

DS T # 3

REPORT NO.
139320

PAGE NO. 1

TEST DATE:
08-MAY-1996

S T A R

Schlumberger Testing Data Report
Pressure Data Report

Schlumberger

COMPANY: NEARBURG PRODUCING CO.

WELL: OSAGE BOYD-15 #5

TEST IDENTIFICATION

Test Type OPEN HOLE DST
Test No. THREE
Formation CANYON "C"
Test Interval (ft) 7784 to 7831
Depth Reference KB

WELL LOCATION

Field N. DAGGER DRAW
County EDDY
State NEW MEXICO
Sec/Twn/Rng 15/19S/25E
Elevation (ft) 3483

HOLE CONDITIONS

Total Depth (MD/TVD) (ft) 7831
Hole Size (in) 8.75
Casing/Liner I.D. (in) 9.625 @ 1115
Perf'd Interval/Net Pay (ft) .. / 35
Shot Density/Diameter (in) ...

MUD PROPERTIES

Mud Type CUT BRAINE WATER
Mud Weight (lb/gal) 8.7
Mud Resistivity (ohm.m) 0.241 @ 60F
Filtrate Resistivity (ohm.m)..
Filtrate Chlorides (ppm) 32000

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi) 3562.78
Gas Cushion Type
Surface Pressure (psi)
Liquid Cushion Type
Cushion Length (ft)

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D. (in) ... 6863 / 3.82
Collar Length (ft)/I.D. (in) .. 872 / 2.25
Packer Depths (ft) 7778, 7784,
Bottomhole Choke Size (in) ... 0.94
Gauge Depth (ft)/Type 7762/SB-20232

NET PIPE RECOVERY

Volume	Fluid Type	Properties
	HEAVILY GAS	
	AND OIL CUT	
1542 ft	DRUG FLUID	Rw0.256@60F 30000ppm
148 ft	OIL	API 43.3@60F
1430 ft	WATER	Rw0.313@60F 24000ppm

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
1.251 cuft	Gas	
250 cc	Oil	API 42.5@60F
1400 cc	Water	Rw0.313@60F 24000ppm
Pressure: 550		GOR: 795
		GLA: 120

INTERPRETATION RESULTS

Model of Behavior
Fluid Type Used for Analysis..
Reservoir Pressure (psi)
Transmissibility (md.ft/cp) ..
Effective Permeability (md) ..
Skin Factor/Damage Ratio
Storage 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 (%) 10
Reservoir Temperature (F) 148
Form. Vol. Factor (bbl/STB)

PRODUCTION RATE DURING TEST: Data Report

COMMENTS:

This on bottom conventional D.S.T. of the Canyon formation was a success. The total recovery was 36.3 barrels. 21.9 barrels was heavily gas and oil cut drilling fluid. 2.1 barrels was distillate. And 12.3 barrels was water. If you have any questions call us at 505-393-4107. Thank you for using Schlumberger.

FIELD REPORT

TYPE OF SERVICE
OPEN HOLE DST

DATE
00-MAY-1996

**DISTRICT
HOBBS**

Page
1 of 2

WELL OWNER: NEARBURG PRODUCING CO.

SERVICE ORDER NUMBER: 139120

REPORTS ADDRESS: P.O. BOX 823058 / DALLAS, TX 75382 ATTN:TIM McDONALD

WELL NAME & NO.: OSAGE BOYD-15 #5

FIELD: N. DAGGER DRAW

LEASE:

LOCATION: 15/198/250

COUNTY: EDDY

STATE: NEW MEXICO

TEST NO. THREE

TEST INTERVAL FROM 7784 FT TO 7831 FT = 47 FT

[illegible]

Schlumberger

FIELD REPORT

TYPE OF SERVICE
OPEN HOLE DSTDATE
08-MAY-1996DISTRICT
HOBBSPage
2 of 2

INSTRUMENT DATA

INSTRUMENT NO.	SB-20232	J-1993	J-427		
CAPACITY (PSIG)	10000	6400	4700		
DEPTH	7762	7831	7744		
INSIDE-OUTSIDE	IN	OUT	ABV		
CLOCK CAP	ELECTRONIC	48 HOURS	48 HOURS		
TEMPERATURE °F	148	154			
I. HYD. PSIG	3562	3576	NO LEAKS		
I. FLOW PSIG	239-323	243-334	18-348		
I.S.I. PSIG	1984	2011			
2nd FLOW PSIG					
2nd S.I. PSIG					
F. FLOW PSIG	352-1323	364-1340	357-1293		
F.S.I. PSIG	1984	2014			
F. HYD. PSIG	3516	3525			

MUD DATA

MUD TYPE	CUT BRINE WATER	MUD WT	8.7	#/gal
VISCOSITY	28	WATER LOSS	N.C.	CC
RESISTIVITY: OF MUD	0.241	° 60	°F	
RESISTIVITY: OF FILTRATE	0	°F		
CHLORIDES	32000	PPM		
H2S DURING TEST	0	PPM		

WELL BORE DATA

FORMATION TESTED	CANYON "C"			
NET PRODUCTIVE INTERVAL	35	ft	EST. POROSITY	10
ELEVATION	3483	ft	DEPTH MEASURED FROM KB	
TOTAL MEASURED DEPTH			7831	ft
O H SIZE	8.75	in		
CASING SIZE	9.625	° 1115'		
LINER SIZE				
PERF INTERVAL FROM		ft	TO	ft
SHOT DENSITY				

