WELL SCHEDULE

SITE NAME 14FF58 OTHER IDENTIFIER Collins Hill Road WELL NUMBER 335843083593101

Latitude 33° 58' 43.29" Longitude -83° 59' 31.79" Ground Elevation 1030.19 NGVD 29

OWNER City of Lawrenceville Casing Elevation 1031.98 NGVD 29

WELL CONSTRUCTION DESCRIPTION

Name of Aquifer: metamorphic - crystalline rock

TYPE OF DRILLING

_X_ Rotary
_____ Percussion
_____ Bored

Total Depth 550

Static Water Level (bls)
-1.96 @
10/31/2001 12:21:00 PM

DRILL HOLE DIAMETER

Size 8 in, from 0 ft to 34 ft
Size 6 in, from 34 ft to 550 ft
Size _____ in, from _____ ft to _____ ft

CASING RECORD

Type material PVC
Size 6 in, from 0 ft to 34 ft
Size _____ in, from _____ ft to _____ ft
Size _____ in, from _____ ft to _____ ft

WELL SCREEN

Type material open hole
Size _____ in, from _____ ft to _____ ft
Size _____ in, from _____ ft to _____ ft
Size _____ in, from _____ ft to _____ ft

Date drilled 6/18/2001 6/19/2001

Driller Middle Georgia Water Systems

GROUTING [X] YES [ ] NO

Type bentonite
From 0 ft to 34 ft
From _____ ft to _____ ft
From _____ ft to _____ ft

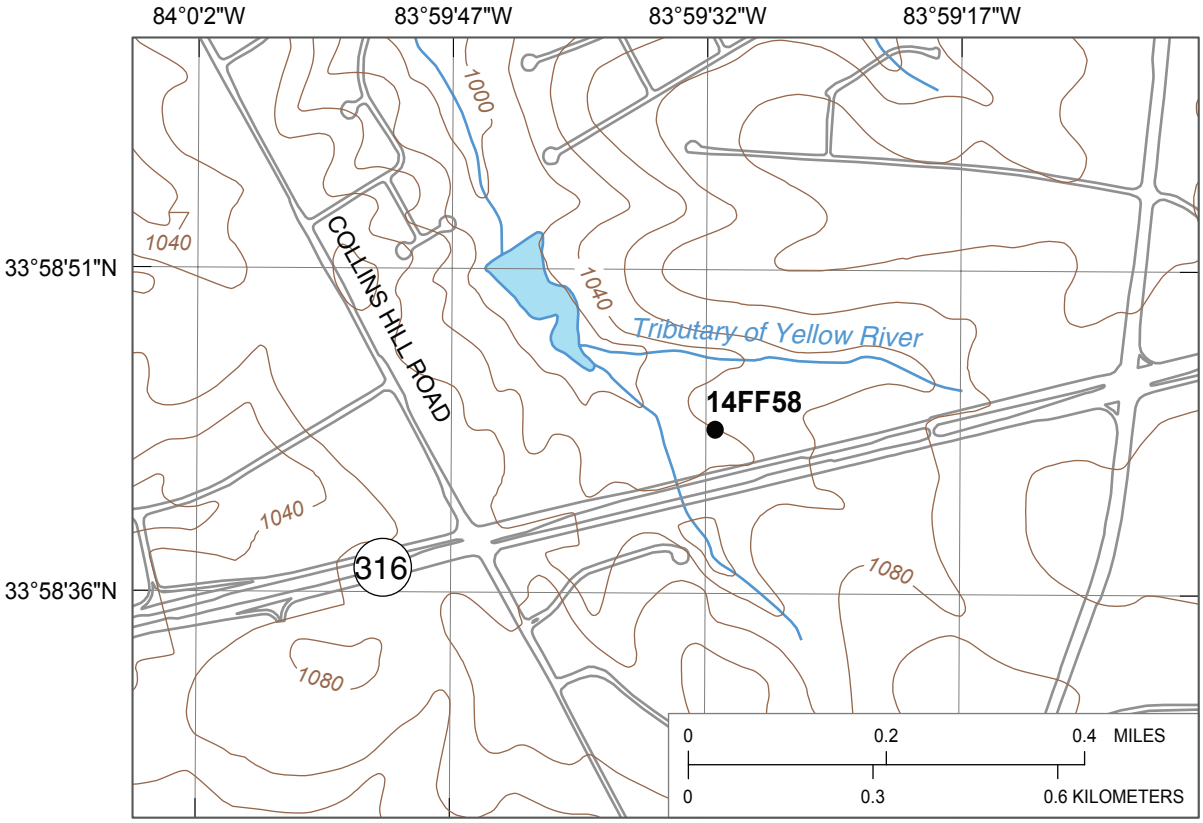
TEST PUMP DATA

Pumped _X_ Bailed _____
Estimated 1 (air-lift yield)
Date tested 8/16/2001
Pump rated _____ gal/min _____HP
Test yield 1.95 gal/min After 2.5 hrs
Water level before test 0 (flowing) ft btoc
Drawdown 114.50 ft
Specific Capacity 0.02 gal/min/ft

