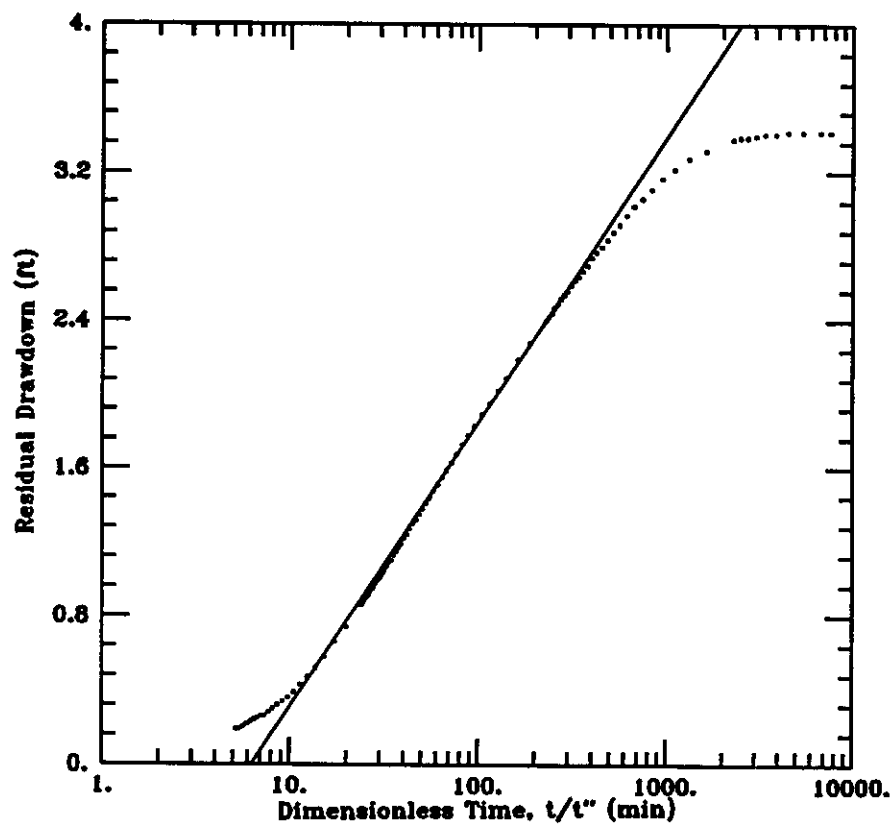


OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SREC1.DAT
12/05/96

AQUIFER MODEL:
Confined
SOLUTION METHOD:
Theis Recovery

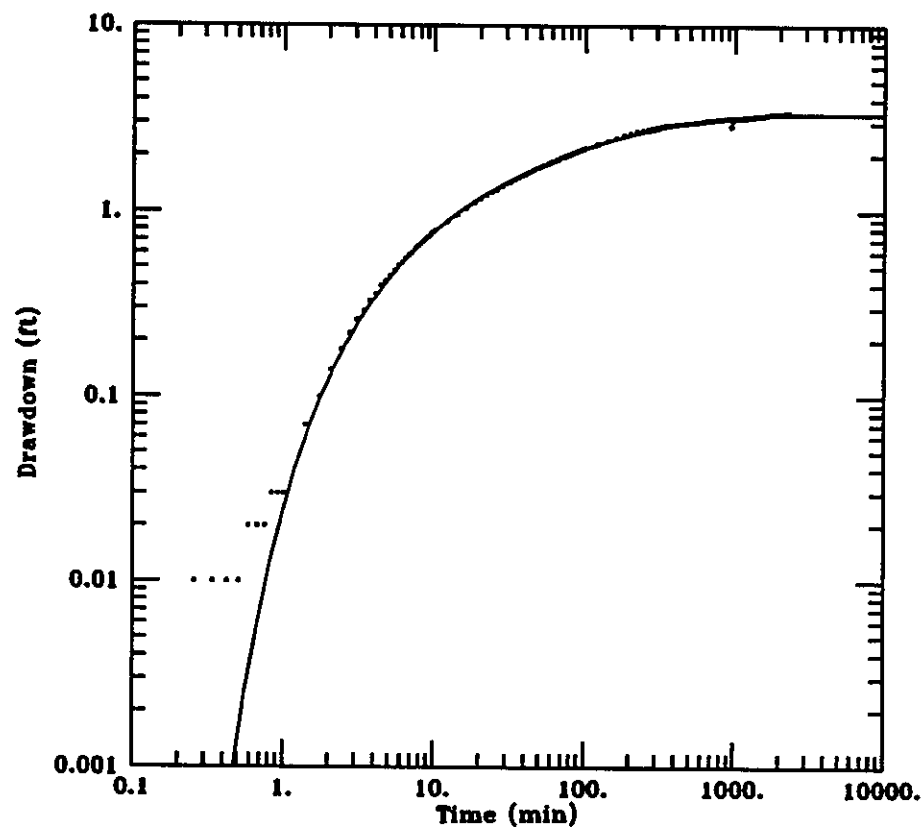
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S01

TEST DATA:
 $Q = 28.$ gal/min
 $r = 70.$ ft
 $r_c = 0.25$ ft
 $r_w = 0.5$ ft
 $b = 54.$ ft

PARAMETER ESTIMATES:
 $T = 4795.4$ gal/day/ft
 $S' = 6.303$

AQTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT1.DAT
12/13/96

AQUIFER MODEL:
Leaky
SOLUTION METHOD:
Hantush (no stor.)

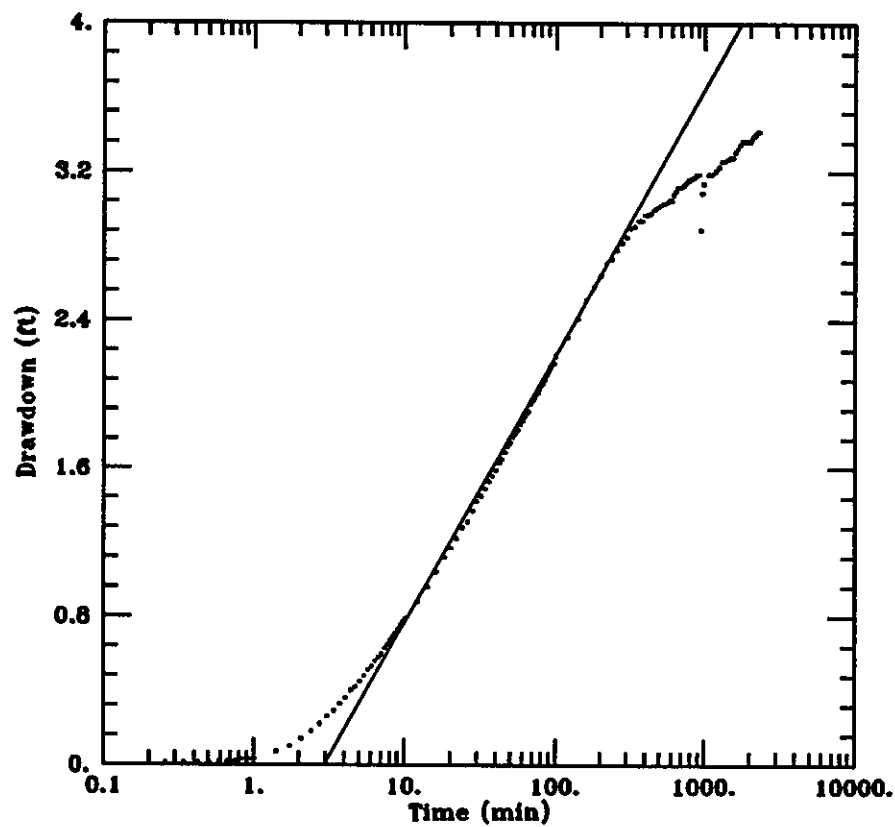
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89SO1

TEST DATA:
 $Q = 28. \text{ gal/min}$
 $r = 70. \text{ ft}$
 $r_c = 0.25 \text{ ft}$
 $r_w = 0.5 \text{ ft}$
 $b = 54. \text{ ft}$

PARAMETER ESTIMATES:
 $T = 4611.1 \text{ gal/day/ft}$
 $S = 0.0007864$
 $r/B = 0.1021$

AGTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT1.DAT
12/13/96

AQUIFER MODEL:
Confined
SOLUTION METHOD:
Cooper-Jacob

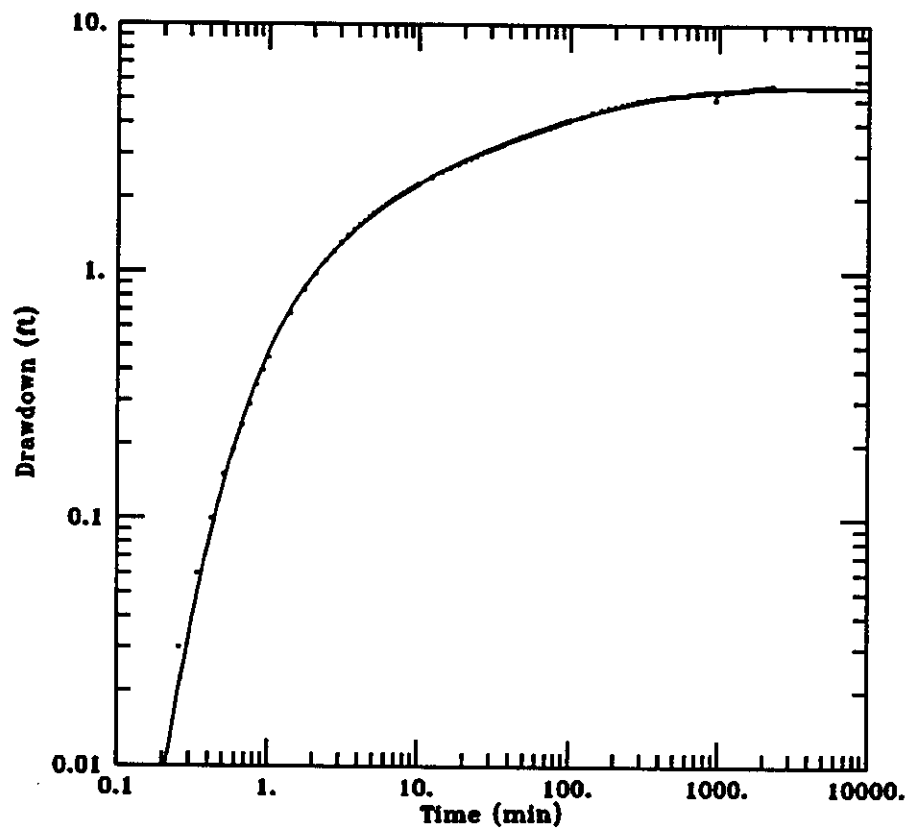
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S01

TEST DATA:
 $Q = 28. \text{ gal/min}$
 $r = 70. \text{ ft}$
 $r_c = 0.25 \text{ ft}$
 $r_w = 0.5 \text{ ft}$
 $b = 54. \text{ ft}$

PARAMETER ESTIMATES:
 $T = 5124.7 \text{ gal/day/ft}$
 $S = 0.0006429$

AGTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT2.DAT
12/13/96

AQUIFER MODEL:
Leaky
SOLUTION METHOD:
Moench

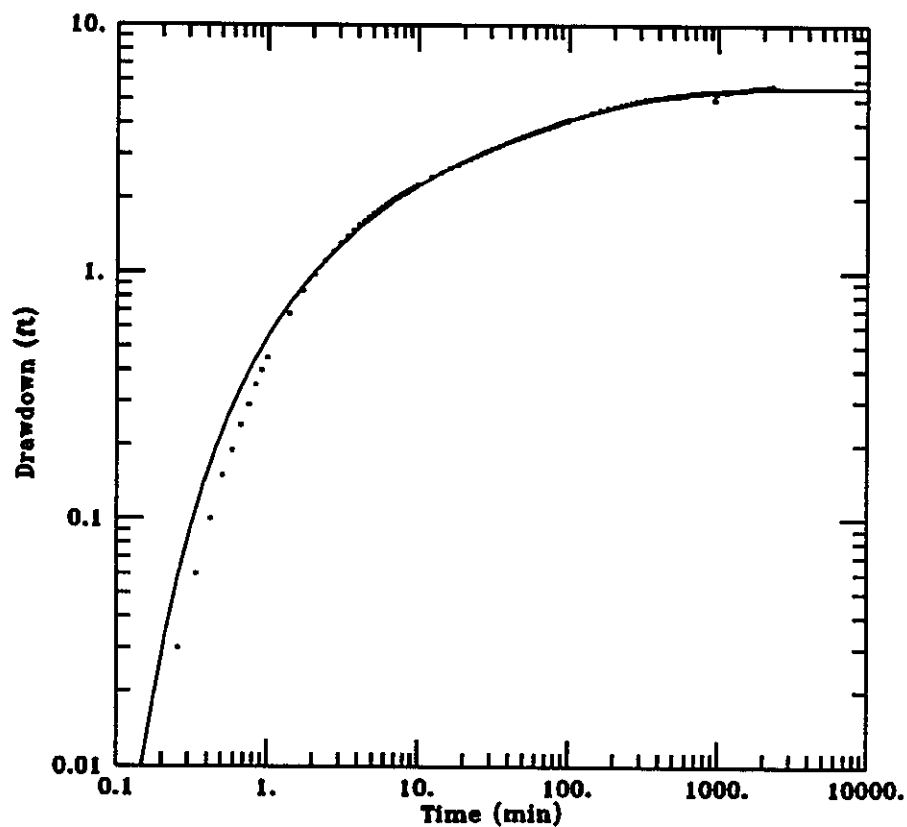
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S02

TEST DATA:
 $Q = 28. \text{ gal/min}$
 $r = 35. \text{ ft}$
 $r_c = 0.25 \text{ ft}$
 $r_w = 0.5 \text{ ft}$
 $b = 54. \text{ ft}$

PARAMETER ESTIMATES:
 $T = 3737.3 \text{ gal/day/ft}$
 $S = 0.0004397$
 $r/B = 0.04335$
 $\beta = 0.00508$
 $SW = 100.$
 $a = 0.0714$

AQTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT2.DAT
12/13/96

AQUIFER MODEL:
Leaky
SOLUTION METHOD:
Hantush (no stor.)

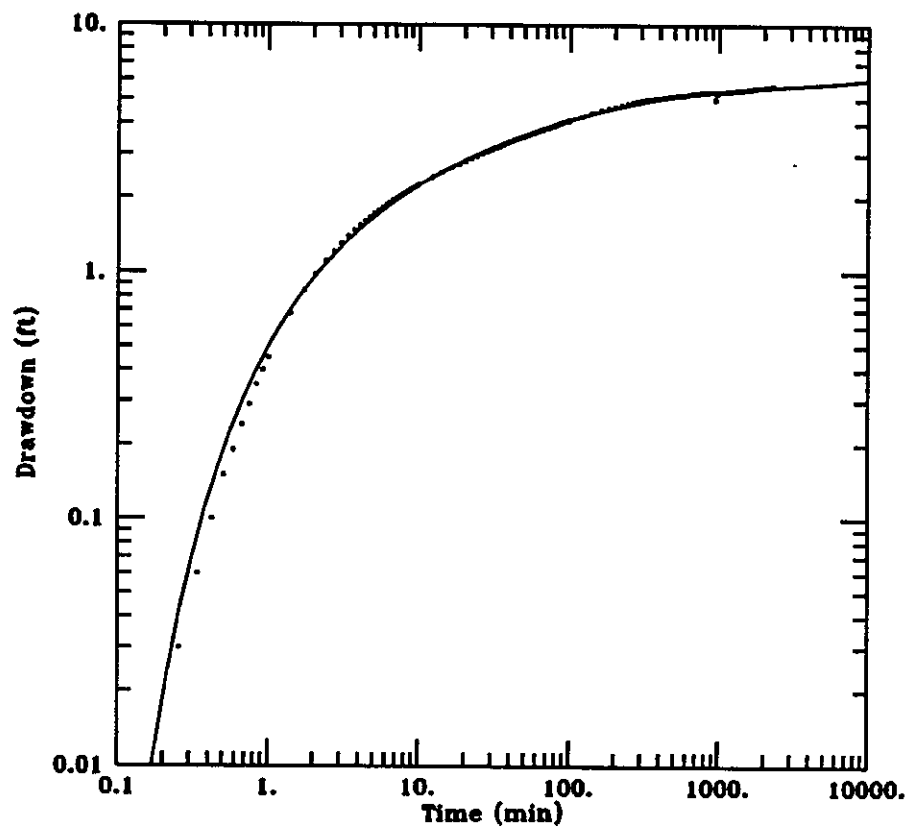
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S02

TEST DATA:
 $Q = 28$ gal/min
 $r = 35$ ft
 $r_c = 0.25$ ft
 $r_w = 0.5$ ft
 $b = 54$ ft