CUSHION	LENGTH	AMOUNT	SURFACE PRESS	BOTTOM CHOKE SIZE
NONE				0.94

SAMPLER DATA

RECOVERY			RESISTIVITY			CHLORIDES	
GAS	1.251	C.F.	RECOVERED WATER	0.313	° 60 deg F	24000	PPM
OIL	250	C.C.	RECOVERED MUD	0	deg F		
WATER	1400	C.C.	REC. MUD FILTRATE	0	deg F		PPM
MUD		C.C.	PIT MUD	0.241	° 60 deg F		
GRAVITY 42.5 °API 60 °P			PIT MUD FILTRATE	0	deg F		PPM
GOR 794		C.F./BBL	SAMPLER PRESSURE	550	psig		

REMARKS:

This on bottom conventional D.S.T. of the Canyon formation was a success. The total recovery was 36.3 barrels. 21.9 barrels was heavily gas and oil cut drilling fluid. 2.1 barrels was distillate. And 12.3 barrels was water. If you have any questions call us at 505-393-4107. Thank you for using Schlumberger.

SERVICE ORDER NUMBER:

139320

SCHLUMBERGER ENGINEER/TECHNICIAN

BILL GRAYSHAW

WELL TEST INTERPRETATION REPORT #:139320		PAGE: 2,
CLIENT : NEARBURG PRODUCING CO.		8-MAY-96
REGION : CSD	SEQUENCE OF EVENTS	FIELD: N. DAGGER DRAW
DISTRICT: HOBBS		ZONE : CANYON "C"
BASE : MIDLAND		WELL : OH BOYD-15 #5
ENGINEER: BILL GRAYSHAW		LOCATION: 15/19s/25e

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)

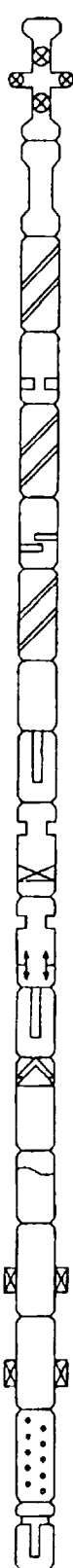
08-MAY		OPEN TO BUBBLE HOSE			
	11:30	HYDROSTATIC MUD	-4	3563	
	11:32	SET PACKERS	-2		
	11:34	START FLOW	0	240	4"
		B.O.BUCKET • 40 SEC.			
	11:35		1		1.3*
	11:36		2		2.5*
	11:37		3		5.6*
	11:38		4		6.8*
	11:39	END FLOW & START SHUT-IN	5	322	10.6*
	11:41	OPEN TO 1" CHOKE	7		
	11:49	GAS TO SURFACE	15		
	12:38	OPEN TO 1/4" CHOKE	64		
	12:39	END SHUT-IN	65	1985	
	12:42	START FLOW	68	353	3oz.
		B.O.BUCKET • 35 SEC.			
	12:43		69		6oz.
	12:44		70		6.5oz
	12:45		71		3*
	12:46		72		4.6*
	12:47		73		6*
	12:52		78		10.4*
	13:02		88		14.8*
	13:12		98		16.8*
	13:22		108		18.4*
	13:32		118		18*
	13:42	END FLOW & START SHUT-IN	128	1323	18.5*
	15:42	END SHUT-IN	248	1985	
	15:45	PULL PACKERS LOOSE	251		
	15:47	HYDROSTATIC MUD	253	3516	
		PULL TO FLUID			

Continued next page

WELL TEST INTERPRETATION REPORT #:139320		PAGE: 3,
CLIENT : NEARBURG PRODUCING CO.		8-MAY-96
REGION :CSD	SEQUENCE OF EVENTS Continued	FIELD:N. DAGGER DRAW
DISTRICT:HOBBS		ZONE :CANYON "C"
BASE :MIDLAND		WELL :OH BOYD-15 #5
ENGINEER:BILL GRAYSHAW		LOCATION:15/19#25e

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
=====					

NEARBURG PRODUCING CO.
OSAGE BOYD-15 #5
TOOL STRING SCHEMATIC

	TOOL DESCRIPTION	OD	ID	LENGTH	DEPTH
	SURFACE FLOWHEAD				0
	DRILL PIPE	4.50	3.82	6863.	6863
	DRILL COLLARS	6.25	2.25	691.9	7554.9
	PUMPOUT DISK REVERSING VALVE	6.00	3.00	0.979	7555.88
	DRILL COLLARS	6.25	2.25	90.03	7645.91
	BREAKOFF PIN REVERSING VALVE	6.00	3.00	1.012	7646.92
	DRILL COLLARS	6.25	2.25	90.09	7737.01
	CROSS OVER SUB	6.00	2.50	0.697	7737.71
	INSIDE/ABOVE RECORDER	5.75	3.00	6.290	7744
	MFE (MFEV-B)	5.75	0.94	10.02	7754.02
	MFE OH BYPASS (MOYP D)	5.00	1.18	2.980	7757
	INSIDE RECORDER CARRIER	4.88	1.25	5.910	7762.91
	TR HYDRAULIC JAR (FJAR-B)	4.75	1.88	6.885	7769.79
	SAFETY JOINT (SAJ-BA)	4.75	2.50	1.885	7771.68
	BOB TAIL PACKER	8.00	1.50	6.200	7777.88
	BOB TAIL PACKER	8.00	1.50	6.120	7784
	PERFORATED ANCHOR	5.75	3.00	40.03	7824.03
	OUTSIDE RECORDER CARRIER	5.75	3.00	6.970	7831

