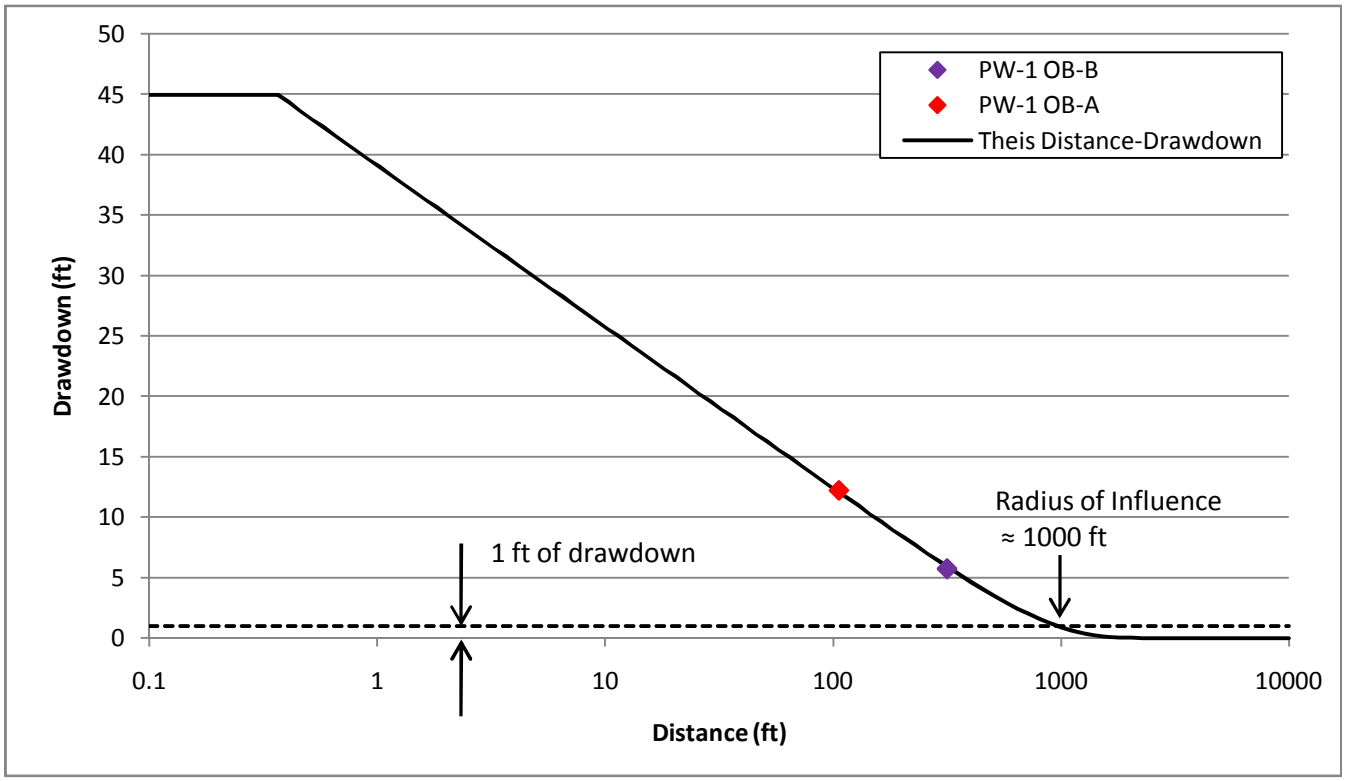
APPENDIX D

AQTESOLV ANALYSES

PW-1 Pumping Test Analyses

PW-1 Distance-Drawdown Relationship



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-1	
Flow Rate:	52.1	gpm

AQUIFER DATA

Saturated Thickness (b):	30	feet
Anisotropy Ratio (Kx/Kr):	1	

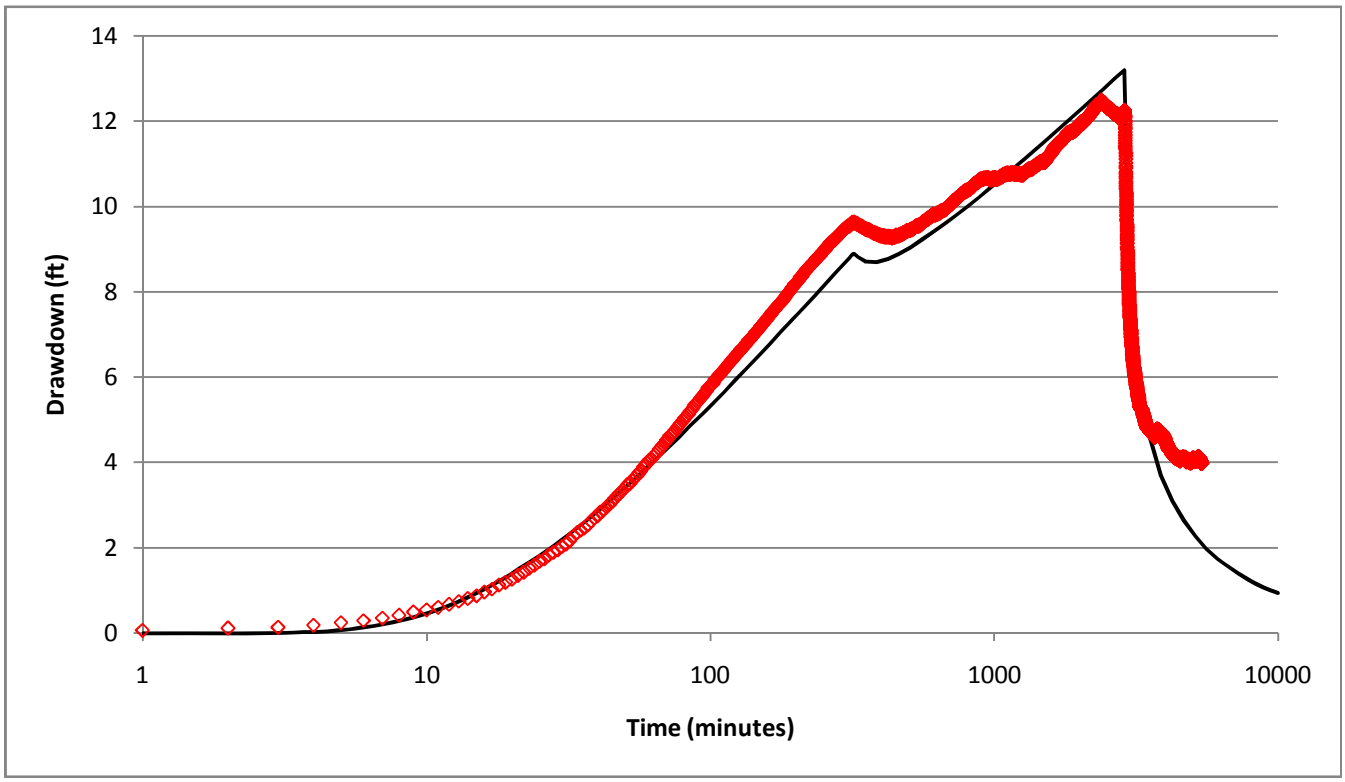
SOLUTION

Aquifer Model:	Confined	
Solution Method:	Theis -- Distance-Drawdown	
Time:	48	hours

ESTIMATED PARAMETERS

Transmissivity (T):	3.01	cm^2/s
Storativity (S)	3.01E-05	
Hydraulic Conductivity (K)	3.29E-03	cm/s