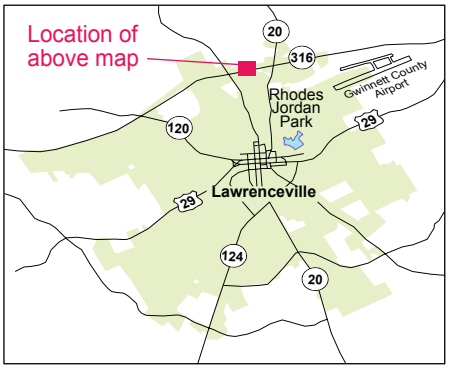
Pumped during Heat Pulse flow-meter test
Altitudes are in reference to NGVD 29
Latitude/longitude in NAD 83
Depths are in feet below land surface (bls)
Feet below top of casing (ft btoc)

Comments: Test hole drilled 6/18-19/2001 and logged by J. Lawson; major fractures at 42-43', 287.5-288.5', 498-499';

water-level rises to the top of casing



Base from U.S. Geological Survey 1:24,000-scale, Luxomni Roads from City of Lawrenceville 1999 digital data



14FF58 **EXPLANATION**

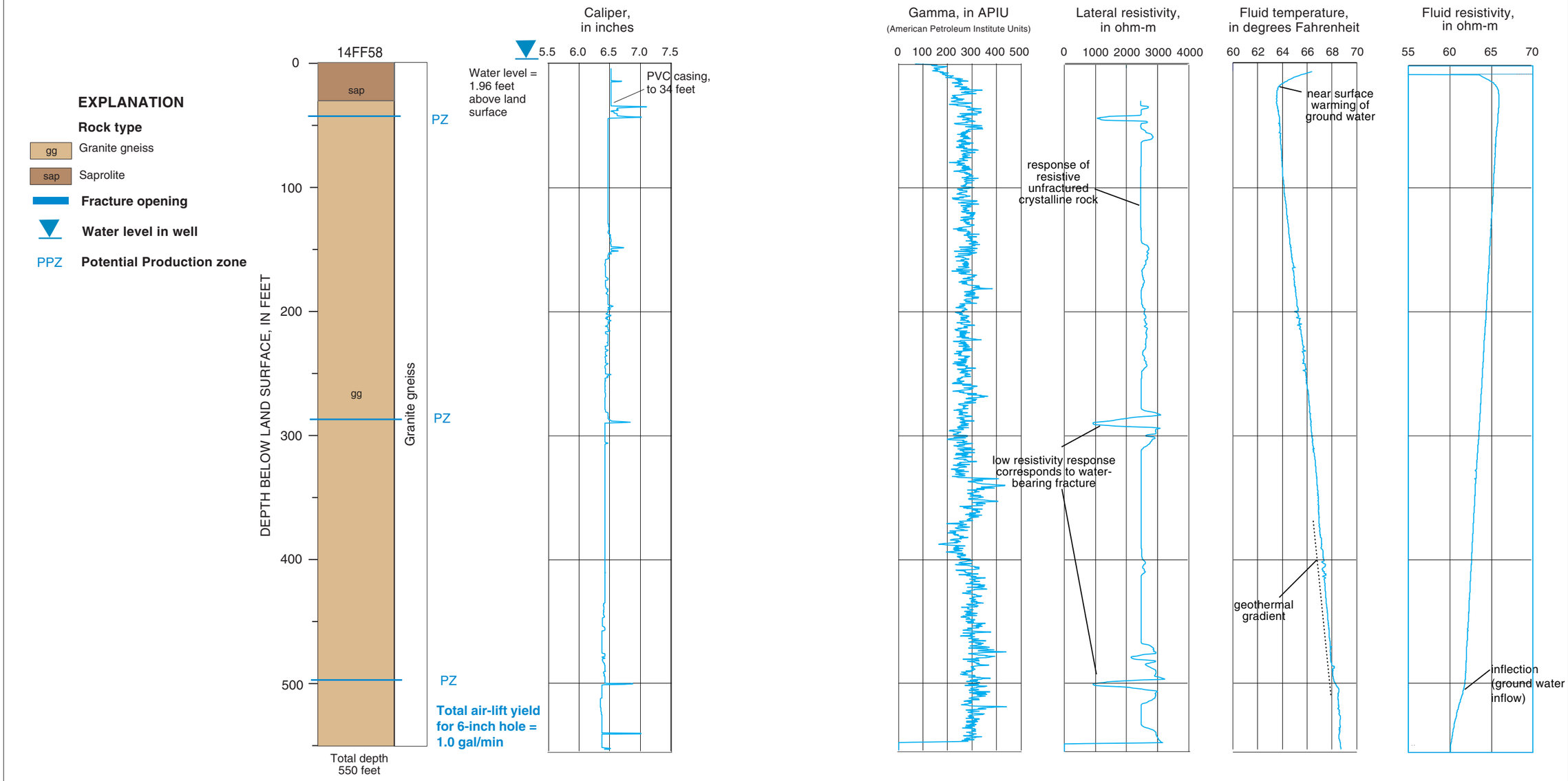
Observation well and site name

Geophysical log files for well 14FF58 [contained on CD in Supplemental_data\log_archive\logs.zip; ft bls, feet below land surface]

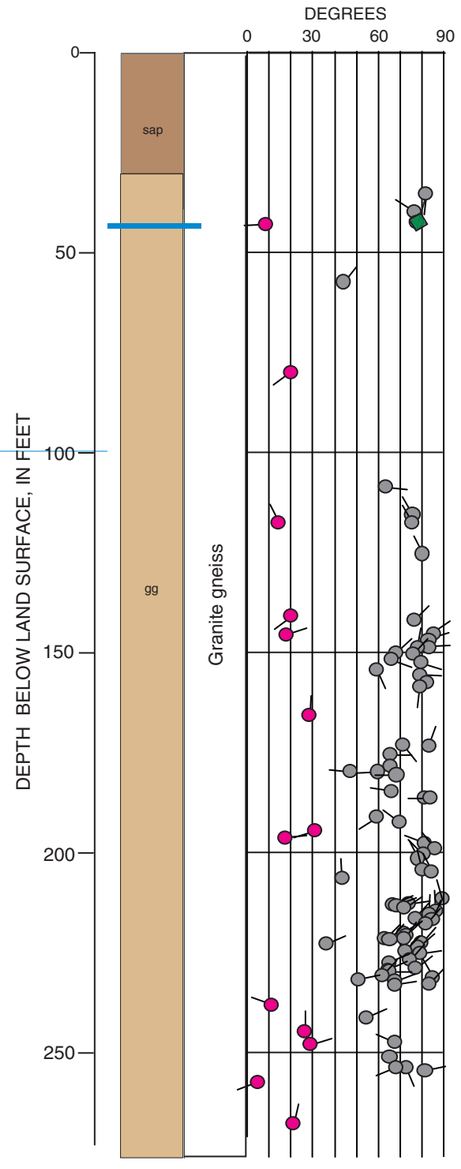
File name	Type	Date	Start depth (ft bls)	Stop depth (ft bls)
14FF58.20010724.ZE01	Combination Tool[1/]	7/24/01	-1.2	550
