

*Reservorio Loma
Fin Udon Petrolera*

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Compañía Petrolera Talara S.A.C.

Arriaga

Well File

LO16-12

Well: LO16-12

Field: Lobitos Offshore

Static & Flowing Gradient Test

January 05th, 2005

Report elaborated by: Ricardo Aguirre

COPETSA

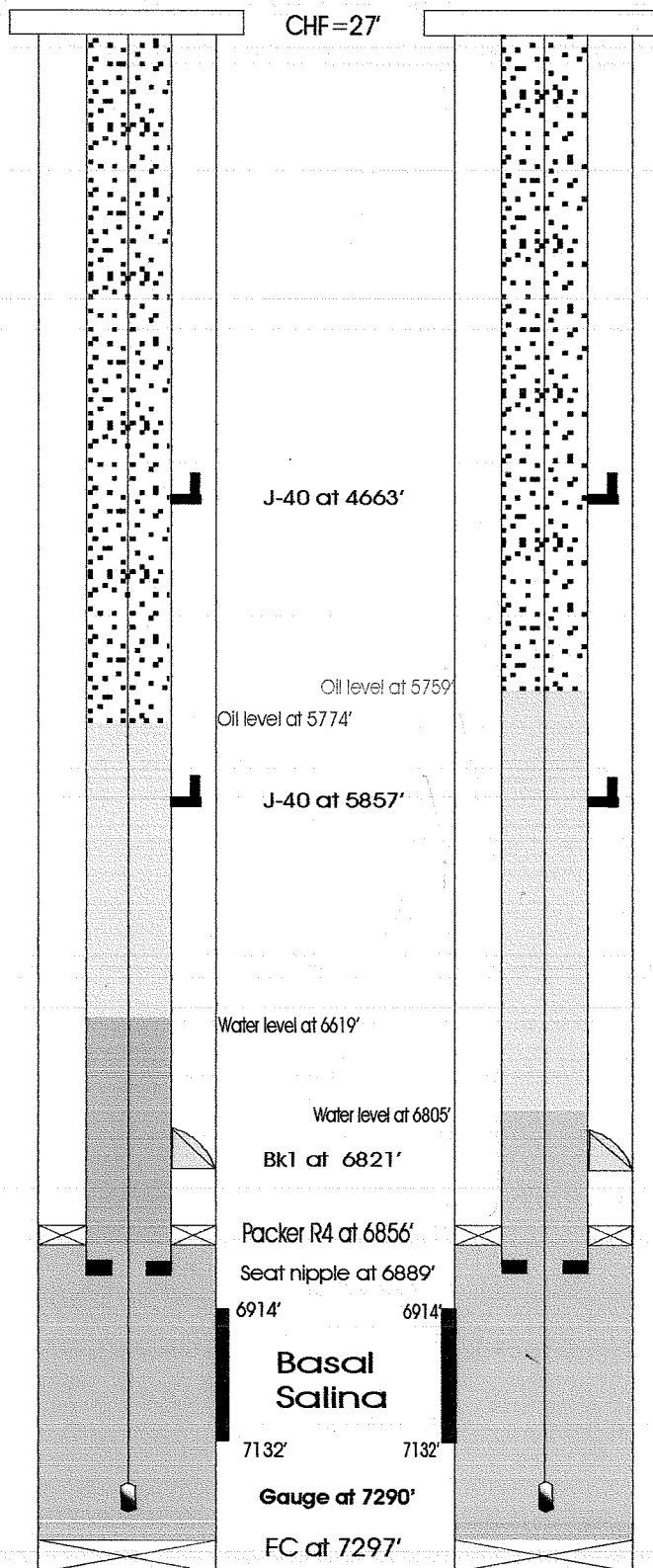
TYPE OF TEST : Static & Flowing Gradient Test
WELL : LO16-12

WEDGE SANDS
SAND : Basal Salina (7132'-6914')
FIELD : Lobitos Offshore

At static condition

At flowing condition

CHF=27'



Field data

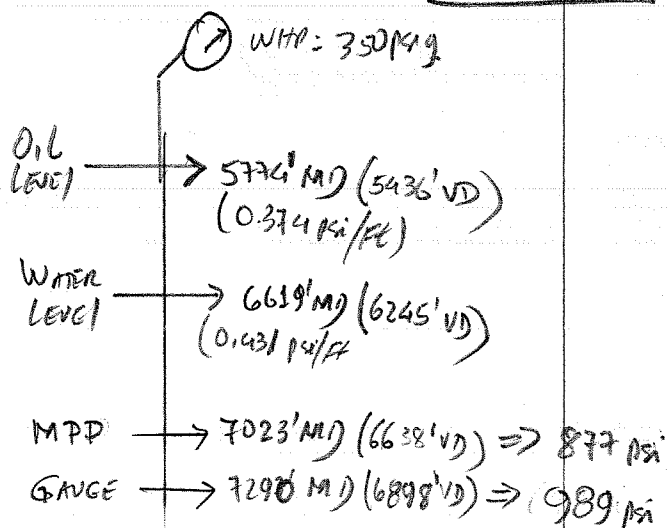
Well status: Producer
BOPD = 1, BWPD = 0
Np = 50511 STB
GOR = 1824 SCF/STB