PW-1 OB-A Pumping Phase



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-1	
Observation Well Name:	PW-1 OB-A	
Distance from Pumping Well:	106.1	feet
Flow Rate:	52.1	gpm

AQUIFER DATA

Saturated Thickness (b):	30	feet
Anisotropy Ratio (Kx/Kr):	1	

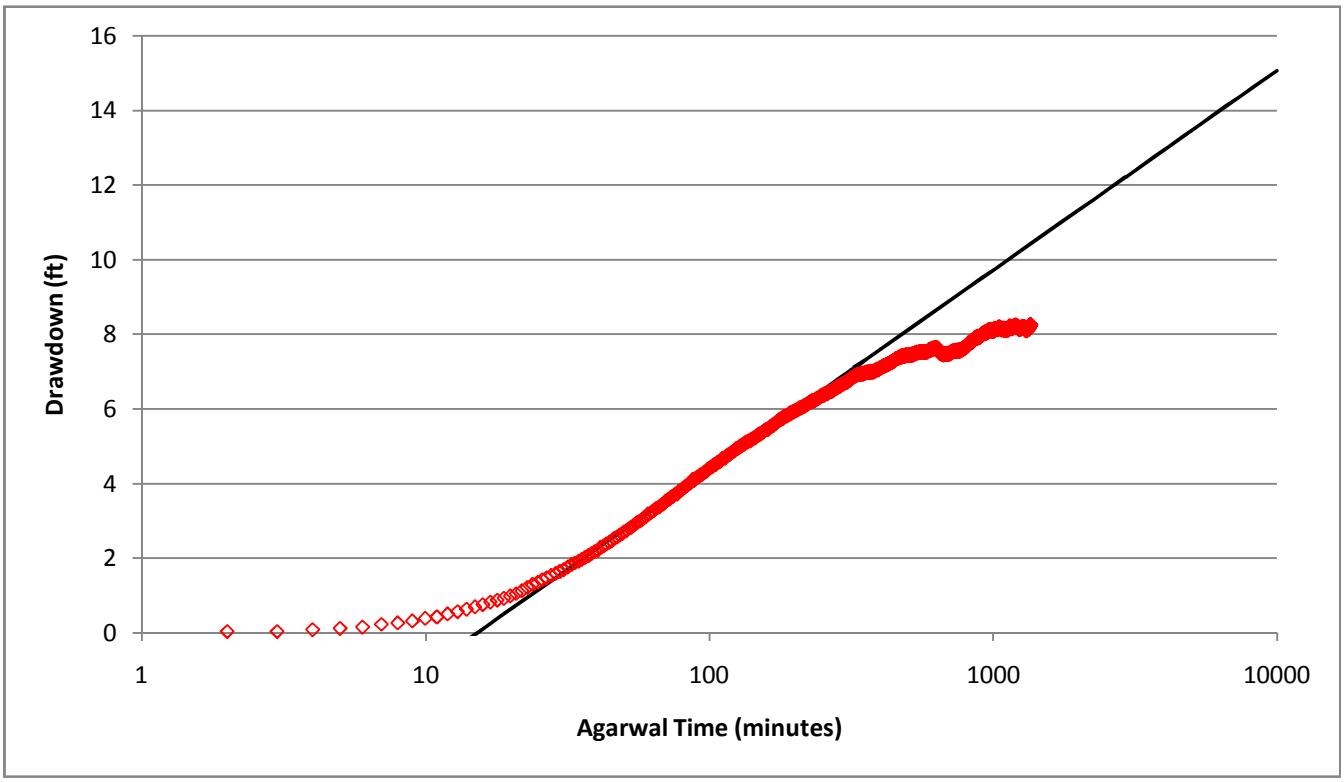
SOLUTION

Aquifer Model:	Confined
Solution Method:	Theis

ESTIMATED PARAMETERS

Transmissivity (T):	3.224	cm^2/s
Storativity (S)	1.58E-05	
Hydraulic Conductivity (K)	3.53E-03	cm/s

PW-1 OB-A Recovery Phase



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-1	
Observation Well Name:	PW-1 OB-A	
Distance from Pumping Well:	106.1	feet
Flow Rate:	52.1	gpm

AQUIFER DATA

Saturated Thickness (b):	30	feet
Anisotropy Ratio (Kx/Kr):	1	

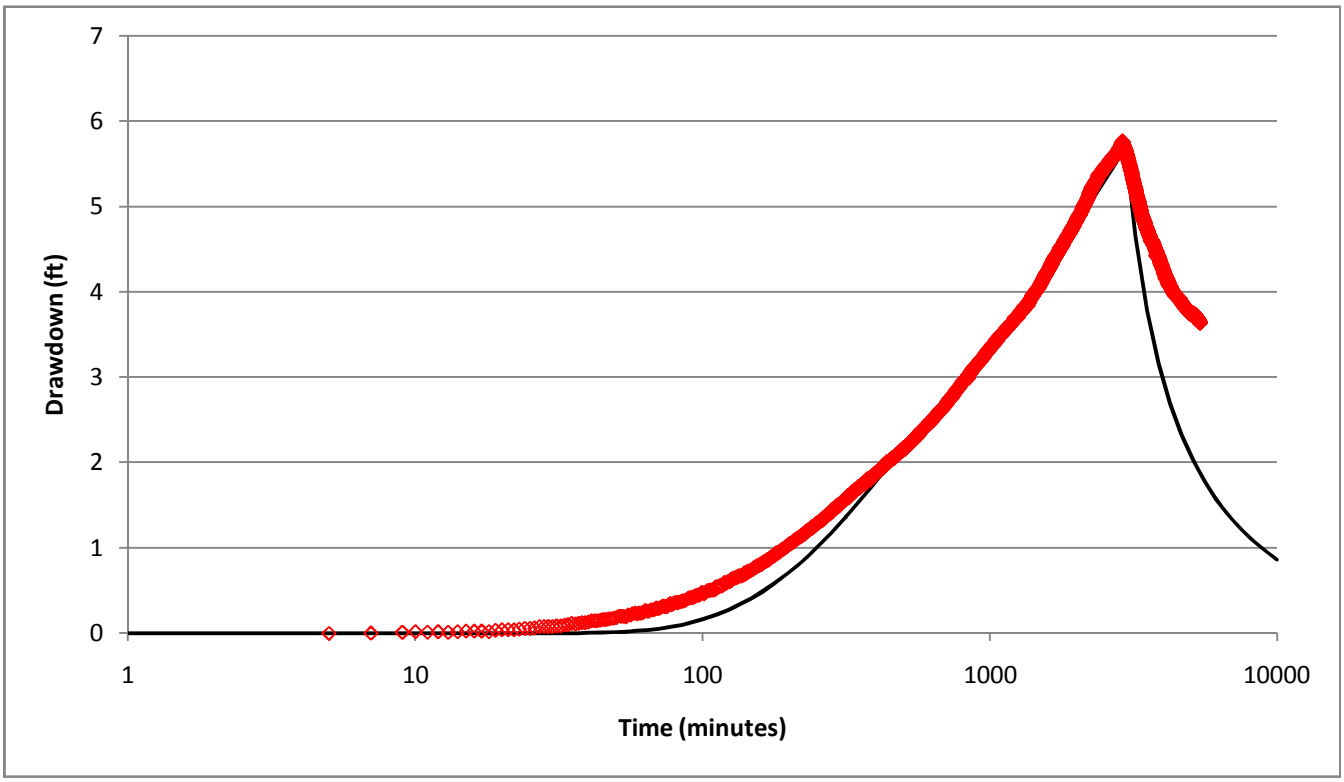
SOLUTION

Aquifer Model:	Confined
Solution Method:	Cooper-Jacob (Agarwal)

