

Phone
(806) 637-3678

Harvill's Drill Stem Testing

P.O. Box 725
Brownfield, Texas 79316

Contractor ZIA Drilling
Rig No. 7
Spot 760' FSL & 1750' FEL
Sec. 5
Twp. 17 S
Rng. 36 E
Field Wildcat
County Lea
State New Mexico
Elevation 3907' KB

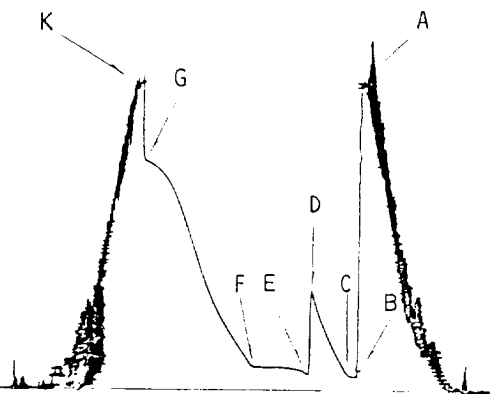
Surface Choke 1/8"
Bottom Choke 5/8"
Hole Size 7 7/8"
Rat Hole Size --
DP Size & Weight 4 1/2" 16.60
Wt. Pipe None
I.D. of DC 2 1/4"
Length of DC 808
Total Depth 7290'
Type of Test Conventional

Mud Type Fresh Water
Weight 8.5
Viscosity 28
Water Loss --
Filter Cake Film
Resistivity -- @ -- OF
25,000 Ppm. Cl
Bottom
Hole Temp. 120° F

Opened Tool @ 13:40 hrs.
Flow No. 1 (15) 13* min.
Shut-in No. 1 (60) 61* min.
Flow No. 2 (90) 90* min.
Shut-in No. 2 (180) 179* min.
Flow No. 3 None Taken min.
Shut-in No. 3 " " min.
*Computed

Recorder Type Kuster AK-1
No. 13750 Cap. 7900 psi
Depth 7284 feet
Inside [] Outside [X]

Initial Hydrostatic	A	3214.0
Final Hydrostatic	K	3214.4
Initial Flow	B	137.4
Final Initial Flow	C	137.1
Initial Shut-in	D	1028.4
Second Initial Flow	E	162.5
Second Final Flow	F	236.5
Second Shut-in	G	2422.8
Third Initial Flow	H	
Third Final Flow	I	
Third Shut-in	J	



Pipe Recovery: 580' Total fluid = 2.85 bbl.
240' Oil & gas = 1.18 bbl.
340' Drilling fluid = 1.67 bbl.

Gravity: 34.5° API @ 60° F
Bottom: 25,000 ppm Cl.

1st Flow: Tool opened with a weak blow, increased to a fair blow at end of flow period.

2nd Flow: Tool opened with a good blow, increased to a strong blow with 5.5 psi. Gas to surface during the final shut-in period.

Co. Rep. Joe Cox
Tester Eugene Harvill

Address 711 Millen Ave. Brownfield, TX 79316
SEE DISTRIBUTION
5-17-90
Test Interval
Formation
7243' - 7290'

BLINEBRY
7243' - 7290'