PARAMETER ESTIMATES:
 $T = 3652.7$ gal/day/ft
 $S = 0.0005067$
 $r/B = 0.04712$

AGTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT2.DAT
12/13/96

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Neuman

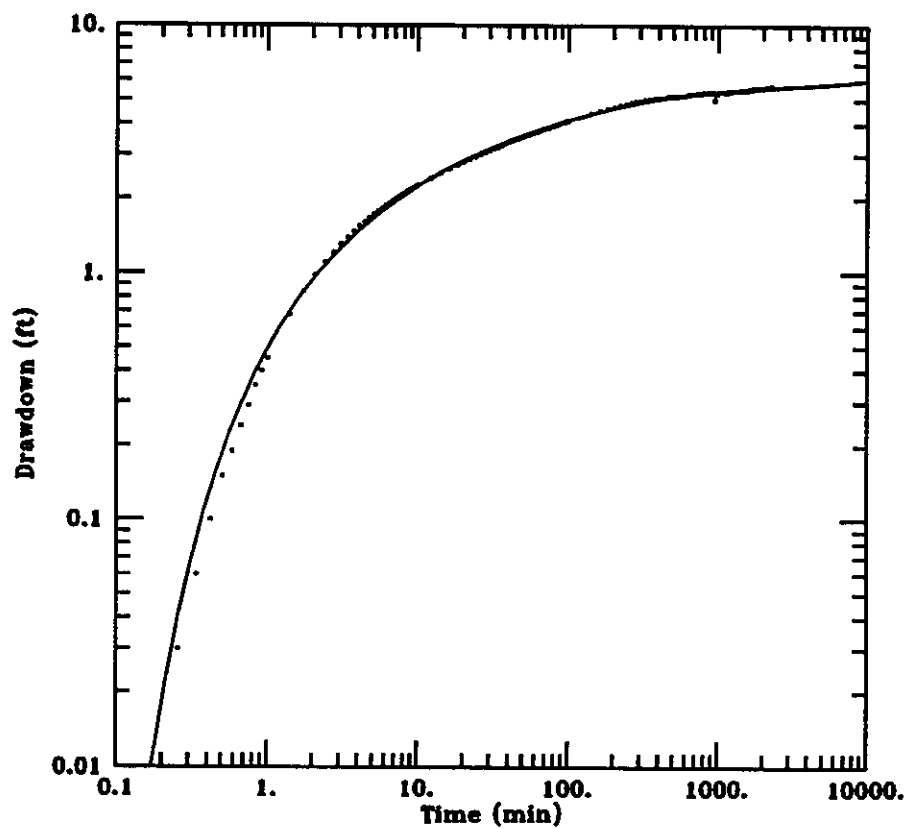
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S02

TEST DATA:
 $Q = 28. \text{ gal/min}$
 $r = 35. \text{ ft}$
 $r_c = 0.25 \text{ ft}$
 $r_w = 0.5 \text{ ft}$
 $b = 54. \text{ ft}$

PARAMETER ESTIMATES:
 $T = 3282.7 \text{ gal/day/ft}$
 $S = 0.0005355$
 $S_y = 0.02287$
 $\beta = 0.001$

AQTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT2.DAT
12/13/96

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Neuman (approx.)

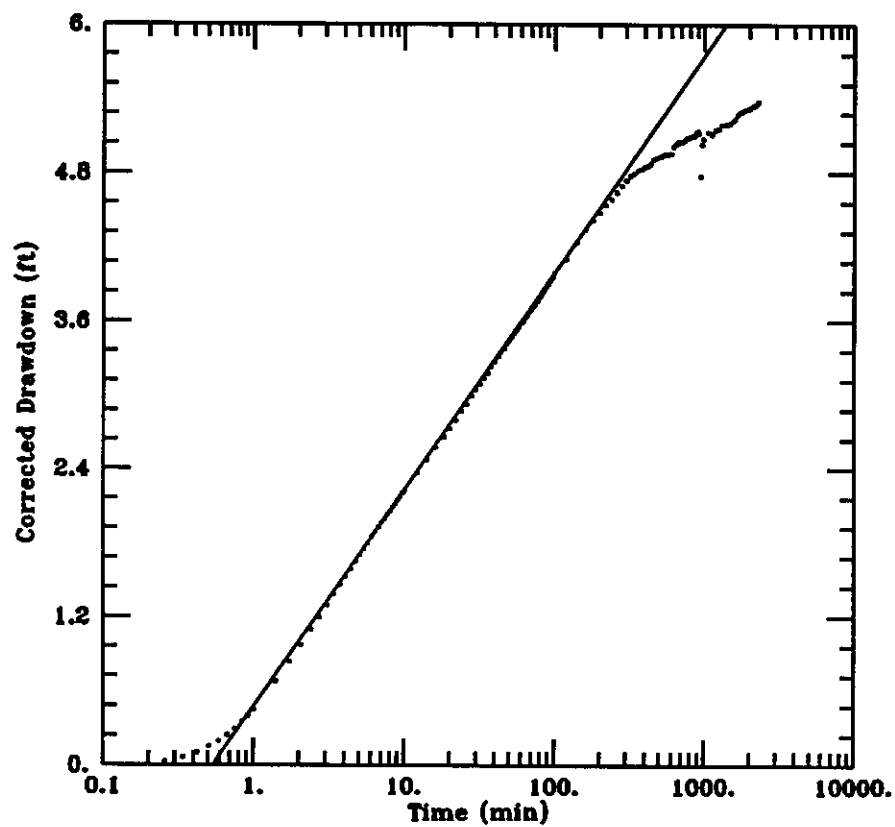
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S02

TEST DATA:
 $Q = 28$ gal/min
 $r = 35$ ft
 $r_c = 0.25$ ft
 $r_w = 0.5$ ft
 $b = 54$ ft

PARAMETER ESTIMATES:
 $T = 3270.8$ gal/day/ft
 $S = 0.0005388$
 $S_y = 0.02611$
 $\beta = 0.001$

AGTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT2.DAT
12/04/96

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Cooper-Jacob

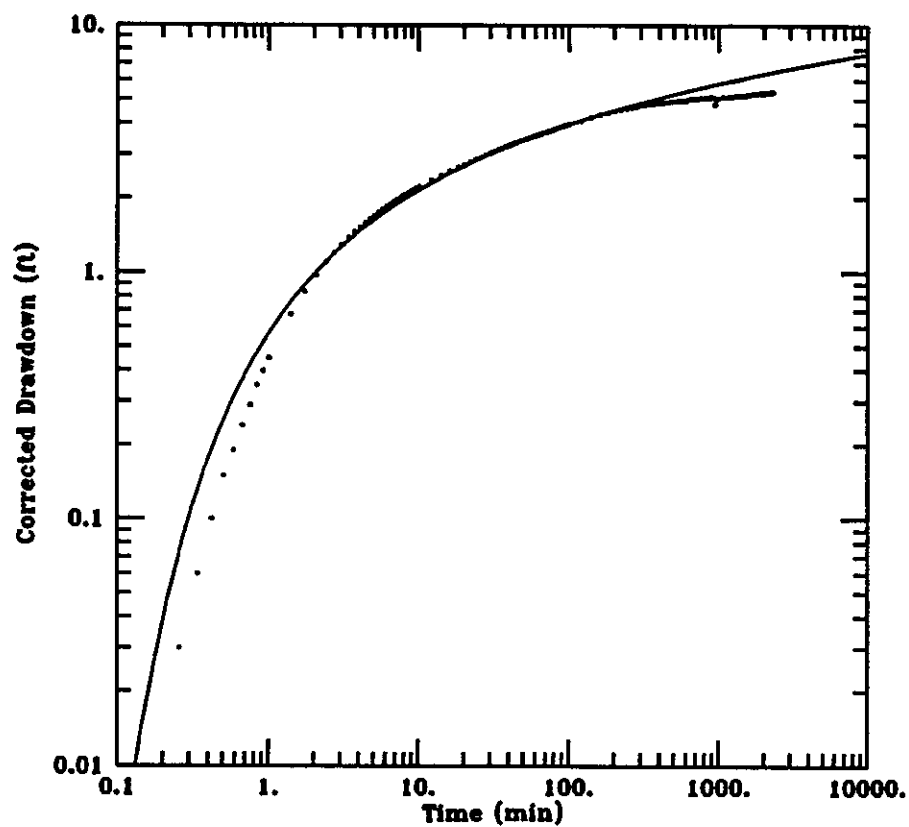
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S02

TEST DATA:
 $Q = 28. \text{ gal/min}$
 $r = 35. \text{ ft}$
 $r_c = 0.25 \text{ ft}$
 $r_w = 0.5 \text{ ft}$
 $b = 54. \text{ ft}$

