REPORT NO.
102996 DST 2

PAGE NO. 1

TEST DATE:
9-Nov-1987

S T A R™

A Schlumberger Transient Analysis Report
A Production System Analysis (NODAL™)
Of A Flopetrol Johnston Drillstem Test

FLOPETROL JOHNSTON
Schlumberger

Company: TIPPERARY PETROLEUM CO.

Well: WISER "29" STATE COMM #1

TEST IDENTIFICATION

Test Type ..... MFE OH DST
Test No. ..... Two
Formation ..... Strawn
Test Interval (ft) ... 11076 to 11230
Reference Depth ..... Kelly Bushing

WELL LOCATION

Field ..... NE LovingtonW/C
County ..... Lea
State ..... New Mexico
Sec/Twn/Rng 29/ 16s/ 37e
Elevation (ft) 3854

HOLE CONDITIONS

Total Depth (MD/TVD)(ft) . 11230
Hole Size (in) 7 7/8
Casing/Liner I.D. (in) ... --
Perf'd Interv./Nt Pay(ft). -- / 65
Shot Density/Diameter(in). --

MUD PROPERTIES

Mud Type ..... Milgel / Drispac
Mud Weight (lb/gal) 9.0
Mud Resistivity (ohm.m) .. n/a
Filtrate Resistiv.(ohm.m). --
Filtrate Chlorides (ppm) . 4,100

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi). 5208
Gas Cushion Type ..... None
Surface Pressure (psi) ... --
Liquid Cushion Type ..... None
Cushion Length (ft) ..... --

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D.(in). 10445 / 3.83
Collar Length ft/I.D.(in). 598 / 2.25
Packer Depths (ft) 11070, 11076
Bottomhole Choke Size(in). 15/16
Gauge Depth (ft)/Type .... 11088 / J-200

NET PIPE RECOVERY

Volume	Fluid Type	Properties
n/a	Oil	Heavily gas cut
Flowed to	surface and	reversed out.
	Top Sample	35 API at 60 F
	Tank Sample	40 API at 60 F

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
9.12 SCF	Gas	
1200 cc	Oil	n/a
Press. 1325	GOR: 1208	GLR: 1208

VALIDATION RESULTS

Model of Behavior ..... Heterogeneous
Fluid Type Used ..... Liquid
Reservoir Pressure (psi) . 3443
Transmissivity (md.ft/cp) 3674.52
Permeability (md) 18.09
Skin Factor/Damage Ratio . 1.69 / 1.21
Storativity Ratio .....
Interporosity Flow Coeff..
Distance to Anomaly (ft).
Investigation Radius (ft). 133
Potentiometric Surf. (ft). 716

ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API) ... 40
Basic Solids (%) .....
Gas Gravity ..... 0.65 (est)
Water Cut (%) ..... None
Viscosity (cp) 0.32
Tot. Compress. (1/psi) ... 4.9 E-05
Porosity (%) ..... 15 (est)
Reservoir Temperature (F). 170
Form.Vol.Factor (bbl/STB). 1.72

PRODUCTION RATE DURING TEST: 1800 Bbls/day

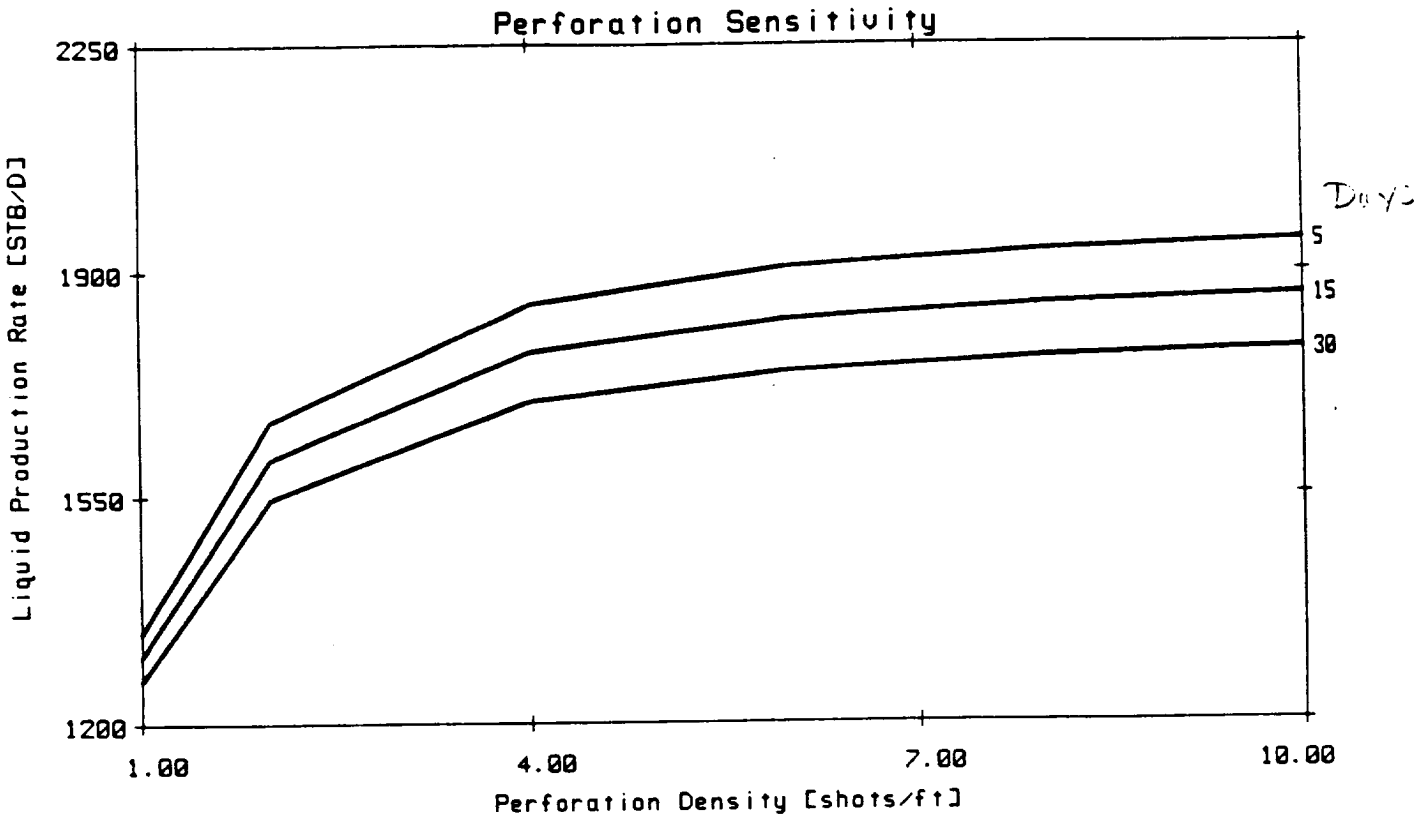
COMMENTS:

