NOV 2 2009 Setup for elliston Fieldreview

ESN

37 21 72

80 0027

744 Rocky Road

To

STOP 1 at Bottom Ck WP 098

N37° 07.733 W80° 10.725

el 2419 Coarse Charnokit

Flugen Mylonite gneiss

(Geochem Myl Foliat

Just Past 100.75 Bottom Creek Rd

Walk back to other drive

to View beginning of Falls

STOP (3) WP 099 N 37 08 730

el 2550 W 80 08 774

V Coarse Porphyritic

Bottom Creek Charnokitic

Gn.

Stop (2) transect Lower Unicoi

on Laurell Creek Road

to Hampton Fm at WP 101

N 37° 08 824 W 80 10.302

el 2682

STOP 4 Pilot Gneiss @ WP 100
N 37 10 388 W 80 08 .003
el 2696
Med gr granoblastic
hbd/pyroxene epidote kspa
granofels

STOP 5 Base Unicoi
WP 102 N 37 11 389
el 2912 W 80 08 475 KSN 654

STOP 6 Metavolanics in Unicoi
WP 103 N 37 11 .655 W 80° 08' 654
E 3153

STOP 7 upper Unicoi Jelly
Bean cgl at WP 104 N 37° 11' .181 W 80° 09 .784
el 3833

Redo WP 105 N 37 11 .215 W 80 09 781
3806

Turn around at laurel Creek
Road at WP 106 37 10 564 W 80 11 098
el 3284 Road to SW Blocked
by equipment

11/2/09 Pyroclastic

Stop 8 - WP 107

N 37° 13.110 W 80° 08.002

el 1798 el 1865 -70 b

Photos of cashed spls

Note bench

Stop 9 Rome below BRF

el 1390 B WP 108

N 37 13 711 W 80 07 993

el 1435

Stop T~~0~~ Shady along

stop 11 Roanoke ~~Valley~~ Flt

Stop T~~2~~ Salem Flt on NEW

Elbrook / Martinsburg

WP 109 Creedsville Trenton

N 37 14.168 W 80 13.732

Salm Flt in Salem Quarry

WP 110 N 37 15 068 1353

GNL W 80 11 342

Stop T 2

Stop T 3

Stop T 4 Pulaski/Salem d 1208
Thrust Sheet Broken Formation
Zone along SR 603 WP 115
N 37° 14 182 W 80 13 009
Stop T5

Stop T6
Sil-Dev Qtzite sliver
SLM Flt Zone at MP 130 WP
N 37 14.683
W80 12.609

Stop T7 Borrow Pit in
Milboro Sh Wimmers'
David Wimmer 540 392 5787

Stop T8 Borrow Pit in
Brallier at D. W. Howards
WP 113 N 37 14 571 Fault
el 1603 W 80 14 127 SHSN Sh

Stop T9 Ledge of Farie Knobs
Reese Mtn Road
WP 114 N 37 15 096 W 80 14 740
el 2214 Glenvar Quad
Fine SS / arg beds

N3

Super 8 East	540 382 7427
Holiday Inn Express	540 381 5302
Hampton Inn	540 381 5874
Quality Inn	540 382 2055
Fairfield Inn	540 381 9596
Econolodge	540 382 6161

NOTES 3/30/09 WP 287

ESN 7514 Sink hole 15' round 10' deep
2137 along road at N 37 08934
2130b Red and Yell. W 80 13.404
argillite sap in road above

ESN 7515 Photos of borrow pit ytzto (a ta
clast blanket deposit = fer
outline of Jasper lens based
on float along road

ESN 7020 E-W 20N grn argillite sap
WP 288 in road cut, silicified
N 37 09.143 breccia / orange jasper blds
W 80.13.284 in soil above el 2101 (2120)

el 2280 ESN 7516 Rd, ylw, gray sh + arg w/
(2240b) WP 289 tan burrow structures,
N37°09.146' slaty cleav. Bedding N35E 33 NW
W80°13.368

ESN 7517 N35E 70NW Rd and grn + ylw
WP 290 weathered argillite w cleavage
2223 N37°09 245' W 80° 13.373'
(2360b)

ESN 7329 el 2273 above PL Laminated
argillite N55E 55 SE
N37 09 402 W 80 B .313

ESN 7330 WP292 N37°09.453 W 80° 13.276'
el 1990 burrowed dolomitic ls massive
2050b N35E 38 SE bedding

March 31 clear, warm
ESN 749 on powerline at 1550' Argillite
photos layer in dolomit W inclined
of Power axial plane folds plunging
Line 310 at 10 SW dol is silicified
w/ vuggy zones dol above N30
50 SE

Day Runner

NOTES

ESN 773 el 2000 b yellow weathered
argillite in front yard of new house
WP 293 N 30 E 84 NW BPC 1931 el
N 37 07 879 W 80 14.164

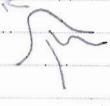
ESN 7810 OC of red grn y/w argillite
WP295 W slaty cleavage and BPC
el 2100 beds N 35E 72N 2140 B
N37° 08.184 W 80° 14.015

ESN 7811 N 45E 75 NW, blk and white
mottled dol OC to SE on knob
knob has ~ dimple as ant
WP 296 2117 N 37° 08.222 W 80 14.029

ESN 7812 dol thn grn + rd arg on knob
el 2143 N 35E 40 NW cleavage (BPC)
21006 in argillite at WP 297
N 37° 08.123 W 80° 14.135

ESN 774 ledges of red arg.
WP 298 N 20 W 80 SW 2110 b (2103)
N 37° 08.046 W 80° 14.316'

ESN 775 ledge w fold hinge
WP-99 ap N 45E 55 SE hinge
2079 N 35-40 E 15
Rabbit photos N 37 08.142
Ear W 80° 14.348'



ESN 776 photo of VT chair in
WP300 dearstand OC above, rd arg
1994 cleav N 10 E 75 NE barometer
(2050) N 37° 08.219 W 80° 14.418

ESN 777 coarse silicified breccia
WP301 float, blk chert in saddle
N37 08 325 W 80 14.550' el 1849 (1840b)
Orange clay 560

Item # 013-200

NOTES

3/31/09 Clouding up at 2:15 pm

ESN74 WP302 2028 (2040b	10 N 35E 58 NW BPC? green slaty argillite ledge on ridge crest at N37°08.440 W80°14.638'
ESN74 303 WP	11 N45E 80NW y/w, grn and rd arg. w/brn el 2030 (2020 N 37°08.569 W 80°14.612'
ESN74 WP304	12 cherty dol, weath orange w/dk chrt N 35E 65 SE bedding N37° 08 646 W80°14.625'
ESN74 WP305 1830	13 dol, massive gray, blocky jointed beds N45E 24 SE N 37° 08 758 W 80° 14.680'
ESN74 WP306 N37°08.741 W80°14.567 el1953	14 Transition to lam argillite to SW N30E 60SE beds in creek, drab gray ary weathered orange thin beds on creek bottom el 1540b
ESN7415 WP307	N 40 E 20 SE bedded ls in creek arg above w slaty clear N 34° 31.448 W 81 24 698
ESN778 WP308 1690	Ledge of argillite N40E 75 NW on spur at el 1700b dol ledge to SE N37 08.320 W80 14 353
ESN779 WP309 El 1802 (1840b)	Road switches back at 1840 red arg clear 330 70NE N 37° 08.221' W 80° 14.191
ESN 7416	Digital photo air strike on argillite ledges on knob along power line

Day Runner

NOTES 4/10/09 Sunny warm

BMT 667C dk green coarse grained charnokitic granitoid

WP 310 N37° 11.398 W 80 00 243

el 1290

ESN 667 B coarse porp qtz garf pyx gn

BMT 667D lt gy to white leucogranitoid med-cg inter layered with green charnokitic granite Layering N30W 30 NE

ESN 1324 N 75 E 65 SE Brallier? Of oncuron > SW at 206W (N70E)

ESN 1325 Karst on nw pink sh chips = Omb/b

N 60E 55 SE thin calcarenite in Omb, Bays like pink shale on top white qtzite block on td. (Q)

ESN 1326 N 65 E 65 SE thin bedded tan mica rich fg ss layers along road bank Omb or Pb? olive shale =

ESN 1327 bench on steep slope w/ cave appears to be thast slice N 6 E E 15 SE

ESN 1328 Med bed ss sh N65E 74 SE

ESN 1329 290 15 NE

Item # 013-200

NOTES 4/13/09 Coold Showers

ESN 1419A Db — gry - dkgry brn weath sh + sltsn 28 S 45 NE
Photo 1419A WP 311
N 37° 14' 079' W 80 14 . 414

ESN 1411A photo of cross fault in Brallier next to SBL I 81 on RNK River
N20W 65SW
Cutts all Brallier!

ESN 1217 massive gray dol beds in rail cut N50E 23 SE

ESN 1214 revisited sh/sltsn ocs along river dk gray to olive argillite highly silicclastic scratches hammer head must be Db

ESN 1325 highly frac gray dol N 80 E 30 SE ledge trend.
Cross Ffactures
N 40 E 58 SE
extension veins / model shears
N10W 85 NE slaty arg above N 85 E 30 SE
then dk gry shale

ESN 1326 massive orange clay stained dol ledge w/breccia
N 40 E 23 dissolution layers
pod layers N 50 E 15 SE
cross frac NS 75 E
NS 73 SE, Slickensided joints

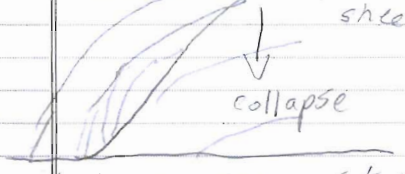
Day Runner

NOTES 7/6 gash veins on NS grooved fractures

ESN1326 WP 312 N 37 14.190
el 1271 W80 13 022

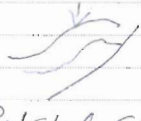
ESN1620 Shaty bed in [illegible] breccia
WP 313 dol w/ epithrust N50E 23SE
N27 14.159 W 80 12.995

ESN1621 Photos of collapse zone in imbricate thrust fault sheet on 603

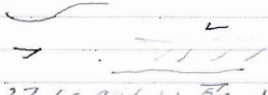


beds on ramp strike N 55E 60SE
ramp strikes N35E 30SE
some green phyllite on ramps

ESN1622 Photo of green shly dol beds w/ fract gray dol above
WP214 el 1252 N 37 14 046 W 80 12.880
Folds in dol on shly detachment beds Ramp N55E 55SE
hinge N 45E 3 NE



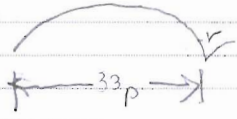
ESN1623 Polished surface N10W 82 NE photos one set of groves
175 30 SE
el 1030 ← Top view of surface



WP 315 N 37 16.991 W 80 12.839

NOTES

ESN 1424 Photo of open anticline
N70E 04 NE delin by shly
beds in ecl



4/18/09 BMT 6316
OC of mylonitic cg
gran gneiss at

WP316 BMT 6317
1352 N 37° 11 980 W 80° 00 466'
Rock pile = cg granulite/charn
just beyond drain

BMT 6318 Fg granulite ledge
in stream, diabase
or basalt pebbles in
bnk and in concrete
mix for old bridge
N 30E 60NW

BMT 6319 coarse augen mylonite
gneiss ledge at WP 317
N37 12. 022 W 80 00 497

BMT 6320 mafic sap along
pipeline orange ylw
clay w/seep

WP 319 BMT 6321 Parkway
e1 1281 N37 11 793 W 80 00 479
ledge of cg fgf gran on SBL
diabase ? Float at drain
ON NBL

Day Runner

NOTES

I BMT 586 Redux - coarse
WP320 augen mylonite at WP
1726 Metz Run overlook
N37.0528 W80 06.698'
el listed 1875
ESN 472 Redux
WP321 N 37° 10.554 W 80° 06.659
2555 2560b

ESN 4T

11 12 / 09 DATE Monday DAY

GLV897 **DIARY AND WORK RECORD**

Beds at beginning gy dol mot / high veined
N 70E 35 NW WP 393 N 37 15 045 W 80° 10 468
Fold at WP 692 EW plng 10E bed N 70E 50 NW

ESN 232 N 75E 40 NW thin added
[illegible] dol gray dol above
WP 393 N 37 14. 926 W 80° 10 518

ESN 233

NW

ESN 233 N 80E 65 SE
highly fract dol dk gry
w/white veining
WP 394 N 37° 14. 819 W 80° 10 577

ESN 234 N 80E 44 SE ledges
of dk gry fract dolomite in
stream bed WP 395 N 37.14.819 W 80° 10.494
Joints N 80E 60 NW N 70E 73 SW
ESN 236 shly/massive dol above
WP 396 bridge N
N 37 14 741 W 80 10 517
N 60 W 55 NE

ESN 236 shly dol w/ [illegible] fields
slat cleavage E W 70 SE
Bedding N 80E 47 SE [illegible] 75 SW
WP 397 N 37 14 691 W 80° 10 605

ESN 237 WP 398 N 37 [illegible]
massive gray [illegible]
dolomite N 80 E 30 SE

ESN 238 WP 399 shly dol
N 70 W 50 SW N 37 [illegible]
Coarse [illegible]

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE

DAY 1/12/04 DATE

APPOINTMENTS & SCHEDULED EVENTS

8 ESN 251 WP 401 N 37°14.088
W 80°11.252
0800 Shly dol soil on ridge
9 long ledge N70W 80 SW
0900 between houses
10
1000 ESN 252
11 Red brn argillite w/ slaty
1100 cleavage N70E 50 SE
12 WP 402 N 37 14.148 W 80 10.993
1200
1 ESN 221 red argillite at WP 403
1300 N 37 14 253 W 80 11 025
2 N75E 74 SE
1400
3 ESN 222 on WBL [illegible]
1500 orange yellow [illegible] saprolite
4 [illegible]
1600 [illegible]
5 N80E 55 [illegible]
1700
6 ESN 253 Red brn argillite chips
1800 in embankment at entrance
7 to Campbell Hills Subdivision
1900 WP 405 N 37 14 165 W 80 11.380
8 Prickly Pear Cactus on S Slope
2000
ESN 223 lt gray fract dol

TO BE DONE TODAY (ACTION LIST)

ledges N75W 32 SW
WP 406 N37°14.535 W 80°11.507'

ESN 224 Shly dol / yellow weath shale
N70E 80 SE cleavage, mottled
is ledge above WP 407
N 37° 14.574 W 80° 11.685
el 1436 14206 at water
meter

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1-12/09 DATE End miles 36 DAY

DIARY AND WORK RECORD

ESN 211
EW 48 SF laminated gray
dolomicrite w/ yell orang gap
Fireplug at WP408 el 1286
N 37 14.506 W 80 11.791
WP 408 next lot el 1279
N 37 14.507 W 80 11.779
Med - thin bedded fine
gray dolomite w/ calcite
veins N60E 64 NW

ESN 225 el 1600 el 1669 (1575B)
WP 410 N 37 14 735 W 80 10.478
N80E 38 NW thin bedded gray
dolomite and yellow weath
shalgely dolomite chips in
red brn soil

ESN 226 el 1667b (1660 gps)
dol blocks shly chips in red soils
County of Roanoke Well house
on side road WP 411
N 37 14.808 W 80 11.697

ESN 227 County Well house at
WP 412 N 37 14 422 W 80 11.378
elevation 1330b

ESN 254 old pond or lagoon
below Campbell hills,
now Sewer pump station
WP 1169 N 37 14 092
W 80 11 525 Rome shale Chips
ESN 241 blds of Ech WP 415 N 37 14.155 W 80 11.865
ESN 242 [illegible]
[illegible] w/ dol blocks
on wall WP 414 N 37 [illegible]
W 80 11 [illegible]
ESN 243 thin bedded dol ledges above
road

1/13/09 Bible Workshop

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 228 Orang y/w weath sh
8 and thin bedded gray dolomite
0800 ledges N 80E 45 SE WP 416
9 N 37° 14.326 W 80° 11 060
0900 [illegible]
10 ESN 229 at end of road
1000 285° 70 SW laminated dk gry dol
11 WP 417 N 37° 14.486 W 80° 11.113
1100 many shears, white calcite
12 el 1237
1200
1 ESN 2210 WP 418 el 1291 N 37° 14 384
1300 W 80° 10.960'. EW 45 S
2 gray fine grained med gray dolomite
1400 ledges below, yellow weathered
3 shaly beds above to SW end
1500 of cut
4
1600 ESN 239 WP 419 el 1278 N 37 14 682
5 W 80 10.245 EWb / ER
1700 laminated tan-greenish gray platy
6 dolomite, photo of strange
1800 breccia ball 280 42 SW
7
1900
8 Photo of bass akwards detachment
2000 folds

TO BE DONE TODAY (ACTION LIST)

ESN 2310 > EWb
Massive lt gry weathered
sandy dolomite overlain
by thin to thick bedded
dk dol. WP 420 N 37 14.736
W 80° 10.160 N70E 40SE photo
boulder terrace in east end of cut
(photo)
ESN 2311. WP 421 N 37° 14.793'
el 1345 (1263 t W 80° 10.205
up to 3' blds in [illegible]

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1-13-09 DATE Bible Workshop

DIARY AND WORK RECORD

Kathy Mother in law.
Joany Brother.

Samuel prophet of the God –

do this about answering the Lord?

Peterson: Language in revelation personal address is how God speaks.

Brueggemann: The form of the narrative is a dream trophy "newness". There is a possibility for newness.

Calling – Kathy funeral

1/14/

colored pencils
plastic pouch
pencil sharpener

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

8 0800	
9 0900	
10 1000	
11 1100	
12 1200	
1 1300	
2 1400	
3 1500	
4 1600	
5 1700	
6 1800	
7 1900	
8 2000	

TO BE DONE TODAY (ACTION LIST)

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1/13/09 DATE DAY

ESN 2313 **DIARY AND WORK RECORD**

tree roots show yellow and orange brown weathered shly dol or argillite at ~2' below surface which is covered w/ alluvial cobbles and blders rotated back seems near horizontal Foliation, WP 422 c1 1278 N 37 14.851 W80° 10.228'

ESN 244 brown and black shale or slaty argillite ledges in Riverbed 280 55 SW WP 423 N 37° 14.042' W80° 11.927'

ESN 245 ledges of dk bluish gray slaty argillite with mica glint on cleavage surface weathered brn and greenish gray 280 57 SW makes prominant riffle at WP 424 N37°14.006 W80° 11.835 photo

ESN 246 massive bedded to med bedded med gray rexline dolomite N85E 75 SE in river @ WP 424 N 37 14.189 W 80 12.419

ESN 247 massive gray dol ledge in river at WP 425 N37 14 188 W80 12.355 N70E 45SE

ESN 248 massive to thk bedded gray dol ledge in river at WP 426 N 37° 14.192 W 80° 12.[illegible]

ESN 249 N70E 35 SE yellow orange argillite sapro[illegible] w/slaty cleavage WP 427 N 37° 13.980 W 80° 12.395 c1 1256

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE

1/14

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

8 ESN 2410
0800 higly fract mottled dk gry & blk
9 Cherty dol N60E 63SE
0900 orange yellow slaty argillite
10 above is continuous w/ brick pit
1000 WP 427 37°13.706 W 80 12.518
11 bedding plane Cleavage in sap
1100 290 17 SW
12 E-W 30 orange y/w sh'y dol
1200 at end of cut
1
1300 ESN 161 WP 428 N 37 13.615 W 80 12.464
2 Photo of detachment folds
1400 above crenulated
3 bed N70E 6" thk dol
1500 45 SE orange brown argil
4 Cren N50E 14 NE dolomites
1600 30' cliff
5
1700 ESN162 WP 429 N 37°13.729'
6 N 80°12.527'
1800 Breccia rd + grn arg yellow brn dol
7 mass dol
1900
8 Succession of mass to the bedded gy
2000 dol o.l. by folded rd + gr argillite
o.l. by yel. orang. weath punky

TO BE DONE TODAY (ACTION LIST)

dol Photos of Folds
dol beds at base N60E 25SE
tight assymetric hinges N50E 15NE
probably MM thrust contact. Photo
of breccia ~6" thick above
elbrook dolomite bck
ESN 163 interval of lt gry-grn ch'
ser. phyllite (Elbrook Poty dol) in
river bottom photo of breccia
cutting weath/shaly dol WP 430
N 37 13.790 W 80 12.57 N 80E

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1/14/09 DATE DAY

DIARY AND WORK RECORD

boudinage N 75E 8 NE (photo)
Photo of crenulation Fold in grn
phyllitic Elbrook N80E 6° NE hinge
AP E-W 68 SE

ESN 164 Shly (phy) dol in stream
bed across from treatment plant
N75E 60SE WP

ESN 165 current scoured bed
rock ledges along W bank ~
1-2' water behind truck park
N 70E 65 SE air strike
WP 431 N 37° 13.932 W 80

ESN 131 massive chrty ls or dol
N80E 20 SE in cut on RR
at WP 432 GPS Batterys dead
N37 14 368 W 80 13 189

ESN 132 Black argillite and
siltsn old riverbank and
in channel below VDOT
dam N 70E 62 SE cleavage
offset by several faults N 30E 40SE
WP 433 N 37° 14 .436 W 80° 13.060

ESN 133 Massive bedded dk gry dol
in 50' cliff on old river
channel below VDOT Dam
N45E 50 SE bed WP 434
N 37 14 .370 W 80° 12 847
Shly dol in cut above shows
mega boudinage 2 photos
boudins trending N75E plunging
11 SW cleavage N 65E 65 SE
extended beds N80E 22SE
ESN 134 body N65E 38 SE
OCS of MM breccia at top of cliff
by bill board WP 435. N37 14 .384 el 1263
W 80 12 791

1/14/09 DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

8 0800 ESN135 ledges of shaly dol and breccia w/carbonate as well as chert clasts N 60E 20SE bed

9 0900 ESN 136 N 37° 14 493 W 80° 12.715'

10 1000 N 30E 60SE dk shly ls breccia near head of hollow

11 1100 ESN 137 N 60E 20 NW dk black

12 1200 limestone thick bedded (Ort ?) wp 437 N 37 14 517

1 1300 el 1328 W 80 12.769

2 1400 ESN 138 Massive breccia / dol outcrop on nose below bk ls

3 1500 and sh on interstate RW Flow Foliation in breccia N 70E 26 SE

4 1600 1/15/09 Elliston Quad

5 1700 ESN 1510 private crossing N60E 50 SE sh, gry and orange wea

6 1800 N 85E 60SE Mass dol, gray N 37 14 165 W 80 13 781 el 1255

7 1900 ESN 121 lower td is ~ 75' wide

8 2000 30' rock face then upper wp 439 N 37 14 297 W 80 13.715 dk gry to black sandstone and

TO BE DONE TODAY (ACTION LIST)

siltstone medium - thick bedded N 70E 47 SE blocky jointed N 20W vert N15E 60SE

ESN122 20' cliff med thin bedded black to dk gr argillite an to ls? strong cleavage wp 440 N 37 14 276 W 80 13 650 floodplain ends at this cliff on W side, extends [illegible] interstate to NE [illegible] N 70E 55SE cleav EW35S

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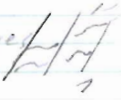
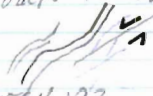
1/15/09 DATE DAY

DIARY AND WORK RECORD

spaced N70E 70SE
5 shaped cleavage planes
weathered by
back thrust





ESN 123 [illegible] in cat channel below intestate
280 16 SW [illegible]
[illegible]
[illegible]
WP441 N 37°14.2[illegible] W 80 13.82[illegible]

ESN152 low ledges of dk gray
argillite w/ strong slaty cleavage
and pencil cleavage thin ferruginous
fine grained ss layers ~1°
cleavage N 30E 42 SE WP
spring above house in ruins next to [illegible]
at WP 442 el 1234 N37°14.094 W80 13.907

dianne@bsmill.com
ESN 166 el 1268 WP 443 N 37 13.724
oc of thin bedded W 80 12.774
argillite weath lite orange bm

ESN167 el 1309 WP 444 N 37 13 746
Yellow weath arg. W 80 12 878
dolomite ledge in stream bed
gully N75E 25 SE thin bedded

ESN 168 WP 445 N 37° 13.753
W 80° 13.143 el 1426 1400b
lim dol ledge 1.5 N70E 78SE
bedding: Heavy orange clay soil resid

ESN 169 WP 446 N37° 13.687 W 80° 12.959
orange yellow clay sh chips in
brown residual soil el 1458
1460 b

DAY 1/15/09 DATE

ESN 1610 **APPOINTMENTS & SCHEDULED EVENTS**

Med - thick bedded Fg (micritic)
8 gray dolomite ledges in
0800 drainage at el 1450 b
9 possible mudcracks on bed tops
0900 N 60 E 65 SE asy @ wp 447
10 el 1454 N 37° 13.807 W 80° 13.200
1000
11 **ESN 1611 N 75E 55 SW** plunging
1100 anticlial hinge in dol, gry frac
12 thk bded NW Limb N 65 E 26 NW N 58 E 45 SE
1200 SE Limb N 75E 45 SE
1 WP 1544 448 14756
1300 N 37 13 839 breccia layers
2 W 80 13.222 in between upright
1400 ledges
3
1500 ESN 1612 @ pedlar hills trading
4 sta ledge dol gry N 65E 65 SE
1600 WP 449 N 37 13.998 80° 13.156
5 el 1629 el 1680 Noted at least
1700 one coarse chilhowee cobble
6 on flat topped ridge
1800
7 ESN 1613 ledge near dear blind
1900 N 70E 45 SE frac clear
8 WP 450 N 37 14 048 37 13.325
2000 dark gray xline dolomite
N 60E 50 SE second ledge

TO BE DONE TODAY (ACTION LIST)

ESN 16
WP 451 N 37° 13.971 W 80° 12.962'
el 1320 1306 B gray frac dol
bedding w med thin layers w
crisscross white veins
ESN 1625 Spring house w / timber
frame / cut nail const - dry
WP 452 37 13 779 W 80 12.784
built w dk lam dol blocks
name slsh

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Tues 20 Jan '09

DATE DAY

DIARY AND WORK RECORD

ESN 1615
Yellow weathered laminated argillite bedding cleavage 290 23 NE
WP 453 N 37 13.375 W 80° 13.054
Thin bedded platy dolomite on bnk by gate.

ESN 1616 dol, dk gy to black med to thk bedded, fractured beds N 75 E 75 NW on slope qtzite bldrs on Flatabove at WP 454 N 37 13 409 W 80 13.098 el 1390

ESN 1617 qtzite boulders above orange clay soil w shly chips along ridgeline to WP 455 N37 13.559 W80 13.250 el 1439

ESN 1618 ledges of thk bedded to massive gray dolomite N 70 E 55 SE in drainage at WP 456
some breccia Float as well
N37 13.633 80 13 239 el 1623

ESN 151 N65 40 SE WP 457
N 37° 13.651 W 80° 13.379 el 1450

ESN 152 E-W 40 S dk gray dolomite ledge, F-g dolo micrite argillaceous Fine popcorn cht
WP 458 N 37 13.909 W 80° 13.430' el 934

ESN 153 Karst Features - el 1375
slope SINK at WP 459
N 37° 13.304 W 80° 13.496'
3 sinks in row, middle one 20' deep 100' dia

DAY 1/20/09 ct DATE

APPOINTMENTS & SCHEDULED EVENTS

8 ESN 154 low ledge of gray dol
0800 [illegible] bedding N 70 E 40 SE
WP 460 N 37 13.851 W 80° 13.748
9 el 1668 sink hole down dip
0900
10 ESN 155 Limonite prospect trench tspl
1000 dk bk foliate texture el 1609
11 WP 461 N 37 13 840 W 80° 13.678
1100
12 ESN 1619 yellow weath
1200 argillite chips on el 1415
1 ledge top at WP 462
1300 N 37 13.447 W 80 13 131
2 1/21/08
1400 ESN 141
3 WP 463 el 1284
1500 N 37° 13.605' W 80° 14.731'
4 Elbrook - med lt gy tan
1600 weathered dol med - thin
5 bedded, shly soil
1700 EW 155
6
1800 ESN 142 N 37° 13 596 W 80 14 720
7 WP 464 Hydrothermal brecciated
1900 W el 1402 dolomite w/ mineralized
8 mtx Flow Foliation
2000 N 60 W 30 SW
ESN 143 ~ el 1400 topo near

TO BE DONE TODAY (ACTION LIST)

horizontal dol ledge over
100' of green and red shale
along old track on slope above
ESN 144 N 70 E 45 SE foliated
tan rusty dol intended in shaly
argillite seq @ WP 465
el 1421 N 37 13 447
W 80 14 738
photo of shly argillite blks

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1/21/09 DATE DAY

DIARY AND WORK RECORD

ESN145 ledge of thin slaty dol
in maroon and grn slaty arg
sequence - N 75E 15 SE beds
cross joints ~ spaced clear
N 20E 60 NW WP 466 N 37° 13.454 W 80° 14.73
el 1525 WP 466 743

ESN 146 WP467 Grn and Rd brn slaty
argillite on knob N55E 48SE
el 1707 N 37° 13.422 W 80° 14.650
N55E 48SE bedding plane clear

ESN 147 WP468 Massive or thk beds
of frac + cleaved gray
dol n 30E 35SE clear? on ledge
a lot of hydrothermal chert
on flat N40°E 12 beding
N 37° 13.413 W 80 14 574 el 1819
Green and black slate above

ESN148 WP 469 on state Land
top at WP el 1912 N60E 75SE clear
N 37° 13.408' W 80° 14.486'

ESN149 WP470 on state land entry
N 37° 13.436 W 80° 14.392 el 1979
130° topo. shale float dk gn
crwb karst terrain below
~ contact w/ cel N45E 50SE

ESN 1410 N45E 50SE clear in
dk gy slaty dol on rimer N 30E 80SE
of sink photo WP471
N 37 13 450 W 80 14 345 Karst

ESN1411 spur ridge supported
by vuggy dolomitic LS light
blue gray w chert and
shaly interbeds N 20E 45SE

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE

1/21/09 DAY Cold (20s) DATE 1/21/09

ESN 1411 APPOINTMENTS & SCHEDULED EVENTS

8 0800 breccia ctd photos of ledge
Big Spring Mills and RR business
WP 472 N 37 13 [illegible] W 8 14.055'
9 0900 Thick bedded butcher blk dol
[illegible] N [illegible] E 35 SE
10 1000 ESN156
11 1100 Thin bedded (fel) dol w/ [illegible]
Fold hinge SE limb N65E 50SE
12 1200 NW limb N 60 E 80 NW
1 1300 hinge asymmetry
rotated back to SE
2 1400 measured plunge E-W at 6° E
3 1500 ESG157 Massive dol forms 2nd
pinicle N70E 55SE slaty
4 1600 argillite or argillaces dol
intervals above and below
5 1700 Biogy lages on "shale barrens"
below pinicles wp 473
6 1800 N 37° 13.466' W 80° 13.639 el 1711
7 1900 ESN158 WP 474 N 37 13 472 W 80° 13.947
[illegible] E 28SE cherty dol el 1661
8 2000 breccia OCs along trail
photos in

TO BE DONE TODAY (ACTION LIST)

ESN159 on trail thu- med beded
gray fract dol ledge N40W 36SW
at WP 175 el 1735 N 37° 13.532'
switchback on trail W 80° 14.075'
at sink hole 120' dia beneath ①

ESN 1412 cave entrance filled
with debris below moss dol
ledge N 25E 62SE WP 476 el 1860
N 37° 13.595' W 80° 14.162

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1/21/09 DATE DAY

DIARY AND WORK RECORD

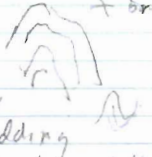
ESN 1413 Ledge of pink rexline dolomite N20E 30SE massive marble like Ledges WP477 N 37°13.652' W 80° 14.232 el 1640 6

ESN 1414 thin bedded platy dol ledge next to drainage N65E45SE

ESN 1415 Fract massive gray dol N20E vertical at WP 478 N 37 13 692 W 80 14.487 el 1353 N 10 E 25 NW 150' to SW Photo of Pulaski slide area 1/22/09 Elliston Quad at Interchange on I81 Parking area ESN 1416 WP 479 El 1352 N 37°13.692' W 80° 14.486' Parking area is on recontoured land or Fill from I 81 cuts Photos of Hanging wall on Pulaski Thrust to SE.

