REPORT NO.
1070338

PAGE NO. 1

TEST DATE:
09-NOV-1998

S T A R

Schlumberger Testing Data Report

Pressure Data Report

Schlumberger

COMPANY: LOUIS DREYFUS

WELL: TORRO 21 ST. COM 1Y

TEST IDENTIFICATION

Test Type	OPEN HOLE DST
Test No.	TWO
Formation	DEVONIAN
Test Interval (ft)	13820 to 13920
Depth Reference	KB

WELL LOCATION

Field	WILDCAT
County	LEA
State	NEW MEXICO
Sec/Twn/Rng	S21T19sR~~32e~~ 35
Elevation (ft)	3778

HOLE CONDITIONS

Total Depth (MD/TVD) (ft)	13920/13920
Hole Size (in)	6.125
Casing/Liner I.D. (in)	7.0 / 26#
Perf'd Interval/Net Pay (ft)	/ 5
Shot Density/Diameter (in)	

MUD PROPERTIES

Mud Type	GEL-PAC
Mud Weight (lb/gal)	8.4
Mud Resistivity (ohm.m)	
Filtrate Resistivity (ohm.m)	1.588 @ 60F
Filtrate Chlorides (ppm)	4200

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi)	6455.75
Gas Cushion Type	
Surface Pressure (psi)	
Liquid Cushion Type	Fresh Water
Cushion Length (ft)	1000

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D. (in)	12601 / 2.602
Collar Length (ft)/I.D. (in)	1170 / 2.250
Packer Depths (ft)	13815, 13820
Bottomhole Choke Size (in)	.75
Gauge Depth (ft)/Type	13799/SLSR-704

NET PIPE RECOVERY

Volume	Fluid Type	Properties
	O&G CUT H2O	
2310 ft	CUSHION	Rw2.184@60F 3000ppm
1163 ft	O&G CUT MUD	API 50.4@60FRw1.275@

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
1.2 cuft	Gas	
1600 cc	Oil	API 50.1@60F
0 cc	Water	
0 cc	Mud	
Pressure:900	GOR:119	GLR:119

INTERPRETATION RESULTS

Model of Behavior	
Fluid Type Used for Analysis	
Reservoir Pressure (psi)	
Transmissibility (md.ft/cp)	
Effective Permeability (md)	
Skin Factor/Damage Ratio	
Storativity Ratio, Omega	
Interporos.Flow Coef..Lambda	
Distance to an Anomaly (ft)	
Radius of Investigation (ft)	
Potentiometric Surface (ft)	

ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API)	
Basic Solids (%)	
Gas Gravity	
GOR (scf/STB)	
Water Cut (%)	
Viscosity (cp)	
Total Compressibility (1/psi)	
Porosity (%)	8
Reservoir Temperature (F)	181
Form.Vol.Factor (bbl/STB)	

PRODUCTION RATE DURING TEST: Data Report

COMMENTS:

THIS WAS A MECHANICALLY SUCCESSFUL TEST. THE RECOVERY WAS REVERSED INTO A TEST TANK AND THE VOLUMES WERE AS FOLLOWS, 11.6 BBLS. OF OIL & 9.3 BBLS. OF H2O CUSHION & MUD. THE TANK FLUIDS RELATE TO A DRILL PIPE RECOVERY OF 3473'. THE "SIGHTING"/PULL TO FLUID RECOVERY WAS 4332'.

WELL TEST INTERPRETATION REPORT #:1070338		PAGE: 2.
CLIENT : LOUIS DREYFUS		10-NOV-98
REGION :CSD DISTRICT:HOBBS BASE :MIDLAND TX. ENGINEER:KIRK BEASLEY	SEQUENCE OF EVENTS	FIELD:WILDCAT ZONE :DEVONIAN WELL :TORRO 21 ST. C LOCATION:S21T19sR32e

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
09-NOV		OPEN TO 1/8" BUBBLE HOSE			
	07:28	HYDROSTATIC MUD	-6	6456	
	07:32	SET PACKER	-2		
	07:34	START FLOW	0	2920	
	07:35	B.O.B. 10" = 5.75 oz	1		
	07:36		2		2.6#
	07:37		3		3.6#
	07:38		4		4.0#
	07:39		5		4.2#
	07:44		10		4.8#
	08:02	CYCLED TOOL	28		
	08:11	END FLOW & START SHUT-IN	37	1486	
	08:22	GAS TO SURFACE	48		
	09:11	END SHUT-IN	97	1510	
	09:12	START FLOW	98	1486	3.4#
	09:13		99		4.0#
	09:14		100		4.6#
	09:16		102		5.2#
	09:17		103		5.6#
	09:27		113		10 #
	09:42		128		16 #
	09:46	OPEN TO 1/4" CHOKE	132		15 #
	10:12		158		10 #
	10:27		173		6.0#
	10:42	END FLOW & START SHUT-IN	188	1513	3.5#
	14:42	END SHUT-IN	428	1712	
	14:51	HYDROSTATIC MUD	437	6440	
	14:55	PULLED LOOSE	441		

