April 19

BBg 982 N76W 60 SW
light gray microcrystalli
limestone interlayers
in thick bedded gray
x/line dolomite L Ob
N 37° 08.314 W 80° 23.60
Abundant chert along roadcut
mostly white replacement masses

BBg 953 thk bedded Fig. gray lam
dol. N40W 70SW Obc
N 37° 08.381 W80° 23.642
BBG 983 Thk bedded gray dol
outcrops in RR cut and
stream bed Brn Butcher Bloo
Weathering porous cherty zone
Obc N37 08.307, W 80° 23 575
Bbg 984 N76W 60 SW lt gry
sandy dol with thin silica and
rexline dol veins 75' wide
alluvial fill Photos of lam
N 37 08.261 W 80 23 548
6" algal chert stringer
algal thrombolite

N 37 08.157
W 80 23.443

Looks like to Oco

BBG 985 Light gray lam. dolomite interbedded w blue-gray cherty dolomite N 66 W 46 SW some thin blk shl layers

BBG 986 lt gray to pinkish tan (salmon) xline dol replace algal boundstone - thick bedded w/ algal matting, weathered in relief ~ 10' zone 2' beds at N 37 08 226 W 80° 23.529

BBG 9618 lt gray chert finely xline dol w/ algal matting (Obc) N 50E 46SE N 37° 08 364 W 80 22888

BBG 9619 N 40E 5 A SE 18" Fine dove gray micrite bed Obc N 37° 08.385' W 80° 22.916' (Photo)

BBG 9620 N 80E 70 SE 3' thick ledge of thin bedded laminated light and dark gray xline dolomite (Photo) N 37° 08.38 W 80° 22.930

NOV 28 2011

BBG-35 12 N 10 W 12 NE

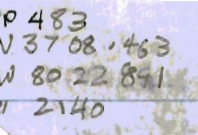
2' gray dol / ledge beside
for Clairmont Dr, dol
cross bedded orange-brn
ss float on slope
above

BBG-327 corner of Fincastle and
Roanoke St - bluish gray argill
dol / ls coarse chert? reef
lenticular bedding abundant
fossil hash layers [cephalopod
irregular zone of karst on top

Siberian Traps
Permo Triassic boundary
Great Global Warming
CH_4 - CO_2

U sequestered
redox state
in the oceans
due to global
not weathering
- methane

WP 483
N 37 08.463
W 80 22 891
el 2140



BBG 962 B breccia at Rd Valley along road looks like Tacoma Fm @ WP 484 el 1923 N 37 08 51 W 80 22 [illegible]

BBG 966 50 gpm spring emerges from hillside at WP 485 N 37 09 514 W 80 22.747 el 2043

BBG 967 Quarry like bench exposed MM breccia, green and yellow brown at WP 486 N 37° 08. 619 W 80 22 807 el 2020 1

BBG 968 N 20W 70 SW slaty clean. Mgn brown weathered slaty argillite at cut near WP 487 N 37° 08.675' W 80° 22.896' el 2082 beds N 30W 30 SW

BBG 969 WP 488 N 37° 08.748' W 80° 22.806 el 2138 [illegible] thin bedded [illegible] ed w broken rd fold [illegible] S 30W

BBG 9610 E-W 505 med bedded gray dolomite in Cut at WP 489 N37 08.784 W80 22.718'

BBG 9611 highly deformed zone in med bedded dolomite then blue gray ls. BBG 9612 WP 490 N37° 08 819" W80° 22.618' el 2040

BBG 9613 WP 491 N37° 08 786' el 2026 W80 22 544

N52E 20SE massive gray dol w/ butcher block text interbeds of gray ls

BBG 9614 massive to thk bedded gray dol with butcher block text N60E. 82SE along road below house Site @ WP 492 N37 08 749 W80 22 [illegible] el 1998

IRO 745 straticulate dolomite in stream bottom thin bedded laminated and siliceous yellow orange weath. Sandy soil above w/ SS cobbles in alluvial soil WP 493 N37 08 638 W80 22 367

Photo of chert bed at gray dol
N 37°09.391 W 80 22.935 dk gry ch
6' chert nodule
BBG 9621 E W 65 SE
massive gray grainstone
Photo of angular dol
pebble cgl in cut near
Beekmantown unconformity?
N37 08.374 W 80° 22.910
Bbg 96 22
Grainstone, gray massive
bedded along 460 cut
~70' thick est
N 37° 08.412 W 80.23.012
dolomite pebble cgl
BBG 9623 N 22E 48SE
gray dol N 37 08 465
Bbg 9624 W 80 23 096
Bbg 9624 m 20 W 70 SW
Beek sap + chert
WP 001 N37 08 412 e12153
W80 23 161 Slope
failure along 16" drain

Bbg 993 collecting site on Walnut Branch
N 37° 07.644 W 080 23.335'

Bbg 987 cobble location
WP 002 N 37 07 633 W 80 23 36
el 2107

BBG 993 el 2142 N 37 07 941
rounded qtz ss W80 22.961
cobbles (Eco) N 66 W 765W Eco
saprolite

BBG 988 at Buckles - large blocks of ss

BBG 994 Starlite drive inn at
WP 004 N 37 07 837 W 80 22 901
2212

BBG 995 vacant lot at WP
Blue Ridge derived pebbles el 2135
N 37 07 598 W 80 22.912

BBG 996 Behind Auto Zone lots
N 30 E 50 SE Brn weathered
stratiform bedded
dol to stromatolitic silty
banding Eco

Nov 1 2011 BBG-3912

N 30 E 20 SE massive
bedded pearl gray x line dol
el. 1990 ft (kingsport like)
N 37° 12.957 W 80° 23.023

BBG-3913 N 10 E 20
at lot site drive el 1650
Fine gray micritic ls thk
ledges, much chert in
regolith below
N 37° 12.847 W 80° 22.515

BBG-3610 el 18406 N4W 16NE
N 37° 13.643 W 80 22 572
gray dol 2' thk ledge
over lies dove gray
micrite at el 18406

BBG 3611 Massive gray x line
dol w/ fracture zone
beds N 20W 14 NE
Fractures N26W 60-70
N37° 13.722' W 80° 22 692'

IRO-1712 N 30E 15 SE
Pavement outcrop
fine gray x line dol
w/ mud cracts el 16006
N 37° B.158' W 80° 22 .317

BBG ~ 3612 N10E 26SE
thk bedded fine x/ln
gray do' el 1680
N 37 13.267 W80°22.445
BBG - 3613 el 1730 b
N 18 E 16 SE thk bedded
dol in stream N37 13.357 W80° 22
broad scarp on NE side
of stream very old,
not much debris below
75' above N20E 60NW
Step in stream N3713.380
beds or joint W80 22.560
BBG-3614 N5 15°SE ledges
in creek scarp to SW
possible spring interstices
vadose zone dissolution
(photo at el 1760
N 37°13.407 W 80° 22.642
BBG-3615 el 1800 b
N4W 12 NE bearing
on waterline in thk
bedded gray butcher block
dolo micrite - caves? on
NE slope N37 13.440
block debris in stream below N80 22.772
beds on SW side N20W 18 SE

2400

BBG 3616 el 18506
photos of 200' cliff
or bluff to SW
photo of Valley Fill
at Quarry N37 13.478'
stream clogging W 80° 27.932
w/ block below cliff
IRO-1 7 13 Fine micrite
dove gray (on)
at el 1620 were side
branch comes in to
main stream (N37°13.187'
IRO-1-7 14 W80° 22.348'
siliceous tan dolo micrite
N 40 E 8° SE thk
beds to stream
at el 1600 6
N37°13.142, W80 22.280
sparks w/ hammer
IRO-1-715 50m from NCR
at el 15806 N 12° 12 SE
thk bedded fine grained
gray dol + chert mass
in float on slopes.
N37 13.128 W80 22°.281

No. 2

Photos of NE side

large stromatites

curved high wall

N37°13.470 W80 23.083

bedding steepens to NE 14° SE

N6°W 8° NE BBG - 3617

SW pit N 24E 70 SE

small fault in HW

at N 37° 13.380 W80° 23.12

Bedding N 4E 10SE

Fissure 6 - 2' Por

25' long 6-8' deep

w/ dissolution as well

as pull apart structures

Bedding N 24W 10°NE

BBG 3618

Cross Sect Chert nodules

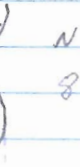
photo of floating colonies

N 37 13.302

W 80° 23.117

Plan of Fissure SD Rio B.

N7W 16 NE



N54E 80NW

9/26/11

BBG 625 N 20 W 15 NE.
chk on google lt gy fg Xline dol in sed pond L shaped

BBG 626 602 Cedar Hill Dr N20W 20 NE
ledges of lt gry dol in front yard.

BBG 627 at old BBG treatment Plant ledges of gray fg Xl dol N 36W 18 NE
Ledge below concrete tank N5 60 W clear

BBG 386 9/29/11 Nellys Cave Park
light gray algal dol. thk bedded w/ wavy siliceous partings
137 2.617
W 23.525
(?) thrombolite.
NS - 20 E dip

BBG 387 Photos of eroded algal mounds in lite gry Xline dol. - massive bedded behind picnic shelter
37 12 .583 80 23 512
Photo behind baseball
N 37 12.560 W 80 23.505
sandy laminations = ribbon ?

BBG 627 N 31 12.475
W 86 23.397
Lite gry fg xline dol
in field ss float on
slope below N 18 W SE
Oct 3 - 2011
BBG 388 Vacant lot
For Sale - trailers gone
ltr ss + dol float on
Fence line = Ccc but not
top - ss throughout
upper ccc section?
BBG 389 Laminated light
and dk gry dol w
sil partings, rip up beds
prism cracked lamaflex
N 10 W 10 NE el 2160 b
BBG 394 lt + dk gy laminated
massive dol w/ sil silty
lam weathered in
roadcut 2140 b NO SS but
wh sil oolite OCS across road at
BBG 395 2108 spot of
thin bedded gry dol (Phos)
N 10 W 8° NE - chepultepec
upper Stonehenge interval ©

BBG 396 ~ 2100 T

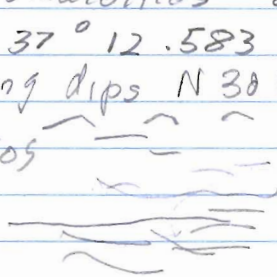
N N3712.310

BBG 397 ~ 2010 W80 22.80

N 14E 10SE massive gray dol w/ clotted text (Oc or Ost?)

