WELL SCHEDULE

SITE NAME 14FF55 OTHER IDENTIFIER Ezzard Street WELL NUMBER 335707083582101

Latitude 33° 57' 6.68" Longitude -83° 58' 21.28" Ground Elevation 969.6 NGVD 29

OWNER City of Lawrenceville Casing Elevation 971.87 NGVD 29

WELL CONSTRUCTION DESCRIPTION

Name of Aquifer: metamorphic - crystalline rock

TYPE OF DRILLING

X Rotary
____ Percussion
____ Bored

Total Depth 450

Static Water Level (bls)
0.47 @
10/31/2001 12:50:00 PM

DRILL HOLE DIAMETER

Size 12 in, from 0 ft to 63 ft
Size 8 in, from 63 ft to 301 ft
Size 6 in, from 301 ft to 450 ft

CASING RECORD

Type material steel
Size 8 in, from 0 ft to 63 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 4/16-17/2001 (6-inch test hole)

Driller Middle Georgia Water Systems

GROUTING [X] YES [ ] NO

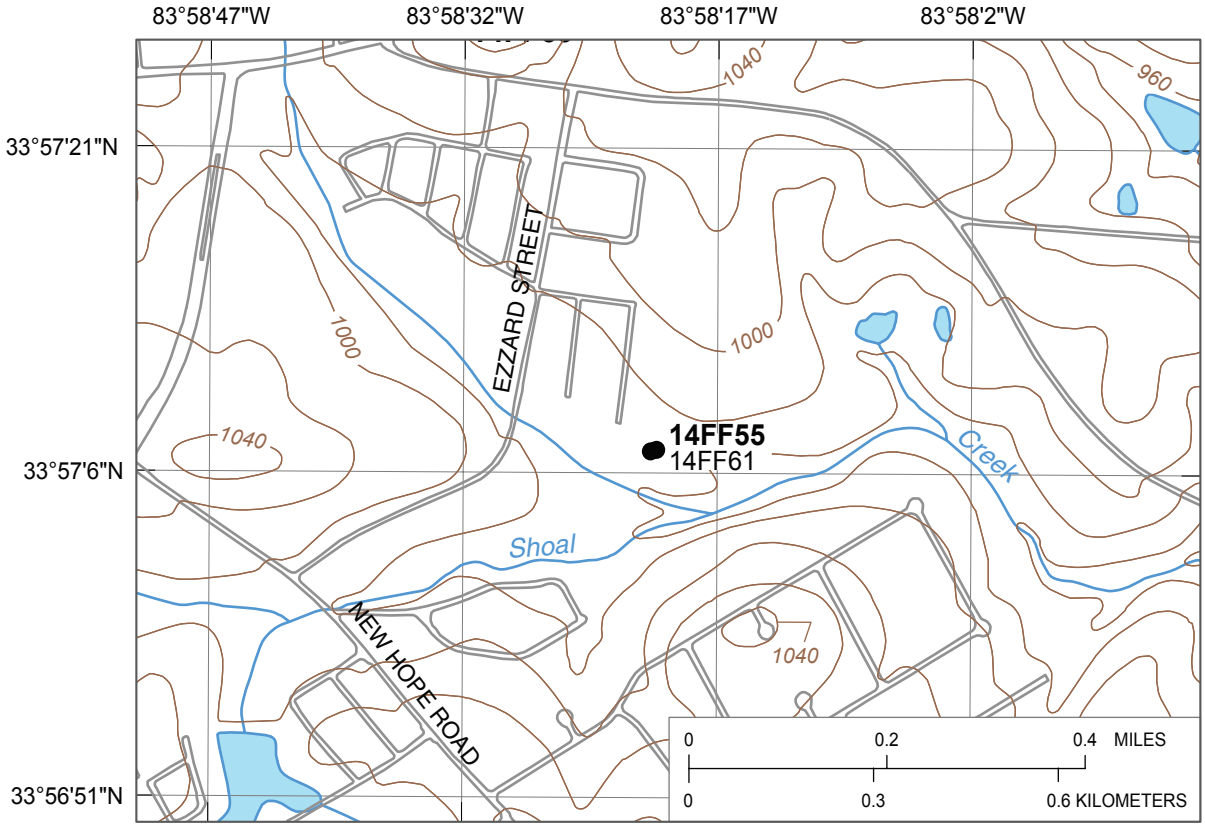
Type portland type I
From 0 ft to 63 ft
From ____ ft to ____ ft
From ____ ft to ____ ft