LOUIS DREYFUS
TORRO 21 ST. COM 1Y
TOOL STRING SCHEMATIC

TOOL DESCRIPTION	OD	ID	LENGTH	DEPTH
SURFACE FLOWHEAD				0
DRILL PIPE	3.50	2.602	12601	12601
DRILL COLLARS	4.75	2.250	983.1	13584.1
BREAKOFF REVERSING VALVE	4.75	2.44	1.17	13585.27
DRILL COLLARS	4.75	2.250	186.5	13771.77
CROSS OVER SUB	4.75	2.50	0.86	13772.63
CROSS OVER SUB	4.69	2.13	0.67	13773.3
MPF MPEL-A	4.13	1.75	0.98	13763.28
MPE DH BRAID	4.13	1.000	3.54	13786.82
CROSS OVER SUB	4.69	2.750	1.00	13787.82
NODE PROGRESS MARKER	4.20	1.50	5.91	13793.73
NODE PROGRESS MARKER	4.13	1.41	5.91	13799.64
60 HYDRAULIC JAR	4.75	1.875	9.84	13806.48
SAFETY JOINT	4.75	2.313	2.46	13808.94
SUB TAIL PACKER	5.25	1.910	5.91	13814.85
SUB TAIL PACKER	5.13	2.38	5.35	13820.2
PERFORATED NIPPLE	4.75	2.250	5.23	13825.43
CROSS OVER SUB	4.75	2.440	0.86	13826.29
DRILL COLLARS	4.75	2.250	89.48	13915.77
CROSS OVER SUB	4.75	2.500	0.77	13916.54
PERFORATED NIPPLE	4.75	2.441	3.00	13919.54
BULLNOSE	4.75	4.00	0.66	13920

Report Number: [illegible]
Test Number: [illegible]
Test Date: [illegible]

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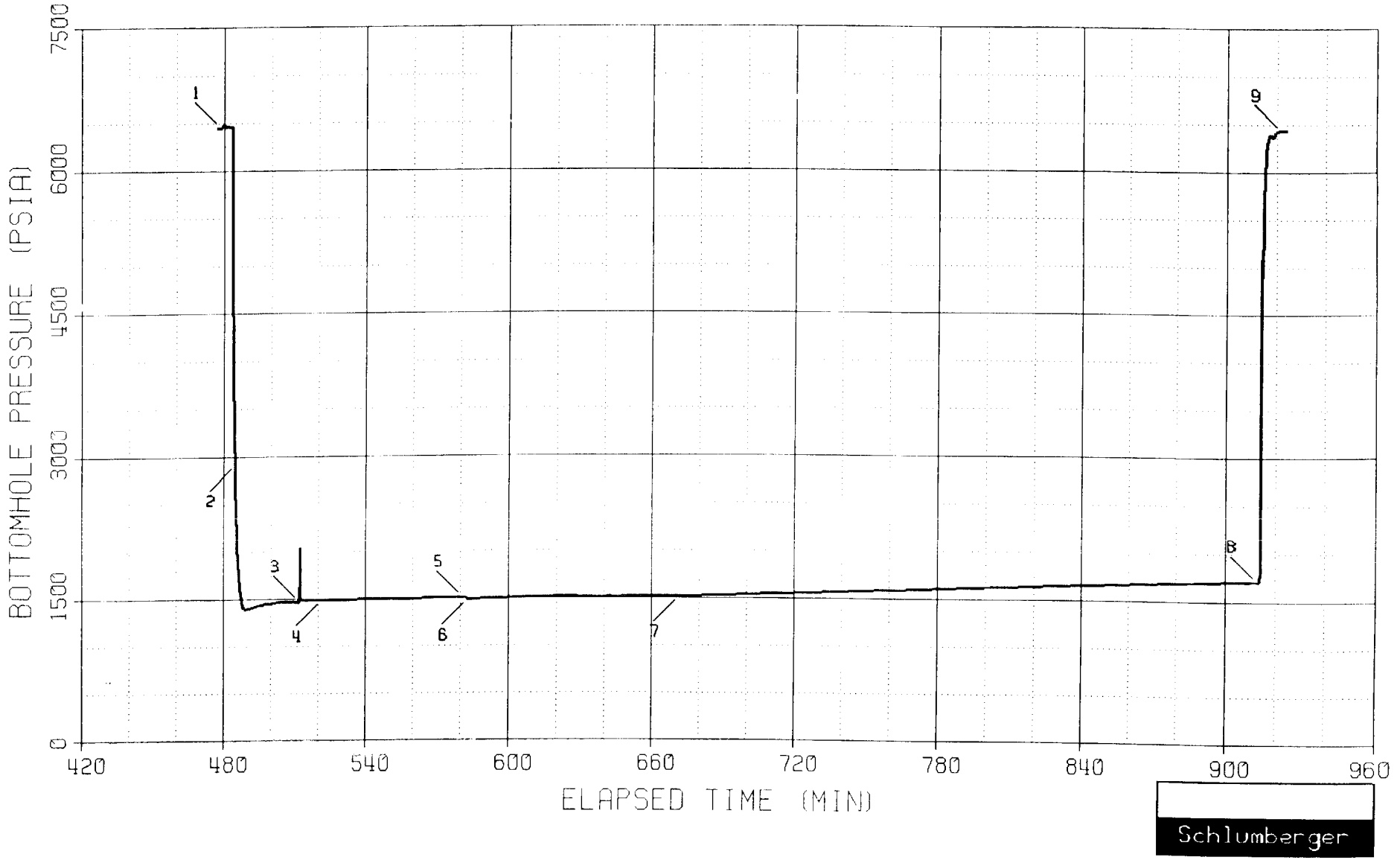
BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 1070338
INSTRUMENT NO. SLSR-704
DEPTH : 13799 FT
CAPACITY : 10000 PSI
PORT OPENING : INSIDE