Report Number: 139320

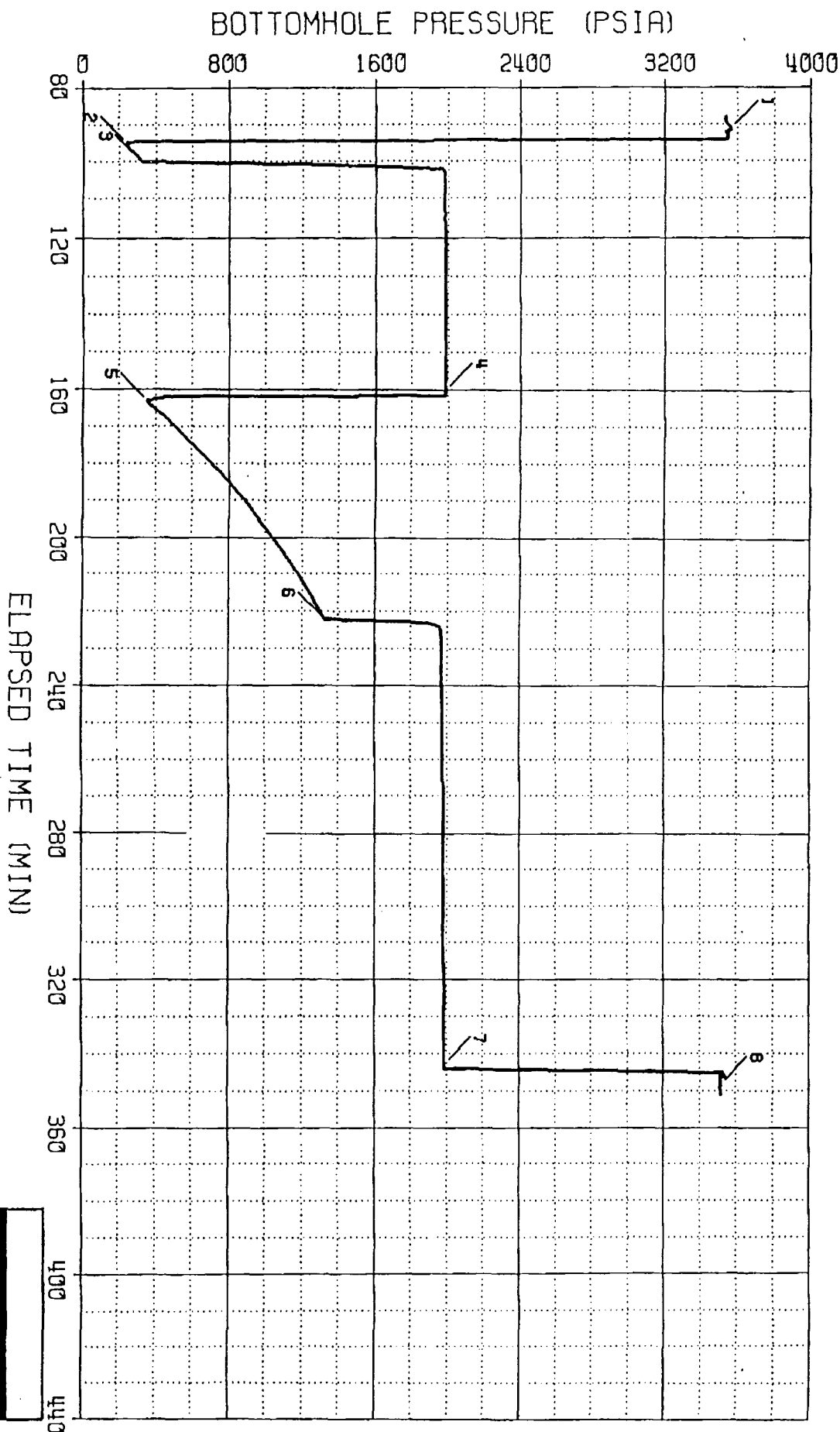
Test Number: THREE

Test Date: 08-MAY-1996

Schlumberger

BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 139320 COMPANY : NEARBURG PRODUCING CO.
INSTRUMENT NO. 20232 WELL : OSAGE BOYD-15 #5
DEPTH : 7762 FT
CAPACITY : 7514 PSI
PORT OPENING : INSIDE
Electronic Pressure Data



