

Reservoir Lima
Sr. Victor Peralta
06-AUG-2004

FLOWPETROL S.A.

Flowing Gradient Test

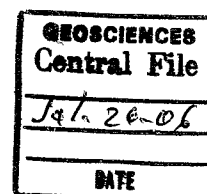
~~BHP & STATIC GRADIENT TEST~~

COMPANY : PETRO-TECH PERUANA S.A.

WELL : LO16-14

FIELD : LOBITOS OFFSHORE

DATE : JULY 23-24th, 2004

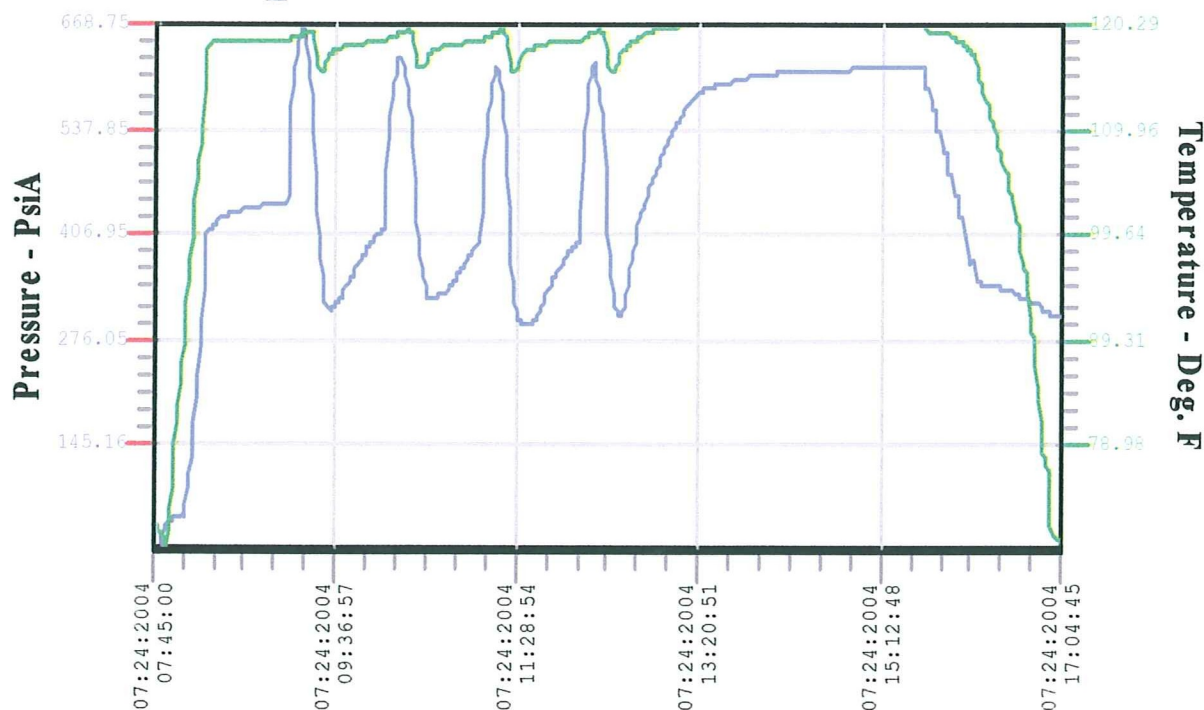


Well Test Data

Test name: LO16-14

Company: FLOWPETROL S.A
Client: PETRO-TECH S.A
Gauge number: 91176
Well name: LO16-14
Well number: 14
Test number: 052
Field name: LOBITOS OFFSHORE
County: TALARA
State: PIURA
Date of test: JULY 24th, 2004
Type of test: BHP & FLOWING GRADIENT TEST
Well status: PRODUCER
BHP on bottom: 616.64 PSIA
BHP off bottom: 306.01 PSIA
Bottom gauge number: 91176
Starting tubing pressure: 25 PSIG
Starting casing pressure: 570 PSIG
Ending tubing pressure: 280 PSIG
Ending casing pressure: 570 PSIG
Depth of tool: 9410'
Surface elevation: -
Tool zero point: 23'
Tubing size: 2 7/8"
Bottom hole temperature: 120.28
:
:
Test operator: ENG.PILAR SALDARRIAGA.
Comments:
:
:

Temperature / Pressure Data



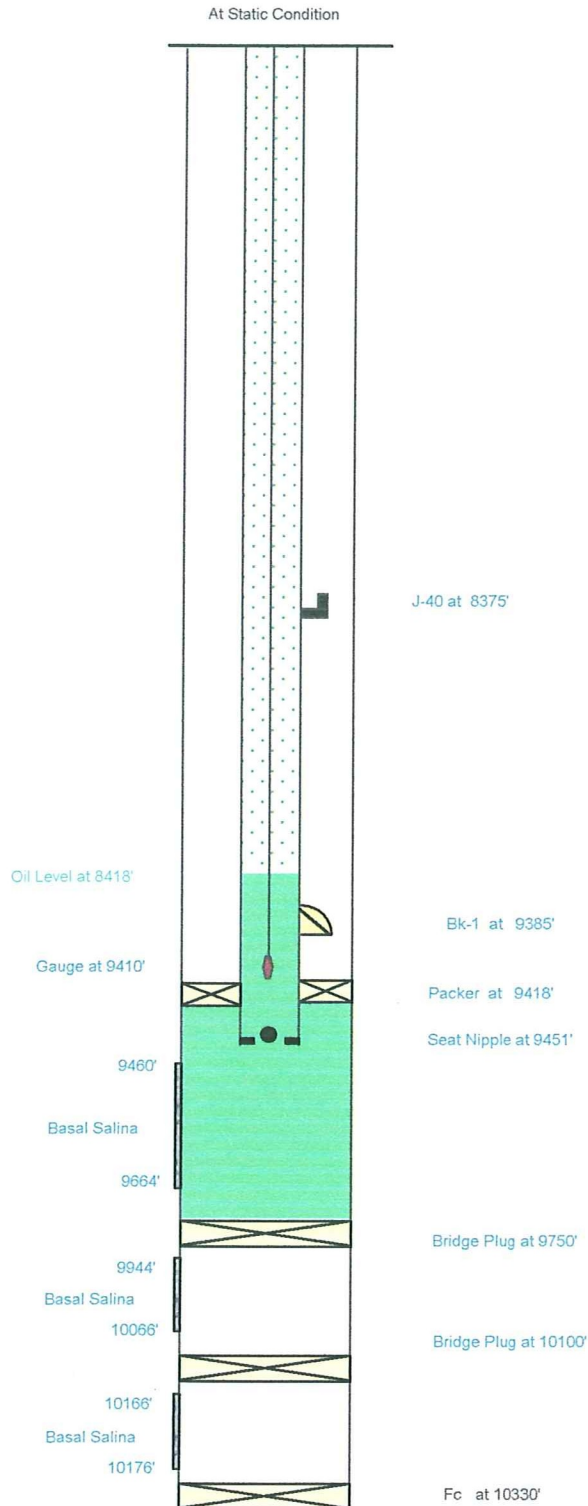
Real Time

CENTRAL FILE
Geosciences

STATIC GRADIENT TEST

Field : Lobitos Offshore
Well : LO16-14

Sand(s) : Basal Salina
Interval(s) : (9664'-9460')



Well Status : Producer
Installation : 2 7/8"
Production (MSCFD) : 64X7
Cumul. (STB) : 744048(30 Junio 2004)