TEST PUMP DATA

Pumped X Bailed ____
Estimated 250 (air-lift yield)
Date tested 8/14/2001 8/17/2001
Pump rated 375 gal/min 25 HP
Test yield 240.9 gal/min After 72 hrs
Water level before test 2.16 ft btoc
Drawdown 91.8 ft
Specific Capacity 2.6 gal/min/ft

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)

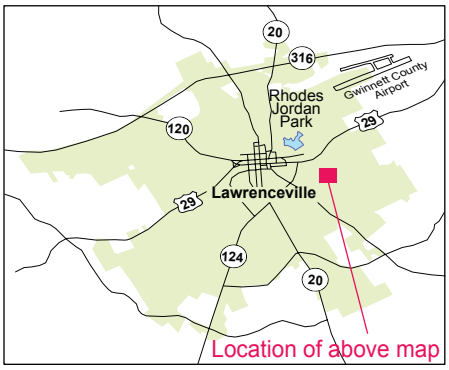
Comments: Test hole drilled 4/16/01 to 4/17/01 and logged by L. Williams; air-lift yield 250 gal/min with shallow fractures exposed in 6" borehole; bottom-hole fracture drowned bit; 6-inch hole later deepened to 450 feet to expose bottom-hole fracture; from logging: major water-bearing fractures at 14-17', 31-32', 50.5-51.5', 64-65' (these sealed off) 100.5-101.5', 172.5-173.5', 181-182', 251-252', 305.5-306.5', 416-417' (bottom hole fracture); small fracture at 64.5-65' appeared after reaming; water exits borehole through this fracture (aprox. 10 gal/min) based on E-M flowmeter log.