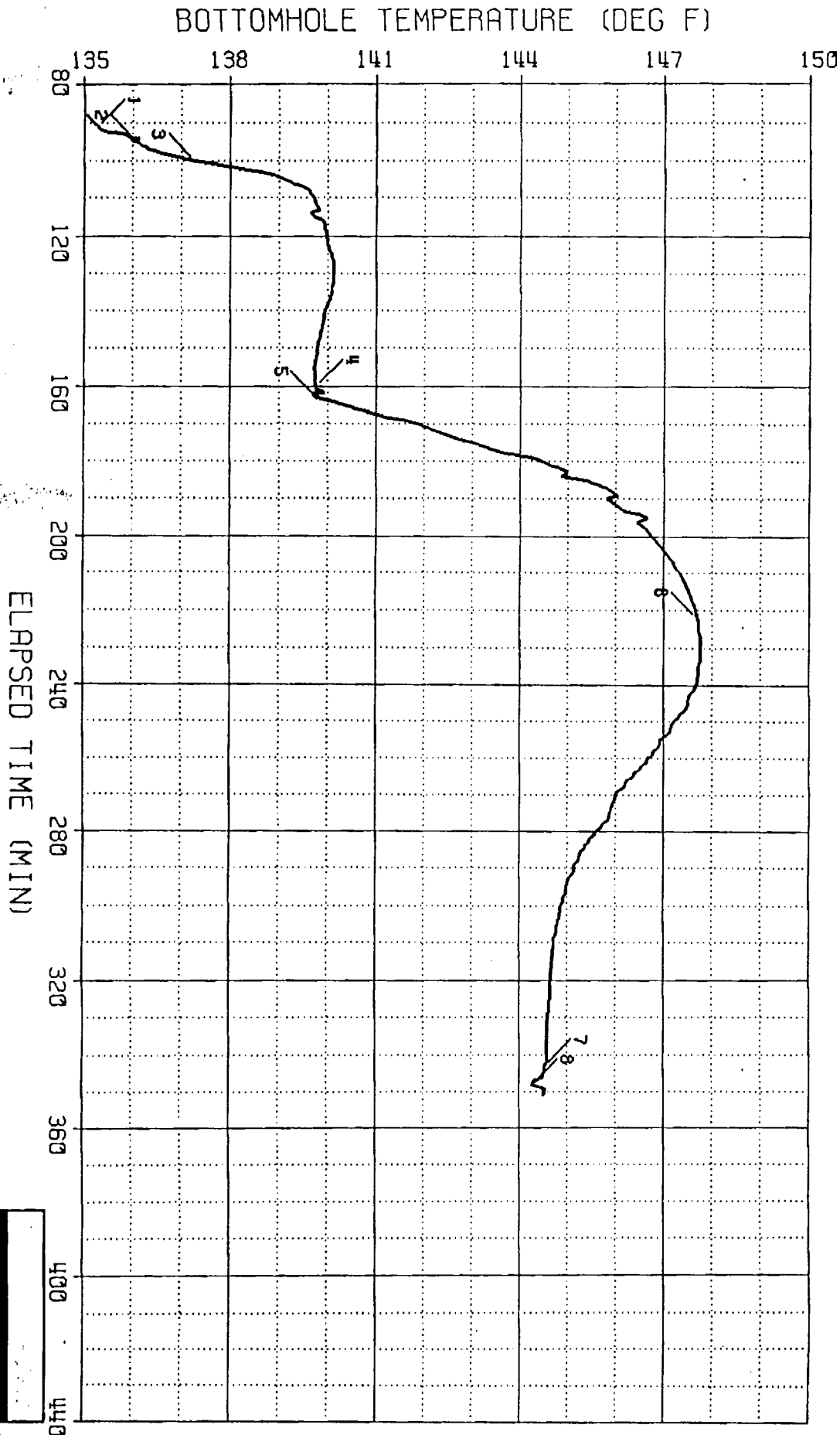
BOTTOMHOLE TEMPERATURE LOG

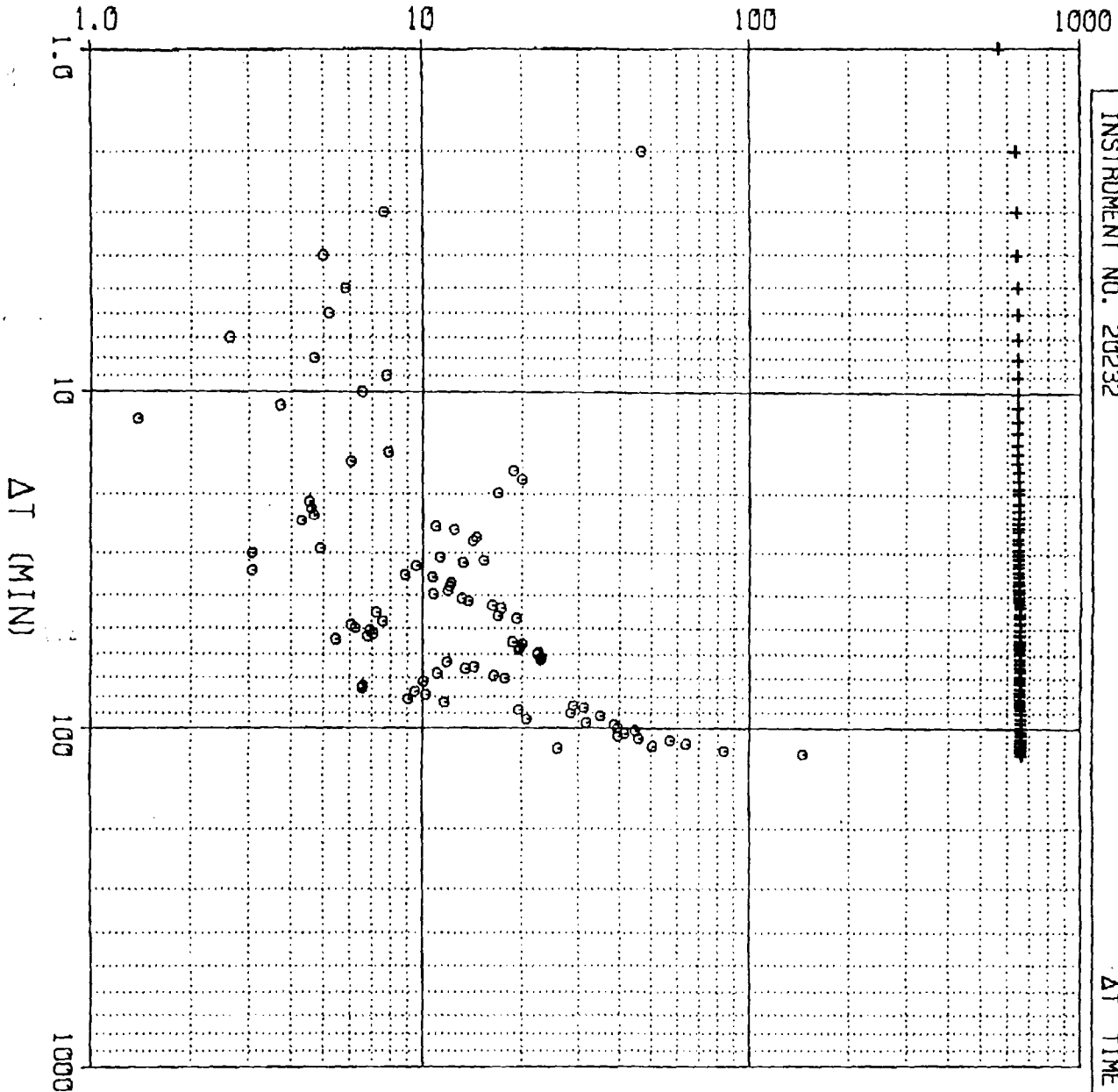
FIELD REPORT NO. 139320
INSTRUMENT NO. 20232

