

Table 1

Well Descriptions

| Well No. | MW#1 | MW#2 | MW#3 | TPW#1 | TPW#2 | TPW#3 | TPW#4 | TPW#5 | TPW#6 | OSW |
|-------------|------|------|------|-------|-------|-------|-------|-------|-------|------|
| Diameter | 4" | 4" | 4" | 10" | 10" | 10" | 10" | 10" | 10" | 6" |
| Cased Depth | 100' | 100' | 100' | 97' | 100' | 86' | 87' | 95' | 95' | 80' |
| Total Depth | 164' | 170' | 113' | 170' | 145' | 150' | 150' | 160' | 170' | 156' |

Table 2

Summary of Aquifer Characteristics

| METHOD | TPW#1 | MW#1 | | | MW#2 | | | TPW#2 | | TPW#3 | OSW | | TPW#4 | |
|------------------------------------|-------------|-------------|---------|------------------------|-------------|----------|------------------------|-------------|----------|-------------|-------------|----------|-------------|----------|
| | T gpd/ft | T gpd/ft | S | L day ⁻¹ | T gpd/ft | S | L day ⁻¹ | T gpd/ft | S | T gpd/ft | T gpd/ft | S | T gpd/ft | S |
| Theis | 10,028 | 15,135 | 0.00084 | | 13,370 | 0.000066 | | | | | | | | |
| Glover | 10,154 | 16,044 | 0.00011 | 0.00034 | 13,370 | 0.000062 | 0.00020 | | | | | | | |
| Jacob- Hantush Time-Drawdown | 11,550 | 16,800 | 0.00007 | | 15,148 | 0.000049 | | 36,960 | 0.000078 | 92,400 | 147,840 | 0.000031 | 184,800 | 0.000014 |
| Jacob- Hantush Recovery | 12,320 | 15,400 | | | 14,215 | | | | | | | | | |
| AVERAGE | 11,013 | 15,845 | 0.00034 | 0.00034 | 14,026 | 0.000059 | 0.00020 | 36,960 | 0.000078 | 92,400 | 147,840 | 0.000031 | 184,800 | 0.000014 |

Long term test

Distance-Drawdown T = 18,480 gpd/ft S = 0.000498 L = 0.000095 day⁻¹

AQUIFER PERFORMANCE TEST FORM

NAME: L J Nobles
PROJECT NAME: Nobles

DATE OF TEST: 4/5/87
LOCATION: S36 T42 R28

DISTANCE FROM PUMPED WELL: FEET WEATHER CONDITIONS: Clear
PUMPING RATE: 700 GPM
WELL #: TPW STATIC W L (FT BELOW TOC) 0.00

| TIME (IN MINUTES) | WATER LEVEL FROM TOC | DRAWDOWN IN FEET |
|----------------------|-------------------------|---------------------|
| 0.25 | | 0.00 |
| 0.50 | 17.26 | 17.26 |
| 0.75 | 19.85 | 19.85 |
| 1.00 | 21.97 | 21.97 |
| 1.25 | 23.36 | 23.36 |
| 1.50 | 24.54 | 24.54 |
| 1.75 | 25.60 | 25.60 |
| 2.00 | 26.74 | 26.74 |
| 2.50 | 28.38 | 28.38 |
| 3.00 | 29.75 | 29.75 |
| 3.50 | 30.90 | 30.90 |
| 4.00 | 31.95 | 31.95 |
| 4.50 | 32.76 | 32.76 |
| 5.00 | 33.58 | 33.58 |
| 6.00 | 34.95 | 34.95 |
| 7.00 | 36.10 | 36.10 |
| 8.00 | 36.96 | 36.96 |
| 9.00 | 37.75 | 37.75 |
| 10.00 | 38.47 | 38.47 |
| 11.00 | 39.08 | 39.08 |
| 12.00 | 39.55 | 39.55 |
| 13.00 | 40.10 | 40.10 |
| 14.00 | 40.50 | 40.50 |
| 15.00 | 40.92 | 40.92 |

PROJECT: Nobles
TIME
(IN MINUTES)

DATE: 4/5/87
WATER LEVEL
FROM TOC

WELL#: TPW
DRAWDOWN
IN FEET

| | | |
|---------|-------|-------|
| 20.00 | 42.45 | 42.45 |
| 25.00 | 43.53 | 43.53 |
| 30.00 | 44.34 | 44.34 |
| 35.00 | 44.94 | 44.94 |
| 40.00 | 45.48 | 45.48 |
| 45.00 | 45.85 | 45.85 |
| 50.00 | 46.20 | 46.20 |
| 55.00 | 46.46 | 46.46 |
| 60.00 | 46.73 | 46.73 |
| 70.00 | 47.30 | 47.30 |
| 80.00 | 47.65 | 47.65 |
| 90.00 | 47.99 | 47.99 |
| 100.00 | 48.23 | 48.23 |
| 110.00 | 48.47 | 48.47 |
| 120.00 | 48.69 | 48.69 |
| 150.00 | 49.24 | 49.24 |
| 180.00 | 49.58 | 49.58 |
| 210.00 | 49.77 | 49.77 |
| 240.00 | 50.10 | 50.10 |
| 360.00 | 50.72 | 50.72 |
| 480.00 | 51.10 | 51.10 |
| 720.00 | 51.73 | 51.73 |
| 960.00 | 52.10 | 52.10 |
| 1260.00 | 51.74 | 51.74 |
| 1560.00 | 52.00 | 52.00 |
| 1980.00 | 52.68 | 52.68 |
| 2460.00 | 52.74 | 52.74 |

PROJECT: Nobles
TIME
(IN MINUTES)

DATE: 4/5/87
WATER LEVEL
FROM TOC

WELL#: TPW
DRAWDOWN
IN FEET

| | | |
|---------|-------|-------|
| 2940.00 | 52.60 | 52.60 |
| 3240.00 | 52.90 | 52.90 |
| 3480.00 | 52.90 | 52.90 |
| 3900.00 | 52.72 | 52.72 |
| 4200.00 | 52.75 | 52.75 |

AQUIFER PERFORMANCE TEST FORM

NAME: L J Nobles
PROJECT NAME: Nobles

DATE OF TEST: 4/5/87
LOCATION: S36 T42 R28

DISTANCE FROM PUMPED WELL: 100 FEET WEATHER CONDITIONS: Clear
PUMPING RATE: 700 GPM
WELL #: 1 STATIC W L (FT BELOW TOC) 2.15

| TIME (IN MINUTES) | WATER LEVEL FROM TOC | DRAWDOWN IN FEET |
|----------------------|-------------------------|---------------------|
| 0.25 | 4.50 | 2.35 |
| 0.50 | 7.01 | 4.86 |
| 0.75 | 7.95 | 5.80 |
| 1.00 | 9.53 | 7.38 |
| 1.25 | 10.58 | 8.43 |
| 1.50 | 11.23 | 9.08 |
| 1.75 | 11.85 | 9.70 |
| 2.00 | 12.61 | 10.46 |
| 2.50 | 13.90 | 11.75 |
| 3.00 | 14.65 | 12.50 |
| 3.50 | 15.34 | 13.19 |
| 4.00 | 15.89 | 13.74 |
| 4.50 | 16.44 | 14.29 |
| 5.00 | 16.91 | 14.76 |
| 6.00 | 17.77 | 15.62 |
| 7.00 | 18.53 | 16.38 |
| 8.00 | 19.24 | 17.09 |
| 9.00 | 19.85 | 17.70 |
| 10.00 | 20.42 | 18.27 |
| 11.00 | 20.90 | 18.75 |
| 12.00 | 21.32 | 19.17 |
| 13.00 | 21.67 | 19.52 |
| 14.00 | 22.01 | 19.86 |
| 15.00 | 22.32 | 20.17 |

PROJECT: Nobles
TIME
(IN MINUTES)

DATE: 4/5/97
WATER LEVEL
FROM TOC

WELL#: 1
DRAWDOWN
IN FEET

| | | |
|---------|-------|-------|
| 20.00 | 23.81 | 21.66 |
| 25.00 | 25.04 | 22.89 |
| 30.00 | 26.02 | 23.87 |
| 35.00 | 26.80 | 24.65 |
| 40.00 | 27.01 | 24.86 |
| 45.00 | 27.32 | 25.17 |
| 50.00 | 27.70 | 25.55 |
| 55.00 | 28.12 | 25.97 |
| 60.00 | 28.46 | 26.31 |
| 70.00 | 29.19 | 27.04 |
| 80.00 | 29.72 | 27.57 |
| 90.00 | 30.26 | 28.11 |
| 100.00 | 30.70 | 28.55 |
| 110.00 | 31.00 | 28.85 |
| 120.00 | 31.32 | 29.17 |
| 150.00 | 32.10 | 29.95 |
| 180.00 | 32.60 | 30.45 |
| 210.00 | 32.90 | 30.75 |
| 240.00 | 33.20 | 31.05 |
| 360.00 | 33.45 | 31.30 |
| 480.00 | 33.95 | 31.80 |
| 720.00 | 34.43 | 32.28 |
| 960.00 | 34.81 | 32.66 |
| 1260.00 | 34.81 | 32.66 |
| 1560.00 | 35.10 | 32.95 |
| 1980.00 | 34.93 | 32.78 |
| 2460.00 | 34.98 | 32.83 |

PROJECT: Nobles
TIME
(IN MINUTES)

DATE: 4/5/87
WATER LEVEL
FROM TOC

WELL#: 1
DRAWDOWN
IN FEET

2940.00

34.85

32.70

3240.00

35.10

32.95

3480.00

35.11

32.96

3900.00

35.02

32.87

4200.00

35.07

32.92

AQUIFER PERFORMANCE TEST FORM

NAME: L J Nobles
PROJECT NAME: Nobles

DATE OF TEST: 4/5/87
LOCATION: S36 T42 R28

DISTANCE FROM PUMPED WELL: 300 FEET WEATHER CONDITIONS: Clear
PUMPING RATE: 700 GPM

WELL #: 2 STATIC W L (FT BELOW TOC) 2.32

| TIME (IN MINUTES) | WATER LEVEL FROM TOC | DRAWDOWN IN FEET |
|----------------------|-------------------------|---------------------|
| 0.25 | 2.40 | 0.08 |
| 0.50 | 2.61 | 0.29 |
| 0.75 | 2.91 | 0.59 |
| 1.00 | 3.29 | 0.97 |
| 1.25 | 3.71 | 1.39 |
| 1.50 | 4.09 | 1.77 |
| 1.75 | 4.48 | 2.16 |
| 2.00 | 4.87 | 2.55 |
| 2.50 | 5.77 | 3.45 |
| 3.00 | 6.51 | 4.19 |
| 3.50 | 7.27 | 4.95 |
| 4.00 | 7.88 | 5.56 |
| 4.50 | 8.47 | 6.15 |
| 5.00 | 8.97 | 6.65 |
| 6.00 | 9.92 | 7.60 |
| 7.00 | 10.75 | 8.43 |
| 8.00 | 11.52 | 9.20 |
| 9.00 | 12.18 | 9.86 |
| 10.00 | 12.80 | 10.48 |
| 11.00 | 13.36 | 11.04 |
| 12.00 | 13.87 | 11.55 |
| 13.00 | 14.36 | 12.04 |
| 14.00 | 14.79 | 12.47 |
| 15.00 | 15.22 | 12.90 |

PROJECT: Nobles
TIME
(IN MINUTES)

DATE: 4/5/87
WATER LEVEL
FROM TOC

WELL#: 2
DRAWDOWN
IN FEET

| | | |
|---------|-------|-------|
| 20.00 | 16.90 | 14.58 |
| 25.00 | 18.17 | 15.85 |
| 30.00 | 19.21 | 16.89 |
| 35.00 | 20.01 | 17.69 |
| 40.00 | 20.75 | 18.43 |
| 45.00 | 21.34 | 19.02 |
| 50.00 | 21.85 | 19.53 |
| 55.00 | 22.32 | 20.00 |
| 60.00 | 22.74 | 20.42 |
| 70.00 | 23.50 | 21.18 |
| 80.00 | 24.08 | 21.76 |
| 90.00 | 24.61 | 22.29 |
| 100.00 | 25.09 | 22.77 |
| 110.00 | 25.38 | 23.06 |
| 120.00 | 25.66 | 23.34 |
| 150.00 | 26.46 | 24.14 |
| 180.00 | 26.96 | 24.64 |
| 210.00 | 27.27 | 24.95 |
| 240.00 | 27.58 | 25.26 |
| 360.00 | 28.20 | 25.88 |
| 480.00 | 28.65 | 26.33 |
| 720.00 | 29.23 | 26.91 |
| 960.00 | 29.48 | 27.16 |
| 1260.00 | 29.53 | 27.21 |
| 1560.00 | 29.90 | 27.58 |
| 1980.00 | 29.99 | 27.67 |
| 2460.00 | 30.02 | 27.70 |

PROJECT: Nobles
TIME
(IN MINUTES)