FIELD REPORT :

July 23th,2004

11:00 Cutting paraffin
RIH oil tramp at 9450'

July 24th, 2004

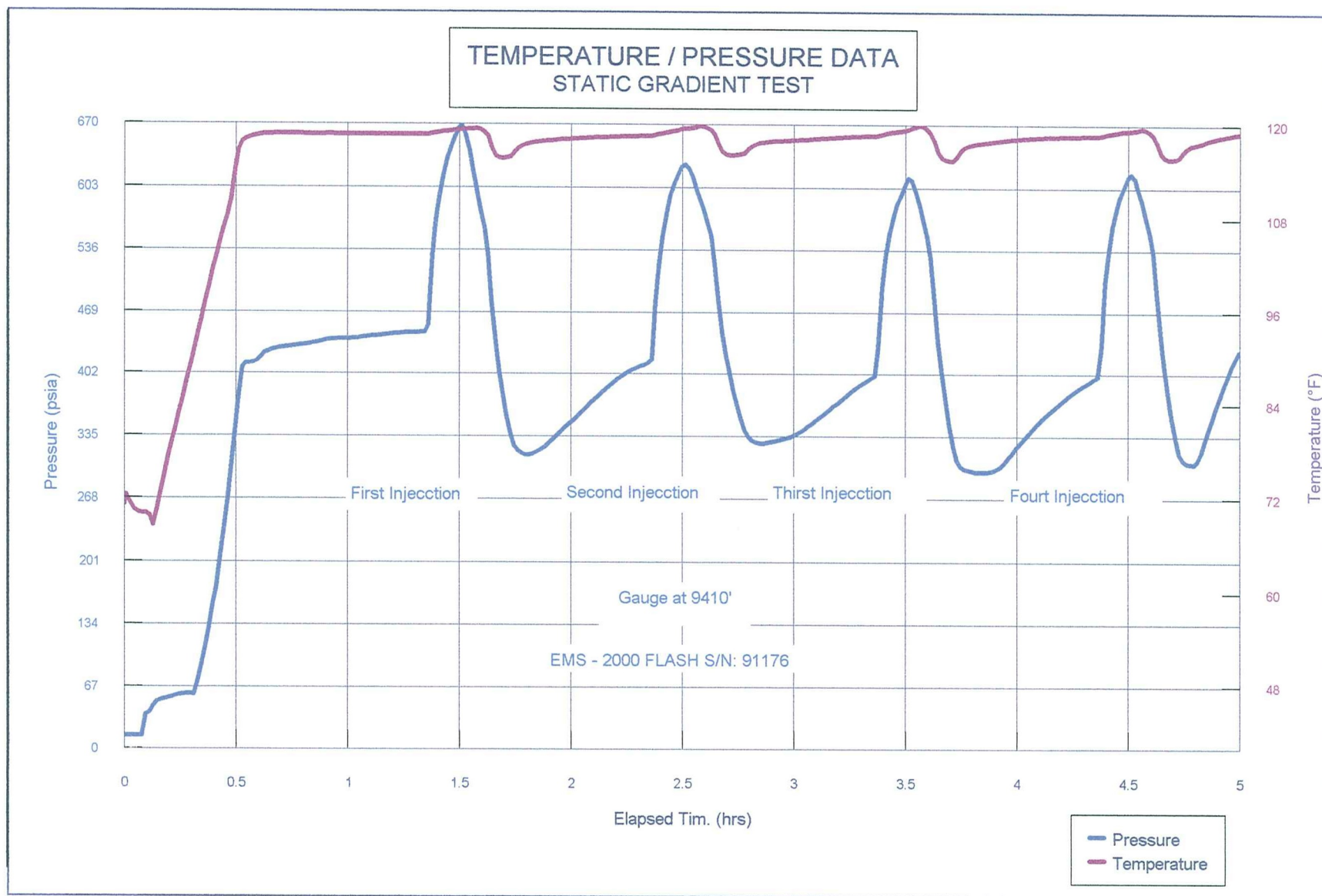
07:35 Rig up
07:44 Activate Memory gauges FPT
07:52 RIH Gauges
08:21 Gauges at 9410
09:07 First Injecction
Pres.Tubing=25 PSIG
Pres.Casing=575PSG
Prod= 4 BO
10:07 Second Injecction
Pres.Tubing=95 PSIG
Pres.Casing=575PSG
Prod=3 BO
11:07 Thirst Injecction
Pres.Tubing=125 PSIG
Pres.Casing=575PSG
Prod=4 BO
12:07 Four Injecction
Pres.Tubing=125 PSIG
Pres.Casing=575PSG
Prod=3 BO
12:30 Shut in gas Injecction ,Shut well X 3hrs
15:40 POOH Gauges with steps at follows:
9410' - 9300' - 9200' - 9100' - 9000' - 8900
8800' - 8900' - 8800' - 8700' - 8600' - 8500'
8000'-7500'-7000'-6500'-6000'-5500'-5000
4000'-3000'-2000'-1000'-0'
17:02 Gauges on Surface
17:50 Rig Down.

NOTE
No recovered N. 10
before tests

Field Operator: Jorge Sanjinez

Field Supervisor: Pilar Saldarriaga

CENTRAL FILE
Geosciences



Summary of Results Well: LO16-14

Date of Test	July 23-24th , 2004	
Formation	Basal Salina	(9664' - 9460')
Depth of gauges	9,410	M.D. ft
	7,480	V.D. ft
<u>03 Hrs. at Static Condition</u>		
Static Pressure at 9410' MD	616.64	psia (Memory)
Static Temperature at 9410' MD	120.28	°F
Static Gradient at 9410' MD	0.0824	psi/ft
Oil level	8418	ft. MD
	6690	ft. VD
Oil Gradient	0.3359	psi/ft
Gas Gradient	0.0065	psi/ft

Set and Security:

Personal Elements of Security: Complete.

I was made cleaning in Location

Remark:

Injection Cycle 60' x 6'15"

System Pressure 950 psig

Separator Pressure 25 psig

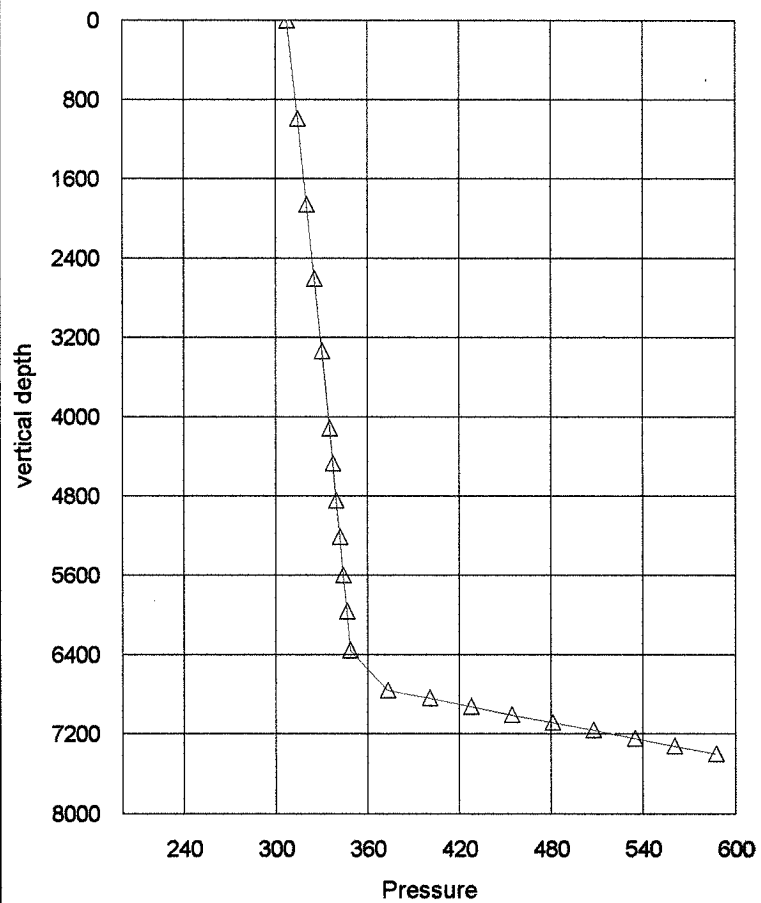
Fluid Level at Static Condition (while POOH gauges)