ESN181 Lam-ribbon banded dol over massive dol N55E 48 Wp 480 EL 1227 N 37 13.259 W 80 13.661 Town wall on corner by river

ESN182 Laminated - mass dol with hydrothermal breccia masses Anticline beneath bridge plunges N50E 20 NE Photo of Fold and block of breccia



WP481 N37 13 248 ESN183 W 80 13 577 N55E 48SE bedding anticline/syncline hinge N60E 10° NE

1/22/08

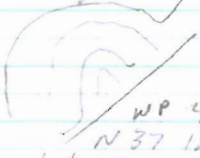
DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN184 WP 482 el 1396
N 37 13 181 W 80 13 519
yellow weathered slaty argillite
in root bat of 24" pine
tree overturned on roadside
ENG - Er

ESN 185 thin terrace deposit above
N57E 50 SE cleavage in yellow
weathered argillite on bluff above
Roanoke River at WP 483
N 37° 13.209 W 80° 13.489

ESN 186 Folds in argillaceous
lot and slaty argillite
plunging S 70 W at 14



Folds are
early detachment
whose axial planes
dip N50E 65NW
WP 484
N 37 13.212 W 80° 13.345
dip between 6 and bridge is
shallower in steep cliff
dolomite beds N55E 30SE

ESN171 air strike from across
river N 20E 50SE dolomite

TO BE DONE TODAY (ACTION LIST)

ledges descending hillside possible
hinge above

ESN

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1/22/09 Clear Thur
DATE Cold DAY

ESN 187 DIARY AND WORK RECORD WP 485

N 30E 48 SE ledge on bluff along
river N 37 13.121 W 80 14.074
Thick bedded + platy dol
w. dextral folds on
Sims Property. Mill Run by Long
family

ESN 411 on ridge in Echo Hills
sink hole in gently dipping
dolomite at WP 486 N 37 12.355
W 80 14.827 el 1858 1840b
N 70 N 9 SW ledge in driveway at

ESN 412 just below gas line
along dirt extension of Echo Hills
light gray - tan weak laminate
overlying massive algal dol
N 30E 30 SE WP 487 El 1912
N 37° 12.468 W 80° 14.887 many
shale chps on pipeline

ESN 413 1600b el 1736 ledge N 80 W 20 SW
WP 488 N 37° 12.503 W 80° 14.657
dk gray fractured dol. in red
shaly soil

ESN 416 N 30 E 65 SE ledge
Gray fractured dol. N 20 E 30 SE
ledge at WP 490 el 1660b el 1540 N 37 12.509 W 80 14.649
ESN 417 N 20E 29 SE gray frac
dol ledge on dip slope
WP 489 el 1710 (1500 b)
N 37° 12.450' W 80° 14.453'

ESN 1-72 air strike on quarry face:
or slide scar up hill from 2
double wides in pasture photo
of Fan next to high school

Ills
Birth

DAY Friday 23 Jan 2009 DATE

APPOINTMENTS & SCHEDULED EVENTS

8 ESN 173 in hollow above
0800 Log House Plant Stuck 2.5 hrs
9 in hole - built Corderoy
0900 road by jacking all 4 wh
10 wp 491 el 1439 N 37° 12.940
1000 red brown soil W 80 14.775
11 steep topo dol ledges 1560 b
1100 Spring at bifurcation 1580 b
12
1200 ESN 174 wp 492 el 1631
1 N 37 12.951 W 80° 14.884
1300 red and green argillite and
2 thin dolomitic sq N S 52W
1400
3 ESN 175 1750 Knob el 1703 GPS
1500 red and grn slaty arg
4 chips dol ledge holds up
1600 ridge N 20E 30SE wp 493
5 N 37 12.998 W 80° 14.912
1700 bearing N 15E up 1-2° to new house
6
1800 IRO 391 el 1817 wp 494 Rome bedding
7 argillite w slaty cleavage
1900 N45W 35 NE N 37° 12.921'
8 Pencil Lineation W 80° 15.016
2000 N 50E 40NE

TO BE DONE TODAY (ACTION LIST)

ESN 176 1830 Knob dol w/ small
sink in saddle red & grn arg
N 35 E 25 SE WP 495
el 1895 N 37° 13.093' W 80° 14.818'

ESN 177 100' dia 20' deep
sinkhole with cave beneath
dusk. dol ledge Mass - lam
N 35 E 20 SE wp 495
N 37° 13.059 W 80° 14.706
el 1641 1710 b

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23 Jan 09 DATE DAY

DIARY AND WORK RECORD

ESN 178 Gray thk-med bedded
butcher block weathering
Cherty elbrook dol N 60E 36 SE
at WP 496 N 37° 13.005 el 1892
W 80° 14.569 1720b

ESN 179 Sink hole 5' deep
75' dia at WP497
N 37° 12.980 W 80° 14.347
el 1743 1760b

ESN 1710 yellow orange weath
arg dol N 75E 12° NW
on S.S lope at WP 498 el 1771
N 37° 12.945 W 80° 14.331

ESN 1711 WP 499 N 30E 4E
el 1702 Platy thn bed dol
overlying mass blue gry
algl mottled dol 15.
N 37° 12.911 W 80° 14.547
1600b

ESN 1712 WP 500 N 20E 30SE
chert pebble breccia ~ 20'
thick overlies thk bedded
gray dol in ravine 1550b
WP 001 N 37 12 952 W 80 14.615
el 1621

29 January 2009
ESN 1713 on drive up to
FCC licensed towers
WP002 N 37 13.132 W 80° 14.864 el 1557
dusky red slaty cleaved argillite
bedding 50 11 S1 N75E 75 SE
transposed surface
ESN 1714 N 20E 14 NW
WP 03 N 37 13.181 W 80 14.874 1906 el

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE

lur Clear & old
DAY Jan 29 09 DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 1715 between Towers
8 WP 004 phyllitic sheen Fg
0800 green to gray silicious Slaty
9 argillite N 60E 10 SE
0900 bedding plane Cleavage
10 Spaced cleav 280 63 NE el 2080
1000 WP 004 N 37 13 235 W 80 14 834
11
1100 ESN 1716 Maroon - dusky rd
12 slaty argillite outcrop on
1200 Pedlar Road at WP 006
1 bedding planes N55E 25 SE joints
1300 cleavage N35E 65 SE Slicks 10 W
2 N 20 W 8 SW 1 FS 80 SW 7551
1400 N 37 13 234 W 80° 14.594' 17806
3
1500 ESN 1717 30' dol section
4 dk gy - blk Frac w/ white
1600 carb veins N 50 E 23 SE el 16206
5 WP 007 N 37 13 022 W 80 14 969
1700
6 ESN 1418 Thin bedded
1800 cel dol N 40E 43 SE
7 6' ledge on Pedlar Rd blk
1900 el 6906 WP 008
8 N 37° 13.713 W 80° 14.950'
2000
ESN 212 WP 009 N 37° 14.211' W 80° 12.020
el 1200

TO BE DONE TODAY (ACTION LIST)

old cemetary at end of field along
cross fence line.

ESN 213 WP 010 N 37° 14.266 W 80° 12.099'
Thin - Med bedded gray dol N55E
45NW (uphill) at Power line 1270 el

ESN 214 Cherty gray dol ledge N 75E 60 NW
on knob at el 14906 wp 011
N 37° 14 416 W 80° 12.133'

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DATE DAY

Making Layer **DIARY AND WORK RECORD** For Polygons

copy into new layer
select all

Select hold option drag
into new la

go to pathFinder
PathFinder
devide

ESN215 (Jan 29 '09) N80E 70SE
heavily weathered ledge w/dol
and yellow argillite layers
near property boundary WP012
N 37 14 499 W 80 12 .195 .439
5006

ESN216 Sinkhole w/breccia ledge
on SE side 100' dia 30' deep
filled at bottom ledge N50E 45SE
[illegible] for imbricate fault
WP 013 N 37 14 549 W 80 12 154 el 1529
1940 b

ESN 217 karst - sink 60' sq 10' deep
below house shly soil on road
WP 014 N 37 14 615 W 80 12 .206

ESN218 E-W 60 N thin bedded
dol after blue ls ledge, much
breccia float on Powerline
WP 15 N 37 14 587 W 80 12 345

ESN219 N70E 50 SE Massive ledges
of brecciated cherty dol. Layering
may be tectonic el 1520 b WP 012
N 37 14 769 W 80 12 .295
Ledge N60E 18°SE - beds

ESN2110 elongate ledge of white
quartz arenite beds N 60E 35SE
lens trends cross ways N S
possible karst on W side WP017 N 37°14.811 el 1554
W 80° 12.310 1580 b

DAY 1/29/09 DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 2111 Ridge underlain by brn-
8 tan weathered clay shale w/
0800 possible ls in drainage (Karst)
9 WP 018 N37° 14.813 W 80° 12.380
0900 el 1569 Possib lr Omb-ORP
10 COUNTY LINE WRONG!
1000 ESN 2112 second pod of qtz
11 SS on ridge above I 81 then
1100 brown shale then sever blocks
12 of coarse calcarenite or rexilline
1200 is with strong Pet odor
1 WP19 el 1429 N37° 14.296 W 80 12.095
1300 Possible trend E-W 585
2 ESN2113 Max meadows type breccia + dol
1400 Float near property line corner
3 WP 020 N 37 14 878 W 80 11.789
1500 el 1599 (1560b)
4 ESN2114 hollow prospected for
1600 limonite (spl) 3-6 pits in woods
5 WP 021 N 37 14.811 W 80° 12.002
1700 el 1502 Deep red clay soil w/
6 limonite nodules — hydrothermal
1800 zone alag flt ?
7 ESN 2115 breccia exposed at head
1900 of prospect trench N 65E 25SE
8 WP 022 N 37° 14.752 W80° 12.074 1614
2000
ESN 2116 Coarse SS bldrs (Ech)

ESN2117 **TO BE DONE TODAY (ACTION LIST)**

power line Dol ledge N60E 60SE
Photo of silted in area
above of dam ESN2117
WP 023 1316 N 37 14.516 W 80 11.189

ESN 2118 N 70E 83 yellow clay
shale sap in bank beneath
Chilhowee Td at WP 024
N 37°14 258 W 80° 11.893
ESN 2119 Dolish interbeds in
borrow pit on road N 70E 45SE
WP 25 N 37° 14.120 W 80° 11.871 el 1253

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Jan 30 2008 DATE DAY

DIARY AND WORK RECORD

ESN 227 redo – N50E 32 SE
tan weath dol breccia ledge
on power line WP 026
N 37 14.945 W 80° 11.024 el 1355

ESN 2211 Photo of drain that
has eroded and collapsed
at WP 027 N 37 14.387 W80° 11.201

ESN 2212 Thick bedded to med
bedded gray and dark gray
dol N to E 12 SE bedding
@ NO SIGNAL – 75 yds W From WP027

ESN 2213 N60W 13NE thk
jointed dol ledge on creek
bank WP 028 N 37°14.958' W 80° 11.428'

ESN 2214 Ledge of gray mealy
tetured nodular bedding limest,
N60W 65SW at WP
Cut fence deer blind drop
Feeder – Dr. Steven Durado
WP 029 N 37° 14.954 W80 11.526'

ESN 2120 Followed Turkeys ~ 20
up hill to old subdivision
road ledge of dol in road
N60E 65SE @ WP 030
N 37 14 870 W 80 11 797 el 1578

ESN 2121 Saddle or valley of
Palaski Fault yellow brn weath gray
shale on roadbed below

ESN 2122 15 ledge OCS on
NBL – sink above WP 031
N 37 14 968 W 80 11 866'

DAY 1/30/09 DATE

APPOINTMENTS & SCHEDULED EVENTS

8 0800 FSN 21 23 dol ls ledges on high anc SBL 130,9 WP

9 0900 N ~280 255W

10 1000 GVR 881 Photo of highwall at old Salem Stone Co. Quarry

11 1100 showing Folded contact

12 1200 N60E 33 SE Contact between

1 1300 shly dol and gray slaty

2 1400 argillite GVR871 borrow pit in shl

3 1500 dol and slaty gra) argillite N65E 40 NW

4 1600 apparent

5 1700 Photo WP 032 N37°15.215 W80°11.743

6 1800 GVR 771 dol ledges along ravine a

7 1900 below Road N 55 E/20 SE strik alluvial fan on nose above

8 2000 road. Fracture dol on road at WP 034 N 37 15.081 W 80 12.000 GVR 330 80 NE w/ breccia layer Bank above (w or Pond) is shale sap

TO BE DONE TODAY (ACTION LIST) fault

along drain below pond

GVR Elbrook thin-med bed dol N80E 10 NE Syn hinge of NW EW 65 SE beds at road

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2/09/09 DATE Clear Warm DAY

DIARY AND WORK RECORD

ESN 1513 Olivgn thin bedded argillite (Ort?) N70E 55SE in cut at rr grade level E of I81 NBL Milboro/Brgllier contact may be exposed on N side of river (Photos of thick sltsn layers above slaty black argillite beds Milboro N30E 20SE airstrike across river at WP 035 (ES1514 N 37° 14.123 W 80° 14.100'

ESN 1515 photos of cut for river relocation bedding in thin to thick bedded argillite and sltsn N60W 25SW WP 036 N 37 14 131 W 80 14.193 el 1235

ESN 1516 N40W 18NE Thk bedded slt/ss/arg seq (Db) on River Bluff WP 037 N 37° 14.174, W 80° 14.324'

ESN 111 gray argillite and thick slt & fine ss N 80E 5SE in deep cut at 1300b WP 038 N 37° 14.239, W 80° 14.284'

ESN 112 Borrow Pit N 37 14 246 80 14 214 N300 22SW olive gn slt sn 60W sh

ESN 112 Borow Pit 1345el N60W 22SW

ESN 124 by Mr Radfords House Photos of Faults and Greenia at WP 040 N37° 14.569 W 80° 14.155 SO 320 20NE el 1593 (1600b)

Normal fault N15E 80SE N20E 68NW

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE

DAY 21 09/09 DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 113 Bedding plane cleavage
8 N10W 18NE WP 041 el 1718
0800 lt gry - tan argillite soprolt
9 w orange + blk stains above
0900 old power line cut
10
1000 ESN 114 Bedding plane cleav
11 in road bed on curve above
1100 Power line N45E 10SE lt olive
12 brn grn micaceous argillite
1200 w/ blk and red stains Massive
1 to laminated at WP 042
1300 N 37° 14.947' 80° 14.317' el 1885 (1820b)
2
1400 GLV 771 el 2100b WP 043 el 2001
3 N 37 15.067 W 80° 14.495
1500 olive brn arenite sap N 15W 12NE
4 2100' wide landslide deposit
1600 in turn below
5
1700 GLV 772 el 2173 WP 044 N 37° 15.038 W 80° 14.661
6 el 2200b Olive gn - brn micaceous argillite
1800 N 15W 10NE
7
1900 GLV 773 el 2183 WP 045 N 37° 15.071' W 80° 14.713'
8 N10W 15NE Medium bedded
2000 lt brn qtz ss very fine
grained at driveway to lot above
WP 045 TO BE DONE TODAY (ACTION LIST) el

GLV 774 N S 10E thk bed
rusty brn weath ss beds
on road at el 2330b
el 2184 at WP 046 N 37° 15.099, W 80 14.717
Rhob

GLV 775 ss fg lt olive grn, weathers
white float above tower at
WP 047 el 2010 N 37 15 019 W 80° 14 833
Black storm bed beneath ss!
Photo of tuna [illegible]

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2/09/09 DATE DAY

DIARY AND WORK RECORD

ESN115 6 below line N60E
10 SE on ledge of rusty brn SS in
or mica rich SW ; in upper Brallier
WP 048 N 37 14.987 W 80 14838

ESN 116 ~50' above Flat ridge
N50E 15 SE thick bed of
rust brn weath fg SS
WP 049 1899 N 37° 14.957 W 80° 14.864

ESN117 argillite ; yellow brn
weathered chips on nose at WP 050
el 1178 N 37° 14.865 W 80 14 892

ESN118 argillite, yellow brn
weatherd chips in many
pine trees down in saddle.
WP 051 el 1685 N 37 14 756 W 80 14.757

ESN119 argillite y/w brn weath
chips on tower feet along
abandoned power line at el. 1523
WP 052 N 37° 14.605 W 80° 14.645

ESN110 gray argillite w/vert
slaty cleav N80E 10 in
trail (dug up) WP 053
N 37° 14.352 W 80° 14.621 el 1517

ESN111 gray argillite w/ slaty
cleavage ∥ bedding?
N70E 45 SE in stream at
WP 054 N 37° 14.327, W 80° 14.612
el 1167

ESN112 gray argillite w slaty cleav
beds in bottom of stream
N80W 45 SW at WP 055
N 37° 14.248 W 80° 14.554
Bower Farm ~10' higer = Td N20W80NE
Jointy

DAY 2/10/09 DATE Clear Warm cloudy

APPOINTMENTS & SCHEDULED EVENTS

GLV 781 Peak of Ft lewis
8 SW of Smith Gap
0800 Float of brn weathed
9 mica qtz ss w/ abdt Crinoid
0900 and brachiopod debry.
10 WP 056 el 2765 T 2751
1000 N 37° 15.367 W 80° 13.865
11
1100 GLV 782 ledge of lt brn wea
12 SS N45E 10 SE at WP 057 on roa
1200 road Joints @ 305 75 NE
1 080 80 NW
1300
2 GLV 761 WP 058 el 2799 (2860 b)
1400 N 37 15 876 W 80 13.048
3 thin bedded Sandstone/weath
1500 argillite very lte tan to olive gray
4 N 48E 33 SE
1600
5 GLV 762 ledge of Wht Cgl
1700 N45E 10 est thin bedd ss
6 below ~100 yds SW N50E 15SE
1800 16.0 From home WP 059
7 N 37 15.925 W 80 12.938
1900
8 GLV 773 red brn weath
2000 argillite. over brn SS.
N 60E 6 SE Photo of Fossil

TO BE DONE TODAY (ACTION LIST)

ledges at WP 060 E 12412
N 37° 15.128 W 80° 14.303

ESN 2124 borrow pit in
Shale, overlain by massive
quartz arenite along interstate
el 1810 WP 061
N 37 14.995 Cleavage N70E
W 80 12.232 40 SE
Nearly 100' of Ort exposed
in slice ~ 1' sltsn beds, orange SS
sp/ of SS - carb layer? Dm?

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2/10/09
DATE DAY

DIARY AND WORK RECORD

ESN 2125 tan shale to green gry
w/ bcds N 60 E 30-40 NW
roll over in creek (photo) @
WP 062 cl 1589
N 37 14 960 W 80 12 . 319
looks like trenton Reedsville

ESN 2126 green gray - tan shale
With thin beds N 60 E 20 NW
dipping beneath SS above

ESN 2127 at low water bridge
dark gray argillite w/
4" pakages of slts m 2"
cross bedded qtz SS photo
Could be Huntersville Chert or
Brallier N 60 E - 89 NW RSU
WP 063 N 37 14 . 920 W 80 12 . 490

ESN 2128 75 yds ds is a edge
of dk gry sheared argillite w/ Fe
ls boudins ? Ort ? N 60 E 75 NW
clean ? WP 064 N37°14.876 W80°12.412
cl 1438

ESN 2129 WP 065 N 37°14.847 W 80°12.501
50 yds ds is a slate/sltsn
pavement N 70 E 65 SE 0.6 meta graywacke

ESN 1310 N 75 E 80 SE brn
weathered gray argillite w
slaty cleavage transposed thin
sltst or fine ss beds N 75 E 80 SE
overturned limb from fold
symmetry below

N 60 E 65 NW on road at creek crossing
ESN 1311 WP 065 cl 1535
N 37° 14 . 932 W 80 12 837 dl646 6
sandstone ledge on point, Fine gr
greenish gray graywacke w/ barrows

PORTABLE UNDATED TWO PAGE PER DAY REFERENCE

TUES 2/10/09 Partly Cloudy Warm + 60

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

GLV791

8 Thin beds of Fine SS oc on road
0800 N46E 15SE el 1690
9 N37 15.082 W 80 12.948
0900

10 GLV792 shale bench on top
1000 Fossilifeous SS Float on
11 Slope below. Triagular brach
1100 tnolds and long thin
12 WP 067
1200 N 37° 15.152' 12.9
1 el 1829 W 80 12.981'
1300

2 Fossil impressions
1400

3 GLV793 Pea sized pebble cgl
1500 Float on road WP068 1738
4 N 37 15 135 W 80 12 886
1600 GLV994 Fossiferous Punky SS on knob
5 WP069 el 1677 N37°15.067 W80° 12.659'
1700

6 ESN 1312 pea gravel (qtzite or vein
1800 qtz derived Float on nose WP070
7 N 37° 14.928 W 80° 12.597 el 1588
1900

8 ESN 1313 embankment exposure
2000 Db thin bedded argillite w/
6" siltsn beds N45E 20NW

TO BE DONE TODAY (ACTION LIST)

WP 071 el 1538 N37°14.925, W 80° 12.506
2/11/09 Partly Cloudy, Warm + 60

ESN1314 embankment exposure
on access road highly deformed
argillite w/slaty cleavage, (OT)
thin slt and fine SS beds
N 60E 47° SE transposed beds, spaced
cleavage N 70E Slaty Cleavage
EW 20 S WP 072 el 1475
N 37° 14.776' W 80° 12.718

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2/12/09

ESN 1212 el 1840 b WP 089
N 37° 14.935 W 80° 13.505 abdt
bleached white ss float on
break in slope el 2099?
N 37° 14.935 W 80° 13.505

ESN 1213 el 1969 WP 090 N 37° 14.897 W 80° 13.360
thin bedded bleached white ss
in argillite sap N30W 5-10 NE
at fork in road. N45E 6 NW ledge
on road 10' below

ESN 1318 WP 091 EL 1860 N 37° 14.907 W 80° 13.325
ss ledge bearing across hollow
to NE N70E 12 SE air strike
1700b

ESN 1322 soil changes near old power
line ROW from fine SS, white beach
s/sh to yellow and orange weathered
argillite chips WP 092 el 1723
N 37° 14.881 W 80° 13.011

ESN 1323 silty soil w/white el 1677
weathered quartz siltstone
blocks in soil Db? WP 093 N 37° 14 W 80°

2/12/09

ESN 1324 beds of white to tan weathered fg qtz SS standing on end N68E 70SE on cliff above Wimmer house WP 094 el 1500 N37°14.784 W80°13.109

ESN 1214 N75E 10-15 SE Yellow weath argillite sap same as exposed all the way back to 1213.

ESN 1215 N70E 7SE argillite sap w thin silicic silt layers along powerline access road at WP 095 el 1564 N37°14.803 W80°13.461

ESN 1216 WP

grn gry weath argillite w thin sltsn N8SE 25NW at drain WP 096 El. 1428 N37 14481 W8013633

2/13/09 DATE Fri DAY

DIARY AND WORK RECORD

ESN 1420 drk grn gry - olive argillite w/ slaty cleavage 030 35NE

ESN 1421 dk grn/olive argillite w/ slaty cleav folded Fold hinge planes N60W 22NW
N 37° 13.872 W 80° 14.336
Photo WP 097 el 1300 deleted.

ESN 1422 spls of slaty cleav black argillite from 181 099 el 1312
N 37° 13.836 W 80° 14.398

ESN 1423 WP 099 N37° 13.788
contact Dm/Fel W80° 14.452
breccia slaty cleavy N80E 33SE
spl

ESN 1424 WP
black argillite w slaty cleav cross cutting spaced cleav and moderately NE dipping joints S1 N 80E 30SE
S2 E W S 45°
Joints N 10E 65SE
WP 100 N37° 13.824 W 80° 14.446
el 1225 (Db) 2-4" siltsn beds

ESN 1425 WP 101 el 1239
N 37 13.793 W 80 14.502
dk gry/black argillite N80E 30SE slaty clearage in stream

ESN 1426 crenulated black argillite (Dm?) at WP 102
N 37° 13.732 W 80° 14.609 el 1311
S1 N70E 32SE S2 N60E 15SE (Photo)

2/13/08

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

8 ESN 1427, highly contorted,
polished and carbonized pyritic
0800 argillite w intersecting c/s
9 fabric E W 37 SE main fol
0900 buttons 530F 32°SE. WP103
10 N37 13 669 W 80 14 .741
1000
11 ESN 1428, gray fractured
1100 argillaceous is w/ many
12 fossil fragments on slope
1200 within 300 yds of scarp
1 ~ 50' below el brook in
1300 stack (Ort) WP104 el 1312
2 N 37 13 645 W 80 14 .826
1400 OC ~ 100' SW 330 35 SW
3 Picture
1500
4 ESN 1429 olive grn argillite
1600 w/ contorted limestone el 1349
5 clasts at WP 105
1700 N 37 13 625 W 80 14 955
6 310 25 NE contorted bedding
1800 slaty clear 060 60SE
7
1900 ESN 1430 Ridge line is yellow
8 weath argillite chips OC
2000 in road bnk NS 20E laminated
silicic silt stone at WP

TO BE DONE TODAY (ACTION LIST)

N37°13.848 W80 14 .682
el 1547

ESN 1431
N80E 70SE grn gry argillite, el 1272
WP106 N37°13 .941 W80 14.444

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Clear, cool

2/17/09 DATE Tuesday DAY

DIARY AND WORK RECORD

ESN 2314 **N 60 W 70 SW** maroon and yellow weathered argillite w/slaty cleavage, measured bedding & comb layering [illegible] WP 107 N 37° 14.337 W 80° 10.374' el 2[illegible]

ESN 2315 **N 30 W 40 NE** Massive bedded gray dolomite ledge coarsely crystalline sparce white carbonate veins WP 108 el [illegible] N 37 14 222 W 80° [illegible]

ESN 261 **N 20 W 50 SW** 2' mottled dk gray dol bed, interlayered with maroonish ylw argillite

ESN 262 **EW 65 N** dk grn argillite w/ bpc WP 109 N 37° 14.044 W [illegible] Note Rock Fall area bldrs

ESN 263 **N 60 W 60 NE** dk grn argillite WP 112 N [illegible] 3.993 W 80 10.788

ESN 264 Mussar Cem. WP 111 N 37 14 028 W 80 10 633 next to Pump station

ESN 265 **N 80 E 65 SE** thin bedded argillite and slate red grn. yellow some dol. WP 112 el 1269 N 37° 13.937 W 80° 10.632

ESN 266 N 80 E 80 NW Rd + grn arg some dol. WP 113 el 1468 N 37° 13.906 W 80° 10.664 consider in fold of Cel

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN267 at dam el
laminated rd brn argillite
280 64 NW WP114 el 1435 N37° 13.871
W80° 10.648

ESN268 above left abutment
10' thin bedded gray dol
280, 64 NE WP 115 N 37 13.861
W 80 10 672 el 1463

ESN 269 100m from dam N 80 E 40 SE
brown weathed laminate argillite
at WP 116 N 37 13.814 W 80° 10.638
el 1437

ESN 2610 orange weath argillite
N 275° 40 NE at WP117
N 37 13.743 W 85 10.633 el 1420

ESN 26[illegible] gray thin lam massive
bedded dolomite 280 76 NE el 1439
WP N37 13 682 W80 10 635

ESN 2612 grn and rd argillite
on point EW 60 N
WP 118 N 37 13 581 W 80 10 588

ESN 2613 rd and yellow argillite

TO BE DONE TODAY (ACTION LIST)

w/ bedding plane cleav. N58 E
35 SE @ WP 119 N 37 13.551
W 85 10 726 el 1607

ESN 2614 75-100' carb section
280 50 NW sighted across res.
from WP 120 N 37 13 447 W80° 10.709

ESN 2910 280 67 NW Yell. and rd
argillite w/ bpc at WP 121 N37 13.276
carb in anticline to SE el 1413 W80 10.679

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ESN 2910 DATE DAY

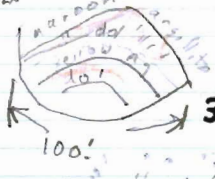
DIARY AND WORK RECORD

anticlinal hinge **300** at **15 SE** est
hinge symmetry verging SW

Measured **285** 10 SE

ESN 2911 EW vert, red and yellow arg w/ bpc, dol in valley below WP 122
N 37 13 156 W 80 10 760 el 1424

ESN 2912 sketched from across res. beneath power line
WP 126



axis trend 290
plunge 12 SE
N37° 13.254 W 80° 10 448
Measured folds
300 10 NE axis
NW Limb E W80 N
SE Limb N85E 17.

ESN 2913 yellow lam argillite w maroon
295° 75° NE bpc 270.32 ft
WP 123 el 1339 N 37 13 060 el 1339
W 80 10 548

ESN 2914 dol oes at spring branch above canoe livery
295 45 SW red argillite [illegible]
dol along trail to NE WP 124
N 37 13 076 W 80 10 254 el 1426

ESN 2915 **290 64 NE** contact between dol and argillite

ESN 2916 Shly gray dol interbed SW bk st
N50E 17 SE WP 125
N 37° 13.193 W 080° 10.431'
Bk s/t looks like EEl near Bo male

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

as well as bore holes at Lane
8 stadium Check w/ R^2
0800
9 ESN 2615 big layered dol ~50' thick
0900 underlain by maroon
10 argillite layering 300 46NE
1000 WP Redu
11
1100 ESN 2616 big layered dol ~
12 100' thk 290 73 NE
1200
1 ESN 2617 monitoring well?
1300 carb below argillite on bench
2 300 55 NE
1400
3 ESN 2618 anticlinal hinge treds
1500 300 12 SE in green and orange
4 death arg. clear cuts bedding
1600 treds 290 50 NE WP127
5
1700 N 37°13.590' W 80°10.417' el 1483
6
1800 ESN 2619 Dol 290 38 NE
7
1900 ESN 2620 Dol arg 290 59 SW
8 roads plunging NW
2000 20
ESN 2621 highly broken dol in cove

TO BE DONE TODAY (ACTION LIST)

dark cherty ly. L is in draw
above trail
2/19/09 Elliston ~ Lafayette area
along US 460 ~ Roanoke River
ESN 2410 on lemob SW of Old Va Brick
pite Red and Grn argillite in
tite V shaped synclinal nose
WP 128 N 37° 13.581 W 80° 12.469 el 1342
NW limb N55E 245 ESW limb 290 65 SW
NON plunging lineation N55E 3 ~ mullions

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2/19/09 DATE Elliston - Lafayette area DAY

DIARY AND WORK RECORD

ESN 2411 in enlarged clay (sh) pit N85E 80SE alternative yellow orange and dusky red argillite saprolite mined for brick clay at WP 129 N37° 13.531 W 80° 12.372 el 1430 mining has stripped a red clay terrace weathered and pitted qtzite bldrs up to .5 m (1.5'

ESN 2412 upper quarry ~ 25' highwall in argillite N60E 62 NW, layering above in avg dolomite beds N60E 76 NW at WP 130 N37° 13.447 W80° 12.272 el 1385 (within 25' h.)