COMPANY : LOUIS DREYFUS NATURAL GAS
WELL : TORRO 21 ST. COM 1Y, DST #2

Electronic Pressure Data

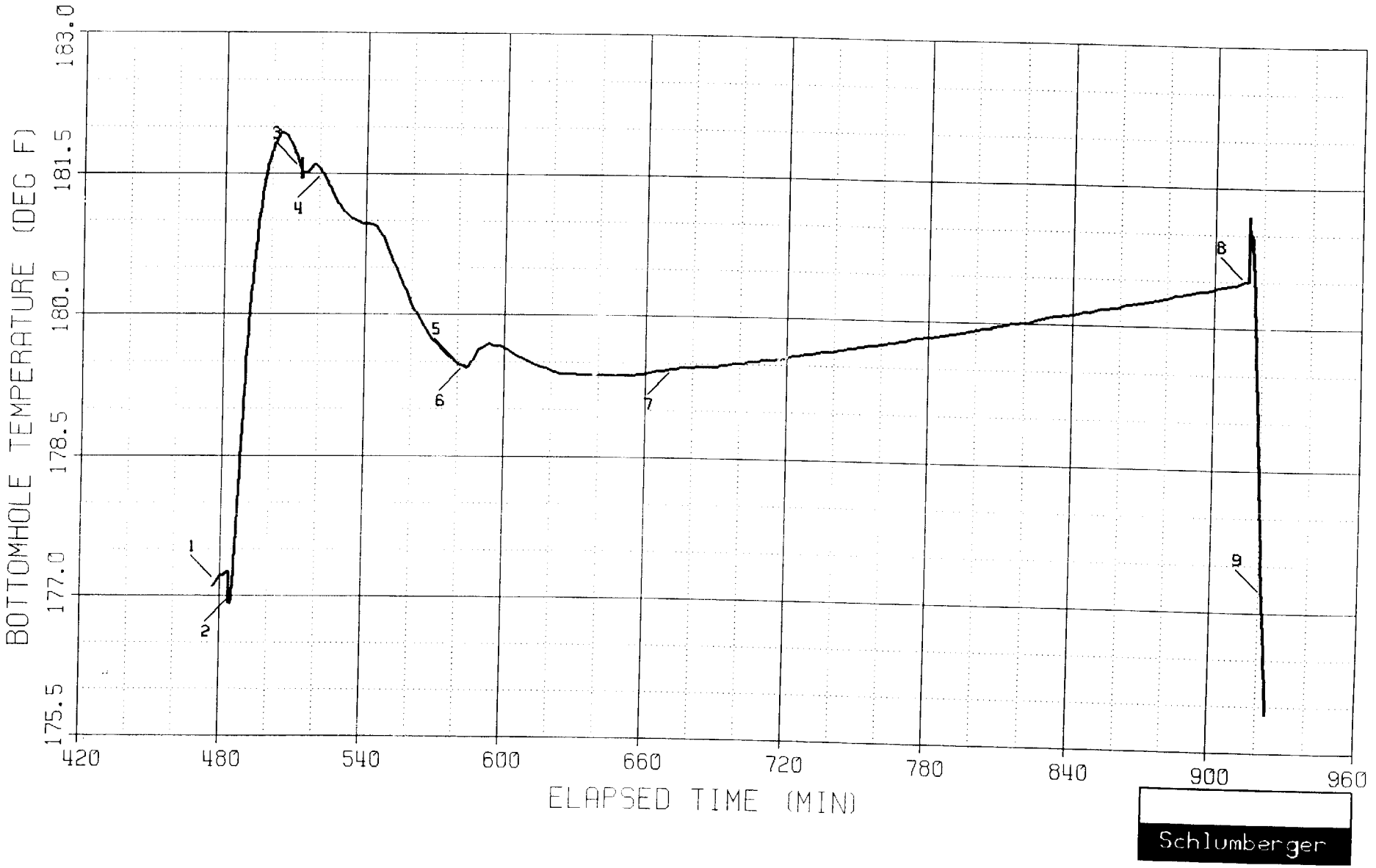


BOTTOMHOLE TEMPERATURE LOG

FIELD REPORT NO. 1070338
INSTRUMENT NO. SLSR-704
DEPTH : 13799 FT

COMPANY : LOUIS DREYFUS NATURAL GAS
WELL : TORRO 21 ST. COM 1Y, DST #2

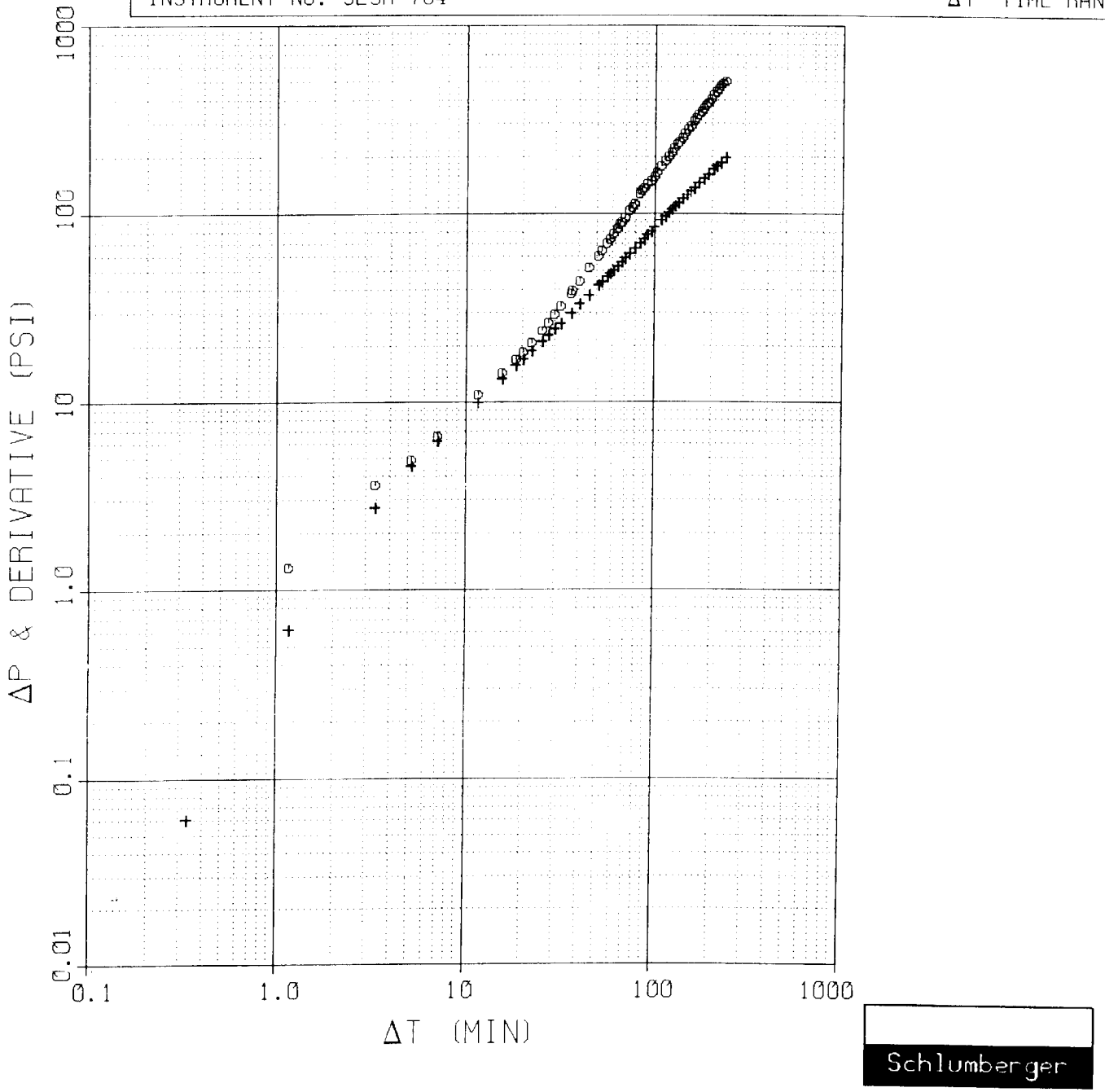
Electronic Temperature Data



LOG LOG PLOT

COMPANY : LOUIS DREYFUS NATURAL GAS
WELL : TORRO 21 ST. COM 1Y, DST #2
FIELD REPORT NO. 1070338
INSTRUMENT NO. SLSR-704

SHUTIN #2 : PRODUCING TIME (Tp): 125.2 MIN
FINAL FLOW PRESSURE (Pwf): 1513 PSIA
PLOT ELAPSED TIME RANGE: 672.0 TO 912.8 MIN
ΔT TIME RANGE: 0.3 TO 241.2 MIN