ESTIMATED PARAMETERS

Transmissivity (T):	3.763	cm^2/s
Storativity (S)	1.23E-05	
Hydraulic Conductivity (K)	4.12E-03	cm/s

PW-1 OB-B Pumping Phase



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-1	
Observation Well Name:	PW-1 OB-B	
Distance from Pumping Well:	317	feet
Flow Rate:	52.1	gpm

AQUIFER DATA

Saturated Thickness (b):	30	feet
Anisotropy Ratio (Kx/Kr):	1	

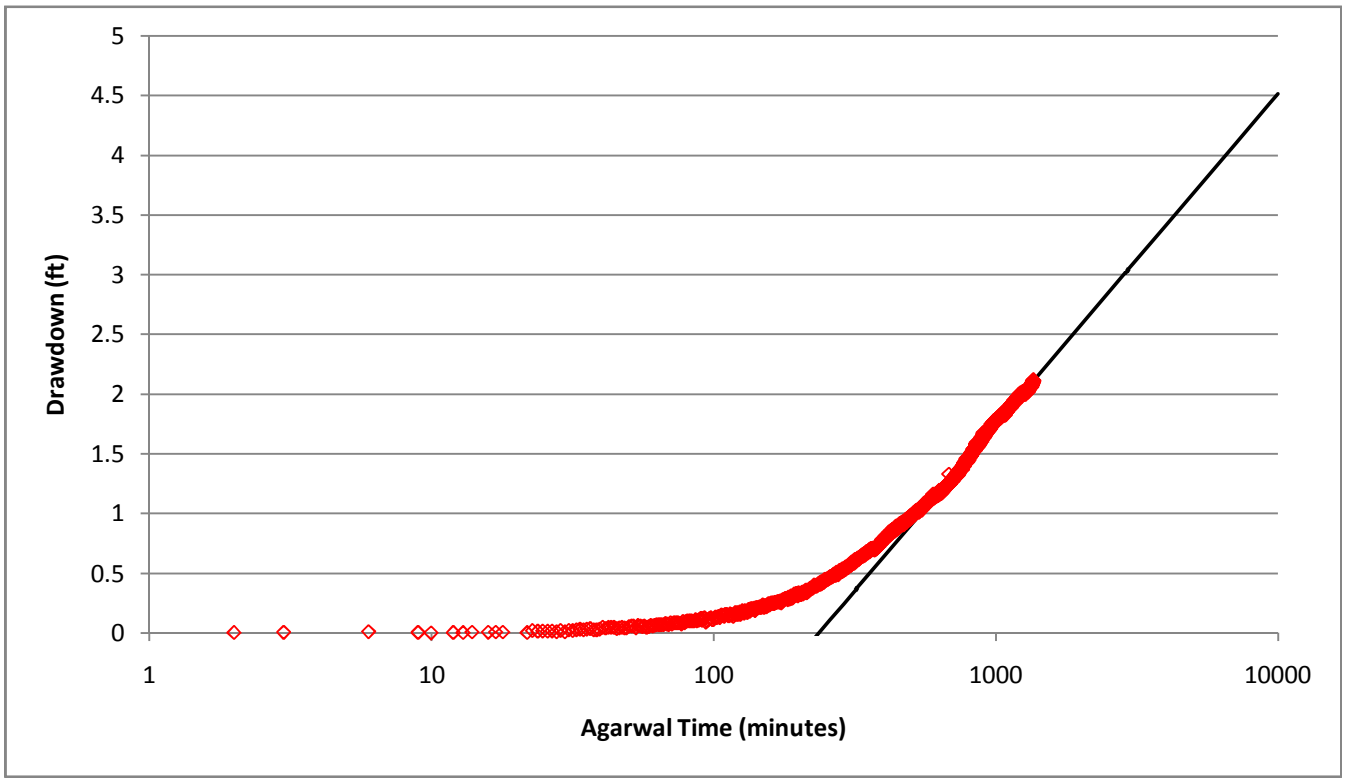
SOLUTION

Aquifer Model:	Confined
Solution Method:	Theis

ESTIMATED PARAMETERS

Transmissivity (T):	3.424	cm^2/s
Storativity (S)	2.87E-05	
Hydraulic Conductivity (K)	3.74E-03	cm/s

PW-1 OB-B Recovery-Phase



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-1	
Observation Well Name:	PW-1 OB-B	
Distance from Pumping Well:	317	feet
Flow Rate:	52.1	gpm

AQUIFER DATA

Saturated Thickness (b):	30	feet
Anisotropy Ratio (Kx/Kr):	1	

SOLUTION

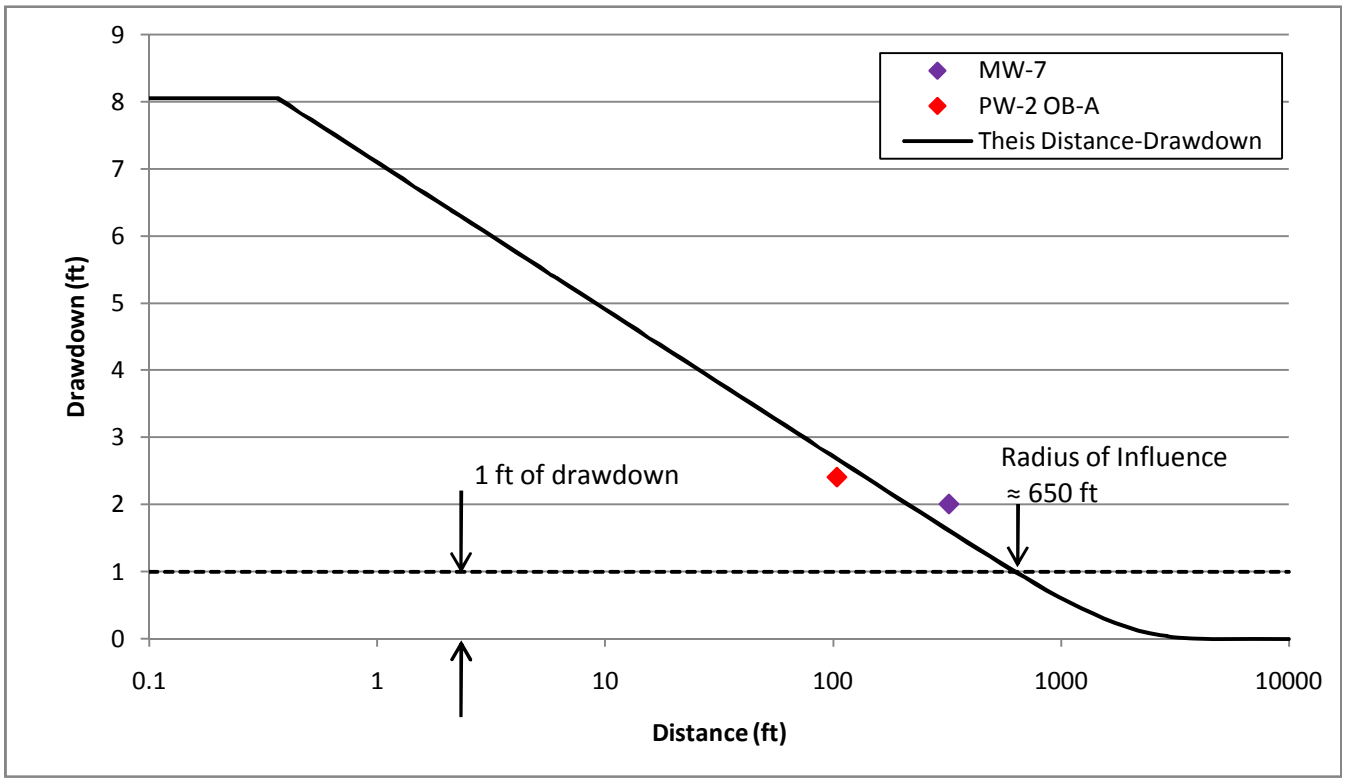
Aquifer Model:	Confined
Solution Method:	Cooper-Jacob (Agarwal)