Measured depth (ft)	Vertical depth (ft)	Pressure (psia)	Gradient (psi/ft)
0	0.00	307.52	
1000	995.82	314.58	0.0071
2000	1862.94	320.37	0.0067
3000	2604.52	325.42	0.0068
4000	3338.03	330.30	0.0067
5000	4116.05	335.64	0.0069
5500	4472.84	337.72	0.0058
6000	4842.24	339.76	0.0055
6500	5210.66	342.12	0.0064
7000	5596.44	344.26	0.0055
7500	5961.86	346.55	0.0063
8000	6354.94	348.91	0.0060
8500	6757.53	373.51	0.0611
8600	6838.77	400.94	0.3376
8700	6919.92	427.92	0.3325
8800	7001.08	454.33	0.3254
8900	7081.69	481.13	0.3325
9000	7161.47	507.95	0.3362
9100	7240.28	534.82	0.3409
9200	7318.02	560.46	0.3298
9300	7395.09	587.82	0.3550
9410	7479.55	616.64	0.3412

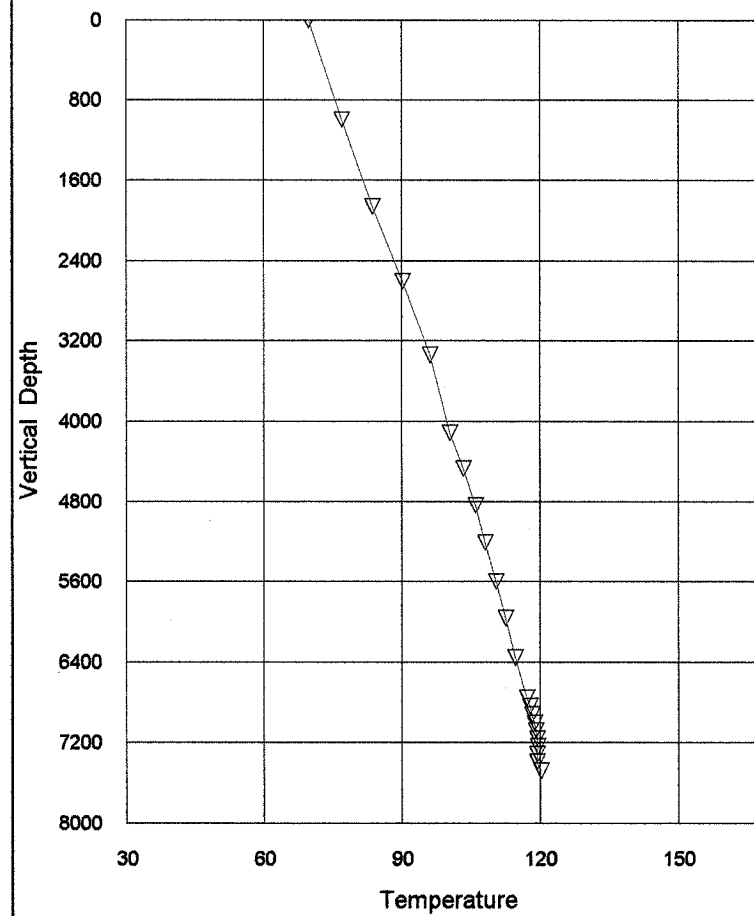
Levels & Gradients

	Static levels		
	Measured (ft)	Vertical (ft)	Gradient (psi/ft)
Gas=	0	0	0.0065
Oil=	8418	6690	0.3359
Gauges =	9410	7480	0.0824