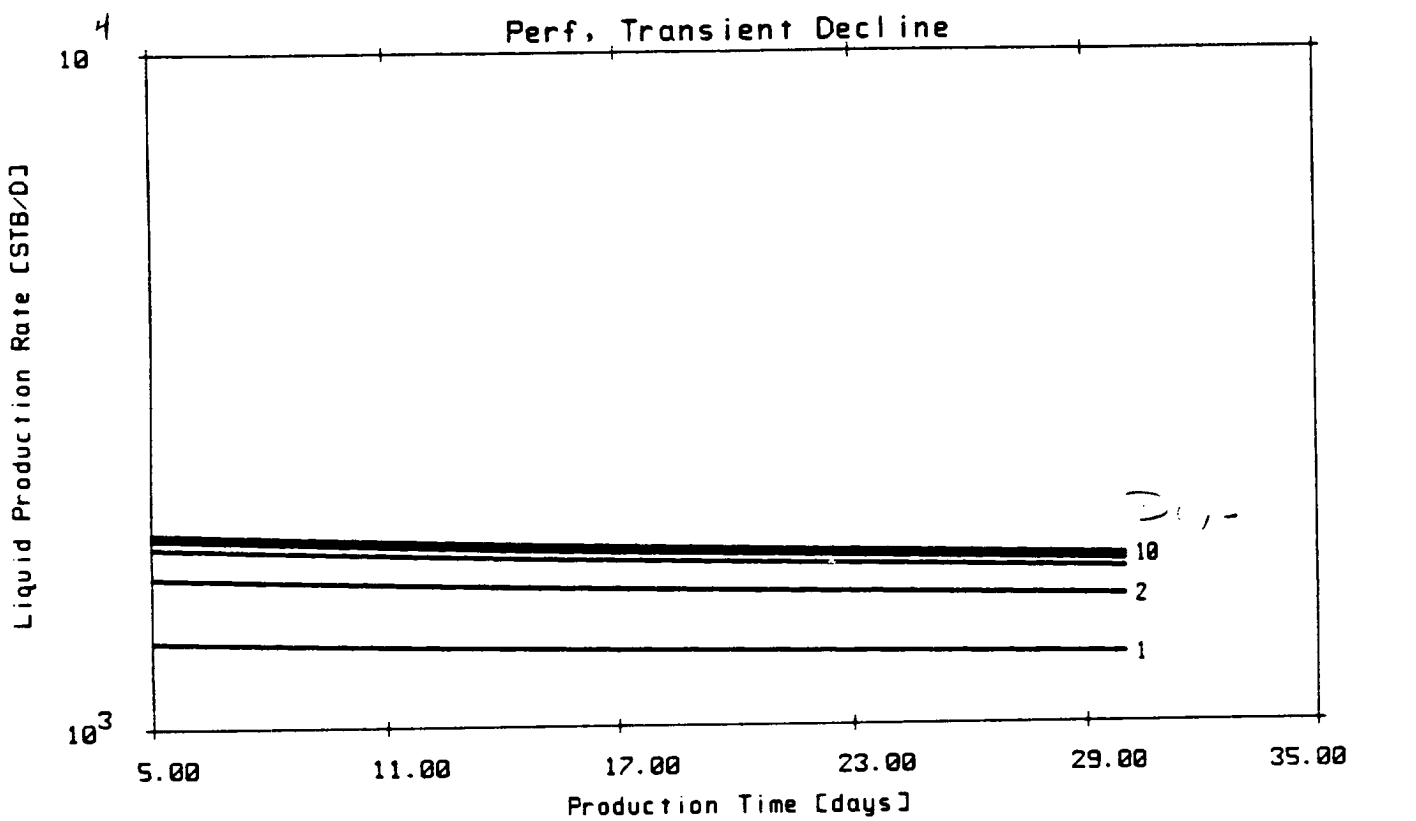
The results of the intepretation indicate that the well is in an apparent heterogeneous system with good effective permeability and with slight wellbore damage at the time and conditions of the test. The general character of the buildup plots suggest that the system is naturally fractured or layered (or both). The upward break on the final shutin plot could also be an indication of boundaries. Additional testing is recommended to completely identify the system.