ESTIMATED PARAMETERS

Transmissivity (T):	7.249	cm^2/s
Storativity (S)	4.11E-05	
Hydraulic Conductivity (K)	7.93E-03	cm/s

PW-2 Pumping Test Analyses

PW-2 Distance-Drawdown Relationship



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-2	
Flow Rate:	10.3	gpm

AQUIFER DATA

Saturated Thickness (b):	40	feet
Anisotropy Ratio (Kx/Kr):	1	

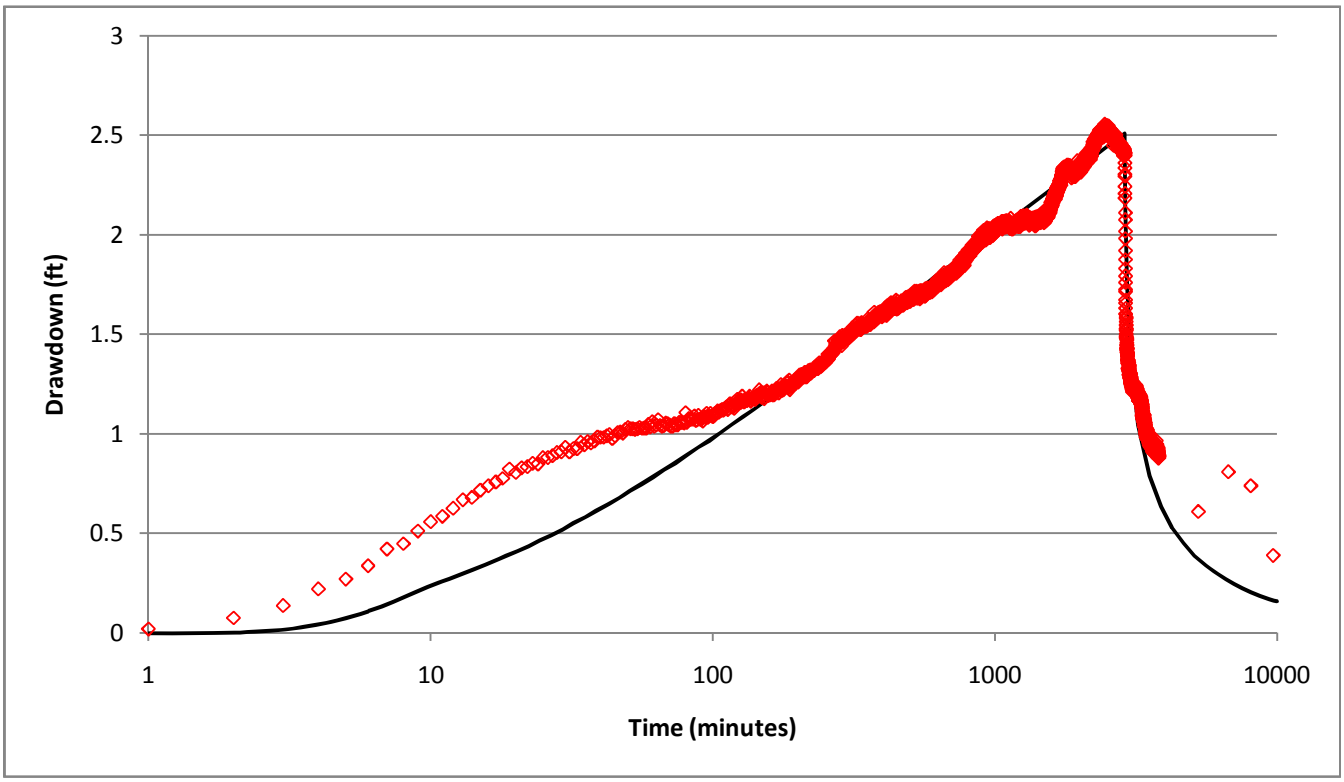
SOLUTION

Aquifer Model:	Confined	
Solution Method:	Theis -- Distance-Drawdown	
Time:	48	hours

ESTIMATED PARAMETERS

Transmissivity (T):	3.64	cm^2/s
Storativity (S)	5.00E-04	
Hydraulic Conductivity (K)	2.99E-03	cm/s

PW-2 OB-A Pumping Phase



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-2	
Observation Well Name:	PW-2 OB-A	
Distance from Pumping Well:	104	feet
Flow Rate:	10.3	gpm