Standing valve was retrieved and well was closed for 06 days

January 05th, 2005

08:20 Arriving Location
09:00 Rig Up
09:16 Activate Memory Gauge s/n 5295
09:20 Lubricator pressurized
09:25 RIH gauge
09:37 Gauge at 7290' x 2 hrs at static condition
11:34 POOH gauge with steps as follows:
7200' 6600' 5400' 3400'
7100' 6400' 5000' 3000'
7000' 6200' 4600' 2000'
6900' 6000' 4200' 1000'
6800' 5700' 3800' 0'
WHP = 350 psig
12:47 Gauge in lubricator
13:11 RIH gauge
13:19 Gauge at 7290'
13:25 Bleed off well to separator x 2 hrs;
at flowing condition
15:29 POOH Gauge with steps as follows:
7200' 6600' 5400' 3400'
7100' 6400' 5000' 3000'
7000' 6200' 4600' 2000'
6900' 6000' 4200' 1000'
6800' 5700' 3800' 0'
Produced Oil = 0 Bbls
WHP = 30 psig
Separator pressure = 26 psig
16:40 Gauge on surface
16:43 Desactivate Memory Gauge
17:00 Standing valve was installed at 6888'
17:40 Rig Down.

ST: 6 days



W. SANDS

Plot: 877 psi (0.132 psi/ft)