ESN 2313 sulfide/limonite ? pit along road at el 1629 (WP 131 N 37° 13.363 W 80° 12.233 chert breccia, vuggy silica peacock colored stains pink carbonate (spl) chert debris on trail up to saddle — must be infolded Carb.

ESN 2314 crenulated laminar argillite dk gry - maroon cren N 85 E 20 NE bedding env. surface 310 25 NE WP 132 N37° 13.364 W 80° 12 110 el 1651

ESG 271 ?? 70W 10N then 290 70 NE cold wind at WP 133 N 37° 13.299 el 1714 1670 topo W 80° 12.085

ESG 272 N80E 65SE yellow-orange weath argillite W BPC N 37 13 173 WP el 1689 W 80 12 050

Thur 19 Feb 2009 Cold windy clearing

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 273 N 55E 32 SE lam yellow
8 brn weathed argillite w/bpc
0800 at pipeline break in slope
9 ocs on embankment of acces
0900 road NP34 N37B.122 W 80 11.492
10
1000 ESN 274 paper thin bpc grn
11 argillite w lamination and burrows
1100 N50E 50NW ledge WP 135
12 N37°13.035, W 80°11.200 El 1611
1200
1 ESN 275 paper thin dusk rd
1300 arg. w/bpc N 80W 75 NE
2 ledge above house site
1400
3 ESN 276 310 50 NE bpc
1500 in red arg ledge w/small
4 spring
1600
5 ESN 277 chevron folded argillite
1700 ledge N 80E 30NW
6
1800 ESN 2515 dk rd brn to gry
7 lam argillite bedding transp.
1900 N 85E 75 SE @ WP
8
2000 ESN 2516 cren yellow rd an grn
arg N 80E 5NE ginstal

TO BE DONE TODAY (ACTION LIST)

ESN 2917 mass cleaved ledge of
dusky red argillite in embankment
N50E 65 NW

ESN 281 at Little Hope Ch N35E 65SE
yellow brn and red brn argillite
ledges in embankment of SR
603

ESN 282 NS 28E ledge of
red argillite in drive

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DATE DAY

DIARY AND WORK RECORD

ESN 283 near Pipeline N63W 60NE
bank rome argillite w bpc

ESN 284 N50E 60NW
gray and red argillite in
cut behind cow shed

ESN 255 gray 1.1 in road
bank in curve lg. blocks
on point prob Karst along strike
to SW

ESN 1432 borrow Pit on Bowers
farm along SR 603 thin bedded
dark gry argillite w regularly
interlayed siltstone beds
D6 N70W, 15 NE
Feb 23, 2008
ESN 2714 alluvial Fan Fills
old Sinkhole ~ 150' dia
across reservoir road at
WP no satellites

ESN 2[illegible] 2 ft ledges of
red argillite w/ bpc 290 75NE
200' Sink hole to N in Field

ESN 2417 N85E 75°NW
interbeds of Rd grn and
yellow argillite w/ bpc @1624
WP 136 N37° 13.287 W80° 10.273'

ESN 2[illegible]18 N60W 55 NE
red maroon arg w/ bpc in bank

ESN 2[illegible]19 N60W 75NE
red maroon argillite ledge
sinkhole at WP, 137
just off pipeline at
N37 13.364' W80° 10.419' @ 1615

PORTABLE UNDATED TWO PAGE PER DAY REFERENCE

Mon
DAY

Feb 23 '09
DATE

Very cold windy, cloudy

APPOINTMENTS & SCHEDULED EVENTS

8 0800 ESN 2622 monitoring well along argillite ridge
9 0900 red grnt ylw chips from depth el 1611 N 37° 8.384 W 80° 10.172
10 1000 ESN 2623 ocs of yellow weath
11 1100 argillite w slaty cleavage in bank along perimeter road N50W 60 SW. On other
12 1200 slope 310 74 NE
1 1300 ESN 3715
2 1400 E-W 45 N thk bedded dusky red argillite
3 1500 ylw and orange weathered beds in road cut. Af
4 1600 covers whole valley floor w/large bldrs
N 37 10 218 W 80 09.764 el 1495
5 1700 ESN 3[illegible] 8 9 10 and [illegible] anticline
6 1800 N80E 55 SE (16) in rome
N 70 N 10 (17) arg.
7 1900 N 70W 65 (18) Photo of Deer
N 37 10 434 bldrs to house
8 2000 W80 09 821 on ridge

TO BE DONE TODAY (ACTION LIST)

ESN 3411 strike 290 60 NE
massive rd + gr argillite and thk bedded blk dol
in stream bed at w 140
N 37 14 075 W 80 09 981 el 1262

ESN 2316
W 80 141 N 37 14 277 W80 10.047
el 1251 EW 70 S
ESN 2317 N 60E 25 SE dextral
Crgn plunging 285 10 SE N 37 14 503
W 80 10 002

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clear cold

DATE 2 | 24 | 09 DAY

DIARY AND WORK RECORD

ESN 31 11 WP 143 N37 14 534 W 80 09 306
E-W 45 N red and yellow brn
thin bedded argillite w laminite
structure and bpc el 1227
Qtzite cobbles in stream
w/ considerable spring flow

BN31 12 WP 144 N 37 14 501
karst dot W 80 09 431

ESN 34 13 "Raccoon Ridge E-W 90
red argillite in drive laminated
w/ bpc @ WP 145 el 1330
N 37 14.066' W 80 09.209

ESN 31 14 red lam argillite
in road
290 GSNE

ESN 3220 thin layered dolomite
orange weathered at WP 145'
N 37 14 581 W 80 09 516

ESN 3221 080 70 NE thk
bedded maroon argillite
and yellow orange weath
dolomitic argillite on RR
WP 146 el 1143 N37 14803 W80 08.410

ESN 322 N80E 5 SE thk
bedded red argillite on track
s at WP 147 el 1263
N 37 14 891 W 80 08 407

G-LN 982 rd argillite in
road bank N80E 85SE

ESN 3115 10' gray carbonate lodge
in River N 85E 42 SE
WP 148 el 1277 N 37 14 698
W 80 09 265

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DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 285 WP 149 el 1480
300 42 NE contact gry dol
yell. weath argillite
N37 12 .813 W80 11.467

ESN 286 E-W 65 N lam
argillite on road at WP
150 el 1317 N37 12 953
W80 11 338

ESN 287 arg
290 35 NE

ESN 288 290 30 NE arg

ESN 289 N 75E 55 NW

ESN 413 pavement in RR river
below old bridge N85E 15 SE
Gray dolomite, refine w/
white veining WP 155
el 1282 N37 12 019 W 80 14386
River stinks! Chevron fold
hinge plunges SW 55 W at 10
ESN 421
VISHINIKS Farm — No one home
N35E 30 SE maroon and orange
WP 152 el 1377
N 37 12 242 W 80 13656

TO BE DONE TODAY (ACTION LIST)

ESN
WP 153 El 1331 N 37 12 523 W 80° 14 112
headwaters (dry of big spring

ESN-188 Headwaters of current
Spring WP 154 N 37° 12.673
W 80 14.060

ESN 189 OCS of gray dol.
at base of Bluff above Spring
N 37 12 738 W80 14 020
N40E 20 SE CEI

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DATE DAY

DIARY AND WORK RECORD

ESN 1810 ledges of dusky red argillite w bpc N50E 40SE just below pipeline, bldrs below. WP 155 N 37° 12.719 W 80° 13.343 el 1353

ESN 1911 crenulated maroon laminated argillite w/ BPC in N70E-5 NE WP

ESN 1911 ~~in~~ Babtist Cem - bldrs and red clay soil

ESN 1912 WP 156 N 37 13.009 el 1477 yellow wealth chip W 80 13 553 of Rome argillite in clay soil on SW side of knob beds exposed on 4 W heeler trail N45E 75SE

Feb 25 '09 ESN 511 at end of road maintanence grn gry argillite ledge strikes 310° 20NE d.p WP 157 el 1573 N 37° 12.328 W 80° 11.974

ESN 512 N 65E 50 SE cleavage in paper thin red argllite sap aposure or creek bank below bldrs WP 158 el 1631 N 37 12 179 W 80 11 911

ESN 513 N45E 50SE cleavage in grn argillite sap rock exposed on road. Al bldrs above and below WP 159 el 1815 N 37° 11.898' W 80° 11.668

ESN 514 red soil abdt metabasalt (GS) flt in soil also limonite breccia chips / w ocheous green stone or phyllite WP 160 el 2154 N 37 11.722 W 80 11 .645 Photo above or at Blue Ridge / Poor Mtn

Wed 2/25/09 ELLISTON

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 526 el 2000 b WP
8 N 50 E 10 SE shistosity on
0800 shear plane in dk grn-gry
9 massive, fractured meta basalt
0900 broken qtzite ledge above
10 N 50 E 39 SE @ WP
1000
11 ESN 527 2000b 2000 GPS WP 161
1100 N 37° 11.887', W 80° 11.571
12 Maroon argillite w/ gray
1200 dol interbeds N 50 E 10 SE dis
1 continuous ledge for 100'
1300
2 ESN 528 el 2050 b 2148 GP
1400 N 37° 11.937', W 80° 11.544'
3 Karst area on slope chert
1500 w/ boxworks, carbonate float
4
1600 ESN 529 el 2009 2120b
5 N 37° 12 075 W 80 11.509
1700 red and green argillite chips
6 on knob
1800
7 ESN 5210 S 70 E to Pow Twr
1900 on spur. Logging road
8 exposes yellow arg chips
2000 and saprolite WP 164
el 2038 N 37° 12.128 W 80 11.357'

Back snorting **TO BE DONE TODAY (ACTION LIST)** above

ESN 5211 knob covered w/ unicoi
bldrs in old fan deposit at
WP 165 N 37 12 267 el 1951
W 80 11 276
ESN 5212 N 70 W 28 SW dusky lam
rd argillite ledge on SE nose
or saddle at WP 166 N 37° 12.314
el 2014 W 80° 11.438'
ESW 5213 N 80 W 68 NE red argillite

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2/25/09

DATE DAY

DIARY AND WORK RECORD

ESN 515 N60E 15 NW grn siliceous argillite ledge on 4 wheeler tr

ESN 515 N80E 40NW grn argillite along trail

ESN 278 N70W 50 NE fractured dolomite ledge in saddle at WP167 el 1679 N37° 12.572 W 80° 11.952 N70E 40 NW on other side of saddle

ESN 279 N 70 W 57 NE red lam argillite w/paper thin bedding plane cleavage

Feb 26 2009 **ESN 517** **N60E 30 NE** crenulation axis and cave that follows it ~150' back in ground

ESN431 dk gry argillite w/bpc instr N60E 45 SE Lime ledges on hill N60E 30 NW ⊥ synclinal fold

ESN 432 Dk gry and lite gry sac dol N60E 65SE WP 165 N 37 12.451 80° 12.579

ESN 433 Mass-Lam dol beds N 55E 75 NW

ESN 434 orange argillite ledge in stream N 55 E 65 SE N 37 12 418 W 86 12 859

ESN 545 GPS 2008 fine qtz ss N 37 11 171 W 80° 12.166 N 10 W 65 NE, N60E 40 SE

ESN546

First Rome WP171 e 20 N 37 11 252 W 85 12 285

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DAY 22 6 09 DATE

ESN 461 **APPOINTMENTS & SCHEDULED EVENTS**

N 37 11 .565 N 10 W 20 5 W
8 W 80 12 .756 WP 173 el 1681
0800
9 Brown - yell weath lam dol arg
0900 on stream bank and in stream
10 bed
1000
11 ESN 165 N 30 E 35 SE Sh/ls
1100 in cliffs el 1654
12 N 37 11 .608
1200 W 80 12 .489
1
1300 ESN 432 WP 174, Farris gate
2 at N 37 11 163 W 80 13 006
1400 el 1753, yellow orange argillite
3 chips in bank N 30 E 55 SE
1500 red argillite across creek
4
1600 ESN 433 WP 175 lt grn
5 arg w/ bpc thin ls
1700 N 33 E 25 SE
6 N 37 11 485 W 80 12 958
1800
7 ESN 433 WP 176 el 1567
1900 N 37 11 672 W 80 12 887
8 N 55 E 30 SE green and
2000 red argillite

TO BE DONE TODAY (ACTION LIST)

ESN 436 WP 37 11.740, W 80 12.909
photo of cave in [illegible] dol
ledge N 60 E 30 SE Strong joint
[illegible] cave N 30 E 70 NW
el 1664 N 40 W 80 5 W

ESN 437 N 60 E 40 SE dk gry
thk bedded dolomite
el 431 N 37 11 831 W 80 12.929

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DATE DAY

DIARY AND WORK RECORD

ESN 438
320 80 NE 1am thin bedded
argillite overlies dk gry
dolomite in anticlinal
core 270° 10 N thin beds
WP 180 el 1584 N 37 11.877
W 80 12.928

ESN 439 Ledges of gry dol
and maroon argillite on
ridge N 70 E 20 SE
From WP 181 N 37 11 976 W 80 12 .931
el 1460

ESN 4310 directly to East arg
ledges in bluff on E. side
of creek dip gently to E

ESN4311 red + gn arg
folia 300 45 SW hinges
S55 W 24 SW
WP el 1454 N 37 12 [illegible]
W 80 12 925

ESN 192 N 50 E 80 SE
red and orang argillite
Saprolite behind house
el 1440 N 37 12 668
W 80 13 016

ESN 193 N 50 E 17 SE behind
garage - sap of thin-med
bedded argillite WP

ESN 771 WP 182 - elliston. Sch Yd
N 37 10.783 W 80 14,513
el 1291 photo to SW of massive
dolomite beds in Salem Thrust
sheet

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE

2/26/09

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN772 N35E 40SE

8 0800 layores of breccia,
9 0900 brecciated dolomite and
gray-yellow weathered argillite
10 1000 in Bluff above S. Fork
of Roanoke River
11 1100 WP 183 N 37 10 526 W 80 14.344'
el 1343 Photo of beds
N20E 28SE
12 1200
ESN 773 N 25E 54 SE yellow
1 1300 weathered argillite w BPC
at WP 184 el 1392
2 1400 N 37° 10.369', W 80° 14.614'
Rome or Elbrook?
3 1500 2/27/09
ESN 491 red and grn arg
4 1600 ledge above powerline N55E 26SE
WP 185 N37 10 123 W80 14.350
5 1700
ESN 492 290 43 SW
6 1800 ledge maroon/grn arg +
some dol below spring.
7 1900 ESN 481 N55E 70SE red
8 2000 tem argillite in road
cut
ESN 482 red argillite w BPC

TO BE DONE TODAY (ACTION LIST)

in road bank N55 70SE

ESN 713 Massive bedded
dk gr mottled lt gray in
ledge along road cut
N15E 38

ESN N65E 76 bedding N40E 49SE
drag overturned ledge
in road cut below powerline
red arg silt BPC and slaty

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2/27/09 DATE DAY

DIARY AND WORK RECORD

ESN 484 lam dol argillite
and green arg w/ BPC
N 20 W 5 NE deep clay
sap in cove across road
where new pond is developed

ESN 485 red mdsn in curve
N40E 20SE

ESN 486 N80E 10SE Photo
600 dark Run Road
lam to tk bedded argillite
and impure dol
above slaty cleaved rd +
x/w weath argillite below

ESN 487 new drive exposed
red mudrock / arg on
steep slope N40E 35 SE
outcrops in stream

ESN 488 Cliff on bluff
N40E 25 NW from road
argillite

ESN 489 big exposure at end
of ridge N55E 55SE
interbedded slaty and
massive bedded argillite

ESN 4810 N30E 15 SE punky
weath dol and breccia w
argillitic layers fe?

lam arg N60E 25 SE behind
[illegible]

N 37 10 485 [illegible] 80 14 [illegible]

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE

2/27/09

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 474 WP 186 el 1350 N 37° 10, 0[illegible]
N 15 E 78 SE W 80° 14.6[illegible]
red argillite w/ BPC
across drain to SW looks
to be all come but no
OC [illegible] of [illegible]

ESN 475 WP el 1519 N 37 10 041 N 80 14 509
old m[illegible] wheel and foundation
laminated argillite N 5 65 SE
BPC, slaty cleavage
dips steeply N 20 E 82 SE
in red argillite = OT
dam may be built
on ledges w/ travertine

ESN 771 N 23 E 28 SE bk dol
w/ 9 [illegible] WP 187 bridge bad'ly
rusted w/ missing sects
of I beams web reinforced
recently w/ bolts
WP 187 N 37 09 751 W 80° 14 525

ESN 772 N 60 E 27 SE Air
strike on Argillite ledges
on Ridge above

3/4/08 **TO BE DONE TODAY (ACTION LIST)**

ESN 773 ls, bk - dk gy mottled
massive in ck and on slope
N 50 E 20 SE bedding
774 ESN miss carb ledges on both
sides of valley ~150' above 0 SE side
air strike N 45 E 15 SE
ESN 775 at old church ledges of
red and gray argillite N 50 E
13 SE w/ slaty cleavage N 60 W
67 SE

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DATE DAY

DIARY AND WORK RECORD

END of Rd 1214 BONEPRIN BLANKENSH, spring at mail box

ESN 776 beneath power line N60W 20SW maroon and gray argillite

ESN 777 beneath powerline maroon argillite N30E 55 SE thin bedded grades up into massive gray dolomite, highly factured with pink weatering calcite veins

ESN 778 gray and maroon argillite thin bedded to laminated N75E 70SE No satellite

IRO 692 N70E 20SE sheared and brecciated Elbrook DOL on driveway

IRO 931, WP 188 N 37°09.936 W 80 15.005 el 1600 shaly argillite chips in shoulder of Ft Vause Road turnaround N 80E, 50 E another shly oc in driveway below - N 20E vert w/ near horizontal cleavage

IRO 932 N20E 65SE yellow weathered argillite in bank along SR637

IRO 933 N20E 50 NW gray slaty dolomite lodge behind house at WP 189 N 37°09.969 W 80 15.235

IRO 934 N30E 5 SW crenulation in lt gr slaty dol bedding N70W 75 WP vert fracture cleavage N25W

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE

DAY 3/4/09 DATE

APPOINTMENTS & SCHEDULED EVENTS

IRO 921 n low 70 NW yellow
[illegible] w/ LPC
N 37 09 759 W 80 15.798'

ESN 4812 airstrike from
digital photo

3/5/09 ESN 715 Digital Air
Strike on Rome beds in Saddle
N20E 25SE

IRO 631 Photos of S. fork
and River Ridge Air Strike
N 50 E 40 SE
elevation 1346 GPS

IRO 632 S 35 W 10 SW
WP 191 N 37 09 160 W 80 15 55'
ot folds
in
rome
Anticlinal axis plane N 60 E 40 SE

ESN 771 Calhoon Hollow
Rome LS + dol 1 edges
crossing road at trailer
N 40 E 48 NW el 1600'

ESN 772 beyond double

TO BE DONE TODAY (ACTION LIST)

wide at WP 19A el 1438
N 20 E 60 2 bk - gry dol
in red bed seq
N 37 07.981 W 80 14896.

IRO 991 dk gry xline dol
N 60 E 48 NW

IRO 992 320 30 NE dol

IRO 993 red beds beds N 50 E 20 SE
cleavage dips N 30 E 75 SE

DOLLAR TIMERS, Inc.

DATE DAY

DIARY AND WORK RECORD

IR0994
N40E 64 SE lamination in
massive red argillite w/
slaty cleavage N 60E 35NW

IR0995 gray thk bedded fract
dolomite w/ wht & yellow
stains = hydrothermal alt
N15 W 53 NE

IRO 996 at end cl 1662
N 37 08.238 W 80° 15.522
N50E 42 NW silt, bn dol
bed ~ 2' thk above
house

IRO 997 N20E 65 NW turn in
by old house exposed red arg.
W BPC

IRO 998 N20E 65 NW bedding
plane in yellow argillite along
road embankment
cl 1536 37 08 013 W 80 15.730
across from house

IRO 999 lam and thick
bedded arg - silicic dolomite
ledge outcrops on shoulder
N30 E 75 SE

ESN 788 oc of massive argillite
on steep slope WP 1689
N37 07 783 W 80 14.014 cl 1689
N 60E 35 SE

SNN 789 yellow arg and silic dol
in bank N20E 85SE

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE

31 5/09

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

IRO 333 N40E 60SE (SEUM
8 ledges of cleaved and
0800
9 dolomite in fold core
0900 N35E 40 NW (NW LIMB)
10 Hinge plunges S 50W at 15 SW
1000 ap N40E 70NW
11 rabbit ear
1100 WP 194 el 1506
12 N 37 10.143 W 80 25.374
1200 Far NW Limb N30E 35NW
1
1300 31 10/09 ESN 434 highly
2 deformed Elbrook Dol
1400 N35E 30SE shly zone
3 w/ folds above
1500
4 ESN 435 N50E 60SE
1600 roll over along tracks
5
1700
6 cren E-W, 7E
1800
7 ESN 441 N45E 50E
1900 Syn C
8 cross joints 320 55 SW
2000 fault ?

TO BE DONE TODAY (ACTION LIST)

ESN 442 N30N 25SW
massive dol beds

ESN 443 NS 50 E bedding (Photo)
massive gry pods of
sil breccia w/ gossan

ESN 444 photo of cross fault ?
w sm fold hinge

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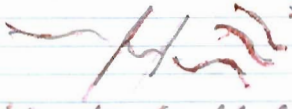
8/16/09 DATE DAY

DIARY AND WORK RECORD

ESN 444 cross struct
340 30SW
N20W 30SW

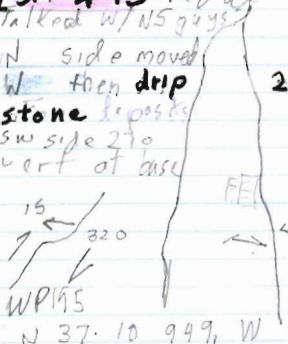


thick bedded gray dol
strikes NS dips 40 E
Fold hinges 30 ft to NE

ESN 445 N80 40SE masive
bedded gry + white dol.
w/cross faults at loc of
old tunnel
240 22 NE
280

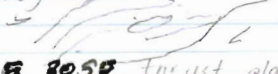
3/17/09 ESN 476 N 45E 38SE
N 75E 12 NW syncline in
thin bedded elbrook dol
plunge ~ 230 at ~10

ESN 445 redux Key stone
Talked w/ NS guys Fault zone
N side moved
W then drip 290 80 NE
stone deposits
SW side 270
vert at base



WP195
N 37.10 949, W 80 14.735

ESN 477 photos of 15 scar
and imbricate thrust
w/folds boudins back thrust
drill



N25E 80SE thrust plane

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St Patrick

DAY 3/17/09 DATE

APPOINTMENTS & SCHEDULED EVENTS

8 0800 ESN 716 N30E 75 SE, Rd mdsn and argillite legs then gray
9 0900 is w/ much travertine in stream below

10 1000 ESN 756 at old house site WP 196 el 1905 el 1700 B
11 1100 N 37 08 .933 W 80 B .810 1700' b Chilhowee qtzite in Fan
12 1200 ESN 757
1 1300 N30E 80 SE SE [illegible] of anticline at WP 197
2 1400 el 1778 N37 08 956 W80 13 821
3 1500 ESN 758 Hinge on property line / old Fence N 20E 12 SW
4 1600 WP 198 el 1808 N 37 08 .993 W 80 13 .830
5 1700 NW LIMB N20E 60 NW at ~ 1850 b
6 1800 ESN 759 WP 199 el 1726 N 37 09 106 W80 13.767
7 1900 SINKHOLE IN SADDLE ARGILLITE OC ON CREST
8 2000 N 30E 75 SE

TO BE DONE TODAY (ACTION LIST)

ESN 722 (edge of y/w orange weathered argillite mangshaly chips in road bed at WP 205 el 2248 1940 Topo correction on AP N 37 09 235 W 80 13 535

ESN 723 dk gy dol blocks in hollow and stongroad

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NOTES

ESN724	Road curves across green and red argillite w BPC N45E 55SE WP 201 N 37 09.279 W80 13.667 el 2050 (2050B)
ESN725	Black chert, red clay in saddle dol/ls in rome
ESN726	N45E 79 SE argillite + siliceous argillite lt grn, wht. 2140T
el 2099 N37°09.350 W80°13.737	to lt gray weath fine ss or sltsn WP 20 WP 202 Turkeys gobbling
ESN727	Flushed gang of turkeys and 3 deer on powerline black chert float in
el 2095	woods on SE side of line
WP 203	N35E 60 SE ledges of
N37 09 38	red and grn arg on
W80 13 925	NW side of Power line
ESN728	Ylw-grn arg N45E 65NW Just above Powerline
ESN729	Very massive to layered
WP 204	dk gry crystalline dol
el 1887	w/ pink splotches (Spal.P)
N37 09 238	N40E 70 SE at WP
W80°14.123	beneat crossing powerlines
ESN717	el 1799 N. 37 09.215 W 80 14 165
WP205	argillite ledges N30E 57 SE bench below
ESN7210	N30E, 55 NW crenulated red argillite ledge

NOTES 3/17/09

ESN 7511	Rd + Grn argillite w/ BPC in
17506	road bank N28E 78 NW
WP 206	N 37 08 942 W 80 13.936
	some Chilhowee cobbles on road
	N 27E 70 NW coarse
	rexline dol below
ESN 718	Argillite ledges on steep slope
	just before rd crosses to
	sw side of stream N 30E, 60SE
ESN 719	Photo of adit in dolomite
WP 207	with timber still standing
N 37 09.264	No OC because of travertine
W 80 14.433	cover dol in creek
	much travertine in creek
ESN 710	Layering N 45E 60SE in lam
	argillite 100' down stream
	from adit
3/18/09	
ESN 711	Road to N from main road at
15506	WP 208 el 1640 N 37 09 296 W 80° 14.366
	Massive dol overlain by thn
	bedded argillite N30E 65SE
ESN 712	mineralized silicified breccia
WP 209	(sed?) yellow and white
N 37° 09.284	vvg filling Trenched from
W 80° 14.385	road to creek below
el 1547	Photos + Spl weathed mtl
	above resembles gossan
	N35 E 70 SE Nodular mineralized
	breccia overlys cleaved brown
	gray + tan ls

NOTES 3/18/09

ESN 713 Two pits above road
WP 210 one across strike ~ 25
N 37°09.326 10 x 10 that crosses zinc
W 80°14.441 blende and one
el 1617 about 10 x 10 x 15
(15906) along vein
Photos Topo expression
is steep ravine with ore vein
dol on N 30 65 SE Mass dol
numerous fract zinc along
bedding and cross veins

Lower N 5W 20°SW, 320° 60 SW joints
WP 211 320° 24 NE. Lower pit exposed
N 37°09.304 weathered mineralized zone
W 80° 14.448 bright sphalerite may be
el 1757 beneath leaves
(16206) Correct.
ESN 714 small pit in vuggy rexline
WP 212 dol w qtz crystal lined
N 37°09.351 vugs rusty limonitic
W 80° 14.430 stains Pit 10 x 6 x 6
el 1709 w 20' dump on slope
el 1736 25' below crest red arg
on NW side of ravine (spur
N 30 E 80 SE

ESN 715 Vertical shaft 10 x 10 x 50?
WP 213 photo in massive fract lt
N 37°09.409 gry xline dolomite
W 80° 14.387 el 1914 ( )
beds N 30E 45 SE joints 330 80 SW
060 60 SE

ESN 716 OCs of lt blu gray intensely
WP 214 el 1932 burrowed and ribbon bandod
N 37°09.409 lime mudsn N 35E 65SE as 713
W 80° 14.354

Day Runner

NOTES 3/18/09

ESN 717	Dark brown to burnt orange arg
WP215	or dol argillite tshflt on top
el 1858	at WP 215 N 37°09.419' W 80°14.296'
2030 Topo	2040 b
ESN7118	Large bench and adit at el
WP216	1600 in massive fractured
el 1601	lt gray x line dolomite 1580b
N 37 09.244	Bedding N30E 78° SE Fracs
W 80 14.459	N60E 67 NW N70E 20SE
ESN 7119	small pit in dol 6x6 x10
WP217	about 100' above adit
el 1607 (1660)	N3709.211 W 80 14 .457
N 7120	
ESN7120	small pit ~50' above 719
WP No	el 1700 b crystal aggregates
sat	of sphal (yel) up to 10MM in vugs
	desiminated sulfide smells
	when rock is broken Galena?
	sparkles
7121	
ESN7121	Small Pit on powerline ROW
WP218	exposes Vuggy (smithsonite?)
N 37°09.165	qtz laden dolomite
W 80°14.601	el 1840b El 1838 GPS
ESN 722	Ledge of red argilline N30E
WP 219	60 BPC N 37°09.136 W 80°14.547
el 1839	
ESN 723	Rd argillite ledges on
WP 220	Spur N30E 78 NW N37°09.245
N	W 80°14.480 el 1828 (1700b)
3/19/09	ESN 7124 N 30 E 58 SE
	BPC in Y/w orange weath. arg
	at el 1450b bench w/chert below

Item # 013-200

WP 221 N 3709.736 W80°14 425

NOTES 3/19/09

ESN7125	el 1560 WP 223 N 37°09.735 W80°14.375
	rd. arg. w/ BPC N 35E 53 SE, corner
ESN7126	WP223 at el 1620 thin bedded
bench	and cross laminate, flaser bedded
el 1759	white to pink weathering arkosic
N	ss beds N 37 09 724 W 80 14.310
	sulfide rich dk gry wacke
	sh refline dol above on bench
	deepred soil
ESN7127	at el 1700 b N 35 E 70 SE ledges
WP224	of red argillite w/ BPC
1931	N 37°09.749 W 80°14.310
ESN7128	at el 1790 top of another carbonate
WP225	interval N 37 09 751 W 80°14.222, 1791
	N45E 20 SE on beds of med
	gray wacke sn.
ESN7211	N 48 E 78 SE laminated
el 1920 b	supratidal dd argillite dips
WP 226	beneath maroon arg w BPC
el 1937	N37° 09.794 W 80 14.111
ESN7212	rd argillite w/BPC N40E 75NW
WP 227	at el 2100b el 2089 N 37 09 900 W 80 14 021
ESN4813	rd arg. w BPC grn and yl w sh
WP228	N 45 E 65 NW, el 2069, N 37 10.050 W 80 13.925
ESN4814	N42E 47 NW red arg w/ BPC
WP229	at crest 2080 b at 30" oak
el 2173	snag corner N 37°10.178', W80° 13.872'
ESN7213	NS 25 E orange arg sap in
1945 el	cut at el 1960 below saddle
	WP230 N 37°09.909' W 80°13.809'