DEPTH : 7762 FT

COMPANY : NEARBURG PRODUCING CO.
WELL : OSAGE BOYD-15 #5

Electronic Temperature Data

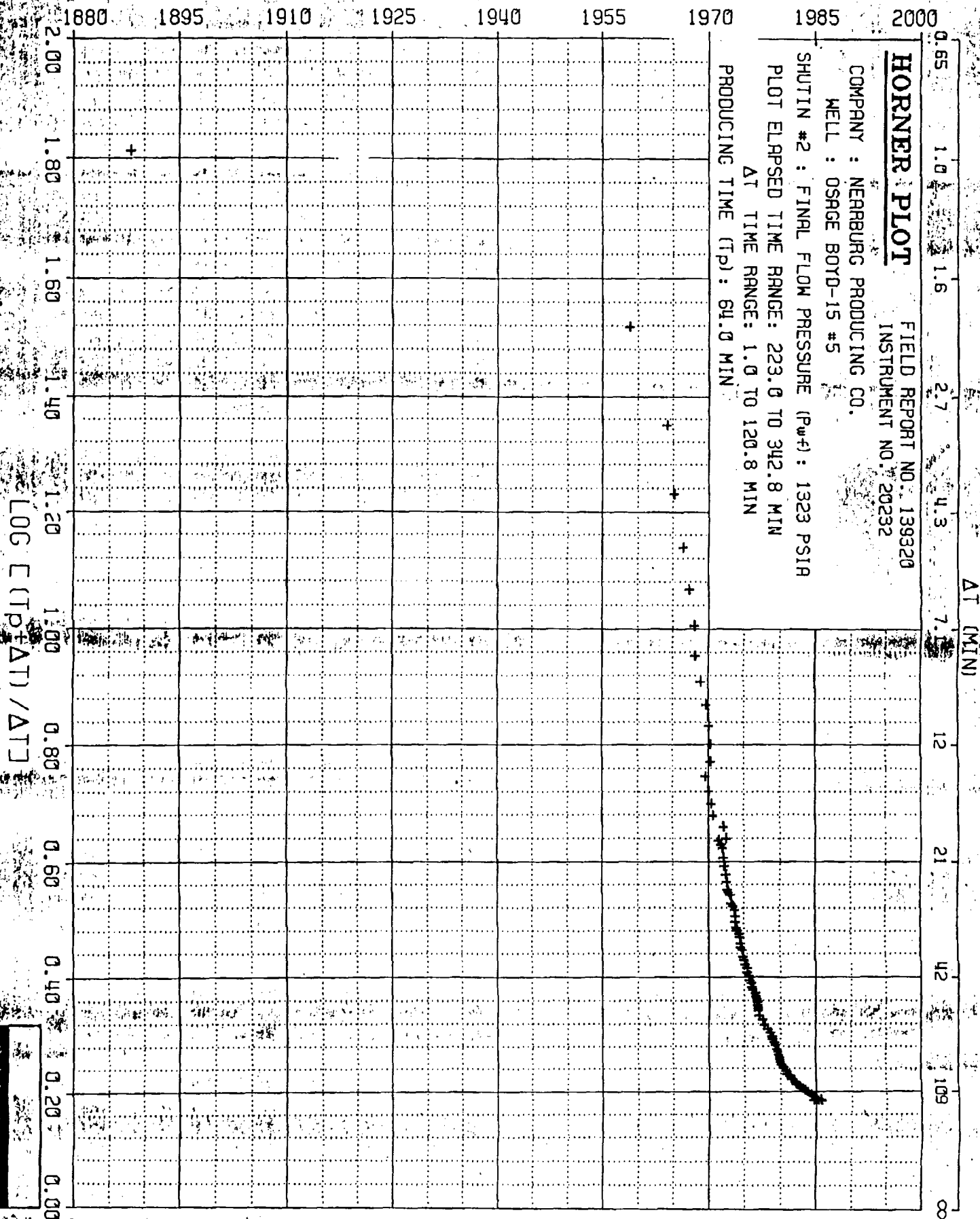


ΔP & DERIVATIVE (PSI)**LOG LOG PLOT**

COMPANY : NEARBURG PRODUCING CO.
 WELL : OSAGE BOYD-15 #5
 FIELD REPORT NO. 139320
 INSTRUMENT NO. 20232

SHUTIN #2 : PRODUCING TIME (TP) : 64.0 MIN
 FINAL FLOW PRESSURE (Pwf) : 1323 PSIA
 PLOT ELAPSED TIME RANGE: 223.0 TO 342.8 MIN
 ΔT TIME RANGE: 1.0 TO 120.8 MIN

PRESSURE (PSIA)



X

 ** WELL TEST DATA PRINTOUT **

COMPANY: NEARBURG PRODUCING CO.
 WELL: OSAGE BOYD-15 #5

FIELD REPORT NO. 139320
 INSTRUMENT NO. 20232

RECORDER CAPACITY: 7514 PSI PORT OPENING: INSIDE DEPTH: 7762 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	11:31:00	8-MAY	HYDROSTATIC MUD	91.00	3562.78	135.27
2	11:35:00	8-MAY	START FLOW	95.00	239.62	136.08
3	11:40:00	8-MAY	END FLOW & START SHUT-IN	100.00	322.09	137.27
4	12:40:00	8-MAY	END SHUT-IN	160.00	1984.78	139.76
5	12:43:00	8-MAY	START FLOW	163.00	352.86	139.79
6	13:42:00	8-MAY	END FLOW & START SHUT-IN	222.00	1323.29	147.70
7	15:42:48	8-MAY	END SHUT-IN	342.80	1984.59	144.54
8	15:48:00	8-MAY	HYDROSTATIC MUD	348.00	3516.16	144.26

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	95.00	100.00	5.00	239.62	322.09	239.62
2	163.00	222.00	59.00	352.86	1323.29	352.86

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	100.00	160.00	60.00	322.09	1984.78	322.09	5.00
2	222.00	342.80	120.80	1323.29	1984.59	1323.29	64.00

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
11:35:00	8-MAY	95.00	0.00	136.08	239.62
11:40:00	8-MAY	100.00	5.00	137.27	322.09

TEST PHASE: SHUTIN PERIOD # 1

FINAL FLOW PRESSURE = 322.09 PSIA
