JOH-A-9-83

North Carolina Department of Natural Resources & Community Development

James B. Hunt, Jr., Governor. Joseph W. Grimsley, Secretary

DIVISION OF LAND RESOURCES

Stephen G. Conrad, Director

Telephone 919 733-3833

Dear Mr. Sauls :

The North Carolina Geological Survey Section, Department of Natural Resources and Community Development is drilling a number of shallow auger holes in order to gather information about geologic structure and rock type. This information will be used to construct a new State Geologic Map. One or more desirable sites for auger holes are located either within the highway easement across your property or on your property as indicated on the attached sketch map.

Geological Survey personnel would be drilling 6-inch diameter auger holes not more than 105 feet deep with a truck mounted auger rig and accompanying service truck. In some instances geophyical equipment would be lowered down the hole to gather part of the necessary information. When finished all equipment, material, and structures will be removed, cuttings scattered, and the holes permanently plugged in accordance with state regulations. All work will take from less than one day to not more than one or two days, depending on how many holes we are requesting to drill on your right-of-way or your property.

Please indicate your permission for us to do this work by signing and returning this letter to us.

Respectfully,

Rebecca M. Enos
Driller-in-Charge

Sidney E. Sauls
Land Owner (or)
Person in charge of the land

8-15-83
Date

Geological Survey–733-2423; Geodetic Survey–733-3836; Land Quality–733-4574; Earth Resources Planning–733-3833;
Land Resources Information Service–733-2090 Box 27687 Raleigh NC 27611–7687

almost all slides have some lignite, the ones 54' and 59' are loaded with this material.

SAMPLE DESCRIPTION

Well # JOH-A-9 TD 69 Examined by: ERD Date 10/10/83 p. ____ of ____

Key: A - Abundant C - Common M - Minor T - Trace R - Rare X - Major Constituent

Interval	Rock Type	Color	Texture: Grain Size	Grain Shape	Sorting	Quartz (unwashed)	Feldspar	Glauconite	Phosphate	Calcite	Shell Frags	Mica (washed)	Pyrite	Lignite	Chalcedony	Amethyst	Rose Quartz	Tourmaline	Siderite	Limestone	Dolomite	H. Fossils	Fe-Stain	Iron Oxides	Heavies	Clear quartz or feldspar	Remarks
0-4 ↓	as below	as below	MS-CS	SA-SR		A	R						T			T						T	T	R			
4-9 ↓	as below	as below	vfs	SA-A		A					T					R						T		T			some mica flakes bluish green
9-14 ↓	as below	as below	vfs	SA-A		A					T												R	R			rare mica flakes bluish green
14-19 ↓	clayey micaceous fine sand	Yellowish gray 5Y 7/2	vfs	SA-A		A					M												T				some mica flakes bluish green gray lithic fragments - not the unwashed material
19-24 ↓	as above	yellowish gray to gray N7	aa	aa		<							aa														aa
24-29 ↓	as above	as above			as	above		except for		presence of		trace	of	blue	quartz	and	rare	lignite									
29-34 ↓	as below	as below	fs	SA-SR		A	T				T		T			R								R			trace chips of black fossil material
34-39 ↓	clayey fine sand	very light olive gray 5Y 6/2	fs	SA-SR		A	T				T	R	R														rare garnet - rare black fossil fragments
34 ↑	medium sand	Yellowish gray 5Y 7/2	MS-CS	SR-SA		A	R				R					R								T			Rose garnet
39 ↑	medium sand	as above	MS-CS	SR-SA		A	T				R					R												gravel including fine grained lithic fragments, fossil fragments, garnet
44 ↑	medium sand	yellowish gray 5Y 7/2	MS-CS	SR-SA		A	R									R								T			gravel, garnet
49 ↑	medium to coarse sand	yellowish gray 5Y 7/2 to gray N6	CS-MS	SA-SR		A	T									R								T			gravel, garnet - aggregate of greenish grains - lithic fragments
54 ↑	med sand	medium dark gray N4	CS-MS	SA-SR		A							T			R								R			single shell fragment, garnet
59 ↑	micaceous med. sand	med gray N6	MS	SA-SR		A						R	R			R								R			garnet
64 ↑	Medium sand	med. gray N5.5	CS-MS	SA-SR		A						R				R						R		R			
69 ↑	coarse sand	yellowish gray 5Y 7/2 med to gray N6	CS	SR-SA		A										R											rare garnet