NOTES

ESN7214 2237 1960B	In saddle 325 14 NE red and grn arg w/BPC at WP 231 N 37 09 836 W 80 13.768
ESN7215 WP 232 2047	Rd + yly arg sap w/ BPC + ocds N50E 35 SE 2030B N 37 09 723, W 80 13 836
ESN 7216 WP 233 N 37 09	Pit in shly gy dol, karst dep to SE N47E 60 SE 662 W 80 13.338 el 2196
ESN 7217 wp 234 el 2025	N50E 62 SE Top of dol seq w/ bk chrt N 37 09 493 W 80 13.914
ESN 7218 WP 235 el 2080	N20E 55 SE Arg slsn fine SC lt grn ylw rd and white weathered 2088 N 37° 09 .324 W 80° 14.063
ESN 7219	Silicified algal chert w vugs in saddle
ESN7129 WP 236 N 37 09	Red argillite w/BPC N25E 75NW in 2ND saddle el 2020B 428 W 80 14.218
ESN 7130 WP	Crossed burrow mot. slaty ls/dol then orange supratidal dol/arg N 40E 62 SE el 1900B
ESN 7131	N 65 E 35 SE gray arg w BPC dips beneath lam car & knd
ESN 7132	lam arg grn gry N75E 15 SE el 1660B

Clear cool

NOTES 3/23/09

ESN 451 Madison Fm WP 237
el 1357 N 37° 11.112 W 80 14.031
Brn sndy loam w w/ rnded
qt cobbles in Td

ESN 452 WP 238 el 1446
N 37 11 131 W 80 13 774
Photo of qtzite bldrs
in pibs on slope

ESN 453 WP
dusky rd argillite w / BPC
335 (N 25 W) 40 NW
WP 239 N 5 40 W el 1440
N 37 11.211 W 80 13.771

ESN 454 WP 240 el 1640
N 37 11.258 W 80° 13.690'
Rd argillite in subsoil
N 10 W 58 NE just above (12')
fenceline on spur ridge

ESN 455 WP 241 N 37° 11.364 W 80 13.661
Rd argillite N 10 W 65 SW BPC on knob
el 1698 1762 T

ESN 456 WP 242 sinkhole 15' deep
150' dia at WP 242 N 37° 11.561'
16906 W 80° 13.556 el 1787

ESN 457 WP 243 N 37 11 631 W 80° 13.60
el 17456 1714 GPS BPC / Rd Arg
N 40 E 64 SE
ESN 458 N 10 E 72 SE y/w gry
WP 244 arg w BPC
el 1838 (1740) N 37° 11.448' W 80° 13.523

Day Runner

NOTES 3/23/09 Clear Cool

ESN 459 N10E 75SE thin cleaved (slaty)
ylw grn argillite SE
of fg gray dol float
in saddle at WP 245
B 1750 el 1633 N 37 11 335 W 80° 13 374

ESN 4510 Bed of orang ylw argill.
WP 246 across saddle clear N 40E 60SE
Bedding NS 10E WP 246
el 1798 N37 11.345 W 80° 13.326

ESN 466 Brown Slty arg N 20E 70SE clear
WP 247 el 1994( ) N 37° 11.378 W 80 13.135

ESN 467 el 2020b
red argillite chips w/ slaty clear
W 248 in tree 100S N 37° 11.400' 80° 13.205'

ESN 468 N 25E 15SE clear ~ bdng
el 1873 transposed in red slaty argillite
WP 249 N 37° 11.308 W 80 10.168 el 1960b

ESN 469 Many cleavage chips grn and rd
1950b argillite on ridge top
1927 laminated arg ledge N 25E 30
WP 250 N 37° 11.157 W 80° 13.181'

ESN 4610 laminated grn-gray micaceous
WP 251 argillite w/ BPC on old road
el 1791 N 18E 30SE, N 37° 10.888 W 80° 13.124'
1880b

ESN 493 WP 252 N 37° 10.274, W 80° 13.113
2102 N 35E 55SE Massive to thk
2000T bedded gray dolomite
2040B ledge

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NOTES 3/23/09

ESN 494	Lam Rd Arg. W/BPC A + lam
el 1956	N 10 E 15 SE, N 37 10 797
N9606	PHOTO OF RR Tunnel W 80 13.249
ESN 4814	N S 30 E lam dk Gryard
WP 254	argillite ledge N 37° 10 797 W 80 13 389
1858, 1920 b	
ESN 4815	NS 35E laminated rd arg.
oc on	steep slope 100' above saddle
WP255	N 37 10 791 W 80 13 453 el 1775
ESN4511	Qtzite bouldres w/Skolithus
WP256	in saddle, and on slope
el 1596	N 37° 10,804', W 80° 13.599'
ESN14512	Red grn and ylw weathered
WP257	argillite chips in soil on nose
~~1621 A~~	above saddle N 37° 10.876 W 80° 13853
ESN14513	N 10E 58 SE Cleavage in
ylw	weath slty argillite
1523 (1620)	on nose at N 37 10 997 W 80° 13 841
ESN 4514	330 38 Massive
WP 258	lam brn weathered gry
1377	dolomite ledge above pond
14806	N 37° 11.030 W 80° 13.829
	March 24 Cool, Sunny
ESN495	lam grn argillite w/ BPC N50E 60
WP259	N 37° 10.169' W 80° 13.114' el 1590 1540
ESN496	Chilhowee blks and cobbles in td
WP260	E1644 N 37.10.207' W 80° 12.942

NOTES 3/24/09

ESN497	Grn-Gray arg dol w/ am
WP261	and BPC N35E 37NW
el 1791	N 37° 10.291 W 80° 12.559
ESN498	brgt orange weath argillite
WP262	or arg dolo sap w/ lamina
el 2191	a mica folia N 35E 15SE
	N 37 10 259 W 80 12.484
ESN5733	Ledge of white to
WP263	med grg fine gr qtzite
el 2498	N 10W 15 NE joints
N 37 10 226	280 85 SW
W 80 12 415	NS 60 W 2400 b ~
	trench below oc - no ore
ESN5734	Large prospect w/ 20' Highwall 50 trench
WP264	N 37 10.137, W 80 12.451' el 2396 2370b
Samp	qtzite - thin bedded N45E 65E
ESN5735	Prospect pit 6-8' HW 30'
P2265	trench small pieces of
E3335	limonite at N 37 10.075'
2330b	W 80 12.975'
N 30E	Medium bedded lt gry - ylw
60 SE	stained quartzite beds
ESN8114	e2300 B White qtzite ledge
WP266	N 37 10 003 W 80 12 446 el 2286
	N 10 E 17 SE at least 50' above
	Fault zone and Rome fm
R-8791	Chem Spl
ESN8115	el 2100b Pit in limonite
WP267	residual ore below Qtzite
el 1979	green shale mix pit 20' long
	dum 40' dia N 37° 09.999 W 80 12.46[illegible]

Item # 013-200
Photos

3/24/09

NOTES

ESN 7319 E 2100 B (2307) N 37° 09.908' W 80° 12.578'
WP 269 large bank and dump - little ore mosty argillite chips

ESN 7321 Big pit ~ 75' long 50' dia dump
WP at 2100 B at site OC above
at 2240 N 45 E 60 SE

ESN 7322 Bull dozed road on spur
WP 265 N 37 09 849 W 80 12 727
el 2240 2200 B Chips of red + grn argillite

ESN 7323 Ledges of yellow + grn and red argillite N 35 E
WP 270 30 SE 1930
E 1890 N 37 09 899 W 80 12 848

ESN 7324 ledges of dol + grn-gry arg N 35 E 60 SE

ESN 422 PHOTO OF Graded River
WP 271 el 1330 N 37 11.869 W 80 13.918
deposits at new school site Qt cobbles + bldrs in orange silty clay soil

WP 272 ESN 423 Sinkhole at
1333 N 37 12 013 W 80 13.318

ESN 424 at spillway to small pond
WP 273 brn weathsl laty argillite
sap N 35 E 48 SE
el 1363 N 37° 11.933' W 80° 13.591'

NOTES

el 1436

ESN 425 Bank exposed Rd gn grn shly
NP 274 argillite N40E 40SE N 37 11.951 W80 13.525

ESN 426 cut at upper pond exposes
el 1685 red and gray argillite beds
(1420T) w/ slaty BPC N80E 25SE
N 37 11.848 W 80 13.395

ESN 427 N 20E 18 NW ledge on
logging road at el 1430b
Rd grn argillite w/BPC

WP 275 Heavily cleaved dk gry argillite
ledge N 37 11 775 W 80° 13 243
W 45E 50SE ~ 50' above spring
boxes and round karst feature

11/5/09 ESN 1-1-13 sltsn + sh
EL 1414 interbeds on site
1570b N 22 W 20 NE
WP 116 N 37 14 706 W 80 14 205

WP117 ESN 1-1-14 N 37 14 812 W 80 14 400
el 1714 N 28°E 18 SE
el 1620b

WP118 ESN 1-1-15 N 36W 10 NE
1793 gray to v lt gry weather
sltsn + sh w tracks
or creases on bedding
N 37° 14.880 W 80° 14.469

WP 119 ESN 1-1-16 N 28W 12 NE
el 1918 gray - tan weath slsn/argillite
thk - med beded
N 37° 14 948 W 80 14 542
Photos of Paris Mtn
and log truck on road to E

Item # 013-200

Pocahontas Section Matoaka W.V.

NOTES July 9 2009

1' coal w/gray clay iterbed in red and tan shl and silt sn

WP 343 el. 2207 G N 37° 28.854
2200 b W 81 18.619
SET BAROmeter at 2200

WP344 2252 G N 37 28.822
2230 b W 81.18.558
gray st sn w/ spaced jointing
//// over sig
by 50' shl dk yt
boardy weathered then
2' ss

WP345 2144 N 37° 28.769',
2280 b W 81° 18.545 2'
light gray qtz ss separated
by 4' shale,

WP 347 3' black shale, 4' above
Marker ss below
2169 G 2270 b

WP340 2320 B 4' sls fine ss 22
w sharp base, coaly part in
above then spheroidal [illegible]
20' shale — GPS el 2270 G
N 37° 28.673 W 81 18.400

WP349 el 2350 b — top of shlg interval
begin boardy weathering silt
int 20' thick — then first
big sand N 37° 28.633', GPS el 2280 G
W 81° 18.383'

2" coal w 1' seat earth at base

Day Runner

NOTES

WP 350 N 37° 28.562' W 81° 18.272 grey pt
2380 b 1' coal above 5'
2300 GPS seathearth then 6" gray
cly sh the 3" black sh/coal
WP 351 el 2420 B 15' above big
sand ~ 18 - 29 coal
2385 GPS 2' clay beneath top of
SS dips 2° NW OAD stk
N 37° 28.590 W 81° 18.088'

WP 352 N 37 28 572 W 81 18.033
2352 G N 70 E 9° NW coal E-W 9 N
2450 b Meas 26" overlain by
mass med gr SS w/
spheroidal weath.
splays and
2480 b
WP 353 e 2453 N 37° 28.019 W 81° 17.795
2530 b top of SS 57-60" coal seam
overlain by white shale
2570 b 21" coal in bleached silty
clay interval below next
SS SS ~ 30'
2600 b laminated mudsn partly
overlain by thick bedded SS.
2610 b SS top E W at 10 N
2630 b base of tan weathered sh
and thk SS tongues w/ disc.
coal zone at top
2660 b base of med-cg mass
cross bedded SS
2720 b Top of big SS black sh
chips silt sh
2790 b 10' interval w 2 3' SS beds
"boudinage weathering"

Item # 013-208

NOTES

overlain by 30' sh/ slt sn seat wide
jointed w boardy weath zones
el 2860b top of Sh thk bedded
med ss, cross beds strong castellated
spaced 20 - 40' between
joints some shaly or flaggy zones
along strike
2880b 2' gray under clay 3" coal at
top of sn/y slt seg
strong rip up contact at
coal in base of massive to
cross bedded ss convalute
bedded zone 5' above coal
WP353 el 2910, 30' above conv. zone
el 2821G very massive ss 30' highwal
thin bedded zo above
N 37° 28.648 W 81 16.868
a2960ba medium - thick - bedd
zone above massive ss
WP354 2965b 8' shale break w/ 3
sand ledges parting
2859G N 37° 28 663 W 81° 16.770

3060b top of hummocky
3065 18" coal w 2-3' underclay
WP355 seg N 37° 28.595
3100b 2987G W 81 16 723
3038 '
WP356 N 37 28 532 W 81 16723
3038 G base of massive sand
black sh chips on bank

File Automate Photomerge

Day Runner

NOTES

NOTES

11/10/07	ESN 341
ESN341	N 70W 55NE (296)
WP286	red and yellow sh sap on pipe line, large qtzite and Cgl bldrs on slope (Photo) WP 286 N 37 13' 35.1" el 1460 13406 W80° 09' 46.8"
ESN342	N35W 35 SW green
WP287	shale saprol, fe along pipeline WP 287 el 1514 (1480) N37° 13' 37.6" W 80° 09' 36.9" Cobbles + bldrs mantle slopes
ESN343	Sinkhole just S of pipeline
WP288	at WP 288 N37° 13' 38.8" el 1564 W80° 09' 26.8 14706
ESN344	ledge ~ 30' cliff above
WP289	stream (dry) at WP lt grnish gray argille and tow rank slate N 70W 74 S.W el 1610 b 1706 N37° 13' 34.8 W80° 09' 19.0"
ESN345	N 37 13' 34.7" W 80° 09' 14.3"
WP290	el 1752 el 1700b ledge of med bedded dk gry - black impure, wavy bedded dolomite N50E 10SE
ESN346	el 1800 topo green shale - phyllite
WP291	+ red argillite stripe
GB1800	on flatted hill top 2 tables adjacent to road 15 del above N37° 13' 33.1" W 80° 09' 10.7" el 1820

Day Runner

N 54 E 15 SE wavy

NOTES 11/12/07

ESN351 WP292	Fractured dolomite brec w/thin lab luc gray micrite float. N58W 32 SW N 37° 13' 32.4" el 1873 N 80° 09' 06.3"
ESN354 B	Photos of ledges @1900b N60W 30SW blueish gray dol ls + yellow brn dolomite w/ sandy laminations microcross beds
ESN352 WP293	Fractured gray laminated dolomite w/ breccia pod (photo) lamination N20E 80NW el 1977 (1980b) N 37° 13' 33.1" W80° 09' 01.1"
ESN353 WP294	lge oc of dol breccia at el 2024 (2040b) gray and yellow stained w/ white 2ndary veins Photo.
ESN354 WP295	Limonite breccia ore bank Ocs (Photo) at el 2140b N37°13'32.5" W80°08'58.2" SPL OF ore ESN 134 Ore bank appears to be limonite & yellow ochen with carbonate dissolved away v 10' thick buff dozed below
ESN355 WP296	@ 2320b el 2187 GPS N 37° 13' 30.7" W 80° 08' 55.0" 15 foot ledge of light gry, med-coarse qtzite or metagwke

Item # 033-3

NOTES 11/12/07

ESN335	thick-bedded, closely
	jointed (2'-3') creating
	< block field ~ 75 by
	300' below.
ESN336	Thk bedded gray qtzite
WP297	ledge N45E 20 SE
	15-20' thk 2334 el (23706)
	N 37° 13' 30.3" W 80° 08' 53.0"
WP298	N 37° 10' 18.7" W 80° 08' 41.0"
ESN382	Coarse pebbly quartzite
	light gray to white
	thk bedded ledges
	60' thick section on
	slope. strike 300, dip 30 SW
1826	2870 Flat iron shaped OC
	20' high by 75' Long
	300 (N60W) 15 SW
	massive bedded qtz ss
ESN383	EW, 25SE broken ledge
WP	pink weathering med-cg
	qtz ss off set on joints
	07? joints N 30E 65 NW
ESN384	el 2681 N 37° 13' 08.4" W 80° 08' 54.6
WP299	20' thick quarentite ledge
	N20E 12° SE
ESN385	el 26000 W
WP300	lower 20' ledge crosses spur
2740'	ridge N35E 30 SE white-lt gr
	med to coarse pebbly grit
	N 37° 13' 07.6"
	W80 08° 57'. 5"
ESN386	3' ledge med-cg qtz
WP301	wacke. N 37 13 12 1 W 80 09 03.4
2276	N 70 W 25 SW N40E 30SE

22806

11/14/07 @ 2224 WP 206 N 37° 13' 11.3 W80° 09' 04.5"

Day Runner

NOTES 11-12-07

ESN327	Rubbly ledge in logging road
el 2000 ft	at WP 302 el 1958
302	N37° 13' 16.6" W80° 09' 11.2"
ESN328	Photo of Terrace gravel
WP 303	17 deep clay cut el 1758 ft
2099	N 37 13 [illegible]
	W 80 09 8.0
11/14/07	
ESN329	el 1976
WP 305	N 37 13' 18.3"
	W 80° 09 15.8"
	oc of qtz vein
	N80E 30SE bedding
	parting in saprolite
ESN330	3 ledges of greenish gry
WP 306	dolomitic mudstone
el 1977	290 (N80W) 64 NE
	N 37° 13' 38.6" W80° 08' 33.4"
ESN331	ledges of red and yellowish
WP 307	brown mdsn w/ gry
	and yelowish dolomit
	N80W 80 NE photos
ES	N 37° 14' 35.1" W80° 08' 36.7"
	ledges below RR bridge
	Rep jointing N30E ESNW
ESN332	Ledge of massive-thick
WP 308	bedded dk gy-blk
1190	xline dolomite N60E 30NW
	N 37° 14' 31.2" W 80° 08' 36'
ESN326	Folded N80E 30 NE
WP 309	sh/slate + mdsn
1245	N 37° 14' 29.3" W 80° 08' 36.0"
ESN327	Ot contact dol, bk mds.
WP	lt gra + gy arg. N80E 78SE

Item # 033-3

ESN 327 Karst

NOTES 11-14-07 cont'd

WP309 WP310	Dol Massive cliff w/cave el 1480 N 37° 14' 26.6 W 80° 08' 36.5 photo of cave 15 / dol beds dip NW N 60 E 30 NW
ESN308 WP311 128	Cliffed out by Massive- thin bedded mudsn/dol w red sh N 80 E 30 SE at bend - first island Shelter cave along river N 37° 14' 24.9" W 80° 08' 36.7"
ESN329 WP312 WP313	Thin bedded red mudsn grn sh + dol ^30-50 cliff EW strike dips 65 N N 37° 14' 20.2" W 80° 08' 37.7"
ESN3210	Massive Dol Pinicle 50' high 150' long 20' wide stick out into valley bound by bedding N 09 20° E and joints EW 80 N
~~ESN3210~~ ~~WP314~~ ENN 3210	Large blocks in river 15 x 15 joint space N 37° 14' 24.9 el 1619 W 80° 08' 41.4 Caves on bedding planes above
ESN3211 WP315	Massive dk gry xline Dol nochert 285 vert N 37° 14' 22.5" W 80° 08' 41.9"
ES3212 WP316	Red argillite in stream 290 64 NW N 37° 14' 09.3" W 80° 08' 40.8' 1141 el above pipe line on stream

Day Runner

NOTES 11/14/07

ESN323	Yellow Sh sap N60E 24SE on road bank
WP317	el 1432 N37°14'13.3" W80°08'49.8
ESN357	Grn Sh/phy sap on road/pipeline row
WP318	N 37°14'07.6 W80°08'47.0 el 1580
ESN358	Red and grn arg. + slate
WP319	N 70 W 60NE
1420	N 37 14 09.1 W 80 08 49.3
ISOO6	
ESN359	Grn + Rd arg + slaty sap
WP320	N 70 W 55 NE crenulated
	N 37 14 01.7 W 80 08 53.5
ESN360	Clearing and Yucca = house
WP321	site road curves to NE
	dolomite bed N 80 W 60 SW
	N 37° 13'55' 0" W 80° 08'55.5
ESN361	banded Rd in stm bed
WP324 rpt	N 70 W 65 SW 50' alluvial plain
	37 13 52.1 80 08 56.7 el 1592
ESN362	Yellow + grn slate/argillite
	N 40 W 65 NE
WP322	37 13 53.2 W 80° 09'05.1"
	1587 on pipeline at powerline
ESN363	Met hunter in stand
	sh/ph N 55 W 62 SW
WP 323	N 37 13 47.4 80 09 10.4
ESN324	N 78 W 75 SW yellow weath
WP325	phyllite targ sap in cut
	N 37 14 24.1
	W 80 08 59.1

Item # 033-3

NOTES 11/16/07 last day of BP

ESN63	12 el 2960 topo Fine gray laminated ash/tsn w/ fine sand layers, slaty cleavage chlorite mtx
ESN 6318	el 3000 6 N70E 60SE dk gm gray phyllite saprolite in road bank
ESN6319	Road switch back at 3120 6 much chl sch/slate flt, a few spheroidal basalt bldrs in regolith. Power line on spur above block SS-qtzite debris foliation from ledges on slope above switchback, below Powerline
ESN6315	el 2850 6 more basalt bldrs in slaty regolith along drag road
ESN6316	el 2600 topo N70E 66 SE Thick, medium grained meta ss ledges in pine woods
ESN6317	El 2550 6 ledge on hill spur above ck N50E 40 NW med gr meta lithic ss. Ang. talus blks fill valley below
ESN6318	E2550 6 saddle with continuous coarse augen gneiss (Ybc) Float above stream
ESN6319	Coarse leucocratic saprolite brecciated boulders along rd
ESN6320	Coarse augen gn (Bottom Crk) N60E 35SE spaced cleav across granulitic foliation

N 70E 15 NW

Day Runner

NOTES 11/16/07

ESN6321	el 2880 b coarse augen gn Flt protomylonic some black basalt bldrs on road (dike?) or sill
ESN6322	el 2960 100' above breakin slope fine gravel N soil bldrs of coarse lithic cgl
ESN6323	at el 3180 below powerline spaced clear or joint? pavement 310 25 NE med gr metagraywacke semi schist - S
ESN665	coarse qtz ss or grit w/ 1" quartzite pebbles N60E 50 NW - Foliated saprolite large ledges above on powerline
ESN6324	N50E 30 NW massive ledge lt gray cg gritty qtzite el 3300b
ESN6325	el 3350 abdt flt gray lam meta siltsn semischist
~~ESN6326~~	N65E 60SE gray argillite OC
ESN6216	On powerline at el 3230b
ESN6217	Basalt ledge on Powerline
R-8788	el 3215 b N70E 40 SE spl

Item # 033-3

RIP John Marr

NOTES 112907 RICHMOND REV

LS GASTON — Stop 1 Progradational grave Fine Gravel estuarine enviorment

TTG1 — Tertiary Gravel 1 upper Ches. GP

el 121

N 37° 34' 53.3

W 77 23 26.7

Peagravel Cp

Clay silt ss

w burrows

Flaser

upper Ch

Yorktown

lower — Eastover Oakwood

Big Burrows

STOP 2 CEM

Eastover cobbles covered by Bacons Castle — Clast size

Joints in Eastover NS and NE SW

Photos WP 326

el 126 N 37 32 13.4

77 23 40.7

N60E 75 SW

Stp 3 — Chimbarazo Slide

Viewing TG1 - 1

From Bacon Castle

Stp 4 — Hadads Mill. Paleocene

Eastover lower Tertiary

Aquia 20-30 glauconite fine med sand, cobbly at base

No Scolitus

Day Runner

NOTES

Top is Burrowed above
is Eastover Cly sand
–

Stop 8 Shirley Td along James
sits on Cretaceous
Cordiz'd
sheet like Fluvial
Sands w/ cross beds
High Terrain off ridges

Stop 9 Map incorrect Base of
Section Green sand
lower Tertiar –
Toc – Windsor Td
prob Qtg 4 alluvial
fans – none terrace
lite Eastover/
/aqua

STOP 7 Bryant Park
Petersburg – Fall line
Old Richmond Granite
Quarries – Paving Stone
Dikes Joints
Upland Brook – Chickahominee
Creek WP 327
cl 240 N 37 35 51.0
477 28 05 7
Med grained gray
foliated biotite gran

NOTES 11/30/07

Stp1 Eastover Ph 2-3
Concrete
el 267 N 37 36 27 7 W 77 21 49.7
WP 329
pebbler line - sandy
joints

STP2 Bodes Mill - Yorktown
Sinclair Manor - WP330
N 37 37 17.8"
W 77° 14' 56.8 el 104
midsection, small pebbles
lacks heavy clay
not a fining upward seq
Ironstained coarse sand
with some nodules

Stp3 Gaines Mill Battle Field
WP301 el 232
N 37 34 26.6 W 77 17 26.5
Turkey Hill Turkey Hollow Borehall
Stop4 Eastover Scarp Gobbler
WP 302 Way
Yorktown
Eastover
Qtg 4 Winddsor Td
N 37 33 49 0
W 77 16 12.2
Groundwater / Foundation

Septic Problems

Day Runner

NOTES

Stop 5 Yorktown/eastover
lower gravels
red structures
Fluvial TCS el
Scour Channels
near Barkers Mill
4 - 7 % heavy minerals
WP 333 el 82 120 ft
N 37 33 34.2
W 77 15 06.7

Heavy mineral
trail

Stop 6 Lower Ches
Bacons Castle on top
WP 334 el 32
N 37° 32' 12.8"
W 77° 15' 53.2"
exposed Yorktown
Eastover
Bacons Castle
Plio
Mio
1506
Bouroo Pit by pond site
4' Bacons Castle
6' York Town
10' Eastover

Stop 7 Spillway of Dam el 150
N 37 31,718
W 77 22 220

Item # 033-3

NOTES Arnold Valley Field

1) Parkers Gap Leucogneiss
WP336 37 32 152
79 31 288

1a biograpofels

2) WP 337
N 37 32 333
W 79 33 233
augen gneiss (grn
mtl = Peaks Pluton
photo of med grained
granulite gneiss

3) WP 338 1645
N 37 32 288
W 79 34 267

coarser layered granitoid
higher mafic content
than finely layered
granulite / lgg

4 Stop 4 Chilhowee
Unicoi / Hampton
N 37 33 360
W 79 34 183

lower volcanic pile
overlain by metagraywacke
meta siltstone

Day Runner

NOTES

Stop 5 WP 340	Childowee Unico phyllite cooling cleavage N 37 32.661 W 79 36.182
Stop 6	Cuv — in creek
Stop 7	Small horse N 37 31.685 79 37.501 geen
Stop 11	Harpers / upper Unicoi
stop 8	Middle Ptzite Snodon N 37 21 296 W 79 37 486

Item # 033-3

NOTES

Buchanan / Arnold Valley

1) Saltings Mtn Erwin/Shady

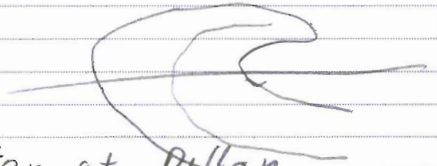
2) Overview Arnold Valley

3) Clearwood Furnace Shady breccia below Blue Ridge Fault

4) Burrowed Is in Waynesboro best burrowed Is seen

5) Well developed Folded axial plane cleavage in Elbrook on Road

6) Quarry in Oln or Oth



7) stop at Dillon

a/t discussion of Fault crossing river From Quarry

Harpers phyllite ap 38

37 32 379

79 37 833

Day Runner

NOTES

Item.# 033[illegible]

Bent Mtn Frost 1541 Laurel Creek

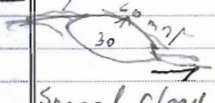
NOTES

FROST FARM 1541 LAUREL CREEK ROAD (SR631)

12/12/07 ESN 941 N 70E 70 SE
Coarse biotite gran gneiss w/ mylonitic foliation, massive weathered OC along road pink granitic stringers very coase feldspars

12/12/07 WP ESN 942 N 55E 42 SE
Schistosity in very sheared mylonitic gneiss protomylonite
Cross cutting slip cleavage N85E 65 SE Crenulation lineation N 75E 25NE w/ some stretched porphyro clasts

WP 344 ESN 943. Coarse Granitic
e 1055 N 37 08 .430 gneiss
W 80 09 .750
light gray, leucocratic Feldspar porphyro clasts



foliation N50E 55 SE
Spaced Cleav N40E 80SE
lineation 155 55 SE

WP 345 DRY SPRING w/ concrete
N 37 08.365 enclosure (PHOTO) CCC
W 80 09.787 Obvious channel in bedrock

WP 346 ESN 971 coarse granitoid
37 08.267 gneiss wide spaced joints leuco veins N40E 50NW

80 09.960 Mafic dike NOW 75 SW chl zn

540 929 4132

540 - 929 4132

Day Runner

NOTES

12/12/07 Elliston

WP 346	ESN 971 Coarse gray augen gneiss (Bottom Ck)
N 37 08 273	N40E 55 SE mylonitic ESN 972
W 80 09 741	Foliation
WP347	ESN 973 N10E 70 SE
N 37 08 209	Mylonitic foliation
W80 09 632	Coase YBC augen gneiss
	Ledge in creek
WP348	ESN 973 N 35E 50SE
12463	Rounded ledges and
37 08 181	blds VCg leucogranitoid
80 09 926	(Charnockitic Gneiss)
	of type bottom Ck

Item # 033-3

11/7/08

WP 262 ESN 392 reduce
top Volc el 1605 @ N 37 13 18.6
W 80 08 03.3

WP 262 ESN-396 ESN el 18706 1862 tops
coarse fragmental, vesicular
gray grn pyroclastic along Rd
N 37° 13' 07.0" W 080° 07' 59.5"

WP263 el 18506 thin lam meta
slfsn a Fine gray SS N90E 70SE
N 37° 13' 08.7" W 80° 08' 00.3" 1964

WP 264 el 17006 massive slaty cleav
isiculated flow top weathered
reddish grn cleav N 75E 30SE
el 1703 GPS N 37° 13' 18.8"
W 80° 07' 59.9"

WP 265 el 1560 lege in Stream
dk grn - gray SS
N 37° 13' 19.6" W 80° 07' 55.4"
e 1809

WP 266 el 1665 b
Vesicular Flow to Float
massive green ledge N80E
35 SE N 37° 13' 17.1"
W 80° 07' 55.1"
el 1916 GPS
WP 267 el 1940 b
N 37° 13' 01.8" W 80° 08' 00.08
1/18/07
ESN 364 rdy Anticline in Rome
N80E 16 SE
WP 268 N 37 13 47.1
W80 07 57.1
ESN 365
WP 269 el 15006 ESN 365
N-37 13 40.0 W 80 07 54.9 1588
Coarse pebbly ss debris - blders
up to 3' along chute, some fe mg dre
ESN 366 el 1730 b colluvial
cover on levees along chute
consists of cg egl, pbl ss
Some dark sh fragments in
chute below. Chute still 75'
wide v 15-20' deep, a major
slide event w/ 24" Chestnut Oak
in middle WP 270 el 1833
N 37° 13' 40.6" W 80° 07' 48.1"

11/8/07

ESN 367 el 1900 b 1907 cps
N 37° 13' 36.5" W 80° 07' 46.2"
2' ledge of light gray medium-coarse Met quartzite of impure (wacke) composition
w gray to milky quartz (75%) pink-yellowish feldspar ~15% dk gray slate fragments ~5%
granite frag ~5%
sand up to 5mm (lithics)
bedding N 30 E 20 NW
jointing N 80 E 65 SE
spacing ~ 1-3' N 40 W 320 87 NE
Spheroidal wea Above (10') N50W 50NE
ESN 368 el 2100 b WP 271
WP 871 el 2057 N 37° 13' 37.7" W 80° 07' 42.7"
ledges of spheroidal weathered coarse lithic metaarenite ~4 lft
N50W 20 SW
ESN 369 el 2400b WP 272
el 2165 N 37° 13' 40.0" W 80° 07' 32.6"
boldrs of impure brn weath ss with angular quartz, dark gray lithic fragments, clayey mtx w/ foliation very impure wacke stone parent. Angular to sm gravel lags