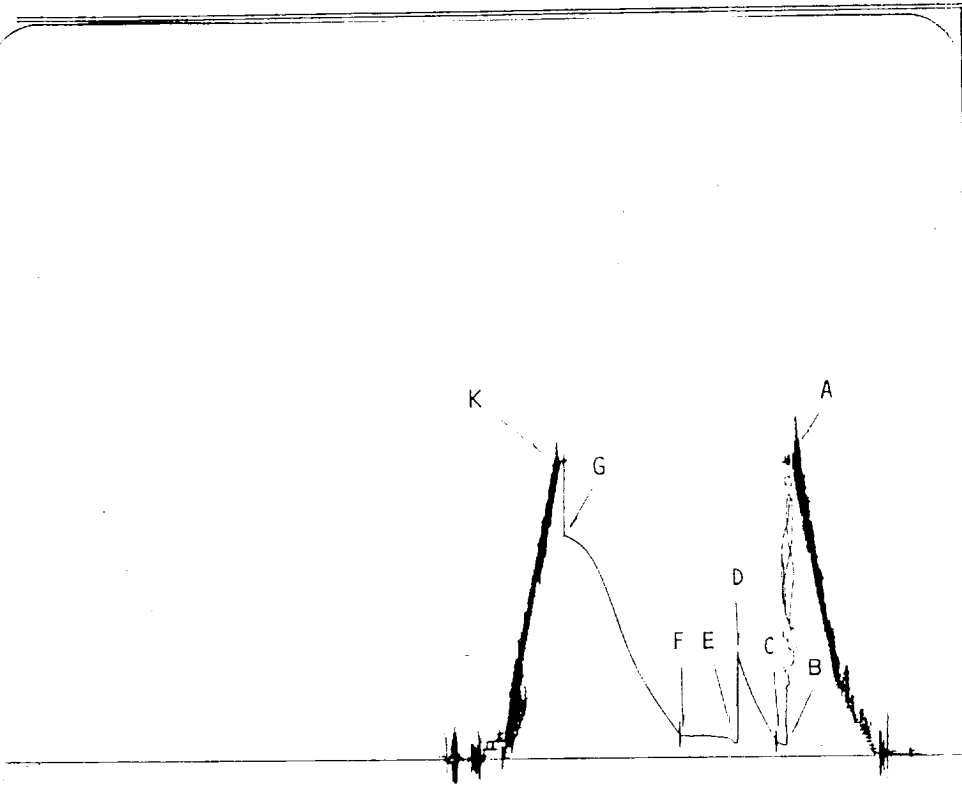
Ticket No. 330
Date 5/15/90

Harvill's Drill Stem Testing

Mallon Oil Co.
Operator

Mobil "5" State #1
Well Name and No.

3
DST No.



Inside Recorder

PRD Make Kuster AK-1
No. 13751 Cap. 8000 @ 7235'

Press	Correcte
Initial Hydrostatic A	3212.
Final Hydrostatic K	3206.
Initial Flow B	121.
Final Initial Flow C	142.
Initial Shut-in D	1016.
Second Initial Flow E	145.
Second Final Flow F	234.
Second Shut-in G	2418.
Third Initial Flow H	
Third Final Flow I	
Third Shut-in J	

PRD Make _____
No. _____ Cap. _____ @ _____

Press	Correcte
Initial Hydrostatic A	
Final Hydrostatic K	
Initial Flow B	
Final Initial Flow C	
Initial Shut-in D	
Second Initial Flow E	
Second Final Flow F	
Second Shut-in G	
Third Initial Flow H	
Third Final Flow I	
Third Shut-in J	

Harvill's Drill Stem Testing

Sampler Report

Company Mallon Oil Co. Date 5/15/90
Well Name & No. Mobil "5" State #1 Ticket No. 330
County Lea State New Mexico
Test Interval 7243' - 7290' DST No. 3

Total Volume of Sampler: 2250 cc.

Total Volume of Sample: 1700 cc.

Pressure in Sampler: 160 psig

Oil: 1500 cc.

Water: 200 cc.

Mud: None cc.

Gas: 2.0 cu. ft.

Other: None

Sample R W: .9 @ 64°F - .50 @ Res Temp; 95,000 ppm Cl.

Resistivity

Make Up Water _____ @ _____ of Chloride Content _____ ppm.

Mud Pit Sample _____ @ _____ of Chloride Content 25,000 ppm.

Gas/Oil Ratio 213/1 cu.ft./bbl. Gravity 34.5 °API @ 60 °F

Where was sample drained On location.

Remarks: _____

Harvill's Drill Stem Testing

Mallon Oil Co.

Operator

Mobil "5" State #1

Well Name and No.

3

DST No

RECORDER NO. 13750 DEPTH 7284 FT.

INITIAL FLOW

<u>DT(MIN)</u>	<u>PRESSURE(PSIG)</u>
0	137.4
5	136.7
10	137.0
13	137.1

RECORDER NO. 13750 DEPTH 7284 FT.