DATE: 4/5/87
WATER LEVEL
FROM TOC

WELL#: 2
DRAWDOWN
IN FEET

2940.00

29.88

27.56

3240.00

30.20

27.88

3480.00

30.23

27.91

3900.00

30.11

27.79

4200.00

30.31

27.99

AQUIFER PERFORMANCE TEST FORM

NAME: L J Nobles
PROJECT NAME: Nobles

DATE OF TEST: 4/25/87
LOCATION: S 36 T 42 R 28

DISTANCE FROM PUMPED WELL: 1000 FEET WEATHER CONDITIONS: Clear

PUMPING RATE: 700 GPM

WELL #: TPW#2 STATIC W L (FT BELOW TOC) 4.42

| TIME (IN MINUTES) | WATER LEVEL FROM TOC | DRAWDOWN IN FEET |
|----------------------|-------------------------|---------------------|
| 65.00 | 8.62 | 4.20 |
| 100.00 | 9.18 | 4.76 |
| 240.00 | 11.42 | 7.00 |
| 960.00 | 12.97 | 8.55 |
| 1560.00 | 15.50 | 11.08 |
| 2940.00 | 16.08 | 11.66 |
| 4200.00 | 18.29 | 13.87 |

AQUIFER PERFORMANCE TEST FORM

NAME: L J Nobles DATE OF TEST: 4/5/87
 PROJECT NAME: Nobles LOCATION: S36 T42 R28
 DISTANCE FROM PUMPED WELL: FEET WEATHER CONDITIONS: Clear
 PUMPING RATE: 700 GPM
 WELL #: TPW STATIC W L (FT BELOW TOC) 0.00
 TIME PUMP TURNED OFF (IN MINUTES): 4200.00

| TIME SINCE PUMP START t (MIN) | TIME SINCE PUMP STOPPED t' (MIN) | t/t' | WATER LEVEL FROM TOC (FT) | RESIDUAL DRAWDOWN s' (FT) |
|-------------------------------------|--|---------|---------------------------------|---------------------------------|
| 4201.00 | 1.00 | 4201.00 | 28.80 | 28.80 |
| 4202.00 | 2.00 | 2101.00 | 24.75 | 24.75 |
| 4203.00 | 3.00 | 1401.00 | 21.97 | 21.97 |
| 4204.00 | 4.00 | 1051.00 | 19.90 | 19.90 |
| 4205.00 | 5.00 | 841.00 | 18.41 | 18.41 |
| 4206.00 | 6.00 | 701.00 | 17.12 | 17.12 |
| 4207.00 | 7.00 | 601.00 | 16.10 | 16.10 |
| 4208.00 | 8.00 | 526.00 | 15.25 | 15.25 |
| 4209.00 | 9.00 | 467.67 | 14.51 | 14.51 |
| 4210.00 | 10.00 | 421.00 | 13.90 | 13.90 |
| 4215.00 | 15.00 | 281.00 | 11.78 | 11.78 |
| 4220.00 | 20.00 | 211.00 | 10.54 | 10.54 |
| 4225.00 | 25.00 | 169.00 | 9.78 | 9.78 |
| 4230.00 | 30.00 | 141.00 | 9.21 | 9.21 |
| 4235.00 | 35.00 | 121.00 | 8.77 | 8.77 |
| 4240.00 | 40.00 | 106.00 | 8.42 | 8.42 |
| 4250.00 | 50.00 | 85.00 | 7.88 | 7.88 |
| 4260.00 | 60.00 | 71.00 | 7.52 | 7.52 |
| 4280.00 | 80.00 | 53.50 | 6.99 | 6.99 |
| 4300.00 | 100.00 | 43.00 | 6.60 | 6.60 |
| 4320.00 | 120.00 | 36.00 | 6.38 | 6.38 |
| 4350.00 | 150.00 | 29.00 | 6.04 | 6.04 |
| 4380.00 | 180.00 | 24.33 | 5.80 | 5.80 |
| 4440.00 | 240.00 | 18.50 | 5.38 | 5.38 |

AQUIFER PERFORMANCE TEST FORM

NAME: L J Nobles DATE OF TEST: 4/5/87
 PROJECT NAME: Nobles LOCATION: S36 T42 R28
 DISTANCE FROM PUMPED WELL: 100 FEET WEATHER CONDITIONS: Clear
 PUMPING RATE: 700 GPM
 WELL #: 1 STATIC W L (FT BELOW TOC) 2.15
 TIME PUMP TURNED OFF (IN MINUTES): 4200.00

| TIME SINCE PUMP START t (MIN) | TIME SINCE PUMP STOPPED t' (MIN) | t/t' | WATER LEVEL FROM TOC (FT) | RESIDUAL DRAWDOWN s' (FT) |
|-------------------------------------|--|---------|---------------------------------|---------------------------------|
| 4201.00 | 1.00 | 4201.00 | | |
| 4202.00 | 2.00 | 2101.00 | | |
| 4203.00 | 3.00 | 1401.00 | | |
| 4204.00 | 4.00 | 1051.00 | | |
| 4205.00 | 5.00 | 841.00 | | |
| 4206.00 | 6.00 | 701.00 | 22.40 | 20.25 |
| 4207.00 | 7.00 | 601.00 | 21.40 | 19.25 |
| 4208.00 | 8.00 | 526.00 | 20.50 | 18.35 |
| 4209.00 | 9.00 | 467.67 | 19.76 | 17.61 |
| 4210.00 | 10.00 | 421.00 | 19.10 | 16.95 |
| 4215.00 | 15.00 | 281.00 | 16.90 | 14.75 |
| 4220.00 | 20.00 | 211.00 | 15.40 | 13.25 |
| 4225.00 | 25.00 | 169.00 | 14.32 | 12.17 |
| 4230.00 | 30.00 | 141.00 | 13.52 | 11.37 |
| 4235.00 | 35.00 | 121.00 | 12.83 | 10.68 |
| 4240.00 | 40.00 | 106.00 | 12.32 | 10.17 |
| 4250.00 | 50.00 | 85.00 | 11.53 | 9.38 |
| 4260.00 | 60.00 | 71.00 | 10.95 | 8.80 |
| 4280.00 | 80.00 | 53.50 | 10.12 | 7.97 |
| 4300.00 | 100.00 | 43.00 | 9.53 | 7.38 |
| 4320.00 | 120.00 | 36.00 | 9.17 | 7.02 |
| 4350.00 | 150.00 | 29.00 | 8.70 | 6.55 |
| 4380.00 | 180.00 | 24.33 | 8.38 | 6.23 |
| 4440.00 | 240.00 | 18.50 | 7.80 | 5.65 |

AQUIFER PERFORMANCE TEST FORM

NAME: L J Nobles
 PROJECT NAME: Nobles
 DISTANCE FROM PUMPED WELL: 300 FEET
 PUMPING RATE: 700 GPM
 WELL #: 2
 DATE OF TEST: 4/5/87
 LOCATION: S36 T42 R28
 WEATHER CONDITIONS:
 STATIC W L (FT BELOW TOC) 2.32
 TIME PUMP TURNED OFF (IN MINUTES): 4200

| TIME SINCE PUMP START t (MIN) | TIME SINCE PUMP STOPPED t' (MIN) | t/t' | WATER LEVEL FROM TOC (FT) | RESIDUAL DRAWDOWN s' (FT) |
|-------------------------------------|--|---------|---------------------------------|---------------------------------|
| 4201.00 | 1.00 | 4201.00 | 30.01 | 27.69 |
| 4202.00 | 2.00 | 2101.00 | 29.15 | 26.83 |
| 4203.00 | 3.00 | 1401.00 | 28.13 | 25.81 |
| 4204.00 | 4.00 | 1051.00 | 27.08 | 24.76 |
| 4205.00 | 5.00 | 841.00 | 26.09 | 23.77 |
| 4206.00 | 6.00 | 701.00 | 25.02 | 22.70 |
| 4207.00 | 7.00 | 601.00 | 24.20 | 21.88 |
| 4208.00 | 8.00 | 526.00 | 23.50 | 21.18 |
| 4209.00 | 9.00 | 467.67 | 22.80 | 20.48 |
| 4210.00 | 10.00 | 421.00 | 22.21 | 19.89 |
| 4215.00 | 15.00 | 281.00 | 19.90 | 17.58 |
| 4220.00 | 20.00 | 211.00 | 18.28 | 15.96 |
| 4225.00 | 25.00 | 169.00 | 17.05 | 14.73 |
| 4230.00 | 30.00 | 141.00 | 16.08 | 13.76 |
| 4235.00 | 35.00 | 121.00 | 15.26 | 12.94 |
| 4240.00 | 40.00 | 106.00 | 14.61 | 12.29 |
| 4250.00 | 50.00 | 85.00 | 13.54 | 11.22 |
| 4260.00 | 60.00 | 71.00 | 12.72 | 10.40 |
| 4280.00 | 80.00 | 53.50 | 11.60 | 9.28 |
| 4300.00 | 100.00 | 43.00 | 10.75 | 8.43 |
| 4320.00 | 120.00 | 36.00 | 10.25 | 7.93 |
| 4350.00 | 150.00 | 29.00 | 9.63 | 7.31 |
| 4380.00 | 180.00 | 24.33 | 9.25 | 6.93 |
| 4440.00 | 240.00 | 18.50 | 8.58 | 6.26 |

AQUIFER PERFORMANCE TEST FORM

NAME: Nobles
PROJECT NAME:

DATE OF TEST: 5/12/87
LOCATION: S 35 T 42 R 28

DISTANCE FROM PUMPED WELL: FEET WEATHER CONDITIONS: cloudy
PUMPING RATE: 700 GPM
WELL #: TPW (#3) STATIC W L (FT BELOW TOC) 3.00

| TIME (IN MINUTES) | WATER LEVEL FROM TOC | DRAWDOWN IN FEET |
|----------------------|-------------------------|---------------------|
| 0.25 | | |
| 0.50 | | |
| 0.75 | | |
| 1.00 | 15.80 | 12.80 |
| 1.25 | | |
| 1.50 | 16.32 | 13.32 |
| 1.75 | | |
| 2.00 | 16.50 | 13.50 |
| 2.50 | 16.79 | 13.79 |
| 3.00 | 16.89 | 13.89 |
| 3.50 | 17.03 | 14.03 |
| 4.00 | 17.17 | 14.17 |
| 4.50 | 17.31 | 14.31 |
| 5.00 | 17.41 | 14.41 |
| 6.00 | 17.60 | 14.60 |
| 7.00 | 17.72 | 14.72 |
| 8.00 | 17.83 | 14.83 |
| 9.00 | 17.93 | 14.93 |
| 10.00 | 18.00 | 15.00 |
| 11.00 | 18.10 | 15.10 |
| 12.00 | 18.16 | 15.16 |
| 13.00 | 18.25 | 15.25 |
| 14.00 | 18.30 | 15.30 |
| 15.00 | 18.37 | 15.37 |

PROJECT: Nobles
TIME
(IN MINUTES)

DATE: 5/12/87
WATER LEVEL
FROM TOC

WELL#: TFW (#3)
DRAWDOWN
IN FEET

| | | |
|--------|-------|-------|
| 20.00 | 18.56 | 15.56 |
| 25.00 | 18.75 | 15.75 |
| 30.00 | | |
| 35.00 | | |
| 40.00 | 19.25 | 16.25 |
| 45.00 | | |
| 50.00 | 19.50 | 16.50 |
| 55.00 | 19.65 | 16.65 |
| 60.00 | 19.80 | 16.80 |
| 70.00 | 19.95 | 16.95 |
| 80.00 | 20.13 | 17.13 |
| 90.00 | 20.36 | 17.36 |
| 100.00 | 20.49 | 17.49 |
| 110.00 | 20.63 | 17.63 |
| 120.00 | 20.79 | 17.79 |
| 150.00 | 21.23 | 18.23 |
| 180.00 | 21.56 | 18.56 |
| 195.00 | 21.74 | 18.74 |

AQUIFER PERFORMANCE TEST FORM

NAME: Nobles
PROJECT NAME:

DATE OF TEST: 5/12/87
LOCATION: S 35 T 42 R 28

DISTANCE FROM PUMPED WELL: 1000 FEET WEATHER CONDITIONS: cloudy
PUMPING RATE: 700 GPM
WELL #: #1 (OBW) STATIC W L (FT BELOW TOC) 3.5

| TIME (IN MINUTES) | WATER LEVEL FROM TOC | DRAWDOWN IN FEET |
|----------------------|-------------------------|---------------------|
| 0.25 | | |
| 0.50 | 3.60 | 0.10 |
| 0.75 | | |
| 1.00 | | |
| 1.25 | | |
| 1.50 | 3.80 | 0.30 |
| 1.75 | | |
| 2.00 | | |
| 2.50 | | |
| 3.00 | 4.10 | 0.60 |
| 3.50 | | |
| 4.00 | | |
| 4.50 | | |
| 5.00 | 4.30 | 0.80 |
| 6.00 | | |
| 7.00 | | |
| 8.00 | 4.60 | 1.10 |
| 9.00 | | |
| 10.00 | | |
| 11.00 | 4.80 | 1.30 |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |
| 15.00 | 5.10 | 1.60 |