Static Gradient LO16-14 Well



Static Gradient LO16-14 Well



Well LO16-14: Development Test

Date	Time	Elapsed Time (hrs)	Pressure (psia)	Temperature (°F)	Date	Time	Elapsed Time (hrs)	Pressure (psia)	Temperature (°F)
Activate Gauge s/n: 91176					24/07/2004	08:40:45	0.92917	439.48	118.75
24/07/2004	07:45:00	0.00000	14.68	71.38	24/07/2004	08:41:45	0.94583	439.82	118.74
24/07/2004	07:45:01	0.00028	14.73	71.28	24/07/2004	08:42:45	0.96250	440.08	118.73
24/07/2004	07:45:02	0.00056	14.82	71.28	24/07/2004	08:43:45	0.97917	440.03	118.73
24/07/2004	07:45:03	0.00083	14.84	71.31	24/07/2004	08:44:45	0.99583	440.1	118.72
24/07/2004	07:45:04	0.00111	14.55	71.47	24/07/2004	08:45:45	1.0125	440.19	118.71
24/07/2004	07:45:05	0.00139	14.35	71.65	24/07/2004	08:46:45	1.02917	440.49	118.71
24/07/2004	07:45:06	0.00167	14.30	71.69	24/07/2004	08:47:45	1.04583	440.75	118.70
24/07/2004	07:45:07	0.00194	14.34	71.72	24/07/2004	08:48:45	1.06250	441.43	118.71
24/07/2004	07:45:08	0.00222	14.33	71.74	24/07/2004	08:49:45	1.07917	442.17	118.71
24/07/2004	07:45:09	0.00250	14.45	71.77	24/07/2004	08:50:45	1.09583	442.72	118.72
24/07/2004	07:45:10	0.00278	14.30	71.80	24/07/2004	08:51:45	1.11250	443.24	118.72
24/07/2004	07:45:11	0.00306	14.37	71.84	24/07/2004	08:52:45	1.12917	443.51	118.72
24/07/2004	07:45:12	0.00333	14.40	71.89	24/07/2004	08:53:45	1.14583	443.98	118.72
24/07/2004	07:45:13	0.00361	14.37	71.96	24/07/2004	08:54:45	1.1625	444.39	118.72
24/07/2004	07:45:14	0.00389	14.28	72.08	24/07/2004	08:55:45	1.17917	444.82	118.72
24/07/2004	07:45:15	0.00417	14.33	72.18	24/07/2004	08:56:45	1.19583	445.22	118.72
24/07/2004	07:45:16	0.00444	14.41	72.27	24/07/2004	08:57:45	1.21250	445.65	118.72
24/07/2004	07:45:17	0.00472	14.39	72.34	24/07/2004	08:58:45	1.22917	446.13	118.72
24/07/2004	07:45:18	0.00500	14.56	72.39	24/07/2004	08:59:45	1.24583	446.40	118.72
24/07/2004	07:45:19	0.00528	14.40	72.42	24/07/2004	09:00:45	1.26250	446.70	118.72
24/07/2004	07:45:20	0.00556	14.46	72.44	24/07/2004	09:01:45	1.27917	446.71	118.71
24/07/2004	07:45:21	0.00583	14.46	72.45	24/07/2004	09:02:45	1.29583	446.85	118.71
24/07/2004	07:45:22	0.00611	14.43	72.47	24/07/2004	09:03:45	1.31250	446.96	118.70
24/07/2004	07:45:23	0.00639	14.40	72.46	24/07/2004	09:04:45	1.32917	447.25	118.70
24/07/2004	07:45:24	0.00667	14.37	72.45	24/07/2004	09:05:45	1.34583	447.55	118.70
24/07/2004	07:45:25	0.00694	14.39	72.45	24/07/2004	09:06:45	1.36250	455.12	118.73
24/07/2004	07:45:26	0.00722	14.41	72.44	First Injection				
24/07/2004	07:45:27	0.00750	14.26	72.43	24/07/2004	09:07:45	1.37917	529.57	118.84
24/07/2004	07:45:28	0.00778	14.38	72.42	24/07/2004	09:08:45	1.39583	568.15	118.92
24/07/2004	07:45:29	0.00806	14.36	72.39	24/07/2004	09:09:45	1.41250	595.81	118.99
24/07/2004	07:45:30	0.00833	14.59	72.38	24/07/2004	09:10:45	1.42917	616.96	119.06
24/07/2004	07:45:31	0.00861	14.38	72.37	24/07/2004	09:11:45	1.44583	633.52	119.12
24/07/2004	07:45:32	0.00889	14.51	72.35	24/07/2004	09:12:45	1.46250	645.68	119.18
24/07/2004	07:45:33	0.00917	14.47	72.32	24/07/2004	09:13:45	1.47917	655.55	119.23
24/07/2004	07:45:34	0.00944	14.36	72.31	24/07/2004	09:14:45	1.49583	665.13	119.27
24/07/2004	07:45:35	0.01250	14.39	72.14	24/07/2004	09:15:45	1.51250	688.75	119.31
24/07/2004	07:46:45	0.02917	14.40	71.32	24/07/2004	09:16:45	1.52917	658.95	119.35
24/07/2004	07:47:45	0.04583	14.36	70.58	24/07/2004	09:17:45	1.54583	641.77	119.38
24/07/2004	07:48:45	0.06250	14.31	70.26	24/07/2004	09:18:45	1.56250	619.67	119.40
24/07/2004	07:49:45	0.07917	14.32	70.13	24/07/2004	09:19:45	1.57917	597.49	119.44
Pressurized lubricator					24/07/2004	09:20:45	1.59583	578.49	119.37
24/07/2004	07:50:45	0.09583	37.08	70.15	24/07/2004	09:21:45	1.61250	559.84	119.05
24/07/2004	07:51:45	0.11250	39.55	69.86	24/07/2004	09:22:45	1.62917	532.21	118.56
24/07/2004	07:52:45	0.12917	46.11	68.66	24/07/2004	09:23:45	1.64583	476.14	116.99
RIH Gauges					24/07/2004	09:24:45	1.66250	436.93	116.03
24/07/2004	07:53:45	0.14583	51.08	70.68	24/07/2004	09:25:45	1.67917	404.63	115.75
24/07/2004	07:54:45	0.16250	52.85	72.77	24/07/2004	09:26:45	1.69583	378.35	115.69
24/07/2004	07:55:45	0.17917	53.78	74.97	24/07/2004	09:27:45	1.71250	356.24	115.76
24/07/2004	07:56:45	0.19583	55.08	77.10	24/07/2004	09:28:45	1.72917	337.25	115.92
24/07/2004	07:57:45	0.21250	56.06	79.16	24/07/2004	09:29:45	1.74583	324.84	116.37
24/07/2004	07:58:45	0.22917	57.70	81.08	24/07/2004	09:30:45	1.76250	319.65	116.97
24/07/2004	07:59:45	0.24583	58.58	83.01	24/07/2004	09:31:45	1.77917	316.37	117.28
24/07/2004	08:00:45	0.26250	59.08	84.88	24/07/2004	09:32:45	1.79583	314.80	117.46
24/07/2004	08:01:45	0.27917	59.40	86.93	24/07/2004	09:33:45	1.81250	314.77	117.59
24/07/2004	08:02:45	0.29583	58.56	88.91	24/07/2004	09:34:45	1.82917	316.13	117.69
24/07/2004	08:03:45	0.31250	59.08	90.85	24/07/2004	09:35:45	1.84583	318.14	117.77
24/07/2004	08:04:45	0.32917	74.08	93.02	24/07/2004	09:36:45	1.86250	320.45	117.84
24/07/2004	08:05:45	0.34583	92.20	95.17	24/07/2004	09:37:45	1.87917	323.09	117.89
24/07/2004	08:06:45	0.36250	109.56	97.21	24/07/2004	09:38:45	1.89583	326.59	117.94
24/07/2004	08:07:45	0.37917	130.94	99.22	24/07/2004	09:39:45	1.91250	330.11	117.99
24/07/2004	08:08:45	0.39583	154.11	101.27	24/07/2004	09:40:45	1.92917	333.84	118.03
24/07/2004	08:09:45	0.41250	174.72	103.09	24/07/2004	09:41:45	1.94583	337.76	118.08
24/07/2004	08:10:45	0.42917	203.85	104.99	24/07/2004	09:42:45	1.96250	341.72	118.12
24/07/2004	08:11:45	0.44583	234.69	106.86	24/07/2004	09:43:45	1.97917	345.50	118.15
24/07/2004	08:12:45	0.46250	267.12	108.48	24/07/2004	09:44:45	1.99583	349.01	118.18
24/07/2004	08:13:45	0.47917	300.95	110.40	24/07/2004	09:45:45	2.01250	352.49	118.21
24/07/2004	08:14:45	0.49583	339.39	114.00	24/07/2004	09:46:45	2.02917	356.19	118.24
24/07/2004	08:15:45	0.51250	375.52	116.67	24/07/2004	09:47:45	2.04583	360.06	118.27
24/07/2004	08:16:45	0.52917	408.53	117.77	24/07/2004	09:48:45	2.06250	364.13	118.29
24/07/2004	08:17:45	0.54583	413.04	118.09	24/07/2004	09:49:45	2.07917	368.47	118.32
24/07/2004	08:18:45	0.56250	413.45	118.30	24/07/2004	09:50:45	2.09583	372.34	118.35
24/07/2004	08:19:45	0.57917	414.45	118.44	24/07/2004	09:51:45	2.11250	375.91	118.37
24/07/2004	08:20:45	0.59583	416.11	118.54	24/07/2004	09:52:45	2.12917	379.48	118.39
24/07/2004	08:21:45	0.61250	419.90	118.64	24/07/2004	09:53:45	2.14583	383.09	118.41
Step at 9410'					24/07/2004	09:54:45	2.16250	386.87	118.43
24/07/2004	08:22:45	0.62917	425.00	118.69	24/07/2004	09:55:45	2.17917	390.37	118.45
24/07/2004	08:23:45	0.64583	426.51	118.71	24/07/2004	09:56:45	2.19583	393.61	118.47
24/07/2004	08:24:45	0.66250	428.07	118.74	24/07/2004	09:57:45	2.21250	396.85	118.49
24/07/2004	08:25:45	0.67917	429.29	118.76	24/07/2004	09:58:45	2.22917	399.78	118.51
24/07/2004	08:26:45	0.69583	430.07	118.76	24/07/2004	09:59:45	2.24583	402.56	118.52
24/07/2004	08:27:45	0.71250	430.66	118.76	24/07/2004	10:00:45	2.26250	404.99	118.53
24/07/2004	08:28:45	0.72917	431.18	118.76	24/07/2004	10:01:45	2.27917	407.14	118.54
24/07/2004	08:29:45	0.74583	431.70	118.76	24/07/2004	10:02:45	2.29583	408.75	118.55
24/07/2004	08:30:45	0.76250	432.28	118.76	24/07/2004	10:03:45	2.31250	410.42	118.56
24/07/2004	08:31:45	0.77917	432.73	118.75	24/07/2004	10:04:45	2.32917	411.98	118.56
24/07/2004	08:32:45	0.79583	433.22	118.75	24/07/2004	10:05:45	2.34583	413.71	118.57
24/07/2004	08:33:45	0.81250	433.74	118.74	24/07/2004	10:06:45	2.36250	418.12	118.58
24/07/2004	08:34:45	0.82917	434.50	118.74	Second Injection				
24/07/2004	08:35:45	0.84583	435.36	118.74	24/07/2004	10:07:45	2.37917	479.87	118.71
24/07/2004	08:36:45	0.86250	436.13	118.74	24/07/2004	10:08:45	2.39583	524.27	118.82
24/07/2004	08:37:45	0.87917	436.90	118.74	24/07/2004	10:09:45	2.41250	553.34	118.90
24/07/2004	08:38:45	0.89583	437.88	118.74	24/07/2004	10:10:45	2.42917	576.09	119.01
24/07/2004	08:39:45	0.91250	438.95	118.75	24/07/2004	10:11:45	2.44583	594.61	119.11