FINAL FLOW

<u>DT(MIN)</u>	<u>PRESSURE(PSIG)</u>
0	162.5
5	172.1
10	189.5
15	202.6
20	208.4
25	214.1
30	218.6
35	222.8
40	226.6
45	230.0
50	231.8
55	232.7
60	231.6
65	232.6
70	230.9
75	229.7
80	233.4
85	237.8
90	236.5

Harvill's Drill Stem Testing

Mallon Oil Co.
Operator

Mobil "5" State #1
Well Name and No.

3
DST No.

RECORDER NO. 13750 DEPTH 7284 FT.

INITIAL SHUT-IN

INITIAL FLOW TIME: T = 13 MIN.

DT(MIN)	LOG((T+DT)/DT)	PRESSURE(P SIG)	DP(P SIG)
0		137.1	0.0
1	1.146	141.5	4.3
2	0.875	147.0	9.8
3	0.727	153.6	16.5
4	0.628	160.5	23.3
5	0.556	166.6	29.4
6	0.501	174.4	37.3
7	0.456	182.2	45.1
8	0.419	191.8	54.7
9	0.388	200.8	63.7
10	0.362	213.6	76.4
12	0.319	239.2	102.1
14	0.285	262.8	125.7
16	0.258	287.4	150.2
18	0.236	313.7	176.6
20	0.217	338.3	201.2
22	0.202	361.4	224.3
24	0.188	393.7	256.6
26	0.176	415.3	278.1
28	0.166	442.7	305.6
30	0.156	470.4	333.3
35	0.137	544.1	406.9
40	0.122	622.0	484.8
45	0.110	704.9	567.8
50	0.100	793.3	656.2
55	0.092	893.7	756.5
60	0.085	1009.3	872.2
61	0.084	1028.4	891.3

EXTRAPOLATED PRESSURE: INDETERMINATE

Harvill's Drill Stem Testing

Mallon Oil Co.

Operator

Mobil "5" State #1

Well Name and No.

3

DST No

RECORDER NO. 13750 DEPTH 7284 FT.

FINAL SHUT-IN

TOTAL FLOW TIME: T = 103 MIN.

DT(MIN)	LOG((T+DT)/DT)	PRESSURE(P SIG)	DP(P SIG)
0		236.5	0.0
1	2.017	239.1	2.6
2	1.720	241.3	4.8
3	1.548	245.3	8.8
4	1.427	250.0	13.5
5	1.334	255.0	18.4
6	1.259	259.7	23.2
7	1.196	267.2	30.7
8	1.142	278.0	41.5
9	1.095	287.8	51.3
10	1.053	298.5	61.9
12	0.982	319.7	83.2
14	0.922	339.6	103.1
16	0.871	357.6	121.1
18	0.828	375.2	138.7
20	0.789	395.1	158.6
22	0.754	413.7	177.2
24	0.724	433.5	197.0
26	0.696	454.3	217.8
28	0.670	471.2	234.6
30	0.647	492.8	256.2
35	0.596	545.5	309.0
40	0.553	595.0	358.4
45	0.517	652.8	416.3
50	0.486	707.7	471.1
55	0.458	765.6	529.0
60	0.434	827.0	590.5
70	0.393	960.2	723.7
80	0.359	1125.5	888.9
90	0.331	1308.0	1071.5
100	0.307	1512.0	1275.5
110	0.287	1720.9	1484.4
120	0.269	1912.9	1676.3
130	0.253	2076.0	1839.5
140	0.239	2196.9	1960.4
150	0.227	2286.1	2049.6
160	0.216	2347.9	2111.3

Harvill's Drill Stem Testing

Mallon Oil Co.

Operator

Mobil "5" State #1

Well Name and No.