PROJECT: Nobles
TIME
(IN MINUTES)

DATE: 5/12/87
WATER LEVEL
FROM TOC

WELL#: #1 (OBW)
DRAWDOWN
IN FEET

| | | |
|--------|------|------|
| 20.00 | 5.40 | 1.90 |
| 25.00 | 5.60 | 2.10 |
| 30.00 | 5.77 | 2.27 |
| 35.00 | 5.95 | 2.45 |
| 40.00 | 6.05 | 2.55 |
| 45.00 | 6.20 | 2.70 |
| 50.00 | 6.36 | 2.86 |
| 55.00 | 6.49 | 2.99 |
| 60.00 | 6.60 | 3.10 |
| 70.00 | 6.94 | 3.44 |
| 80.00 | 7.03 | 3.53 |
| 90.00 | 7.23 | 3.73 |
| 100.00 | 7.39 | 3.89 |
| 110.00 | 7.55 | 4.05 |
| 120.00 | 7.70 | 4.20 |
| 150.00 | 8.17 | 4.67 |
| 180.00 | 8.51 | 5.01 |

AQUIFER PERFORMANCE TEST FORM

NAME: Nobles
PROJECT NAME:

DATE OF TEST: 5/12/87
LOCATION: S 35 T 42 R 28

DISTANCE FROM PUMPED WELL: 2000 FEET WEATHER CONDITIONS: cloudy
PUMPING RATE: 700 GPM
WELL #: 2 (TPW#4) STATIC W L (FT BELOW TOC) 6.09

| TIME (IN MINUTES) | WATER LEVEL FROM TOC | DRAWDOWN IN FEET |
|----------------------|-------------------------|---------------------|
| 0.25 | | |
| 0.50 | 6.16 | 0.07 |
| 0.75 | | |
| 1.00 | 6.20 | 0.11 |
| 1.25 | | |
| 1.50 | 6.28 | 0.19 |
| 1.75 | | |
| 2.00 | 6.34 | 0.25 |
| 2.50 | 6.40 | 0.31 |
| 3.00 | 6.46 | 0.37 |
| 3.50 | 6.48 | 0.39 |
| 4.00 | 6.52 | 0.43 |
| 4.50 | 6.56 | 0.47 |
| 5.00 | 6.60 | 0.51 |
| 6.00 | 6.66 | 0.57 |
| 7.00 | 6.76 | 0.67 |
| 8.00 | 6.80 | 0.71 |
| 9.00 | 6.84 | 0.75 |
| 10.00 | 6.88 | 0.79 |
| 11.00 | 6.94 | 0.85 |
| 12.00 | 7.02 | 0.93 |
| 13.00 | 7.05 | 0.96 |
| 14.00 | 7.09 | 1.00 |
| 15.00 | 7.14 | 1.05 |

PROJECT: Nobles
TIME
(IN MINUTES)

DATE: 5/12/87
WATER LEVEL
FROM TOC

WELL#: 2 (TPW#4)
DRAWDOWN
IN FEET

| | | |
|--------|-------|------|
| 20.00 | 7.38 | 1.29 |
| 25.00 | 7.55 | 1.46 |
| 30.00 | 7.76 | 1.67 |
| 35.00 | 7.87 | 1.78 |
| 40.00 | 7.99 | 1.90 |
| 45.00 | 8.11 | 2.02 |
| 50.00 | 8.23 | 2.14 |
| 55.00 | 8.35 | 2.26 |
| 60.00 | 8.57 | 2.48 |
| 70.00 | 8.76 | 2.67 |
| 80.00 | 8.93 | 2.84 |
| 90.00 | 9.09 | 3.00 |
| 100.00 | 9.26 | 3.17 |
| 110.00 | 9.35 | 3.26 |
| 120.00 | 9.49 | 3.40 |
| 150.00 | 9.85 | 3.76 |
| 180.00 | 10.12 | 4.03 |

AQUIFER PERFORMANCE TEST FORM

NAME: Nobles
PROJECT NAME:

DATE OF TEST: 5/12/87
LOCATION: S 35 T 42 R 28

DISTANCE FROM PUMPED WELL: 3200 FEET WEATHER CONDITIONS: cloudy
PUMPING RATE: 700 GPM
WELL #: TPW#1 STATIC W L (FT BELOW TOC) 3.00

TIME
(IN MINUTES)