Date	Time	Elapsed Time (hrs)	Pressure (psia)	Temperature (°F)
24/07/2004	10:12:45	2.46250	606.87	119.19
24/07/2004	10:13:45	2.47917	616.60	119.28
24/07/2004	10:14:45	2.49583	624.99	119.46
24/07/2004	10:15:45	2.51250	627.78	119.52
24/07/2004	10:16:45	2.52917	623.80	119.56
24/07/2004	10:17:45	2.54583	614.77	119.60
24/07/2004	10:18:45	2.56250	602.35	119.64
24/07/2004	10:19:45	2.57917	590.18	119.82
24/07/2004	10:20:45	2.59583	578.48	119.79
24/07/2004	10:21:45	2.61250	565.66	119.62
24/07/2004	10:22:45	2.62917	550.75	119.34
24/07/2004	10:23:45	2.64583	520.63	118.79
24/07/2004	10:24:45	2.66250	479.57	117.50
24/07/2004	10:25:45	2.67917	448.46	116.64
24/07/2004	10:26:45	2.69583	422.83	116.24
24/07/2004	10:27:45	2.71250	401.48	116.12
24/07/2004	10:28:45	2.72917	383.49	116.13
24/07/2004	10:29:45	2.74583	367.72	116.19
24/07/2004	10:30:45	2.76250	353.73	116.27
24/07/2004	10:31:45	2.77917	341.51	116.41
24/07/2004	10:32:45	2.79583	334.96	116.87
24/07/2004	10:33:45	2.81250	330.7	117.28
24/07/2004	10:34:45	2.82917	328.61	117.54
24/07/2004	10:35:45	2.84583	327.62	117.69
24/07/2004	10:36:45	2.86250	327.39	117.78
24/07/2004	10:37:45	2.87917	327.92	117.85
24/07/2004	10:38:45	2.89583	329.11	117.9
24/07/2004	10:39:45	2.91250	329.98	117.94
24/07/2004	10:40:45	2.92917	330.87	117.97
24/07/2004	10:41:45	2.94583	331.92	117.99
24/07/2004	10:42:45	2.96250	332.85	118.02
24/07/2004	10:43:45	2.97917	333.9	118.04
24/07/2004	10:44:45	2.99583	335.6	118.06
24/07/2004	10:45:45	3.01250	337.63	118.09
24/07/2004	10:46:45	3.02917	339.9	118.12
24/07/2004	10:47:45	3.04583	342.4	118.15
24/07/2004	10:48:45	3.06250	345.35	118.18
24/07/2004	10:49:45	3.07917	348.37	118.22
24/07/2004	10:50:45	3.09583	351.6	118.26
24/07/2004	10:51:45	3.11250	354.69	118.3
24/07/2004	10:52:45	3.12917	357.55	118.33
24/07/2004	10:53:45	3.14583	360.76	118.36
24/07/2004	10:54:45	3.16250	364	118.4
24/07/2004	10:55:45	3.17917	367.35	118.43
24/07/2004	10:56:45	3.19583	370.42	118.46
24/07/2004	10:57:45	3.21250	373.85	118.49
24/07/2004	10:58:45	3.22917	377.17	118.52
24/07/2004	10:59:45	3.24583	380.73	118.55
24/07/2004	11:00:45	3.26250	383.89	118.57
24/07/2004	11:01:45	3.27917	386.88	118.59
24/07/2004	11:02:45	3.29583	389.82	118.61
24/07/2004	11:03:45	3.31250	392.47	118.63
24/07/2004	11:04:45	3.32917	395.02	118.64
24/07/2004	11:05:45	3.34583	397.44	118.65
24/07/2004	11:06:45	3.36250	400.1	118.66
Thirst Injection				
24/07/2004	11:07:45	3.37917	432.31	118.74
24/07/2004	11:08:45	3.39583	496.34	118.87
24/07/2004	11:09:45	3.41250	529.81	118.97
24/07/2004	11:10:45	3.42917	554.82	119.07
24/07/2004	11:11:45	3.44583	573.3	119.15
24/07/2004	11:12:45	3.46250	585.41	119.22
24/07/2004	11:13:45	3.47917	595.02	119.29
24/07/2004	11:14:45	3.49583	604.49	119.37
24/07/2004	11:15:45	3.51250	613.46	119.49
24/07/2004	11:16:45	3.52917	610.67	119.65
24/07/2004	11:17:45	3.54583	599.08	119.75
24/07/2004	11:18:45	3.56250	584.86	119.98
24/07/2004	11:19:45	3.57917	568.61	119.9
24/07/2004	11:20:45	3.59583	550.74	119.56
24/07/2004	11:21:45	3.61250	529.64	119.03
24/07/2004	11:22:45	3.62917	482.12	118.05
24/07/2004	11:23:45	3.64583	438.82	116.63
24/07/2004	11:24:45	3.66250	403.13	115.91
24/07/2004	11:25:45	3.67917	372.92	115.61
24/07/2004	11:26:45	3.69583	347.16	115.5
24/07/2004	11:27:45	3.71250	324.66	115.51
24/07/2004	11:28:45	3.72917	309.6	115.94
24/07/2004	11:29:45	3.74583	303	116.71
24/07/2004	11:30:45	3.76250	300.47	117.16
24/07/2004	11:31:45	3.77917	299.52	117.41
24/07/2004	11:32:45	3.79583	298.25	117.55
24/07/2004	11:33:45	3.81250	297.32	117.64
24/07/2004	11:34:45	3.82917	296.99	117.71
24/07/2004	11:35:45	3.84583	297.07	117.78
24/07/2004	11:36:45	3.86250	296.99	117.84
24/07/2004	11:37:45	3.87917	297.84	117.9
24/07/2004	11:38:45	3.89583	298.95	117.97
24/07/2004	11:39:45	3.91250	300.93	118.03
24/07/2004	11:40:45	3.92917	303.3	118.09
24/07/2004	11:41:45	3.94583	308.09	118.16
24/07/2004	11:42:45	3.96250	312.93	118.21
24/07/2004	11:43:45	3.97917	317.91	118.26
24/07/2004	11:44:45	3.99583	322.79	118.3
24/07/2004	11:45:45	4.01250	327.63	118.35
24/07/2004	11:46:45	4.02917	332.27	118.39
24/07/2004	11:47:45	4.04583	336.46	118.42