PRODUCING TIME = 5.00 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 HORN TIME
11:40:00	8-MAY	100.00	0.00	137.27	322.09	0.00	
11:41:00	8-MAY	101.00	1.00	137.81	1375.50	1053.41	0.7782
11:42:00	8-MAY	102.00	2.00	138.22	1970.25	1648.16	0.5441
11:43:00	8-MAY	103.00	3.00	138.65	1976.98	1654.89	0.4260
11:44:00	8-MAY	104.00	4.00	138.94	1978.53	1656.44	0.3522
11:45:00	8-MAY	105.00	5.00	139.12	1979.10	1657.01	0.3010
11:46:00	8-MAY	106.00	6.00	139.28	1979.84	1657.75	0.2632
11:47:00	8-MAY	107.00	7.00	139.47	1980.13	1658.04	0.2341
11:48:00	8-MAY	108.00	8.00	139.61	1980.52	1658.43	0.2109
11:49:00	8-MAY	109.00	9.00	139.66	1980.64	1658.55	0.1919
11:50:00	8-MAY	110.00	10.00	139.71	1980.73	1658.64	0.1761
11:52:00	8-MAY	112.00	12.00	139.79	1981.13	1659.04	0.1513
11:54:00	8-MAY	114.00	14.00	139.65	1981.44	1659.35	0.1326
11:56:00	8-MAY	116.00	16.00	139.92	1981.49	1659.40	0.1181
11:58:00	8-MAY	118.00	18.00	139.95	1981.62	1659.53	0.1065
12:00:00	8-MAY	120.00	20.00	139.98	1981.74	1659.65	0.0969
12:02:00	8-MAY	122.00	22.00	140.01	1981.83	1659.74	0.0889
12:04:00	8-MAY	124.00	24.00	140.04	1981.95	1659.86	0.0822
12:06:00	8-MAY	126.00	26.00	140.10	1982.26	1660.17	0.0764
12:08:00	8-MAY	128.00	28.00	140.12	1982.51	1660.42	0.0714
12:10:00	8-MAY	130.00	30.00	140.12	1982.74	1660.65	0.0669
12:15:00	8-MAY	135.00	35.00	140.09	1983.06	1660.97	0.0580
12:20:00	8-MAY	140.00	40.00	139.94	1983.73	1661.64	0.0512
12:25:00	8-MAY	145.00	45.00	139.88	1983.90	1661.81	0.0458
12:30:00	8-MAY	150.00	50.00	139.79	1984.33	1662.24	0.0414
12:35:00	8-MAY	155.00	55.00	139.73	1984.62	1662.53	0.0378
12:40:00	8-MAY	160.00	60.00	139.76	1984.78	1662.69	0.0348

