	3.0833	4128.48	134.24
Parada @ 9200'.					
187	0	7:31:55	3.1000	4085.18	134.24
188	0	7:32:55	3.1167	4085.38	134.23
189	0	7:33:55	3.1333	4066.31	134.20
Parada @ 8900'.					
190	0	7:34:55	3.1500	4005.75	134.15
191	0	7:35:55	3.1667	4003.61	133.91
192	0	7:36:55	3.1833	4003.90	133.60
193	0	7:37:55	3.2000	3994.48	133.18
Parada @ 8500'.					
194	0	7:38:55	3.2167	3903.17	133.06
195	0	7:39:55	3.2333	3903.71	132.55
196	0	7:40:55	3.2500	3904.23	132.43
197	0	7:41:55	3.2667	3894.85	132.37
Parada @ 8000'.					
198	0	7:42:55	3.2833	3783.76	132.43
199	0	7:43:55	3.3000	3779.76	132.21
200	0	7:44:55	3.3167	3780.18	132.30
201	0	7:45:55	3.3333	3780.33	132.30
202	0	7:46:55	3.3500	3670.71	132.31
Parada @ 7000'.					
203	0	7:47:55	3.3667	3541.66	132.15
204	0	7:48:55	3.3833	3541.17	131.71
205	0	7:49:55	3.4000	3541.26	131.44
206	0	7:50:55	3.4167	3541.53	131.12
207	0	7:51:55	3.4333	3457.75	130.91
Parada @ 6000'.					
208	0	7:52:55	3.4500	3357.72	130.53
209	0	7:53:55	3.4667	3315.62	129.92
210	0	7:54:55	3.4833	3315.66	129.27
211	0	7:55:55	3.5000	3315.98	128.80
212	0	7:56:55	3.5167	3274.42	128.14
213	0	7:57:55	3.5333	3171.46	127.56
Parada @ 5000'.					
214	0	7:58:55	3.5500	3094.35	127.02
215	0	7:59:55	3.5667	3094.38	126.19
216	0	8: 0:55	3.5833	3094.69	125.42
217	0	8: 1:55	3.6000	3073.55	124.82
218	0	8: 2:55	3.6167	2940.33	124.15
Parada @ 4000'.					
219	0	8: 3:55	3.6333	2851.40	123.37
220	0	8: 4:55	3.6500	2851.46	122.34
221	0	8: 5:55	3.6667	2852.08	121.07
222	0	8: 6:55	3.6833	2821.58	120.27
223	0	8: 7:55	3.7000	2697.18	119.44
Parada @ 3000'.					
224	0	8: 8:55	3.7167	2622.82	118.58
225	0	8: 9:55	3.7333	2623.12	117.70

SPC

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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)	BHT (Deg.F)
226	0	8:10:55	3.7500	2623.47	116.80
227	0	8:11:55	3.7667	2585.06	115.87
Parada @ 2000'.					
228	0	8:12:55	3.7833	2455.60	114.94
229	0	8:13:55	3.8000	2376.52	114.42
230	0	8:14:55	3.8167	2379.52	113.77
231	0	8:15:55	3.8333	2381.91	112.82
232	0	8:16:55	3.8500	2321.43	112.40
Parada @ 1000'.					
233	0	8:17:55	3.8667	2186.57	111.39
234	0	8:18:55	3.8833	2168.80	110.03
235	0	8:19:55	3.9000	2168.77	108.59
236	0	8:20:55	3.9167	2169.42	107.39
237	0	8:21:55	3.9333	2123.71	106.03
Parada @ 500'.					
238	0	8:22:55	3.9500	2057.48	104.99
239	0	8:23:55	3.9667	2055.88	103.93
240	0	8:24:55	3.9833	2056.23	102.88
241	0	8:25:55	4.0000	2056.48	101.80
242	0	8:26:55	4.0167	2013.06	101.12
243	0	8:27:55	4.0333	1964.68	100.01
244	0	8:28:55	4.0500	1942.78	98.89
245	0	8:29:55	4.0667	1938.13	97.26
246	0	8:30:55	4.0833	1935.19	95.99
Parada @ 0'.					
247	0	8:31:55	4.1000	1932.96	94.98
248	0	8:32:55	4.1167	1933.44	93.99
249	0	8:33:55	4.1333	1933.88	92.73
250	0	8:34:55	4.1500	1930.84	91.62
Se despresuriza Lubricador.					
251	0	8:35:55	4.1667	1868.08	90.48
252	0	8:36:55	4.1833	1581.43	89.47
253	0	8:37:55	4.2000	1482.50	87.83
254	0	8:38:55	4.2167	1376.92	86.05
255	0	8:39:55	4.2333	1280.63	84.02
256	0	8:40:55	4.2500	1198.37	82.64
257	0	8:41:55	4.2667	1118.16	80.81
258	0	8:42:55	4.2833	1047.95	79.41
259	0	8:43:55	4.3000	984.68	78.01
260	0	8:44:55	4.3167	869.26	76.77
261	0	8:45:55	4.3333	779.71	75.49
262	0	8:46:55	4.3500	663.53	74.28
263	0	8:47:55	4.3667	565.30	73.02
264	0	8:48:55	4.3833	342.42	71.75
265	0	8:49:55	4.4000	15.77	70.00
266	0	8:50:55	4.4167	14.50	68.15
267	0	8:51:55	4.4333	14.50	66.79
268	0	8:52:55	4.4500	14.50	65.49