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

EXPLANATION

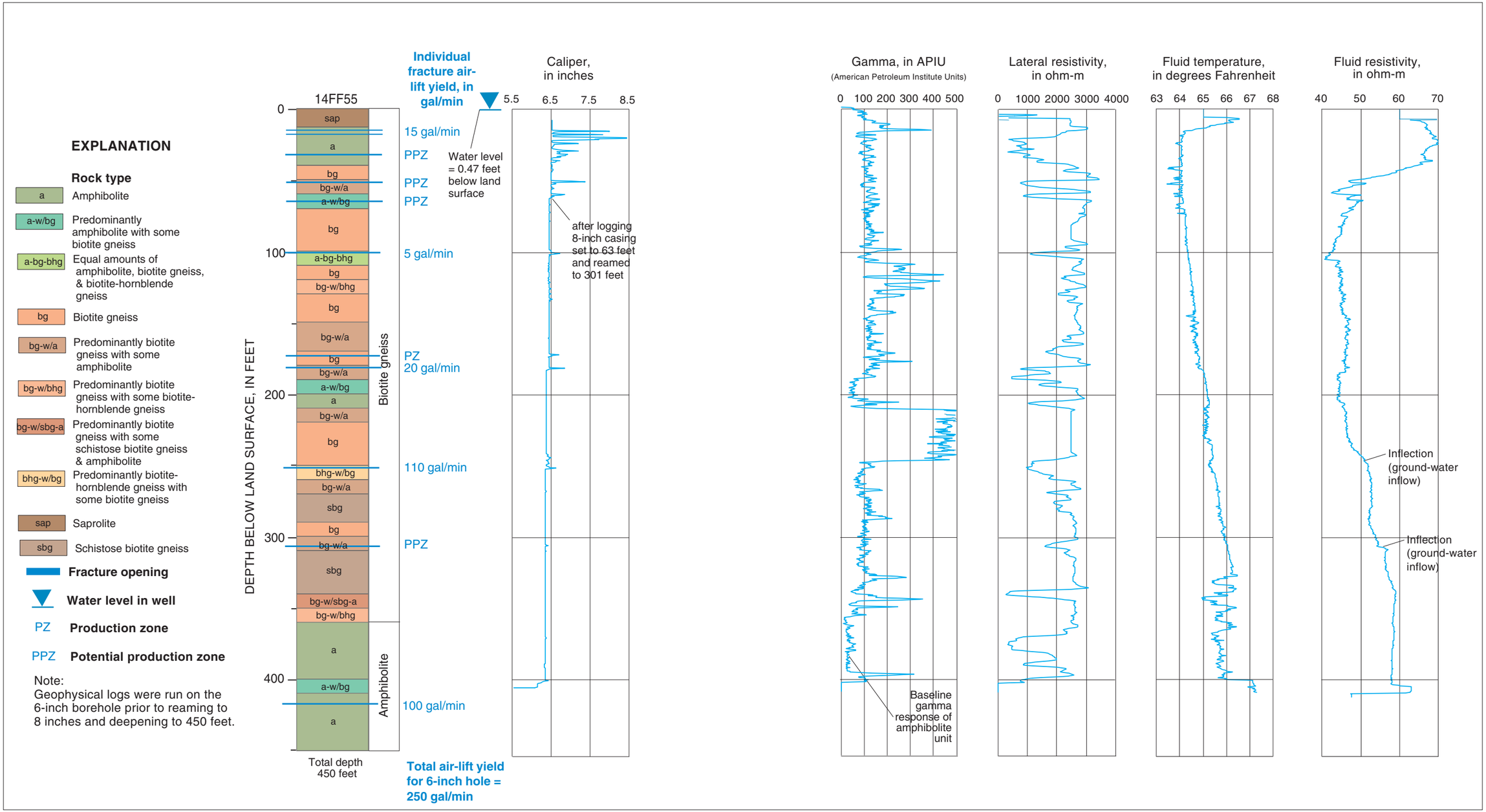
14FF55 ● Observation well and site name



Geophysical log files for well 14FF55 [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)
14FF55.20010712.ZE01	Combination Tool[1]	7/12/01	-1.5	409
14FF55.20011114.AT01	Acoustic Televiewer[2]	11/14/01	298.7	414.78
14FF55.20011114.AT02	Acoustic Televiewer[2]	11/14/01	60.93	300.77
14FF55.20010712.CT01	Caliper, Three Arm	7/12/01	7.4	407.9
14FF55.20011129.FE01	Electromagnetic Flowmeter	11/29/01	42.1	306.9
14FF55.20011130.FE02	Electromagnetic Flowmeter	11/30/01	296.6	449.2
14FF55.20011130.FE03	Electromagnetic Flowmeter	11/30/01	47	429.3
14FF55.20011130.FE04	Electromagnetic Flowmeter	11/30/01	296.7	429
14FF55.20011130.FE05	Electromagnetic Flowmeter	11/30/01	51.1	305.7
14FF55.20011130.FE06	Electromagnetic Flowmeter	11/30/01	308.7	448.8
14FF55.20010712.ZI01	Gamma and EM Induction	7/12/01	3	405.3
14FF55.20011129.FEI01	Interpreted EM Flowmeter	11/29/01	75.4	310.2
14FF55.20011130.FEI01	Interpreted EM Flowmeter	11/30/01	313.8	449
14FF55.20011130.FEI02	Interpreted EM Flowmeter	11/30/01	57.3	294.2
14FF55.20011130.FEI03	Interpreted EM Flowmeter	11/30/01	314.2	429.2

[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 14FF55 (Ezzard Street well), Lawrenceville, Georgia.