Date	Time	Elapsed Time (hrs)	Pressure (psia)	Temperature (°F)
24/07/2004	11:48:45	4.0625	341.21	118.46
24/07/2004	11:49:45	4.07917	345.67	118.49
24/07/2004	11:50:45	4.09583	349.93	118.52
24/07/2004	11:51:45	4.1125	354.16	118.54
24/07/2004	11:52:45	4.12917	357.42	118.56
24/07/2004	11:53:45	4.14583	361.11	118.58
24/07/2004	11:54:45	4.1625	364.46	118.59
24/07/2004	11:55:45	4.17917	368.09	118.61
24/07/2004	11:56:45	4.19583	371.48	118.62
24/07/2004	11:57:45	4.2125	374.92	118.64
24/07/2004	11:58:45	4.22917	378.24	118.65
24/07/2004	11:59:45	4.24583	381.46	118.66
24/07/2004	12:00:45	4.2625	384.36	118.67
24/07/2004	12:01:45	4.27917	386.87	118.68
24/07/2004	12:02:45	4.29583	389.61	118.69
24/07/2004	12:03:45	4.3125	392.01	118.7
24/07/2004	12:04:45	4.32917	394.45	118.71
24/07/2004	12:05:45	4.34583	397.08	118.71
Fourt Injection				
24/07/2004	12:06:45	4.3625	399.62	118.72
24/07/2004	12:07:45	4.37917	433.26	118.77
24/07/2004	12:08:45	4.39583	501.97	118.91
24/07/2004	12:09:45	4.4125	536.91	119.02
24/07/2004	12:10:45	4.42917	562.5	119.1
24/07/2004	12:11:45	4.44583	580.89	119.18
24/07/2004	12:12:45	4.4625	593.9	119.25
24/07/2004	12:13:45	4.47917	604.27	119.31
24/07/2004	12:14:45	4.49583	614.15	119.37
24/07/2004	12:15:45	4.5125	618.44	119.41
24/07/2004	12:16:45	4.52917	612.75	119.46
24/07/2004	12:17:45	4.54583	600.46	119.51
24/07/2004	12:18:45	4.5625	586.86	119.67
24/07/2004	12:19:45	4.57917	571.69	119.56
24/07/2004	12:20:45	4.59583	555.04	119.27
24/07/2004	12:21:45	4.6125	535.36	118.86
24/07/2004	12:22:45	4.62917	486.62	117.83
24/07/2004	12:23:45	4.64583	443.49	116.5
24/07/2004	12:24:45	4.6625	408.33	115.99
24/07/2004	12:25:45	4.67917	378.78	115.79
24/07/2004	12:26:45	4.69583	354.25	115.76
24/07/2004	12:27:45	4.7125	333.37	115.82
24/07/2004	12:28:45	4.72917	316.44	116.04
24/07/2004	12:29:45	4.74583	308.66	116.7
Cut Injection				
24/07/2004	12:30:45	4.7625	306.79	117.17
24/07/2004	12:31:45	4.77917	306.01	117.44
24/07/2004	12:32:45	4.79583	305.53	117.58
24/07/2004	12:33:45	4.8125	309.79	117.7
24/07/2004	12:34:45	4.82917	319.35	117.85
24/07/2004	12:35:45	4.84583	331.26	118.02
24/07/2004	12:36:45	4.8625	343.84	118.19
24/07/2004	12:37:45	4.87917	356.02	118.34
24/07/2004	12:38:45	4.89583	367.49	118.46
24/07/2004	12:39:45	4.9125	378.45	118.56
24/07/2004	12:40:45	4.92917	389.29	118.65
24/07/2004	12:41:45	4.94583	399.68	118.75
24/07/2004	12:42:45	4.9625	409.47	118.85
24/07/2004	12:43:45	4.97917	418.6	118.95
24/07/2004	12:44:45	4.99583	427.27	119.05
24/07/2004	12:45:45	5.0125	434.79	119.15
24/07/2004	12:46:45	5.02917	441.5	119.24
24/07/2004	12:47:45	5.04583	447.87	119.33
24/07/2004	12:48:45	5.0625	453.97	119.41
24/07/2004	12:49:45	5.07917	459.97	119.49
24/07/2004	12:50:45	5.09583	465.83	119.56
24/07/2004	12:51:45	5.1125	471.47	119.62
24/07/2004	12:52:45	5.12917	477.02	119.68
24/07/2004	12:53:45	5.14583	482.47	119.73
24/07/2004	12:54:45	5.1625	487.85	119.77
24/07/2004	12:55:45	5.17917	493.31	119.82
24/07/2004	12:56:45	5.19583	498.48	119.86
24/07/2004	12:57:45	5.2125	503.64	119.89
24/07/2004	12:58:45	5.22917	508.84	119.92
24/07/2004	12:59:45	5.24583	513.78	119.95
24/07/2004	13:00:45	5.2625	518.57	119.98
24/07/2004	13:01:45	5.27917	523.27	120
24/07/2004	13:02:45	5.29583	527.87	120.02
24/07/2004	13:03:45	5.3125	532.32	120.04
24/07/2004	13:04:45	5.32917	536.57	120.05
24/07/2004	13:05:45	5.34583	540.75	120.06
24/07/2004	13:06:45	5.3625	544.84	120.07
24/07/2004	13:07:45	5.37917	548.79	120.09
24/07/2004	13:08:45	5.39583	552.79	120.09
24/07/2004	13:09:45	5.4125	556.37	120.1
24/07/2004	13:10:45	5.42917	559.46	120.11
24/07/2004	13:11:45	5.44583	562.53	120.11
24/07/2004	13:12:45	5.4625	565.52	120.11
24/07/2004	13:13:45	5.47917	568.19	120.11
24/07/2004	13:14:45	5.49583	570.78	120.11
24/07/2004	13:15:45	5.5125	573.15	120.11
24/07/2004	13:16:45	5.52917	575.37	120.11
24/07/2004	13:17:45	5.54583	577.57	120.11
24/07/2004	13:18:45	5.5625	579.85	120.11
24/07/2004	13:19:45	5.57917	581.79	120.11
24/07/2004	13:20:45	5.59583	583.34	120.12
24/07/2004	13:21:45	5.6125	584.62	120.12
24/07/2004	13:22:45	5.62917	585.68	120.12