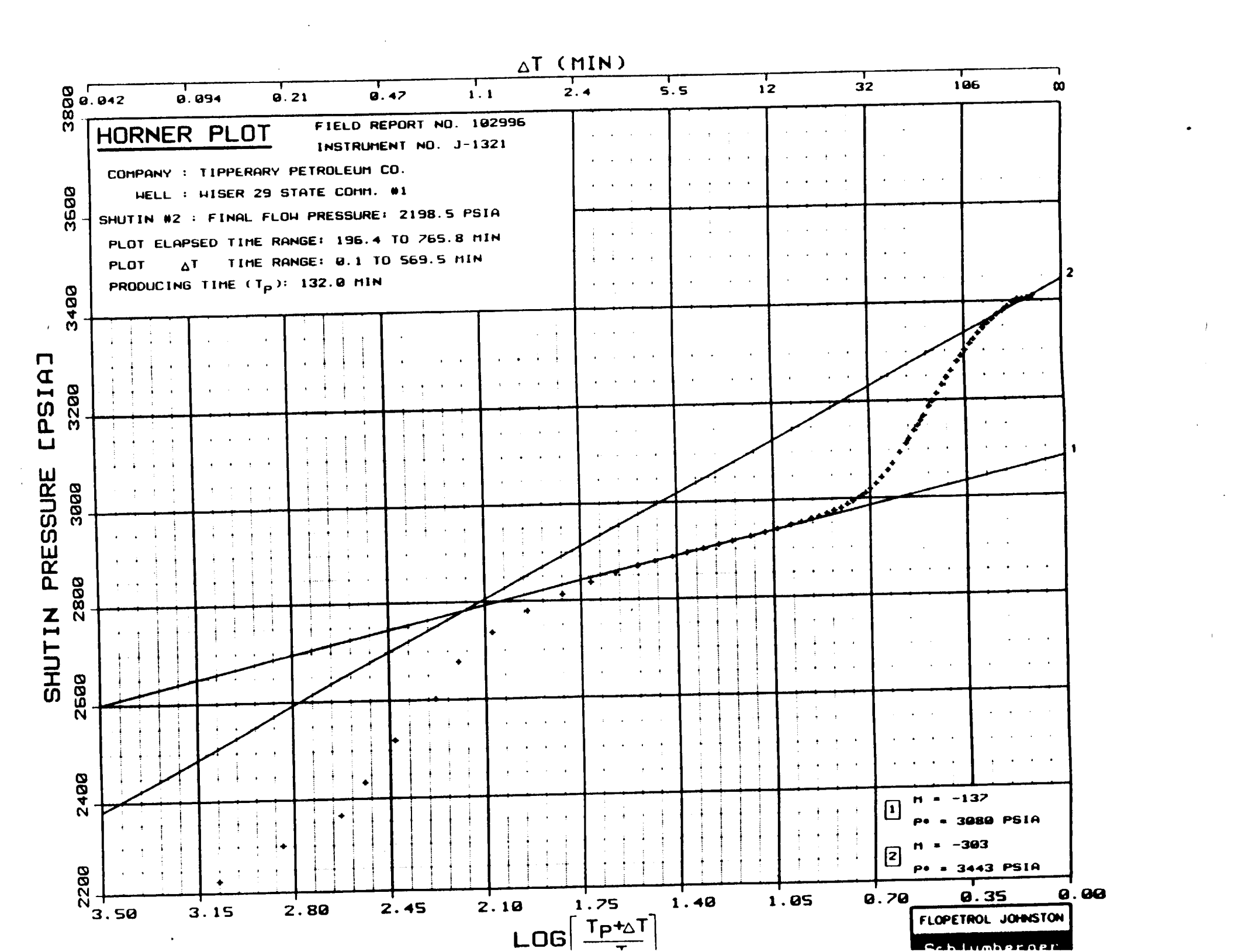
REPORT NO. 102996 DST 2
PAGE NO. 2

NODAL(tm) ANALYSIS PLOTS
2 7/8 Tbg WHP= 200 psi S= 0

FLOPETROL JOHNSTON
Schlumberger



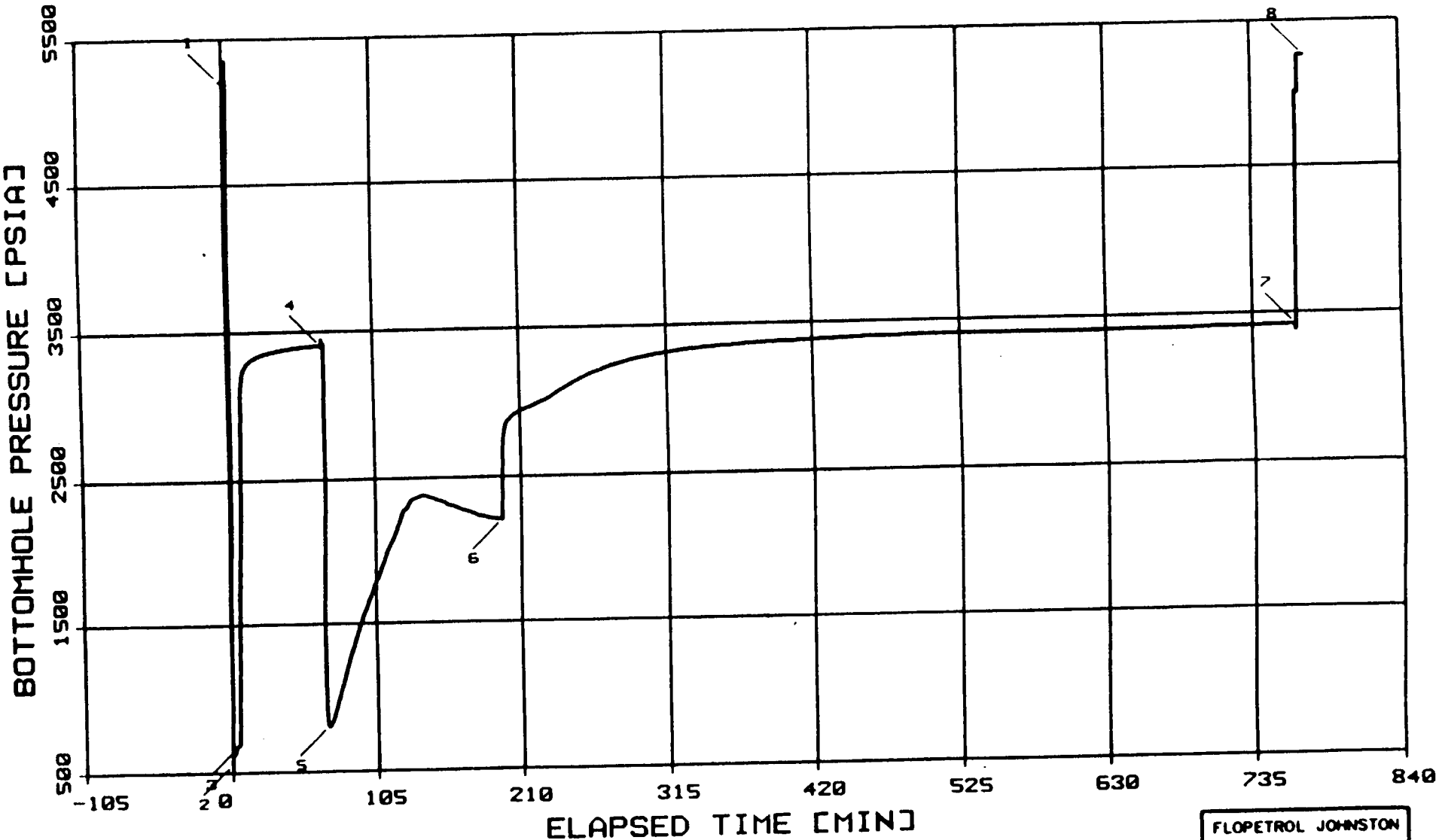



ΔT (MIN)
0.042
0.094
0.21
0.47
1.1
2.4
5.5
12
32
106
∞
HORNER PLOT
FIELD REPORT NO. 102996
INSTRUMENT NO. J-1321
COMPANY : TIPPERARY PETROLEUM CO.
WELL : WISER 29 STATE COMM. #1
SHUTIN #2 : FINAL FLOW PRESSURE: 2198.5 PSIA
PLOT ELAPSED TIME RANGE: 196.4 TO 765.8 MIN
PLOT ΔT TIME RANGE: 0.1 TO 569.5 MIN
PRODUCING TIME (Tp): 132.0 MIN
SHUTIN PRESSURE [PSIA]
3800
3600
3400
3200
3000
2800
2600
2400
2200
2
1
1 M = -137
P* = 3080 PSIA
2 M = -303
P* = 3443 PSIA
3.50
3.15
2.80
2.45
2.10
1.75
1.40
1.05
0.70
0.35
0.00
LOG [Tp+ΔT / ΔT]
FLOPETROL JOHNSTON
Schlumberger

BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 102996
INSTRUMENT NO. J-1321
DEPTH : 11088 FT
CAPACITY : 6400 PSI
PORT OPENING : INSIDE

COMPANY : TIPPERARY PETROLEUM CO.
WELL : WISER 29 STATE COMM. #1



WELL TEST INTERPRETATION REPORT #:102996 DST 2
CLIENT : TIPPERARY PETROLEUM CO.