AQUIFER DATA

Saturated Thickness (b):	40	feet
Anisotropy Ratio (Kx/Kr):	1	

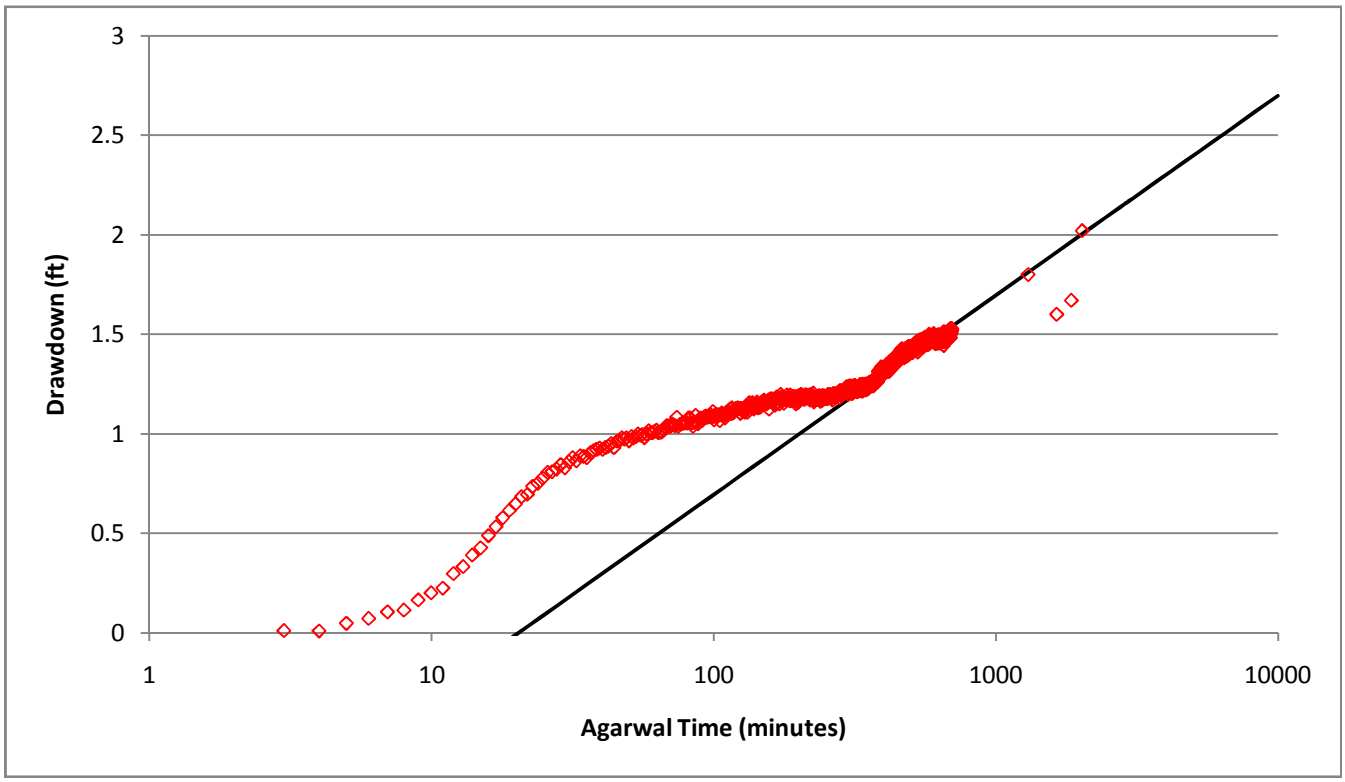
SOLUTION

Aquifer Model:	Confined
Solution Method:	Theis

ESTIMATED PARAMETERS

Transmissivity (T):	3.675	cm^2/s
Storativity (S)	6.87E-04	
Hydraulic Conductivity (K)	3.01E-03	cm/s

PW-2 OB-A Recovery Phase



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-2	
Observation Well Name:	PW-2 OB-A	
Distance from Pumping Well:	104	feet
Flow Rate:	10.3	gpm

AQUIFER DATA

Saturated Thickness (b):	40	feet
Anisotropy Ratio (Kx/Kr):	1	

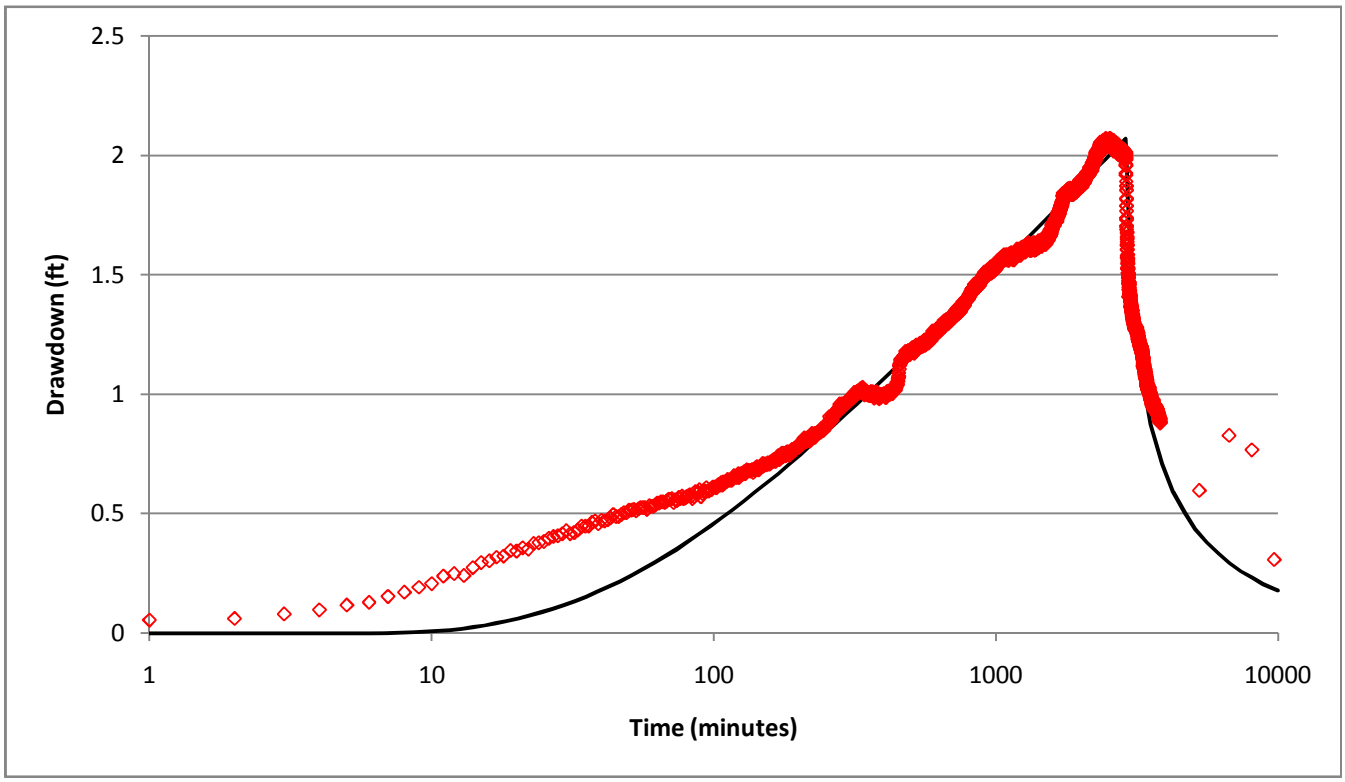
SOLUTION

Aquifer Model:	Confined
Solution Method:	Cooper-Jacob (Agarwal)

ESTIMATED PARAMETERS

Transmissivity (T):	3.976	cm^2/s
Storativity (S)	1.08E-03	
Hydraulic Conductivity (K)	3.26E-03	cm/s

MW-7 Pumping Phase (PW-2 Test)



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-2	
Observation Well Name:	MW-7	
Distance from Pumping Well:	322.2	feet
Flow Rate:	10.3	gpm