10/19/11 BBG 3810 corner of London and new Kent Oc of corase gray flat pbl cyl (Oc-cco unit stromatolites on top of bm N 37° 12.583 W 80 23.732

bedding dips N 30 W 60 NE



BBG 3811 dolomitic ribbon rock 1-2" wavy beds with small algal bioherms N 50 W 20 dol fg grg w/ siliceous partings, tan weath

N 37 12.635 W 80 23.610

10/5/11 BBG 398 N37 12 820 W 80 22 689
N20W 60 NE
Massive bedded chert & gray dolomite

BBG 399
N50W 18° NE Massive gray recrystalline dol w/white chert layers up to 1' thick. Grades up into massive-thick bedded bluish gray limestone at N 37° 12.657 W 80° 22.56 el 1820 b.o. road
1 of 88

BBG 3910 massive gray micritic ls w thin silty partings - dissolution stylolites (Photo) past intersection of Woodhaven and Deercroft
Photos of ledge N10E18SE
N 37 12.627 W 80° 22.523
el 1830'

N 37 12.54
BBG 634 el 1810 W 80 22 427
Massive dol - fg above
very cherty interval
N 20 E N10 SE,
10/5/11 end home loc
N 37° 12.655 W80° 21.70

10/6/11 BBG 3911 massive gray
line dol, fg, thin silica
laminae weather in
pos relief, scours
x beds = tidal flat
environment w/ mud crack
prism structures =
N 37° 12.822 W 80° 22.980
Photos = Oc N 20W 16 NE
at el 2070
(5) BBG 635 cherty mod gr la
N 30E 15 SE, small algal
heads covered by silic.
ss or grainstone
(6) BBG 636
N 60E 20SE fg mass
micritic ls or dol
(7) BBG 637 lt-dk gy
mod xline dol - mass

beds w/ thin sil parting
butcher block weath
abudant chert regolith
above N 24E/18 SE.
Massive beds. 100' dia
20' deep sink hole
about 75' sout of road, to
Sample For. acid test
BBG 638 N 34-10W 14NE
thk bedded med gr
Xline dol minor chert
Float
BBG 639 ~ 50 above 20' wide
30' deep doline is a 2'
thk white chert ledge
N 20E 18 SE which is
cap rock for the ridge

BBG 6310 el 2150 Small
doliness ~ 20 dia - 2' deep
filled w. chert debris
TO-T= 11 BBG 355
N 24 W 12 NE Com
tan weath dol in
Estes Front yard
N 37° 13.633 W 80° 23.877

10/7/11 Estes Farm

BBG - 35G N 20 W 14 NE

an air strike on med bedded dol ledge in drain. at el 224

BBG 357 N 30 W - 20 NE

ledge of tan-brn weath thin bedded - shly dol in drain at 2200

N 37° 13.677 W 80° 23.605'

BBG 358 el 2120 N 37° 13.683 W 80° 23.552'

ledge of tan weath dol in stream

Fg, massive, N 60 W 16 NE

karst spring at el 2100 6

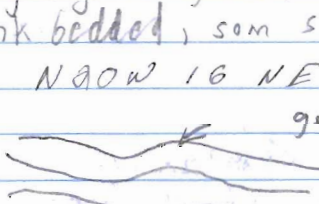
N 37 13.865 W 80° 23.537

BBG 359 el 2090 6 N 37 13.682

gry fg dol, med to W 80 23.49

thk bedded, som sil lam (silt)

N 30 W 16 NE OG



BBG 3510 el 2060 6 gray dol ls w thin yellow weath

silt sn layers, some sort of sulfide mineral has been oxidized leaving rusty spots, mica plates or qtz give sparkling lustre
N 37° 13.687 W 80 23.445
N 20 W 18 NE on shly pty ab
Fine sandy chert layers in regolith below (el SPL) of Drusy qtz x/s
BBG 360 el 2000 ± N37° 13.780 W80° 23.373 lt gry – tan weath thk chrt Fg thk - thin bedded dol
N 70 W 10 NE in stream
strongly jointed Frac system N 12 - 14 E 70 NW
BBG 361 el 1990 ± at Y intersect. of streams Fg lt gr dol Med thick beds, strong jointing evident, beds N 15 W 12 NE
N 37° 13.828 W 80° 23.275
Joints N 5 E 85 W N 80 E 80 N. Photos of big bldrs in ld below confluence

10-7-11

BBG 362 el 1830
VTE 10 SF, Fg gry dol thk bedded in stream
37°13.885 W 80°23.120
Very quiet woods / young Poplar Stand some old oaks have fallen
on slopes, 40' wide al deposit, many blders
BBG 363 el 1800 ft at confluence - landslide deposit to N, pavement of thk bedded gry dol
N30W NO NE -
coarse alluvial fill belo
6 sets N 37°13.907 W 80°23.05
photo of
steep imbricate sect in stream below =
fold? or Fault zone
BBG 364 el 1760 6 N20W 10 N
cascade below landslide headwall ~5' al above bedrock N 37°13.902 W 80 22.941

10-7-11 6 satellites N 37° 13.918' W 80° 22.827'

BBG-365 el 1750 b

Yellow brn mottling dol above bluish gray wacke ls in stream bed, algal struct in lam dol above (Photo)

6 sat.

BBG 366 photos of burrowed upper Beekmantown Limestone in stream el 1720 b N 37 13.942 W80 22.788

N 10 W 10 NE

burrows are in muddy zones separating pure gs beds

6" some coarse tufa cemented blocks

BBG 367 el 1710 at confluence still in thk bedded burrow mottled Beekmantown Ls N 20W 10NE

N 37° 13.957 W 80° 22.732'

Silty lam dol ls below

6 3" x 1/2" Photo chert nodules

Looks like OI

Flood plain alocked w/ ls blds

E flow confluence

BBG 368 el 1690 ± below confluence is med bedded fine - cg dolomite in stream N 30 W 20 NE N 37° 13.977' W 80° 22.648'

BG 369 el 1675± N5E 10SE 2' ledge of thk bedded gry dolomite in 200' wide braided debris flow Filled Valley

BBG cross Fence line in wide alluvial Filled Valley at el 1660 N 37 13.983 W 80 22.527 10/17/11 Blacksburg

BBG 291 in Field area at VT N 37° 13.325 W 80° 25.0 gray to yellowish rd (weathers) argillaceous dolomite highly Fractured, yellow and reddish shly chips in silty clay loam Joints N62W 66SW N12E 46NW Bedding CThin N30W 24NE Vline veins

10/17

BBG 292 photo of 3" qtzite cobble in situ on td above Football practise field at edge of wooded area N37°13.330 W80° 25.000

2' white silty top soil
3' cherty sdy soil
then orage clay loam w/ dol and slate chips

BBG 293 on road bank opposite ew runway at N 37 12.653 W 80 25.047 copples and pebbles in sandy soil = old td some lithic frags from Price? or Vmc6u are totally Rotten 3 Photos

BBG 372 RR and Runway no longer exist

BBG 534 black slate / anthracite OCS in new pond at N 37° 12.267' W 80 25.012'
Price formation Coal extremely cleaved N20W

conversion 37° 12.267.0 42 NE
DMS 80° 25.0 12

10/7/11 IRO 1415
just past bend/saddle
ne ledges of thk
bedded dk gry Micrite
On (new market ls)
N 37 13 902 W 80° 22.002'
<1.3606
IRO 1416 20' section of
thk bedded gr ls N8W 10
at el 1540
N 37 13.880' W 80 22.005'
Oct 24 '2011 Blacksburg
BBG 581 N S 80 SE light
gray sheared dol? Fault
zone near rail switch
Huckleberry N 37° 10.232
BBG 582 W 80° 25.012
50 E 40 SE Mme red mudst
w/slaty cleavage
N 37 10.393 W 80 25.872
gray mdst and blks of
gry ss just N of drain
(50 – 75')
BG 583 N 80 E 20 NW 25
bedded red mudst ledge
N 37° 10.522 W 80° 25.930

grooving lineation on beds
S80E 20 SE
BBG 584 Price SS and
Shale outcrops greenish
gray fine grained slt +
SS Slaty Cleaved Mdst
Red Stops at N37° 10.592',
Contact covered W80° 25.947'
BBG 551 Thn bedded grey
SS W Cross beds N 70E
20 SE N 37° 10.905
W 80° 25.963
BBG 552 Concrete plug on Ma
adit of Merrimac Mine
N 37° 11.173 W 80° 25.855

BBG 561 Thin bedded SS
OC behind restroom. N54E 24SE
at N37° 11.247 W 80° 25.763
BBG 562 Thk/Mass X bedded grey
N 30W 10 SS beds
N 37° 11.340 W 80 25.198'
BBG 641 N 20E 16 NW
N 37 11 397, W 80 24 755
BBG 642 N 84 W 12 NE
Thk bedded SS (Photo

Photograph N 37° 11.743, W 80° 24.850
BBL 642 - could
BBG643 N 60 E 34 NW
N 37° 12 027' W 80° 24.972
thk bedded SS ledge
on cut
BBG 535 EW 24N red
Mdsn w/ slaty cleavage
in ditch along bike
trail at N 37° 12.125'
W 80° 25.005'
Mmcl
BBG 294 EW 12 N
lt blue gray algal lg
w cpotted texture low
ledge along Dairy Conlan Road
N 37° 12 525 W 80° 25.535
cl

July 21, 2011.
Cedar Run
BBG 662
N 80 E 40 SE butcher block tex thk bedded gray dol el 16406 (L. Phil
BBG 663 photo of c/s struct in dol el 1650 N 30 E 60 SE Main Front
BBG 664 el 1660 Stratiform atz dol qtz or dol fracs N 20 W 20 NE
BBG 6646 N 85 W 50 NE Frac Photo of 1665
BBG-631 el 16806 base of Falls med, thin bedded dol N 20 W 2 SW
BBG-632 el 17206 near base of 3rd cascade N 40 W 40 NE thk bdd gray slinc dolosn Stratiform laminated dolosn on road above = 06

BBG 633 Top of Cascade #3
el 1770 gray fract
dolomite N80E 20NW
BBG 632 b N5W Fault
dips 80 SW, hinge
in stream (phot.)

IRONTO FIED WORK
21 Days Detail Map
7 Days Digital Comp

Bburg Mapping 18 x 1/2
12
Knox Group 15 days
Strat and
structure

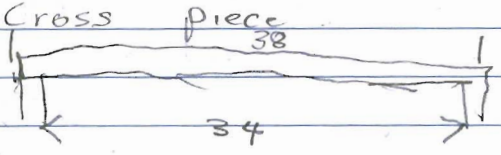
VDF
Http://www.dof.virginia.
gov/info/index/presentations
htm
Matt Heller
put in Field Check
on Blacks -
Aaron → Get up
with Aaron

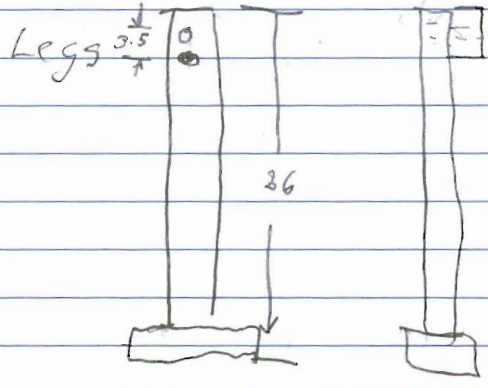
Grant Budget Both
Project - 20 K
1/4 IRO 7.65 %
Field check
18% indirects $1930 F.C
on Salary cost 1404 trav

For 31.94 hr -
626 hours -
check hourly rate

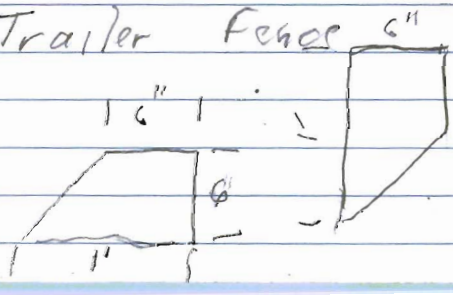
More towards Travel

Loader Props





Trailer Fenes



August 26, 27, 2001 W80°27'-

BB 6 351 Saprolite of
light grn and dusky
red Elbrook fm argi
in cut for new sewe
N 76 W 25 SW aparen
bedding plane cleavage
with N60E 12NE sinstral ki
some breccia preser
in cut. No fd visi
N 37E Bearing to end of NW
N 54W Bearing to Seismic Va
N 78W Bearing to small barn
on dairy center
S 40E Bearing to SE ran
(Parking Strip
BB 352 Outcrop or M
160E Brg to end R
N 40 W Brg to Barn
Sedimentation Pond
(full) oc on N siz
gray argillite and d
of sulfate or mylonite
altsm, high shrink
swell clay slf soc
thinly bedded, br
Weathered N 74E 32
N 34 12.360 W 80 24.9