York Town 6-30 Unit F: 30-69

Back in Geophysical log →

Interval	Drilling Remarks	Description: Circulated Returns	Sample	Circulation Remarks	Description: Flight Returns	Sample
0-4	Easy 20 sec	micaceous dark brownish gray clayey moist sand (1)	X	spin out		
4-9	easy 20 sec	aa	X	aa	ab	
9-14	aa	moist silty sandy clay micaceous light green with brown tinge	X	aa	displaced and mixed ab	
14-19	aa 25 sec	pea green silty micaceous clay	X	aa	ab	
19-24	aa 30 sec	aa	X	aa	ab	
24-29	aa 35 sec	small amount after long spin pea green clay soup	X	aa	ab	
29-34	tougher 35 sec	aa	X	aa	greenish sand with balls of darker green finer sand. Shell fragment (cast)	X
34-39	aa	aa	X	aa	sand is coarser towards top ab except sand is slightly finer and there is more clay	X
39-44	45 sec	little return no sample		aa (2)	greenish gray coarse sand w/ gravels and balls of finer green sand and balls of green clay. looks like phosphate pebble	X
44-49	easy 30 sec	little return no sample		aa	greenish gray coarse sand w/ pebbles and balls of finer green sand.	X
49-54	easy 35 sec	no return		screen in	color change at top to greenish gray sand ab	X
54-59	Tougher → 3 → 40 sec	soup return no sample pulled		aa	Purplish gray coarse sand, some clay and definite lignite fragments.	X
59-64	easy 30 sec	aa		aa	grayish coarse sand with slight amount of clay. Has small balls of finer grained green sand. Coarse sand becomes more purplish up flight ↑ more purple lignite	X
64-69	aa	aa		aa	grayish coarse sand with slight amount of clay. Rose qtz. present	X
69-74						
74-79	(1) doesn't appear to be any cretaceous here					
79-84	(2) last six flights less than 1/4 full.					
84-89						
89-94						
94-99						
99-104	aa = as above ab = as below					

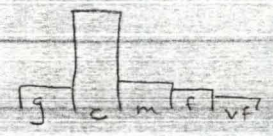
Well: JOH-A-9-83 Spud: _____ Cement: _____ Elev.: _____

Date: 8/17/83 Plug: _____ Sand: _____ T.D.: 69

JOH-A-9-83

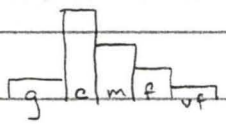
KG
8/15/00

69↑ granules sba/sbr tr rose (gran-f)
euhedral Qtz x1 r mica (f-vf) <1% HM (c-vf)
ky staur
pk garnet
FeOx



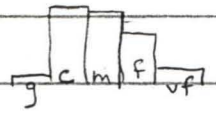
sli granular
mw srtd C sd

64↑ amber granules a/sba <1% HM (c-vf
tr rose (c-f) r gy fspar (c-m) FeOx
tr secondary pyrite tr Lignite staur
pk garnet
schorl



sli granular m srtd C sd

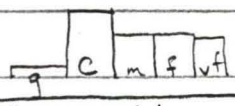
59↑ tr rose (g-m) ↓tr gy fspar (g-m)
tr Lignite ↓tr mica (f-vf) <1 HM (c-vf)
pk garnet
schorl
staur
FeOx



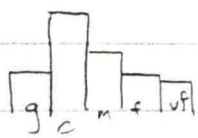
v sli granular p srtd c/m SD

54↑ ↓tr gy fspar (g-m) ↓tr rose (c-m)
1 dk shell frag ↓tr mica (f-vf) <1% HM (c-vf)
tr secondary pyrite cmt pk garnet
schorl
staur
↑tr Lignite

sli granular m: srtd C sd



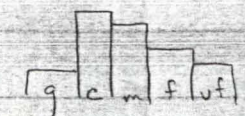
49↑ ↑tr gy fspar (g-m) tr rose (g-m)
↓tr mica (c-vf) <1 HM (c-vf)
euhedral Qtz pk garnet
schorl
staur
dk brown/blk shell frag trav
tr secondary pyrite



granular mp srtd
C sd

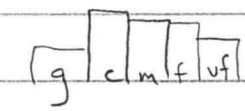
JOH-A-9-83

44↑ ↓tr mica (m-vf)
↑tr gy fspar (g-f) tr wt fspar (g-f) ↓tr rose (g-f)
brachiopod Discinisca PO_4 + other frags 1% HM (c-vf)
pk garnet
schorl
staur
rdd blk PO_4 granule