PAGE: 1
11-NOV-87

REGION :W.T.D.
DISTRICT:Hobbs
BASE :Midland
Engr :Uermeyen/ djs

SEQUENCE OF EVENTS

Field:NELovingtonW/C
Zone :Strawn
Well :Wiser29StCom#1
Location:29/16s/37e

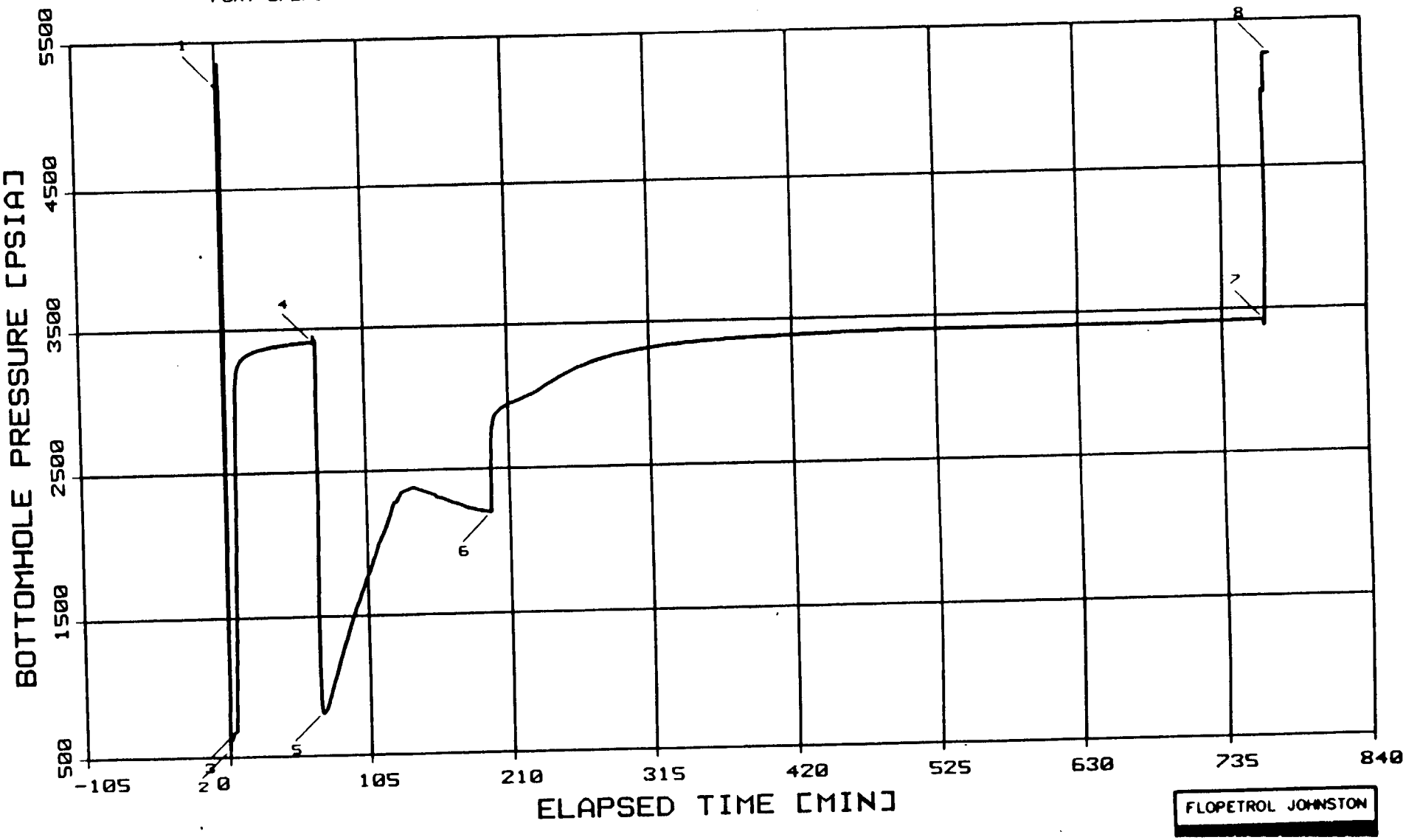
EVENT NO.	DATE	TIME (HR:MIN)	DESCRIPTION	ELAPSED TIME (HR:MIN)	BHP (PSIA)	WHP (PSIG)
1	9-NOV	17:11	SET PACKER, Hydrostatic		5207.9	
2		17:13	START FLOW, Bubble hose	0:00	558.7	
3			Blow to bottom of bckt			
4		17:15		0:02		10.00
5		17:16		0:03		20.00
6						
7		17:18	END FLOW & START SHUT-IN	0:05	691.6	60.00
8		17:26	Gas to surface	0:13		
9						
10		18:20	END SHUT-IN	1:08	3402.6	
11		18:22	START FLOW, 1/4" choke	1:10	815.9	5.00
12		18:27		1:14		30.00
13		18:33		1:20		45.00
14		18:43		1:30		70.00
15		18:53		1:40		115.00
16		19:03		1:50		185.00
17		19:11	Mud to surface	1:58		195.00
18		19:17	Change to 1" choke	2:04		250.00
19		19:29		2:16		270.00
20		19:43		2:30		250.00
21		20:03	Oil to surface	2:50		250.00
22		20:13		3:00		240.00
23		20:19		3:06		240.00
24		20:23	Est. rate: 1800 BPD	3:10		245.00
25			(from choke correlation)			
26		20:29	END FLOW & START SHUT-IN	3:16	2198.5	245.00
27						
28	10-NOV	5:58	END SHUT-IN	12:46	3417.5	
29		6:06	PULLED LOOSE, Hydrostatic	12:53	5269.3	
30						
31		6:32	Start reversing	13:19		250.00
32		10:10	Finish reversing	16:57		