August 26 2011
N14E 32 NW laminated
gray clst near end of
runway
August 27 2011
BBG Loc BBG-533 at N 37°12.453
SE of Dairy Barn on Map W80°24.237
pglitte (dusky red and
grn fragments in orange
red clayey saprolite
(€el
August 30 2011
on crc at N 37 12 210
BBG 611 W 80 24 787
hiking trail crossing branch
drain hill covered w/
rd to silty soil,
angular residual cobbles
of fg ss - brn weath
BBG 612 pink slaty arg sap
N80E 30 SE on both
180E 10 SE sides of
137°12.165' W 80°24.133'
BBG 613 N 56 W 16 NE
gently undulose slaty argil

at N 37° 12.063' W 80° 24.7
N 37 12.053 W 80 24
BBG 614 gray fine-ing cht, SS
w/ some feld sand mica, c
chips in cut for interch
N 30E 24 SE color bandings
red ss layer in gray
N 37° 11.703' W 80° 24.172'
BG-621 thk bedded burrowed
gray doloslone ledge in
road bank N 37° 11.963
SSD N 80 W 20 NE W 80 24.117
BBG 622 thk bedded dol
w/ green shale interbed
N 60W 30SE
N 37 12.067 W 80° 24.0
Elbrook Clown
BBG 623 thk bedded dol
w/ breccia zones (Lower
N 37° 12.185 W 80° 23.979'
BBG 381 green phyllite and
argillite sap rock in cut
N 37 12 568 W 80 24 027
thn bedded dol N 84
good stop for " Rome

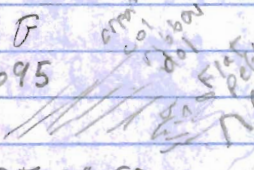
8/11 Did Virginian RW
BBG 691 mlc 275 on DEW
N 30E 28 SE Massive bedd
gray rexline dol cut 30'
high, Strong joint set
N60E 70 NW
BBG 692 N 14E 40 SE
Tuk bedded gray cherty
dol w/ thin laminated
beds succeeded by bioclastic
(gastropod, trilobite) grain
stones, burrowed zones
BBG 693 N 10E 60 SE 10-20'
interval of ribbony bedded
gray micritic ls w algal
biohorms,
BBG 694
Ribbon rock (blue gry ls
with thin irregular brn
to tan dol beds in rare
preserved blocks, mostly
fine gry dol, crinkly sdca
partings N20E 70SE
Eco
693 Fracture zone on

BBG 931 9/8/11

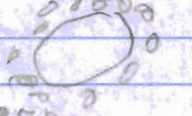
point = coopers Unit 9

N5E 70SE distinct fracture zone ~ || bedding some thin shaly interval; slaty

BBG 695



Good CCO



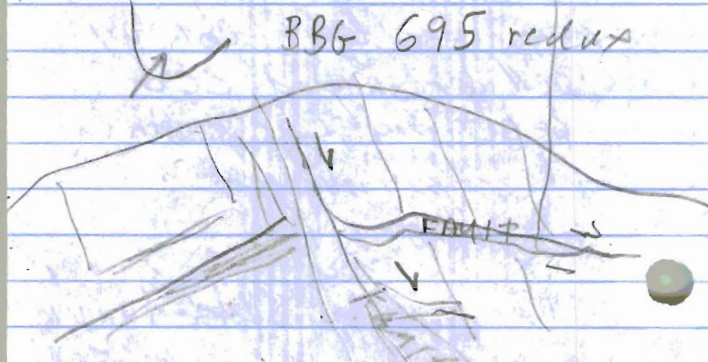
N20E 24 SE

BED

(copper ridge dol w/ well preserved CCO peritidal cycle in Cut

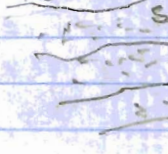
Many wedge block failures same as smart road Mostly laminated dolomite in massive beds at tops of cycles prominant white weathered siliciFied beds (cgl and grainstone portion of cycles)

show brown staining
cross bedded sections
BBG 681 N30E 46SE
Thick peritidal cycles
w 1' thick flat cobble
and pebble cgl zones
add 10 M ribbon layers
overlain by breccia
Caramdrite ?? Zone)



Big Detached Blocks

BBG 694 Redux



block of red brown med-cg Friable ss

NEW 691

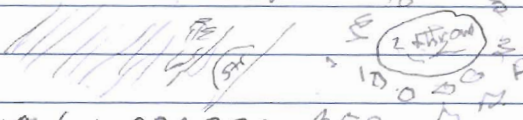
9-2-7-11 Newport Quad at gate Jeff for

NEW 1 N37 16.118'
Cloyd W80 24.143'
Turnaround PT 6' cgl
ledge N74E 535E
el 2820.6 N 37° 18.367
Photos W 80° 23.110

NEW 691

BBG

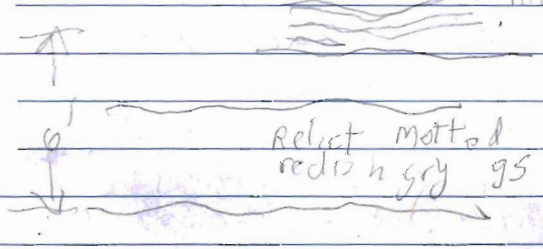
cream col dol ribbon dol Flat pebbly cgl



9/19/11 BBG 321 BEO

beginning of Windy Ridge lane N 37° 14.635
W 80 24.028'

laminated reddish gray dol on top
N40W 20 NE



9/15/14

BBG 322 old quarry site now house site
N 37°14 715 W 80 24,30'
N40 E 10 SE sr/cdc ribbon banded gray to buff weath dol. /s
BBG 323 oc on hareling cream - buff weath gray randy dol N 50 E 20 SE
N 37 14 560 W 80 23 713
BBG 324 oc in roadside at Bdg Shop N37 14 600 W 80°23.605
NS 10E ribbony dol w/ blk/ layers, stromatolites

stone henge interval?
BBG 325 N 20E 10SE ribbony dol w/ qtz sand floating in dol sh BBG 326 gray dol
N 37 14 .780 W 80 23 535
N37 14 .921 80 23 390

With Phillip Prince!

9/13/11 BBG 982

W 40 E 50 SE cream colored laminated sandy dolomite at stream intersection

N 37 09 957

W 80 23 297

BBG 983 N 18 E 60 SE thin bedded - laminated cream colored silicic dol.

N 37 09 .946

W 80 23 .068

BBG 984

N 40 E 65 SE med thick bedded sandy gray dol w/ thin brown to orange weathering sandy beds Oolite w/ silicified mtg weathered in relief at base of GI falls

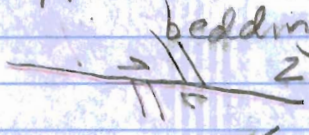
N 37 09 962 N80° 23. 102

BBG 985 N 24 E 60 SE coarse gray xline dol at N 37 09 .992 W 80 23 .093

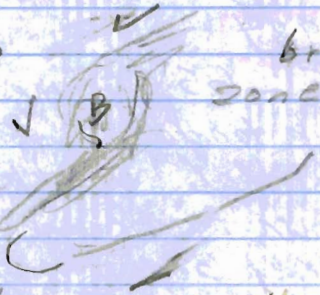
1 Sept 12, 2011

BBG682 Breccia and massive dolomite dipping SE

BBG683A Photo of Breccia lower Elbrook W strike (70°) SE dip, shallow epikarst fractures appear to offset bedding in extension zone



BBG683B



breccia zone w/ mass. dol boudin's in yellow sulfur zone

BBG683C Platy dol cut by NW dipping disc.

BBG683D Fold zone in yellow sulfur fault beds dip NW, refolds

9-15-11

BBG N25E 10SE Thin to medium bedded light to dk gray s+ic dol with chert nodules along bedding

oolitic + sand beds cutting down on chert beds draping channeled Tidal Flat N25E 10SE

BBG 335 Typ Beck Burrowed ls facies (dol) Mass laminated beds. N4W 12°

N 37° 14. 868 W 80° 23. 217'

BG 336 Brown Lam. Dol Blu gray alg ls

Photo #

N37 14 275 W80 23 192

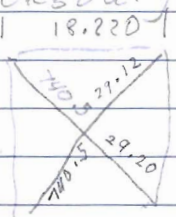
9/16/11 With Trish at Walnut Springs Farm

BBG 151 Terrace gravel, gray sandy top soil at Trish House Site

BBG 152 blder of brecciated gry

BBG 393 WP
N 37 12 527
W 80 22 983
karst dep 10' deep
100' dia small cave
in chty dol N20W 10NE
ledge on rim

Blacksburg Quad 9/23/11



— BBG 624
22.730 on entrance rd
AEP ELLETT ST
— gray lam dol, slty
ss flt N 3E 12 SE

Blacksburg 9/26/11
BBG 384 gray to pale
grn xline dolosn with
silcified lam. pos
Flat pebs N 37 12.567'
W 023°. 608'
N 16W 30 NE
erodcl surface
BBG 623 lam dol, N 52E
Tp cco cycle! ss flt
in reg.

Fiddlers Green Subdivision 6/30/10
6/30/10 Lot 77 705

BBG 341 block of ribbon mbd dol w/ thin ss and sh partings sh is dk gry w/ brown burrow mottles penetrating into gray dol grainstone bed below outcrop at back of lot BBG 34

gray dol w/ thin brn weath ss beds, cross beds scour channels and burrows

ss up to 2"

is purplish dol gs

dip 5° Eward WP 601 N 37 13 6
W 80 24.2

N35W5NE el 2200

Photo of cephalopod mould

3BG 342 N35W5 WP 602 N 37 13 855 W 80 24 283 el 2175

Corner Prospect and Artis

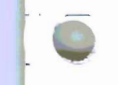
court another ledge of gray thk bedded sandy dol with thin sandy beds (weath buff - tan, burrowed into fine grainstone below at least one rip up cyl bed with 1" dia flat dol pe

BBG 34.3 WP 603 N37°13.897, W80°24.242
el 2168
3) Corner of Clay and Jeff sed pond exposes 4' ledge w gentle NE dip. Pebble agl w pebbles ~ rounded and flat up to 1" ø white popcorn chert replaces anhydrite darker gray limestone beds up to 1"

bs - gray dol ls burrowed zone above dolstone micrite w/ sandy burrows and sand layers
ODG3 N12W 15NE

BBG 34.4 in Sed pond Corner Jefferson and Clay nearly flat (2-5°) NE dipping gray (beige to tan weathering straticulate dolomite w/ complex disrupted algal mat structures — Thrombolites and Stromatites over 1 ft. reddish mty. pebble bed (3" thick)

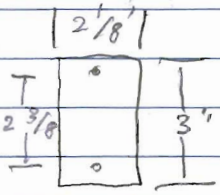
ladder like along strike



prism cracks or collapse zones above evaporite horizon
WP 104 N 37 13 935
W 80 24 203
dipping N 80 E 3° - 6°
gps (strike N 10 W)
WP 605 ledge of tan - purplish weathering dolomite w/ gray burrow sh or mudstone layers and dark gray grainstone beds (LS) GPS N 37° 13.750'
el 2291, W 80° 24.1
strike N 10 W dip 3 - 0 NE, by GPS lot 10A
WP 606 BBG 352 ditch (eroded) above Pond at WP N 37° 13.75
el 2276 W 80° 24.110
saprolite and chert layers dip steeply N, at 80°
WP 607 sink (Karst dep) at bw point along surveyed trail N 37 13 790 W 80 24 064

BBG 3 54 cut lease
WP 108 N 37 13 905
el 2162 W 80 24 106
ledge along ok below
dips 5 E moderate hinge
trends W
thin lam dol ledges
d.p gently east above
at WP N 37 13 876
W 80 23 81
Fiddlers Green Subdivision
7/1/10
photos 1-4 are arenaceous
erratic of Ecol dolomitic
ss w/ most dol leached
Photos 4-7 are of
dolomite w/ peritidal
features in Sed pond
BBG 344 Photos of burrowed
supr to peritidal
beds w/ lg anhydrite to
crystal masses replaced
by white gtz
WP 608 N 37° 13 716
W 80 24 272