Field Operator : Roberto Talledo

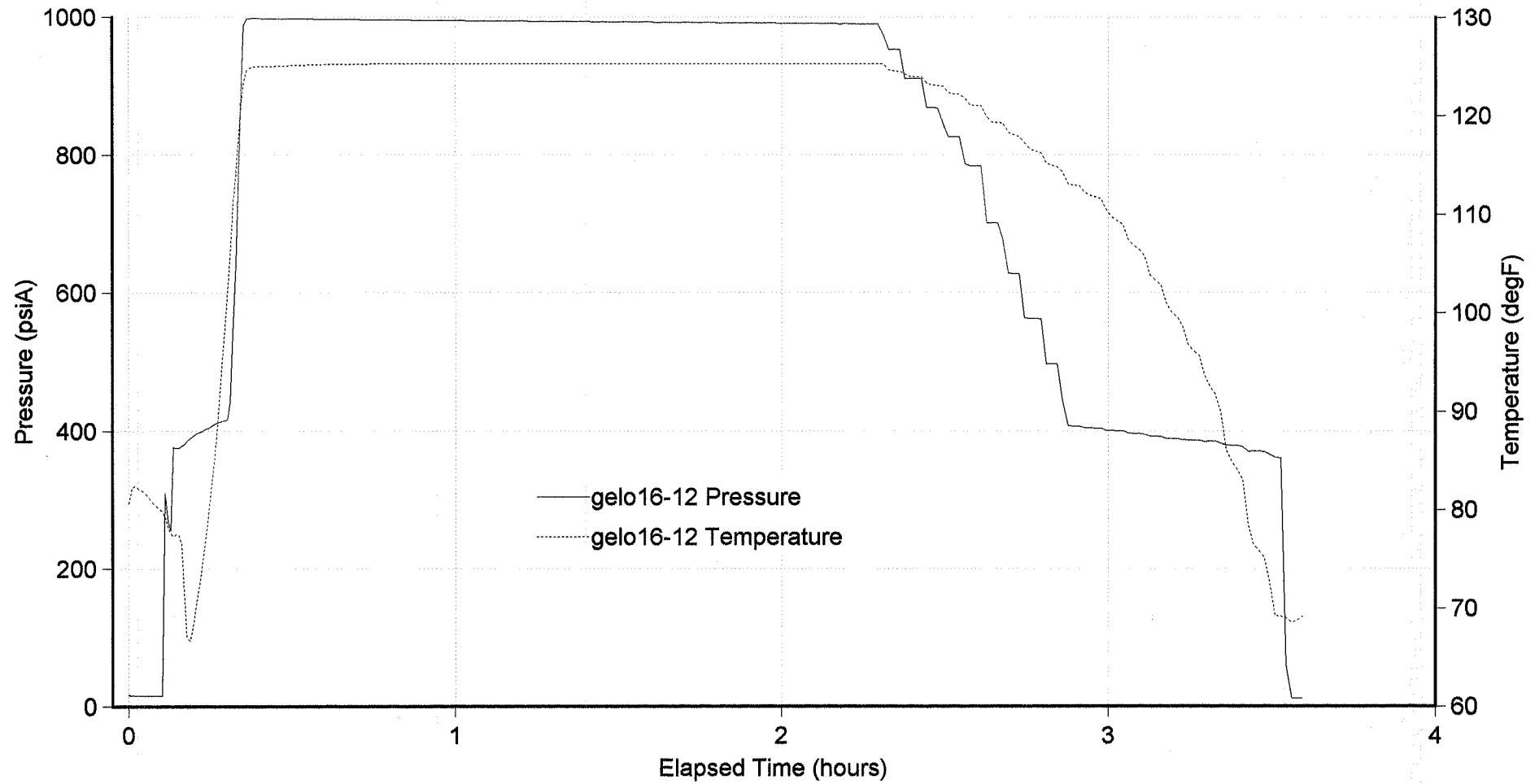
Field Supervisor : Eng. Ricardo Aguirre

FBHP = 640 psi

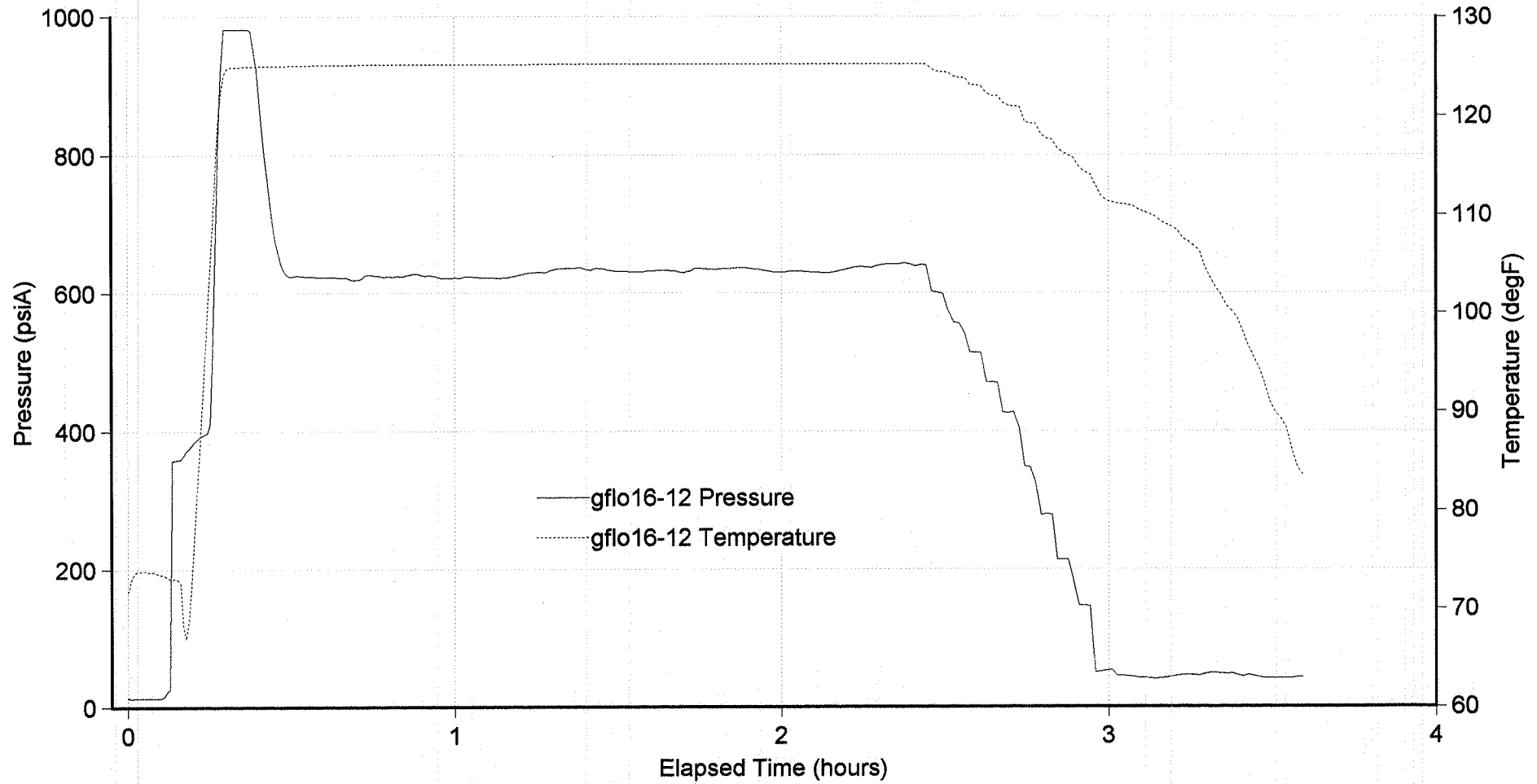
INCOG: 6 psi

W. SANDS: GRS produced only. Not HOS.

Data Graph Static Gradient - Well LO16-12



Data Graph Flowing Gradient - Well LO16-12



Summary of Results

Date of Test	January 05th, 2005	
Formation	Bs. Salina (7132'-6914')	
Depth of gauge	7290	M.D. ft
	6898	V.D. ft

02 hrs at Static Condition

Well Head Pressure	350	psig (manometer)
Static Pressure at 7290' MD	989.50	psia (Memory)
Static Temperature at 7290' MD	125.23	°F
Gradient at 7290' MD	0.1434	psi/ft
Gas gradient	0.0084	psi/ft
Oil level	5774	MD ft
	5443	VD ft
Oil gradient	0.3747	psi/ft
Water level	6619	MD ft
	6245	VD ft
Water gradient	0.4311	psi/ft