BMT 1410
11-8-07 WP 273 el 2576 2500b
N 37° 13' 38.4" W 80° 07' 19.8"
cut bank on road - thin bedded -
laminated qtz rich silt and
fine sandstone saprolite. N70E 1. NW
BMT 1411 WP274 N 37° 13' 32.0" W 80° 07' 18.1"
Ledge forms pavemen N 65E 22 NW
Med to Fg light gray to tan met
ss ~ 5' thk el 2660b 2570 GPS
BMT 1412 WP 275 el 2785, 2940b
Pavement Oc eg metass cgl
w 20mm rounded pebbles (clay or bolc
< white qtz clasts in coarse
lithic ss mtx
N 37° 13' 26.5" W 80° 07' 04.1"
Steep Foliation EW 62 S
possible dip slope
on pavement.
BMT 1413 WP 276 el 2916 3030b
N 37° 13' 24.1" W 80° 06' 58.7" qtz
ss ledge along road ~ 4' thk
apparent dip N30E 16 NW
BMT 1414 wp 277 el 3129 el 3160b Near Flat
N 37° 13' 20.9" W 80° 06' 55.0" 120' corr ~ 100
apoint where power line crosses ridge
ss lt gy-white med-fine, med N30E
bedded. Feld ~ 30 qtz 50 mtx 20 5NW

11-8-07

BMT 1715 el 2990b ledge crosses road, ss lt gry med fg impure qtzite } WP 278 S120 N 37° 13' 11.9" W 80° 06' 50.9"

BMT 1716 el 2910b WP 279 (S139) N 37° 13' 06.7" W 80° 06' 55.4" ledge crossing road ~ 4' thk cgl w/ meta qtz ss

BMT 1717 coarse ss ledge forms pinacles along rdg - X beds N 50W 42 SW bed N 30E 15 NW ?? ≈

WP 280 el 2838 N 37° 12' 56.2" W 80° 07' 04.0"

BMT 1718 el 2260 b road crossing big ledge large bear scat ledge ~ 10' gentle dip NW pos cross bedding, black tam qtzite No signal

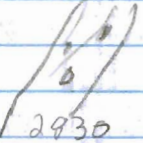
BMT 1719 el 2810b 2864 abs WP 281 N 37° 12' 46.3" W 80° 07' 24.0" qtz ledge w/slicks on bedding bedding N 45 E 25 NW slicks plunge S10 at 25 movement up to SE

11/8/07

ESN 669 redux el 2780 b WP 282
N 37° 12' 29.9" W 80° 07' 42.8"
el 2900 -

N 45E 22 NW rippled or gently folded qtz ss bed top
med - fine w/ pink to orange weath ortho feldspar, opaques, qtz cement, breaks across qtz grains, large opaques (1-3 mm) rotted out in vugs

ESN 634 redux N50E vert foliation in chlorite? weath brn phyllite bmpy text looks pyroclastic
el 2860 b phyllite float
GPS 2887 N 37° 12' 18.0" W 80° 08' 01.8"
WP 282 - Possible fault?
pyroclastic unit in rab 6/6 has 3/8" phenocrysts



ESN 836 redux el 2930 WP 283
2803 N 37° 12' 19.2" W 80° 08' 05.0"
pyroclastic layering or flow bndr
EW 10° S base of lower flow ex

ESN 63 11 el 2730 b green chl phyllite
N 70E 30 SE WP 284 (2706) N 37° 12' 25.8" W 80° 07' 57.7"

11/8/07

ESN 3916 redux el 2380 6

WPRES N37°12'50W86°07'40.8" 2360 GPS

Photo of Folds below basalt syn

25 580
25

NOTES 12/14/07

WP 349 ESN 944 WP 349 N 37 08 678
W 80 09 857
Large angular blocks
of lower unicoi cgl
ss/qtzite on khob by
cabin el 2061 el 2645 6

WP 350 ESN 945
Foliated sap in bottom
of backhoe pit ~ 3' soil
then 2 - 3' granular
gray + white sap foliat.
N60E 45SE
el 2604 N 37° 08.640
W 80° 09.865
Sap contains pink gran
stringers
ESN 946 el 2580 6 ocs of
slaty cleaved, siliceous
ch phyllite above badly
cleaved ot qtzite ledge
on hillside N40E 75SE
Foliation on ot ledge
clear in phyllite N40E 87SE

WP 351 N 37 08 .677
W 80° 09 .947
ESN 917 Thk bedded qtzite
ledge, lite gy - white
f-mg. ~ 20' wide
bed. N 45 E 68 SE X bedd.
W70 E vert

WP 352 N 37° 08 .684 W 80° 09.917
el 2559 el 2590 6
about 50 paces combined SS scot
125' along road before in paces/SH

Day Runner

NOTES

12/14/07

WP 353	sister in grotto / white qtzite w/ qtz tension veins photo ESN el 2686 2600b N50 45 NW N 37 08.709 W80 10.006
WP 354	ESN861 (Ot) N70E 60SE gry - redish brn weathered - cg lithic metarenite w Ot cross beds (photo N 37°08.735' W 80°10.043 el 2211 2r006
	Succeded by dark grayphyllite in turn tight folds rsu sense hinge plunges S60W 245 NW
WP 355	ESN 862 at turn gray fg lithic m. ss N45E 60NW thk bedded spheroidal weath 05° N37 08.752 W80 10.070 crest of hill on road 2610
WP 356	ESN863 N37 08.748 W80 10.206 N45E 30SE poss. Foldhing steep NW dippi N80E 40NW impure qtz ss el 2743 el 2620b

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NOTES 12/14/08

WP358	ESN 864 N 37° 08 787' W 80° 10 344'
ESN864	N50E vert foliation/bedding in thin bedded metasc/phyl section, paper thin silicic phyllite below 2690 b
WP 359	ESN 805 N37° 08.987 W 80° 10.298'
ESN 805	medium gr med - Fine bedded SS N51E 45SE el 2719 el 2740b
WP 360	Fold hinge (photo) in thk bedded
ESN 866	metagraywacke/graphite chl phyllite sequence plunge 245 16 N 37° 09.049' W 80° 10.290 el 2740
WP 361	ESN 831 el 2790b Fold hinge
ESN 831	1' cgl layer in lithic SS section N 70E 25 bed 1' N 45E 42 NW
	hinge plunges S40W 10SW
	N 37° 09.220' W 80 10.383' el 2810
ESN 832	WP 362 el 2860 b e 2870 N37° 09.234 W 80° 10.394'
WP362	Assymetry to SE
	qtz crenulation core
	PHOTO
	hinge plunges S40W at 10SW
	ap N45E 70 NW
ESN 833	WP363 N 37° 09.216 W 80° 10
	N40E 75' white banded quartz bed, slicks on bottom el 2870
	hinge around cracker NW limo

N 35E 65NW

Day Runner

NOTES 12-14-08 ctd

ESN 833	qtzite is repeated on NW limb N35E 65NW
ESN 834	Upper cgl ledge of Unicoi across road 100' E of
WP364	BM 2761 el 2810.6 (50') off N 37°09.209 W 80°10.710' beds N40E 38SE
ESN 835	N55E 66SE coarse pebble ledges in stream
el2765	at WP 365 N 37°09.208 W 80 10.724
ESN 836	Ledge of white qtzite in
WP366	road N65E 28SE N 37°09.334 W 80°10.834' el 2772 Ledge above road N55E 10SW
ESN 837	Spring near contact between
WP367	upper and lower Unicoi units N45E 10 bedding in brown weath metawacke N 37° 09.912 W 80°10.848 cleavage - spaced N35E 70SE
	Spring is 2" iron pipe from concrete filled Fissure. In to 24" galv. culvert set on End
N40E vert down to SE at 140°	just beyon spring are N90E vert Frac in pebbly gtzarenite ledge - N slickensided (photo) down to SE @ 140
	contact just before bridge

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NOTES 12/14/07

ESN621	Ledge of qtz pbl ss crossing
WP368	road el 2932 2980b
	N 37°09.822' W 80°10.821'
	Joint face 11 road N20E
	15 SE bed top N70E 18SE
	max dip on top ledge
ESN838	WP 369 N37°09.966' W80°10.817'
	FINE white sap of fine ss
	N20E 45 NW cleavage is
	el 2926 3020 B
ESN691	N65E 32 SE coarse qtzite
	ledge along road just
	above junction. WP 370
	N 37° 10.037' W 80° 10.530'
	el 3058 N55° 38° SE at top
ESN681	Ledge of coarse cgl ss
	in road bank
WP371	Photo @ N 37° 10.044 el 3185
N70E	18SE bed W 80° 10.885
ESN682	WP372 el 3220 b 3197 GB
	N 37° 10.376 ledge of
	W80° 11.055 jolly beam
	cgl across road N45E 15SE
	bedding plane parting in
	OC
12/20/07	Ice on Mtn
ESN 561	el 3850 b 3795 GB
WP 373	N37° 11.211 W80° 09.791
Large	(6') blk sdy coarse qtz
	sandstone or meta qtzite
	Ledge at 3800' b FSN 562
	N 55 E 22 SE
10'	light gry - white cg qtzite

Day Runner

NOTES

12/20/07 ESN 562 contd el 3763' 3 8006
WP 374 N37°11.251 W 80 09.838
WP375 ESN 641 N 37° 10.820' el 3853
W 80°09.770' 39406
coarse grit or ss sap.
N55E 25 SE bedding?
near steel rod in road
WP376 ESN 672 coarse grit/w rnd pbls
N55E 25 SE white qtzose
cleavage? N55E 65SE
el 4003 N 37° 10.718' W 80°09.914'
WP377 ESN 591 - N37 10.608 W 80°10.063
3918 great view of Buffalo mtn
39406 to SW
ESN 591 cleav w/slicks N52E 52 SE
10' ledge across road
slicken sides plunge 140, 44 SE
hw up
dark gry phyll photo of slicks
below w/stp photo of phyllite
cleavage N15E 62 SE
This must be Harpers
so uniformly dark
WP378 ESN 592
el 3712 N 37° 10.487' W 80° 10.207'
OCS of coarse ss ledge
large blocks to
West side of trail
orange clay soil on
trail - Chs
good view of Hang Rock area
270 of Sarrowtown Mtns
245 orange sh/sap in road below

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NOTES 12/20/07

WP 379 el 3768 3670b	ESN 593 Block field on gentle knob as predicted qtzite residuum along ridge N37° 10.499' W 80° 10.367
WP380 el 3742	ESN 594 - qtzite ledge N 20E 47SE N 37° 10.262' W 80° 10.368' photo. Thin bedded meta sltsn/phyllite oc in road 75'
ESN 595 WP382	to S. N 10 E 60SE el 3583 N37° 10.262' W 80° 10.345
WP383	ESN 596 cg pebbly qtzite white to brnish gray ledge E-W (270) 22 S across road N 37° 10.200' W 80° 10.348'
ESN597 WP384	cg pebbly ledge N 30 E 75SE on hill point @ N 37° 10.092' el 3563 3580 b W 80° 10.316'
ESN 899 WP385 el 3500	Qtzite ledge crosses powerline N45E 35 SE thk wht/brnish gy pebbly ledge N 37° 10.001' W 80° 10.376'
ESN 598	N 35E 75 SE bed thin bedded Harpers metasltsn W N 20E Vert cleavage and bedding relation indicating tops to SE N 30E 30 NE cren lin
ESN 599	Ledge of cg qtz ss w/pbls in road N
ESN 5910 WP386 el 3310 3320b	NS 65 E thin bedded Harpers metasilt sap pink/yellow photo N37° 10.067' W 80° 10.077'

View to S all harpers on slope

Day Runner

NOTES 12/20/07

ESN 59	11 contact w/ Char Cua
wp 387	N 37° 10.602' W 80° 10.062'
	el 3774 59606 dip slope
	strike 320 20° SW
ESN 642	N45E 75SE clear
	in gray/tan phyllite
WP 388	
el 3762	N 37° 11.218' W 80° 9.650'
	bedding dips NW on
	cleavage sur N40E 70NW
1/09/08	Clear windy warm
ESN 643	low lying coarse
	redish brn weathered
	SS OC in road N20E 12 NW
	el 3800 t
ESN 644	N20E 10NW
WP389	thin bedded gray-grnish gry
	meta silt-n / argillite sp
	N 37° 11.678'
	W 80° 09'.607' el 3708 (3700 b)
ESN645	
WP390	DK gy-grnish gry meta argilite
N 37° 11.187'	't sltsh sp1
W 80° 09.67	N 35E 70SE Slaty Clear
	N55E 17 NW Bedding
	photos of new road
	No erosion controls
	el 3650 b
ESN646	Coarse qtzite block field in
WP391	drainage ~ 300" wide at
N 37° 11.285	el 3550 @ 3500 b photos
W 80° 09.510	
ESN647	N20E 60 NW ~ 20' Hard SS
WP392	med gray - med - cg
	light gry weathering

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NOTES 1/08/08

	Day timer Refill
ESN648	Calender el 3437 3400b
WP392	N 37 11.347 W 80 09.344
ESN648	Photo of blackfield at el
WP393	3380b N 37 11 395 W 80 09 316
ESN649	outcrop of gray laminated mssn
WP394	N 35 E 56 SE el 3315
N 37°11.352' W 80°09.285'	
ESN658	Ocof lt grnish gry meta s/sml
WP395	phyllite N 50 E 34 SE cleav
N 37°11.376'	N 50 E 65 SE el 3200b
W 80°09.150'	road switches back to
	log landing.
ESN659	N 40 E 80 SE slaty cleavage
WP 396	in ltgrn - grnish gy chl
N 37°11.368	phllite in creek bed
W 80°08.871	el 3040 b
1	
ESN6510	N50E 80SE dk gy - grnisgy fine
WP 397	slaty cleaved argillite ledge
N 37°11.374'	el 3140 b (lower Unicoi
W 80°08.85[illegible]	pyrite, much chlt in
	mtx, qtz veins
ESN6511	bldrs, round, dk grn
1 WP398	granular meta basal w/
N 37°11.328	yellow grn epidote angdules (1-3mm)
W 80°08.792	el 3190 b
ESN 6512	Meta qtzite, pbly lt gry - grnish
WP 399	gry coase grained N 55E 80NW
N 37°11.296	strong cleavge N 50 E 70 SE
W 80°08.692	el 3250 b 3296 GPS
ESN6513	Flt of cg arkosic metaarenite
WP400	very angular, white mtx

Stong topo expression

Day Runner

NOTES

ESN 6514	N 50 E 55 NW ledge of qtz ss
WP 401	above gray meta argillite
N 37° 11.350'	
W 80° 08.650	el 3227
ESN 6515	Red clay soil profile
WP 402	begins at turn of
N 37° 11.163'	road - bottom of Eu ledge
W 80° 08.522	el 3068 Eu bldrs in soil
	all the way down to valley
ESN 6516	Massive ledge of breccia or
WP 403	meta conglomerate lt
N 37° 11.152'	gray coarse feldspathic
W 80° 08.62	meta arenite mtx
	many pebbles
	N 30 E 75 NW el 3135
ESN 6517	N 35 E 70-80 NW thin
WP 404	bedded, lt-grn, meta
N 37° 11.272	sltsn + argillite in road bank
W 80° 08.756	just before gap
el 3227	
ESN 6518	by dear Tower el 3352
WP 405	meta argilite, fg qtzite
N 37° 11.120'	flt the whole way
W 80° 08.856	from last stop
ESN 6410	Ridge seems held up by
WP 406	fine white qtzite or sil.
N 37° 10.980	slt sn. weathers lt gry to
W 80° 09.206	white thinly layered chips
	in soil el 3418
ESN 6411	WP 407 el 3534 Eg ss bldrs along
N 37° 10.934	trail at break in slope
W 80° 09.256	

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NOTES

1/08/08

ESN673	N 30 W 30 SW coarse
WP 408	SS, med-thk bedded
N 37°10.814	ledge along ridge.
W 80°09.277	coarse gritty pebbly cgl
el 3512	
ESN674	Prominent Topo ledge form
WP 409	~5-6' high along ridge
N 37 10.678	el 3679 6 → 3810
W 80 09.43	
ESN675	Prominent to ledge form ~10'
WP 410	high N 40 E
N 37°10.687	el 3701
W 80°09.479	
ESN676	Hampton gry argillite + spheroidal
WP 411	weat SS N 40 E 70 NW
N 37°10.728	Oc in road bed above qtzite
W 80°09.528	at el 3787
	Then pavement N 5E 20 SE
	coarse pbly mtc cgl
ESN677 A	
WP 412	Thin lam silic slsn Hamp
N 37 10 749	fine SS N 30 E 20 NW
W 80 09 592	el 3770 in road
1/11/08	clear breazy
ESN 677	Oc + Photo Med gr thk bed
WP413	lite gy - tan SS beds N 55 E [illegible]
N 37°10 651	Cross beds ~ vert base of
W 80°09.386	upper unicoi
3656	3650b
ESN678	OC of lt gry - tan weak
WP 414	thin bedded, fg siliceous sltsn
N 37°10.601	+ fine SS. Photo bedding
W 80°09.372	el 3610b N 30 E 55 NW.
el 3600b	Pg spheroidal SS ocs N 30 E 45 NW

Jt 310 66 SW

Day Runner

NOTES 1/11/08

ESN679	Coarse gy qtz pbly ss Float
	on road in saddle area
ESN6710	Some orange ocher clay
WP	soil w/ shly chips in
10	road at el 3560 b
ESN6711	Oc in embankment lt gry-grn
WP415	laminated chl phyllite /
N 37°10.492	metaargillite N 30E 68 NW
W 80°09.200	lamination cleavage gentl see
ESN6712	Blocks of very lt colored
	coarse gr pebbly white
	qtzite Float ~ 75'
ESN682	along trail on backside
WP416	ocknob then argillaceous
N 37°10.491	Chippy bleached gry
W 80°9.129	tan soil on road beyond
	N 40E 75 NW - pavent sed
	lite laminated Fg ss + slf
ESN683	Coarse lt gy - white lithic
WP417	ss Flt along road
N 37°10.419	to break in slope at
W 80°09.096	el 3663 el 3430 b
ESN684	Lt gry gn phyllite in
WP418	bnk cleavage N45E
N 37°10.348	50SE el 3380b
W 80°9.107	bedding N 80E 75 in
	laminated lt gry gn
el 3350 b	chl phyllite - meta slsn
ESN685	el 3280 b Fine sugary qtzite
WP419	white with white veins
N 37°10.240	N 30E 60 NW possible bedd
W 80°09.058	Strongly shear zones
ESN686	Oc 8" qtz ss bed in shly sp
WP420	N 30E 35 SE el 3140 b

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NOTES

WP 420	ESN686 Photo of Arpant esc.
	N37 10.280 W80 08.926
	el 3157
ESN687	continuous matle of coarse
el 2910b	sandstone Flt + breccia
WP	along this nose last
	massive ss-cgl oc at
	power line. Foliation N10W 35NE
	in phyllitic sap above tower
	in road way
ESN688	Coarse pbly bed
WP421	N45E 65SE Of
N 37°10.283	wit strong lineated
W 80°08.812	Fabric pbls plung S20W at 55°
ESN689	el 3100 b orange
	plastic clay soil,
	ocherous meta basalt
	balls 2-3" dike just
	above cgl ledge on
	power line road
1/16/08	ESN6713 el
WP422	ledge of qtz ss - topo form
N 37°10.589'	el 3720 and Float
W 80°09.433'	on road bed.
WP423	ESN 6714 ledge on edge
el 3638	of clff N5E 20NW
N 37°10.454'	Massive qtz pebble
W 80°09.492'	conglomerate + coarse
WP424	lithic ss 3660 b. Powerline cut
3713	ESN 6715 ledge of qtzite/lithic
N 37°10.112'	m.ss N10E 24NW ripple?
80°09.527	300 at 19

Day Runner

NOTES 1/6/08

	ESN 911	el 3645 ~ 3610 b
	WP425	broken cg gry qtz ss
N	37.10.034	ledge w/ white qtz veins
W	80°09.584	N20E 35 SE - spaced cleavage?
	ESN912	el 3259 pressure dropping 3700b
	WP426	broken ledge just above
N	37°09.937'	break in slope N20E 20NW
W	80°09.58'	estimated on flats
		NO continuous beds
		Knob is chl phyllite +
		some graphitic beds
	ESN 913	bg stable on ridge
	WP427	highly cleaved ledge
N	37°09.811	cleavage N45E 55 SE
W	80°09.944	el 3490 photo of what
	ESN 914	must be bedding N15E 40NW
	WP428	laurel Hell N40E 65 NW
N	37°09.826	thick bed of qtz wacke
W	80°09.258	el 3459 23 20 b cored at
		last stop
	ESN915	el 3284 (31806) Topo bench
	WP429	covered w/ cg ss blks
N	37 08 740	+ rnd blders up to 2'
W	80 09.160	
	ESN 92	N50W cleav N40E 50SO
	WP430	Coarse qtz pbl ledge SPI
N	37 09 679	- 5' thick or more
W	80 09 132	highly cleaved el 3249
		31406.
	ESN916	el 3411 33506 at edge
	WP431	of laurel - small x blks
N	37 09.844	N oc
W	80 09.204	

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NOTES 1/28/08 Clear, very cold

ESN982	N40E 45 SE lt gry fg
	ss w/ sltsn chips
	Joints N40E45 NW
ESN983	N80E 34 SE bumpy phyllonite
	or phyllite, lite grnish gray in
	road cut WP
WP 433	N 37° 08' 08" W 80° 08.87'
ESN984	Pebbly gry m/ss 1' thk
	bds N 70E 75 SE
WP	434 N 37 08.015 W 80 08 .960
ESN985	Mass Fol augen gn
WP435	N 37 07.981 W 80 00 899'
	coarse protomylonitic
	bottom ck chk gn
	Foliation N 80E 38 SE
	joints N75E 51 NW NS 65W
	lin (feld) S 30W 30SW
ESN951	large ∝ of Vcg granitoid
WP436	w/ 1-2" pelasts joints
N 37 08 565	N60W 60SW, E W 35N
W 80 09 028	Allighed X/s N 35W 45SW
el 2531	Bottom Creek type loc.
ESN952	N70E 60 spaced cleavage
WP437	in Vcg granitoid (Ybc)
N 37 08 647	on point at Power line
W 80 09 967	el 2577
ESN953	granular tan (light brown
WP 438	saprolite, pink and green
N 37° 08.808'	Pilot Gneiss chips then
W 80° 09.201	foliated sericite phyl/
el 2699	w/ phyllite or
26506	Phylonite

1/28/08

NOTES

ESN 9448	Foliated meta tuff, weath
	light gy to lite grn
	w/ rusty vesicular struct
	N 55 E 60 SE cleavage
ESN 949	Coarse chl semi schist/myl
	w pclasts of pink gran
ESN	250' highwall, foundations
9410	behind poultry house
	outcrops of coarse gry
	protomylonitic granitoid
	w 3/4 - 1" fold p. clasts
WP 434	joints N S 82 NE
N 37°09.985	N 60 W 78 NE green +
W 80°09.161	myl fol N 45 E 65 SE pink
ESN	+ 6' leucosome = Airpoint
9411	Brown clay loam - granular
WP 441	soil in saddle exposed
N 37°09.057	on old orchard benchs w/
W 80°09.191	orange Fold chips
ESN	dk grn chl bio sch w gran
9412	Fragments - sheared breccia
WP 442	N 70 E 65 SE Foliato
SPL	N 37°09.855 W 80°09.240
WE1	2792
ESN	
9413	
WP 443	
N 37°09.098	el 2891 cg myl augen gn
W 80°09.241	N 70 E 65 NW ledge 6' thick
ESN 911	Coarse white qtzite w vein
WP 444	N 70 E vert spaced cleavage EW 65S
N 37°09.117	el 2920
W 80°09.335	

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NOTES

	ESN918	el 3017 3050 b 6' qtzite ledge
	WP445	white to light gray
N	37 09.194	coarse qtz sand
W	80 09.396	Bedding N40E 18 NW
		Joints N10E 85 SE
	ESN9414	2937 el N700N 10 SW
	WP 446	Lithic ss gry + bk
N	37.09.125	coarse sand and
W	80 09.259	& lithic fragments
el	2920 b	salt and pepper mtx
	ESN9415	WP447 el 2860 - 2830 b
N	37°09.060'	pile of 8" rounded cobbles
W	80°09.209'	coarse ss derived from Eu
		at old terrace level!
	ESN9546	Photos of perfect quarry
	WP448	site in coase pink and
N	37°09.035	green augen gneiss
W	80°09.093	el 2783 2750 b
		mafic dike in creek and
		on SW wall of canyon
		Joints N20E 62NE EW 75S
		Foliation N50E 45SE lineation 125 10SE
	ESN955	N37°09.149' W 80°08.892' el 2766
	WP449	Blks + Bldrs + Cobbles of Coarse Eu
	ESN922	on ridge ang blocks of Eu
	WP450	breccia + cg gritty lithic ss
N	37 09 212	el 2789, 2950 b
W	80 08 939	
	ESN923	Ledge of coarse lithic
	WP451	ss or gray wacke
N	37°09.226	el 2885 0950 b N55E 45E
	80°09.014	

NOTES 1/28/08

ESN956	Ledge of impure lithic eqs
WP452	w/ phyllitic mt & N70E 60SE
N 37°09.109'	
W 80°08.836	el 2999
ESN957	ledge of grit el 2615 ~28806
WP453	37°08.993' W 80°08.872
ESN958	By abandoned poultry operation
WP454	well site large blocks of
N 3708.982	mylonitic granite gneiss
W 8008.746	e2679. 26806 Fol N70E65SE
ESN959	Vcy Y6c (Photos)
WP455	Joints NS 70E EW 70N
N 3708 724	N70E 50SE Foliation
W 80 08 783	(oriented pclasts
ESN924	N60W 64SW Joint ledges of
WP456	lt gry-grn unicoi
N 3709834	metasandstone on
W 8008602	Knob along tred of ridge
	bedding N70E 25 NW
ESN925	Big Spring beside house
WP457	in qtzite bldr field
N 3708796	
W 80 08 696	
ESN926	el 2842 Rim Rock OCS
WP458	on side of ridge qtzite
N 3709 668	ledge w/ gypsymoth eggs
W 8008 654	N30E 45SE N50W 80NE
ESN927	Unakite / granitoid spaced clean
WP459	N30E 65 SE joints N10W 70 NE
	N55E 60 NW mn filled vugs

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el 2823 N 37°09.529 W 80°08.569'

1 30 08

NOTES

ESN928	N 80E 50S Foliated rx
WP460	in stream bottom
N37094091	lg cgl and grit blocks
W 8089492	above
	Reg 6" spaced joints
	N5W 82SW
ESN929	Ledge of Qtz pebble cgl
WP461	w & clasts of metamorpic
N 37°09.612'	rx + basalt N55E 65SE
W 80°08.491'	Cleavage N30E 38SE
el 2860	06906 N40E 55SE mass spheroidal
	weath nqw bed
ESN9510	Unicor meta cgl w
	schistose to qtzitic
	mtx < qtz and
	lithic fragments 60
	70 dip SE 30' cliff
	behind garage
ESN9210	2/04/08 Ellston Quad Clear
	warm am - grn chl phyll
	(UMV) on road above
	house
ESN9211	Coarse arkosic Mss on
	Flats ~ el 2860 much
	lam slt sn flt
ESN6812	coarse gritty qtzite
WP462	bldrs on knob
N 37°10.065	el 2869 ft
W 80°08.673	
ESN6813	Qtzite + phyllite Float along
WP463	ridge at turn OC grag grn
N	graph meta sltsn el 3027
37°10.152	N60E 40 NW banded ss + sh
80°08.837	w/ thin gritty ss layers

Day Runner

NOTES 2-4-08

ESN 6814	Blocks of white
WP 464	qtzite on roadside
N 37°10.160'	6" ledge N45E 60 NW @31806
W 80°08.961'	el 3149 31606
ESN 6815	Ochor colored argillite
WP 465	or chl phy saprolite
N 37 10 245	some m. tuff or basalt
80 08 910	with limonite filled
el 3300	amygdules fine grained
	feld spocks in yellow
	orage mtx
	€ UV sap
ESN 6816	Steep ledge ~3' thick cg
WP 466	qtz ss N35E 70 NW
N 37° 10.358	on N. slope in laurel Hell
W 80° 08.779	el 3004 38006
ESN 6817	Coarse meta ss ledge thick
WP 467	bedded white qtz granule
N 37° 10,477	gritty qtzite al 2840
W 80° 08 756	N10E 55 SE ledges in
	creek are dipping steeper
	to vertical. Ledge forms
	rounded ridge + valley on
	cross spur above
ESN 6818	Pilot gneiss OCs on hillside
WP 468	NS 78 NW N10E 34 NW
N 37° 10.564	260 70 NE
W 80° 08.613	2918
ESN 6819	Ledge of pink grgn (Pilot gn)
WP 469	jointing rectilinear @
	240 85 SE 10 87° NW
	050 24 NW qtz banding

Item # 033-3

NOTES 2/4/08

ESN6820	Boxed spring along
WP46N	prop. Fault line at
N 37° 10	.358 W 30 08.519 2743 F
ESN6821	Possible Dimension Stone
WP470	site N40W 78NE joint
N 37 10.332'	N60W 24 SW sheat
W 80 08.382'	N75E 70SE joint
el 2761	
ESN6822	Pink granitoid gn
WP471	N10W 80SW close spaced
N 37 10279	N40W 85 SW shear zone
	open fractures
N 80 08144	N 80 45NW qtz ribbons
el 2750	E W 80 N joints
ESN6823	Highly sheared and foliated
WP6	green and pink granitoid gn
	protomylonitic Float blocks in woods
ESN6824	Highly sheared and foliated
WP472	chlorite semischist w/
N 37 10.102	lithic fragments limonite
W 80° 07.967	replacements of vessicle
el 2849.	fills - meta basalt or
	mafic - intermediate tuff
	Breccia N 70E 83NW
ESN931	Andesite? gray chtschist
WP 473	w/ hbd phenocrysts then qtz rich
felsite,	angular cgl above w/ qtz
	rich clasts then spheroidal
el 3018	weathering SS - N 45E 38 NW
N	N 37 10 057 W 80 08 056
ESN932	Pilot gneiss w/ leucosome / qtz stringer
	N 70E 35SE comp layering
el 2998	photo @ WP 474

Day Runner

N 37 09886 W 80 07 813

NOTES 2/4/08

ESN 934	N70E 35° NW
	mafic schist / tuff
2/05/08	ESN 935 WP476
N 37°09.274	el 2996 2660T
W 80°08.145	N40E 30SE spaced
	cleavage in sheared
	pink and grn granitoid
	gneiss
ESN 936	N40 E 20 SE
WP 477	Fracture cleavage in
N 37°09.154	sheared pink granitoid
W 80 08 326	saprolite el 2650
ESN 951	N 60 E 38 SE cleavage
WP 476	in coarse lithic
N 37 09 177	ss / w schistose (mylonitic)
W 80 08 489	el 2636 6 2762 GPS
ESN 952	Sheared augen gneiss gry
	w/ lt pnk / white Feld
	p-clasts to 30mm N45E 65
el 2590 6	
ESN 953	Photo of old pump
ESN 954	
WP 479	N10E 80 SE N35 W 80 SW
N 37 09 34	lineation 19 SOS
W 80 08 469	coarse pink and gray
	(sericitic?) granitoid gn.
	w/ bk hbd p-clasts
WP 480	ESN 955 N45E 47 SE Foliation
N 37 09 359	very angular qtz rich, coarse
W 80 08 467	feldspathic breccia,
	weathers redish to pink
	qtz clasts up to 1/2"

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NOTES 2/5/08

WP481 ESN 9516
N 37°09.440 blocks of coarse grit
W 80 08.478 and breccia
el 2922

WP482 ESN 9517 massive, coarse
N 37 09.427 black/white granulite
W 080 08.488 qtz, Feldspar black
el 2711 minerals - possibly chloritized
amphiboles blaky weathered
some rounded (resorbed?) grains

WP483 ESN 9518 el 2705
N 37°09.409 15-20' thick cgl ledge
W 80 08.533 1/2 inch feld clasts
N70E 30 SE - possibly
shallower dip as rim rock

WP484 ESN 9519 N80E 20°SE
ledge form crossing
peninsula

WP484 ESN 9520 OCs of coarse
N green and pink gran
37 09 25 augen gneiss by
W stream, large spring
80 08 506 house on cgl/gran Contact
2606 from Foliation N45E 12SE
(Tops of ledges)
Joint N5 80 E

WP485 ESN 9521 coarse cu ss/cgl ledge
N50E 20 SE Master bed?
N70E 55 SE x bed?