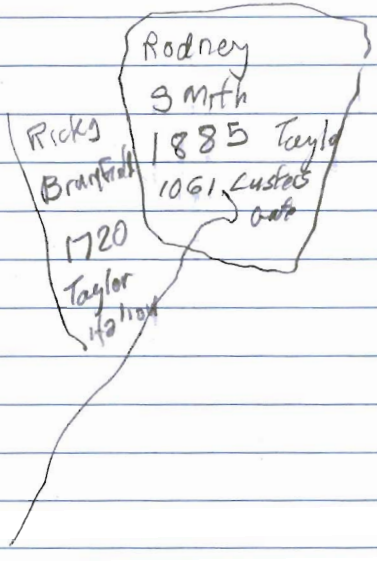
Trailer Tail light side lens



July 19, 2011 Rain w/ Phillip
BBG-371 airport Td
N 310 W dip NE 55°
orange N50°W mottled saprolit
beneath 6" (excavated)
wite to gray sandy terra
deposits w/ red brn my
quartzite pebbles & arg
qtz mylonite clasts
white silty mtx Phot
N

Mtn Lake

TAYLOR MTN ROAD



10/25/11 Tuesday Sunny

BBG 629 Massive bedded gray dol w/ widely spaced laminations, strong cross joints N37°12.358' W80°23.7[illegible] N40W 50SW & N70E vert

BBG 6210 sandy gray to tan dol in sidewalk bank & N48W 20 NE (N60W 20 SW)
N37°12.227' W80°23.810'

BBG 6211 dk gray algal ls (Mg) interbedded w/ dol N40W 20 NE N37°12.137' W80°23.78[illegible]
el 2060 +

BBG-6212 N60W 50NE ledge of light-dk gry, thk bedded closely jointed dol N37°12.048' W80°23.717'

BBG-6213 - cobbles of fgtz ss in white sandy matrix
el 2080
N37°12.055' W80°23.692'

BBG-6214 N30W 40NE
thk bedded to laminated
crystalline lt gry weath
dolomite in road cut (Photo)
N 37° 12.025 W 80° 23.660
BBG-6215 apparent bedding dips reversed
in thick bedded gray dol N10W 40SW
cleavage? Massive beds below
BBG 6216 distinct 1" lam
(Photo) N50W, 30NE
N 37° 12.000 W 80 23.562
BBG-6217 N14E 30 SE Massive
light cream colored sandy dol
N 37° 11.960' W 80° 23.423'
BBG-6218 quarry highwall
in lt gray-cream colored (wea)
dol N 37 11.943 W 80° 23 343
N50W 40NE
BBG-6219 el 1930 ft N60E 30SE
Photos of typ Eco ribbon
banded, dolomitized ls seq.
N 37° 11.890' W 80° 23.300'
BBG-6311 good relbon. ex at el 1910 ft
near apex of curve
N 37° 11.890', 80° 23.247 thin white
sh/ex, silt sh layer above which
are large blocks detached (Vram

NOTES Dec 2'11 Oliver Farm

BBG 337 edge of field — N 26 W 18 NE thk bedded gray dol ledge above creek. Creek w/ valley

17006 — Fall above Subtle Karst depression near fenceline

BBG 338 — Blue-dove gray micrite on ledge above creek debris N 20 W 18 NE

BBG 339 — Blue gray ls base, gray dol below in stream bottom N 20 W 18 NE el 2006

BBG 340 — N 12 W 12 NE broken (Closely cstrike) jointed thk dol bed crossing el 1710-20 above road crossing

BBG 341 — Gentle beds gray dol N S 10-20 E 75' wide al belt on N S side of stream

BBG 3312 — 300' cascade in thk butcher block Dol N 8 W 20 NE 30' al on SE side 1800ft

BBG 3313 gentle — Broke Fall cut hand Fold hinge

1810ft — N 26 E 20 NW (NW limb N 60 W 14 NE hinge N 12 W 10 NW

BBG 3314 — Scarp like detachment ledge, travertine covered in stream N 56 W 45 NE butcher block 06

NOTES

BBG 3315 el 1850 -80
Scarp like headwall on SW side of valley.
Old spring? Tufa and blocks in Creek cascad on beds N10W 20 NE

BBG 3316 photos of epikarst collapse features on creek side el 1400 b photo of tufa beds N40E 10SE

BBG 3317 Massive frac dol w Sil. crinoid parting N50W 20 NE beds joint passages N50W 75 NE

Upper Stonehinge?

BBG 3317 cherty gry Frac dol n 20 W 8 NE el 2100 6 0be

BBG 3318 Massive gray dol n 20W 14NE just NE of 60 dia 20' deep doline (photo)

Item # 033-3

NOTES

1386 $319 N 14E 10 SE
4t ledge 6gray
ls W/sil part.dg
dol rl 1800

NOTES Dec 21 '11

BBG 3 8 13 N40W 18 NE reddish crystalline dol w/ grn shale parting on ledge

22607 ss float on soil slope Obe lower? similar to Quarry

GPS N 37° 13.267 W 80° 23.37

BBG 3 14 N 14 W 12 NE el 2130 6
N 37° 13.250 W 80° 23.270
massive gray + orange weathered dolomite ledge exposed in driveway

BBG 3 9 14 Greenish parting in reddish gray massive dol at el 2130 6 Obe
N 37° 13.250 W 80° 23.212

BBG 3 15 active Karst Field ~4 sinks one active epikarst drainage visible el 2100 6

Sink A
Sink B N 37 13 330 W 80 23 007
Sink C N 37 13 342 W 80 23.012
Sink D N 37 13 347 W 80 23 062
N 6W, 12 NE ledge to NE of 50' diam lunette sink with blocks filling ent.

BBG 3 9 16 Sink A 30' dia 3' deep ledges - massive dol
el 2100 6 N 18W 10 NE N 37° 13.327
W 80 23.00

BBG 3 6 20 E 2080 N 37° 13.250
Sink W 80° 22.903

Dol Ledges N 4 W 10 NE

Day Runner

NOTES

BBG-3621 N 37 13 353 W80 22.930
Thkt to Mass bedded dol (edges N4W 10NE

BBG-3622 N 37° 13.343 W 22.878
Fragment of axe head found just below powerline

just below about 15' scraper

BBG3918 bench or old road in overgrown clearing at el 1860 6 N 37° 13.290 W 80° 22.663 el 1780+ chert walls

BBG 3919 - over grown grassy field nearly flat, dol edges along edge of knoll + valley N 8 W 10NE N 37° 13.320 W 80 22.608

BBG 3920 N4W 8 NE dol edges next to old log house N37 13 333 W 80 22.563 1740 T 60' bar change

BBG 3921 large house site Lots of Yucca, old stone walls in field LS chimney N37 13.287 W80 22.578

Item # 033-3

NOTES 12/12/ Yellow Sulfur Sp

BBG683 gray to dk gray xline dolomite w/ white deep blocky jointing N70E 55S N58W 80 NE ochreous clay / tufa sap in stream

BBG684 spring house next to office (hot spot big

BBG685 N 15 E 40 SE blk thin bedded dol ledge on gray dol

BBG686 60' dia depression next to upper cabin prob old spring! — big trees black ls fill

BBG687 dol or ls quarry behind foundation of addional cabins tan weath lam dol. N10E 40SE

BBG688 N 15 W 40 NE - thk bedded dolomite beds along old road, rock wall just South of Bridge ledges in stream bed N10W 40NE beneath old bridge

BBG6810 Massive bedded dol ledges below old cabin in stream bank N15W 52NE

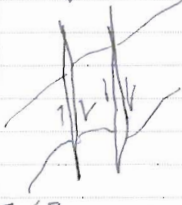
BBG6811 N10W 50 NE butcher block black dol. crossing creek at barbeque area, some blue algals? block

BBG6812 N10W 40 NE more med to thin bedded ls breaks

Day Runner

NOTES

BBG 6812 prominant factures



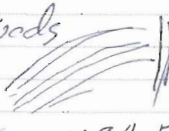
N 60 W 80 NE.
in black shly
to slaty dol

BBG 6813 green phyllitic layer in stream below big rain on stone piers beneath old lake, ba

BBG 6814 concrete spring house above old lake

BBG 651 alternating light and dark ls t/sh (buff) weat. in stream could be slice of Olh (Oe)

arched beds



N 18 W
60 NE

Cross fault N 84 E 60 SE
ductile deformation zone

cleavage N 70 E 74 NW

BBG 652 mas dol beds in old roadside quarry 41 ledge N 70 W 38 NE

NOTES

BBG 3922 barn site? large Stone pilesz junk N 37°13.262
W80° 22.590
Sink hole above ledge
chty dol ledge NS/G E

BBG 3923 big ledge below pavement in stream ; N4E 15 SE N 37°13.208' butcher block dol W80°22.615
nice woods, young timber
running cedar clean
stream, some tufa frag

BBG 3924 el 1770 b breach sink hole ledge N4W 12 NE cascades below
N37 13 197 W80 22.537

Dec 27 2011 BBG-328
N 24 W 10 NE layered ribbony dol w/ two zones and silica replacement of evaporite
OS or OC

Day Runner®

NOTES 1/05/12

IRO43 12 el 18906 - On Knob at M East house grn sh N48E 20SE on circle drive
N 37 12.288 W 86° 20. 657

IRO43 13 N50E 16SE rd mdstn bedding 20' below house station at el 18606

IRO43 14 N40E 20 at el 18506 light gray thk bedded ss interbedded w/grn-gray shale el 1846 b
N 37° 12.307 W 80° 20' 775

IRO43 15 el 1835 N40E 26SE 10' white ss ledge bits on green shale at top of Edinburg tansh and ss above ledge
N37 12.310 W 80 20 803

IRO4217 green olive sh w/ pencil cleavage el 1880 N40E 24SE
N37 12 307W 80 20.878

IRO4218 N40E 20SE section of gray arg ls on road way el 1520
N37 12.347
W80 21.027 Liberty Hall LS

Item # 032-3

NOTES Jan 12/12

BBC 261 gray dol sap
N14E 42 SE
N 37 13 925 W 80 25 417
massive elbrook opp
joints (epicenter N 20W
80 NE
BBC 373 dol ledge on RR
cut, lt gry - tan
Massive (2' bed)
W/ joints
bed N20W 36 NE
joint N70W 75SW N40E 72N
N 37° 13 252 W 24 120
BBC 375 red and green Rrg
slaty bearing
N37 12 168 W80 24.442
N5 20 W clear
BBC 617 red & green
sap - qtzite cobbles
on hill top
N 37° 12 147 W 80 24 506

Dearcroft On 1630
OL 1550

Day Runner

NOTES

Feb 24 1pm 2012

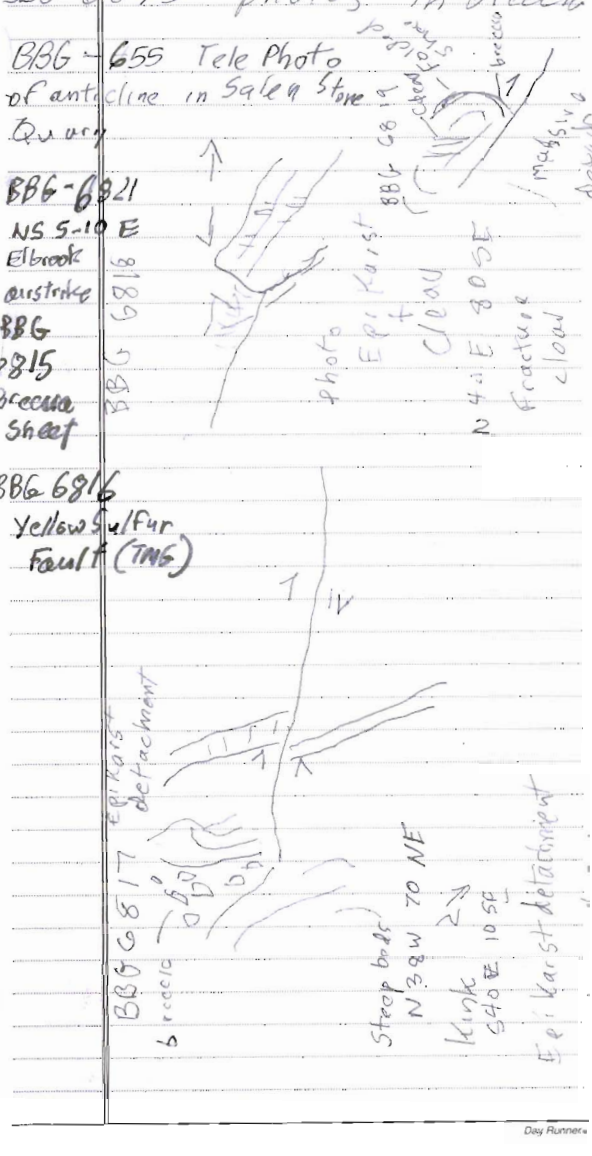
BBG-6815 photos in breccia

BBG-655 Tele Photo of anticline in Salem Stone Quarry

BBG-6821
NS 5-10 E
Elbrook
outstroke

BBG 6815
Breccia
Sheet

BBG 6816
Yellow Sulfur
Fault (TNS)