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
12:43:00	8-MAY	163.00	0.00	139.79	352.86
12:58:00	8-MAY	178.00	15.00	143.68	669.14
13:13:00	8-MAY	193.00	30.00	146.16	932.01
13:28:00	8-MAY	208.00	45.00	147.23	1152.13
13:42:00	8-MAY	222.00	59.00	147.70	1323.29

X

FIELD REPORT # 139320

INSTRUMENT # 20232

PAGE 3

TEST PHASE: SHUTIN PERIOD # 2

FINAL FLOW PRESSURE = 1323.29 PSIA

PRODUCING TIME = 64.00 MIN

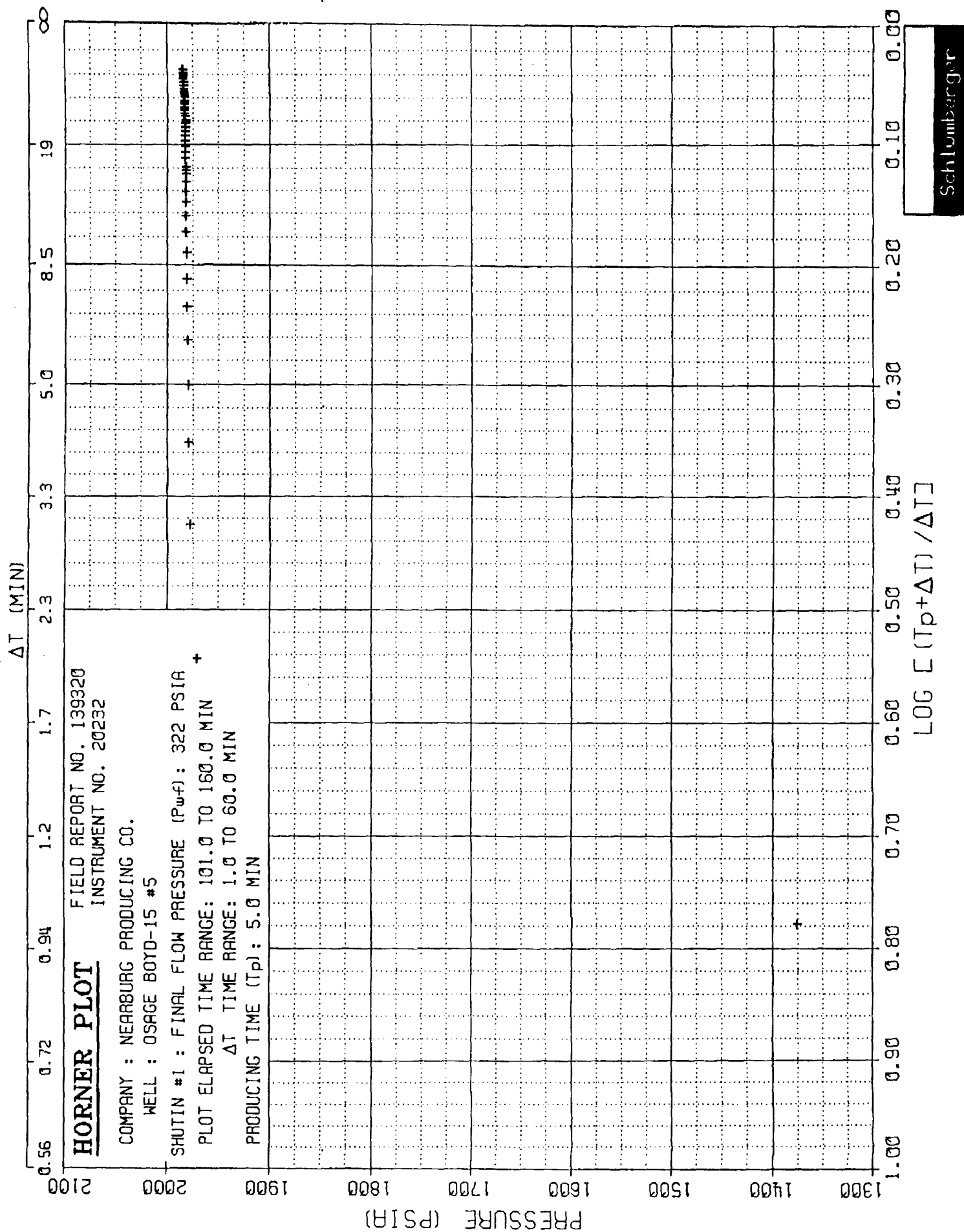
TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
13:42:00	8-MAY	222.00	0.00	147.70	1323.29	0.00	
13:43:00	8-MAY	223.00	1.00	147.72	1888.10	564.81	1.8129
13:44:00	8-MAY	224.00	2.00	147.73	1958.77	635.48	1.5185
13:45:00	8-MAY	225.00	3.00	147.73	1964.13	640.84	1.3490
13:46:00	8-MAY	226.00	4.00	147.74	1965.05	641.76	1.2304
13:47:00	8-MAY	227.00	5.00	147.75	1966.36	643.07	1.1399
13:48:00	8-MAY	228.00	6.00	147.76	1967.28	643.99	1.0669
13:49:00	8-MAY	229.00	7.00	147.76	1967.98	644.69	1.0062
13:50:00	8-MAY	230.00	8.00	147.76	1968.05	644.76	0.9542
13:51:00	8-MAY	231.00	9.00	147.76	1968.91	645.62	0.9091
13:52:00	8-MAY	232.00	10.00	147.76	1969.58	646.29	0.8692
13:54:00	8-MAY	234.00	12.00	147.74	1970.19	646.90	0.8016
13:56:00	8-MAY	236.00	14.00	147.73	1969.46	646.17	0.7460
13:58:00	8-MAY	238.00	16.00	147.70	1970.33	647.04	0.6990
14:00:00	8-MAY	240.00	18.00	147.67	1972.00	648.71	0.6585
14:02:00	8-MAY	242.00	20.00	147.55	1971.94	648.65	0.6232
14:04:00	8-MAY	244.00	22.00	147.51	1972.21	648.92	0.5921
14:06:00	8-MAY	246.00	24.00	147.46	1972.51	649.22	0.5643
14:08:00	8-MAY	248.00	26.00	147.32	1973.09	649.80	0.5393
14:10:00	8-MAY	250.00	28.00	147.19	1973.61	650.32	0.5166
14:12:00	8-MAY	252.00	30.00	147.14	1973.76	650.47	0.4960
14:17:00	8-MAY	257.00	35.00	146.89	1974.50	651.21	0.4516
14:22:00	8-MAY	262.00	40.00	146.54	1975.31	652.02	0.4150
14:27:00	8-MAY	267.00	45.00	146.20	1976.08	652.79	0.3842
14:32:00	8-MAY	272.00	50.00	145.95	1976.69	653.40	0.3579
14:37:00	8-MAY	277.00	55.00	145.83	1977.02	653.73	0.3352
14:42:00	8-MAY	282.00	60.00	145.46	1978.09	654.80	0.3153
14:47:00	8-MAY	287.00	65.00	145.24	1978.82	655.53	0.2977
14:52:00	8-MAY	292.00	70.00	145.08	1979.33	656.04	0.2820
14:57:00	8-MAY	297.00	75.00	144.96	1979.64	656.35	0.2680
15:02:00	8-MAY	302.00	80.00	144.84	1979.98	656.69	0.2553
15:07:00	8-MAY	307.00	85.00	144.77	1980.25	656.96	0.2438
15:12:00	8-MAY	312.00	90.00	144.70	1980.83	657.54	0.2333
15:17:00	8-MAY	317.00	95.00	144.67	1981.48	658.19	0.2237
15:22:00	8-MAY	322.00	100.00	144.64	1982.12	658.83	0.2148
15:27:00	8-MAY	327.00	105.00	144.62	1982.89	659.60	0.2067
15:32:00	8-MAY	332.00	110.00	144.59	1983.88	660.59	0.1992
15:37:00	8-MAY	337.00	115.00	144.58	1984.59	661.30	0.1922
15:42:00	8-MAY	342.00	120.00	144.56	1985.42	662.13	0.1856
15:42:48	8-MAY	342.80	120.80	144.54	1984.59	661.30	0.1846