WATER LEVEL
FROM TOC

DRAWDOWN
IN FEET

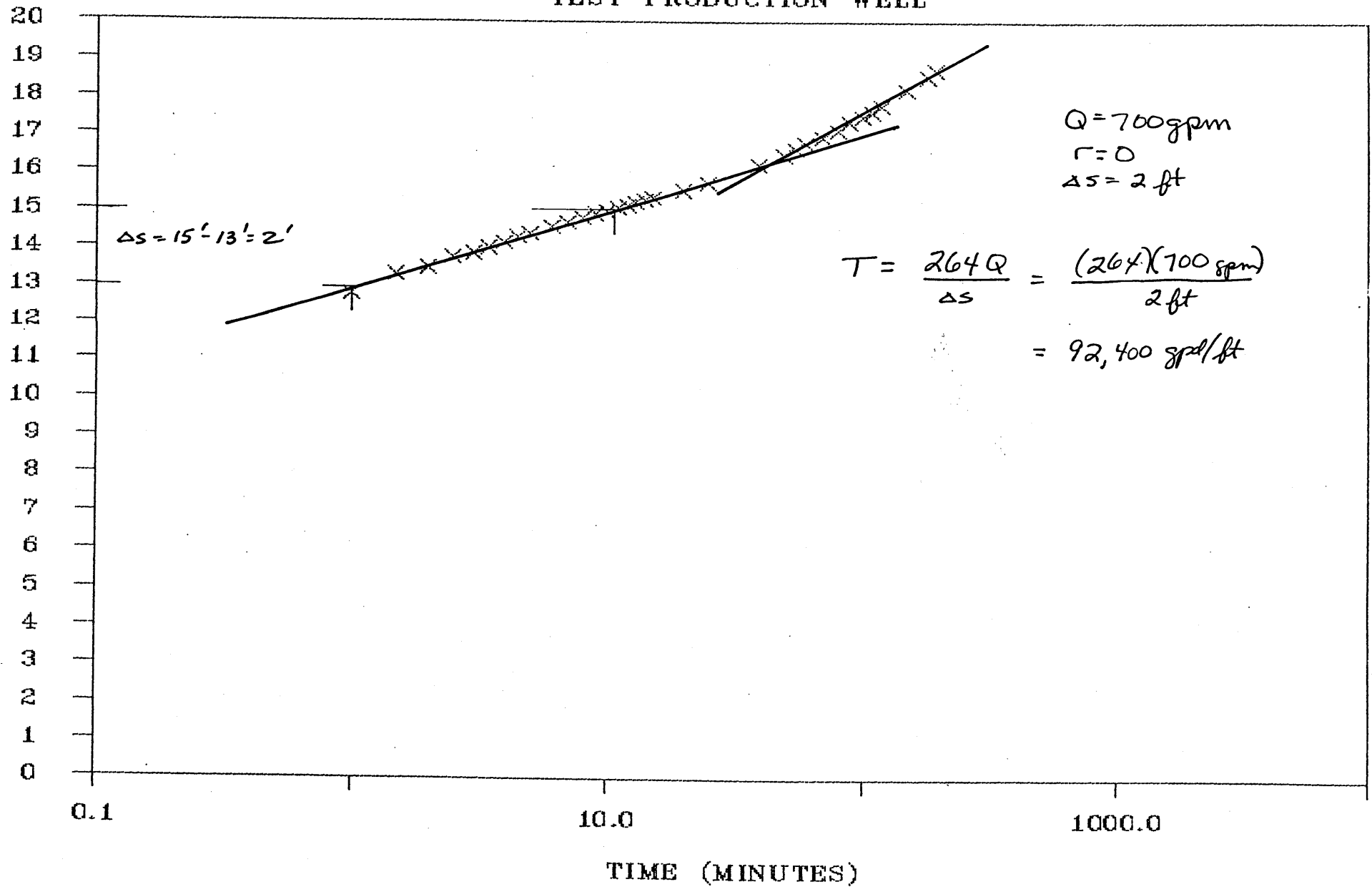
120.00

6.00

3.00

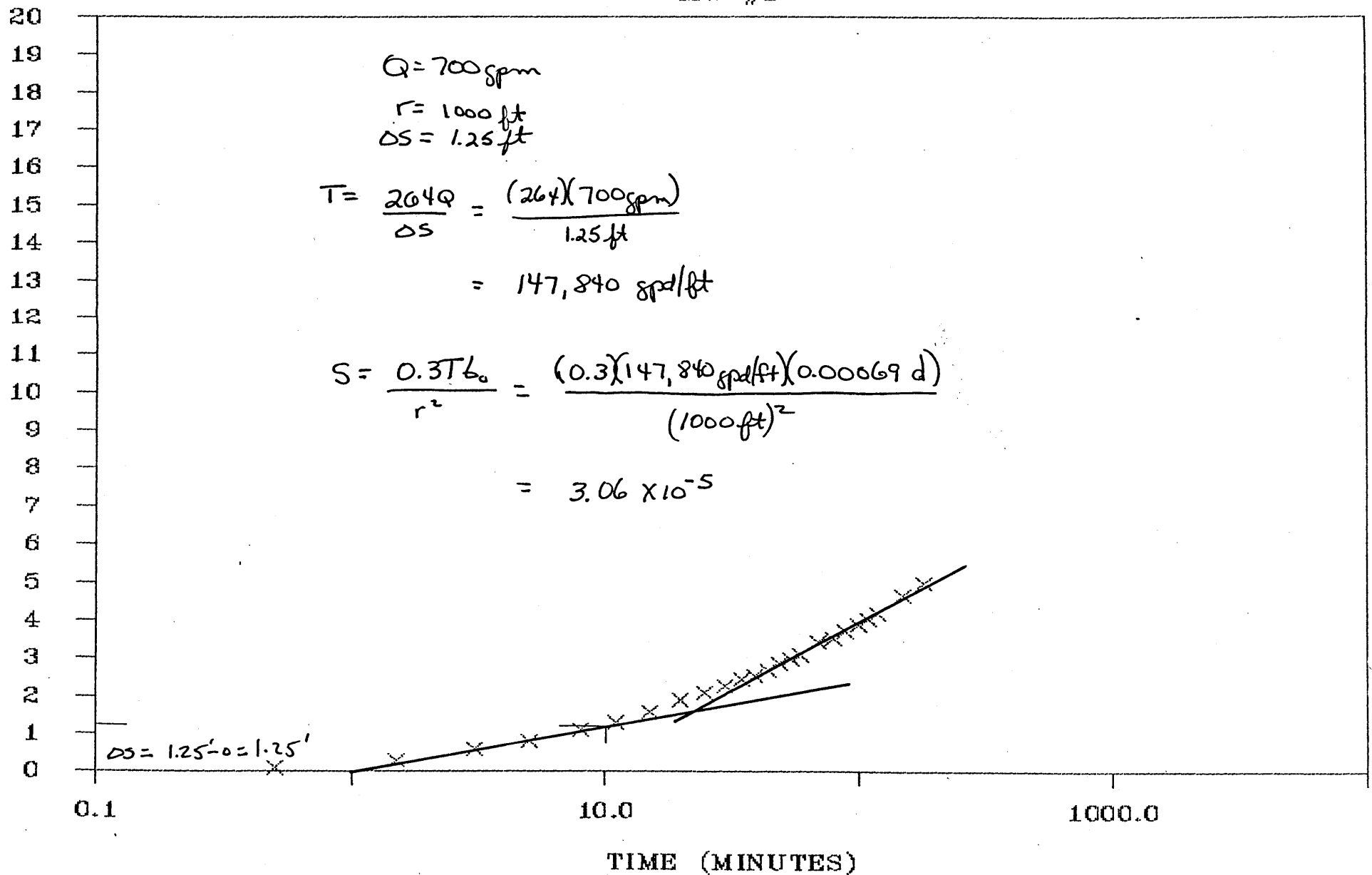
SEMI-LOG OF DRAWDOWN VS TIME

TEST PRODUCTION WELL



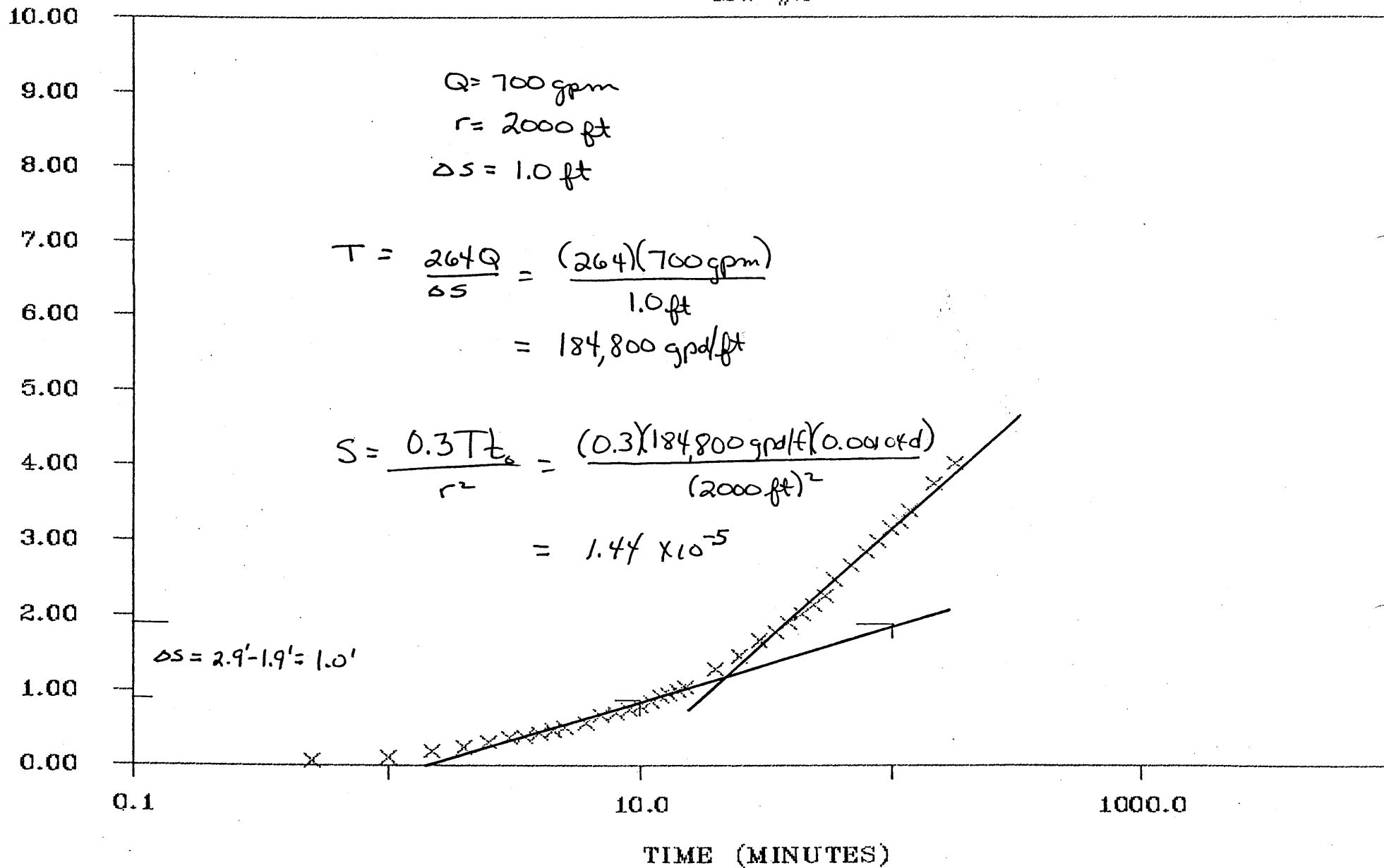
SEMI-LOG OF RAWDOWN VS TIME

MW #1



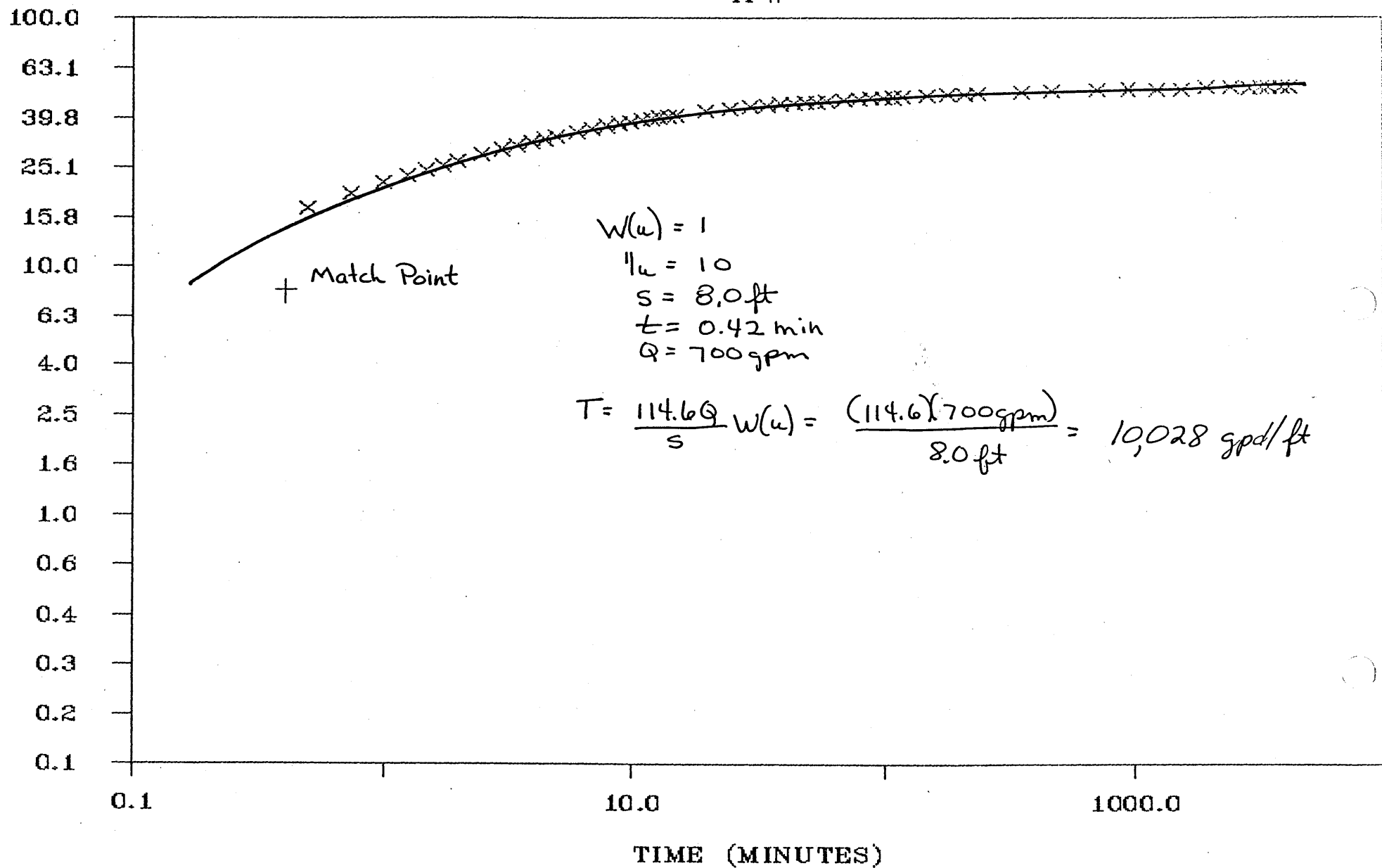
SEMI-LOG OF DRAWDOWN VS TIME

MW #2

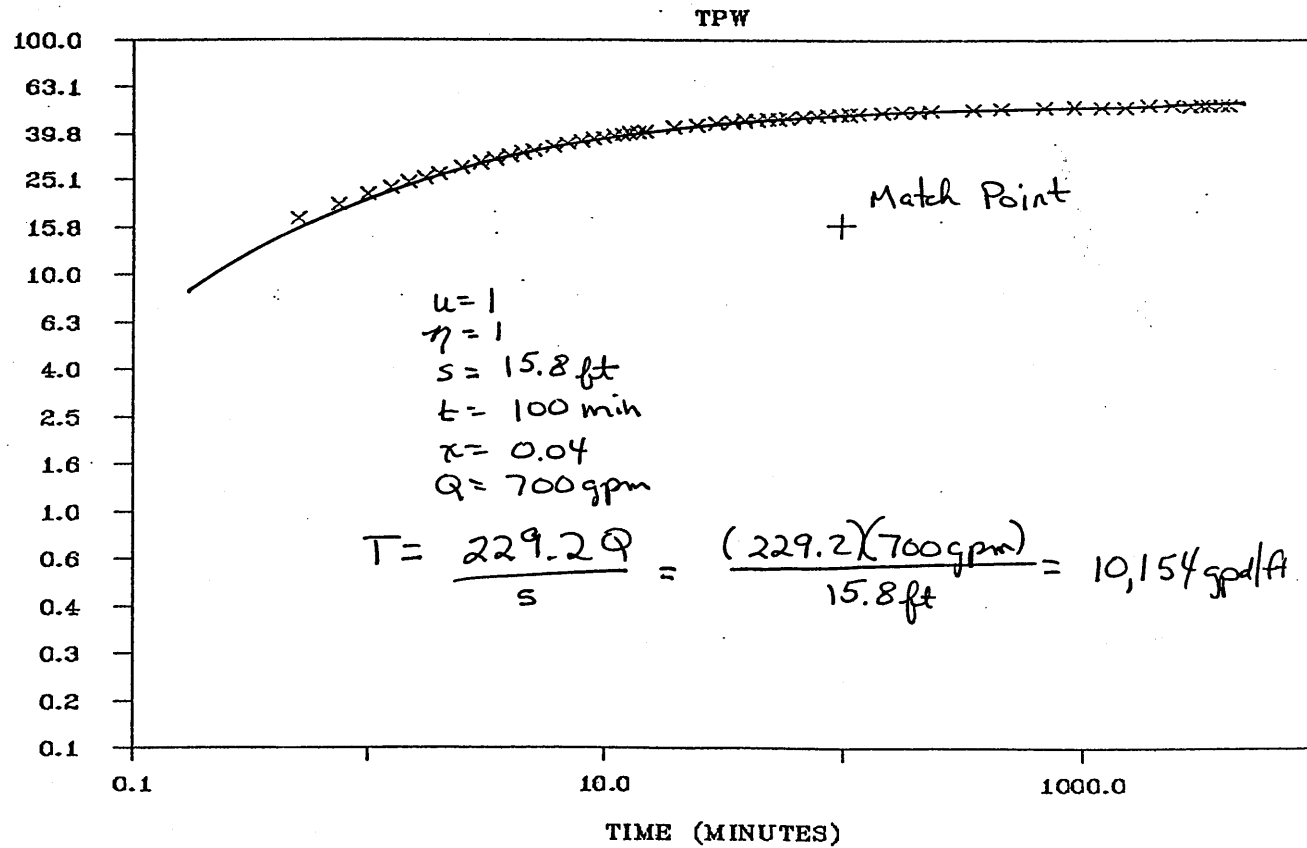