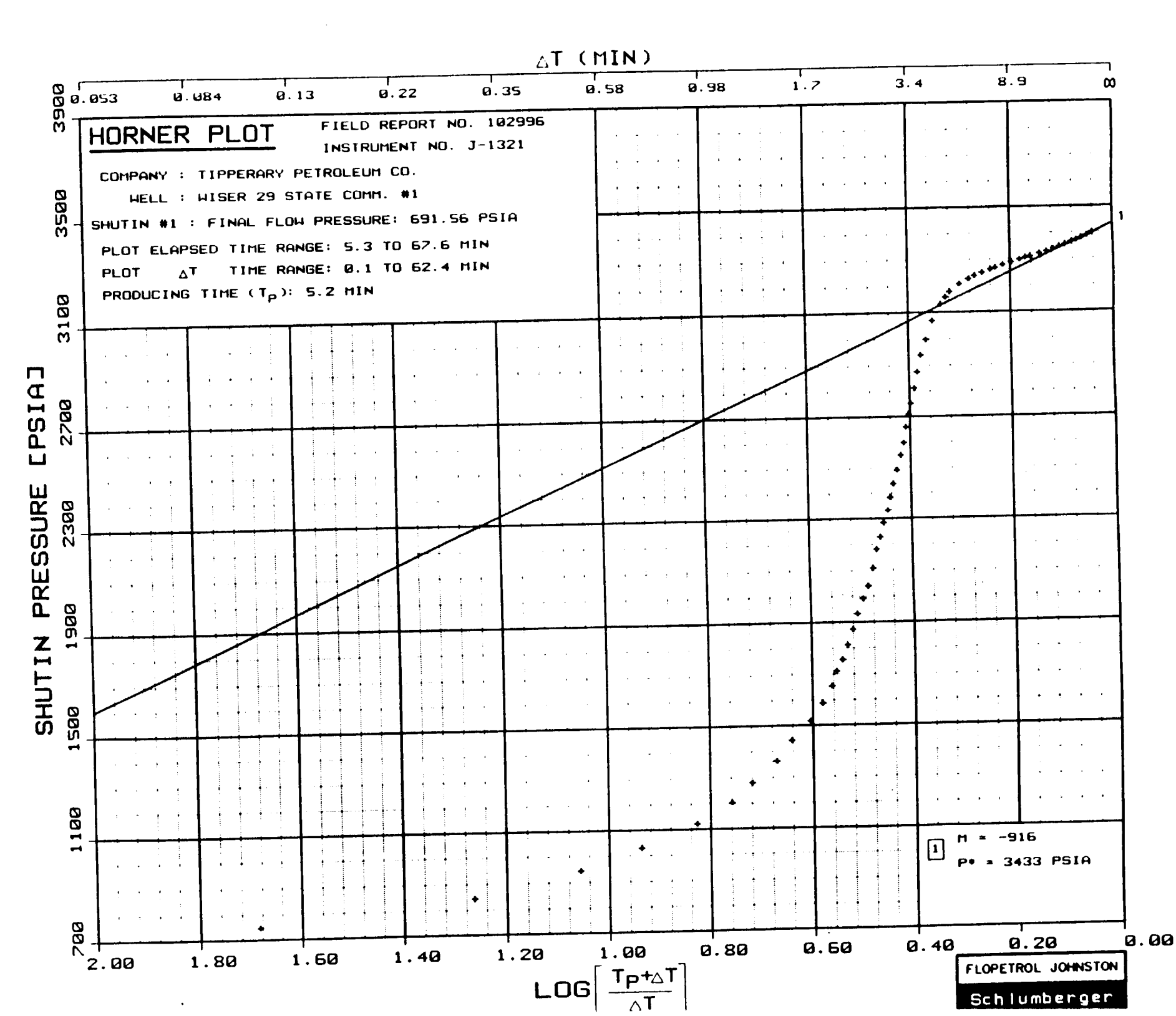
FLOPETROL JOHNSTON
SCHLUMBERGER

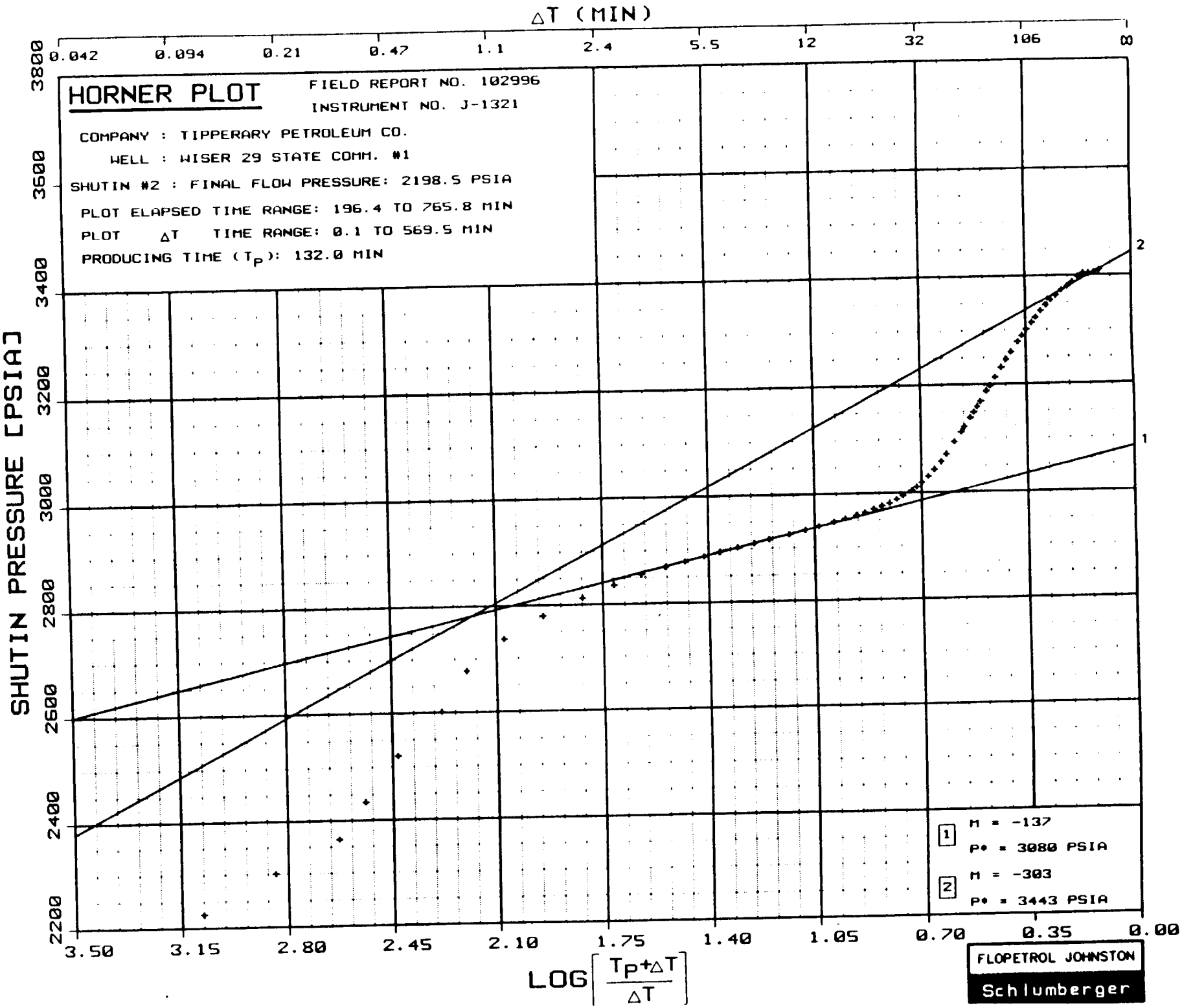
BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 102996
INSTRUMENT NO. J-1321
DEPTH : 11088 FT
CAPACITY : 6400 PSI
PORT OPENING : INSIDE

COMPANY : TIPPERARY PETROLEUM CO.
WELL : WISER 29 STATE COMM. #1




ΔT (MIN)
0.053
0.084
0.13
0.22
0.35
0.58
0.98
1.7
3.4
8.9
∞
HORNER PLOT
FIELD REPORT NO. 102996
INSTRUMENT NO. J-1321
COMPANY : TIPPERARY PETROLEUM CO.
WELL : WISER 29 STATE COMM. #1
SHUTIN #1 : FINAL FLOW PRESSURE: 691.56 PSIA
PLOT ELAPSED TIME RANGE: 5.3 TO 67.6 MIN
PLOT ΔT TIME RANGE: 0.1 TO 62.4 MIN
PRODUCING TIME (T_p): 5.2 MIN
SHUTIN PRESSURE [PSIA]
3900
3500
3100
2700
2300
1900
1500
1100
700
1
1 M = -916
P* = 3433 PSIA
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
LOG $\left[\frac{T_p+\Delta T}{\Delta T}\right]$
FLOPETROL JOHNSTON
Schlumberger