Date	Time	Elapsed Time (hrs)	Pressure (psia)	Temperature (°F)	Date	Time	Elapsed Time (hrs)	Pressure (psia)	Temperature (°F)
24/07/2004	13:23:45	5.64583	586.58	120.12	24/07/2004	14:59:45	7.24583	613.42	120.24
24/07/2004	13:24:45	5.6625	587.46	120.12	24/07/2004	15:00:45	7.2625	613.54	120.25
24/07/2004	13:25:45	5.67917	588.29	120.12	24/07/2004	15:01:45	7.27917	613.62	120.25
24/07/2004	13:26:45	5.69583	589.05	120.12	24/07/2004	15:02:45	7.29583	613.69	120.25
24/07/2004	13:27:45	5.7125	589.77	120.12	24/07/2004	15:03:45	7.3125	613.78	120.25
24/07/2004	13:28:45	5.72917	590.44	120.12	24/07/2004	15:04:45	7.32917	613.88	120.25
24/07/2004	13:29:45	5.74583	591.12	120.12	24/07/2004	15:05:45	7.34583	613.97	120.25
24/07/2004	13:30:45	5.7625	591.74	120.12	24/07/2004	15:06:45	7.3625	614.03	120.25
24/07/2004	13:31:45	5.77917	592.31	120.12	24/07/2004	15:07:45	7.37917	614.1	120.26
24/07/2004	13:32:45	5.79583	592.83	120.12	24/07/2004	15:08:45	7.39583	614.22	120.25
24/07/2004	13:33:45	5.8125	593.41	120.12	24/07/2004	15:09:45	7.4125	614.27	120.26
24/07/2004	13:34:45	5.82917	593.95	120.12	24/07/2004	15:10:45	7.42917	614.41	120.26
24/07/2004	13:35:45	5.84583	594.45	120.13	24/07/2004	15:11:45	7.44583	614.49	120.26
24/07/2004	13:36:45	5.8625	595.01	120.13	24/07/2004	15:12:45	7.4625	614.55	120.26
24/07/2004	13:37:45	5.87917	595.59	120.13	24/07/2004	15:13:45	7.47917	614.62	120.26
24/07/2004	13:38:45	5.89583	596.17	120.13	24/07/2004	15:14:45	7.49583	614.72	120.26
24/07/2004	13:39:45	5.9125	596.74	120.13	24/07/2004	15:15:45	7.5125	614.82	120.26
24/07/2004	13:40:45	5.92917	597.28	120.13	24/07/2004	15:16:45	7.52917	614.88	120.26
24/07/2004	13:41:45	5.94583	597.84	120.13	24/07/2004	15:17:45	7.54583	614.99	120.27
24/07/2004	13:42:45	5.9625	598.35	120.14	24/07/2004	15:18:45	7.5625	615.05	120.27
24/07/2004	13:43:45	5.97917	598.91	120.14	24/07/2004	15:19:45	7.57917	615.16	120.26
24/07/2004	13:44:45	5.99583	599.43	120.14	24/07/2004	15:20:45	7.59583	615.22	120.27
24/07/2004	13:45:45	6.0125	599.99	120.14	24/07/2004	15:21:45	7.6125	615.34	120.27
24/07/2004	13:46:45	6.02917	600.46	120.14	24/07/2004	15:22:45	7.62917	615.43	120.27
24/07/2004	13:47:45	6.04583	600.93	120.14	24/07/2004	15:23:45	7.64583	615.54	120.27
24/07/2004	13:48:45	6.0625	601.4	120.15	24/07/2004	15:24:45	7.6625	615.63	120.28
24/07/2004	13:49:45	6.07917	601.88	120.15	24/07/2004	15:25:45	7.67917	615.77	120.28
24/07/2004	13:50:45	6.09583	602.3	120.15	24/07/2004	15:26:45	7.69583	615.81	120.27
24/07/2004	13:51:45	6.1125	602.75	120.15	24/07/2004	15:27:45	7.7125	615.99	120.28
24/07/2004	13:52:45	6.12917	603.15	120.16	24/07/2004	15:28:45	7.72917	616.05	120.28
24/07/2004	13:53:45	6.14583	603.56	120.16	24/07/2004	15:29:45	7.74583	616.2	120.28
24/07/2004	13:54:45	6.1625	603.94	120.16	24/07/2004	15:30:45	7.7625	616.26	120.28
24/07/2004	13:55:45	6.17917	604.27	120.16	24/07/2004	15:31:45	7.77917	616.36	120.28
24/07/2004	13:56:45	6.19583	604.64	120.16	24/07/2004	15:32:45	7.79583	616.46	120.28
24/07/2004	13:57:45	6.2125	604.88	120.17	24/07/2004	15:33:45	7.8125	616.6	120.28
24/07/2004	13:58:45	6.22917	605.18	120.17	24/07/2004	15:34:45	7.82917	616.68	120.28
24/07/2004	13:59:45	6.24583	605.49	120.17	24/07/2004	15:35:45	7.84583	616.79	120.28
24/07/2004	14:00:45	6.2625	605.62	120.17	24/07/2004	15:36:45	7.8625	616.91	120.29
24/07/2004	14:01:45	6.27917	605.93	120.17	24/07/2004	15:37:45	7.87917	617.04	120.29
24/07/2004	14:02:45	6.29583	606.22	120.17	24/07/2004	15:38:45	7.89583	616.99	120.29
24/07/2004	14:03:45	6.3125	606.52	120.18	24/07/2004	15:39:45	7.9125	616.64	120.28
24/07/2004	14:04:45	6.32917	606.83	120.18	Step at 9300'				
24/07/2004	14:05:45	6.34583	607.17	120.18	24/07/2004	15:40:45	7.92917	587.82	119.66
24/07/2004	14:06:45	6.3625	607.42	120.18	24/07/2004	15:41:45	7.94583	587.65	119.48
24/07/2004	14:07:45	6.37917	607.63	120.18	24/07/2004	15:42:45	7.9625	587.82	119.44
24/07/2004	14:08:45	6.39583	607.86	120.18	24/07/2004	15:43:45	7.97917	571.24	119.42
24/07/2004	14:09:45	6.4125	608.1	120.19	Step at 9200'				
24/07/2004	14:10:45	6.42917	608.31	120.19	24/07/2004	15:44:45	7.99583	580.53	119.49
24/07/2004	14:11:45	6.44583	608.44	120.19	24/07/2004	15:45:45	8.0125	580.4	119.49
24/07/2004	14:12:45	6.4625	608.63	120.19	24/07/2004	15:46:45	8.02917	580.46	119.49
24/07/2004	14:13:45	6.47917	608.84	120.19	Step at 9100'				
24/07/2004	14:14:45	6.49583	609.09	120.19	24/07/2004	15:47:45	8.04583	534.91	119.52
24/07/2004	14:15:45	6.5125	609.19	120.19	24/07/2004	15:48:45	8.0625	534.69	119.53
24/07/2004	14:16:45	6.52917	609.36	120.19	24/07/2004	15:49:45	8.07917	534.82	119.53
24/07/2004	14:17:45	6.54583	609.49	120.2	Step at 9000'				
24/07/2004	14:18:45	6.5625	609.63	120.2	24/07/2004	15:50:45	8.09583	513.53	119.53
24/07/2004	14:19:45	6.57917	609.74	120.2	24/07/2004	15:51:45	8.1125	508.19	119.51
24/07/2004	14:20:45	6.59583	609.9	120.2	24/07/2004	15:52:45	8.12917	507.95	119.47
24/07/2004	14:21:45	6.6125	610	120.2	24/07/2004	15:53:45	8.14583	508.01	119.46
24/07/2004	14:22:45	6.62917	610.15	120.2	Step at 8900'				
24/07/2004	14:23:45	6.64583	610.28	120.2	24/07/2004	15:54:45	8.1625	481.24	119.35
24/07/2004	14:24:45	6.6625	610.41	120.2	24/07/2004	15:55:45	8.17917	481.41	119.23
24/07/2004	14:25:45	6.67917	610.52	120.2	24/07/2004	15:56:45	8.19583	481.13	119.17
24/07/2004	14:26:45	6.69583	610.66	120.21	Step at 8800'				
24/07/2004	14:27:45	6.7125	610.73	120.21	24/07/2004	15:57:45	8.2125	454.85	119.11
24/07/2004	14:28:45	6.72917	610.84	120.21	24/07/2004	15:58:45	8.22917	454.26	118.9
24/07/2004	14:29:45	6.74583	610.94	120.21	24/07/2004	15:59:45	8.24583	454.33	118.82
24/07/2004	14:30:45	6.7625	611.04	120.21	24/07/2004	16:00:45	8.2625	454.47	118.78
24/07/2004	14:31:45	6.77917	611.14	120.21	Step at 8700'				
24/07/2004	14:32:45	6.79583	611.24	120.21	24/07/2004	16:01:45	8.27917	427.82	118.57
24/07/2004	14:33:45	6.8125	611.29	120.21	24/07/2004	16:02:45	8.29583	427.75	118.42
24/07/2004	14:34:45	6.82917	611.39	120.22	24/07/2004	16:03:45	8.3125	427.92	118.36
24/07/2004	14:35:45	6.84583	611.48	120.22	Step at 8600'				
24/07/2004	14:36:45	6.8625	611.53	120.22	24/07/2004	16:04:45	8.32917	401.06	118.17
24/07/2004	14:37:45	6.87917	611.65	120.22	24/07/2004	16:05:45	8.34583	400.89	117.93
24/07/2004	14:38:45	6.89583	611.76	120.22	24/07/2004	16:06:45	8.3625	400.94	117.83
24/07/2004	14:39:45	6.9125	611.8	120.22	Step at 8500'				
24/07/2004	14:40:45	6.92917	611.91	120.22	24/07/2004	16:07:45	8.37917	376.91	117.75
24/07/2004	14:41:45	6.94583	611.96	120.22	24/07/2004	16:08:45	8.39583	373.42	117.36
24/07/2004	14:42:45	6.9625	612.07	120.22	24/07/2004	16:09:45	8.4125	373.51	117.18
24/07/2004	14:43:45	6.97917	612.12	120.22	24/07/2004	16:10:45	8.42917	373.62	117.1
24/07/2004	14:44:45	6.99583	612.18	120.23	Step at 8000'				
24/07/2004	14:45:45	7.0125	612.3	120.23	24/07/2004	16:11:45	8.44583	348.67	115.94
24/07/2004	14:46:45	7.02917	612.35	120.23	24/07/2004	16:12:45	8.4625	348.74	115.06
24/07/2004	14:47:45	7.04583	612.43	120.23	24/07/2004	16:13:45	8.47917	348.91	114.72
24/07/2004	14:48:45	7.0625	612.5	120.23	24/07/2004	16:14:45	8.49583	349.07	114.42
24/07/2004	14:49:45	7.07917	612.59	120.23	Step at 7500'				
24/07/2004	14:50:45	7.09583	612.68	120.23	24/07/2004	16:15:45	8.5125	346.22	113.43
24/07/2004	14:51:45	7.1125	612.75	120.23	24/07/2004	16:16:45	8.52917	346.39	112.93
24/07/2004	14:52:45	7.12917	612.84	120.24	24/07/2004	16:17:45	8.54583	346.55	112.63
24/07/2004	14:53:45	7.14583	612.91	120.24	24/07/2004	16:18:45	8.5625	346.71	112.38
24/07/2004	14:54:45	7.1625	613.02	120.24	Step at 7000'				
24/07/2004	14:55:45	7.17917	613.07	120.24	24/07/2004	16:19:45	8.57917	344.14	111.57
24/07/2004	14:56:45	7.19583	613.18	120.24	24/07/2004	16:20:45	8.59583	344.16	110.85
24/07/2004	14:57:45	7.2125	613.27	120.24	24/07/2004	16:21:45	8.6125	344.26	110.51
24/07/2004	14:58:45	7.22917	613.32	120.24	24/07/2004	16:22:45	8.62917	344.39	110.22