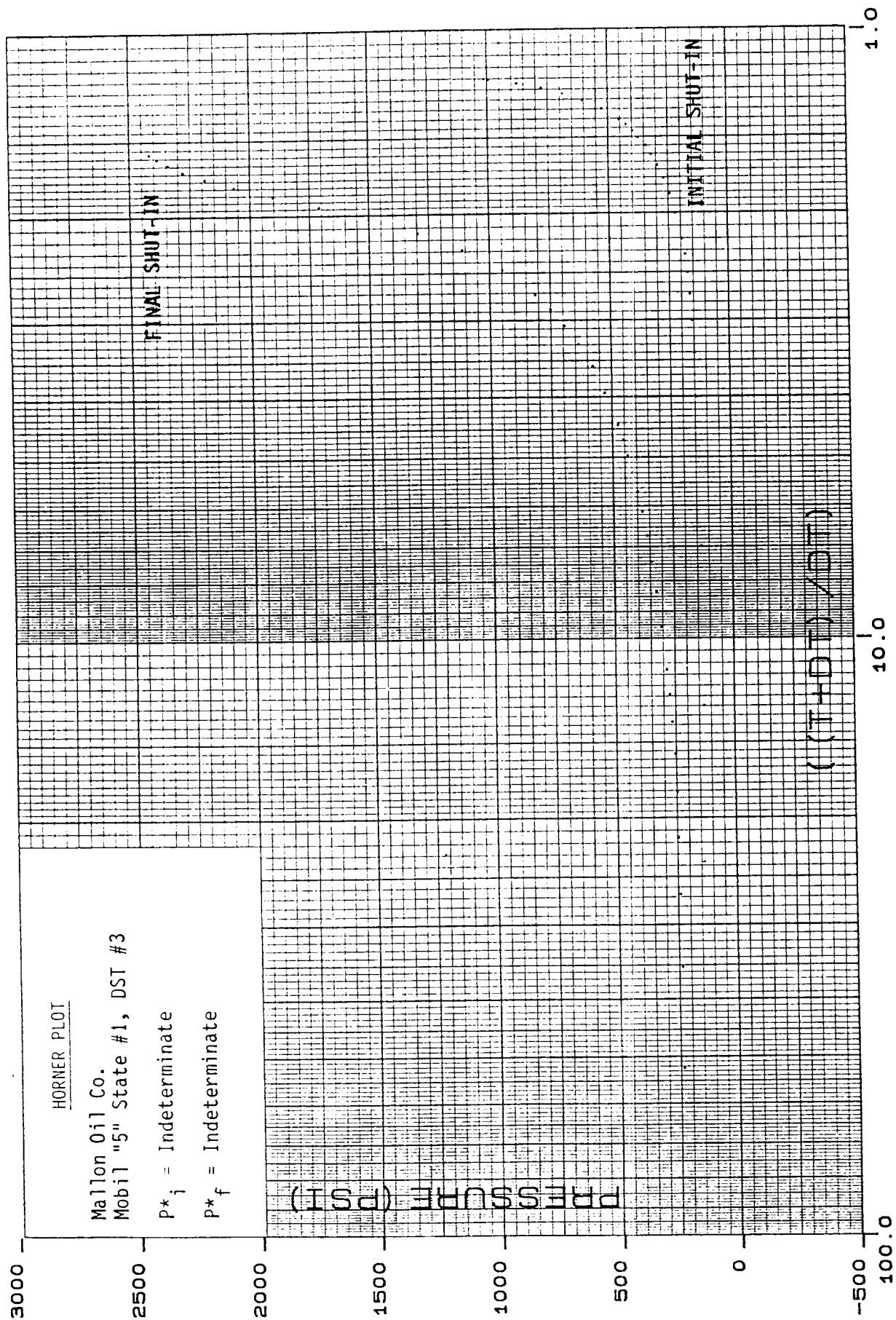
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DST No.

FINAL SHUT-IN CONTINUED

<u>DT(MIN)</u>	<u>LOG((T+DT)/DT)</u>	<u>PRESSURE(P SIG)</u>	<u>DP(P SIG)</u>
170	0.206	2393.3	2156.8
179	0.197	2422.8	2186.3

EXTRAPOLATED PRESSURE: INDETERMINATE



HORNER PLOT

Mallon Oil Co.
Mobil "5" State #1, DST #3

P^*_i = Indeterminate

P^*_f = Indeterminate

PRESSURE (PSI)