LOG-LOG PLOT OF TIME VS DRAWDOWN

TPW

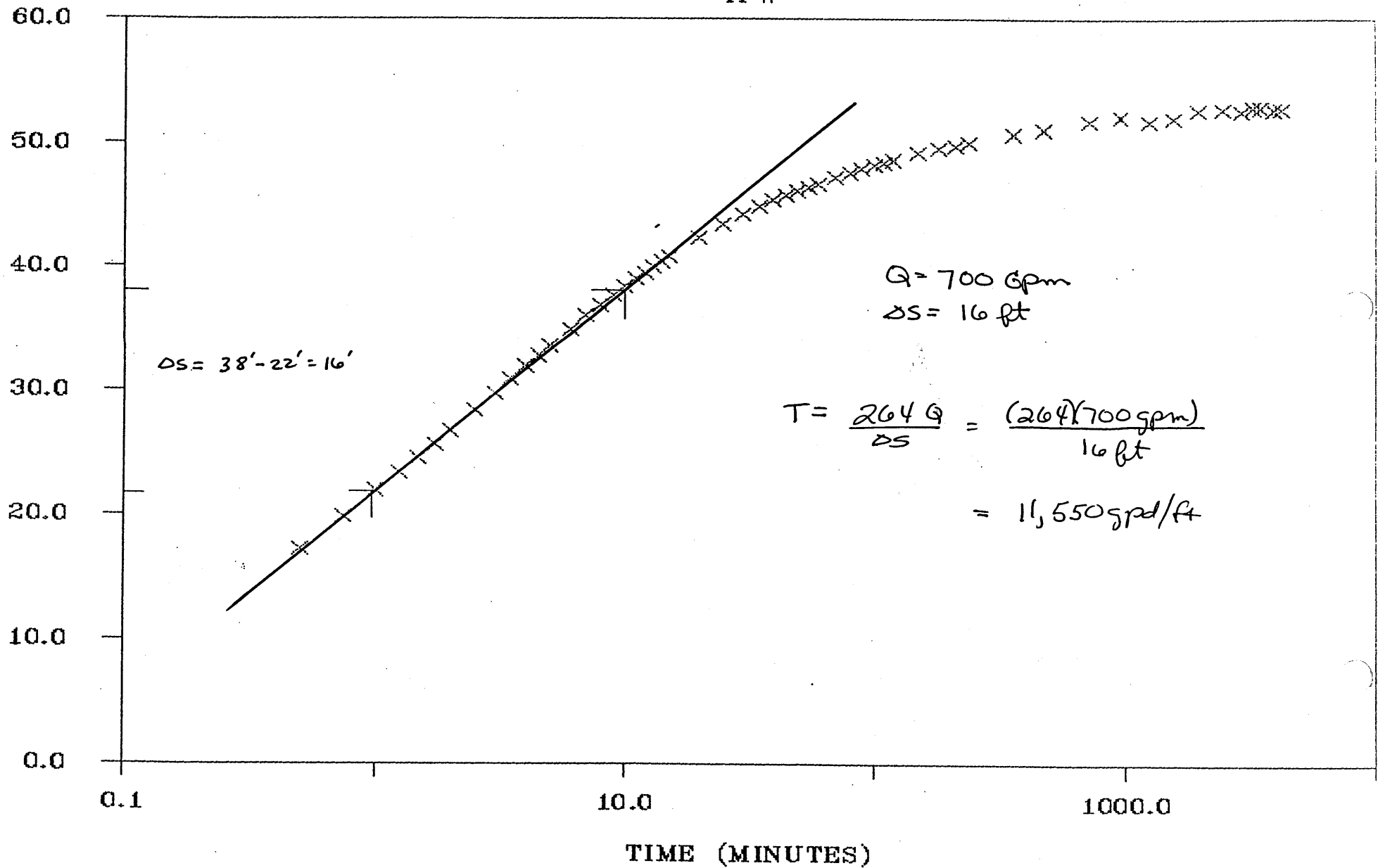


LOG-LOG PLOT OF TIME VS DRAWDOWN



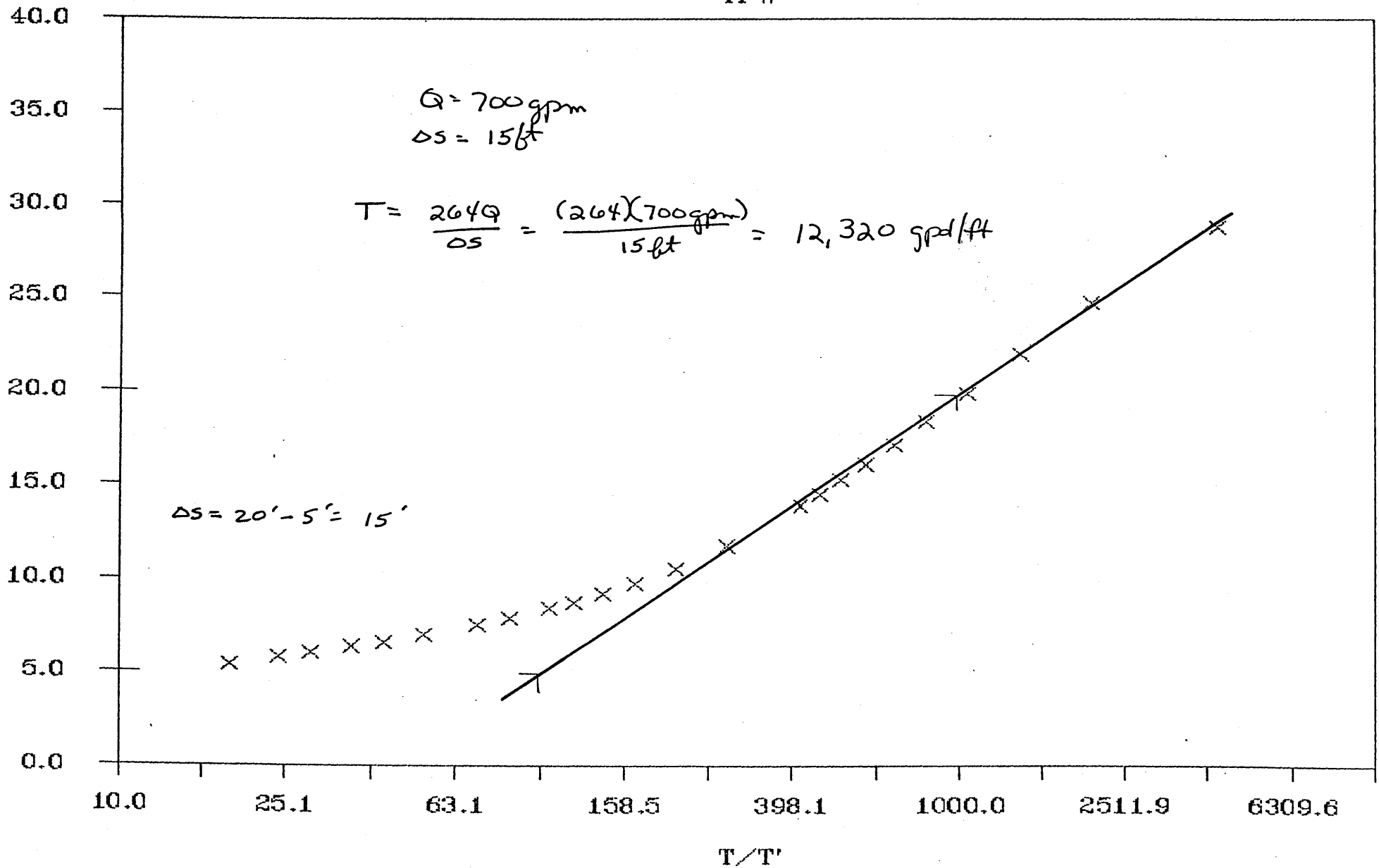
SEMI-LOG PLOT OF TIME VS DRAWDOWN

TPW



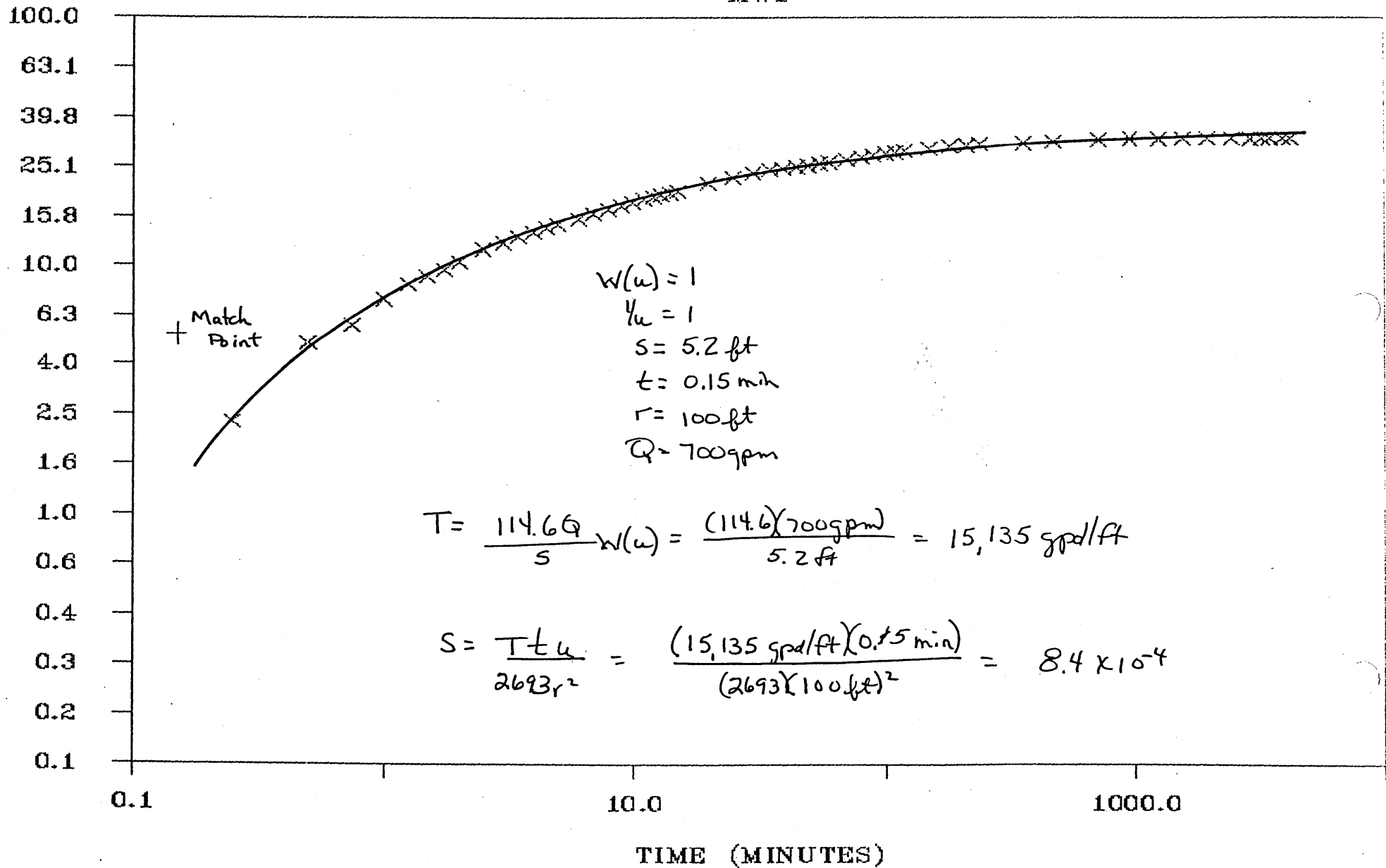
SEMI-LOG PLOT OF RECOVERY DATA

TPW



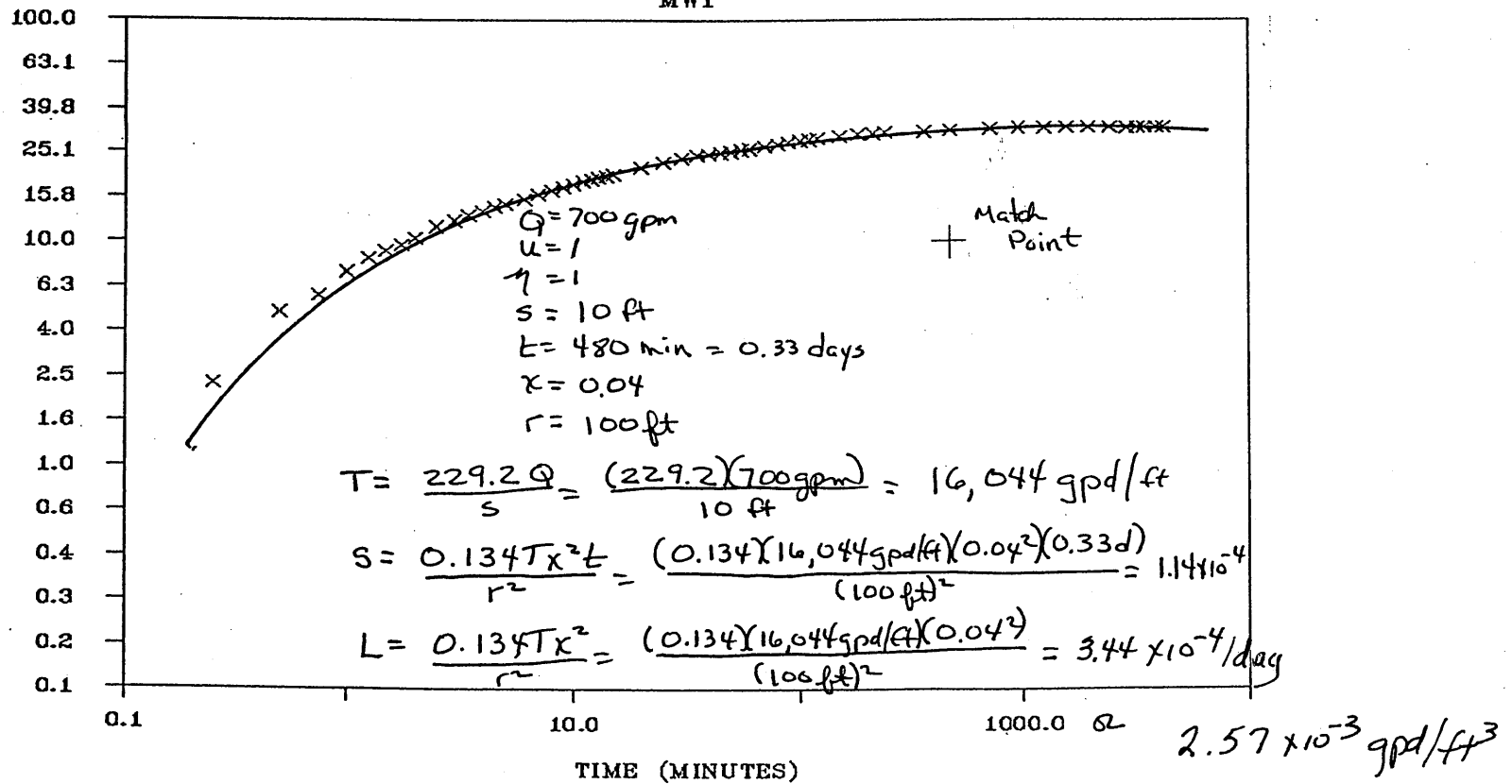
LOG-LOG PLOT OF TIME VS DRAWDOWN

MW1



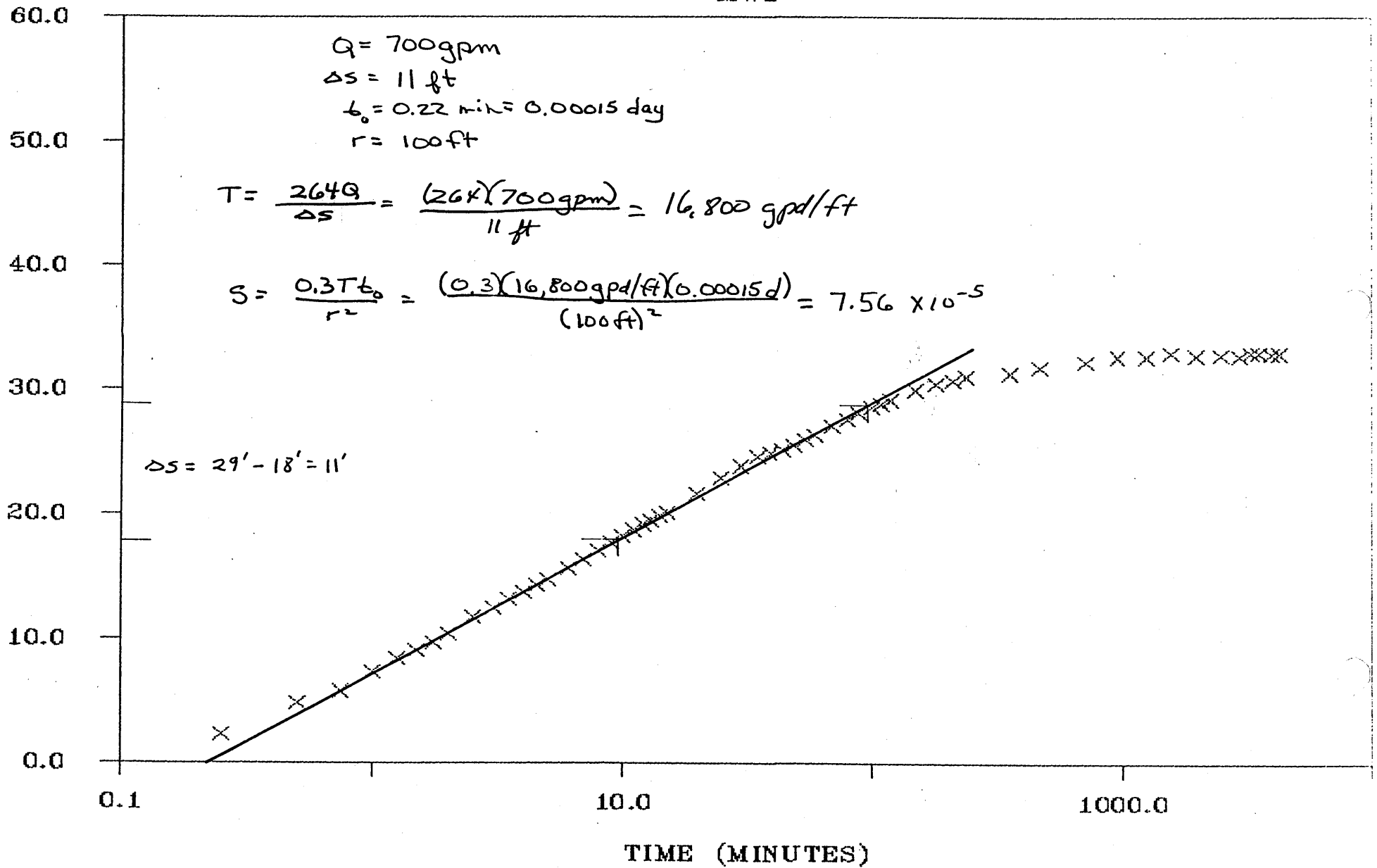