Day Runner

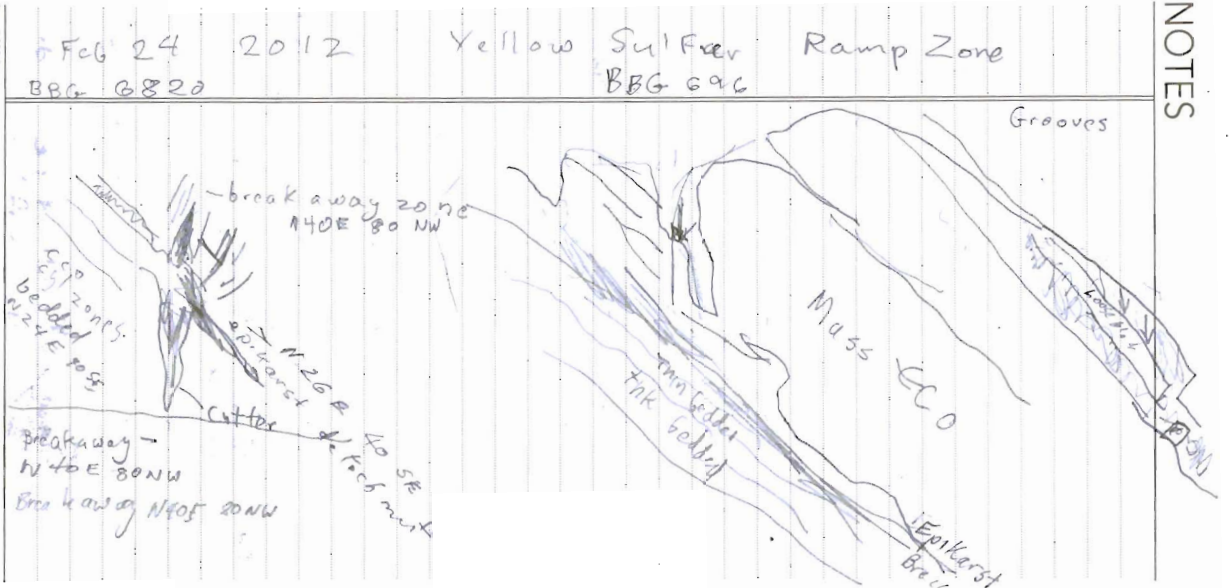
Item #4553

Feb 24 2012 Yellow Sulfur Ramp Zone

BBG 6820

BBG 6916

NOTES



NOTES Blacksburg 2-27-12

BBG-39 18 lt grn lam – sandy dol, fg, rexme, cross bedded fragmental rip up bed (ledge in vacant lot N 20 E (83
N 37° 12.627 W 80 23.16
pnky weath w/ popcorn chert. Large sink on SE side of roadway

BBG-39 19 cave entrance in massive chert gray dol N 37. 12.58E
W 80. 23 (corr)

BBG-39 20 N 20 W 26 SE
cherty gry Kline dol
Forms knob mass cgt
ledge N 20W 26 NE
N 37 12.543
W 80 22.857

BBG-63 12 cl 12 306 gray
thk-massive bedded
dolomite N 5 20 E
N 37 12.433 W 80 22 807
(mascot – Beekmantown
perl gray "to pinkish

BBG-6313 cl 1800 ft
dol ledge in ck N 10 E
20 SE along logging road

BBG-6314 cl 1930 ft N 50 E 20 SE
massive gray dol
ledge on scarp above slide
N 37° 12.358 W 80° 22 710

Day Runner

NOTES

BBG- 6315 N 36 E 20 SE thk bdcd
N37° 12.407' gray x/line dolomite
W80° 23.872' regular bedded thn
cleavage siliceous layers
N73E photo of cleavage (
.75SE extension)

BBG-6316 cl 2060 b emergent
spring from beneath ledge
of thk bedded fine gray
dol with round bfs
to brn weathering chert
Os (Och) N 20 E 20 SE
water line in spring
at N 37 12.408 W 80 23.030

BBG-6317 cl 2080 Os
N 30 W 20 NE
thk bedded gr dol
w/ sand laminated
zones black chert
extensional joints
NS 70 W dil →]
N 37. 12.432 W 80 23.023'

BBG-6318 N 68 W 20 NE
photos of ledges
and tufa below old
Blacksburg Water supply
Photo of Spring at
N 37° 11' 880"
W 80 23' 150"

BBG 6319 thk bedded - med
bedded dk gray

NOTES Os (Och)

Fine Grained limestone in road cut E-W 20 N
N 37 11.873 W 80 23.232
Ribbon banded dol above
Photos of Och - Os section along Cedar Run Road

2-28-2012
Syn Formal hinge N 74 E 4 NE

BBG911 N75E 65 NW
thk bedded gry dol w/ sdy interbeds, blocks OF orang bleached dol near base of Cat

BBG912 Purple grn & dusky red slaty chips on sdy steep bank, al in Stream no Oc ~ lower Elbrook
Not Rome

BBG41 below Holiday Inn site dk gry slaty arg. and anthracite float on bank N 50 E 35 SE Cut off on ramp (Photo)
coal horse Good Stop

7' qtz ss overlies coal then gray sltsn gray slate (under clay below

Day Runner

NOTES Feb 29 2012 cloudy east breeze

BBGG 221 N 60W 24 NE thk bedded gray dolomite (Eco ?)

OBG 6222 N 80W 18 NE gray massive dol ledge

BBG 642 & 643 slaty grn and red argillite chips 96 ns Sewer line below hospital MM
N37 11.308 W 80 24.863

BBG C44 green and brn weath siliceous argillite Ledge in drive way along Sewer line
N 60 E 30 SE Mp or MM ?

BBG 645 yellow brn and [illegible] weathed siliceous argillite + meta siltsn
N 50E 40 SE

March 3 N 37° 10.799 W 24 943

BBG 561 Site of Price well photo SS chps
N 37 11.248 el 24506
W 80 27 623

BBG 861 N 80E 80 NW burrowed bed ~4'
Olv spr. Coarse black wackestn/grain stone with shly pfg

Item # 033-3

NOTES 8/27/12 UT Research/IP

BBG 656 Tr along Sower line to Jenelle Road. 1s 6 rocks from Smart roadcut fill area up to 50' thi... photo — no native karst preserved all covered with fill deposi... Some SS float along road and sewer line confirms Eco on Pub. Map

BBG 657 on N side of new tract in IP across Parking lot from Simon... Ocs or float of Gray Sandstone in conoco choa gue Sa...

BBG 658 across from reseavch Park (Smart Road Control ... a farm around grude... on a white SS cobble terrace deposit (Phot...

BBG 96 11 revisited on 4/11/12 photo of synf. hinge at N 37° 08.808 W 22.6... hinge plunges N 80E 50... axial surface N10W 90 SW

BBG 96 23 N 70 W 50 NE Fault

photos of polymictic brecc... PP and synform on thrust that truncat... early folds

BBG 96 24 disharmonic folds plunge 55E

hinge N 52 W [N 37° 08.550 W 90 24.0

Day Runner

NOTES BBG 9 6 24 (4/11/12)

hinge plunges S 52 E @ 5°
a p N 40 W 25 NE
BBG 9625 photo of Salt
permeating saprolite
of lower Elbrook
detachment zone
beneat N bound Lane US 460
beds N70E 20 NW

BBG 9626 EW 80 N on SW side
breccia on NW side
of ROW at N 37 08.502
W 8023.303

4/17/12 N 37 09 978 W 80 22.806

BBG-937 N 40 60 SE thin
bedded shly arg

BBG-938 N 37 09 882 W 80 22.765
travertine bank in stm
flood plain 2 100 yds across

BBG-939 N 20 E 50 SE
massive bedded black micrite
and coarse x/line dol beds above
slaty argillite above creek
at N 37 09.870 W 80 22.727
Edinburg below Cleaved N35E 40 SE

BBG-9310 brecciated dol
and lmdol, and chert
on pipeline above
at N 37 09.882
W 80 22.713
el 1700T N40E 25 SE
Cleavage in slaty argillite

BBG-9311 el 1710 dk brn
weath thk bdded dol to lpes

Item # 033-3

NOTES

BBG - 9311 E-W 60 N at N 37° 09.732
el 17106 W 80° 22.69
Eel ?

BBG 9312 N 76 W 40 NE
Creme colored sandy
Turkey hen dolomite (Eco)
on nose - gradational
contact below some
ribbon rock ts/dol
ledges No clear cut
fault zone on slope
pretty continous OC
on upper slope may
be hanging wall
N 37 09.658 W 80 22.658
N 60 W 30 NE on
slope to SW

BBG 9313 in ravine
N 85 W 20 NE slaty tan
dol w/ complex cleavage
above tcl el 1710
N 37 09.627 W 80 22.717 p.

BBG 9314 thin bedded
tan-gray arg dol
N 50 E 62 NW in stream be
at el 16506 N 37° 09.615
Elbrook W 80° 22.810

BBG - 9315 Elbrook ls + do
N 40 W 20 SW Scarp
in drainage at el 18006
N 37° 09.600 W 80 22 933

BBG - 9316 N20W 70SW paper thin gr
Hogback chl phyll. slaty arg
rid 2 N 37 09 655 W 80 22.947 Ants

Day Runner

NOTES

Chris Austin 540 292 5311

Cabalas Arton
552-7118
Rodney Smith
(Lisa) 641-3617

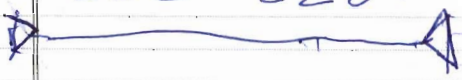
Norman Woods
(Matt Osborne
250-6088

Dear Carter

1157 East, Michael
Taylor Kelle Ann
Hollow

Contact 558-8130
Robert Bradbury

552-3281



BBG 9317 ridge top changes from grn argillite to poly mictic tectonic breccia
e/ 19206 (1860 T)
N 37° 09 630
W 80° 23 028
scarps below

BBG 9318 N74W 18NE brecciated dol on bench at N 37 09 700 W 80 23.145

Item # 033-3

4/18/12 Blacksburg VA 1720 ft +40 var 6.0

BBG 771 Highland View at circle brecciated gray dol in gard N10W 20 NE platar as pect to brocoia ledge (photos) shly chips transposed on internal clean

BBG 772 Black shale bench at el 1880 ft +40 1920
BBG 773 dol ledges in road bed by Picknic shelter el 1840 ft +40 N 30 E 40 NW Fold hinge S60W 40 SW Tan platy dol ap ap N50 E vert b.g Spring house pond on geol map no longer there Photo Fault Contact Iforce
BG-774 elbrook thin bedded - thk bedded gray - 6" dol sheared and brecciated dol N 20 E Photo of fault contact w/ black shale sap light colored sap in cut must have been interp as (OS) on SR 604 Fault Contact int.
BG-781 new lot on Rd. go road exposed lower Elbrook green phyllite + breccia dol N 74 W 60 NE layering