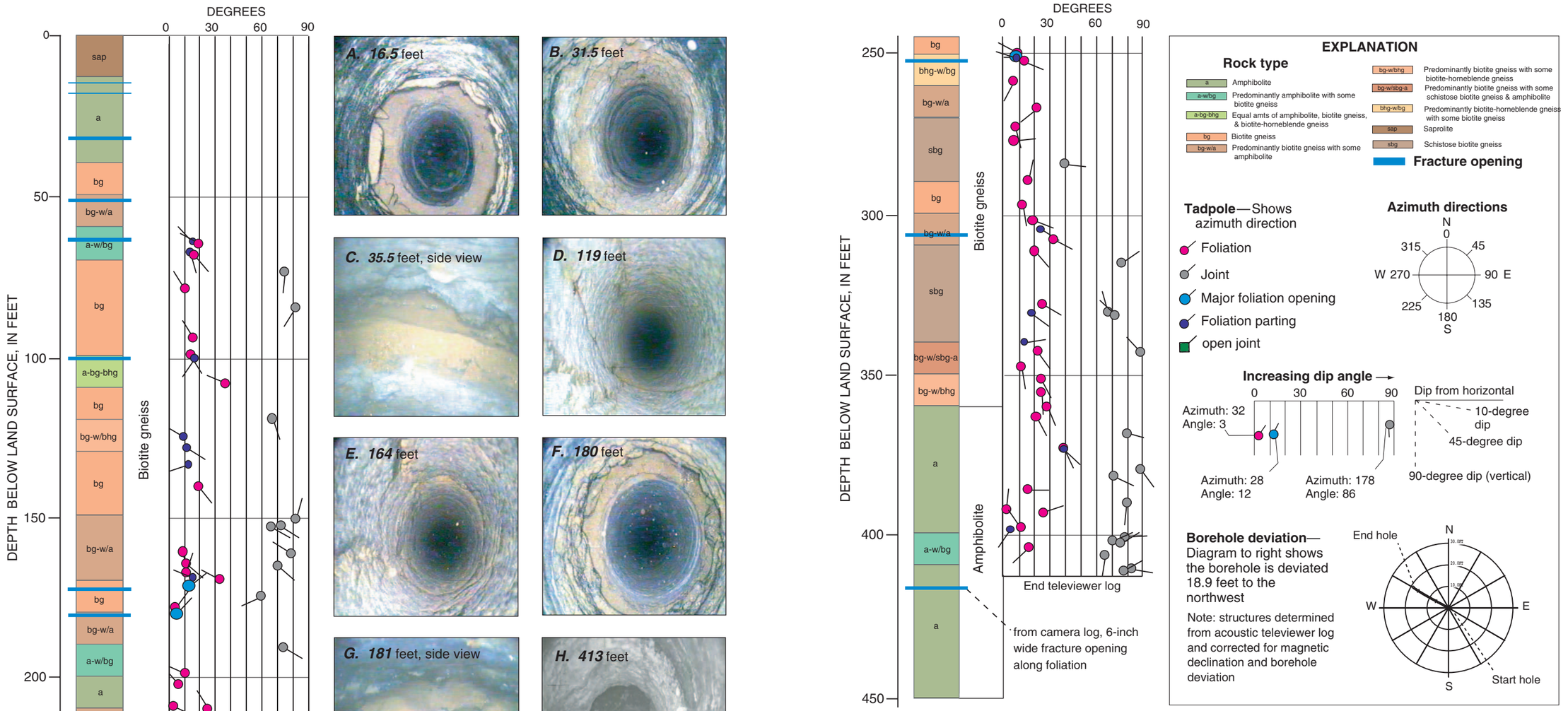
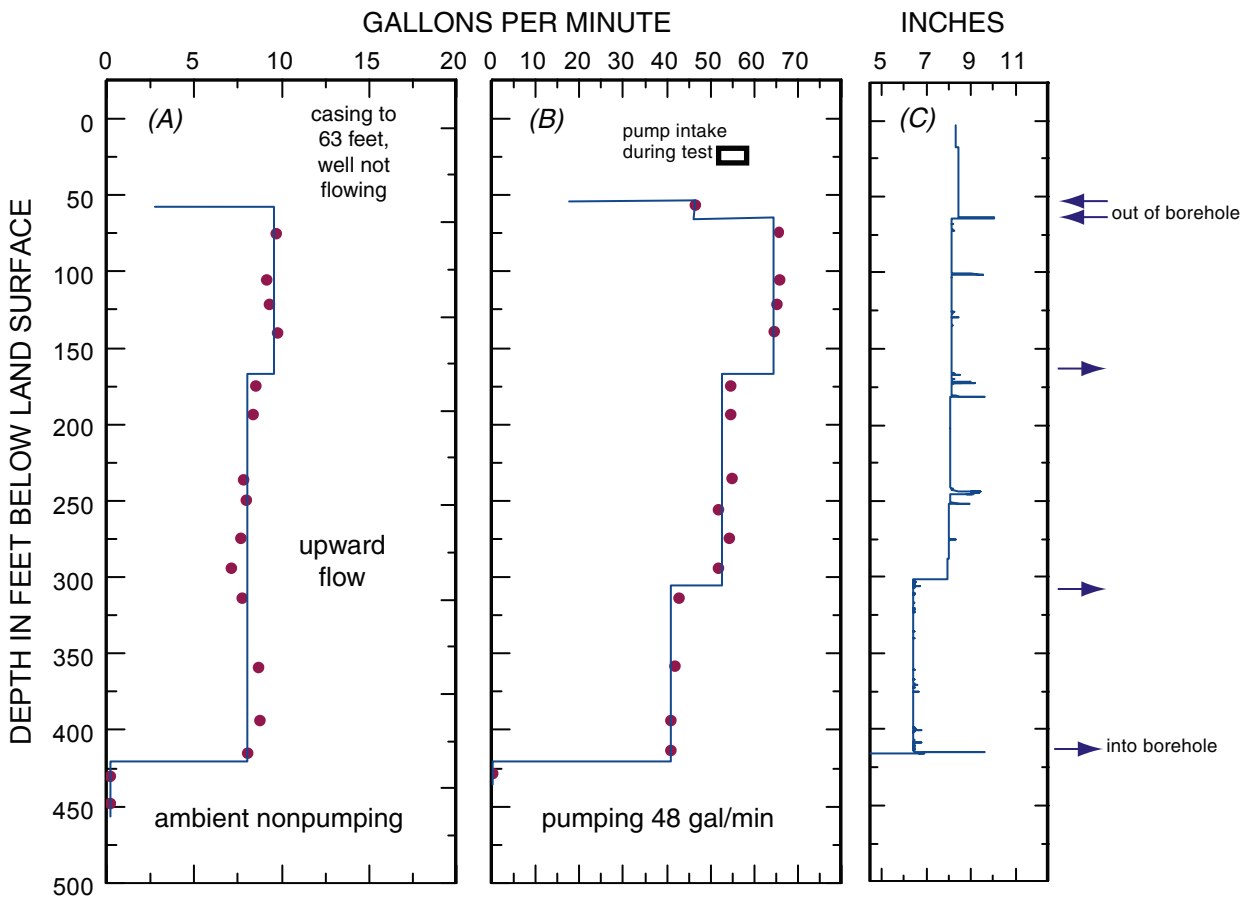