AQUIFER DATA

Saturated Thickness (b):	40	feet
Anisotropy Ratio (Kx/Kr):	1	

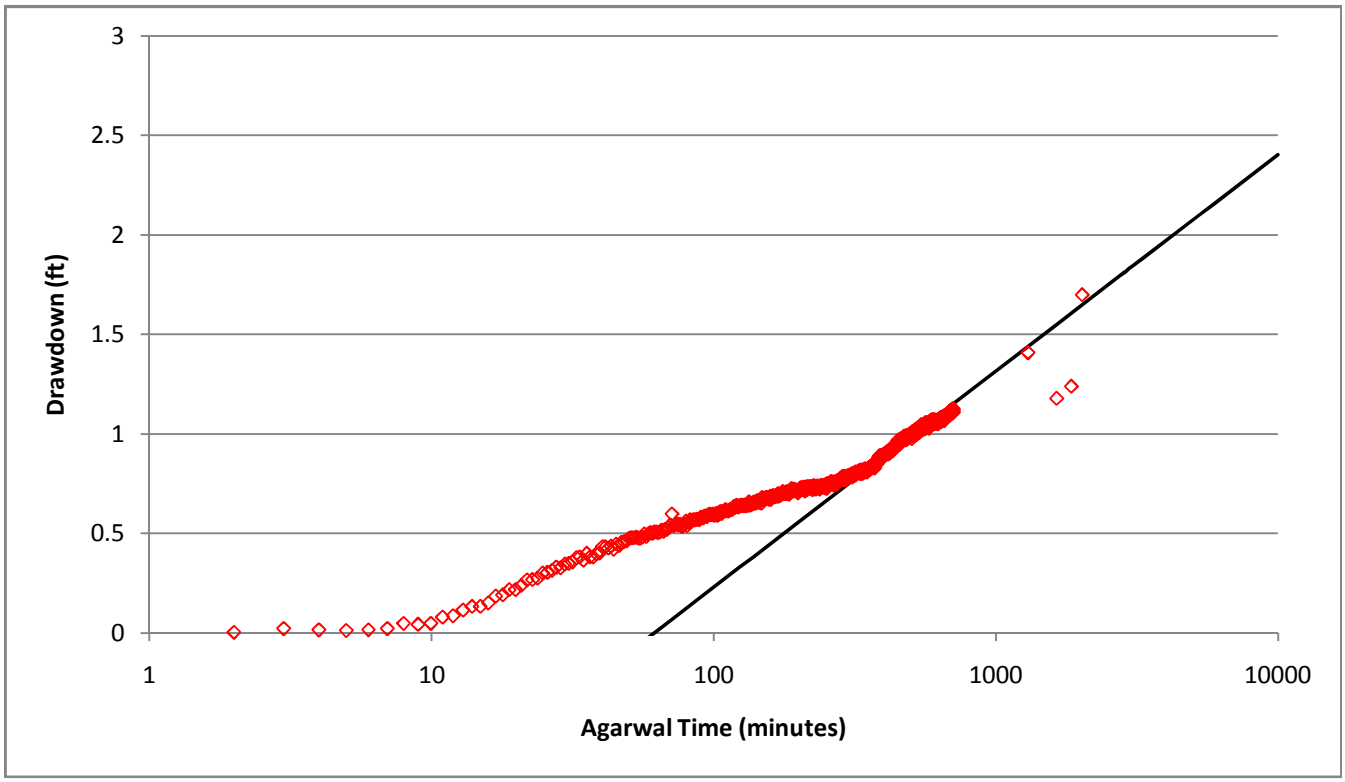
SOLUTION

Aquifer Model:	Confined
Solution Method:	Theis

ESTIMATED PARAMETERS

Transmissivity (T):	3.263	cm^2/s
Storativity (S)	2.68E-04	
Hydraulic Conductivity (K)	2.68E-03	cm/s

MW-7 Recovery Phase (PW-2 Test)



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-2	
Observation Well Name:	MW-7	
Distance from Pumping Well:	322.2	feet
Flow Rate:	10.3	gpm

AQUIFER DATA

Saturated Thickness (b):	40	feet
Anisotropy Ratio (Kx/Kr):	1	

SOLUTION

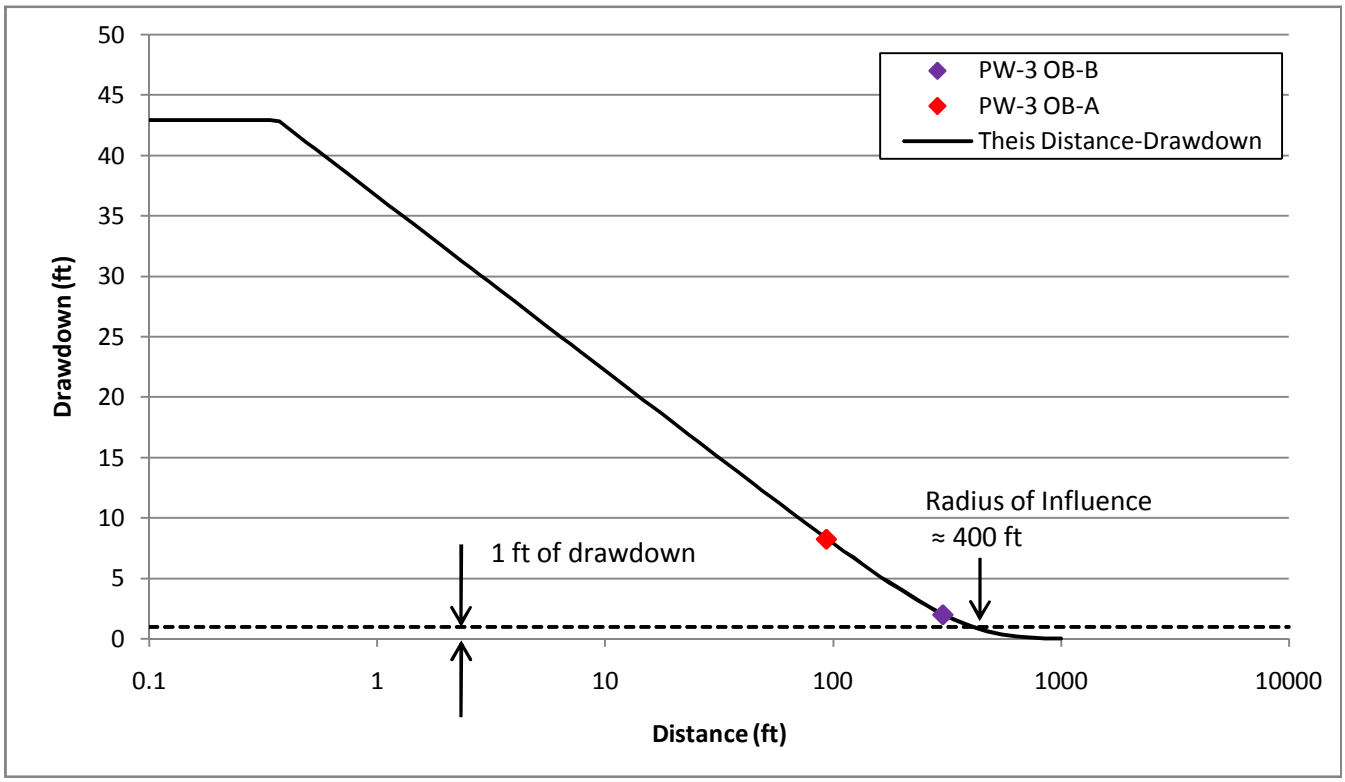
Aquifer Model:	Confined
Solution Method:	Cooper-Jacob (Agarwal)

ESTIMATED PARAMETERS

Transmissivity (T):	3.669	cm^2/s
Storativity (S)	3.14E-04	
Hydraulic Conductivity (K)	3.01E-03	cm/s