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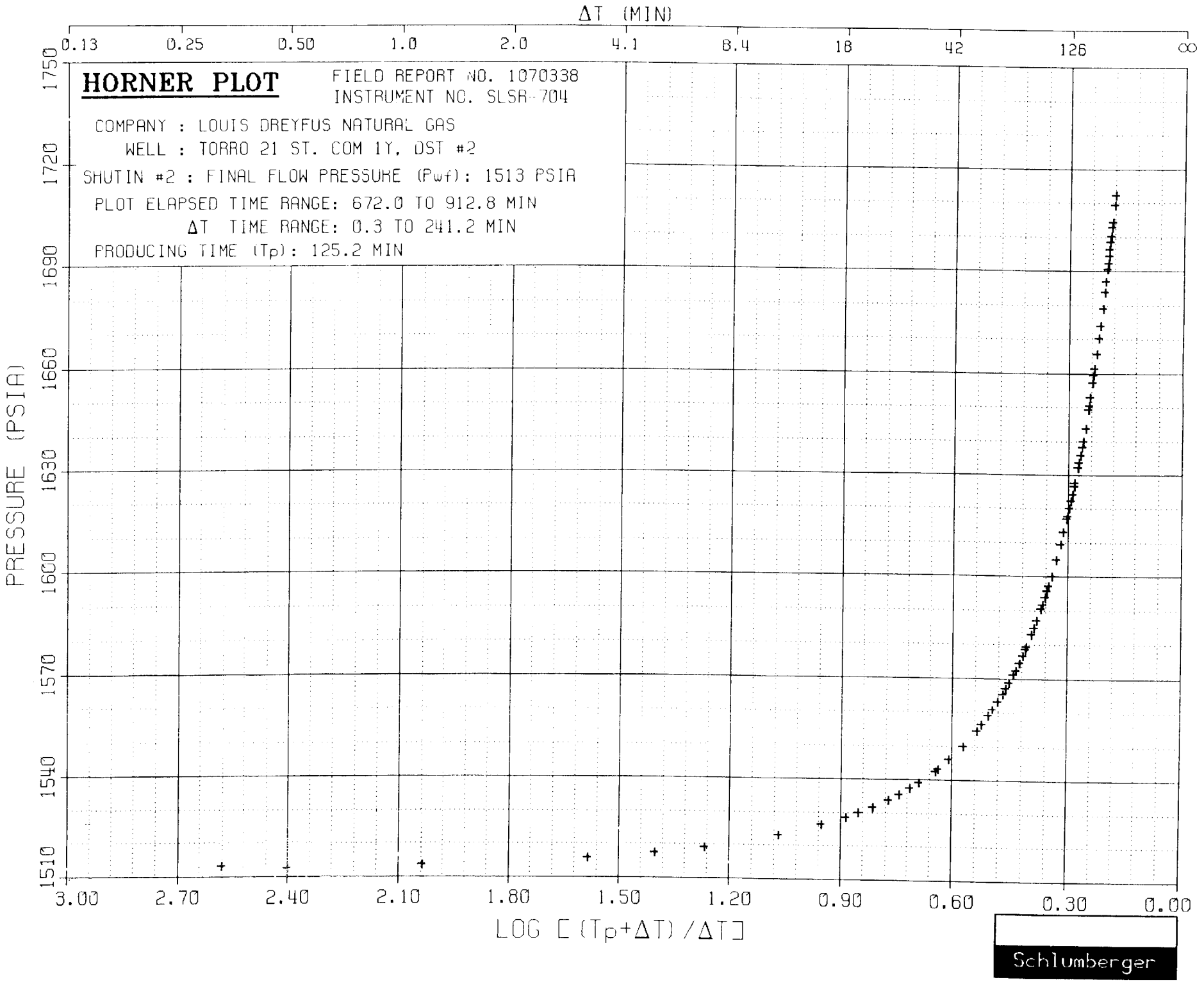
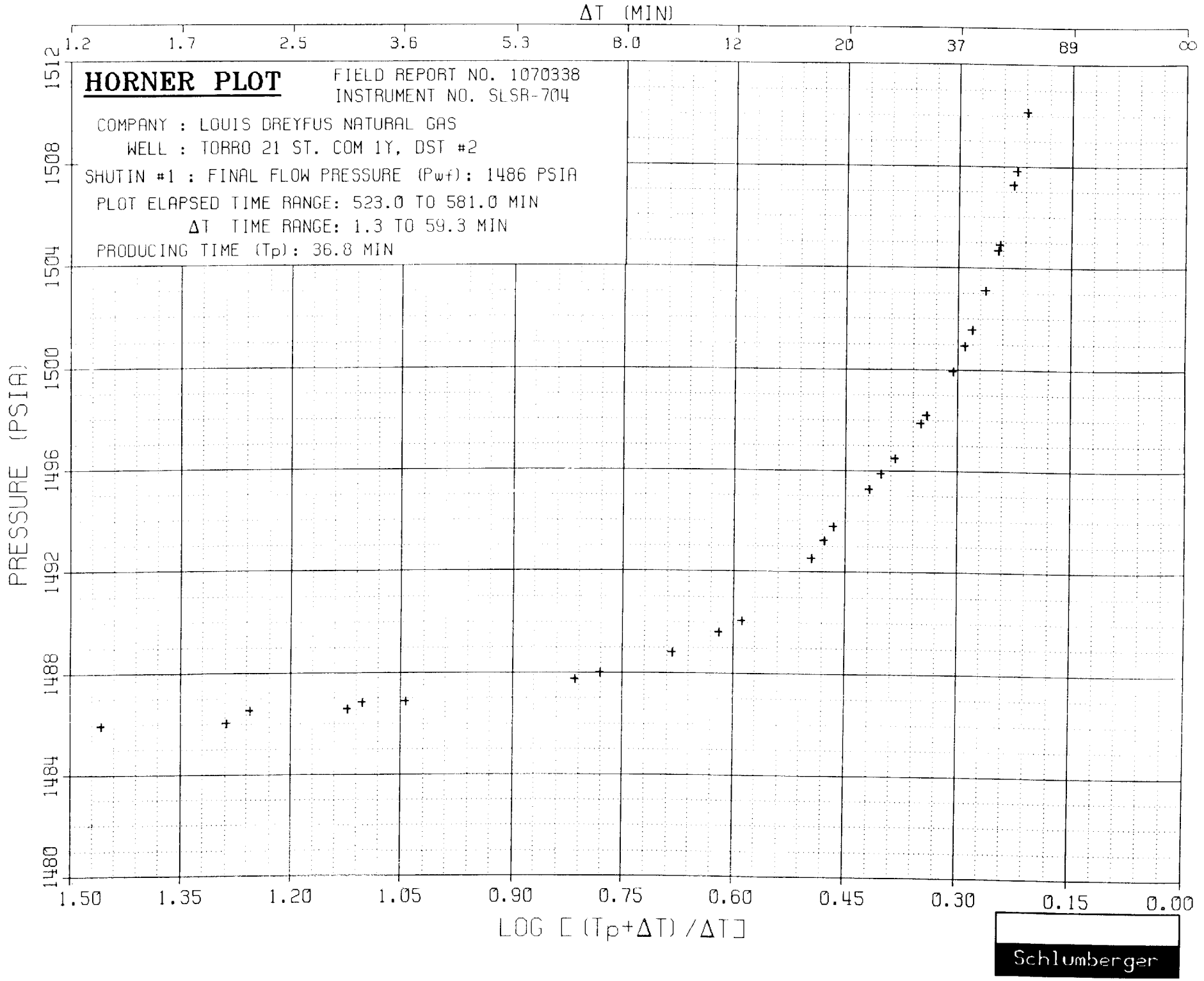