Image A *shows a downhole view of fracture opening 16.5 feet below land surface. This fracture appears to be formed along a foliation/compositional layering of the rock.* ***Image B*** *shows a fracture at a contact between a darker rock above and a lighter rock below.* ***Image C*** *shows a side view into the fracture shown in Image B at a depth of 35.5 feet below land surface.* ***Image D*** *is a downhole view of two high-angle joints intersecting the borehole wall, and each other, at about 119 feet below land surface.* ***Image E*** *shows a high-angle joint from a view at about 164 feet below land surface.* ***Image F*** *is a fracture opening formed along foliation and layering at 181 feet below land surface and* ***Image G*** *is a side view looking into the fracture in Image F; light-colored material is sediment resting on the floor of the fracture opening.* ***Image H*** *shows a 6-inch wide fracture opening at about 416 ft below land surface.*

Structural tadpole plot and downhole camera images for well 14FF55 (Ezzard Street well), Lawrenceville, Georgia.



Flowmeter logs from well 14FF55 showing *(A)* flow in borehole under ambient nonpumping conditions, and *(B)* vertical flow in borehole during pumping 48 gal/min. Caliper log *(C)* shows peaks where the borehole diameter is enlarged at discrete fracture openings in the bedrock. Right facing-arrow indicates flow into borehole during pumping. Left facing-arrow indicates flow out of borehole. Well is not flowing, flow is assumed zero above 63 feet where casing is set. Top left-facing arrow is placed assuming remainder of flow is lost behind surface casing.