PW-3 Pumping Test Analyses

PW-3 Distance-Drawdown Relationship



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-3	
Flow Rate:	67.5	gpm

AQUIFER DATA

Saturated Thickness (b):	80	feet
Anisotropy Ratio (Kx/Kr):	1	

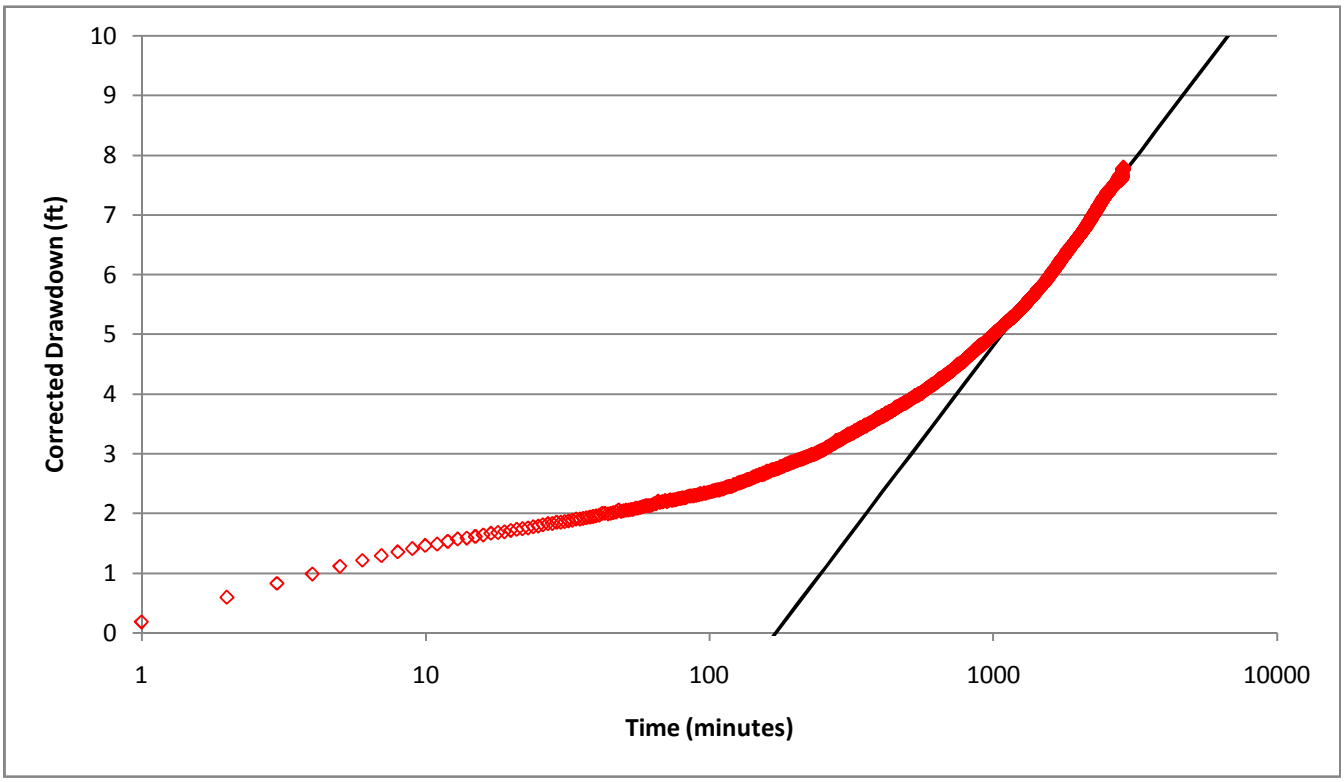
SOLUTION

Aquifer Model:	Confined	
Solution Method:	Theis -- Distance-Drawdown	
Time:	48	hours

ESTIMATED PARAMETERS

Transmissivity (T):	3.559	cm^2/s
Storativity (S)	1.26E-02	
Hydraulic Conductivity (K)	1.46E-03	cm/s

PW-3 OB-A Pumping Phase



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-3	
Observation Well Name:	PW-3 OB-A	
Distance from Pumping Well:	93.4	feet
Flow Rate:	67.5	gpm

AQUIFER DATA

Saturated Thickness (b):	80	feet
Anisotropy Ratio (Kx/Kr):	1	

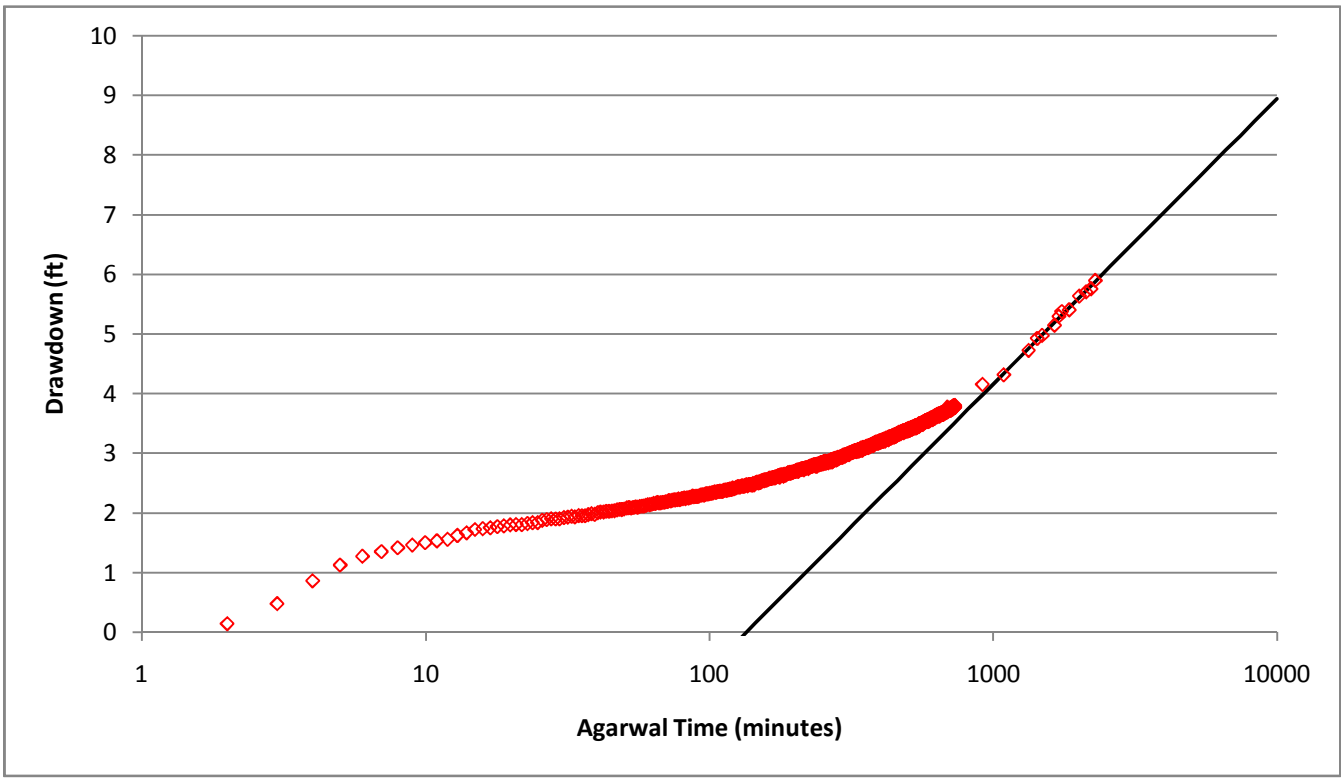
SOLUTION

Aquifer Model:	Unconfined
Solution Method:	Cooper-Jacob

ESTIMATED PARAMETERS

Transmissivity (T):	4.091	cm^2/s
Storativity (S)	1.16E-02	
Hydraulic Conductivity (K)	1.68E-03	cm/s

PW-3 OB-A Recovery Phase



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-3	
Observation Well Name:	PW-3 OB-A	
Distance from Pumping Well:	93.4	feet
Flow Rate:	67.5	gpm