PARAMETER ESTIMATES:
 $T = 4200.2 \text{ gal/day/ft}$
 $S = 0.0003869$

AGTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT2.DAT
12/04/96

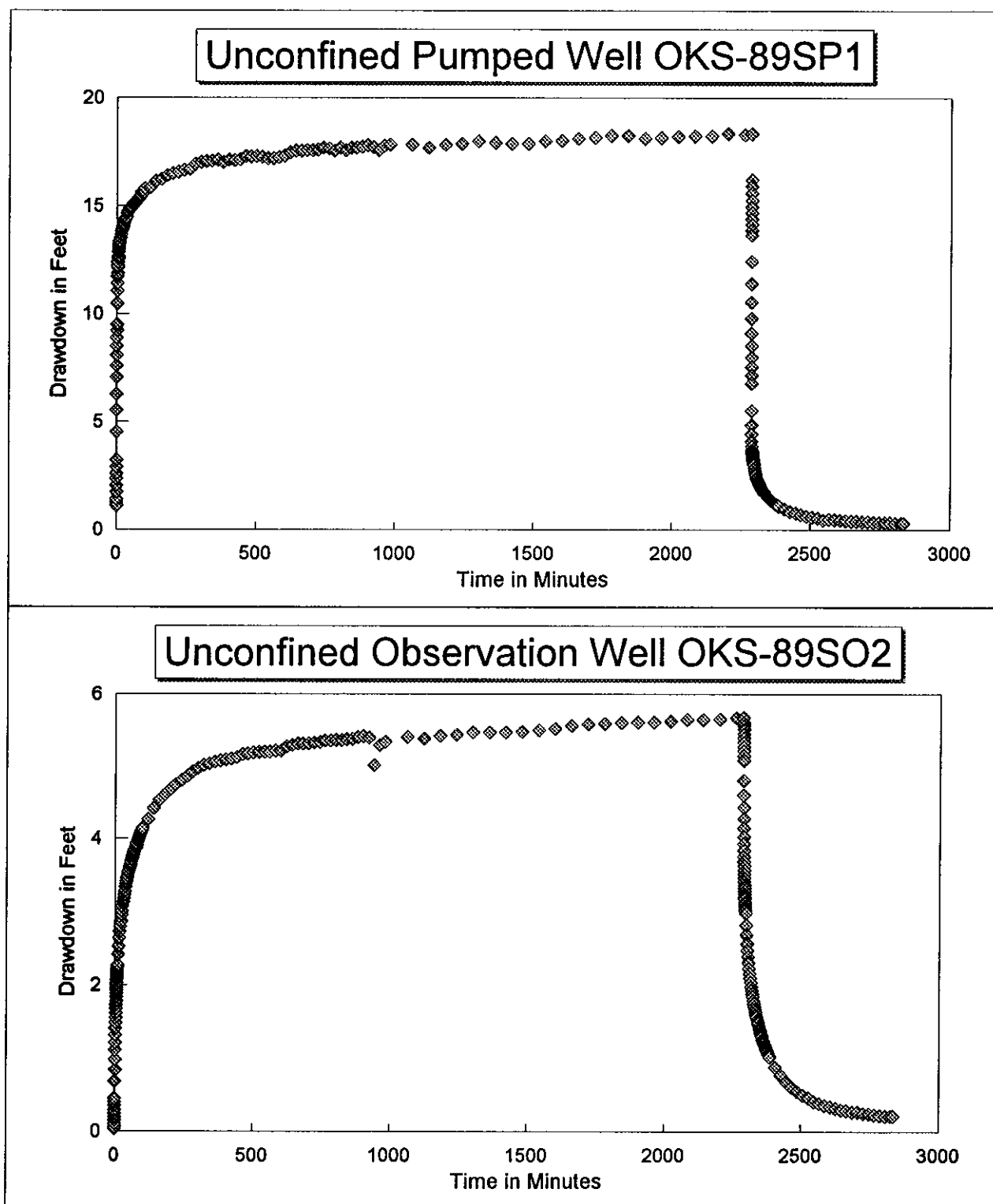
AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Theis

PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S02

TEST DATA:
 $Q = 28$ gal/min
 $r = 35$ ft
 $r_c = 0.25$ ft
 $r_w = 0.5$ ft
 $b = 54$ ft

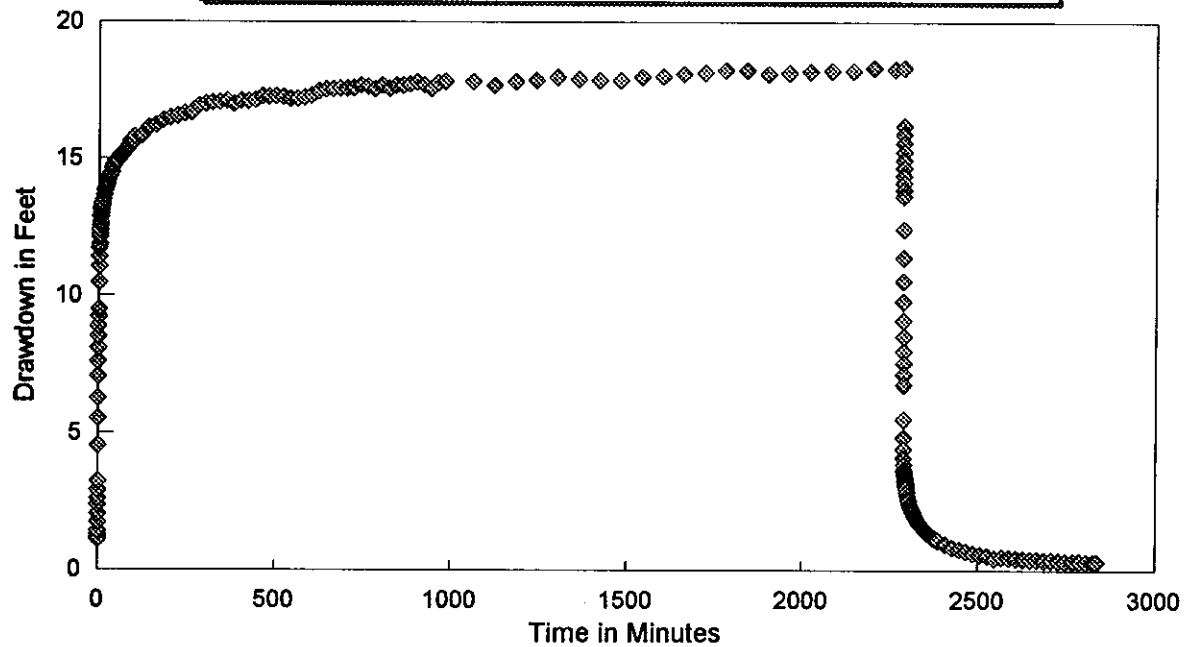
PARAMETER ESTIMATES:
 $T = 4000$ gal/day/ft
 $S = 0.0004851$