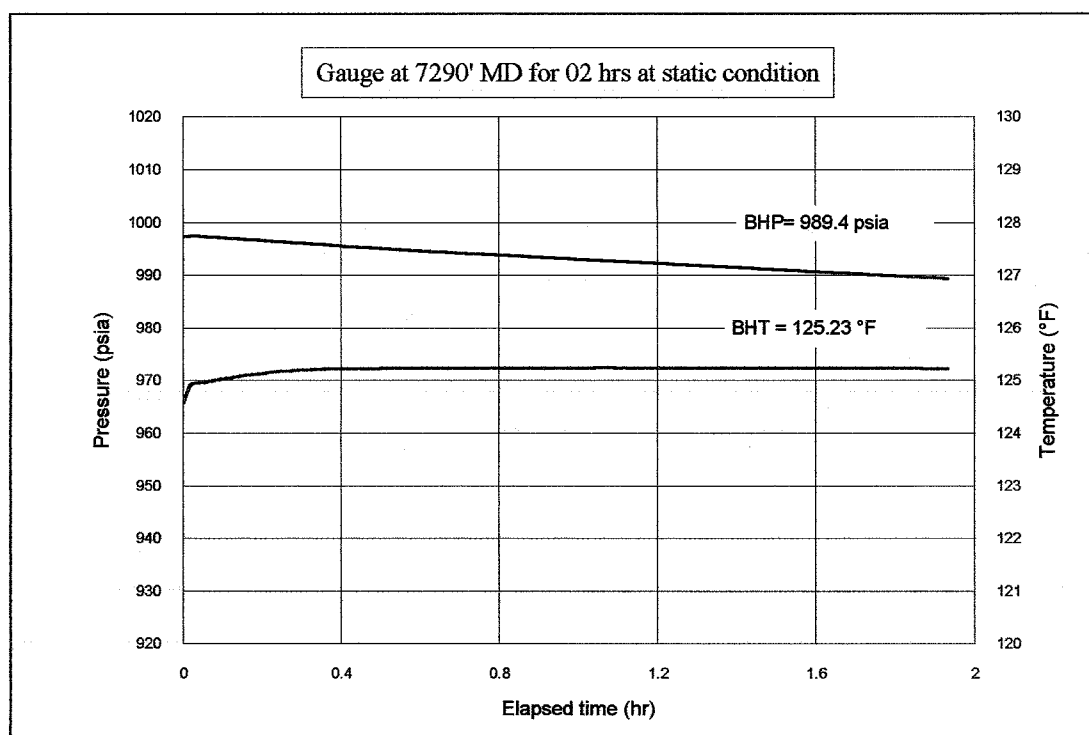
02 hrs at Flowing Condition

Well Head Pressure	30	psig (manometer)
Flowing Pressure at 7290' MD	640.29	psia (Memory)
Flowing Temperature at 7290' MD	125.19	°F
Gradient at 7290' MD	0.0928	psi/ft
Gas gradient	0.0223	psi/ft
Oil level	5759	ft. MD
	5427	ft. VD
Oil gradient	0.3771	psi/ft
Water level	6805	ft. MD
	6427	ft. VD
Water gradient	0.4510	psi/ft
Separator pressure	26	psig
System pressure	900	psig