LOG-LOG PLOT OF TIME VS DRAWDOWN

MW1



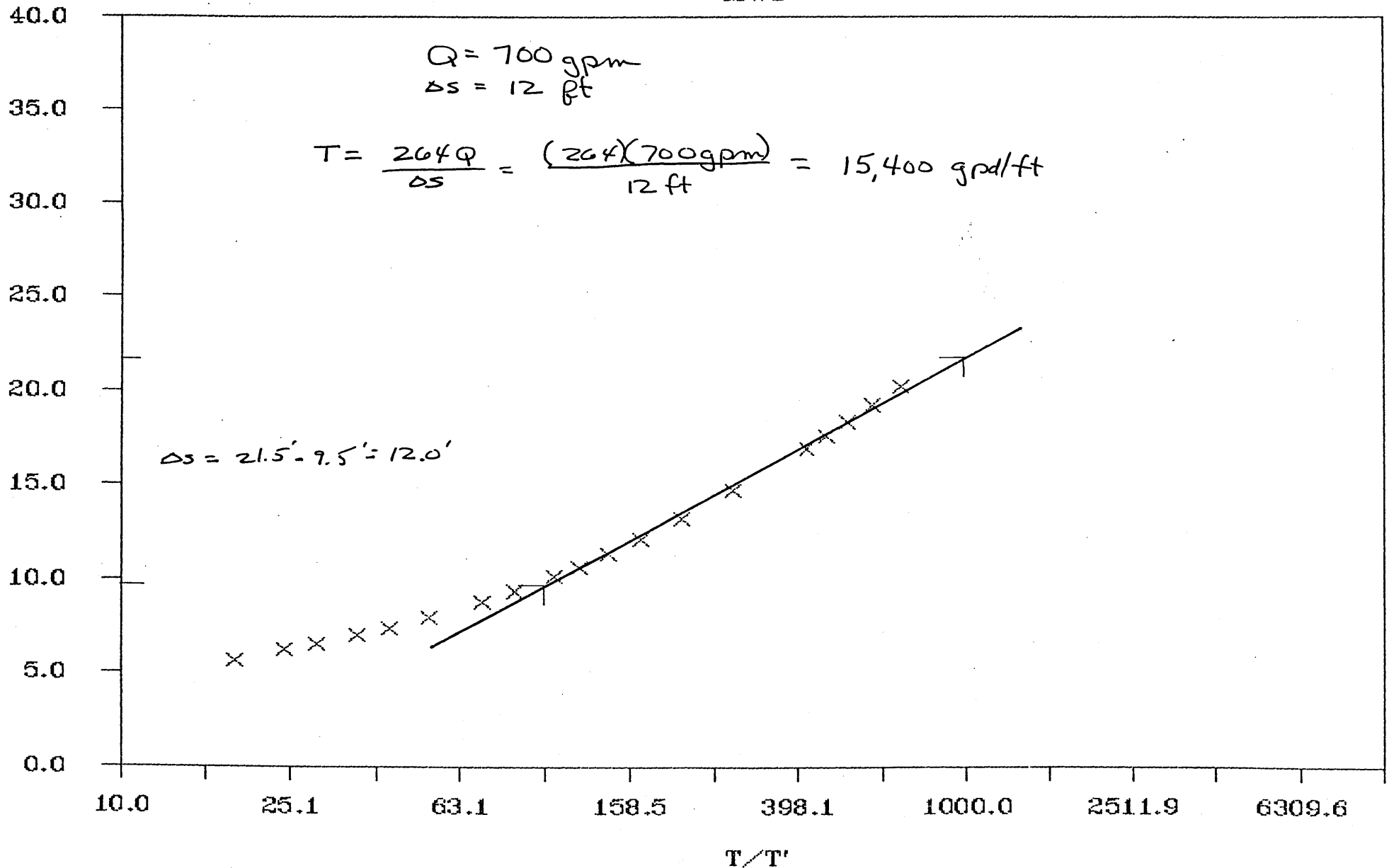
SEMI-LOG PLOT OF TIME VS DRAWDOWN

MW1



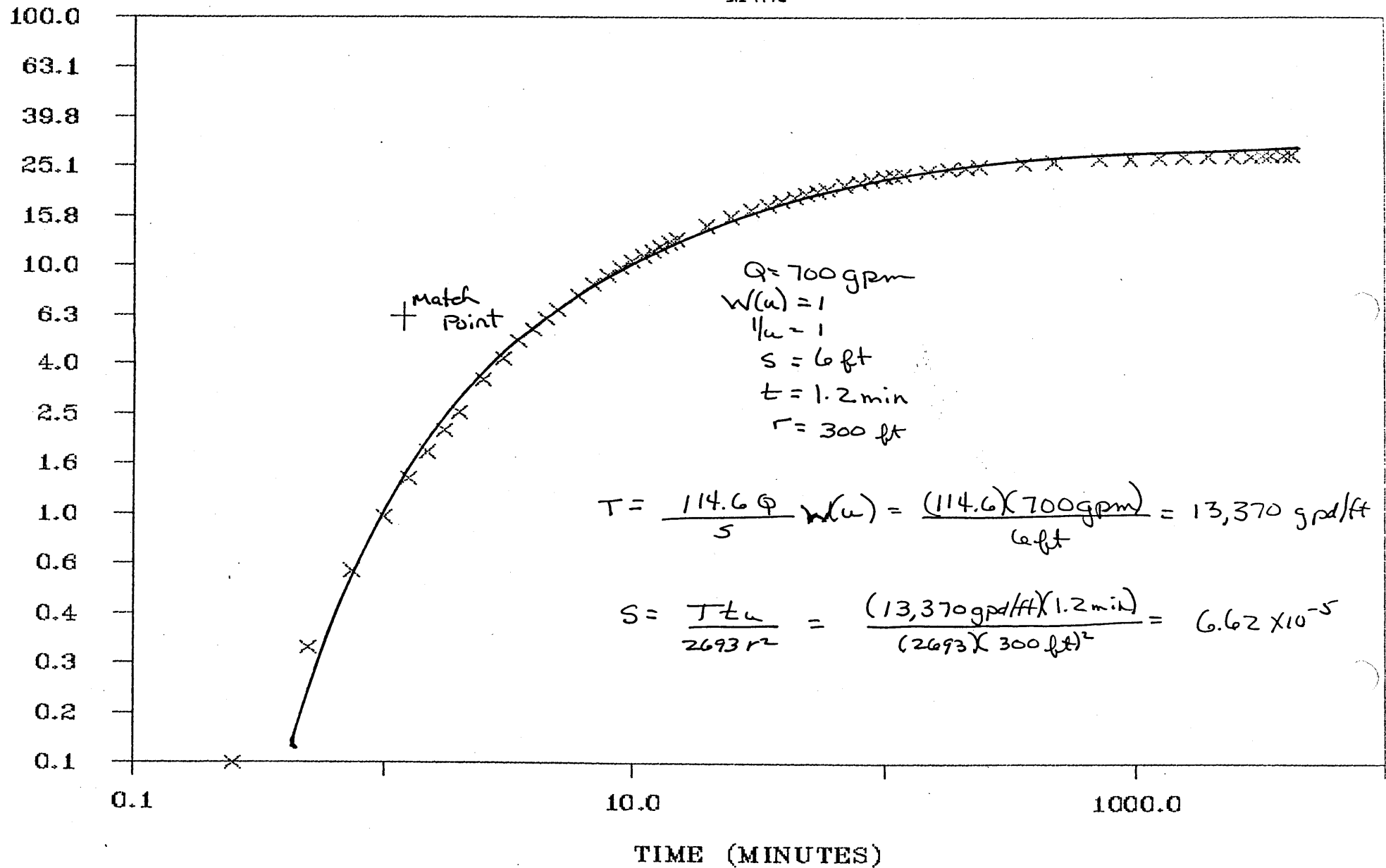
SEMI-LOG PLOT OF RECOVERY DATA

MW1



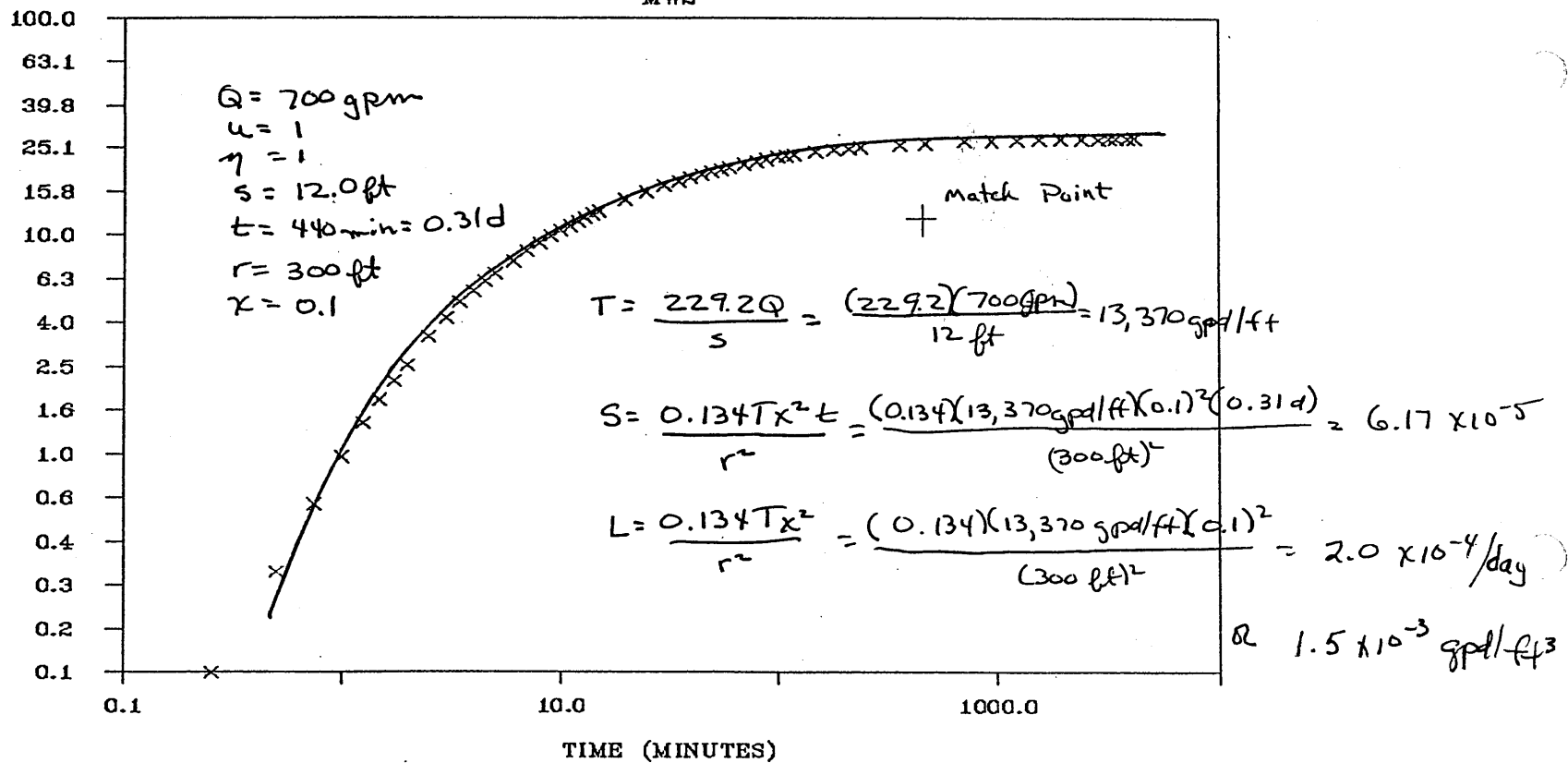
LOG-LOG PLOT OF TIME VS DRAWDOWN

MW2



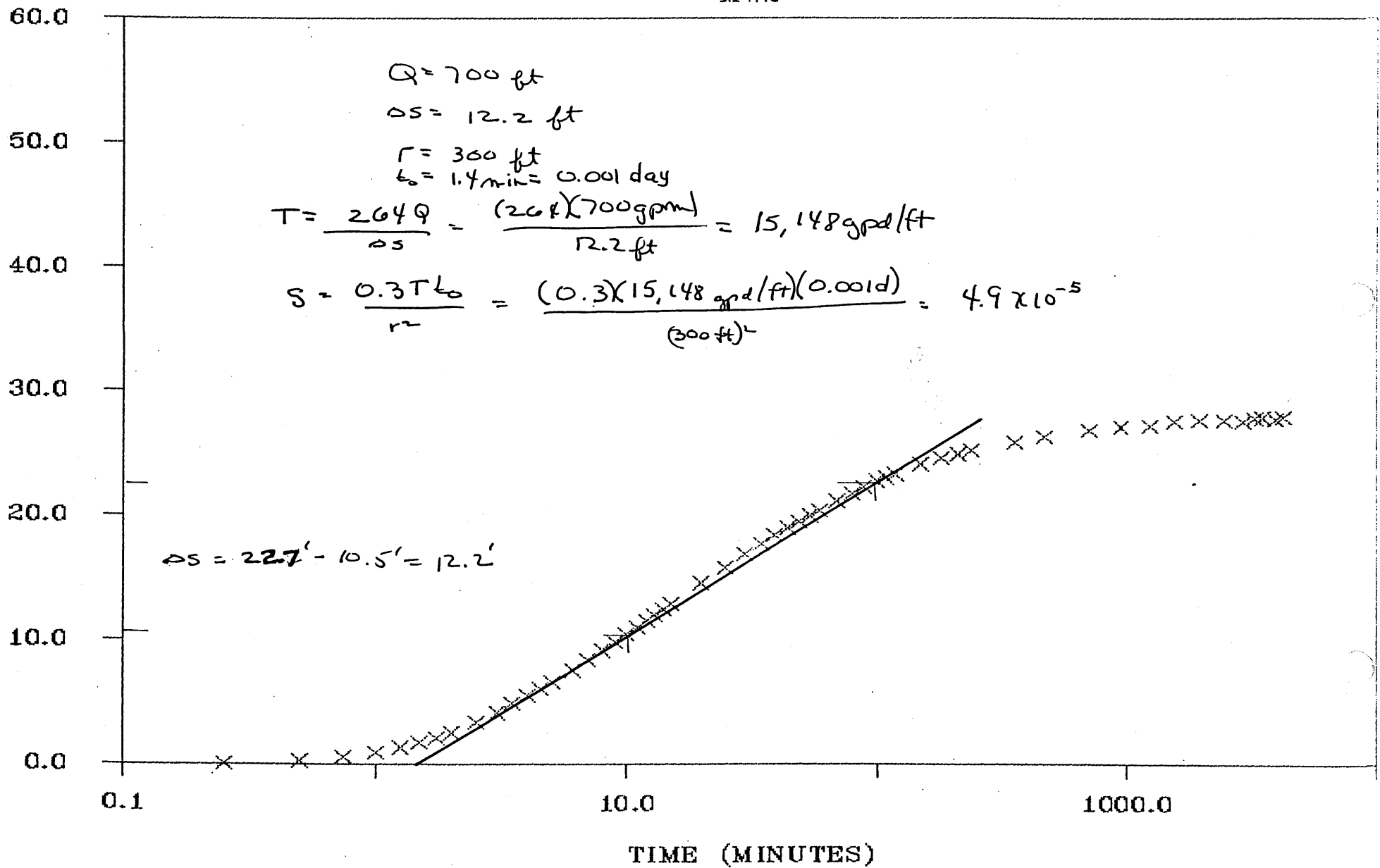
LOG-LOG PLOT OF TIME VS DRAWDOWN

MW2