AQTESOLV

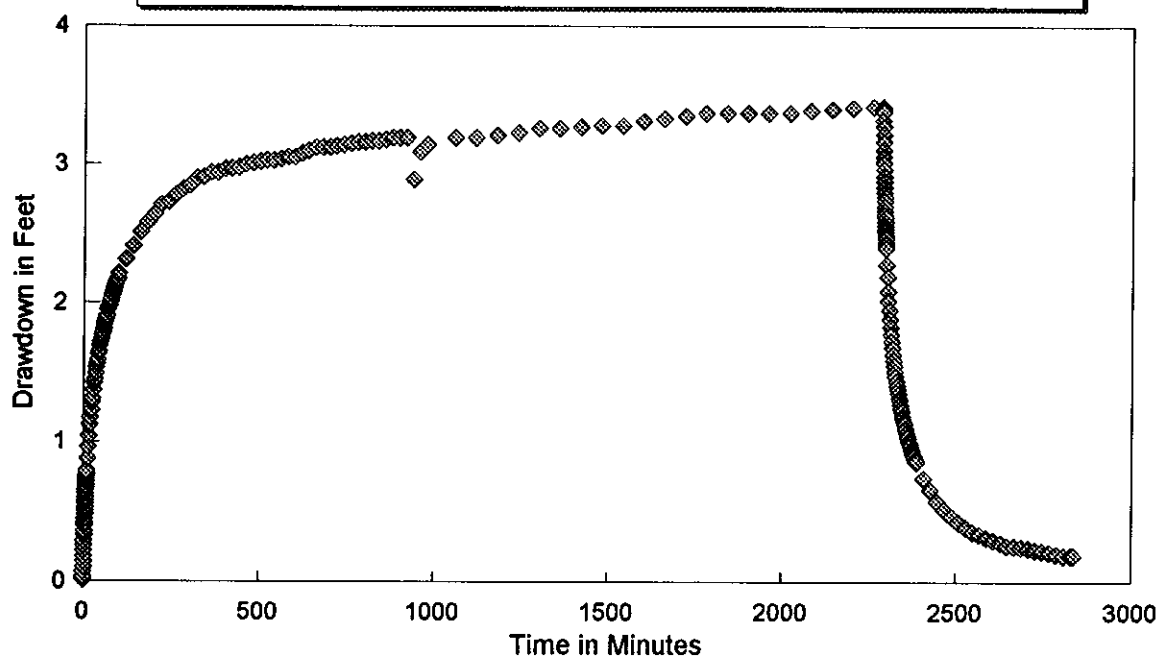


APT SITE OKS-89, UPPER SAS PRODUCTION ZONE

Unconfined Pumped Well OKS-89SP1

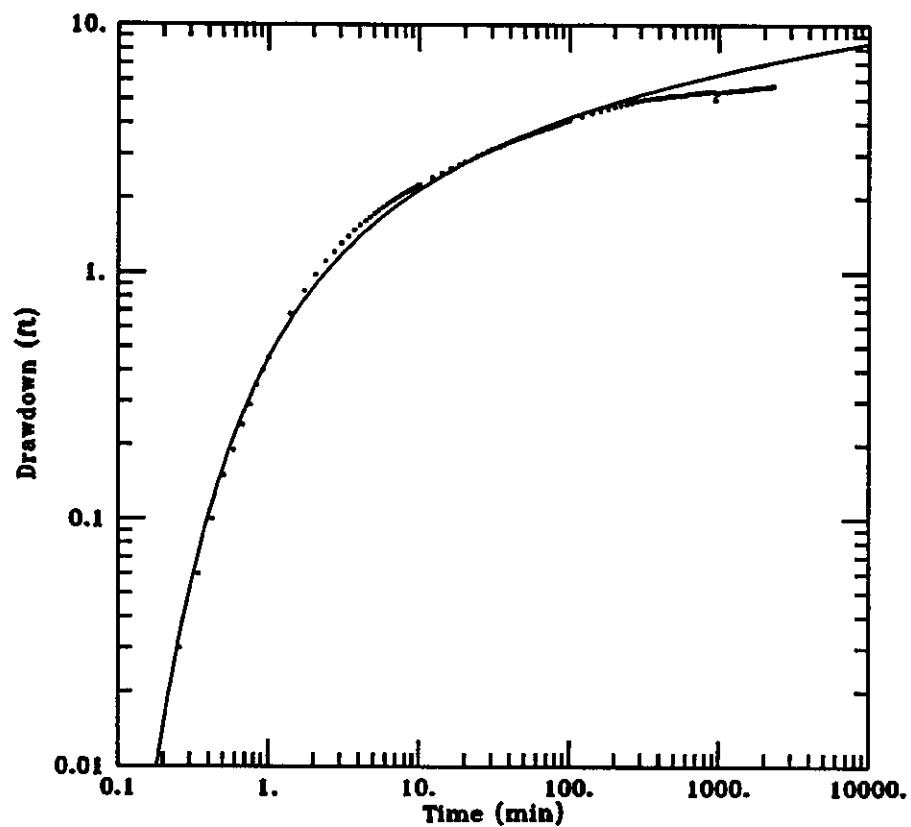


Unconfined Observation Well OKS-89SO1



APT SITE OKS-89, UPPER SAS PRODUCTION ZONE

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT2.DAT
12/13/96

AQUIFER MODEL:
Confined
SOLUTION METHOD:
Theis

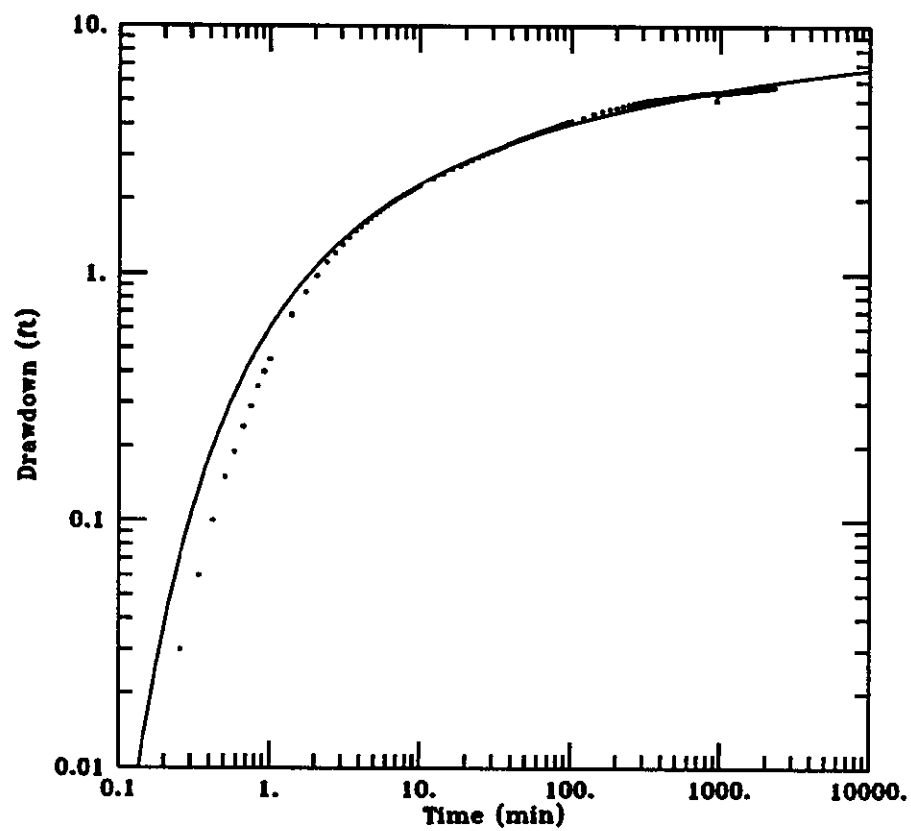
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S02

TEST DATA:
Q = 28. gal/min
r = 35. ft
r_c = 0.25 ft
r_w = 0.5 ft
b = 54. ft

PARAMETER ESTIMATES:
T = 3501.1 gal/day/ft
S = 0.0006017

AQTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT2.DAT
12/13/96

AQUIFER MODEL:
Leaky
SOLUTION METHOD:
Hantush (w/ stor.)

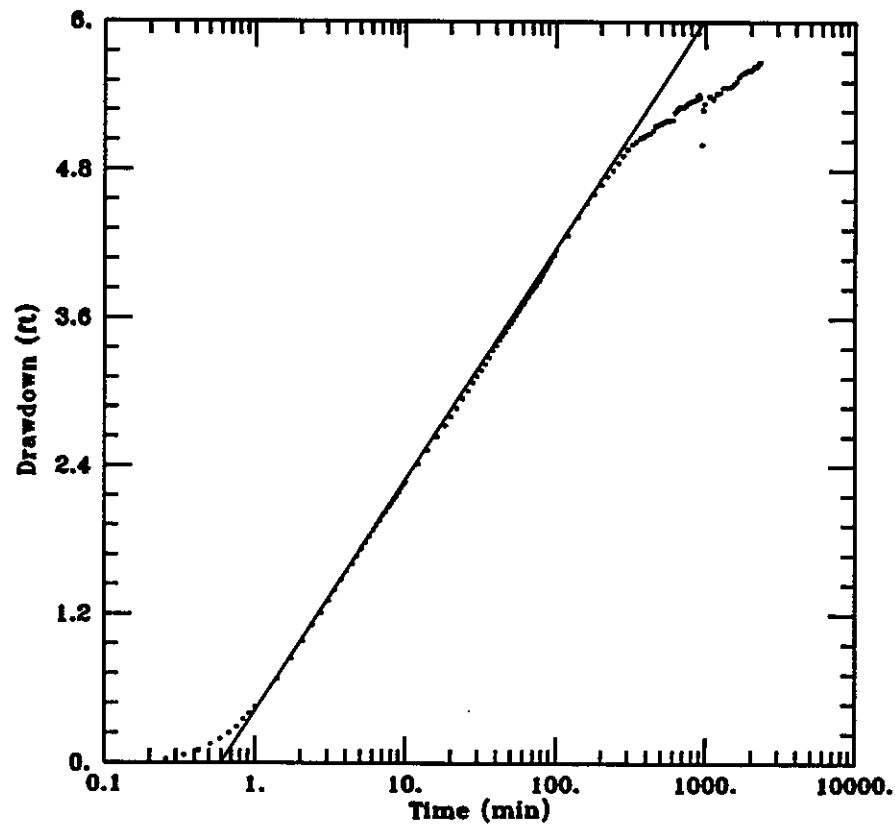
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S02

TEST DATA:
 $Q = 28$ gal/min
 $r = 35$ ft
 $r_c = 0.25$ ft
 $r_w = 0.5$ ft
 $b = 54$ ft

PARAMETER ESTIMATES:
 $T = 3298.5$ gal/day/ft
 $S = 0.0004226$
 $\beta = 0.0315$

AQTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT2.DAT
12/13/96

AQUIFER MODEL:

Confined

SOLUTION METHOD:

Cooper-Jacob

PROJECT DATA:

test date: May 11-13, 1994

test well: OKS-89SP1

obs. well: OKS-89S02

TEST DATA:

$Q = 28$ gal/min

$r = 35$ ft

$r_c = 0.25$ ft

$r_w = 0.5$ ft

$b = 54$ ft

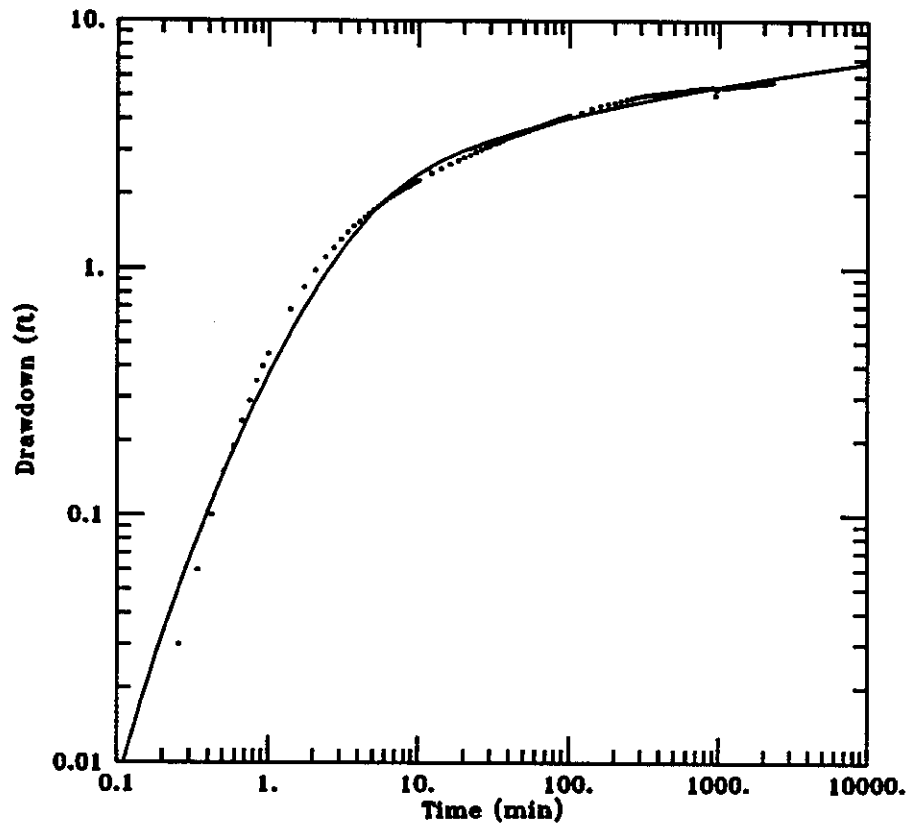
PARAMETER ESTIMATES:

$T = 3950.4$ gal/day/ft

$S = 0.0004037$

AGTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT2.DAT
12/13/96

AQUIFER MODEL:
Confined
SOLUTION METHOD:
Papadopoulos-Cooper

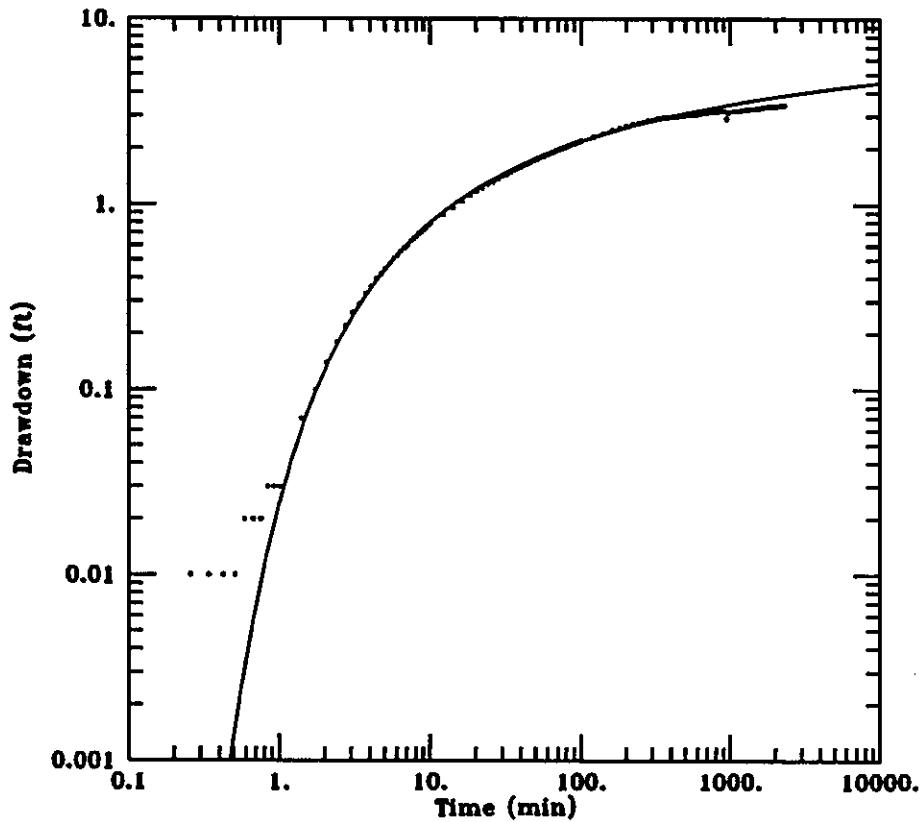
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S02

TEST DATA:
Q = 28. gal/min
r = 35. ft
r_c = 0.25 ft
r_w = 0.5 ft
b = 54. ft

PARAMETER ESTIMATES:
T = 5484.2 gal/day/ft
S = 8.838E-05
a = 4.95E-05

AQTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT1.DAT
12/13/96

AQUIFER MODEL:
Leaky
SOLUTION METHOD:
Hantush (w/ stor.)

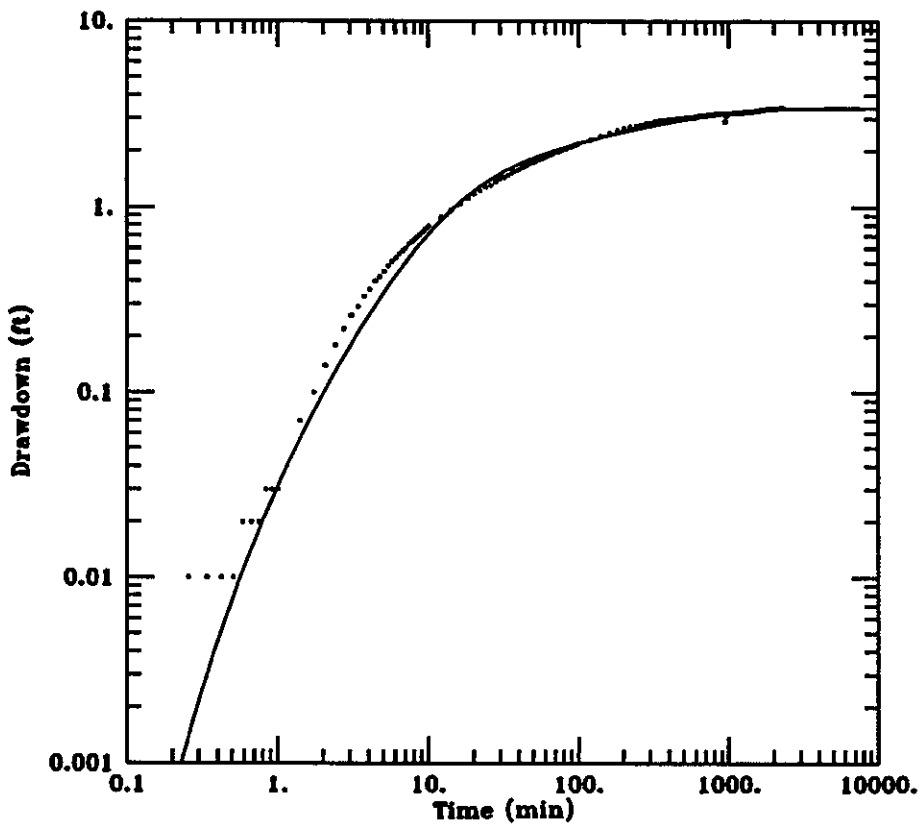
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S01

TEST DATA:
 $Q = 28.$ gal/min
 $r = 70.$ ft
 $r_c = 0.25$ ft
 $r_w = 0.5$ ft
 $b = 54.$ ft

PARAMETER ESTIMATES:
 $T = 3970.8$ gal/day/ft
 $S = 0.0006864$
 $\beta = 0.04785$

AGTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT1.DAT
12/13/96

AQUIFER MODEL:
Leaky
SOLUTION METHOD:
Moench

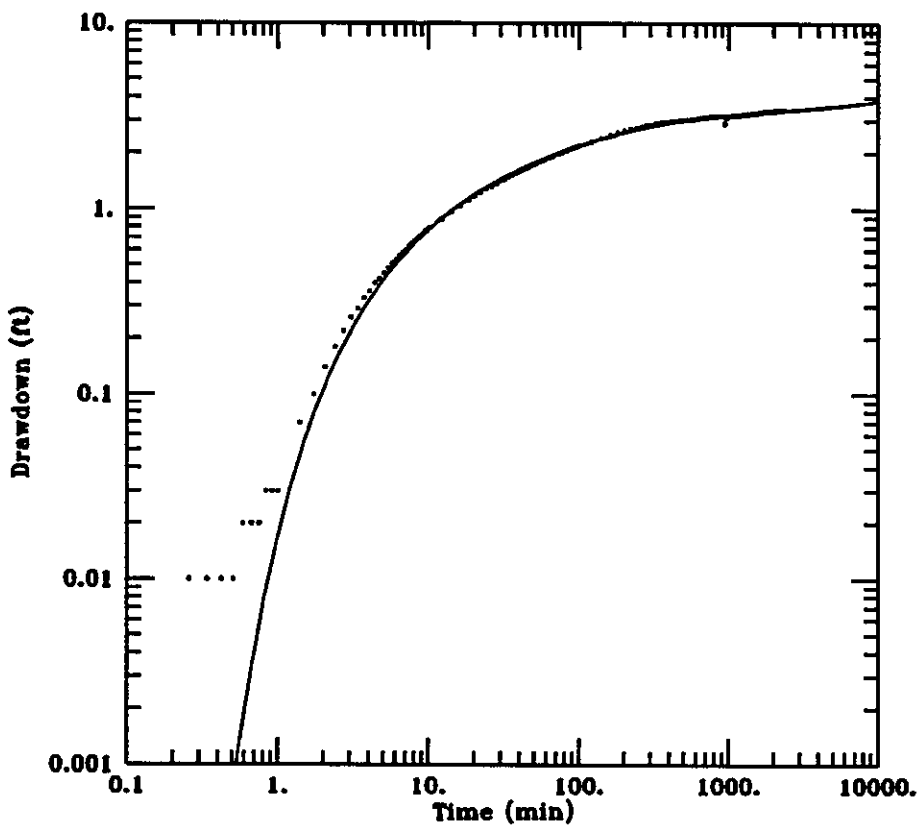
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S01

TEST DATA:
 $Q = 28$ gal/min
 $r = 70$ ft
 $r_c = 0.25$ ft
 $r_w = 0.5$ ft
 $b = 54$ ft

PARAMETER ESTIMATES:
 $T = 3457.3$ gal/day/ft
 $S = 6.596E-05$
 $r/B = 0.1849$
 $\beta = 0.3982$
 $S_w = 0$
 $a = 1.657E-05$

AQTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT1.DAT
12/13/96

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Neuman

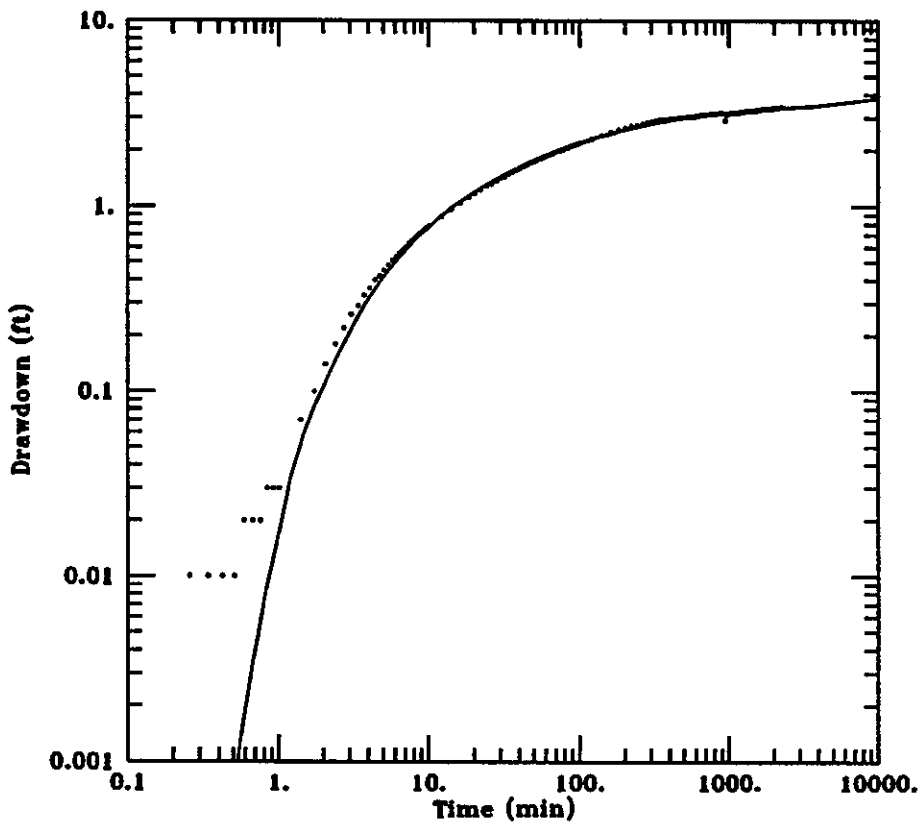
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S01

TEST DATA:
Q = 28. gal/min
r = 70. ft
r_c = 0.25 ft
r_w = 0.5 ft
b = 54. ft

PARAMETER ESTIMATES:
T = 3969.3 gal/day/ft
S = 0.0007871
Sy = 0.02348
β = 0.00538

AQTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT1.DAT
12/13/96

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Neuman (approx.)

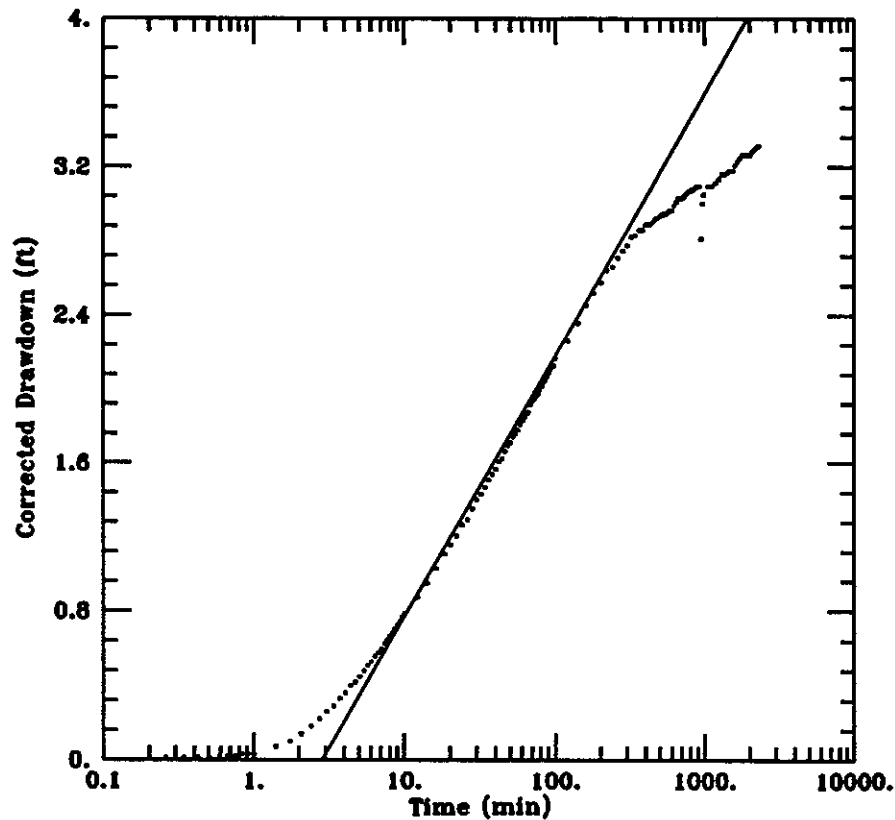
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S01

TEST DATA:
 $Q = 28$ gal/min
 $r = 70$ ft
 $r_c = 0.25$ ft
 $r_w = 0.5$ ft
 $b = 54$ ft

PARAMETER ESTIMATES:
 $T = 3973.7$ gal/day/ft
 $S = 0.0007851$
 $S_y = 0.0197$
 $\beta = 0.005611$

AQTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT1.DAT
12/13/96

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Cooper-Jacob

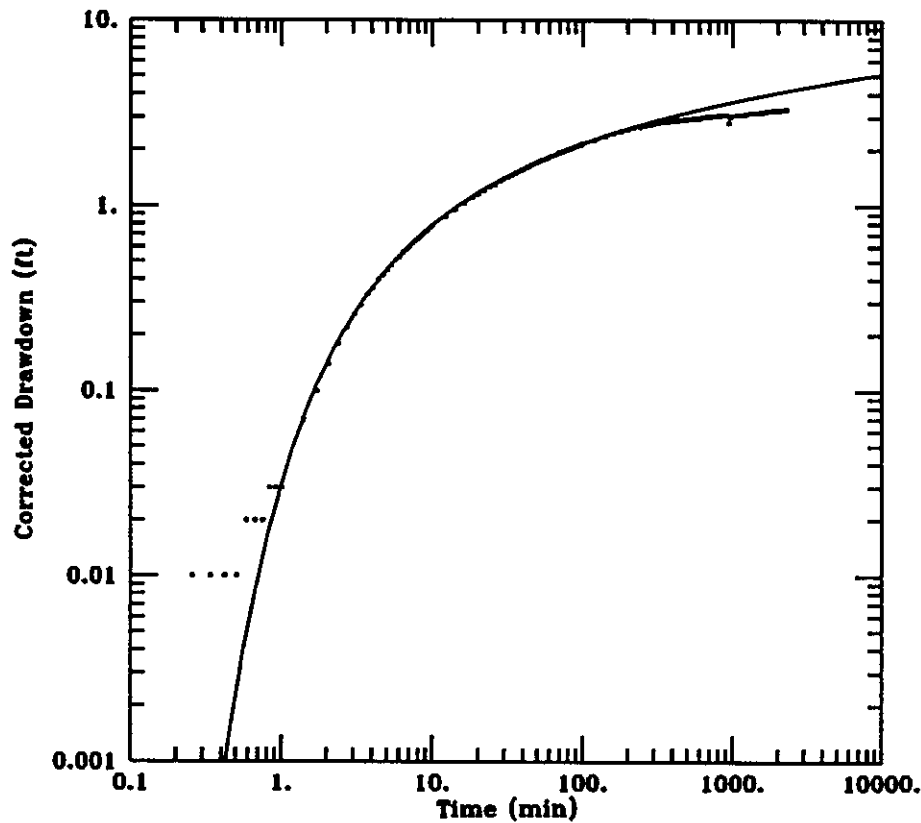
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S01

TEST DATA:
 $Q = 28$ gal/min
 $r = 70$ ft
 $r_c = 0.25$ ft
 $r_w = 0.5$ ft
 $b = 54$ ft

PARAMETER ESTIMATES:
 $T = 5227.3$ gal/day/ft
 $S = 0.0006352$

AQTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT1.DAT
12/13/96

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Theis

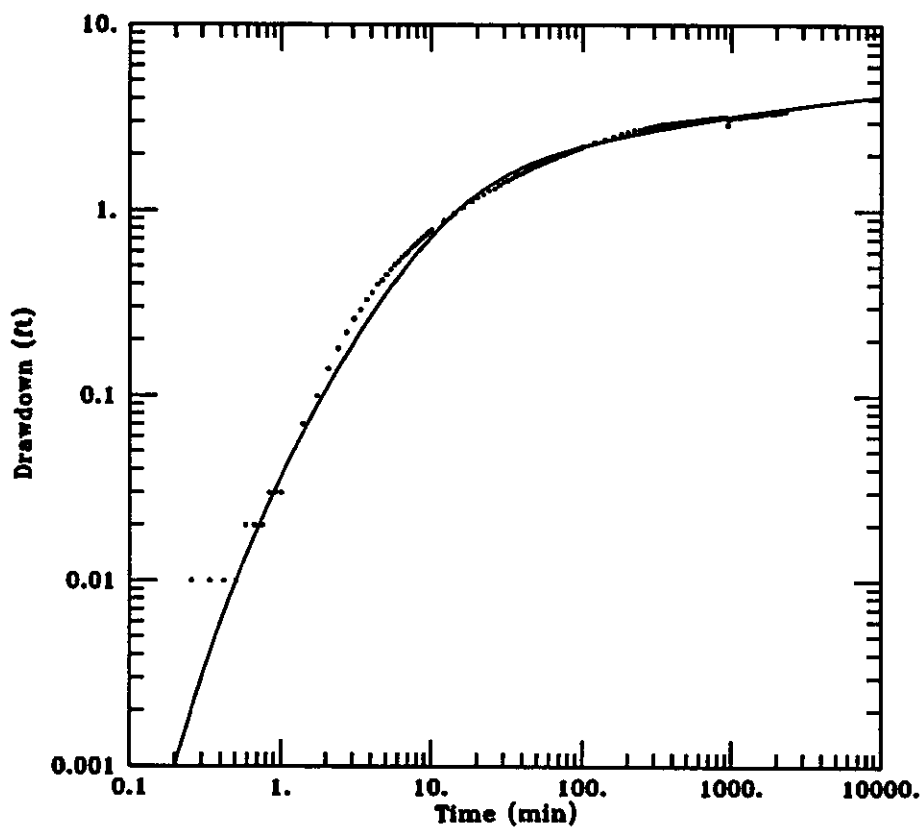
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S01

TEST DATA:
 $Q = 28. \text{ gal/min}$
 $r = 70. \text{ ft}$
 $r_c = 0.25 \text{ ft}$
 $r_w = 0.5 \text{ ft}$
 $b = 54. \text{ ft}$

PARAMETER ESTIMATES:
 $T = 4967.1 \text{ gal/day/ft}$
 $S = 0.0007598$

AQTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT1.DAT
12/13/96

AQUIFER MODEL:
Confined
SOLUTION METHOD:
Papadopoulos-Cooper

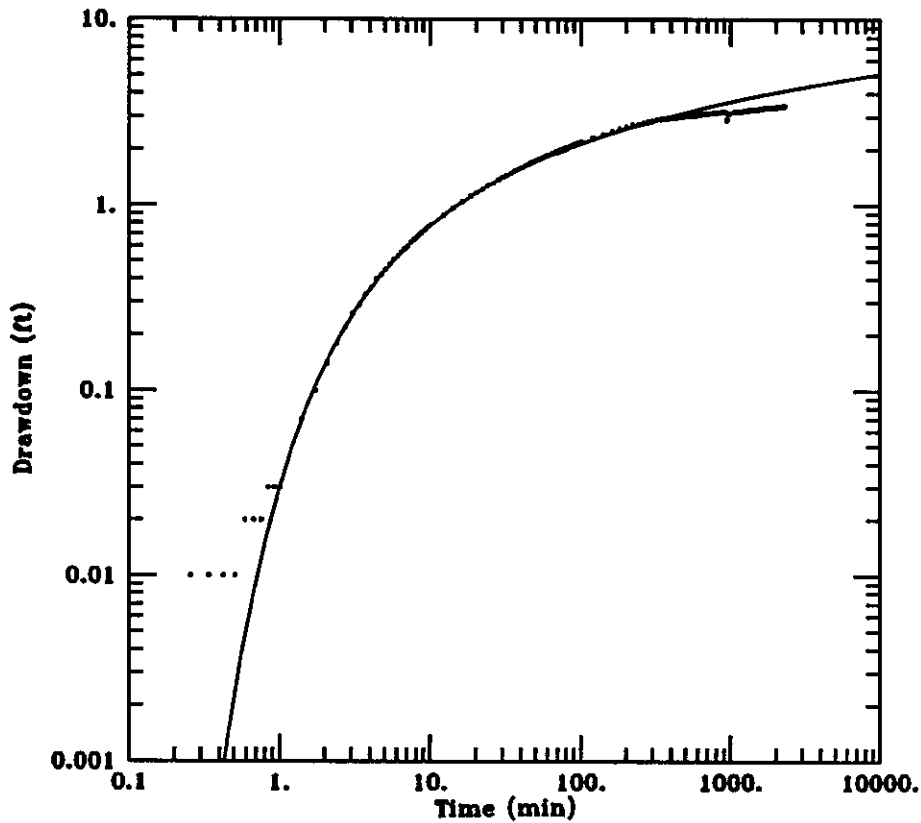
PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S01

TEST DATA:
 $Q = 28$ gal/min
 $r = 70$ ft
 $r_c = 0.25$ ft
 $r_w = 0.5$ ft
 $b = 54$ ft

PARAMETER ESTIMATES:
 $T = 7935.6$ gal/day/ft
 $S = 0.0001229$
 $a = 1.451E-05$

AQTESOLV

OKS-89 UPPER PRODUCING ZONE APT



DATA SET:
S89SAPT1.DAT
12/13/96

AQUIFER MODEL:
Confined
SOLUTION METHOD:
Theis

PROJECT DATA:
test date: May 11-13, 1994
test well: OKS-89SP1
obs. well: OKS-89S01

TEST DATA:
 $Q = 28$ gal/min
 $r = 70$ ft
 $r_c = 0.25$ ft
 $r_w = 0.5$ ft
 $b = 54$ ft

PARAMETER ESTIMATES:
 $T = 5003.1$ gal/day/ft
 $S = 0.0007715$

AQTESOLV