Day Runner

NOTES 2/5/08

	ESN485	OC of coarse molass w/qtz pbls
N	37 09 330	lithic Frag N 30W 20NE bed
N	10 08 761	cleavage N 30 E 70 SE
	el 2248	
	ESN936	N 70E 38SE compositional
	WP486	layering (gneissic
	2709	foliation in green and
N	37°09.567	pink gneiss OCs
	80°08.346	behind barn
	ESN937	Ledge of banded coarse-g.
	WP1	sandstone N 70E 39 SE layer
	487	
N	37 09.535	
W	80 08.341	el 2800
	ESN938	blder of coarse grn + pnk
	WP488	gran at el 29403
N	37 09 438	
W	80 08 206	
	ESN939	ledge N 70E 54 NW cg/uniform
	WP489	ss w/qtz layers
N	37 09 495	el 28&1 29480
W	80 08 268	hilltop bowl shaped
		w/ multi ledge
		forms on NE
		↓ N

Item # 033-3

NOTES 2/6/08

BMT 746 Coarse grain gn w/peg stringers
N5 65SE Fracture Cleavor
(Mylonitic foliation
ESN 961 Entrance to Stone Ridge
WP 490 at Bent Mtn Subdiv
N 37 08.868 el 2654
W 80 07.602 Photo of Entrance and
Dam which has trees
growing on it

BMT 747 Sap exposure of sheared
WP 491 augen gneiss Ybg in
N 37 08 972 culdesac at WP
W 80 07 355 N 70E 75 NW qtz bands in
Sap el 2743 AN filled joints
N 30W 30SW
BMT 748 Coarse augen gn Ocg
WP 492 N60W 85 SV N60W 80 SW
N 37 08 924 N40E 33 SE
W 80 07 287 el 2718

ESN 963 el 2708 culdesac at
WP 493 end of Cobble trail
N 37 08 648 lot 26
W 80 07 700

ESN 964 Mylonitic foliation in cg
WP 494 augen gneiss ledge
N 37 08 706 trends N 70E 65 SE
W 80 07 779 el 2866

ESN 965 Mylonitic Foliation in cg
WP 495 Ybg N60E 65 SE WP 495
el 2883 N 37 08.625 W 80 07.793

Day Runner

NOTES 2/3/08

ESN966	thin bedded fg SS + slsn,
WP 496	phyllite sap in road
N 3708582	bank 65E 75 SE
W 80°07772	E ul
ESN967	Greenish grg phyllite w/clasts
WP001	typical Cocade hat ocs
	N 75E 75 SE at edge
	of Floodplain
N 3708	513
W 080 07	715
ESN968	graphite slate/phyllite
WP002	w grits interbeds
N 3708.438	el 2680
W 8007.593	
ESN969	Intesely sheared bio augen
WP	gneiss blue gray with
	myl text N 80E 60SE
2/8/08	lin 530E at 15SE
ESN9616	White to light gray
WP 003	leucogranitoid gneiss
N 3708733	With White pegmatitic
W 8007.867	Stringers above bridge
el 2628	N 70E 52SE N30W 78SW
	Comp layering Joint set
	N40E 55NW joint set
ESN951	Sheared Qtz Pebble
	lithic clast Cgl
	N55E 60 NW
E	

Item # 033-3

NOTES 21 08/08

Ed	Trestor 929 4132
ESN99	OC OF Unica Phyllitic Mtx
WP04	meta SS N60E 60SE Foliat
N 37 08 138	el 2725, laminated gray
W 80 09 065	phyllitic meta sltsn towards
	base.
ESN987	Highly strained protomylonite
WP005	in shear zone at top
contact	of basement
N 37 08 157	N60E 55SE foliation
W 80 04 140	extensional mylonite zone?
	plunging 100 at 10 Slicks
	plunging N30 at 85 NE
	C cleavage E W 80 S
ESN976	coarse lithic metaarenite
WP	OCS N 60E 55 SE
N 37 07 890	massive rubble bed
W 80 09 212	reg joint N20E 60NW
el 2702	N70W 290 57SW
ESN977	N85W 85SW cg myl
WP007	augen gn / protomylonite
N 37 07 593	rude compositional
W 80 09 596	layering
	Fracture cleavage N50E 65SE
ESN978	Large blks or pavement N30W 70SW
WP008	OCS OF coarse granite gn
N 37 07 772	(Ybc) my comp layering
W 80 09 367	N55E 65SE 2692
WP009	Outcrop (pavement in field
ESN979	Mylonite grgn 78SE 58SE
El 2612	N37 07 872 W 80 09 340

Day Runner

NOTES 2/08/08

ESN 9710	leucogran gneiss qtz
WP10	feldspar tiny specs
	of pyx or hbd in
	granular/sheared mtx
	N55E 65SE Foliation?
ESN 9711	Coarse augen gneiss —
N 37 07.357	mylonitic foliation
W 80 09.442	N 70E 75 SE
	qtz Kspar + bio + augite/pyx Ortho
e2857	B
ESN 9712	Big ledge bio myl
WP11	augen gneiss 1" feld
	pe N45E 50SE
ESN 9713	ledge of coarse
Wp 11	protomylonitic granitoid
N 37 07.836	bio/qtz/K spar
W 80 09.858	
el 2910	N 50E 36SE myl Fol.
ESN 895	on spur ridge many
P 12	piles of leucogran (pg)
N 37 07.840	where old orchard was
W 80 09.941	El 3044
ESN 896	ledges of coarse
WP 13	mylonitic granitoid
N 37 07.809	gneiss/equigranular
W 80 10.061	el 2997 granoblastic elongate
	text Ybc or Ypg?
ESN 897	Coarse-med pyx bearing
WP 14	granulite Gneiss. N
N 37 07.714	N 60E 45SE ledge - joints
W 80 10.037	N 80E 75 my Fol
el 3053	N 20E 75 NW

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NOTES 2/08/08

	ESN898	coarse mylonitic gneiss
	WP15	greenish gray mylonite (Ypy)
N	37 07 647	derived on hill top pavement
W	80 10 095	N 80E 80SE very schistose
el	3163	foliations but abundt gran
		epidotite large pyrite
		or pyrrotite phenocryst
		or pb
	ESN899	crossed some sort of
		contact back into coarse
	WP16	leucogranitoid gneiss
N	3707 608	
W	8010054	el
	ESN9714	N80E 72 NW Mylonitic
		foliation in coarse
		protomylonitic granitoid
		gneiss ledges on crest
	2/12/08	Coald Cloudy
	ESN 8910	N60E 55 SE highly
		foliated coarse mylonite
		gneiss derived from Ybc
		granitoid
	ESN8911	N, N75E 25 NW
	WP17	Foliation in qtz
N	3708027	chlorite phyllite
W	8010.814	saprolite along old
el	2291	mill race or trail
	ESN 8912	Highly sheared graphitic qtz
	WP18	chl musc (sericite) phyllite
N	37 08 069	Ocs above old stone dam
W	8010 814	on little laurel creek
	2446	C+S S = N70E 78 SE
		or C = N55E 75 NW

Dels

Day Runner

NOTES 2/12/08

ESN 89	13 el 2583 GPS coarse
WP 19	white qtzite blocks + blds
N 37 08.115	on top of ridge = ℄ WW
W 80 10.813	1160E 85 NW block
	in place? on top
	cut by qtz veins !!
	Fractures N 20E vert
	crossing olde extension fracs
	N 60 W 90 SW
ESN 881	Coarse white qtzite
WP 20	ledge, rnd ad qtz sand
N 37 08 248	and pebbles
W 80 10 886	2650 b N 45 E 40 NW
2665	Gen trend N 35E 45SE
	2 med - thk bdd ledges
	above form ridge line
	cross veined as below
ESN 851	Ledges of cgg+pebbles
WP 021	cgl N 30E 67 SE
N 37 08 318	top expression strg
W 80 10 891	~ beck el 2740 b 2650 GPS
ESN 852	Coarse lithic cgl w/qtz pebbles
WP 22	ledge N 45E 65 SE
N 37 08 388	strong cleavage N 35E 55SE
W 80 10 881	Gentle slope topo exp.
el 2890	2850 b
ESN 853	Top ledge form at 2930
WP 023	qtzite blks on 2950 b
N 37°08.490'	surface
W 80°10.848'	
ESN 854	On nose cg pbl ledge N 10E
EL 3055	30 NW thin qtz - banding
	cataclasite zone N 45E 20 SE

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WP 024 N 37 08 515 W 80° 10.879'

NOTES 2/12/08

ESN 867	coarse qtzite ledge at
WP 025	el 3096
N 37 08 616	
W 80 10 803	N 10 E 10 NW qtz layer
	may be bed
ESN 868	N 80 E 25 SE big
9961	Flat iron ridge
3059	WP 26 N 37 08 635
	W 80 10 764
ESN 869	Pink weath arcosic
WP 027	SS W 1/4 grains
N 37 08 524	feld + qtz massive
W 80 10 335	to thick bedded
el 2840	N 45 E 70 SE
ESN 8610	Photo of green chlorite ser
WP 028	mtx laminated fine SS
26 B5	Float in saddle between
	ridges N 37 08 431 W 80 10 165
ESN 8611	Legs of medium bedded
WP 029	gray to greenish gray
N 37 08 489	coarse lithic SS
80 10 148	N 45 E 65 NW
ESN 8612	Coarse schistose text
WP 030	cgl w/large lithic
N 37 08 322	+ qtz clasts N 35 E 75 NW
W 80 10 189	N 35 E 75 NW very schistose
el 2635	
ESN 8613	N 55 E 55 SE myl foliation
WP 31	in coarse mylonite gn
N 37 08 186	derived from YGC
W 80 11 432	
2439	

Clear, very cold wind

NOTES 2/14/08 Total 6.92 Miles

	ESN 882 Bottom Creek Nature Pr
N	3108001 Just beyond Scott Finney
	8011137 Bridge over little Laurel
	2552 Oc light tan Silicous
	WP 32 sh N65E 75
	lt grey grn inside
	ESN 883 Oc at NE end of
	WP 33 drumlin shaped knob
N	3707991 N75E 40SE crenu
W	8011220 Foliation in Silicous
	2602 qtz ser chl phyllite
	38° with qtz sand layers
	ESN 884 Cocade flat Oc (Photo)
	WP 34 of Mylonitic Augen
	54 gneiss Oc. YBC
N	3707861 61 2608 2660
W	8011228 N30E 70SE lineation 210 70 SW
	ESN 885 A series of stone
	WP 35 EW terrace mark remains
N	3707943 of cultivation (orchard)
W	8011330 In this slope. Stones
	2712 are angular qtz pebble
	cgl w/ white qtz 65 mtx
	(metamorphic fabric
	is schistose) grn phyllite
	chips on benches
	ESN 886 Couse qtz 65 ledge with
	WP 36 white qtz pebbles
N	3707957 N45E 65 SE strong
W	8011383 physiographic expression
	+/- 69 2844 2780 ft

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NOTES 2/14/08

ESN 887	On ribbon marked trail
WP 37	large blocks OF qtzite
N 37 08 044	With angular qtz pebbles
W 80 11 389	up to 1" across 28306
el 2950	Big ledge on top N 85E 15 NW
	Joints N 60 W 65 SW
	Photos S 25E 75 NE
ESN 888	Ledge (6') dk greenish grey
WP 39	fine, well rounded qtz
N 37 08 207	sandstone N 30E 10 NW
W 80 11 594	Crossing trail Sh + SS
el 2889	Float in saddle below 28006
ESN 889	Photos of fine grained
WP 39	vitreous qtzite & ledges
N 37 08 241	Cross ridge ~ 6' thick
W 80 11 537	N 35 E 10 NW 28406 2906
ESN 890	Ledge of vitreous qtzite
WP 40	crosses trail at 29806
N 37 08 298	N 45 E 22 NW
W 80 11 604	2987 el GPS Good View B/H
ESN 891	el 3042 On trail crossing
WP 41	10' qtzite ledge
N 37 08 367	
W 80 11 781	
ESN 892	Scolithus bearing vitreous qtzite
WP 42	ledge N 75E 35 NW, 25'th
N 37° 08.604'	syncline on top
W 80° 12.102'	ledge N 30E 45 SE photo
3326	looking NW
ESN 893	Shale and thin SS Fit
WP 43	N 37 08.710 W 80° 11.977
	el 3460

Day Runner

NOTES 2/14/08

ESN 3 44	Fractured and brecciated qtzite
WP 44	Ledge N 50 E 23 NW along old
N 37 06 707	graded trail ~3450b
W 80 11 648	el 3555
ESN 85 9	Synclinal axis in
WP 45	qtzite S 45 W at 25
N 37 06 708	el 3550
W 80° N. 689	skolitus between 9 + 10
ESN 85 10	ledge of med grained
N 37 09 040	gritty granule cgl ss
W 80 11 521	N 55 E 60 SE at bend
	in ridge el 3588 3640b
ESN 85 11	Skolithus in abundance
	along trail
ESN 85 12	Ledge forms on
WP 47	both sides of trail
N 37 08 772	el 3724
W 80 11 680	3520b
ESN 8 45	Ledge of vitreous qtzite
WP 48	N 20 E 5 NW on trail at bend
N 37 08 611	el 3563 - good antethan
W 80 11 799	
ESN 84 6	N 20 E 55° NW
WP 49	brown weathered Hampton
N 37° 08 . 651	phyllite or meta argillite
W 80° 12 . 012	along old trail
	2/15/08
ESN 5 83	Grn argillite w/ brn lam, wea brn
N 37 10 481	N 50 15 NW, cleavage n vert
80 11 135	el 3441 3400b

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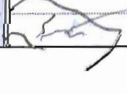
2/15/08 – 4.7 mile

NOTES

2/15/08 cool windy clear

ESN 584	Oc of ~20' qtz SE in [illegible]
WP51	N 30 E 23 NW Bedding
N 37 10 395	W 80 11 173 el 3549 6 3420
ESN 585	N 35 E 45 SE 15' ledge
WP 52	gray qtzite crossed road
N 37° 10 314	el 3488 34006
W 80 11 218	
ESN 586	Hampton qtzite crosses
WP 53	road below and OCs on
N 37° 10 133	Ridge above road here N30E 25 NW
W 80° 11 316'	el 3603
ESN 587	Photo of 30' qtzite
WP 54	where it crosses road
N 37° 10 975	at WP 54 N 10 E 46 NW
W 80° 11 328'	el 3670 Fg weath orange
ESN 822	N 20 E 48 NW 12' ledge orange
WP 55	Weath Fg vitreous qtzite crosses
N 37 09 926	el 3604 36006
W 80 11 399	
ESN 823	Medium bedded coarse
WP 56	qtzite w/ 4" beds Photo
N 37 09 864	cut by scolithus tubes
W 80 11 507	N 60 E 30 SE el 3647
ESN 824	Photo of buff to Gray shale tan weath
WP 57	sh/sltsn w/ mica flakes
N 37 09 821	bioturbation Cleavage N 15 E 45 SE
W 80 11 505	in plane of tubes
37 06	below power line



Day Runner

NOTES

ESN825	N45E 38° NW Massive Cg qtzite
WP58	highly fractured brecciated
N 37 09 751	as ESN844
W 80 11.498	el 3783
ESN 826	Massive qtzite ledge N 20W 30NE
WP59	bedding el 37206
N 37 09.639	W 80° 11.524' el 3717
ESN827	Massive qtzite ledge N45E
WP60	23 NW at edge of Clearing
N 37 09 505	W 80° 11.509' el 3598 3600b
ESN 828	Massive qtzite ledge N 60W 10NE
WP 61	el 3550b N 70W 25NE
N 37 09 390	W 80 11.537 el 3453
ESN 85B	Ledge on hill crest seems
	to have toroidal
	topo expression creating
	a bowl bed at SE quadrant
	N 45E 30 NW strong fracture
	cleavage ~ close spaced
	jointing N50E 60 SE
WP 62	150' S dip reversal across
N 37 09.044	ravine N 70E 18 SE
W 80° 11524	el 3663
ESN829	Higly burrowed gray grn
WP63	Metargillite in new road
N 37 09.44	bed disrupted bed N55E 38N
W 80° 11.649'	el 3549
2/18/08	Don Copen Fmn
ESN 57	Cemetary on Shale knob mtn
	Stuart ~ Civil War Vet

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NOTES 2/15/08 5

ESN8210	Ledge of white Fg qtzite
WP64	N45E 18SE along
N 37°09.681	old trail. at WP
W 80°11.559	el 3617 37406
ESN8211	photos from Powerline
WP65	Hummocky Cross beds
N 37°09.812	in Qtzie el 3739
W 80°11.595	N40 37SE
Feb18	ESN Qud Cool, breezy
2	DON COPEN FARM Land owner
cell	537 8250 5miles on old 631
ESN571	Stewart Cemetary
ESN572	Breccia w/ mn fe cement
WP66	el 2124 oc along
N 37 10.799	road side (photo)
W 80 12.268	N40E 40SE fract cleavage
	in qtzite above
ESN573	N 20W 30 NE mass
WP67	Fig w/gr to brn weath
N 37 10.814	qtzite Ledges Of ?
W 80 12.250	cross bedg el 2125
ESN574	Ledges above powerline N85W
WP68	40NE massive Fine grained
N 37 10.804	vitreous qtzite with
W 80 12.128	Skoliths streaks any
at least	purple mottles dimpled
50' ledge	red bottoms. Dark gray
	to brn shale and Fine SS
	interval above

Guy Runner

NOTES 2/18/07

ESN 541	Long section of gry argillite
WP69	and fine sitsn. N 65E 25NE
N 37 10 883	Photo of exposure below
W 80 12 094	powerline el 2330 ft
ESN 542	Rusty weatherm ss fg 330 54NE
ESN 575	Flt of dk grn phyllite
WP070	(chlt) w rounded
N 37° 10.840	black carbonaceous
W 80° 12.019	inclusions and siderite
el 2434	nodules - looks like
volcanic	a lime bed brown weathered
	interval 315 32 NE
	hinge EW 22W
	photo
ESN 576	Closely folded gray argillite
WP 71	with thin white qtzite
N 37 10.642	N 65E 24NE hinge
80 11.997	axial plane ←
	N 70E 30NW 2507
ESN 577	N 70 W 30 NE 10' white
WP72	qtz ss ocs in turn
N 37 10 583	med - thin bedded qtzite above
W 80 11 998	looks RSU
ESN 578	20' thick grn ledge across
WP 73	road at el 2649
N 37 10 651	NS 45E
W 80 11.962	
ESN 579	Massive, coarse, pbl ss/qtzite
WP 74	white to gray weath brn
N 37° 10.723	N 20 W 36NE el 2622
W 80 11.926	Photo of inverted cross bed
	photo of scour

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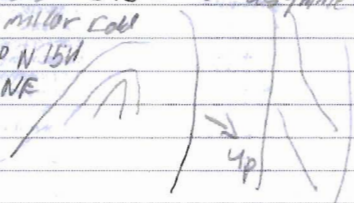
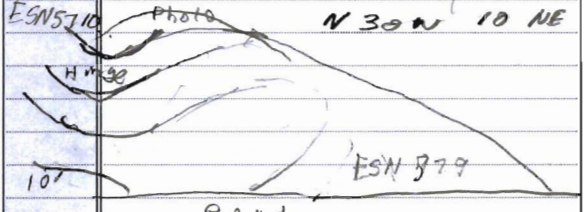
NOTES 2/18/07

ESN579	cold S15W 5° asymmetric
	smaller cold
	AP N15W
	65NE
	
ESN5710	N 30W 10 NE
	
WP 75	el 2791 6' qtzite at road
N 37 10 760	level N 10 W 45 NE v.c.g.
W 80 11 900	white / gray qtzite thickbed
ESN 543	N 10 W 34 NE massive
WP 76	cg qtzite ledge
N 37 10 831	becomes thin bedded on point
W 80 11 900	el 2743
ESN 5711	Ledges of tan weathered
WP 77	med - cg qtzit thin -
N 37 10 819	med bedded N 55 SE
W 80 11 809	el 2787 0° 55 E
ESN 5772	N 20 E 55 SE MASS to thick
WP 078	White cg qtzite ledges
N 37° 10.704	el 2827
W 80 11.753	
ESN 5713	N 70 E 10 SE thick bedded qtz ss
WP 79	N 37° 10.658' W 80° 11.669' el 2784

Day Runner

NOTES 2/18/08

ESN588	Ocs of coarse qtz pebble
WP80	cgl SS beds in turn
N 37°10704	N35-40E 40SE
80 11.584	el 2911
ESN589	Long shale interval
WP81	below (above cgl)
N 37 10656	then impuress oc at
W 80 11480	point N 30E 60
el 3047	Small thrust N65E 25°S
WP82	ESN 5810 highly cleaved
N 37°10.529	gray sh + arg + slsn N
W 80°11.335	el 3181 Beds N 50E 20SE
Photo	clear N 20E 45SE pencil
ESN5811	Crenulation folds in
WP83	th bded argite
N 37 10.532	Purge S at 15°S
W 80 11.284	AP N10E 80SE el 3157
ESN5812	Thin bedded dk gr argillite
WP84	and qtzite N30E 85NW
N 37°10.642	in road bed
N 80 11.106	el 3287
2/19/08	TRAVERSE OF 2.69
ESN562	Coarse gr white massive
WP85	qtzite on road side bank
N 37 11106	N 75E 30NW
W 80 10205	el 3394
WP86	ESN 5813 Cg massive white
N 37 10.580	qtzite ledge (Euu) N65E 25NW
W 80 9 017	el 3398

Item # 033-3

NOTES

WP87	ESN 563 Coarse white pbl
N 37°10.991	qtzite ledge along road
W 80 10 708	N55E 25 SE el 3474
	ESN 564 Qtzite ledge N60E 30NW
WP88	ESN 565 oc thin bedded
N 37°11.300	fg qtz ss on trail
W 80°10.518	N 55 E 37 SE 3594 Ft
WP89	ESN566
N 37°11.	N 35E 35 NW 20' ledge
W 80 10.	of qtz ss in Hampton
	crosses road
WP89	ESN567 N75E 25 SE
N 37 11.643	tan weat thin bedded
W 80 10.533	sitsn + argillite
el	3403
N WP 90	ESN 531 N45E 15 SE 10'
N 37 11 713	white qtzite ledge across
W 80 10 794	ridge 3220
WP91	ESN 521 N80E 20 SE Air strike
N 37°11.900	across valley above Spring Hollow
W 80°10 851	Reservoir
	Ledges on ridge dip SE
	below crest V ing up hollow
N60E	Outcrops in road of corse qtz
30SE	qtzite pebble cgl at base
	[illegible] in El 3238 SNow
Cgl	Photo of ledge on trail
	pavement N50E 18 NW
WP 92	ESN522 Cgl ledge on top
N 37 11 904	N45E 45SE graded
80 11 804	3109

Day Runner

NOTES 2/19/08

ESN 523 at power line
Thin bedded qtzite of argillite
WP93 N35E 30SE N37 beneath
2/20/08 Atkins Farm massive qtzite

Richard Vicker
McVitty House
Salem Air Photos

WP93 ESN 731 Silicified breccia
N 37 09 371 Float w/ yellow mineralization
80 12 864 box works, + limonite
el 2008 2000 b

~~WP94~~ ESN 732 Trail turns to NW
N ~~37 09~~ at break in slope el 2
W ~~80 12~~ shale chips on slope 2100b

WP 94 ESN 733 Oc of thick
N 37 09 341 el 2245 bedded white lg
W 80 12 609 meta qtzite ~ 2' thick
N 25 W 22 NE

WP95 ESN 734 Trail switches
N 37 09 095 back el 2293
W 30 12 637 Road visible across hollow

WP96 ESN 735 30' White-gry fg
N 37°09.[illegible] Vitreous qtzite ledge
W 80°12.[illegible] N35E 65 SE e487
ESN 811 saddle in sh
WP 097 ESN 872 saddle in sh
N 37 09 653 N35E 78 SE below
W 80 12.295 Powerline Photo across
hollow 3 qtzite legs el 3104

Item # 033-3

March 5 DATE 2008 Wed DAY

ELLISTON DIARY AND WORK RECORD COLD BREEZY

ESN 568 6' qtzite ledge in top Hampton N 20 E 26 NW medium gray to white coarse sorted well rounded qtz sand
WP 163 3547 N 37 11 463 W 80° 10.491'

ESN 536 on nose of ridge in Eh sh/ss Flt no OC bearing N 75 E on white upper unicoil ledge air strike N 80 E 70 SE (07) WP 164 el 3200 N 37° 11.702 W 80° 10.364' Photo bering on upper ledge N 63 E N 50 E 60 NW AIR ESTIMATE

ESN 537 on First Knob photos of Gypsy moth Egy cases and Pupae stage shed skins Hampton Shale + ss Flt grn gray weather brown slaty cleavage
WP 165 N 37 9 1/4 W 80° 10.310 d 3221

ESN 538 on second knob 6' qtzite ledge rusty white, lt gry med-corase well rounded + sorted est strike on topo N 76 E dip ~22 NW from bench ~~WP 166~~ Battery low

ESN 539
Second Ledge N 45 E 20 NW est forms large Rock shelter clr 20' high along game trail white coarse grained massive bulled qtzite WP 166 el 3131 N 37° 11.935 W 80° 10.244' at 100' wide valley across ridge 2nd ledge.
ESN 5310 Third ledge N 40 E 22 NW on knob - more gypsy moth cases
WP 167 N 37 12 087 W 80° 10.232 el 3141

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE

Wed
DAY 3-5-08 DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 5310 contd bearing N 65E to
8 syncline on Power Line
0800 Ridge photos. N551
9
0900 ESN 5311 Dip Reversal on Next Knob
10 N 55E 40 SE 61 rusty wea.
1000 gl ledge. Trail more worn.
11 lots of bear dung. Photos
1100 WP 168 N 37° 12.099 W 80° 10.244 el 3152
12
1200 ESN 5312 Drk grn-gry musc chl qtz
1 argillite w/ strong slaty cleavage
1300 N 55E 60 SE at WP
2 pos bed N 80E 65 NW old drag
1400 road goes down to valley
3 WP 169 el 3131 N 37° 11.718' W 80 10.348
1500 ESN 569 Massive gray feld ss ledge
4 N 50E 58 NW at WP 170
1600 N 37° 11.263 W 80° 10.576' el 3296
5 3-6-08
1700 ESN 5610 Knob is underlain
6 by thin bedded rg ss + sltsn + argillite
1800 with slaty cleavage. Beds N 35E 44 NW
7 WP 171 N 37° 11.304 W 80 10.522 el 3587
1900
8 ESN 5611 Road turns N on nose, dk gry
2000 thin bedded, highly burrowed argillite
w/ slaty cleavage & beds N 35E 86 NW
WP TO BE DONE TODAY (ACTION LIST) el 3539
171, N 37° 11.267 W 80° 10.642
qtzite ledge ~ 30' below in turn
makes small flat on road - fs
x bedded to laminar
ESN 5612 thin bedded ss forms
pavement N 25E 20 SE WP 173
N 37 11.302 W 80° 10.781 el 3341

ESN 551 Eh dk grn gray cg qtz ss
micaceous N 25 E 16 NW. Bench w/ 10'
cliff beside road WP 174 el 3149

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3/6/08 DATE

Thur DAY clear, cool

DIARY AND WORK RECORD

ESN 551 Contd photo of SS in road joints N10E 85 SE ~~260~~ 080 75 NW qtz veins 290 64 NE, 050, 66 NW N 37 11 348 W 80° 10.896

ESN 552 Pavement Dk gry argillite w/slaty cleavage N 35E 70 SE bedding not preserved ~ transposed WP 175 N37° 11.393 W80° 10.083 el 3049

ESN 553 Pavement + Flt cgl E [illegible] meta qtzite ledge, white to light gray w cathers yellow orange w/gravel soil N35E 30SE WP176 N 37° 11.417 W80° 11.100 el 3072 on knob WP 176

ESN 554 Pavement 2nd major ee ledge gray to white coarse x bedded SS with thin gravel beds W30E 20 SE x beds N 30E 42 NW WP 177 N 37° 11.420 W80° 11.193

ESN 555 Pavement 2nd Major ledge N 25E 15 SE at WP 178 2968 N 37 11.423 W 80° 11.212

ESN 556 Top of First rusty weath pebbly qtzite N 30E 25SE pavement in saddle at WP 179 c 2969 N 37° 11.425 W 80° 11.241

ESN 557 base of cgl ledge on knob N 60E 17 SE pavement at WP 180 N37° 11.429 W80° 11.290 el 2996

ESN558 Conglomerate ledge N25E 25NW on knob pavement at WP 181 N 37° 11.481 W80° 11.417 elevation 2940 photo on slope below N30E 15 NW

Thur DAY March 6 DATE 2008 ESN

APPOINTMENTS & SCHEDULED EVENTS

ESN559 thk cgl bed one 1283

8 0800 steep slope below knob and above Powerline - photos

9 0900 White Qtzite at base N30E 15NW WP182 N37 11484 W80° 11.476

10 1000 ESN5510 pavement of White

11 1100 quartzite below junk (photo) cars at powerline. Bedding

12 1200 N45E 22 NW scolithus in bedding, undulose rippled sur

1 1300 WP183 N37 11.494 W80° 11.537 el 1288

2 1400 ESN5511 White to pink vitreous qtzite with = sharp

3 1500 cross beds N40E 15SE WP184 N37° 11.521' W80° 11.594' el 2755

4 1600 ESN5512 N40E 30SE there

5 1700 are 5 cross bedded qtzite ledges WP between 11 & 12

6 1800 wp185 N37° 11.564 W80° 11.627 el 2630

7 1900 ESN545 N30E 28SE 20' coarse

8 2000 qtzite ledge on knob separated from 5512 above by dk gray other weathering slaty argillite

WP186 N37° 11.581 W80° 11.68 el 2503

TO BE DONE TODAY (ACTION LIST)

ESN525 Photo of Talus area w/ possible Anticlinal nose

ESN526 Talus area w/ ledge sp

ESN548 20' ledge massive bedded white to pink qtzite WP187 N37° 11.608 W80° 11.718 N45E 25SE el 2458

Photo of graded beds

©DAYTIMERS Inc

March 6 '08 DATE DAY

DIARY AND WORK RECORD

ESN 547 WP 188 N 37° 11.612' W 80° 11.728
el 2506 another cgss ledge
less pure 5-6' thick N 45E 30° est