14FF58.20011108.AT01	Acoustic Televiewer[2/]	11/8/01	27.26	550
14FF58.20010724.CT01	Caliper, Three Arm	7/24/01	3	551.9
14FF58.20010724.ZI01	Gamma and EM Induction	7/24/01	-1.8	549.1
14FF58.20010806.FH01	Heat-pulse Flowmeter	8/6/01	10	545
14FF58.20010816.FH01	Heat-pulse Flowmeter	8/16/01	10	545

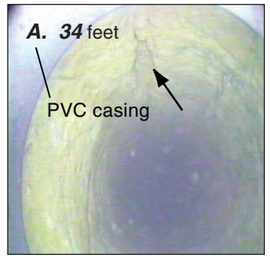
[1/] Includes gamma, long/short normal resistivity, spontaneous potential, single-point resistance, fluid resistivity, and temperature

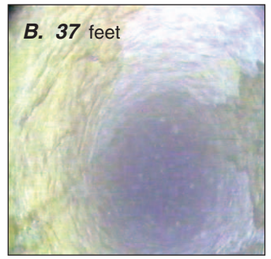
[2/] Does not include trace data, original log is provided in Century binary format under the same file name with extension ".log"

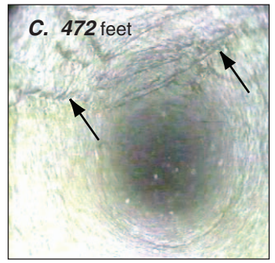


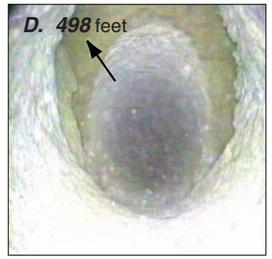
Lithology and borehole geophysical logs for well 14FF58 (Collins Hill Road well), Lawrenceville, Georgia.