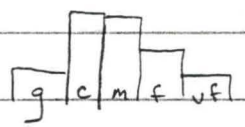
m srtd
sli granular c sd

39↑ tr blk rdd PO_4 granules + pebbs ↓tr gy fspar (c-m)
brachiopod frags rose (g-
secondary FeS_2 cmt ↓tr mica (m-vf) 1% HM c-vf)
pk garnet
red garnet
schorl
drav



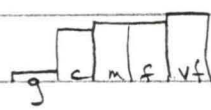
p srtd granular c sd

34↑ brachiopod frag ↑tr rose (g-f)
PO_4 granules + sm pebs tr gy fspar (c-f) <1 HM (c-vf)
pk garnet
staur
schorl



granular
^ m srtd c/m SD

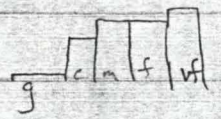
34-39↓ brachiopod frag ↑tr rose (g-f)
tr gy fspar + wt fspar (c-f) <1% HM (c-vf)
mnr mica (c-vf) pk garnet
secondary pyrite cmt schorl
Fe Ox



v sli granular p srtd vf SD

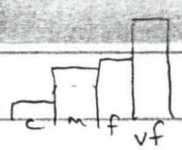
JOH-A-9-83

29-34 ↓ almost no granule
brachiopod frags euhedral @tz x(
↓mnr mica (c-vf) tr gy fspar (c-f) <1 HM (c-vf)
pk garnet
staur
FeOx



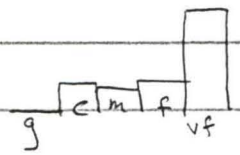
prtd vf sd

24-29 ↓ no granules ↓tr gy fspar (c-m) contam
phosphatized fish tooth ↓tr rose (c-m) Lignite
Fe cmtd ss
mnr mica (m-vf)
<1% HM (c-vf)
pk garnet
staur
drav
FeOx



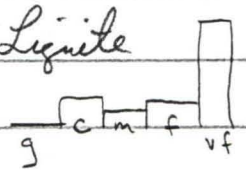
mw srtd vf SD

19-24 ↓ only 2 granules r rose (c-m)
mnr mica (m-vf) r gy fspar (c-m) (vf)
<<1 HM FeOx drav



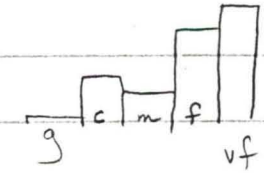
w srtd vf SD contam Lignite

14-19 ↓ only 1 granule
Fe cmtd ss mnr mica (m-vf) <1 HM (m-vf)
drav
FeOx
contam Lignite



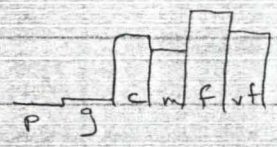
w srtd vf SD

9-14 ↓ ↓mnr mica (m-vf) <1% HM (m-vf)
contam Lignite
scarce
drav
FeOx



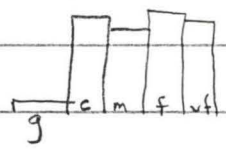
Fe rich wood-like mat'l

4-9↓ gran ∀ vc ∝ some c sd rdd r rose (c)
↑tr mica (m-vf) r amethyst (c) 1% HM (f-vf)
drav FeOx