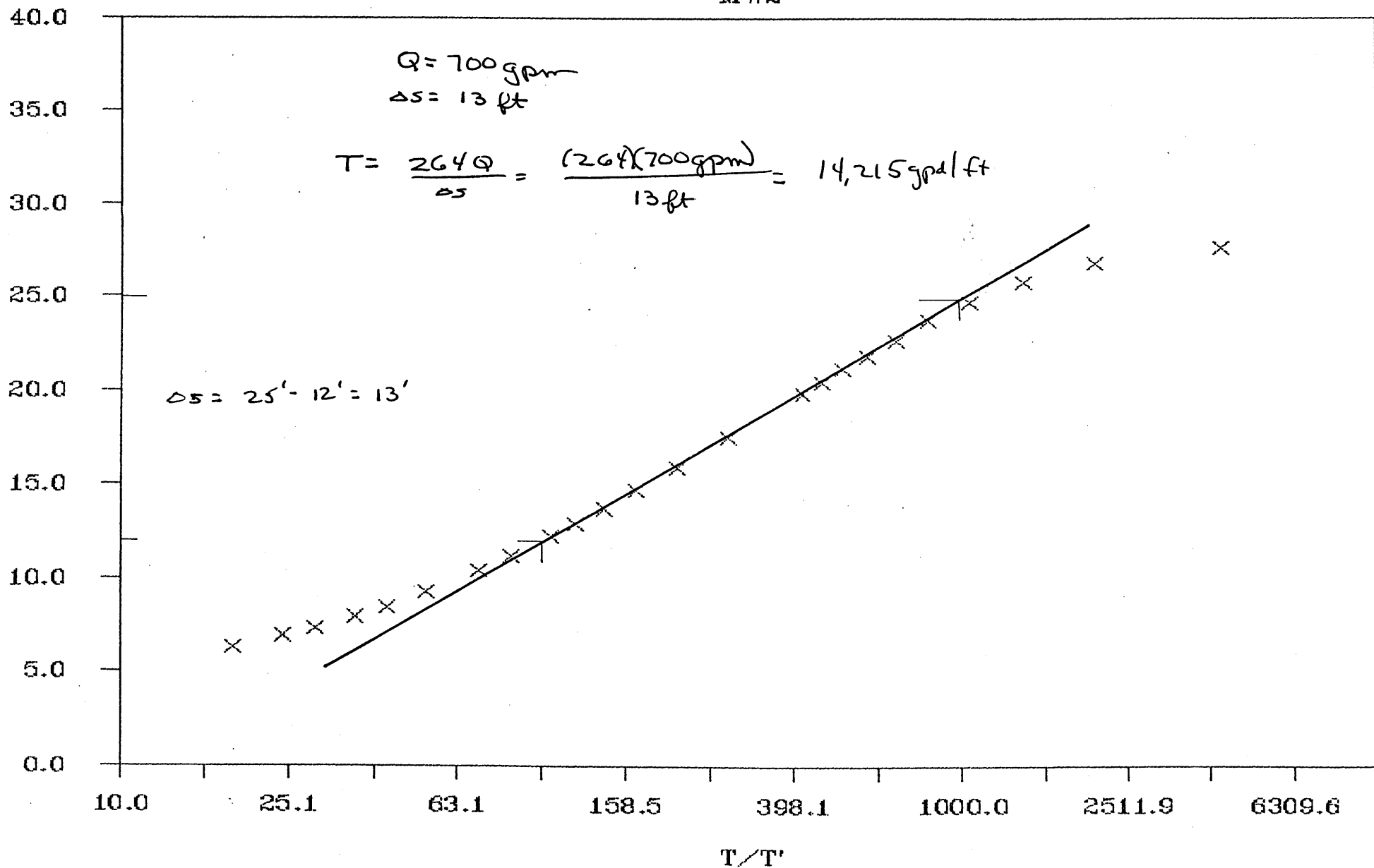
SEMI-LOG PLOT OF TIME VS DRAWDOWN

MW2



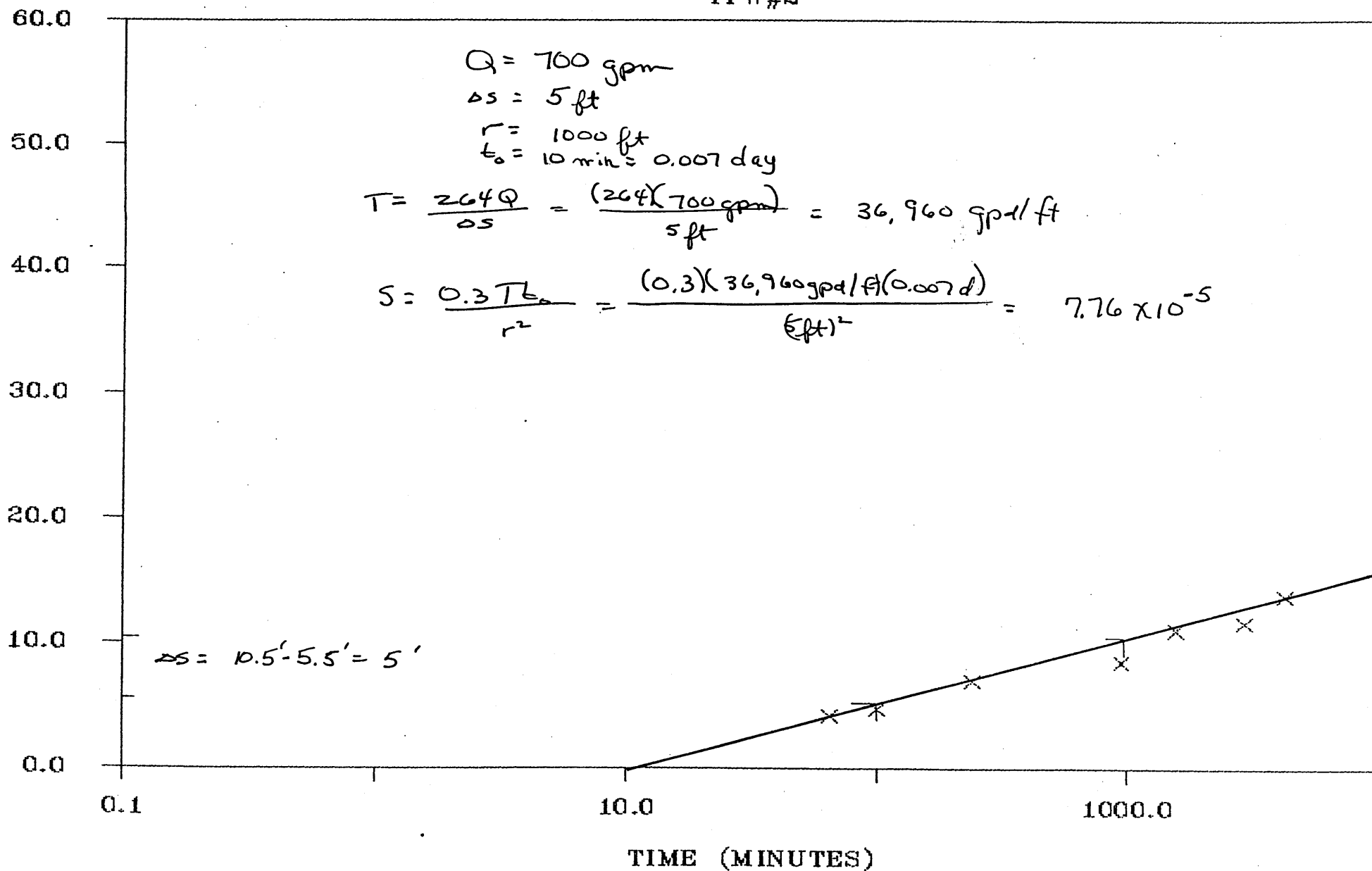
SEMI-LOG PLOT OF RECOVERY DATA

MW2



SEMI-LOG PLOT OF TIME VS DRAWDOWN

TPW#2



SEMI-LOG PLOT OF DISTANCE VS DRAWDOWN

AFTER 4200 MINUTES

$$\begin{aligned} Q &= 700 \text{ gpm} \\ \Delta s &= 20 \text{ ft} \\ t &= 2.92 \text{ days} \\ r_0 &= 5,700 \text{ ft} \end{aligned}$$