AQUIFER DATA

Saturated Thickness (b):	80	feet
Anisotropy Ratio (Kx/Kr):	1	

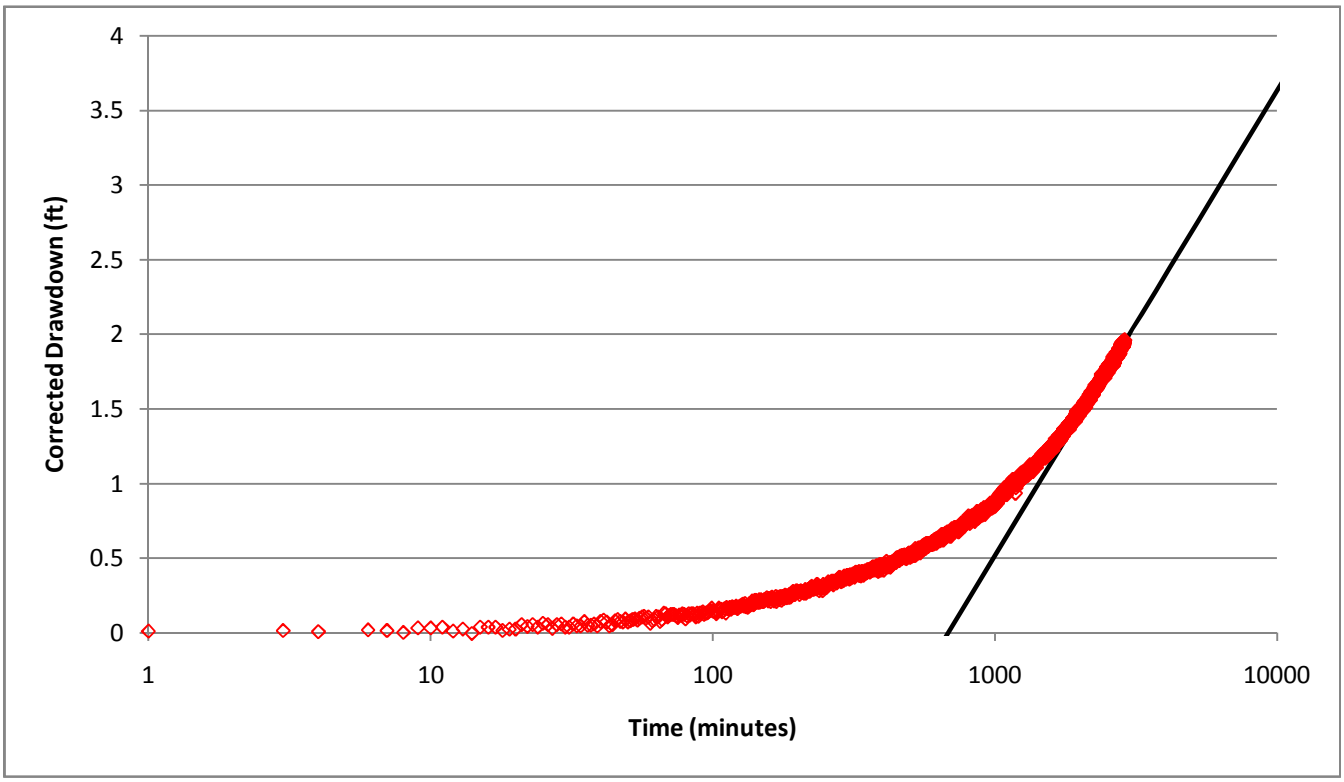
SOLUTION

Aquifer Model:	Unconfined
Solution Method:	Cooper-Jacob (Agarwal)

ESTIMATED PARAMETERS

Transmissivity (T):	5.375	cm^2/s
Storativity (S)	1.20E-02	
Hydraulic Conductivity (K)	2.20E-03	cm/s

PW-3 OB-B Pumping Phase



PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-3	
Observation Well Name:	PW-3 OB-B	
Distance from Pumping Well:	303.1	feet
Flow Rate:	67.5	gpm

AQUIFER DATA

Saturated Thickness (b):	80	feet
Anisotropy Ratio (Kx/Kr):	1	

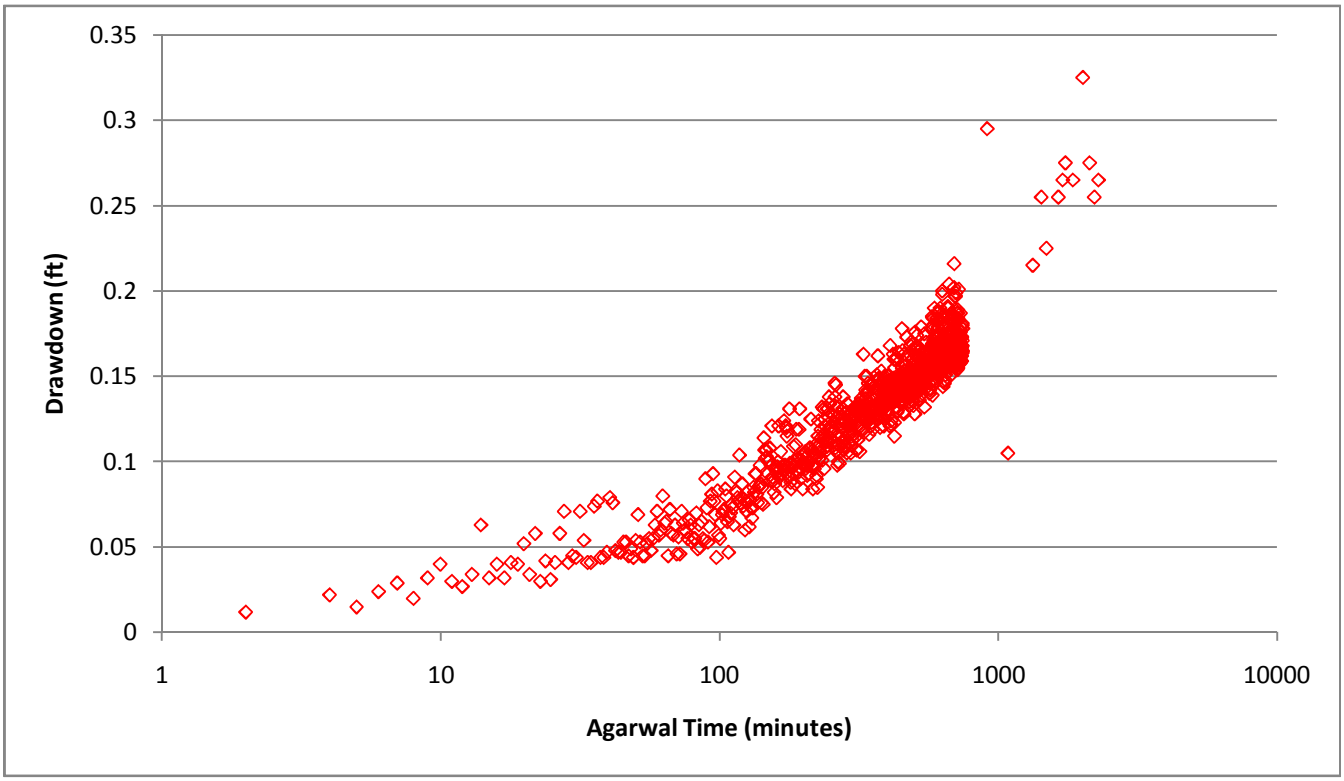
SOLUTION

Aquifer Model:	Unconfined
Solution Method:	Cooper-Jacob

ESTIMATED PARAMETERS

Transmissivity (T):	8.248	cm^2/s
Storativity (S)	8.87E-03	
Hydraulic Conductivity (K)	3.38E-03	cm/s

PW-3 OB-B Recovery Phase



**recovery is poor, cannot be analyzed*

PROJECT INFORMATION

Company:	Golder Associates Inc.
Client:	Energy Fuels Resources Corp.
Project:	073-81694
Location:	Paradox Valley, CO

WELL INFORMATION

Pumping Well Name:	PW-3	
Observation Well Name:	PW-3 OB-B	
Distance from Pumping Well:	303.1	feet
Flow Rate:	67.5	gpm

AQUIFER DATA

Saturated Thickness (b):	80	feet
Anisotropy Ratio (Kx/Kr):	1	

SOLUTION

Aquifer Model:	--
Solution Method:	--

ESTIMATED PARAMETERS

Transmissivity (T):	--	cm^2/s
Storativity (S)	--	
Hydraulic Conductivity (K)	--	cm/s