ΔT (MIN)
0.042
0.094
0.21
0.47
1.1
2.4
5.5
12
32
106
∞
HORNER PLOT
FIELD REPORT NO. 102996
INSTRUMENT NO. J-1321
COMPANY : TIPPERARY PETROLEUM CO.
WELL : WISER 29 STATE COMM. #1
SHUTIN #2 : FINAL FLOW PRESSURE: 2198.5 PSIA
PLOT ELAPSED TIME RANGE: 196.4 TO 765.8 MIN
PLOT ΔT TIME RANGE: 0.1 TO 569.5 MIN
PRODUCING TIME (Tp): 132.0 MIN
SHUTIN PRESSURE [PSIA]
3800
3600
3400
3200
3000
2800
2600
2400
2200
1
2
1 M = -137
P* = 3080 PSIA
2 M = -303
P* = 3443 PSIA
3.50
3.15
2.80
2.45
2.10
1.75
1.40
1.05
0.70
0.35
0.00
LOG [(Tp+ΔT)/ΔT]
FLOPETROL JOHNSTON
Schlumberger

LOG LOG PLOT

COMPANY : TIPPERARY PETROLEUM CO.

WELL : WISER 29 STATE COMM. #1

FIELD REPORT NO. 102996

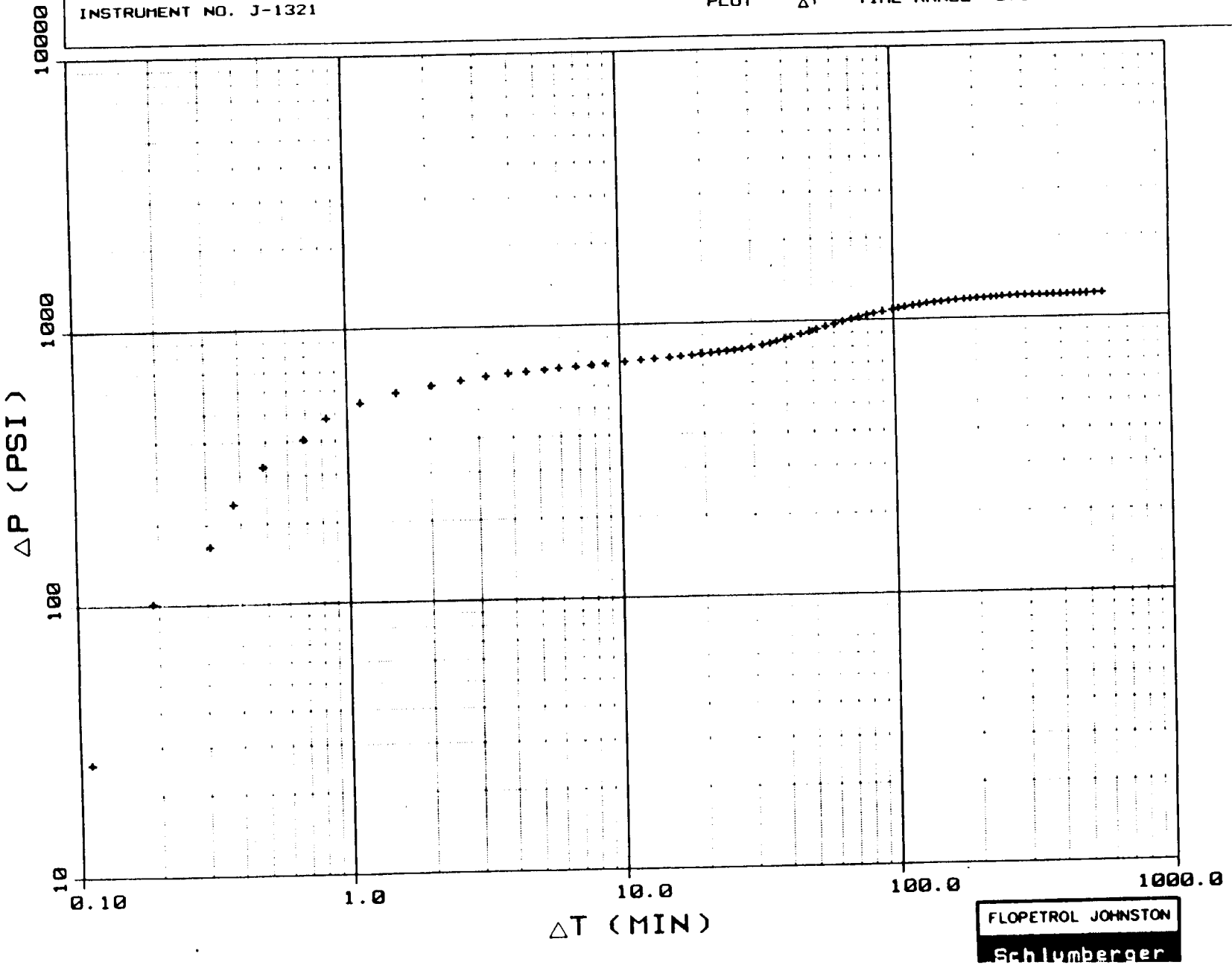
INSTRUMENT NO. J-1321

SHUTIN #2 :

FINAL FLOW PRESSURE (PWF): 2198.5 PSIA

PLOT ELAPSED TIME RANGE: 196.4 TO 765.8 MIN

PLOT ΔT TIME RANGE: 0.1 TO 569.5 MIN



WELL TEST DATA PRINTOUT

FIELD REPORT # : 102996

COMPANY : TIPPERARY PETROLEUM CO.
WELL : WISER 29 STATE COMM. #1

INSTRUMENT # : J-1321
CAPACITY [PSI] : 6400.
DEPTH [FT] : 11088.0
PORT OPENING : INSIDE
TEMPERATURE [DEG F] : 170.0

LABEL POINT INFORMATION

#	TIME OF DAY HH:MM:SS	DATE DD-MM	EXPLANATION	ELAPSED TIME,MIN	BOT HOLE PRESSURE PSIA
1	17:11:25	9-NO	HYDROSTATIC MUD	-1.58	5208
2	17:12:59	9-NO	START FLOW	-0.02	559
3	17:18:11	9-NO	END FLOW & START SHUT-IN	5.18	692
4	18:20:36	9-NO	END SHUT-IN	67.60	3403
5	18:22:31	9-NO	START FLOW	69.52	816
6	20:29:19	9-NO	END FLOW & START SHUT-IN	196.32	2199
7	5:58:51	10-NO	END SHUT-IN	765.85	3417
8	6: 6:11	10-NO	HYDROSTATIC MUD	773.19	5269

SUMMARY OF FLOW PERIODS

PERIOD	START ELAPSED TIME,MIN	END ELAPSED TIME,MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA
1	-0.02	5.18	5.20	559	692
2	69.52	196.32	126.80	816	2199

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	5.18	67.60	62.42	692	3403	692	5.20
2	196.32	765.85	569.53	2199	3417	2199	132.00