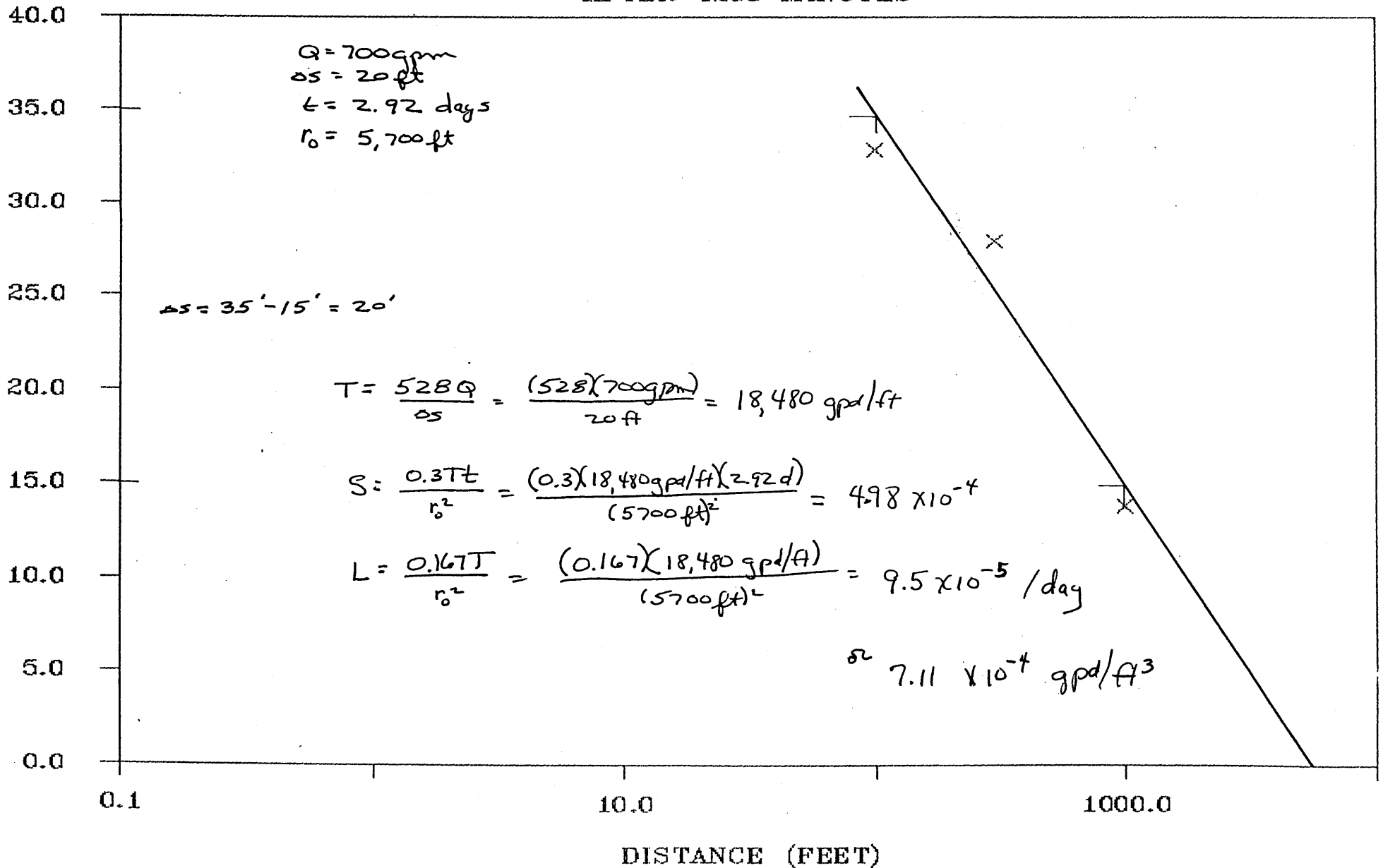
$$\Delta s = 35' - 15' = 20'$$

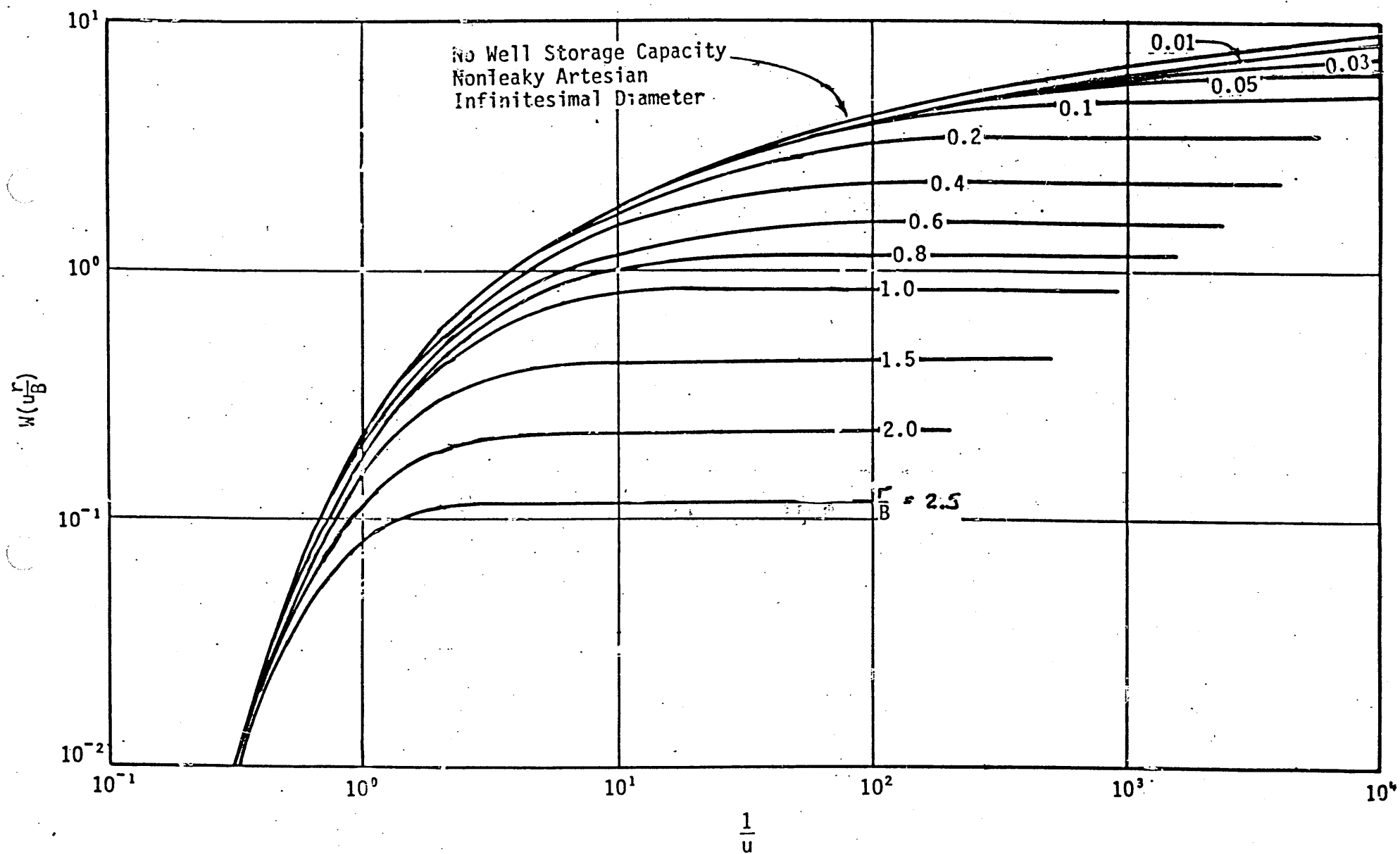
$$T = \frac{528Q}{\Delta s} = \frac{(528)(700 \text{ gpm})}{20 \text{ ft}} = 18,480 \text{ gpd/ft}$$

$$S = \frac{0.3Tt}{r_0^2} = \frac{(0.3)(18,480 \text{ gpd/ft})(2.92 \text{ d})}{(5700 \text{ ft})^2} = 4.98 \times 10^{-4}$$

$$L = \frac{0.167T}{r_0^2} = \frac{(0.167)(18,480 \text{ gpd/ft})}{(5700 \text{ ft})^2} = 9.5 \times 10^{-5} / \text{day}$$

$$\approx 7.11 \times 10^{-4} \text{ gpd/ft}^3$$





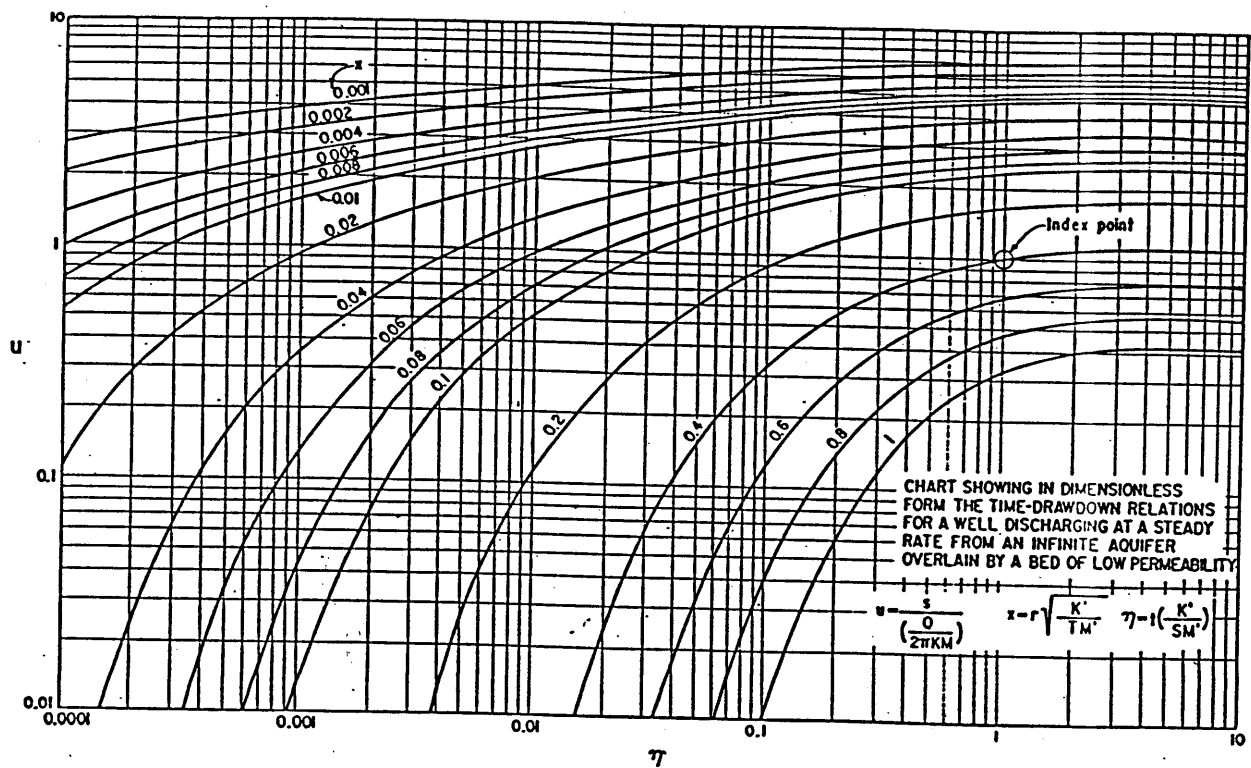


FIGURE 5-11.—Leaky aquifer type curves. 103-D-1438.