Gauge at 7290' MD for 02 hrs at static condition

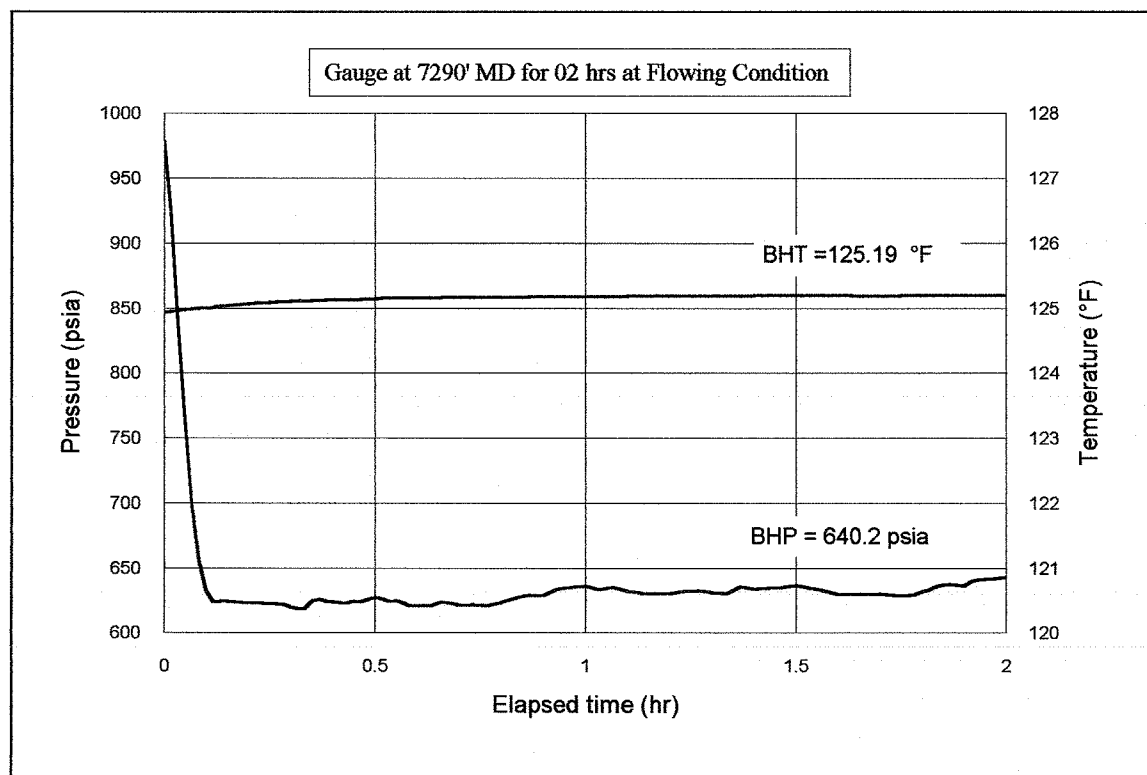
Date	Time	Elapsed Time (hr)	Pressure (psia)	Temperature (°F)
05/01/2005	09:37:45 a.m.	0	997.35	124.57
05/01/2005	09:38:45 a.m.	0.01667	997.45	124.90
05/01/2005	09:39:15 a.m.	0.025	997.44	124.94
05/01/2005	09:40:15 a.m.	0.04167	997.42	124.96
05/01/2005	09:41:15 a.m.	0.05833	997.30	124.97
05/01/2005	09:42:15 a.m.	0.075	997.23	124.99
05/01/2005	09:43:15 a.m.	0.09167	997.15	125.02
05/01/2005	09:44:15 a.m.	0.10833	997.07	125.04
05/01/2005	09:45:15 a.m.	0.125	996.99	125.06
05/01/2005	09:46:15 a.m.	0.14167	996.91	125.08
05/01/2005	09:47:15 a.m.	0.15833	996.83	125.10
05/01/2005	09:48:15 a.m.	0.175	996.74	125.11
05/01/2005	09:49:15 a.m.	0.19167	996.65	125.13
05/01/2005	09:50:15 a.m.	0.20833	996.56	125.14
05/01/2005	09:51:15 a.m.	0.225	996.48	125.16
05/01/2005	09:52:15 a.m.	0.24167	996.39	125.17
05/01/2005	09:53:15 a.m.	0.25833	996.31	125.18
05/01/2005	09:54:15 a.m.	0.275	996.22	125.19
05/01/2005	09:55:15 a.m.	0.29167	996.14	125.20
05/01/2005	09:56:15 a.m.	0.30833	996.05	125.20
05/01/2005	09:57:15 a.m.	0.325	995.97	125.21
05/01/2005	09:58:15 a.m.	0.34167	995.88	125.21
05/01/2005	09:59:15 a.m.	0.35833	995.79	125.22
05/01/2005	10:00:15 a.m.	0.375	995.71	125.22
05/01/2005	10:01:45 a.m.	0.4	995.58	125.22
05/01/2005	10:02:15 a.m.	0.40833	995.54	125.22
05/01/2005	10:03:45 a.m.	0.43333	995.41	125.23
05/01/2005	10:04:15 a.m.	0.44167	995.37	125.23
05/01/2005	10:05:45 a.m.	0.46667	995.26	125.23
05/01/2005	10:06:15 a.m.	0.475	995.22	125.23
05/01/2005	10:07:45 a.m.	0.5	995.10	125.24
05/01/2005	10:09:15 a.m.	0.525	994.99	125.24
05/01/2005	10:10:45 a.m.	0.55	994.87	125.24
05/01/2005	10:12:15 a.m.	0.575	994.76	125.24
05/01/2005	10:13:45 a.m.	0.6	994.65	125.24
05/01/2005	10:15:15 a.m.	0.625	994.55	125.24
05/01/2005	10:16:45 a.m.	0.65	994.44	125.24
05/01/2005	10:17:45 a.m.	0.66667	994.37	125.24
05/01/2005	10:19:15 a.m.	0.69167	994.27	125.24
05/01/2005	10:20:45 a.m.	0.71667	994.17	125.24
05/01/2005	10:22:15 a.m.	0.74167	994.07	125.24
05/01/2005	10:22:45 a.m.	0.75	994.03	125.24
05/01/2005	10:23:15 a.m.	0.75833	994.00	125.24
05/01/2005	10:23:45 a.m.	0.76667	993.97	125.24
05/01/2005	10:24:45 a.m.	0.78333	993.90	125.24
05/01/2005	10:25:15 a.m.	0.79167	993.87	125.24
05/01/2005	10:26:15 a.m.	0.80833	993.81	125.24
05/01/2005	10:27:15 a.m.	0.825	993.74	125.24
05/01/2005	10:28:15 a.m.	0.84167	993.68	125.24
05/01/2005	10:29:15 a.m.	0.85833	993.61	125.24
05/01/2005	10:30:15 a.m.	0.875	993.55	125.24
05/01/2005	10:31:15 a.m.	0.89167	993.48	125.24