ESN 548 ~ 50' amydaloidal
meta basalt oes 100' above
Fault - extremely steep
N 20E 30 SE photos

ESN 549 Just below (25') 2064' el
infered fault trace based
on topographic expression
ground covered w/ss + basalt
WP 189 N 37° 11.432 W 80° 11.813

ESN 5410 ss Ledge on steep
phyllite / slaty argillite
slope N 30W 35 SW 2006
WP 190 N 37 11 323 W 80 11 894 2132

ESN 5411 amydaloidal basalt
and lithic tuff breccia cul
blocks and cobbles at WP
191 N 37° 11.269 W 80° 11.872 2067 ft
2080 b ledge 20' above N 20W 64SE clea
N 55W 20 SW possible Flow banding

ESN 5412 Just below PL. WP 192
ledge of coarse qtzite N 35E 20SE
cu N 37° 11.214 W 80° 11.805' 2330 el

ESN 5413 Just above Powerline
exposure of tan weathered siliceous
argillite + fine sss Photo of
Unicoi Ledges across devide
N 35E 20 SE Clear here N 20W
50NE Probably wrong PL interferen
WP 192 N 37 11 213 W 80 11 734'
el 2393 N 50E 16 NW Top ledg

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

8 0800 ESN 5414 WP193 N 37°11.189' W 80 11 685 el 2481 middle of upper unicoi ledge N 30 E 26 SE

9 0900 ESN 5513 Cgl ledge 50' thick WP194 N 37° 11.162' W 80° 11.606 el 2599

10 1000 Ledge N 40 E 15 SE

11 1100 ESN 5514 Top Cgl section el 2650b

12 1200 WP 195 N 37° 11.134 W 80° 11.560 E 2695 N 35 E 15 SE cgl ledge

1 1300 ESN 5515 pebbly ss in Hampton

2 1400 at 2700b

3 1500 ESN 5516 pebbly Cgl ledge base at N 20 E 35 SE WP 196 N 37° 11.092' W 80 11.422

4 1600 el 2803 2720b

5 1700 ESN 5517 Top cgl ledge at WP 197 N 37° 11.075' W 80° 11 431 el 2906

6 1800 ESN 5518 thin 10' fg ss N 15 E 20 SE

7 1900 WP 198 N 37 11.039 W 80 11 382 el 3001 2920b

8 2000 ESN 5519 N 20 E 45 SE transposed thin beds // cleavage N 37 11.067 W 80 11.245 3695 el th

TO BE DONE TODAY (ACTION LIST)

ESN 5520 Pavement thin bedded Cn n 20 E 14 NW on flat (WP 200 N 37 11 038 W 80 11 .170 el 3135

ESN 5521 pavement thin bedded Cn N 25 E 20 SE WP 201 N 37° 11.020 W 80° 11 071 el 3150

ESN 522 N 60 E 35 NW 10' qtzite in lower Cn at WP 201 N 37° 10.995 W 80° 10.947 el 3320

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March 6 DATE DAY

DIARY AND WORK RECORD

ES N 5523 W 203 E 3388
N 37 10 943 W 80 10 877
Ledges N 50 E 34 NW pavement
in Greep pend
Chis

ESN 5

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

8 0800
9 0900
10 1000
11 1100
12 1200
1 1300
2 1400
3 1500
4 1600
5 1700
6 1800
7 1900
8 2000

TO BE DONE TODAY (ACTION LIST)

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DATE DAY

DIARY AND WORK RECORD

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DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

8 0800
9 0900
10 1000
11 1100
12 1200
1 1300
2 1400
3 1500
4 1600
5 1700
6 1800
7 1900
8 2000

TO BE DONE TODAY (ACTION LIST)

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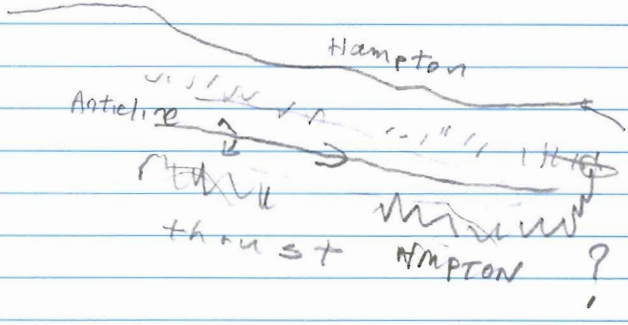
4/17/08 Sketch
View SW From



DATE DAY

DIARY AND WORK RECORD

APRIL 17 '08 ESN 57-15 limonite qtz
Breccia Flt along Powerline
access Road
ESN 5-7-16 Red Rome argillite
residuum on road at powerline
WP208 el 2193 N 37° 10.451 W80°12.480'
N40E 39 SE 2150 topo slaty cleavage
WP 209 ~ 10' above sh contact
white qtzite Flt at el 2235
N 37 10 .444 W 80 12 .44 2200 b
WP210 Breccia, cemented w/ Fe ore
el 2382 N37 10 437 W80°12.401'
el 2360 b outcrop of Qtzite
20' above Photo of Fe ore
close spaced cleavage above breccia
N20E 60 SE
ESN5-7-17 290 28° NE Med
bedded, lite gry - white
qtzite (Erwin) at
WP 211 N 37°10.427 W 80°12.292 2249 2300 b
20' breccia zone then DSU qtzite
beds
ESN 5-7-18 WP 212 el 2585 2700 b
N37°10.37' W 80° 12.311
Med - thk bedded x bedded
white fg - mg qtzite
N 10E 25 SE CROSS Beds N30W 35N

ESN 5-7-19 WP 213 N 37°10.359
N 10E 27 SE W80°12.304'
med bedded white - light orange -
pnk well rounded qtz arenite. med gr
strongly burrowed by linear
skolithus.
ESN 5-7-20 WP 214 N10E 27 SE
Med - tk bded white - pink
skolithus bored qtz ss
N 37°10.251' W 80°12.232' 2828
Fine
ESN 57-21 Fine qtite Flt el 2950 b

DAY 4/17/08 DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 5712 - gry shale + phyll
Float in saddle WP 214
el 2874 N 37° 10.172' W 80 12 130

5/6/08 ESN 3714 WP 282
N 25 W 10 NE light gry
to white + grn weathered
meta sltsn w/ cleavage
bedding N 37 R .741 1800
W 80 09 .708 el
N40E 14 SE ~ 20 17506
below on Road

ESN 3715 WP 283 el 1896
N 37 12 663 W 80 09 826
coarse fan deposits w/ sandy
soil mtx bldrs up to 2'
at Stump Pump

ESN 611 WP 284 el 1980
N 37° 12 392 W 80 09 868
much fan debris, sh + mdsn
Flt along trail, ledge at
el 1980 on side trail tuck
N 55 E 23 SE Mdsn
lt gry fine ss + sltsn
laminations E 411 (611)
ESN 612 in stream below WP 285

TO BE DONE TODAY (ACTION LIST)

N 37 12.368 W 80 09 891
grn gry, thn-med bedded
el 1892 18406 N 85 E 30
laminated to massive green
fg meta ss and meta
sltsn w/ qtz chl
muscovite & bio in mtx
Photo of boudined or
isoclinal hinge streams
choked with 10 - 15 blocks
of Cyl and ss

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5/6/08 DATE DAY

DIARY AND WORK RECORD

ESN 613 - WP 286 el 1983
1940 b 20' cliff ~ 75' beyond
end of logging Road
N37 12 .335 W80 09 849
coarse qtz arenite ledge ~20'
N85E 30SE

ESN 3716 el 2000 b 2076 cp
WP 287 N 37 12 .649 W 80° 09.610
many chips in orange clay soil
along logging road some orange
mottled white and gray some
very porous scoreaceous saprolite
fragments

ESN 3717 wp 288 el 2158 2046
N 37°12.610 W 80°09.624
abundant white & lt gray
chips of fine SS [illegible]
bleached soil above Voles

ESN 373 redux wp 289
N 75 E 40 SE Metavolcanic
beds — basalt saprolite
some fresh Float (Spl)
el 1848 N 37 12.713
W 80 09 .726

5/9/07 ESN
N70E 75 SE mylonitic fol
in sheared ~~[illegible]~~ WP 290
N 37° 07 .722 W 80°11.150
el 1934 2620 m

CHK N70E 75 NW mylonite
gneiss
WP 291 2438
N 37 07 400 W 80 11.210 2180 b
CHK el 2468
WP 292 37° 07 050 W 80°10.975 2400b

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

8 0800	
9 0900	
10 1000	
11 1100	
12 1200	
1 1300	
2 1400	
3 1500	
4 1600	
5 1700	
6 1800	
7 1900	
8 2000	

TO BE DONE TODAY (ACTION LIST)

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DATE DAY

DIARY AND WORK RECORD

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DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 5-7-23 Ocs of massive
8 pebbly ledges of Unicoi
0800 Fm N 45E 30SE visually
9 on strike with ledges
0900 across hollow to NE
10 WP 215 N 37°10.138 W 30°11.973
1000
11 ESN 5-7-24 V cg cgl Float
1100 on slopes and knob
12 WP 216 el 3146 3700 b
1200 N 37° 10.097 W 80° 11.933
1
1300 ESN 5-7-25 cgl Float on knob
2 ledge Fg ss N 35E ~15-30°
1400 dip into saddle
3 WP 217 N 37 10 056 W 90 11.902'
1500 No oc in saddle el 3206 3280 b
4
1600 ESN 5-7-26 el 2895 WP 218
5 N 37 10 150 W 80 11.790 (2960 b)
1700 cgl blocks on slope
6 below shale
1800
7 ESN 5-7-27 el 2890 b 100' down
1900 stream from side drain shale
8 on slopes ledges cross
2000 cg ss N 10E 20SE 2 ledges

TO BE DONE TODAY (ACTION LIST)

ESN 5-7-28 N 70 E 50NW
ledge cross el 2650 b
WP 219 2577
N 37 10 232 W 80 11 854

ESN 5-7-29 N 45E 40SE beds
brush + ss ch el 2823 2550 b
N 37 10 317 W 80.11.877

ESN 5-7-30 N 40E 20°SE Mass Fg wh
[illegible] / Solitary looks like Erwin

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DATE DAY

DIARY AND WORK RECORD

WP 227 er 2451 & same
N 37 10 379 W 80 11 899

ESN5-7-31 N 30 W 35 NE
broken ss + qtzite
ledges - Fold hinge or Fault?

ESN 5-7-32 Historical Spring
piped to house below
WP 222 N 37° 10.509 2636
W 80° 12.168 22306

4/29/00
ESN 3711 WP223 @ 1838 Qc
N 37° 12.812 W 80° 09.696
ESN 3712 N 80 W 20 SW
cleavage in Rome Mdstn in
deep cut ~ 20' of Colluvium
w/ white qtz lite overlies
rome residual soil

ESN 3713 Mdsn chips in
Blankenship Cem

ESN 29[illegible] Mdsn chips on knob

ESN296 20' dia ~ 4' deep
pit in breccia at BRE
breccia limonite cemented
saprolitized ss fragments
Photos at 1980 & WP 226
N 37° 12.634 W 80° 10 079
Epidotized meta Basalt flt, blue
stake = property line at
saddle
ESN 297 N50E bearing to
Circle turnaround across hollow
chips and slabs of chl
phyllite schist and green ss
on slope 100' above
saddle

4/29/08

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 298 at el 2150 b
bearing N 52 E to Circle
WP 227 N 37° 12.556 W 80° 10.092
el 2108 - OC of thin yellow
orange sltsn, or fine sand
NS to N 30 W dipping 20
SE above 100' of meta
volcanics including massive
meta basalt 30-50' thk
then another vol. laye
above with flow on
lithic tuff breccia and
ryholitic float forms small
sholdrear or knob on ridge

ESN 299 N 70 E 18 SE yellow
orange tolt gray weakly fine
mg lithic tuff / volcaniclastic
meta ss w some rnded
qtz many angular mv
fragments at el 2220 b
above small break in slope (below)
WP 228 N 37° 12.529 W 80° 10.110 el 2155

ESN 5313 el 2363, 2320 b
WP 229 N 37 12 493 W 80 10.081
N 70 E 20° SE ledge of
coase pebbly qtz sand
at top of 100' shly
section

TO BE DONE TODAY (ACTION LIST)

ESN 5314 about 50' above ↑ rst
ss ledge is 20' massive
white qtzite ledge N 70 E 35 SE
WP 230 N 37 12.452 W 80° 10.094
el 2427 2400 b photo of Syn
across the valley.

ESN 5315 WP 231 2500 b, 540 E bearing on
N 37° 12.396' W 80° 10.409' el 2552

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4/29/08

DATE DAY

ESN 5315 DIARY AND WORK RECORD

30' ledge of white qtzite, w/ large talus slope below Apparent dip 10 SW strike N30W at WP

ESN 5316 2' ledge of qtzite N35E 30 SE on ridge at WP 232 el 2671, N 37° 12.379 W 80° 12.1

ESN 5517 WP 233 N 37° 12.313' W 80° 10.185' N45E 40SE broken ledge prob up ridge el 2791, 2706, 4' ledge interbedded with tan to light gray siliceous mudstone and siltstone with strong slaty cleavage

ESN 5518 N75W 18°SW ledge crossing ridge SS, qtz tan, gray thick bedded massive 26' WP234 el 2852 N37 12.257 W 80 10.188

ESN 5519 N35E 22SE base of massive ledge ~ 30' which is marker for upper uniconi - note some pebbles in ledges below WP 235, el 2752 N 37° 12.184' W 80° 10.311' Photos of ledge and syncline to NE el 2900 6

4/30/08 ATKINS GATE WP 236 el 1518 N 3709.605 W80 3.246

ESN 736 el 17906 WP 237 1608 GPS N 37° 09.530 W 80° 12.974 Huge spring ~ 1500 gpm out of Rome GPS el 1845

ESN 737 el 19506 WP 238 N 37° 09.587 Thin bedded ls/ss N35E 80SE 6' max W 80° 12.767

DAY 4/30/08 DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 737 ctd sub horizontal
8 filled ext fracs N8E&NW
0800 Photo
9
0900 ESN738 el 2140 b el 2314 GPS
10 N 37° 09.601 W 80° 12.796 ~30'
1000 above break in slope tan
11 shale chips in soil —
1100 maroon and green chips on
12 trail in saddle below
1200 qtzite Plt Foliation in saprolite
1 N 40E 75 SE thin bedded
1300 mudstone lt gry splotched ylw + rd + grn
2
1400 ESN 739 el 2220 b WP 240
3 N40E 75 SE ~ 6' Ch ss layer
1500 N 37° 09.608 W 80° 12.711 el 2311
4 N40E 50 SE nearer saddl
1600 cleavage N 20E 70SE ~ 8T beds
5
1700 ESN 7310 Outcrop of Fg sandy
6 phyllite or slaty mudstone
1800 N 35E 30 NW bedding
7 N 40E 75 SE cleavage
1900 photo of bed WP 241 el 2419
8 N37° 09.649 W80° 12.589 24206
2000 F

TO BE DONE TODAY (ACTION LIST)

ESN 7311 N 30 80 NW 6' qtzite in
Ch at wp 242 el 2583 25206
N 37° 09.617 W80° 12.541'

ESN 814 OCS of gry slty
mudsh with strong slaty
cleavage laminae N 40E 25 NW
cleavage N 35E 65 SE
WP 243 N 37° 09.637 W 80 12.373' el
2982 29806 Photos

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4/30/08 DATE Wed DAY

DIARY AND WORK RECORD

ESN 815 el 3090 30506
WP 244 N37 09.674 W80 12.373
Pavement, o upper Unicoi Grit
and cobble beds Photos
N 35 E 38 SE wh/lt gy
thk bedded/massive well
rounded pebbly grit,
actual contact (Photos) N 45E 30SE

ESN 816 Photos of Ce block
to NE bedding in cliff
N20W 38-40 NE talus below
Bearing to knob N 20E bearing to Oc
N10E

ESN 817 N15E bearing to knob
(Ec) Photos of Eu/Ch contact
strike N 35E 30SE WP 245
el 3050 N 37°09.724 W 80°12.261 30806

ESN 818 contact @ WP 246 el 3132
N 37°09.311' W 80°.12.142' N30E 38 bed

ESN 819 E-W 20S coarse grit
at top of unicoi WP 247 el 3199
N 37°09.840' W 80°12.052'

ESN 810 N65E 40 at top of 100'
cliff held up by 30' ledge of
upper Unicoi WP 248 el 3221
N 37 09 873 W 80 12 010 el 32506

ESN 811 well preserved landslide
scarp on ridge at WP 249
el 3291 shale float 31006
N 37°09.705' W 80 12.191'

ESN 812 WP 250 37°09'707 80°12'408 el 30006
N60W 20SW massive beds of cg
gritty ss + cg/ el 2940 gps

Wed 4/30/08

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

ESN 8L13. NS 60 W congl.
ledge, no Oc below WP251
N 37 09 726 W 80 12 .447 24006

ESN 7312 el 8556, 2600b WP 252
N37°09.798' W 80°12.555'
6-8' fine qtzite ledge crossing
spur N 70W 23 SW.

ESN 7313 el 2493 2480 b
N45E15SE fine white qtzite
6' or less burrows pos. scol.
WP 253 N37 09 731 W 80 12 644
ESN 7314 el 2401 24006 WP 244
N37, 09 722 W 80 12 612
50't of white qtzite — scolithus
Ce? N10E 10 SE

ESN7315 contact sh / qtzite
thought to be fault N50E 30SE
qtz ledges ~ 50' thick
WP 255 el 2497, 23006
N 3700 .691 W 80°12.661'

ESN 7316 Jasper Float on 4 wheel
trail sh flt above - Erwin Pinches

ESN 7317 N45E 10 NE Kink axis
in red [illegible]

TO BE DONE TODAY (ACTION LIST)

WP 256 1983 (1920b) Just above big spring
N 37 09 490 W 80 12 953

5/1/08

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5/1/08 DATE

Thursday DAY

DIARY AND WORK RECORD

Chk 135 ac of qtzite behind tracler ~30' tk ledge n60W 40 SW WP 257 el 1841 - 15806ft N 37 06 752 W 8012 596

Chk 136 above small bench w/ stolithus float at WP 258 el 1857 N 37 06.915 W 80°12.559 19006

Chk 137 75' wide bench w/Stolithus Float at WP 259 el 2022 N 37 06.979 W 80°12.587 20106

CHK 138 Top of 3' stolithus bearing ledge in place at el 2140 N 30 W 27 SW @ WP 260 el 2098 N 37 07 018 W 80 12.601'

CHK 139 continuous block Field on ridge at WP 261 el 2267, 23406 N37 07.117 W 80° 12.602. In place blocks strike w dip slope N 30E 35SE, Stolithus ledge

CHK 140 N 30E 35SE base 2407 of Stolithus ledge at WP 262 photos of contractors house N 37 07.193 W 80°12.616' 25006

CHK 141 Ledge turns across ridge N20E 45 SE WP 263 N37° 07.395 W80° 12.597 el 28096

ESN 773 el 29006 WP 264 upper Erwin ledge N 35E 40SE 2869 N 37 07.515 W 80 12.481 Stolithus in place

thur 5/1/08

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

8 ESN 774 Photo of Massive
0800 20' ledge N 20E 40 SF at
notch in ridgeline WP 269
9 el 2873 (29 40 6)
0900 N 37 07 637 W 80 12 436'
10
1000 ESN 775 Saddle underlain
11 by tan to gray siliceous
1100 mudstone (upper Hampton)
12 KNob above 40 SE also
1200 mudstone N 55 E 45 SE clear
1 of transposed layers
1300
2 ESN 776 Sheared OT basal Erwin
1400 N 20 W 50 SW N 15 W 70 SW
3 Folded ? WP 266 el 2862
1500 N 37 07 880 W 80°12.303'
4 29506 N 60 W 40 SW on SE slop
1600
5 ESN 777 scolitus Ledge
1700 N 10 E 5 SE RSU?
6 WP 267 N 37 07 950 W 80°12 281
1800 el 2847
7
1900 ESN 778 basal erwin N 30E 35 SE
8 ledge and shale contact
2000 WP 268 N 37 07 720 W 80°12.346'
el 2830

TO BE DONE TODAY (ACTION LIST)

ESN 779 Aparent ledge form
at WP 269 el 2930 N 37 07.596
white qtzite Float N 80 12.348
N 30 W 40 SW ledge on other
side of form

ESN 77 10 N 30 E 60 SE Slicky plunge
S 20 E 45 SE Qtzite ledge
WP 270 N 37 07 685 W 80 12 265 el 2141

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5/1/08

DATE DAY

DIARY AND WORK RECORD

LHK 211 el 2300'
N 37 07 409
W 80 17 302
mudstone pavement
no real soil just rock chips
on bench

138.9
157.2

DAY 5.7 DATE

APPOINTMENTS & SCHEDULED EVENTS

8 0800
9 0900
10 1000
11 1100
12 1200
1 1300
2 1400
3 1500
4 1600
5 1700
6 1800
7 1900
8 2000

TO BE DONE TODAY (ACTION LIST)

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May 5 DATE 2008 Mon DAY

DIARY AND WORK RECORD

Bolar Draft (Mill Creek Valley)
el 1755
Sp of Black Mill boro
mudstone with strong slaty
cleavage along State Road 600
mile 5 of High 39
WP 272 N 38° 04.150 W 79 54.705
Strike N 25 E 70 SE dip
(Cleavage) no bedding

Box 1217 1.2 miles S of 3°

Back Creek 1, Back Creek
Millboro shale OCS in Creek
Bedding strike N 55 E dip 80° NW
on Thin un cleave Black lime mud stones
El 1663 WP 273 W 79° 52, 188
Joints N 45 W 86 NE N 38° 07.478
spaced 6-10' apart

133.6 leaving

photo Dam at 139.8

mile 145.4 olive Drab

turn at 147.1 on 603
west Park to bridge on 600 at 147.8

152.1 tan brown weathered shale
157.2 shale dk. gy.
N 44 E vert
wp 274 1927 N 38 23.05
Back Creek 2 W 79 41.389

250 600 162.9
Millboro crosses 250 1/4 mi SE of
intersection
dark grey shale too
weathered to sample

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE.

DAY May 5 DATE 08

APPOINTMENTS & SCHEDULED EVENTS

8 185.9 milage
0800 on 250E pass McDowell about 4 mile
9 H1 Head waters
0900 WP 275 Ele 2722
10 N 38 19.531 W 79 26.526
1000
11 220.8 Agusta Sp wet Lands
1100 228.4 on 601
12
1200 ESTALINE VALLEY EV1
1 WP276 2808 N 38 05.727
1300 W 79 19.047
2 Very stiff black fissile
1400 Mudstone w slaty cleavage
3 N 80 E 35 SE
1500 Abundant Pyritized Graptolites
4 milage 234.4 Little River Rd
1600 EV2
5 WP 277 1478
1700 N 38 03.039
6 W 79 23.804
1800
7 end milage 369.6
1900
8
2000

TO BE DONE TODAY (ACTION LIST)

May 6 '2008 - Ell Ironto Quay

SPL IR0181C1 1615
Black Mudstone w/ pencil
cleavage from new lot
excavation on Arrington
Bedding (Isoclinally Folded?)

N20E 23 SE at WP 278
N37 13.208 W80 21.164
Stream Choked Mileage 2 mi

©DAY-TIMERS, Inc.

May 6 2008 DATE DAY

DIARY AND WORK RECORD

SPL IRO -191,903
WP 280 e
fd NS 10 E
N 37 13.242 W 80° 20.829
150
16
900
50
2400

162.9	162.9	
133.6	157.2	
29.3	5.7	

May 7 Shipped 6 miles
6 miles
12 mile

DAY DATE

APPOINTMENTS & SCHEDULED EVENTS

8 0800
9 0900
10 1000
11 1100
12 1200
1 1300
2 1400
3 1500
4 1600
5 1700
6 1800
7 1900
8 2000

TO BE DONE TODAY (ACTION LIST)

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1/09/09 DATE DAY

DIARY AND WORK RECORD

ESN 3216 310, 38 NE thin bedded shly dol, dk gray argillite beds / 6" w/ slaty cleav

ESN MM breccia / w/ red sh horse blocks, overlies massive gray dol w/ abundant synthetic and antithetic fractures spring on hilside before cut WP

115 @ 12 plung

fold in hw breccia

WP 374 el 721
N 37 14 667 W 80 09 027

ESN 3217 wp 375 el 1231
N 37 14 832 W 80° 08 994
saddle is karst valley truncated by river, filled w/ unicoi ss tg + zite blrs + cobbles white sand top pale orange pink subsoils. Along RR shyly soils to pk ~ low vchp on fault contact

ESN 3218 el 1392 wp 376
some chips of shly dol in top soil w/ unicoi / antietam - erwin cobbles in peekaboo terrace
N 37 14 966 W 80 09 153
GLV 971 Family Cem plot in red arg chip soil at WP 377 el 1334 (12826)
N 37 15 050 W 80 09 263

GLV 7[illegible] at [illegible] of ridge [illegible] arg / slaty cleav 100 55 N

PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE

DAY 11/9/9 DATE

APPOINTMENTS & SCHEDULED EVENTS

8 0800

9 0900

10 ESN 311 WP 1000

11 dk brn weath black dolomite 1100
beds form ridge above
12 river ~ 6' bed E-W 225 1200
red and grn argillite
1 chips above ∠ slaty 1300
Cleavage cuts dol
2 N 55E Vert. 1400

3 ESN 312 E W 24 S greenish gry 1500
argillite, thin bedded (∈ wb)
4 spring house at edge of Qal 1600
WP 378 N 37 14.998 W 80 09 535

5 1700 ESN 313 N65E 32 SE massive
6 grn dol in stream at 1800
WP
7 cg a/ fan sed above 1900
WP 379 N 37 14 847 W 80 09 512
8 a/ 12 18

2000 ESN 314 Ledges of interlayered argillite and dol. N 65E 34 SE

TO BE DONE TODAY (ACTION LIST)

(CWP) WP 380
deep turn hole in river
N 37° 14.831 W 80 09.622

ESN315 WP 381 N 37° 14.834' W 80° 09.185
N80E 42 SE
dk grn black xline dol ledges
argillite above (∈ wb)

ESN 316 mass dol N 65E 40 SE
below argillite in cut up 387

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DATE DAY

DIARY AND WORK RECORD

ESN 316 N 37 14 361
W 80 09 869

ESN231 N20E 30 SE est strike
of dol layers in thin bedded
ledge in middle of Roanoke
River below Prison site / Transfer
WP 383 N 37° 14 983 W 80° 09.643
el 994 (1100 b)
Elbrook Contact
GLV8 91 N80E 70' to SS at
stream level thin bedded to
massive dolomite along SE
margin of big pinnicled
area visible from 460
layer in Flattening above to about
35° complex struct
in Footwall of Max Meadows

inverted lam N80E 55SE
burrows in lam algal
dol. Cren EW 5°N plunge

ESN 317 ledge of slaty cleaved
argillite form prominent topo nose
fol N70E 80SE at WP384
N 37° 14.950 W 80° 09 966'
greenish gry and redbrn pyyll

ESN 318 Chilhowlee Bldr Terrace
on top at WP 385 el 1197
N 37 14 908 W 80 09.905 plenty
skolithus bldrs
ESN 319 WP 386 N 37 14.817 W 80 09 531
Gry 135 42 NE thin lam argillite
wlf fd cover along rivere WP 7d below
~15' above river / big heron just landed

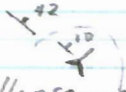
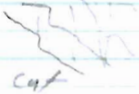
PORTABLE UNDATED TWO PAGE-PER-DAY REFERENCE 240 p.