NEARBURG PRODUCING CO.
OSAGE BOYD-15 #5
TOOL STRING SCHEMATIC

	TOOL DESCRIPTION	OD	ID	LENGTH	DEPTH
	SURFACE FLOWHEAD				0
	DRILL PIPE	4.50	3.82	6863.	6863
	DRILL COLLARS	6.25	2.25	691.9	7554.9
	PUMPOUT DISK REVERSING VALVE	6.00	3.00	0.979	7555.88
	DRILL COLLARS	6.25	2.25	90.03	7645.91
	BREAKOFF PIN REVERSING VALVE	6.00	3.00	1.012	7646.92
	DRILL COLLARS	6.25	2.25	90.09	7737.01
	CROSS OVER SUB	6.00	2.50	0.697	7737.71
	INSIDE/ABOVE RECORDER	5.75	3.00	6.290	7744
	MFE (MFEV-B)	5.75	0.94	10.02	7754.02
	MFE OH BYPASS (MBYP-B)	5.00	1.18	2.980	7757
	INSIDE RECORDER CARRIER	4.88	1.25	5.910	7762.91
	TR HYDRAULIC JAR (FJAR-B)	4.75	1.88	6.885	7769.79
	SAFETY JOINT (SAJ-BA)	4.75	2.50	1.885	7771.68
	BOB TAIL PACKER	8.00	1.50	6.200	7777.88
	BOB TAIL PACKER	8.00	1.50	6.120	7784
	PERFORATED ANCHOR	5.75	3.00	40.03	7824.03
	OUTSIDE RECORDER CARRIER	5.75	3.00	6.970	7831

Report Number: 139320
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Test Date: 08-MAY-1996

Schlumberger



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• 10/20/15 #4