4/18/12 Blacksburg

This is typical lower Elbrook

BBG-78 Rdol at intersection
N70E 40SE thick, gray lams

BBG-79 mass grec dol
N35E 40SE

BBG 78A on 11 black slate
bn ditch turn dol
breccia edge just up
hill and across road
N38W 20SW slaty dcv

Fault not exposed
Need / dashed line
For approx loc

BBG-783 site of Old Lithia Spring
N70E 20 → N30E 50SE

BBG-871 thin bedded ls / cale argillite, dk gray (bmb)
N50E 60SE S70W 20SW Shingle

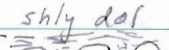
BBG 872 N80E 30SE
mass dol lodges on power line

BBG751 borrow in sh Fault not exposed

BBG-752 in elbrook phyllite NS 20E
show as pattern - no contact

BBG731 N24W 24NE plunge in 14N
dk gray slaty do in new cut
behind water plant = "JB" Rome
Google Site for geometry
Tightly folded
= punkin valley / Conasauga

BBG 732 brecciated thinly bedded gry dol
N80W 10NE shale chips to SE
No contact observed

4/19/12 BBG Field C
BBG-862 Michel Co. Warehous
N37°06.503 W80 25.217
Thick bedded gray laminate
dolomite White gash ve
tan shly dol lum above

sandy dol w/ripp
= upper Elbrook in place rsu
(photo) N40E 40 NW bedding
BG 863 N 5E 10 NW highly
bioeciated gray dol ls
N 37 08 442 W 8025.623
4/20/12 BBG-941 SS Flt Mass
dol ledge N60W 40 NE
fine siliceous lamination below
= cycle top grades down
to bluish gray ribbon banded ls w
algal bioherms
BG 942 N70W 30 NE light
tan dol w ribbon
banded Fabric preserved
siliceous partings and sandy
zones
BG-891 tan-brn dol ls
on ridge air strike N80E
dip est 30-40 NW Eco
BG 892 lam dol ls exposed
n bank on Beaver St N74W 30 N
photos of layering ted (upper
N 37° 07°.760 W 80° 25.840
BBG-882 N70E 40 NW lt gry

- med
lite w/ thin bedded
layers = Basal CCO
notes OF SS layers
N 37 07 777 W 80 25 900

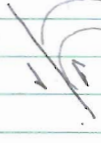
BBG-851 gray dol ledge
below Clubhouse (lam ls / dol
middle - upper elbrook ribbon rx
N10E 60SE OT (alga) stroms
N 37 08 480 W 80 26.240

BBG-841 - shaley chips in soil
bank along driveway
N 37 08 467 W 80 26 815

BBG-871 new cut in corn
N60E 80SE thin bedded
ochreous weathering platy
dolomite ledge at
N 37 08 292 W 80 26 733
photo of ledge and
rolling elbrook terrain

BBG 842 thk bedded gray dol ledge
in driveway cut N 37 08.507
N20E 40SE col W80 26.865

BBG 852 photos of Elbrook
dol and breccia
Lots of green breccia in
this cut cut begins
at CK
N 37 08.813
W 80° 26 673



4/20/12

BBG-843 N S 40 E light gray weath cherty dol/ls in cut below house at N 37 08 875 W 80 26 82[illegible] photo of Strom Google Earth N 37° 8.871 W 80° 26.842

BBG-844 N54E 24 SE argillaceous ls in Omb exposed next to new bridge at N 37° 08.897 W 80 26.920

BBG-811 new cul de sak Seneca Springs W 37 08 585 W 80 26 87[illegible] dol, breccia sap rock exposed in embankment no measurable struc

4/21/12 ESN - PILOT Quad Field Metho

N 37 09 245 W 80 14 435 ESN-7

Stop in Rome

Pilot PLT 1 N 80 E TO SE AP PLT-3

Quad Hinge E W 30 E PLT 38

N 37 05.752 W 80° 15.102 1150

Gohaush and Bloodroot PLT 38

Stop In Unicoi N 40 E 40 SE PLT-[illegible]

N 46 W 20 SW Okaito ledge / Mica phyllite

N37 5.239 W 80° 15.907

N37 05 072 W 80° 15 875 PLT-62

37° 04.978 W 80° 15.988 Unicoi

~~N 20~~ N Leucogranulite gn 25 SE

N 37° 04 .913
W 80° 15 .960 PLT 6 24
Falls o c thin banded
granitic (qtz - Feldspar)
gneiss N 50 E 52 SE
photo of joint system
controling stream
N 26 W 74 SW
N 20 E 26 SE ultracol ledge

N 37° 04 987 W 80 15. 942
April 24
BBG 181 N 37 12. 977 W 80 28. 6?
tan and grn phyllite soil
E-W 70 SSW dol in yd

BBG 171 reduct N 37 13.315
phyllite in W 80 29.693
Ccl N 40 E 30 SE
BBG 211 (ss area lt grey ls/dol
BBG 581 oc in new basement
cut cross bedded ss sap
N 58 W 15 SW
N 37 10.632 W 26.268
BBG 582 red sh on bank
N 37 10 488 W 80 26 285
BBG 821 N 37 10 000 W 80 26 56?
N 40 E 45 SE Ccl brec dol
BBG 811 Ccl ledge below Trailer
park N 37 09 983 W 80 27 250
N 80 W 18 SW

April 27 2012 BBG 987
redux - coarse x line grai
dolomite interbedded w/
algal chert (strom+ throm
on crab Creek spur N-S RR
BBG - 987 cherty dol ledge
below house site
BBG-988 dol ledge crosses
road dipping steeply SE
typical butcher block dol tart
cdar cellular lite gray chert
poss. karst area between
7+8!
RNR 131 techlsta N 37. 124/67
upper terrace level W 80. 37866
No bedrock deep orange clay loa
w qtz (cht gravels)

BBG 913 shly gry dol+
Feegia OCs N side of
cut dips 20 SE
strike
29/ 12 BBG-831 Target/Home Depo
2 OCin drainage on SW side
of Target, thk bedded gray
dolomite N60E 20SE
NS 50E (Folded)
BG-831 2 OCs in drain
May 2 2012
BBG-892 top of Com by Water
Tanks N 65E 40 SE s1/ Oolit
N 37 07 922 W 80 25 342

BBG-893 large block lam upper Elbrook algal IS in Ye
N 37 07 832 W 80 25 397

BBG-883 large Flow From intermitten Stream, just up stream From large reservoir old water supply in Upper Beekmantown Limestone and dolomite
N 37 06 12 W 26.443' NS 40 W
N GE 40 NW

BBG-872 Spl N 37 07 763
W 80 26 742
N 60E 25SE bryozoan packstone w/ large bioch or algal ocalites. OIP

BBG-873 N 30 E 30 NW
light gray weath gray IS and dol w/ oolitic chat layers
N 37° 07 650
W 80 26 787 = CCo
algal stromatex highly deformed - Photo!

BBG 884
N 37 07 605 W 80 26 602
N 60 E 80 NW Obc
Ob

5/2/12 BBG-971 Lot for sa

Pepper St at Depot
N 37 07 965 W 80 24.700
light grey (creamy) colored
med gray finely x'ing
dolomite w/ thin siliceous
ribs (ribbon banded)
Massive algal beds
dolomitized rip up cgl beds
algal protoerms) cut
and fill structures N 80 W
20 SW - Good Eco OC
for field review)
BBG-962 quarry in ls + dol
chert N 45E 56 SE photos
2 spls 1 ls 1 dol brec

BBG-
N 37 07 857 W 80 23 898
sandy dolomite float en
deep orange brown saprolite
SS like chert float

Library N 37 07 938
W 80 22.023
BG-994 brecciated algal
gray microxtine dol w/green
phyllite N 37 07 638
W 80 25 169
NR 221 dol gr. w/ 8"
Cross bedded SS float N 30 E 45 SE
N 37 07 402 W 80 25 813

RNR-222 new lot at Subdivision
N 37 07 342 W 80 26 030
deep mottled soils w chert gravel sandy top = d Td on carb
RNR-223 corner lot on Kensington and
N 37 07 367 W 80 26 105
N48E 72 SE dol, grey weath chert or qtz vein pile above some rnd cht gravel (photo) corner Kensington terrace
RNR 231 Water reservoir on nose at BBG Middle School
N 37 07 103 (W80 25.665)
cherty soil = carb
RNR-232 oc in road bank at N37 07 .167 W 80 25.672
SS in weath sh/ls (photo)
EW 295 fossils in SS ~ Ordovician Brachs (Omb) or Bays (red ss)
P 796(B)
RNR-224 blk sh Photo + ls?
Dizzie lane & Dianna OE
N 34 W 10 SW
N 37 07 168 W 80 26.017
BBG 225 deep orange sap (soil) w/ chert gravels one 1" ○ in 60
N37 07.29 W80 25.910

5/5/12 IRS 7-7-11 photo of
Td at new Shealor
Dealership under const
N37 08 19.2 W 80 22.037
N 37 08 628 W 80 29.975
5/

BBG 943

N 40 W 34 NE thk bed of chorty grg ls interbedded in mass lt gray weath dol

N5 RR at Bone Oil

N 37 08 502

W 80 24 407 ✓

Photos of cave ls ledges above

N 60 E 285 E

5/18/12 BBG 743 dolomite above spring N 5 10 W

N 37

BBG 744 N 70 E 45 NW thin bedded platy dol overlain by breccia dol, orange brn sdy w/ th dol and grn-orange weath shely chips in soil

bore on ridge

N 30 08 495 W 80 24.91

30 08 487 80 24 9

BG 745 gray massive layered algal ls, micritic w/ bioherm dl structure N 10 E Jones Photo

N 37 08 532 W 80 30 058 N 40 E 45'

BBG 746 thin bedded blue gry ls to massive mottled algal dol in stream ~~N40 W 46 NE~~ N 20 E 15 SE beds in stream bed broke algal lam ls (lower Elbrook) RDN 961 thn silt soil w/ tan to green chlt phyllite chips mapped as Er by shultz N 37 08.645 W 80 30 002 Photos of soil on steep nose Ledges above creek, below = N40 W 24 NE broken blue ls w/ algal state rd

BBG 747 below calf barn above pond, lt colored silty soil in road W brecciated dol blocks brecciated dol on stream bank at N 37 08662 W 80 29 982

BBG 748 693 695 N 80 W 40 SW algal lam blue gray L. Elbrook Ls on ridge at N 37 08 513 W 80 29 955 W 80 29 980 N 37 08 527

BBG 749 gray dol brec in stream bank N 37 08 562 W 80 29 781

BBG 7410 light gray to white sandy topsoil
mottled orange-gry clay subsoil
RDN 962 lt gray thin bdd platy dol (lower Ec1)
N 30 E 30 NW N 37°08 907
W 80° 30 298
RDN 963 lt gray, thin bdd platy dolomite w thin grn phyllite partings N 30 E 10-15 NW at start of farm Road N 37 08 905
W 80 30 225
RDN 964 Grn gry and brn chl mtx dol breccia breaks up to 4 green-brn gravel size clasts on slope above massive outcrop
Photos at N 37 08 883
W 80 30 192
RDN 965 NB 16 N
Massive dol breccia, grn dl
N 37 08 862 W 80 30 112
not comp, lower Ec1

5/11/12 RDN 691
N52E 45SE Mccrady red and gray mdst w/ bedding

RDN-631 at tunnel Gate to RAAP
gently dipping dol ledges
Cross Fractures N30W 70 NE
bedding N50E 10 NW
Fold nullcon N 78 W 2 NW
N 37° 11.737
W 80° 30.553
el 1726 m

RDN-632 thin bedded brecciated dol in embankment, tufa below, Karst Valley to W N52E 20 NW
N37° 12.358 W80 30.0