05/01/2005	10:32:15 a.m.	0.90833	993.41	125.24
05/01/2005	10:33:15 a.m.	0.925	993.34	125.24
05/01/2005	10:34:15 a.m.	0.94167	993.27	125.24
05/01/2005	10:35:15 a.m.	0.95833	993.20	125.24
05/01/2005	10:36:15 a.m.	0.975	993.13	125.24
05/01/2005	10:37:15 a.m.	0.99167	993.06	125.24
05/01/2005	10:38:15 a.m.	1.00833	993.00	125.24
05/01/2005	10:39:15 a.m.	1.025	992.93	125.24
05/01/2005	10:40:15 a.m.	1.04167	992.87	125.25
05/01/2005	10:41:15 a.m.	1.05833	992.80	125.25
05/01/2005	10:42:15 a.m.	1.075	992.74	125.25
05/01/2005	10:43:15 a.m.	1.09167	992.68	125.25
05/01/2005	10:44:15 a.m.	1.10833	992.61	125.24
05/01/2005	10:45:15 a.m.	1.125	992.55	125.24
05/01/2005	10:46:15 a.m.	1.14167	992.49	125.24
05/01/2005	10:47:15 a.m.	1.15833	992.43	125.24
05/01/2005	10:48:15 a.m.	1.175	992.36	125.24
05/01/2005	10:49:15 a.m.	1.19167	992.30	125.24
05/01/2005	10:50:15 a.m.	1.20833	992.23	125.24
05/01/2005	10:51:15 a.m.	1.225	992.16	125.24
05/01/2005	10:52:15 a.m.	1.24167	992.10	125.24
05/01/2005	10:53:15 a.m.	1.25833	992.03	125.24
05/01/2005	10:54:15 a.m.	1.275	991.96	125.24
05/01/2005	10:55:15 a.m.	1.29167	991.90	125.24
05/01/2005	10:56:15 a.m.	1.30833	991.83	125.24
05/01/2005	10:57:15 a.m.	1.325	991.77	125.24
05/01/2005	10:58:15 a.m.	1.34167	991.70	125.24
05/01/2005	10:59:15 a.m.	1.35833	991.64	125.24
05/01/2005	11:00:15 a.m.	1.375	991.57	125.24
05/01/2005	11:01:15 a.m.	1.39167	991.51	125.24
05/01/2005	11:02:15 a.m.	1.40833	991.45	125.24
05/01/2005	11:03:15 a.m.	1.425	991.38	125.24
05/01/2005	11:04:15 a.m.	1.44167	991.31	125.24
05/01/2005	11:05:15 a.m.	1.45833	991.24	125.24
05/01/2005	11:06:15 a.m.	1.475	991.17	125.24
05/01/2005	11:07:15 a.m.	1.49167	991.10	125.24
05/01/2005	11:08:15 a.m.	1.50833	991.04	125.24
05/01/2005	11:09:15 a.m.	1.525	990.97	125.24
05/01/2005	11:10:15 a.m.	1.54167	990.91	125.24
05/01/2005	11:11:15 a.m.	1.55833	990.84	125.24
05/01/2005	11:12:15 a.m.	1.575	990.77	125.24
05/01/2005	11:13:15 a.m.	1.59167	990.70	125.24
05/01/2005	11:14:15 a.m.	1.60833	990.62	125.24
05/01/2005	11:15:15 a.m.	1.625	990.55	125.24
05/01/2005	11:16:15 a.m.	1.64167	990.47	125.24
05/01/2005	11:18:45 a.m.	1.68333	990.34	125.24
05/01/2005	11:20:45 a.m.	1.71667	990.23	125.24
05/01/2005	11:21:45 a.m.	1.73333	990.18	125.24
05/01/2005	11:23:45 a.m.	1.76667	990.06	125.24
05/01/2005	11:25:45 a.m.	1.8	989.94	125.24
05/01/2005	11:27:45 a.m.	1.83333	989.85	125.24
05/01/2005	11:29:45 a.m.	1.86667	989.66	125.24
05/01/2005	11:31:45 a.m.	1.9	989.52	125.23
05/01/2005	11:33:45 a.m.	1.93333	989.31	125.23