FINAL SHUT-IN

INITIAL SHUT-IN

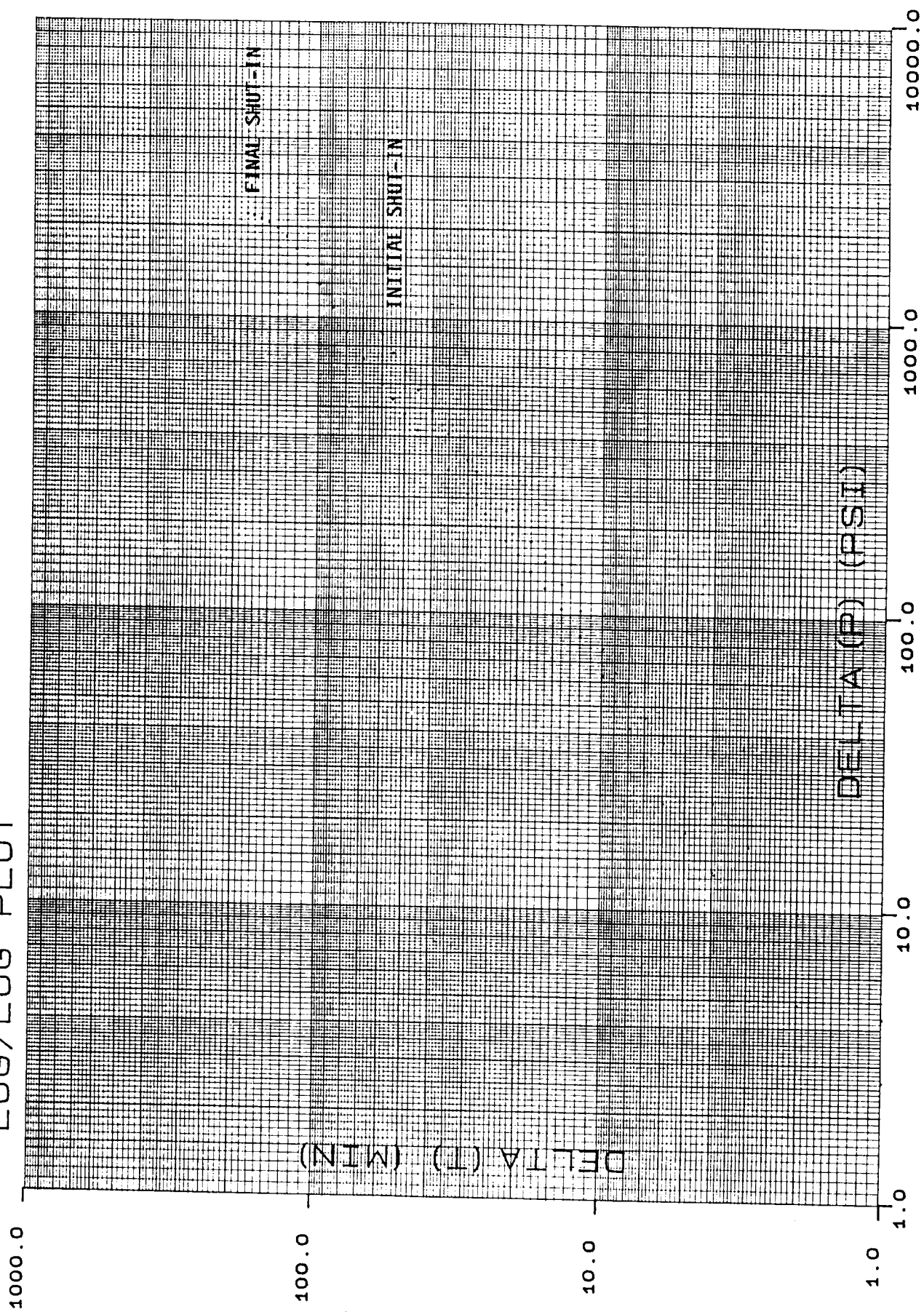
$((T+DT)/DT)$

100.0

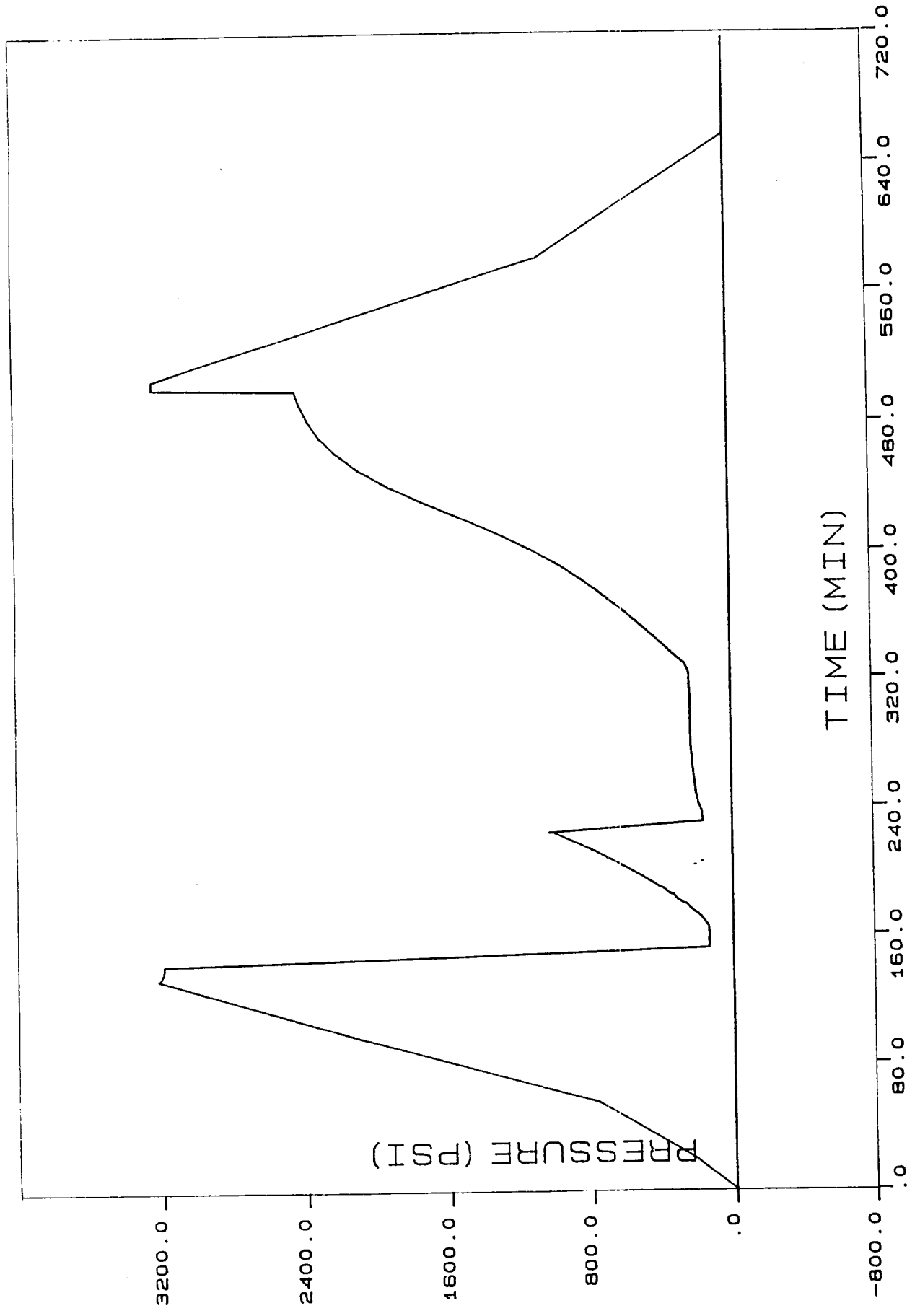
10.0

1.0

LOG/LOG PLOT



GAUGE NO. 13750 @ 7284 FT.



Harvill's Drill Stem Testing

DISTRIBUTION OF FINAL REPORTS

Mallon Oil Co.
Operator

Mobil "5" State #1
Well Name and No.

Mallon Oil Co. 5
Attn: Joe Cox
1099-18th St., Suite 2750
Denver CO 80202