RDN-633 el 1940 ft on spur behind house, orange weath argillite chips in soil on nose 75 m from CurPoint
rome sh on map
N37 12.327 W30.020

RDN - 634 Knob behind
house shows yellow orang
weath argillite chips
some red chips below
terrace blders cobbles + dol
in front yard el 19808
N 37 12 25 3 W 80 30. 0
RDN 635 ledge of Sol.
bluish gray algal matte
bearing micrite N 30 E 44 SE
on slope. Elbrook ls is in
strat position above SH/a
RDN-636 black xline dol float
RDN-637 ledge of platy
to thin bedded butcher
block dol N 40 W 60 SW
el 19806 N 37° 12.133 W 80 30 11
158 W 80 30 17
Best loc 123 12
RDN - 638 Massive ledge
of brecciated dol N 50 W 20 SW
N 3

5/11/12 BBG-6622
NOW 20 NE Massive ledg
of siliceous ribbon banded
facies dolomite / light
medium gray weathers tan
typical t2o dol
#1 1900 ± N 37
N 37 11 232
W 80 22. 458
Photos
5/13/12 BBG-151 redux
sample of terrace gravel
exposed in new house site
on top of hill - Jay Dove Farm
5/16/12 BBG-281 breccia
gray and tan weathered thk
bedded algal dol N 20 E 40
N 37 12 962 W 80 26. 227'
No Ord above road
BBG-271 Heath Farm / Heath
V 30 W 20 SW light tan-g
Massive (Thrombolitic) dol
between thin bedded-la
ribbon dol (photos)
N 37° 12. 673', W 80° 26. 802'
BBG-272 lam-thin bedded

gray algal lam dol
exposed in drain
at N 37° 12 825 W 80
27.013'
N 20W, 12 SW
BBG 191 N 37 12.693 W 80 27 502
N 50E 65 SE red shly sap
thn slaty dol
BBG-192 Photos of Breccia
M/M + crackle, bedding
N 37° 12 665 W 80 27.510
N 60W 40 NE
BBG-431 N4W From Price Mtn Town
old Farm house. N 80W to barn
N 37 12 560 W 80 27.527
corner of 1/2 green w cast
green shale OCS in graded
road by big Fill.
N 84E 60SE cleavage
N 60E 44 SE clean in
green phyllite
5-17-12 BBG-
N 80 W 70 NE thk bedded
dol below bridge
BBG-262
N 34 W 08 SW burrowed
mottled gray and brn dol's
by Duckpond

Turned 5/22/12 N 37 10 52.21 (.870)
✓RAN 551 W 80 22 28.33 (.472)

BBG 192 B ✓ X Imnb (de
N 37° 12.719 W 80° 27.490
Aynew IRO 111A X OR 15 Lime

N 37° 14.750 W 80° 21.887
BBG 192A ✓ X Carbonal Breccia
N 37° 12.728 W 80° 27.488

BBG 192C ✓ X Rome Phyllite
N 37° 12.720 W 80° 27.477
I81 NBL IRO 6218 ✓ X MMB
climbing Lane N 37° 11.962 W 80° 16.116
IRO 4711 Bays SS ✓
Lipsey Farm N 37° 10.598 W 80° 22.048
Hickory Hill Nortin Farm IRO 1213 Bays SS ✓
N 37° 14.444 W 80° 20.889

IRO 5424 Fagg cgl (Ridge
N 37° 11.607' W 80° 19.669'
VI Research Center BBG 534 Anthracite
N 37° 12.381 W 80° 24.988

BL ESN 1423 Onb.
N 37° 13.851 W 80° 1F.365
F

IRO 458 Bays (Walker Mtn SS)
N 37° 11.118' W 80° 21.351
SR 603 IRO 533 Millboro Fm
SR Turnout N 37° 12.250 W 80° 18.01

NOTES JAN 17 2012

BBG 3210 Orchards RecArea
Massive algal dol N30E
30SE ribbon banded ls
blocks in parts
Photos of Ribbon rx / algal
Stromatolites
large breccia blks (reef
talus? cemented
w/ 2nd carb dolomite

BBG 3211 Sed pond below park
Massive gray dol ledge
sticky orange clay, cherty
soily, some burrow mott
ls beds (photo)
N65E 10 NW Sink hole to E

BBG 3212 interlayered alga
blue gray ls (10c and
laminated to thick
bedded dolomite sed
pond 100 b 75 X 15' dee
N40W 8° NE bedding

BBG 3213 thk bedded gra
dol ledge N60W 8 NE

BBG 3214 Actively eroding
gully below Rpt cpx
N60W 10 NE shly beds
interlayered in yell oran
dol sap

BBG 3215 Photo of coase
dol blder breccia in
cut in Front of 1511
N10E 30SE

Day Runner

NOTES

BBG 1 S13 N 10 W 14 NE Massive gray dol ledge, cht FH

Jan 18 12 BBG 311 Thk red dol algal strom / hematite replacement, red and yellow sh + shly dol, Chert breccia float N 30 E 10 SE
N37 14 922 W 80 24 857

BBG 312 N37 14 925
N 05 W 6 SW W 80 24 895
more hem/ algal replacement

BBG 313 N 6 SE 10 SE
Massive light gray sandy dol ledge (B S S Co)
N 37 14.702
W 80 24.197

BBG 314 N 37 14.732 W 80 24.168'
sinkhole in woods
25' dia

BBG 315 N 30 E 8 SE thk-med bedded dol ledges on rim of 75' dia sink 15' deep
N 37° 14 780 W 80° 24.145'

BBG 3216 laminate dol ledge in Creek
N 34° 14.978' W 80 24.105
N 58 E 6 SE

Item # 033-3

NOTES

BBG 3 2 17 Spring burial bureau
George street N37 15.00 W80 24.298

BBG 3 16, Massive Dol Ledge
N56E 8 SE
N 37 ° 18. 880 W80 ° 24 4
BBG 3 17 N50E 9 SE gray fine
X line dol
N37° 14. 790 W 80° 29 515
Jan 19/2012
NPT 98 N 37 15.000
W 80 24.037
butcher block weath
massive bedded chert
dol
N84E 6SE dy

BBG 3 19
N 37 14 953 W 80 23 992
trail fork Wagon
trail crosses Indian
Run N 20E 6 SE
Frac across st bed
1/20/12 N36 E 80 NW
BBG 319 dol, thin bedded gray
ledge along Giles
at Rec Center
N 37 °14.647 W 80 29.782
N80E 6SE
ribbon rock ~~w/ sandy lam~~
BBG 310 Algal Strom bed white
crdme strat dol (photos)
N37°14.655 W80°24.847
N60E 10SE

Day Runner

NOTES

BBG-311 N40E 10 SE light color dol ledges in field
N 37° 14.497 W 80° 24.
BBG-312 N37 14.435 572
W80 24.760
Sand stone pebble sized float no OC on this ridge sandy brn soium
BBG-313 Photo of SS & dol chips in soil behind Church mostly sub rounded SS — stream deposit?
N 37° 14.448 W 80° 24.918'
BBG-314 N80E 10 SE 3' 1am - straticulate dol ledge below SS Float
N 37° 14.480 W 80° 24.958
BBG-321 N&W 80 NE brecciated elbrook fine gry-tan dolomite fault or cleavage? N 6W 60 NE
N 37° 14.322 W 80 24.988
BBG-322
N30W 50 SW shly dol in Ck behind Service Sta
N 37° 14.340 W 80 25 40
BBG-323 med - thin bedded dk gy dol in creek N 30 W 7.5 SW
Photo, shly dol upstm
N 37° 14.462 W 80° 25 077
BBG-324 red brn cly sap w/ tan dol/sh chips bk-dk gry dol clasts
Cross Cal?
N 37° 14.723 W 80° 25.038'

Item # 033-3

NOTES Jan 24

BBG 665 N 30 W 15 NE 1cm (silt)
thk bedded dol ate 17206
N 37 11 297 W 80 22638
BBG-666 el 1820 b sink hole
and dol ledge
(GPS) N 37° 11.225'
W 80° 22.567'
Photo of Ledge
massive chert dolo
discont st roinses 5 CM5
Along bedding
EW dip 12° N
1st display st dolom led
formation hillside solution
depression below ledge pass
cave below at
2nd BBG 667 1800 in cleared
area res is chert dol Led
on trail st N 20 W dip 24 NE
Lat Long N 37° 11.170'
W 80° 22.593'
BBG668 water supply elevation
Sp box agn dol ledge,
elev 1810 N 37° 11.133
W 80° 22.640'
BBG 669 1800 Th Bed dol /ledg
ed crosses at
N 37° 11.120' W 80° 22.6
Ledge str N 32° E dip 16° SE
BBG670 sink hole 75' diam
15' deep conical
cherty dolo on surface
Elev 1770 deepest
N 37° 11.072' W 80° 22.512'
out crop upper limb
str dip N 15 E 11 20 SE

Day-Runner

NOTES

Photo 2nd of sink hole
BBG66 11 1750 or 1760B elev
N 37° 11.008'
W 80 22.630'
Beek dol Th bed chert
stri N 80E dip 36 SE
Trail cross ledges in
Scarp area
BBG6612 1830 ele
GPS N 37° 10.988'
W 80° 22.908'
open Fracture photo
Str N20E Dip 60 NW
Bed seams N10E 24 SE
BBG 6613 1880 ele
Little Bench below
highly Fract dol Led
steep Fr
N 56 E dip SE at 70
possible cave Intr
below on a bench
N 37 10.998 W 80 22.113
BBG 6614 el 1950
N 37 11.063 W 80° 22.722
light gry sandy dol
ledge top of Sec
exposed below NIOW BONE
BBG — 6615 el 1800 ±
N 37 11 238 W 80 22 592
N50W 10 NE cry gr dol
~ 30' above Lemon Treater
1/25/12
BBG— 6616 saddle SW of
trail switch back
massive dol ledges

Item # 033-3

NOTES BBG-6616 ctd.

N37° 10.973 W 80° 22.772'
N18E 30SE
BBG-6617 big long doline
100' wide 300' long
at deep spot N37° 10.962
el 1940 b W80° 22.837
dol ledge on SE wall
N26W 20NE
BBG-6618 2nd steep conical
doline at el 1950 b
N37° 10.990 W80 22.820
75' dia 15' deep
Photo of Fract at NE
end thk bedded to strat. dol
Bedding N 20W 20 NE
Dom fracture dir N14E 80NW
BBG-6619 Cave in deep dol.
w/ Comet? Photo
Bed N 5° 40E
Frac N40W (Cave) 85 NE
Frac N60° E 80 NW

Tan 30/12

BBG-6620 Med bedded gray
dol ledge el 1780 ±
N20W 20 NE
N37° 11.265 W 80 22 653
BBG-6621 el 2000 b N15E 20E
N37 11 090 W 80 22 737

BBG-6622 stone wall at
SW end of b.g Karst field
el 1990 N37 10.817 W80 22.000
b.g. turnaround looks like
proto subdivision road
embankment and fill area
N37 10.800 W 80 22.983

Day Runner

NOTES BBG-698 200 yds NW of SR
Fg dol and ss Float (Pic)
possible algal structure
in ss
el 20606
N 37° 10.705'
W 80° 22.962'
BBG-699 100 yds NE of SR
SR on NW side of Ridge
at el 21406 N 12 E 38 SE
N 37° 10.820' W 80° 23.032
Fractures in cut
N10E 60 NW (A)
N50E 50 SE (B)
N20W 20 SW (C)
Main cut trends
N 72 E inclined
45 NW

BBG-6910
N10E 20 SE
med bed fine gr
ltgray dolosn
massive rubble
Fill to N
N 37° 10.878'
W 80° 23.122'
20506

BBG 6622
N20E 40 SE
Thk bedded dol
gry to v lgry
20' thk spoil pile
25' to N
N 37° 10.867 W 80° 23.062
el 21006
Top of Fill photo