TEST PHASE : FLOW PERIOD # 1

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA
17:12:59	9-NO	-0.02	0.00	559
17:17:59	9-NO	4.98	5.00	684
17:18:11	9-NO	5.18	5.20	692

TEST PHASE : SHUTIN PERIOD # 1
FINAL FLOW PRESSURE [PSIA] = 692
PRODUCING TIME [MIN] = 5.20

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
17:18:11	9-NO	5.18	0.00	692	0	
17:19:11	9-NO	6.18	1.00	1159	467	0.792
17:20:11	9-NO	7.18	2.00	1691	1000	0.556
17:21:11	9-NO	8.18	3.00	2429	1737	0.437
17:22:11	9-NO	9.18	4.00	3019	2328	0.362
17:23:11	9-NO	10.18	5.00	3190	2498	0.310
17:24:11	9-NO	11.18	6.00	3236	2544	0.271
17:25:11	9-NO	12.18	7.00	3258	2567	0.241
17:26:11	9-NO	13.18	8.00	3274	2583	0.217
17:27:11	9-NO	14.18	9.00	3286	2595	0.198
17:28:11	9-NO	15.18	10.00	3295	2604	0.182
17:30:11	9-NO	17.18	12.00	3311	2620	0.156
17:32:11	9-NO	19.18	14.00	3322	2631	0.137
17:34:11	9-NO	21.18	16.00	3332	2640	0.122
17:36:11	9-NO	23.18	18.00	3340	2648	0.110
17:38:11	9-NO	25.18	20.00	3347	2655	0.100
17:40:11	9-NO	27.18	22.00	3353	2661	0.092
17:42:11	9-NO	29.18	24.00	3358	2666	0.085
17:44:11	9-NO	31.18	26.00	3363	2671	0.079
17:46:11	9-NO	33.18	28.00	3367	2675	0.074
17:48:11	9-NO	35.18	30.00	3371	2679	0.069
17:53:11	9-NO	40.18	35.00	3379	2688	0.060
17:58:11	9-NO	45.18	40.00	3385	2693	0.053
18: 3:11	9-NO	50.18	45.00	3390	2699	0.047
18: 8:11	9-NO	55.18	50.00	3394	2703	0.043
18:13:11	9-NO	60.18	55.00	3398	2706	0.039
18:18:11	9-NO	65.18	60.00	3401	2709	0.036
18:20:36	9-NO	67.60	62.42	3403	2711	0.035

TEST PHASE : FLOW PERIOD # 2

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA
18:22:31	9-NO	69.52	0.00	816
18:27:31	9-NO	74.52	5.00	903
18:32:31	9-NO	79.52	10.00	1064
18:37:31	9-NO	84.52	15.00	1224
18:42:31	9-NO	89.52	20.00	1377
18:47:31	9-NO	94.52	25.00	1516
18:52:31	9-NO	99.52	30.00	1645
18:57:31	9-NO	104.52	35.00	1770
19: 2:31	9-NO	109.52	40.00	1891
19: 7:31	9-NO	114.52	45.00	2017
19:12:31	9-NO	119.52	50.00	2122
19:17:31	9-NO	124.52	55.00	2254
19:22:31	9-NO	129.52	60.00	2328
19:27:31	9-NO	134.52	65.00	2360
19:32:31	9-NO	139.52	70.00	2374
19:37:31	9-NO	144.52	75.00	2362
19:42:31	9-NO	149.52	80.00	2344
19:47:31	9-NO	154.52	85.00	2326
19:52:31	9-NO	159.52	90.00	2303
19:57:31	9-NO	164.52	95.00	2280
20: 2:31	9-NO	169.52	100.00	2264
20: 7:31	9-NO	174.52	105.00	2248
20:12:31	9-NO	179.52	110.00	2230
20:17:31	9-NO	184.52	115.00	2216
20:22:31	9-NO	189.52	120.00	2207
20:27:31	9-NO	194.52	125.00	2201
20:29:19	9-NO	196.32	126.80	2199

TEST PHASE : SHUTIN PERIOD # 2
FINAL FLOW PRESSURE [PSIA] = 2199
PRODUCING TIME [MIN] = 132.00

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
20:29:19	9-NO	196.32	0.00	2199	0	
20:30:19	9-NO	197.32	1.00	2710	512	2.124
20:31:19	9-NO	198.32	2.00	2809	611	1.826
20:32:19	9-NO	199.32	3.00	2847	649	1.653
20:33:19	9-NO	200.32	4.00	2869	671	1.531
20:34:19	9-NO	201.32	5.00	2883	684	1.438
20:35:19	9-NO	202.32	6.00	2894	695	1.362
20:36:19	9-NO	203.32	7.00	2902	704	1.298
20:37:19	9-NO	204.32	8.00	2910	711	1.243
20:38:19	9-NO	205.32	9.00	2917	718	1.195
20:39:19	9-NO	206.32	10.00	2922	723	1.152

TEST PHASE : SHUTIN PERIOD # 2
FINAL FLOW PRESSURE [PSIA] = 2199
PRODUCING TIME [MIN] = 132.00

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
20:41:19	9-NO	208.32	12.00	2933	734	1.079
20:43:19	9-NO	210.32	14.00	2942	743	1.018
20:45:19	9-NO	212.32	16.00	2950	751	0.966
20:47:19	9-NO	214.32	18.00	2958	759	0.921
20:49:19	9-NO	216.32	20.00	2965	766	0.881
20:51:19	9-NO	218.32	22.00	2972	773	0.845
20:53:19	9-NO	220.32	24.00	2979	780	0.813
20:55:19	9-NO	222.32	26.00	2987	788	0.784
20:57:19	9-NO	224.32	28.00	2995	797	0.757
20:59:19	9-NO	226.32	30.00	3004	806	0.732
21: 4:19	9-NO	231.32	35.00	3029	831	0.679
21: 9:19	9-NO	236.32	40.00	3058	860	0.633
21:14:19	9-NO	241.32	45.00	3089	891	0.595
21:19:19	9-NO	246.32	50.00	3117	918	0.561
21:24:19	9-NO	251.32	55.00	3142	944	0.531
21:29:19	9-NO	256.32	60.00	3165	967	0.505
21:34:19	9-NO	261.32	65.00	3187	988	0.482
21:39:19	9-NO	266.32	70.00	3206	1007	0.460
21:44:19	9-NO	271.32	75.00	3223	1024	0.441
21:49:19	9-NO	276.32	80.00	3238	1040	0.423
21:54:19	9-NO	281.32	85.00	3251	1053	0.407
21:59:19	9-NO	286.32	90.00	3264	1065	0.392
22: 4:19	9-NO	291.32	95.00	3276	1077	0.378
22: 9:19	9-NO	296.32	100.00	3286	1087	0.365
22:14:19	9-NO	301.32	105.00	3296	1097	0.354
22:19:19	9-NO	306.32	110.00	3304	1106	0.342
22:24:19	9-NO	311.32	115.00	3312	1113	0.332
22:29:19	9-NO	316.32	120.00	3318	1120	0.322
22:34:19	9-NO	321.32	125.00	3325	1126	0.313
22:39:19	9-NO	326.32	130.00	3330	1132	0.304
22:44:19	9-NO	331.32	135.00	3337	1138	0.296
22:49:19	9-NO	336.32	140.00	3341	1143	0.288
22:54:19	9-NO	341.32	145.00	3346	1147	0.281
22:59:19	9-NO	346.32	150.00	3350	1151	0.274
23: 4:19	9-NO	351.32	155.00	3353	1155	0.268
23: 9:19	9-NO	356.32	160.00	3357	1158	0.261
23:14:19	9-NO	361.32	165.00	3360	1162	0.255
23:19:19	9-NO	366.32	170.00	3362	1164	0.250
23:24:19	9-NO	371.32	175.00	3366	1168	0.244
23:29:19	9-NO	376.32	180.00	3369	1171	0.239
23:34:19	9-NO	381.32	185.00	3371	1173	0.234
23:39:19	9-NO	386.32	190.00	3373	1175	0.229
23:44:19	9-NO	391.32	195.00	3374	1176	0.225
23:49:19	9-NO	396.32	200.00	3376	1178	0.220
23:54:19	9-NO	401.32	205.00	3377	1179	0.216
23:59:19	9-NO	406.32	210.00	3379	1180	0.212
0: 4:19	10-NO	411.32	215.00	3381	1182	0.208
0: 9:19	10-NO	416.32	220.00	3383	1184	0.204