ΔT (MIN)
0.13
0.25
0.50
1.0
2.0
4.1
8.4
18
42
126
∞
HORNER PLOT
FIELD REPORT NO. 1070338
INSTRUMENT NO. SLSR-704
COMPANY : LOUIS DREYFUS NATURAL GAS
WELL : TORRO 21 ST. COM 1Y, DST #2
SHUTIN #2 : FINAL FLOW PRESSURE (Pwf): 1513 PSIA
PLOT ELAPSED TIME RANGE: 672.0 TO 912.8 MIN
ΔT TIME RANGE: 0.3 TO 241.2 MIN
PRODUCING TIME (Tp): 125.2 MIN
PRESSURE (PSIA)
1750
1720
1690
1660
1630
1600
1570
1540
1510
3.00
2.70
2.40
2.10
1.80
1.50
1.20
0.90
0.60
0.30
0.00
LOG [(Tp+ΔT)/ΔT]
Schlumberger


ΔT (MIN)
1.2
1.7
2.5
3.6
5.3
8.0
12
20
37
89
∞
HORNER PLOT
FIELD REPORT NO. 1070338
INSTRUMENT NO. SLSR-704
COMPANY : LOUIS DREYFUS NATURAL GAS
WELL : TORRO 21 ST. COM 1Y, DST #2
SHUTIN #1 : FINAL FLOW PRESSURE (Pwf): 1486 PSIA
PLOT ELAPSED TIME RANGE: 523.0 TO 581.0 MIN
ΔT TIME RANGE: 1.3 TO 59.3 MIN
PRODUCING TIME (Tp): 36.8 MIN
PRESSURE (PSIA)
1512
1508
1504
1500
1496
1492
1488
1484
1480
1.50
1.35
1.20
1.05
0.90
0.75
0.60
0.45
0.30
0.15
0.00
LOG [(Tp+ΔT)/ΔT]
Schlumberger

****
** WELL TEST DATA PRINTOUT **
****

COMPANY: LOUIS DREYFUS NATURAL GAS
WELL: TORRO 21 ST. COM 1Y, DST #2

FIELD REPORT NO. 1070338
INSTRUMENT NO. SLSR-704

RECORDER CAPACITY: 10000 PSI PORT OPENING: INSIDE DEPTH: 13799 FT

LABEL POINT INFORMATION
****

#	TIME OF DAY HH:MM:SS	DATE DD-MMM	EXPLANATION	ELAPSED TIME,MIN	BOT HOLE PRESSURE PSIA	BOT HOLE TEMP. DEG F
1	7:28:17	9-SEP	HYDROSTATIC MUD	478.28	6455.75	177.15
2	7:34:47	9-SEP	START FLOW	484.78	2919.84	176.99
3	8:02:07	9-SEP	CYCLED TOOL	512.12	1469.98	181.56
4	8:11:37	9-SEP	END FLOW & START SHUT-IN	521.62	1485.78	181.51
5	9:10:57	9-SEP	END SHUT-IN	580.95	1510.12	179.47
6	9:13:17	9-SEP	START FLOW	583.28	1485.73	179.46
7	10:41:37	9-SEP	END FLOW & START SHUT-IN	671.62	1512.97	179.44
8	14:42:47	9-SEP	END SHUT-IN	912.78	1712.22	180.50
9	14:51:37	9-SEP	HYDROSTATIC MUD	921.62	6439.66	177.19

SUMMARY OF FLOW PERIODS
****

PERIOD	START ELAPSED TIME,MIN	END ELAPSED TIME,MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	INITIAL PRESSURE PSIA
1	484.78	521.62	36.84	2919.84	1485.78	2919.84
2	583.28	671.62	88.34	1485.73	1512.97	1485.73

SUMMARY OF SHUTIN PERIODS
****

PERIOD	START ELAPSED TIME,MIN	END ELAPSED TIME,MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
1	521.62	580.95	59.33	1485.78	1510.12	1485.78	36.84
2	671.62	912.78	241.16	1512.97	1712.22	1512.97	125.18

TEST PHASE: FLOW PERIOD # 1

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA
7:34:47	9-SEP	484.78	0.00	176.99	2919.84
7:49:47	9-SEP	499.78	15.00	181.71	1449.71
8:04:47	9-SEP	514.78	30.00	181.51	1486.91
8:11:37	9-SEP	521.62	36.84	181.51	1485.78

TEST PHASE: SHUTIN PERIOD # 1

FINAL FLOW PRESSURE = 1485.78 PSIA
PRODUCING TIME = 36.84 MIN

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
8:11:37	9-SEP	521.62	0.00	181.51	1485.78	0.00	
8:12:57	9-SEP	522.95	1.33	181.45	1485.95	0.17	1.4579
8:14:37	9-SEP	524.62	3.00	181.36	1486.58	0.80	1.1232
8:18:17	9-SEP	528.28	6.66	181.18	1487.74	1.96	0.8150
8:21:17	9-SEP	531.28	9.66	181.09	1488.79	3.01	0.6825
8:23:17	9-SEP	533.28	11.66	181.04	1489.61	3.83	0.6190
8:28:57	9-SEP	538.95	17.33	180.97	1492.54	6.76	0.4950
8:34:17	9-SEP	544.28	22.66	180.95	1495.26	9.48	0.4193
8:37:27	9-SEP	547.45	25.83	180.84	1496.47	10.69	0.3849
8:41:17	9-SEP	551.28	29.66	180.61	1497.85	12.07	0.3507
8:47:27	9-SEP	557.45	35.83	180.27	1499.93	14.15	0.3071
8:55:47	9-SEP	565.78	44.16	179.87	1503.11	17.33	0.2635
9:05:17	9-SEP	575.28	53.66	179.58	1507.27	21.49	0.2270
9:10:57	9-SEP	580.95	59.33	179.47	1510.12	24.34	0.2098