Incorrect = 4 psia



Gauge at 7290' MD for 02 hrs at Flowing Condition

Date	Time	Elapsed Time (hr)	Pressure (psia)	Temperature (°F)
05/01/2005	01:25:07 p.m.	0.00	977.89	124.93
05/01/2005	01:26:07 p.m.	0.02	924.86	124.95
05/01/2005	01:27:07 p.m.	0.03	838.68	124.96
05/01/2005	01:28:07 p.m.	0.05	763.84	124.98
05/01/2005	01:29:07 p.m.	0.07	699.44	124.99
05/01/2005	01:30:07 p.m.	0.08	655.83	125.00
05/01/2005	01:31:07 p.m.	0.10	632.21	125.00
05/01/2005	01:32:07 p.m.	0.12	623.75	125.01
05/01/2005	01:33:07 p.m.	0.13	624.45	125.03
05/01/2005	01:34:07 p.m.	0.15	624.42	125.04
05/01/2005	01:35:07 p.m.	0.17	623.60	125.05
05/01/2005	01:36:07 p.m.	0.18	623.49	125.06
05/01/2005	01:37:07 p.m.	0.20	622.95	125.07
05/01/2005	01:38:07 p.m.	0.22	622.95	125.08
05/01/2005	01:39:07 p.m.	0.23	623.01	125.08
05/01/2005	01:40:07 p.m.	0.25	622.48	125.09
05/01/2005	01:41:07 p.m.	0.27	622.16	125.1
05/01/2005	01:42:07 p.m.	0.28	621.72	125.1
05/01/2005	01:43:07 p.m.	0.30	620.13	125.11
05/01/2005	01:44:07 p.m.	0.32	618.44	125.11
05/01/2005	01:45:07 p.m.	0.33	619.15	125.11
05/01/2005	01:46:07 p.m.	0.35	624.56	125.12
05/01/2005	01:47:07 p.m.	0.37	625.73	125.12
05/01/2005	01:48:07 p.m.	0.38	624.4	125.13
05/01/2005	01:49:07 p.m.	0.40	623.73	125.13
05/01/2005	01:50:07 p.m.	0.42	623.44	125.13
05/01/2005	01:51:07 p.m.	0.43	622.88	125.13
05/01/2005	01:52:07 p.m.	0.45	624.14	125.13
05/01/2005	01:53:07 p.m.	0.47	623.76	125.14
05/01/2005	01:54:07 p.m.	0.48	625.58	125.14
05/01/2005	01:55:07 p.m.	0.50	627.33	125.14
05/01/2005	01:56:07 p.m.	0.52	626.47	125.15
05/01/2005	01:57:07 p.m.	0.53	624.47	125.15
05/01/2005	01:58:07 p.m.	0.55	625	125.15
05/01/2005	01:59:07 p.m.	0.57	623.4	125.15
05/01/2005	02:00:07 p.m.	0.58	621.07	125.15
05/01/2005	02:01:07 p.m.	0.60	620.88	125.15
05/01/2005	02:02:07 p.m.	0.62	621.48	125.15
05/01/2005	02:03:07 p.m.	0.63	620.93	125.15
05/01/2005	02:04:37 p.m.	0.66	623.76	125.16
05/01/2005	02:06:37 p.m.	0.69	622.41	125.16
05/01/2005	02:07:07 p.m.	0.70	621.52	125.16
05/01/2005	02:09:07 p.m.	0.73	621.69	125.16
05/01/2005	02:11:07 p.m.	0.77	621.04	125.16
05/01/2005	02:13:07 p.m.	0.80	623.43	125.16
05/01/2005	02:15:07 p.m.	0.83	626.72	125.16
05/01/2005	02:17:07 p.m.	0.87	629.11	125.17
05/01/2005	02:19:07 p.m.	0.90	628.69	125.17
05/01/2005	02:21:07 p.m.	0.93	633.90	125.17
05/01/2005	02:23:07 p.m.	0.97	635.14	125.17
05/01/2005	02:25:07 p.m.	1.00	636.23	125.17
05/01/2005	02:27:07 p.m.	1.03	633.22	125.17
05/01/2005	02:29:07 p.m.	1.07	634.92	125.17
05/01/2005	02:31:07 p.m.	1.10	632.22	125.18
05/01/2005	02:33:07 p.m.	1.13	630.88	125.18
05/01/2005	02:35:07 p.m.	1.17	630.17	125.18
05/01/2005	02:37:07 p.m.	1.20	630.20	125.18
05/01/2005	02:39:07 p.m.	1.23	631.97	125.18
05/01/2005	02:41:07 p.m.	1.27	632.50	125.18
05/01/2005	02:43:07 p.m.	1.30	631.44	125.18
05/01/2005	02:45:07 p.m.	1.33	630.26	125.18
05/01/2005	02:47:07 p.m.	1.37	635.57	125.18
05/01/2005	02:49:07 p.m.	1.40	633.90	125.19
05/01/2005	02:51:07 p.m.	1.43	634.41	125.19
05/01/2005	02:53:07 p.m.	1.47	634.93	125.19
05/01/2005	02:55:07 p.m.	1.50	636.58	125.19
05/01/2005	02:57:07 p.m.	1.53	634.57	125.19
05/01/2005	02:59:07 p.m.	1.57	632.57	125.19
05/01/2005	03:01:07 p.m.	1.60	629.57	125.19
05/01/2005	03:03:07 p.m.	1.63	629.61	125.19
05/01/2005	03:07:07 p.m.	1.70	630.22	125.18
05/01/2005	03:08:07 p.m.	1.72	629.51	125.18
05/01/2005	03:09:07 p.m.	1.73	629.34	125.18
05/01/2005	03:10:07 p.m.	1.75	628.66	125.19
05/01/2005	03:11:07 p.m.	1.77	628.53	125.19
05/01/2005	03:12:07 p.m.	1.78	629.74	125.19
05/01/2005	03:13:07 p.m.	1.80	631.51	125.19
05/01/2005	03:14:07 p.m.	1.82	633.35	125.19
05/01/2005	03:15:07 p.m.	1.83	635.43	125.19
05/01/2005	03:16:07 p.m.	1.85	636.92	125.19
05/01/2005	03:17:07 p.m.	1.87	637.41	125.19
05/01/2005	03:18:07 p.m.	1.88	637.05	125.19
05/01/2005	03:19:07 p.m.	1.90	636.16	125.19
05/01/2005	03:20:07 p.m.	1.92	639.62	125.19
05/01/2005	03:21:07 p.m.	1.93	641.12	125.19
05/01/2005	03:22:07 p.m.	1.95	641.61	125.19
05/01/2005	03:23:07 p.m.	1.97	641.75	125.19
05/01/2005	03:25:07 p.m.	2.00	642.82	125.19
05/01/2005	03:27:07 p.m.	2.03	638.81	125.19
05/01/2005	03:29:07 p.m.	2.07	640.29	125.19