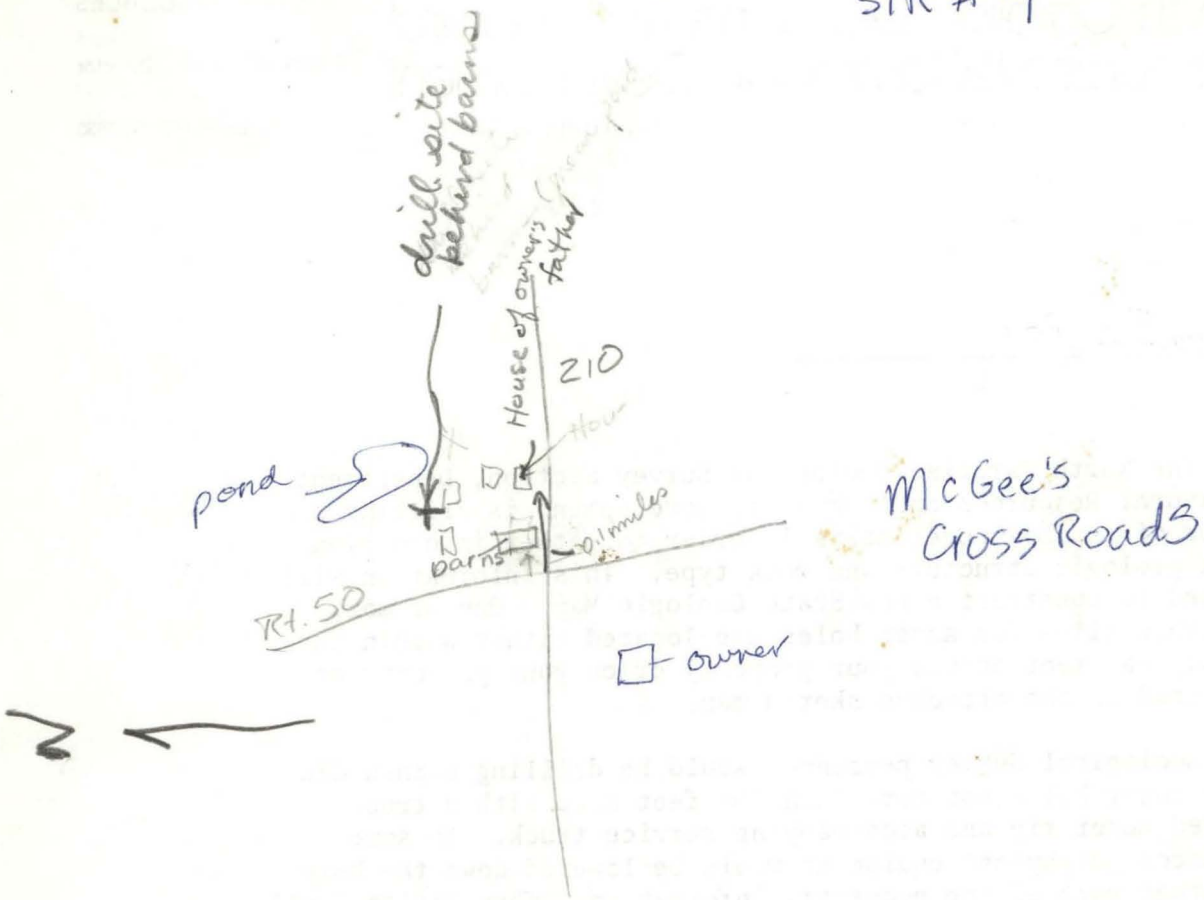
mp sr-rd f SD

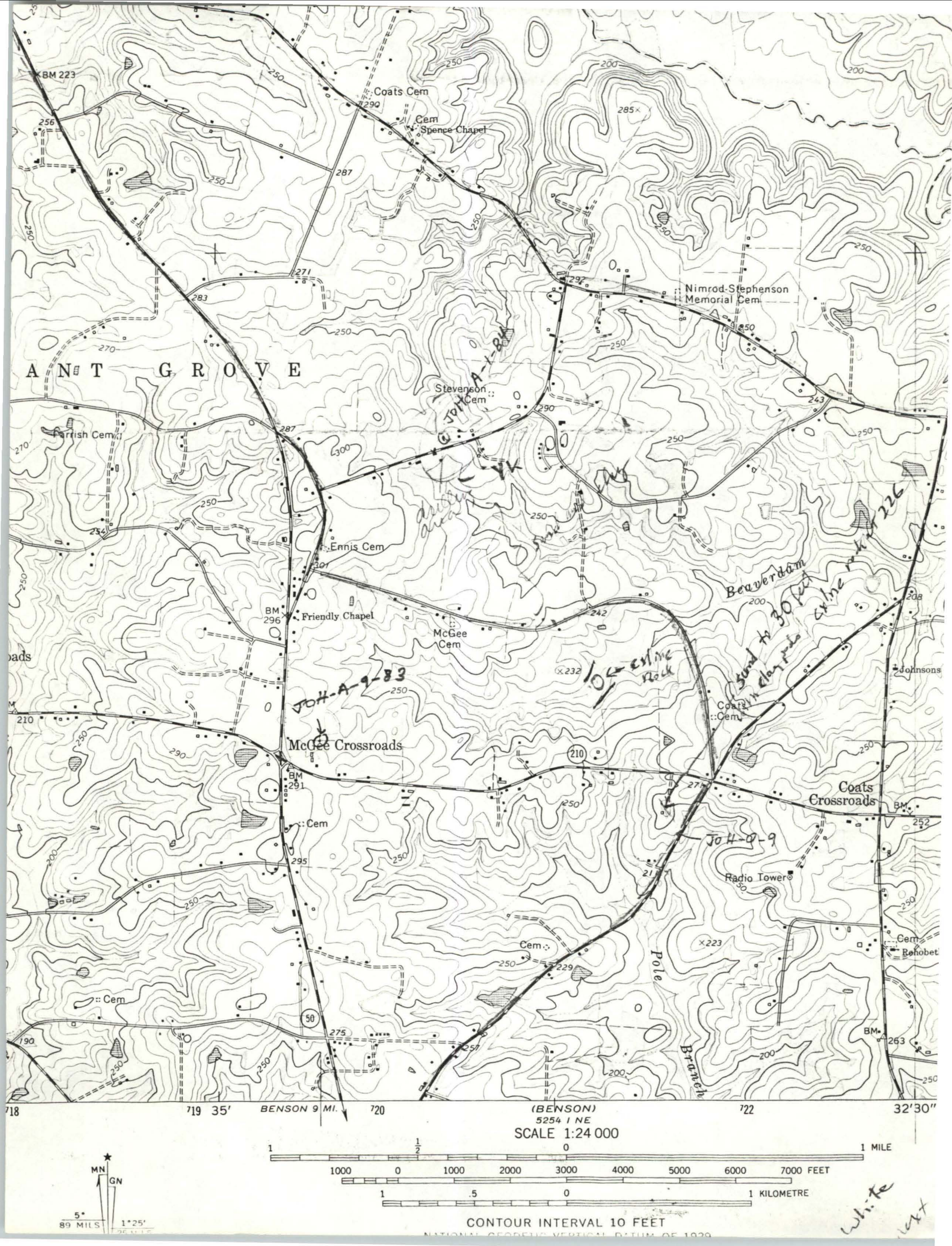
0-4↓ Fe rich wood-like mat'l r rose (c)
r amethyst (c-m) 1% HM (m-vf)
gran ∝ vc sbr/rd school
drav
stain FeOx



sl granular
∧ psrtd c∝f SD

Johnston County
site # 4





BM 223
Coats Cem
290
Cem
Spence Chapel
287
256
271
283
297
Nimrod-Stephenson
Memorial Cem
285
A N T G R O V E
Stevenson
Cem
Parrish Cem
287
300
290
243
Ennis Cem
301
254
BM
296
Friendly Chapel
McGee
Cem
242
Beaverdam
208
Johnsons
JOH-A-9-83
McGee Crossroads
210
BM
291
Cem
Coats
Cem
Coats
Crossroads
BM
252
295
JOH-9-9
Radio Tower
×223
Cem
Rehobeth
229
Pole
Branch
50
Cem
275
257
BM
263
190
JOH-A-1-84
sand to 30 feet
w/ clay pods
crline rock at 226
crline rock
×232
718
719 35′
BENSON 9 MI.
720
(BENSON)
5254 I NE
722
32′30″
SCALE 1:24 000
1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETRE
MN
GN
5°
89 MILS
1°25′
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
white