TEST PHASE: FLOW PERIOD # 2

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA
9:13:17	9-SEP	583.28	0.00	179.46	1485.73
9:30:47	9-SEP	600.78	17.50	179.64	1502.77
9:47:27	9-SEP	617.45	34.17	179.44	1512.28
10:08:47	9-SEP	638.78	55.50	179.37	1511.97
10:27:57	9-SEP	657.95	74.67	179.38	1512.59
10:41:37	9-SEP	671.62	88.34	179.44	1512.97

TEST PHASE: SHUTIN PERIOD # 2

FINAL FLOW PRESSURE = 1512.97 PSIA
PRODUCING TIME = 125.18 MIN

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
10:41:37	9-SEP	671.62	0.00	179.44	1512.97	0.00	
10:42:47	9-SEP	672.78	1.16	179.44	1513.58	0.61	2.0371
10:44:57	9-SEP	674.95	3.33	179.46	1515.68	2.71	1.5865
10:46:47	9-SEP	676.78	5.16	179.46	1517.47	4.50	1.4024

TEST PHASE: SHUTIN PERIOD # 2 FINAL FLOW PRESSURE = 1512.97 PSIA
PRODUCING TIME = 125.18 MIN

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
10:48:47	9-SEP	678.78	7.16	179.46	1519.13	6.16	1.2668
10:53:17	9-SEP	683.28	11.66	179.47	1522.87	9.90	1.0695
10:57:17	9-SEP	687.28	15.66	179.47	1526.20	13.23	0.9539
11:00:17	9-SEP	690.28	18.66	179.47	1528.55	15.58	0.8870
11:04:17	9-SEP	694.28	22.66	179.49	1531.66	18.69	0.8145
11:07:07	9-SEP	697.12	25.50	179.51	1533.86	20.89	0.7715
11:09:17	9-SEP	699.28	27.66	179.51	1535.55	22.58	0.7424
11:11:37	9-SEP	701.62	30.00	179.51	1537.36	24.39	0.7137
11:18:07	9-SEP	708.12	36.50	179.53	1542.55	29.58	0.6464
11:27:17	9-SEP	717.28	45.66	179.56	1550.03	37.06	0.5731
11:32:47	9-SEP	722.78	51.16	179.60	1554.58	41.61	0.5374
11:38:07	9-SEP	728.12	56.50	179.62	1559.07	46.10	0.5073
11:45:37	9-SEP	735.62	64.00	179.65	1565.49	52.52	0.4707
11:52:17	9-SEP	742.28	70.66	179.67	1571.26	58.29	0.4427
11:58:27	9-SEP	748.45	76.83	179.69	1576.63	63.66	0.4198
12:05:37	9-SEP	755.62	84.00	179.73	1582.87	69.90	0.3962
12:13:57	9-SEP	763.95	92.33	179.76	1590.42	77.45	0.3721
12:19:57	9-SEP	769.95	98.33	179.78	1595.65	82.68	0.3566
12:25:07	9-SEP	775.12	103.50	179.82	1600.14	87.17	0.3443
12:30:37	9-SEP	780.62	109.00	179.83	1604.99	92.02	0.3321
12:35:47	9-SEP	785.78	114.16	179.85	1609.42	96.45	0.3215
12:44:27	9-SEP	794.45	122.83	179.89	1616.91	103.94	0.3052
12:50:37	9-SEP	800.62	129.00	179.92	1622.26	109.29	0.2946
12:55:47	9-SEP	805.78	134.16	179.94	1626.69	113.72	0.2862
13:02:17	9-SEP	812.28	140.66	179.98	1632.19	119.22	0.2764
13:09:17	9-SEP	819.28	147.66	180.01	1638.09	125.12	0.2666
13:16:07	9-SEP	826.12	154.50	180.05	1643.83	130.86	0.2577
13:22:37	9-SEP	832.62	161.00	180.09	1649.29	136.32	0.2498
13:32:07	9-SEP	842.12	170.50	180.12	1657.16	144.19	0.2391
13:37:17	9-SEP	847.28	175.66	180.14	1661.40	148.43	0.2337
13:42:27	9-SEP	852.45	180.83	180.18	1665.59	152.62	0.2285
13:59:07	9-SEP	869.12	197.50	180.25	1678.96	165.99	0.2132
14:16:07	9-SEP	886.12	214.50	180.34	1692.33	179.36	0.1996
14:31:37	9-SEP	901.62	230.00	180.43	1704.22	191.25	0.1887
14:42:47	9-SEP	912.78	241.16	180.50	1712.22	199.25	0.1816

WELL TEST INTERPRETATION REPORT #:1070338 CLIENT : LOUIS DREYFUS		PAGE: 12, 10-NOV-98
REGION :CSD DISTRICT:HOBBS BASE :MIDLAND TX. ENGINEER:KIRK BEASLEY	DISTRIBUTION OF REPORTS	FIELD:WILDCAT ZONE :DEVONIAN WELL :TORRO 21 ST. C LOCATION:S21T19sR32e

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