Friday 1/09/09

DAY DATE

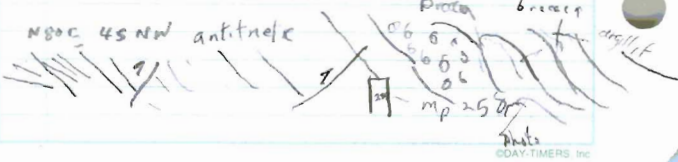
APPOINTMENTS & SCHEDULED EVENTS

ESN 3110 wp 387 N 3714.899 W 8009.114

8 laminated yellow orge dolomite
0800
9 and gray green argillite in 42NE
0900 30' high cut strikes 300
10 or N60W 42 NW. about 100' E
1000 thick bedded cherty Ls
11 with pink marble
1100 balls
12 ESN
1200 up to 6"
1 across forms gently dipping
1300 ledges (300, 10 NE) inset
2 with at least 2 cave openings
1400
3 Karst  in window (horse)
1500
4 or collapse structure?
1600
5 tan weathered N50E 405E
1700 argillite w/
6 slaty clay 
1800
7 at cut end of cut
1900
8 ESN 3219 crenulated tan argillite
2000 and gray shaly dolomite
300 10 SE plunge off

TO BE DONE TODAY (ACTION LIST)

duplex zone WP 388
el 9262
N 37 14 866 W 80 09 076



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March 1 2008

ESN 842 redux WP 155

ESN 324W N 37 08,585 W 80° 12.139

N 30E 65SE massive ledge

10' thick on W side

of ridge is b'main Erwin

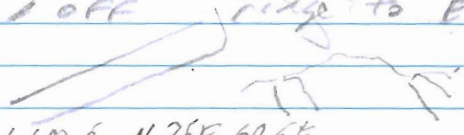
ridge former, beds along

E side are thinner bedded

w/ more scolithus as

syncline plunges SW of limbs

peel off ridge to E



SE LIMB N 35E 60SE

March 3 2008 Cove Hollow el 1820

ESN291 silified fault breccia

blocks ~ 1-2' dia along

woods road at WP 156

N 37° 12,550 W 80° 10,511' el 1964

ESN532 red sh flt w/ocorgus

mtx topo expression is semi

circular bench at WP157

N 37 12 455 W 80 10 482 c 1999 1980

WP158 N 37 12 424 W 80, 10.412

ESN533 gray to tan silicous sh/ph

N 20E 45NW OC in stump hole WP158, 2150'

ESN 534 N30E 10 NW
1' Fine grained qtz arenite
ledge at WP 159
N 37 12 458 W 80 10.293
el 2140 b 2312 GP

ESN 535 This fan is
largely pebbly
qtzite from near
ledge above
WP 160 el 2078 2080 b
N 37 12 529 W 80 10 168

ESN 292 yellow och calc shale
Ctr float on Ridge spur WP 161
N37 12 544 W 80 10 300
el 2124 2040 b

ESN 293 Argillite, slaty gray-grn
clear N80E to E W ~20 SE
in road embankment
adjacent to Dearstad at
WP 162 1679 1800 b
N 37 12 630 W 80 10.456

ESN 294 Shale/slaty rd
arg in ravine
fold S 70 E 20 Cleavage
85 N W

March 1 '08 Elliston
cold breezy
ESN 8811 pebbly qtzite
ledge outcrop in cut on old
road N 55E 40 NW many
Fractures qtz veins (tension) bed?
N 60E 60 NW
N 10E 55 SE Cross N 20N vert lro
N 8E 45 SE (Clear)
ESN 8812 Another big pbl
ledge N 30E 35 NW
pbls sheared and flattened
long axes trend
N 5W 5 lineation stretched pbl
ESN 8813 Trail crosses side
drainge begins ascent in slaty
argillite chip soil (Cn ?)
ESN 8814 2' qtzit ledge, no bedding
ESN 8514 Cleavage in paper
thin slaty argillite (massive ledge)
N 45E 55 SE Finally Got GPS WP 148
N 37° 08.290' W 80° 11.364' 2813
ESN 8515 Fine grained white,
vitreous qtzite float N 45E 15 NW
blocks in scree slope have scolith

ESN 8810 Redux - alt check WP 149 2986
N 37 08 293 W 80° 11.659

March 1 '08 Elliston el 2000b
ESN 847 Massive pink to
white vitreous qtzite
repetes to SW 330 38° sr
ee WP 150 el 3292
N 37 08 500 W 80° 12.192

ESN 848 thin bedded scoli
bearing ledge N 10E 65 NW
at wp 151 N 37 08 460 W 80° 12.205'
el 3284 3264b

ESN 849 N 15E 65 SE thk
bedded scolitius ledge forms
hog back ridge WP el 3200b
WP 152 N 37 08.338 W 80° 12.225
3245 GPS

ESN 871 2nd ledge
crossing ridge line N 50E
36 SE OTS WP 153 el 3083 3149
N 37° 08.212 W 80 12308

ESN 872 photos of thin
skolitus burrowed beds
WP 154 N 37 08 243 W 80 12.303
el 3126 3160b
N 50E 40 SE

ESN7915 Fractured Qtzite outcrop, Scolitnus float on hillside. Main ledge strikes N60E dip 22SE Fe cemented fractures here are continuous with silified breccia towards Fault line WP 138
N 37° 08.247 W80° 13.206' E 2598

ESN7916 Massive Fractured Qtzite N30W 60 NE ledge on Ridge at WP 139 E12623
N 37° 08.283 W 80° 13.117'

ESN7610 gray shale bank N25E 30SE cleavage WP 140
N 37 08 43 W 80 13 205 2356

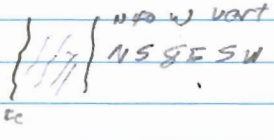
ESN 7611 gray shale thin ss orange weathering N 45E 60 SE in Road cut at WP 141 el 23306 2389 GP
N37 08.402 W80° 12.864 scolithus float on rd
END OF ROAD AT PROPERTY LINE
ESN7612 at stream WP 142 el 2212 2175
N37° 08.549 W80° 12.755' sh OC in stream Thin bedded ss & sh N35E 65SE

el 2591

ESN 7917 4' thk bedded white vitreous qtzite ledge holds up ridge N45E 50SE WP 143 N 37° 08.227 W 80° 12.986'
6 mm dia scolithus in Flt
EL 2200 6 2118

ESN 7918 Massive ledge is highly fractured in breccia zone N10W 21° SE WP 142
N 37° 08.110' W 80° 12.314

close spaced fracs N40W vert



ESN 785 less than 100' down hill is a prospect trench 6 X 15' & 5' deep in breccia residuum WP 145 el 2333
N 37° 08 098' W 80 13.342' 2147

ESN 786 Red and Grn Slaty argillite chips in tree roots
2080 2018 in saddle WP 146 N 37° 08.057 W 80° 13.4[illegible]

ESN 787 cleav in slaty arg
N 50E 70-75 NW WP 147
N 37° 08.003 W 80° 13 473'

2-27-09 Elliston Cold, Wi

ESN 781

N 20E 22 NW bedding in steeply cleaved gn slaty argillite WP 135 N 37 08.162

El 1950 ft W 80° 13.840

ESN 782 el 2024

thk to thin crinkly lam gray dolomite in Rome

N 20E 28° NW at WP 136

N 37°08.109 W 80° 13.721

ESN 783 el 2200

2' Rd Argillite bed on Fold crest at WP 137

N 37°08.166' W 80° 13.701'

plunge N 30E 10° SW

W limb N 10E 20 NW

E Limb N 18E 8 SE

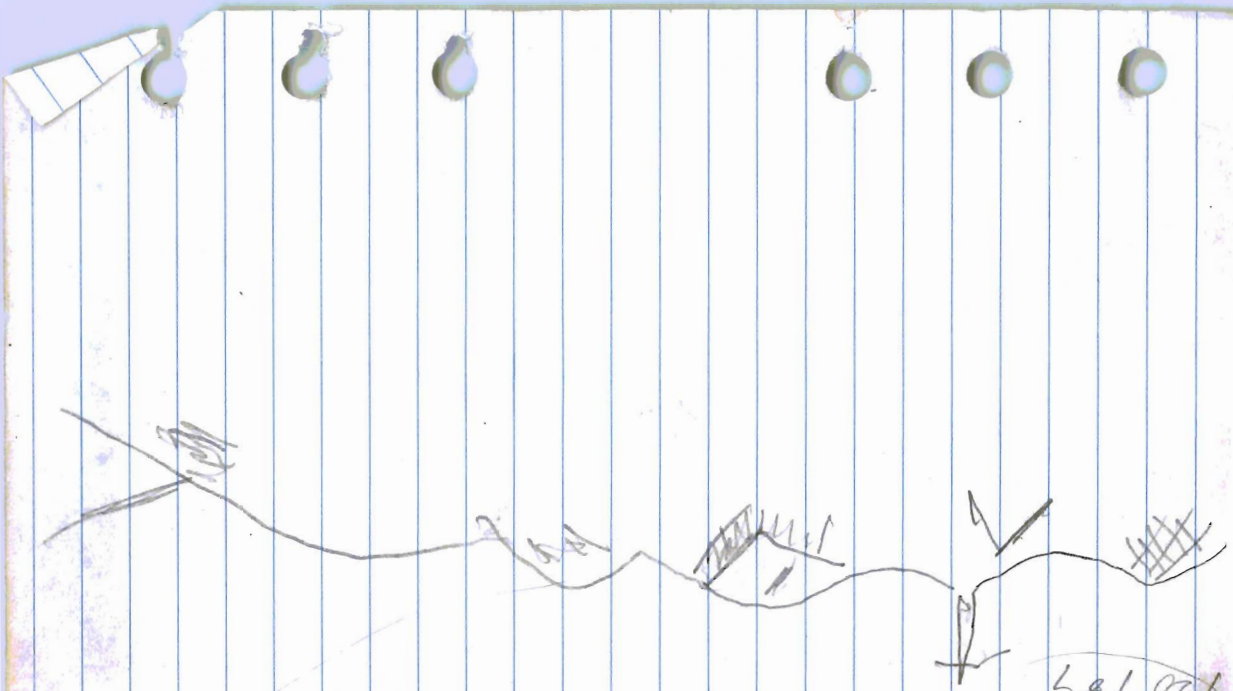
ESN 784 el 2104

saddle marks boundary between ground of Rome and Erwin

Erwin qtzite begins Talkow w/ [illegible]

N 37° 08.171 W 80° 13.407' loader man

12/20/07



Elliston Quad

2/20/08 3.1 miles E

ESN 714 Air strike from Powerline ridge to S. N 15 W 38 NE at least 50' ledge w/ broad talus slope below, another ledge is poorly exposed near rim or ridge crest

ESN 733 N 50 E 65 SE dk gry humpton shale along powerline at WP 99 N 37° 09.668' 3176 W 80° 12.293

ESN 736 E W 15 S brecc bed above Fault line photos ~ 20' above stream 2100 ft el 3285 N 37 09 . 287 raining now W 80 12 . 831

ESN 737 Rome N 55 E 55 SE lato WP 100 N 37 09 541 el 1771 WP 101 W 80 12 201

2/21/08 Boone Hollow 7mi log

ESN 741 WP 101 N 37° 08 689 el 1852 W 80 14 362

Rome Red Slate N 55 E 60 SE

WP 102 ESN 742 N 37 08 . 519 W 80° 14, 274

EL 1864 N 50 E 65 SE black dol 75' wide on hill

2/21/08

ESN 751 drk gy micrite on ridge N25E 60 NW @ WP103 N 37 08.603 W 80° 13.941' el 2015

ESN 752 dk dusky rd / grn / gry slate N 20E 63SE Blk dol on shoulder WP 104 N 37 08.637 N 80 13.809 2121 (2 Pd)

ESN 753 Rd + ylw + grn slate N 25E 70 SE WP 105 N 37° 08.645 W 80° 13.621 2318 bm 2292 Tag on line AP CO multiple Grounds

ESN 754 Rd + Grn + ylw slate in logging landing N 60E 64 NW at WP 106 N 37° 08.726 W 80° 13.424 el 2162

ESN 755 large block of white-light gray qtzite breccia then scree slope w/ abundant white scolitus bearing quartzite blocks + bldrs

ESN 761 E 2290b Oc of impure ss fg sltsn + phyllite (greenish weathered drab gray, chippy N30W 30NE WP 107 N 37° 08.822 W 80 13.304 el 2211

ESN 762 2400 bt gry sil. sltsn N 10W 70 NE WP 108 cl 0 N 50E 38SE N 37 08.929 W 80 13.24

ESN 763 el 2560 b no Oc
on sh1 knob some small
Δ qtzite bldrs 2583
N 37 08.853 W 80° 13.206

ESN 764 el 2620 b (262861) ledge of med bedd
med-Fg white skolithus bearing
qtzite skolithus
indicates RSU beds
N 50 W 80 NE WP 111 N 37 08.852 W 80 13.204

ESN 765 el 2900 b WP 112 Sh1 Knob
N 37° 08.776 W 80° 13.007' el 2851

ESN 766 el 2899 top spot elelevation
20' skolithus bearing qtzite caps
knob at WP 113 N 37° 08.765'
el gp 2892 W 80° 12.947'

ESN 767 Vertical skolithus bearing
qtzite ledge N 10 W vert
el 2590 b WP 114 N 37° 08.664'
3026 W 80° 12.078'

ESN 768 N 80 E 50 SE qtzite
ledge W 11 J el 3004 2840 m
N 37° 08.653' W 80° 12.144'
ES 769 Sh exp in road at switch back
WP 116 N 37 08686 W 80 13 230 2389 N ~ 40 W 48 NE

Spring WP 117 el 178
N 37 08.391 W 80 18.943
breccia in yard above
FEB 25, 2008 CHECK - ELLISTON
CHK 131 black + dk gry arg
+ Metaslsn N70E 38SE
at WP
ESN 791 WP 118 N37 07.553'
N 80W 30 SW Pool W 80° 12.890
in EH at el 1843
ESN 792 WP 119 N 37° 07.692 W 80° 12.855
el 1950
Dark gray massive bedded arg
w/ dark qtzite layers N60E 60SE
ESN 793 6' white qtzite crossing
creek large scree slopes above
N45+50E 43 SE ledge some
skolithus float but no OC el 2058
WP 120 N 37° 07.801 W 80° 12.829'
ESN 794 10' qtzite ledge on
SE side of valley N30E 45NW'
big scree slope to NW WP 12'
N 37° 07.842' W 80° 12.790' El 1884

ESN 795 Slope is OC at WP 122 el 1996
N 37 07 871 W 80° 12.797'
skolithus bearing qtzite ledge
N35E 33 SE

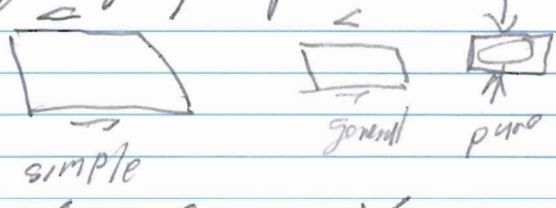
Walters / Deposit -
Rick Law / Himalaya 1987

Interal Flow an Extrusion
melamorphic
zone of inverted melamorph.
= SRA
25/50 °C / km

3-400 °C / km spl by spl

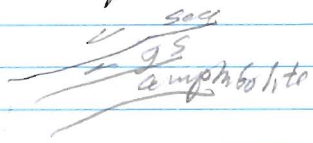
Channel Flow model
driven by difference in
overburdent - lithostatic
load gradient

incremental normal strain (↗)
incremental shear ////
squeezing - pure shear



need a free surface
for pure shear to drive
extrusion -
need 100s of km of she

Eastern Nepal



1) Telescoping Isotherms

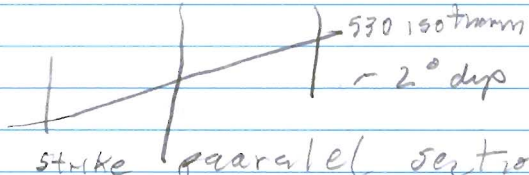
qtz preferred orientation - direct handle on temp of deformation

opening angle vs temp

increases w/ depth

convert to t

500° to 650° C



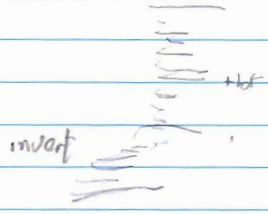
strike parallel sections

Telescoping isotherms

strait vert shortening requires 250 to 1 strain ratio = ultra mylonite

Actual Strain ratio 2-1

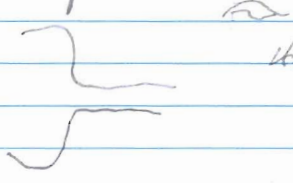
Particle Paths



Thermobarometry peak pressure

90 - 100 Km 10° deg 200 at 5

Mdged grains



45% pure shear component

10 to 30% stretching must go to surface

Local of vorticity (depth position

Garnets as indicator of flow
50%-60% pure shear
30% ls

40%

base 55-60% pure shear

Feb 25/08

ESN 796 el 2311 WP 123
N 37° 07 897 W 80° 12.838
Qtzite dip slope OT? scoliths
Float beds N60E 38SE

ESN 797 WP 124 el 2299
N 37° 07.903' W 80° 12.912'
shale chips above dipslope

ESN 798 Pink to gray white Vit.
qtzite N 40 E 35 SE WP 125
N 37° 07.967' W 80° 12.983' 2433
[illegible]

ESN 799 Pink to gray white vit Qtzite
N45E 42 SE 6' ledge WP 126
N 37° 07.966' W 80° 13.020' el 2600

ESN 7910 White-pink vitreous
qtzite ledge N60E WP 12
N 37° 07.944' W 80° 13.081' 246

ESN 7911 silified cataclasite Float
limonite/wad exploration
pits along ridge at WP 128
Rude layering N30 E55 NW
el 2371 N 37° 07.807 w 80 13.185'

ESN 7912 more iron pits in residual soil of Sil. cataclasite WP 129
E2327 N 37 07 .739 W 80 13 13

ESN 7913 discontinuous block field of silicified cataclasite and breccia blocks along ridge and E. slope from (11). Rude layering or Foliation NS 35 W
Ocherous yellow, orange, and red chalcedony or jasper cement w/ gtzite breccia and limonite, goethite and wad matrix in middle of body WP 130
N 37 07 562 W 80° 13.165 el 2253'

ESN 781 N45E 24 SE? Ledge of coarse xline dk gy weathered light gray to white dol w/ hematite? Typical deep red shady dol soil zone

ESN 782 el 2050 b NS 15 E
Pos bedding in sacheroidal dol, wh
WP 131 N 37° 07.709' W 80° 13.329' el 1935

2/25/08

ESN 783 Rome Red slaty argillite Oc Wp 132 el 1987
N37 07621 W80°13.372
cleavage NS Vert dol below ledge n 20E 7S SE

ESN 7914 WP 133 el 2165
N37° 07 573 W80° 10.313
Massive to lam gry to white xline dol ledge 3' thick N60W 13 SW

CHK 133 limonite pit on saddle at WP 134 el 2150
N37°07.474'
W80°13.191' Rude layer N35E 45N

CHK 134 View to SE shows reclined or recumbant fold hinge outlined by qtzite ledges on steep slopes above creek

10/11/12 Additions to

Numbers to convert ACT AD 09-2365

37 09 244	80 14.454
3707.734	80 13.133
3709.999	80 12.462
37.15407	80.24098
37.12898	80.21888
37.16665	80.20782

Elliston 2/11/09

ESN 1315 black shale saprolite in road at turn, chips back to crest of NW ridge, SW ridge held up by white quatzite ledge 20' thick WP 073 (sh)
el 1510 N 37° 14.697 W 80° 12.713'

ESN1316 WP 074 20' tkk qtzite ledge pipslope N55 25S
el 1581 N 37° 14.677 W 80° 12.666
bedding at NE end of OC N70E 33 SE
is not as

ESN1317 photo of massive limestone ledge in sawmill ck hollow

ESN1318 Photo of qtzite ledge where it crosses powerline el 1384
WP074 N 37° 14.647, W80° 12.767
overturned bedding cleavage N85E 30SE

ESN1319 borrow pit in Millboro on PL el 1431
cleavage in Dm N55E 42SE
back thrse N35E 22 NW; WP 75
N 37° 14.688'
pts N10W 85SW higly cren- W80° 12.825'

Elliston 2-11-09

ESN 1319 gray sh (Ort) or sl chips beneath qtzite on this nose WP 77 N 37° 14.592 W 80 12.840' el 1351

ESN 1320 N 60E 65 SE dk gry argillite and slt sn interbedded typical Db from gully to river air strike on bluff N 80 E 10 WP 078 el 1355 N 37° 14.464 W 80 12.

Bridge on old river bed not passible due to high water

ESN 1321 WP 079 N37 14.630 W80 12.844 . small Karst area below Sc hill probably in top of Ort Filled with bldrs of Sc some ogl. O

2130 Millboro

ESN 2130 paper thin black shale clean N5 10W at head of drain - Om ? WP 080 el 1460 N 37 14 915 W 80 12 329 Photo of concrete drain w/ dessolation crusts

ESN 2131 NS 15 E el 152
thick cgl qtzite beds
on top of Knob at WP
Photo of outlyer or synclinal
shield WP 081 N 37° 14.966, W 80° 12.304
2112/09 Wimmer Farm ESN 125
N 55E 10NW Massive bedded
silt stone/argillite sequence
n stream, Stream deposits
above. WP082 el 1256 N 37 14 536
W 80° 13.466'

ESN 126 WP 083 N 37 14 690 W 80 13 573
massive bedded dk gray siltsn
argillite sequence some v. Fg
ss ledges el 1327

ESN 127 WP 084 el 1476 N 37 14 467
W 80 13.449 Flat lying Db siltsn
argillite sequence in trough
joint set N 30E vertical N 20W 60 SW

ESN 128 WP 084 N 37 14 798' W 80° 13.532
N 70 W 10 SW el 1491 lite olive gray
argillite, thin clay stone beds
minor Fossil SC beds 1' tk on bench bd

2/12/09

ESN 129 el 1760b thk
bedded Ltolive grn ss w thin (mm) br
qtz rich layers = base of Forekn.
Fm WP 085 N 37 14 895 W 80 13.616
el 1722 next ledge (photo) to SW
has 1" fossil layer, some
qtz pebble cgl float above

ESN 1210 thk bedded fg
lt grn is gray graywacke
N 50 W 12 SW at el 2130b 2083 GPS
WP 036 N 37 14.999 W 80° 13.673

GLV 784 yellow orange arg
chips on flat, SS + Cgl (rare)
Float - very fossiferous here.
WP 087 N 37 15 157, W 80 13.77
el 2315 2360 b

ESN 1211 el 1999 gps 2000b WP 088
N 37° 14.978', W 80 13.596' yellow
weathered argillite + slstn chips
in trail, just below coarse
cgl float on steep slope

NOTES

March 30 clear cool breezy

ESN7325 dil N55E 80SE in stream bed
18206 covered w/ qtzite bldrs

ESN7326 el(1960b) WP 276 N37°09.321' W80°12.970'
.1903 Large block of FeO stained
silicified breccia in stream cruse

ESN7327 Deep red clay silt soil
WP277 in hollow, road crosses
N 37.09.2[illegible] drainage at el 2000b
W 80 12.887 Old Ford Tractor and Chevy Pump
2051 el bear tracks (Photo) more
silc breccia Float, Fine SS/S/t
gravel in residuum

ESN7328 Karst like hollow no dump
qtzite debris el 2120b
Knob and saddle 30 above

ESN 7613 WP 273 N37 09.097' W 80°12.927'
el 2214 / 2220b angular blx of
cy grnish gry meta qtzite
breaks cleanly across sand
grains forming knife like
edges ledge near old road
Brown and gray siliceous sh
on road at el 2230b
~30' above WP at el 2257
N 37°09 078 W 80°12.915'

ESN 7614 WP 273 el 2368 N 37 08 909 W 80 12.869
2400b dark gray clay sh w/ slaty clean
and tan weathered barrow
mottles. Beds N 30E 185E
clean 270 75 S

ESN7615 Antique Bulldozer park at switch bo
WP 280 2520 untetam/erwin ledges ~ 50' above
(2400B) Form talus slope to road
N 37 08 792 W 80 12.849

Day Runner
24406

NOTES March 30'09 3/30/09

ESN7616 Trailer site at el 2480b
Great view of Christiansburg
Blacksburg / Elliott Valley
WP 281 el 2648 N37°09.010' W 80°12.826'

ESN7617 Erwin ledge el 2635, 2660b
WP 282 N45E 23SE Massive gray
N 3708.973 qtz arenite beds w/
W 80 12 768 thin x beds or lamenation

ESN7618 N 3709.078 W 80° 13.053' el 2145
WP 283 red residuall clay w some
2120b sht sap, many cobbles
of residual old breccia
(very low grade ochepus
breccia)

ESN7619 Deep resiual clay soil w cobble
WP 284 size chunks of silicified
limonite mineralized breccia
Possible dump ~ 15' 6' high
30' long. N 37° 09.060'
el 2143 W 80° 13.126'
Probably shady dol resid.
Just past half track dump

ESN7512 Red and grn arg ledge
trends across the road at N50E 85SE
(BPC) WP 285 N 37° 09.237 W 80 13.371
el 2096 (2050 b)

ESN7513 Prospect pit 50' by 6'
WP 286 by 4' deep on hill side el 2109
N3708.999 above road. Blocks of (2130b)
W 80° 13.331 Silicified hematite mineralized
jasper

Item # 013-200

Elliston (ESN) 5/14/98

ESN 361 rome? ylw grn-gray phyllite

N70E 20-25 SE est

Bldr cgl w 2' clasts polymetic in old debris flow

ESN 362 N60W 26-32 ESN 363

N82W 80 NE N85E 70 NW

Black fg xline dolomite then red mudstone

ESN 364

N38W 15 NE on dol / sh ms contact in waynesboro sh ms from bridge to sta 363 N25W 15 NE

ESN 391 dk grnish gry aphenitic metabasalt

N52E 20 SE aparent layering closely jointed unicol? CIMP

ESN 392 dk gry ves. meta basalt ves + amydules up to 9mm contact w/ fine grained. ss at el 1610 baro.

ESN 393 el 1740 b 2' x beddal lithic arenite N 50W 48 SW?

ESN 394 N56W 24 SW cg, thk bded lithic arenite at turn 1800 b

ESN 395 fg spheroidal green ss on oc on road

ESN 396 highly cleaved grn (breccia) shale then massive metabasalt flow - med-fg otoase; N60E 35 SE

ESN 397 N70E 19 SE el 2000, TUFF layer

ESN 398 Large spl of Volc breccia above
2nd Flow From ESN 396 Flows ~50 thick
2nd top @ el

ESN 399 N55E 20 NW dipping channel
beneath a flow? buff clay sh - fill

ESN 3910 N35E 17 SE fig
gray grn phyllite saprolite
top of basalt has tuffaceous
fine sandy beds at 2060 on road
ESN 3911 el 2080 spheroidal weathered
meta basalt Flow laminated tuff
at 2100.

~~ESN 3912~~

ESN 3912 sh/y interval at turn

ESN 3913 2180 another basalt flow

ESN 3914 N30E 35-40 SE ss/sh contact
ss fg blk+wh weathered 2250 sh/bedding tops SE

ESN 3915 el 2280
top of flow

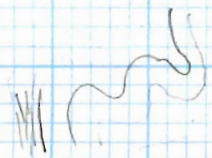
ESN 3916 el 2250 ~20' Flow

ESN 3917 el 2290 at curve phyllitic ocs
N76E 30SE

ESN 3918 Vesiculated Flow el 2340 N45E
00SE cleavage in ss

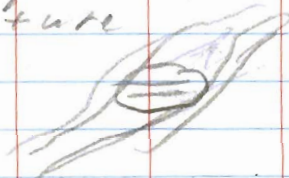
ESN 3919 at corner, Tan sh + blk ss

ESN 3920 N80E 18 plunge of chevron
similar folds Ap N48E 50SE



ES 3921 N50E 72 NW Fault w/qtz
fibers indicating ⊙ to NW
N76W 80 NW

ESN 39 22 cg gray SS cl 2450 N40E 30
ESN 3923 N50W 20 NE cl 2550 dk gry
black weathered carb. silt sh
and sh beds
ESN 3924 N48E 28 NW Fg lam SS + sh
dk - lt grn
ESN 631 ledge of Fg blk M basalt
ESN 632 coarse ss w/ feldspar qtz
musc. - metaarkose
ESN 633 N 28W 16 NE fg lam gray
slate, siliceous Strong cleavage
ESN 634 N 70E 70SE VFg gy volc slate
epidote amygdules 1-2 mm across along
foliation
8/26/98 3
ESN 371 qtz mica phyllite or
breccia N 70E 60SE quartz
clasts in micaceous foliated
mtx qtz clasts have imbricated
structure

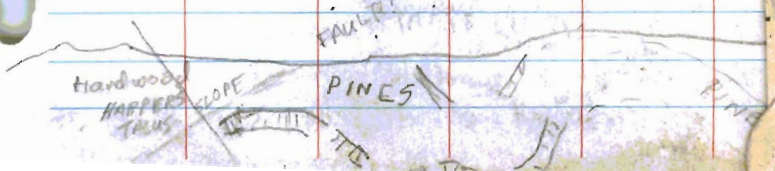


9/28/98 ESN 371 ew vert red + grn
sh + mrock by camp bldg
ESN 372 in stream channel (dry)
Many cg grit and pebbl cgl bldrs

grn, rg and white considerable basalt in alluvial fan deposit
ESN 373 at el 1800 b switch back on logging road exposed thin bedded grn and rdbrn weathered fine ss and slsn. N60E 15SE
SAW 2 DEER
ESN 374 el 1900 soil along road is orange - red, fe nodules on slope clay on crests, basalt cobbles in soil ~ looks residual
ESN 375 el 1960 on knob, red fg metamorphic (basalt) chips on saddle then thin ss chips
ESN376 el 2050 flat spot abundant metavolcanic float chips and stones up to cobble size, some scoria
ESN377 el 2100 N45E 38 SE TOP OF VOLCANIC OUTCROPS ON DRAG ROAD
lt BRN - gry SHL + SS ABOVE
ESN 378 el 2100 Top of vesiculated flow across hollow
ESN 379 el 2120 N80E 27 SE, lt gry laminated slsn and shale
ESN 625 el 3740 N45E 65SE OT X beds scour, graded coarse grn - gray ss bed s(2
ESN 626 el N60E 75 SE thk bd gry fg SS X beds indicate concave asymptotic tonn
ESN627 N45E 25 SE RSU ledge
Qtzite above at 3600 b st dip on dirty qtzite in upper unica below ledge
ESN 628 Photos of ledge [illegible]

ESN 629 green-gray Fg ss (lower unicoi ~~harpers~~ N45E 65
at el 3140b at 3200b N40E 75SE cgl
ESN 6210 el 3000 ~15' ferruginous cgl
harpers? N50E 35 10 NW slick surface
qtz Fibers plunge 12 NW N50

is this a bed top
ESN 6211 N30E 30 NW pebbly qtzite ledge
ESN 381 white qtzite OCS top at 2880b
N60E 50 NW, fine - med ss, vitr
prob = Snoden or antetam -
ESN 371 E another vitreous ledge possible scol
ESN
ESN 372 E ledges opposing on knob seem over
1
ESN 373 E pebbly ss float at end of
seems to be down into the unicoi again
ESN 374 E N80E 35 SE White Vitreous qtzi
ledge cross road at 2700b 2680b on power line N65E 17 SE
ESN 375 E cross bedded white to gray pe
✓ ledge at 2600b, punky fine, brown
to olive gry weath volcanoclastic ss
below at el 2500b N30E 40 SE P



ESN 6212 N35E 75 NW TAN lt brn
laminated SS or silfsn
6213 N35E 32 SE cg x bedded SS
ESN 6214 Orange meta vol sap - fg
spheroidal, phyllitic in part
gentle dip to S
ESN 6215 N 50E 25 SE dk gy - black
laminated slate. Slnty cleav N30E 70
ESN 651, N25E 45 NW fg gray ss tphylite
cleavage steep to SE
ESN 652 N30E 52 NW thn bedded SS
parting in mass gray SS stream
bed
ESN 653 N65E 52 NW x bed gray ss
very thk bedded
ESN
ESN
ESN 661 coarse granitoid sap w epidosite
and fine amphibolite (meta diabase
dikes or layers
ESN 662 poor foliation in hbd granofels
ESN 663 N55E 28 NW layrin in leuco
granulite saprolite ~ grading up into
dot gneiss or airpoint granite
ESN 664 tan leucogranofels sap, grn amp, pink
K-spar = altered granulite N 20W 30 SW pos.
foliation

ESN 654 N55E 50NW basal breccia, amuld and rounded pebbles and cobbles of granitoid

ESN 655 N55E 54NW grn and pink layered granofels of leuco granulite gneiss

ESN 656 10/20/98 - clear brook, cold wind, dk minnows, leaves rustling above. Pink + green cg leucogranitoid ou - large rnded gr + qtzite cobbles in stream

ESN 657 N60W 75NE thick bedded pyx granulite gneiss ocs at bridge

ESN 681 (A) is cg amphibolite? dike.

ESN 681 (B) is mg amphibolite

ESN 681 C is pink and green granite massive, unlayered NS 75E joints N60W 85NE joints N35E 40NW joints

ESN 691 N45W 60'SW ledge of gray equigranular granitoid, med grained

ESN 692 N70W vertical shear cleavage in med gray med-cg leucogranitoid in stream bank pink and grn hbd granitoid subtle banding N80E 10NW ledge to E of above.

L 10/29/98

ESN 634 rounded hillock held up by gray green vessicular chl muss phyllite / gs highly cleaved N60E 65 SE

ESN 635 rounded basalt bldrs on upper end of escarpment at el 28[illegible]

ESN 636 N 30E 19 NW med-cg grnish-gray qtz wacke massive - thk beds, spheroidal weathering Buck seen in saddle, Snort in below what is that noisy bird? cork cork - cluck-cluck) Lam, Fg ss, + sl/sh below, rip ups, coffee grounds (black carbonaceous mt)

lisagang stains

ESN 687
N60E 60 NW wh/lt gy weath pt wacke mass bedded poor bedding el 2550 b
el 2540 - 30 N55E 55 NW

ESN 638 N55E 30 NW joints ll bedding? cg dirty weathering wacke w/ 6' spheroidal weathering bldrs in OC el 25 10 b

ESN 639 Cabbin on ~~basalt contact~~
N 40 W to qtzite ridge el at cabin 2800 b
cabin built from basalt and ss

ESN 3930 el 2830 ss OC N30 E 15 NW
qtz Fibers on beds N55W 14 top moved

NW
ESN 3934 el 2860 b (15' correct)
cg impure ss bldr on knob

ESN 3932 at 2nd trailer site new well at
el 2760 b cut ss + basalt (

ESN 6310 Spl of vesicular basalt from regolith on ridge road

9/10/99

ESN 992 N55E 60SE cg sheared leucogranite of Bottom Ck Suite

ESN 993 N50E 73SE bedding of clea. N40E 28SE slip cleavage, spaced

ESN 994 N45E 40SE bedding in Cg ss meta cgl cleavage N55E60 = RSU

EC

Dan 831-6710

8-10-00 DANV

E-W 28° North