N 37 10.075'
W 80 23.520'

BBG 622A

Item # 033-3

NOTES 1/30/12 Tuesday

BBG- 591
N37 18.367 W80 24.940
Photo of pink to light brown phyllite chips (tcl)
No red shale —
behind shelter at Mont. Park and Swimming Pool

BBG-671 just below motor Pool shop on Trail blocks of Bluish Gray Algal limestone, and thin bedded arg. dol = Eel lower
Photo of stromatolite
N37° 10.370 W80° 24.92

BBG-672 just below dog pound
N 24 E 60 SE med gray micrite and sandy dk gray dol layers
N37 10 385 W80 24 853
Eel (lower) Photo of LS and lam l. gray dol below

BBG-673 Photo of round dol pebble in blue gray alg
is on point
N26E 48 SE

N37 10.395 W80° 24.718

BBG-674 large spring in Karst valley
N37 10.460' W80° 24.780
photo

BBG-675 Thk bedded gray dol ledges SC about trail
N50E 34 SE
N37 16 427 W80 24 767

Day Runner

NOTES

BBG - G76 yellow orange shaly weathered dol ledge in stream N 20E 50SE N 37° 10.383 W 80° 24.683

BBG - G77 gray thk bedded to lam dol N 30 W 60NE N 37° 10.392 W 80 24.623

BBG - G78 dk gray massive to thk bedded dol N30W 30SW N 37° 10 432 W 80° 24 540 100 m to track

BBG - G79 blue gray algal ls Float, small doline on hill side N 37 10 413 W 80 24 493

BBG - G710 yellow phyllite chips, Fragments of Fourous dol matrix and typical breccia fragments on knob at N 37 10 390 W 80 24 497

BBG - G711 pink - tan weath phyllite chips on knob N 37 10 322 W 80 24 568 Cl - lower

NOTES

BBG 65 3 hilltop Trask & Cammaro
Oc, ss Flt in soil
N37 11 535 W 80 23 360

Boal

BBG 654 N 20 W 16 NE algal
Stromdol in soil pa
N37 11 483 W 80 23 280

BBG 6 219 WP N37° 11.817'
dol oc across W80° 23.663'
street from
BT Conference N 20 W 16 N
massive close jointed gry
dol w/ strom

BBG 62 20 massive dol
ledge by bus barn
N10°W 20°NE Typ Crm Ecr
N37° 11.610 W 80 23.72

BBG 349 Eakin & Kentwood
Stromatolite in boulder
ripped out of building sit
WP BBG 349 N 37 13 035
W 80 24 332

BBG 328 photo of old Quarry
thk bedded dol N45E 85E
N 37 14 552 W80 23 388

BBG E91 n 50 E 40 SE
red yellow and brn
saprolite of siliceou
argillite and meta
siltstone in new
road cut N8E fro
Corning Smokestack
N37° 10.545 W 80° 25.4

Day Runne

June 7 2012

NEW -- 1 clayd cgl oc at corner W FS 18[illegible] and 460 lt grey [illegible]

ss +sh beds rusty rd fibre cgl weathers bumpy, N80E 20 SE N 37 16893 W80 26.597

white qtz ss qtz

NEW -- 2 ledge N 20E 40 SE ~ 6' coarse qtz cgl cross road by ccm N 37 16.798 W 80 26.7[illegible]

NEW -- 3 Horse Nettle Trail head at N 37 16 367 10.4 trip W 80° 27.285

-- 3a 100 yds S of trail clayd ledy N 20 W 20 NE ~ 2' ledge N 37 16.327 W 80 27.2[illegible]

NEW -- 3b Old road blocked, W cgl bldrs N 37 16.333 W 80 27.292

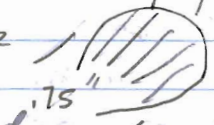
NEW 4 N 37 16.243 W 80 27.53 road goes off to left

NEWS Blacksburg
com Facility
N37 15.813 W80 27.942

NEW-6 Trail Circles Sign
Horse Nettle goes to SW Road to S
N37 15 803 W80 28.020
Fire Trail Tower Site el 2840
S/S N 20E 2L 5F
NEW --- 7 N 30E 20 SE
thin bedded grey qtz ss
Ocs in road at el 28206
N37 15 735 W80 28.110
NEW --- 8 Int Horse Nettle
and Snake Root trail
N37 15 575 W80 28 35
el 28206 N45E 30 SE
thin bedded lt gy tan ledgy
qtz ss in trail
NEW --- 9 N30E 20
1st cgl ledge crosses
gate way trail ~
5' thick el 27006
N37 15 462 W80 28 278

NEW --- 10 line crosses road - bearing tree at N 37 15.342 W 80 28.518 el 27506 Thin bedded gray ss yellow clay soil N50E 45 SE

NEW --- 11 on crest Float of gry ss w large coarse ribbed .75" brachiopod shells, mostly broken N37° 15.170 W 80 28.778 el 27406



NEW --- 12 on curve crossing Property line at N 37 15.045 W 80 29.137 gentle basin on nose el 27506

NEW --- 13 N 50 E 40 SE thin bedded qtz oze slt sn Fine sand w/ Yellow glaze orange silty soil el 2700 N37° 15.073 W 80 29.247

BBG 111 cl 2600
N 37° 14.970 W 29.233 Brn
Fine grained slsn & Fg ss
Float on logging road
N 65E 36 SE white
fine grained thin bedded
qtzite 2' max
al N 37 15.017 W 29.260
NEW --- 14 good chemung
foss. ll bed - punky orange
weath calcisiltsn w/ bi
large molds of brachiopods
CN 37° 15 052, 80° 99.415 W
B19 112 BBG-114 Toms Ck
at least 6' al exposed

June 7, 2012

BBG 111 el 2600b
N 37 14 9 70 W 80°29.233
Good Chemung sl tss
N 37 15 .017 W 80 99.260
N 65E 36 SE white thn bedded qtz arenite in road bank
BBG 112 at 1st A pt no monument. Brown weathered qtz ss F/+ on road, orange yellow punky weath Fossil slts beds el 2850 +
N 37°14.990 W 80° 29.813
BBG 113 el 2780 b
N 37° 14.965' W 80° 29.68
thin bedded fine grained tan pink to lt grey ss and slts ocs in road
N 44E 38 SE
BBG 114 el 2 590 b on old fire trail. Gray mtx g basal cgl (cloyd ocs as thk ledges in woods pebbles of white qtz

JUN 8 '12 BBG 131 thk bedded upper E/B creek bol N86E 10SW gentle open fold hinge need photo

BBG 132 N44E 3+ SE 2' SS in brn sh crosses creek at el 1940 b N 37°14.960 W82°27.630 Mpl

BBG 133 el 2000 first switch back N 37° 15.600 W 80° 27.682' small flat at streams junctn gray clay collapsed adit, pit + 2 soams prospect or small mine (ruins along ck el 2000 b N37 15 010W 80° 27.670

NEW — — 15 el 2050 gry SS N42E 28 SE 20' above coal pits N 37° 15.040 W 80° 27.688'

NEW — — 16 el 2100 b N37°15.07 gry slty soil crossing W 80° 27.76 old woods road on contour

6/8/12

NEW ___ 17 Thick brn weath qtz SS ledge in trail (Nose 16 SE at el 2180
N 37° 15 .073 W 80° 27.843
upper price w/ lite sand soil

NEW ___ 18 trail swings W around nose on coarse lithic qtz arenite ledge no big pebbles of coarse sand at el 2250-70
N 37° 15 .137 W 80° 27.94
ledge strikes N 60E 18° SE

NEW ___ 19 trail swings W across coarse cgl ledge w qtz pebbles up to 1" Sandy soil at el 2350
N 37° 15.293 W 80 28.103

NEW ___ 20 trail swings NE to bypass 12-20' ledge of white-lite gry med-thk bedded cgl qtz arenite el 2400
N 37° 15.355 W 80 28 1
a few beds thick enough for mill stones

NEW ___ 9 redux el 2640 basal cloyd cgl ledge
N 37° 15.457 W 80° 28.275'
11 28 am June 08

6/9/12 BBG 114
Toms Ck 6' al on banks N 37 14.557 W 80 27 8
bridge on heritage Park Trail
BBG 115 N80E 50SE brecciated
lt gry xline dol w/ tan argillite & slaty layers, extensive white veins (calcite) cut old fabric N30E 80NW N 37° 14.502 W 80° 27.870
BBG 116 N70E 40SE dk gray thin bedded LS N 37
BBG 117 N30E 50SE thin bedded lt gray platy dol. N37° 14.470 W 80° 27.58
BBG 118 N 26 W 48 NE platy dol. ldg in creek at N37 14.560 W 80 27 603
BBG 212 in Park next to tennis court, no rome on traverse N37 14 287 W 80 27078
BBG 121 Red, brn and green shale or slate N 80 W 64 SW (mmc
BBG 122 gray sh/slt coal bloom on road cf 27506 N 37 14.505 W 80 20.600

BBG 127 concrete cistern (coal Fl or well head, water 2-3' below
cl 2200b N37° 14.587 W80 28.615
BBG 123 el 2220b
on ss ledge in road
N 37° 14.612 W 80°28.658
N82W 20SW

BBG 124 el 2250 another
Mica lithic ss crosses
road at {N 37 14 645}
N74 W 18SW {W 80 28.710}

BBG 125 cross yellow blaze
to ll road w/ ss Flt and
lite sandy soil in saddle
barometer corrected +z 239c

BBG 126 el 2420, white
to lte gry qtz pebble
cgl pebbles ~, 150 mm in float
N37° 14.805 W 80° 29.053'

BBG 1115 el 2580b head
of drainage to west, end
qtz ss Flt begin brn ss + sh
chips in soil = Dch (Dfs)

BBG 127 N82 W 26 SW
cg pebbly ss ledge crosses
trail at el 2480 - 2500
N37° 14.870 W80 29 065
cg blks to NE

BBG 128 along yellow blaze line 4 wheeler trail crosses top of cloyd (Flt, el 2440
N37° 14.813 W80° 29.053'

6/18/12 BBG-116 slate & waste coal dump on powerline at el 2150 N 37 14.277 W 80 29 09
BBG-117 N 80W 38 SW 2 coal blooms 10' apart thickness upper bloom 2' lower bloom mostly black sh
N 37 14.312 W 80 29.698 el 2460
BBG-118 el 2420 E-W 16'S top pebble ledge OC in road bed N 37°14.697 W 80°29.50
just above break in slope on old road white to grey f-my qtz ss w/tn larg (1") lithic fragments weathered out in moldic form, carbonate or clay clasts?
BBG-119 N 52W 14 SW med bedded gray to tan weathered lithic ss w/ hummocky, rippled bedding at el 246
N 37° 14.732 W 80 29 585

BBG 110 abundant b/ks and b/drs of coarse rusty to white q+z pebble Cgl at el 2550'
N 37 14.800 W 80° 29.562
Cloud turned around in bn ss at 2575' saddle at
N 37 14.857 W 80 29.563

BBG 111 redwy el 2540
N 37 14 807 W 29 530
BBG 1111 brown rusty q+z ss ledge, few p b/s crossed road el 2420
N 37 14 703 W 80 29 680
Cgl lenses, calc or clay clasts
N 74 W 24 SW
BBG 1112 N 20 E 34 SE
road weathered fine ss + s/t mica wtr el 2200'
road turns left
N 37 14 335 W 80 29 670
BBG 1113 caved adit el 2130'
N 37 14.270 W 80 29.685

10/24/2012 reviewed Statem
2012 Eastern Seismological
Society of America
(www.geol.vt.edu/outreach/
VTSO/essa2012)
BBG-954 N80E 80SE
blue gray ls ledgy cg bur
Fragmental text

BBG-9810 newcut in
rot across From Wades
white Sil. oolite bed
~2' thick in sandy
dol residual soil N36W
16 SW Sp/ N37° 07.868'
Sample W80° 23.867