TEST PHASE : SHUTIN PERIOD # 2
FINAL FLOW PRESSURE [PSIA] = 2199
PRODUCING TIME [MIN] = 132.00

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
0:14:19	10-NO	421.32	225.00	3385	1186	0.200
0:19:19	10-NO	426.32	230.00	3386	1187	0.197
0:24:19	10-NO	431.32	235.00	3388	1189	0.194
0:29:19	10-NO	436.32	240.00	3390	1191	0.190
0:34:19	10-NO	441.32	245.00	3391	1193	0.187
0:39:19	10-NO	446.32	250.00	3392	1194	0.184
0:44:19	10-NO	451.32	255.00	3393	1195	0.181
0:49:19	10-NO	456.32	260.00	3396	1197	0.178
0:54:19	10-NO	461.32	265.00	3397	1198	0.176
0:59:19	10-NO	466.32	270.00	3397	1199	0.173
1: 4:19	10-NO	471.32	275.00	3398	1199	0.170
1: 9:19	10-NO	476.32	280.00	3399	1200	0.168
1:14:19	10-NO	481.32	285.00	3400	1201	0.165
1:19:19	10-NO	486.32	290.00	3401	1202	0.163
1:24:19	10-NO	491.32	295.00	3402	1204	0.161
1:29:19	10-NO	496.32	300.00	3403	1205	0.158
1:34:19	10-NO	501.32	305.00	3404	1205	0.156
1:39:19	10-NO	506.32	310.00	3404	1205	0.154
1:44:19	10-NO	511.32	315.00	3404	1205	0.152
1:49:19	10-NO	516.32	320.00	3404	1205	0.150
1:54:19	10-NO	521.32	325.00	3404	1205	0.148
1:59:19	10-NO	526.32	330.00	3404	1205	0.146
2: 4:19	10-NO	531.32	335.00	3404	1205	0.144
2: 9:19	10-NO	536.32	340.00	3404	1205	0.142
2:14:19	10-NO	541.32	345.00	3404	1205	0.141
2:19:19	10-NO	546.32	350.00	3404	1205	0.139
2:24:19	10-NO	551.32	355.00	3404	1205	0.137
2:29:19	10-NO	556.32	360.00	3404	1205	0.136
2:34:19	10-NO	561.32	365.00	3404	1205	0.134
2:39:19	10-NO	566.32	370.00	3404	1205	0.133
2:44:19	10-NO	571.32	375.00	3404	1205	0.131
2:49:19	10-NO	576.32	380.00	3404	1206	0.129
2:54:19	10-NO	581.32	385.00	3404	1206	0.128
2:59:19	10-NO	586.32	390.00	3404	1206	0.127
3: 4:19	10-NO	591.32	395.00	3404	1206	0.125
3: 9:19	10-NO	596.32	400.00	3404	1206	0.124
3:14:19	10-NO	601.32	405.00	3405	1206	0.123
3:19:19	10-NO	606.32	410.00	3405	1206	0.121
3:24:19	10-NO	611.32	415.00	3405	1207	0.120
3:29:19	10-NO	616.32	420.00	3405	1207	0.119
3:34:19	10-NO	621.32	425.00	3406	1207	0.117
3:39:19	10-NO	626.32	430.00	3406	1208	0.116
3:44:19	10-NO	631.32	435.00	3406	1208	0.115
3:49:19	10-NO	636.32	440.00	3407	1208	0.114
3:54:19	10-NO	641.32	445.00	3407	1209	0.113
3:59:19	10-NO	646.32	450.00	3408	1209	0.112
4: 4:19	10-NO	651.32	455.00	3408	1209	0.111
4: 9:19	10-NO	656.32	460.00	3408	1209	0.110

TEST PHASE : SHUTIN PERIOD # 2
FINAL FLOW PRESSURE [PSIA] = 2199
PRODUCING TIME [MIN] = 132.00

TIME OF DAY HH:MM:SS	DATE DD-MM	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
4:14:19	10-NO	661.32	465.00	3408	1209	0.109
4:19:19	10-NO	666.32	470.00	3408	1210	0.107
4:24:19	10-NO	671.32	475.00	3409	1210	0.106
4:29:19	10-NO	676.32	480.00	3409	1210	0.106
4:34:19	10-NO	681.32	485.00	3409	1211	0.105
4:39:19	10-NO	686.32	490.00	3409	1211	0.104
4:44:19	10-NO	691.32	495.00	3410	1212	0.103
4:49:19	10-NO	696.32	500.00	3412	1213	0.102
4:54:19	10-NO	701.32	505.00	3413	1214	0.101
4:59:19	10-NO	706.32	510.00	3413	1215	0.100
5: 4:19	10-NO	711.32	515.00	3414	1215	0.099
5: 9:19	10-NO	716.32	520.00	3414	1215	0.098
5:14:19	10-NO	721.32	525.00	3414	1215	0.097
5:19:19	10-NO	726.32	530.00	3414	1215	0.097
5:24:19	10-NO	731.32	535.00	3414	1216	0.096
5:29:19	10-NO	736.32	540.00	3415	1216	0.095
5:34:19	10-NO	741.32	545.00	3416	1217	0.094
5:39:19	10-NO	746.32	550.00	3416	1218	0.093
5:44:19	10-NO	751.32	555.00	3417	1218	0.093
5:49:19	10-NO	756.32	560.00	3418	1219	0.092
5:54:19	10-NO	761.32	565.00	3418	1219	0.091
5:58:51	10-NO	765.85	569.53	3417	1219	0.091

FLOPETROL JOHNSTON has sent copies of this report to the following:

TIPPERARY PETROLEUM CO.
P.O. Box 3179
Midland, Texas 79702
(3 copies)