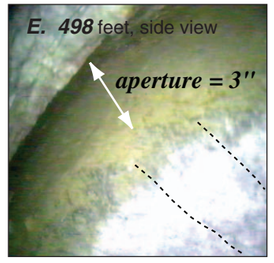












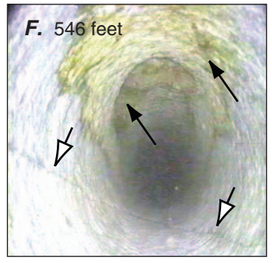
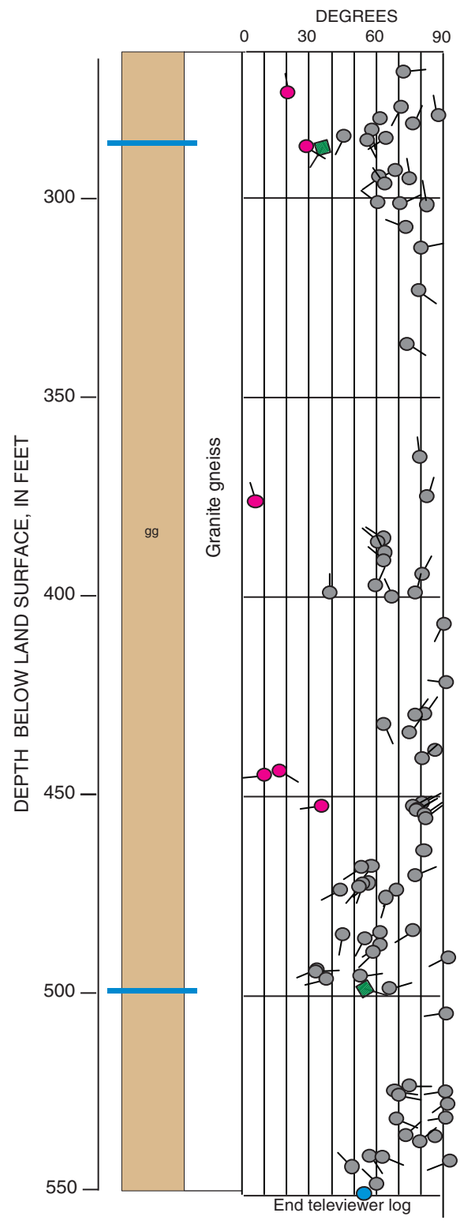
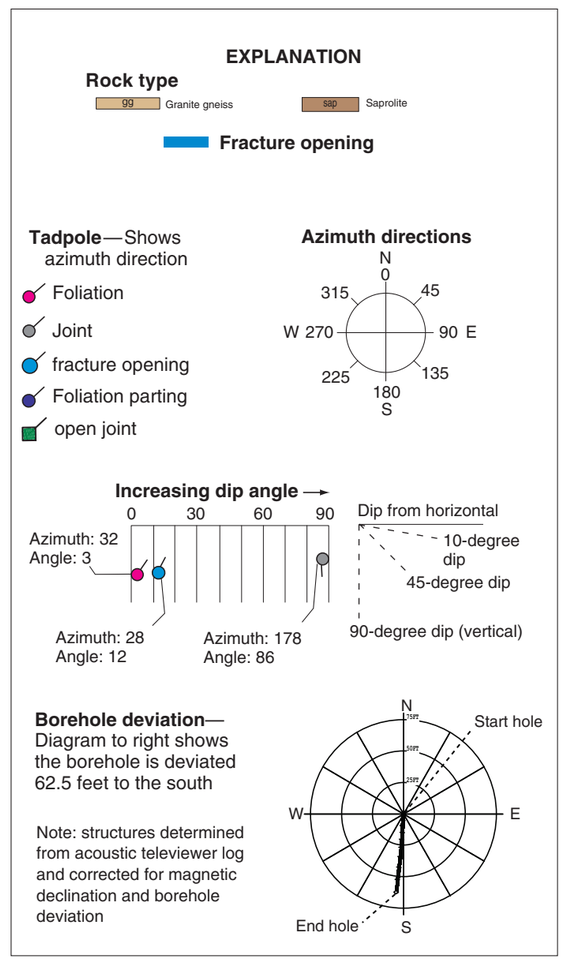
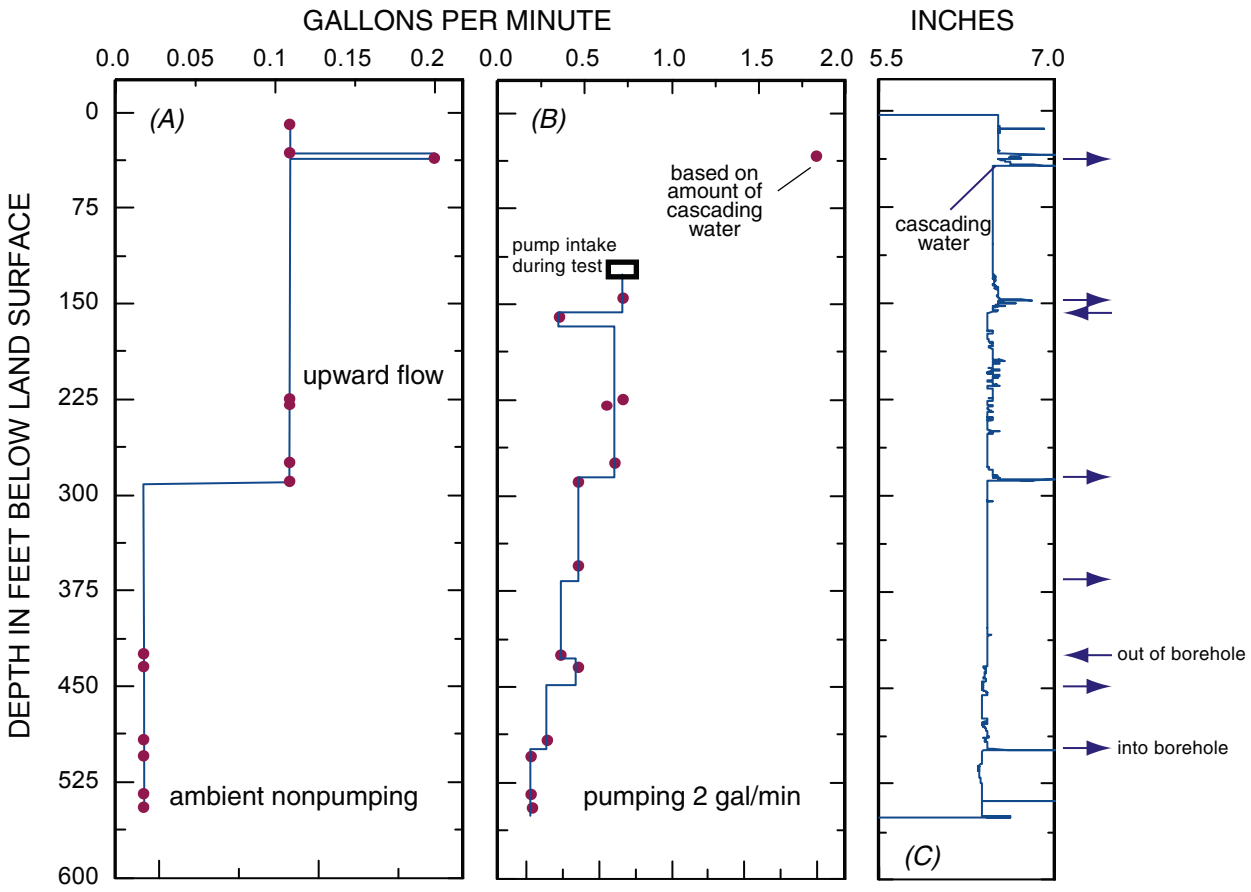


Image A shows a high-angle fracture (arrow) intersecting the borehole just below casing. Image B shows a downhole view of chemical weathering and oxidation of bedrock, darker areas are stained with iron oxides. Image C shows a group of closely-spaced joints (black arrows), spacing is less than one inch. Image D shows an open joint (black arrow) dipping 53 degrees. Image E is a side view of the open joint in Image D; joint cuts across foliation (dotted lines). Image F shows chemical oxidation along a high-angle joint face (black arrows); another joint (open arrows) dips in the opposite direction and appears to be tight.





Structural tadpole plot and downhole camera images for well 14FF58 (Collins Hill Road well), Lawrenceville, Georgia.



Flowmeter logs from well 14FF58 showing *(A)* upward vertical flow in borehole under ambient non-pumping conditions, and *(B)* vertical flow in borehole during pumping 2 gal/min. Caliper log *(C)* shows peaks where the borehole diameter is enlarged at discrete fracture openings in the bedrock. Right-facing arrows indicate flow into borehole, and left-facing arrows indicate flow out of borehole during pumping.