Fluid Level at Static Condition

Measured depth (ft)	Vertical depth (ft)	Pressure (psia)	Gradient (psi/ft)
0	0	361.00	
1000	974	370.00	0.0092
2000	1956	379.10	0.0093
3000	2826	384.00	0.0056
3400	3190	386.60	0.0071
3800	3566	388.80	0.0059
4200	3943	392.20	0.0090
4600	4322	396.40	0.0111
5000	4711	400.30	0.0100
5400	5084	404.30	0.0107
5700	5365	407.00	0.0096
6000	5680	496.30	0.2835
6200	5842	561.00	0.3994
6400	6034	627.50	0.3464
6600	6226	700.90	0.3823
6800	6422	784.30	0.4255
6900	6520	826.60	0.4316
7000	6617	868.40	0.4309
7100	6714	910.30	0.4320
7200	6811	952.40	0.4340
7290	6898	989.50	0.4264

Levels & Gradients

	Static levels		Gradient (psi/ft)
	Measured (ft)	Vertical (ft)	
Gas =	0	0	0.0392
Oil =	5774	5443	0.3747
Water =	6619	6245	0.4311
Gauge =	7290	6898	0.1434

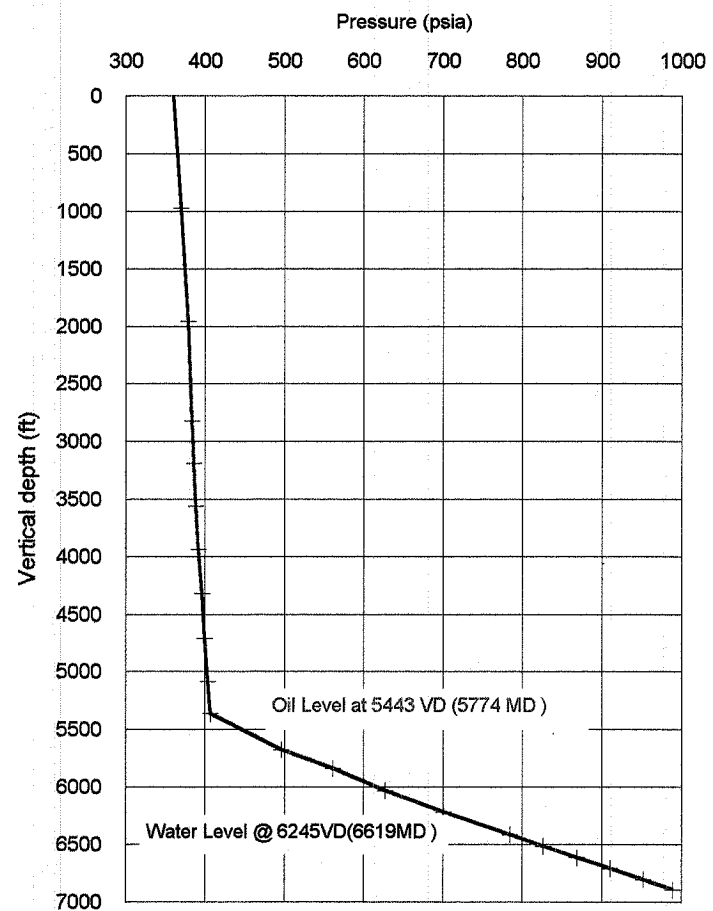
Fluid Level at Flowing Condition

Measured depth (ft)	Vertical depth (ft)	Pressure (psia)	Gradient (psi/ft)
0	0	40.80	
1000	974	41.10	0.0003
2000	1956	41.50	0.0004
3000	2826	42.20	0.0008
3400	3190	42.80	0.0016
3800	3566	43.40	0.0016
4200	3943	43.70	0.0008
4600	4322	44.00	0.0008
5000	4711	44.50	0.0013
5400	5084	44.70	0.0005
5700	5365	50.50	0.0206
6000	5680	146.20	0.3038
6200	5842	210.30	0.3957
6400	6034	279.50	0.3604
6600	6226	348.00	0.3568
6800	6422	426.00	0.3980
6900	6520	469.80	0.4469
7000	6617	512.70	0.4423
7100	6714	555.60	0.4423
7200	6811	599.90	0.4567
7290	6898	640.29	0.4643

Levels & Gradients

	Flowing levels		Gradient (psi/ft)
	Measured (ft)	Vertical (ft)	
Gas =	0	0	0.0223
Oil =	5759	5427	0.3771
Water =	6805	6427	0.4510
Gauge =	7290	6898	0.0928

Fluid Level at Static Condition



Fluid Level at Flowing Condition