+4.84 psi
 1 hr. Minum
 (SCHEMATIC SV)

Date	Time	Elapsed Time (hrs)	Pressure (psia)	Temperature (°F)
Step at 6500'				
24/07/2004	16:23:45	8.64583	341.76	109.2
24/07/2004	16:24:45	8.6625	341.99	108.48
24/07/2004	16:25:45	8.67917	342.12	108.13
24/07/2004	16:26:45	8.69583	342.23	107.84
Step at 6000'				
24/07/2004	16:27:45	8.7125	339.62	106.73
24/07/2004	16:28:45	8.72917	339.76	106.17
24/07/2004	16:29:45	8.74583	339.9	105.85
24/07/2004	16:30:45	8.7625	340.05	105.57
Step at 5500'				
24/07/2004	16:31:45	8.77917	337.45	104.23
24/07/2004	16:32:45	8.79583	337.63	103.75
24/07/2004	16:33:45	8.8125	337.72	103.42
24/07/2004	16:34:45	8.82917	337.13	103.03
Step at 5000'				
24/07/2004	16:35:45	8.84583	335.34	101.43
24/07/2004	16:36:45	8.8625	335.48	100.94
24/07/2004	16:37:45	8.87917	335.64	100.52
24/07/2004	16:38:45	8.89583	334.94	100.06
Step at 4000'				
24/07/2004	16:39:45	8.9125	330.61	98
24/07/2004	16:40:45	8.92917	330.19	96.65
24/07/2004	16:41:45	8.94583	330.3	96.24
24/07/2004	16:42:45	8.9625	330.4	95.81
Step at 3000'				
24/07/2004	16:43:45	8.97917	327.89	94.43
24/07/2004	16:44:45	8.99583	325.19	91.45
24/07/2004	16:45:45	9.0125	325.27	90.76
24/07/2004	16:46:45	9.02917	325.42	90.24
24/07/2004	16:47:45	9.04583	325	89.67
Step at 2000'				
24/07/2004	16:48:45	9.0625	320.76	86.57
24/07/2004	16:49:45	9.07917	320.23	84.44
24/07/2004	16:50:45	9.09583	320.37	83.74
24/07/2004	16:51:45	9.1125	320.45	83.18
24/07/2004	16:52:45	9.12917	317.41	81.44
Step at 1000'				
24/07/2004	16:53:45	9.14583	314.31	78.4
24/07/2004	16:54:45	9.1625	314.46	77.68
24/07/2004	16:55:45	9.17917	314.58	77.17
24/07/2004	16:56:45	9.19583	314.14	76.66
24/07/2004	16:57:45	9.2125	308.91	73.68
24/07/2004	16:58:45	9.22917	307.36	71.28
24/07/2004	16:59:45	9.24583	307.13	70.45
24/07/2004	17:00:45	9.2625	307.23	70.26
24/07/2004	17:01:45	9.27917	307.35	70.07
24/07/2004	17:02:45	9.29583	307.52	69.89
24/07/2004	17:03:45	9.3125	307.62	69.72
24/07/2004	17:04:45	9.32917	307.75	69.55
Desactivate				

Date	Time	Elapsed Time (hrs)	Pressure (psia)	Temperature (°F)
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